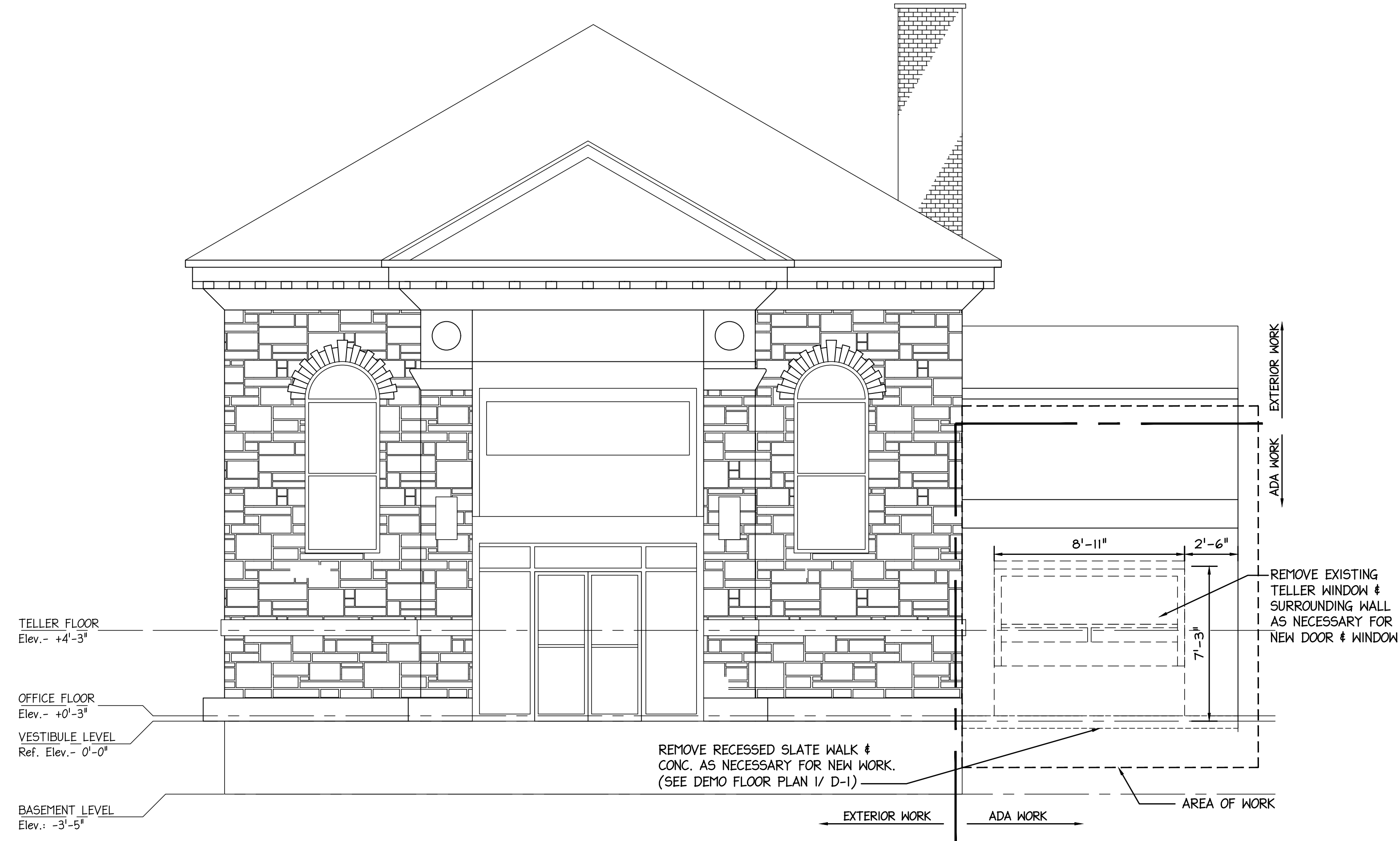
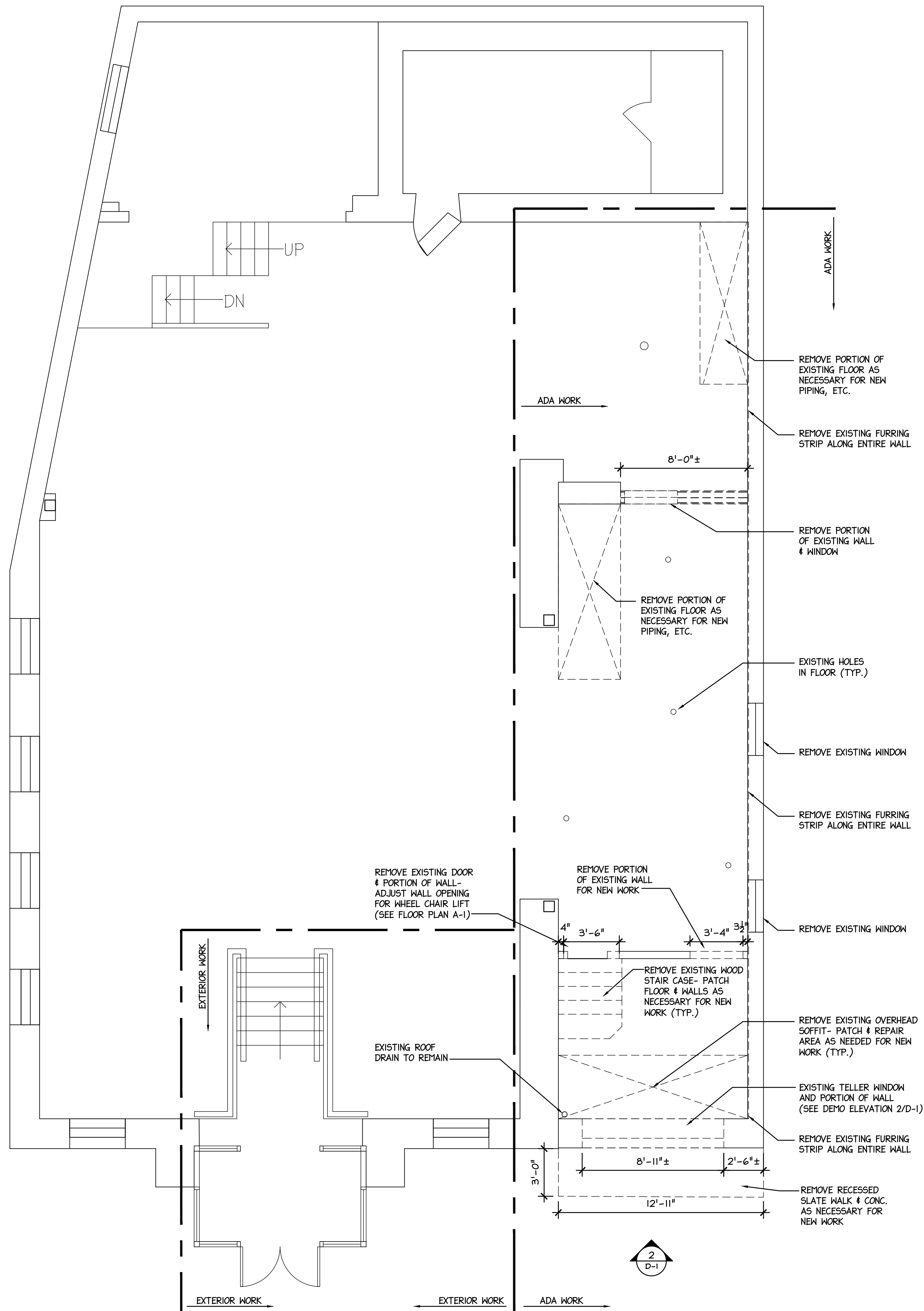


EXTERIOR & ADA RENOVATIONS
FOR THE
GLOUCESTER TOWNSHIP BLACK BOX
COMMUNITY CENTER
3 S. BLACK HORSE PIKE
BLACKWOOD, NEW JERSEY 08012

[illegible]

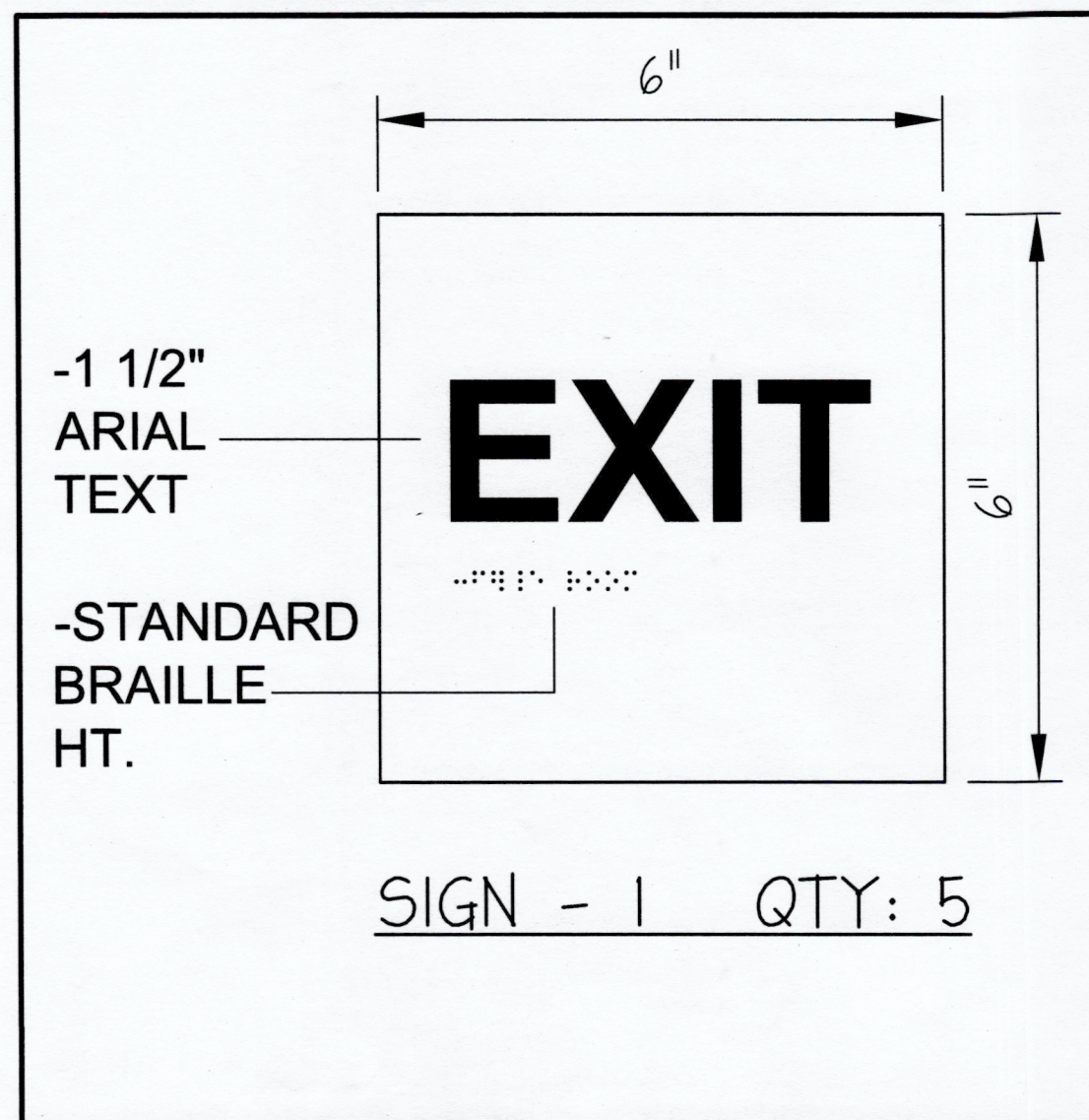


2
 D-1 DEMO FRONT ELEVATION- ADA WORK
 SCALE: 1/4" = 1'-0"

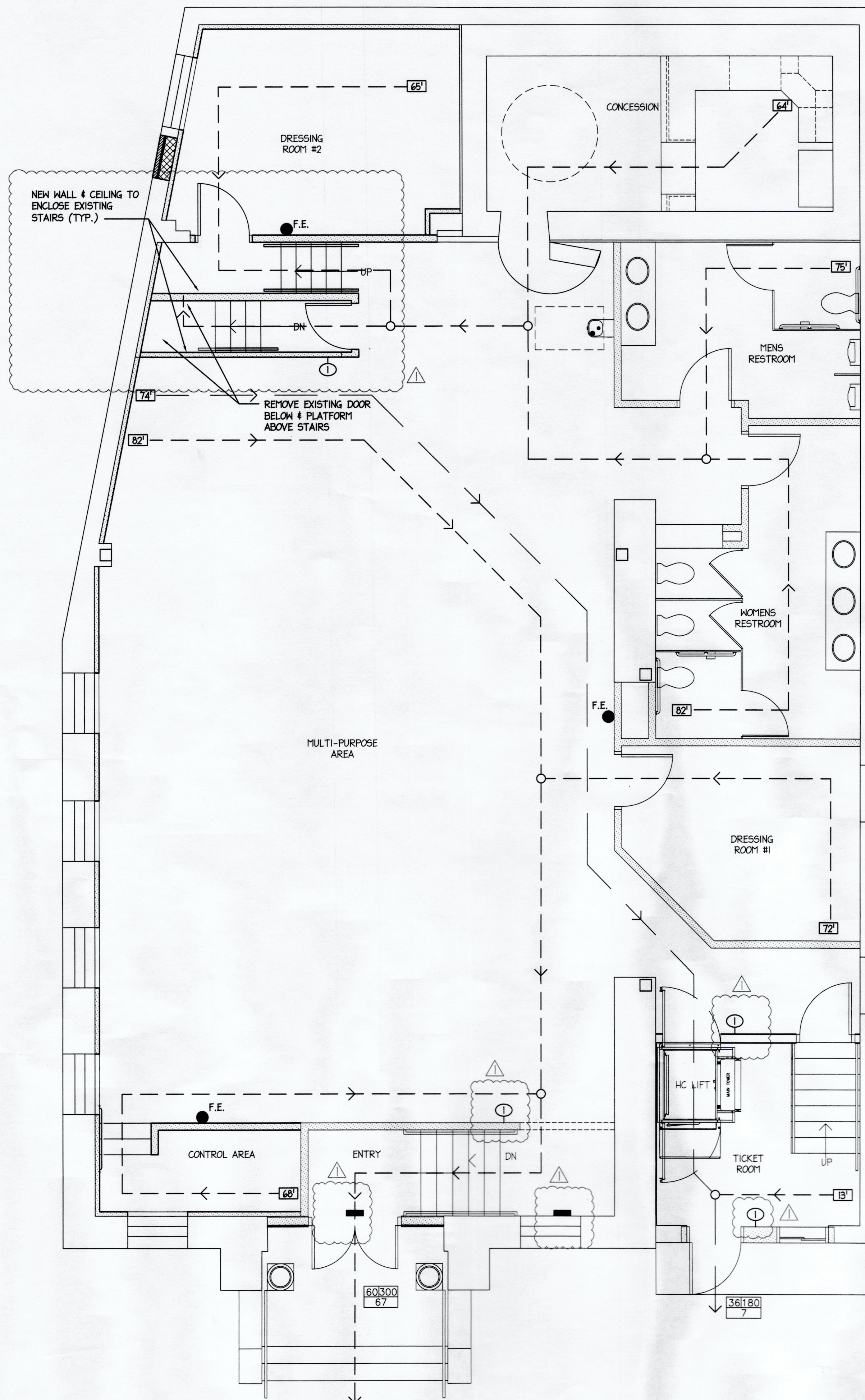
FOR SCOPE OF WORK
 SEE SHEET A-1

1
 D-1 DEMO PLAN- ADA WORK
 SCALE: 1/4" = 1'-0"

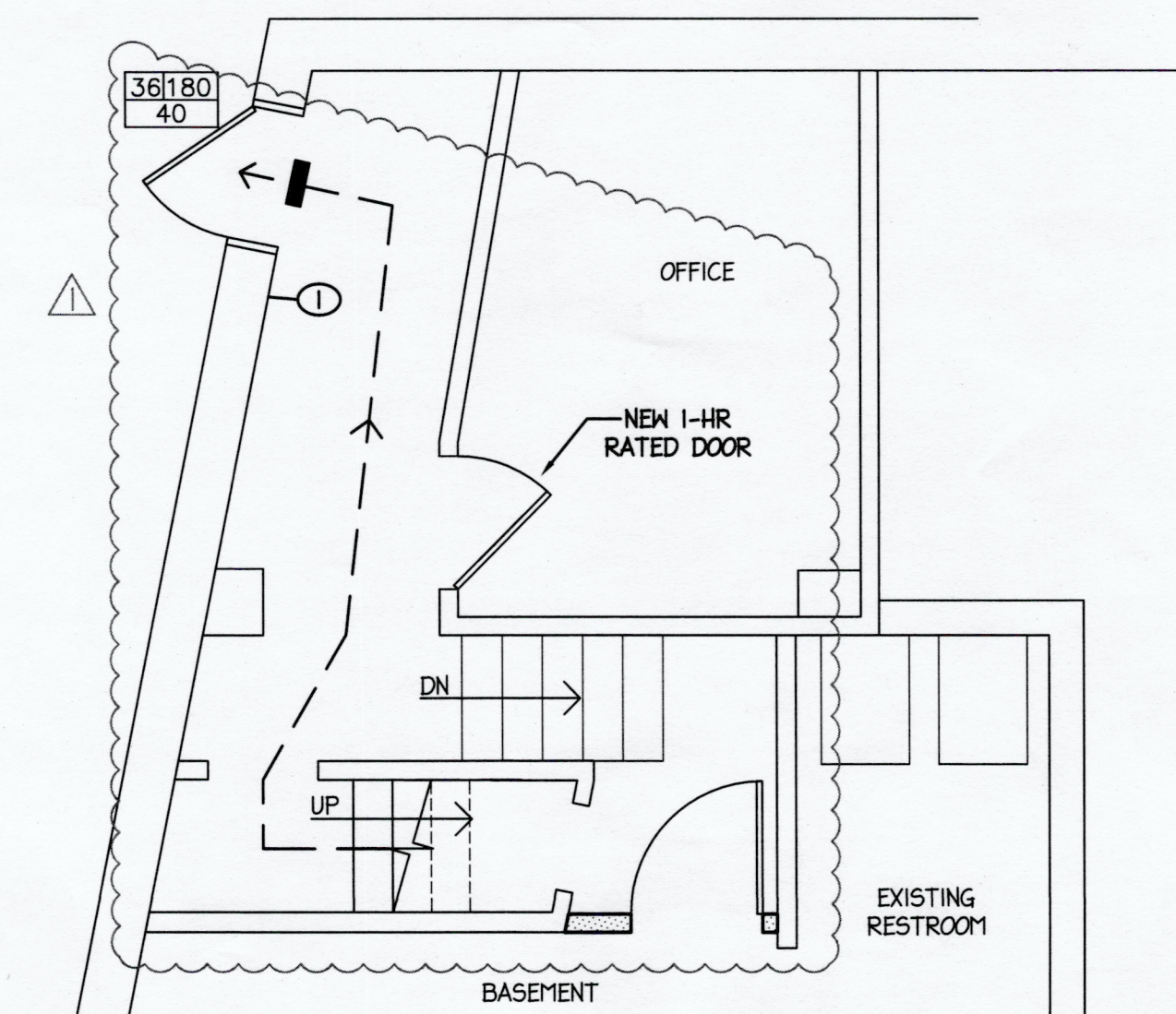
No.	DATE	DESCRIPTION	REV'D BY
REVISIONS			
APPROVAL:		PROJECT:	
JOSEPH F. McKERNAN JR., R.A. 100 Dobbs Lane Suite 204 Cherry Hill, New Jersey 08034 <small>ALIA: NJ ARCH 01 0784 PA ARCH 04-0840-X CT ARCH 7034</small>		ADA RENOVATIONS TO THE GLOUCESTER TOWNSHIP BLACK BOX COMMUNITY CENTER 3 S. BLACK HORSE PIKE BLACKWOOD, NEW JERSEY	
		TITLE: DEMO PLAN & ELEVATIONS ADA WORK	
SEAL:		SCALE: AS NOTED PROJ. NO: 006 DATE: 9/14/23 REV'D:	DRAWING NO: D-1
<small>DIMENSIONS MUST BE VERIFIED BY CONTRACTOR. VERIFY THE ACCURACY OF ANY DIMENSIONS BEFORE PROCEEDING WITH CONSTRUCTION. DO NOT SCALE DRAWING.</small>		<small>JOSEPH F. McKERNAN JR. & ASSOCIATES, INC. COPYRIGHT 2023</small> DRAWN BY: TC CHECKED BY: DF	



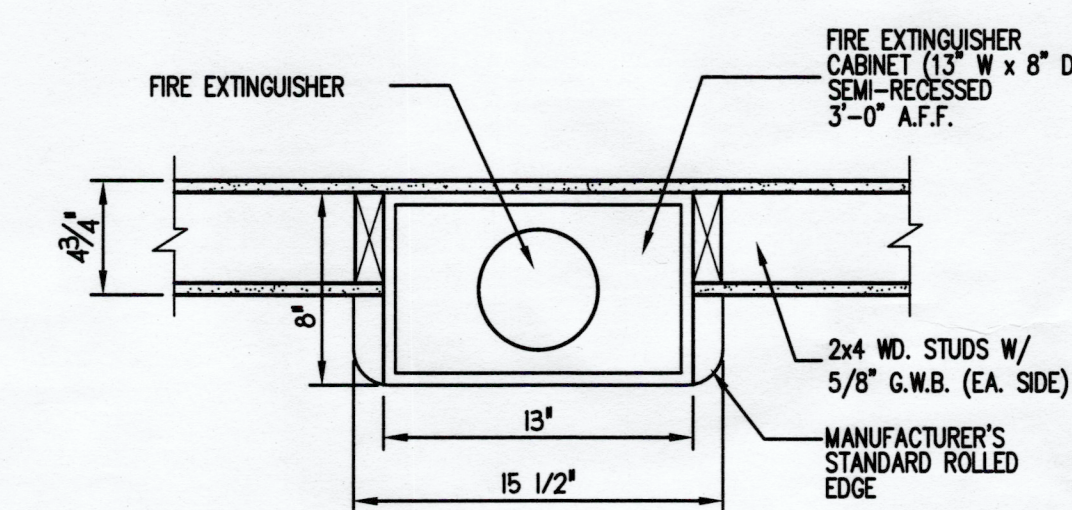
6 SIGN KEY
LS-1 SCALE: 6" = 1'-0"



1 UPPER LEVEL LIFE SAFETY PLAN
LS-1 SCALE: 1/4" = 1'-0"



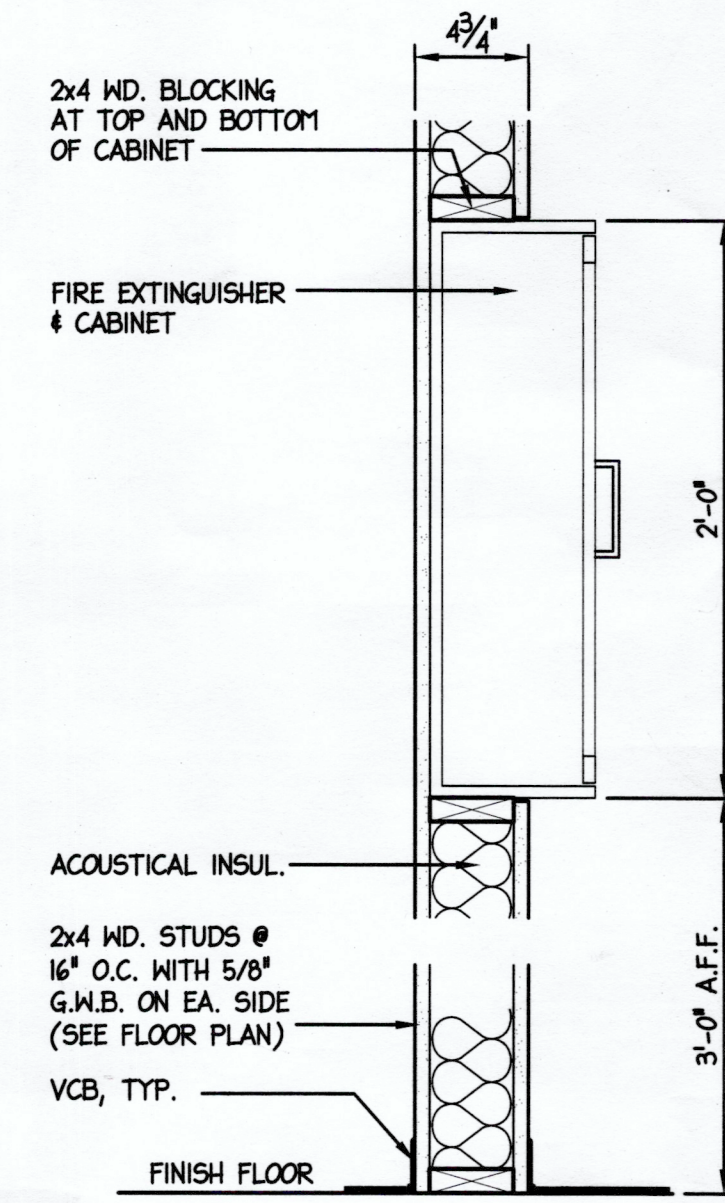
2 LOWER LEVEL LIFE SAFETY PLAN
LS-1 SCALE: 1/4" = 1'-0"



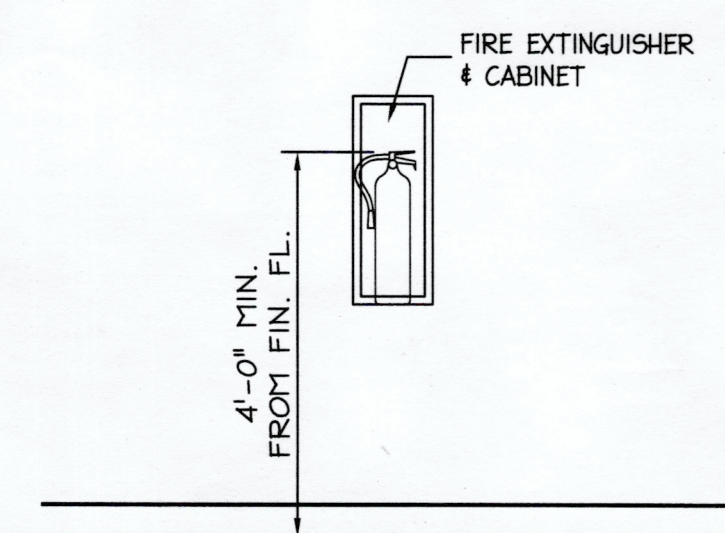
4 FIRE EXTINGUISHER DETAIL
LS-1 SCALE: 1-1/2" = 1'-0"

ROOM NAME	AREA	PERSONS
TICKET ROOM	140 SQ.FT.	2
DRESSING ROOM #1	143 SQ.FT.	5
ENTRY	89 SQ.FT.	-
CONTROL AREA	65 SQ.FT.	2
MULTI-PURPOSE ROOM	1,421 SQ.FT.	80
WOMENS RESTROOM	178 SQ.FT.	-
MENS RESTROOM	134 SQ.FT.	-
CONCESSION	181 SQ.FT.	8
DRESSING ROOM #2	188 SQ.FT.	6
OFFICE	105 SQ.FT.	3
BASEMENT	1,530 SQ.FT.	8
TOTAL=		114

- LEGEND:
- > PATH OF EGRESS
 - XX' TRAVEL DISTANCE
 - XXX' EGRESS WIDTH / CAPACITY
ACTUAL OCCUPANT LOAD
(EGRESS CAPACITY FACTOR = 0.2
INCH/OCCUPANT - NJ IBC 1005.3.2)
 - F.E. FIRE EXTINGUISHER
CABINET LOCATION
 - ILLUMINATED EXIT SIGNS

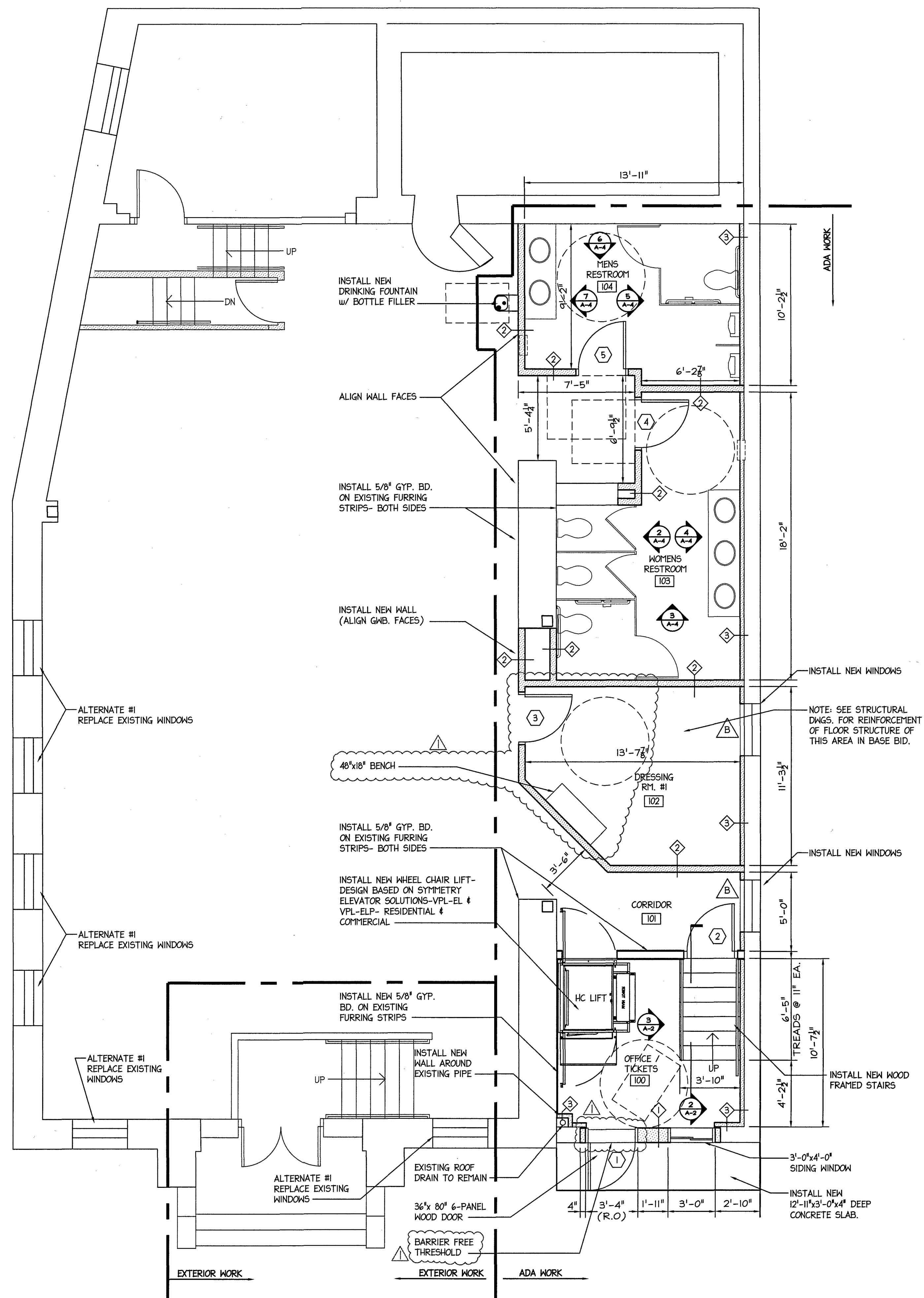


3 FIRE EXTINGUISHER DETAIL
LS-1 SCALE: 1-1/2" = 1'-0"

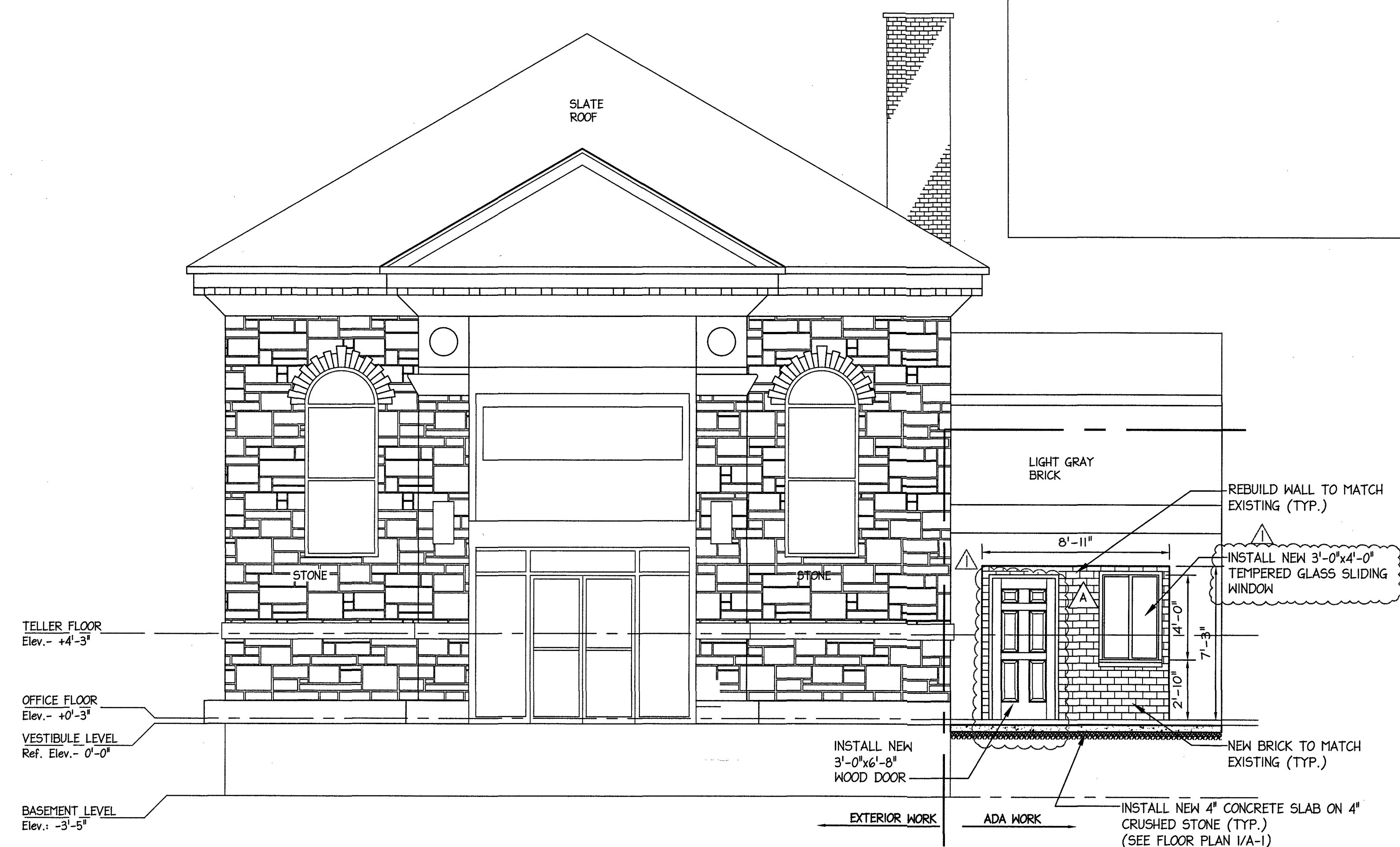


5 FIRE EXTINGUISHER DETAIL
LS-1 SCALE: 1-1/2" = 1'-0"

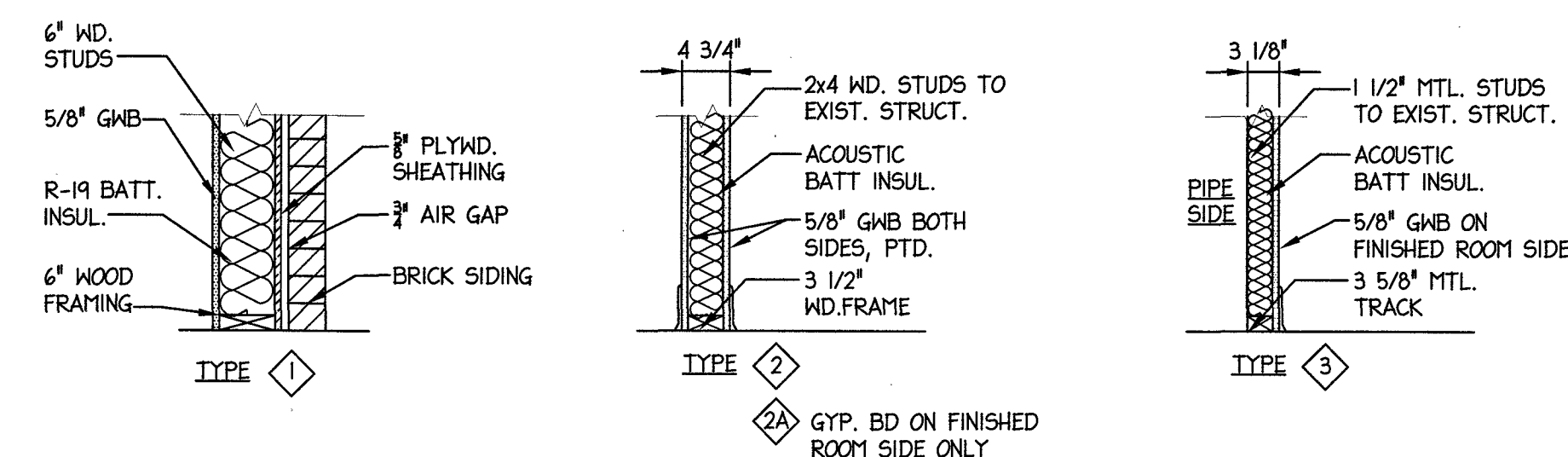
TOWNSHIP REVIEW COMMENTS			
No.	DATE	DESCRIPTION	REV'D BY
REVISIONS			
APPROVAL:		PROJECT:	
Joseph F. McKernan Jr., R.A. 100 Dobbs Lane Suite 204 Cherry Hill, New Jersey 08034		ADA RENOVATIONS TO THE GLOUCESTER TOWNSHIP BLACK BOX COMMUNITY CENTER 3 S. BLACK HORSE PIKE BLACKWOOD, NEW JERSEY	
TITLE: LIFE SAFETY PLAN & DETAILS		DRAWING NO: LS-1	
SEAL:		SCALE: AS NOTED	
JOSEPH F. MCKERNAN JR., R.A. A.I.A. NJ ARCH. NO. 0004 PA ARCH. NO. 0004-01 CT ARCH. NO. 0004		PROJ. NO.: 106 DATE: 9/14/23 REV'D: DRAWN BY: TC CHKD BY: DF	



1 FLOOR PLAN- ADA WORK
A-1 SCALE: 1/4" = 1'-0"



2 FRONT ELEVATION- ADA WORK
A-1 SCALE: 1/4" = 1'-0"



3 WALL TYPES
A-1 SCALE: 1/4" = 1'-0"

- ADA WORK INCLUDES BUT IS NOT LIMITED TO THE FOLLOWING:
- DEMOLITION OF A PORTION OF FRONT ELEVATION TO CREATE A NEW ADA ENTRANCE & TICKET BOOTH WINDOW
 - INSTALLATION OF NEW HANDICAP LIFT & INSTALLATION OF NEW STAIR, ETC. IN THE TICKET BOOTH ROOM
 - REINFORCE FLOOR STRUCTURE IN AREA NOTED AS BASE BID.
 - NEW HANDICAP DRESSING ROOM & BATHROOMS
 - MECH., PLUMB, ELEC. SYSTEMS FOR THESE AREAS NOTED.

TOTAL SQUARE FOOTAGE OF BUILDING = 3,290 SQ.FT.

AREA OF ADA WORK = 890 SQ.FT. = 27%

ADA SCOPE INCLUDES:

GENERAL CONSTRUCTION = CONSTRUCTION OF ADA AREA

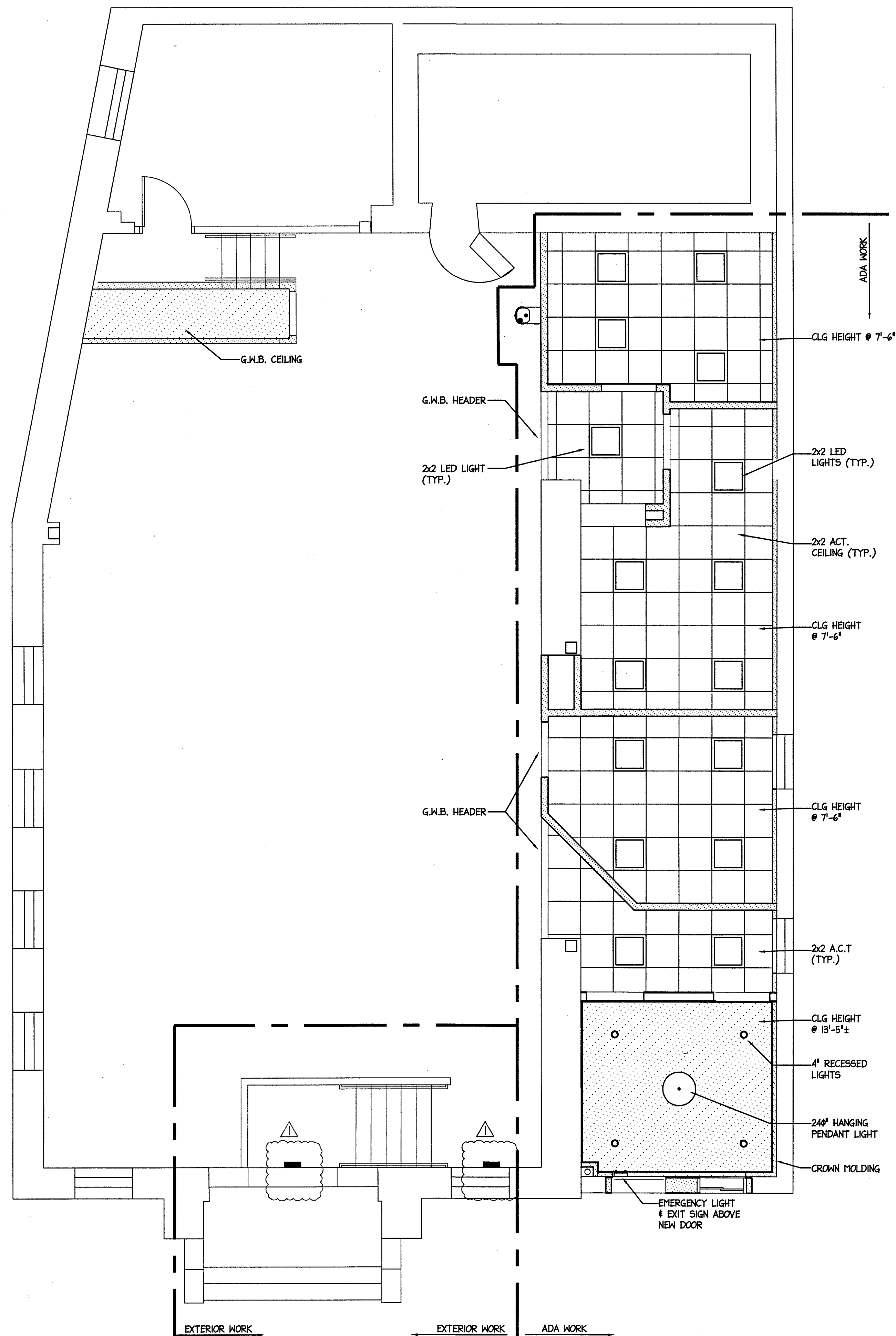
MECHANICAL = 30% OF TOTAL COST

PLUMBING = 100% OF TOTAL COST

ELECTRICAL = 30% OF TOTAL COST

STRUCTURAL = 30% OF TOTAL COST

TOWNSHIP REVIEW COMMENTS			
No.	DATE	DESCRIPTION	REV'D BY
APPROVAL:		PROJECT:	
		ADA RENOVATIONS TO THE GLOUCESTER TOWNSHIP BLACK BOX COMMUNITY CENTER 3 S. BLACK HORSE PIKE BLACKWOOD, NEW JERSEY	
Joseph F. McKernan Jr., Architects & Associates 100 Dobbs Lane Suite 204 Cherry Hill, New Jersey 08034		TITLE: FLOOR PLAN & ELEVATIONS ADA WORK	
JOSEPH F. MCKERNAN JR., R.A. <small>ALL ARCH. & ENGR. - PA ARCH REG-00489-2 - CT ARCH 7024</small>		SCALE: AS NOTED PROJ. NO: 106 DATE: 9/14/23 REV'D: DRAWN BY: TC CKD BY: DF	
		A-1	



1 REFLECTED CEILING PLAN- ADA WORK
A-2 SCALE: 1/4" = 1'-0"

NOTE: SEE MECHANICAL DRAWINGS FOR SUPPLY & RETURN DIFFUSERS & ADDITIONAL INFORMATION (TYP.)

ROOM FINISH SCHEDULE							
ROOM NO.	ROOM NAME	FLOOR	BASE	WALLS	CEILING	HEIGHT	REMARKS
100	TICKET ROOM	L.V.T.	R.B.	PTD.	GYP. BD.	EXIST.	
101	CORRIDOR	L.V.T.	R.B.	PTD.	GYP. BD.	7'-6"	
102	DRESSING ROOM #1	L.V.T.	R.B.	PTD.	A.C.T.	7'-6"	
103	WOMENS RESTROOM	T.	T.	T./ PTD.	A.C.T.	7'-6"	
104	MENS RESTROOM	T.	T.	T./ PTD.	A.C.T.	7'-6"	

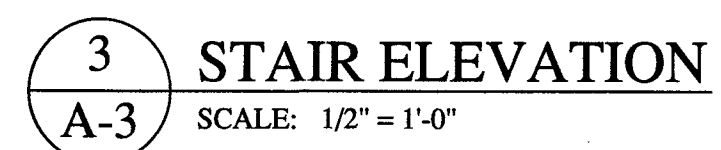
FINISH LEGEND		
FLOORING	BASE	WALLS
CPT = CARPET TILE	C.B. = CARPET BASE	PTD. = PAINTED
VCT. = VINYL COMPOSITION TILE	V.B. = VINYL BASE	VWC. = VINYL WALL COVERING
LVT. = LINEAR VINYL TILE	R.B. = RUBBER BASE	T. = PORCELAIN TILE
T. = PORCELAIN TILE	T.B. = TILE BASE	CEILINGS
S.C. = SEALED CONCRETE		A.C.T. = ACOUSTIC CEILING TILE
		GYP. BD. = GYPSUM CEILING BOARD

- FINISH NOTES:**
- ALL SURFACES SHALL BE PREPARED AS RECOMMENDED BY THE PAINT MANUFACTURER.
 - ALL PAINT SHALL BE APPLIED AS RECOMMENDED BY THE PAINT MANUFACTURER.
 - PROVIDE THE FOLLOWING PAINT SYSTEMS FOR THE VARIOUS SUBSTRATES INDICATED UNLESS OTHERWISE NOTED:
GYPSUM BOARD PARTITIONS
1ST COAT PRIMER (TINY FOR DARK HUES)
2ND ALKYD, SEMI-GLOSS ENAMEL
3RD ALKYD, SEMI-GLOSS ENAMEL
DOOR, FRAMES, MISC. METALS
1ST COAT PRIMER (DELETE IF FACTORY)
2ND COAT, SEMI-GLOSS ENAMEL
3RD ALKYD, SEMI-GLOSS ENAMEL
GYPSUM BOARD SOFFITS
1ST COAT PRIMER
2ND COAT LATEX, EGGSHELL ENAMEL
3RD COAT LATEX, EGGSHELL ENAMEL
 - CONTRACTOR TO REPAINT ANY EXISTING HOLLOW METAL DOORS AND FRAME DAMAGED DURING CONSTRUCTION.
 - ALL CEILINGS AND WALL FINISHES TO HAVE A "B" FLAME SPREAD FINISH
 - DRYWALL CEILINGS & UNDERSIDE SOFFITS TO BE PAINTED BERBER WHITE UNLESS OTHERWISE NOTED.
 - ALL VISIBLE BLOCKING BELOW COUNTERS TO BE PAINTED TO MATCH WALL BEYOND.
 - ALL EXCESS MISC. FINISH MATERIAL (TILE, STONE, WOOD, ETC.) SHALL BE TURNED OVER TO OWNER, NOT DISCARDED. CONTRACTOR SHALL BE RESPONSIBLE FOR THE PURCHASE OF ALL MATERIALS IF REPAIRS ARE REQUIRED AND OVERAGES HAVE NOT BEEN SUPPLIED.
 - ALL INTERIOR PRODUCTS INCLUDING BUILDING MATERIALS, FINISHES, AND FURNITURE PRODUCTS SPECIFIED FOR THE PROJECT ARE TO FALL BELOW ACCEPTABLE CONTAMINANT LEVELS AS OUTLINED IN "MSDS".

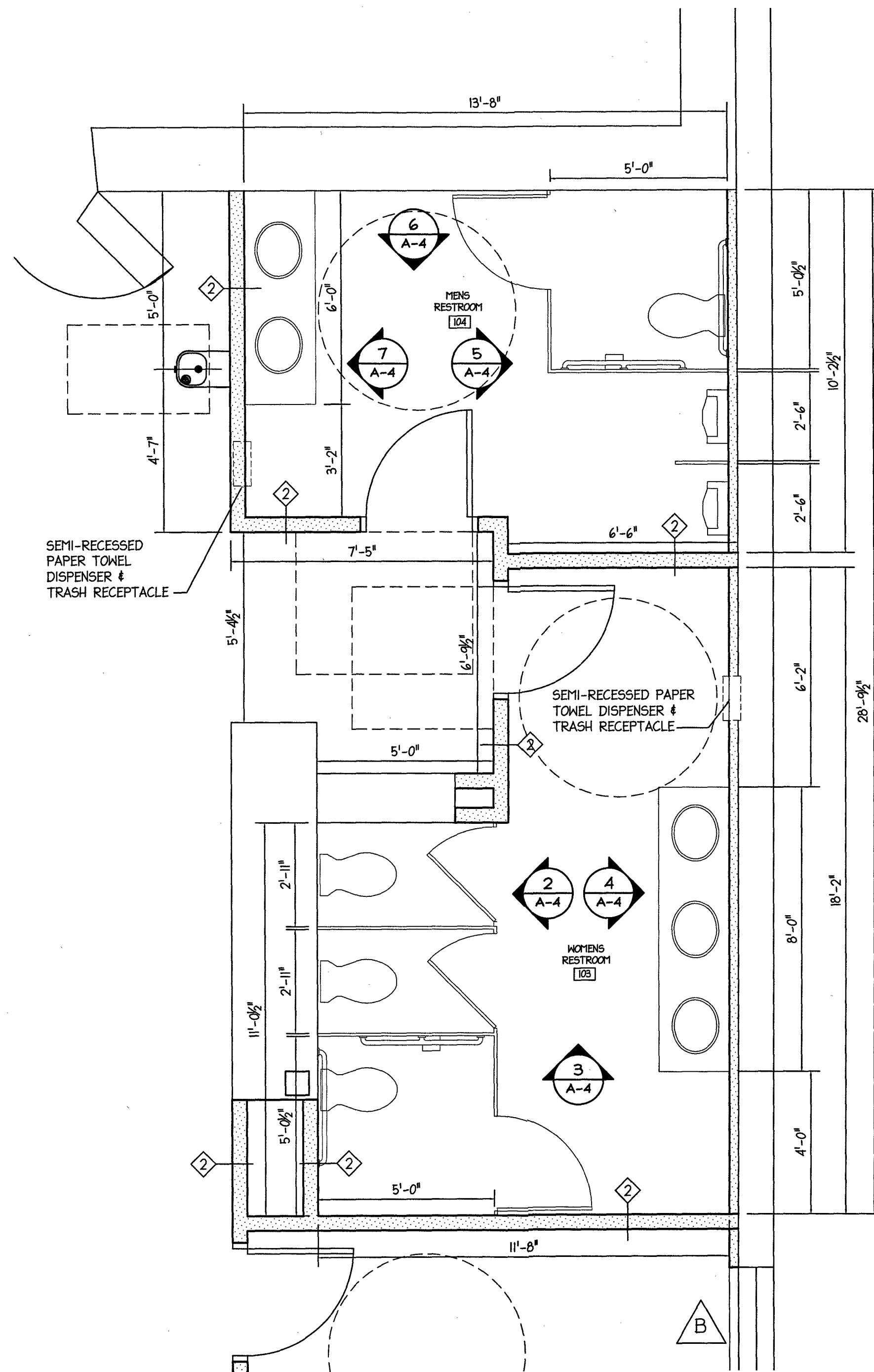
- CEILING NOTES:**
- CEILING DESIGN BASED ON ARMSTRONG FINE FISSURED 1756. SIZE 24x48, SQUARE EDGE LAY-IN w/ 15/16" GRID.
 - PENDANT LIGHT DESIGN BASED ON VISA LIGHTING CP4410 HELLEN 24" DIRECT PENDANT LIGHT
 - RECESSED LIGHT DESIGN BASED ON GREEN CREATIVE SPECFIT 4" NEW CONSTRUCTION RECESSED LIGHT

LEGEND:
EXIT SIGNS

02/12/24		TOWNSHIP REVIEW COMMENTS	
01/25/24		DCA SUBMISSION	
No.	DATE	DESCRIPTION	REV'D BY
APPROVAL:		PROJECT:	
ADA RENOVATIONS TO THE GLOUCESTER TOWNSHIP BLACK BOX COMMUNITY CENTER 3 S. BLACK HORSE PIKE BLACKWOOD, NEW JERSEY			
Joseph F. McKernan Jr., Architects & Associates 100 Dobbs Lane Suite 204 Cherry Hill, New Jersey 08034		TITLE: CEILING PLAN- ADA WORK	
JOSEPH F. MCKERNAN JR., R.A. A.I.A. <small>10 ARCH AT 0004 - PA ARCH RA-0162-X - CT ARCH 7034</small>	SEAL:	DRAWINGS MUST BE REVIEWED BY CONTRACTOR NOTED THE ADDRESS OF ANY DISCREPANCIES BEFORE PROCEEDING WITH CONSTRUCTION. DO NOT SCALE DRAWING.	SCALE: AS NOTED DRAWING NO: A-2
DATE: 01/25/24 REV'D: TC DRAWN BY: TC C.H.K.D. BY: DP			



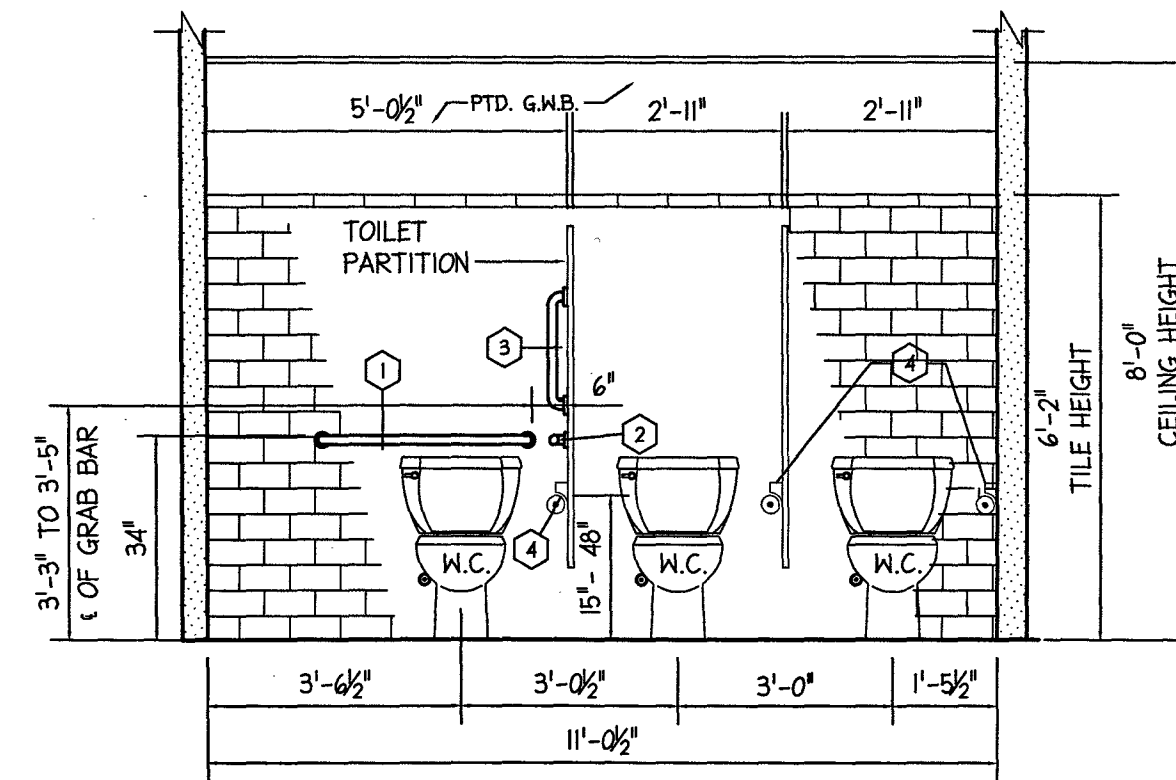
A-3



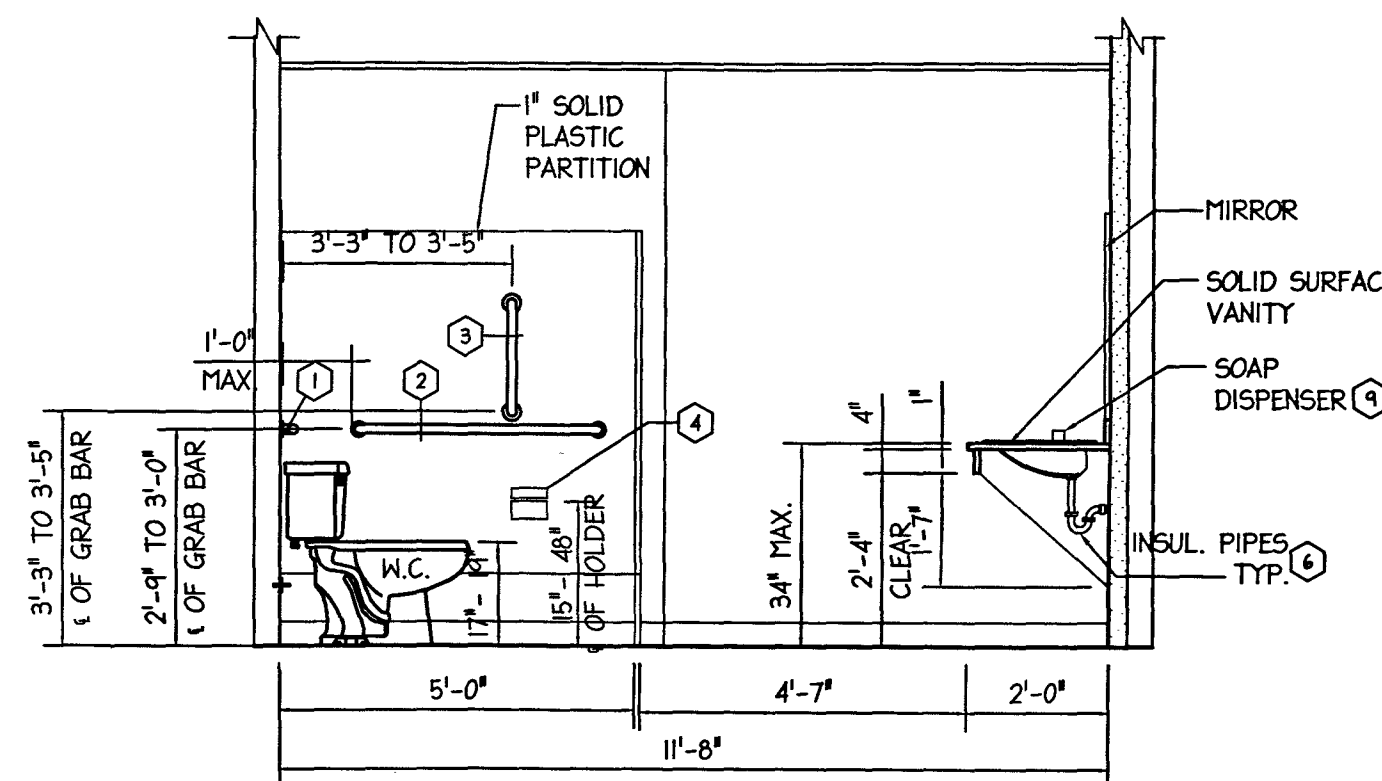
1 ENLARGED RESTROOM PLAN- ADA WORK
A-4 SCALE: 3/8" = 1'-0"

TOILET ROOM NOTES:

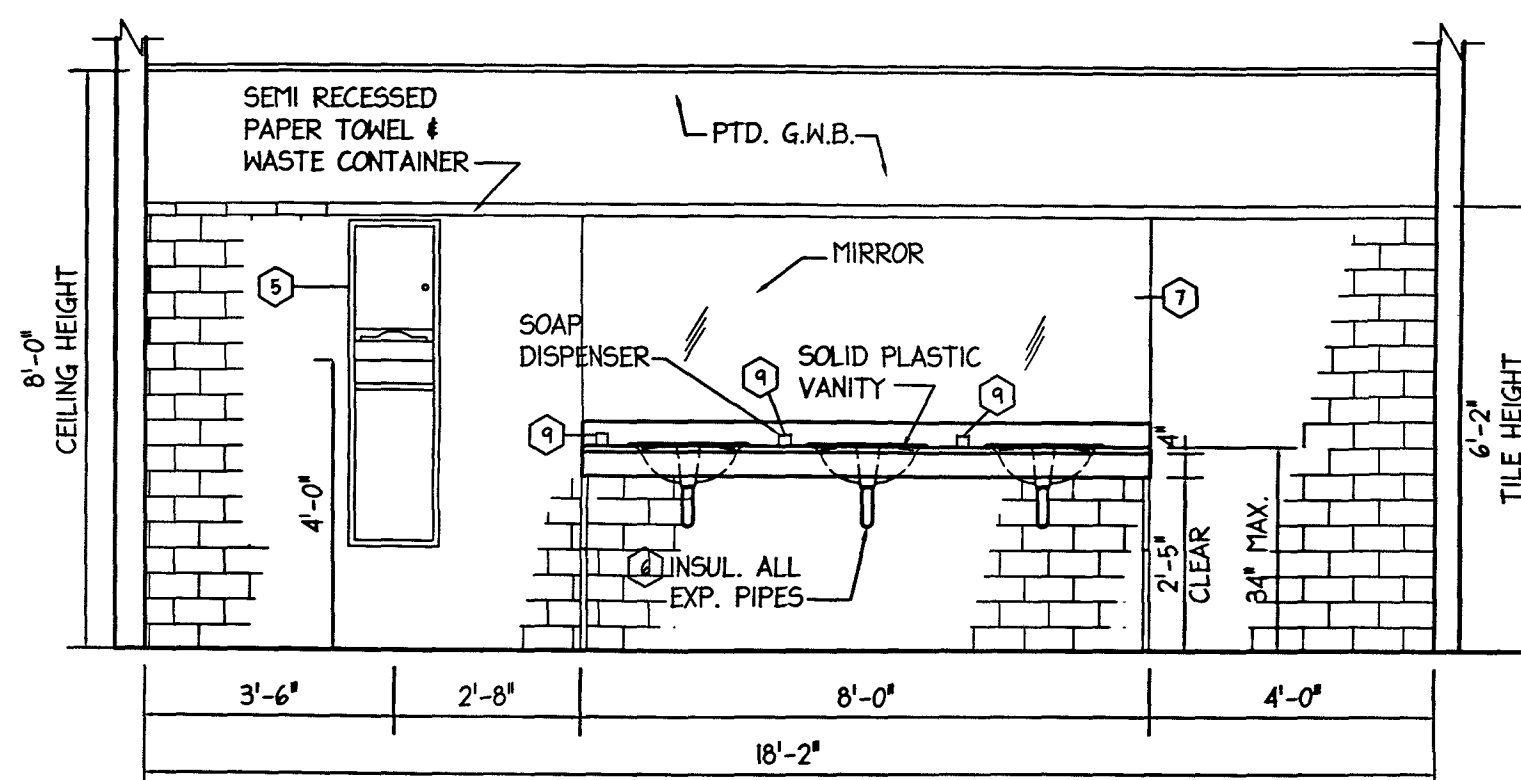
1. PROVIDE SOLID CONTINUOUS WOOD BLOCKING BEHIND ALL WALL HUNG EQUIPMENT TO SUPPORT 250LB. LOAD.
2. PROVIDE ALL APPROPRIATE ACCESSORIES (DRAINS, TRAPS, SUPPLIES AND STOPS, MOUNTING HARDWARE, BLOCKING, ETC.) FOR A COMPLETE INSTALLATION.
3. **HANDRAIL, GRAB BAR STRUCTURAL NOTES:**
 - A. Bending stress in a grab bar or seat induced by the maximum bending moment from the application of 250 lbf shall be less than the allowable stress for the material of the grab bar or seat.
 - B. Shear stress induced in a grab bar or seat by the application of 250 lbf shall be less than the allowable shear stress for the material of the grab bar or seat. If the connection between the grab bar or seat and its mounting bracket or other support is considered to be fully restrained, then direct and torsional shear stresses shall be totaled for the combined shear stress, which shall not exceed the allowable shear stress.
 - C. Shear force induced in a fastener or mounting device from the application of 250 lbf shall be less than the allowable lateral load of either the fastener or mounting device or the supporting structure, whichever is the smaller allowable load.
 - D. Tensile force induced in a fastener by a direct tension force of 250 lbf plus the maximum moment from the application of 250 lbf shall be less than the allowable withdrawal and the supporting structure.
 - E. Grab bars shall not rotate within their fittings.



2 WOMENS RESTROOM ELEVATION- ADA WORK
A-4 SCALE: 3/8" = 1'-0"



3 WOMENS RESTROOM ELEVATION- ADA WORK
A-4 SCALE: 3/8" = 1'-0"

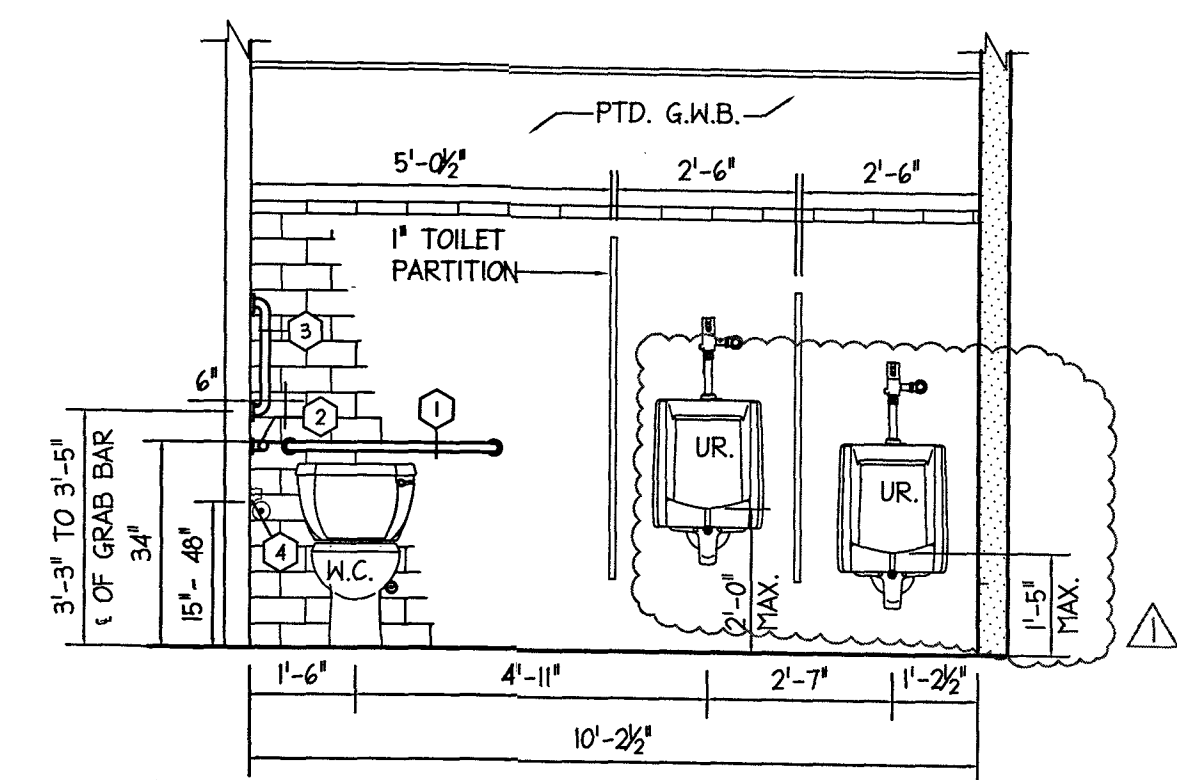


4 WOMENS RESTROOM ELEVATION- ADA WORK
A-4 SCALE: 3/8" = 1'-0"

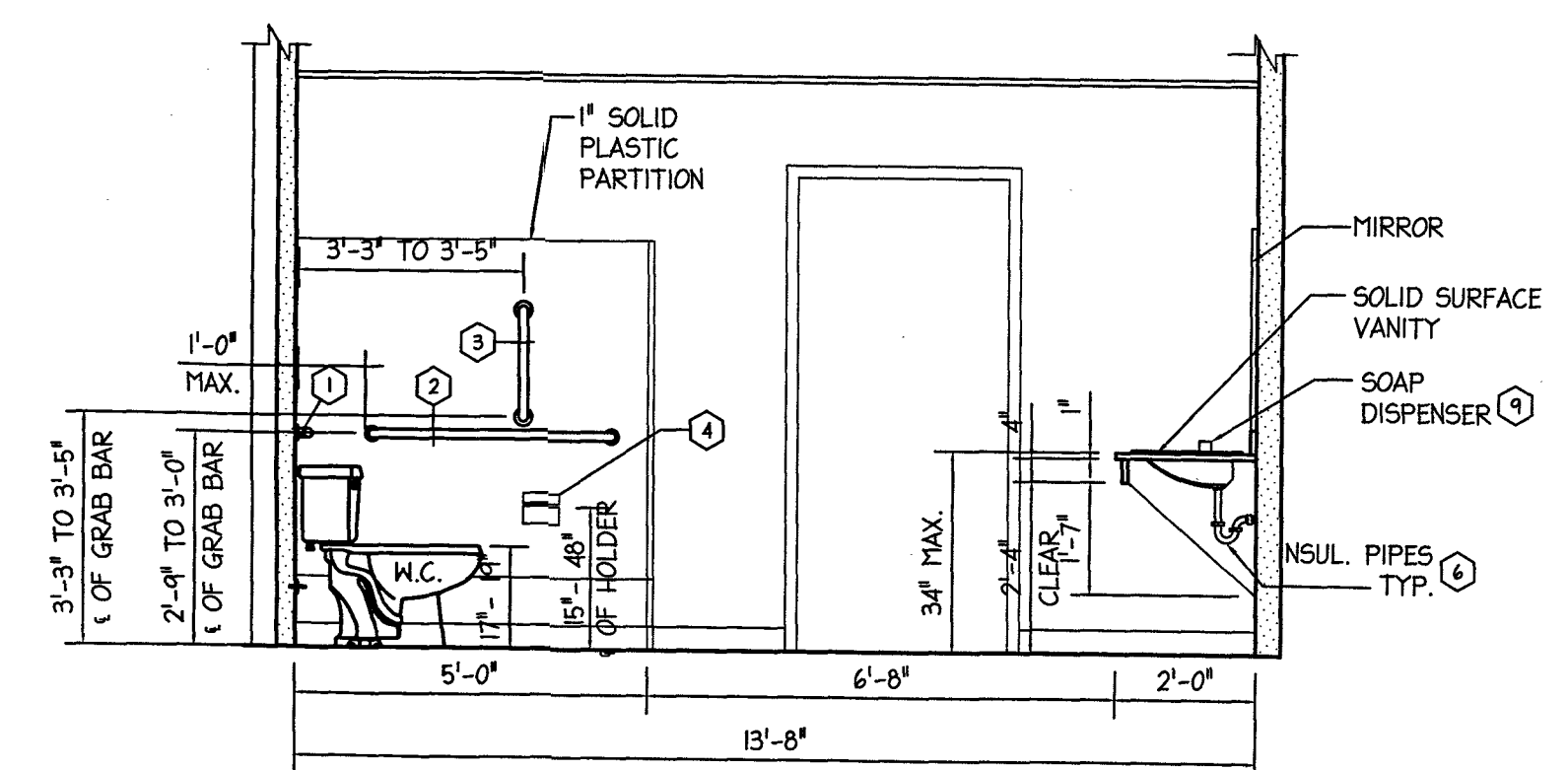
RESTROOM LEGEND:

- | | |
|--|--|
| ① 36" MIN. STAINLESS STEEL HORIZ. GRAB BAR | ⑤ SEMI RECESSED PAPER TOWEL DISPENSER/ TRASH |
| ② 42" MIN. STAINLESS STEEL HORIZ. GRAB BAR | ⑥ INSULATE ALL EXPOSED PIPING |
| ③ 18" MIN. STAINLESS STEEL VERT. GRAB BAR | ⑦ 6"x34" MIRROR (WOMENS RESTROOM) |
| ④ TOILET PAPER DISPENSER | ⑧ 60"x34" MIRROR (MENS RESTROOM) |
| | ⑨ SOAP DISPENSER |

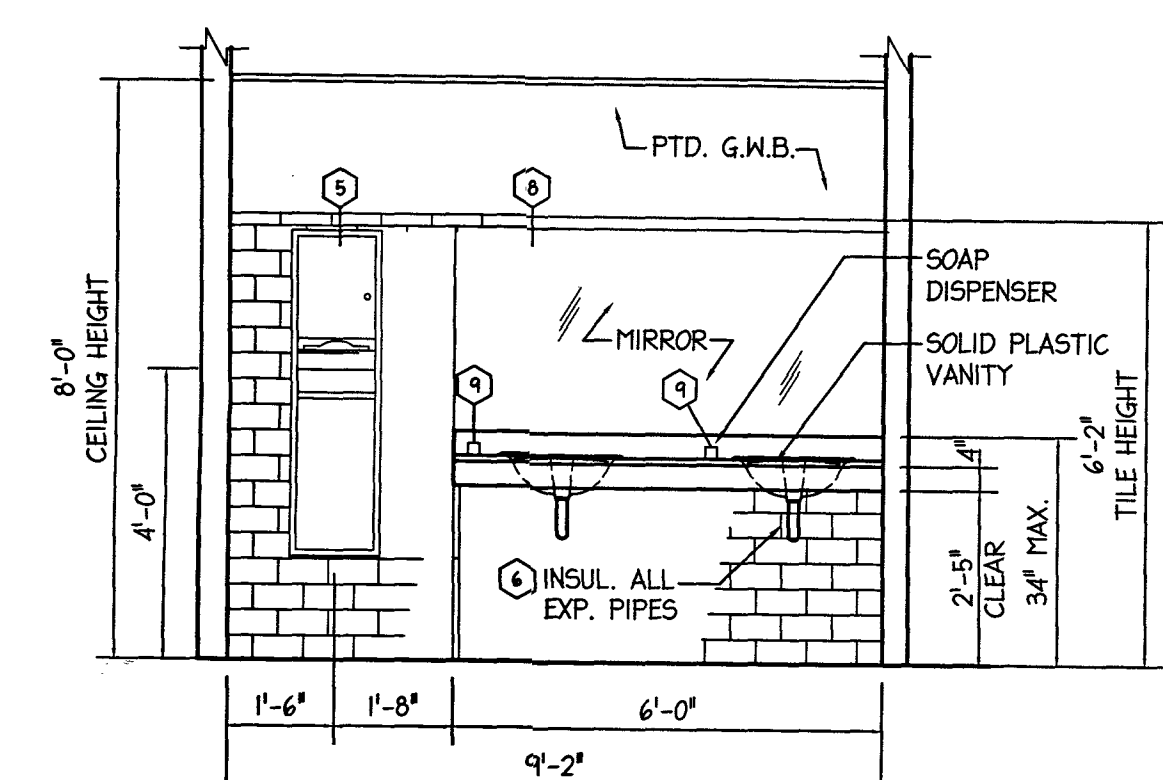
NOTE: TOILET ROOM ACCESSORIES ARE BASED ON BOBRICK OR ASI PRODUCTS



5 MENS RESTROOM ELEVATION- ADA WORK
A-4 SCALE: 3/8" = 1'-0"



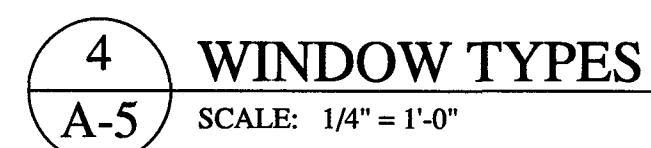
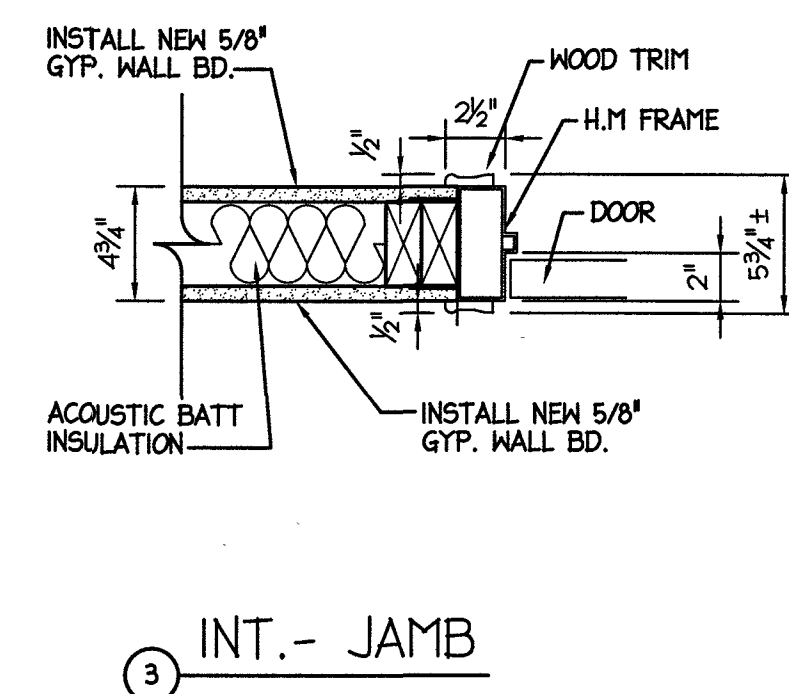
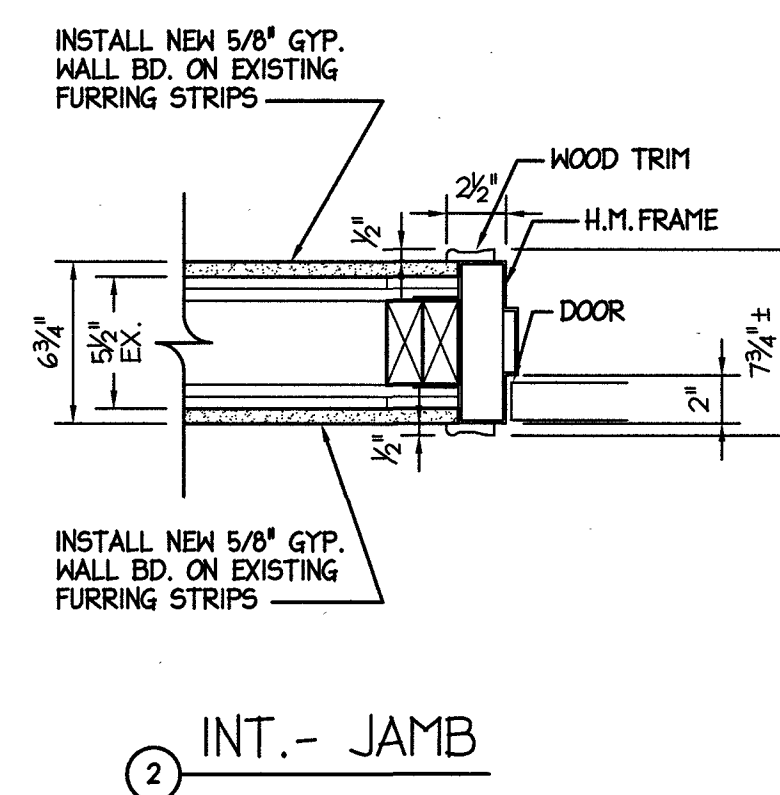
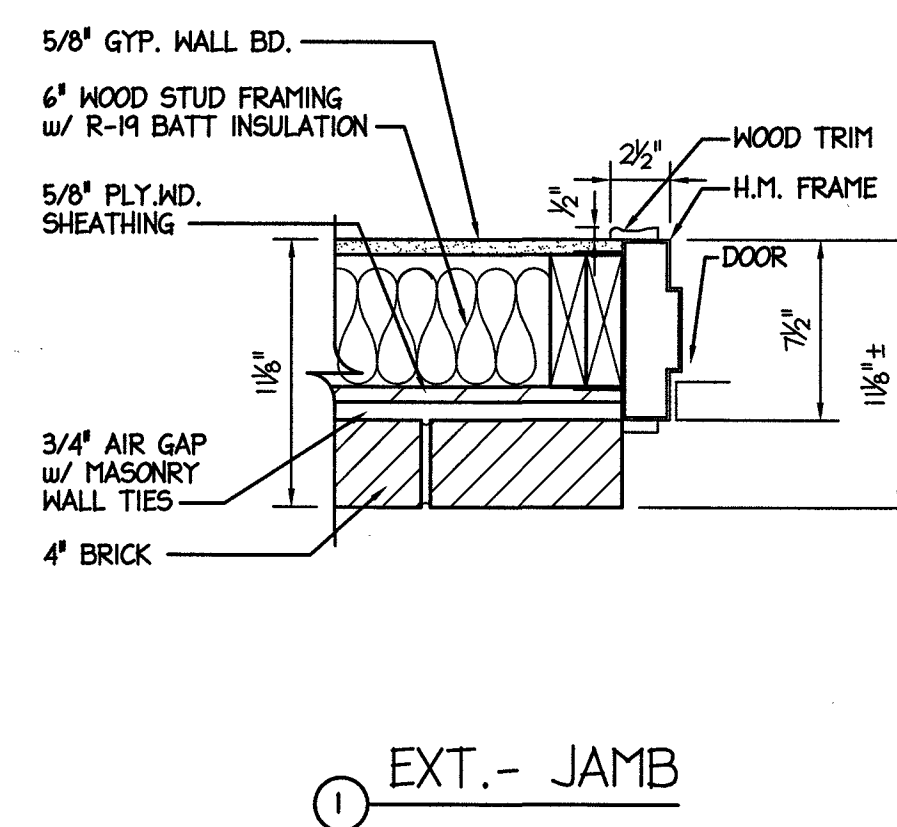
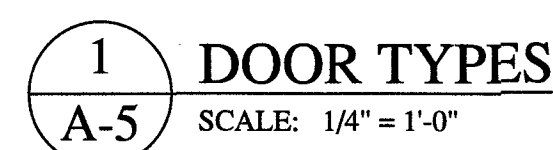
6 MENS RESTROOM ELEVATION- ADA WORK
A-4 SCALE: 3/8" = 1'-0"




7 MENS RESTROOM ELEVATION- ADA WORK
A-4 SCALE: 3/8" = 1'-0"

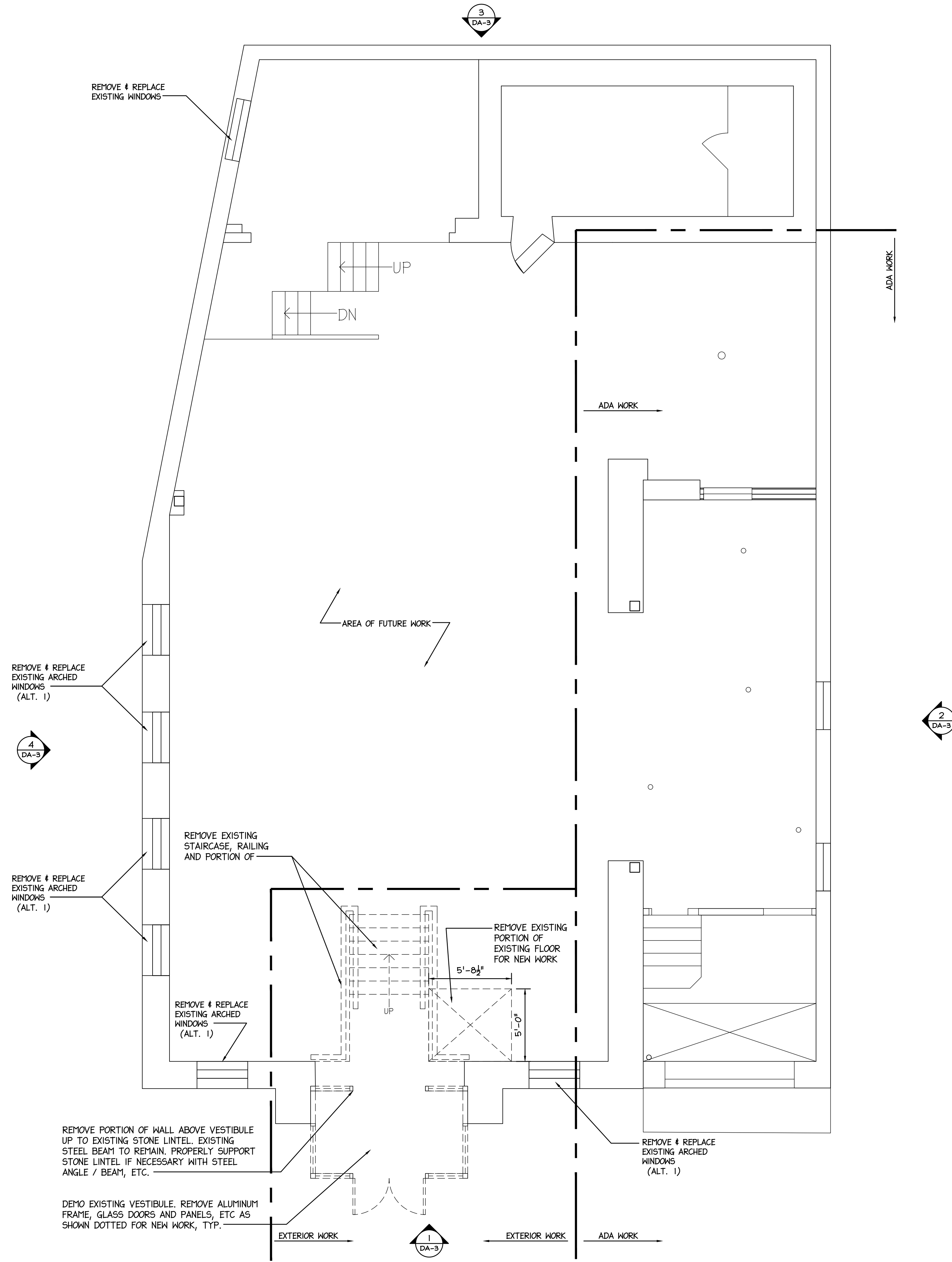
TOWNSHIP REVIEW COMMENTS		DCA SUBMISSION	
NO.	DATE	DESCRIPTION	REV'D BY
APPROVAL: PROJECT: ADA RENOVATIONS TO THE GLOUCESTER TOWNSHIP BLACK BOX COMMUNITY CENTER 3 S. BLACK HORSE PIKE BLACKWOOD, NEW JERSEY			
JOSEPH F. MCKERNAN JR., R.A. 100 DOBBIE LANE SUITE 204 CHERRY HILL, NEW JERSEY 08034		TITLE: ENLARGED PLANS & INTERIOR ELEVATIONS- ADA WORK SCALE: AS NOTED DATE: 9/14/23 REV'D: DRAWN BY: TC CHECKED BY: DF	

NOTE: FRAMES ARE
PAINTED HOLLOW METAL
FRAMES w/ WOOD TRIM



- CONTRACTOR TO SUBMIT DOOR HARDWARE SCHEDULE FOR ARCHITECT'S APPROVAL PRIOR TO PURCHASE AND INSTALLATION.
- CONTRACTOR TO PROVIDE COMPLETE PROFESSIONALLY PREPARED WIRING DIAGRAMS FOR ANY OPENINGS REQUIRING ELECTRONIC HARDWARE.
- CONTRACTOR TO PROVIDE COMPLETE OPERATIONAL DESCRIPTIONS OF ELECTRONIC COMPONENTS LISTED BY THE OPENING IN THE HARDWARE SUBMITTALS. DETAIL HOW EACH ELECTRICAL COMPONENT FUNCTIONS WITHIN THE OPENING INCORPORATING ALL CONDITIONS OF INGRESS AND EGRESS.
- PROVIDE ELEVATION DRAWINGS OF ELECTRONIC HARDWARE AND SYSTEMS IDENTIFYING LOCATIONS OF THE SYSTEM COMPONENTS WITH RESPECT TO THEIR PLACEMENT IN THE DOOR OPENING.

I		02/12/24		TOWNSHIP REVIEW COMMENTS	
		01/25/24		DCA SUBMISSION	
No.		DATE		REVISIONS	
APPROVAL:		PROJECT:			
		ADA RENOVATIONS TO THE GLOUCESTER TOWNSHIP BLACK BOX COMMUNITY CENTER 3 S.BLACK HORSE PIKE BLACKWOOD, NEW JERSEY			
		Joseph F. McKernan Jr., Architects & Associates 100 Dobbs Lane Suite 204 Cherry Hill, New Jersey 08034		TITLES: DOOR SCHEDULE & DETAILS, - ADA WORK	
JOSEPH F. MCKERNAN JR., R.A. AIA NJ ARCH # 0964 P. NJ ARCH NO-0462-08, CT ARCH 7524		SEAL:		SCALE: AS NOTED DRIVING IN:	
		(STAMP: I HEREBY CERTIFY THAT THE ARCHITECT OR ANY ARCHITECTS FIRM HAS REVIEWED THIS PROCEEDING WITH THE PROJECT AND DOES NOT SCALE DRAWING.)		(STAMP: DRIVING IN: 1/26 DATE: 9/4/23 REV'D: DRAWN BY: TC CHECK BY: DF	
		(STAMP: I HEREBY CERTIFY THAT THE ARCHITECT OR ANY ARCHITECTS FIRM HAS REVIEWED THIS PROCEEDING WITH THE PROJECT AND DOES NOT SCALE DRAWING.)		A-5	



ALTERNATE #1
REMOVE EXISTING ARCHED
WINDOWS & REPLACE WITH
NEW DOUBLE INSULATED
METAL WINDOWS

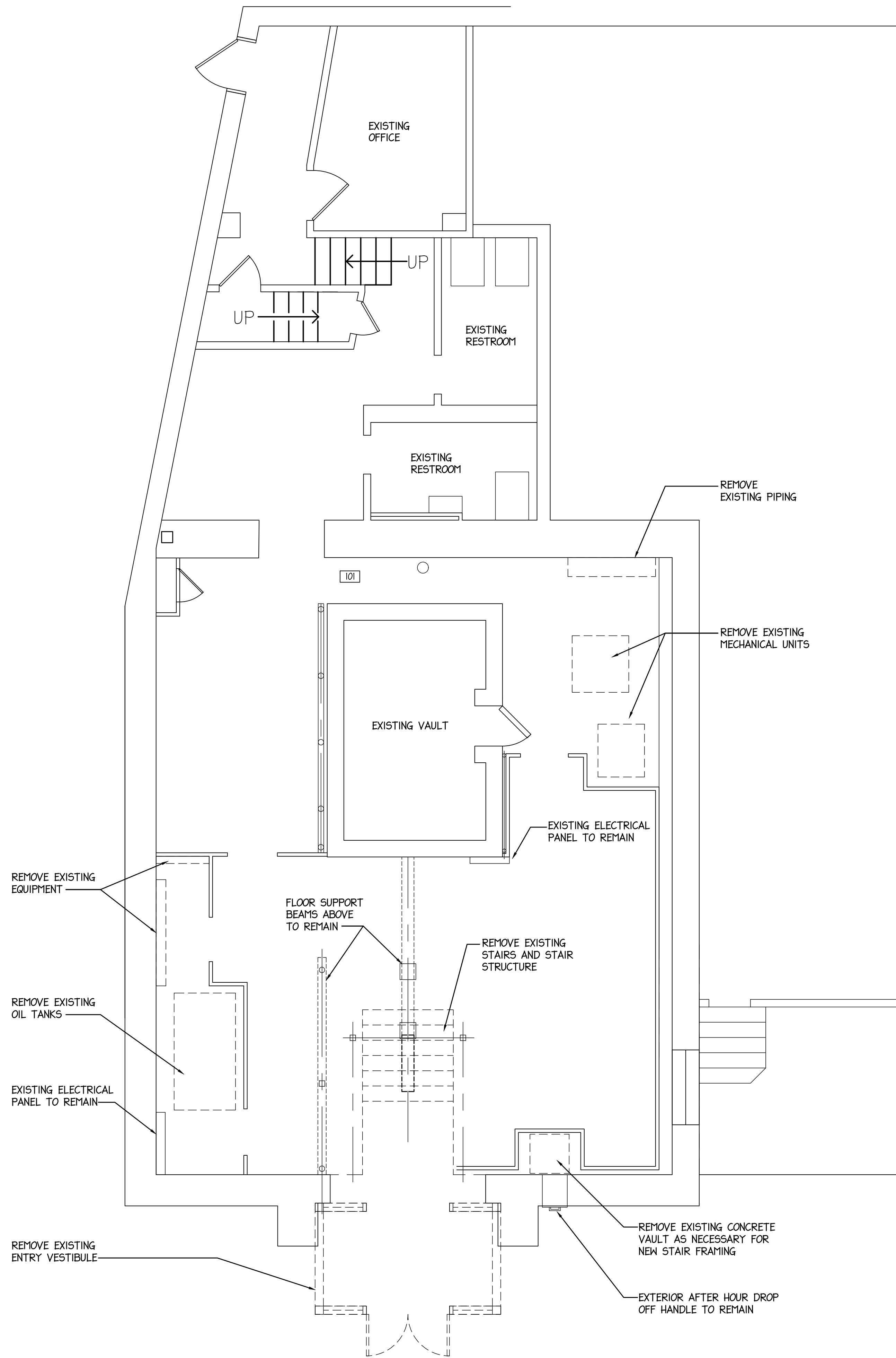
- EXTERIOR WORK INCLUDES BUT IS NOT LIMITED TO THE FOLLOWING:
- REMOVE EXISTING AND INSTALL NEW EPDM ROOFING ON FLAT ROOF AREAS
 - SLATE REPAIR/ REPLACEMENT ON SLOPED ROOFS
 - EXTERIOR PEDIMENT & CROWN TRIM REPAIR
 - REPAIR & CLEANING OF EXTERIOR FACADE
 - INSTALLATION OF NEW FRONT ENTRY INCLUDING STAIRS, RAILINGS & LANDING, ETC.
 - INTERIOR STAIR TO 1ST FLOOR LEVEL
 - REPAIR OF ROOF STRUCTURE AS NECESSARY - SEE STRUCT DWGS.)

- ALTERNATE #1 INCLUDES BUT IS NOT LIMITED TO THE FOLLOWING:
- REMOVAL OF 6 EXISTING ARCHED WINDOWS, 1 SIDE WINDOW
 - INSTALLATION OF 6 NEW WOOD FRAMED ARCHED WINDOWS TO MATCH EXISTING & 1 NEW WOOD FRAMED WINDOW TO MATCH EXISTING (SEE DEMO DA-1, DA-2 & DA-3)
 - PATCH & REPAIR AS NECESSARY AT NEW WINDOWS (TYP.)

No.	DATE	DESCRIPTION	REV'D BY
APPROVAL:		PROJECT:	
		ADA RENOVATIONS TO THE GLOUCESTER TOWNSHIP BLACK BOX COMMUNITY CENTER	
		3 S.BLACK HORSE PIKE BLACKWOOD, NEW JERSEY	
		TITLE	
		DEMO PLAN EXTERIOR WORK	
JOSEPH F. McKERNAN JR., R.A. A.J.A. NJ ARCH. #11984 - PA ARCH. #A-0840-X - CT ARCH. 7504		SEAL:	SCALE: AS NOTED PROJ. NO.: 896 DATE: 9/14/23 REV'D: DRAWN BY: TC CHKD. BY: DF
		DIMENSIONS MUST BE VERIFIED BY CONTRACTOR. VERIFY THE ARCHITECT OF ANY DISCREPANCIES BEFORE PROCEEDING WITH CONSTRUCTION. DO NOT SCALE DRAWING.	
		REVISIONS	
		COPYRIGHT 2023	

1
DA-1 DEMO PLAN- EXTERIOR WORK
SCALE: 1/4" = 1'-0"

DA-1

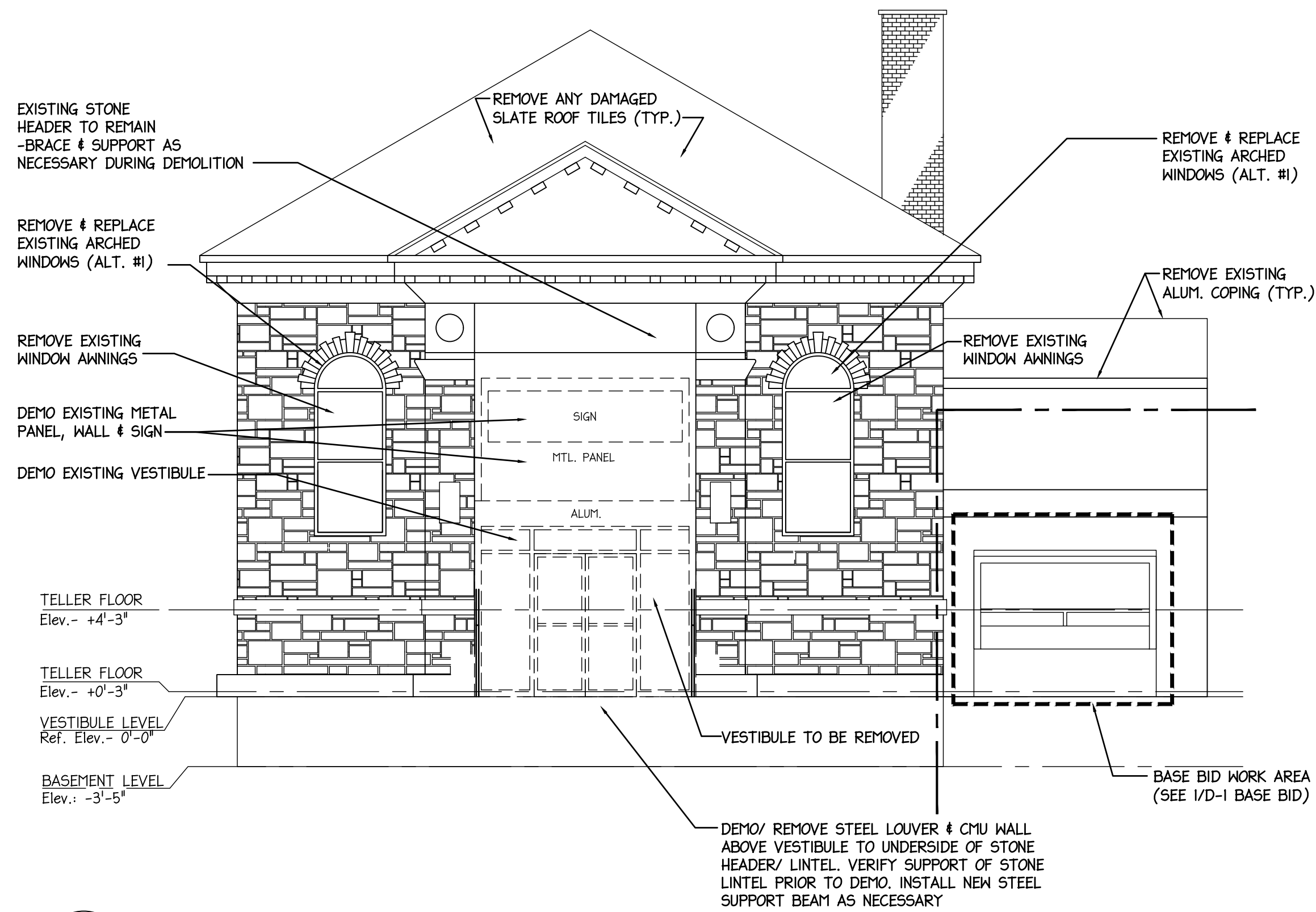


1
DA-2

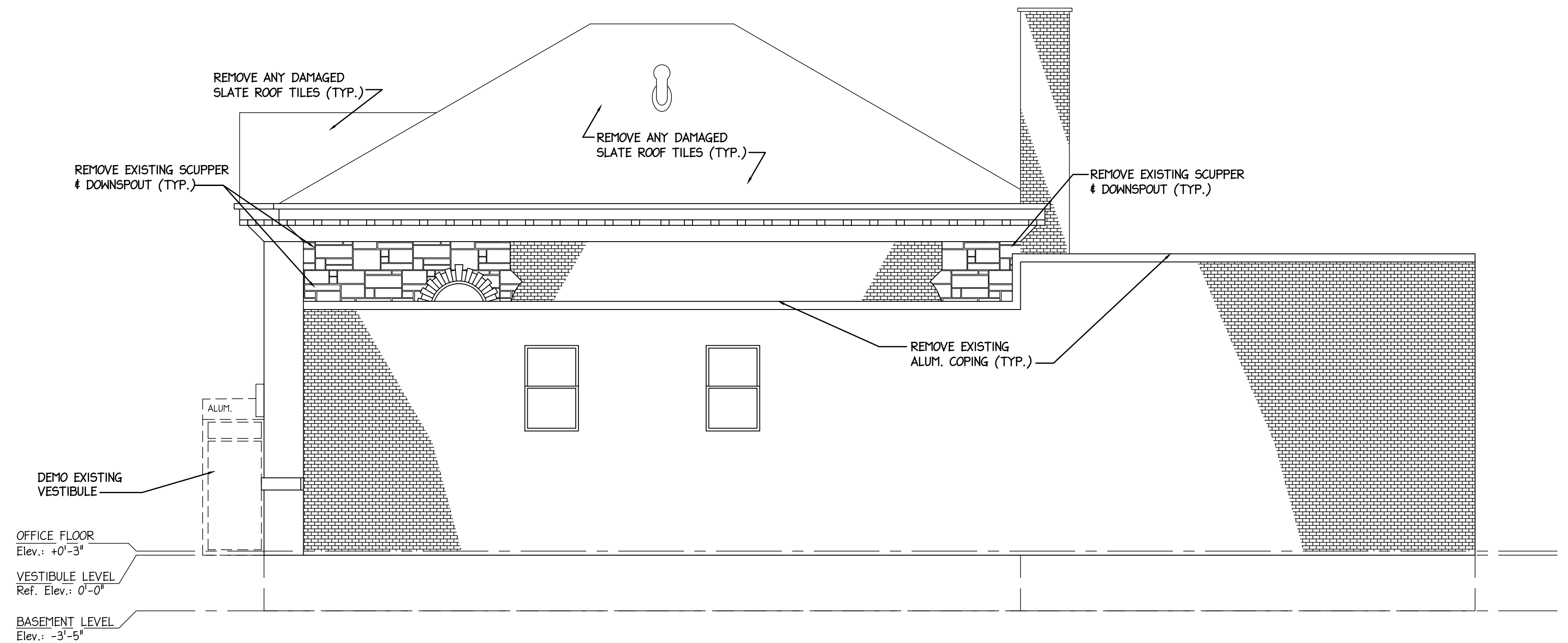
BASEMENT DEMO PLAN- EXTERIOR WORK

SCALE: 1/4" = 1'-0"

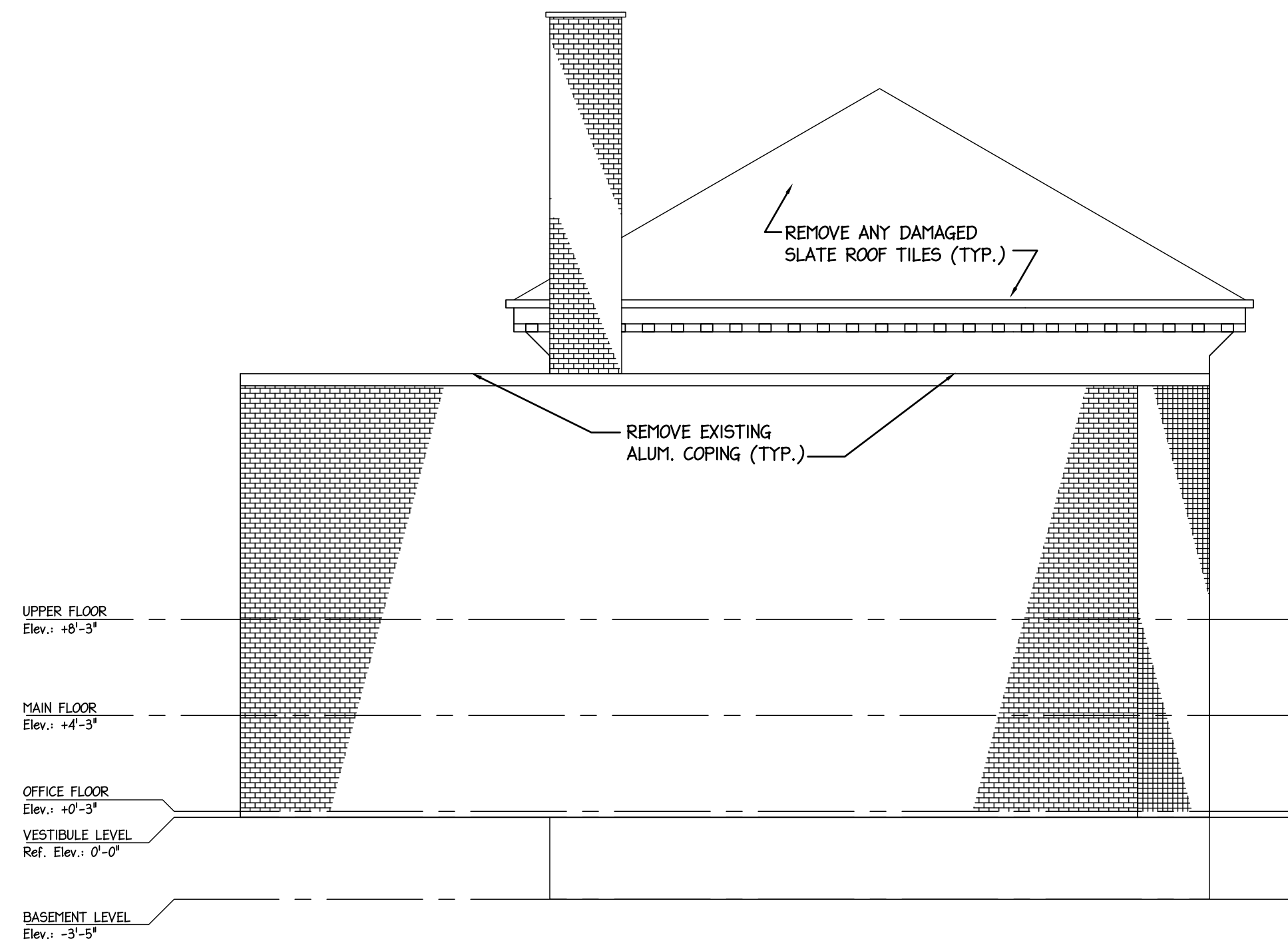
No.	DATE	DESCRIPTION	REV'D BY
		REVISIONS	
APPROVAL:		PROJECT:	
		ADA RENOVATIONS TO THE GLOUCESTER TOWNSHIP BLACK BOX COMMUNITY CENTER 3 S.BLACK HORSE PIKE BLACKWOOD, NEW JERSEY	
Joseph F. McKernan Jr., Architects & Associates 100 Dobbs Lane Suite 204 Cherry Hill, New Jersey 08034		TITLE: BASEMENT DEMO PLAN EXTERIOR WORK	
JOSEPH F. MCKERNAN JR., R.A. A.J.A. NJ ARCH 01 0784 PA ARCH 04-0640-X CT ARCH 7534		SEAL: DIMENSIONS MUST BE VERIFIED BY CONTRACTOR. VERIFY THE ARCHITECT OF ANY DISCREPANCIES BEFORE PROCEEDING WITH CONSTRUCTION. DO NOT SCALE DRAWING.	
		SCALE: AS NOTED PROJ.NO.: 006 DATE: 9/14/23 REV'D: DRAWN BY: TC CHECKED BY: DF	
		DRAWING NO: DA-2	



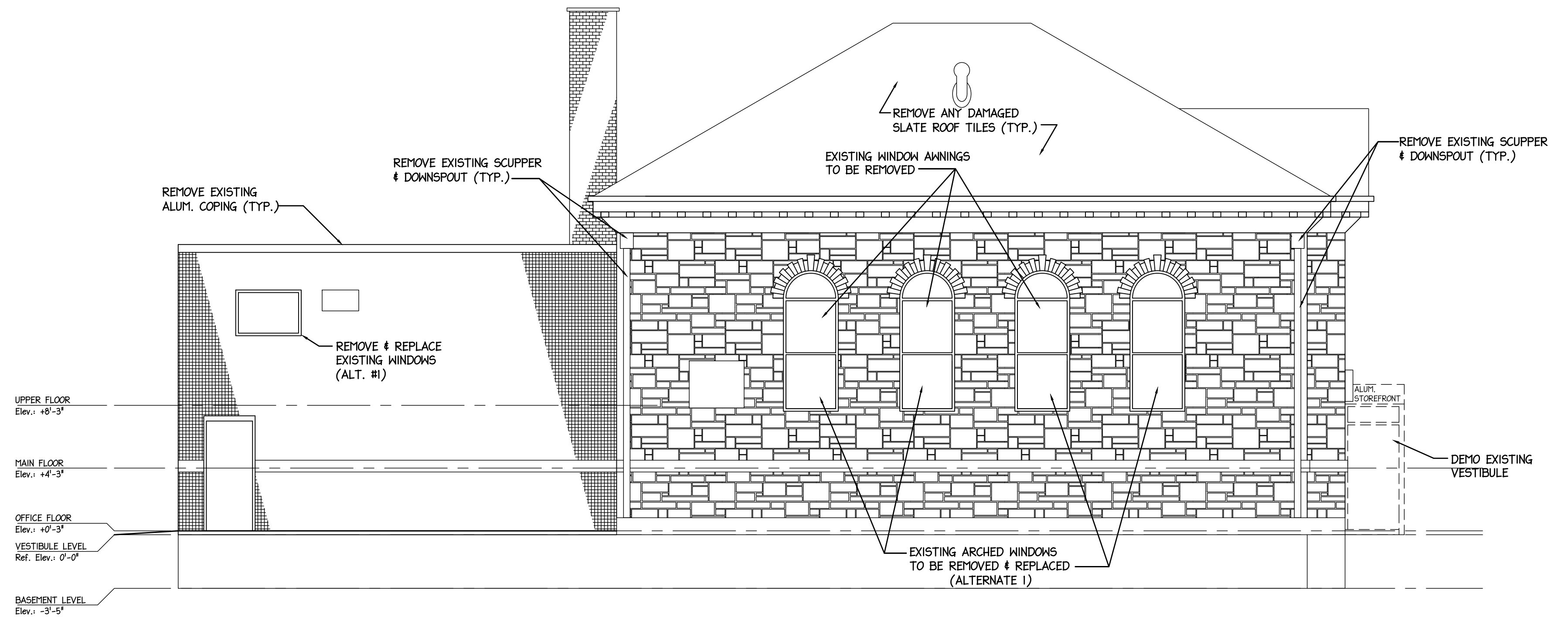
1
DA-3 DEMO FRONT ELEVATION- EXTERIOR WORK
SCALE: 3/16" = 1'-0"




2
DA-3 DEMO SIDE ELEVATION- EXTERIOR WORK
SCALE: 3/16" = 1'-0"

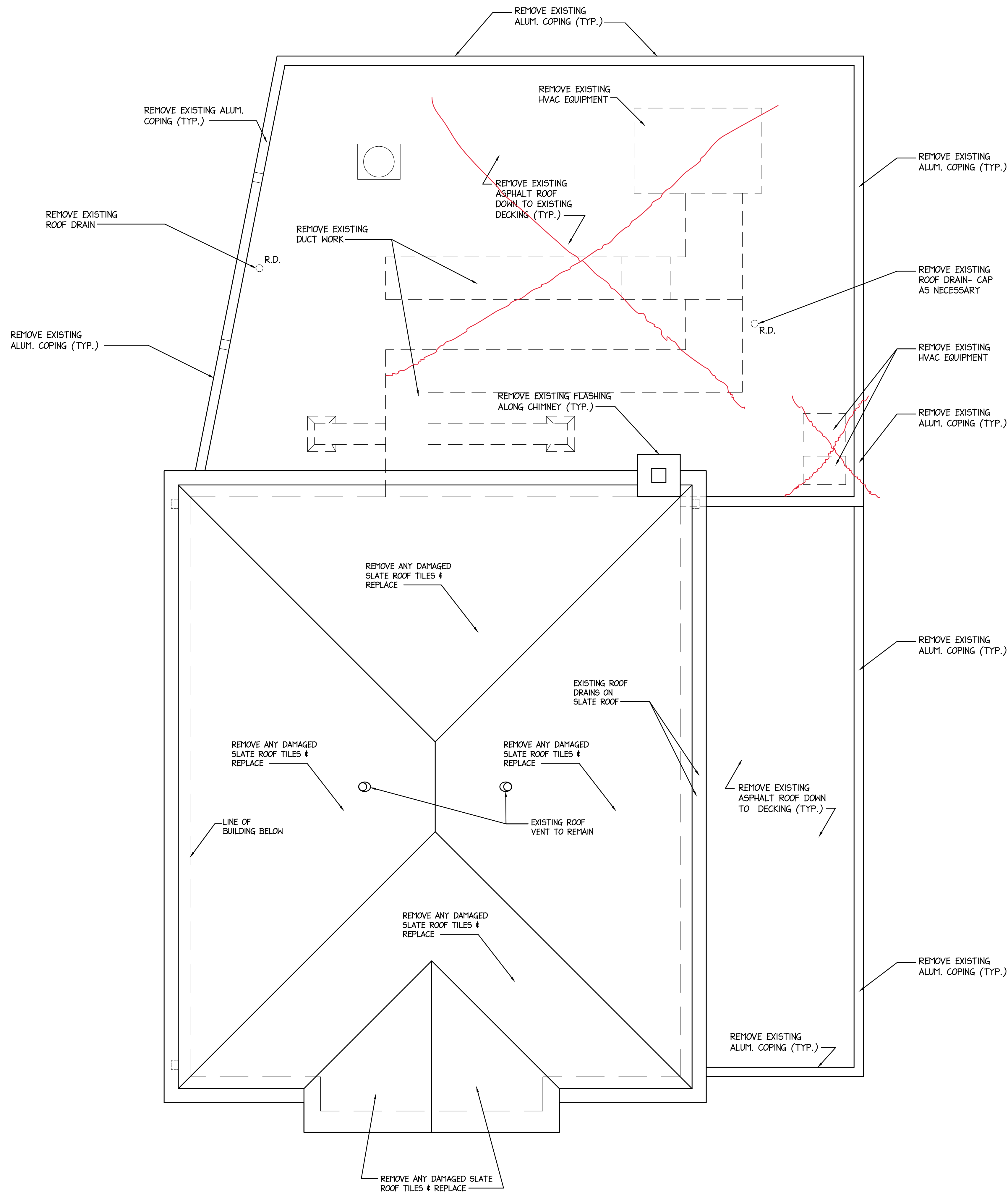


3
DA-3 DEMO SIDE ELEVATION- EXTERIOR WORK
SCALE: 3/16" = 1'-0"



4
DA-3 DEMO REAR ELEVATION- EXTERIOR WORK
SCALE: 3/16" = 1'-0"

No.	DATE	DESCRIPTION	REV'D BY
REVISIONS			
APPROVAL:		PROJECT:	
 Joseph F. McKernan Jr., Architects & Associates 100 Dobbs Lane Suite 204 Cherry Hill, New Jersey 08034 JOSEPH F. MCKERNAN JR., R.A. <small>AJLA, NJ ARCH. 01-0084, PA ARCH. 04-0040-X, CT ARCH. 7034</small>		ADA RENOVATIONS TO THE GLOUCESTER TOWNSHIP BLACK BOX COMMUNITY CENTER 3 S. BLACK HORSE PIKE BLACKWOOD, NEW JERSEY	
		TITLE: DEMO ELEVATIONS EXTERIOR WORK	
SCALE: AS NOTED PROJ. NO.: 1016 DATE: 9/14/23 REV'D: DRAWN BY: TC C.K.O. BY: DF		DIMENSIONS MUST BE VERIFIED BY CONTRACTOR. VERIFY THE ARCHITECT OF ANY DISCREPANCIES BEFORE PROCEEDING WITH CONSTRUCTION. DO NOT SCALE DRAWING.	
SEAL:		DA-3	




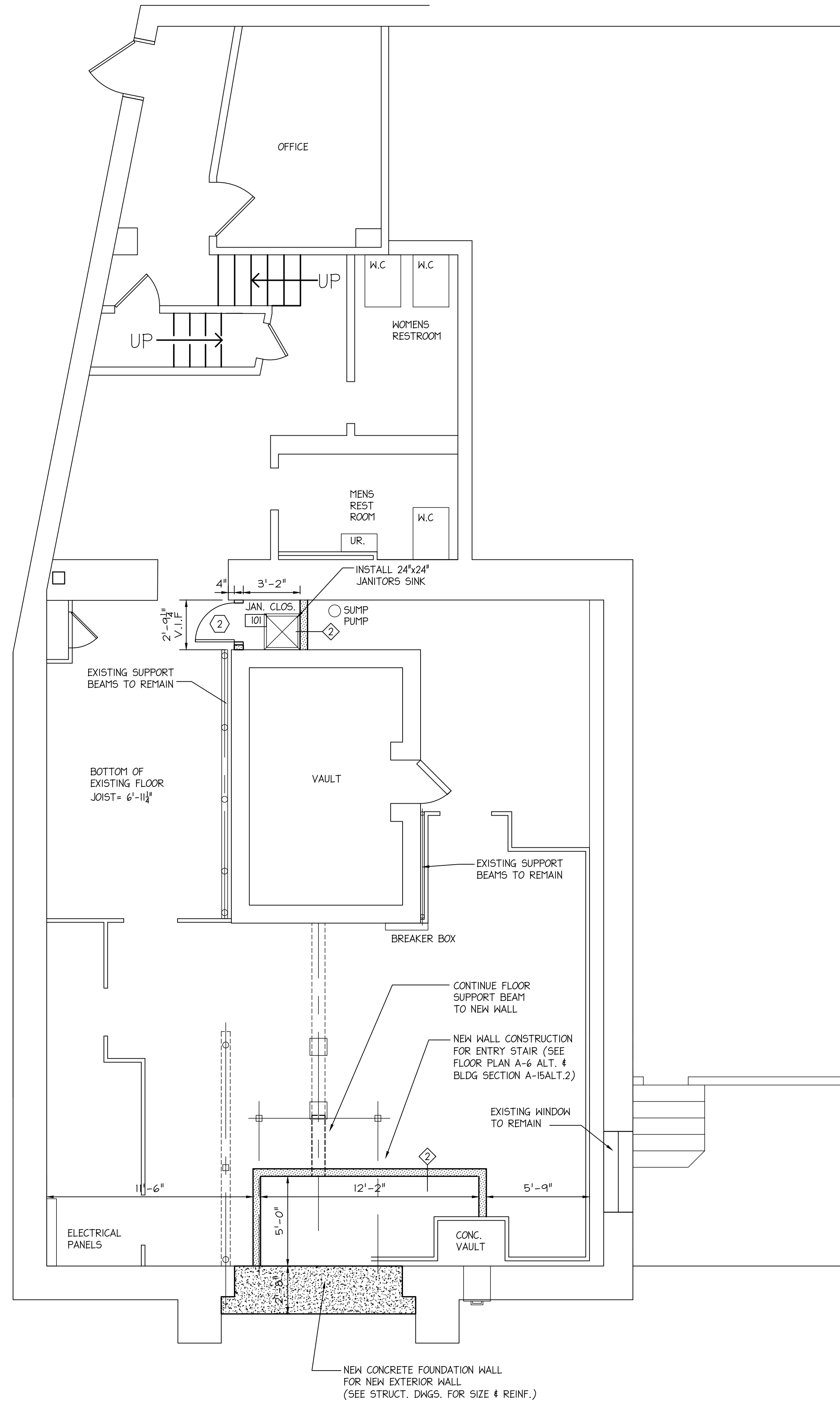
The Owners had a Phase 1 Cleanup already;
They removed all the ductwork and units;

1 DEMO ROOF PLAN- EXTERIOR WORK
DA-4 SCALE: 1/4" = 1'-0"

No.	DATE	DESCRIPTION	REV'D BY
APPROVAL:		PROJECT:	
		ADA RENOVATIONS TO THE GLOUCESTER TOWNSHIP BLACK BOX COMMUNITY CENTER	
		3 S.BLACK HORSE PIKE BLACKWOOD, NEW JERSEY	
		TITLE:	
		DEMO ROOF PLAN EXTERIOR WORK	
JOSEPH F. McKERNAN JR., R.A. A.J.A. NJ ARCH 01 0784 - PA ARCH 0A-0040-X - CT ARCH 7034		SEAL:	
		DIMENSIONS MUST BE VERIFIED BY CONTRACTOR. VERIFY THE ARCHITECT OF ANY DISCREPANCIES BEFORE PROCEEDING WITH CONSTRUCTION. DO NOT SCALE DRAWING.	
		SCALE: AS NOTED PROJNO.: 006 DATE: 9/14/23 REV'D: DRAWN BY: TC CHKD BY: DF	
		DRAWING NO. DA-4	

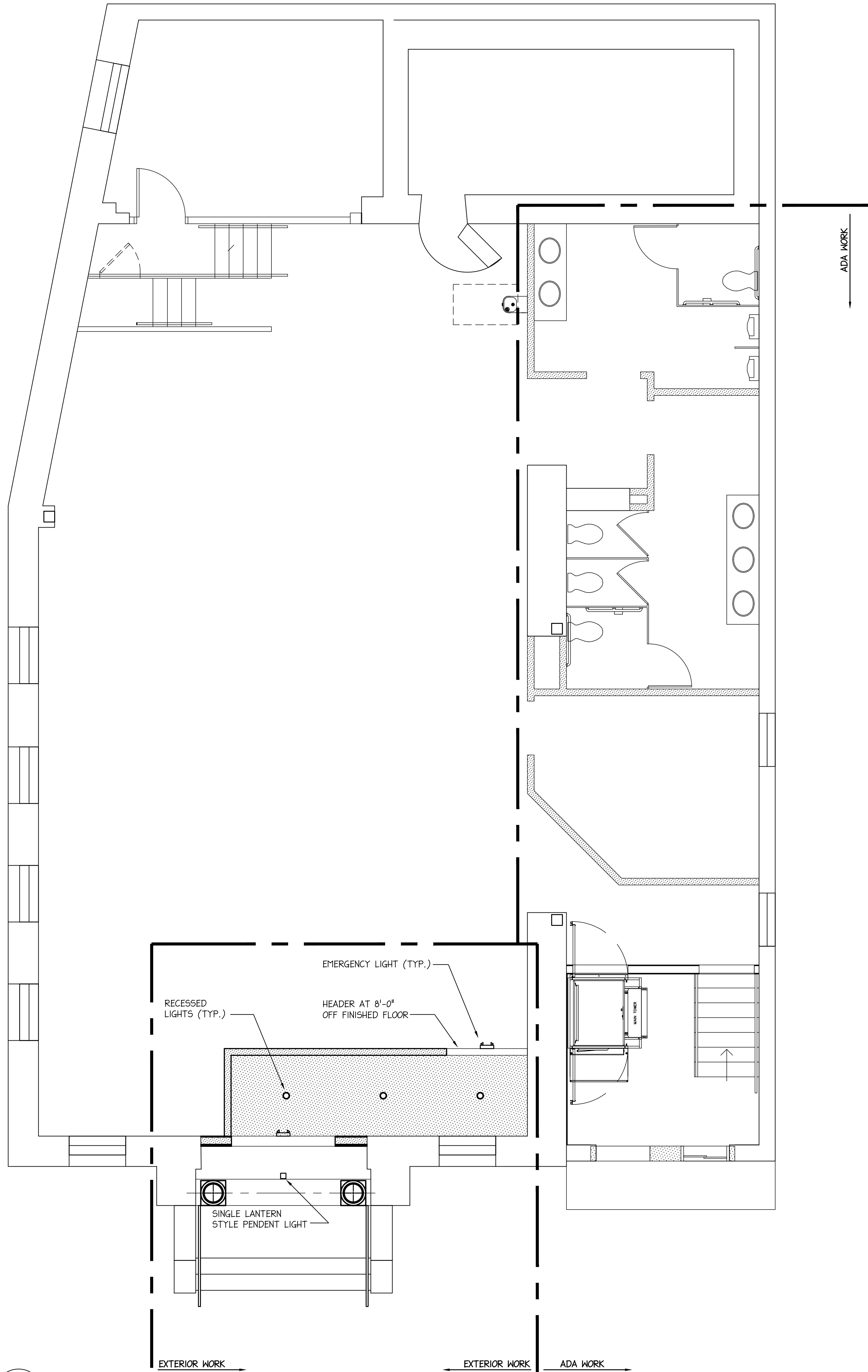


No.	DATE	DESCRIPTION			REVD BY
		REVISIONS			
APPROVAL:		PROJECT:			
<p style="text-align: center;">ADA RENOVATIONS TO THE GLOUCESTER TOWNSHIP BLACK BOX COMMUNITY CENTER</p> <p style="text-align: center;">3 S.BLACK HORSE PIKE BLACKWOOD, NEW JERSEY</p>					
		Joseph F. McKernan Jr., Architects & Associates 100 Dobbs Lane Suite 204 Cherry Hill, New Jersey 08034		TITLE: FLOOR PLANS & DETAILS- EXTERIOR WORK	
JOSEPH F. MCKERNAN JR., R.A. A.I.A. NJ ARCH A# 1084 - PA ARCH A# 0842-X - CT ARCH T034		SCALE:	SHOOTING MUST BE VERIFIED BY CONSTRUCTION MEASUREMENTS BEFORE PROCEEDING WITH CONSTRUCTION. DO NOT SCALE DRAWING.	SCALE: AS NOTED PRLDNG: 1/16" DATE: 9/14/23 REV'D:	DRAWING NO. A-6
			DRAWN BY: TC CHKD.BY: DF <small>ISSUED: ARCHITECTS & ASSOC. FORMING DATE</small>		



1
A-7 BASEMENT FLOOR PLAN- EXTERIOR WORK
SCALE: 1/4" = 1'-0"

No.	DATE	DESCRIPTION	REV'D BY
		REVISIONS	
APPROVAL:		PROJECT:	
		ADA RENOVATIONS TO THE GLOUCESTER TOWNSHIP BLACK BOX COMMUNITY CENTER 3 S. BLACK HORSE PIKE BLACKWOOD, NEW JERSEY	
Joseph F. McKernan Jr., Architects & Associates 100 Dobbs Lane Suite 204 Cherry Hill, New Jersey 08034		TITLE: BASEMENT FLOOR PLANS EXTERIOR WORK	
JOSEPH F. MCKERNAN JR., R.A. A.J.A. NJ ARCH. #10984 PA ARCH. #A-0840-X CT ARCH. 7534		SEAL:	DRAWING NO: A-7
		DIMENSIONS MUST BE VERIFIED BY CONTRACTOR. VERIFY THE ARCHITECT OF ANY DISCREPANCIES BEFORE PROCEEDING WITH CONSTRUCTION. DO NOT SCALE DRAWING.	SCALE: AS NOTED PROJ. NO.: 606 DATE: 9/14/23 REV'D: DRAWN BY: TC CHKD. BY: DF
		BASEMENT ARCHITECTS & ASSOCIATES COPYRIGHT 2023	

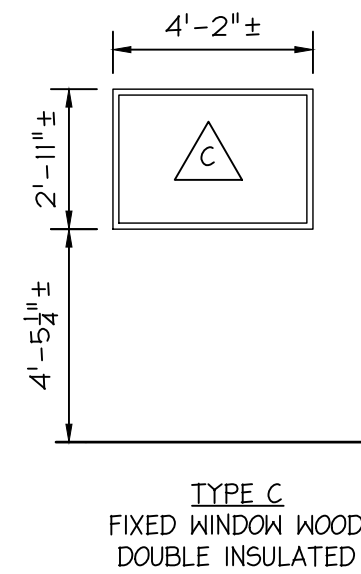
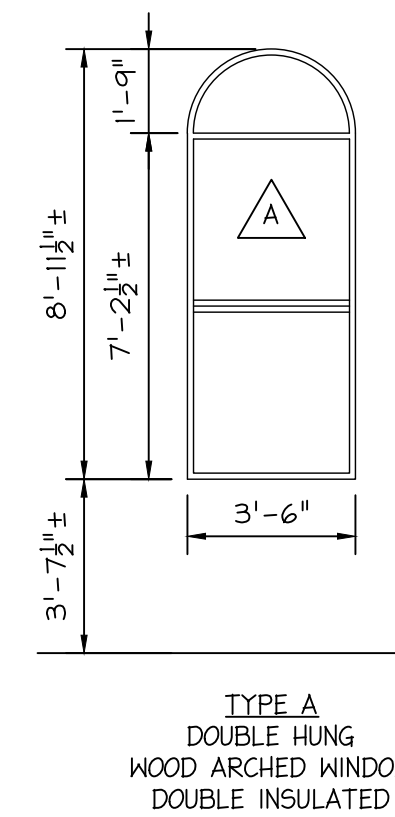
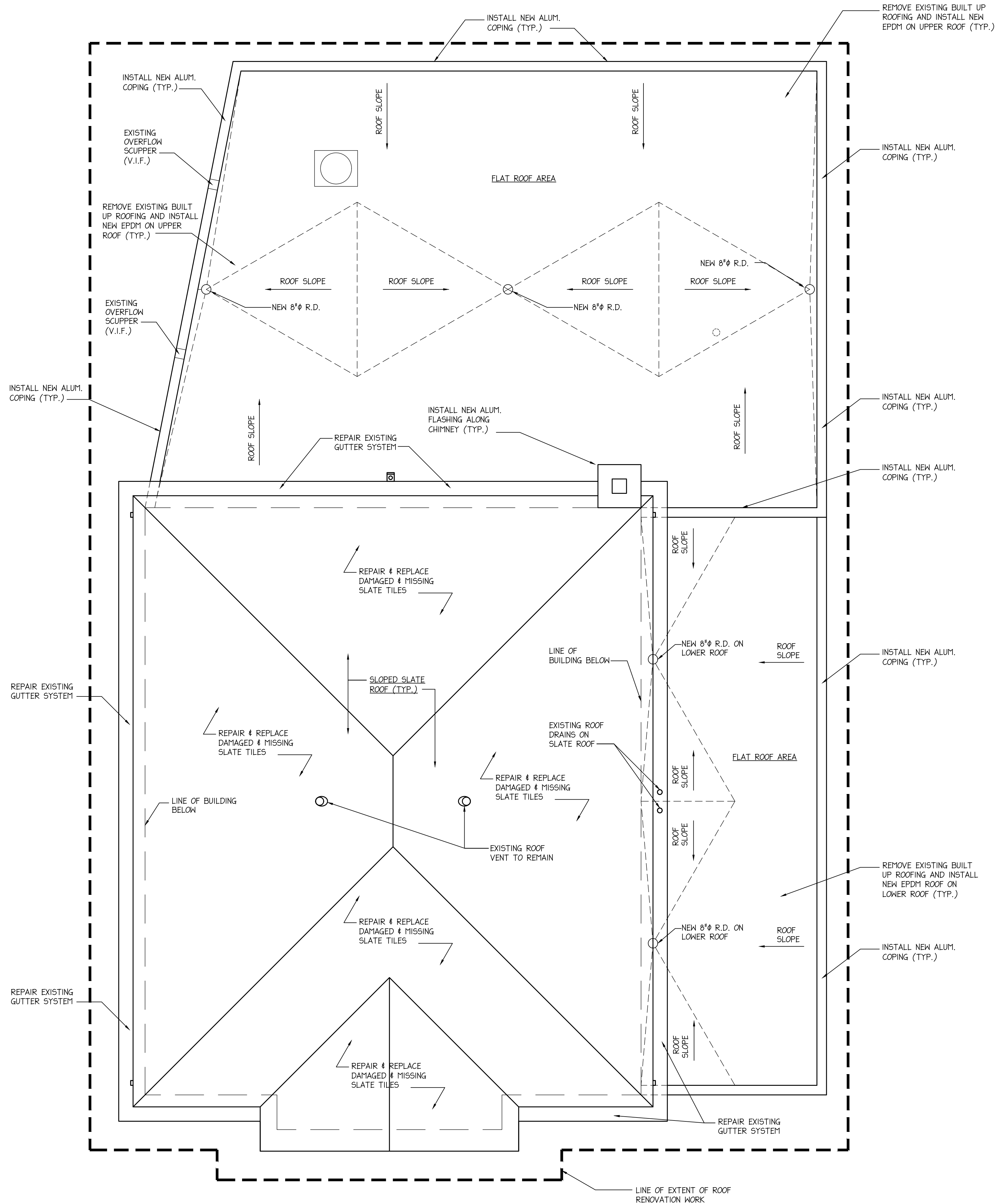


1
A-8
CEILING PLAN- EXTERIOR WORK
SCALE: 1/4" = 1'-0"

LEGEND:

- 5/8" GYP. BD ON EXISTING WOOD JOIST
- 4" RECESSED LIGHT
- EXIT SIGN w/ EMERGENCY LIGHT
- SINGLE LANTERN PENDANT LIGHT

No.		DATE	DESCRIPTION	REV'D BY
APPROVAL:		PROJECT:		
		ADA RENOVATIONS TO THE GLOUCESTER TOWNSHIP BLACK BOX COMMUNITY CENTER		
		3 S.BLACK HORSE PIKE BLACKWOOD, NEW JERSEY		
JOSEPH F. McKERNAN JR., R.A. A.J.A. NJ ARCH 01 0784 - PA ARCH 0A-0040-X - CT ARCH 7034		SEAL:		TITLE
DIMENSIONS MUST BE VERIFIED BY CONTRACTOR. VERIFY THE ACCURACY OF ANY DIMENSIONS BEFORE PROCEEDING WITH CONSTRUCTION. DO NOT SCALE DRAWING.		SCALE: AS NOTED PROJ. NO.: 006 DATE: 9/14/23 REV'D: DRAWN BY: TC CHKD BY: DF		CEILING PLAN EXTERIOR WORK
				DRAWING NO. A-8



NOTE:
 • GC TO VERIFY ALL WINDOW DIMENSIONS PRIOR TO INSTALLATION
 • WINDOWS TO BE MARVIN WOOD WINDOWS OR EQUAL (TYP.)

2 WINDOW TYPES- ALTERNATE #1


SCALE: 1/4" = 1'-0"

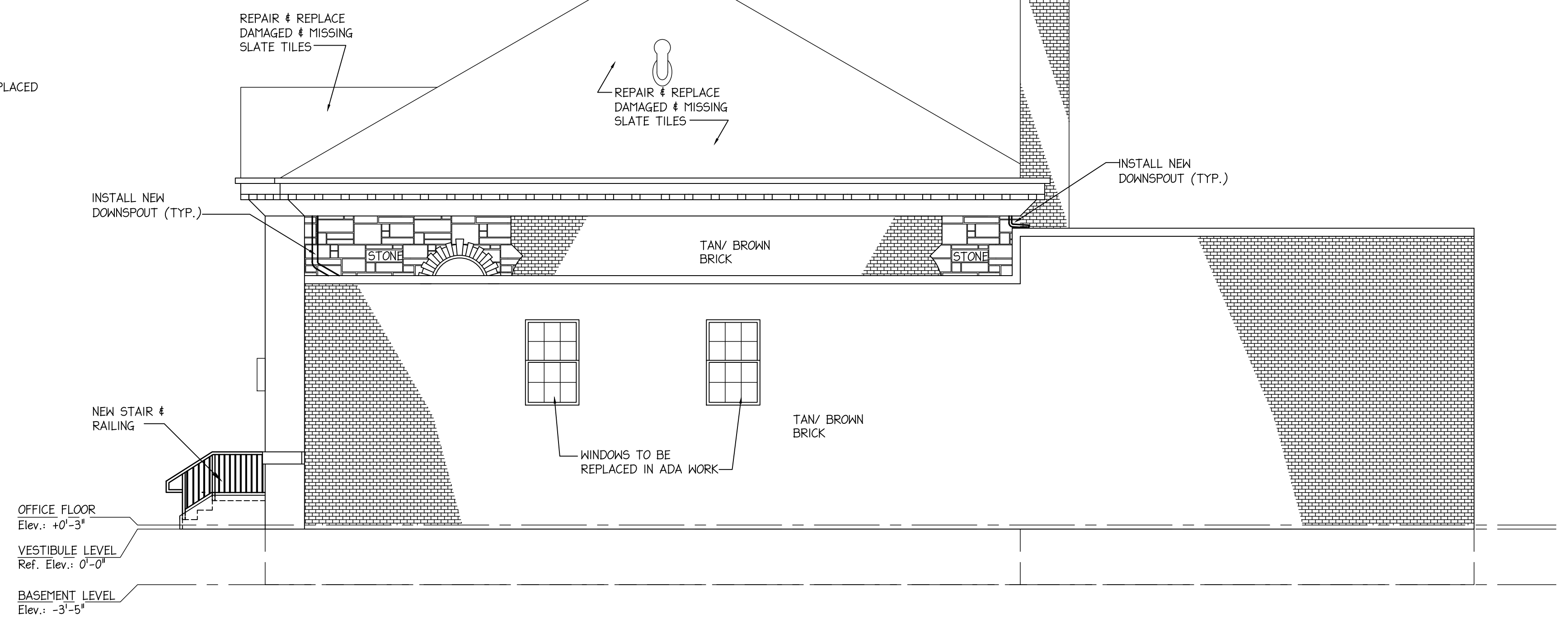
SLATE ROOF NOTES:

- FROM THE SLATE ROOF REPORT DATED 7-29-22 THERE IS ±20 YEARS OF LIFE LEFT IN THE SLATE ROOF. HOWEVER, SIGNIFICANT REPAIRS ARE NECESSARY.
- SLATE REPAIR, HIP CAPS, VALLEY, GUTTER PATCHING AND REPAIR IS NECESSARY.
- LEADER HEADS AND DOWN SPOUTS NEED TO BE REPLACED.
- CRICKET FLASHING AND SOIL STACK COLLARS SHOULD BE REPLACED.
- SEE ROOF REPORT FOR FULL DETAILS.
- PROVIDE \$25,000 ALLOWANCE FOR SLATE ROOF REPAIRS.

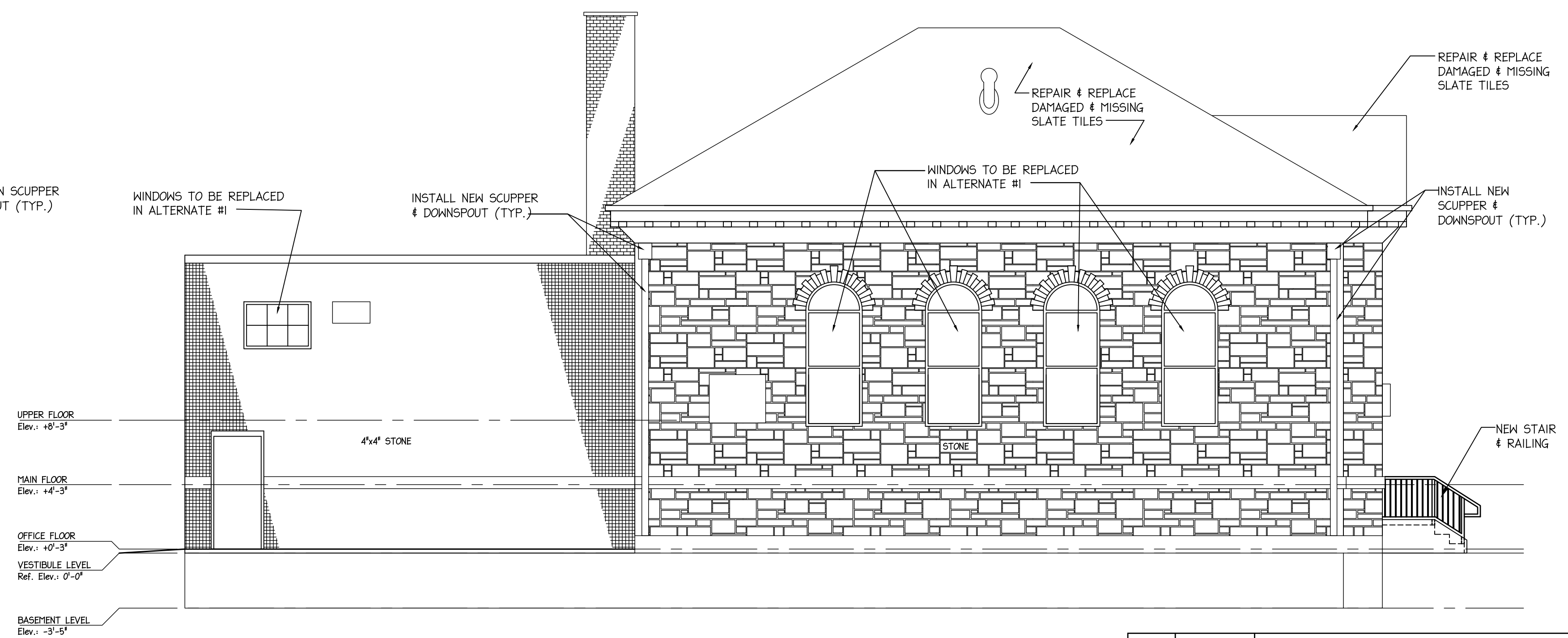
1 ROOF PLAN- EXTERIOR WORK

SCALE: 1/4" = 1'-0"

No.		DATE	DESCRIPTION	REV'D BY
APPROVAL:		PROJECT:		
		ADA RENOVATIONS TO THE GLOUCESTER TOWNSHIP BLACK BOX COMMUNITY CENTER 3 S. BLACK HORSE PIKE BLACKWOOD, NEW JERSEY		
 Joseph F. McKernan Jr., Architects & Associates 100 Dobbs Lane Suite 204 Cherry Hill, New Jersey 08034		TITLE ROOF PLAN EXTERIOR WORK		
JOSEPH F. MCKERNAN JR., R.A. AIA, AIA NJ ARCH. #11984 PA ARCH. #A-0840-X CT ARCH. 7534		SCALE: AS NOTED PROJ. NO. 006 DATE: 9/14/23 REV'D: DRAWN BY: TC CHECKED BY: DF		
		DIMENSIONS MUST BE VERIFIED BY CONTRACTOR BEFORE ANY CONSTRUCTION. IF ANY DISCREPANCIES ARE FOUND, THE ARCHITECT SHALL BE NOTIFIED IMMEDIATELY. DO NOT SCALE DRAWING.		
		COPYRIGHT 2023		




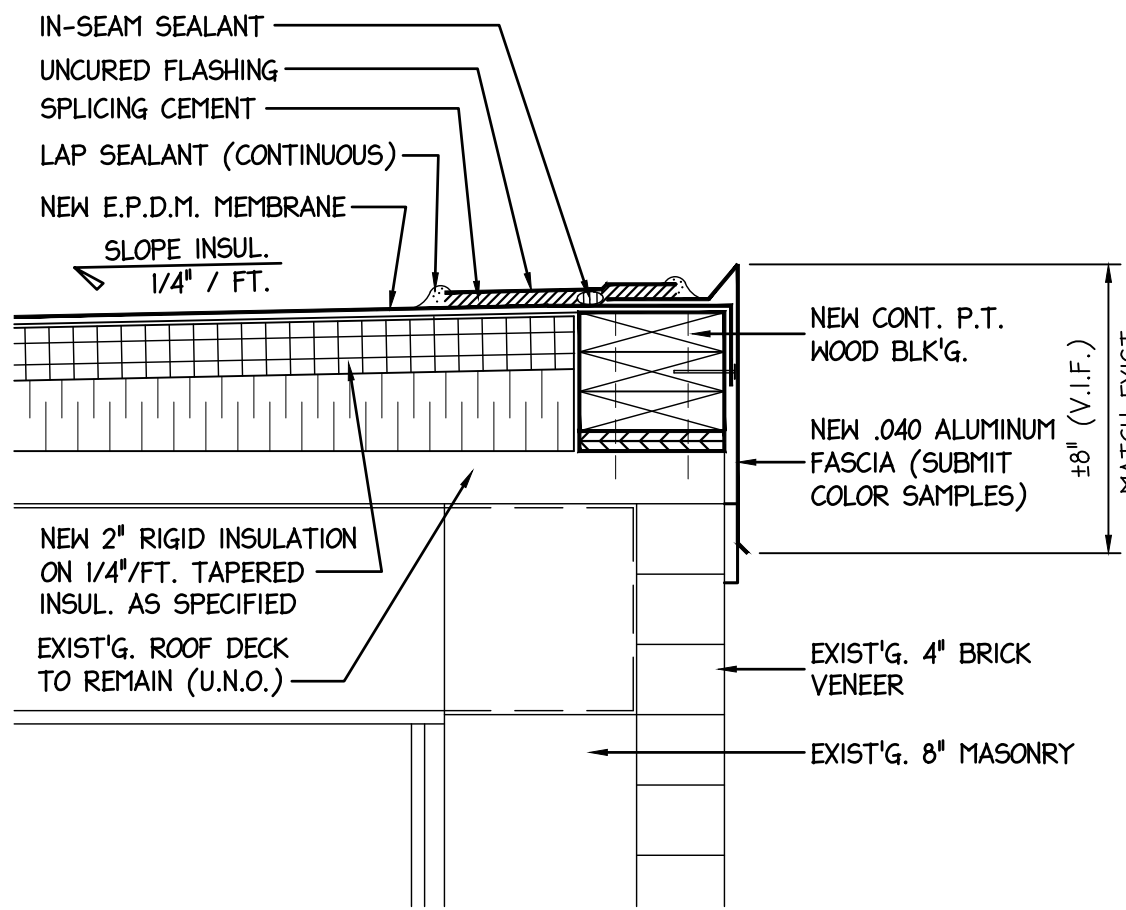
2 SIDE ELEVATION- ALT. #1 & 2
A-10 SCALE: 3/16" = 1'-0"



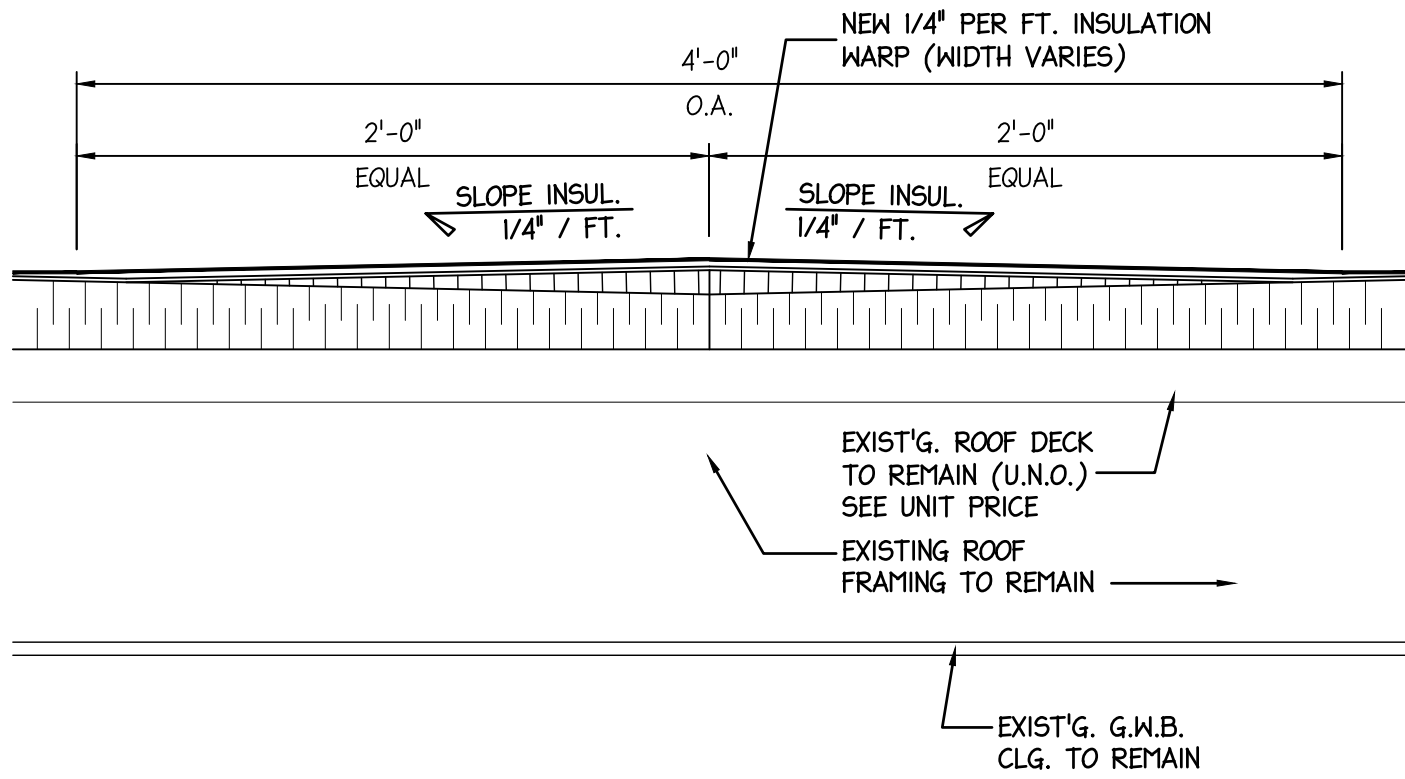
4 REAR ELEVATION- EXTERIOR WORK
A-10 SCALE: 3/16" = 1'-0"

- ADDITIONAL NOTES:
- MORTAR ANALYSIS TO BE COMPLETED TO DETERMINE THE TYPE OF MORTAR THAT EXIST IN THE BUILDING TO DETERMINE A FORMULA FOR NEW GROUT TO BE USED

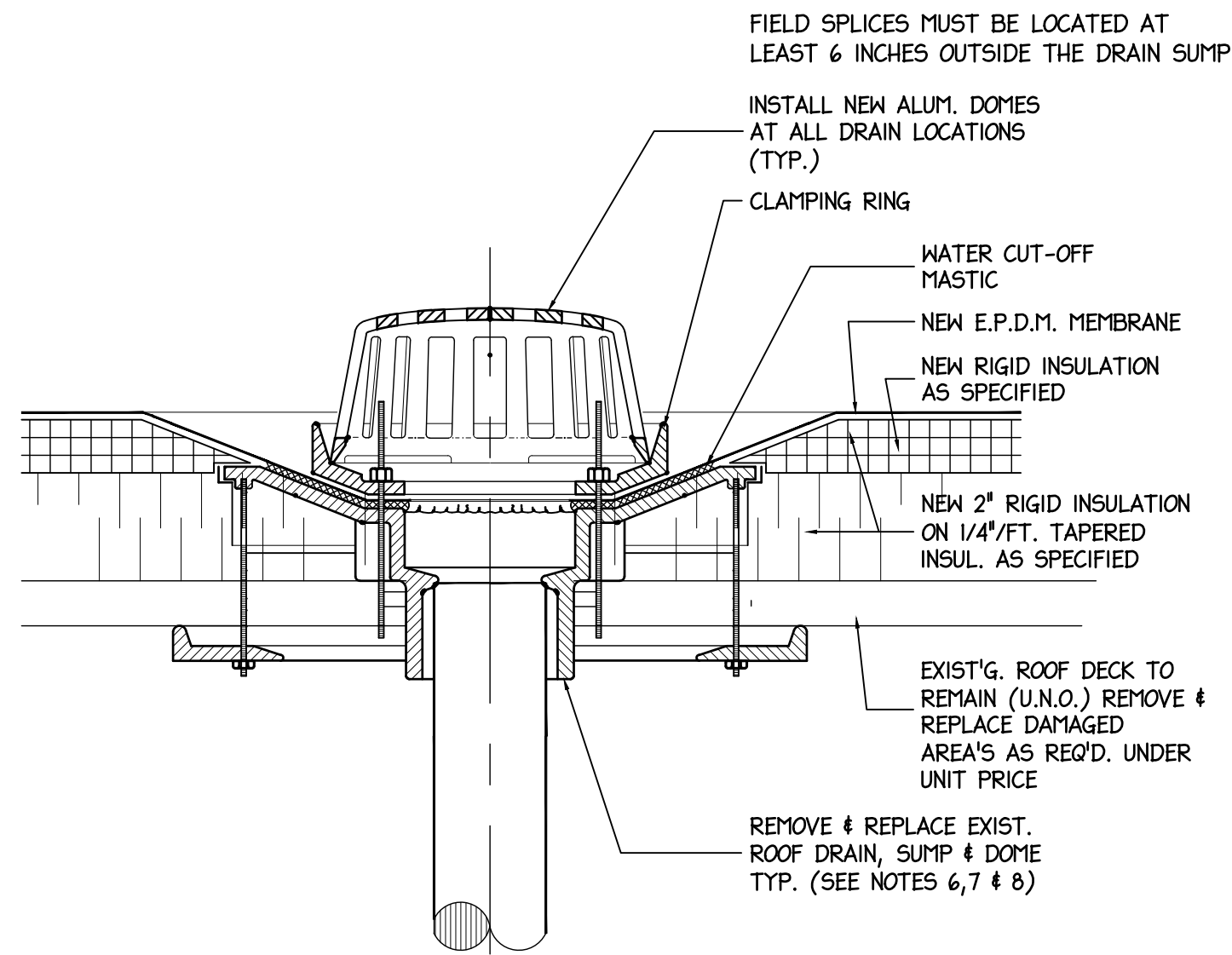
No.	DATE	DESCRIPTION						REV'D BY	
REVISIONS									
APPROVAL:		PROJECT:							
ADA RENOVATIONS TO THE GLOUCESTER TOWNSHIP BLACK BOX COMMUNITY CENTER									
3 S.BLACK HORSE PIKE BLACKWOOD, NEW JERSEY									
		Joseph F. McKernan Jr., Architects & Associates 100 Dobbs Lane Suite 204 Cherry Hill, New Jersey 08034						TITLE:	
								ELEVATIONS EXTERIOR WORK	
JOSEPH F. MCKERNAN JR., R.A. A/E ARCHIT AT SPEN A PAUCH KKA-GRAD-X - CT ARCH TUSA		SCALE:	DRAUGHTING MUST BE REVIEWED FOR CONSTRUCTION PURPOSES BY AN ENGINEER BEFORE PROCEEDING WITH CONSTRUCTION. DO NOT SCALE DRAWING.					DRAWING NO.	
			SCALE: AS NOTED PROLONG.: 1/16" DATE: 9/4/73 REV'D: DRAWN BY: TC CHK'D BY: DF					A-10	
			JENNIFER MCHEWES & ASSOC. FROTHICK DET						



1 PERIMETER EDGE E.P.D.M. / FASCIA DETAIL
SCALE: N.T.S.

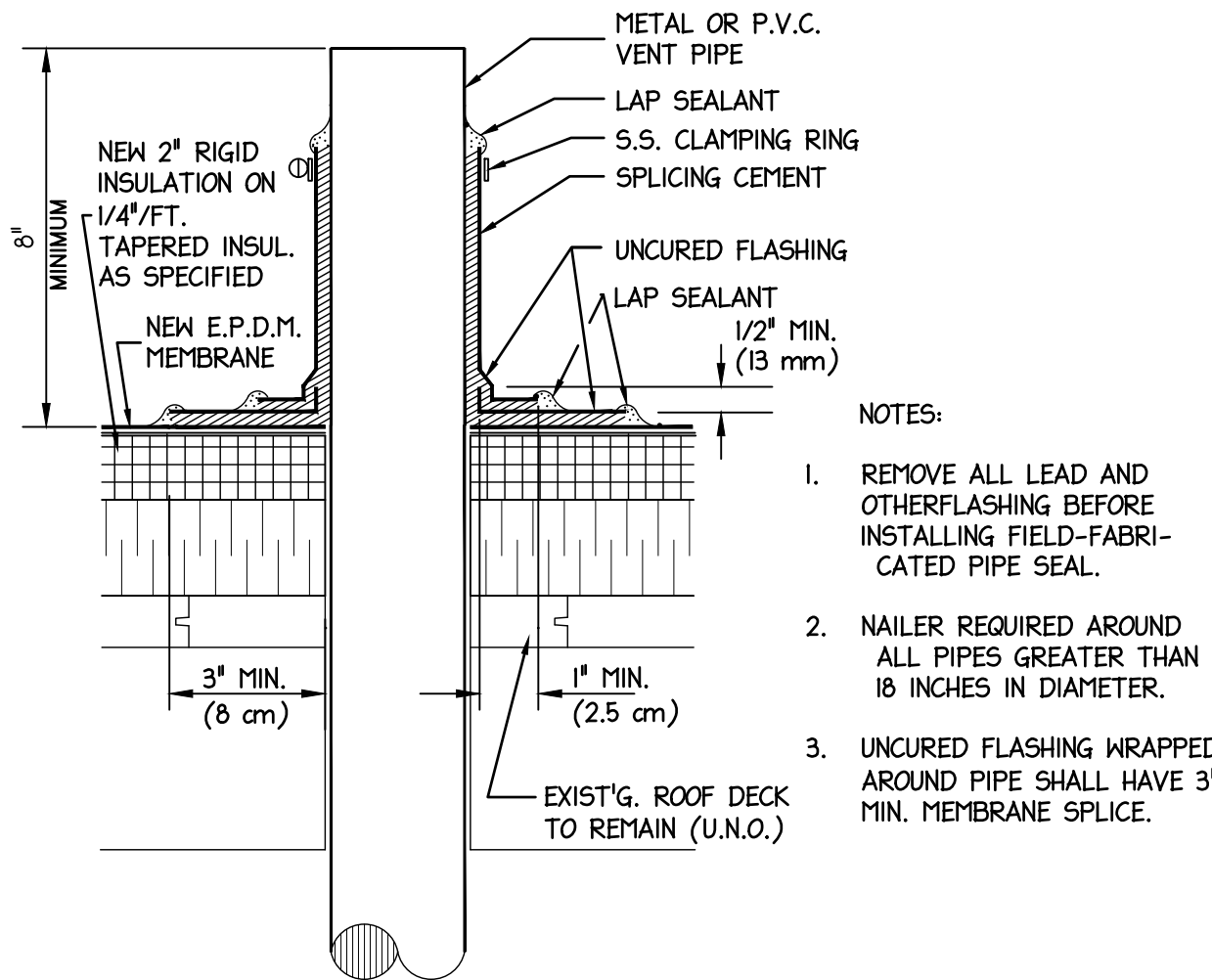


2 ROOF CRICKET DETAIL
SCALE: N.T.S.

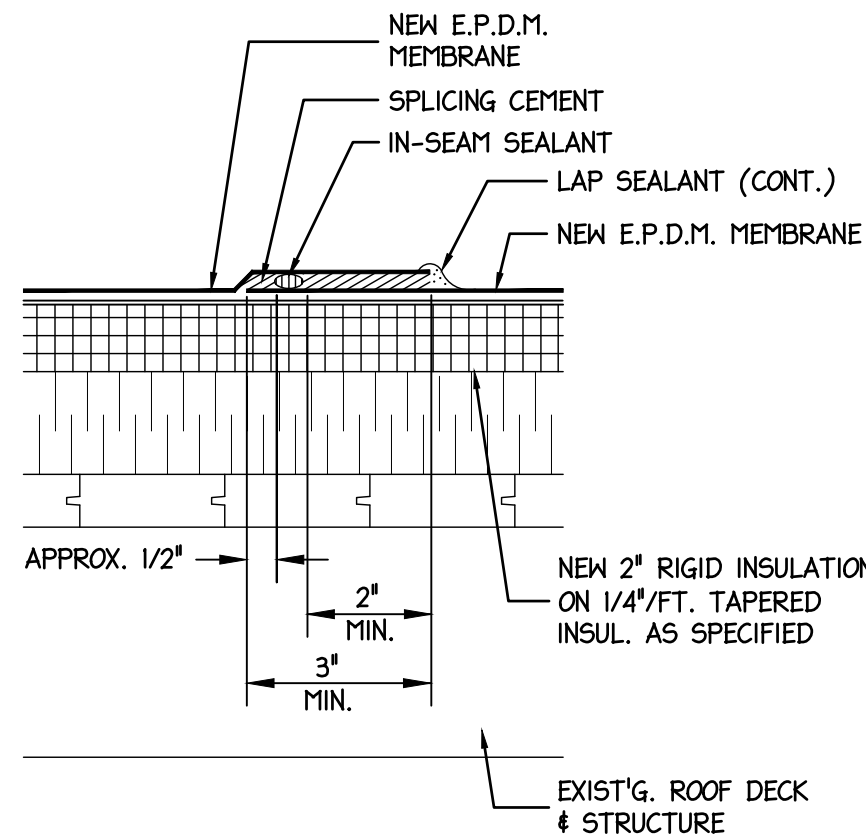


3 ROOF DRAIN DETAIL
SCALE: N.T.S.

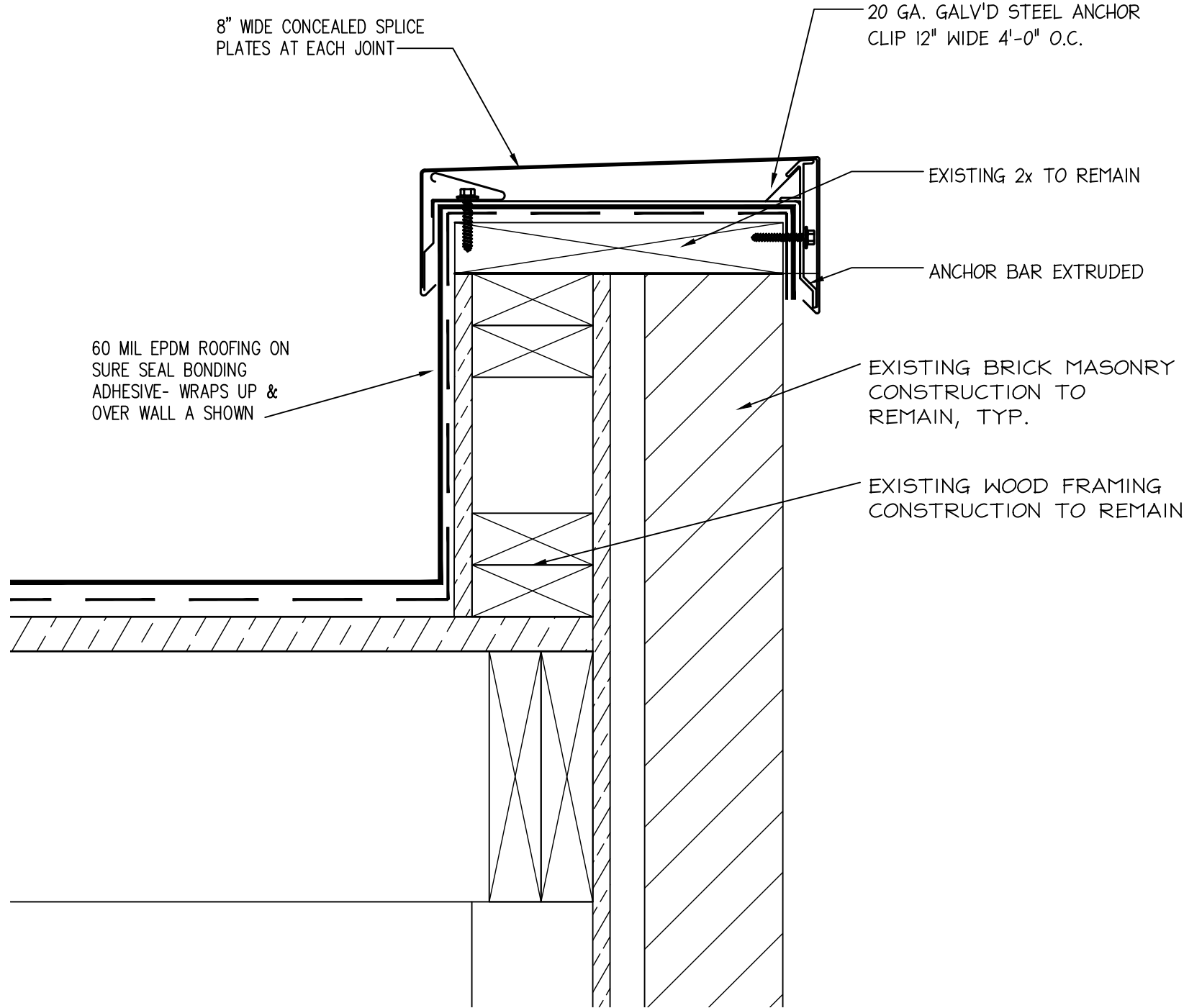
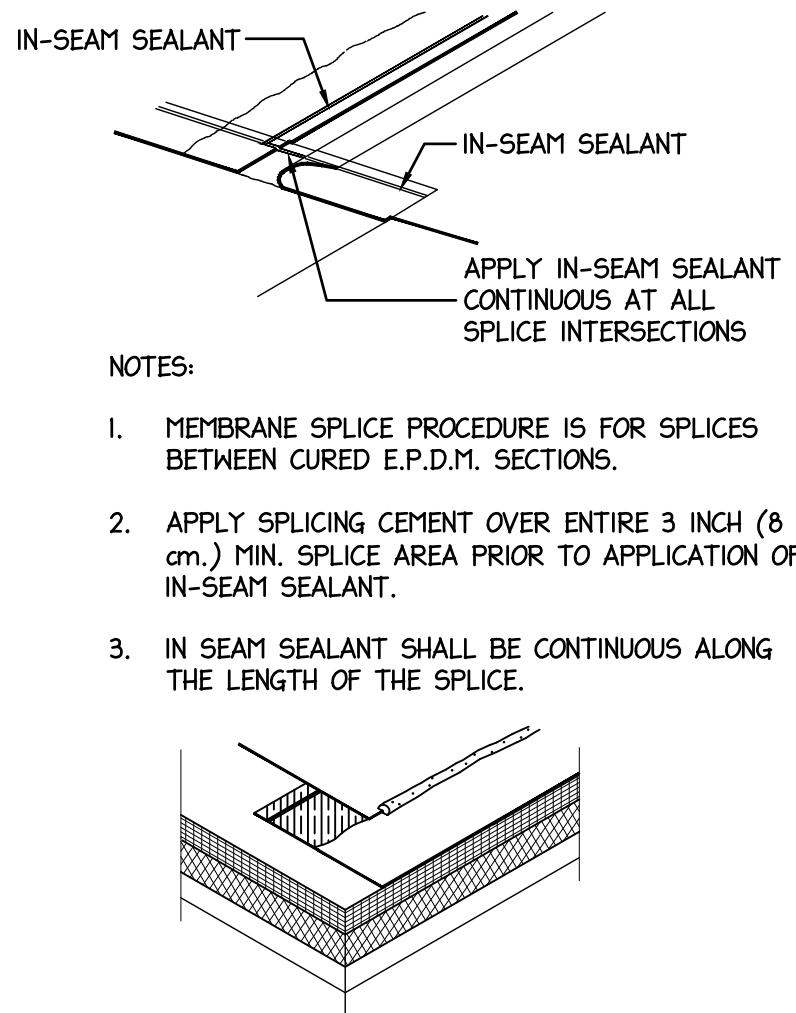
NOTE: NEW RIGID INSULATION AND TAPERED INSULATION TO BE MINIMUM 3" TOTAL



4 FIELD FABRICATED PIPE SEAL
SCALE: N.T.S.



5 MEMBRANE SPLICE DETAIL
SCALE: N.T.S.



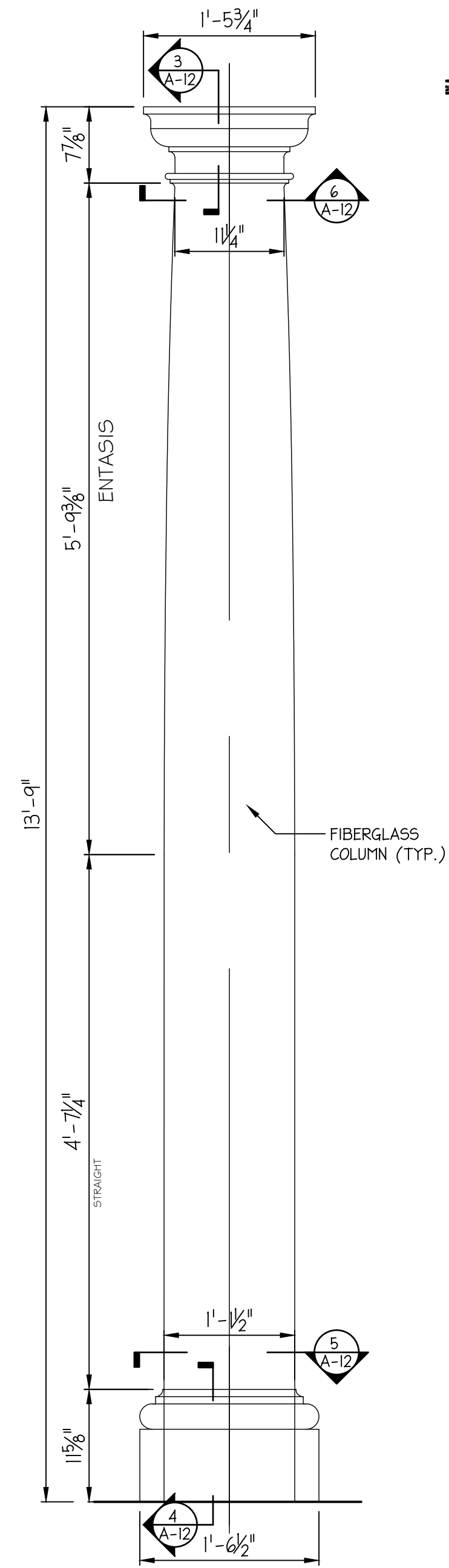
6 COPING DETAIL - EXTERIOR WORK
SCALE: 3" = 1'-0"

GENERAL NOTES:

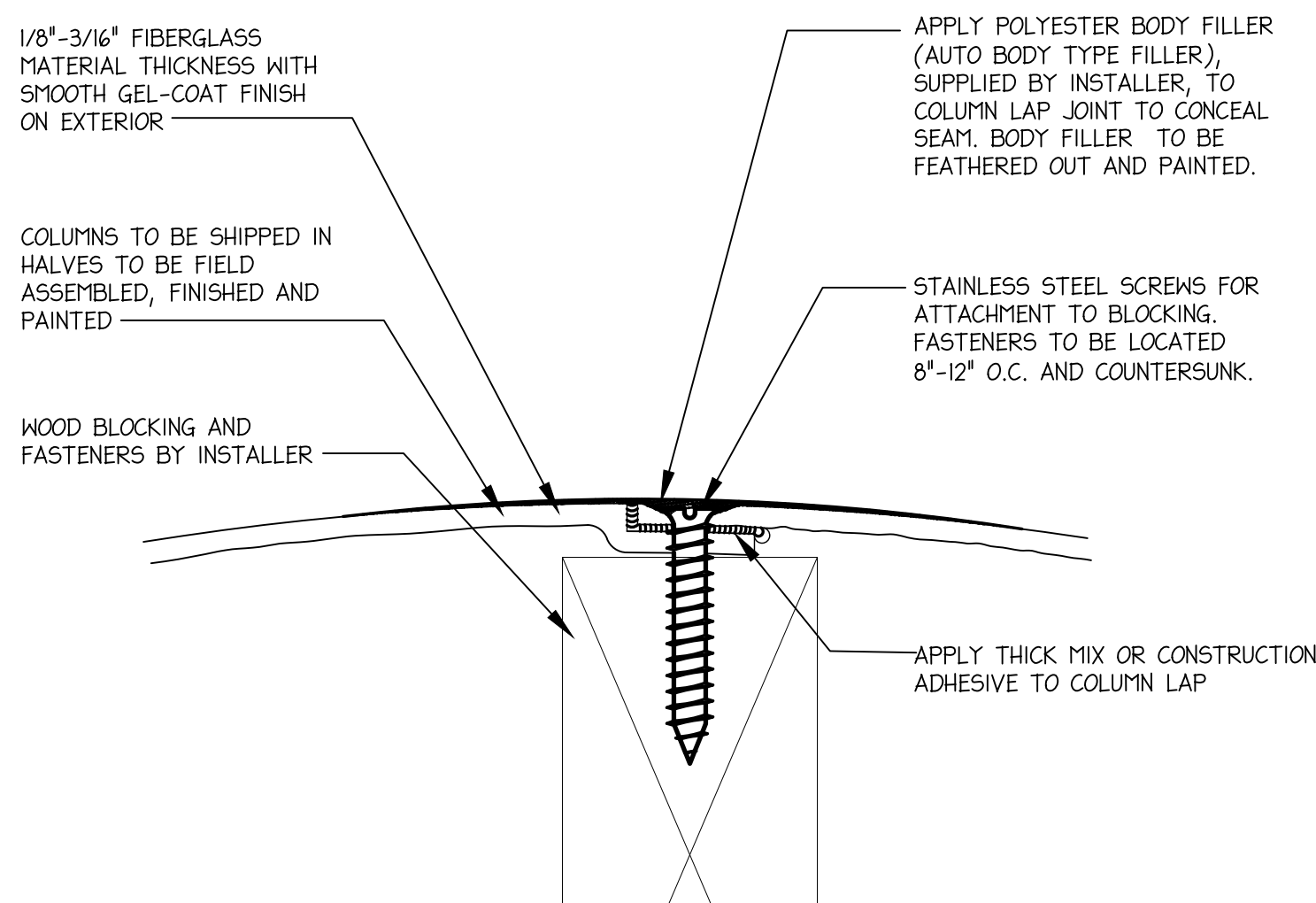
1. TYPICAL ASSUMED EXISTING ROOF CONSTRUCTION IS (1) LAYER OF BALLASTED/NON-BALLASTED E.P.D.M. ROOFING ON RIGID AND TAPERED INSULATION ON WOOD DECKING & ±8" WOOD ROOF FRAMING OR ON POURED CONCRETE DECKS.
2. TYPICAL NEW ROOF CONSTRUCTION WILL BE NEW 2" RIGID POLYISOCYANURATE INSULATION ON NEW 1/4" PER FT. TAPERED INSULATION, ON EXISTING DECKING. MECHANICALLY ATTACH THE NEW INSULATION INTO THE EXISTING DECKING @ 1 FASTENER EVERY 2 SQUARE FEET OR AS RECOMMENDED BY THE ROOF MANUFACTURER. THE CONTRACTOR WILL INSTALL A FULLY ADHERED E.P.D.M. MEMBRANE SET ON THE FACE OF THE NEW RIGID POLYISOCYANURATE INSULATION. (SEE SPECIFICATION FOR ALTERNATE MATERIALS.)
3. THE CONTRACTOR WILL REPLACE ALL EXISTING FASCIA & DRIP EDGES w/ NEW .040 ALUM. SUBMIT A FULL RANGE OF STANDARD COLOR SAMPLES FOR ALL ROOF AREAS TO BE REPLACED. (SEE ROOF PLAN FOR LOCATIONS)
4. ALL ROOF DRAIN LOCATIONS SHOWN ARE EXISTING. PROVIDE & INSTALL NEW DRAIN SUMPS TYP., REPLACE OR MODIFY EXISTING DRAINAGE PIPING & PROVIDE NEW ALUMINUM DOMES @ EACH LOCATION. (TYP. FOR 6-8 DRAINS @ EACH BUILDING TO BE RENOVATED.)
5. THE CONTRACTOR WILL PROVIDE A NIGHT SEAL ON ALL INCOMPLETE AREAS OF THE ROOF DURING CONSTRUCTION. NO AREAS OF EXPOSED ROOF DECK WILL BE LEFT OVER NIGHT.
6. THE CONTRACTOR WILL PROVIDE & INSTALL NEW WARPED INSULATION SLOPING 1/4" PER FT. TO CENTER OF ROOF DRAINS. THE LAYOUT WILL CONFORM TO EXISTING ROOF DRAIN LOCATIONS (SEE TYP. ROOF PLAN FOR APPROXIMATE LOCATIONS) G.C. TO FIELD VERIFY.
7. THE CONTRACTOR WILL COMPLETE A TOTAL TEAR-OFF AND PROPER DISPOSAL OF ALL EXISTING LAYERS OF ROOFING AND INSULATION. (EXISTING CONSTRUCTION AS NOTED IN LINE ONE. CONTRACTOR WILL FIELD VERIFY ALL CONDITIONS.)
8. THE APPROXIMATE PER BUILDING TOTAL ROOF AREA TO BE REPLACED IS ±5,133 S.F. G.C. TO FIELD VERIFY ALL CONDITIONS.
9. THE CONTRACTOR WILL BE RESPONSIBLE TO FIELD VERIFY ALL DIMENSIONS, QUANTITIES & CONDITIONS.
10. DIMENSIONS ARE SHOWN TO THE CENTER OF ROOF DRAINS TO ASSIST THE CONTRACTOR w/ THE LAYOUT OF THE NEW INSULATION WARPS.
11. ALL ROOF DRAINS SHOWN ARE EXISTING. FINAL LAYOUT OF INSULATION WARPS WILL BE REFLECTED ON THE CONTRACTORS SHOP DRAWINGS.
12. THE CONTRACTOR WILL MECHANICALLY CLEAN ALL DRAIN PIPING FROM THE ROOF TO ENSURE THAT NO DEBRIS OR BLOCKAGES EXIST. AFTER THE ROOF RENOVATIONS HAVE BEEN COMPLETED. (TYPICAL ON THE (2) STORY APARTMENT BUILDINGS IN THIS SCOPE OF WORK.)

13. THE CONTRACTOR WILL COORDINATE DUMPSTER PLACEMENT w/ THE OWNER AND ARCHITECT. THE CONTRACTOR WILL BE RESPONSIBLE TO RESTORE THE SURFACES OF ANY AREAS DISTURBED BY PLACEMENT OF THE DUMPSTER OR CONSTRUCTION TRAFFIC. A DAILY SITE CLEAN-UP WILL BE COMPLETED BY THE CONTRACTOR. (THE CONTRACTOR'S USE OF ON SITE DUMPSTER'S PROVIDED BY THE HOUSING AUTHORITY FOR USE BY THE RESIDENTS IS PROHIBITED.)
14. ALL PEDESTRIAN WALKWAYS BELOW ROOF DEMOLITION OR RENOVATION WILL BE CORDONED OFF WITH YELLOW CAUTION TAPE UNTIL COMPLETION OF THE WORK.
15. THE CONTRACTOR WILL PERFORM A DAILY CLEAN-UP OF THE SITE AND AREAS AROUND THE DUMPSTER.
16. THE CONTRACTOR WILL POST SIGNAGE ON INTERIOR DOORS AROUND THE BUILDINGS WITH INFORMATION ABOUT THE ALTERNATE PASSAGE FOR RESIDENTS DURING COMPLETION OF CONSTRUCTION.
17. SPECIAL PRECAUTIONS WILL BE TAKEN NOT TO INTERFERE w/ THE RESIDENTS, FLOW OR FUNCTION OF THE BUILDINGS. ALL UNITS ARE OCCUPIED.
18. THE CONTRACTOR AND ALL EMPLOYEE'S ARE REQUIRED TO REGISTER DAILY @ THE SECURITY POST WHEN ENTERING AND LEAVING THE SITE.
19. THE COMPLEX IS FULLY GATED GIVING THE CONTRACTOR LIMITED ACCESS TO SOME OF THE SITE AND IT'S PERIMETER.
20. STORAGE OF MATERIALS ON SITE WILL BE LIMITED, THERE ARE SECURITY ISSUES TO BE CONSIDERED WHILE ON THE SITE. ROOF AREAS TO BE COMPLETED CAN BE LOADED DAILY WITH MATERIALS. ANY TOOLS OR MATERIALS LEFT ON SITE WILL BE THE RESPONSIBILITY OF THE CONTRACTOR.
21. THERE IS NO ACCESS TO THE ROOF FROM THE INTERIOR OF THE APARTMENTS, ACCESS CAN ONLY BE ACCOMPLISHED ON THE EXTERIOR BY A LADDER OR LIFT PROVIDED BY THE CONTRACTOR.
22. THE CONTRACTOR WILL PROVIDE ALTERNATE PRICING TO REPLACE LOW SLOPED SHINGLED ROOFS @ ENTRY OF EACH APARTMENT. G.C. FIELD VERIFY CONDITIONS AND QUANTITIES (SEE BID SECTION OF SPECIFICATION FOR PRICE BREAKDOWN.
23. G.C. TO PROVIDE DISCRETE LOCATION OF SPOT-A-POT. VERIFY LOCATION WITH OWNER BEFORE BRINGING TO SITE.

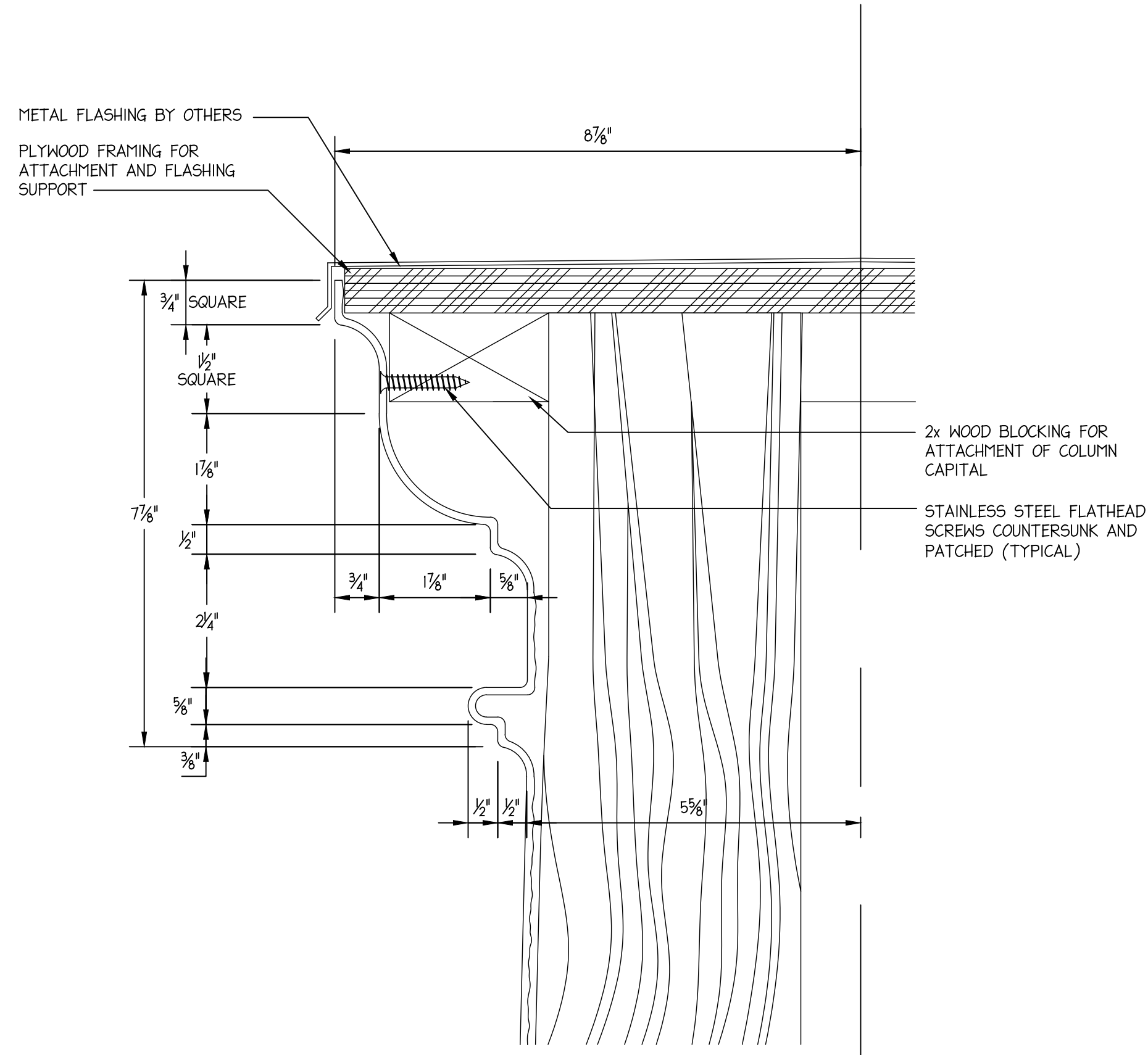
No.	DATE	DESCRIPTION	REV'D BY
APPROVAL:		PROJECT:	
		ADA RENOVATIONS TO THE GLOUCESTER TOWNSHIP BLACK BOX COMMUNITY CENTER	
		3 BLACK HORSE PIKE, BLACKWOOD, NEW JERSEY	
Joseph F. McKernan Jr., Architects & Associates 100 Dobbs Lane Suite 204 Cherry Hill, New Jersey 08034		TITLE: ROOF DETAILS EXTERIOR WORK	
JOSEPH F. MCKERNAN JR., R.A. AIA NJ ARCH #11984 PA ARCH RA-0840-X CT ARCH 7034		SCALE: AS NOTED PROJ. NO. 1006 DATE: 9/14/23 REV'D: DRAWN BY: TC CHKD BY: DF	
		DIMENSIONS MUST BE VERIFIED BY CONTRACTOR. VERIFY THE ARCHITECT OF ANY DISCREPANCIES BEFORE PROCEEDING WITH CONSTRUCTION. DO NOT SCALE DRAWING.	
		REVISIONS	



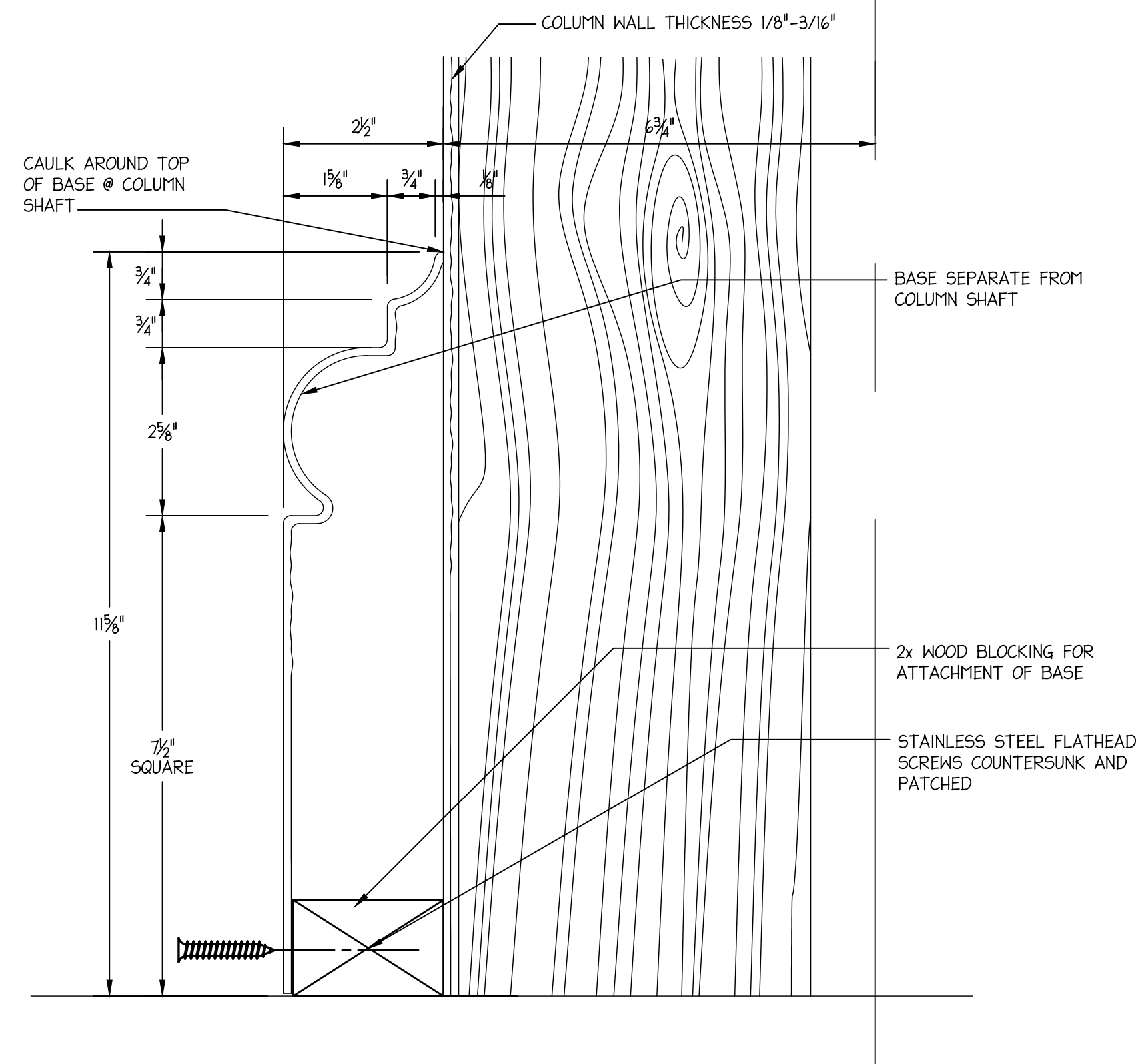
1 COLUMN ELEVATION- EXTERIOR WORK
SCALE: 1" = 1'-0"



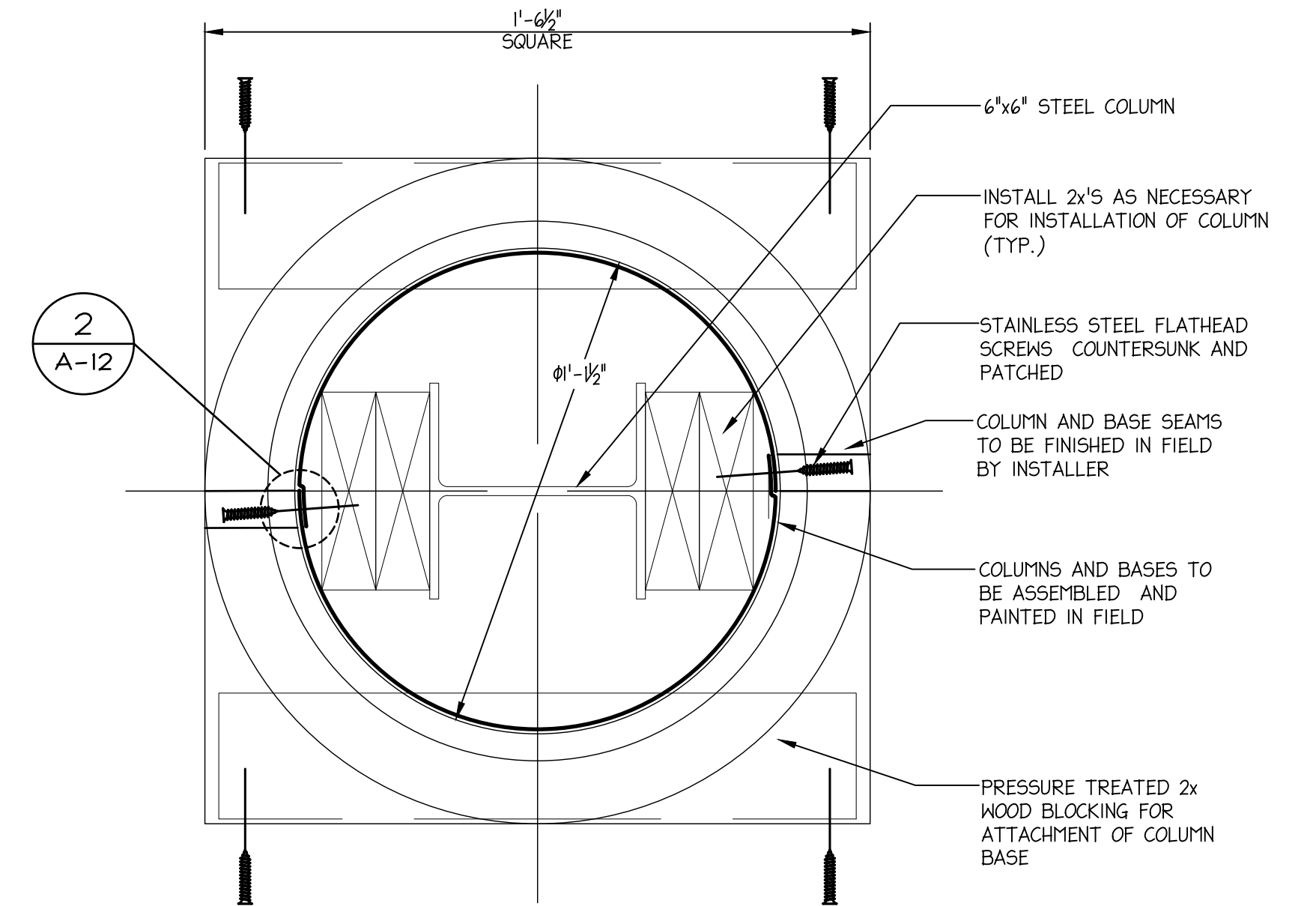
2 COLUMN LAP JOINT DETAIL- EXTERIOR WORK
SCALE: 1:1



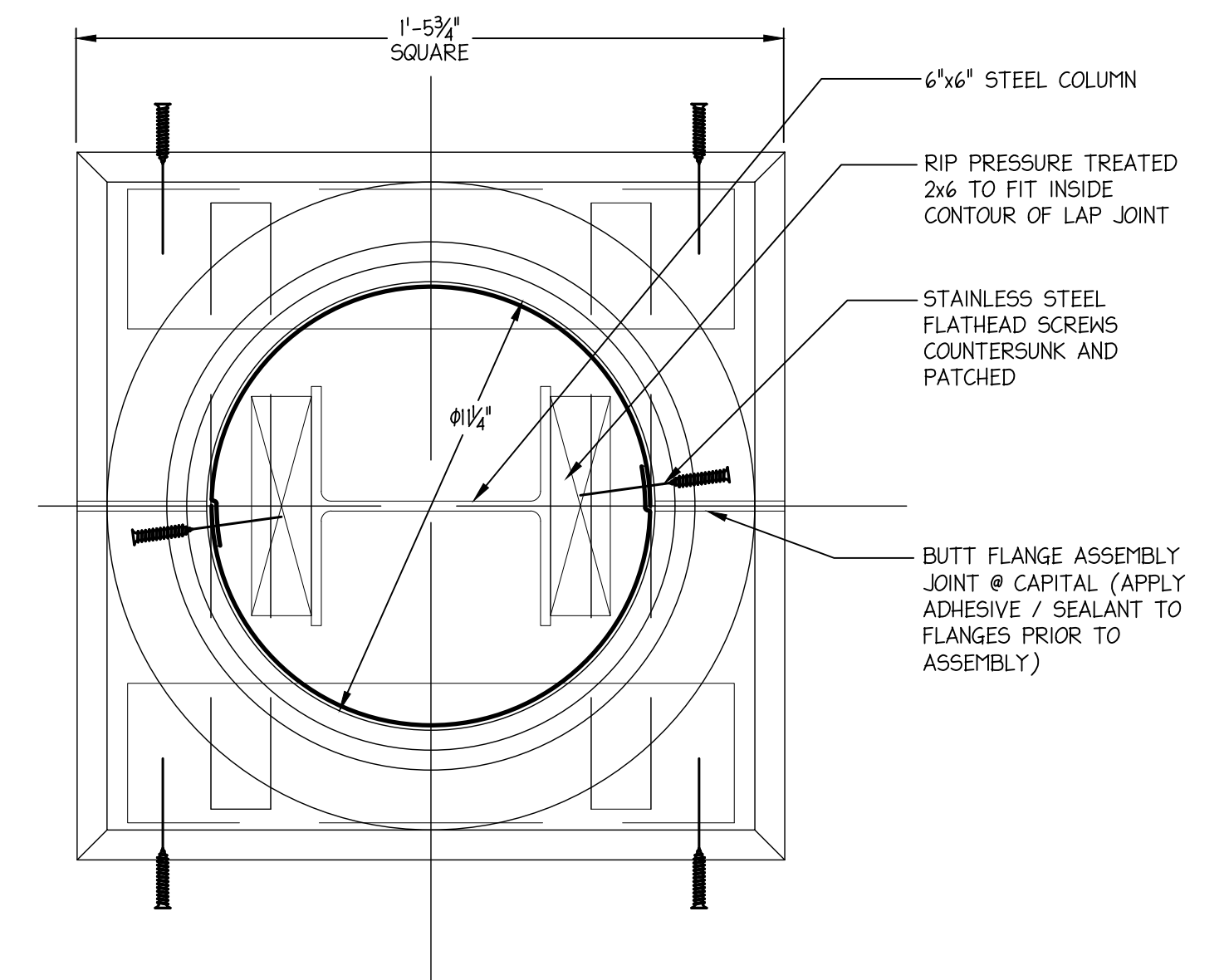
3 COLUMN ELEVATION- EXTERIOR WORK
SCALE: 1" = 1'-0"




4 COLUMN ELEVATION- EXTERIOR WORK
SCALE: 1" = 1'-0"



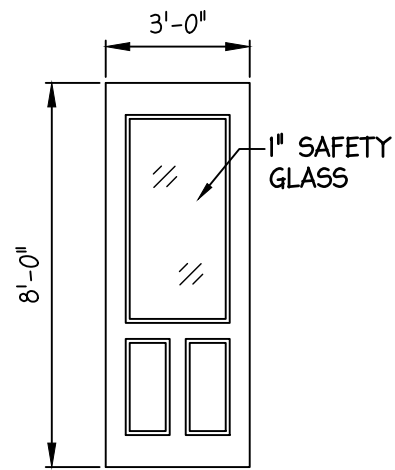
5 COLUMN PLAN DETAIL -EXTERIOR WORK
SCALE: 3" = 1'-0"



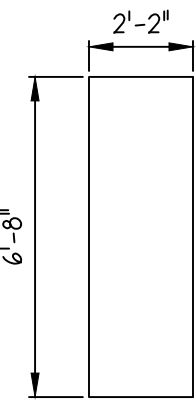
6 CAPITAL FROM BELOW DETAIL -EXTERIOR WORK
SCALE: 3" = 1'-0"

No.	DATE	DESCRIPTION	REV'D BY
REVISIONS			
APPROVAL:		PROJECT:	
 Joseph F. McKernan Jr., Architects & Associates 100 Dobbs Lane Suite 204 Cherry Hill, New Jersey 08034		ADA RENOVATIONS TO THE GLOUCESTER TOWNSHIP BLACK BOX COMMUNITY CENTER 3 S.BLACK HORSE PIKE BLACKWOOD, NEW JERSEY	
		TITLE: COLUMN DETAILS EXTERIOR WORK	
JOSEPH F. MCKERNAN JR., R.A. <small>AJIA: NJ ARCH 01 0784 PA ARCH 04-0840-X CT ARCH 7034</small>		SCALE: AS NOTED PROJ. NO.: 006 DATE: 9/14/23 REV'D: _____ DRAWN BY: TC CHECKED BY: DF	
<small>DIMENSIONS MUST BE VERIFIED BY CONTRACTOR. VERIFY THE ACCURACY OF ANY DIMENSIONS BEFORE PROCEEDING WITH CONSTRUCTION. DO NOT SCALE DRAWING.</small>		A-12	

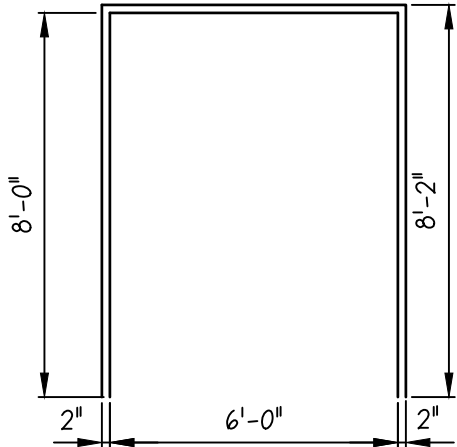
DOOR SCHEDULE											
DOOR NO.	OPENING SIZE	TYPE	THICK	MAT.	FRAME						REMARKS
					TYPE	MAT.	HEAD	JAMB	SILL	HDW. SET	
1	(2) 3'-0" x 8'-0"	1	1 3/4"	WD.	A	H.M.	1	1	-	-	
2	2'-2" x 6'-8"	2	1 3/4"	WD.	B	H.M.	2	2	-	-	



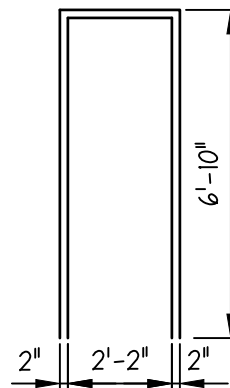
TYPE 1
6 PANEL BIRCH
DOOR w/ MERLOT
STAIN SANDING
SEALER & 2
COATS OF POLY.



TYPE 2
WD. FLUSH DOOR



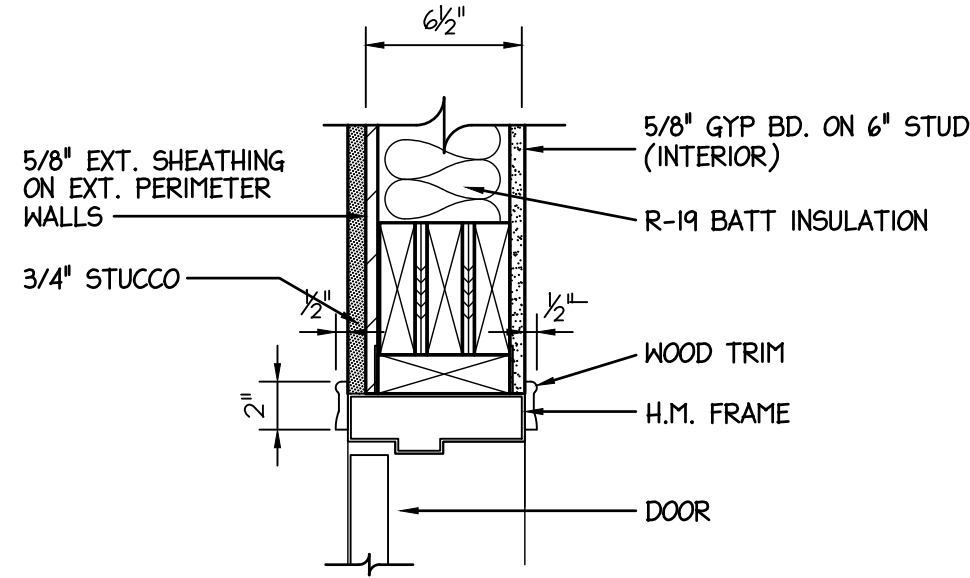
TYPE A
H.M. FRAME
PAINTED



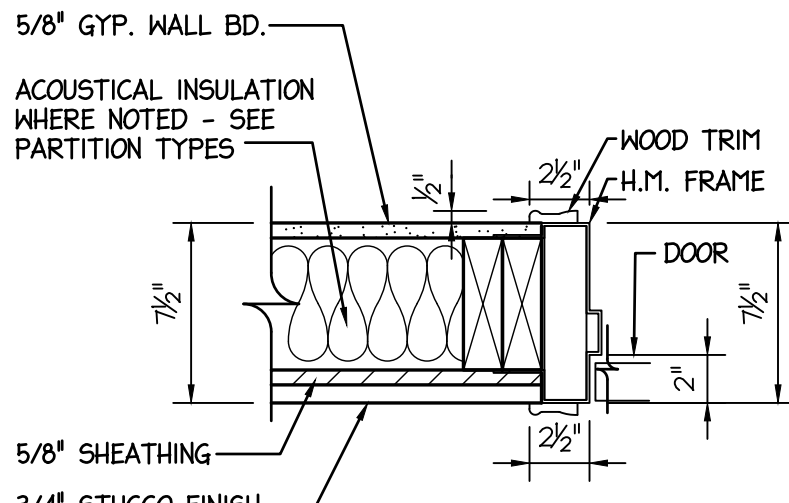
TYPE B
H.M. FRAME
PAINTED

1 DOOR TYPES- EXTERIOR WORK
A-13 SCALE: 1/4" = 1'-0"

2 FRAME TYPES- EXTERIOR WORK
A-13 SCALE: 1/4" = 1'-0"

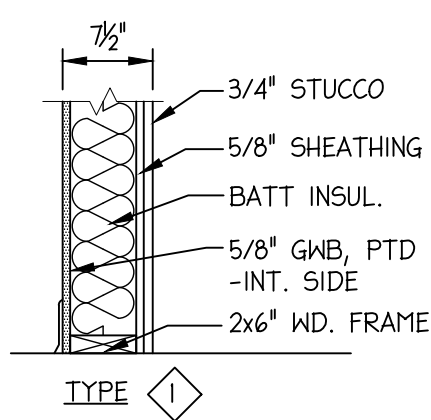


1 EXT.- HEAD

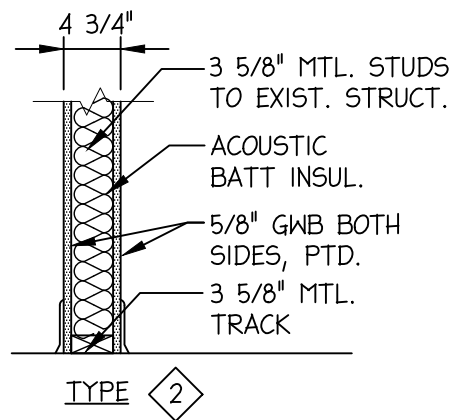


1 EXT.- JAMB

3 HEAD & JAMB DETAILS- EXTERIOR WORK
A-13 SCALE: 1/4" = 1'-0"



TYPE 1



TYPE 2

4 WALL TYPES- EXTERIOR WORK
A-13 SCALE: 3/4" = 1'-0"

ROOM FINISH SCHEDULE						
ROOM NO.	ROOM NAME	FLOOR	BASE	WALLS	CEILING	HEIGHT
100	ENTRY	L.V.T.	R.B.	PTD.	GYP. BD.	8'-0"
101	JANITORS CLOSET	EXIST.	EXIST.	PTD.	-	-

FINISH LEGEND

FLOORING

CPT = CARPET TILE

VCT. = VINYL COMPOSITION TILE

LVT. = LINEAR VINYL TILE

T. = PORCELAIN TILE

S.C. = SEALED CONCRETE

BASE

C.B. = CARPET BASE

V.B. = VINYL BASE

R.B. = RUBBER BASE

T.B. = TILE BASE

WALLS

PTD. = PAINTED

VNC. = VINYL WALL COVERING

T. = PORCELAIN TILE

CEILINGS

A.C.T. = ACOUSTIC CEILING TILE

GYP. BD = GYPSUM CEILING BOARD

FINISH NOTES:

- ALL SURFACES SHALL BE PREPARED AS RECOMMENDED BY THE PAINT MANUFACTURER.
- ALL PAINT SHALL BE APPLIED AS RECOMMENDED BY THE PAINT MANUFACTURER.
- PROVIDE THE FOLLOWING PAINT SYSTEMS FOR THE VARIOUS SUBSTRATES INDICATED UNLESS OTHERWISE NOTED:
GYPSUM BOARD PARTITIONS
1ST COAT PRIMER (TINY FOR DARK HUES)
2ND ALKYD, SEMI-GLOSS ENAMEL
3RD ALKYD, SEMI-GLOSS ENAMEL
DOOR, FRAMES, MISC. METALS
1ST COAT PRIMER (DELETE IF FACTORY)
2ND COAT, SEMI-GLOSS ENAMEL
3RD ALKYD, SEMI-GLOSS ENAMEL
GYPSUM BOARD SOFFITS
1ST COAT PRIMER
2ND COAT LATEX, EGGSHELL ENAMEL
3RD COAT LATEX, EGGSHELL ENAMEL
- CONTRACTOR TO REPAINT ANY EXISTING HOLLOW METAL DOORS AND FRAME DAMAGED DURING CONSTRUCTION.
- ALL CEILINGS AND WALL FINISHES TO HAVE A "B" FLAME SPREAD FINISH
- DRYWALL CEILINGS & UNDERSIDE SOFFITS TO BE PAINTED BERBER WHITE UNLESS OTHERWISE NOTED.
- ALL VISIBLE BLOCKING BELOW COUNTERS TO BE PAINTED TO MATCH WALL BEYOND.
- ALL EXCESS MISC. FINISH MATERIAL (TILE, STONE, WOOD, ETC.) SHALL BE TURNED OVER TO OWNER, NOT DISCARDED. CONTRACTOR SHALL BE RESPONSIBLE FOR THE PURCHASE OF ALL MATERIALS IF REPAIRS ARE REQUIRED AND OVERAGES HAVE NOT BEEN SUPPLIED.
- ALL INTERIOR PRODUCTS INCLUDING BUILDING MATERIALS, FINISHES, AND FURNITURE PRODUCTS SPECIFIED FOR THE PROJECT ARE TO FALL BELOW ACCEPTABLE CONTAMINANT LEVELS AS OUTLINED IN "HSDS".

No.	DATE	DESCRIPTION	REV'D BY
APPROVAL:		PROJECT:	
		ADA RENOVATIONS TO THE GLOUCESTER TOWNSHIP BLACK BOX COMMUNITY CENTER	
		3 S.BLACK HORSE PIKE BLACKWOOD, NEW JERSEY	
Joseph F. McKernan Jr., Architects & Associates 100 Dobbs Lane Suite 204 Cherry Hill, New Jersey 08034		TITLE SCHEDULES & DETAILS EXTERIOR WORK	
JOSEPH F. MCKERNAN JR., R.A. NJ ARCH 01 0784 PA ARCH 0A-0040-X CT ARCH 7034		SCALE: AS NOTED PROJNO: 006 DATE: 9/14/23 REV'D: DRAWN BY: TC CHECKED BY: DF	
		DIMENSIONS MUST BE VERIFIED BY CONTRACTOR BEFORE ANY CONSTRUCTION. DO NOT SCALE DRAWING.	
		REVISIONS ARCHITECTS & ASSOCIATES COPYRIGHT 2023	

STRUCTURAL NOTES

GENERAL NOTES:

- THIS PROJECT HAS BEEN DESIGNED USING THE 2021 INTERNATIONAL BUILDING CODE, NJ EDITION.
- STRUCTURAL SPECIAL INSPECTIONS ARE A REQUIREMENT FOR THIS PROJECT. A QUALIFIED INDEPENDENT INSPECTION AGENCY SHALL BE SELECTED TO PERFORM THIS SERVICE. ALL INSPECTIONS AS REQUIRED BY CHAPTER 17 OF THE INTERNATIONAL BUILDING CODE (SEE THE FOLLOWING TABULAR REFERENCES) ARE REQUIRED AT A MINIMUM. FOR STEEL CONSTRUCTION REFER TO TABLE 1704.3, FOR CONCRETE CONSTRUCTION SEE TABLE 1704.4, FOR MASONRY CONSTRUCTION SEE TABLE 1704.5.3, FOR SOILS SEE TABLE 1704.7. SEE THE NOTES ON THIS DRAWING FOR ANY ADDITIONAL INSPECTIONS REQUIRED.
- ALL CONTRACTORS AND SUBCONTRACTORS ARE RESPONSIBLE FOR ADHERING TO THE REQUIREMENTS AS INDICATED IN THE NOTES FOR THIS JOB. FAILURE OF THE CONTRACTOR TO READ THE STRUCTURAL NOTES DOES NOT PERMIT THE CONTRACTOR TO DEVIATE FROM THEIR REQUIREMENTS.
- NO FIELD MODIFICATIONS TO ANY STRUCTURAL COMPONENTS SHALL BE MADE WITHOUT PRIOR APPROVAL BY THE STRUCTURAL ENGINEER. THIS INCLUDES, BUT IS NOT LIMITED TO REVISIONS DUE TO MIS-LOCATION, MISFIT, OR ANY OTHER CONSTRUCTION ERRORS.
- ALL CONSTRUCTION AND DEMOLITION SHALL COMPLY WITH ALL APPLICABLE NATIONAL, STATE, AND LOCAL CODES INCLUDING ALL OSHA REGULATIONS.
- CONTRACTOR SHALL TAKE ALL NECESSARY PRECAUTIONS TO PROTECT ALL PEOPLE WHO MAY BE ON OR NEAR THE WORK AREA, BY MAINTAINING A SAFE WORK AREA, SAFE WORKING CONDITIONS, AND LIMITING ACCESS TO THE WORK AREA.
- CONTRACTOR IS FULLY RESPONSIBLE FOR HIS WORKERS' SAFETY, SAFETY EQUIPMENT, FIRST AID, AND EMERGENCY HANDLING PROCEDURES.
- CONTRACTOR SHALL PERSONALLY SUPERVISE THE WORK AND SHALL BE PRESENT AT THE WORK SITE AT ALL TIMES DURING CONSTRUCTION WORK. CONTRACTOR SHALL PROVIDE ADEQUATE PERSONNEL FOR THE PROPER COORDINATION AND EXPEDITING OF THE WORK.
- THESE DRAWINGS SHALL NOT BE SCALED FOR PURPOSES OF CONSTRUCTION.
- TYPICAL DETAILS ARE NOT NECESSARILY REFERENCED ON EVERY DRAWING SHEET AND SHALL BE USED BY THE CONTRACTOR AS REQUIRED FOR ALL CONDITIONS WHERE APPLICABLE.
- IN CASE OF CONFLICT BETWEEN STRUCTURAL DRAWINGS AND OTHER DRAWINGS OF THIS PROJECT, CONTRACTOR SHALL IMMEDIATELY CONTACT ARCHITECT FOR CLARIFICATION PRIOR TO START OF WORK.
- IN CASE OF CONFLICT BETWEEN STRUCTURAL DRAWINGS AND STRUCTURAL SPECIFICATIONS, CONTRACTOR SHALL IMMEDIATELY CONTACT ENGINEER FOR CLARIFICATION PRIOR TO START OF WORK.
- ALL COLUMN LINE AND WALL DIMENSIONS SHOWN ON STRUCTURAL DRAWINGS ARE FOR REFERENCE AND SHALL FIRST BE VERIFIED WITH THE ARCHITECTURAL DRAWINGS PRIOR TO THE START OF THE PROJECT.
- THE CONTRACTOR IS RESPONSIBLE FOR SURVEYING AND VERIFICATION OF EXISTING CONDITIONS INCLUDING BUT NOT LIMITED TO THE LOCATION, ELEVATIONS AND DIMENSIONS OF EXISTING WALLS AND FRAMING.
- THE CONTRACTOR IS RESPONSIBLE FOR THE DESIGN, INSTALLATION, AND TEMPORARY SHORING OF THE EXCAVATIONS AND BUILDING STRUCTURE AS REQUIRED DURING CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR THE MEANS AND METHODS OF CONSTRUCTION, DESIGN OF SHEETING, SHORING, SCAFFOLDING, FORM WORK, AND OTHER MEANS AND METHODS STRUCTURES SHALL BE DESIGNED BY ENGINEERS HIRED BY THE CONTRACTOR.
- SECTIONS SHOWN ON PLANS APPLY TO SIMILAR CONDITIONS THROUGHOUT THE BUILDING.
- THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH ALL DRAWINGS FOR THE PROJECT FOR THE FOLLOWING INFORMATION.
 - LOCATION OF ALL REQUIRED OPENINGS IN WALLS, FLOORS, ROOF, ETC. ALL OPENINGS MAY NOT BE INDICATED ON STRUCTURAL DRAWINGS.
 - SIZE AND LOCATION OF ALL SLEEVES, INSERTS, AND DEPRESSIONS.
 - LOCATION AND SIZE OF ALL EQUIPMENT HOUSE REQUIREMENTS.
- ALL COSTS OF INVESTIGATION OR REDESIGN REQUIRED TO CORRECT CONTRACTOR MIS-LOCATION OF STRUCTURAL ELEMENTS OR OTHER CONSTRUCTION DOCUMENT DEVIATIONS SHALL BE AT THE CONTRACTOR'S EXPENSE.
- SEE ARCHITECTURAL DRAWINGS FOR LOCATIONS OF ALL MASONRY AND STUD NON-LOAD BEARING PARTITIONS. PROVIDE SLIP CONNECTIONS THAT ALLOW FOR VERTICAL MOVEMENT OF THE BUILDING STRUCTURE AT THE HEADS OF ALL PARTITIONS. CONNECTIONS SHALL BE DESIGNED TO SUPPORT THE TOP OF WALL LATERALLY FOR ALL CODE REQUIRED LATERAL FORCES. PROVIDE FIRE SAFING AT THE TOP OF THE WALL AS REQUIRED BY ARCHITECTURAL DRAWINGS.
- THE DESIGN OF NON-LOAD BEARING METAL STUD AND CURTAIN WALLS SHALL BE PERFORMED BY ENGINEERS RETAINED BY THE CONTRACTOR. DRAWINGS AND CALCULATIONS FOR THESE WALLS SHALL BE PREPARED AND SUBMITTED FOR REVIEW. ALL SUBMITTALS SHALL BE SIGNED AND SEALED BY ENGINEERS LICENSED IN THE STATE OF THE PROJECT'S JURISDICTION. DESIGN OF WALL SYSTEM AND CONNECTIONS SHALL CONSIDER ALL VERTICAL AND LATERAL LOADS REQUIRED BY THE APPLICABLE BUILDING CODE.
- METAL STAIRS, RAILINGS, GUARDRAILS, AND LADDERS SHALL BE DESIGNED BY ENGINEERS RETAINED BY THE CONTRACTOR. SEE THE DELEGATED DESIGN SCHEDULE FOR MORE INFORMATION. DRAWINGS AND CALCULATIONS FOR THESE ITEMS SHALL BE PREPARED AND SUBMITTED FOR REVIEW. ALL SUBMITTALS SHALL BE SIGNED AND SEALED BY ENGINEERS LICENSED IN THE STATE OF THE PROJECT'S JURISDICTION. DESIGNS ARE THE RESPONSIBILITY OF THE ENGINEER RETAINED BY THE CONTRACTOR AND SHALL BE IN ACCORDANCE WITH ALL LOADS REQUIRED BY THE APPLICABLE BUILDING CODE. REVIEW OF SHOP DRAWINGS FOR THESE ITEMS WILL BE FOR CONCEPT ONLY AND WILL NOT BE A CHECK OF THE DESIGN OF THESE ITEMS. COORDINATE WITH ARCHITECTURAL DRAWINGS FOR ALL LOCATIONS, DIMENSIONS, AND DETAILS.
- FORMWORK FOR CONCRETE CONSTRUCTION SHALL BE DESIGNED BY A REGISTERED DESIGN PROFESSIONAL. SEE THE DELEGATED DESIGN SCHEDULE FOR MORE INFORMATION. THE PROFESSIONAL ENGINEER SHALL HAVE EXPERIENCE IN THE DESIGN OF FORM WORK AND SHORING AND SHALL PREPARE, SIGN AND SEAL FABRICATION AND ERECTION DOCUMENTS. THESE DOCUMENTS SHALL INCLUDE CALCULATIONS, SPECIFYING FORM WORK AND SHORING REQUIREMENTS, STRIPPING CRITERIA, AND RESHORING PROCEDURES FOR STRUCTURAL CONCRETE SLABS, BEAMS, WALLS, AND COLUMNS. THE FABRICATION AND ERECTION DOCUMENTS SHALL INDICATE FORM WORK SYSTEM REQUIREMENTS, INCLUDING CONSTRUCTION SCHEDULES, SHORING DESIGN AND LAYOUT, SHORING REMOVAL, AND RESHORING REQUIREMENTS. THE DESIGN SHALL INCLUDE THE CONSTRUCTION LOADS TO BE DELIVERED TO THE BUILDING AND SUPPORT SYSTEMS, AS WELL AS THE SLAB DEFLECTIONS ANTICIPATED DURING CONSTRUCTION AND SHALL INDICATE THE STRENGTHS OF THE BUILDING ELEMENTS, INCLUDING SLABS ON GRADE, ASSUMED FOR FORM WORK AND SHORING DESIGNS, AND STRIPPING AND RESHORING SCHEDULES.

SHOP DRAWINGS AND SUBMITTALS:

- FOR A LISTING OF SHOP DRAWINGS AND OTHER SUBMITTALS REQUIRED FOR THIS PROJECT SEE THE SHOP DRAWING AND SUBMITTAL REQUIREMENTS TABLE. CERTAIN SUBMITTALS MUST BE PREPARED UNDER THE SUPERVISION OF A REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF THE PROJECTS JURISDICTION. THE CONTRACTOR IS REQUIRED TO RETAIN SPECIALTY ENGINEERS AS REQUIRED TO PREPARE THESE SUBMITTALS.
- SHOP DRAWINGS AND RELATED MATERIALS PREPARED BY SUPPLIERS AND SUBCONTRACTORS SHALL BE REVIEWED BY THE GENERAL CONTRACTOR PRIOR TO SUBMITTING TO THE ARCHITECT/STRUCTURAL ENGINEER. THE GENERAL CONTRACTOR SHALL REVIEW ALL SUBMISSIONS FOR CONFORMANCE WITH THE CONTRACT DOCUMENTS, MEANS, METHODS, TECHNIQUES, SEQUENCES, AND OPERATION OF CONSTRUCTION, TECHNICAL CONTENT, COORDINATION OF TRADES, DIMENSIONAL ACCURACY, SAFETY PRECAUTIONS AND PROGRAMS INCIDENTAL THERETO, ALL OF WHICH ARE THE SOLE RESPONSIBILITY OF THE GENERAL CONTRACTOR. THE GENERAL CONTRACTOR SHALL APPROVE AND SO STAMP EACH SUBMISSION.
- SHOP DRAWINGS, WHERE REQUIRED, SHALL BE SUBMITTED AS FOLLOWS. PROVIDE ONE (1) ELECTRONIC PDF COPY TO THE ENGINEER FOR REVIEW. ONE (1) COPY WILL BE MARKED UP AND RETURNED BY THE CONTRACTOR. ALL SHOP DRAWINGS SHALL BE CHECKED PRIOR TO SUBMISSION. CONTRACTOR SHALL ALLOW (10) WORKING DAYS IN THE CONSTRUCTION SCHEDULE FOR SHOP DRAWING REVIEW. FAX SUBMITTALS OF SHOP DRAWINGS WILL NOT BE ACCEPTED.
- STRUCTURAL DESIGN DRAWINGS (INCLUDING ORIGINAL CAD DRAWINGS) SHALL NOT BE USED AS THE BACKGROUNDS FOR THE PRODUCTION OF ANY SHOP DRAWINGS THAT ARE SUBMITTED FOR REVIEW. SHOP DRAWINGS PRODUCED IN SUCH A MANNER WILL BE REJECTED AND RETURNED. THIS INCLUDES REBAR PLACEMENT DRAWINGS, FABRICATION DRAWINGS, ERECTION DRAWINGS, ERECTION DETAILS, ETC. THE CONTRACTOR SHALL PREPARE THEIR OWN SHOP DRAWINGS (INCLUDING DETAILS).
- ANY DEVIATIONS FROM THE ORIGINAL DESIGN OR DESIGN CRITERIA AS SPECIFIED ON THE "ISSUED FOR CONSTRUCTION" DESIGN DOCUMENTS OF THE PROJECT SHALL BE NOTED (BUBBLED, NOTE, ETC.) ON THE SHOP DRAWINGS THAT ARE SUBMITTED FOR APPROVAL.
- REVIEW OF SHOP DRAWINGS SHALL NOT RELIEVE THE CONTRACTOR OF ANY CONTRACT REQUIREMENTS EVEN IF SUCH ITEMS ARE NOT SHOWN ON THE SHOP DRAWINGS. THE ENGINEER'S REVIEW OF SHOP DRAWINGS IS ONLY FOR GENERAL CONFORMANCE WITH THE DESIGN CONCEPT AND PROJECT REQUIREMENTS, AND DOES NOT IMPLY APPROVAL OR VARIANCE FROM THE CONTRACT DOCUMENTS. QUANTITIES WILL NOT BE CHECKED BY THE ENGINEER.
- ALL REVISIONS TO SHOP DRAWINGS AFTER THE FIRST SUBMISSION SHALL BE APPROPRIATELY IDENTIFIED ON SUBSEQUENT SUBMISSIONS.
- SUBSTITUTIONS TO PRODUCTS SPECIFIED ON THE DRAWINGS IS ACCEPTABLE PROVIDED THE FOLLOWING CRITERIA ARE MET. THE CONTRACTOR SHALL SUBMIT INFORMATION ON THE PRODUCT TO BE SUBSTITUTED THAT SUBSTANTIATES ITS PERFORMANCE ON AN EQUAL OR BETTER VALUE. CONTRACTOR SHALL ALLOW A MINIMUM OF (5) WORKING DAYS IN THE CONSTRUCTION SCHEDULE FOR REVIEW OF THE SUBSTITUTED PRODUCT BY THE ENGINEER.

BUILDING STRUCTURE AND LATERAL BRACING DURING CONSTRUCTION:

- WOOD STUDS IN BEARING WALLS ARE TO BE BRACED WITH FULL DEPTH WOOD BLOCKING AT 1/3 POINTS ALONG THE STUD LENGTH. IN ADDITION, ALL SHEAR WALLS AND EXTERIOR WALLS SHALL HAVE SOLID FULL DEPTH WOOD BLOCKING AT ALL SHEATHING PANEL EDGES.
- WOOD STUD SPACING DEPICTED ON STRUCTURAL PLANS FOR BEARING AND SHEAR WALLS IS THE MAXIMUM SPACING ALLOWED FOR SUPPORT OF THE DESIGN LOADS. CONTRACTOR SHALL COORDINATE WITH ARCHITECTURAL DRAWINGS FOR THE LOCATION AND DIMENSIONS OF ALL WOOD BEARING AND SHEAR WALLS. CONTRACTOR SHALL REVIEW UL FIRE RATING REQUIREMENTS AND SOUND STC RATINGS FOR EACH WALL AND CONFIRM THAT STUD SPACING SHOWN ON STRUCTURAL DRAWINGS CONFORMS TO MAXIMUM SPACING ALLOWED IN ULSTC ASSEMBLY SPECIFIED ON ARCHITECTURAL DRAWINGS. IF STUD SPACING SHOWN ON STRUCTURAL DRAWINGS DOES NOT MATCH STUD SPACING SHOWN IN ULSTC ASSEMBLY ON ARCHITECTURAL DRAWINGS, THE CONTRACTOR SHALL CONTACT THE ARCHITECT FOR DIRECTION PRIOR TO CONSTRUCTION OF THE WALL.
- PROPER WEIGHT DISTRIBUTION OF CONSTRUCTION MATERIALS DURING CONSTRUCTION IS A MUST AND IS THE RESPONSIBILITY OF THE CONTRACTOR. DO NOT STACK CONSTRUCTION MATERIALS ON UNBRACED FRAMING. AVOID STACKING HEAVY CONSTRUCTION MATERIALS AT MID-SPAN OF FRAMING. HEAVY CONSTRUCTION MATERIALS SHOULD BE STORED AT GROUND LEVEL AND ONLY MOVED TO ELEVATED FLOOR AND ROOF LOCATIONS WHEN REQUIRED FOR INSTALLATION.
- A CONTINUOUS LOAD PATH FROM THE ELEVATED FLOOR AND ROOF STRUCTURE IS TO BE PROVIDED IN ALL BEARING WALLS. ALL BEARING WALL STUDS SHALL ALIGN WITH FLOOR AND ROOF FRAMING POINTS OF BEARING. ADDITIONAL STUD FRAMING SHALL BE ADDED WHERE FLOOR AND ROOF FRAMING DOES NOT ALIGN WITH A WALL STUD. PROVIDE SOLID BLOCKING AS REQUIRED BETWEEN FLOORS TO PROVIDE A CONTINUOUS LOAD PATH THROUGH THE FLOOR TO THE FOUNDATION.
- SINCE DRAWINGS FOR THE EXISTING BUILDING WERE NOT AVAILABLE DURING DESIGN, CERTAIN ASSUMPTIONS WERE MADE REGARDING EXISTING CONSTRUCTION. THESE ASSUMPTIONS TYPICALLY REQUIRE CONTRACTOR FIELD VERIFICATION PRIOR TO CONSTRUCTION OF THE NEW STRUCTURES. IN ANY EVENT, THE ENGINEER MUST BE NOTIFIED IMMEDIATELY IF EXISTING CONDITIONS DIFFER FROM THOSE SHOWN OR ASSUMED ON THE CONTRACT DRAWINGS. IN NO INSTANCE SHALL THE EXISTING BUILDING BE MODIFIED IF EXISTING CONDITIONS DIFFER FROM THOSE DEPICTED ON THE CONTRACT DOCUMENTS. THE ENGINEER MUST BE NOTIFIED IMMEDIATELY TO PROVIDE ADDITIONAL DETAILS AS REQUIRED IF EXISTING CONDITIONS DIFFER FROM THOSE DOCUMENTED ON THE CONTRACT DOCUMENTS.

CONCRETE:

- THE PROVISIONS OF ACI 318 HAVE BEEN UTILIZED FOR THE DESIGN OF CONCRETE ELEMENTS ON THIS PROJECT.
- FLOOR FINISH TOLERANCES FOR THE SLAB ON GRADE CONSTRUCTION SHALL BE IN ACCORDANCE WITH ACI 117. FLOOR FINISH TOLERANCE SHALL BE MEASURED USING A 10 FOOT STRAIGHTEDGE ANYWHERE ON THE SLAB AND ALLOWING IT TO REST UPON TWO HIGH SPOTS WITHIN 72 HOURS AFTER SLAB PLACEMENT. THE GAP AT ANY POINT BETWEEN THE STRAIGHT EDGE AND THE FLOOR SHALL NOT EXCEED 1/4".
- ALL CONCRETE SHALL BE NORMAL WEIGHT, READY-MIX. ALL CONCRETE MIX DESIGNS SHALL BE DESIGNED BY ENGINEERS RETAINED BY THE CONCRETE SUPPLIER ACCORDING TO THE CRITERIA CONTAINED WITHIN THESE NOTES AND AS SHOWN ON THE CONTRACT DRAWINGS. SUBMIT ALL CONCRETE MIX DESIGNS TO THE ENGINEER FOR REVIEW AND APPROVAL PRIOR TO CONSTRUCTION. ALL SUBMITTED MIX DESIGNS SHALL INCLUDE SAMPLE CYLINDER BREAK TEST RESULTS CONFIRMING COMPRESSIVE STRENGTH OF EACH MIX DESIGN.
- ALL CONCRETE SHALL HAVE A WATER REDUCING ADMIXTURE AS REQUIRED TO INCREASE WORKABILITY. WORKABILITY SHALL NOT BE ACHIEVED THROUGH THE ADDITION OF WATER TO THE MIX. CONCRETE SLUMP PRIOR TO ADMIXTURE ADDITION SHALL BE A MAXIMUM OF 3 INCHES. PROPORTIONS OF CONCRETE ADMIXTURES SHALL BE DETERMINED BY THE CONCRETE MIX DESIGNER.
- DO NOT USE ADMIXTURES THAT CONTAIN CHLORIDES. FLY ASH OR OTHER POZZOLANS SHALL NOT BE USED IN ANY CONCRETE UNLESS APPROVED BY THE ENGINEER.
- ALL CONCRETE WORK SHALL COMPLY WITH THE REQUIREMENTS OF THE LATEST EDITIONS OF THE FOLLOWING ACI PUBLICATIONS ACI 301 (SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS), ACI 302.1R (GUIDE TO CONCRETE FLOOR AND SLAB CONSTRUCTION), ACI 304 (GUIDE FOR MEASURING, MIXING, TRANSPORTING AND PLACING CONCRETE), ACI 311.4 (GUIDE FOR CONCRETE INSPECTION), ACI 315 (DETAILS AND DETAILING OF CONCRETE REINFORCEMENT), ACI 318 (BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE), ACI 347R (GUIDE TO FORMWORK FOR CONCRETE), AND ACI 348R (GUIDE TO CONCRETE REPAIR). IN ADDITION, REFER TO THE CRSI - MANUAL OF STANDARD PRACTICE FOR DETAILS ON THE FABRICATION AND PLACEMENT OF CONCRETE REINFORCING.
- PRIOR TO FABRICATION OR SHIPMENT OF MATERIAL, THE CONTRACTOR SHALL SUBMIT AND RECEIVE APPROVAL OF SHOP DRAWINGS. SHOP DRAWINGS SHALL INDICATE BENDING DIAGRAMS, SPLICING, LAPPING, SHAPES, DIMENSIONS AND DETAILS OF ALL BAR REINFORCING. THE APPROVAL OF SHOP DRAWINGS WILL BE FOR ARRANGEMENT ONLY AND SHALL NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY FOR ERRORS, OMISSIONS OR THE ACCURACY OF HIS OWN DIMENSIONS. DRAWINGS AND DETAILS SHALL CONFORM WITH ACI 315. CONTRACTOR SHALL SUBMIT ALL SHOP DRAWINGS TO THE OWNERS REPRESENTATIVE.
- ALL REINFORCING STEEL SHALL BE MANUFACTURED FROM HIGH STRENGTH BILLET STEEL CONFORMING TO ASTM DESIGNATION A615 GRADE 60. WWF SHALL BE COMPRISED OF CARBON STEEL PLAIN WIRES FABRICATED INTO SHEETS OR ROLLS IN ACCORDANCE WITH ASTM A1064.
- FOOTING, SLAB, AND WALL REINFORCEMENT NOT SHOWN ON SECTIONS AND PLANS IS THE SAME AS THAT SHOWN IN SIMILAR SECTIONS AND AT SIMILAR LOCATIONS.
- LAP ALL BARS PER TABLE 1 LAP SPLICE LENGTHS FOR CONCRETE, CLASS B. LAP ALL WWF A MINIMUM OF 8 INCHES.
- CONTRACTOR SHALL PROVIDE ALL BOLSTERS, CHAIRS, BAR POSITIONERS, ETC. AS REQUIRED TO SET REBAR AND SLAB WWF TO REQUIRED DIMENSIONS INDICATED ON DRAWINGS.
- CONTROL JOINTS FOR SLABS-ON-GRADE SHALL BE SAW CUT IN ACCORDANCE WITH THE PATTERN AS INDICATED ON THE STRUCTURAL DRAWINGS. THE SPACING OF CONTROL JOINTS SHALL BE ARRANGED SUCH THAT THE AREA OF CONCRETE SLAB BETWEEN CONTROL JOINTS DOES NOT EXCEED 225 SQUARE FEET (MAXIMUM). COORDINATE WITH THE STRUCTURAL CONTRACT DRAWINGS FOR TYPICAL CONTROL JOINT DETAILS.
- PROVIDE CONTINUOUS KEYWAYS AND DOWELS IN THE TOP OF WALL FOOTINGS SUPPORTING CONCRETE WALLS. AT CONSTRUCTION JOINTS IN CONCRETE WALLS PROVIDE KEYWAYS AND CONTINUE REINFORCING THROUGH THE JOINT.
- REFER TO ARCHITECTURAL DRAWINGS FOR ALL WATERPROOFING DETAILS AT FOUNDATIONS, WALLS, AND SLABS.
- AT CONCRETE WALL INTERSECTIONS PROVIDE CORNER BARS EQUAL IN SIZE AND SPACING TO TYPICAL WALL REINFORCING STEEL.
- ALL CONCRETE PLACED AT TEMPERATURES BELOW 50 DEGREES F. SHALL CONFORM TO THE REQUIREMENTS OF ACI 308R "GUIDE TO COLD WEATHER CONCRETING". ALL CONCRETE PLACED IN HOT WEATHER SHALL CONFORM TO THE REQUIREMENTS OF ACI 305R "GUIDE TO HOT WEATHER CONCRETING".
- THE CONTRACTOR SHALL COORDINATE THE LOCATION OF ALL SLEEVES, INSERTS, ANCHOR BOLTS, AND OTHER EMBEDDED ITEMS AS REQUIRED BY OTHER TRADES.
- ALL CONCRETE SHALL BE PROPERLY CONSOLIDATED THROUGH THE USE OF VIBRATORS. VIBRATORS SHALL NOT BE USED TO TRANSPORT CONCRETE ALONG FORMWORK.
- CONTRACTOR SHALL FOLLOW THE GUIDELINES IN ACI 303 - GUIDE TO CAST-IN-PLACE ARCHITECTURAL CONCRETE PRACTICE TO ACHIEVE SPECIFIED SURFACE FINISHES OF EXPOSED CONCRETE. COORDINATE WITH ARCHITECTURAL DRAWINGS FOR ADDITIONAL REQUIREMENTS ON FINISH.
- UNLESS OTHERWISE SPECIFIED, A TESTING AGENCY SHALL BE EMPLOYED FOR EVALUATION AND QUALITY CONTROL OF CONCRETE PLACED. THE TESTING AGENCY PERFORMING ACCEPTANCE TESTING SHALL COMPLY WITH ASTM C1077. CONCRETE SHALL BE TESTED IN ACCORDANCE WITH THE REQUIREMENTS OF ACI 318. FREQUENCY OF CONCRETE TESTING SHALL MEET THE REQUIREMENTS OF ACI 318 AT A MINIMUM UNLESS REQUIRED OTHERWISE BY THE APPLICABLE BUILDING CODE.

FOUNDATIONS:

- SPECIAL INSPECTIONS FOR EXISTING SITE SOIL CONDITIONS, FILL PLACEMENT, AND LOAD BEARING REQUIREMENTS SHALL BE IN ACCORDANCE WITH CHAPTER 17 OF THE INTERNATIONAL BUILDING CODE AND TABLE 1704.7.
- BOTTOM OF ALL FOOTINGS HAVE BEEN DESIGNED TO BEAR ON SOIL CAPABLE OF SAFELY SUPPORTING 2000 PSF.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING THE APPROPRIATE AUTHORITIES TO LOCATE ALL POTENTIALLY BURIED UTILITIES WITHIN THE PROPOSED PROJECT SITE BUILDING FOOTPRINT PRIOR TO COMMENCING EXCAVATION FOR NEW BUILDING FOUNDATIONS.
- EXISTING FOUNDATIONS, SLABS, PAVEMENTS, UNDERGROUND UTILITIES, AND OTHER BELOW GRADE STRUCTURES SHALL BE REMOVED FROM THE PROPOSED PROJECT SITE BUILDING FOOTPRINT. REMOVE SURFACE VEGETATION, TOPSOIL, ROOT SYSTEMS, ORGANIC MATERIAL, EXISTING FILL, AND SOFT UNSUITABLE MATERIAL FROM THE BUILDING AREA.
- CONTRACTOR SHALL EXERCISE EXTREME CAUTION DURING NEW FOUNDATION CONSTRUCTION ACTIVITIES ADJACENT TO EXISTING BUILDING FOUNDATIONS THAT ARE TO REMAIN (EVEN IF LOCATED ON AN ADJACENT PROPERTY). SINCE DRAWINGS FOR EXISTING CONSTRUCTION ARE NOT ALWAYS AVAILABLE DURING DESIGN, CERTAIN ASSUMPTIONS MAY BE MADE REGARDING EXISTING FOUNDATIONS BASED ON TYPICAL CONSTRUCTION PRACTICES. THESE ASSUMPTIONS TYPICALLY REQUIRE CONTRACTOR FIELD VERIFICATION PRIOR TO CONSTRUCTION OF THE NEW STRUCTURES. IN ANY EVENT, THE ENGINEER MUST BE NOTIFIED IMMEDIATELY IF EXISTING SITE OR FOUNDATION CONDITIONS DIFFER FROM THOSE SHOWN OR ASSUMED ON THE CONTRACT DRAWINGS. IN NO INSTANCE SHALL EXISTING BUILDING FOUNDATIONS BE UNDERMINED TO INSTALL NEW FOUNDATIONS. IF NEW BOTTOM OF FOOTING ELEVATIONS ARE LOWER THAN ADJACENT EXISTING BOTTOM OF FOOTING ELEVATIONS THE ENGINEER MUST BE NOTIFIED IMMEDIATELY TO PROVIDE ADDITIONAL DETAILS AS REQUIRED TO CONSTRUCT THE NEW FOUNDATIONS AT THE LOWER LEVEL.
- BOTTOM OF ALL FOOTINGS MUST BE INSPECTED AND APPROVED BY A REGISTERED SOILS ENGINEER BEFORE PLACING ANY CONCRETE. APPROVAL IN WRITING MUST INDICATE THE SOIL IS ADEQUATE TO SAFELY SUSTAIN A SOIL BEARING PRESSURE OF 2000 PSF BELOW ALL FOOTINGS.
- BOTTOM OF ALL EXTERIOR FOOTINGS SHALL BE A MINIMUM OF THREE FEET (3'-0") BELOW EXTERIOR FINISH GRADE.
- STANDARD PROCEDURES FOR FROST PROTECTION OF FOUNDATIONS AND EXCAVATIONS SHALL BE EMPLOYED FOR WINTER CONSTRUCTION. BACKFILLING OF EXCAVATIONS SHALL BE DONE AS SOON AS POSSIBLE TO PROTECT FOUNDATIONS FROM FROST.
- EXPOSED CONCRETE WALLS SHALL HAVE CONTROL JOINTS AT 30 FEET MAXIMUM ON CENTERS UNLESS NOTED OTHERWISE. WALLS WITH INTEGRAL COLUMN PIERS OR PILASTERS SHALL HAVE A FORMED CONTROL JOINT ON ONE SIDE OF EACH PIER ON BOTH FACES OF THE WALL. JOINTS TO BE FILLED WITH AN APPROVED SEALANT.
- UNLESS OTHERWISE DICTATED BY THE GEOTECHNICAL ENGINEER, ALL FILL AND BACKFILL SHALL BE COMPACTED IN 8 INCH MAXIMUM LIFTS TO NOT LESS THAN 95% OF THE MAXIMUM DENSITY IN ACCORDANCE WITH ASTM D1557.
- HORIZONTAL REINFORCING BARS IN FOUNDATIONS AND STEM WALLS SHALL BE CONTINUOUS. PROVIDE CORNER BARS AT ALL CORNERS AND INTERSECTIONS.
- FOUNDATION PENETRATIONS SHALL BE SUBJECT TO APPROVAL BY THE ENGINEER. PENETRATIONS SHALL BE THROUGH THE FOUNDATION STEM WALL OR 6" CLEAR BELOW FOOTINGS.
- ALL CMU WALL FOUNDATION WALLS SHALL BE FILLED SOLID WITH 3,000 PSI GROUT BELOW FINISHED GRADE ELEVATION UNLESS NOTED OTHERWISE ON PLANS.

CONCRETE MIX DESIGN AND DURABILITY REQUIREMENTS PER ACI 318 BUILDING CODE

LOCATION	DENSITY NW = 145 pcf LW = 115 pcf	FREEZE/THAW SEVERITY	SULFATE SEVERITY	PERMEABILITY	CORROSION PROTECTION OF REINF	f'c (psi)	AIR CONTENT	w / c RATIO (max)
FOOTINGS	NW	F0	S0	P0	C1	4,000	----	0.50
SLAB-ON-GRADE CONCRETE WALLS (INTERIOR LOCATIONS)	NW	F0	S0	P0	C0	4,000	----	0.50
EXTERIOR WALLS	NW	F1	S0	P0	C1	4,500	6 %	0.45
EXTERIOR SLABS	NW	F3	S0	P0	C2	5,000	6 %	0.40

CONCRETE MIX DESIGN & DURABILITY NOTES:

- CONCRETE MIX SHALL BE DESIGNED BY THE CONCRETE SUPPLIER USING THE INFORMATION CONTAINED IN THIS SCHEDULE.
- REFER TO CHAPTER 19 OF THE ACI-318 BUILDING CODE FOR ADDITIONAL INFORMATION NOT PROVIDED OR NOTED IN THIS SCHEDULE.
- TOTAL AIR CONTENT LISTED IN THIS SCHEDULE IS BASED ON A MAXIMUM AGGREGATE SIZE OF 3/4" AND SHALL BE ADJUSTED BY THE CONCRETE MIX DESIGNER AS REQUIRED FOR DIFFERENT AGGREGATE SIZES PER ACI-318.
- REFER TO THE CONCRETE NOTES ON THE LEAD SHEET FOR THIS PROJECT FOR ADDITIONAL REQUIREMENTS.
- FLY ASH OR OTHER POZZOLANS SHALL NOT BE UTILIZED IN ANY CONCRETE MIX UNLESS APPROVED BY THE ENGINEER. THE QUANTITY OF POZZOLANS USED IN CONCRETE SUBJECT TO EXPOSURE CLASS F3 SHALL NOT EXCEED THE LIMITS SET FORTH IN ACI-318.

CAST-IN-PLACE CONCRETE CLEAR COVER FOR REINFORCING

TYPE	COVER
FOOTINGS AND OTHER CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH	3"
FORMED CONCRETE EXPOSED TO EARTH OR WEATHER (#6 BAR AND LARGER)	2"
FORMED CONCRETE EXPOSED TO EARTH OR WEATHER (#5 BAR AND SMALLER)	1 1/2"
INSIDE FACE OF WALLS	1"

CAST-IN-PLACE CONCRETE CLEAR COVER NOTES:

- MINIMUM REINFORCING COVER SHALL BE PROVIDED PER THIS TABLE UNLESS SHOWN OR NOTED OTHERWISE ON PLANS AND SECTIONS.

STRUCTURAL DRAWING INDEX

DRAWING	TITLE	BID SET 07/28/2023	
S-0.0	STRUCTURAL LEAD SHEET 1	X	
S-0.1	STRUCTURAL LEAD SHEET 2	X	
S-0.2	STRUCTURAL LEAD SHEET 3	X	
S-1.0	FOUNDATION PLAN	X	
S-1.1	MAIN FLOOR FRAMING PLAN	X	
S-1.2	ROOF FRAMING PLAN	X	
S-2.0	SECTIONS AND DETAILS	X	
S-2.1	SECTIONS AND DETAILS	X	



MICHAEL A. BEACH & ASSOCIATES, LLC

CONSULTING STRUCTURAL ENGINEERING

TWIN PONDS EXECUTIVE CAMPUS, SUITE 205

200 BIRCHFIELD DRIVE
MOUNT LAUREL, NEW JERSEY 08054

PH: (856) 273-1909 FAX: (856) 273-1480

EMAIL: mail@mabeachassoc.com

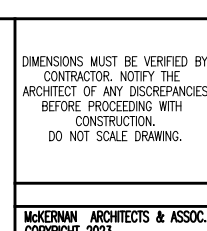
NJ Certificate of Authorization No. 24GA27962200

Project No: 747.216

TIMOTHY D. JENNINGS

PROFESSIONAL ENGINEER

NJ LIC. NO. 24GE03838500

	07/28/2023	BID SET	TDJ & WAB
No.	DATE	DESCRIPTION	REV'D BY
REVISIONS			
APPROVAL:	PROJECT: ADA RENOVATIONS TO THE GLOUCESTER TOWNSHIP BLACK BOX COMMUNITY CENTER		
Joseph F. McKernan Jr., Architects & Associates 100 Dobbs Lane Suite 204 Cherry Hill, New Jersey 08034		3 S.BLACKHORSE PIKE BLACKWOOD, NEW JERSEY	
TITLE: STRUCTURAL LEAD SHEET 1		SCALE: AS NOTED PROJ.NO.: 1016 DATE: --/-- REV'D: DRAWN BY: TC CHK'D BY: DF	
JOSEPH F. MCKERNAN JR., R.A. NJ ARCH. # 10884, P.E. ARCH. #A-214622-1, CT. ARCH. 7324		SEAL:  UNLESS OTHERWISE SPECIFIED BY THE ARCHITECT, THE ARCHITECT'S SEAL IS NOT VALID FOR ANY OTHER PROJECTS OR FOR ANY OTHER SCALE. EXPIRATION DATE: 07/28/2025	
REVISIONS		S-0.0	

STRUCTURAL NOTES

STEEL:

1. ALL STRUCTURAL STEEL SHALL BE DETAIL, FABRICATED AND ERECTED IN ACCORDANCE WITH AISC 360-10 (SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS), AND WITH AISC 303-10 (CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS AND BRIDGES). QUALITY CONTROL AND QUALITY ASSURANCE DURING STEEL FABRICATION AND ERECTION SHALL BE IN ACCORDANCE WITH CHAPTER N OF AISC 360.
2. STRUCTURAL STEEL WIDE FLANGE SHAPES SHALL CONFORM TO ASTM SPECIFICATION A992 (FY = 50 KSI MIN.). ALL HSS RECTANGULAR SHAPES SHALL CONFORM TO ASTM SPECIFICATION A500 (FY = 50 KSI MIN.), ALL HSS ROUND SHAPES SHALL CONFORM TO ASTM SPECIFICATION A500 GRADE C (FY = 48 KSI), ALL STEEL PIPE (STANDARD, EXTRA STRONG, DOUBLE EXTRA STRONG) SHALL CONFORM TO ASTM A53 GRADE B (FY = 35 KSI), ALL CHANNELS, ANGLES AND PLATE MATERIAL SHALL CONFORM TO ASTM A36.
3. ALL BOLTS SHALL BE 3/4" DIAMETER ASTM F1554 GRADE 325 HIGH STRENGTH BOLTS, UNLESS OTHERWISE NOTED.
4. ALL ANCHOR RODS SHALL BE FABRICATED IN ACCORDANCE WITH ASTM F1554. ALL ANCHOR RODS SHALL BE 36 KSI UNLESS OTHERWISE NOTED.
5. ALL STEEL SHALL BE THOROUGHLY CLEANED BY POWER TOOL CLEANING (SSPC SP3) PRIOR TO APPLYING PRIMER OR GALVANIZING.
6. ALL STEEL SHALL HAVE A SHOP COAT OF RUST INHIBITIVE PRIMER UNLESS OTHERWISE NOTED. ALL PRIMER THAT IS DAMAGED IN THE FIELD AND ALL FIELD WELDS SHALL BE TOUCHED UP WITH FIELD APPLIED PRIMER.
7. STEEL SCHEDULED TO RECEIVE SPRAY APPLIED FIREPROOFING SHALL NOT BE PRIMED. STEEL WHICH IS TO BE FIREPROOFED IS INDICATED ON THE ARCHITECTURAL DRAWINGS.
8. GALVANIZE ALL STEEL EXPOSED TO WEATHER AND WHERE INDICATED ON THE DRAWINGS. STEEL SHALL BE HOT-DIP GALVANIZED IN ACCORDANCE WITH ASTM A123. ALL GALVANIZED SURFACES DAMAGED DURING CONSTRUCTION SHALL BE REPAIRED USING A GALVANIZING REPAIR PANT IN ACCORDANCE WITH ASTM A780.
9. ALL CONNECTIONS SHALL BE BOLTED OR WELDED. FULL DEPTH CONNECTIONS ARE TO BE USED ON ALL GIRDER AND BEAM CONNECTIONS TO COLUMNS. WELDS SHALL BE AT 3 INCH O/C VERTICAL PROVIDE A MINIMUM 3/8" THICK FULL DEPTH TAB PLATE FOR ALL TUBE COLUMN CONNECTIONS.
10. ALL BOLTED CONNECTIONS SHALL BE BEARING TYPE WITH THREADS INCLUDED IN THE SHEAR PLANE UNLESS NOTED OTHERWISE. ALL BOLTED CONNECTIONS SHALL BE BOLTED "SNUG-TIGHT" UNLESS NOTED OTHERWISE.
11. THE STEEL FABRICATOR SHALL SELECT AND COMPLETE THE STEEL CONNECTION DETAILS FOR THE SHOP DRAWINGS BASED ON THE INFORMATION CONTAINED ON THE STRUCTURAL DESIGN DRAWINGS. THE FABRICATOR SHALL COMPLETE THE CONNECTION DETAILS UTILIZING THE REQUIREMENTS IN THE AISC SPECIFICATION AND THE CONTRACT DOCUMENTS. SUBMIT THE CONNECTION DETAILS TO THE FOR APPROVAL PRIOR TO CONSTRUCTION.
12. THE DESIGN OF ALL CONNECTIONS IS THE RESPONSIBILITY OF THE STEEL CONTRACTOR AND SHALL BE PERFORMED BY A QUALIFIED PROFESSIONAL ENGINEER RETAINED BY THE STEEL CONTRACTOR. SEE PLANS FOR DESIGN LOADS AND ANY OTHER SPECIAL CONNECTION REQUIREMENTS. SUBMIT ENGINEERING DESIGN CALCULATIONS, SIGNED AND SEALED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF CONSTRUCTION, PRIOR TO SUBMITTING STEEL PIECE SHOP DRAWINGS. DESIGN CONNECTIONS FOR MINIMUM SERVICE LEVEL REACTION (ASD) 15K, UNLESS NOTED OTHERWISE ON PLAN.
13. ALL SHOP AND FIELD WELDING SHALL BE PERFORMED BY WELDERS QUALIFIED, AS DESCRIBED IN "AMERICAN WELDING SOCIETY'S STANDARD QUALIFICATION PROCEDURE" (AWS D1.1), TO PERFORM THE TYPE OF WORK REQUIRED.
14. ALL STEEL WELDING RODS SHALL BE E70XX.
15. THE MINIMUM SIZE OF ALL FILLET WELDS SHOWN ON DRAWINGS SHALL BE IN ACCORDANCE WITH AISC STEEL CONSTRUCTION MANUAL TABLE J2.4 UNLESS NOTED OTHERWISE.
16. ALL MILL CAMBER TO BE ORIENTED UPWARD DURING FABRICATION AND ERECTION.
17. GROUT FOR BASE, LEVELING, AND BEARING PLATES SHALL BE NONMETALLIC AND SHRINKAGE-RESISTANT, 6000 PSI MINIMUM. GROUT SHALL MEET THE REQUIREMENTS OF ASTM C-1107 AND SHALL BE FACTORY-PACKAGED, NONMETALLIC AGGREGATE, NON CORROSIVE, NON STAINING, MIXED WITH WATER TO CONSTANCY SUITABLE FOR APPLICATION AND A 30-MINUTE WORKING TIME. SUBMIT GROUT MANUFACTURES DATA SHEETS FOR APPROVAL PRIOR TO CONSTRUCTION.
18. PROMPTLY PACK GROUT SOLIDLY BETWEEN BEARING SURFACES AND BASE OR BEARING PLATES SO NO VOIDS REMAIN. NEATLY FINISH EXPOSED SURFACES. PROTECT GROUT AND ALLOW TO CURE. COMPLY WITH MANUFACTURER'S WRITTEN INSTALLATION INSTRUCTIONS FOR SHRINKAGE-RESISTANT GROUTS.
19. ALL STEEL AND SHEAR ANGLES SHALL BE HOT DIP GALVANIZED, ANY POINTS OF WELDING SHALL BE TOUCHED UP IN THE FIELD WITH A GALVANIZING REPAIR PANT IN ACCORDANCE WITH ASTM A780.
20. PROVIDE BEARING PLATES WITH (2") DIAMETER X 6" LONG HEADED STUDS FOR STEEL BEAMS BEARING UPON CMU OR CONCRETE. BEARING PLATE THICKNESS SHALL BE THE SAME THICKNESS AS THE BEAM BOTTOM FLANGE (3/8" MINIMUM). BEARING PLATE SIZE SHALL EXTEND TO WITHIN 1/2" OF THE FACE OF CMU WALLS. FILL CMU CELLS (2) COURSES BELOW THE BEAM BEARING WITH 3,000 PSI GROUT.
21. ALL STEEL BEAMS FRAMING OVER THE TOP OF COLUMNS SHALL BE FITTED WITH (2) 1/2" THICK STIFFENER PLATES ON EACH SIDE OF THE BEAM WEB. THE COLUMN PLATE SHALL MATCH THE THICKNESS OF THE BEAM ABOVE (1/2" THICK MINIMUM) UNLESS NOTED OTHERWISE.
22. PROVIDE STABILITY BRACING AND TOP PLATE CONNECTIONS FOR STEEL BEAMS ADJACENT TO VERTICAL SHAFTS OR EXTERIOR WALL SPANDREL CONDITIONS. ALLOW FOR A HORIZONTAL ADJUSTMENT OF 1/2" OUTWARD OR INWARD IN THE BENT PLATE OR ANGLE TO COMPENSATE FOR STEEL ERECTION TOLERANCES. MAKE FINAL CONNECTION OF ANGLE OR BENT PLATE TO STEEL BEAM IN THE FIELD AFTER STEEL ERECTION AND FINAL ALIGNMENT.
23. ALL ALUMINUM AND STEEL MEMBERS TO BE TREATED OR PROPERLY SEPARATED TO PREVENT GALVANIC AND CORROSIVE EFFECTS.
24. HOLLOW-BOLTS AS SPECIFIED ON THE DRAWINGS SHALL BE AS MANUFACTURED BY LINDAPTER. ALL HOLE PREPARATION, BOLT TIGHTENING, AND PROTECTIVE COATING SHALL BE PERFORMED BY THE MANUFACTURER.
25. FOR ALL STEEL COLUMNS EMBEDDED IN OR ADJACENT TO MASONRY WALLS PROVIDE HOBMAN AND BARNARD #359 WELD-ON THE VEE-WEE-TYPE STEEL TIE #WVW @ 24" ON CENTER (GALVANIZED). PROVIDE ON EACH SIDE OF WEBS OF COLUMNS EMBEDDED IN CMU WALLS. FOR STEEL BEAMS ADJACENT TO CMU WALLS PROVIDE HOBMAN & BARNARD GRIPSTAY #360 W/ #365 MASONRY ANCHORS (3/16" THICK) @ 24" ON CENTER (GALVANIZED). PROVIDE ANCHORS AT EACH SIDE OF CONTROL AND EXPANSION JOINTS.
26. STEEL FABRICATOR IS SOLELY RESPONSIBLE FOR SURVEYING AND VERIFICATION OF EXISTING CONDITIONS INCLUDING BUT NOT LIMITED TO THE LOCATION, ELEVATION, AND DIMENSIONS OF EXISTING WALLS AND FRAMING.
27. THE STEEL FABRICATOR SHALL PROVIDE TEMPORARY BRACING TO RESIST WIND LOADS, CONSTRUCTION LOADS, ETC. DURING CONSTRUCTION. BRACING SHALL REMAIN IN PLACE UNTIL THE STRUCTURE IS CAPABLE OF SUSTAINING ALL DESIGN LOADS.
28. SUBMIT CHECKED STEEL SHOP DRAWINGS FOR REVIEW PRIOR TO ANY FABRICATION.
29. PERFORM INSPECTIONS OF STEEL CONSTRUCTION IN ACCORDANCE WITH THE REQUIREMENTS OF THE APPLICABLE BUILDING CODE.

POST-INSTALLED ADHESIVE ANCHORS & REINFORCING:

1. THE ADHESIVE ANCHOR SYSTEM USED FOR POST-INSTALLED ANCHORAGE TO CONCRETE SHALL CONFORM TO THE REQUIREMENTS OF THE MOST RECENTLY PUBLISHED ACI 308.4, ACCEPTANCE CRITERIA FOR QUALIFICATION OF POST-INSTALLED ADHESIVE ANCHORS IN CONCRETE AND COMMENTARY.
2. THE ADHESIVE ANCHOR SYSTEM SHALL BE SUPPLIED AS AN ENTIRE SYSTEM. THE SYSTEM SHALL INCLUDE, BUT IS NOT LIMITED TO, THE NEW ADHESIVE CARTRIDGE, A CLEAN MIXING NOZZLE, EXTENSION TUBE, A DISPENSING GUN, AND ALL MANUFACTURER RECOMMENDED SUPPLIES FOR PROPERLY CLEANING THE DRILLED HOLE.
3. EYEBOLTS, THREADED STUDS, INTERNAL THREADED PARTS TO BE USED IN ADHESIVE ANCHOR ASSEMBLIES SHALL CONFORM TO ASTM A36, A193 (GRADE B7), A307, B348 (BD), OR F1554. STAINLESS STEEL ANCHOR RODS SHALL BE AISI TYPE 304 OR TYPE 316. THREADS SHALL BE UNC COARSE THREADS, UNLESS NOTED OTHERWISE. COMPATIBLE NUTS AND WASHERS SHALL BE FURNISHED WITH THE ALL-THREAD ROD AND CONSIDERED PART OF THE ASSEMBLY. THE COST OF THE HARDWARE SHALL BE CONSIDERED INCIDENTAL TO THE INSTALLED ADHESIVE ANCHOR ASSEMBLY.
4. NUTS, WASHERS, AND OTHER HARDWARE USED WITH AN ALL-THREADED BAR ADHESIVE ANCHOR SYSTEM SHALL HAVE A MATERIAL OR AN ALLOY DESIGNATION THAT MATCHES THE ALL-THREAD MATERIAL /ALLOY. GALVANIZED ASSEMBLIES SHALL BE HOT-DIP GALVANIZED IN ACCORDANCE WITH ASTM A153 CLASS C. ELECTROPLATE GALVANIZING IS NOT ACCEPTABLE. DISSIMILAR METAL ASSEMBLIES SHALL BE SEPARATED BY NYLON, EPDM, OR OTHER APPROVED NON-METALLIC WASHERS.
5. REINFORCING BARS TO BE USED IN ADHESIVE ANCHOR ASSEMBLIES SHALL CONFORM TO ASTM A615.
6. CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI AT THE TIME OF ADHESIVE ANCHOR INSTALLATION.
7. CONCRETE AT TIME OF ADHESIVE ANCHOR INSTALLATION SHALL HAVE A MINIMUM AGE OF 21 DAYS.
8. CONCRETE TEMPERATURE AT THE TIME OF ADHESIVE ANCHOR INSTALLATION SHALL BE AT LEAST 50 DEGREES F.
9. EMBEDMENT DEPTH AND ANCHOR PROJECTION (STICK-OUT) FROM THE CONCRETE SURFACE SHALL BE AS SHOWN ON THE DRAWING OR DETAIL. FOR THE PARTICULAR ANCHOR OR GROUP OF ANCHORS BEING INSTALLED, ABSENT ANY INFORMATION, THE MINIMUM EMBEDMENT DEPTH SHALL BE 10 TIMES THE ANCHOR DIAMETER IN INCHES AND MINIMUM STICK-OUT SHALL BE AS REQUIRED TO MAKE THE CONNECTION.
10. ANCHOR RANGES SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
11. ADHESIVE ANCHORS SHALL BE INSTALLED BY QUALIFIED PERSONNEL TRAINED TO INSTALL ADHESIVE ANCHORS IN ACCORDANCE WITH THE REQUIREMENTS OF THE MANUFACTURER AND THE CONTRACT DOCUMENTS. POST-INSTALLED ADHESIVE ANCHORS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S PRINTED INSTALLATION INSTRUCTIONS.
12. INSTALLATION OF ADHESIVE ANCHORS HORIZONTALLY OR UPWARDLY INCLINED TO SUPPORT SUSTAINED TENSION LOADS SHALL BE PERFORMED BY PERSONNEL CERTIFIED BY THE ACI/CRSI ADHESIVE ANCHOR INSTALLER CERTIFICATION PROGRAM. THESE ANCHORS ARE TO BE INSTALLED WITH TENSION TO THE ANCHOR CALL-OUT. NOTE: SOME DOWNHANG INSTALLATIONS AS SHOWN ON THESE DRAWINGS SUPPORT SUSTAINED TENSION LOADS AND ARE SO DESIGNATED WITH A (CERT) AFTER THE ANCHOR CALL-OUT.
13. THE INSTALLER'S QUALIFICATIONS SHALL BE SUBMITTED AND APPROVED IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
14. THE CONTRACTOR SHALL PROVIDE ALL EQUIPMENT REQUIRED TO INSTALL THE ADHESIVE ANCHOR INCLUDING, BUT NOT LIMITED TO, DRILLS, SETTING TOOLS, CLEAN-OUT BRUSHES, BLOW OUT BULBS, OIL-FREE COMPRESSED AIR, SHOP VACUUMS, WRENCHES, ETC.
15. ANCHORS SHALL BE INSTALLED IN HOLES DRILLED WITH A ROTARY IMPACT HAMMER DRILL OR ROCK DRILL.
16. ANCHOR HOLES SHALL BE THOROUGHLY CLEANED PRIOR TO ADHESIVE INJECTION, AS REQUIRED BY THE MANUFACTURER'S PRINTED INSTALLATION INSTRUCTIONS.
17. ANCHORS TO BE INSTALLED IN THE ADHESIVE SHALL BE CLEAN, OIL-FREE, AND FREE OF LOOSE RUST, PAINT, OR OTHER COATINGS.
18. INSTALLED ADHESIVE ANCHORS SHALL BE SECURELY FIXED IN-PLACE TO PREVENT DISPLACEMENT WHILE THE ADHESIVE CURES. UNLESS SHOWN OTHERWISE ON THE DRAWINGS, ANCHORS SHALL BE INSTALLED PERPENDICULAR TO THE CONCRETE SURFACE. ANCHORS DISPLACED BEFORE FULL ADHESIVE CURE SHALL BE CONSIDERED DAMAGED AND REPLACED AT THE CONTRACTOR'S EXPENSE.
19. REPAIRS TO REINFORCED CONCRETE ADJACENT TO ANCHORS SHALL NOT BE DONE AFTER BEING ADHESIVELY EMBEDDED IN HARDENED, SOUND CONCRETE, UNLESS PERMITTED BY THE ENGINEER.
20. ANCHORS SHALL HAVE NO VISIBLE INDICATIONS OF DISPLACEMENT OR DAMAGE DURING OR AFTER PROOF LOAD APPLICATION. CONCRETE CRACKING IN THE VICINITY OF THE ANCHOR AFTER LOADING SHALL BE CONSIDERED A FAILURE.
21. ADHESIVE ANCHORS INTO CONCRETE SUBSTRATE APPLICATIONS SHALL USE THE HILTI HIT-HY-200 SYSTEM.
22. ADHESIVE ANCHORS INTO SLOTTED GROUTED CMU SUBSTRATE APPLICATIONS SHALL USE THE HILTI HY-270 SYSTEM.
23. ADHESIVE ANCHORS INTO CONCRETE SUBSTRATE APPLICATIONS SHALL USE THE HILTI HIT-HY-200 SYSTEM.
24. HOLES IN STEEL MEMBERS TO RECEIVE POST-INSTALLED ADHESIVE OR EXPANSION ANCHORS SHALL BE STANDARD SIZE BASED ON THE ANCHOR DIAMETER (UNLESS NOTED OTHERWISE), OVERSIZED OR SLOTTED HOLES IN THE DIRECTION OF FORCE APPLICATION ARE NOT PERMITTED.

BOLTS, SCREWS, & FASTENERS:



1. FASTENERS FOR MATERIALS SHOWN ON STRUCTURAL DRAWINGS SHALL BE IN ACCORDANCE WITH THE MATERIAL SPECIFICATION NOTES ON THE LEAD SHEET OR IF NOT INDICATED, THE NOTES IN THIS SECTION.
2. INSTALLATION OF ALL THE FASTENERS SHALL BE IN ACCORDANCE WITH THE FASTENER MANUFACTURERS WRITTEN INSTRUCTIONS.
3. PROVIDE CORROSION RESISTANCE ON ALL APPLICATIONS OF APPLICATION AND MATERIAL BEING FASTENED. FOR APPLICATIONS INVOLVING PRESSURE TREATED LUMBER OR FOR FASTENERS BEING INSTALLED IN WET AREAS, PROVIDE STAINLESS STEEL OR HOT-DIP GALVANIZED FASTENERS. ALL FASTENERS INSTALLED INTO SLAB ON GRADE APPLICATIONS SHALL BE HOT-DIP GALVANIZED OR ZINC PLATED.
4. DO NOT INSTALL PAF OR POST-INSTALLED DRILLED-IN FASTENERS INTO POST-TENSIONED CONCRETE SLABS WITHOUT PRIOR APPROVAL OF STRUCTURAL ENGINEER. DO NOT CUT CONCRETE REINFORCING TO INSTALL POST-INSTALLED DRILLED-IN FASTENERS.
5. ALL POWDER ACTUATED FASTENERS SHALL BE AS MANUFACTURED BY HILTI OR APPROVED EQUAL.
6. ALL PAF'S TO BE INSTALLED SHALL HAVE THE SAME TENSILE STRENGTH AS THE BASE MATERIAL. IT IS CLAMPED TIGHT TO THE BASE MATERIAL. THE APPROPRIATE PAF FASTENER SHALL BE SELECTED BASED ON THE APPLICATION AND BASE MATERIAL.
7. ALL SCREWS FOR COLD-FORMED STEEL APPLICATIONS SHALL BE AS MANUFACTURED BY ITW BULDEX.
8. ALL SELF-DRILLING SCREWS SHALL BE INSTALLED FULLY SEATED WITH THE FASTENER HEAD FLUSH WITH THE WORK SURFACE.
9. DO NOT OVERTIGHTEN SELF-TAPPING SCREWS. TORSIONAL FAILURE OF FASTENER OR STRIP OUT OF SUBSTRATE MAY RESULT.
10. INSTALL ALL SELF-DRILLING SCREWS TO PENETRATE BEYOND THE METAL STRUCTURE A MINIMUM OF 3 PITCHES OF THREAD.
11. ALL BOLTS TO BE INSTALLED TO FASTEN WOOD BLOCKING OR WOOD PLATE TO STEEL SHAPES SHALL BE ASTM A307. PROVIDE HOT-DIP GALVANIZED BOLTS FOR APPLICATIONS INVOLVING PRESSURE TREATED LUMBER.
12. PROVIDE STEEL WASHERS ON ALL BOLTS ANCHORING WOOD FRAMING TO STEEL SHAPES.
13. ALL POST-INSTALLED EXPANSION AND SCREW ANCHORS INTO CONCRETE SHALL BE AS MANUFACTURED BY HILTI OR APPROVED EQUAL.
14. EMBEDMENT DEPTH FOR ALL POST-INSTALLED ANCHORAGE TO CONCRETE SHALL BE AS SHOWN ON THE STRUCTURAL SECTIONS AND DETAILS. IF NOT SPECIFIED, PROVIDE THE FOLLOWING MINIMUM EMBEDMENT DEPTHS:
15. SELF-INSTALLED ANCHORS (E.G. ANCHOR NOTES OR CHEMICAL/EPOXY ADHESIVE ANCHORS INSTALLED IN CONCRETE OR HOLLOW CMU).
16. EXPANSION ANCHORS INTO CONCRETE SHALL BE HILTI KWIK BOLT TZ (UNO). EXPANSION ANCHORS INTO SOLID GROUTED CMU SHALL BE HILTI KWIK BOLT 3.

DIMENSIONAL LUMBER, ENGINEERED LUMBER, SHEATHING:

1. CONTRACTOR SHALL SUBMIT CERTIFICATION FOR ALL LUMBER USED ON PROJECT. CERTIFICATION SHALL INDICATE LUMBER COMPLIANCE WITH DESIGN PROPERTIES INDICATED IN THESE NOTES AND ON THE DRAWINGS.
2. ALL STRUCTURAL LUMBER NOTED ON PLANS SHALL BE HEM-FIR NO. 1 (OR APPROVED EQUAL) AND HAVE MINIMUM ALLOWABLE PROPERTIES AS FOLLOWS: $F_b = 1000$ PSI, $F_v = 150$ PSI, $E = 1,500,000$ PSI. ALL STRUCTURAL LUMBER TO BE STAMPED IN ACCORDANCE WITH THE AMERICAN INSTITUTE OF TIMBER CONSTRUCTIONS' "CONSTRUCTION MANUAL".
3. ALL DIMENSIONAL LUMBER PROVIDED FOR THE PROJECT SHALL BE SURFACE DRY WITH A MAXIMUM MOISTURE CONTENT NOT EXCEEDING 19 PERCENT. GREEN LUMBER SHALL NOT BE UTILIZED FOR ANY PORTIONS OF THIS PROJECT.
4. WOOD STUDS IN BEARING WALLS ARE TO BE BRACED WITH FULL DEPTH WOOD BLOCKING AT 1/3 POINTS ALONG THE STUD LENGTH. IN ADDITION ALL SHEAR WALLS AND EXTERIOR WALLS SHALL HAVE SOLID FULL DEPTH WOOD BLOCKING AT ALL SHEATHING PANEL EDGES.
5. WOOD STUD SPACING DEPICTED ON STRUCTURAL PLANS FOR BEARING AND SHEAR WALLS IS THE MAXIMUM SPACING ALLOWED FOR SUPPORT OF LOADS. CONTRACTOR SHALL COORDINATE WITH ARCHITECTURAL DRAWINGS FOR THE LOCATION AND DIMENSIONS OF ALL WOOD BEARING AND SHEAR WALLS. CONTRACTOR SHALL REVIEW UL FIRE RATING REQUIREMENTS AND SOUND STC RATINGS FOR EACH WALL, AND CONFIRM THAT STUD SPACING SHOWN ON STRUCTURAL DRAWINGS CONFORMS TO MAXIMUM SPACING ALLOWED IN UL/STC ASSEMBLY SPECIFIED ON ARCHITECTURAL DRAWINGS. IF STUD SPACING SHOWN ON STRUCTURAL DRAWINGS DOES NOT MATCH STUD SPACING SHOWN IN UL/STC ASSEMBLY ON ARCHITECTURAL DRAWINGS, THE CONTRACTOR SHALL CONTACT THE ARCHITECT FOR DIRECTION PRIOR TO CONSTRUCTION OF THE WALL.
6. ALL WOOD FOR EXTERIOR DECKS SHALL BE PRESSURE-TREATED.
 - A. AMERICAN INSTITUTE OF TIMBER CONSTRUCTION: TIMBER CONSTRUCTION MANUAL.
 - B. ANSI / APFA: NATIONAL DESIGN SPECIFICATIONS FOR WOOD CONSTRUCTION 2015.
 - C. ENGINEERED WOOD ASSOCIATION (APA): PLYWOOD DESIGN SPECIFICATION.
 - D. AMERICAN WOOD PRESERVERS ASSOCIATIONS STANDARDS.
 - E. NATIONAL LUMBER MANUFACTURERS ASSOCIATIONS: NATIONAL DESIGN SPECIFICATION FOR STRESS-GRADE LUMBER AND PRESERVATIVES.
7. ALL WOOD CONNECTIONS ARE TO BE MADE USING PREFABRICATED CONNECTORS. TOE-NAILING WILL NOT BE PERMITTED. SUBMIT MANUFACTURER'S DATA FOR APPROVAL. FASTENERS TO BE AS MANUFACTURED BY SIMPSON OR APPROVED EQUAL.
8. ALL WOOD CONNECTORS SHALL BE PROVIDED IN MANUFACTURERS STANDARD FINISH EXCEPT FOR APPLICATIONS INVOLVING PRESSURE TREATED OR FIRE-RETARDANT TREATED LUMBER. FOR TREATED LUMBER APPLICATION, ALL METAL CONNECTORS SHALL BE HOT DIP GALVANIZED OR STAINLESS STEEL. USING SIMPSON PRODUCTS AS A BASIS, CONNECTORS FOR PRESSURE TREATED APPLICATIONS SHALL BE "ZMAX", POST HOT DIPPED GALVANIZED, OR STAINLESS STEEL. ANY PRODUCT SUBSTITUTIONS MUST MEET THIS MINIMUM STANDARD.
9. 10. ALL LOADS, CONTRACTOR SHALL COORDINATE WITH ARCHITECTURAL DRAWINGS FOR THE LOCATION AND DIMENSIONS OF ALL TREATED WOOD SHALL BE HOT-DIP GALVANIZED OR STAINLESS STEEL. PLAIN CARBON STEEL FASTENERS ARE ALLOWED IN S&D/TD AND ZINC BORATE PRESERVATIVE-TREATED WOOD IN AN INTERIOR DRY ENVIRONMENT ONLY.
11. SIMPSON STRONG TIE CONNECTIONS HAVE BEEN SPECIFIED TO MEET THE STRUCTURAL CALCULATIONS OF PLAN ELEMENTS. PRIOR TO SUBSTITUTING ANOTHER BRAND, CONFIRM LOAD CAPACITY BASED ON RELIABLE PUBLISHED TESTING DATA OR CALCULATIONS. THE ENGINEER SHALL EVALUATE AND GIVE WRITTEN APPROVAL FOR SUBSTITUTIONS PRIOR TO INSTALLATIONS.
12. ALL NAILS FOR PROJECT SHALL BE COMMON WIRE NAILS OR POWER DRIVEN NAILS IN CONFORMANCE WITH ICC-ES EVALUATION REPORT ESR-539. SEE PLANS AND DETAILS FOR NAILING REQUIREMENTS. STAPLES SHALL NOT BE SUBSTITUTED FOR NAILS UNLESS APPROVED BY THE ENGINEER PRIOR TO CONSTRUCTION. IF THE CONTRACTOR DESIRES TO SUBSTITUTE STAPLES FOR NAILS, A FORMAL SUBMISSION MUST BE MADE TO THE ENGINEER. THE SUBMISSION MUST CLEARLY DOCUMENT HOW THE STAPLES MEET OR EXCEED THE NAILS SPECIFIED ON THE DRAWINGS. THE STAPLES MUST BE IN COMPLIANCE WITH ALL CODE REQUIREMENTS. INCOMPLETE SUBMISSIONS WILL NOT BE REVIEWED.
13. SHEATHING NAILS IN SHEAR WALLS AND EXTERIOR WALLS SHALL BE DRIVEN WITH THE HEAD OF THE NAIL FLUSH WITH THE SURFACE OF THE SHEATHING.
14. PLYWOOD PRODUCTS SHALL BE MANUFACTURED IN ACCORDANCE WITH THE LATEST PROVISIONS OF THE U.S. DEPARTMENT OF COMMERCE FACTORY MUTUAL PRODUCT STANDARD PS-1 OR PS-2.
15. SHEATHING FOR SLOPED ROOFS SHALL BE 5/8 INCH THICK 40/20 SPAN RATING APA RATED SHEATHING, EXPOSURE 1. ALL JOINTS IN SHEATHING SHALL BE STAGGERED. USE PANEL CLIPS, TONGUE & GROOVE, OR LUMBER BLOCKING EDGE SUPPORTS AS RECOMMENDED BY APA FOR ROOF SHEATHING DECKS. NAILING SHALL COMPLY WITH REQUIREMENTS FOR PLYWOOD ROOF DIAPHRAGMS (SEE PLANS).
16. SHEATHING FOR FLAT ROOFS SHALL BE 3/4 INCH THICK 24' SPAN RATING APA RATED, EXPOSURE 1. ALL JOINTS IN SHEATHING SHALL BE STAGGERED. ALL EDGES IN FLOOR SHEATHING SHALL BE TONGUE AND GROOVE. NAILING REQUIREMENTS SHALL BE AS INDICATED ON PLANS.
17. 17. SHEATHING FOR EXTERIOR WALLS SHALL BE 1/2 INCH THICK 24' INCH BLOCK 24' INCH RATING APA RATED, EXPOSURE 1. ALL JOINTS IN SHEATHING SHALL BE STAGGERED. ALL EDGES IN FLOOR SHEATHING SHALL BE TONGUE AND GROOVE. NAILING REQUIREMENTS SHALL BE AS INDICATED ON PLANS.
18. SHEATHING FOR EXTERIOR WALLS SHALL BE 1/2 INCH THICK 32/16 SPAN RATING APA RATED SHEATHING, EXPOSURE 1. ALL JOINTS IN SHEATHING SHALL BE STAGGERED. USE BLOCKING AT ALL PANEL EDGES AND NAIL AS SHOWN ON DETAILS.
19. ALL WOOD EXPOSED TO WEATHER AND/OR IN CONTACT WITH GROUND, CONCRETE, OR CMU SHALL BE PRESSURE TREATED SOUTHERN PINE LUMBER.
20. THE ENGINEERED LUMBER SPECIFIED ON THE DRAWINGS IS BASED ON WEYERHAEUSER ENGINEERED WOOD PRODUCTS. NO ALTERNATIVES, MODIFICATIONS OR SUBSTITUTIONS ARE ALLOWED UNLESS THE GENERAL CONTRACTOR AND SUB-CONTRACTORS SUBMITS IN WRITING FOR SUCH REQUESTS TO THE PROJECT ENGINEER FOR APPROVAL. ALTERNATE PRODUCTS MUST HAVE A CURRENT ICC-ES CODE EVALUATION REPORT WITH LISTED DESIGN PROPERTIES EQUIVALENT TO OR GREATER THAN SPECIFIED PRODUCTS. SUBSTANTIATING CALCULATIONS SHALL BE SUBMITTED. ALL HOLES, TAPERED CUTS AND NOTCHING SHALL BE JUSTIFIED FOR ALTERNATE. THE ENGINEER OF RECORD SHALL BE REIMBURSED FOR ANY REVIEW TIME.
21. ALL PARALAM PSL AND MICROLAM LVL LUMBER SHALL BE AS MANUFACTURED BY LEVEL BY WEYERHAEUSER OR APPROVED EQUIVALENT. ALL LVL LUMBER EXPOSED TO WEATHER SHALL BE TREATED FOR EXTERIOR EXPOSURE. ALL TJI FRAMING SHALL BE MANUFACTURED AND LABELED FOR EXTERIOR PROTECTION.
22. ALL HOLES FOR PLUMBING, MECHANICAL, AND ELECTRICAL UTILITIES THROUGH TJI FRAMING SHALL BE LOCATED AND SIZED ACCORDING TO THE GUIDELINES IN THE ENGINEERED WOOD PRODUCT LITERATURE. ANY NON-CONFORMING OPENINGS/PENETRATIONS MADE THROUGH ENGINEERED FRAMING SHALL BE REPAIRED AS REQUIRED AT THE EXPENSE OF THE CONTRACTOR RESPONSIBLE FOR THE NON-CONFORMING MODIFICATIONS.
23. PROVIDE ADDITIONAL STUDS IN BEARING WALLS AT LOCATIONS OF BEAM OR GIRDER TRUSS BRACING. MINIMUM BUILT UP STUD DIMENSIONS SHALL BE 2" X 4" IN BEARING WALLS AND 2" X 6" IN GIRDER TRUSS OR WIDE FLANGE BEAM BRACING ON WALLS. SHOWN OR OTHERWISE ON DRAWINGS.
24. IN ALL BEARING WALLS AND SHEAR WALLS WHERE THE TOP OF THE BOTTOM PLATE HAVE BEEN CUT OR NOTCHED TO ACCOMMODATE PLUMBING OR HVAC DUCTWORK, THE PLATES SHALL BE REPAIRED USING SIMPSON CT5218 COMPRESSION AND TENSION STRAPS. THESE STRAPS SHALL BE INSTALLED ON ALL DAMAGED PLATES ON BOTH SIDES OF THE PLATE. USE ALL SPECIFIED FASTENERS AS RECOMMENDED BY SIMPSON.

STANDARD ABBREVIATIONS

A: Area	F TO F: Face to Face	N: North
AB: Anchor Bolt	FABR: Fabricate	NF: Near Face
ABV: Above	FAST: Fastener, Fasten	NIC: Not In Contract
ACC: American Concrete Institute	FD: Floor Drain	NJ: Number (with period)
ACQUC: Acoustical	FDN: Foundation	NOM: Nominal
AD: Access Door, Area Drain	FF: Finished Floor	NS: Near Side
ADD: Addendum, Addition	FFE: Finished Floor Elevation	NTS: Not To Scale
ADDL: Additional	FIN: Finish, Finished	O: Overall
ADJ: Adjust, Adjustable, Adjacent	FLG: Flange	o/c: On Center
AFF: Above Finished Floor	FLR: Floor	OD: Outside Diameter
AISC: American Institute of Steel Construction	FO: Finished Opening	OF: Outside Face
ALT: Alternate, Alteration	FOC: Face of Concrete	OPNG: Opening
AMT: Amount	FOS: Face of Studs	OPP: Opposite
ANCH: Anchor, Anchorage	FRM: Frame	
APPROX: Approximate	FS: Far Side	
APRVd: Approved	FT: Foot, Feet	PAF: Powder Actuated Fasteners
ARCH: Architect, Architectural	FTG: Footing	PARTN: Partition
ASCE: American Society of Civil Engineers	FURR: Furring	PC: Piece, Precast Concrete
ASSOC: Association, Associate		PCF: Pounds per cubic foot
ASSY: Assembly	Ga: Gauge, Gage	PERP: Perpendicular
ASTM: American Society for Testing and Materials	GALV: Galvanized	PJ: Preformed Joint Filler
AVG: Average	GC: General Contractor	R: Plate
AWIS: American Welding Society	GENL: General	RCS: Places
	GL: Glass	PLF: Pounds Per Linear Foot
B TO B: Back to Back	GR: Grade	PLTF: Platform
B/: Bottom of	GRND: Ground	PREFAB: Prefabricated
BLW: Below	GRTG: Grating	PRTN: Partition
BETW: Between	GT: Groat	PSF: Pounds per square foot
BEV: Bevel	GVL: Gravel	PSI: Pounds per square inch
BF: Bottom Face, Both Faces	GWB: Gypsum Wallboard	PT: Preservative Treated or Point
BL: Base Line, Building Line, Block		QTY: Quantity
BLDG: Building	H: High	
BLK: Block	HD: Head	R: Riser
BLKG: Blocking	HDR: Header	RAD: Radius
BMT: Beam	HDW: Hardware	REBAR: Reinforcing Bar
BMT: Bent	HEF: Horizontal Each Face	REF: Reference
BOS: Bottom of Steel	HGR: Hanger	REINF: Reinforcement, or Reinforce
BOT: Bottom	HGT: Height	REQD: Required
BASE: g Base Plate	HKD: Hooked	RET: Return, Retaining
BRG: g Bearing Plate	HORIZ: Horizontal	RF: Roof
BRDG: Bridge, Bridging	HP: High Point	RF: Roofing
BRG: Bearing	HSS: Hollow Structural Section	RM: Room
BRK: Brick	HVAC: Heating, Ventilating & Air Conditioning	RO: Rough Opening
BRKT: Bracket	HVVY: Heavy	RT: Right
BRS: Both Sides	ID: Inside Diameter	RWC: Rain Water Conductor
BSMT: Basement	IN: Inch	S: South
BT: Bolt	INFO: Information	SC: Solid Core
BVL: Beveled	INSP: Inspect	SCHED: Schedule
BW: Both Ways	INSTL: Install	SE: Structural Engineer
C: Channel	INSUL: Insulation	SECT: Section
CANT: Cantilever, Cantilevered	INT: Interior	SF: Square Foot
CHAM: Chamfer	INTERM: Intermediate	SHT: Sheet
CJ: Control Joint	JF: Joint Filler	SHTHG: Sheathing
C: Centerline	JST: Joist	SIM: Similar
CLR: Clear	JT: Joint	SLV: Sleeve
CLR OPNG: Clear Opening		SPEC: Specification, Specifications
CMU: Concrete Masonry Unit	KB: Knes Brace	SQ: Square
COL: Column	KP: Kickplate	SS: Stainless Steel
COMB: Combination	KIP: (1000 pounds)	STD: Standard
CONC: Concrete	L: L: Angle	STRG: Stagger
CONN: Connection	LAD: Ladder	STIFF: Stiffener
CONST: Construction	LAM: Laminate, Laminated	STL: Steel
CONT: Continuous, Continue, Control	LAT: Lateral	STRU: Structural
CONTR: Contractor	LB: Pound (weight)	STWY: Stairway
CTR: Center	LG: Long	SUPP: Supplementary, Supplement
CTRD: Centered	LH: Left Hand	SUR: Surface
	LIN: Linear	SY: Square Yard
DBL: Double	LL: Live Load	SYM: Symmetrical
DEMO: Demolition	LLH: Long Leg Horizontal	SYS: System
DEP: Depressed	LLV: Long Leg Vertical	
DET: Detail	LN: Length	T/: Top of
DIA: Diagonal	LNTL: Lintel	(TB): Top and Bottom
Ø: Diameter	LOC: Locate	TEMP: Temporary
DIM: Dimension	LOCS: Locations	THK: Thick, Thickness
DL: Dead Load	LP: Low Point	THRU: Through
DN: Down	LT WT: Lightweight	TOC: Top of Concrete
DWG: Drawing	LWC: Light Weight Concrete	TOS: Top of Steel
DWGS: Drawings		TPY: Typical
DWL: Dowel	M: Bending Moment	
EA: Each	MAS: Masonry	UNEXO: Unexcavated
EB: Expansion Bolt	MATL: Material	UNFIN: Unfinished
ECC: Eccentric	MAX: Maximum	UNC: Unless Noted Otherwise
EF: Each Face	MECH: Mechanical	
EJ: Expansion Joint	MED: Medium	VAR: Varies
EL: Elevation	MEMB: Membrane	VEF: Vertical Each Face
ELEV: Electrical	MET: Metal	VERT: Vertical
ELEV: Elevator	MEZZ: Mezzanine	VIF: Verify In The Field
ENGR: Engineer	MFR: Manufacture, Manufacturer	VNR: Veneer
ENTR: Entrance	MIN: Minimum	
EQ: Equal	MISC: Miscellaneous	W: West, Width, Wide
EQUIP: Equipment	MR: Mark	w/o: Without
EW: Each Way	MO: Masonry Opening	WD: Wood
EWB: Each Way Bottom	MONO: Monolithic	WF: Wide Flange (structural steel)
EWFE: Each Way Each Face	MRD: Metal Roof Deck	WP: Waterproof, Working Point, Weatherproof
EWT: Each Way Top	MTL: Material, Metal	WR: Water Resistant
EXIST: Existing		WT: Weight
EXP: Expansion		WWF: Welded Wire Fabric
EXT: Exterior		
		XS: Extra Strong (pipe)
		XXS: Double Extra Strong (pipe)

 <p>MICHAEL A. BEACH & ASSOCIATES, LLC CONSULTING STRUCTURAL ENGINEERING TWIN PONDS EXECUTIVE CAMPUS, SUITE 205 200 BIRCHFIELD DRIVE MOUNT LAUREL, NEW JERSEY 08054 PH: (856) 273-1909 FAX: (856) 273-1480 EMAIL: mail@mabeachassoc.com NJ Certificate of Authorization No. 24GA27962200 Project No: 747.216</p>	<p>TIMOTHY D. JENNINGS PROFESSIONAL ENGINEER NJ LIC. NO. 24GE03836500</p>	<table><tr><td></td><td>07/28/2023</td><td>BD SET</td><td>TDJ & VB</td></tr><tr><td>No.</td><td>DATE</td><td>DESCRIPTION</td><td>REV'D BY</td></tr><tr><td colspan="4">REVISIONS</td></tr></table>					07/28/2023	BD SET	TDJ & VB	No.	DATE	DESCRIPTION	REV'D BY	REVISIONS			
			07/28/2023	BD SET	TDJ & VB												
		No.	DATE	DESCRIPTION	REV'D BY												
		REVISIONS															
APPROVAL:		PROJECT: ADA RENOVATIONS TO THE GLOUCESTER TOWNSHIP BLACK BOX COMMUNITY CENTER 3 S.BLACKHORSE PIKE BLACKWOOD, NEW JERSEY															
 <p>Joseph F. McKernan Jr., Architects & Associates 100 Dobbs Lane Suite 204 Cherry Hill, New Jersey 08034</p>		TITLE: STRUCTURAL LEAD SHEET 2															
JOSEPH F. MCKERNAN JR., R.A. A.I.A. NJ ARCH # 10084 - PA ARCH 04-01042-X - CT ARCH 7124		SCALE: DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23	SCALE: AS NOTED PROJNO.: 1016 DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23														
JOSEPH F. MCKERNAN JR., R.A. A.I.A. NJ ARCH # 10084 - PA ARCH 04-01042-X - CT ARCH 7124		SCALE: DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23	SCALE: AS NOTED PROJNO.: 1016 DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23														
JOSEPH F. MCKERNAN JR., R.A. A.I.A. NJ ARCH # 10084 - PA ARCH 04-01042-X - CT ARCH 7124		SCALE: DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23	SCALE: AS NOTED PROJNO.: 1016 DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23														
JOSEPH F. MCKERNAN JR., R.A. A.I.A. NJ ARCH # 10084 - PA ARCH 04-01042-X - CT ARCH 7124		SCALE: DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23	SCALE: AS NOTED PROJNO.: 1016 DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23														
JOSEPH F. MCKERNAN JR., R.A. A.I.A. NJ ARCH # 10084 - PA ARCH 04-01042-X - CT ARCH 7124		SCALE: DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23	SCALE: AS NOTED PROJNO.: 1016 DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23														
JOSEPH F. MCKERNAN JR., R.A. A.I.A. NJ ARCH # 10084 - PA ARCH 04-01042-X - CT ARCH 7124		SCALE: DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23	SCALE: AS NOTED PROJNO.: 1016 DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23														
JOSEPH F. MCKERNAN JR., R.A. A.I.A. NJ ARCH # 10084 - PA ARCH 04-01042-X - CT ARCH 7124		SCALE: DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23	SCALE: AS NOTED PROJNO.: 1016 DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23														
JOSEPH F. MCKERNAN JR., R.A. A.I.A. NJ ARCH # 10084 - PA ARCH 04-01042-X - CT ARCH 7124		SCALE: DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23	SCALE: AS NOTED PROJNO.: 1016 DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23														
JOSEPH F. MCKERNAN JR., R.A. A.I.A. NJ ARCH # 10084 - PA ARCH 04-01042-X - CT ARCH 7124		SCALE: DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23	SCALE: AS NOTED PROJNO.: 1016 DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23														
JOSEPH F. MCKERNAN JR., R.A. A.I.A. NJ ARCH # 10084 - PA ARCH 04-01042-X - CT ARCH 7124		SCALE: DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23	SCALE: AS NOTED PROJNO.: 1016 DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23														
JOSEPH F. MCKERNAN JR., R.A. A.I.A. NJ ARCH # 10084 - PA ARCH 04-01042-X - CT ARCH 7124		SCALE: DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23	SCALE: AS NOTED PROJNO.: 1016 DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23														
JOSEPH F. MCKERNAN JR., R.A. A.I.A. NJ ARCH # 10084 - PA ARCH 04-01042-X - CT ARCH 7124		SCALE: DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23	SCALE: AS NOTED PROJNO.: 1016 DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23														
JOSEPH F. MCKERNAN JR., R.A. A.I.A. NJ ARCH # 10084 - PA ARCH 04-01042-X - CT ARCH 7124		SCALE: DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23	SCALE: AS NOTED PROJNO.: 1016 DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23														
JOSEPH F. MCKERNAN JR., R.A. A.I.A. NJ ARCH # 10084 - PA ARCH 04-01042-X - CT ARCH 7124		SCALE: DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23	SCALE: AS NOTED PROJNO.: 1016 DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23														
JOSEPH F. MCKERNAN JR., R.A. A.I.A. NJ ARCH # 10084 - PA ARCH 04-01042-X - CT ARCH 7124		SCALE: DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23	SCALE: AS NOTED PROJNO.: 1016 DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23														
JOSEPH F. MCKERNAN JR., R.A. A.I.A. NJ ARCH # 10084 - PA ARCH 04-01042-X - CT ARCH 7124		SCALE: DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23	SCALE: AS NOTED PROJNO.: 1016 DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23														
JOSEPH F. MCKERNAN JR., R.A. A.I.A. NJ ARCH # 10084 - PA ARCH 04-01042-X - CT ARCH 7124		SCALE: DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23	SCALE: AS NOTED PROJNO.: 1016 DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23														
JOSEPH F. MCKERNAN JR., R.A. A.I.A. NJ ARCH # 10084 - PA ARCH 04-01042-X - CT ARCH 7124		SCALE: DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23	SCALE: AS NOTED PROJNO.: 1016 DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23														
JOSEPH F. MCKERNAN JR., R.A. A.I.A. NJ ARCH # 10084 - PA ARCH 04-01042-X - CT ARCH 7124		SCALE: DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23	SCALE: AS NOTED PROJNO.: 1016 DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23														
JOSEPH F. MCKERNAN JR., R.A. A.I.A. NJ ARCH # 10084 - PA ARCH 04-01042-X - CT ARCH 7124		SCALE: DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23	SCALE: AS NOTED PROJNO.: 1016 DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23														
JOSEPH F. MCKERNAN JR., R.A. A.I.A. NJ ARCH # 10084 - PA ARCH 04-01042-X - CT ARCH 7124		SCALE: DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23	SCALE: AS NOTED PROJNO.: 1016 DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23														
JOSEPH F. MCKERNAN JR., R.A. A.I.A. NJ ARCH # 10084 - PA ARCH 04-01042-X - CT ARCH 7124		SCALE: DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23	SCALE: AS NOTED PROJNO.: 1016 DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23														
JOSEPH F. MCKERNAN JR., R.A. A.I.A. NJ ARCH # 10084 - PA ARCH 04-01042-X - CT ARCH 7124		SCALE: DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23	SCALE: AS NOTED PROJNO.: 1016 DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23														
JOSEPH F. MCKERNAN JR., R.A. A.I.A. NJ ARCH # 10084 - PA ARCH 04-01042-X - CT ARCH 7124		SCALE: DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23	SCALE: AS NOTED PROJNO.: 1016 DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23														
JOSEPH F. MCKERNAN JR., R.A. A.I.A. NJ ARCH # 10084 - PA ARCH 04-01042-X - CT ARCH 7124		SCALE: DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23	SCALE: AS NOTED PROJNO.: 1016 DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23														
JOSEPH F. MCKERNAN JR., R.A. A.I.A. NJ ARCH # 10084 - PA ARCH 04-01042-X - CT ARCH 7124		SCALE: DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23	SCALE: AS NOTED PROJNO.: 1016 DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23														
JOSEPH F. MCKERNAN JR., R.A. A.I.A. NJ ARCH # 10084 - PA ARCH 04-01042-X - CT ARCH 7124		SCALE: DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23	SCALE: AS NOTED PROJNO.: 1016 DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23														
JOSEPH F. MCKERNAN JR., R.A. A.I.A. NJ ARCH # 10084 - PA ARCH 04-01042-X - CT ARCH 7124		SCALE: DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23	SCALE: AS NOTED PROJNO.: 1016 DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23														
JOSEPH F. MCKERNAN JR., R.A. A.I.A. NJ ARCH # 10084 - PA ARCH 04-01042-X - CT ARCH 7124		SCALE: DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23	SCALE: AS NOTED PROJNO.: 1016 DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23														
JOSEPH F. MCKERNAN JR., R.A. A.I.A. NJ ARCH # 10084 - PA ARCH 04-01042-X - CT ARCH 7124		SCALE: DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23	SCALE: AS NOTED PROJNO.: 1016 DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23														
JOSEPH F. MCKERNAN JR., R.A. A.I.A. NJ ARCH # 10084 - PA ARCH 04-01042-X - CT ARCH 7124		SCALE: DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23	SCALE: AS NOTED PROJNO.: 1016 DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23														
JOSEPH F. MCKERNAN JR., R.A. A.I.A. NJ ARCH # 10084 - PA ARCH 04-01042-X - CT ARCH 7124		SCALE: DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23	SCALE: AS NOTED PROJNO.: 1016 DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23														
JOSEPH F. MCKERNAN JR., R.A. A.I.A. NJ ARCH # 10084 - PA ARCH 04-01042-X - CT ARCH 7124		SCALE: DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23	SCALE: AS NOTED PROJNO.: 1016 DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23														
JOSEPH F. MCKERNAN JR., R.A. A.I.A. NJ ARCH # 10084 - PA ARCH 04-01042-X - CT ARCH 7124		SCALE: DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23	SCALE: AS NOTED PROJNO.: 1016 DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23														
JOSEPH F. MCKERNAN JR., R.A. A.I.A. NJ ARCH # 10084 - PA ARCH 04-01042-X - CT ARCH 7124		SCALE: DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23	SCALE: AS NOTED PROJNO.: 1016 DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23														
JOSEPH F. MCKERNAN JR., R.A. A.I.A. NJ ARCH # 10084 - PA ARCH 04-01042-X - CT ARCH 7124		SCALE: DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23	SCALE: AS NOTED PROJNO.: 1016 DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23														
JOSEPH F. MCKERNAN JR., R.A. A.I.A. NJ ARCH # 10084 - PA ARCH 04-01042-X - CT ARCH 7124		SCALE: DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23	SCALE: AS NOTED PROJNO.: 1016 DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23														
JOSEPH F. MCKERNAN JR., R.A. A.I.A. NJ ARCH # 10084 - PA ARCH 04-01042-X - CT ARCH 7124		SCALE: DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23	SCALE: AS NOTED PROJNO.: 1016 DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23														
JOSEPH F. MCKERNAN JR., R.A. A.I.A. NJ ARCH # 10084 - PA ARCH 04-01042-X - CT ARCH 7124		SCALE: DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23	SCALE: AS NOTED PROJNO.: 1016 DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23														
JOSEPH F. MCKERNAN JR., R.A. A.I.A. NJ ARCH # 10084 - PA ARCH 04-01042-X - CT ARCH 7124		SCALE: DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23	SCALE: AS NOTED PROJNO.: 1016 DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23														
JOSEPH F. MCKERNAN JR., R.A. A.I.A. NJ ARCH # 10084 - PA ARCH 04-01042-X - CT ARCH 7124		SCALE: DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23	SCALE: AS NOTED PROJNO.: 1016 DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23														
JOSEPH F. MCKERNAN JR., R.A. A.I.A. NJ ARCH # 10084 - PA ARCH 04-01042-X - CT ARCH 7124		SCALE: DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23	SCALE: AS NOTED PROJNO.: 1016 DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23														
JOSEPH F. MCKERNAN JR., R.A. A.I.A. NJ ARCH # 10084 - PA ARCH 04-01042-X - CT ARCH 7124		SCALE: DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23	SCALE: AS NOTED PROJNO.: 1016 DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23														
JOSEPH F. MCKERNAN JR., R.A. A.I.A. NJ ARCH # 10084 - PA ARCH 04-01042-X - CT ARCH 7124		SCALE: DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23	SCALE: AS NOTED PROJNO.: 1016 DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23														
JOSEPH F. MCKERNAN JR., R.A. A.I.A. NJ ARCH # 10084 - PA ARCH 04-01042-X - CT ARCH 7124		SCALE: DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23	SCALE: AS NOTED PROJNO.: 1016 DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23														
JOSEPH F. MCKERNAN JR., R.A. A.I.A. NJ ARCH # 10084 - PA ARCH 04-01042-X - CT ARCH 7124		SCALE: DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23	SCALE: AS NOTED PROJNO.: 1016 DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23														
JOSEPH F. MCKERNAN JR., R.A. A.I.A. NJ ARCH # 10084 - PA ARCH 04-01042-X - CT ARCH 7124		SCALE: DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23	SCALE: AS NOTED PROJNO.: 1016 DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23														
JOSEPH F. MCKERNAN JR., R.A. A.I.A. NJ ARCH # 10084 - PA ARCH 04-01042-X - CT ARCH 7124		SCALE: DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23	SCALE: AS NOTED PROJNO.: 1016 DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23														
JOSEPH F. MCKERNAN JR., R.A. A.I.A. NJ ARCH # 10084 - PA ARCH 04-01042-X - CT ARCH 7124		SCALE: DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23	SCALE: AS NOTED PROJNO.: 1016 DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23														
JOSEPH F. MCKERNAN JR., R.A. A.I.A. NJ ARCH # 10084 - PA ARCH 04-01042-X - CT ARCH 7124		SCALE: DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23	SCALE: AS NOTED PROJNO.: 1016 DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23														
JOSEPH F. MCKERNAN JR., R.A. A.I.A. NJ ARCH # 10084 - PA ARCH 04-01042-X - CT ARCH 7124		SCALE: DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23	SCALE: AS NOTED PROJNO.: 1016 DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23														
JOSEPH F. MCKERNAN JR., R.A. A.I.A. NJ ARCH # 10084 - PA ARCH 04-01042-X - CT ARCH 7124		SCALE: DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23	SCALE: AS NOTED PROJNO.: 1016 DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23														
JOSEPH F. MCKERNAN JR., R.A. A.I.A. NJ ARCH # 10084 - PA ARCH 04-01042-X - CT ARCH 7124		SCALE: DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23	SCALE: AS NOTED PROJNO.: 1016 DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23														
JOSEPH F. MCKERNAN JR., R.A. A.I.A. NJ ARCH # 10084 - PA ARCH 04-01042-X - CT ARCH 7124		SCALE: DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23	SCALE: AS NOTED PROJNO.: 1016 DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23														
JOSEPH F. MCKERNAN JR., R.A. A.I.A. NJ ARCH # 10084 - PA ARCH 04-01042-X - CT ARCH 7124		SCALE: DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23	SCALE: AS NOTED PROJNO.: 1016 DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23														
JOSEPH F. MCKERNAN JR., R.A. A.I.A. NJ ARCH # 10084 - PA ARCH 04-01042-X - CT ARCH 7124		SCALE: DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23	SCALE: AS NOTED PROJNO.: 1016 DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23														
JOSEPH F. MCKERNAN JR., R.A. A.I.A. NJ ARCH # 10084 - PA ARCH 04-01042-X - CT ARCH 7124		SCALE: DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23	SCALE: AS NOTED PROJNO.: 1016 DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23														
JOSEPH F. MCKERNAN JR., R.A. A.I.A. NJ ARCH # 10084 - PA ARCH 04-01042-X - CT ARCH 7124		SCALE: DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23	SCALE: AS NOTED PROJNO.: 1016 DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23														
JOSEPH F. MCKERNAN JR., R.A. A.I.A. NJ ARCH # 10084 - PA ARCH 04-01042-X - CT ARCH 7124		SCALE: DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23	SCALE: AS NOTED PROJNO.: 1016 DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23														
JOSEPH F. MCKERNAN JR., R.A. A.I.A. NJ ARCH # 10084 - PA ARCH 04-01042-X - CT ARCH 7124		SCALE: DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23	SCALE: AS NOTED PROJNO.: 1016 DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23														
JOSEPH F. MCKERNAN JR., R.A. A.I.A. NJ ARCH # 10084 - PA ARCH 04-01042-X - CT ARCH 7124		SCALE: DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23	SCALE: AS NOTED PROJNO.: 1016 DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23														
JOSEPH F. MCKERNAN JR., R.A. A.I.A. NJ ARCH # 10084 - PA ARCH 04-01042-X - CT ARCH 7124		SCALE: DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23	SCALE: AS NOTED PROJNO.: 1016 DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23														
JOSEPH F. MCKERNAN JR., R.A. A.I.A. NJ ARCH # 10084 - PA ARCH 04-01042-X - CT ARCH 7124		SCALE: DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23	SCALE: AS NOTED PROJNO.: 1016 DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23														
JOSEPH F. MCKERNAN JR., R.A. A.I.A. NJ ARCH # 10084 - PA ARCH 04-01042-X - CT ARCH 7124		SCALE: DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23	SCALE: AS NOTED PROJNO.: 1016 DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23														
JOSEPH F. MCKERNAN JR., R.A. A.I.A. NJ ARCH # 10084 - PA ARCH 04-01042-X - CT ARCH 7124		SCALE: DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23	SCALE: AS NOTED PROJNO.: 1016 DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23														
JOSEPH F. MCKERNAN JR., R.A. A.I.A. NJ ARCH # 10084 - PA ARCH 04-01042-X - CT ARCH 7124		SCALE: DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23	SCALE: AS NOTED PROJNO.: 1016 DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23														
JOSEPH F. MCKERNAN JR., R.A. A.I.A. NJ ARCH # 10084 - PA ARCH 04-01042-X - CT ARCH 7124		SCALE: DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23	SCALE: AS NOTED PROJNO.: 1016 DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23														
JOSEPH F. MCKERNAN JR., R.A. A.I.A. NJ ARCH # 10084 - PA ARCH 04-01042-X - CT ARCH 7124		SCALE: DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE: 7/28/23	SCALE: AS NOTED PROJNO.: 1016 DATE: 7/28/23 REVISIONS: NO. REVISIONS: 0 DATE:														

SHOP DRAWING SUBMITTAL REQUIREMENTS		Submittal Required	Signed & Sealed
		Yes	Yes
Section 1 - General			
	1	Temporary Shoring Shop Drawings & Calculations	X
Section 3 - Concrete			
	1	Concrete Mix Design	X
	2	Concrete Reinforcing Shop Drawings	X
Section 4 - Metals			
	1	Steel Shop Drawings	X
	2	Steel Connection Calculations	X
	3	Post Installed Anchors, Materials, Adhesives	X
Section 5 - Wood & Composites			
	1	Miscellaneous Lumber Including: Wood Products, Nails, Hangers, & Sheathing	X
	2	Engineered Lumber Beams, Posts, & Joists Shop Drawings	X

STAIR, HANDRAIL, GUARDRAIL, GRAB BAR, & FIXED LADDER DESIGN SCHEDULE	
COMPONENT	DESIGN LOAD
STAIRS AND LANDINGS	100 PSF UNIFORM LOAD AND 300 LB (NON CONCURRENT) CONCENTRATED LOAD ON STAIR TREADS APPLIED TO 2" x 2" AREA.
HANDRAIL/ GUARDRAIL SYSTEMS	200 LB LOAD APPLIED AT ANY POINT IN ANY DIRECTION ON HANDRAIL ON TOP RAIL TO PRODUCE MAXIMUM LOAD EFFECT, OR 50 LB PER FOOT NON-CONCURRENT UNIT LOAD APPLIED IN ANY DIRECTION ALONG HANDRAIL OR TOP RAIL TO PRODUCE MAXIMUM LOAD EFFECT. INTERMEDIATE RAILS SHALL BE DESIGN FOR HORIZONTAL LOAD OF 50 LBS APPLIED ON AN AREA NOT TO EXCEED 12"x12".

NOTES:
1. SEE THE APPLICABLE EDITION OF ASCE 7 FOR MORE INFORMATION REGARDING LIVE LOADS ON THESE COMPONENTS.
2. STAIRS, HANDRAIL, GUARDRAIL, GRAB BARS, & FIXED LADDERS ARE DELEGATED DESIGN COMPONENTS PER THE SCHEDULE ON DWG S0.2

DELEGATED DESIGN	
1	Temporary Shoring of Excavations & Building Structure During Construction, Other Contractor Means & Methods Components (e.g. Scaffolding, Fall Protection, etc.)
2	Concrete Formwork
3	Site Appurtenances (e.g. Site Walls, Planters, Pools, Trellises, Gazebos, etc.)
4	Metal Stairs, Railings, Guardrails, & Ladders

DELEGATED DESIGN SCHEDULE NOTES:
1. THE ITEMS LISTED IN THIS SCHEDULE HAVE NOT BEEN DESIGNED BY THE STRUCTURAL ENGINEER OF RECORD FOR THIS PROJECT. A SPECIALTY ENGINEER SHALL BE RETAINED BY THE CONTRACTOR TO PERFORM THE REQUIRED DESIGNS.
2. THE SPECIALTY ENGINEER SHALL BE A LICENSED PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF THE PROJECT.
3. CALCULATIONS AND/OR SHOP DRAWINGS SHALL BE SUBMITTED FOR REVIEW AND APPROVAL TO THE STRUCTURAL ENGINEER OF RECORD PRIOR TO CONSTRUCTION.

LATERAL LOAD DESIGN SCHEDULE		
WIND CRITERIA		
DESCRIPTION	SYMBOL	VALUE
BASIC WIND SPEED (3 SECOND GUST)	V	114 MPH
RISK CATEGORY	-	II
EXPOSURE CATEGORY	-	B
INTERNAL PRESSURE COEFF	GCpi	+/- 0.18
SEISMIC CRITERIA		
DESCRIPTION	SYMBOL	VALUE
RISK CATEGORY	-	II
SEISMIC IMPT FACTOR	I _E	1.0
MAPPED SPECTRAL ACCEL FOR SHORT PERIODS	S _s	0.17 g
MAPPED SPECTRAL ACCEL FOR ONE SECOND PERIOD	S ₁	0.046 g
SPECTRAL RESPONSE COEFF	S _{DS}	0.182 g
SPECTRAL RESPONSE COEFF	S _{D1}	0.073 g
SITE CLASS	-	D
SEISMIC DESIGN CATEGORY	-	B

GRAVITY LOAD DESIGN SCHEDULE				
COMPONENT	AREA	4" SLAB ON GRADE	MAIN FLOOR	ROOF AREAS
ROOF & INSULATION				10
WOOD FRAMING & DECK			5	5
CEILINGS			5	2
MISC / COLLATERAL			10	3
4" CONCRETE SLAB		50		
TOTAL DEAD LOAD		50	20	20
LIVE LOAD		100	100	20
TOTAL LOAD		150	120	40
LIVE LOAD REDUCTION USED IN DESIGN (YES/NO)		NO	NO	NO

NOTES:
1. ALL LOADS SHOWN ARE IN POUNDS PER SQ FT.
2. ALL LOADS ARE IN ACCORDANCE WITH THE 2021 INTERNATIONAL BUILDING CODE.

SNOW LOAD DESIGN SCHEDULE		
DESCRIPTION	SYMBOL	VALUE
GROUND SNOW LOAD	P _g	20 PSF
FLAT-ROOF SNOW LOAD	P _f	20 PSF
SNOW EXPOSURE CATEGORY	C _e	1.0
THERMAL FACTOR	C _t	1.1
SNOW LOAD IMPT FACTOR	I	1.0

SPECIAL INSPECTION AND TESTING (IBC 2021 CHAPTER 17)

- ALL TESTS AND INSPECTIONS SHALL BE PERFORMED BY AN INDEPENDENT TESTING AND INSPECTION AGENCY. THE SPECIAL INSPECTOR FROM THIS TESTING AGENCY SHALL OBSERVE THE WORK FOR CONFORMANCE TO THE DESIGN DRAWINGS AND SPECIFICATIONS. THE SPECIAL INSPECTOR SHALL BE TRAINED/CERTIFIED TO PERFORM THE REQUIRED SPECIAL INSPECTIONS. THE SPECIAL INSPECTOR SHALL SUBMIT WRITTEN DOCUMENTATION OF CERTIFICATIONS FOR RECORD PRIOR TO CONSTRUCTION.
- THE SPECIAL INSPECTOR SHALL FURNISH INSPECTION REPORTS TO THE BUILDING OFFICIAL, THE ENGINEER OR ARCHITECT OF RECORD, AND ALL OTHER DESIGNATED INDIVIDUALS. ALL DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE CONTRACTOR FOR CORRECTION. THEN, IF NOT CORRECTED, TO THE PROPER DESIGN AUTHORITY AND TO THE BUILDING OFFICIAL.
- THE SPECIAL INSPECTOR SHALL SUBMIT A FINAL SIGNED REPORT STATING WHETHER THE WORK REQUIRING SPECIAL INSPECTION WAS, TO THE BEST OF THE INSPECTOR'S KNOWLEDGE, IN CONFORMANCE WITH THE APPROVED DESIGN DRAWINGS, SPECIFICATIONS, SOILS REPORT AND APPLICABLE WORKMANSHIP PROVISIONS OF THE INTERNATIONAL BUILDING CODE.
- STRUCTURAL OBSERVATIONS BY THE STRUCTURAL ENGINEER SHALL NOT BE CONSIDERED A SPECIAL INSPECTION.
- THE FOLLOWING ITEMS MARKED "X" REQUIRE SPECIAL INSPECTIONS: (REFER TO IBC 2018 CHAPTER 17 FOR ADDITIONAL INFORMATION)

VERIFICATION AND INSPECTION		INSPECTION REQUIRED	
		OBSERVE	PERFORM
1705.2 - STEEL CONSTRUCTION			
	Special inspection for structural steel shall be in accordance with AISC 360. At a minimum, the following inspections are required.		
1.	Inspection tasks prior to welding:		
a.	Welder qualification records and continuity records	X	
b.	WPS available		X
c.	Manufacturer certifications for welding consumables available		X
d.	Material identification (type/grade)	X	
e.	Welder identification system	X	
f.	Verification of in-situ concrete strength, prior to stressing of tendons in post-tensioned concrete and prior to removal of shores and forms from beams and structural slabs		X
g.	Fit-up of CJP groove welds of HSS T-, Y-, and K-joints without backing (including joint geometry): joint preparations, dimensions, cleanliness, and tacking	X	
h.	Configuration and finish of access holes	X	
i.	Fit up of fillet welds: dimensions, cleanliness, and tacking	X	
2.	Inspection tasks during welding		
a.	Control and handling of welding consumables: packaging and exposure control	X	
b.	No welding over cracked tack welds	X	
c.	Environmental conditions: wind speed within limits, precipitation, and temperature	X	
d.	WPS followed: settings on welding equipment, travel speed, selected welding materials, shielding gas type/flow rate, preheat applied, interpass temperature maintained, and proper position	X	
e.	Welding techniques: interpass and final cleaning, each pass within profile limitations, and each pass meets quality requirements	X	
f.	Placement and installation of steel headed stud anchors		X
3.	Inspection tasks after welding		
a.	Welds cleaned	X	
b.	Size, length, and location of welds		X
c.	Welds meet visual acceptance criteria: crack prohibition, weld/base-metal fusion, crater cross section, weld profiles, weld size, undercut, and porosity		X
d.	Arc strikes		X
e.	k-area		X
f.	Weld across holes in rolled heavy shapes and built-up heavy shapes		X
g.	Backing removed and weld tabs removed (if required)		X
h.	Repair activities		X
i.	Document acceptance or rejection of welded joint or member		X
j.	No prohibited welds have been added without the approval of the EOR	X	
4.	Inspection tasks prior to bolting:		
a.	Manufacturer's certifications available for fastener materials		X
b.	Fasteners marked in accordance with ASTM requirements	X	
c.	Correct fasteners selected for the joint detail: grade, type, bolt length if threads are to be excluded from shear plane	X	
d.	Correct bolting procedure selected for joint detail	X	
e.	Connecting elements, including the appropriate faying surface condition and hole preparation, if specified, meet applicable requirements	X	
f.	Pre-installation verification testing by installation personnel observed and documented for fastener assemblies and methods used	X	
g.	Protected storage provided for bolts, nuts, washers, and other fastener components	X	
5.	Inspection tasks during bolting:		
a.	Fastener assemblies placed in all holes and washers and nuts are positioned as required	X	
b.	Joint brought to the snug-tight condition prior to the pretensioning operation	X	
c.	Fastener component not turned by the wrench prevented from rotating	X	
d.	Fasteners are pretensioned in accordance with the RCSC Specification, progressing systematically from the most rigid point toward the free edges	X	
6.	Inspection tasks after bolting:		
a.	Document acceptance or rejection of bolted connections		X

VERIFICATION AND INSPECTION		INSPECTION REQUIRED	
		CONTINUOUS	PERIODIC
1705.3 - CONCRETE CONSTRUCTION			
1.	Inspection of reinforcement including prestressing tendons and verification of placement		X
2.	Inspection of reinforcing bar welding (in accordance with AWS D1.4):		
a.	Verification of weldability of reinforcing bars other than ASTM A706		X
b.	Inspection of single-pass fillet welds, maximum 5/16"		X
c.	Inspection of all other welds	X	
3.	Inspection of anchors cast in concrete		X
4.	Inspection of anchors post-installed in hardened concrete members:		
a.	Adhesive anchors installed in horizontally or upwardly inclined orientations to resist sustained tension loads	X	
b.	Mechanical anchors and adhesive anchors not defined in 4.a		X
5.	Verification of required design mix		X
6.	Prior to concrete placement, fabricate specimens for strength tests, perform slump and air content tests, and determine the temperature of the concrete	X	
7.	Inspection of concrete and shotcrete placement for proper application techniques	X	
8.	Verification of maintenance of specified curing temperature and techniques		X
9.	Fit-up of groove welds (including joint geometry): joint preparations, dimensions, cleanliness, tacking, and backing (if applicable)	X	
10.	Inspection of formwork for shape, location, and dimensions of the concrete member being formed		X

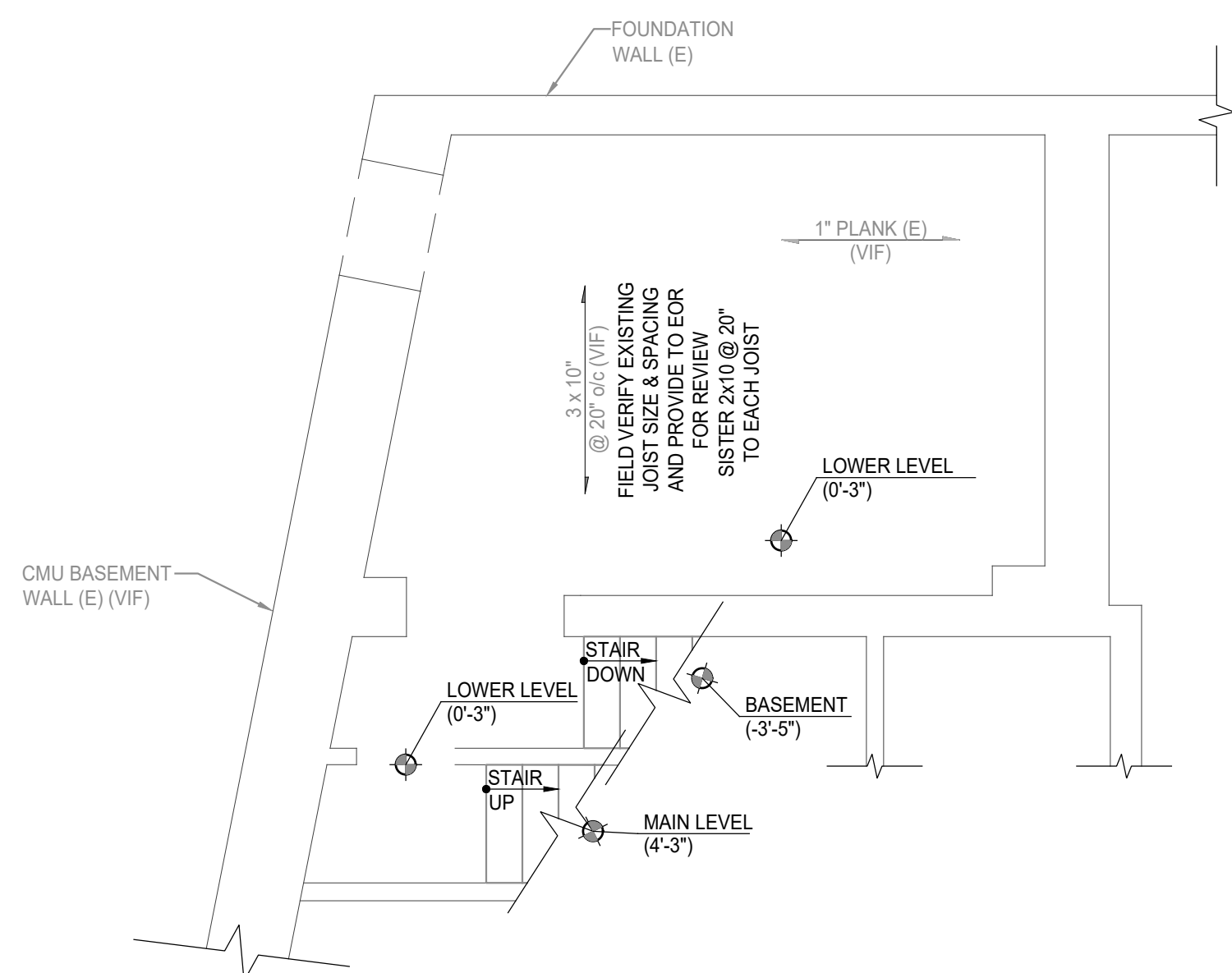
VERIFICATION AND INSPECTION		INSPECTION REQUIRED	
		CONTINUOUS	PERIODIC
1705.5 - WOOD CONSTRUCTION			
	Special inspection for wood construction shall be in accordance with IBC Section 1705.5. At a minimum, the following inspections are required:		
1.	Verify, size, species and grade of lumber/sheathing complies with construction documents.		X
2.	Verify nailing of diaphragm floor and roof sheathing and shear walls complies with construction documents.		X

VERIFICATION AND INSPECTION		INSPECTION REQUIRED	
		CONTINUOUS	PERIODIC
1705.6 - SOILS			
1.	Verification of materials below shallow foundations are adequate to achieve the design bearing capacity		X
2.	Verification that excavations are extended to proper depth and have reached proper material		X
3.	Perform classification and testing of compacted fill materials.		X
4.	Verification of use of proper materials, densities and lift thicknesses during placement and compaction of compacted fill	X	
5.	Prior to placement of compacted fill, inspection of subgrade and verify that site has been prepared properly		X

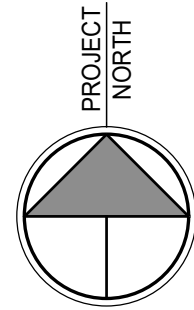
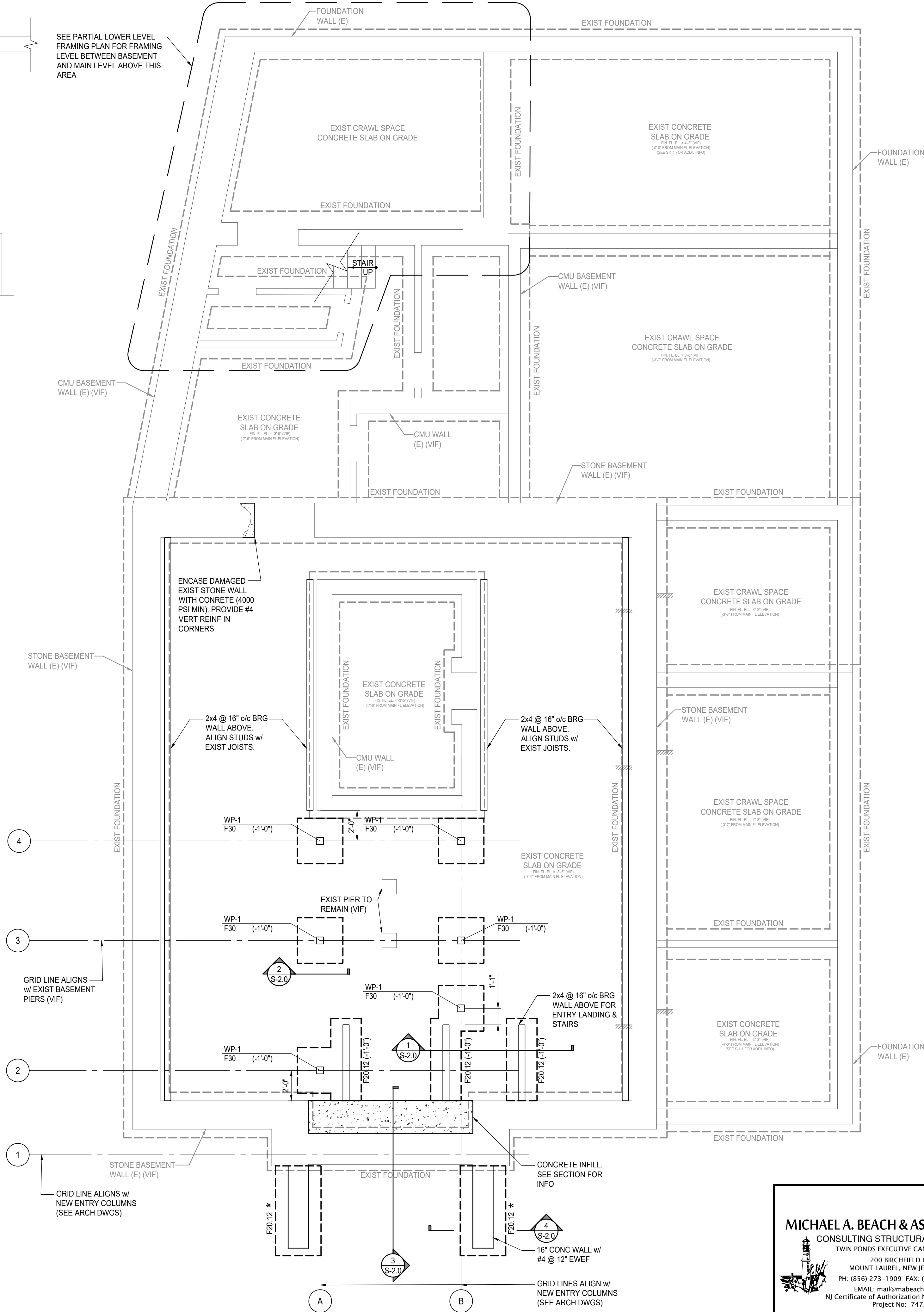


TIMOTHY D. JENNINGS
PROFESSIONAL ENGINEER
NJ LIC. NO. 24GE03838500

	01/28/2023		BID SET		TDJ & VAB
No.	DATE		DESCRIPTION		REV'D BY
REVISIONS					
APPROVAL:		PROJECT:			
		ADA RENOVATIONS TO THE GLOUCESTER TOWNSHIP BLACK BOX COMMUNITY CENTER			
		3 S.BLACKHORSE PIKE BLACKWOOD, NEW JERSEY			
		TITLE:		STRUCTURAL LEAD SHEET 3	
		Joseph F. McKernan Jr., Architects & Associates 100 Dobbs Lane Suite 204 Cherry Hill, New Jersey 08034			
JOSEPH F. MCKERNAN JR., R.A. NJ ARCH. # 10864 PA ARCH. #A-014822-X, CT ARCH. 7234		SEAL:		SCALE: AS NOTED PROJ.NO.: 1016 DATE: --/-- REV'D: -- DRAWN BY: TC CHK'D BY: DF	
		DIMENSIONS MUST BE VERIFIED BY THE CONTRACTOR. NOTIFY THE ARCHITECT IF ANY DISCREPANCIES DETECTED. PRINTED DIMENSIONS WITH CONSTRUCTION. DO NOT SCALE DRAWING.		S-0.2	
		SPECIAL INSPECTION AND TESTING (IBC 2021 CHAPTER 17)			



PARTIAL LOWER LEVEL FRAMING PLAN
SCALE: 1/4" = 1'-0"



BASEMENT & FOUNDATION PLAN

SCALE: 1/4" = 1'-0"

1. FINISH FLOOR ELEVATION = -3'-5" FROM DATUM EL 0'-0", U.N.O. FIELD VERIFY EXISTING FLOOR ELEVATIONS.
2. BOTTOM OF FOOTING ELEVATION SHALL BE -1'-0" BELOW FINISH FLOOR ELEVATION UNLESS NOTED THUS (-#'-#") ON PLAN.
3. (E) & 'EXIST' DENOTES EXISTING.
4. DENOTES EXTENT OF REINFORCED CONC WALLS. SEE PLAN AND APPLICABLE SECTIONS FOR THICKNESS AND REINFORCING.
5. SECTIONS SHOWN ON PLAN APPLY TO SIMILAR CONDITIONS THROUGHOUT THE BUILDING.
6. SEE DRAWINGS S0.0 THRU S0.2 FOR STRUCTURAL NOTES.
7. DENOTES BOTTOM OF NEW FOUNDATION TO MATCH BOTTOM OF EXISTING FOUNDATION. BOTTOM OF EXISTING FOUNDATION TO BE FIELD VERIFIED.
8. ALL EXISTING CONDITIONS MUST BE FIELD VERIFIED BEFORE ANY NEW WORK IS PERFORMED.
9. (VIF) DENOTES TO VERIFY IN FIELD.
10. SEE ARCHITECTURAL DRAWINGS FOR ALL REQUIRED DEMOLITION PRIOR TO START OF NEW WORK.

FOUNDATION ELECTRICAL GROUNDING NOTE:
THE BUILDING ELECTRICAL GROUNDING SYSTEM SHALL BE BONDED TO THE FOUNDATION REBAR IN ACCORDANCE WITH THE REQUIREMENTS OF N.J.A.C. 5:23-3.4 AND N.E.C. 2014, SECTION 250.52 (A) (3). CONTRACTOR SHALL COORDINATE WITH PROJECT ELECTRICAL DRAWINGS FOR REQUIREMENTS. ATTACHMENT OF ELECTRICAL GROUNDING SYSTEM TO FOUNDATION REBAR SHALL BE MADE PRIOR TO PLACEMENT OF CONCRETE FOR THE FOUNDATION.

FOOTING SCHEDULE

MARK	SIZE	REINFORCING
F20.12	2'-0"x1'-0" CONT	(3) #4 LONG WAY BOT #4 @ 12" SHORT WAY BOT
F30	3'-0"x3'-0"x1'-0"	(4) #4 BOT EACH WAY

FOOTING SCHEDULE NOTES:

1. ALL FOUNDATIONS HAVE BEEN DESIGNED USING A SAFE ALLOWABLE SOIL BEARING PRESSURE OF 2,000 PSF.
2. REFER TO THE FOUNDATION INVESTIGATION REPORT LISTED IN THE STRUCTURAL NOTES ON DRAWING S-X FOR ADDITIONAL INFORMATION REGARDING THE FOUNDATION CONSTRUCTION.

WOOD POST SCHEDULE

MARK	SIZE	COLUMN BASE CONNECTION	COLUMN CAP CONNECTION
WP-1	6x6 PT POST	(2) SIMPSON RPBZ & 1" CFS STANDOFF w/ (4) 3/8" HILTI KWIK BOLT T2 (STD EMBED) TO CONC & (8) 1/4" x 1 1/2" SDS TO POST	SIMPSON BC52-3/6 w/ (12) 0.162 x 3 1/2" NAILS TO BEAM & (6) 0.162 x 3 1/2" NAILS TO POST
ALTERNATE CONNECTIONS		SIMPSON AB66Z w/ (1) 5/8" HILTI KWIK BOLT T2 (STD EMBED) TO CONC & (8) 0.162 x 3 1/2" NAILS TO POST	SIMPSON CCO4 62-5.50SDS w/ (16) 1/4" x 2 1/4" SDS SCREWS TO BEAM & (14) 1/4" x 2 1/4" SDS SCREWS TO POST

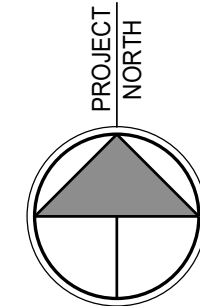
NOTES:

1. PT POSTS TO BE SOUTHERN PINE No. 1

MICHAEL A. BEACH & ASSOCIATES, LLC
CONSULTING STRUCTURAL ENGINEERING
TWIN PONDS EXECUTIVE CAMPUS, SUITE 205
200 BIRCHFIELD DRIVE
MOUNT LAUREL, NEW JERSEY 08054
PH: (856) 273-1909 FAX: (856) 273-1480
EMAIL: mail@maeachassoc.com
NJ Certificate of Authorization No. 24GA27962200
Project No. 747.216

TIMOTHY D. JENNINGS
PROFESSIONAL ENGINEER
NJ LIC. NO. 24GE0363500

07/28/2023		BID SET	TJD & VAB
No.	DATE	DESCRIPTION	REV'D BY
REVISIONS			
APPROVAL:		PROJECT:	
		ADA RENOVATIONS TO THE GLOUCESTER TOWNSHIP BLACK BOX COMMUNITY CENTER	
		3 S.BLACKHORSE PIKE BLACKWOOD, NEW JERSEY	
		Joseph F. McKernan Jr., Architects & Associates 100 Dobbs Lane Suite 204 Cherry Hill, New Jersey 08034	
JOSEPH F. MCKERNAN JR., R.A. NJ ARCH. A 10864 - P.N. ARCH. 84-01462-X, CT. ARCH. 7524		SCALE: AS NOTED DATE: --/-- REV'D: --/-- DRAWN BY: TC CHECKED BY: DP	PROJECT NO. PROJ. NO: 1016 DATE: --/-- REV'D: --/-- DRAWN BY: TC CHECKED BY: DP
S-1.0		S-1.0	



MAIN FLOOR FRAMING PLAN

SCALE: 1/4" = 1'-0"

DESIGN LIVE LOAD = 100 PSF

1. FINISH FLOOR ELEVATION = + 4'-3" FROM DATUM ELEVATION 0'-0" (TYP UNO) (VIF).
2. $\frac{3}{4}"$ DENOTES SPAN OF 3/4" PLYWOOD FLOORING. SEE PLAN FOR NAILING REQUIREMENTS.
3. SECTIONS SHOWN ON PLAN APPLY TO SIMILAR CONDITIONS THROUGHOUT THE BUILDING.
4. SEE DRAWINGS S0.0 THRU S0.2 FOR STRUCTURAL NOTES.
5. ALL EXISTING CONDITIONS MUST BE FIELD VERIFIED BEFORE ANY NEW WORK IS PERFORMED.
6. (VIF) DENOTES TO VERIFY IN FIELD.
7. SEE ARCHITECTURAL DRAWINGS FOR ALL REQUIRED DEMOLITION PRIOR TO START OF NEW WORK.
8. (E) & 'EXIST' DENOTES EXISTING.
9. DENOTES EXTENT OF LOW ROOF OVER-FRAMING.
10. (LO) DENOTES TOP OF BEAM TO BE AT UNDERSIDE OF JOISTS.

STUD BEARING WALL CONSTRUCTION NOTE

1. ALL STUDS IN BEARING WALLS SHALL MEET MINIMUM PROPERTIES OF SPF No 1/2. SEE STRUCTURAL NOTES FOR MORE INFORMATION.
2. ALL BEARING WALL STUDS SHALL BE AT A MAXIMUM 16" o/c SPACING & SHALL ALIGN WITH FLOOR JOISTS FOR FULL HEIGHT OF WALL. WHERE A JOIST DOES NOT ALIGN WITH THE STUD, A STUD SHALL BE ADDED.

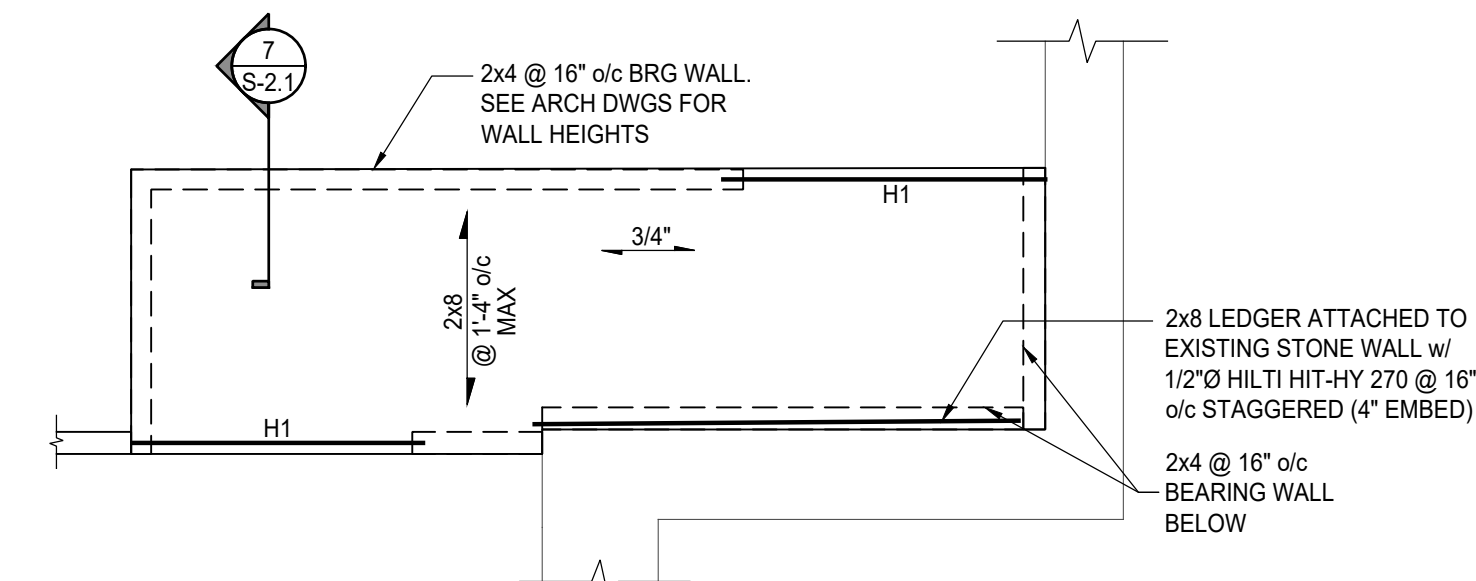
NOTE FOR PLYWOOD

PLYWOOD FOR FLOORS SHALL BE 23/32" THICK (3/4" NOMINAL), 24" SPAN RATING APA RATED SHEATHING, EXPOSURE 1. ALL JOINTS SHALL BE STAGGERED. ALL EDGES SHALL BE TONGUE & GROOVE. NAIL TO SUPPORTING FLOOR STRUCTURE W/10d NAILS @ 6" o/c AT SUPPORTED PANEL EDGES. SPACE 10d NAILS AT MAX 12" o/c ALONG INTERMEDIATE FRAMING MEMBERS.

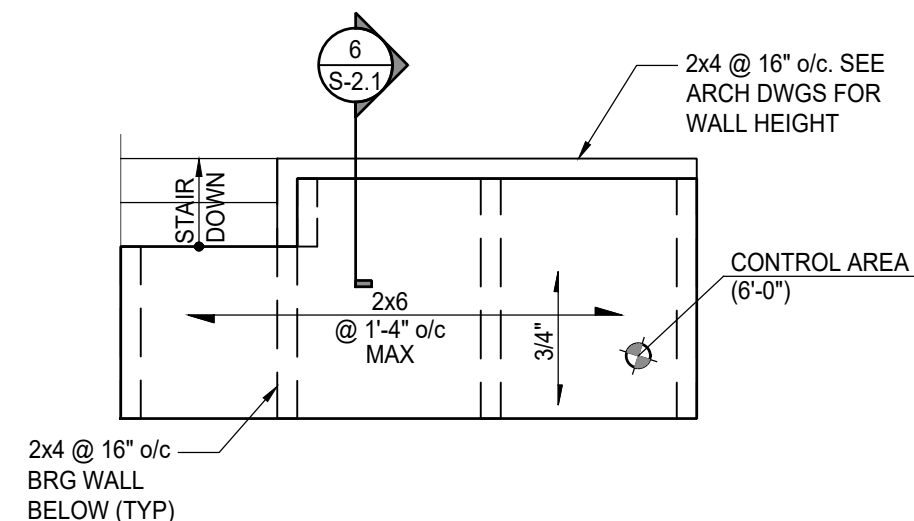
HEADER SCHEDULE

MARK	SIZE	REMARKS
H1	(2) 2x10 w/ 1/2" PLYWOOD SPACER	-----

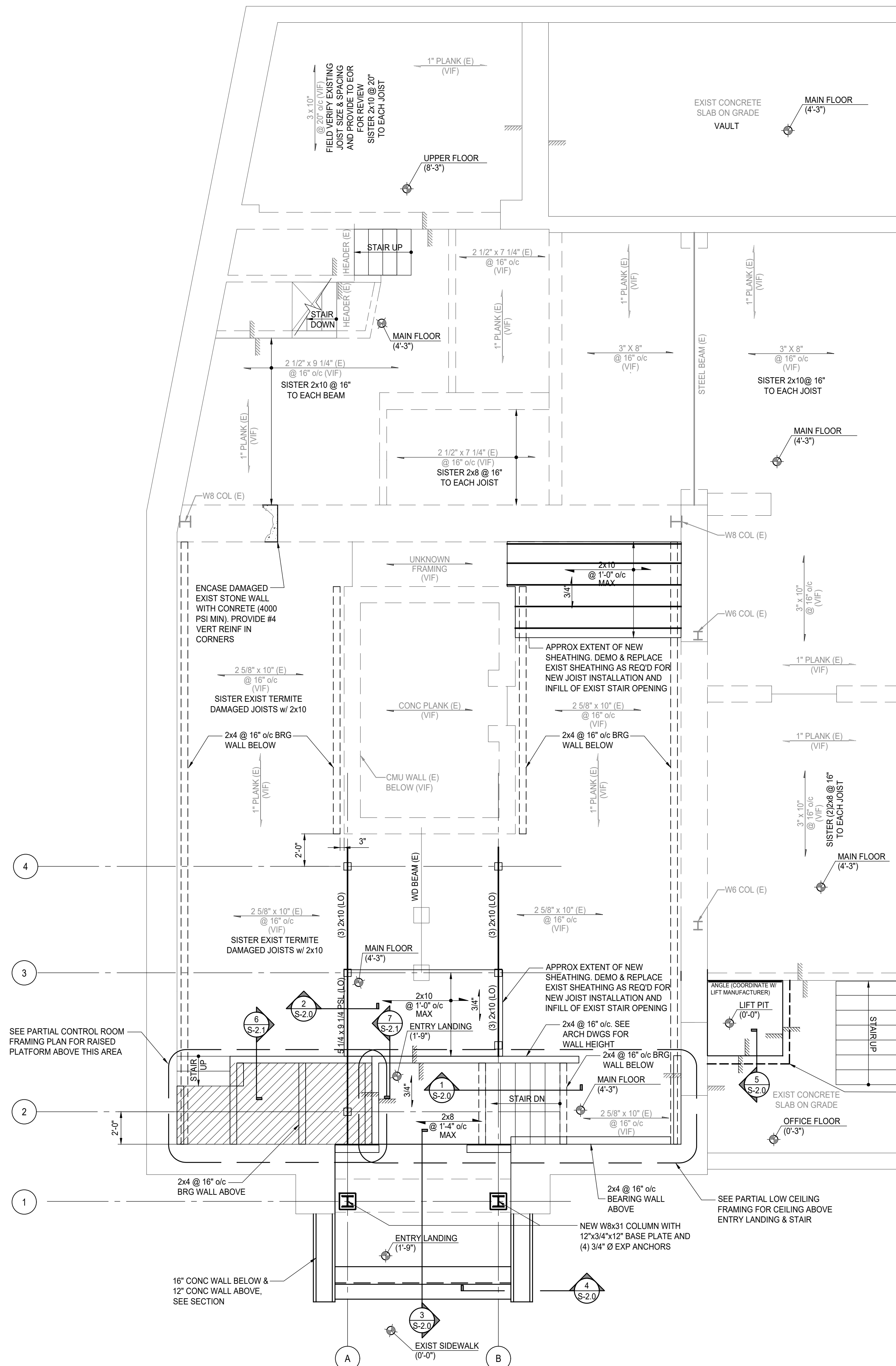
1. WOOD FOR ALL HEADERS SHALL BE SPRUCE-PINE-FIR #1/2 (UNO). SEE NOTES ON S0.0-S0.2 FOR MORE INFO.
2. PROVIDE A MINIMUM OF (1) KING STUD & (2) JAMB STUDS @ ALL INTERIOR HEADER & WOOD BEAM BEARING (UNO). PROVIDE A MINIMUM OF (2) KING STUD & (3) JAMB STUDS @ ALL EXTERIOR HEADER & WOOD BEAM BEARING (UNO).



PARTIAL LOW CEILING ABOVE ENTRY LANDING & STAIR FRAMING PLAN



PARTIAL CONTROL ROOM FRAMING PLAN



8" CONC DEPRESSIONED SLAB w/ #4 @ 12" EWB OVER LEAN CONCRETE FILL w/ BOTTOM OF LEAN CONCRETE FILL ELEVATION TO MATCH BOTTOM OF ADJACENT EXISTING FOUNDATION (4000PSI MIN)

MICHAEL A. BEACH & ASSOCIATES, LLC
CONSULTING STRUCTURAL ENGINEERING
TWIN PONDS EXECUTIVE CAMPUS, SUITE 205
200 BIRCHFIELD DRIVE
MOUNT LAUREL, NEW JERSEY 08054
PH: (856) 273-1909 FAX: (856) 273-1480
EMAIL: mail@mabeachassoc.com
NJ Certificate of Authorization No. 24GA27962200
Project No: 747.216

TIMOTHY D. JENNINGS
PROFESSIONAL ENGINEER
NJ LIC. NO. 24GE0383500


No.	01/28/2023	BID SET	TDJ & VAB
DATE		DESCRIPTION	REV'D BY
REVISIONS			
APPROVAL:		PROJECT:	
Joseph F. McKernan Jr., R.A.		ADA RENOVATIONS TO THE GLOUCESTER TOWNSHIP BLACK BOX COMMUNITY CENTER	
100 Dobbs Lane Suite 204 Cherry Hill, New Jersey 08034		3 S.BLACKHORSE PIKE BLACKWOOD, NEW JERSEY	
TITLE: MAIN FLOOR FRAMING PLAN		SCALE: AS NOTED	
JOSEPH F. MCKERNAN JR., R.A.		PROJECT NO: 1016	
DATE: --/--		REV'D: TC	
DRAWN BY: TC		CHECKED BY: DP	
DESIGNED BY: TC		DATE: 01/28/2023	
REVISIONS MUST BE VERIFIED BY ARCHITECT OR ENGINEER BEFORE CONSTRUCTION. DO NOT SCALE DRAWING.		SCALE: AS NOTED	
REVISIONS MUST BE VERIFIED BY ARCHITECT OR ENGINEER BEFORE CONSTRUCTION. DO NOT SCALE DRAWING.		SCALE: AS NOTED	

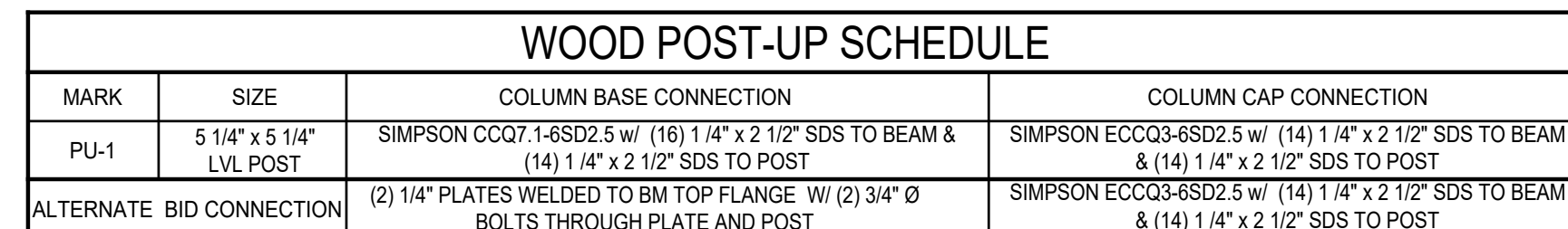
S-1.1




SCALE: 1/4" = 1'-0"

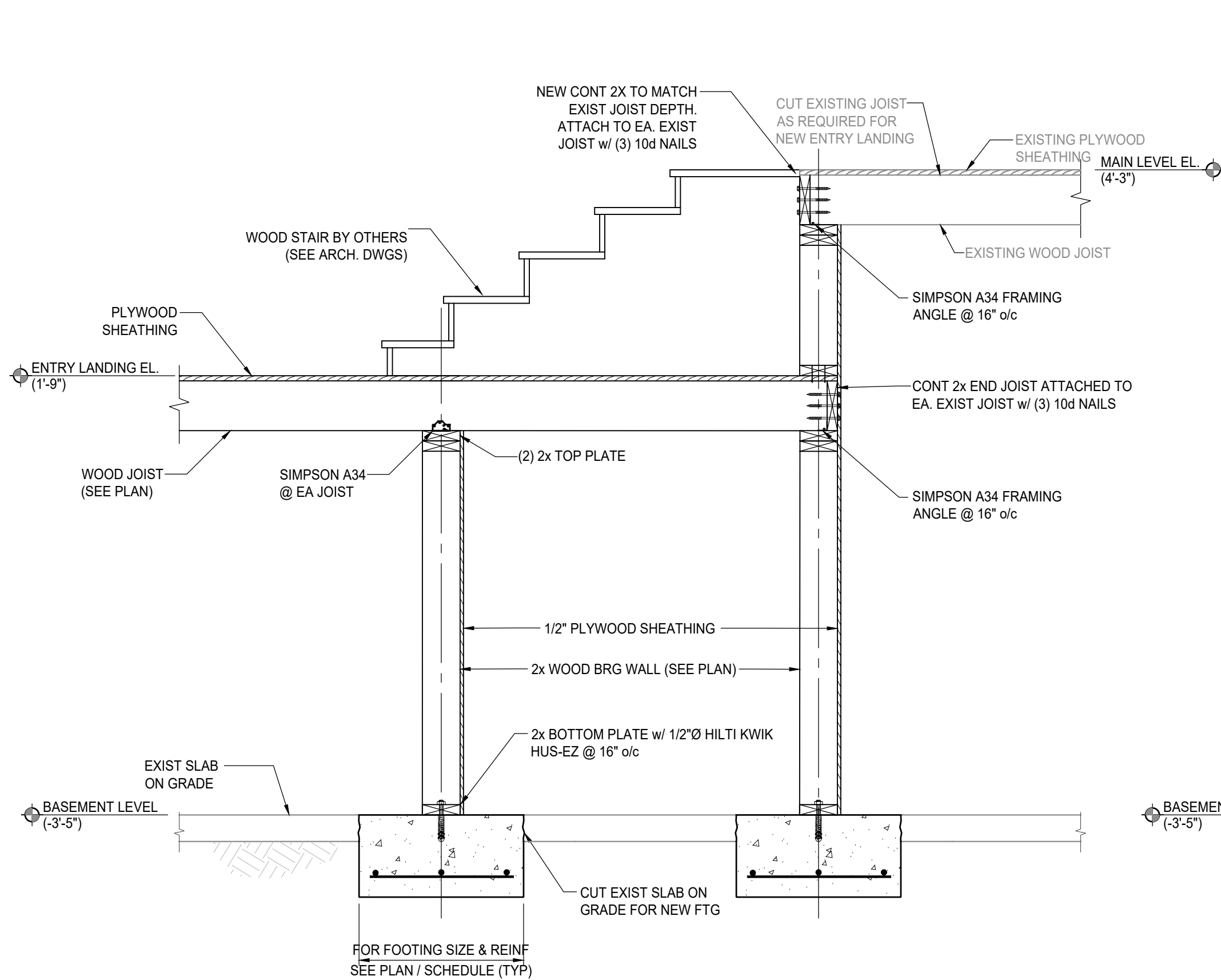
DESIGN LIVE LOAD = 30 PSF

1. EXISTING ROOF ELEVATIONS VARY (VIF).
2.  DENOTES BEAM TO COLUMN MOMENT CONNECTION. SEE DETAIL ON S-2.0.
3. SECTIONS SHOWN ON PLAN APPLY TO SIMILAR CONDITIONS THROUGHOUT THE BUILDING.
4. SEE DRAWINGS S0.0 THRU S0.2 FOR STRUCTURAL NOTES.
5. ALL EXISTING CONDITIONS MUST BE FIELD VERIFIED BEFORE ANY NEW WORK IS PERFORMED.
6. (VIF) DENOTES TO VERIFY IN FIELD.
7. SEE ARCHITECTURAL DRAWINGS FOR ALL REQUIRED DEMOLITION PRIOR TO START OF NEW WORK.
8. (E) & 'EXIST' DENOTES EXISTING.
9. CONCEPTUAL SHORING IS SHOWN ON PLAN, DESIGN AND DETAIL OF TEMPORARY SHORING IS A DELEGATED DESIGN. SEE DELEGATED DESIGN SCHEDULE ON S0.2 FOR ADDITIONAL INFORMATION. TEMPORARY SHORING TO BE PROVIDED ON THE JOB AS REQUIRED FOR NEW WORK.
10. "BRACE" INDICATES (2) 2x10 BRACE BEAM @ 1/4 POINTS OF BEAM (MAX 10' O.C., V.I.F.) (ALT. W6x15 STL BM) SEE DETAILS ON S-2.1 FOR ADDITIONAL INFORMATION.
11. (LO) INDICATES BOTTOM OF BEAM TO BE AT TOP OF EXISTING WALL. SEE DETAILS ON S-2.1.
12. (LOW) INDICATES TOP OF BEAM TO BE TIGHT TO UNDERSIDE OF EXISTING ROOF RIDGE AND HIP BEAMS.

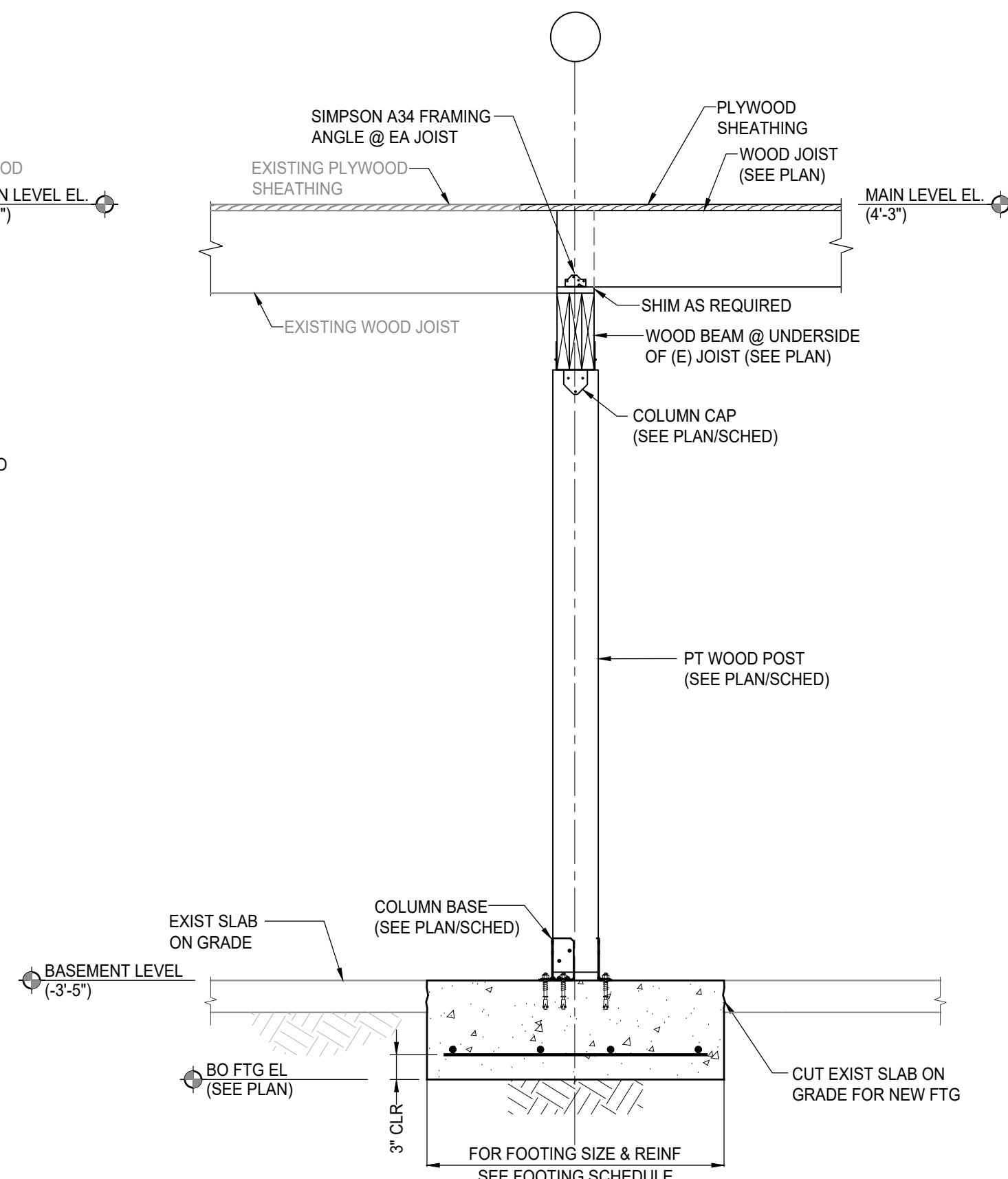


WOOD POST-UP SCHEDULE			
MARK	SIZE	COLUMN BASE CONNECTION	COLUMN CAP CONNECTION
PU-1	5 1/4" x 5 1/4" LVL POST	SIMPSON CCQ7-1-6SDS2.5 w/ (16) 1/4" x 2 1/2" SDS TO BEAM & (14) 1/4" x 2 1/2" SDS TO POST	SIMPSON ECCQ3-6SDS2.5 w/ (14) 1/4" x 2 1/2" SDS TO BEAM & (14) 1/4" x 2 1/2" SDS TO POST
ALTERNATE	BID CONNECTION	(2) 1/4" PLATES WELDED TO BM TOP FLANGE W/ (2) 3/4" Ø BOLTS THROUGH PLATE AND POST	SIMPSON ECCQ3-6SDS2.5 w/ (14) 1/4" x 2 1/2" SDS TO BEAM & (14) 1/4" x 2 1/2" SDS TO POST

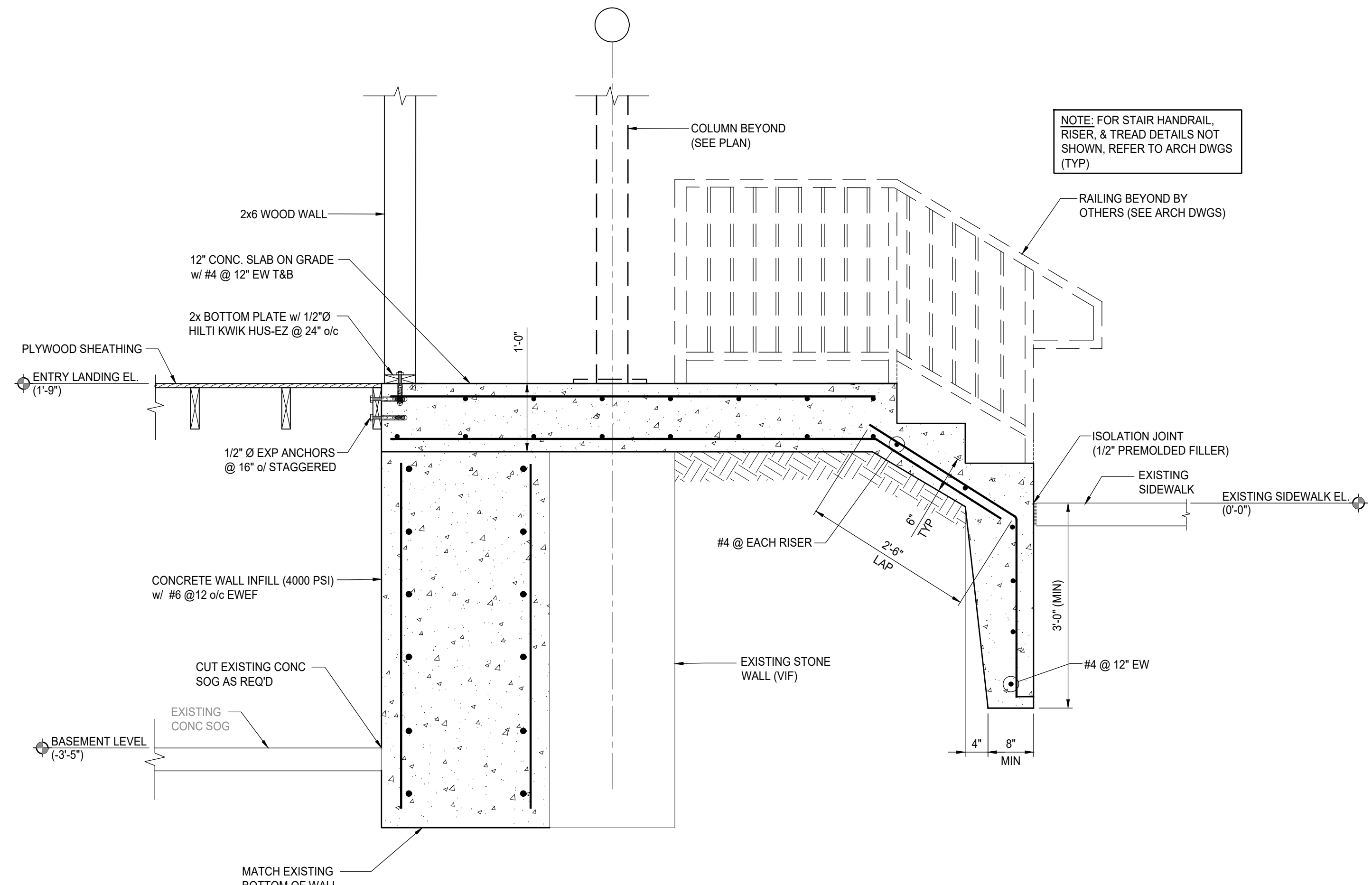
	07/28/2023		RD SET	TDL & VAL
No.	DATE		DESCRIPTION	REV'D BY
		REVISIONS		
APPROVAL:		PROJECT:		
		<p align="center">ADA RENOVATIONS TO THE GLOUCESTER TOWNSHIP BLACK BOX COMMUNITY CENTER</p> <p align="center">3 S.BLACKHORSE PIKE BLACKWOOD, NEW JERSEY</p>		
 <p>Joseph F. McKernan Jr., Architects & Associates 100 Dobbs Lane Suite 204 Cherry Hill, New Jersey 08034</p>		<p>TITLE: ROOF FRAMING PLAN</p>		
<p>JOSEPH F. MCKERNAN JR., R.A. A.I.A.</p> <p>31 ARCH B 1038A - PA ARCH 01-01402-X - CT ARCH 7024</p>		<p>SCALE:</p>	<p>SCALE: AS NOTED</p> <p>PROMO: 1016</p> <p>DATE: -/-/-</p> <p>REV'D:</p> <p>DRAWN BY: TC</p> <p>CHK'D BY: OF</p>	<p>DRAWING NO:</p> <p align="center">S-1.2</p>
		<p>CONTRACTOR MUST BE SERVED BY INVESTIGATOR. NOTIFY THE ARCHITECT OF ANY PROCEEDINGS BEFORE PROCEEDING WITH CONSTRUCTION.</p> <p>DO NOT SCALE DRAWING.</p>		
		<p>REGISTERED ARCHITECT & ASSOCIATES ESTABLISHED 2003</p>		



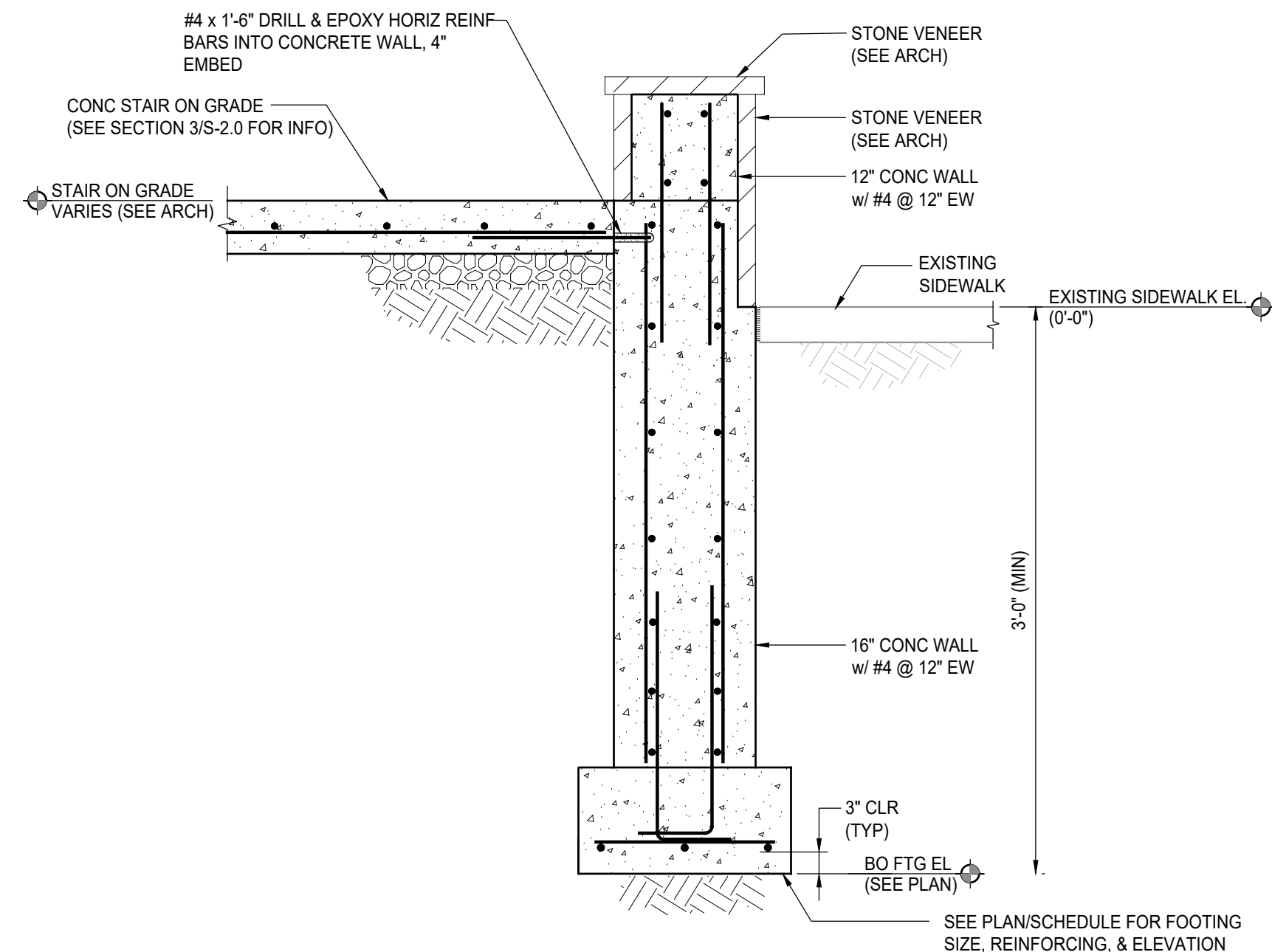
1 SECTION
S-2.0 SCALE: 3/4"=1'-0"



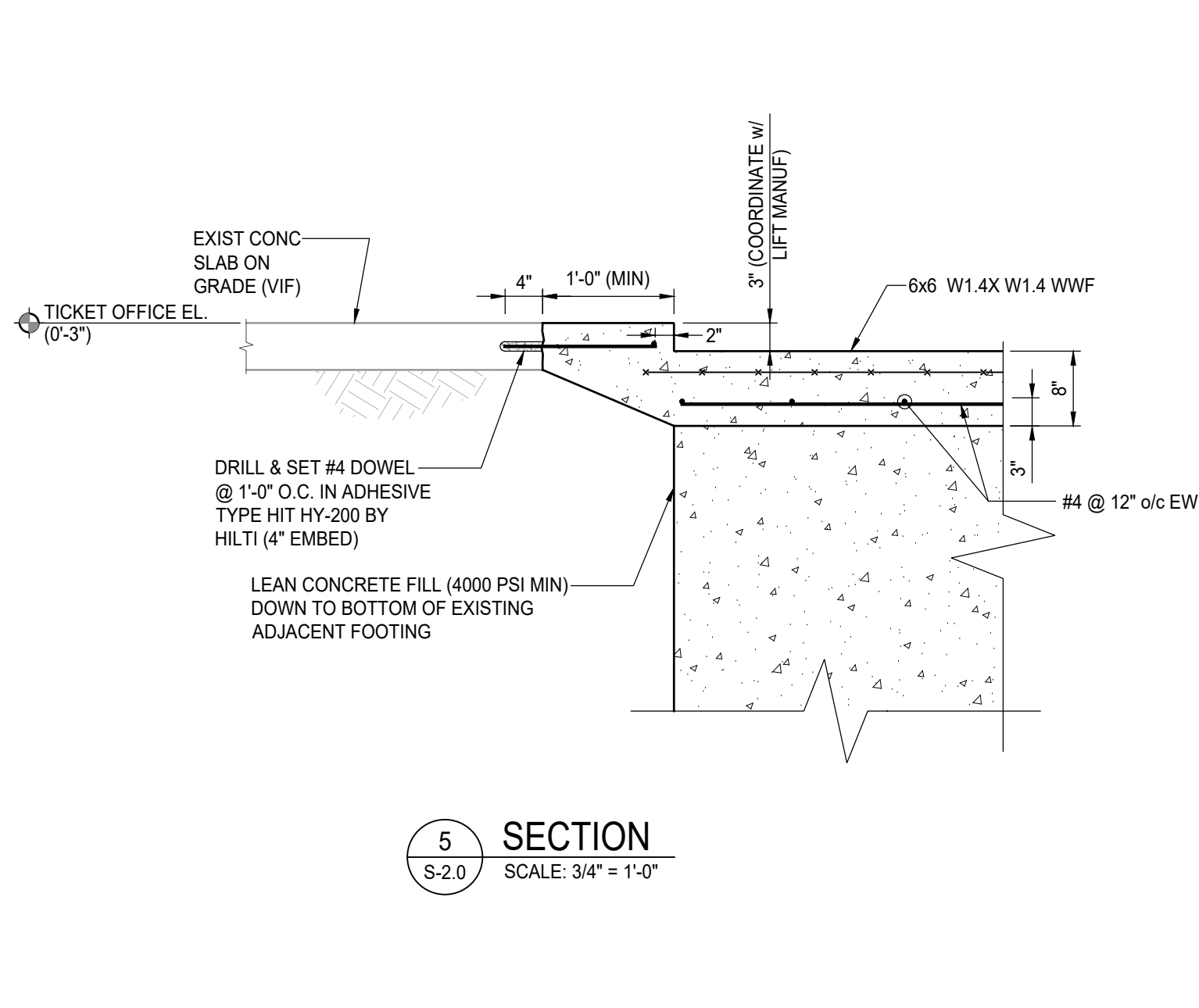
2 SECTION
S-2.0 SCALE: 3/4"=1'-0"



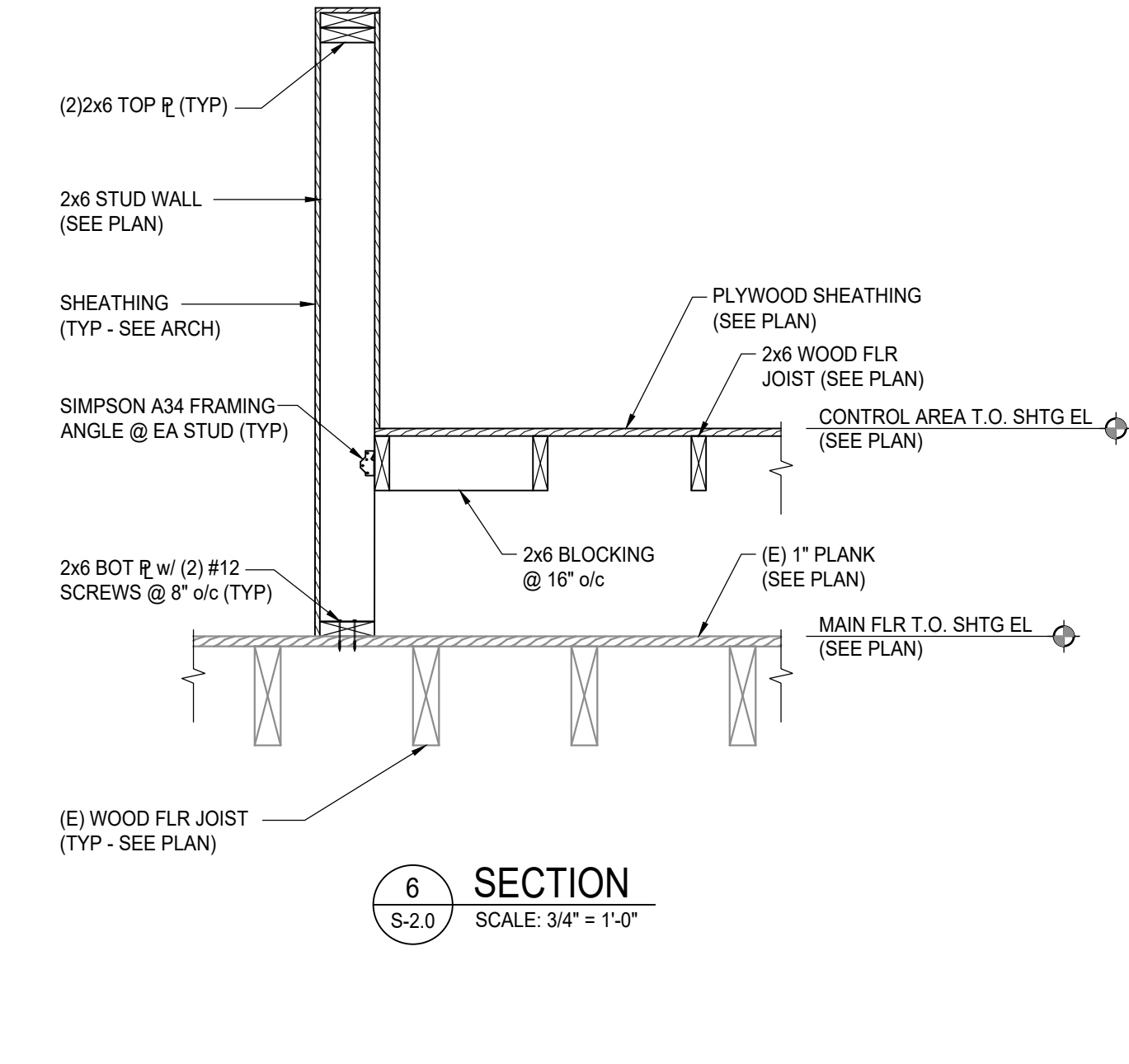
3 SECTION
S-2.0 SCALE: 3/4"=1'-0"



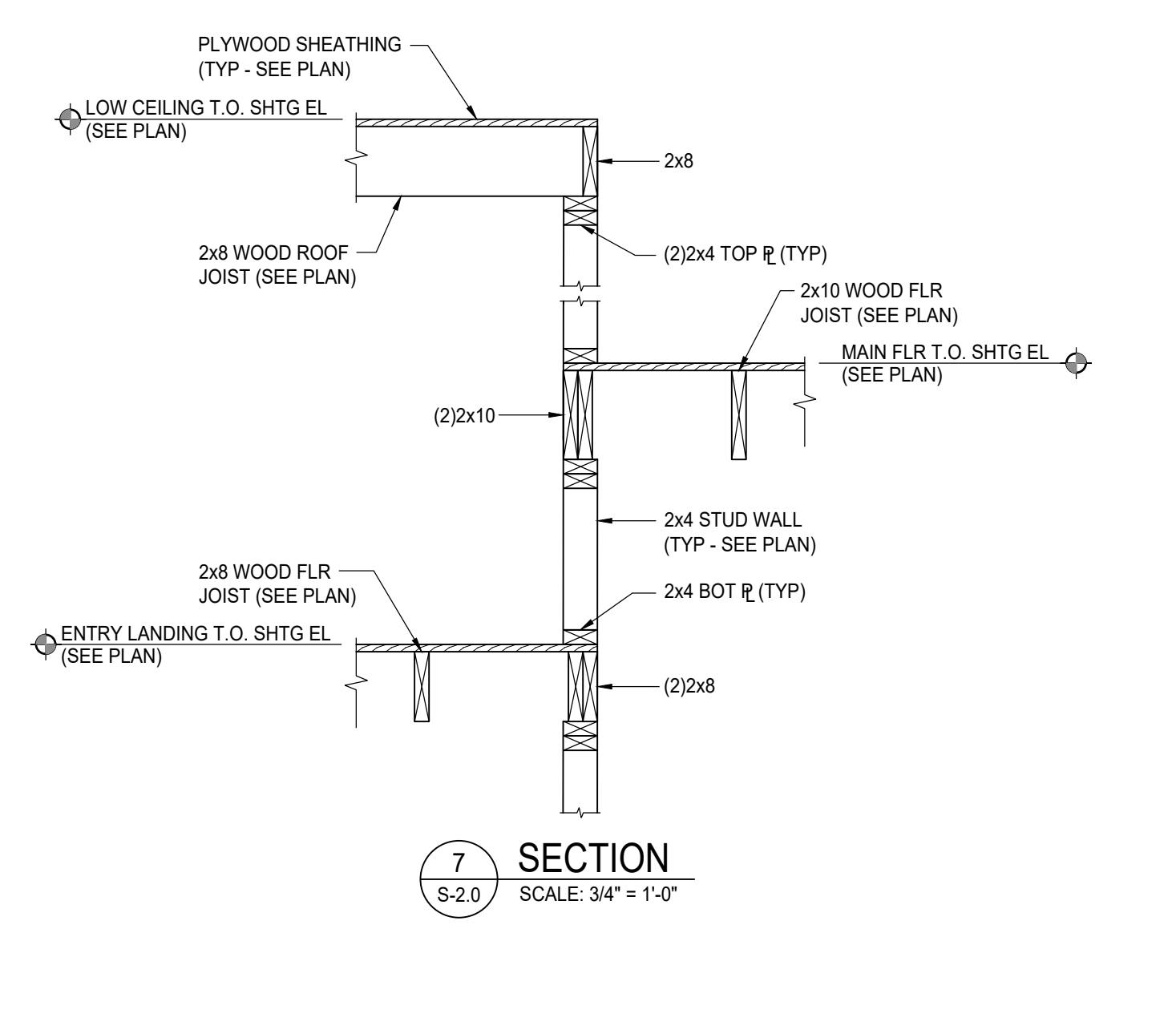
4 SECTION
S-2.0 SCALE: 3/4"=1'-0"



5 SECTION
S-2.0 SCALE: 3/4"=1'-0"



6 SECTION
S-2.0 SCALE: 3/4"=1'-0"

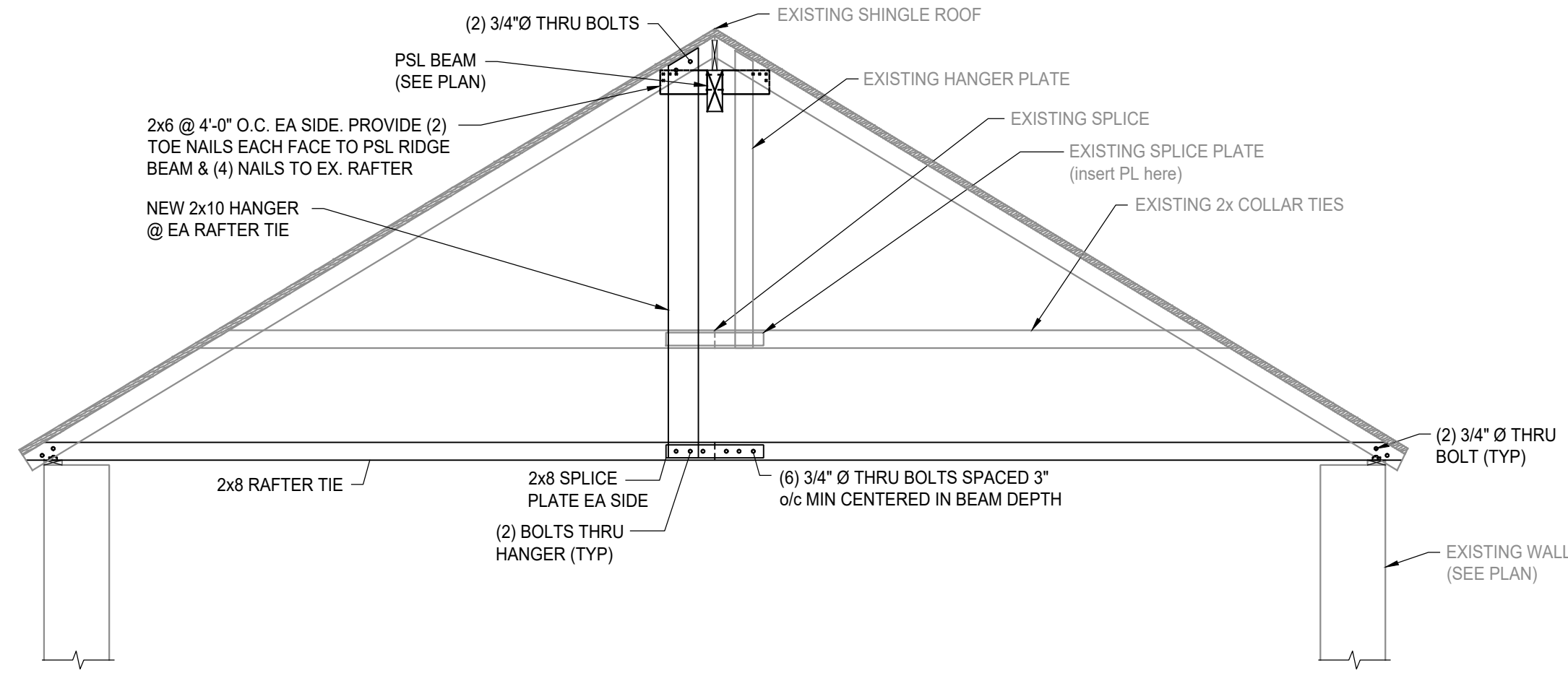


7 SECTION
S-2.0 SCALE: 3/4"=1'-0"

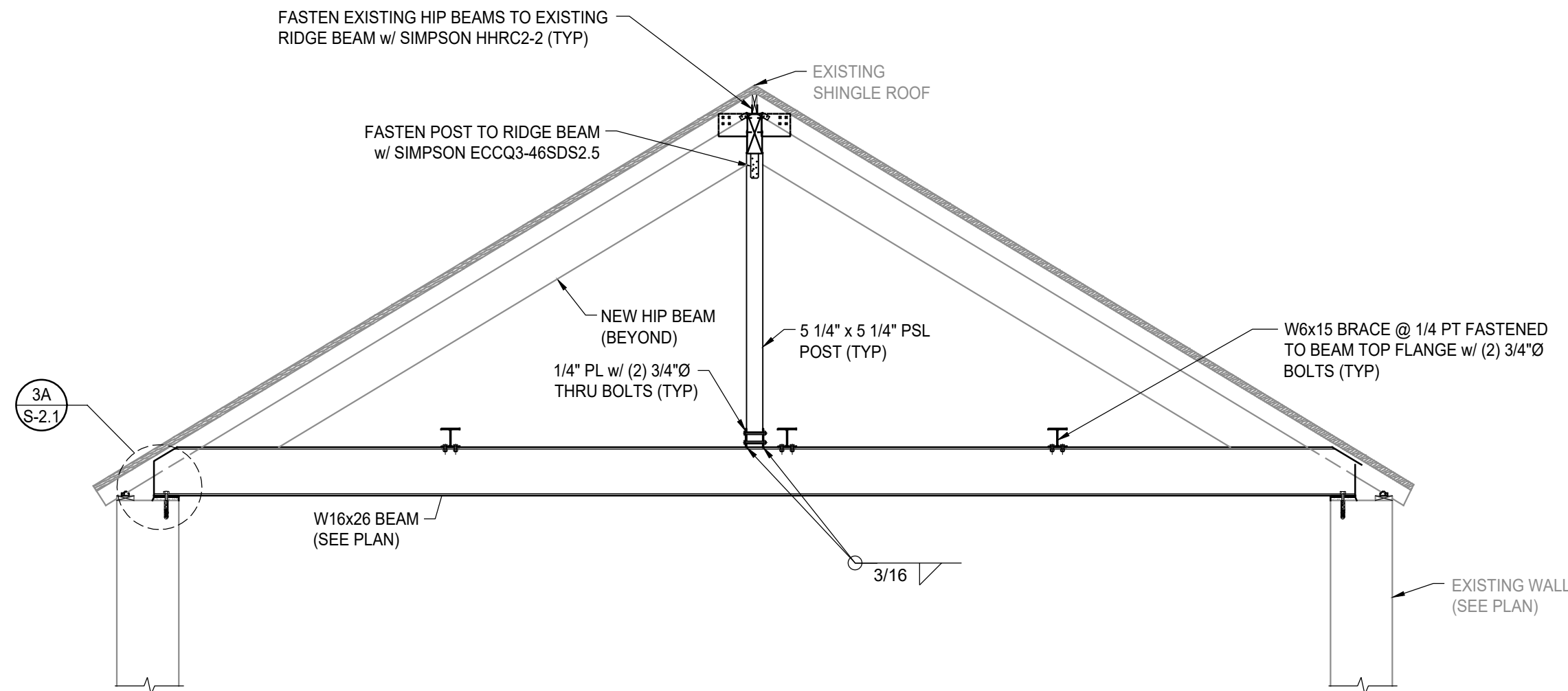
MICHAEL A. BEACH & ASSOCIATES, LLC
CONSULTING STRUCTURAL ENGINEERING
TWIN PONDS EXECUTIVE CAMPUS, SUITE 205
200 BIRCHFIELD DRIVE
MOUNT LAUREL, NEW JERSEY 08054
PH: (856) 273-1909 FAX: (856) 273-1480
EMAIL: mail@mabeachassoc.com
NJ Certificate of Authorization No. 24GA27962200
Project No: 747.216

TIMOTHY D. JENNINGS
PROFESSIONAL ENGINEER
NJ LIC. NO. 24GE0383500

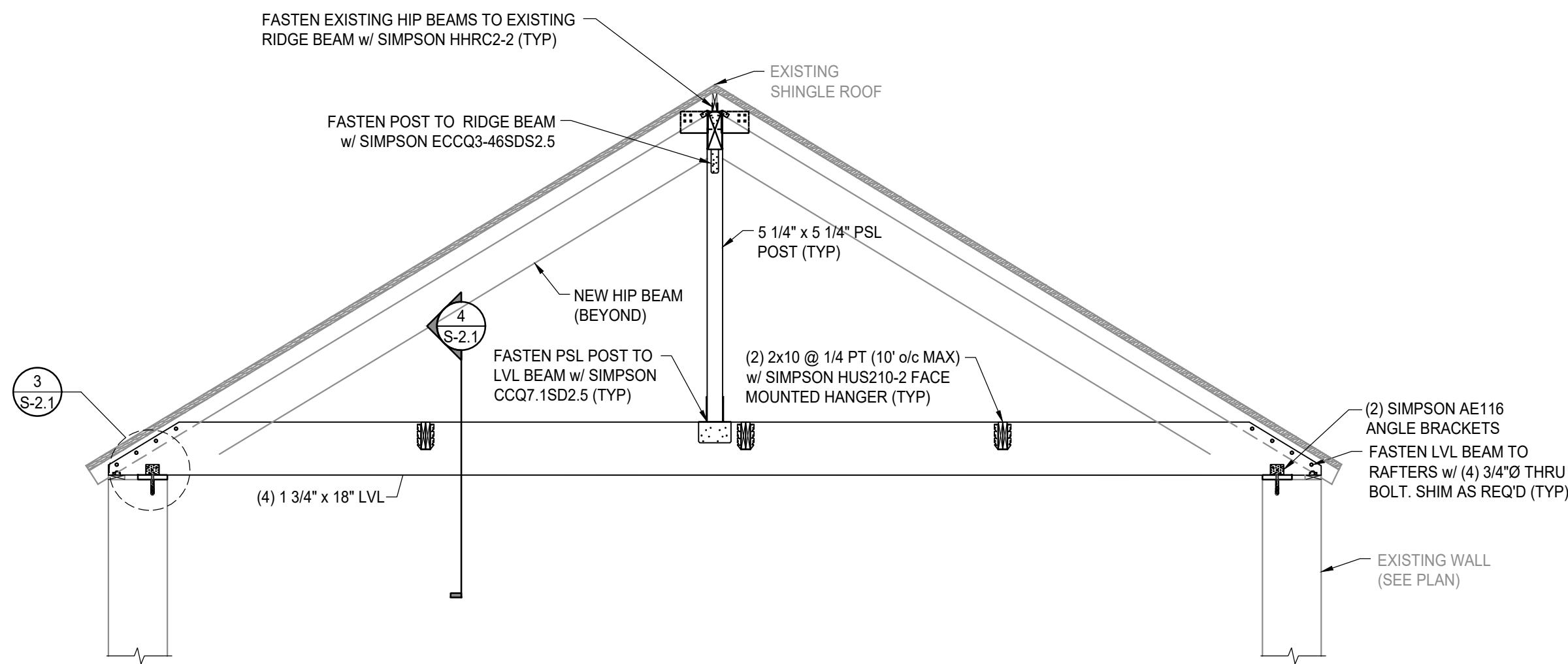
01/28/2023		BID SET	TJD & VAB
No.	DATE	DESCRIPTION	REV'D BY
REVISIONS			
APPROVAL:		PROJECT:	
		ADA RENOVATIONS TO THE GLOUCESTER TOWNSHIP BLACK BOX COMMUNITY CENTER	
		3 S.BLACKHORSE PIKE BLACKWOOD, NEW JERSEY	
		TITLE: SECTIONS & DETAILS	
JOSEPH F. MCKERNAN JR., R.A. A.I.A. NJ ARCH. # 10864 - P.A. ARCH. #A-01402-X, CT. ARCH. 7024		SEAL:	DATE: 01/28/2023 REV'D: TC DRAWN BY: DF
UNLESS NOTED, ALL DIMENSIONS MUST BE VERIFIED BY THE ARCHITECT. IF NOT, THE ARCHITECT'S RESPONSIBILITY IS TO VERIFY THE CONSTRUCTION. DO NOT SCALE DRAWING.		SCALE: AS NOTED	PROJECT NO: 747.216
S-2.0		S-2.0	



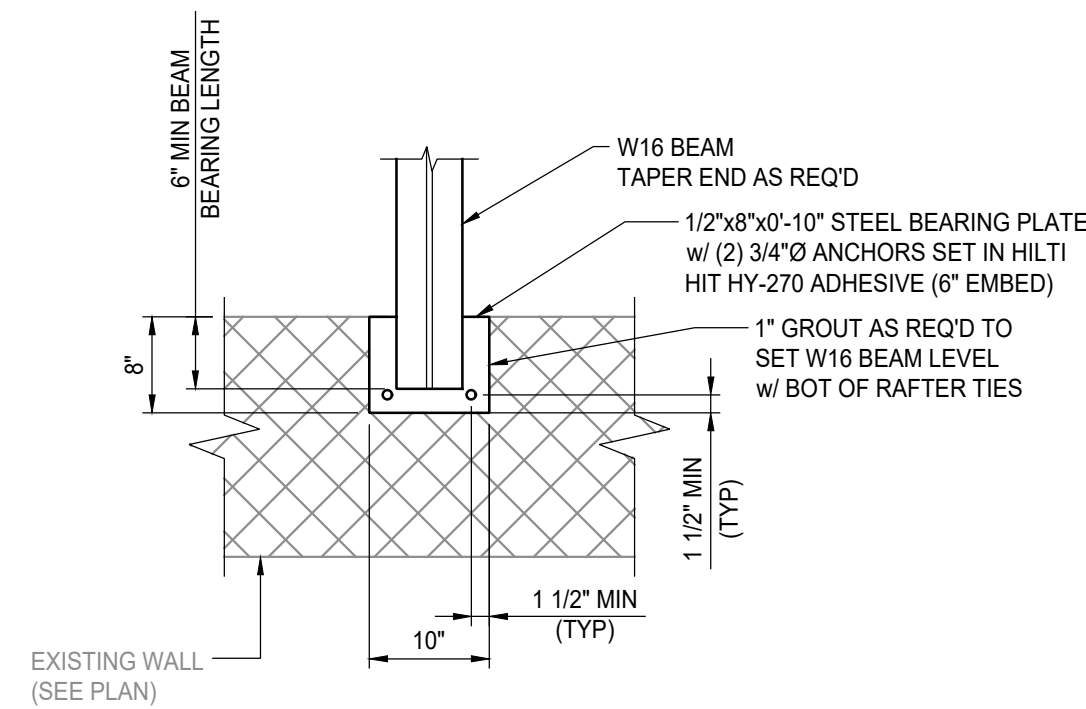
1 RAFTER TIE ASSEMBLY DETAIL
S-2.1 NOT TO SCALE



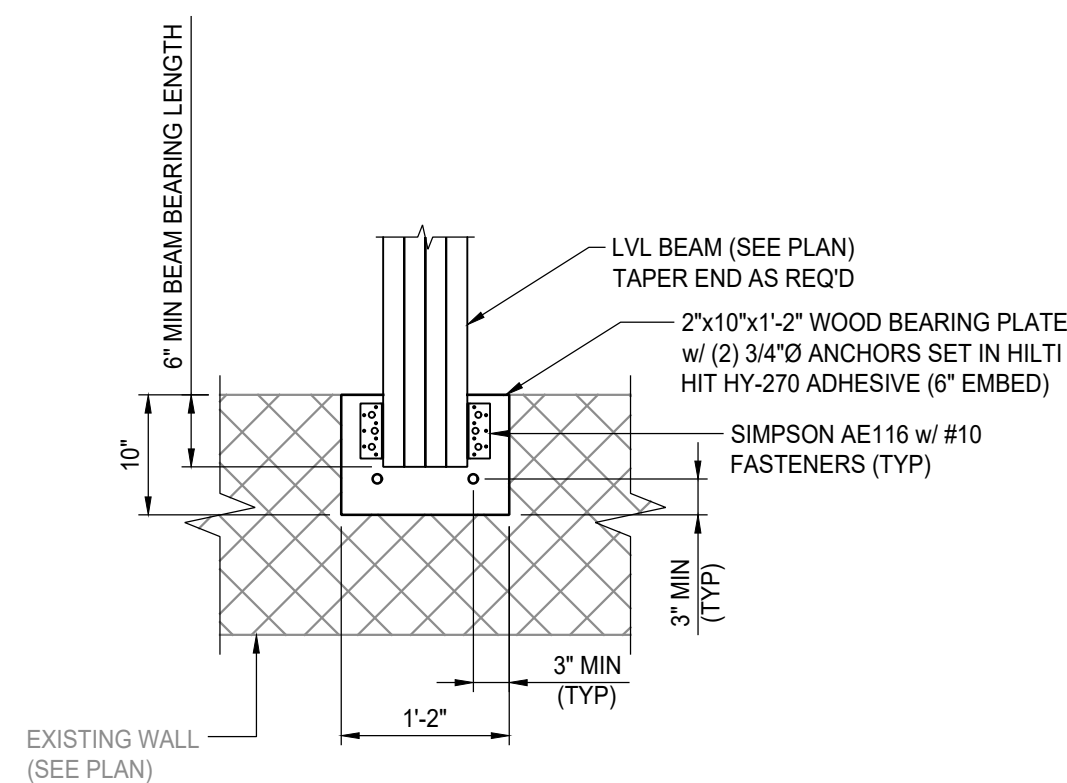
2A STEEL ALTERNATE ROOF BEAM ASSEMBLY DETAIL
S-2.1 NOT TO SCALE



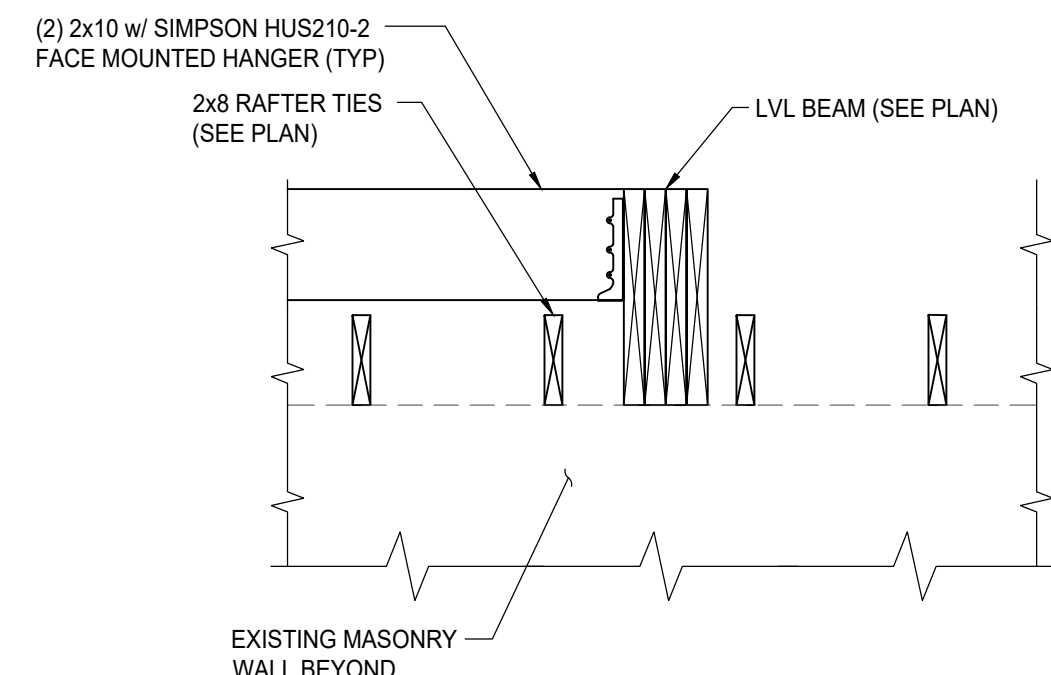
2 WOOD ROOF BEAM ASSEMBLY DETAIL
S-2.1 NOT TO SCALE



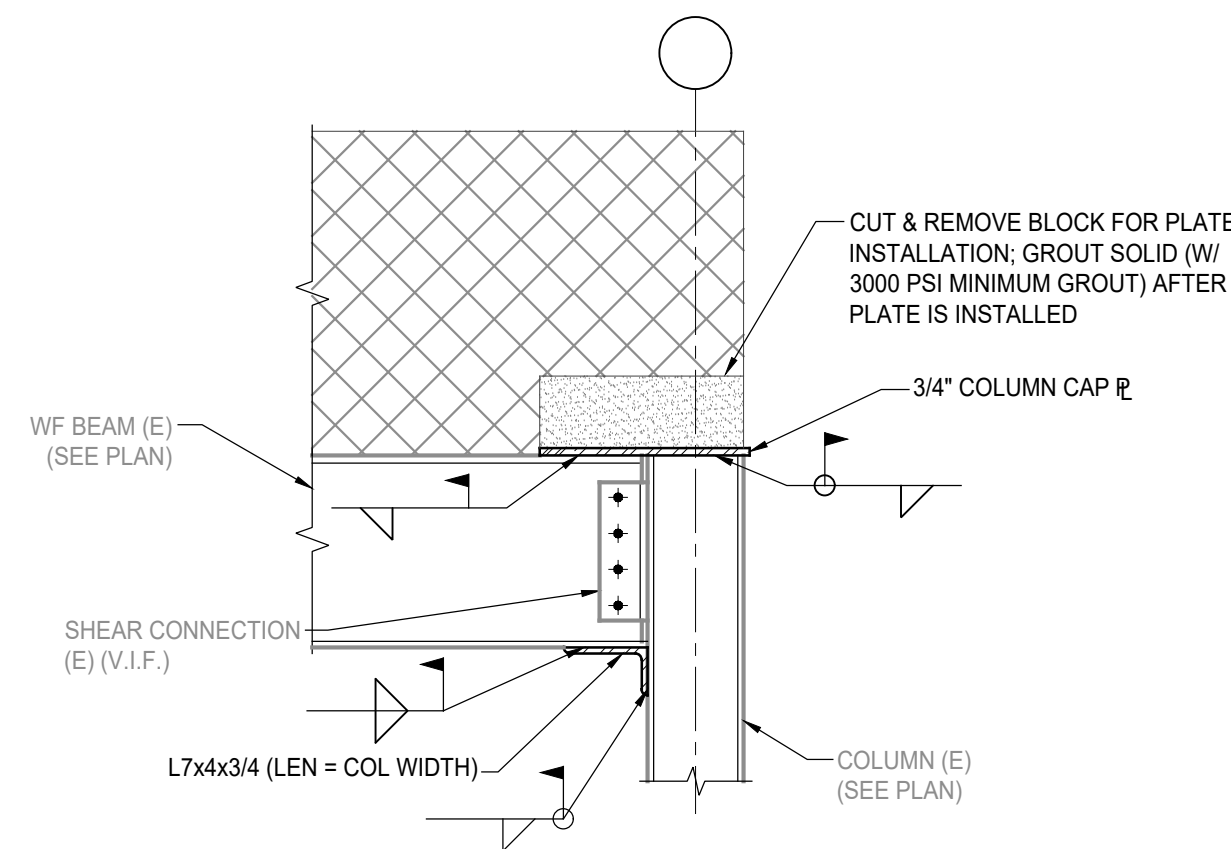
3A PLAN DETAIL
S-2.1 SCALE: 3/4"=1'-0"



3 PLAN DETAIL
S-2.1 SCALE: 3/4"=1'-0"



4 SECTION
S-2.1 SCALE: 3/4"=1'-0"



A TYPICAL MOMENT CONNECTION DETAIL
S-2.1 SCALE: 3/4"=1'-0"

MICHAEL A. BEACH & ASSOCIATES, LLC
CONSULTING STRUCTURAL ENGINEERING
TWIN PONDS EXECUTIVE CAMPUS, SUITE 205
200 BIRCHFIELD DRIVE
MOUNT LAUREL, NEW JERSEY 08054
PH: (856) 273-1909 FAX: (856) 273-1480
EMAIL: mail@mabeachassoc.com
NJ Certificate of Authorization No. 24GA27962200
Project No: 747.216

TIMOTHY D. JENNINGS
PROFESSIONAL ENGINEER
NJ LIC. NO. 24GE0383500

No.	01/28/2023	BID SET	TDJ & VAB
DATE		DESCRIPTION	REV'D BY
REVISIONS			
APPROVAL:		PROJECT:	
		ADA RENOVATIONS TO THE GLOUCESTER TOWNSHIP BLACK BOX COMMUNITY CENTER	
		3 S.BLACKHORSE PIKE BLACKWOOD, NEW JERSEY	
		TITLE:	
		SECTIONS & DETAILS	
JOSEPH F. MCKERNAN JR., R.A. NJ ARCH. A 10864 - P.A. ARCH. 84-01402-X - CT ARCH 7124		SEAL:	DATE: 10/16
		UNLESS NOTED, ALL DIMENSIONS MUST BE VERIFIED BY THE ARCHITECT. IF ANY DISCREPANCIES ARE FOUND, THE ARCHITECT SHALL BE RESPONSIBLE FOR CORRECTION. DO NOT SCALE DRAWING.	PROJ. NO: 1016
		DATE: 10/16	REV'D: TC
		DATE: 10/16	CHG'D BY: DF
		DATE: 10/16	CHG'D BY: DF

S-2.1



1.	REMOVE DESIGNATED ELEMENTS AS SHOWN ON DRAWINGS.	8.	CONDUCT DEMOLITION TO MINIMIZE INTERFERENCE WITH ADJACENT BUILDING AREAS. MAINTAIN PROTECTED LEVEL EGRESS AND ACCESS AT ALL TIMES. KEEP REQUIRED EXIT WAYS UNOBSTRUCTED AT ALL TIMES AND ARTIFICIALLY LIGHTED.	13.	THE CONTRACTOR SHALL VISIT SITE PRIOR TO SUBMITTING THEIR PROPOSAL TO VERIFY ACTUAL SITE CONDITIONS AND DISCREPANCIES BETWEEN DRAWINGS AND SITE CONDITIONS SHALL BE BROUGHT TO THE OWNER'S ATTENTION PRIOR TO SUBMITTING THEIR BID. THE CONTRACTOR SHALL INCLUDE ALL DEMOLITION WORK EXPOSED AND CONCEALED, WHETHER OR NOT SHOWN ON DRAWINGS, NECESSARY FOR THE EFFECTIVE INSTALLATION AND PERFORMANCE OF NEW SYSTEM. THE CONTRACTOR SHALL ALSO INCLUDE TEMPORARY REMOVAL AND REINSTALLATION OF EXISTING WORK WHEREVER NECESSARY. THE OWNER SHALL PROVIDE (NOR THE CONTRACTOR PAID) EXTRA COSTS ASSOCIATED WITH THE DEMOLITION AND/OR TEMPORARY REMOVAL AND REINSTALLATION WORK FROM THE CONTRACTOR.
2.	ALL MECHANICAL EQUIPMENT AND ASSOCIATED APPURTENANCES DESCRIBED SHALL BE REMOVED AND DEMOLISHED.	9.	ALL SYSTEMS CONTAINING REFRIGERANTS SHALL BE EVACUATED FOR REFRIGERANT RECYCLING PRIOR TO DEMOLITION.	14.	CONTRACTOR SHALL PATCH ROOF AS REQUIRED AND SEAL WATERIGHT (CONTRACTOR SHALL COORDINATE ALL ROOF WORK WITH EXISTING ROOF CONTRACTORS IN ORDER NOT TO VOID EXISTING ROOF WARRANTY).
3.	ALL ELECTRICAL WIRING SHALL BE DEMOLISHED BACK TO MAIN PANEL UNLESS INDICATED TO BE RECONNECTED.	10.	REMOVE DEMOLISHED MATERIALS FROM SITE AS WORK PROGRESSES AND DISPOSE OF IN A PROPER, LEGAL MANNER. UPON COMPLETION OF WORK, LEAVE AREAS OF WORK IN A CLEAN CONDITION AT THE END OF EACH DAY.		
4.	COMPLY WITH APPLICABLE NFPA STANDARDS WHEN TORCH CUTTING.	11.	COORDINATE ALL DEMOLITION WORK WITH FACILITIES MANAGEMENT PRIOR TO SHUT DOWN THE SERVICE MAINS TO PERFORM THE REQUIRED WORK		
5.	PROVIDE, ERECT AND MAINTAIN TEMPORARY BARRIERS AND SECURITY DEVICES AS REQUIRED.	12.	PRIOR TO COMMENCEMENT OF DEMOLITION, THE CONSTRUCTION MANAGER SHALL WALK THE PROJECT WITH THE CONTRACTOR PERFORMING THIS WORK TO CONFIRM THE EXTENT OF DEMOLITION.		
6.	OBTAIN WRITTEN CONSENT OF OWNER PRIOR TO TORCH CUTTING.				
7.	ERECT AND MAINTAIN TEMPORARY PARTITIONS TO PREVENT SPREAD OF DUST, FUMES, NOISE AND SMOKE TO PROVIDE FOR CONTINUING OWNER OCCUPANCY.				

(E)	EXISTING MECHANICAL WORK TO REMAIN
(R)	EXISTING MECHANICAL WORK TO BE DEMOLISHED AND REMOVED
—	EXISTING MECHANICAL WORK TO REMAIN
---	EXISTING MECHANICAL WORK TO BE DEMOLISHED AND REMOVED
—	NEW MECHANICAL WORK

16) CONTRACTOR SHALL DEMOLISH AND REMOVE EXISTING ROOF TOP UP AS SHOWN. ALL WORK NOT BEING REUSED SHALL BE DEMOLISHED. EXISTING ROOFING AND MATERIALS TO BE REMOVED. ROOF CURBS SHALL BE INSPECTED AND REUSED WITH UNDER CURBS IF FEASIBLE. IF NOT, THEY SHALL BE DEMOLISHED AND REPLACED. CONTRACTOR SHALL BE RESPONSIBLE FOR MEANS AND METHODS OF ROOF TOP DEMOLITION INCLUDING ALL RIGGING AND REMOVAL. CARE SHOULD BE TAKEN TO PROTECT ROOF. CONTRACTOR SHALL RETAIN THE SERVICES OF THE ENGINEER FOR ROOFING INSPECTION AND ROOFING REPAIRS OR WORK TO ENSURE THAT THE EXISTING ROOF WARRANTY IS NOT VOIDED. ALL ROOF PIPING, FLASHINGS, AND OTHER COMPONENTS SHALL BE DEMOLISHED AND REMOVED. ALL ROOF AND WALL PENETRATIONS SHALL BE PATCHED/SEAL. WORK SHALL BE ACCEPTABLE TO THE LANDLORD/ARCHITECT

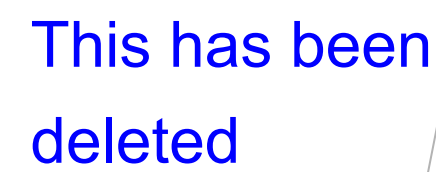
27) CONTRACTOR SHALL DEMOLISH AND REMOVE INDICATED CONDENSING UNIT. VERIFY EXACT SIZE AND LOCATION IN FIELD. DEMOLISH AND REMOVE INDICATED ROOF CURB. REMOVE ALL MATERIALS AND ASSOCIATED APPURTENANCES AS WELL AS ALL POWER AND CONTROL WIRING. COORDINATE ELECTRICAL DEMOLITION WITH ELECTRICAL CONTRACTOR.

3D CONTRACTOR SHALL DEMOLISH AND REMOVE INDICATED VERTICAL AIR HANDLING UNIT AND ASSOCIATED OUTDOOR CONDENSING UNIT IN ITS ENTIRETY, INCLUDING ALL SUPPLY AIR AND RETURN AIR DUCTWORK, AIR FILTERS, AIR DIFFUSERS, RETURN AIR GRILLES, HANGERS, SUPPORTS REFRIGERANT PIPING, CONDENSATE PIPING, CONTROL WIRING AND ALL ASSOCIATED APPURTENANCES. CONTRACTOR SHALL VERIFY EXACT LOCATION OF AIR HANDLING UNIT, DUCTWORK AND ALL ASSOCIATED APPURTENANCES IN FIELD.

4D INDICATED THERMOSTAT SHALL BE DEMOLISHED AND REMOVED INCLUDING ALL WIRING AND MOUNTING HARDWARE.

1. ALL THE EXISTING DUCTWORK SIZES, LOCATIONS, EXISTING MECHANICAL EQUIPMENT LOCATIONS, SIZES, EXISTING ELECTRICAL PLANS, ETC., HAVE BEEN DOCUMENTED BASED OFF A SITE SURVEY CONDUCTED BY HOLSTEIN WHITE, INC. (ENGINEER) ON APRIL 11, 2023.
2. ALTHOUGH THE EXISTING CONDITIONS HAVE BEEN MODIFIED PER OBSERVATIONS IN THE FIELD, THE CONTRACTOR SHALL BE RESPONSIBLE TO PERFORM FINAL FIELD VERIFICATION OF ALL OF THE EXISTING CONDITIONS PRIOR TO COMMENCING WORK.

No.	DATE	DESCRIPTION REVISIONS			REV'D BY
APPROVAL:		PROJECT:			
<p align="center">ADA RENOVATIONS TO THE GLOUCESTER TOWNSHIP BLACK BOX COMMUNITY CENTER</p> <p align="center">3 S.BLACKHORSE PIKE BLACKWOOD, NEW JERSEY</p> <div style="float: left; width: 10%;"> </div> <div style="float: right; width: 90%; text-align: center;"> Joseph F. McKernan Jr., Architects & Associates 100 Dobbs Lane Suite 204 Cherry Hill, New Jersey 08034 </div> <hr/> <div style="clear: both;"></div> <div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <small>3800 Hamilton Blvd. Ste 503 Scranton, PA 18515 O: (717) 322-7771 F: (717) 322-7749 www.holdenwhite.com</small> </div> <div style="width: 45%;"> <p>SCALE:</p> <p>SCHOTT A. WHITE N.J. PE NO. 3ACED04B7700 NJ LAUD. NO. 24AGAR-S42D0</p> </div> <div style="width: 45%;"> <p><small>DRAWINGS MUST BE REVIEWED BY CERTAINING AGENTS OF THE STATE OF NJ PRIOR TO ANY REVISIONS BEFORE PROCEEDING WITH CONSTRUCTION OR NOT SOLE DRAWING.</small></p> <p>CHECKED BY: SW</p> <p>SCALE: AS NOTED</p> <p>PLOT./NO.: 23-560</p> <p>DATE: xx/xx/xx</p> <p>REV'D.: : SW</p> <p>DRAWN BY: SH</p> <p>CHECKED BY: SW</p> <p align="center"><small>BUILDING ARCHITECTS & ASSOCIATES</small> <small>NORTHWEST 203</small></p> </div> <div style="width: 45%;"> <p>TITLE:</p> <h2 align="center">BASEMENT DEMOLITION MECHANICAL PLAN</h2> </div> </div> <div style="text-align: right; margin-top: -50px; font-size: 2em;">DM-0.0</div>					



- 1.) WORK IS SHOWN BEING INSTALLED WITHIN CRAWLSPACE COORDINATE INSTALLATION OF DUCTWORK, PIPING AND FLUES WITH ALL STRUCTURAL ELEMENTS, PLUMBING PIPING, AND ELECTRICAL CONDUIT.
- 2.) COORDINATE INSTALLATION OF ALL WORK WITH FINAL LOCATION OF ACCESS HATCH/DOOR TO CRAWLSPACE.

A. AIR HANDLING UNITS: THE AIR HANDLING SYSTEM IS EQUIPPED WITH A GAS-FIRED FURNACE, DX COOLING COIL AND SUPPLY AIR FAN.

THE AIR HANDLING UNIT WILL BE CONTROLLED BY STANDALONE THERMOSTATIC CONTROLS.

B. OCCUPANCY: A USER ADJUSTABLE OCCUPANCY SCHEDULE WILL BE ESTABLISHED AND MAINTAINED BY THE BUILDING OWNER/OPERATOR. OCCUPIED AND UNOCCUPIED HEATING AND COOLING SETPOINTS WILL BE ESTABLISHED. THE FAN SYSTEM WILL MAINTAIN SPACE CONDITIONS TO THE OCCUPIED AND UNOCCUPIED SETPOINTS BASED ON THIS OPERATING SCHEDULE.

INITIAL SETPOINTS:

OCCUPIED HEATING	=	70°F
OCCUPIED COOLING	=	74°F
UNOCCUPIED HEATING	=	65°F
UNOCCUPIED COOLING	=	62°F

IN "OCCUPIED MODE", THE OUTSIDE AIR MOTOR-OPERATED DAMPER SHALL OPEN AND FAN SHALL RUN CONTINUOUSLY. IN THE UNOCCUPIED MODE THE OUTSIDE AIR DAMPER SHALL CLOSE. THE FAN SYSTEM WILL SHUTDOWN, BUT WILL CYCLE AS NECESSARY TO MAINTAIN UNOCCUPIED SETPOINTS.

C. OPTIMAL START: AN OPTIMAL START ROUTINE WILL CALCULATE AN EARLY START TIME TO BRING SPACE CONDITIONS TO OCCUPIED SETPOINTS BY THE BEGINNING OF THE SCHEDULED OCCUPANCY TIME PERIOD. THE OPTIMAL START ROUTINE FACTORS SPACE TEMPERATURE(S) AND OUTDOOR CONDITIONS TO CALCULATE AND LEARN THE START-UP RECOVERY TIME FROM THE UN-OCCUPIED MODE.

D. FAN SYSTEM CONTROL: THE FAN SYSTEM WILL BE ENABLED TO RUN IN THE OCCUPIED MODE. THE SUPPLY FAN WILL START AND RUN CONTINUOUSLY ALL SAFETY DEVICES MUST BE "CLEAR" TO ALLOW RUN PERMISSIVE. FAN STATUS WILL BE MONITORED VIA CURRENT SENSING SWITCH. ALL CONTROL LOOPS WILL BE ENABLED BASED ON PROOF OF THE SUPPLY FAN, UNLESS OTHERWISE SPECIFIED.

E. HEATING: THE GAS HEAT WILL MODULATE TO MAINTAIN THE ZONE TEMPERATURE SETPOINT. UPON A FALL IN ZONE TEMPERATURE ONE SETPOINT ABOVE THE HEATING VALVE WILL MODULATE OPEN. UPON A RISE IN ZONE TEMPERATURE THE REVERSE WILL OCCUR.

F. COOLING: DX, DX COOLING WILL BE ENERGIZED TO MAINTAIN THE ZONE TEMPERATURE TO SETPOINT. UPON A RISE IN ZONE TEMPERATURE ABOVE SETPOINT DX COOLING WILL BE ENERGIZED. UPON A FALL IN TEMPERATURE THE REVERSE WILL OCCUR.

1. ALL BRANCH DUCTWORK SHALL HAVE BALANCING DAMPERS.
2. COORDINATE ALL AIR DEVICES WITH LIGHTING AND REFLECTED CEILING PLANS.
3. IT IS THE INTENT TO MAINTAIN THE CEILING HEIGHTS AS SHOWN ON THE REFLECTED CEILING PLANS.
4. DUCTWORK SHOULD BE INSTALLED AS TIGHT AS POSSIBLE TO THE STRUCTURAL FRAMING AND DECK.
5. MECHANICAL CONTRACTOR SHALL FURNISH ALL REQUIRED CEILING ACCESS PANELS AND WALL OPENINGS TO SERVICE ALL MECHANICAL EQUIPMENT. INSTALLED BY G.C. COORDINATED ALL LOCATIONS AND SIZES WITH ARCHITECT PRIOR TO INSTALLATION.
6. ALL TRANSVERSE JOINTS AND LONGITUDINAL SEAMS SHALL BE SEALED WITH RCD#9 LOW-VOC MASTIC. ALL DUCTWORK SHALL BE IN ACCORDANCE WITH SMACNA'S "CLASS B".
7. ALL DUCTWORK SIZES SHOWN ON PLAN OR CALL OUT D. DIMENSIONS. ALL SUPPLY AND RETURN DUCTWORK SHALL BE INSULATED.
8. CONTRACTOR SHALL COORDINATE ALL REQUIRED ROOF CUTTING AND PATCHING WITH CURRENT ROOFING CONTRACTOR TO MAINTAIN ROOF WARRANTY. CONTRACTOR SHALL WORK WITH LANDLORD PRIOR TO CONSTRUCTION.

- 1 REFER TO THE FOLLOWING NOTES FOR EACH AHU:
 - RUN REFRIGERANT PIPING FROM INDOOR AIR HANDLING UNIT TO CORRESPONDING OUTDOOR CONDENSING UNIT. SIZE REFRIGERANT PIPING TO MANUFACTURER'S RECOMMENDATIONS. COORDINATE ALL RUNS WITH ARCHITECT.
 - CONDENSATE SHALL DRAIN TO FLOOR DRAIN IN STORAGE ROOM. REFER TO PLUMBING PLANS FOR SIZE AND LOCATION.
 - COORDINATE WITH THE LOCATION OF AHU W/ ARCHITECT. INSTALL PER MANUFACTURER'S RECOMMENDATIONS TO PROVIDE ALL REQUIRED MAINTENANCE CLEARANCES.
- 2 REFER TO THE FOLLOWING NOTES FOR EACH CU/HP:
 - INSTALL PER MANUFACTURER'S RECOMMENDATIONS AND PROVIDE ALL REQUIRED MAINTENANCE CLEARANCES.
 - ROUTE REFRIGERANT PIPING TO CORRESPONDING SIZE REFRIGERANT PIPING PER MANUFACTURER'S RECOMMENDATIONS. COORDINATE ALL RUNS WITH ARCHITECT.
 - CONDENSING UNIT SHALL BE MOUNTED ON REFRIGERANT SUPPORT.
- 3 INDICATES LOCATION OF NEW SEVEN-DAY ELECTRIC CONTROL DAMPER THERMOSTAT WITH OCCUPIED AND UNOCCUPIED CAPABILITIES TO OPERATE NEW OUTDOOR AIR DAMPER. PROVIDE PORTABLE TRANSFORMER (ELECTRIC) FOR THERMOSTAT. COORDINATE ENCLOSURE AND FINAL MOUNTING HEIGHT OF THE THERMOSTAT WITH ARCHITECT.

(E) EXISTING MECHANICAL WORK TO REMAIN

(R) EXISTING MECHANICAL WORK TO BE
DEMOLISHED AND REMOVED

— EXISTING MECHANICAL WORK TO REMAIN

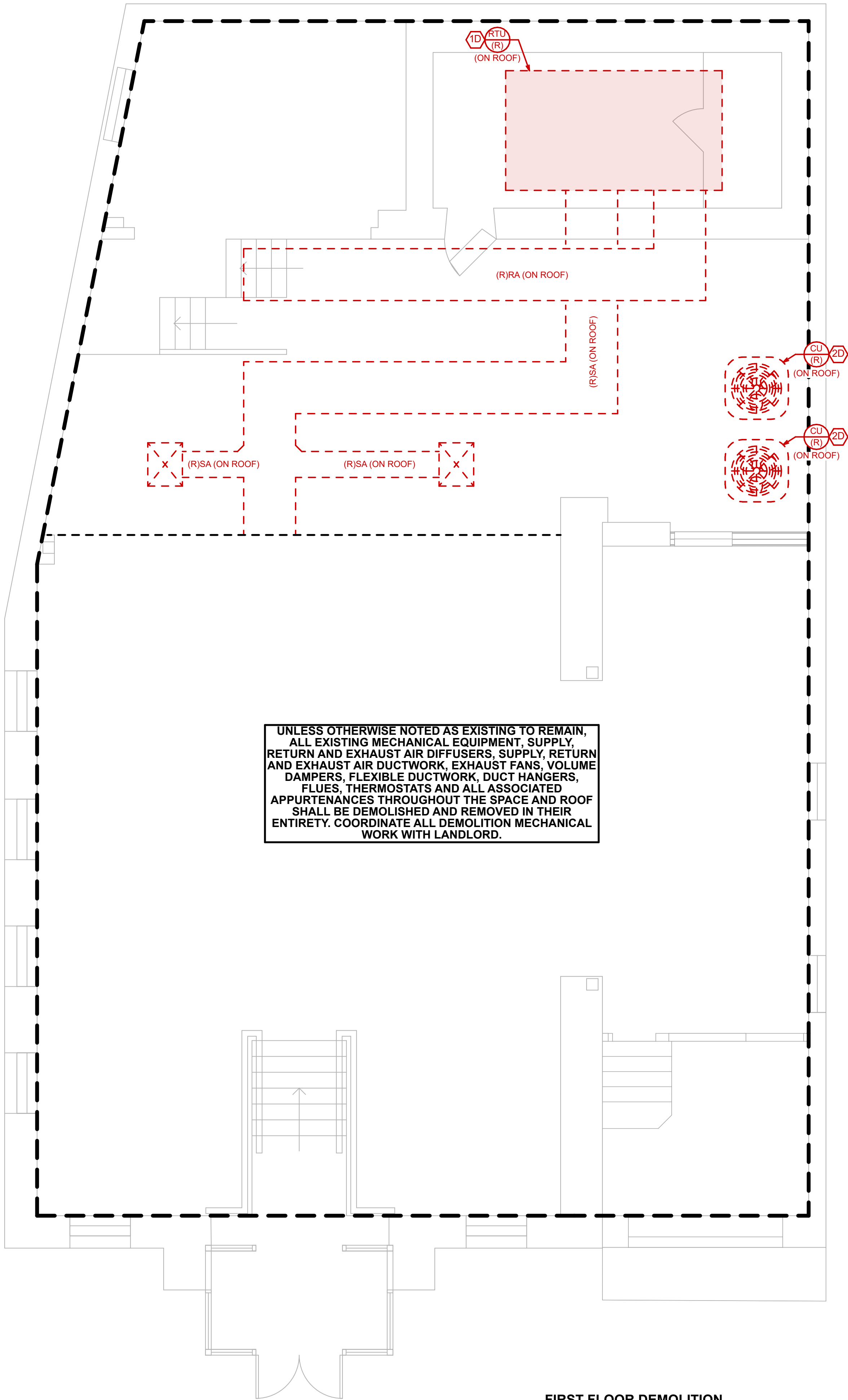
- - - EXISTING MECHANICAL WORK TO BE
DEMOLISHED AND REMOVED

— NEW MECHANICAL WORK

SCALE: 1/4" = 1' - 0"

[illegible]

2023-10-25 ISSUED FOR BID



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

DEMOLITION GENERAL NOTES

- REMOVE DESIGNATED ELEMENTS AS SHOWN ON DRAWINGS.
- ALL MECHANICAL EQUIPMENT AND ASSOCIATED APPURTENANCES DESCRIBED SHALL BE REMOVED AND DEMOLISHED.
- ALL ELECTRICAL WIRING SHALL BE DEMOLISHED BACK TO MAIN PANEL UNLESS INDICATED TO BE RECONNECTED.
- COMPLY WITH APPLICABLE NFPA STANDARDS WHEN TORCH CUTTING.
- PROVIDE, ERECT AND MAINTAIN TEMPORARY BARRIERS AND SECURITY DEVICES AS REQUIRED.
- OBTAIN WRITTEN CONSENT OF OWNER PRIOR TO TORCH CUTTING.
- ERECT AND MAINTAIN TEMPORARY PARTITIONS TO PREVENT SPREAD OF DUST, FUMES, NOISE AND SMOKE TO PROVIDE FOR CONTINUING OWNER OCCUPANCY.
- CONDUCT DEMOLITION TO MINIMIZE INTERFERENCE WITH ADJACENT BUILDING AREAS. MAINTAIN PROTECTED LEGAL EGRESS AND ACCESS AT ALL TIMES. KEEP REQUIRED EXIT WAYS UNENCUMBERED AT ALL TIMES AND ARTIFICIALLY LIGHTED.
- ALL SYSTEMS CONTAINING REFRIGERANTS SHALL BE EVACUATED FOR REFRIGERANT RECYCLING PRIOR TO DEMOLITION.
- REMOVE DEMOLISHED MATERIALS FROM SITE AS WORK PROGRESSES AND DISPOSE OF IN A PROPER, LEGAL MANNER. UPON COMPLETION OF WORK, LEAVE AREAS OF WORK IN BROOM CLEAN CONDITION AT THE END OF EACH DAY.
- COORDINATE ALL DEMOLITION WORK WITH FACILITIES MANAGEMENT PRIOR TO SHUT DOWN THE SERVICE MAINS TO PERFORM THE REQUIRED WORK.
- PRIOR TO COMMENCEMENT OF DEMOLITION, THE CONSTRUCTION MANAGER SHALL WALK THE PROJECT WITH THE CONTRACTOR PERFORMING THIS WORK TO CONFIRM THE EXTENT OF DEMOLITION.
- THE CONTRACTOR SHALL VISIT SITE PRIOR TO SUBMITTING THEIR PROPOSAL TO VERIFY ACTUAL SITE CONDITIONS AND ANY DISCOVERED DISCREPANCIES BETWEEN DRAWINGS AND SITE CONDITIONS SHALL BE BROUGHT TO THE OWNER'S ATTENTION PRIOR TO SUBMITTING THEIR BID. THE CONTRACTOR SHALL INCLUDE ALL DEMOLITION WORK EXPOSED AND CONCEALED, WHETHER OR NOT SHOWN ON DRAWINGS. NECESSARY FOR THE EFFECTIVE INSTALLATION AND PERFORMANCE OF NEW SYSTEM. THE CONTRACTOR SHALL ALSO INCLUDE TEMPORARY REMOVAL AND REINSTALLATION OF EXISTING WORK WHEREVER NECESSARY. THE OWNER SHALL NOT ACCEPT (NOR THE CONTRACTOR PAID) EXTRA COSTS ASSOCIATED WITH THE DEMOLITION AND/OR TEMPORARY REMOVAL/REINSTALLATION WORK FROM THE CONTRACTOR.
- CONTRACTOR SHALL PATCH ROOF AS REQUIRED AND SEAL WATER-TIGHT (CONTRACTOR SHALL COORDINATE ALL ROOF WORK WITH EXISTING ROOF CONTRACTOR IN ORDER NOT TO VOID EXISTING ROOF WARRANTY).

DRAWING SYMBOLS

- (E) EXISTING MECHANICAL WORK TO REMAIN
(R) EXISTING MECHANICAL WORK TO BE DEMOLISHED AND REMOVED
EXISTING MECHANICAL WORK TO REMAIN
EXISTING MECHANICAL WORK TO BE DEMOLISHED AND REMOVED
NEW MECHANICAL WORK

DEMOLITION SHEET NOTES

- 1D CONTRACTOR SHALL DEMOLISH AND REMOVE EXISTING ROOFTOP UNIT AS SHOWN. ALL WORK NOT BEING REUSED SHALL BE DEMOLISHED. REMOVED AND MADE SAFE AS REQUIRED. ROOF CURBS SHALL BE INSPECTED AND REUSED WITH ADAPTOR CURBS IF FEASIBLE. IF NOT, THEY SHALL BE REPLACED UNDER THIS CONTRACT. CONTRACTOR SHALL BE RESPONSIBLE FOR MEANS AND METHODS OF ROOFTOP UNIT DEMOLITION INCLUDING ALL RIGGING AND REMOVAL. CARE SHOULD BE TAKEN TO PROTECT ROOF. CONTRACTOR SHALL RETAIN THE SERVICES OF THE EXISTING ROOFING CONTRACTOR TO DO ANY ROOFING REPAIRS OR WORK TO ENSURE THAT THE EXISTING ROOF WARRANTY IS NOT VOIDED. ALL EXISTING PIPING, VALVES, WIRING AND COMPONENTS SHALL BE DEMOLISHED AND REMOVED. ALL ROOF AND WALL PENETRATIONS SHALL BE PATCHED/SEALED IN A MANNER ACCEPTABLE TO THE LANDLORD/ARCHITECT.
- 2D CONTRACTOR SHALL DEMOLISH AND REMOVE INDICATED CONDENSING UNIT. VERIFY EXACT SIZE AND LOCATION IN FIELD. DEMOLISH AND REMOVE ALL ASSOCIATED REFRIGERANT PIPING AND ALL ASSOCIATED APPURTENANCES AS WELL AS ALL POWER AND CONTROL WIRING. COORDINATE ELECTRICAL DEMOLITION WITH ELECTRICAL CONTRACTOR.
- 3D CONTRACTOR SHALL DEMOLISH AND REMOVE INDICATED VERTICAL AIR HANDLING UNIT AND ASSOCIATED OUTDOOR CONDENSING UNIT IN ITS ENTIRETY, INCLUDING ALL SUPPLY AIR AND RETURN AIR DUCTWORK, SUPPLY AIR REGISTERS, DIFFUSERS, RETURN AIR GRILLES, HANGERS, SUPPORTS, REFRIGERANT PIPING, CONDENSATE PIPING, CONTROL WIRING, POWER WIRING AND ALL ASSOCIATED APPURTENANCES. CONTRACTOR SHALL VERIFY EXACT LOCATION OF AIR HANDLING UNIT, DUCTWORK AND ALL ASSOCIATED APPURTENANCES IN FIELD.
- 4D INDICATED THERMOSTAT SHALL BE DEMOLISHED AND REMOVED INCLUDING ALL WIRING AND MOUNTING HARDWARE.

EXISTING CONDITIONS NOTES

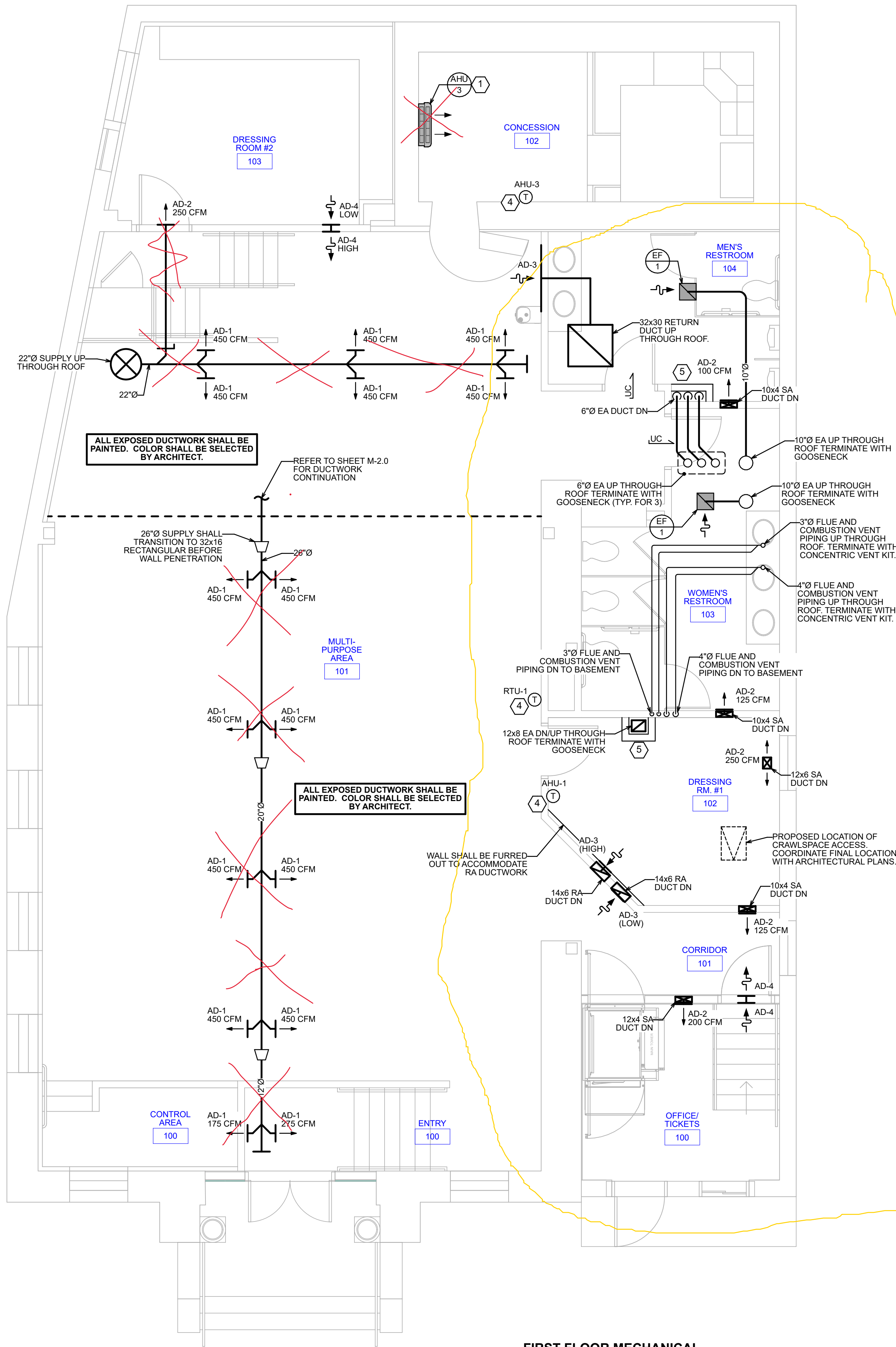
- ALL THE EXISTING DUCTWORK SIZES, LOCATIONS, EXISTING MECHANICAL EQUIPMENT LOCATIONS, TAGS, EXISTING ARCHITECTURAL PLANS, ETC., HAVE BEEN DOCUMENTED BASED OFF A SITE SURVEY CONDUCTED BY HOLSTEIN WHITE, INC. (ENGINEER) ON APRIL 11, 2023.
- ALTHOUGH THE EXISTING CONDITIONS HAVE BEEN MODIFIED PER OBSERVATIONS IN THE FIELD, THE CONTRACTOR SHALL BE RESPONSIBLE TO PERFORM FINAL FIELD VERIFICATION OF ALL OF THE EXISTING CONDITIONS PRIOR TO COMMENCING WORK.

No.	DATE	DESCRIPTION	REV'D BY
REVISIONS			
APPROVAL:		PROJECT:	
		ADA RENOVATIONS TO THE GLOUCESTER TOWNSHIP BLACK BOX COMMUNITY CENTER	
		3 S BLACKHORSE PIKE BLACKWOOD, NEW JERSEY	
Joseph F. McKernan Jr., Architects & Associates 100 Dobbs Lane Suite 204 Cherry Hill, New Jersey 08034		TITLE: FIRST FLOOR DEMOLITION MECHANICAL PLAN	
3800 Horizon Blvd., Suite 203 Trenton, NJ 08611 P: (609) 322-7711 F: (609) 322-7709 www.holsteinwhite.com		SEAL: SCOTT A. WHITE NJ P.E. NO. 34620467000 NJ AUTH. NO. 24620467000 COPYRIGHT 2023	DRAWING NO. DM-1.0

- GENERAL NOTES**
- ALL BRANCH DUCTWORK SHALL HAVE BALANCING DAMPERS.
 - COORDINATE ALL AIR DEVICES WITH LIGHTING AND REFLECTED CEILING PLANS.
 - IT IS THE INTENT TO MAINTAIN THE CEILING HEIGHTS AS SHOWN ON THE REFLECTED CEILING PLANS.
 - DUCTWORK SHOULD BE INSTALLED AS TIGHT AS POSSIBLE TO THE STRUCTURAL FRAMING AND DECK.
 - MECHANICAL CONTRACTOR SHALL FURNISH ALL REQUIRED CEILING ACCESS PANELS AND WALL OPENINGS TO SERVICE ALL MECHANICAL EQUIPMENT. INSTALLED BY G.C. COORDINATED ALL LOCATIONS AND SIZES WITH ARCHITECT PRIOR TO INSTALLATION.
 - ALL TRANSVERSE JOINTS AND LONGITUDINAL SEAMS SHALL BE SEALED WITH RCD#8 LOW-VOC MASTIC. ALL DUCTWORK SHALL BE IN ACCORDANCE WITH SMACNA'S SEAL CLASS "B".
 - ALL DUCTWORK SIZES SHOWN ON PLAN ARE CLEAR I.D. DIMENSIONS. ALL SUPPLY AND RETURN DUCTWORK SHALL BE INSULATED.
 - CONTRACTOR SHALL COORDINATE ALL REQUIRED ROOF CUTTING AND PATCHING WITH CURRENT ROOFING CONTRACTOR TO MAINTAIN ROOF WARRANTY. COORDINATE ALL WORK WITH LANDLORD PRIOR TO CONSTRUCTION.



- SHEET NOTES**
- REFER TO THE FOLLOWING NOTES FOR EACH AHU:
 - RUN REFRIGERANT PIPING FROM INDOOR AIR HANDLING UNIT TO CORRESPONDING OUTDOOR HEAT PUMP. SIZE REFRIGERANT PIPING PER MANUFACTURER'S RECOMMENDATIONS. COORDINATE ALL RUNS WITH ARCHITECT.
 - CONDENSATE SHALL DRAIN TO MOP RECEPTOR IN BASEMENT. PROVIDE CONDENSATE PUMP.
 - COORDINATE THE FINAL LOCATION OF AHU W/ ARCHITECT. INSTALL PER MANUFACTURER'S RECOMMENDATIONS. PROVIDE ALL REQUIRED MAINTENANCE CLEARANCES.
 - REFER TO THE FOLLOWING NOTES FOR EACH AHU:
 - RUN REFRIGERANT PIPING FROM INDOOR AIR HANDLING UNIT TO CORRESPONDING OUTDOOR CONDENSING UNIT. SIZE REFRIGERANT PIPING PER MANUFACTURER'S RECOMMENDATIONS. COORDINATE ALL RUNS WITH ARCHITECT.
 - CONDENSATE SHALL DRAIN TO FLOOR DRAIN IN STORAGE ROOM. REFER TO PLUMBING PLANS FOR SIZE AND LOCATION.
 - COORDINATE THE FINAL LOCATION OF AHU W/ ARCHITECT. INSTALL PER MANUFACTURER'S RECOMMENDATIONS. PROVIDE ALL REQUIRED MAINTENANCE CLEARANCES.
 - REFER TO THE FOLLOWING NOTES FOR EACH CUI/HP:
 - INSTALL PER MANUFACTURER'S RECOMMENDATIONS AND PROVIDE ALL REQUIRED MAINTENANCE CLEARANCES.
 - ROUTE REFRIGERANT PIPING TO CORRESPONDING AHU. SIZE REFRIGERANT PIPING PER MANUFACTURER'S RECOMMENDATIONS. COORDINATE ALL RUNS WITH ARCHITECT.
 - CONDENSING UNIT SHALL BE MOUNTED ON PATE EQUIPMENT SUPPORTS.
 - INDICATES LOCATION OF NEW SEVEN-DAY ELECTRONIC PROGRAMMABLE THERMOSTAT WITH OCCUPIED AND UNOCCUPIED CAPABILITIES TO OPERATE NEW OUTSIDE AIR DAMPER. PROVIDE NON-TAMPER TRANSPARENT ENCLOSURE FOR THERMOSTAT. COORDINATE ENCLOSURE AND FINAL LOCATION MOUNTING HEIGHT OF THE THERMOSTAT WITH ARCHITECT.
 - PROPOSED LOCATION OF DUCT / PIPE SHAFT. COORDINATE FINAL LOCATION WITH ARCHITECTURAL PLANS.

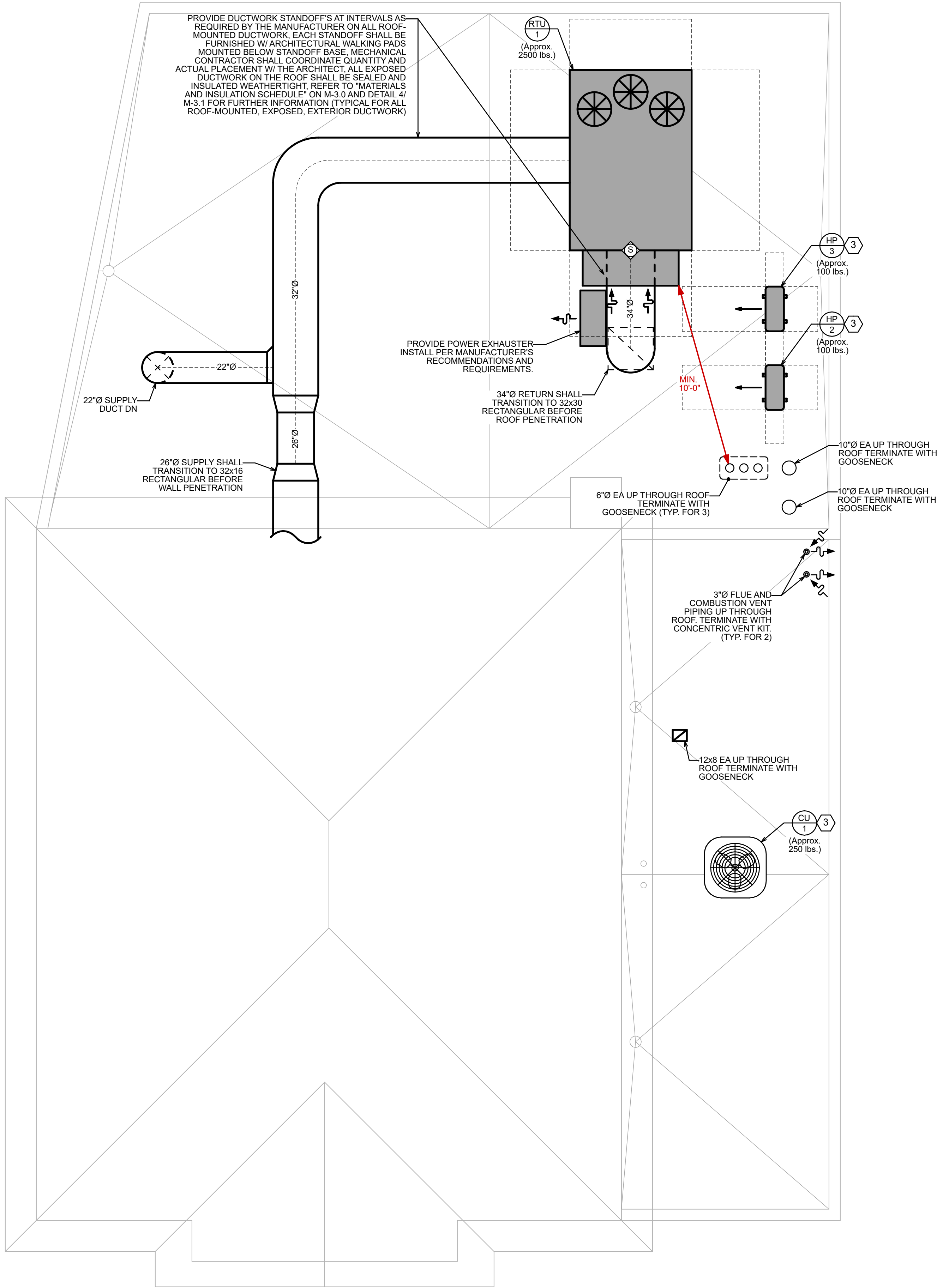
- DRAWING SYMBOLS**
- (E) EXISTING MECHANICAL WORK TO REMAIN
(R) EXISTING MECHANICAL WORK TO BE DEMOLISHED AND REMOVED
— EXISTING MECHANICAL WORK TO REMAIN
- - - EXISTING MECHANICAL WORK TO BE DEMOLISHED AND REMOVED
— NEW MECHANICAL WORK



THIS IS THE WORK AREA
IN THE FIRST FLOOR

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

No.	DATE	DESCRIPTION			REV'D BY
		REVISIONS			
APPROVAL:		PROJECT:			
		ADA RENOVATIONS TO THE GLOUCESTER TOWNSHIP BLACK BOX COMMUNITY CENTER			
		3 S. BLACKHORSE PIKE BLACKWOOD, NEW JERSEY			
		Joseph F. McKernan Jr., Architects & Associates		TITLE: FIRST FLOOR MECHANICAL PLAN	
100 Dobbs Lane Suite 204 Cherry Hill, New Jersey 08034					
		SEAL:	DRAWING NO.		M-1.0
3800 Horizon Blvd., Suite 503 Trenton, NJ 08611 P: (609) 322-7771 F: (609) 322-7709 www.holsteinwhite.com		DIMENSIONS MUST BE VERIFIED BY CONTRACTOR. VERIFY THE ACCURACY OF ALL DIMENSIONS BEFORE PROCEEDING WITH CONSTRUCTION. DO NOT SCALE DRAWING.		SCALE: AS NOTED PROJ. NO.: 23-560 DATE: xxx/xx/xx REV'D: SW DRAWN BY: SH CHKD BY: SW	
		SCOTT A. WHITE NJ REG. NO. 34620467000 NJ AUTH. NO. 24620467000		COPYRIGHT 2023	



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

SEQUENCE OF OPERATIONS : RTU-1

- A. OCCUPANCY: A USER ADJUSTABLE OCCUPANCY SCHEDULE WILL BE ESTABLISHED AND MAINTAINED BY THE BUILDING OWNER/OPERATOR. OCCUPIED AND UNOCCUPIED HEATING AND COOLING SETPOINTS WILL BE ESTABLISHED. THE FAN SYSTEM WILL MAINTAIN SPACE CONDITIONS TO THE OCCUPIED AND UNOCCUPIED SETPOINTS BASED ON THIS OPERATING SCHEDULE.
- INITIAL SETPOINTS:
- | | | |
|--------------------|---|------|
| OCCUPIED HEATING | = | 70°F |
| OCCUPIED COOLING | = | 74°F |
| UNOCCUPIED HEATING | = | 65°F |
| UNOCCUPIED COOLING | = | 82°F |
- B. OPTIMAL START: AN OPTIMAL START ROUTINE WILL CALCULATE AN EARLY START TIME TO BRING SPACE CONDITIONS TO WITHIN OCCUPIED SETPOINTS BY THE BEGINNING OF THE SCHEDULED OCCUPANCY TIME PERIOD. THE OPTIMAL START ROUTINE FACTORS SPACE TEMPERATURE(S) AND OUTDOOR CONDITIONS TO CALCULATE AND LEARN THE START-UP RECOVERY TIME FROM THE UN-OCCUPIED MODE.
- C. FIRE / SMOKE - SAFETY DEVICE: UPON ACTIVATION OF THE FIRE/SMOKE SAFETY DEVICE, THE FAN SYSTEM WILL SHUTDOWN AND CEASE ALL FUNCTION, EXCEPT WHERE SPECIFIED OTHERWISE. A MANUAL RESET OF THE DEVICE WILL BE REQUIRED TO ALLOW THE SYSTEM RE-START IN ITS APPROPRIATE MODE OF OPERATION. AN ALARM WILL BE ACTIVATED AT THE OPERATOR'S TERMINAL.
- D. COOLING: WHEN FREE COOLING IS NOT AVAILABLE, THE COMPRESSORS WILL BE CONTROLLED BY THE ZONE THERMOSTAT. WHEN FREE COOLING IS AVAILABLE, THE OUTDOOR AIR DAMPER IS MODULATED BY THE ECONOMIZER CONTROL TO PROVIDE A 50°F TO 55°F MIXED AIR TEMPERATURE INTO THE ZONE. AS THE MIXED AIR TEMPERATURE FLUCTUATES ABOVE 58°F OR BELOW 50°F, DAMPERS WILL BE MODULATED (OPEN OR CLOSE) TO BRING THE MIXED AIR TEMPERATURE BACK WITHIN CONTROL. IF MECHANICAL COOLING IS UTILIZED WITH FREE COOLING, THE OUTDOOR AIR DAMPER WILL MAINTAIN ITS CURRENT POSITION AT THE TIME THE COMPRESSOR IS STARTED. IF THE INCREASE IN COOLING CAPACITY CAUSES THE MIXED AIR TEMPERATURE TO DROP BELOW 48°F, THEN THE OUTDOOR AIR DAMPER POSITION WILL BE DECREASED TO THE MINIMUM POSITION. IF THE MIXED AIR TEMPERATURE CONTINUES TO FALL, THE OUTDOOR AIR DAMPER WILL CLOSE. CONTROL RETURNS TO NORMAL ONCE THE MIXED AIR TEMPERATURE RISES ABOVE 48°F. THE POWER EXHAUST FANS WILL BE ENERGIZED AND DE-ENERGIZED AS THE OUTDOOR AIR DAMPER OPENS AND CLOSSES.

FIELD INSTALLED ACCESSORY CO2 SENSORS ARE TO BE CONNECTED TO THE ECONOMIZER CONTROL FOR A DEMAND CONTROLLED VENTILATION SEQUENCE. AS THE CO2 LEVEL IN THE ZONE INCREASES ABOVE THE CO2 SETPOINT, THE MINIMUM POSITION OF THE DAMPER WILL BE INCREASED PROPORTIONALLY. AS THE CO2 LEVEL DECREASES BECAUSE OF THE INCREASE IN FRESH AIR, THE OUTDOOR AIR DAMPER WILL BE PROPORTIONALLY CLOSED. FOR ECONOMIZER OPERATION, THERE MUST BE A THERMOSTAT CALL FOR THE FAN. IF THE UNIT IS OCCUPIED AND THE FAN IS ON, THE DAMPER WILL OPERATE AT MINIMUM POSITION. OTHERWISE, THE DAMPER WILL BE CLOSED.

WHEN THE ECONOMIZER CONTROL IS IN THE OCCUPIED MODE AND A CALL FOR COOLING EXISTS (Y1 ON THE THERMOSTAT), THE CONTROL WILL FIRST CHECK FOR INDOOR FAN OPERATION. IF THE FAN IS NOT ON, THEN COOLING WILL NOT BE ACTIVATED. IF THE FAN IS ON, THEN THE CONTROL WILL OPEN THE ECONOMIZER DAMPER TO THE MINIMUM POSITION.

ON THE INITIAL POWER TO THE ECONOMIZER CONTROL, IT WILL TAKE THE DAMPER UP TO 2-1/2 MINUTES BEFORE IT BEGINS TO POSITION ITSELF. AFTER THE INITIAL POWER-UP, FURTHER CHANGES IN DAMPER POSITION CAN TAKE UP TO 30 SECONDS TO INITIATE. DAMPER MOVEMENT FROM FULL CLOSED TO FULL OPEN (OR VICE VERSA) WILL TAKE BETWEEN 1-1/2 AND 2-1/2 MINUTES. IF FREE COOLING CAN BE USED AS DETERMINED FROM THE APPROPRIATE CHANGEOVER COMMAND (SWITCH, DRY BULB ENTHALPY CURVE, DIFFERENTIAL DRY BULB OR DIFFERENTIAL ENTHALPY), THEN THE CONTROL WILL MODULATE THE DAMPERS OPEN TO MAINTAIN THE MIXED AIR TEMPERATURE SETPOINT AT 50°F TO 55°F. IF THERE IS A FURTHER DEMAND FOR COOLING (COOLING SECOND STAGE - Y2 IS ENERGIZED), THEN THE CONTROL WILL BRING ON COMPRESSOR STAGE 1 TO MAINTAIN THE MIXED AIR TEMPERATURE SETPOINT. THE ECONOMIZER DAMPER WILL BE OPEN AT MAXIMUM POSITION.

- E. HEATING: WHEN THE THERMOSTAT CALLS FOR HEATING, POWER IS SENT TO W ON THE INTEGRATED GAS CONTROLLER (IGC) BOARD. AN LED ON THE IGC BOARD TURNS ON AND REMAINS ON DURING NORMAL OPERATION. A CHECK IS MADE TO ENSURE THAT THE ROLLOUT SWITCH AND LIMIT SWITCH ARE CLOSED. IF THE CHECK WAS SUCCESSFUL, THE INDUCED-DRAFT MOTOR IS ENERGIZED AND WHEN ITS SPEED IS SATISFACTORY, AS PROVEN BY THE "HALL EFFECT" SENSOR, THE IGNITION ACTIVATION PERIOD BEGINS. THE BURNERS WILL IGNITE WITHIN 5 SECONDS. IF THE BURNERS DO NOT LIGHT, THERE IS A 22-SECOND DELAY BEFORE ANOTHER 5-SECOND ATTEMPT. THIS SEQUENCE IS REPEATED FOR 15 MINUTES OR UNTIL THE BURNERS LIGHT. IF, AFTER THE 15 MINUTES, THE BURNERS STILL HAVE NOT LIT, HEATING IS LOCKED OUT. TO RESET THE CONTROL, BREAK 24V POWER TO THE THERMOSTAT.

WHEN IGNITION OCCURS, THE IGC BOARD WILL CONTINUE TO MONITOR THE CONDITION OF THE ROLLOUT SWITCH, THE LIMIT SWITCHES, THE "HALL EFFECT" SENSOR, AS WELL AS THE FLAME SENSOR. 45-SECONDS AFTER IGNITION OCCURS, ASSUMING THE UNIT IS CONTROLLED THROUGH A ROOM THERMOSTAT SET FOR FAN AUTO, THE INDOOR FAN MOTOR WILL ENERGIZE (AND THE OUTDOOR AIR DAMPERS WILL OPEN TO THEIR MINIMUM POSITION). IF, FOR SOME REASON, THE OVER-TEMPERATURE LIMIT OPENS PRIOR TO THE START OF THE INDOOR FAN BLOWER, THE UNIT WILL SHORTEN THE 45-SECOND DELAY TO 5-SECONDS LESS THAN THE TIME FROM INITIATION OF HEAT TO WHEN THE LIMIT TRIPPED. GAS WILL NOT BE INTERRUPTED TO THE BURNERS AND HEATING WILL CONTINUE. ONCE THE FAN-ON DELAY HAS BEEN MODIFIED, IT WILL NOT CHANGE BACK TO 45-SECONDS UNTIL POWER IS RESET TO THE CONTROL.

ON UNITS WITH 2 STAGES OF HEAT, WHEN ADDITIONAL HEAT IS REQUIRED, W2 CLOSSES AND INITIATES POWER TO THE SECOND STAGE OF THE MAIN GAS VALVE. WHEN THE THERMOSTAT IS SATISFIED, W1 AND W2 OPEN AND THE GAS VALVE CLOSSES, INTERRUPTING THE FLOW OF GAS TO THE MAIN BURNERS.

IF THE CALL FOR W1 LASTED LESS THAN 1 MINUTE, THE HEATING CYCLE WILL NOT TERMINATE UNTIL 1 MINUTE AFTER W1 BECAME ACTIVE. IF THE UNIT IS CONTROLLED THROUGH A ROOM THERMOSTAT SET FOR FAN AUTO, THE INDOOR FAN MOTOR WILL CONTINUE TO OPERATE FOR AN ADDITIONAL 45-SECONDS THEN STOP. IF THE OVER-TEMPERATURE LIMIT OPENS AFTER THE INDOOR MOTOR IS STOPPED, BUT WITHIN 10 MINUTES OF W1 BECOMING INACTIVE, ON THE NEXT CYCLE THE TIME WILL BE EXTENDED BY 15-SECONDS. THE MAXIMUM DELAY IS 3 MINUTES. ONCE MODIFIED, THE FAN OFF DELAY WILL NOT CHANGE BACK TO 45-SECONDS UNLESS POWER IS RESET TO THE CONTROL. AN LED INDICATOR IS PROVIDED ON THE IGC TO MONITOR OPERATION.

- F. HUMID-MIZER DEHUMIDIFICATION SYSTEM: UNITS WITH THE FACTORY EQUIPPED HUMID-MIZER OPTION ARE CAPABLE OF PROVIDING MULTIPLE MODES OF IMPROVED DEHUMIDIFICATION AS A VARIATION OF THE NORMAL COOLING CYCLE. THE HUMID-MIZER OPTION INCLUDES ADDITIONAL VALVES IN THE LIQUID LINE AND DISCHARGE LINE OF EACH REFRIGERANT CIRCUIT, A SMALL REHEAT CONDENSER COIL DOWNSTREAM OF THE EVAPORATOR, AND MOTORMASTER VARIABLE-SPEED CONTROL OF SOME OR ALL OUTDOOR FANS. OPERATION OF THE REVISED REFRIGERANT CIRCUIT FOR EACH MODE IS DESCRIBED BELOW.

THE HUMID-MIZER SYSTEM PROVIDES THREE MODES OF OPERATION: COOL, REHEAT1 AND REHEAT2:

- | | |
|-----------|---|
| COOL MODE | PROVIDES A NORMAL RATIO OF SENSIBLE AND LATENT COOLING EFFECT FROM THE EVAPORATOR COIL. |
| REHEAT1 | PROVIDES INCREASED LATENT COOLING WHILE SLIGHTLY REDUCING THE SENSIBLE COOLING EFFECT. |
| REHEAT2 | PROVIDES NORMAL LATENT COOLING BUT WITH NULL OR MINIMUM SENSIBLE COOLING EFFECT DELIVERED TO THE SPACE. |

THE REHEAT1 AND REHEAT2 MODES ARE AVAILABLE WHEN THE UNIT IS NOT IN A HEATING MODE AND WHEN THE LOW AMBIENT LOCKOUT SWITCH IS CLOSED.

GENERAL NOTES

- ALL BRANCH DUCTWORK SHALL HAVE BALANCING DAMPERS.
- COORDINATE ALL AIR DEVICES WITH LIGHTING AND REFLECTED CEILING PLANS.
- IT IS THE INTENT TO MAINTAIN THE CEILING HEIGHTS AS SHOWN ON THE REFLECTED CEILING PLANS.
- DUCTWORK SHOULD BE INSTALLED AS TIGHT AS POSSIBLE TO THE STRUCTURAL FRAMING AND DECK.
- MECHANICAL CONTRACTOR SHALL FURNISH ALL REQUIRED CEILING ACCESS PANELS AND WALL OPENINGS TO SERVICE ALL MECHANICAL EQUIPMENT. INSTALLED BY G.C. COORDINATED ALL LOCATIONS AND SIZES WITH ARCHITECT PRIOR TO INSTALLATION.
- ALL TRANSVERSE JOINTS AND LONGITUDINAL SEAMS SHALL BE SEALED WITH RCD#8 LOW-VOC MASTIC. ALL DUCTWORK SHALL BE IN ACCORDANCE WITH SMACNA'S SEAL CLASS "B".
- ALL DUCTWORK SIZES SHOWN ON PLAN ARE CLEAR I.D. DIMENSIONS. ALL SUPPLY AND RETURN DUCTWORK SHALL BE INSULATED.
- CONTRACTOR SHALL COORDINATE ALL REQUIRED ROOF CUTTING AND PATCHING WITH CURRENT ROOFING CONTRACTOR TO MAINTAIN ROOF WARRANTY. COORDINATE ALL WORK WITH LANDLORD PRIOR TO CONSTRUCTION.

SHEET NOTES

- REFER TO THE FOLLOWING NOTES FOR EACH AHU:
 - RUN REFRIGERANT PIPING FROM INDOOR AIR HANDLING UNIT TO CORRESPONDING OUTDOOR HEAT PUMP. SIZE REFRIGERANT PIPING PER MANUFACTURER'S RECOMMENDATIONS. COORDINATE ALL RUNS WITH ARCHITECT.
 - CONDENSATE SHALL DRAIN TO MOP RECEPTOR IN BASEMENT. PROVIDE CONDENSATE PUMP.
 - COORDINATE THE FINAL LOCATION OF AHU W/ ARCHITECT. INSTALL PER MANUFACTURER'S RECOMMENDATIONS. PROVIDE ALL REQUIRED MAINTENANCE CLEARANCES.
- REFER TO THE FOLLOWING NOTES FOR EACH AHU:
 - RUN REFRIGERANT PIPING FROM INDOOR AIR HANDLING UNIT TO CORRESPONDING OUTDOOR CONDENSING UNIT. SIZE REFRIGERANT PIPING PER MANUFACTURER'S RECOMMENDATIONS. COORDINATE ALL RUNS WITH ARCHITECT.
 - CONDENSATE SHALL DRAIN TO FLOOR DRAIN IN STORAGE ROOM. REFER TO PLUMBING PLANS FOR SIZE AND LOCATION.
 - COORDINATE THE FINAL LOCATION OF AHU W/ ARCHITECT. INSTALL PER MANUFACTURER'S RECOMMENDATIONS. PROVIDE ALL REQUIRED MAINTENANCE CLEARANCES.
- REFER TO THE FOLLOWING NOTES FOR EACH CUI/HP:
 - INSTALL PER MANUFACTURER'S RECOMMENDATIONS AND PROVIDE ALL REQUIRED MAINTENANCE CLEARANCES.
 - ROUTE REFRIGERANT PIPING TO CORRESPONDING AHU. SIZE REFRIGERANT PIPING PER MANUFACTURER'S RECOMMENDATIONS. COORDINATE ALL RUNS WITH ARCHITECT.
 - CONDENSING UNIT SHALL BE MOUNTED ON PATE EQUIPMENT SUPPORTS.
- INDICATES LOCATION OF NEW SEVEN-DAY ELECTRONIC PROGRAMMABLE THERMOSTAT WITH OCCUPIED AND UNOCCUPIED CAPABILITIES TO OPERATE NEW OUTSIDE AIR DAMPER. PROVIDE NON-TAMPER TRANSPARENT ENCLOSURE FOR THERMOSTAT. COORDINATE ENCLOSURE AND FINAL LOCATION MOUNTING HEIGHT OF THE THERMOSTAT WITH ARCHITECT.

DRAWING SYMBOLS

- | | |
|-----|---|
| (E) | EXISTING MECHANICAL WORK TO REMAIN |
| (R) | EXISTING MECHANICAL WORK TO BE DEMOLISHED AND REMOVED |
| — | EXISTING MECHANICAL WORK TO REMAIN |
| --- | EXISTING MECHANICAL WORK TO BE DEMOLISHED AND REMOVED |
| — | NEW MECHANICAL WORK |

No.	DATE	DESCRIPTION	REV'D BY
APPROVAL:		PROJECT:	
		ADA RENOVATIONS TO THE GLOUCESTER TOWNSHIP BLACK BOX COMMUNITY CENTER	
		3 S BLACKHORSE PIKE BLACKWOOD, NEW JERSEY	
Joseph F. McKernan Jr., Architects & Associates 100 Dobbs Lane Suite 204 Cherry Hill, New Jersey 08034		TITLE: ROOF MECHANICAL PLAN	
3800 Horizon Blvd., Suite 203 Trenton, NJ 08611 P: (609) 322-7711 F: (609) 322-7709 www.holsteinwhite.com		SCALE: AS NOTED PROJ. NO.: 23-580 DATE: xxx/xx/xx REV'D: SW DRAWN BY: SH CHKD BY: SW	DRAWING NO: M-2.0
SCOTT A. WHITE NJ REG. NO. 346204677000 NJ AUTH. NO. 246CA0143700		DESIGNER MUST BE VERIFIED BY CONTRACTOR WITH THE ARCHITECT OR ANY DISCREPANCY BEFORE PROCEEDING WITH CONSTRUCTION. DO NOT SCALE DRAWING.	

MATERIAL AND INSULATION SCHEDULE

System	Material		Insulation			Remarks
	Basis of Design	Basis of Design	Type	Wall (in.)	Vapor Barrier	
Ductwork; Flexible	Aluminized Steel Mylar	Certaiteed	Certaiflex	1-1/2	Yes	UL Listed Flexible Air Duct Tested Under UL-181, R-5 Duct Insulation (Common Area Only)
Ductwork; Supply	Galvanized Steel	Certaiteed	Duct Wrap	1-1/2	Yes	Construct per SMACNA Standards, 2" Pressure Class, R-6 Duct Insulation Wrap
Ductwork; Return	Galvanized Steel	Ultralite 150	Duct Liner	1/2	---	Construct per SMACNA Standards, 2" Pressure Class
Ductwork; Combustion Air Intake	Sch. 40 PVC (Solid Wall)	---	---	---	---	---
Ductwork; Gas Flue Exhaust	Sch. 40 PVC (Solid Wall)	---	---	---	---	---
Piping; Refrigerant (Liquid / Suction)	"ACR" Copper	Armacell	Armatuff	1-1/2	Integral	Insulate per Mfr. Recommendations, Provide UV Protection Where Exposed to Sunlight
Piping; Condensate Discharge (A/C)	Type "L" Copper	Rubutex	R-180FS	1/2	Integral	Insulate Trap Only, Provide UV Protection Where Exposed to Sunlight
Ductwork; Roof Mounted	Galvanized Steel (Min. 16 ga.)	1577 CW Duct Board	2	Yes	---	Construction per SMACNA standards and IMC Section 506
Ductwork; Supply Spiral	Dbt. Wall Spiral	Lindab	Duct Liner	1	Yes	Construction per SMACNA, 2" Pressure Class, R-6 Duct Insulation Wrap
Ductwork; Return Spiral	Dbt. Wall Spiral	Lindab	Duct Liner	1	---	Construction per SMACNA, 2" Pressure Class

AIR DEVICE SCHEDULE

No.	CFM	Size	Neck	Mfr.	Model #	Finish	Damper	Mtd. Surface	Material	Remarks
AD-1	0 - 175	12x8	10x6	Krueger	5DMGDR	Note #3	Yes	Duct	Aluminum	Double Deflection Duct Mounted Grille with 3/4" Blade spacing
	176 - 275	16x8	14x6	Krueger	5DMGDR	Note #3	Yes	Duct	Aluminum	Double Deflection Duct Mounted Grille with 3/4" Blade spacing
	276 - 450	16x10	14x8	Krueger	5DMGDR	Note #3	Yes	Duct	Aluminum	Double Deflection Duct Mounted Grille with 3/4" Blade spacing
AD-2	0 - 125	8x6	6x6	Krueger	5880	Note #3	Yes	Wall	Aluminum	Double Deflection Supply Grille with 3/4" Blade Spacing
	125 - 250	12x8	10x6	Krueger	5880	Note #3	Yes	Wall	Aluminum	Double Deflection Supply Grille with 3/4" Blade Spacing
AD-3	0 - 250	10x8	8x6	Krueger	S580	Note #3	Yes	Wall	Aluminum	Return Grille with 3/4" Spacing and 35° Deflection
	251 - 325	12x8	10x6	Krueger	S580	Note #3	Yes	Wall	Aluminum	Return Grille with 3/4" Spacing and 35° Deflection
	326 - 7000	50x38	48x36	Krueger	S580	Note #3	Yes	Wall	Aluminum	Return Grille with 3/4" Spacing and 35° Deflection

Air Device Notes:

- Unless otherwise indicated, provide duct connection the full size of duct shown on drawing
- Provide air device frames to suit wall and ceiling construction.
- Finish, color, sizes and style of all air devices shall be coordinated with Architect and Owner prior to ordering and installation.
- Paint return air plenums behind / above return air, transfer air and / or exhaust air grilles black.
- For any air devices installed in areas with non-accessible ceilings, provide Bowden Cable Control system to allow for damper adjustment. Refer to detail 14/M-3.1 for more information.

WALL HEATER SCHEDULE

Unit Designation		FFH - 1	
Description	Unit Heater		
Basis of Design	Q-Mark		
Model Number	CWH1151DSF		
Mount	Wall		
Dimensions (H x W x D) (in.)	11 x 9-1/4 x 4		
Weight (lbs.)	10		
Service	Refer to Plans		
Electrical		120 / 1Ø / 60	
Capacity (kW)	1.5		
Number of Elements	1		
Unit FLA	12.5		
Element (Watts/ft.)	N/A		
Accessories			
Finish	---		
Mounting Kit	Yes		
Disconnect Switch	Yes		
Over Current Protection	Yes		
Automatic Reset Thermal Limit	Yes		
Automatic Fan Delay Circuit	No		
Control			
Unit Mounted Thermostat	Yes, Tamperproof		

UNIT HEATER SCHEDULE

Unit Designation		UH - 1	
Description	Unit Heater		
Basis of Design	Q-Mark		
Model Number	MUH0381		
Mount	Ceiling - Vertical		
Dimensions (H x W x D) (in.)	16 x 14 x 7.5		
Weight (lbs)	25		
Service	Refer to Plans		
Electrical		208 / 1Ø / 60	
Capacity (kW)	3.0		
Number of Elements	1		
Unit FLA	14.5 Amps		
Element (Watts/ft.)	N/A		
Accessories			
Finish	---		
Mounting Kit	Yes		
Disconnect Switch	Yes		
Over Current Protection	Yes		
Automatic Reset Thermal Limit	Yes		
Automatic Fan Delay Circuit	No		
Control			
Unit Mounted Thermostat	Yes		

GAS-FIRED ROOFTOP UNIT SCHEDULE

Unit Designation		RTU-1	
Basis of Design	Carrier		
Model No	48FCTM20BJA5-6F0C0		
Nominal Tonnage	17.5		
Total Airflow (SA)(CFM)	7,000		
Outside Airflow (OA)(CFM)	1,400		
E.S.P. Supply Fan (in. W.G.)	0.57		
Weight (lbs)	2,300		
Dimensions (L x W x H) (in.)	127-7/8 x 86-3/8 x 47-3/4		
Discharge Direction	Horizontal		

Cooling Performance			
Gross Total Capacity (MBH)	218.18		
Gross Sensible Total Capacity (MBH)	162.39		
Compressor Power Input (kW)	16.98		
EAT (db/wb)(°F)	80 / 67		
LAT (db/wb)(°F)	58.5 / 57.2		
EER	10.80		
IEER	14.5		

Heating Performance			
Heating Fuel	Natural Gas		
Input Capacity (MBH)	320 / 400		
Output Capacity (MBH)	260 / 324		
EAT (db)(°F)	70.0		
LAT (db)(°F)	112.9		
Thermal Efficiency	81%		

Electrical		208-230 / 3Ø / 60	
Compressor Quantity	2		
Compressor #1 RLA / LRA (A)	28.2 / 240		
Compressor #2 RLA / LRA (A)	27.6 / 191		
Indoor Fan Motor FLA (A)	7.5		
Outdoor Fan Quantity	3		
Outdoor Fan FLA (ea)(A)	1.5		
MCA (A)	82.4		
MOCP (A)	100		

Options			
BACnet Controls	Yes		
410A Refrigerant	Yes		
Factory Mtd. Powered GFCI Outlet	Yes		
Duct Mounted Thermostat	Yes		
14" High, Insulated Roof Curb	Yes		
Roof Curb Spring Isolation Rails	Yes		
10 Year Compressor Warranty	Yes		
Mfg. Start-up & Checkout Service	Yes		
Deep Seal Condensate Trap	Yes		
Non-Fused Disconnect	Yes		
Field Installed Economizer	Yes		
Field Installed Power Exhauster with Control in RA Ductwork	Yes		
Factory Installed RA Smoke Detector	Yes		
Dual Enthalpy Control	Yes		
Demand Control Ventilation	Yes		
Hot Gas Reheat Dehumidification	Yes		

Notes:

- Provide thermostat capable of operating unit at occupied and unoccupied cycle.
- Mechanical Contractor shall furnish all equipment disconnect switches and Electrical Contractor shall install all equipment disconnect switches.
- Contractor shall mark and label unit with unit designation, date, and company who installed equipment.
- Run condensate drain line to nearest roof drain, splash block, or approved interior location as required.
- Contractor shall coordinate with Electrical Contractor to provide provisions for and location of thermostat controls.
- Provide Emergency Drain Pan with a Water Sensing Device to Shut Down Unit if Water is Detected in the Pan.
- Provide PATE equipment supports (M/N: ES-2), insulated 16" High w/ 2x6 wood nailer for HP. Coordinate final location w/ architect. Install per manufacturer's requirements and ensure that all service and maintenance clearances are provide.
- Provide Pipe Supports for Refrigerant Piping and Conduit Serving Outdoor Unit.
- Provide Thermostat Capable of Operating Unit at Occupied and Unoccupied Cycle to Control Outdoor Air Motorized Damper.
- Coordinate refrigerant Lineset Lengths, Provide Long Line Kit As Necessary.
- Mechanical Contractor Shall Furnish All Equipment Disconnect Switches and Electrical Contractor Shall Install all Equipment Disconnect Switches.
- Contractor shall Mark and Label Unit with Unit Designation, Date, and Company Who Installed Equipment

DUCTLESS MINI SPLIT SYSTEM HEAT PUMP SCHEDULE

Indoor Unit Designation		AHU-2		AHU-3	
Basis of Design	Carrier				
Model Number	40MBCQ09-3			40MAHBQ06XA3	
Orientation	Ceiling Mounted			Wall Mounted	
Airflow (Lo - Mid - Hi) (CFM)	260/320/380			176/229/335/382	
Entering Air Temp. (°F db / °F wb)	80 / 67			80 / 67	
Drive Type	Direct			Direct	
Dimensions (L x W x H) (in.)	22.4 x 22.4 x 10.24			31.3 x 8.86 x 11.61	
Weight (lbs.)	50.0			30.0	
Service	Basement Office			Concession 102	

Cooling Performance			
Nominal Cooling Capacity (Btu/h)	9,000		6,000
Cooling Capacity Range (Btu/h)	2,850 - 11,100		2,500 - 11,000
SEER	20.5		26.5
EER	16.2		15.8

Heating Performance			
Rated Capacity @ 47°F (Btu/h)	10,000		7,400
Rated Capacity @ 17°F (Btu/h)	6,650		4,900
Maximum Capacity @ 17°F (Btu/h)	11,800		9,000
Maximum Capacity @ 5°F (Btu/h)	10,200		7,500
Capacity Range (min.-max.) (Btu/h)	1,800 - 12,500		3,500 - 11,600
HSPF	10.8		14.0
COP(47°F)	2.93		3.9
COP(17°F)	1.8		3.05
COP(5°F)	1.79		1.9

Indoor Unit Electrical			
Minimum Circuit Ampacity (A)	0.2		0.3125

Outdoor Unit Designation		HP-2		HP-3	
Basis of Design	Carrier				
Model Number	38MARBQ09AA-3			38MARBQ06AA-3	
Dimensions (L x W x H) (in.)	31.69 x 12.99 x 24.21			30.12 x 11.93 x 21.85	
Weight (lbs.)	100			100	
Rated Cooling Capacity (MBH)	6.0			6.0	
Refrigerant	R-410A			R-410A	
Refrigerant Lines (Liquid / Vapor)	Sized by MFGR			Sized by MFGR	

Outdoor Unit Electrical		208-230V / 1Ø / 60Hz		208-230V / 1Ø / 60Hz	
Minimum Circuit Ampacity (A)	15			13	
Maximum Overcurrent Protection (A)	15			15	

Accessories & Options			
Wired Remote Controller	Yes		Yes
Wind Baffle	Yes		Yes
HP Weatherproof Disconnect Switch	Yes		Yes
AHU Disconnect Switch	Yes		Yes
Mini Condensate Pump	Yes		Yes
Low Ambient Controls	Yes		Yes
410A Refrigerant	Yes		Yes
Wall Mounting Brackets	No		Yes

NOTE:

- Provide Spring Vibration Isolation Hangers With Uni-strut Supports.
- Provide Emergency Drain Pan with a Water Sensing Device to Shut Down Unit if Water is Detected in the Pan.
- Provide PATE equipment supports (M/N: ES-2), insulated 16" High w/ 2x6 wood nailer for HP. Coordinate final location w/ architect. Install per manufacturer's requirements and ensure that all service and maintenance clearances are provide.
- Provide Pipe Supports for Refrigerant Piping and Conduit Serving Outdoor Unit.
- Provide Thermostat Capable of Operating Unit at Occupied and Unoccupied Cycle to Control Outdoor Air Motorized Damper.
- Coordinate refrigerant Lineset Lengths, Provide Long Line Kit As Necessary.
- Mechanical Contractor Shall Furnish All Equipment Disconnect Switches and Electrical Contractor Shall Install all Equipment Disconnect Switches.
- Contractor shall Mark and Label Unit with Unit Designation, Date, and Company Who Installed Equipment

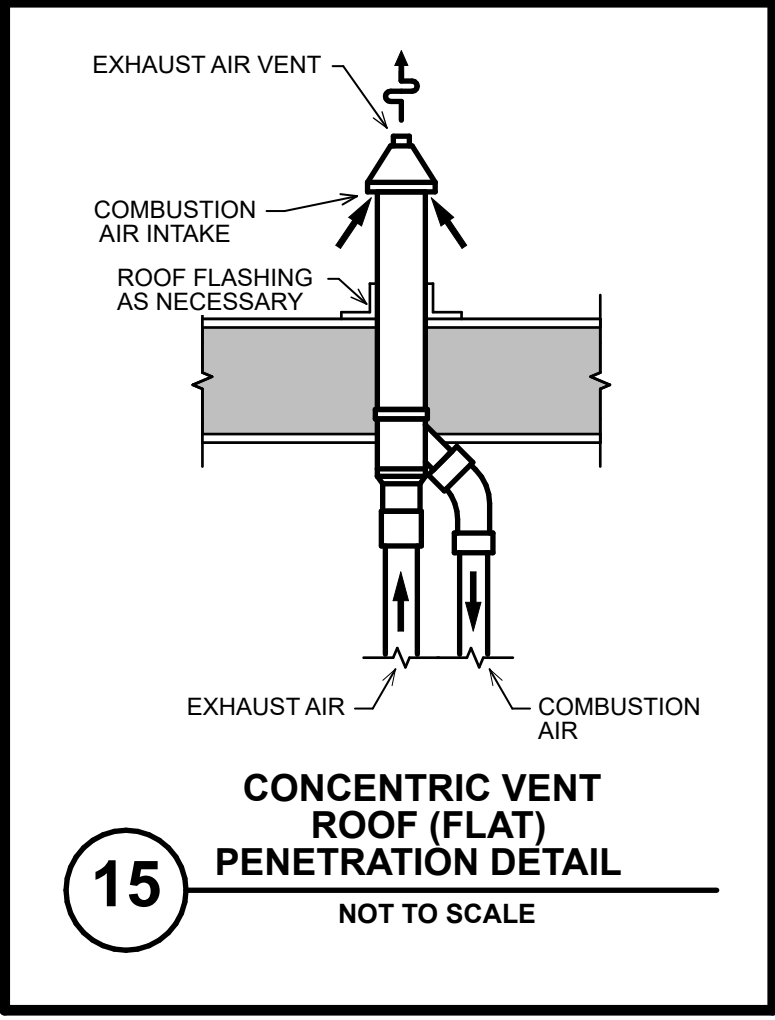
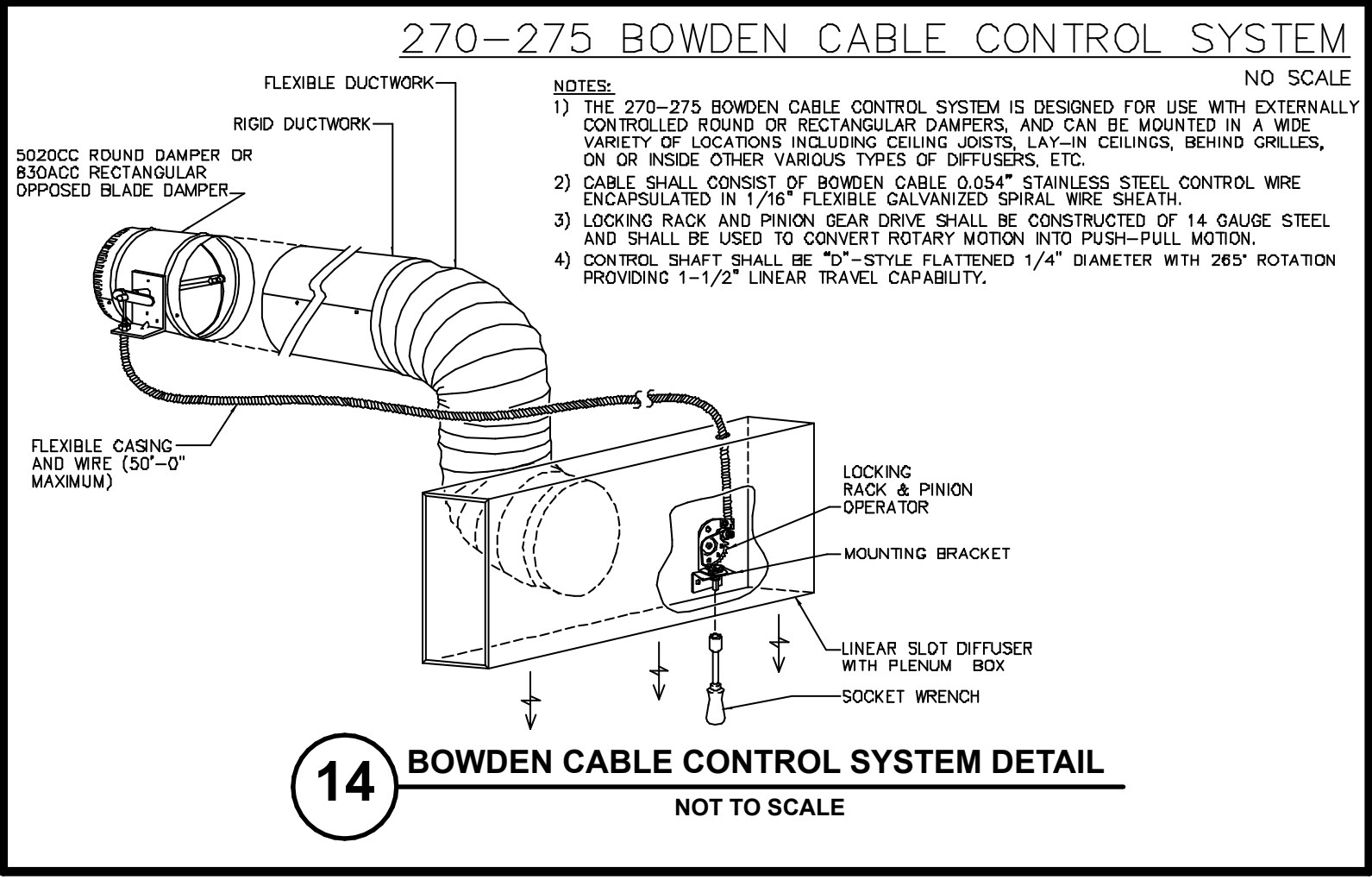
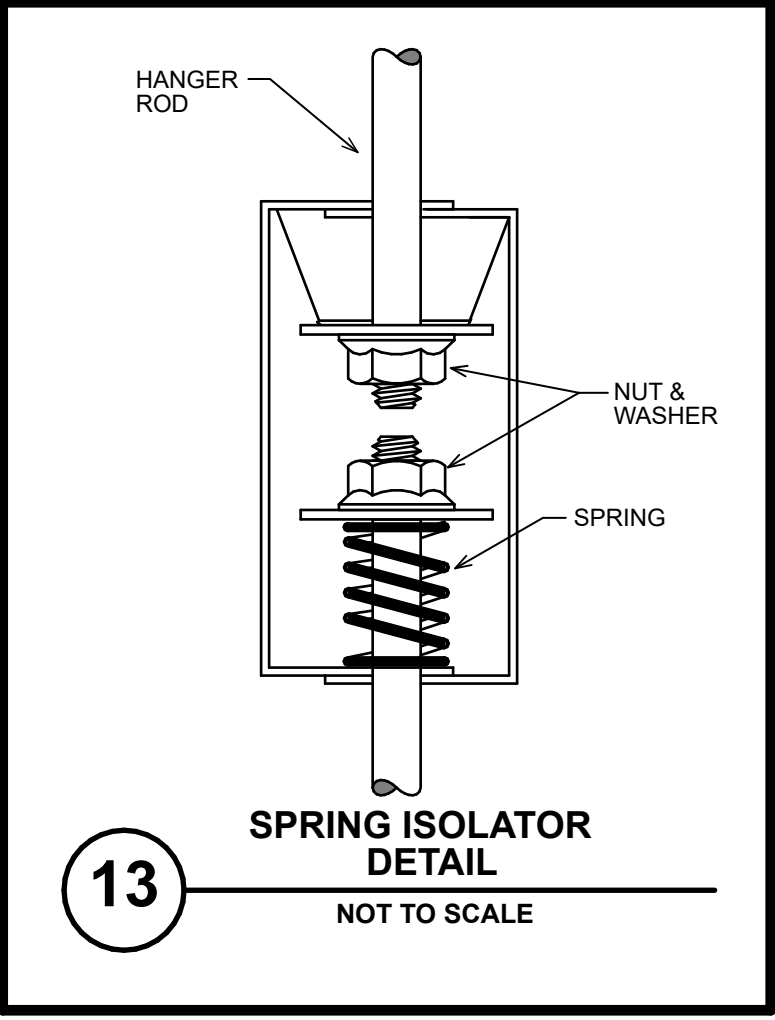
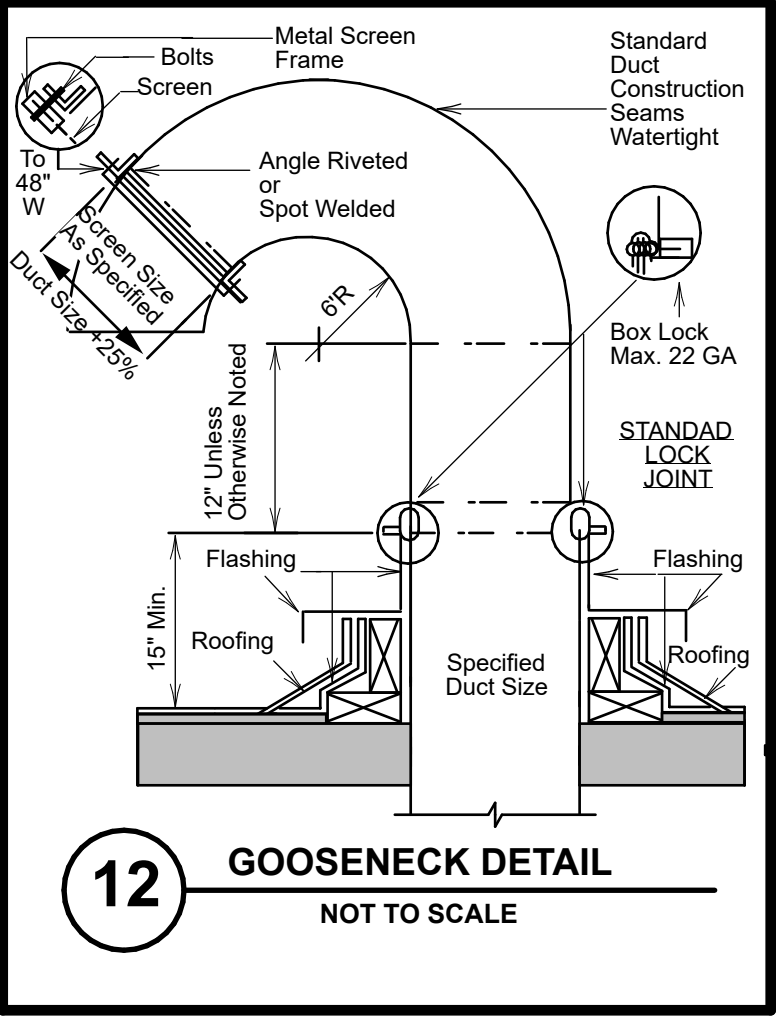
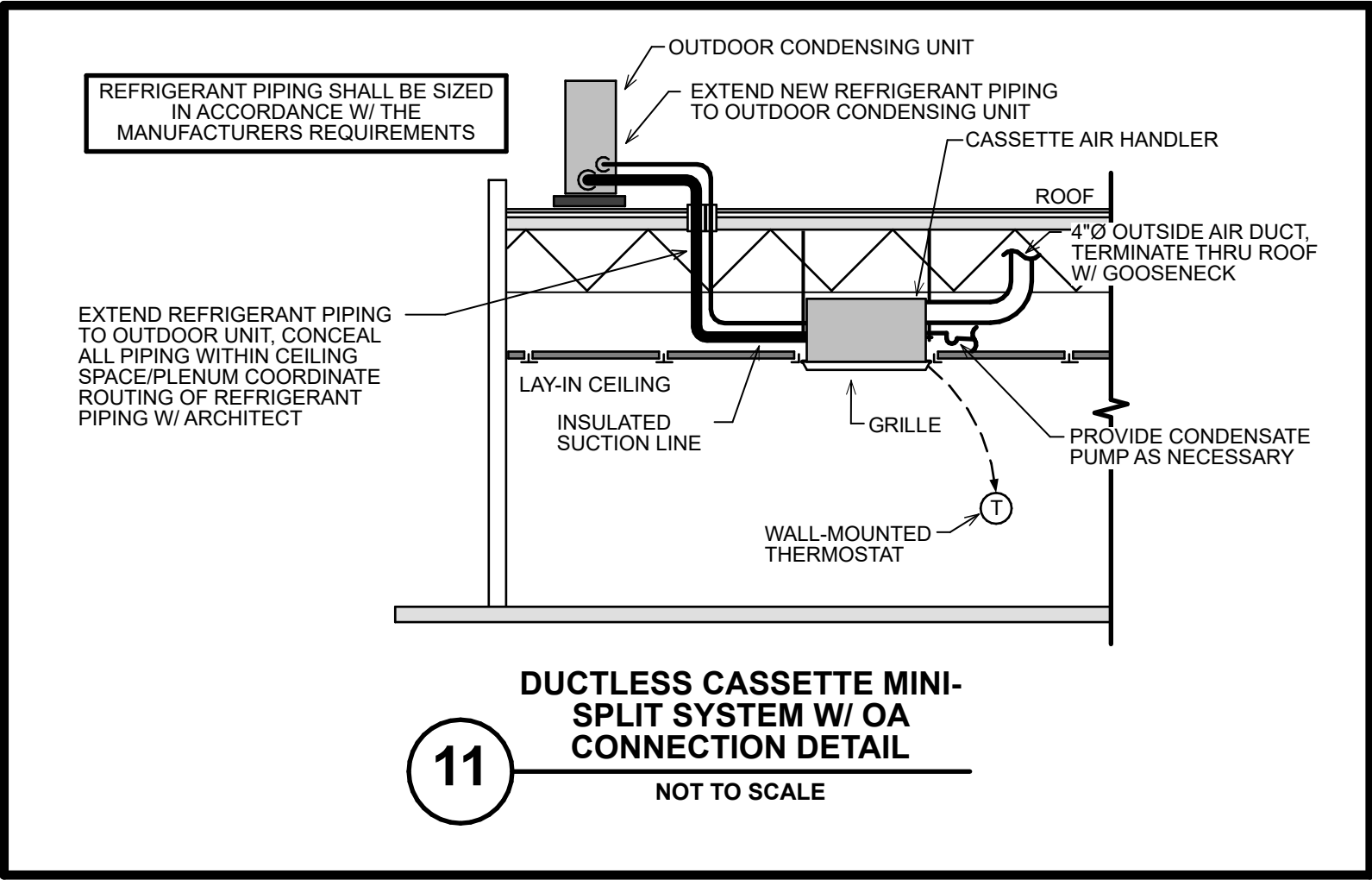
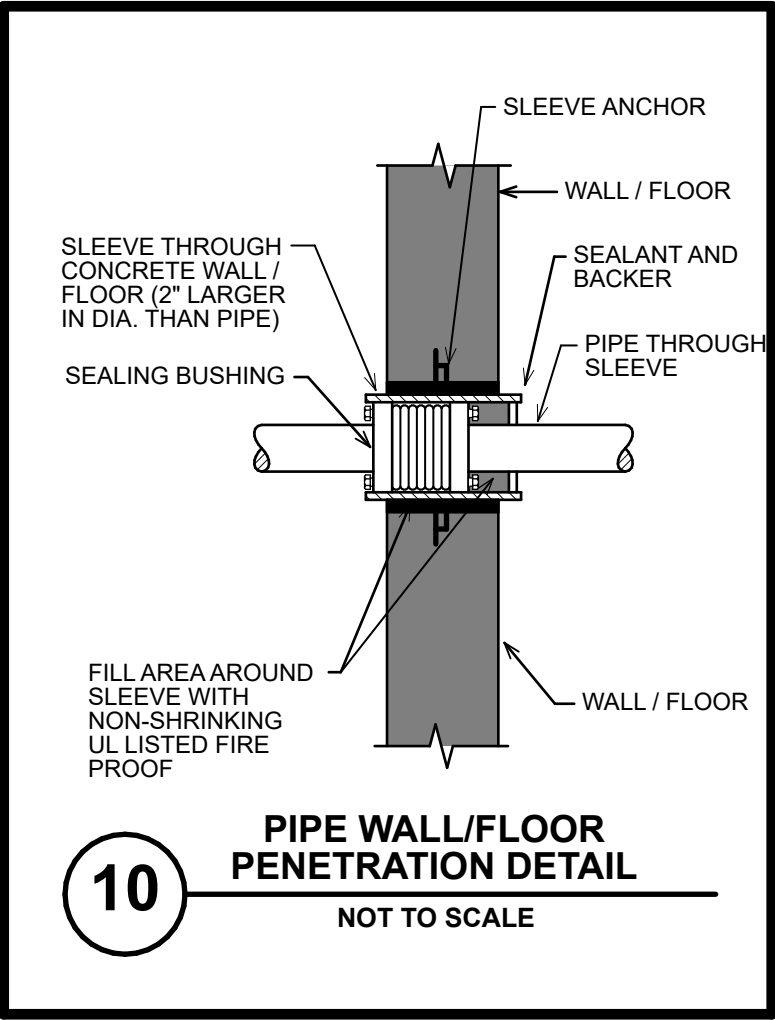
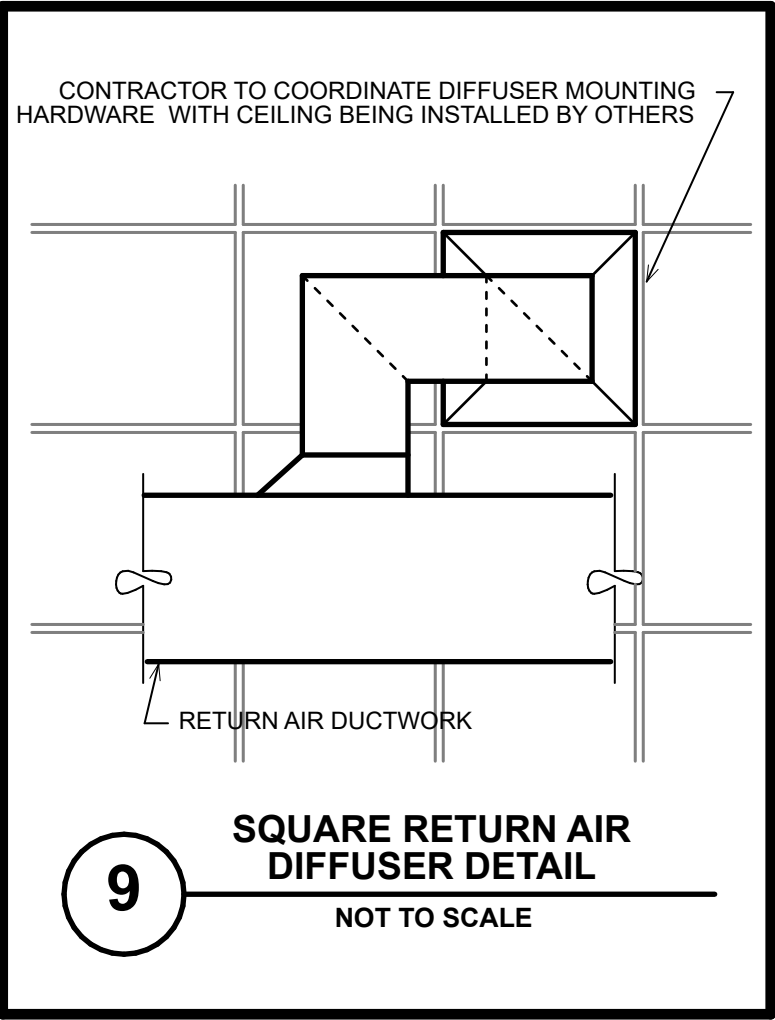
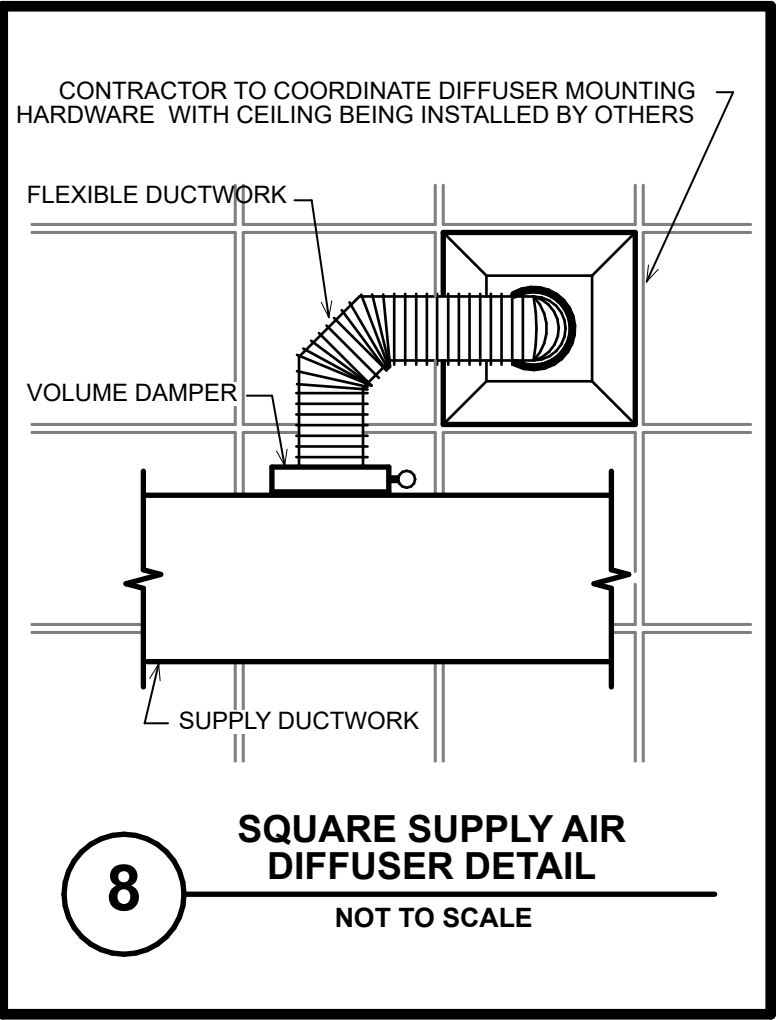
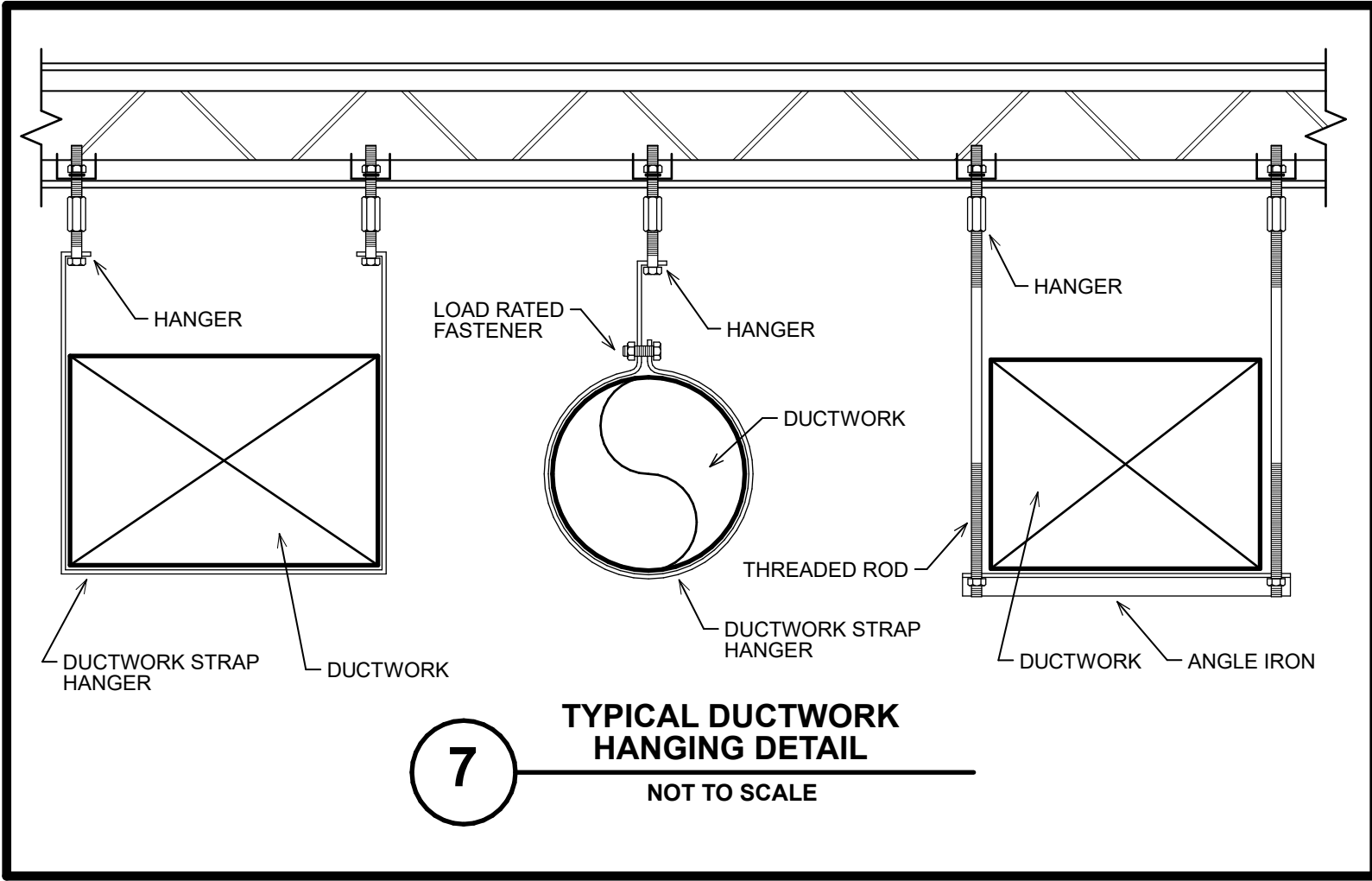
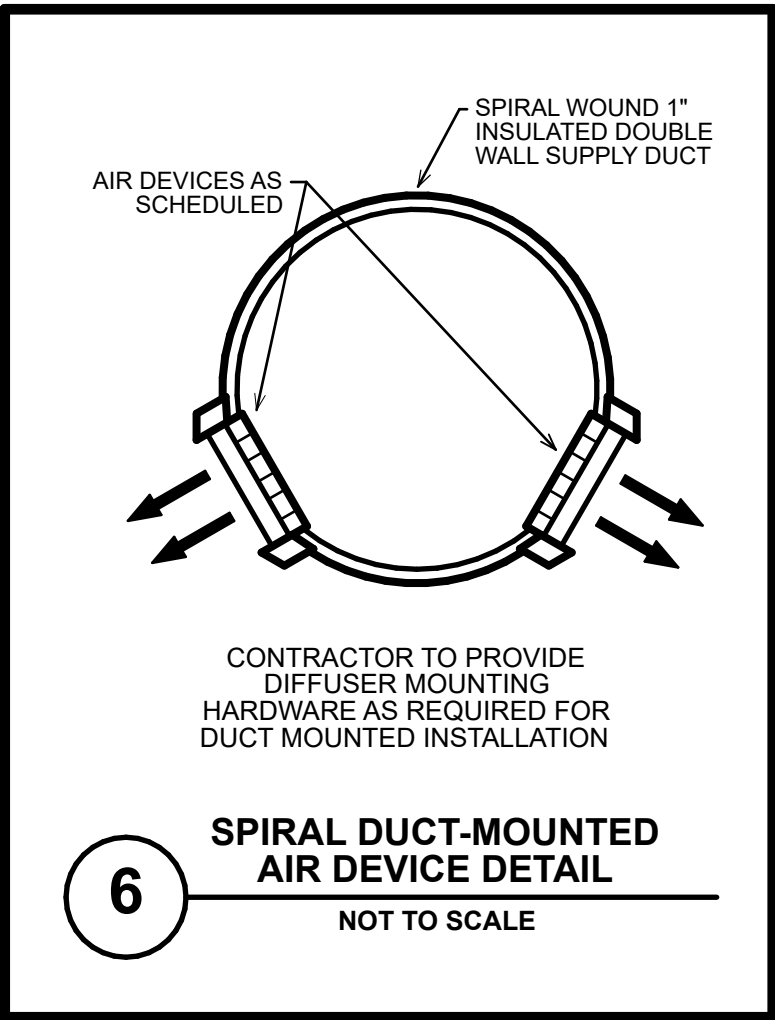
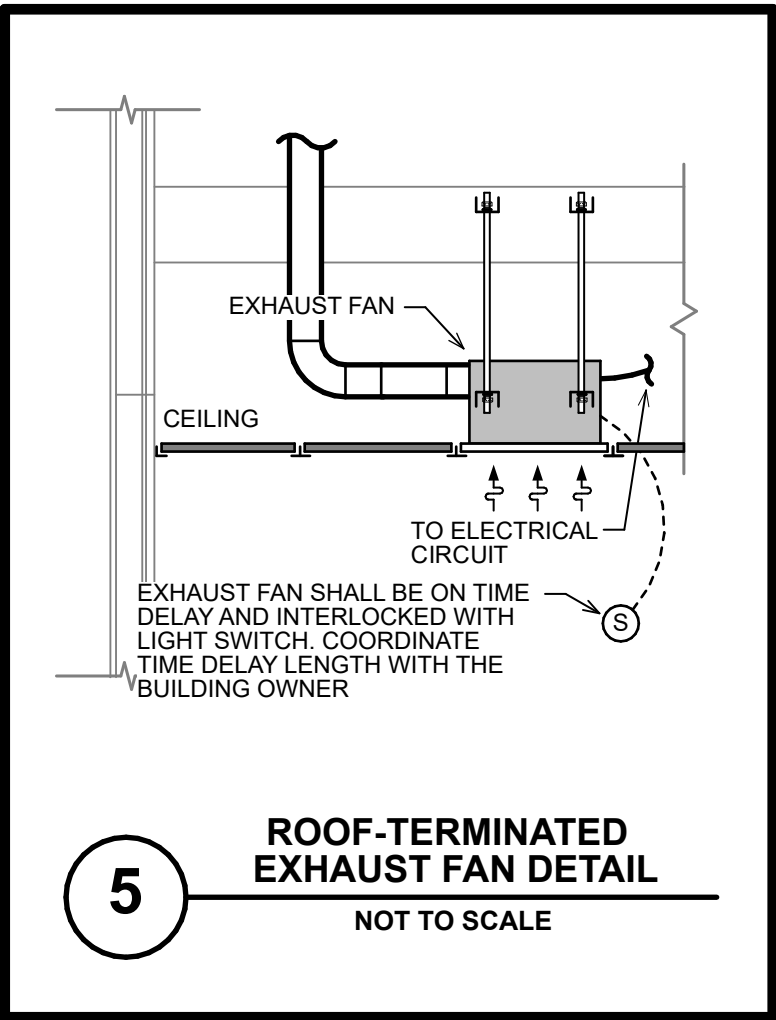
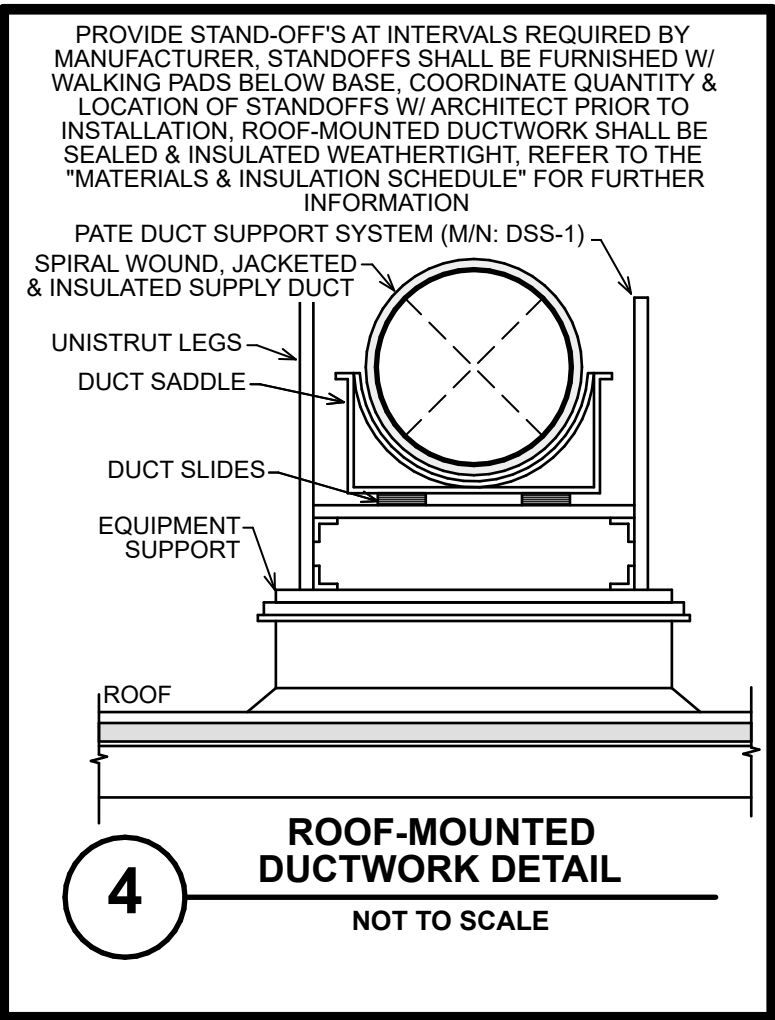
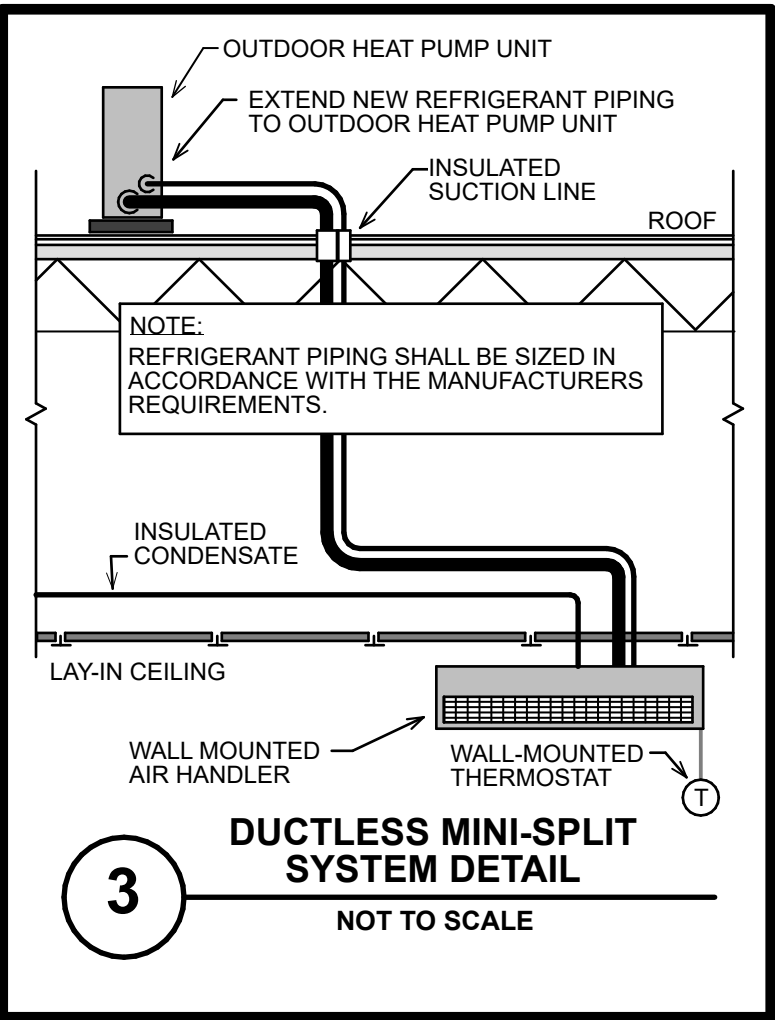
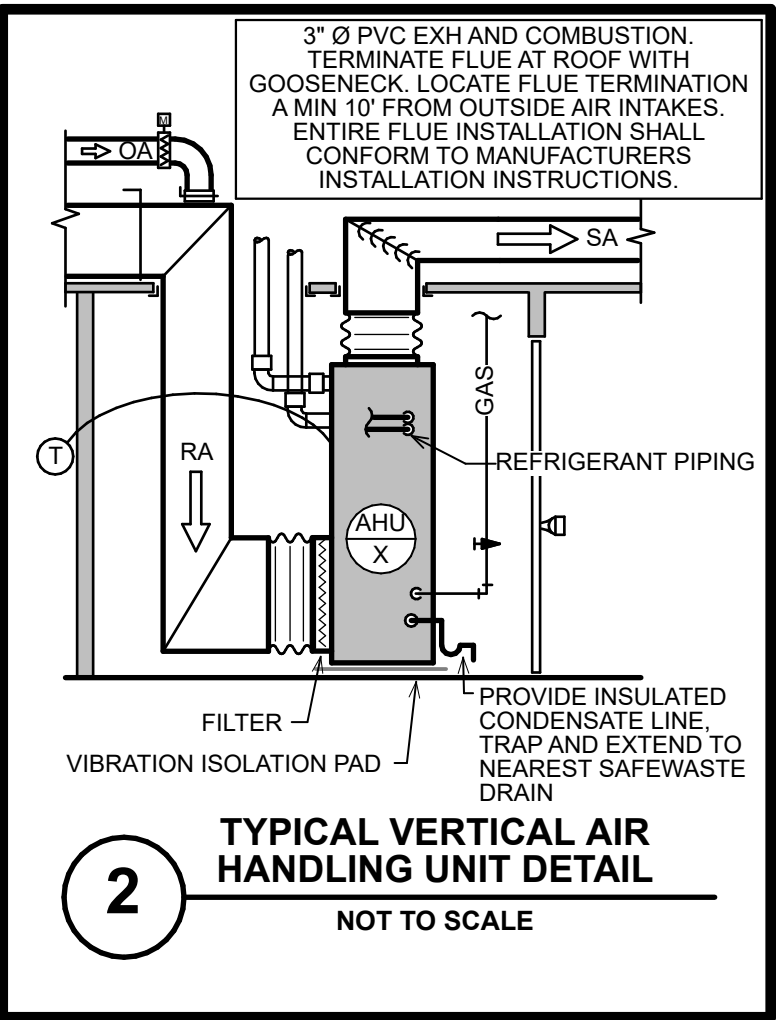
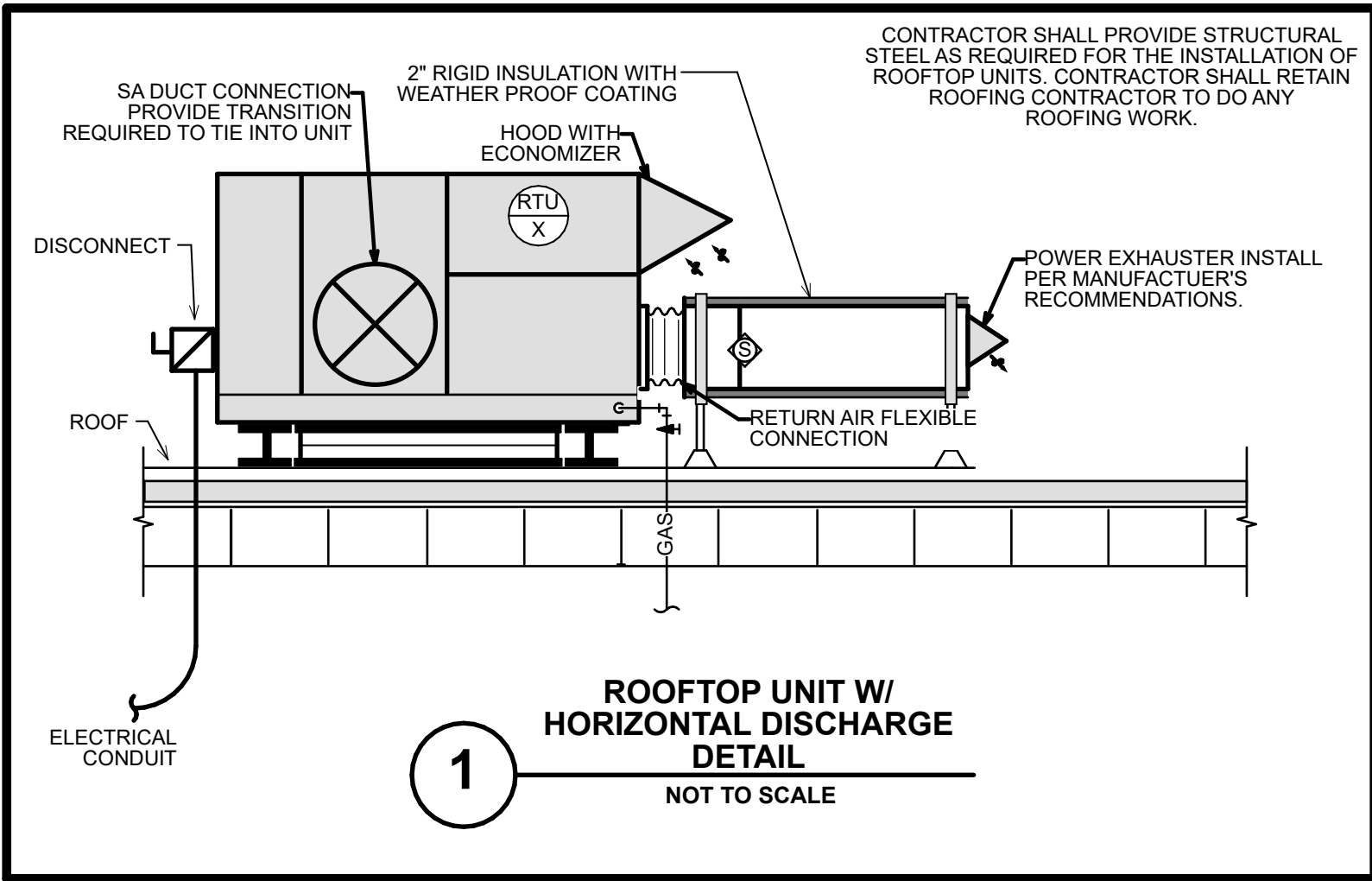
GAS FIRED SPLIT SYSTEM SCHEDULE

Air Handling Unit Designation		AHU-1	
Basis of Design	Carrier		
Model No	59TP6B080V17--16		
Orientation	Vertical		
CFM (Supply / CFM)	800 / 120		
Ext. Static Pres. (in. WC)	0.5		
Supply Duct Connection (L x W)(in.)	18-11/16 x 15-3/4		
Return Duct Connection (L x W)(in.)	22 x 14-13/16		
Unit L x W x H with Coil (in.)	29-1/2x17-1/2x16-13/16		
Approx. Wt. (Lbs.)	210		

Condensing Unit Designation		CU-1	
Basis of Design	Carrier		
Model No.	24SCA524V003		
Nominal Tons	2.0		
Total Clg Capacity (MBH)	23.81		
Length x Width x Height (in.)	25-3/4 x 25-3/4 x 35-1/2		
Weight (lbs.)	150		

Coil Cooling			
Basis of Design	Carrier		
Model No.	CAPMP241TALA		
Refrigerant Type	410A		
Condenser EAT (°F db / °F wb)	80 / 67		
Condenser LAT (°F db / °F wb)	58.92 / 57.68		
SEER2	15.2		

Gas Fired Furnace	
Single - Stage Condensing	Yes
AFUE (%)	+96
Input (min./max.)(MBH)	52.0 / 80.0
Output (min./max.)(MBH)	50.0 / 78.0



VENTILATION SCHEDULE (IN ACCORDANCE W/ 2021 INTERNATIONAL MECHANICAL CODE)																						
ROOM NAME	Az AREA (SQ. FT.)	2018 INTERNATIONAL MECHANICAL CODE OCCUPANCY CATEGORY	REQUIRED OUTDOOR AIR (BASED ON OCCUPANCY)				REQUIRED OUTDOOR AIR (BASED ON AREA)		TOTAL REQUIRED OUTDOOR AIR			OUTDOOR AIR PROVIDED		REQUIRED EXHAUST AIR (BASED ON FIXTURES)			EXHAUST AIR PROVIDED		HVAC SYSTEM			
			Rp (CFM / PERSON)	OCCUPANCY (# / 1000 SQ.FT.)	Pz (# OF PEOPLE)	Rp*Pz (CFM)	Ra (OA / SQ. FT.)	Ra*Az (CFM)	Vbz REQ'D OA	Ez ZONE EFFECTIVENESS	Voz REQ'D OA	DESIGN OUTDOOR AIRFLOW RATE (CFM)	FIX. QTY.	EXHAUST AIRFLOW PER FIXTURE (CFM)	TOTAL EXHAUST REQUIRED (CFM)	DESIGN EXHAUST AIRFLOW RATE (CFM)	ASSOCIATED HVAC SYSTEM DESIGNATION	SYSTEM TOTAL AIRFLOW (CFM)	SYSTEM OUTDOOR AIRFLOW (%)	SYSTEM OUTDOOR AIRFLOW (CFM)		
B - Office	106	Office space	5	5	1	3	0.06	6	9	0.8	11	15				AHU-2	260	6%	15			
Mens Restroom 104	135											15.00	3	70	210	225	AHU-1	800	15%	120		
Womens Restroom 104	178											18.75	3	70	210	225						
Dressing room #1 102	143	Break rooms (general)	5	25	4	18	0.06	9	26	0.8	33	37.50										
Corridor 101	80	Corridors	0	0	0	0	0.06	5	5	0.8	6	18.75										
Office / Tickets 100	126	Office space	5	5	1	3	0.06	8	11	0.8	13	30				RTU-1	7,000	20%	1,400			
Concession 102	182	Kitchen (cooking)	7.5	20	4	27	0.12	22	49	0.8	61	61										
Dressing Room #2 103	189	Break rooms (general)	5	25	5	24	0.06	11	35	0.8	44	44										
Multi-Purpose Area 101	575	Multi-purpose assembly	5	120	69	345	0.06	35	380	0.8	474	475										
Multi-Purpose Area 101 (front)	970	Multi-purpose assembly	5	120	116	582	0.06	58	640	0.8	800	800										
Control area 100	61	Storage rooms	0	0	0	0	0.12	7	7	0.8	9	10										
Entry 100	90	Corridors	0	0	0	0	0.06	5	5	0.8	7	10										
TOTAL AREA = 2,835			TOTAL OCCUPANCY = 199				1,002	OA AIRFLOW = 166		TOTAL OA AIRFLOW = 1,459			1,535	TOTAL EA AIRFLOW = 420			450	TOTAL SA AIRFLOW = 8,060		TOTAL OA AIRFLOW = 1,535		
NOTES:																						

No.	DATE	DESCRIPTION	REV'D BY
APPROVAL:			
PROJECT:			
ADA RENOVATIONS TO THE GLOUCESTER TOWNSHIP BLACK BOX COMMUNITY CENTER			
3 S BLACKHORSE PIKE BLACKWOOD, NEW JERSEY			
Joseph F. McKernan Jr., Architects & Associates 100 Dobbs Lane Suite 204 Cherry Hill, New Jersey 08034		TITLE: MECHANICAL DETAILS	
3800 Horizon Blvd., Suite 203 Trenton, NJ 08611 P: (609) 392-7711 F: (609) 392-7709 www.jmckernan.com		SCALE: AS NOTED PROJ. NO.: 23-580 DATE: xx/xx/xx REV'D: SW DRAWN BY: SH CHKD BY: SW	DRAWING NO: M-3.1

Basement Scope of work:

We need one 400 AMP Panel in the basement

We need a light, switch and outlet in the Janitor's Closet

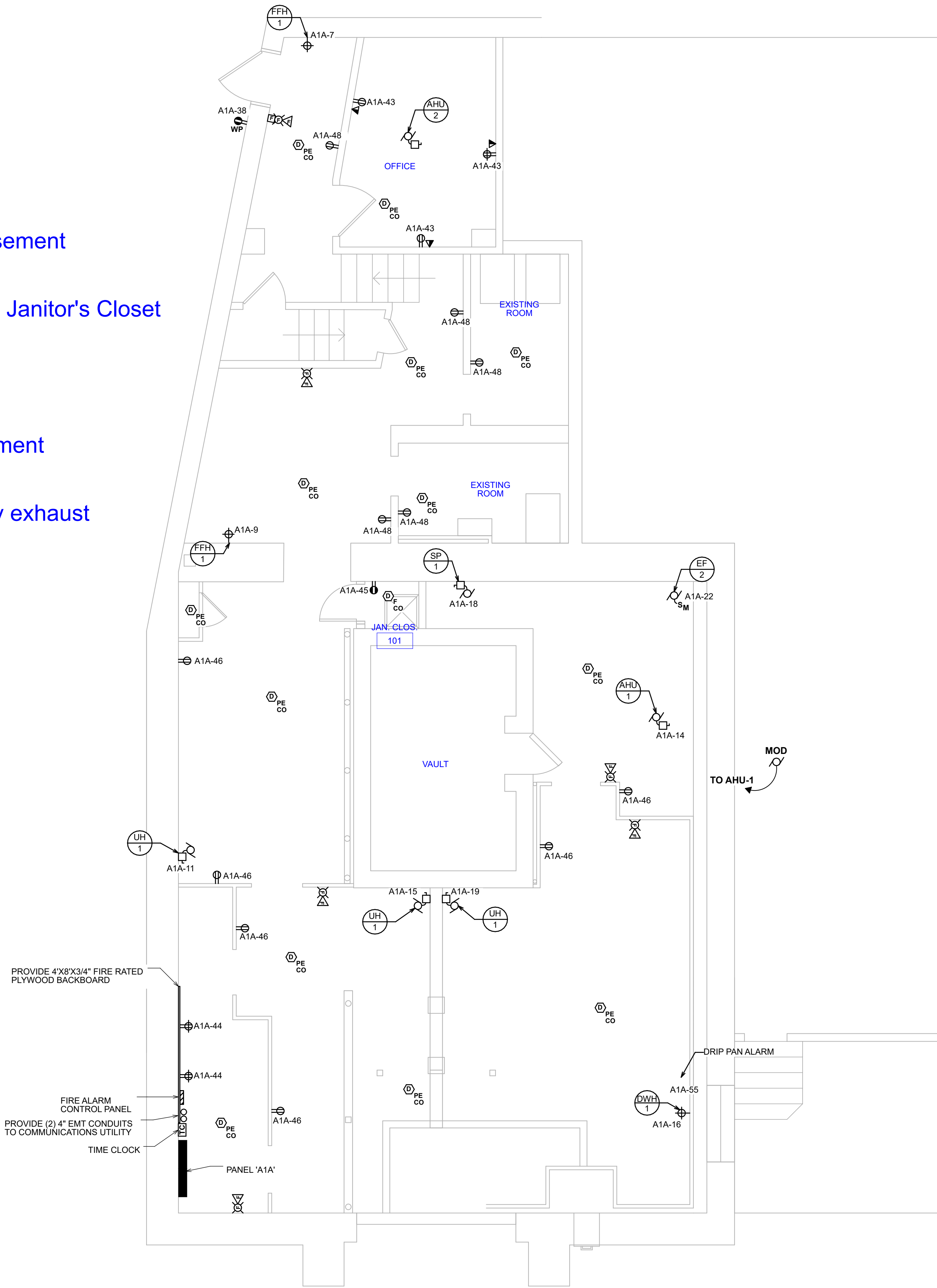
Power to the sump pump

We need temporary lighting in the basement

Outlets near panel, injection pumps, any exhaust fans in the basement

include all demo work

Note: Please provide Fire Alarm Panel to be large enough for future work and only in the area that is highlighted in the ADA area



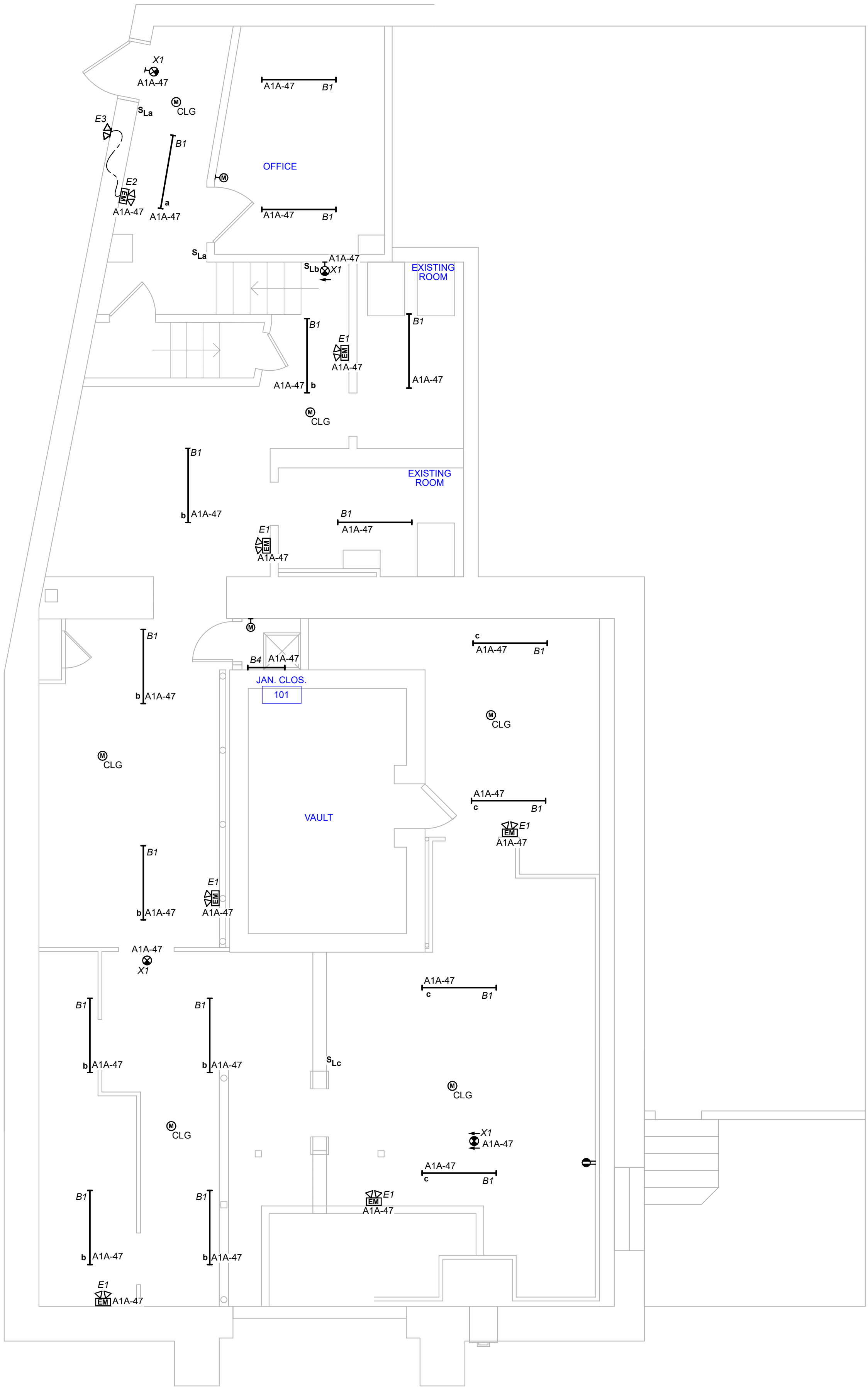
DEMOLITION NOTES

- WHERE EXISTING FACILITIES ARE BEING ALTERED, DISCONNECT AND REMOVE OR RELOCATE ALL EXISTING ELECTRICAL WORK THAT INTERFERES WITH OR IS NECESSARY BECAUSE OF NEW CONSTRUCTION AS SPECIFIED, SHOWN OR REQUIRED.
- PERFORM ALTERATION AND ADDITIONS TO PRESENT ELECTRICAL SYSTEM WITH AM MINIMUM INTERRUPTION IN THE OPERATION OF THESE SYSTEMS. OBTAIN WRITTEN CLEARANCE FROM OWNER FOR SUCH INTERRUPTIONS AND SCHEDULE SAME AT WHATEVER TIME SPECIFIED IN WRITING BY OWNER.
- WHERE SPECIFIED OR REQUIRED, EXTEND EXISTING SYSTEMS OR TIE INTO SAME TO PROVIDE A COMPLETE COORDINATED ELECTRICAL SYSTEM TO SATISFACTION OF OWNER AND ARCHITECT.
- ALL EXISTING WORK TO REMAIN, BUT DISTURBED AND DISCONNECTED BECAUSE OF ALTERATIONS AND NEW CONSTRUCTION SHALL BE REPLACED AND PUT IN OPERATING CONDITION UNLESS INSTRUCTED OTHERWISE IN WRITING BY OWNER OR ARCHITECT.
- EXISTING BRANCH CIRCUITS NOT SHOWN SHALL REMAIN INTACT TO EXTENT PRACTICABLE, AND SHALL BE EXTENDED AS REQUIRED.
- DISCONNECT AND REMOVE EXISTING WIRING DEVICES, LIGHTING FIXTURES AND ASSOCIATED BRANCH CIRCUIT WIRING NO LONGER REQUIRED BY NEW CONSTRUCTION.
- PERFORM ALL WORK NECESSARY TO PERMIT OPERATION OF ALL EXISTING SYSTEMS DURING THE CONSTRUCTION PERIOD. PROVIDE AND MAINTAIN APPLICABLE APPROVED TEMPORARY WIRING TO MEET THIS REQUIREMENT.
- DEMOLISH AND REMOVE EXISTING ELECTRICAL EQUIPMENT, FEEDERS AND CONDUIT NO LONGER REQUIRED BY NEW CONSTRUCTION BACK TO ELECTRICAL PANEL.
- ALL CIRCUIT BREAKERS NO LONGER REQUIRED BY NEW CONSTRUCTION SHALL BE MADE SPARE AND SET OPEN POSITION.
- ELECTRICAL CONTRACTOR SHALL UPDATE PANEL DIRECTORIES AT THE COMPLETION OF WORK.
- THE CONTRACTOR SHALL VISIT SITE PRIOR TO SUBMITTING HIS PROPOSAL TO VERIFY ACTUAL SITE CONDITIONS AND ANY DISCOVERED DISCREPANCIES BETWEEN DRAWINGS AND SITE CONDITIONS SHALL BE BROUGHT TO THE OWNERS ATTENTION PRIOR TO SUBMITTING THEIR BID. THE CONTRACTOR SHALL INCLUDE ALL DEMOLITION WORK EXPOSED AND CONCEALED, WHETHER OR NOT SHOWN ON DRAWINGS, NECESSARY FOR THE EFFECTIVE INSTALLATION AND PERFORMANCE OF NEW SYSTEM. THE OWNER SHALL NOT ACCEPT (NOR THE CONTRACTOR PAID) EXTRA COSTS ASSOCIATED WITH THE DEMOLITION AND/OR TEMPORARY REMOVAL/REINSTALLATION WORK FROM THE CONTRACTOR.

DRAWING NOTES

- FIELD VERIFY LOCATION OF ALL WIRING DEVICES WITH ARCHITECT PRIOR TO ROUGH-IN.
- COORDINATE INSTALLATION OF HVAC EQUIPMENT WITH MECHANICAL CONTRACTOR AND WIRE DISCONNECT SWITCHES FURNISHED BY MECHANICAL CONTRACTOR.
- MOTORIZED DAMPERS REFER TO MECHANICAL PLANS FOR EXACT LOCATION, INTERCONNECT TO LOCAL AHU AS DIRECTED BY M.C.
- UNLESS OTHERWISE NOTED, ALL POWER SHALL BE CIRCUITED TO PANEL 'A1A'.
- COORDINATE ALL LOW VOLTAGE WORK WITH OWNER AND OWNERS LOW VOLTAGE VENDOR. ELECTRICAL CONTRACTORS SHALL FURNISH AND INSTALL ALL BACK BOXES WITH CONDUIT AND PULL STRING TO ACCESSIBLE CEILING SPACE.

No.	DATE	DESCRIPTION	REV'D BY
APPROVAL:		PROJECT:	
		ADA RENOVATIONS TO THE GLOUCESTER TOWNSHIP BLACK BOX COMMUNITY CENTER	
		3 S BLACKHORSE PIKE BLACKWOOD, NEW JERSEY	
MK Joseph F. McKernan Jr., Architects & Associates 100 Dobbs Lane Suite 204 Cherry Hill, New Jersey 08034		TITLE: BASEMENT POWER PLAN	
HOLSTEIN WHITE 3800 Horizon Blvd., Suite 503 Trenton, NJ 08611 P: (609) 322-7771 F: (609) 322-7709 www.holsteinwhite.com		SEAL: JEFFREY E. HOLSTEIN NJ P.E. NO. 3462046430 NJ AUTH. NO. 2462046430	DRAWING NO: E-0.0
OWNERS MUST BE VERIFIED BY CONTRACTOR BEFORE ANY WORK BEGINS. DO NOT SCALE DRAWING.		SCALE: AS NOTED PROJ. NO.: 23-580 DATE: xxx/xx/xx REV'D: JEH DRAWN BY: JS CHKD BY: JC JEH	



1 BASEMENT LIGHTING PLAN
SCALE: 1/4" = 1' - 0"

DEMOLITION NOTES

- WHERE EXISTING FACILITIES ARE BEING ALTERED, DISCONNECT AND REMOVE OR RELOCATE ALL EXISTING ELECTRICAL WORK THAT INTERFERES WITH OR IS NECESSARY BECAUSE OF NEW CONSTRUCTION AS SPECIFIES, SHOWN OR REQUIRED.
- PERFORM ALTERATION AND ADDITIONS TO PRESENT ELECTRICAL SYSTEM WITH AM MINIMUM INTERRUPTION IN THE OPERATION OF THESE SYSTEMS. OBTAIN WRITTEN CLEARANCE FROM OWNER FOR SUCH INTERRUPTIONS AND SCHEDULE SAME AT WHATEVER TIME SPECIFIED IN WRITING BY OWNER.
- WHERE SPECIFIED OR REQUIRED, EXTEND EXISTING SYSTEMS OR TIE INTO SAME TO PROVIDE A COMPLETE COORDINATED ELECTRICAL SYSTEM TO SATISFACTION OF OWNER AND ARCHITECT.
- ALL EXISTING WORK TO REMAIN, BUT DISTURBED AND DISCONNECTED BECAUSE OF ALTERATIONS AND NEW CONSTRUCTION SHALL BE REPLACED AND PUT IN OPERATING CONDITION UNLESS INSTRUCTED OTHERWISE IN WRITING BY OWNER OR ARCHITECT.
- EXISTING BRANCH CIRCUITS NOT SHOWN SHALL REMAIN INTACT TO EXTENT PRACTICABLE, AND SHALL BE EXTENDED AS REQUIRED.
- DISCONNECT AND REMOVE EXISTING WIRING DEVICES, LIGHTING FIXTURES AND ASSOCIATED BRANCH CIRCUIT WIRING NO LONGER REQUIRED BY NEW CONSTRUCTION.
- PERFORM ALL WORK NECESSARY TO PERMIT OPERATION OF ALL EXISTING SYSTEMS DURING THE CONSTRUCTION PERIOD. PROVIDE AND MAINTAIN APPLICABLE APPROVED TEMPORARY WIRING TO MEET THIS REQUIREMENT.
- DEMOLISH AND REMOVE EXISTING ELECTRICAL EQUIPMENT, FEEDERS AND CONDUIT NO LONGER REQUIRED BY NEW CONSTRUCTION BACK TO ELECTRICAL PANEL.
- ALL CIRCUIT BREAKERS NO LONGER REQUIRED BY NEW CONSTRUCTION SHALL BE MADE SPARE AND SET OPEN POSITION.
- ELECTRICAL CONTRACTOR SHALL UPDATE PANEL DIRECTORIES AT THE COMPLETION OF WORK.
- THE CONTRACTOR SHALL VISIT SITE PRIOR TO SUBMITTING HIS PROPOSAL TO VERIFY ACTUAL SITE CONDITIONS AND ANY DISCOVERED DISCREPANCIES BETWEEN DRAWINGS AND SITE CONDITIONS SHALL BE BROUGHT TO THE OWNERS ATTENTION PRIOR TO SUBMITTING THEIR BID. THE CONTRACTOR SHALL INCLUDE ALL DEMOLITION WORK EXPOSED AND CONCEALED, WHETHER OR NOT SHOWN ON DRAWINGS, NECESSARY FOR THE EFFECTIVE INSTALLATION AND PERFORMANCE OF NEW SYSTEM. THE OWNER SHALL NOT ACCEPT (NOR THE CONTRACTOR PAID) EXTRA COSTS ASSOCIATED WITH THE DEMOLITION AND/OR TEMPORARY REMOVAL/REINSTALLATION WORK FROM THE CONTRACTOR.

DRAWING NOTES

- FIELD VERIFY LOCATION OF ALL WIRING DEVICES WITH ARCHITECT PRIOR TO ROUGH-IN.
- FIELD VERIFY EXACT LOCATIONS OF ALL LIGHTING FIXTURES WITH ARCHITECT PRIOR TO ROUGH-IN.
- UNLESS OTHERWISE NOTED ALL LIGHTING SHALL BE CIRCUITED TO 'A1A'.
- EMERGENCY LIGHTING AND EXIT SIGNS SHALL BE CONNECTED TO LINE SIDE OF LOCAL LIGHTING CONTROL.

No.	DATE	DESCRIPTION	REV'D BY
APPROVAL:		PROJECT:	
		ADA RENOVATIONS TO THE GLOUCESTER TOWNSHIP BLACK BOX COMMUNITY CENTER	
		3 S BLACKHORSE PIKE BLACKWOOD, NEW JERSEY	
MK Joseph F. McKernan Jr., Architects & Associates 100 Dobbs Lane Suite 204 Cherry Hill, New Jersey 08034		TITLE: BASEMENT LIGHTING PLAN	
HOLSTEIN WHITE 3800 Horizon Blvd., Suite 503 Trenton, NJ 08611 P: (609) 322-7771 F: (609) 322-7709 www.holsteinwhite.com	SEAL: JEFFREY E. HOLSTEIN NJ P.E. NO. 3462046430 NJ AUTH. NO. 2462046430/3705	OWNER'S MUST BE VERIFIED BY CONTRACTOR. VERIFY THE ARCHITECT OF ANY DISCREPANCIES BEFORE PROCEEDING WITH CONSTRUCTION. DO NOT SCALE DRAWING.	
		SCALE: AS NOTED PROJ. NO.: 23-580 DATE: xxx/xx/xx REV'D: JEH DRAWN BY: JS CHKD BY: JC / JEH	DRAWING NO: E-0.1

- DEMOLITION NOTES
1. WHERE EXISTING FACILITIES ARE BEING ALTERED, DISCONNECT AND REMOVE OR RELOCATE ALL EXISTING ELECTRICAL WORK THAT INTERFERES WITH OR IS NECESSARY BECAUSE OF NEW CONSTRUCTION AS SPECIFIES, SHOWN OR REQUIRED.

2. PERFORM ALTERATION AND ADDITIONS TO PRESENT ELECTRICAL SYSTEM WITH AM MINIMUM INTERRUPTION IN THE OPERATION OF THESE SYSTEMS. OBTAIN WRITTEN CLEARANCE FROM OWNER FOR SUCH INTERRUPTIONS AND SCHEDULE SAME AT WHATEVER TIME SPECIFIED IN WRITING BY OWNER.

3. WHERE SPECIFIED OR REQUIRED, EXTEND EXISTING SYSTEMS OR TIE INTO SAME TO PROVIDE A COMPLETE COORDINATED ELECTRICAL SYSTEM TO SATISFACTION OF OWNER AND ARCHITECT.

4. ALL EXISTING WORK TO REMAIN, BUT DISTURBED AND DISCONNECTED BECAUSE OF ALTERATIONS AND NEW CONSTRUCTION SHALL BE REPLACED AND PUT IN OPERATING CONDITION UNLESS INSTRUCTED OTHERWISE IN WRITING BY OWNER OR ARCHITECT.

5. EXISTING BRANCH CIRCUITS NOT SHOWN SHALL REMAIN INTACT TO EXTENT PRACTICABLE, AND SHALL BE EXTENDED AS REQUIRED.

6. DISCONNECT AND REMOVE EXISTING WIRING DEVICES, LIGHTING FIXTURES AND ASSOCIATED BRANCH CIRCUIT WIRING NO LONGER REQUIRED BY NEW CONSTRUCTION.

7. PERFORM ALL WORK NECESSARY TO PERMIT OPERATION OF ALL EXISTING SYSTEMS DURING THE CONSTRUCTION PERIOD. PROVIDE AND MAINTAIN APPLICABLE APPROVED TEMPORARY WIRING TO MEET THIS REQUIREMENT.

8. DEMOLISH AND REMOVE EXISTING ELECTRICAL EQUIPMENT, FEEDERS AND CONDUIT NO LONGER REQUIRED BY NEW CONSTRUCTION BACK TO ELECTRICAL PANEL.

9. ALL CIRCUIT BREAKERS NO LONGER REQUIRED BY NEW CONSTRUCTION SHALL BE MADE SPARE AND SET OPEN POSITION.

10. ELECTRICAL CONTRACTOR SHALL UPDATE PANEL DIRECTORIES AT THE COMPLETION OF WORK.

11. THE CONTRACTOR SHALL VISIT SITE PRIOR TO SUBMITTING HIS PROPOSAL TO VERIFY ACTUAL SITE CONDITIONS AND ANY DISCOVERED DISCREPANCIES BETWEEN DRAWINGS AND SITE CONDITIONS SHALL BE BROUGHT TO THE OWNERS ATTENTION PRIOR TO SUBMITTING THEIR BID. THE CONTRACTOR SHALL INCLUDE ALL DEMOLITION WORK EXPOSED AND CONCEALED, WHETHER OR NOT SHOWN ON DRAWINGS, NECESSARY FOR THE EFFECTIVE INSTALLATION AND PERFORMANCE OF NEW SYSTEM. THE OWNER SHALL NOT ACCEPT (NOR THE CONTRACTOR PAID) EXTRA COSTS ASSOCIATED WITH THE DEMOLITION AND/OR TEMPORARY REMOVAL/REINSTALLATION WORK FROM THE CONTRACTOR.


- DRAWING NOTES
1. FIELD VERIFY LOCATION OF ALL WIRING DEVICES WITH ARCHITECT PRIOR TO ROUGH-IN.

2. COORDINATE INSTALLATION OF HVAC EQUIPMENT WITH MECHANICAL CONTRACTOR AND WIRE DISCONNECT SWITCHES FURNISHED BY MECHANICAL CONTRACTOR.

3. MOTORIZED DAMPERS REFER TO MECHANICAL PLANS FOR EXACT LOCATION, INTERCONNECT TO LOCAL AHU AS DIRECTED BY M.C.

4. UNLESS OTHERWISE NOTED, ALL POWER SHALL BE CIRCUITED TO PANEL 'A1A'.

5. COORDINATE ALL LOW VOLTAGE WORK WITH OWNER AND OWNERS LOW VOLTAGE VENDOR. ELECTRICAL CONTRACTORS SHALL FURNISH AND INSTALL ALL BACK BOXES WITH CONDUIT AND PULL STRING TO ACCESSIBLE CEILING SPACE.

No.	DATE	DESCRIPTION	REV'D BY
APPROVAL:		PROJECT:	
		ADA RENOVATIONS TO THE GLOUCESTER TOWNSHIP BLACK BOX COMMUNITY CENTER	
		3 S BLACKHORSE PIKE BLACKWOOD, NEW JERSEY	
Joseph F. McKernan Jr., Architects & Associates 100 Dobbs Lane Suite 204 Cherry Hill, New Jersey 08034		TITLE: FIRST FLOOR POWER PLAN	
 3800 Horizon Blvd., Suite 503 Trenton, NJ 08611 P: (609) 322-7771 F: (609) 322-7709 www.holsteinwhite.com	SEAL: JEFFREY E. HOLSTEIN NJ P.E. NO. 3462644430 NJ AUTH. NO. 2462644430/3700	SCALE: AS NOTED PROJ. NO.: 23-580 DATE: xx/xx/xx REV'D: JEH DRAWN BY: JS CHKD BY: JC / JEH	
		DRAWING NO: E-1.0	



The only work that is being done on the first floor is on the right side of the building

E1.0 and E.1.1, E2.0,

Wire all Mechanical Equipment include all demo work



Include fire alarm panel in work area. large enough for future use

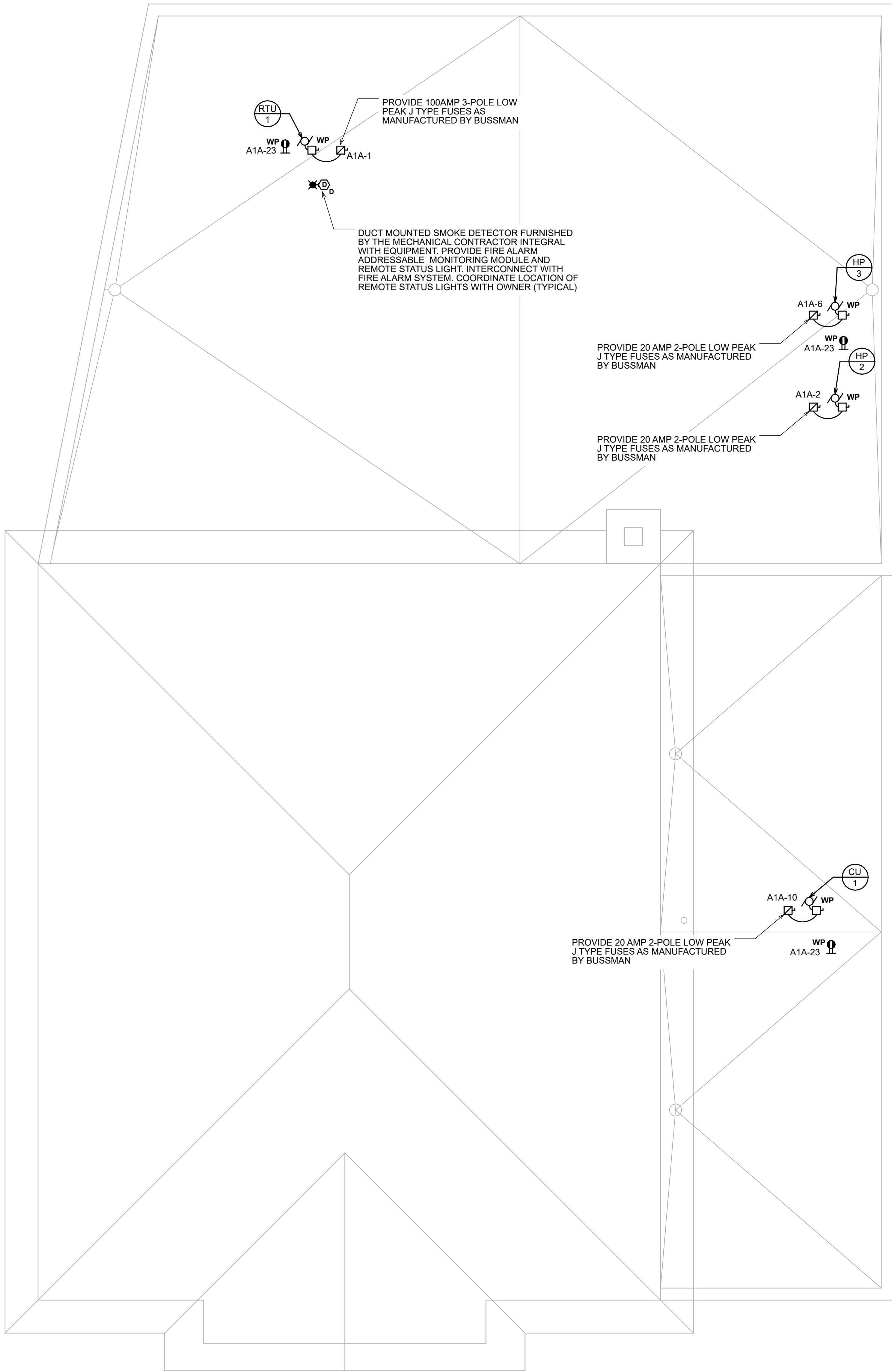
YELLOW INDICATES ADA AREA OF WORK. ADA AREA NEEDS TO BE BROKEN OUT SEPARATELY FOR AIA BILLING. THE FUNDS FOR THIS PROJECT ARE FROM AN ADA GRANT

1. WHERE EXISTING FACILITIES ARE BEING ALTERED, DISCONNECT AND REMOVE OR DEMOLISH ALL EXISTING ELECTRICAL WORK THAT INTERFERES WITH OR IS NECESSARY BECAUSE OF NEW CONSTRUCTION AS SPECIFIED, SHOWN OR REQUIRED.
2. PERFORM ALTERATION AND ADDITIONS TO EXISTING ELECTRICAL SYSTEM WITH AM MINIMUM INTERRUPTION IN THE OPERATION OF THESE SYSTEMS. OBTAIN WRITTEN CLEARANCE FROM OWNER FOR SUCH WORK. SCHEDULE SAME AT WHATEVER TIME SPECIFIED IN WRITING BY OWNER.
3. WHERE SPECIFIED OR REQUIRED, EXTEND EXISTING SYSTEMS OR Tie TO SAME TO PROVIDE A CONTINUOUS ELECTRICAL SYSTEM TO SATISFACTION OF OWNER AND ARCHITECT.
4. ALL EXISTING WORK TO REMAIN, BUT DISTURBED AND DISCONNECTED BECAUSE OF ALTERATIONS OR NEW CONSTRUCTION SHALL BE REPLACED AND PUT IN OPERATING CONDITION UNLESS INSTRUCTED OTHERWISE IN WRITING BY OWNER OR ARCHITECT.
5. EXISTING BRANCH CIRCUITS NOT SPECIFIED SHALL REMAIN INTACT AND EXTEND PRACTICABLE, AND SHALL BE EXTENDED AS REQUIRED.
6. DISCONNECT AND REMOVE EXISTING WIRING DEVICES, LIGHTING FIXTURES AND ASSOCIATED BRANCH CIRCUIT WIRING NO LONGER REQUIRED BY NEW CONSTRUCTION.
7. PERFORM ALL WORK NECESSARY TO PERMIT OPERATION OF EXISTING SYSTEMS DURING THE CONSTRUCTION PERIOD. PROTECT AND MAINTAIN APPLICABLE APPROVED TEMPORARY WIRING TO MEET THIS REQUIREMENT.
8. DEMOLISH AND REMOVE EXISTING ELECTRICAL EQUIPMENT, FEEDERS AND CONDUIT NO LONGER REQUIRED BY NEW CONSTRUCTION BACK TO ELECTRICAL PANEL.
9. ALL CIRCUIT BREAKERS NO LONGER REQUIRED BY NEW CONSTRUCTION SHALL BE MADE SPARE AND SET OPEN POSITION.
10. ELECTRICAL CONTRACTOR SHALL UPDATE PANEL DIRECTORIES AT THE COMPLETION OF WORK.
11. THE CONTRACTOR SHALL VISIT SITE PRIOR TO SUBMITTING HIS PROPOSAL TO VERIFY ACTUAL CONDITIONS AND DISCREPANCIES BETWEEN DRAWINGS AND SITE CONDITIONS SHALL BE BROUGHT TO THE OWNER'S ATTENTION PRIOR TO SUBMITTING THEIR BID. THE CONTRACTOR SHALL INCLUDE ALL DEMOLITION WORK EXPOSED AND CONCEALED, WIRING OR NOT, AND/OR ANY OTHER WORK NECESSARY FOR THE EFFECTIVE INSTALLATION AND PERFORMANCE OF NEW SYSTEM. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CONTRACTOR PAID) EXTRA COSTS ASSOCIATED WITH THE DEMOLITION AND/OR TEMPORARY WIRING INSTALLATION WORK FOR THE CONTRACTOR.

1. FIELD VERIFY LOCATION OF ALL WIRING DEVICES WITH ARCHITECT PRIOR TO ROUGH-IN.
2. FIELD VERIFY EXACT LOCATIONS OF ALL LIGHTING FIXTURES WITH ARCHITECT PRIOR TO ROUGH-IN.
3. UNLESS OTHERWISE NOTED ALL LIGHTING SHALL CIRCUITED TO 'A1A'.
4. EMERGENCY LIGHTING AND EXIT SIGNS SHALL BE CONNECTED TO LINE SIDE OF LOCAL LIGHTING CONTROL.
5. SCENE SELECTOR SWITCH SHALL HAVE CAPABILITY TO CONTROL ZONES "a,b,c,d,f" REFER TO LIGHTING PLANS FOR LOCATION OF SWITCH. REFER TO DET.#4 ON DRAWING E-3.1.



No.	DATE	DESCRIPTION			REV'D BY									
		REVISIONS												
APPROVAL:		PROJECT:												
		ADA RENOVATIONS TO THE GLOUCESTER TOWNSHIP BLACK BOX COMMUNITY CENTER												
		3 S BLACKHORSE PIKE BLACKWOOD, NEW JERSEY												
		Joseph F. McKernan Jr., Architects & Associates 100 Dobbs Lane Suite 204 Cherry Hill, New Jersey 08034		TITLE: FIRST FLOOR LIGHTING PLAN										
 HOLSTEN WHITE DESIGNERS 3800 Harrison Blvd. Suite 303 Trenton, NJ 08611 C: (215) 332-7711 F: (215) 332-7709 www.holstenwhite.com		SEAL: JEFFREY E. HOLSTEIN NJ LP NO. 24620604300 N.J. AUTH. REG. #JES-83500	DRAWING NOT TO BE REPROD CONTAINED HEREIN. ANY REPR DUCTION OF ANY DESCRIPTION WITHOUT THE WRITTEN CONSEN T OF THE FIRM IS PROHIBITED. DO NOT SCALE DRAWING.		SCALE: AS NOTED PROJ. NO.: 23-560 DATE: x0x/xx/xx REV'D.: JEJH DRAWN BY: JS CHECKED BY: JC JEH									
		<table><tr><th colspan="3">MAKING CHANGES & REVISIONS</th></tr><tr><th>NO.</th><th>DESCRIPTION</th><th>DATE</th></tr><tr><td> </td><td> </td><td> </td></tr></table>		MAKING CHANGES & REVISIONS			NO.	DESCRIPTION	DATE				E-1.1	
MAKING CHANGES & REVISIONS														
NO.	DESCRIPTION	DATE												



1 ROOF POWER PLAN
SCALE: 1/4" = 1' - 0"

DEMOLITION NOTES

- WHERE EXISTING FACILITIES ARE BEING ALTERED, DISCONNECT AND REMOVE OR RELOCATE ALL EXISTING ELECTRICAL WORK THAT INTERFERES WITH OR IS NECESSARY BECAUSE OF NEW CONSTRUCTION AS SPECIFIES, SHOWN OR REQUIRED.
- PERFORM ALTERATION AND ADDITIONS TO PRESENT ELECTRICAL SYSTEM WITH AM MINIMUM INTERRUPTION IN THE OPERATION OF THESE SYSTEMS. OBTAIN WRITTEN CLEARANCE FROM OWNER FOR SUCH INTERRUPTIONS AND SCHEDULE SAME AT WHATEVER TIME SPECIFIED IN WRITING BY OWNER.
- WHERE SPECIFIED OR REQUIRED, EXTEND EXISTING SYSTEMS OR TIE INTO SAME TO PROVIDE A COMPLETE COORDINATED ELECTRICAL SYSTEM TO SATISFACTION OF OWNER AND ARCHITECT.
- ALL EXISTING WORK TO REMAIN, BUT DISTURBED AND DISCONNECTED BECAUSE OF ALTERATIONS AND NEW CONSTRUCTION SHALL BE REPLACED AND PUT IN OPERATING CONDITION UNLESS INSTRUCTED OTHERWISE IN WRITING BY OWNER OR ARCHITECT.
- EXISTING BRANCH CIRCUITS NOT SHOWN SHALL REMAIN INTACT TO EXTENT PRACTICABLE, AND SHALL BE EXTENDED AS REQUIRED.
- DISCONNECT AND REMOVE EXISTING WIRING DEVICES, LIGHTING FIXTURES AND ASSOCIATED BRANCH CIRCUIT WIRING NO LONGER REQUIRED BY NEW CONSTRUCTION.
- PERFORM ALL WORK NECESSARY TO PERMIT OPERATION OF ALL EXISTING SYSTEMS DURING THE CONSTRUCTION PERIOD. PROVIDE AND MAINTAIN APPLICABLE APPROVED TEMPORARY WIRING TO MEET THIS REQUIREMENT.
- DEMOLISH AND REMOVE EXISTING ELECTRICAL EQUIPMENT, FEEDERS AND CONDUIT NO LONGER REQUIRED BY NEW CONSTRUCTION BACK TO ELECTRICAL PANEL.
- ALL CIRCUIT BREAKERS NO LONGER REQUIRED BY NEW CONSTRUCTION SHALL BE MADE SPARE AND SET OPEN POSITION.
- ELECTRICAL CONTRACTOR SHALL UPDATE PANEL DIRECTORIES AT THE COMPLETION OF WORK.
- THE CONTRACTOR SHALL VISIT SITE PRIOR TO SUBMITTING HIS PROPOSAL TO VERIFY ACTUAL SITE CONDITIONS AND ANY DISCOVERED DISCREPANCIES BETWEEN DRAWINGS AND SITE CONDITIONS SHALL BE BROUGHT TO THE OWNERS ATTENTION PRIOR TO SUBMITTING THEIR BID. THE CONTRACTOR SHALL INCLUDE ALL DEMOLITION WORK EXPOSED AND CONCEALED, WHETHER OR NOT SHOWN ON DRAWINGS, NECESSARY FOR THE EFFECTIVE INSTALLATION AND PERFORMANCE OF NEW SYSTEM. THE OWNER SHALL NOT ACCEPT (NOR THE CONTRACTOR PAID) EXTRA COSTS ASSOCIATED WITH THE DEMOLITION AND/OR TEMPORARY REMOVAL/REINSTALLATION WORK FROM THE CONTRACTOR.

DRAWING NOTES

- FIELD VERIFY LOCATION OF ALL WIRING DEVICES WITH ARCHITECT PRIOR TO ROUGH-IN.
- COORDINATE INSTALLATION OF HVAC EQUIPMENT WITH MECHANICAL CONTRACTOR AND WIRE DISCONNECT SWITCHES FURNISHED BY MECHANICAL CONTRACTOR.
- MOTORIZED DAMPERS REFER TO MECHANICAL PLANS FOR EXACT LOCATION, INTERCONNECT TO LOCAL AHU AS DIRECTED BY M.C.
- UNLESS OTHERWISE NOTED, ALL POWER SHALL BE CIRCUITED TO PANEL 'A1A'.
- COORDINATE ALL LOW VOLTAGE WORK WITH OWNER AND OWNERS LOW VOLTAGE VENDOR. ELECTRICAL CONTRACTORS SHALL FURNISH AND INSTALL ALL BACK BOXES WITH CONDUIT AND PULL STRING TO ACCESSIBLE CEILING SPACE.

No.	DATE	DESCRIPTION			REV'D BY
		REVISIONS			
APPROVAL:		PROJECT:			
		ADA RENOVATIONS TO THE GLOUCESTER TOWNSHIP BLACK BOX COMMUNITY CENTER			
		3 S BLACKHORSE PIKE BLACKWOOD, NEW JERSEY			
MK		Joseph F. McKernan Jr., Architects & Associates 100 Dobbs Lane Suite 204 Cherry Hill, New Jersey 08034			TITLE: ROOF POWER PLAN
HOLSTEIN WHITE		SEAL:	JEFFREY E. HOLSTEIN NJ P.E. NO. 3462046430 NJ AUTH NO. 2462046430		SCALE: AS NOTED PROJ. NO.: 23-580 DATE: xxx/xx/xx REV'D: JEH DRAWN BY: JS CHKD BY: JC / JEH
3800 Horizon Blvd., Suite 503 Trenton, PA 19103 O: (215) 322-7771 F: (215) 322-7709 www.holsteinwhite.com		DRAWINGS MUST BE VERIFIED BY CONTRACTOR WITH THE ARCHITECT OR ANY DISCREPANCIES BEFORE PROCEEDING WITH CONSTRUCTION. DO NOT SCALE DRAWING.		DRAWING NO: E-2.0	

ELECTRICAL SPECIFICATIONS

- Contractor shall provide all labor, materials, tools, apparatus and equipment required to complete his work in accordance with the contract documents, codes, laws and ordinances, and accepted trade procedures.
- The contractor by his acceptance of the contract guarantees that all work installed shall be free from all defects in workmanship and materials and that all apparatus furnished by him shall develop the capacities and characteristics specified. He further guarantees that if, during a period of one (1) year from the date of the certificate of completion and acceptance of the work, any such defects in workmanship, material or performance appear, such defects shall be remedied by him without cost to the owner. If the contractor fails to remedy the defects as outlined within a reasonable length of time, to be specified in a notice from the owner's authorized representative to the contractor, the owner will have such work done, and he will charge the cost to the contractor.
- The contractor shall visit the site before he submits his proposal. He shall examine all existing conditions which affect the work. The submission of the proposal shall be considered evidence that this requirement has been fulfilled. No extra payment will be allowed for additional work made necessary by the failure to visit the site.
- Electrical equipment shall be installed in a neat and workmanlike manner in accordance with latest and best practices of the trade. Only mechanics skilled in this type of Work shall be employed and utilized by Contractor for this Division in the execution of this Work.
- The contract drawings are diagrammatic and indicate the general arrangement of all systems and work included in the contract. The contract drawings are not to be scaled. The architectural contract drawings and details together with the other contract documents shall be examined for all dimensional information.
- The contractor shall, without additional costs to the owner, make reasonable modifications in the layout of his work in order to prevent conflicts with the work of other trades or for the proper execution of his work.
- The contractor shall provide and maintain in good order a complete set of blue-line prints of the contract drawings. As the work progresses, the actual location of all work shall be clearly recorded, including all changes to the contract and equipment size and type. These prints shall be available at the site for inspection at all times. At the conclusion of the work, the contractor shall, at his own expense, obtain a set of reproducible of the original contract drawings, and utilizing the symbols on the contract drawings, shall incorporate all "as built" data in a clearly legible and reproducible manner. All schedules shall be corrected to indicate "as built" conditions. All revisions shall be incorporated on these reproducible including all sketches and written directives. All concealed equipment, manifeeders, pull and junction boxes, etc. shall be dimensionally located from the building structure. As a condition for acceptance of the work, the "as built" reproducible and one (1) set of prints shall be signed, dated and delivered to the engineer.
- The lighting controls shall be commissioned per Philadelphia L&I's requirements. This should be submitted as a shop drawing for review by the engineer and owner. Final payment is predicated upon approval of this shop drawing. The shop drawing submittal should include the following:
 - Drawings that include the location and catalogue number of each lighting control;
 - An operating and maintenance manual;
 - A report of functional testing including results, deficiencies, and corrective actions.
- The contractor shall supply all labor required to perform all work which may be claimed by trade organizations within his jurisdiction. All work shall be performed without any additional cost to the owner regardless of which section of the contract documents the work is described. The contractor shall be responsible to verify with all local organizations the extent of any collective bargaining agreements and/or any jurisdictional decisions rendered regarding disputes between the respective trades, and provide and install his work in accordance with the accepted trade practice in the area.
- The entire installation shall conform with all pertinent codes and regulations of the local, municipal, county, state, and federal authorities, The National Board of Fire Underwriters, the codes of the International Code Council, the codes of the National Fire Protective Association, the New Jersey Uniform Construction Codes, and all other regulatory bodies having jurisdiction. All materials and equipment shall bear the stamps or seals of the NFPA, ASME, NEMA, IEEE, UL and other recognized industry regulatory groups.
- The contractor shall give all necessary notices, obtain all permits, pay all governmental taxes, fees and other costs in connection with his work. He shall file all necessary plans, and prepare all other documents including additional detailed plans that are required for compliance with all applicable laws, ordinances, rules and regulations.
- Before starting any work under this Contract, file for inspection with the Middle Department Inspection Agency or other certified Agency. Upon completion of the work, furnish Electrical Certificates from said Agency for all Electrical equipment and systems installed or furnished and installed as part of the work.
- The contractor shall at all times keep the premises free from the accumulation of waste materials or rubbish caused by his employees or work. At the completion of the work, he shall remove all superfluous materials, equipment and debris resulting from the work.
- All feeder wiring shall be soft drawn copper of 98% conductivity, installed in code conforming metallic raceways or cable assemblies. All wiring shall be copper, thermoplastic covered insulated Type 75° C. THW or 90° C. Type THHN, 600-volt wiring. Wire No. 8 AWG and smaller shall be solid. Wire larger than No. 8 shall be stranded.
- All wiring shall be insulated copper conductors installed in code conforming raceways or cable assemblies.
- All wiring shall be run concealed wherever possible. All exposed conduit shall be EMT or rigid steel as required. Flexible conduit shall be smooth liquidtight with appropriate fittings. Conduit drops from above ceiling shall be structurally secured and supported. Cable assemblies used for branch circuits shall not be run exposed. Cable assemblies shall be permitted exposed for final connections to Mechanical and Plumbing equipment and shall be limited to 6 feet total length, routing shall not interfere with equipment workspace.
- Where conductors connect directly to equipment, the insulation temperature rating of the conductor shall meet or exceed the equipment temperature rating.
- Color code conductors to designate neutral conductor and phases. Color coding shall conform with existing building standard.
- Exercise great care in maintaining a uniform and consistent arrangement of phase conductors on all systems. Throughout the entire wiring systems, each phase conductor must always be in the same physical position with respect to the other phase wires at equipment terminals.
- Grounding shall comply with Article 250 of NEC and to approval of local Underwriters inspection authorities.
- Panelboards shall be dead front type with plated aluminum bus, bolt-on breakers, fully rated neutral bus and grounding bus block. Cabinet shall be steel, NEMA 1, minimum 20" wide, 5-3/4" deep. Cover shall have door and trim and adjustable clamps, gray baked finish, and turner type key lock. "Spaces" shall be fully bussed and drilled, ready for breaker installation.
- Contractor shall provide typed updated panel schedules at completion of project for all panels effected by scope of work.
- Circuit Breakers shall be molded case, bolted, thermal magnetic trip in each pole, enclosure-compensated to carry full rated load at 40°C, trip-free handles shall clearly indicate trip, on or off condition, quick-make and quick-break action. Lugs approved for copper and aluminum conductors and compression type. Ground Fault type breakers shall be provided with thermal and magnetic protection, UL Class A, 5 milliamperes ground fault sensitivity, where required. Circuit breakers used as switches in 120 volt circuits feeding incandescent, fluorescent, and/or HID fixtures shall be approved for such use and marked "SWD", per NEC. Circuit breakers serving Heating and Air Conditioning equipment shall be HACR rated.
- Provide all labor, materials and equipment required to provide electric power to meet the requirements for heating, ventilating, air-conditioning and plumbing systems. Fully coordinate installation of electrical wiring and equipment with installation of electrically operated mechanical equipment provided by the Mechanical and Plumbing Contractors. Install disconnect switches, motor starters, and control transformers furnished by the Mechanical and Plumbing Contractors. Provide final electrical equipment terminations. All internal equipment wiring shall be by manufacturer.
- Test equipment, including panelboards and all other equipment and wiring for unintended grounds, short circuits, open circuits, continuity, current leakage, and that equipment will operate as specified. Test feeders for insulation resistance; for load balance in the final installation, and for overall operation of systems. Furnish labor and material required for making such tests and make corrections necessary to balance the load and to obtain proper operation.
- Where existing facilities are being altered, disconnect and remove or relocate all existing electrical work that interferes with or is necessary because of new construction as specified, shown or required.
- Perform alterations and additions to present electrical systems with a minimum interruption in the operation of these systems. Obtain written clearance from Owner for such interruptions and schedule same at whatever time specified in writing by Owner.
- Perform alteration of utilities and services in accordance with the rules, regulations and requirements of the involved utility companies and regulatory agencies having jurisdiction.
- Arrange and pay for the relocation, disconnection or removal of existing utilities and services where shown and where such utilities or services interfere with new construction, whether shown or not. Provide all excavation, backfilling and paving, manholes, and cables required by such work.
- Fully coordinate installation, wiring and connection of service and distribution systems with the owner, PSE&G and all contractors.
- Coordinate with Power Company; inform them of the proposed work; obtain their approval before beginning work; comply with their requirements for details of installation and materials used.
- Determine and pay any and all charges required by Power Company. Have electrical service available when required by construction schedule.
- Fully coordinate installation, wiring and connection of service and distribution systems with the owner and PSE&G.
- Coordinate with Power Company; inform them of the proposed work; obtain their approval before beginning work; comply with their requirements for details of installation and materials used.
- Verify locations of existing underground services in the area of construction. Verify existing locations of underground electrical services, natural gas piping, water services and sanitary piping, which may affect work.
- Submit Shop Drawings and complete product data of the incoming electric service equipment to the PSE&G for their review and approval prior to approval by Engineer.
- Lay out all work from approved building and property lines and benchmarks. Verify and be responsible for the correctness of all measurements in connection with work. Any change made in major overall dimensions as shown which affect the physical size, shape, or location of any part of the Work, whether due to field check or changes due to the use of equipment of a manufacturer other than that used as the basis of design shall not cause any interference with other work.
- Electrical equipment shall not interfere in any way with other material or equipment and shall provide adequate working space; see Requirements for Electrical Installations, Article 110 and other related articles of the National Electrical Code.
- Provide materials, equipment, supplies and labor necessary as required to adequately support, brace and strengthen all equipment and materials furnished as part of this work.
- Locations are subject to changes that may be necessary to avoid obstacles in building construction. Verify all dimensions and conditions at site. Check layout for sizes and clearances, and provide so that the apparatus and material may be installed and operated satisfactorily in space provided. Install equipment and raceways to preserve headroom and to keep openings and passageways clear.
- Protect all conduit, fittings, panelboards, switchgear, transformers and other equipment before and during installation and keep clean.
- Identify each switchboard, panel, panelboard, and other electrical equipment as to nature, service and purpose, by means of permanently attached, approved size, laminated phenolic nameplates.
- Where sleeves containing a single conduit penetrate FIRE RATED walls, floors, partitions or slabs, fill and seal conduit to the sleeve with a 1-part intumescent caulk/putty sealant creating a fire stop equal to or exceeding fire rating of construction material being penetrated. Fire sealant shall prevent spread of flame, smoke, air and water through the sleeve and shall pass 3-hour test per ASTM E814 and UL 1479. Fire sealant shall be installed in accordance with manufacturer's written instructions. Where sleeves containing multiple conduits or multiple cables penetrate FIRE RATED walls, floors, partitions, or slabs, fill and seal spaces between the conduits or cables and the sleeve with a 1-part intumescent caulk/putty sealant creating a fire stop equal to or exceeding fire rating of construction material being penetrated. Fire sealant shall prevent spread of flame, smoke, air and water through the sleeve and shall pass 3-hour test per ASTM E814 and UL 1479. Fire sealant shall be installed in accordance with manufacturer's written instructions. Where sleeves penetrate exterior walls, fill and seal ends around conduit and/or cables with dual component caulking compound equal to Solid red KN-1146, or Link Seal. Install seals in accordance with the manufacturer's recommendations to provide air tightness above ground and hydrostatic sealing below grade. Caulking or other type mastic is not acceptable. Where wiring devices are placed in fire rated construction, fire rating of installed assembly shall meet or exceed the rating of the construction.

Provide for each voice and data outlet a 4x4 outlet box with pullsting to accessible ceiling space. In non-fishable construction, provide 3/4" conduit with pullsting between outlet box and accessible ceiling space.

Provide for each CCTV location a 4x4 outlet box with pullsting to accessible ceiling space. In non-fishable construction, provide 3/4" conduit with pullsting between outlet box and accessible ceiling space. Provide weatherproof gasketed cover plates for outdoor locations.

Telephone, data, CCTV, and security cabling shall be by owner's communications and security contractors.

CCTV locations are for diagrammatic purposes only. Final locations, aiming, lens angle, and pant-tilt-zoom capabilities, and system specification of all CCTV cameras shall be provided by owner's security contractors.

Coordinate all lighting fixture locations and quantities with Architectural plans, and provide all fixtures indicated.

120 Volt Switches shall be quiet toggle type with totally enclosed case, rated 20 ampere, specification grade, color as selected by Architect.

Where dimmers are provided, install a separate neutral conductor for each circuit.

Dimmable switches shall be 120 volt switches rated for load controlled (LED). Switch shall be dimmable thru the entire range from 0 to 100%, with preset control and separate on-off switch. Switches shall be as manufactured by Legrand. Provide Tru-Universal dimmer. Care shall be taken when de-rating switches for installation in multi-gang switch boxes. Install switches with highest loads on outside of boxes to minimize the quantity of cooling fins (sides) removed. Contractor shall be responsible to ensure quantity of sides removed does not derate switch below required capacity. Multiple switch boxes shall be provided as required to maintain ratings of switches. All switches shall be installed in accordance with manufacturers instructions.

Provide occupancy sensors where indicated on plan. Occupancy sensors shall be as manufactured by Watt Stopper. Wall type shall be dual technology, combination passive infrared and ultrasonic with toggle switch. Refer to detail for exact model number. Provide as built list of settings to owner in operations manuals.

Furnish and install all lighting fixtures as specified OR by other consultants. Provide all interior and exterior lighting fixtures complete with sockets, reflectors, diffusers, shades, holders, lamps, ballasts, protective devices and all other required appurtenances. Prior to ordering lighting fixtures, verify exact type of ceiling to be used for each space type. Coordinate with Division 15 to avoid conflicts between lighting fixtures and Mechanical and Plumbing piping, ductwork, supports, fittings and equipment. Furnish to other trades, plaster frames, trim rings, etc., where required.

Receptacles shall be permanently labeled to identify panelboard and circuit number from which served. Use hot, stamped or engraved machine printing with black-filled lettering on face of plate, and durable wire markers or tags inside outlet boxes.

Standard duplex receptacles shall be polarized, duplex, parallel blade, U-grounding slot, specification grade, rated 20 amperes, 125 volts, style and color as selected by Architect.

GFI receptacles shall be 125V, 20 amp rated, as manufactured by Leviton or equal, style and color as selected by Architect. Trip threshold and time shall be as required for the application in accordance with the NEC.

Plates for Flush Devices shall be type and color as selected by Architect.

Contractors shall be permanent magnetic latched, electrically operated, mechanically-held type with number of poles and current rating as shown. Operating coils shall be 120 volts as required. Contractors shall be housed in NEMA Type 1 enclosures with knockouts and provisions for padlocking or incorporated in branch circuit or distribution panelboards as indicated. Provide hand-off-automatic switching in cover to facilitate safe maintenance. Contractors shall be UL listed for switching 208-volt ballast inductive loads. Install, completely wire and connect all systems in accordance with details on Drawings and manufacturer's instructions.

Motor and circuit disconnect means shall be a horsepower rated safety switch or a circuit breaker, each sized for the applied load and system voltage having an interrupting capacity not less than maximum available short-circuit current of circuit on which applied. Disconnects shall be sized in accordance with NEC and NEMA requirements. Safety switches shall be cartridge fuse type or unfused, as required. Manual toggle type motor switches with overload protection may be used as motor circuit disconnects for fractional horsepower motors provided they meet NEC requirements including padlock provision. Safety switches shall be quick-make, quick-break and NEMA Heavy Duty, Type HD. Disconnect enclosures: NEMA 1, NEMA 3R, NEMA 4 to suit application.

Contractor shall include in bid Unit Prices for each of the following:

- Each type of receptacle, including coverplate connected to area circuit.
- Voice outlet box with conduit and pullsting.
- Each type of switch, including coverplate connected to area circuit.
- 20/1 Homerun to Local Branch Circuit Panel.

Unless otherwise noted all electrical equipment is a basis of design of Square D. Equipment shall be as manufactured by Square D or approved equal.

All electrical equipment shall be labeled to warn qualified persons of potential Arc Flash hazards in accordance with NEC Article 110.16 and all local codes. Electrical contractor shall provide all required labels.

All electrical equipment and HVAC equipment shall be rated in excess of the available fault current, and shall be permanently labeled in accordance with NEC Articles 110.24, 430.59, 430.99, 440.10, 700.5, and all local codes. The electrical contractor shall coordinate with the utility company to verify actual available fault current. Max values shown on the single line diagram are based on worst case conditions, actual conditions may vary.

No product shall be installed without prior approval from Owner.

Contractor shall perform all system commissioning with an approved agency per Section C408 of the 2015 International Energy Conservation Code.

The Electrical Contractor shall contact the local electric company and be responsible for installing adequate temporary electric light and power service to the project site.

The temporary light and power service installation shall conform to the requirements of all local, state and federal regulations, National Electric Code, National Safety Code and the local utility company.

The cost of the energy consumption for temporary light and power shall be paid by the General Contractor.

Temporary light and power electrical work shall be installed in such a manner as not to interfere with permanent construction. The temporary design and location of light and power plan will be coordinated with and approved by the General Contractor/Construction Manager prior to installation.

The Electrical Contractor shall distribute light and power from the meter location to the sub-disconnect location to serve all buildings during construction. This distribution shall be done using overhead suspension means or underground conduit to provide reliable service for the duration of the project.

The Electrical Contractor shall provide main distribution panel for lighting and power within all buildings. This panel shall have adequate provisions for 120-volt wiring and lighting to meet or exceed OSHA requirements. Temporary lighting shall be installed to provide a minimum of 25 watts per square foot over the floor. There shall be no area without temporary lighting. In addition, the Electrical Contractor shall provide 120 Volt quadplex receptacles located at intervals throughout the building area, so that each trade Contractor can obtain power by utilizing a 100' extension cord. Temporary systems shall be maintained until the completion of the project.

The Electrical Contractor shall turn off all temporary power and lighting at the end of each day and turn it on at the beginning of each day.

Lighting in stairways and other areas required for public and employee safety shall operate on a 24-hour basis.

The Electrical Contractor shall provide power for gas fired temporary heaters provided by the General Contractor. Heaters shall operate on a 24-hour basis when directed by the General Contractor.

The Electrical Contractor shall provide power to any heat tape (installed by others) on temporary water and or fire lines. Heat Tape shall operate on a 24-hour basis.

The Electrical Contractor shall provide a termination box in the Contractors Office trailer area for electrical service connection of the Trade Contractor's trailers. Cost for individual trade contractor trailer electrical service connection shall be borne by the Trade Contractor requiring this service. Use of electric heaters in those trailers and shanties will not be permitted.

Electrical connection of Trade Contractors' tools and equipment to the power distribution system shall be at the expense of the Trade Contractor.

The Electrical Contractor shall obtain and pay for any required applications, permits and inspections pertaining to this work. The Electrical Contractor shall include the cost for all wiring, panels, circuit breakers, disconnects, etc., in order to provide a complete system in conformance with the above requirements.

Temporary lighting and power receptacles will be required at various locations as the work progresses. Costs for moving these items, as directed by the General Contractor, shall be included as part of the contract costs.

Temporary lighting and power shall be provided for construction purposes during normal working hours, Monday through Friday. Any costs required to accomplish this work shall be included as part of the Electrical contract. Any temporary light or power required outside these hours shall be paid for by the contractor requiring the extra service.

The Electrical Contractor shall remove temporary power system when it is no longer required.

A source for temporary electric will not be available for welding machines. The Trade Contractor requiring this temporary connection shall be responsible to hire the Electrical Contractor to perform this work. Trade Contractors may utilize a gas or diesel-powered unit. Welding units must be placed outside in accordance with applicable safety codes.

Provide power for parking lot lighting as directed by owner.

Provide new Addressable Fire Alarm system. The system shall include, but not limited to: control panel, dialer, alarm initiating and indicating peripheral devices, conduit, wire and accessories required to furnish a complete operational system. The equipment and installation shall comply with the current provision of the National Fire Protection Association Standards, 70, 72, and all local codes. All equipment shall be UL listed. Flashing lights shall be ADA approved, candles as required by location. Contractor shall use equipment manufacturer or manufacturers representative for all system testing and programming.

FIRE ALARM SUBMITTAL REQUIREMENTS: In addition, the contractor shall prepare a Fire Alarm system submittal to fulfill the requirements of the local Fire Marshall. Submit (3) sets of Signed and Sealed plans prepared by a professional engineer or certified Fire Protection Engineer for Fire Marshall review. The submittal shall include the following: Scaled plans indicating Fire Alarm work, Project Name and Address, Square Footage, Fire Alarm symbols list, Device matrix showing description and quantity of devices, Equipment Cut sheets, Wiring information including size, type, and all point to point wire runs, Fire Alarm Risk diagram including initiating and annunciating devices, Battery calculations and proposed battery capacity, and voltage drop calculations.

Power System Study: The following shall be provided with the gear submittal and be performed by a licensed professional engineer authorized to work in the State of New Jersey. The electrical submittals will not be reviewed until a complete Study including all of the following is received. Provide a **Short Circuit and Arc Flash Protection Studies**. The Studies shall be performed using SKM Power Tools or equal approved by Holstein White. All calculations shall be based on the exact equipment proposed in the gear submittal. All wire types, sizes, and lengths, shall be confirmed by the contractor and accurately reflected in the calculations. The calculations shall start at the utility company termination to the owner's next equipment and shall be based on the available fault current and X/R values furnished by the Utility Company. Contractor shall request the information from the Utility Company and include a copy in the Study Appendix. The **short circuit study** shall be performed in conformance with IEEE 141 and all submitted equipment shall have an AIC rating equal to or exceeding the available fault current. The **arc flash study** shall be performed in accordance with the requirements of IEEE 1584 and NFPA 70E. The report shall make recommendations for the reduction of any Dangerous conditions. Upon approval of the study, the contractor shall be responsible for the reduction of any Dangerous conditions. The labels shall be compliant with the latest applicable codes, and shall at a minimum contain the following information: Equipment Name, Upstream Protective Device, Flash Hazard Boundary, Flash Hazard at 18 inches, Shock Hazard (Voltage) with covers removed, Glove Class, Limited Approach Boundary, Restricted Approach Boundary, and Prohibited Approach Boundary.

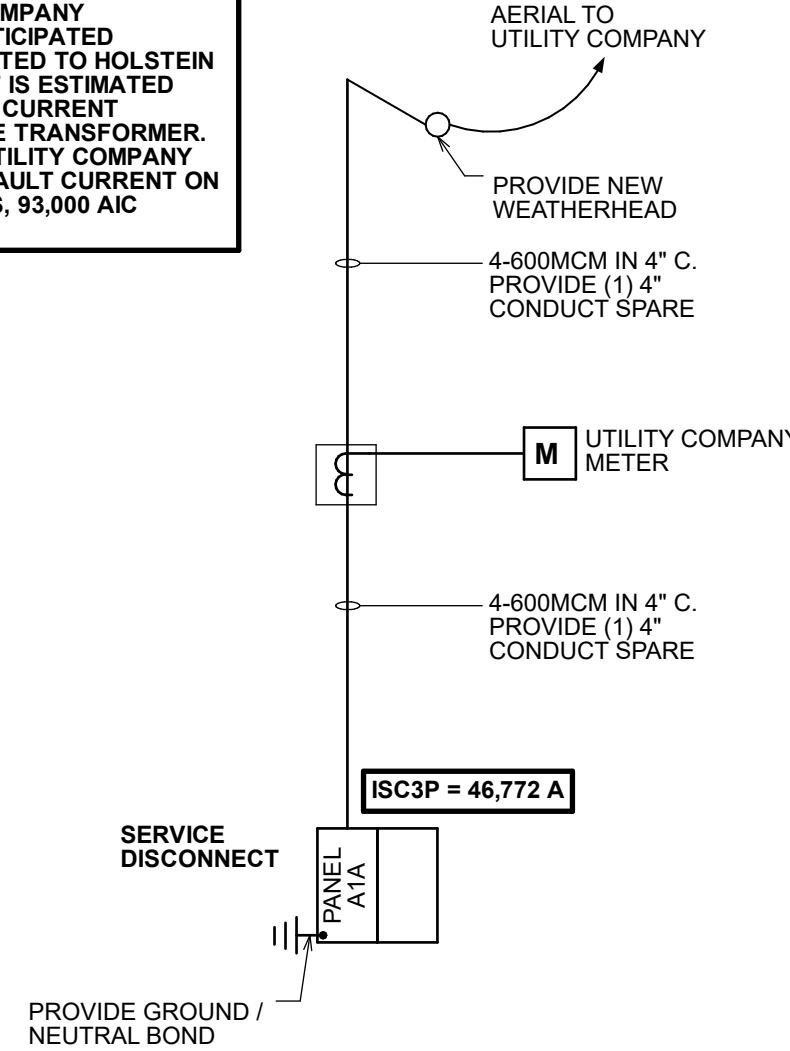
Mounting Heights to center of outlets unless otherwise noted. In masonry construction the mounting heights shall be used for reference to the nearest block or brick coursing. The above mounting heights shall be adhered to unless specifically noted or detailed on the Architectural drawings or specifications.

SINGLE LINE DIAGRAM NOTES

- UNLESS OTHERWISE NOTED, ALL DEVICES AND SPACES ARE 3 POLE.
- UNLESS OTHERWISE NOTED, ALL ABOVE GRADE CONDUCTORS SHALL BE COPPER, TYPE THW, RATED 75°C.
- UNLESS OTHERWISE NOTED ALL BELOW GRADE CONDUCTORS SHALL BE COPPER, TYPE XHHW-2, RATED 75°C.
- UNLESS OTHERWISE NOTED, ALL INTERIOR CONDUITS SHALL BE EMT.
- UNLESS OTHERWISE NOTED ALL UNDERGROUND AND EXTERIOR CONDUITS SHALL BE SCHEDULE 40 PVC.
- ALL EQUIPMENT SHALL BE SERIES RATED TO WITHSTAND THE AVAILABLE SHORT CIRCUIT CURRENT.
- CONTRACTOR SHALL PROVIDE PERMANENT LABELS ON ALL ELECTRICAL AND HVAC EQUIPMENT INDICATING THE MAXIMUM AVAILABLE FAULT CURRENT.

FOR FAULT CURRENT CALCULATION AND ANALYSIS PURPOSES 93,000 AIC IS ESTIMATED FOR MAXIMUM AVAILABLE UTILITY COMPANY FAULT CURRENT, ON THE SECONDARY SIDE OF THE UTILITY COMPANY TRANSFORMER. THIS ESTIMATION IS BASED ON THE ANTICIPATED SECONDARY SERVICE TRANSFORMER SIZE COMMUNICATED TO HOLSTEIN WHITE, INC. BY PSE&G. THE AVAILABLE FAULT CURRENT IS ESTIMATED PER PSE&G GUIDELINES FOR MAXIMUM SHORT CIRCUIT CURRENT AVAILABLE AT SECONDARY TERMINALS OF THE SERVICE TRANSFORMER. VERIFY THE EXACT AVAILABLE FAULT CURRENT WITH UTILITY COMPANY PRIOR TO ORDERING ELECTRICAL EQUIPMENT. IF THE FAULT CURRENT ON THE SECONDARY SIDE OF THE TRANSFORMER EXCEEDS 93,000 AIC NOTIFY THE ENGINEER.

ISC3P = INSTANTANEOUS THREE PHASE CURRENT



SINGLE LINE DIAGRAM

NOT TO SCALE

ELECTRICAL SYMBOLS

- LED Lighting Fixture, Refer to Lighting Fixture Schedule for More Information
- Exterior Lighting Fixture - Pole or Wall Mounted
- Exit Sign - Ceiling or Wall Mounted
- Emergency Battery Pack
- Dual Remote Lighting Heads
- Communication System Outlet
- Single Pole Switch
- Low Voltage Switch
- Duplex Receptacle - 125V, 2P, 3W
- Quadruplex Receptacle - 125V, 2P, 3W
- 125V Duplex Receptacle - 125V, 2P, 3W
- Solid Connection to Equipment
- Junction Box
- Unfused Disconnect Switch
- Fused Disconnect Switch
- Motor
- Automatic Detector [Detector Control Function]
 - Duct Mounted, Smoke Ionization
 - PE - Smoke PhotoElectric
 - CO - Carbon Monoxide
- Fire Alarm Horn
- Fire Alarm Manual Pull Station
- Fire Alarm Flashing Light

ELECTRICAL STANDARD MOUNTING HEIGHTS

- 9" Below Finished Ceiling: Wall-Mounted Clocks, Program Bells, Fire Alarm Gongs and Horns
- 10'-0": Battery Lighting Units and Remote Wall Mounted Lighting Heads (Or 1'-0" Below Finished Ceiling)
- 8'-0": Pendant Hung Industrial and Strip Lighting Fixtures
- Center Above Door or Window Opening: Warning and Signaling Fixtures/Signs
- 6'-8" or 6'-6" Below Finished Ceiling: Fire Alarm Illuminated Flashing Lights (Lowest of the two Heights), Mounting Height to the Bottom of Device.
- 6'-8": Top of Back-Mounted Wall Exit Signs (Not Mounted Above Doors)
- 6'-6": Top of Flush and Surface Mounted Electrical Panelboards and Communication System Cabinets
- 6'-0": Top of Highest Electrical Safety Disconnect Switches, Magnetic Motor Starters and Contactors
- 4'-6": Wall Mounted Telephones and Pay Stations (3'-6" at Handicap Locations)
- 4'-0": Top of Highest Circuit Breaker in Accessible Load Centers
- 3'-6": Fire Alarm Pull Stations
- 3'-4": Wall Mounted Electrical Device Lighting Switches
- 2'-0": Electrical Receptacles in Mechanical Spaces, Electrical and Elevator Rooms
- 1'-6": Electrical Receptacles, Television Outlets, Telephone Outlets, and Computer Outlets
- 0'-0": Finished Floor

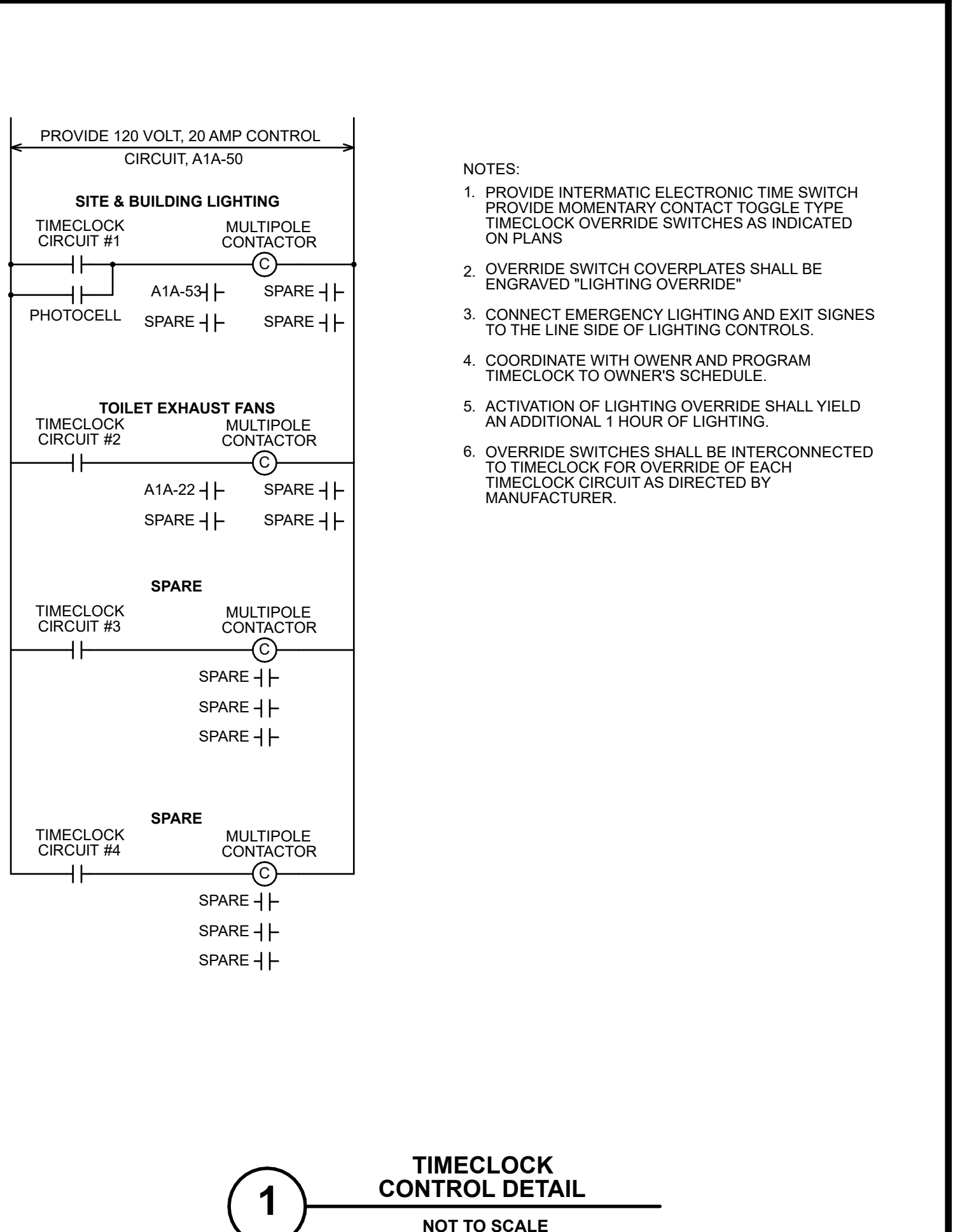
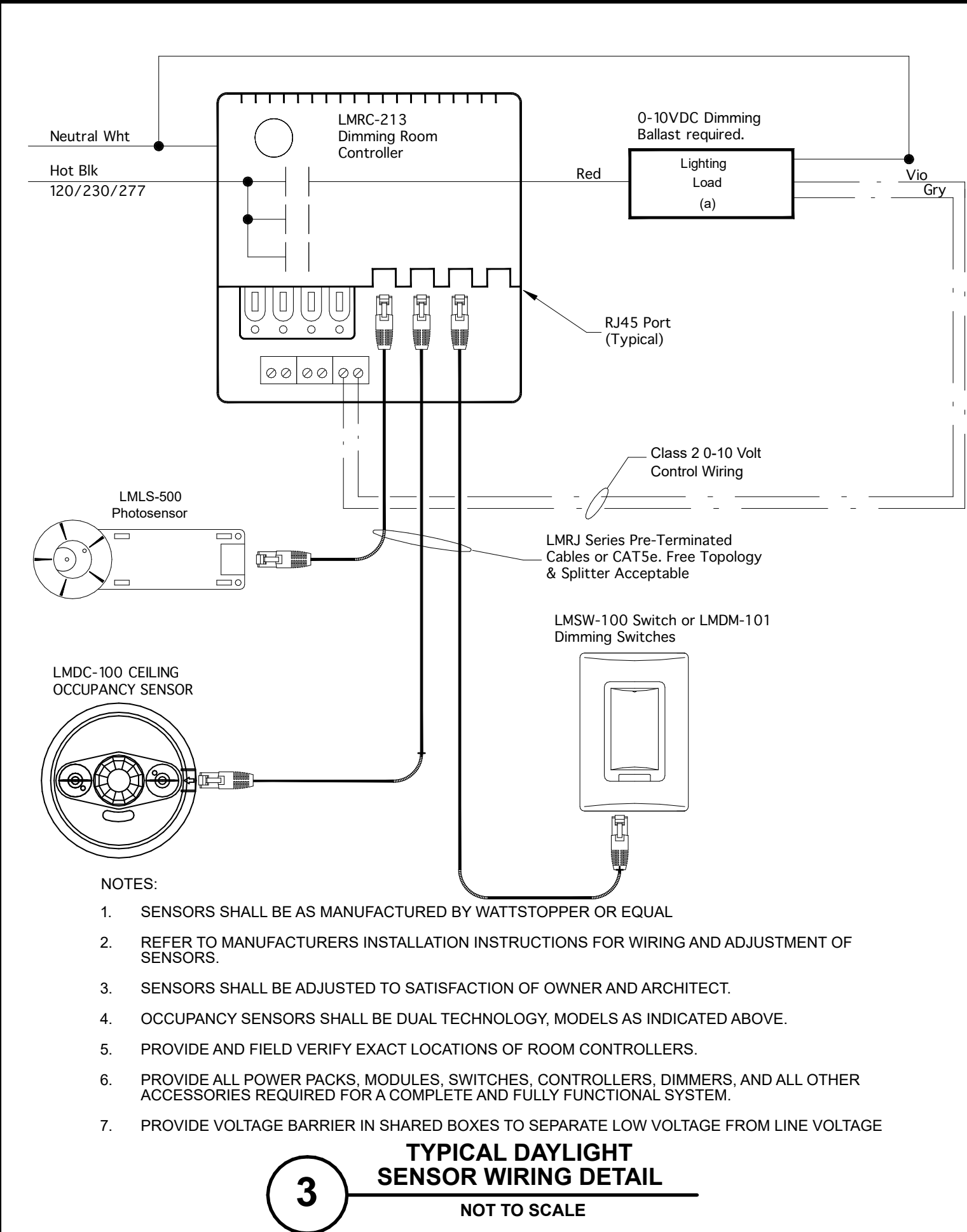
Mounting Heights to center of outlets unless otherwise noted. In masonry construction the mounting heights shall be used for reference to the nearest block or brick coursing. The above mounting heights shall be adhered to unless specifically noted or detailed on the Architectural drawings or specifications.

No.	DATE	DESCRIPTION	REV'D BY
APPROVAL		PROJECT	
ADA RENOVATIONS TO THE GLOUCHESTER TOWNSHIP BLACK BOX COMMUNITY CENTER			
3 S BLACKHORSE PIKE BLACKWOOD, NEW JERSEY			
Joseph F. McKernan Jr., Architects & Associates 100 Dobbs Lane Suite 204 Cherry Hill, New Jersey 08034		TITLE: ELECTRICAL SCHEDULES & DETAILS SCALE: AS NOTED PROJECT: 23-580 DATE: xxx/xx/xx REV'D: JEH DRAWN BY: JS CHECKED BY: JC / JEH	
3800 Horizon Blvd., Suite 205 Trenton, NJ 08611 P: (609) 322-7771 F: (609) 322-7769 www.holsteinwhite.com		JEFFREY E. HOLSTEIN NJ Lic. No. 362264640 NJ AUTH. No. 246208143706 DRAWINGS MUST BE VERIFIED BY CONTRACTOR WITH THE ARCHITECT OR AN INDEPENDENT PROFESSIONAL ENGINEER BEFORE CONSTRUCTION. DO NOT SCALE DRAWING.	

E-3.0

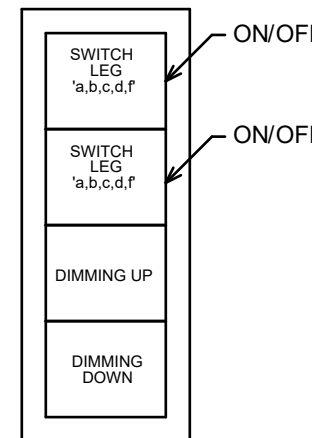
2023-10-20 ISSUED FOR BID

LIGHTING FIXTURE SCHEDULE									
Type	Manufacturer	Catalog No.	Lamps			Volts	Mounting		Remarks
			No.	Watts	Type				
Interior Lighting									
A1	ILP Lighting	VAT24-54L-U-40		43	LED 3500K	120	Recessed		LED 2'x4' fixture located in Multipurpose Area. Provide fixture with 0-10V dimming. Coordinate exact fixture and finish with Owner and Architect prior to rough-in.
A2	ILP Lighting	VAT24-48L-U-40		38	LED 3500K	120	Recessed		LED 2'x4' fixture located in Multipurpose Area. Provide fixture with 0-10V dimming. Coordinate exact fixture and finish with Owner and Architect prior to rough-in.
A3	ILP Lighting	VAT24-43L-U-40		29	LED 3500K	120	Recessed		LED 2'x3' fixture located in dressing rooms, rest rooms. Provide fixture with 0-10V dimming. Coordinate exact fixture and finish with Owner and Architect prior to rough-in.
A4	ILP Lighting	VAT22-38L-U-40		29	LED 3500K	120	Recessed		LED 2'x2' fixture located in Multipurpose Area. Provide fixture with 0-10V dimming. Coordinate exact fixture and finish with Owner and Architect prior to rough-in.
A5	Green Creative Lighting	SPFTR4LE15-90-40-NR		18	LED 3500K	120	Recessed		LED downlight fixture located in Multipurpose Area. Provide fixture with 0-10V dimming. Coordinate exact fixture and finish with Owner and Architect prior to rough-in.
B1	ILP Lighting	VS4-4L-U-50-FRL		33	LED 3500K	120	Surface		LED 4' strip fixture located in back of house areas. Provide fixture with 0-10V dimming. Coordinate exact fixture and finish with Owner and Architect prior to rough-in.
B2	Visa Lighting Hellen	CP4410-L40K(H)-		58	LED 3500K	120	Surface		LED 4' strip fixture located in back of house areas. Provide fixture with 0-10V dimming. Coordinate exact fixture and finish with Owner and Architect prior to rough-in.
B4	ILP Lighting	VS2-4L-U-50-FRL		19	LED 3500K	120	Surface		LED 2' strip fixture located in back of house areas. Provide fixture with 0-10V dimming. Coordinate exact fixture and finish with Owner and Architect prior to rough-in.
Exterior Lighting									
N1	Teron Lighting	CDSQ-L14-U-X-40K		14	LED 4000K	120	Surface		Wet location listed LED wall sconce. Coordinate exact fixture and finish with Owner and Architect prior to rough-in.
B3	Teron Lighting	Forestdale 4 light Outdoor Pendant. 8300K-497400Z		30	LED 3500K	120	Surface		Wet location listed LED pendant fixtrue. Coordinate exact fixture and finish with Owner and Architect prior to rough-in. Provide LED replacement lamps
Emergency Lighting									
E1	Evenlite	TEBL3W	2	3	LED	120V / 9.6VDC	Surface		Indoor battery pack w/ dual 9.6V/2W LED lighting heads, lithium-ion battery, white housing.
E2	Evenlite	TEBL5W	2	3	LED	120V / 9.6VDC	Surface		Indoor battery pack w/ dual 9.6V/2W LED lighting heads & remote head capabilities. lithium-ion battery, white housing.
E3	Evenlite	PRWLED2-MV	2	1	LED	120V / 9.6VDC	Surface		Outdoor dual remote 9.6V/2W LED lighting head
X1	Evenlite	TLX-EM-RU-W			LED	120	As Indicated		LED exit sign, red letters, number of faces and directional arrows as indicated on plan or required by installed location, integral battery to provide 90 minutes of illumination.
Notes: 1. In addition to those indicated above, refer to Architectural drawings and provide all fixtures specified. 2. All fixtures shall be provided with lamping. 3. Confirm final fixture options and color selection with Architect prior to purchase. 4. Refer to specifications for detailed requirements for construction, handling, ballasts, lamps, etc. 5. Coordinate fixture location and mounting requirements with Architectural drawings and details. 6. Refer to Architectural reflected ceiling plans for ceiling types and conditions affecting mounting and installation of lighting fixtures. 7. Coordinate exact fixture color temperature with owner and architect prior to purchase.									

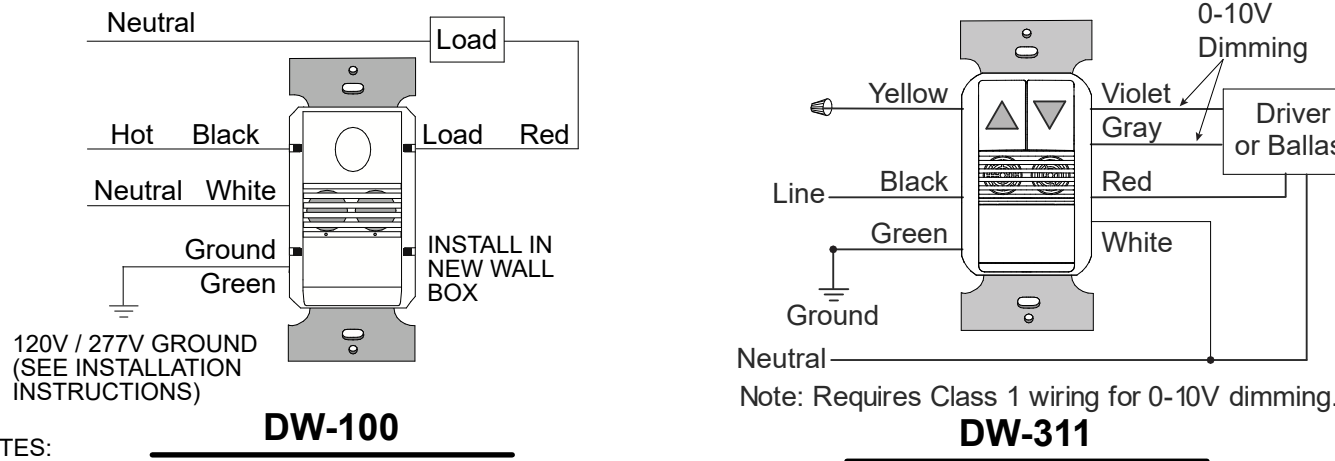


LIGHTING CONTROL MATRIX													
COMMON SPACE TYPES		CONTROL FUNCTIONS AND REQUIREMENTS											
		CONTROL TYPE	SENSOR(S)	LOCAL CONTROL	RESTRICTED TO MANUAL ON	RESTRICTED TO PARTIAL AUTOMATIC ON	BILEVEL LIGHTING CONTROL	AUTOMATIC DAYLIGHT RESPONSIVE CONTROLS FOR SIDELIGHTING	AUTOMATIC DAYLIGHT RESPONSIVE CONTROLS FOR TOPLIGHTING	AUTOMATIC PARTIAL OFF	AUTOMATIC FULL OFF	SCHEDULE SHUTOFF	NOTES
	DESCRIPTION												
	MULTIPURPOSE ROOM	DIMMING	VACANCY	X	X		X	X	X		X		1, 2, 4, 5, 6, 7, 9, 10
	CORRIDOR	DIMMING	VACANCY	X				N/A	N/A	X			1, 2, 3, 4, 5, 6, 7, 9, 10
	ELECTRICAL/MECHANICAL ROOM	ON/OFF	N/A	X									5
	LOBBY	DIMMING	VACANCY	X	X			N/A	N/A		X		1, 2, 4, 5, 6, 7, 9, 10
	ENCLOSED OFFICE	DIMMING	VACANCY	X	X		X	N/A	N/A		X		1, 2, 4, 5, 6, 7, 9, 10
	RESTROOM	ON/OFF	VACANCY	X				N/A	N/A		X		1, 2, 4, 5, 6, 7, 9, 10
	GENERAL SEATING AREA	DIMMING	VACANCY	X	X		X	N/A	N/A		X		1, 2, 4, 5, 6, 7, 9, 10
	STORAGE ROOM (>50 SQFT AND <1000 SQFT	ON/OFF	VACANCY	X	X			X	X		X		1, 2, 4, 5, 6, 7, 9, 10
	STORAGE ROOM (>1000 SQFT)	ON/OFF	VACANCY	X	X			X	X		X		1, 2, 4, 5, 6, 7, 9, 10
NOTES:													
	1.) SENSOR FAILURE SHALL RESULT IN 100% ILLUMINATION.												
	2.) AUTO/SCHEDULED OFF.												
	3.) FIXTURE SHALL AUTOMATICALLY BE REDUCED TO AT LEAST 50% WITHIN 20 MINUTES OF ALL OCCUPANTS LEAVING THE SPACE.												
	4.) FIXTURE SHALL AUTOMATICALLY INCREASE ILLUMINATION TO 100% WHEN OCCUPIED.												
	5.) ALL LIGHTING CONTROLS SHALL BE IN ACCORDANCE WITH ASHRAE 90.1 2016, AND LOCAL ORDINANCES												
	6.) PROVIDE ALL POWER PACKS, MODULES, SWITCHES, CONTROLLERS, DIMMERS, RELAYS, AND ALL OTHER ACCESSORIES REQUIRED FOR A COMPLETE AND FULLY FUNCTIONAL SYSTEM.												
	7.) REFER TO DRAWING E-3.3 FOR LIGHTING CONTROL DETAILS.												
	8.) LOW-VOLTAGE LIGHTING CONTROLS SHALL UTILIZE MULTIPLE BUTTON CONFIGURATION TO MINIMIZE NUMBER OF DEVICES PER ROOM.												
	9.) STAND ALONE CONTROL, SEE DETAIL #3 & #4 ON DRAWING E-3.3.												
	10.) INCLUDE PROGRAMMING AND START-UP FOR A COMPLETE AND OPERATIONAL SYSTEM TO THE SATISFACTION OF THE OWNER.												

S_{LS} 4 BUTTON LOCAL LIGHTING CONTROLLER





4 LOW-VOLTAGE SWITCH
NOT TO SCALE



- NOTES:
- SENSORS SHALL BE VACANCY TYPE CONFIGURATION, MANUAL ON, AUTOMATIC OFF.
 - WALL SENSORS SHALL HAVE INTEGRAL MANUAL ON / OFF SWITCH.
 - WALL SENSORS SHALL BE WATTSTOPPER MODELS AS FOLLOWS:
DUAL TECHNOLOGY SINGLE ZONE: DW-100
DUAL TECHNOLOGY 0-10V DIMMING: DW-311 SENSORS SHALL BE CONFIGURED SUCH THAT THEY ARE MANUAL ON TO 100%, AUTOMATIC OFF.
 - REFER TO MANUFACTURERS INSTALLATION INSTRUCTIONS FOR WIRING AND ADJUSTMENT OF SENSORS.
 - SENSORS SHALL BE ADJUSTED TO SATISFACTION OF OWNER AND ARCHITECT.

**STAND ALONE SYSTEM
WALL BOX VACANCY
SENSOR WIRING DETAIL**

2
NOT TO SCALE

No.	DATE	DESCRIPTION		REV'D BY
		REVISIONS		
APPROVAL:		PROJECT:		
		ADA RENOVATIONS TO THE GLOUCESTER TOWNSHIP BLACK BOX COMMUNITY CENTER		
		3 S BLACKHORSE PIKE BLACKWOOD, NEW JERSEY		
		Joseph F. McKernan Jr., Architects & Associates 100 Dobbs Lane Suite 204 Cherry Hill, New Jersey 08034		TITLE: ELECTRICAL SCHEDULES & DETAILS
 3800 Horizon Blvd., Suite 205 Trenton, NJ 08611 P: (609) 322-7771 F: (609) 322-7709 www.holsteinwhite.com		SEAL: JEFFREY E. HOLSTEIN NJ P.E. NO. 3462646430 NJ ARCH. NO. 2462646430	INDICATING MUST BE VERIFIED BY CONTRACTOR, REVIEW THE AUTHORITY OF ANY DISCREPANCY BEFORE PROCEEDING WITH CONSTRUCTION. DO NOT SCALE DRAWING.	SCALE: AS NOTED PROJ. NO.: 23-580 DATE: xx/xx/xx REV'D.: JEH DRAWN BY: JS CHK'D BY: JC JEH
				E-3.1

DEMOLITION GENERAL NOTES

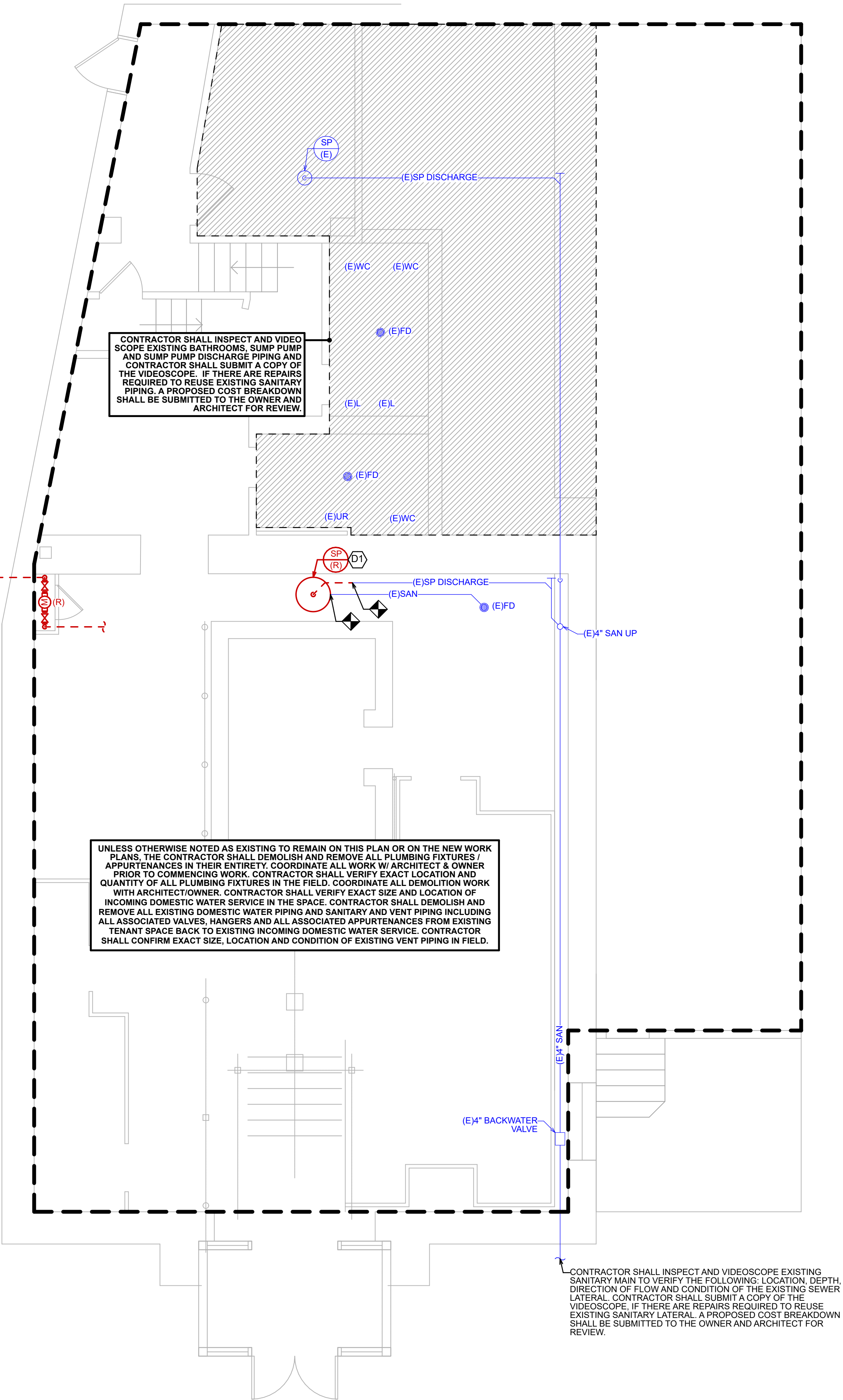
1. REMOVE DESIGNATED ELEMENTS AS SHOWN ON DRAWINGS.
2. ALL PLUMBING EQUIPMENT AND ASSOCIATED WATER AND SANITARY PIPING DESCRIBED SHALL BE DEMOLISHED AND REMOVED. CAP AT MAIN.
3. COMPLY WITH APPLICABLE NFPA STANDARDS WHEN TORCH CUTTING.
4. PROVIDE, ERECT AND MAINTAIN TEMPORARY BARRIERS AND SECURITY DEVICES AS REQUIRED.
5. OBTAIN WRITTEN CONSENT OF OWNER PRIOR TO TORCH CUTTING.
6. ERECT AND MAINTAIN TEMPORARY PARTITIONS TO PREVENT SPREAD OF DUST, FUMES, NOISE AND SMOKE TO PROVIDE FOR CONTINUING OWNER OCCUPANCY.
7. CONDUCT DEMOLITION TO MINIMIZE INTERFERENCE WITH ADJACENT BUILDING AREAS. MAINTAIN PROTECTED LEGAL EGRESS AND ACCESS AT ALL TIMES. KEEP REQUIRED EXIT WAYS UNENCUMBERED AT ALL TIMES AND ARTIFICIALLY LIGHTED.
8. REMOVE DEMOLISHED MATERIALS FROM SITE AS WORK PROGRESSES AND DISPOSE OF IN A PROPER, LEGAL MANNER. UPON COMPLETION OF WORK, LEAVE AREAS OF WORK IN BROOM CLEAN CONDITION AT THE END OF EACH DAY.
9. COORDINATE ALL DEMOLITION WORK WITH LANDLORD PRIOR TO SHUT DOWN THE SERVICE MAINS TO PERFORM THE REQUIRED WORK.
10. PRIOR TO COMMENCEMENT OF DEMOLITION, THE CONSTRUCTION MANAGER SHALL WALK THE PROJECT WITH THE CONTRACTOR PERFORMING THIS WORK TO CONFIRM THE EXTENT OF DEMOLITION.
11. THE CONTRACTOR SHALL VISIT SITE PRIOR TO SUBMITTING THEIR PROPOSAL TO VERIFY ACTUAL SITE CONDITIONS AND ANY DISCOVERED DISCREPANCIES BETWEEN DRAWINGS AND SITE CONDITIONS SHALL BE BROUGHT TO THE OWNER'S ATTENTION PRIOR TO SUBMITTING THEIR BID. THE CONTRACTOR SHALL INCLUDE ALL DEMOLITION WORK EXPOSED AND CONCEALED, WHETHER OR NOT SHOWN ON DRAWINGS, NECESSARY FOR THE EFFECTIVE INSTALLATION AND PERFORMANCE OF NEW SYSTEM. THE CONTRACTOR SHALL ALSO INCLUDE TEMPORARY REMOVAL AND REINSTALLATION OF EXISTING WORK WHEREVER NECESSARY. THE OWNER SHALL NOT ACCEPT (NOR THE CONTRACTOR PAID) EXTRA COSTS ASSOCIATED WITH THE DEMOLITION AND/OR TEMPORARY REMOVAL/REINSTALLATION WORK FROM THE CONTRACTOR.
12. CONTRACTOR SHALL PATCH ROOF AS REQUIRED AND SEAL WATERTIGHT (CONTRACTOR SHALL COORDINATE ALL ROOF WORK WITH EXISTING ROOF CONTRACTOR IN ORDER NOT TO VOID EXISTING ROOF WARRANTY).

EXISTING CONDITIONS NOTE

1. ALL THE EXISTING PIPE SIZES AND LOCATIONS, THE PLUMBING FIXTURE LOCATIONS AND TAGS, THE EXISTING ARCHITECTURAL FLOOR PLANS, ETC., HAVE BEEN DOCUMENTED BASED OFF SURVEY DATA HOLSTEIN WHITE, INC. (ENGINEER) CONDUCTED ON APRIL 11, 2023.
2. ALTHOUGH THE EXISTING CONDITIONS DOCUMENTED ON THESE PLANS HAVE BEEN MODIFIED PER OBSERVATIONS IN THE FIELD, THE CONTRACTOR SHALL BE RESPONSIBLE TO PERFORM FINAL FIELD VERIFICATION OF ALL OF THE EXISTING CONDITIONS PRIOR TO COMMENCING WORK TO CONFIRM ALL EXISTING CONDITIONS AND LOCATIONS OF ALL PLUMBING FIXTURES, VALVES, PIPING, ETC.

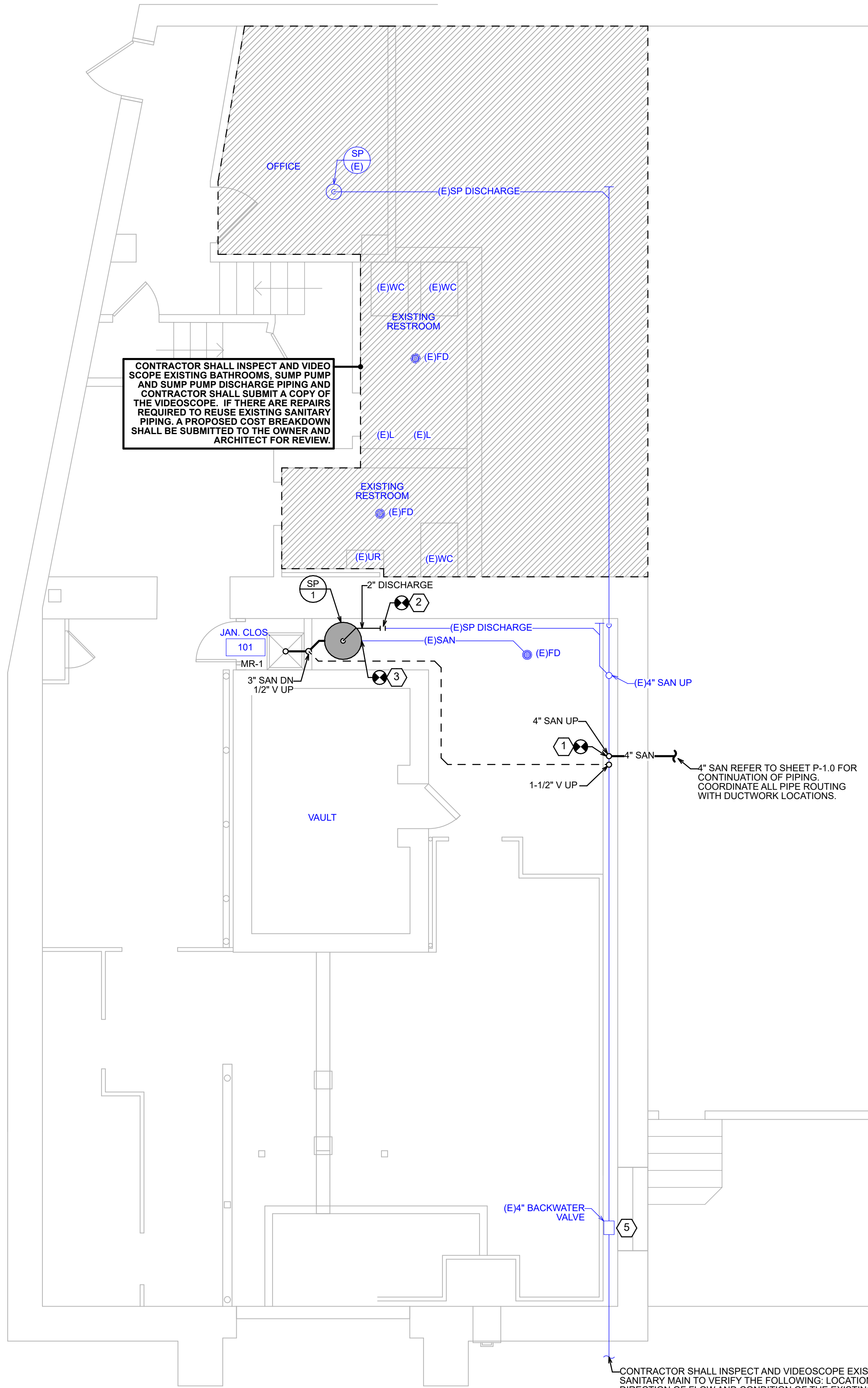
DRAWING SYMBOLS

- (E) EXISTING PLUMBING WORK TO REMAIN
- EXISTING PLUMBING WORK TO BE DEMOLISHED AND REMOVED
- - - EXISTING PLUMBING WORK TO REMAIN
- NEW SANITARY WORK
- - - NEW VENTING WORK
- - - NEW COLD WATER PLUMBING WORK
- - - NEW HOT WATER PLUMBING WORK
- NEW NATURAL GAS PIPING WORK
- ⊙ POINT OF CONNECTION TO EXISTING
- ◊ POINT OF DEMOLITION, CUT AND CAP



1 BASEMENT DEMOLITION PLUMBING PLAN
SCALE: 1/4" = 1' - 0"

No.		DATE	DESCRIPTION	REV'D BY
APPROVAL:		REVISIONS		
PROJECT:		ADA RENOVATIONS TO THE GLOUCESTER TOWNSHIP BLACK BOX COMMUNITY CENTER 3 S BLACKHORSE PIKE BLACKWOOD, NEW JERSEY		
SEAL:		TITLE: BASEMENT DEMOLITION PLUMBING PLAN		
DRAWING NO. DP-0.0		SCOTT A. WHITE NJ REG. NO. 34620407000 NJ AUTH. NO. 246204143700		
DATE: 2023-10-25		SCALE: AS NOTED		
REV'D: SW		PROJ. NO. 23-580		
DRAWN BY: SH		DATE: 10/20/23		
CHKD BY: SW		REV'D: SW		



CONTRACTOR SHALL INSPECT AND VIDEO SCOPE EXISTING BATHROOMS, SUMP PUMP AND SUMP PUMP DISCHARGE PIPING AND CONTRACTOR SHALL SUBMIT A COPY OF THE VIDEOSCOPE. IF THERE ARE REPAIRS REQUIRED TO REUSE EXISTING SANITARY PIPING, A PROPOSED COST BREAKDOWN SHALL BE SUBMITTED TO THE OWNER AND ARCHITECT FOR REVIEW.

4" SAN REFER TO SHEET P-1.0 FOR CONTINUATION OF PIPING. COORDINATE ALL PIPE ROUTING WITH DUCTWORK LOCATIONS.

CONTRACTOR SHALL INSPECT AND VIDEOSCOPE EXISTING SANITARY MAIN TO VERIFY THE FOLLOWING: LOCATION, DEPTH, DIRECTION OF FLOW AND CONDITION OF THE EXISTING SEWER LATERAL. CONTRACTOR SHALL SUBMIT A COPY OF THE VIDEOSCOPE. IF THERE ARE REPAIRS REQUIRED TO REUSE EXISTING SANITARY LATERAL, A PROPOSED COST BREAKDOWN SHALL BE SUBMITTED TO THE OWNER AND ARCHITECT FOR REVIEW.

1 BASEMENT SANITARY PLAN
SCALE: 1/4" = 1' - 0"

EXISTING CONDITIONS NOTE

- ALL THE EXISTING PIPE SIZES AND LOCATIONS, THE PLUMBING FIXTURE LOCATIONS AND TAGS, THE EXISTING ARCHITECTURAL FLOOR PLANS, ETC., HAVE BEEN DOCUMENTED BASED OFF SURVEY DATA HOLSTEIN WHITE, INC. (ENGINEER) CONDUCTED ON APRIL 11, 2023.
- ALTHOUGH THE EXISTING CONDITIONS DOCUMENTED ON THESE PLANS HAVE BEEN MODIFIED PER OBSERVATIONS IN THE FIELD, THE CONTRACTOR SHALL BE RESPONSIBLE TO PERFORM FINAL FIELD VERIFICATION OF ALL OF THE EXISTING CONDITIONS PRIOR TO COMMENCING WORK TO CONFIRM ALL EXISTING CONDITIONS AND LOCATIONS OF ALL PLUMBING FIXTURES, VALVES, PIPING, ETC.

DRAWING SYMBOLS

(E) EXISTING PLUMBING WORK TO REMAIN
— EXISTING PLUMBING WORK TO REMAIN
(R) EXISTING PLUMBING WORK TO BE DEMOLISHED AND REMOVED
- - - EXISTING PLUMBING WORK TO REMAIN
— NEW SANITARY WORK
- - - NEW VENTING WORK
- - - NEW COLD WATER PLUMBING WORK
- - - NEW HOT WATER PLUMBING WORK
— NEW NATURAL GAS PIPING WORK
⊗ POINT OF CONNECTION TO EXISTING
⊠ POINT OF DEMOLITION, CUT AND CAP

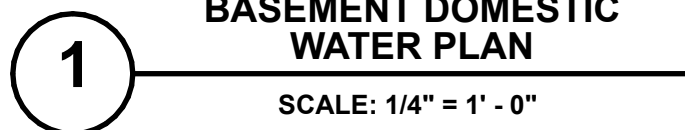
DRAWING NOTES

- REFER TO ARCHITECTURAL DRAWINGS FOR THE EXACT LOCATIONS OF ALL THE FURNITURE, PLUMBING FIXTURES, AND EQUIPMENT.
- CONTRACTOR SHALL COORDINATE THE INSTALLATION OF ALL UNDERGROUND PIPING WITH THE LOCATION OF ALL FOOTERS AND EXISTING UTILITY PIPING.
- CONTRACTOR SHALL VERIFY THE EXACT SIZE AND LOCATION OF EXISTING SANITARY AND DOMESTIC WATER PIPING IN THE FIELD. COORDINATE THE INSTALLATION OF THE NEW PIPING WITH THE EXISTING LOCATION.
- CONTRACTOR SHALL COORDINATE THE INSTALLATION OF THE NEW PIPING WITH THE LOCATION OF THE PIPING, DUCT WORK, EQUIPMENT, ARCHITECTURAL PLANS, AND STRUCTURAL ELEMENTS IN THE FIELD.
- ALL PIPING CONNECTIONS ARE SHOWN DIAGMAMTICALLY. CONTRACTOR SHALL VERIFY FINAL CONNECTION POINTS IN FIELD.
- CONTRACTOR SHALL COORDINATE FINAL LOCATION OF ALL ROOF AND EXTERIOR WALL PENETRATIONS IN THE FIELD WITH LANDLORD PRIOR TO ROUGHING-IN.
- CONTRACTOR SHALL COORDINATE ALL DOMESTIC WATER PIPING WITHIN THERMAL ENVELOPE OF THE BUILDING TO PREVENT FREEZING.
- CONTRACTOR SHALL COORDINATE ALL ROOF PENETRATIONS WITH EXISTING ROOFING. CONTRACTOR AS TO NOT VOID ROOF WARRANTY.



SHEET NOTES

- TIE NEW 4"Ø SANITARY STACK INTO EXISTING 4" SANITARY MAIN RUNNING ALONG BASEMENT FLOOR. VERIFY EXACT SIZE, LOCATION AND ROUTING OF EXISTING SANITARY MAIN IN THE FIELD.
- TIE NEW 2"Ø SUMP PUMP DISCHARGE INTO EXISTING DISCHARGE PIPE. VERIFY EXACT SIZE, LOCATION AND ROUTING OF EXISTING PIPE IN THE FIELD.
- TIE EXISTING SANITARY LINE INTO NEW SUMP BASIN. VERIFY EXACT SIZE AND LOCATION OF EXISTING PIPING IN THE FIELD.
- CONTRACTOR SHALL TIE NEW 2"Ø G (540 MBH) INTO EXISTING GAS SERVICE. VERIFY EXACT SIZE AND LOCATION EXISTING GAS MAIN IN THE FIELD. COORDINATE ALL REQUIRED MODIFICATIONS TO EXISTING SERVICE WITH SOUTH JERSEY GAS.
- CONTRACTOR SHALL INSPECT AND REPAIR (E) BACKWATER VALVE AS REQUIRED. PROVIDE A CONTINGENCY PRICE TO REPLACE THE 4" BACKWATER VALVE.
- CONTRACTOR SHALL INSPECT EXITING DOWNSPOUT AND DRAINS AND PROVIDE CONTINGENCY TO REPLACE DOWNSPOUT AND ASSOCIATED DRAIN.

No.		DATE	DESCRIPTION	REV'D BY
APPROVAL:		PROJECT:		
ADA RENOVATIONS TO THE GLOUCESTER TOWNSHIP BLACK BOX COMMUNITY CENTER		3 S BLACKHORSE PIKE BLACKWOOD, NEW JERSEY		
Joseph F. McKernan Jr., Architects & Associates 100 Dobbs Lane Suite 204 Cherry Hill, New Jersey 08034		TITLE: BASEMENT SANITARY PLAN		
SEAL:		SCALE: AS NOTED		DRAWING NO:
HOLSTEIN WHITE 3800 Horizon Blvd., Suite 303 Trenton, NJ 08611 P: (609) 322-7711 F: (609) 322-7709 www.holsteinwhite.com		PROJ. NO.: 23-580 DATE: xx/xx/xx REV'D: SW CHKD BY: SW		P-0.0
SCOTT A. WHITE NJ REG. NO. 34620467000 NJ AUTH. NO. 245A08143700		DIMENSIONS MUST BE VERIFIED BY CONTRACTOR WITH THE ARCHITECT OR ANY DISCREPANCIES BEFORE PROCEEDING WITH CONSTRUCTION. DO NOT SCALE DRAWING.		



1. ALL GAS PIPING SHALL BE INSTALLED PER THE REQUIREMENTS OF IFGC 2021.
2. ALL EXPOSED EXISTING AND NEW GAS PIPING & FITTING SHALL BE COATED OR WRAPPED WITH A CORROSION-RESISTANT MATERIAL.
3. 2" GAS (540 MBH) SIZED FOR LONGEST RUN OF 150 FT FROM METER PER IFGC 2021, TABLE 402.4(1), LESS THAN 2 PSI, 0.3 IN. W.C. PRESSURE DROP, & 0.60 SPECIFIC GRAVITY.
4. PROVIDE VERTICAL PIPE SUPPORTS AS REQUIRED PER 2021 IFGC.
5. ENTIRE INSTALLATION SHALL CONFORM TO MANUFACTURER'S RECOMMENDATIONS, THE NATIONAL FUEL GAS CODE, AND SOUTH JERSEY GAS RULES AND REGULATIONS.

No.	DATE	DESCRIPTION			REV'D BY
		REVISIONS			
APPROVAL:		PROJECT:			
		<p align="center">ADA RENOVATIONS TO THE GLOUCESTER TOWNSHIP BLACK BOX COMMUNITY CENTER</p> <p align="center">3 S.BLOCKHORSE PIKE BLACKWOOD, NEW JERSEY</p>			
 <p align="center">Joseph F. McKernan Jr., Architects & Associates 100 Dabbs Lane Suite 204 Cherry Hill, New Jersey 08034</p>		<p align="center">TITLE: BASEMENT DOMESTIC WATER PLAN</p>			
 <p align="center">3800 Horizon Blvd, Suite 503 Roseland, NJ 07068 O: (201) 329-7711 F: (201) 327-7759 www.holsteinwhite.com</p>		<p align="center">SEAL:</p> <p align="center">SCOTT A. WHITE NJ PE NO. 240264877000 NJ State Professional Engineer</p>		<p align="center">DRAWING NO:</p> <p align="center">P-0.1</p>	
		<p align="center"><small>ENGRAVING MUST BE VERIFIED BY REGISTERED PROFESSIONAL ENGINEER BEFORE PROCEEDING WITH CONSTRUCTION DO NOT SCALE DRAWING.</small></p>		<p align="center">SCALE: AS NOTED</p> <p align="center">PROJ. NO.: 23-560</p> <p align="center">DATE: x/xx/xx</p> <p align="center">REV'D BY: SW</p> <p align="center">DRAWN BY: SH</p> <p align="center">CHECKED BY: SW</p>	
		<p align="center">EXHIBIT ARCHITECT & ENGINEER</p>			

EXISTING CONDITIONS NOTE

- ALL THE EXISTING PIPE SIZES AND LOCATIONS, THE PLUMBING FIXTURE LOCATIONS AND TAGS, ETC., HAVE BEEN DOCUMENTED BASED OFF SURVEY DATA HOLSTEIN WHITE, INC. (ENGINEER) CONDUCTED ON APRIL 11, 2023.
- ALTHOUGH THE EXISTING CONDITIONS DOCUMENTED ON THESE PLANS HAVE BEEN MODIFIED PER OBSERVATIONS IN THE FIELD, THE CONTRACTOR SHALL BE RESPONSIBLE TO PERFORM FINAL FIELD VERIFICATION OF ALL OF THE EXISTING CONDITIONS PRIOR TO COMMENCING WORK TO CONFIRM ALL EXISTING CONDITIONS AND LOCATIONS OF ALL PLUMBING FIXTURES, VALVES, PIPING, ETC.

DRAWING SYMBOLS

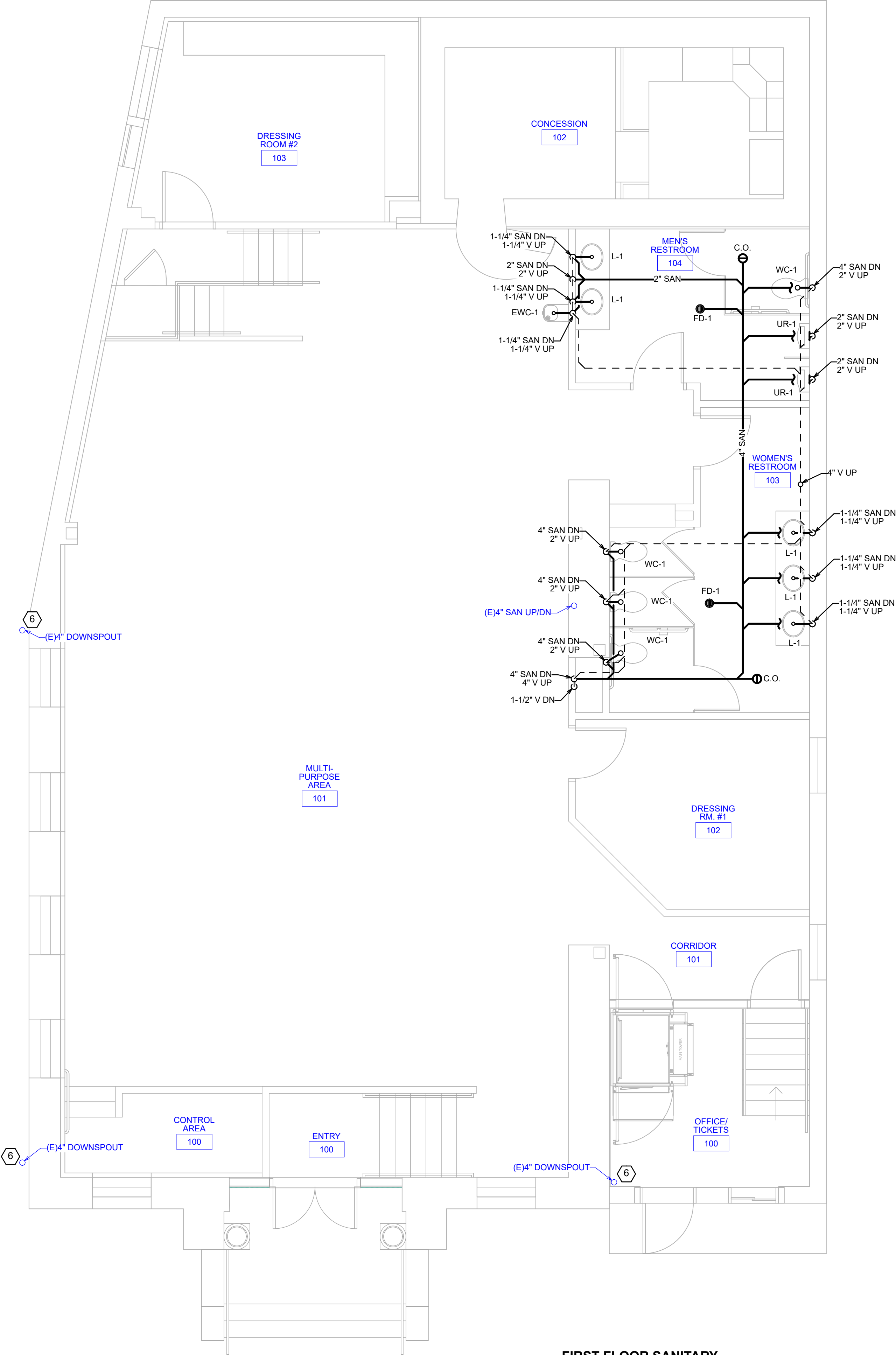
- (E) EXISTING PLUMBING WORK TO REMAIN
- EXISTING PLUMBING WORK TO REMAIN
- (R) EXISTING PLUMBING WORK TO BE DEMOLISHED AND REMOVED
- - - EXISTING PLUMBING WORK TO REMAIN
- NEW SANITARY WORK
- - - NEW VENTING WORK
- NEW COLD WATER PLUMBING WORK
- NEW HOT WATER PLUMBING WORK
- NEW NATURAL GAS PIPING WORK
- POINT OF CONNECTION TO EXISTING
- POINT OF DEMOLITION, CUT AND CAP

DRAWING NOTES



- REFER TO ARCHITECTURAL DRAWINGS FOR THE EXACT LOCATIONS OF ALL THE FURNITURE, PLUMBING FIXTURES, AND EQUIPMENT.
- CONTRACTOR SHALL COORDINATE THE INSTALLATION OF ALL UNDERGROUND PIPING WITH THE LOCATION OF ALL FOOTERS AND EXISTING UTILITY PIPING.
- CONTRACTOR SHALL VERIFY THE EXACT SIZE AND LOCATION OF EXISTING SANITARY AND DOMESTIC WATER PIPING IN THE FIELD. COORDINATE THE INSTALLATION OF THE NEW PIPING WITH THE EXISTING LOCATION.
- CONTRACTOR SHALL COORDINATE THE INSTALLATION OF THE NEW PIPING WITH THE LOCATION OF THE PIPING, DUCT WORK, EQUIPMENT, ARCHITECTURAL PLANS, AND STRUCTURAL ELEMENTS IN THE FIELD.
- ALL PIPING CONNECTIONS ARE SHOWN DIAGRAMMATICALLY. CONTRACTOR SHALL VERIFY FINAL CONNECTION POINTS IN FIELD.
- CONTRACTOR SHALL COORDINATE FINAL LOCATION OF ALL ROOF AND EXTERIOR WALL PENETRATIONS IN THE FIELD WITH LANDLORD PRIOR TO ROUGHING-IN.
- CONTRACTOR SHALL COORDINATE ALL DOMESTIC WATER PIPING WITHIN THERMAL ENVELOPE OF THE BUILDING TO PREVENT FREEZING.
- CONTRACTOR SHALL COORDINATE ALL ROOF PENETRATIONS WITH EXISTING ROOFING. CONTRACTOR AS TO NOT VOID ROOF WARRANTY.

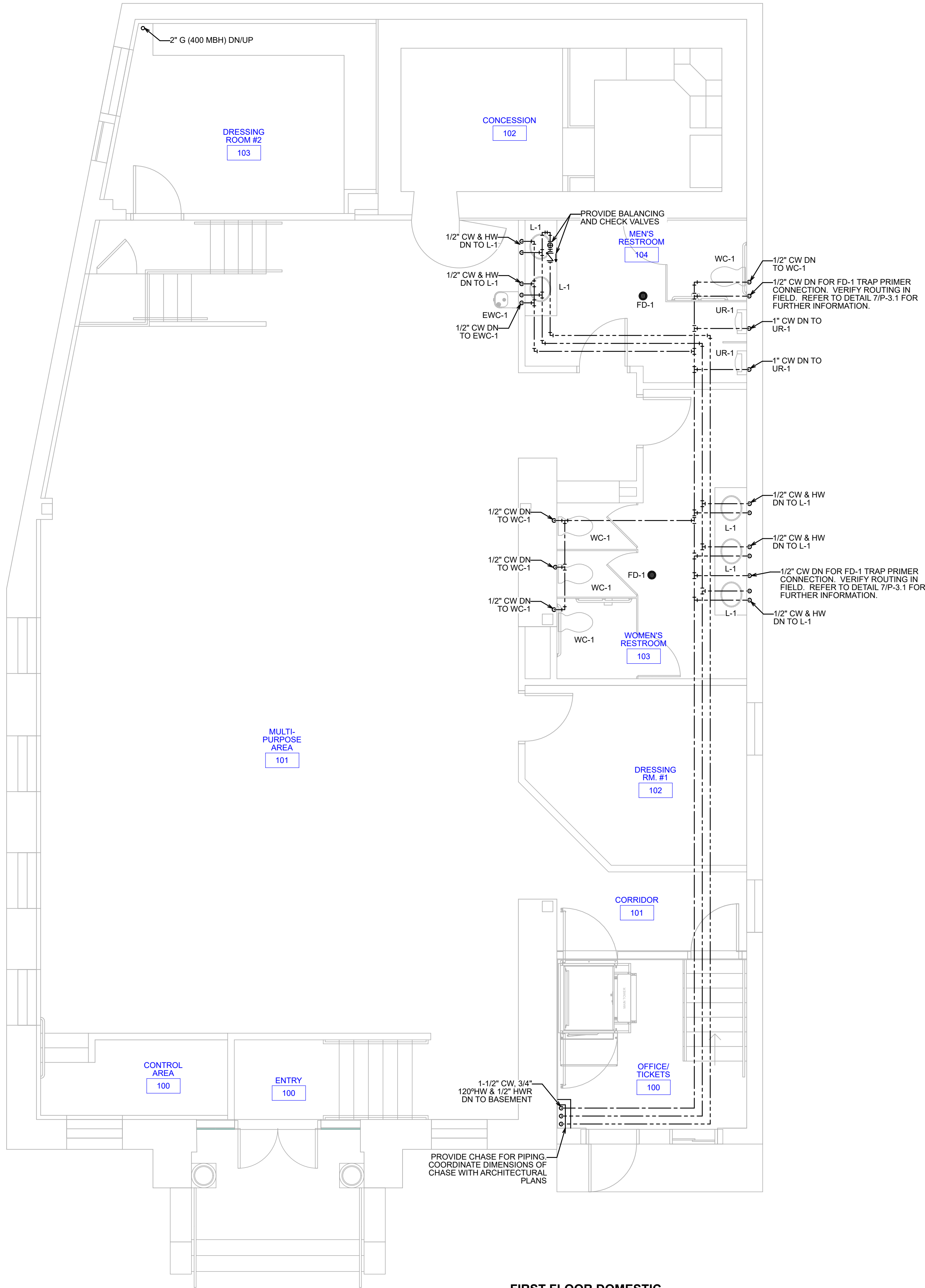
SHEET NOTES

- TIE NEW 4"Ø SANITARY STACK INTO EXISTING 4" SANITARY MAIN RUNNING ALONG BASEMENT FLOOR. VERIFY EXACT SIZE, LOCATION AND ROUTING OF EXISTING SANITARY MAIN IN THE FIELD.
- TIE NEW 2"Ø SUMP PUMP DISCHARGE INTO EXISTING DISCHARGE PIPE. VERIFY EXACT SIZE, LOCATION AND ROUTING OF EXISTING PIPE IN THE FIELD.
- TIE EXISTING SANITARY LINE INTO NEW SUMP BASIN. VERIFY EXACT SIZE AND LOCATION OF EXISTING PIPING IN THE FIELD.
- CONTRACTOR SHALL TIE NEW 2"Ø G (540 MBH) INTO EXISTING GAS SERVICE. VERIFY EXACT SIZE AND LOCATION EXISTING GAS MAIN IN THE FIELD. COORDINATE ALL REQUIRED MODIFICATIONS TO EXISTING SERVICE WITH SOUTH JERSEY GAS.
- CONTRACTOR SHALL INSPECT AND REPAIR (E) BACKWATER VALVE AS REQUIRED. PROVIDE A CONTINGENCY PRICE TO REPLACE THE 4" BACKWATER VALVE.
- CONTRACTOR SHALL INSPECT EXITING DOWNSPOUT AND DRAINS AND PROVIDE CONTINGENCY TO REPLACE DOWNSPOUT AND ASSOCIATED DRAIN.



1 FIRST FLOOR SANITARY PLAN
SCALE: 1/4" = 1' - 0"

No.	DATE	DESCRIPTION			REV'D BY
		REVISIONS			
APPROVAL:		PROJECT:			
ADA RENOVATIONS TO THE GLOUCESTER TOWNSHIP BLACK BOX COMMUNITY CENTER					
3 S BLACKHORSE PIKE BLACKWOOD, NEW JERSEY					
		Joseph F. McKernan Jr., Architects & Associates 100 Dobbs Lane Suite 204 Cherry Hill, New Jersey 08034		TITLE: FIRST FLOOR SANITARY PLAN	
 13800 Horizon Blvd., Suite 203 Trenton, NJ 08611 O: (610) 322-7711 F: (610) 322-7709 www.holtzworthwhite.com		SEAL: SCOTT A. WHITE NJ REG. NO. 24620467000 NJ AUTH. NO. 24620467000		SCALE: AS NOTED PROJ. NO.: 23-580 DATE: xx/xx/xx REV'D: SW DRAWN BY: SH CHKD BY: SW	
		DRAWING NO: P-1.0			



1 FIRST FLOOR DOMESTIC WATER PLAN
SCALE: 1/4" = 1' - 0"

EXISTING CONDITIONS NOTE

1. ALL THE EXISTING PIPE SIZES AND LOCATIONS, THE PLUMBING FIXTURE LOCATIONS AND TAGS, ETC., HAVE BEEN DOCUMENTED BASED OFF SURVEY DATA HOLSTEIN WHITE, INC. (ENGINEER) CONDUCTED ON APRIL 11, 2023.

2. ALTHOUGH THE EXISTING CONDITIONS DOCUMENTED ON THESE PLANS HAVE BEEN MODIFIED PER OBSERVATIONS IN THE FIELD, THE CONTRACTOR SHALL BE RESPONSIBLE TO PERFORM FINAL FIELD VERIFICATION OF ALL OF THE EXISTING CONDITIONS PRIOR TO COMMENCING WORK TO CONFIRM ALL EXISTING CONDITIONS AND LOCATIONS OF ALL PLUMBING FIXTURES, VALVES, PIPING, ETC.

DRAWING SYMBOLS

(E) EXISTING PLUMBING WORK TO REMAIN
— EXISTING PLUMBING WORK TO REMAIN
(R) EXISTING PLUMBING WORK TO BE DEMOLISHED AND REMOVED
- - - EXISTING PLUMBING WORK TO REMAIN
— NEW SANITARY WORK
- - - NEW VENTING WORK
- - - NEW COLD WATER PLUMBING WORK
- - - NEW HOT WATER PLUMBING WORK
— NEW NATURAL GAS PIPING WORK
⊗ POINT OF CONNECTION TO EXISTING
⊠ POINT OF DEMOLITION, CUT AND CAP

DRAWING NOTES

1. REFER TO ARCHITECTURAL DRAWINGS FOR THE EXACT LOCATIONS OF ALL THE FURNITURE, PLUMBING FIXTURES, AND EQUIPMENT.

2. CONTRACTOR SHALL COORDINATE THE INSTALLATION OF ALL UNDERGROUND PIPING WITH THE LOCATION OF ALL FOOTERS AND EXISTING UTILITY PIPING.

3. CONTRACTOR SHALL VERIFY THE EXACT SIZE AND LOCATION OF EXISTING SANITARY AND DOMESTIC WATER PIPING IN THE FIELD. COORDINATE THE INSTALLATION OF THE NEW PIPING WITH THE EXISTING LOCATION.

4. CONTRACTOR SHALL COORDINATE THE INSTALLATION OF THE NEW PIPING WITH THE LOCATION OF THE PIPING, DUCT WORK, EQUIPMENT, ARCHITECTURAL PLANS, AND STRUCTURAL ELEMENTS IN THE FIELD.

5. ALL PIPING CONNECTIONS ARE SHOWN DIAGRAMMATICALLY. CONTRACTOR SHALL VERIFY FINAL CONNECTION POINTS IN FIELD.

6. CONTRACTOR SHALL COORDINATE FINAL LOCATION OF ALL ROOF AND EXTERIOR WALL PENETRATIONS IN THE FIELD WITH LANDLORD PRIOR TO ROUGHING-IN.

7. CONTRACTOR SHALL COORDINATE ALL DOMESTIC WATER PIPING WITHIN THERMAL ENVELOPE OF THE BUILDING TO PREVENT FREEZING.

8. CONTRACTOR SHALL COORDINATE ALL ROOF PENETRATIONS WITH EXISTING ROOFING CONTRACTOR AS TO NOT VOID ROOF WARRANTY.

SHEET NOTES

1. TIE NEW 4"Ø SANITARY STACK INTO EXISTING 4" SANITARY MAIN RUNNING ALONG BASEMENT FLOOR. VERIFY EXACT SIZE, LOCATION AND ROUTING OF EXISTING SANITARY MAIN IN THE FIELD.

2. TIE NEW 2"Ø SUMP PUMP DISCHARGE INTO EXISTING DISCHARGE PIPE. VERIFY EXACT SIZE, LOCATION AND ROUTING OF EXISTING PIPE IN THE FIELD.

3. TIE EXISTING SANITARY LINE INTO NEW SUMP BASIN. VERIFY EXACT SIZE AND LOCATION OF EXISTING PIPING IN THE FIELD.

4. CONTRACTOR SHALL TIE NEW 2"Ø G (540 MBH) INTO EXISTING GAS SERVICE. VERIFY EXACT SIZE AND LOCATION EXISTING GAS MAIN IN THE FIELD. COORDINATE ALL REQUIRED MODIFICATIONS TO EXISTING SERVICE WITH SOUTH JERSEY GAS.

5. CONTRACTOR SHALL INSPECT AND REPAIR (E) BACKWATER VALVE AS REQUIRED. PROVIDE A CONTINGENCY PRICE TO REPLACE THE 4" BACKWATER VALVE.

6. CONTRACTOR SHALL INSPECT EXISTING DOWNSPOUT AND DRAINS AND PROVIDE CONTINGENCY TO REPLACE DOWNSPOUT AND ASSOCIATED DRAIN.

GAS PIPING NOTES

1. ALL GAS PIPING SHALL BE INSTALLED PER THE REQUIREMENTS OF IFGC 2021.

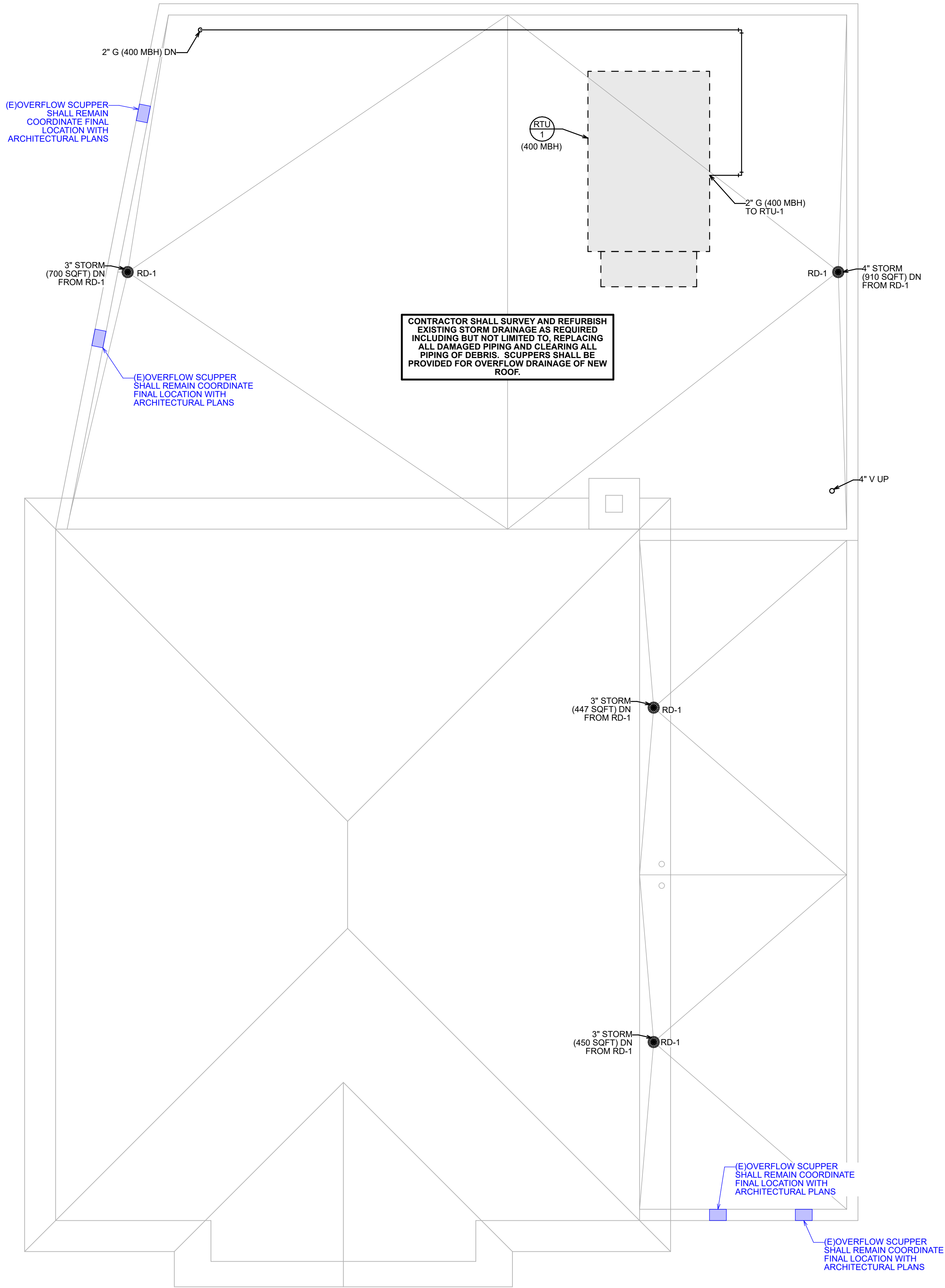
2. ALL EXPOSED EXISTING AND NEW GAS PIPING & FITTING SHALL BE COATED OR WRAPPED WITH A CORROSION-RESISTANT MATERIAL.

3. 2" GAS (540 MBH) SIZED FOR LONGEST RUN OF 150 FT FROM METER PER IFGC 2021, TABLE 402.4(1), LESS THAN 2 PSI, 0.3 IN. W.C. PRESSURE DROP, & 0.60 SPECIFIC GRAVITY.

4. PROVIDE VERTICAL PIPE SUPPORTS AS REQUIRED PER 2021 IFGC.

5. ENTIRE INSTALLATION SHALL CONFORM TO MANUFACTURER'S RECOMMENDATIONS, THE INTERNATIONAL FUEL GAS CODE, AND SOUTH JERSEY GAS RULES AND REGULATIONS.

No.		DATE	DESCRIPTION	REV'D BY
APPROVAL:		PROJECT:		
ADA RENOVATIONS TO THE GLOUCESTER TOWNSHIP BLACK BOX COMMUNITY CENTER		3 S BLACKHORSE PIKE BLACKWOOD, NEW JERSEY		
Joseph F. McKernan Jr., Architects & Associates 100 Dobbs Lane Suite 204 Cherry Hill, New Jersey 08034		TITLE: FIRST FLOOR DOMESTIC WATER PLAN		
SEAL:		SCALE: AS NOTED		DRAWING NO:
HOLSTEIN WHITE 3800 Horizon Blvd., Suite 203 Trenton, NJ 08611 P: (609) 322-7711 F: (609) 322-7709 www.holsteinwhite.com		PROJ. NO.: 23-580 DATE: xx/xx/xx REV'D: SW DRAWN BY: SH CHKD BY: SW		P-1.1
SCOTT A. WHITE NJ REG. NO. 34620467000 NJ AUTH. NO. 24620467000		DESIGNER MUST BE VERIFIED BY CONTRACTOR WITH THE ARCHITECT OR ANY DISCREPANCIES BEFORE PROCEEDING WITH CONSTRUCTION. DO NOT SCALE DRAWING.		



CONTRACTOR SHALL SURVEY AND REFURBISH EXISTING STORM DRAINAGE AS REQUIRED INCLUDING BUT NOT LIMITED TO: REPLACING ALL DAMAGED PIPING AND CLEARING ALL PIPING OF DEBRIS. SCUPPERS SHALL BE PROVIDED FOR OVERFLOW DRAINAGE OF NEW ROOF.

- ### EXISTING CONDITIONS NOTE
- ALL THE EXISTING PIPE SIZES AND LOCATIONS, THE PLUMBING FIXTURE LOCATIONS AND TAGS, THE EXISTING ARCHITECTURAL FLOOR PLANS, ETC., HAVE BEEN DOCUMENTED BASED OFF SURVEY DATA HOLSTEIN WHITE, INC. (ENGINEER) CONDUCTED ON APRIL 11, 2023.
 - ALTHOUGH THE EXISTING CONDITIONS DOCUMENTED ON THESE PLANS HAVE BEEN MODIFIED PER OBSERVATIONS IN THE FIELD, THE CONTRACTOR SHALL BE RESPONSIBLE TO PERFORM FINAL FIELD VERIFICATION OF ALL OF THE EXISTING CONDITIONS PRIOR TO COMMENCING WORK TO CONFIRM ALL EXISTING CONDITIONS AND LOCATIONS OF ALL PLUMBING FIXTURES, VALVES, PIPING, ETC.

- ### DRAWING SYMBOLS
- (E) EXISTING PLUMBING WORK TO REMAIN
— EXISTING PLUMBING WORK TO REMAIN
(R) EXISTING PLUMBING WORK TO BE DEMOLISHED AND REMOVED
- - - EXISTING PLUMBING WORK TO REMAIN
— NEW SANITARY WORK
- - - NEW VENTING WORK
- - - NEW COLD WATER PLUMBING WORK
- - - NEW HOT WATER PLUMBING WORK
— NEW NATURAL GAS PIPING WORK
⊗ POINT OF CONNECTION TO EXISTING
⬢ POINT OF DEMOLITION, CUT AND CAP

- ### DRAWING NOTES
- REFER TO ARCHITECTURAL DRAWINGS FOR THE EXACT LOCATIONS OF ALL THE FURNITURE, PLUMBING FIXTURES, AND EQUIPMENT.
 - CONTRACTOR SHALL COORDINATE THE INSTALLATION OF ALL UNDERGROUND PIPING WITH THE LOCATION OF ALL FOOTERS AND EXISTING UTILITY PIPING.
 - CONTRACTOR SHALL VERIFY THE EXACT SIZE AND LOCATION OF EXISTING SANITARY AND DOMESTIC WATER PIPING IN THE FIELD. COORDINATE THE INSTALLATION OF THE NEW PIPING WITH THE EXISTING LOCATION.
 - CONTRACTOR SHALL COORDINATE THE INSTALLATION OF THE NEW PIPING WITH THE LOCATION OF THE PIPING, DUCT WORK, EQUIPMENT, ARCHITECTURAL PLANS, AND STRUCTURAL ELEMENTS IN THE FIELD.
 - ALL PIPING CONNECTIONS ARE SHOWN DIAGRAMMATICALLY. CONTRACTOR SHALL VERIFY FINAL CONNECTION POINTS IN FIELD.
 - CONTRACTOR SHALL COORDINATE FINAL LOCATION OF ALL ROOF AND EXTERIOR WALL PENETRATIONS IN THE FIELD WITH LANDLORD PRIOR TO ROUGHING-IN.
 - CONTRACTOR SHALL COORDINATE ALL DOMESTIC WATER PIPING WITHIN THERMAL ENVELOPE OF THE BUILDING TO PREVENT FREEZING.
 - CONTRACTOR SHALL COORDINATE ALL ROOF PENETRATIONS WITH EXISTING ROOFING CONTRACTOR AS TO NOT VOID ROOF WARRANTY.

- ### SHEET NOTES
- TIE NEW 4"Ø SANITARY STACK INTO EXISTING 4" SANITARY MAIN RUNNING ALONG BASEMENT FLOOR. VERIFY EXACT SIZE, LOCATION AND ROUTING OF EXISTING SANITARY MAIN IN THE FIELD.
 - TIE NEW 2"Ø SUMP PUMP DISCHARGE INTO EXISTING DISCHARGE PIPE. VERIFY EXACT SIZE, LOCATION AND ROUTING OF EXISTING PIPE IN THE FIELD.
 - TIE EXISTING SANITARY LINE INTO NEW SUMP BASIN. VERIFY EXACT SIZE AND LOCATION OF EXISTING PIPING IN THE FIELD.
 - CONTRACTOR SHALL TIE NEW 2"Ø G (540 MBH) INTO EXISTING GAS SERVICE. VERIFY EXACT SIZE AND LOCATION EXISTING GAS MAIN IN THE FIELD. COORDINATE ALL REQUIRED MODIFICATIONS TO EXISTING SERVICE WITH SOUTH JERSEY GAS.
 - CONTRACTOR SHALL INSPECT AND REPAIR (E) BACKWATER VALVE AS REQUIRED. PROVIDE A CONTINGENCY PRICE TO REPLACE THE 4" BACKWATER VALVE.
 - CONTRACTOR SHALL INSPECT EXITING DOWNSPOUT AND DRAINS AND PROVIDE CONTINGENCY TO REPLACE DOWNSPOUT AND ASSOCIATED DRAIN.

- ### GAS PIPING NOTES
- ALL GAS PIPING SHALL BE INSTALLED PER THE REQUIREMENTS OF IFGC 2021.
 - ALL EXPOSED EXISTING AND NEW GAS PIPING & FITTING SHALL BE COATED OR WRAPPED WITH A CORROSION-RESISTANT MATERIAL.
 - 2" GAS (540 MBH) SIZED FOR LONGEST RUN OF 150 FT FROM METER PER IFGC 2021, TABLE 402.4(1), LESS THAN 2 PSI, 0.3 IN. W.C. PRESSURE DROP, & 0.60 SPECIFIC GRAVITY.
 - PROVIDE VERTICAL PIPE SUPPORTS AS REQUIRED PER 2021 IFGC.
 - ENTIRE INSTALLATION SHALL CONFORM TO MANUFACTURER'S RECOMMENDATIONS, THE INTERNATIONAL FUEL GAS CODE, AND SOUTH JERSEY GAS RULES AND REGULATIONS.

1 ROOF PLUMBING PLAN
SCALE: 1/4" = 1' - 0"

No.		DATE	DESCRIPTION	REVISIONS	REV'D BY
APPROVAL:		PROJECT:			
ADA RENOVATIONS TO THE GLOUCESTER TOWNSHIP BLACK BOX COMMUNITY CENTER		3 S BLACKHORSE PIKE BLACKWOOD, NEW JERSEY			
MK Joseph F. McKernan Jr., Architects & Associates 100 Dobbs Lane Suite 204 Cherry Hill, New Jersey 08034		TITLE: ROOF PLUMBING PLAN			
HOLSTEIN WHITE 3800 Horizon Blvd., Suite 203 Trenton, NJ 08611 P: (609) 322-7711 F: (609) 322-7709 www.holsteinwhite.com		SEAL: SCOTT A. WHITE NJ REG. NO. 34620467000 NJ AUTH. NO. 24620467000 COPYRIGHT 2023		DRAWING NO. P-2.0	

GAS-FIRED WATER HEATER SCHEDULE		
Unit Designation	DWH - 1	
Basis of Design	Bradford White	
Model Number	LG2PDV50H603N	
Test Pressure (PSI)	300	
Working Pressure (PSI)	150	
Storage Capacity (Gal.)	48	
Recovery (GPH @ 100°F Rise)	58	
Operating Temperature (°F)	140	
Dimensions (Diameter x Height) (in.)	22" x 68-7/16"	
Flue / Combustion Connection Size (in.)	4" Ø / 4" Ø	
Weight (lbs.)	625	
Heating Capacity		
Fuel	Nat. Gas	
Burner Type	Submerged	
Ignitor	Electronic	
Gas Input (MBH)	60	
Inlet Gas Pressure (Min-Max) (Recommended)(in. W.C.)	4.4-14.0(7.0)	
Uniform Energy Factor	0.68	
Electrical	110 / 10 / 60	
	Unit FLA	3.1
Accessories		
ASME T&P Relief Valve	Yes	
Brass Drain Valve	Yes	
Direct Vent Concentric Penetration Kit	Yes	
Fuel Pressure Regulator	Yes	
Draft Control	Yes	
Low Water Cut-Off	Yes	
Drain Pan	Yes	
Pan Drain with Alarm	Yes	

PLUMBING FIXTURE SCHEDULE											
NOTE: ALL PLUMBING FIXTURES AND FAUCETS SHALL BE PROVIDED IN CUSTOM COLORS AND FINISHES. COORDINATE COLOR & FIXTURE SELECTION WITH THE ARCHITECT AND OWNER.											
Tag	Fixture Type	Mount	Fixture Mfr./Model #	Domestic Water		Sanitary		Faucet Mfr./Model #	Flush/Valve Mfr./Model #	Seat Mfr./Model #	Remarks
				CWS	HWS	Drain	Trap				
WC-1	Water Closet	Floor	American Standard 238AA.114CP	1/2"	---	4"	Integral	---	---	Integral	Floor-Mounted, Vitreous China, Two-Piece, Elongated Bowl Water Closet, Flow Rate of 1.00 GPF, ADA Compliant (Min. 17" Rim Height), WaterSense Labeled. Coordinate Lever Location w/ Approach Side. Provide w/ Elongated Toilet Seat. Provide Braided, Flexible Stainless Steel Supply w/ Angle Stop.
L-1	Lavatory Sink	Under Mount	American Standard 0545.000	1/2"	1/2"	1-1/4"	1-1/4"	Zurn Z6956-XL-CV-F-CP4	---	---	Under counter-Mounted, Vitreous China Lavatory Sink w/ Integral Overflow, ADA Compliant Installation. Provide Battery Powered, Sensor Operated Faucet w/ a Flow Rate of 0.5 GPM. Provide Braided, Flexible Stainless Steel Supplies w/ Angle Stops, P-Trap Assembly, Pop-Up Drain and Z1240-EZR Sundara Lavatory Carrier.
UR -1	Urinal	Wall-Hung	Zurn Z5755-U	1"	---	2"	Integral	---	Zurn Z6003AV-WS1	---	Wall-Hung, Vitreous China, Top Spud, ADA Rim Height Of 15-1/4" A.F.F., Exposed Automatic Flush Valve With Flow Rate Of 0.5 GPF, & Zurn Z1222 Wall Urinal Support System.
EWC-1	Water Cooler	Wall	Ebay LZS8WSLK	1/2"	---	1-1/4"	1-1/4"	---	---	---	Enhanced ezH2O Bottle Filling Station, Filtered 8 GPH Light Gray, HandsFree, Visual Monitor, Automatic Filter Status Reset, Filtered, Energy Savings, Green Ticker, Laminar Flow, Antimicrobial, Real Drain.
MR-1	Mop Sink	Floor	Fiat MSB2424	3/4"	3/4"	3"	3"	Moen 8124	---	---	24"x24" cast stone floor model mop sink with 3" outlet stainless steel rim gaurd and combination supply faucet with P-trap, integral stops and vacuum breaker hose connection.
FD-1	Floor Drain	Floor	Zurn Z415-BZ1	---	---	3" / 4"	3" / 4"	---	---	---	Dura-Coated Cast Iron Body Floor Drain w/ Bottom Outlet, Combination Invertible Membrane Clamp and Adjustable Collar w/ Seepage Slots and Top Assembly, Light-Duty, Heat Proof Strainer. Provide w/ Trap Primer Connection, Stabilizer Assembly and Vandal-Proof Secured Top. For Any Floor Drain Installed in Mechanical Rooms Provide w/ 4" Diameter Funnel Accessory. Refer to Plans for Floor Drain Size (Match to Pipe Size).
RD-1	Roof Drain	Roof	Zurn Z100-DR-89	---	---	3" / 4"	3" / 4"	---	---	---	High efficiency flow performing roof drain w/ 16-9/16" body diameter and smooth funnel-shaped interior surface. Dura-coated cast iron bodies w/ combination membrane flashing clamp/gravel guards, top-set deck plate and low silhouette polydomes, provide with compatible outlet type to connect to storm drainage piping.
Notes: 1. Provide Water Hammer Arresters (WHA), Similar to Zurn Wilkins 1260XL, on the Domestic Water Branch Pipes Serving Flush Valve Fixtures (if Applicable). Install and Size per Manufacturer's Recommendations. 2. Provide Trap Primer Valves, Similar to Zurn Z1022, for all Floor Drains. Install and Size per Manufacturer's Recommendations. 3. Provide Individual Quarter-Turn, Lead-free Shut-Off Valves at Each Plumbing Device / Fixture w/ a Water Connection. All Valves Shall Match Pipe Size and Shall be Installed in a Fully Accessible Location. 4. Provide Floor Cleanouts (FCO), Similar to Zurn Z1400-BZ, in Locations as Indicated on Floor Plans. Install and Size per Manufacturer's Recommendations. 5. Provide Wall Cleanouts (WCO), Similar to Zurn Z1446, at the Base of All Sanitary and Storm Risers and in Locations as Indicated on Floor Plans. Install and Size per Manufacturer's Recommendations.											

MATERIAL AND INSULATION SCHEDULE					
System	Material	Insulation			
	Basis of Design	Basis of Design	Type	Wall (in)	Vapor Barrier
Domestic CW - Above Grade	Type "L" Copper	Certainleed	500" Snap On	1/2	Yes
Domestic HW & HWR - Above Grade	Type "L" Copper	Certainleed	500" Snap On	1	Yes
Sanitary Piping - Above Grade	Cast Iron	-----	-----	-----	-----
Sanitary Piping - Below Grade	Service Weight Cast Iron	-----	-----	-----	-----
Sanitary Vent Piping	Cast Iron	-----	-----	-----	-----
Natural Gas Piping	Sch. 40 Black Steel	-----	-----	-----	-----
Comply with Utility company standards.					

SUMP PUMP SCHEDULE		
Unit Designation	SP-1	
Basis of Design	Penn Pump	
Pump Model No.	I137	
Side Outlet Discharge Size	1-1/2"	
Vent Size	1-1/2"	
System	Duplex Wastewater Sump Pump	
GPM	50	
Head (FT)	10	
Dimensions(Ø x D)(in)	24 x 36	
Fiberglass Basin	Yes	
Electrical	208/1Ø/60	
	HP	1/2
	Amps	6.2
Accessories		
Control Panel Type	Duplex NEMA 4X	
Remote Alarm/Control Panel	Yes / Wall Mounted	
On/Off Switch	Yes	
Starters & Disconnects	Yes	
Check Valve	Yes	
Low Suction Cut-off	Yes	
Lights and Horns	Yes	
High Water Alarm	Yes	
Electric Alternation	No	
Float Controls	Yes	
Electrical Connections	20ft. Cord	
NOTES: Pump off float shall be set at height to allow the maximum pumping range. Off float height shall meet manufacturers recommendations for minimum depth required for proper pump operation.		

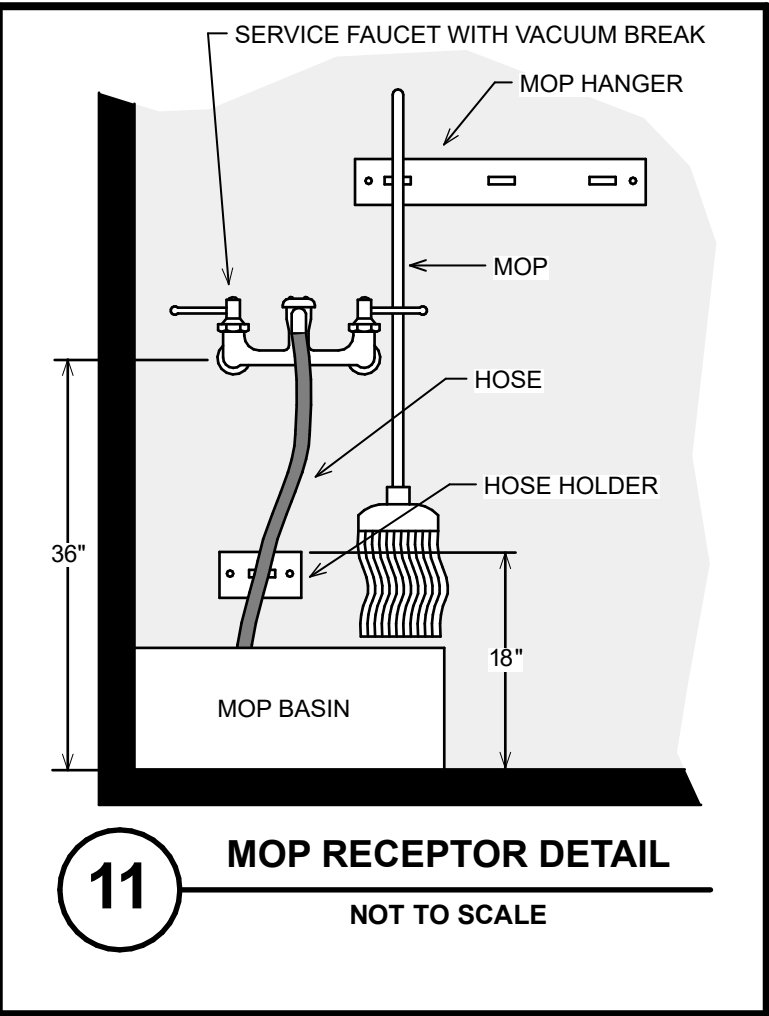
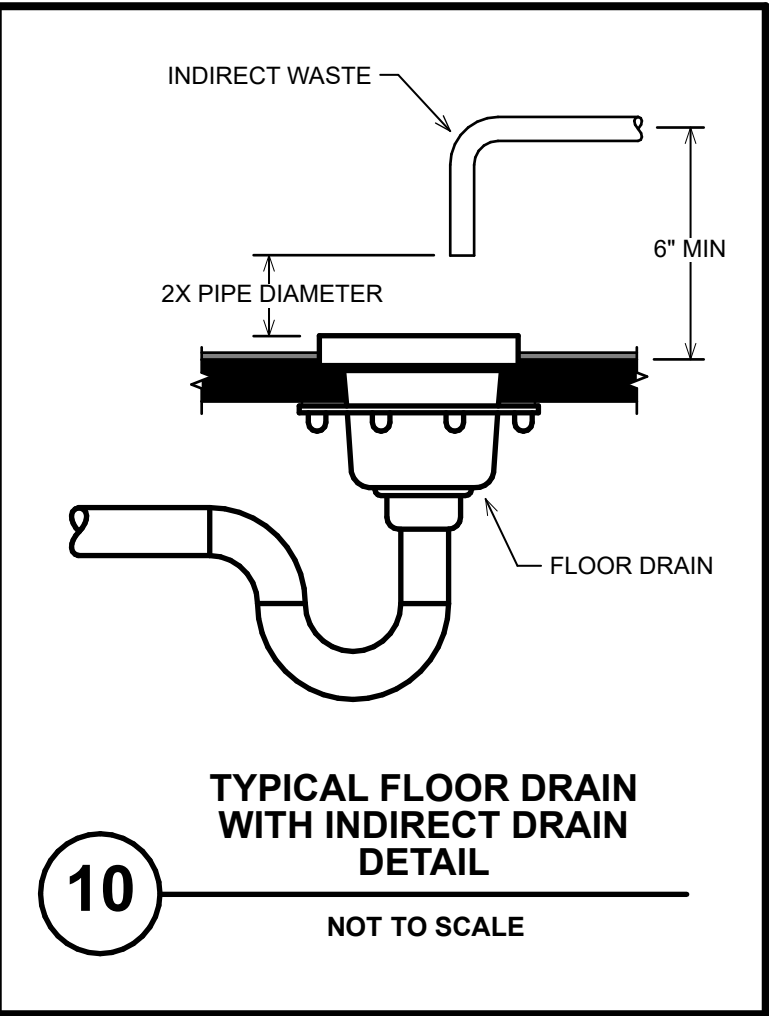
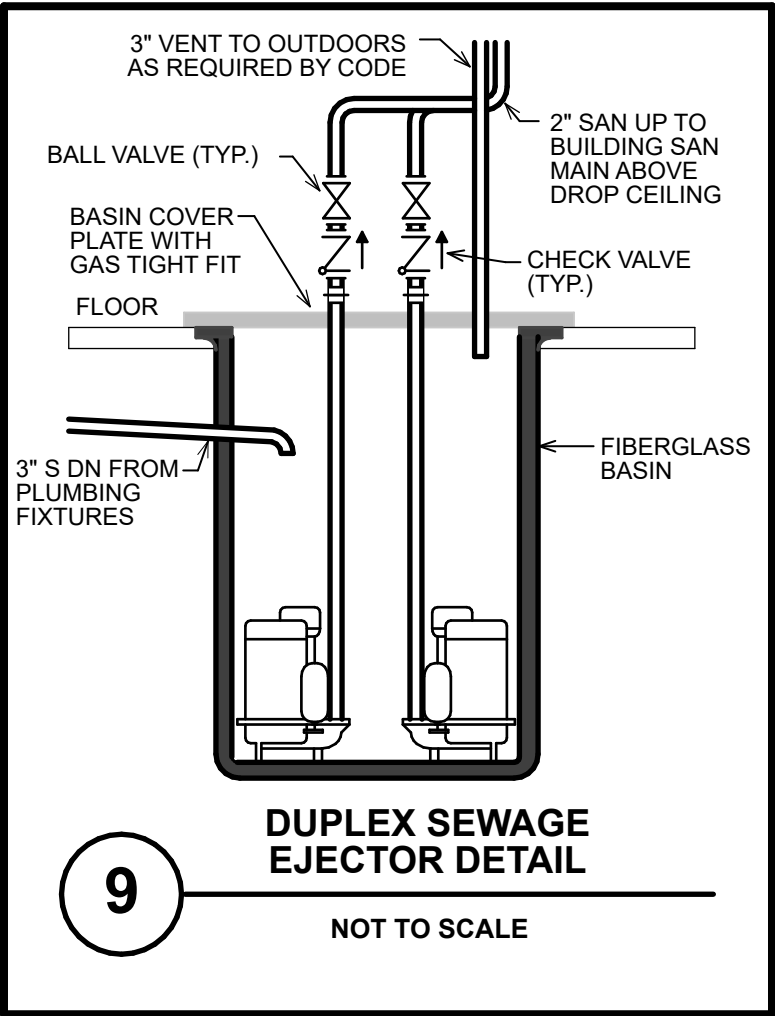
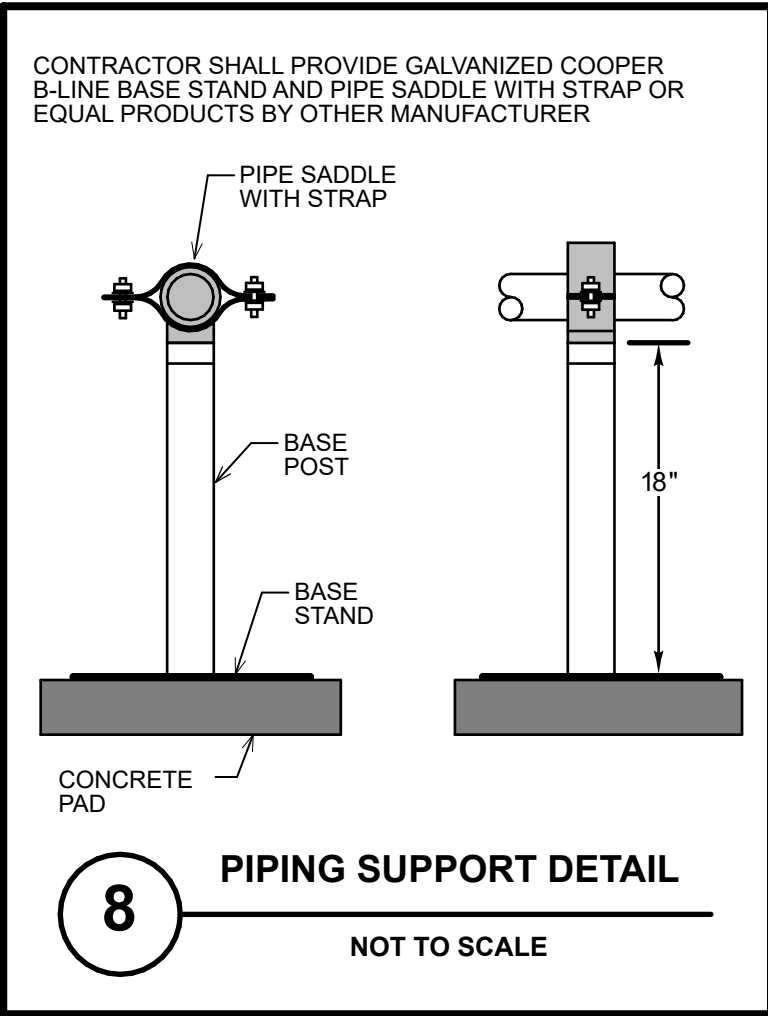
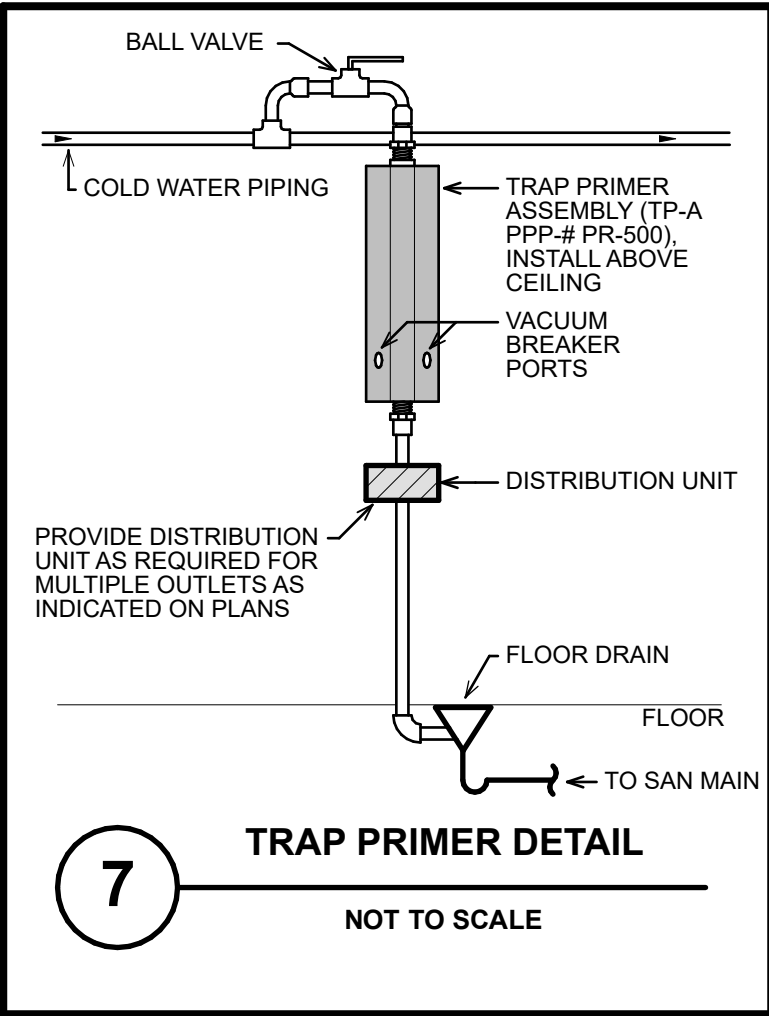
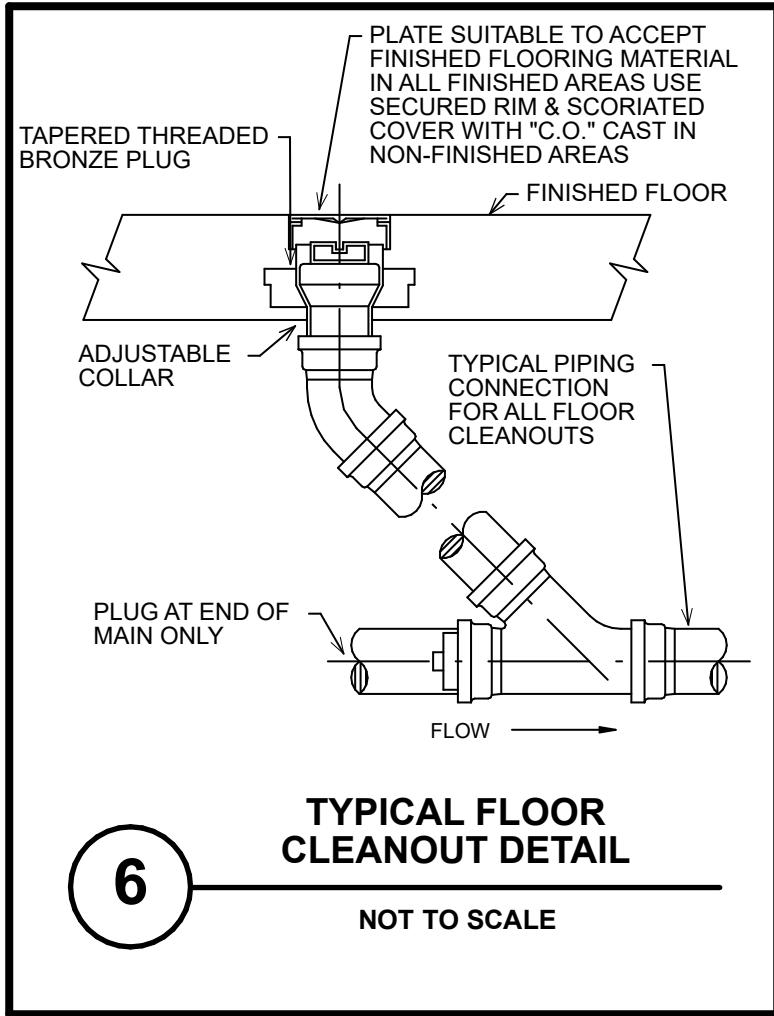
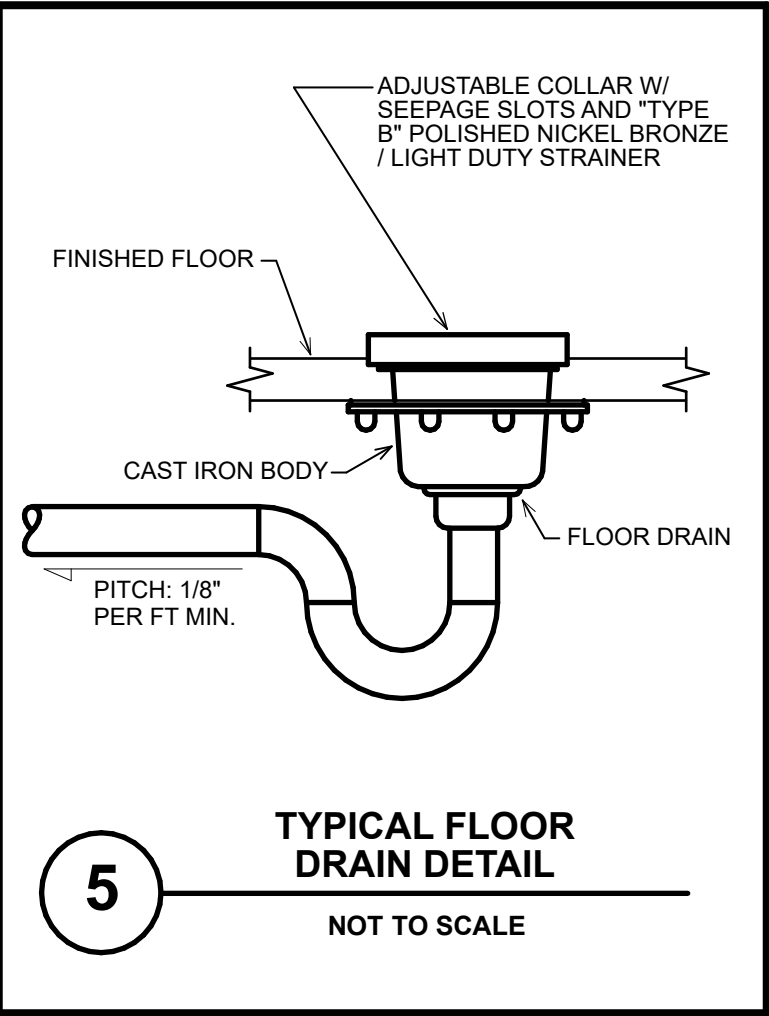
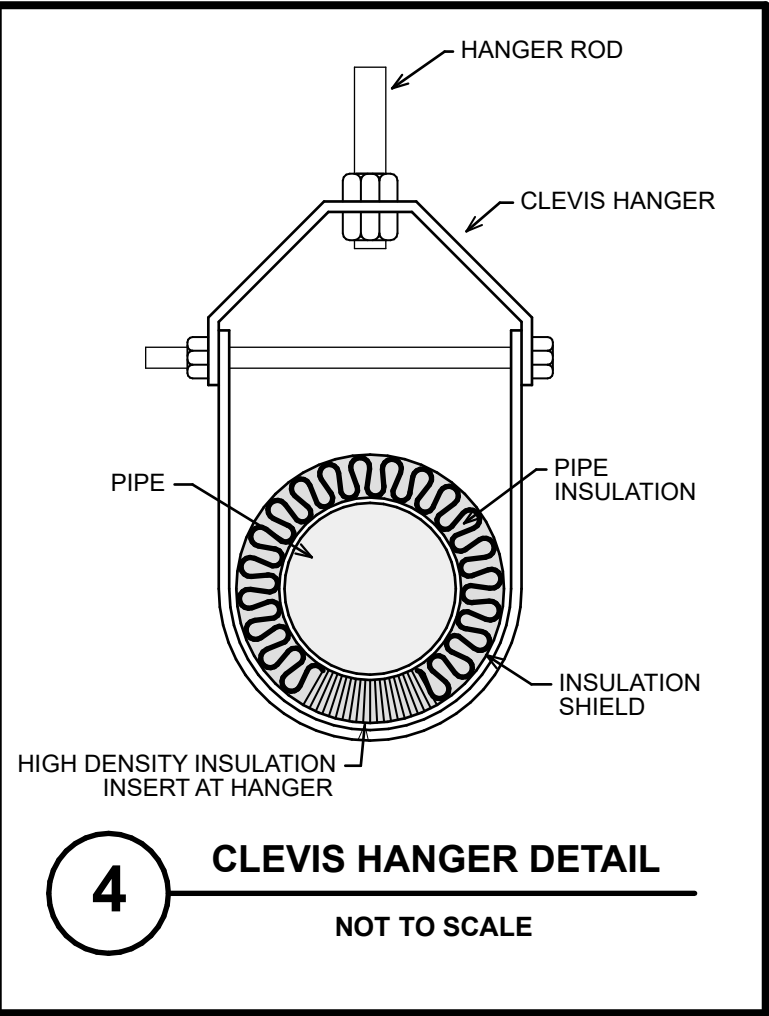
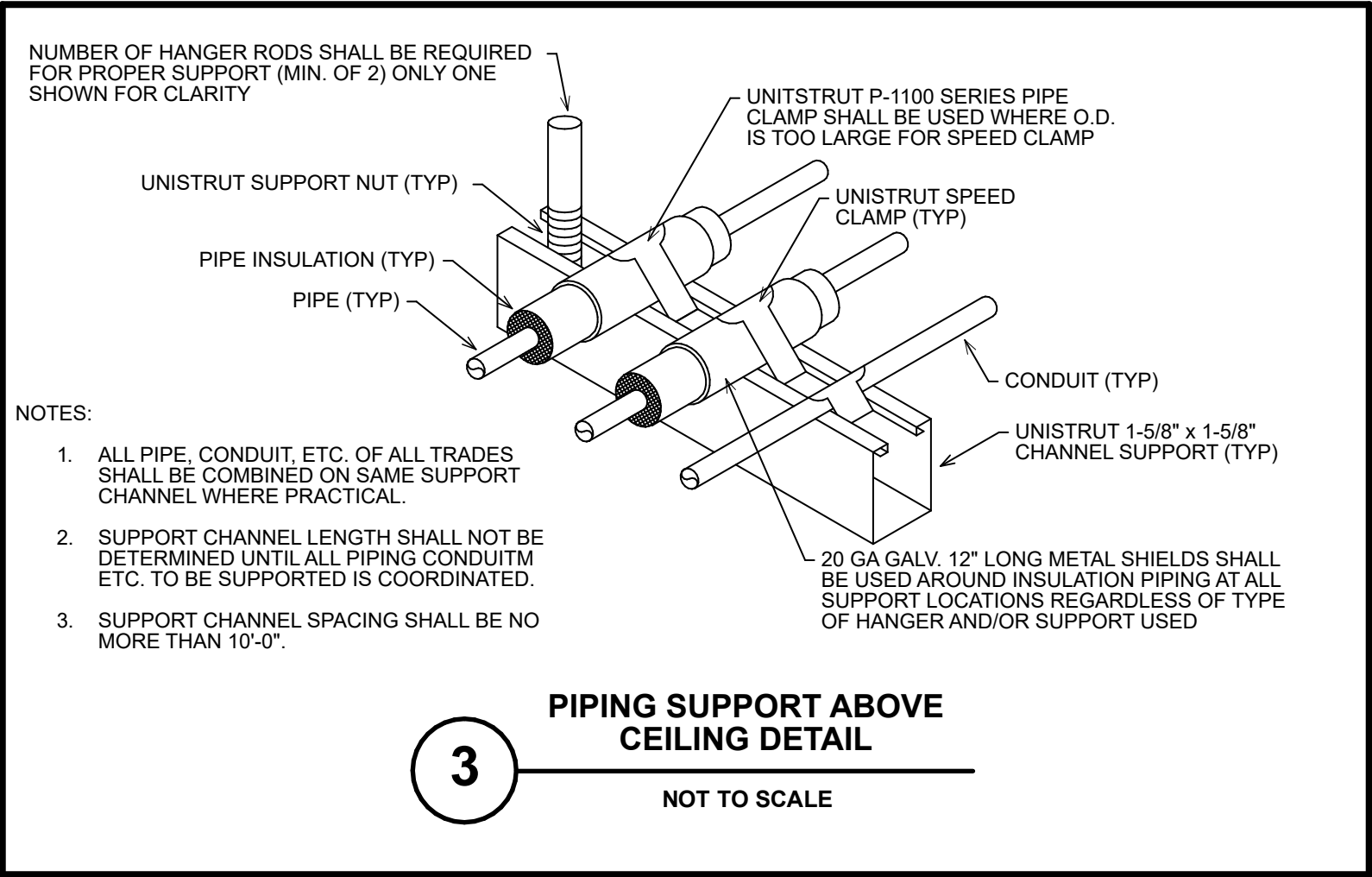
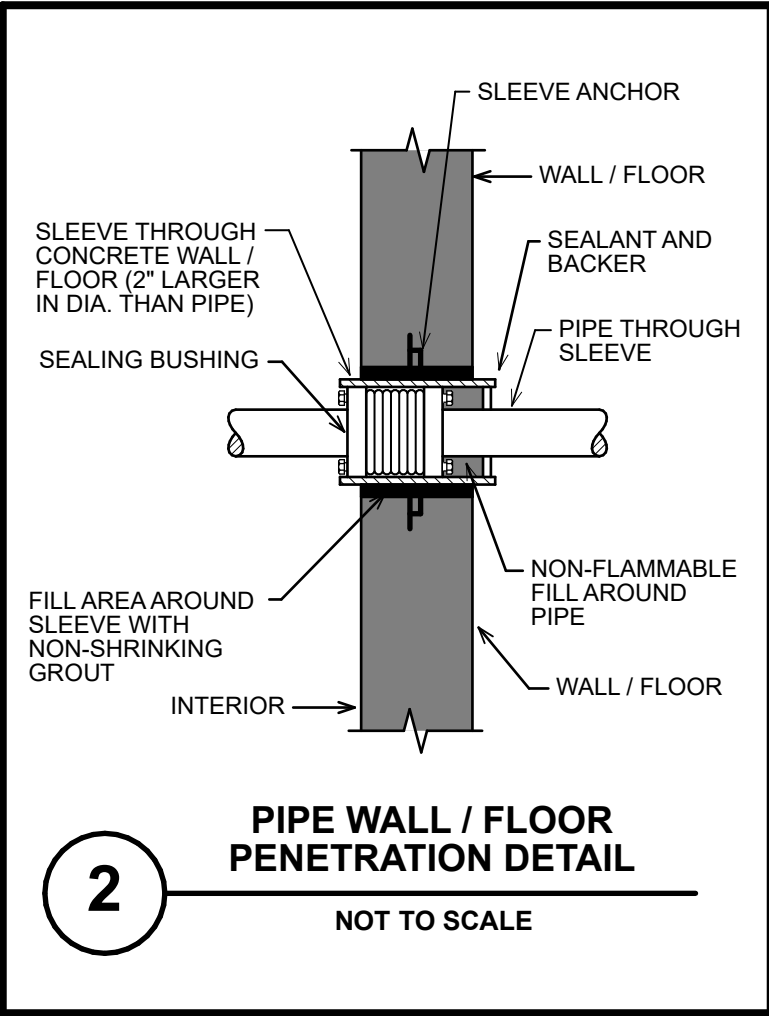
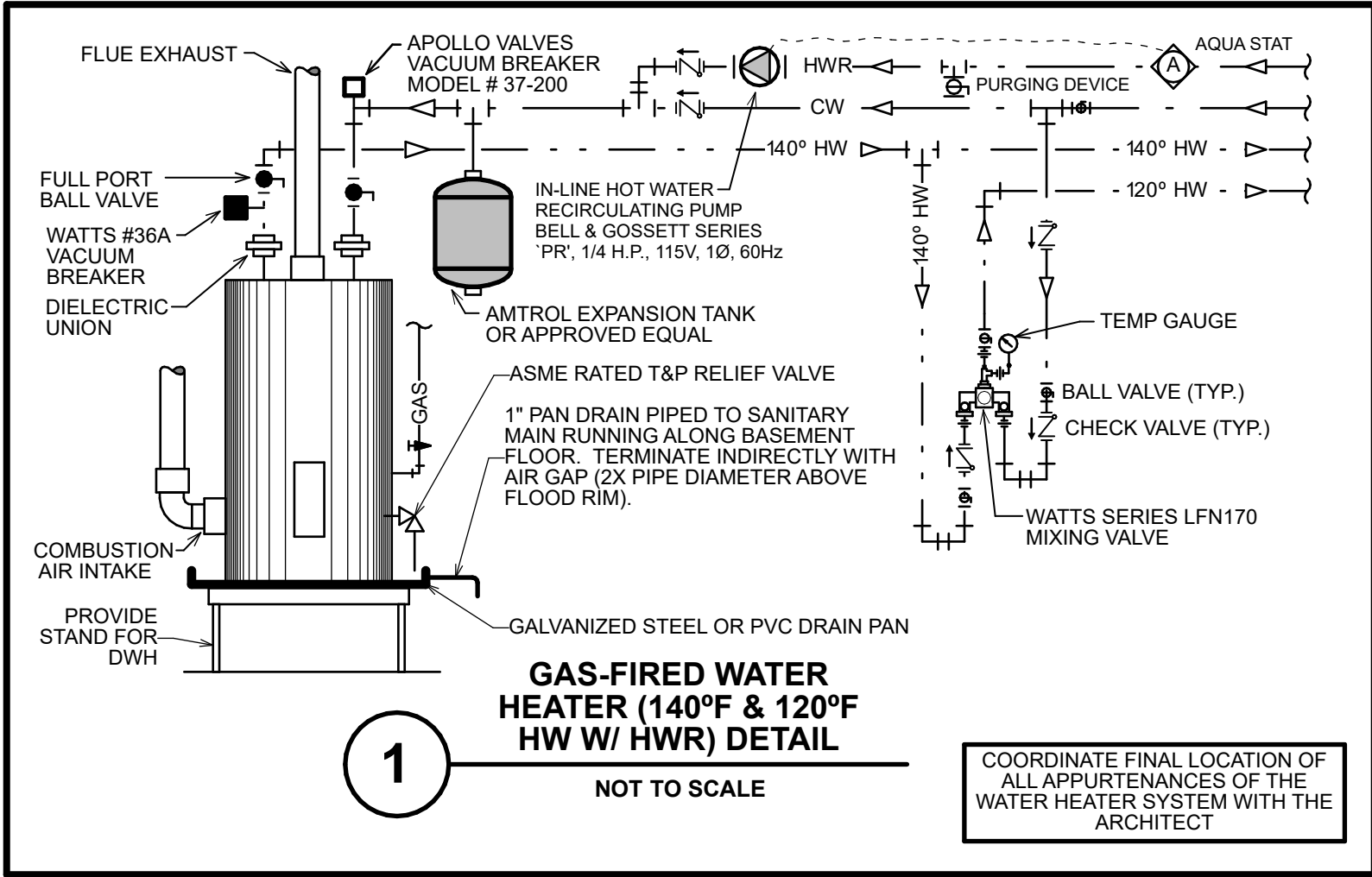
ELECTRICAL COORDINATION		
1. IT SHALL BE THE RESPONSIBILITY OF THE PLUMBING CONTRACTOR TO COORDINATE THE LOCATIONS OF PIPING WITH THE ELECTRICAL CONTRACTOR. PLUMBING PIPING SHALL NOT BE INSTALLED WITHIN THE DEDICATED EQUIPMENT SPACE REQUIRED FOR EXISTING OR NEW ELECTRICAL EQUIPMENT.		
2. COORDINATION OF PIPING LOCATIONS SHALL BE SOLELY THE RESPONSIBILITY OF THE PLUMBING CONTRACTOR. APPROVAL OF PLUMBING SUBMITTAL DRAWINGS DOES NOT RELEASE THE CONTRACTOR FROM COORDINATION RESPONSIBILITY. FINAL COORDINATION SHALL OCCUR IN FIELD WITH ELECTRICAL CONTRACTOR. FAILURE TO COMPLY WITH THIS REQUIREMENT MAY RESULT IN RELOCATION OF SUPPRESSION SYSTEM PIPING AT CONTRACTOR'S EXPENSE.		
3. PER NFPA 70, ARTICLE 110.26(F), DEDICATED EQUIPMENT SPACE SHALL APPLY TO SWITCHBOARDS, DISTRIBUTION PANELS, AND MOTOR CONTROL CENTERS. THE SPACE EQUAL TO THE WIDTH AND DEPTH OF THE EQUIPMENT AND EXTENDING FROM THE FLOOR TO A HEIGHT OF 6' ABOVE THE EQUIPMENT OR TO THE STRUCTURAL CEILING, WHICHEVER IS LOWER, SHALL BE DEDICATED TO THE ELECTRICAL INSTALLATION. NO PIPING, DUCTS, LEAK PROTECTION APPARATUS, OR OTHER EQUIPMENT FOREIGN TO THE ELECTRICAL INSTALLATION SHALL BE LOCATED IN THIS ZONE.		

PLUMBING SYMBOLS, INDICATIONS, & ABBREVIATIONS			
	EQUIPMENT DESIGNATION TAG		DIRECTION OF FLOW
	GAS SHUT-OFF VALVE W/ DRIP LEG		PIPE UP
	GAS REGULATOR		PIPE DN
	GAS METER		PIPE CAPPED
	WATER METER		BRANCH CONNECTION (BOTTOM)
	BACK FLOW PREVENTOR		BRANCH CONNECTION (SIDE)
	WATER HAMMER ARRESTOR		BRANCH CONNECTION (TOP)
	PUMP		DEMOLITION WORK
	SOLENOID VALVE		EXISTING WORK TO REMAIN
	SHUT-OFF VALVE		BELOW GRADE SANITARY PIPING
	PRESSURE REDUCING VALVE		ABOVE GRADE SANITARY PIPING
	CHECK VALVE		INDIRECT WASTE PIPING
	BALANCE VALVE		BELOW GRADE VENT PIPING
	HOSE BIB		VENT PIPING
	FLOOR SINK		PUMPED WASTE (GREASE)
	CLEAN OUT		BELOW GRADE GAS PIPING
	FLOOR CLEAN OUT		GAS PIPING
	ROOF DRAIN		BELOW GRADE DW PIPING
	FLOOR DRAIN		COLD WATER PIPING
	MIXING VALVE		HOT WATER PIPING
	POINT OF DEMOLITION		HOT WATER RETURN PIPING
	POINT OF CONNECTION		
		AD	AREA DRAIN
		AW	AIR ADMITTANCE VALVE
		AWB	AUXILIARY WALL BOX
		BFP	BACKFLOW PREVENTER
		BT	BATHTUB
		CO	CLEANOUT
		CW	COLD WATER
		DFU	DRAINAGE FIXTURE UNIT
		DN	DOWN
		DWH	DOMESTIC WATER HEATER
		(E)	EXISTING TO REMAIN
		EEW	EMERGENCY EYE WASH
		ESH	EMERGENCY SHOWER
		EWC	ELECTRIC WATER COOLER
		FAI	FRESH AIR INLET
		FD	FLOOR DRAIN
		G	GAS
		H	HOT WATER
		L	LAVATORY
		(RE)	RELOCATE EXISTING
		(R)	DEMOLISH AND REMOVE
		RD	ROOF DRAIN
		RV	RELIEF VENT
		S / SAN	SANITARY
		SH	SHOWER
		SK	SINK
		SUDS RV	SUDS RELIEF VENT
		WB	WASHER BOX
		WC	WATER CLOSET
		WH	WALL HYDRANT
		V	VENT
		V / VENT	VENT THRU ROOF
		VTR	

PLUMBING SPECIFICATIONS

- GENERAL WORK:**
- The Contractor shall provide all labor, materials, tools, apparatus and equipment required to complete his work in accordance with the contract documents, codes, laws and ordinances, and accepted trade procedures.
 - In preparing his estimate, the contractor shall review all of the contract documents including those of the other trades in order to acquaint himself with existing and related conditions that may, will, or could affect his work. He shall be experienced, skilled, and knowledgeable with this type of construction and shall be expert and proficient in the preparation of estimates and the comprehension, implementation, and interpretation of contract documents such as those prepared for this project.
 - The contractor by his acceptance of the contract guarantees that all work installed shall be free from all defects in workmanship and materials and that all apparatus furnished by him shall develop the capacities and characteristics specified. He further guarantees that it, during the period of one (1) year from the date of the certificate of completion and acceptance of the work, any such defects in workmanship, material or performance appear, such defects shall be remedied by him without cost to the owner. If the contractor fails to remedy the defects as outlined within a reasonable length of time, to be specified in a notice from the owner's authorized representative to the contractor, the owner will have such work done, and he will charge the cost to the contractor.
 - The contractor shall visit the site before he submits his proposal. He shall examine all existing conditions which affect the work. The submission of the proposal shall be considered evidence that this requirement has been fulfilled. No extra payment will be allowed for additional work made necessary by the failure to visit the site.
 - Plumbing work shall be installed in a neat and workmanlike manner in accordance with latest and best practices of the trade. Only mechanics skilled in this type of Work shall be employed and utilized by Contractor for this Division in the execution of this Work.
 - The contract drawings are diagrammatic and indicate the general arrangement of all systems and work included in the contract. The contract drawings are not to be scaled. The architectural contract drawings and details together with the other contract documents shall be examined for all dimensional information.
 - The contractor shall follow the contract drawings in laying out his work, and he shall also check the contract drawings of the other trades to verify spaces in which his work shall be provided.
 - The contractor shall, without additional costs to the owner, make reasonable modifications in the layout of his work in order to prevent conflicts with the work of other trades or for the proper execution of his work.
 - The contractor shall supply all labor required to perform all work which may be claimed by trade organizations within his jurisdiction. All work shall be done in accordance with the latest edition of the 2018 National Standard Plumbing Code, the codes of the International Code Council, the National Fire Protective Association and all other regulatory bodies having jurisdiction. All materials and equipment shall bear the stamps or seals of the NFPA, ASME, NEMA, IEEE, UL and other recognized industry regulatory groups.
 - The contractor shall give all necessary notices, obtain all permits, pay all governmental taxes, fees and other costs in connection with his work. He shall file all necessary plans, and prepare all other documents including additional detailed plans that are required for compliance with all applicable laws, ordinances, rules and regulations.
 - The Contractor shall coordinate with the General Contractor and locate all required cutting and patching and the like required by the installation of the plumbing work.
 - All work shall be installed in strict accordance with the equipment manufacturer's recommendations and requirements. All systems are to be tested, adjusted and balanced to provide performance as indicated on the drawings. Test and adjust all safety controls.
 - Coordinate to assure that all work of all trades will be concealed within the wall and ceiling construction and without the need to reduce ceiling heights. Report exceptions to the Architect prior to construction and erection of the work. Openings around piping passing through the construction shall be sealed with fire barrier caulking. All materials located within the return air plenum shall be non-combustible with flame spread ratings of 25 or less and smoke developed ratings of 50 or less. All control wiring located within ceiling return air plenums shall be plenum rated or shall be run in conduit. All work shall be located to avoid conflicts with other work and provide adequate clearances for architectural design, proper operation, adjustments, component service, and provide a minimum 2" clearance between all piping and other work.
 - Provide supports, hangers, flexible pipe connections, vibration isolation, supplementary supports, controls and wiring, cleaning, painting, specialties and all other labor, materials, devices and services required for a complete, first quality installation. All work shall be supported from the building structural system. Work shall not be supported from the ceiling suspension system, from electrical work, nor from other mechanical work. Unless otherwise indicated, run all piping as high as possible. Provide drivers for all motor driven equipment.
 - The contractor shall provide and maintain in good order a complete set of blue line prints of the contract drawings. As the work progresses, the actual location of all work shall be clearly recorded, including all changes to the contract and equipment size and type. These prints shall be available at the site for inspection at all times. At the conclusion of the work, the contractor shall, at his own expense, obtain a set of reproducible of the original contract drawings, and utilizing the symbols on the contract drawings, shall incorporate all "as built" data in a clearly legible and reproducible manner. All schedules shall be corrected to indicate "as built" conditions. All revisions shall be incorporated on these reproductions including all sketches and written directives. All concealed equipment, mainfeeders, pull and junction boxes, etc. shall be dimensionally located from the building structure. As a condition for acceptance of the work, the "as built" reproducible and one (1) set of prints shall be signed, dated and delivered to the engineer.
- PLUMBING:**
- All shutoff valves, fixture trims, and plumbing specialties shall be Lead Free per the current regulations.
 - All shutoff valves shall be ball or gate valves. All valves shall be bronze, 125 psi WP, solid wedge disc, non-rising stem, soldered ends. Provide shut-off valves for all connected equipment and plumbing fixtures.
 - The Contractor shall provide a sanitary drain from all fixtures. The Contractor shall provide all required vent piping for all fixtures installed. Pitch Drainage Piping Equal or Smaller than 3"Ø at 1/4" per foot. Pitch Drainage Piping 4"Ø or Larger at 1/8" per foot.
 - Provide cleanouts in new sanitary and piping 50 feet on centers on all horizontal piping, at direction changes of 45° or more, and elsewhere required by codes. Cleanouts accessible through walls shall be provided with chrome-plated covers and frame, in floors with recessed top to receive floor finishing material.
 - The Contractor shall sterilize all new domestic water piping as required by the plumbing code and the Health Department. The plumbing contractor shall provide water hammer arresters as required. Water hammer arresters: Smith Series 5000 stainless steel Hydrotrols, P.D.I. certified and A.S.S.E. approved.
 - Alternate sanitary vent piping shall be standard weight uncoated cast iron bell and spigot soil pipe and fittings conforming to ASTM A74 with caulked oakum and lead joints, no-hub if permitted by code, DWV Copper, or no-hub if permitted weight galvanized steel with galvanized cast iron banded and recessed screwed drainage fittings, ASTM A125. Alternate sanitary piping within the building shall be standard weight, uncoated cast iron bell and spigot soil pipe and fittings conforming to ASTM A 74 with caulked oakum and lead joints or DWV copper. Codes permitting, no-hub may be used.
 - Provide thermostatic mixing valve at each lavatory, exam room sink, and any sink where hand washing will take place. The mixing valve shall be similar to Powers Model 480, with the following devices: union inlet strainers, check stops, and shutoff valves. Mixing valve shall be installed under the counter or fixture being served. Install per manufacturer's recommendations. Leaving water temperature shall be adjusted to 110°F.
 - Provide trap primers for all floor drains. Trap primers shall be supplied with a 1/2" cold water branch pipe. The pipe shall be installed below grade and insulated with 1" Armaflex.
 - Floor Drains shall be installed according to the 2018 National Standard Plumbing Code.
 - All Plumbing must be tested and approved by plumbing inspector and meet the requirements of the 2018 National Standard Plumbing Code.
 - All potable water outlets shall be protected from cross connection as required per the 2018 National Standard Plumbing Code and local utility rules and regulations.
 - Provide an unconditional one-year written guarantee to replace or repair all defective work.
 - All hole drilling for pipe hangers or floor and wall penetrations shall be by the Plumbing Contractor for Plumbing work.
 - All piping shall be supported by pipe hangers of similar material as pip ng being supported. Suspend from building structure with spacing of hangers not to exceed requirements of the latest edition of the IBC 2018 and the 2018 National Standard Plumbing Code as well as the local authority having jurisdiction. Do not use wire or perforated metal strap to support piping. Do not rest piping on any part of building structure for support. Provide all necessary hangers, inserts, supports required to properly support the equipment and piping. Hanger and supports shall be made of the same material as the material of pipe or equipment which is being supported.
 - All plumbing fixtures and fixture trim shall be provided as specified herein. Fixtures shall be complete with all necessary wall hangers & supports, supply stop valves, 17-gauge chrome-plated brass drainage fittings & p-trap, and chrome-plated escutcheons. All exposed piping shall be chrome-plated brass. All fixtures shall be installed level and plumb according to manufacturer's recommendations and code requirements. Provide mildew resistant joint sealant similar to Phenoseal vinyl adhesive caulk.
 - Seismic protection for the Plumbing system shall be provided as required by the IBC 2018.
 - All gas piping, electric, and other rooftop utilities are to be run from below and brought directly to the machinery they service.
 - Contractor to X-Ray slab/floor for utilities prior to saw cutting, coring, or demolition of floors.
 - All trenches to be backfilled and compacted to 95% compaction, or filled with 3/4" clean stone. Landlord to inspect compaction prior to pouring concrete.



No.	DATE	DESCRIPTION			REV'D BY
APPROVAL:		PROJECT:			
		ADA RENOVATIONS TO THE GLOUCESTER TOWNSHIP BLACK BOX COMMUNITY CENTER			
		3 S BLACKHORSE PIKE BLACKWOOD, NEW JERSEY			
		Joseph F. McKernan Jr., Architects & Associates 100 Dobbs Lane Suite 204 Cherry Hill, New Jersey 08034		TITLE: PLUMBING SCHEDULES & DETAILS	
		3800 Horizon Blvd., Suite 203 Trenton, NJ 08611 Tel: (609) 322-7711 Fax: (609) 322-7709 www.holsteinwhite.com		SCALE: AS NOTED PROJECT NO: 23-580 DATE: xx/xx/xx REV'D: SW DRAWN BY: SH CHECKED BY: SW	
		SCOTT A. WHITE NJ REG. NO. 34620407000 NJ AUTH. NO. 246204143700		P-3.0	



No.		DATE	DESCRIPTION	REV'D BY
APPROVAL:		PROJECT:		
		ADA RENOVATIONS TO THE GLOUCESTER TOWNSHIP BLACK BOX COMMUNITY CENTER		
		3 S BLACKHORSE PIKE BLACKWOOD, NEW JERSEY		
MK Joseph F. McKernan Jr., Architects & Associates 100 Dobbs Lane Suite 204 Cherry Hill, New Jersey 08034		TITLE:		PLUMBING DETAILS
HOLSTEIN WHITE		SEAL:	DIMENSIONS MUST BE VERIFIED BY CONTRACTOR. VERIFY THE ARCHITECT OF ANY DISCREPANCIES BEFORE PROCEEDING WITH CONSTRUCTION. DO NOT SCALE DRAWING.	SCALE: AS NOTED PROJ. NO.: 23-580 DATE: xx/xx/xx REV'D: SW DRAWN BY: SH CHK'D BY: SW
		SCOTT A. WHITE NJ REG. NO. 34620467000 NJ AUTH. NO. 24620467000 COPYRIGHT 2023		DRAWING NO. P-3.1



- ## GAS PIPING NOTES
1. ALL GAS PIPING SHALL BE INSTALLED PER THE REQUIREMENTS OF IFGC 2021.
 2. ALL EXPOSED EXISTING AND NEW GAS PIPING & FITTING SHALL BE COATED OR WRAPPED WITH A CORROSION-RESISTANT MATERIAL.
 3. 2" GAS (40 MBH) SIZED FOR LONGEST RUN OF 125' FT. FROM METER PER IFGC 2021, TABLE 402.4(1), LESS THAN 2 PSI, 0.3 IN. W.C. PRESSURE DROP, & 0.60 SPECIFIC GRAVITY.
 4. PROVIDE VERTICAL PIPE SUPPORTS AS REQUIRED PER 2021 IFGC.
 5. ENTIRE INSTALLATION SHALL CONFORM TO MANUFACTURER'S RECOMMENDATIONS, THE INTERNATIONAL FUEL GAS CODE, AND SOUTH JERSEY GAS RULES AND REGULATIONS.

No.	DATE	DESCRIPTION	REV'D BY
		REVISIONS	
APPROVAL:		PROJECT:	
		<p align="center">ADA RENOVATIONS TO THE GLOUCESTER TOWNSHIP BLACK BOX COMMUNITY CENTER</p> <p align="center">3 S BLACKHORSE PIKE BLACKWOOD, NEW JERSEY</p>	
 <p>Joseph F. McKernan Jr., Architects & Associates 100 Dobbs Lane Suite 204 Cherry Hill, New Jersey 08034</p>		<p>TITLE: PLUMBING RISER DIAGRAMS</p>	
 <p>1800 Harrison Blvd., Suite 503 Harrison, NJ 07033 O (201) 322-7711 F (201) 322-7749 www.holtzmanwhite.com</p>		<p>SCALE:</p> <p>AS NOTED</p> <p>PROJ. NO.: 23-562</p> <p>DATE: xx/xx/xx</p> <p>REV'D: SW</p> <p>DRAWN BY: SW</p> <p>CHECKED BY: SW</p> <p>BRUSHED ARCHITECTS & ASSOC. OFFICE 203</p> <p>SCOTT A. WHITE NJ PE NO. 2462604877000 NJ LAIC NO. 246260487000</p> <p>WARNING: THIS SET IS NOTED BY THE PROJECTOR AS BEING SUBMITTED BEFORE PROCEEDING WITH CONSTRUCTION. DO NOT STOP DRIVING.</p>	
		<p align="center">P-3.2</p>	