A NEW CLASSROOM ADDITION FOR
COLUMBIANA MIDDLE SCHOOL
222 JOINERTOWN ROAD, COLUMBIANA, ALABAMA 35051
SHELBY COUNTY BOARD OF EDUCATION

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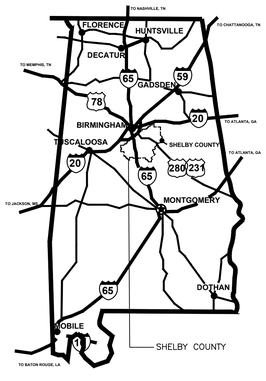
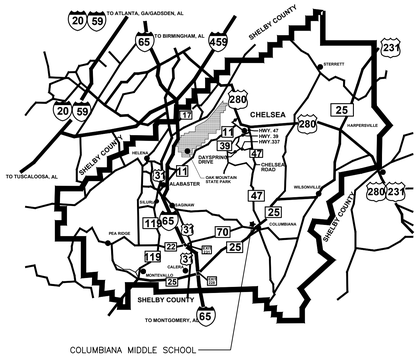


AREA MAP
STATE OF ALABAMA



VICINITY MAP
CITY OR COUNTY, STATE

DRAWING INDEX (SET - 59 TOTAL SHEETS)

GENERAL (6 SHEETS)

- T1 - TITLE AND INDEX
- LS1.1 - LIFE SAFETY PLAN
- SH1.1 - TORNADO SHELTER PLANS
- G1.1 - GENERAL NOTES
- G1.2 - GENERAL NOTES
- G1.3 - GENERAL NOTES

CIVIL DRAWINGS (8 SHEETS)

- C0.1 - CIVIL NOTES
- C1.0 - SITE DEMOLITION PLAN
- C2.0 - SITE LAYOUT PLAN
- C3.0 - SITE GRADING AND DRAINAGE PLAN
- C4.0 - UTILITY PLAN
- C5.0 - EROSION CONTROL PLAN
- C6.0 - CIVIL DETAILS
- C6.1 - CIVIL DETAILS

ARCHITECTURAL DRAWINGS (22 SHEETS)

- A1.1 - ARCHITECTURAL SITE LAYOUT PLAN
- A2.0 - PARTIAL DEMOLITION FLOOR PLAN
- A2.1 - PARTIAL DIMENSIONED FLOOR PLAN
- A2.2 - PARTIAL ANNOTATION FLOOR PLAN
- A2.3 - PARTIAL ROOF PLAN
- A2.4 - TYPICAL ROOF DETAILS
- A2.5 - DOOR AND WINDOW SCHEDULE AND DETAILS
- A2.6 - PLAN DETAILS
- A2.7 - CANOPY PLAN, ELEVATIONS, AND DETAILS
- A3.1 - BUILDING ELEVATIONS
- A3.2.1 - BUILDING SECTIONS
- A3.3.1 - WALL SECTIONS
- A3.3.2 - WALL SECTIONS
- A3.3.3 - WALL SECTIONS
- A5.1 - ENLARGED TOILET PLAN INTERIOR ELEVATIONS AND DETAILS
- A6.1 - INTERIOR ELEVATIONS AND ENLARGED PLANS
- A6.2 - INTERIOR ELEVATIONS
- A6.3 - DETAILS
- A7.1 - REFLECTED CEILING PLAN AND DETAILS
- A8.1 - FINISH FLOOR PLAN, TRANSITION DETAILS, FINISH SCHEDULE, AND MATERIAL LEGEND
- A9.1 - SIGNAGE PLAN
- A10.1 - ALTERNATE FINISH FLOOR PLAN - GYMNASIUM

STRUCTURAL DRAWINGS (11 SHEETS)

- S1.0 - GENERAL NOTES
- S1.1 - GENERAL NOTES - CONTINUED
- S1.2 - TYPICAL DETAILS
- S1.3 - TYPICAL DETAILS
- S1.4 - TYPICAL DETAILS
- S2.1 - FOUNDATION PLAN
- S2.2 - ROOF FRAMING PLAN
- S3.1 - SECTIONS AND DETAILS
- S3.2 - SECTIONS AND DETAILS
- S4.1 - SECTIONS AND DETAILS
- S4.2 - SECTIONS AND DETAILS

PLUMBING DRAWINGS (2 SHEETS)

- P0.1 - PLUMBINGSCHEDULES, DETAILS, AND NOTES
- P1.0 - PLUMBING FLOOR PLAN

MECHANICAL DRAWINGS (5 SHEETS)

- M0.1 - MECHANICAL LEGEND, SCHEDULES, AND NOTES
- M0.2 - MECHANICALDETAILS AND SCHEDULES
- M0.3 - MECHANICAL DETAILS AND CONTROLS
- M0.4 - MECHANICAL CALCS
- M1.0 - MECHANICAL FLOOR PLAN

ELECTRICAL DRAWINGS (5 SHEETS)

- E1.1 - SCHEDULES, SYMBOLS, AND NOTES
- E2.1 - MASTER PLAN AND SINGLE LINE DIAGRAM
- E3.1 - FLOOR PLAN LIGHTING
- E4.1 - FLOOR PLAN - POWER
- E5.1 - FLOOR PLAN - AUXLIARIES

LATHAN ▪ McKEE ARCHITECTS

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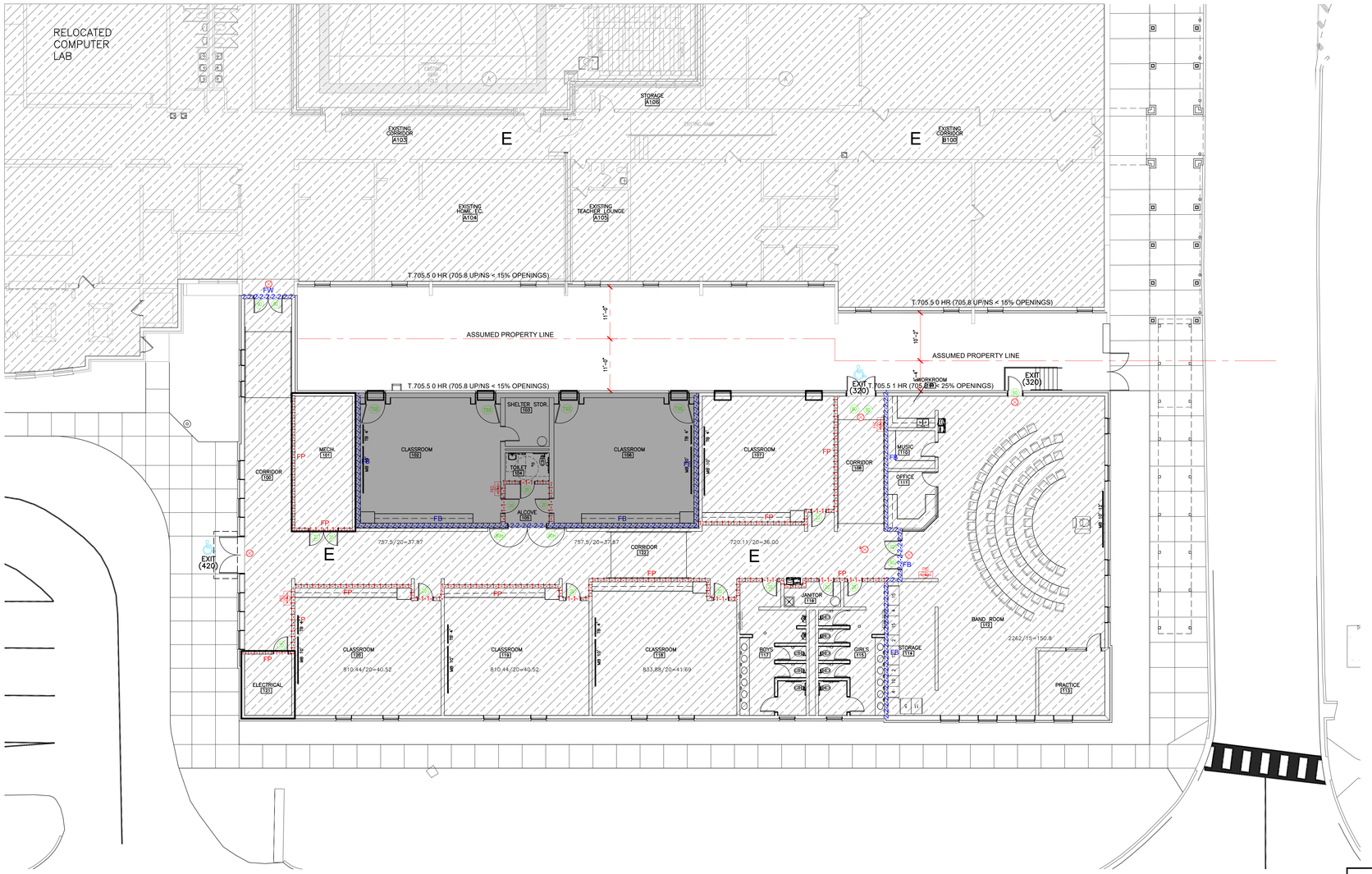
SHELBY COUNTY BOARD OF EDUCATION

SHEET TITLE:
TITLE AND INDEX

STATE OF ALABAMA
No. 7007
RYAN D. VERNON
REGISTERED ARCHITECT

PROJ. MGR.: H.RASCO
DRAWN: ELM
DATE: OCTOBER 30, 2026
REVISIONS

JOB NO.
LAA-26-054-00
SHEET NO:
T1
1 OF 6



1 LIFE SAFETY PLAN
SCALE: 3/32" = 1'-0"

2021 IBC BUILDING DATA

OCCUPANCY CLASSIFICATION:	GROUP E	
TYPE OF CONSTRUCTION:	TYPE IIB (NS)	
BUILDING AREA:	EXISTING - 60,709 S.F. NEW ADDITION - 12,553 S.F.	
TABLE 504.4 ALLOWABLE NUMBER OF STORIES:	ALLOWABLE STORIES: 2	ACTUAL STORIES: 1
TABLE 506.2 ALLOWABLE AREA:	AREA FACTOR: NS	14,500 S.F.

TABLE 601 FIRE-RESISTANCE RATING REQUIREMENTS FOR BUILDING ELEMENTS:	CONSTRUCTION TYPE:	IIB	
	STRUCTURAL FRAME:	0	
	BEARING WALLS:		
		EXTERIOR:	0
		INTERIOR:	0
	NONBEARING WALLS:		
		EXTERIOR:	SEE 705.5
		INTERIOR:	0
	FLOOR CONSTRUCTION:	0	
	ROOF CONSTRUCTION:	0	
TABLE 705.5 FIRE-RESISTANCE RATING REQUIREMENTS FOR EXTERIOR WALLS:	OCCUPANCY:	GROUP E	
	SEPARATION DISTANCE:	< 5'	1
		≥ 5'< 10'	1
		≥ 10'< 30'	0
		≥ 30'	0
TABLE 1020.2 CORRIDOR FIRE-RESISTANCE RATING PARTITIONS AND OPENING PROTECTIVES	GROUP E UNSPRINKLERED	1	

WALL TYPE LEGEND

1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1- 1 HR WALL
2-2-2-2-2-2-2-2-2-2-2-2-2-2-2-2-2- 2 HR WALL
4-4-4-4-4-4-4-4-4-4-4-4-4-4-4-4-4- 4 HR WALL

LIFE SAFETY NOTES

- FIRE EXTINGUISHER AND CABINET (PROVIDE FIRE RATED CABINETS IN RATED WALLS.)
- FE — FIRE EXTINGUISHER
- FE(K) — K-TYPE FIRE EXTINGUISHER
- EXIT SIGN DIRECTION
- ACCESSIBLE
- EXIT (320) — EXIT CAPACITY

EXTEND AND KEY ALL RATED WALLS TO SHAFT WALL SYSTEM, AND/OR BOTTOM OF ROOF ASSEMBLY

STENCIL LABEL ALL RATED WALLS & DRAFT STOPS ABOVE CEILING EACH SIDE @ 20'-0" O.C. MAX.

ALL RATED DOORS AND FRAMES TO BE LABELED WITH EMBOSSED LABELS INDICATING RATING IN MINUTES

PROVIDE FOAM FILL INSULATION AS SPECIFIED IN ALL WALLS BETWEEN TOILETS AND CLASSROOMS.

HE - HORIZONTAL EXIT	XHE - EXISTING HORIZONTAL EXIT
FB - FIRE BARRIER	XFB - EXISTING FIRE BARRIER
FP - FIRE PARTITION	XFP - EXISTING FIRE PARTITION
FW - FIRE WALL	XFW - EXISTING FIRE WALL

EGRESS TRAVEL DISTANCE — 200' DISTANCE; START; PATH; DIRECTION

LOCATION OF TORNADO STORM SHELTER

DOOR/WINDOW RATING LEGEND

- 20 — 20 MINUTE DOOR AND FRAME
- 60 — 60 MINUTE DOOR AND FRAME
- 90 — 90 MINUTE DOOR AND FRAME
- 90H — 90 MINUTE RATING AND TORNADO IMPACT RATED
- TSR — TORNADO IMPACT RATED SHUTTER

OCCUPANCY USE LEGEND

E — GROUP E

CHAPTER 29 - PLUMBING SYSTEMS

OCCUPANCY		WATERCLOSETS				LAVATORIES				DRINKING FOUNTAINS		SERVICE SINKS
USE	LOAD	RATIO	MALE	RATIO	FEMALE	RATIO	MALE	RATIO	FEMALE	RATIO	ALL	ALL
A3	163.56	1/125	.65	1/65	1.26	1/200	.41	1/200	.41	1/500	.33	
B	.78	1/25 FIRST 50 1/50 REMAINDER EXCEEDING 50.	.02	1/25 FIRST 50 1/50 REMAINDER EXCEEDING 50.	.02	1/40 FIRST 80 1/80 EXCEED 80.	.01	1/40 FIRST 80 1/80 EXCEED 80.	.01	1/100	.01	
E	236.37	1/50	2.36	1/50	2.36	1/50	2.36	1/50	2.36	1/100	2.36	
S1,S2	3.54	1/100	.02	1/100	.02	1/100	.02	1/100	.02	1/1000	.00	
REQUIRED TOTALS			3.05		3.66		2.8		2.8		2.7	1
PROVIDED TOTALS			5		6		6		7		4	1

LATHAN McKEE ARCHITECTS

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222 JOINERTOWN ROAD, COLUMBIANA, ALABAMA 35051
SHELBY COUNTY BOARD OF EDUCATION

SHEET TITLE:
LIFE SAFETY PLAN

STATE OF ALABAMA
No. 7007
RYAN D. VERNON
REGISTERED ARCHITECT

PROJ. MGR.: H.RASCO
DRAWN: HR
DATE: OCTOBER 30, 2026
REVISIONS

JOB NO.
LAA-26-054-00
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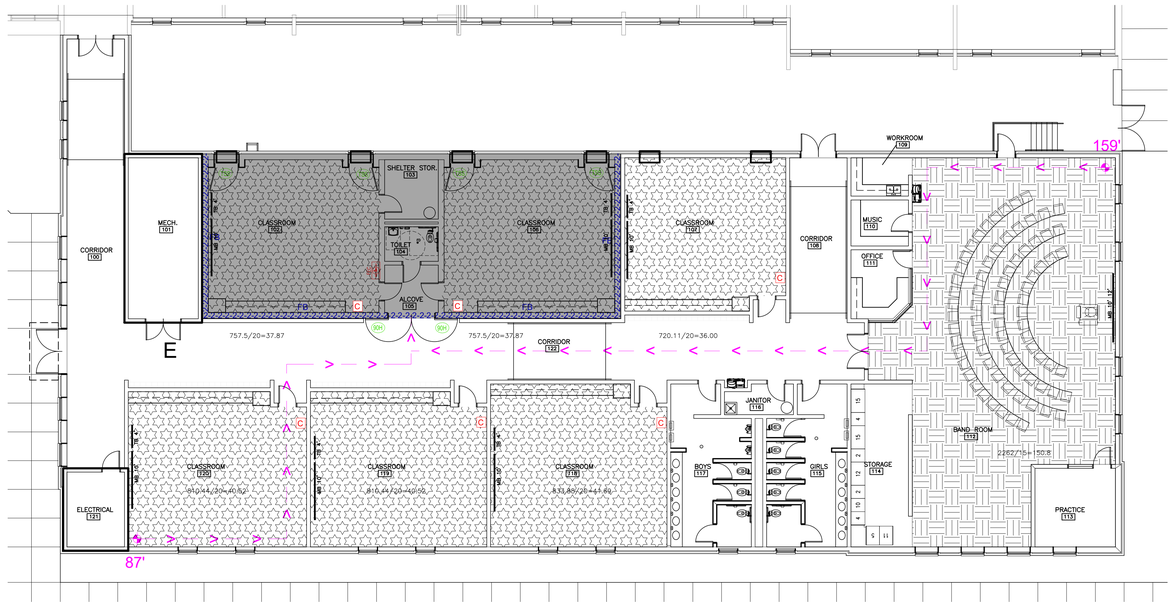
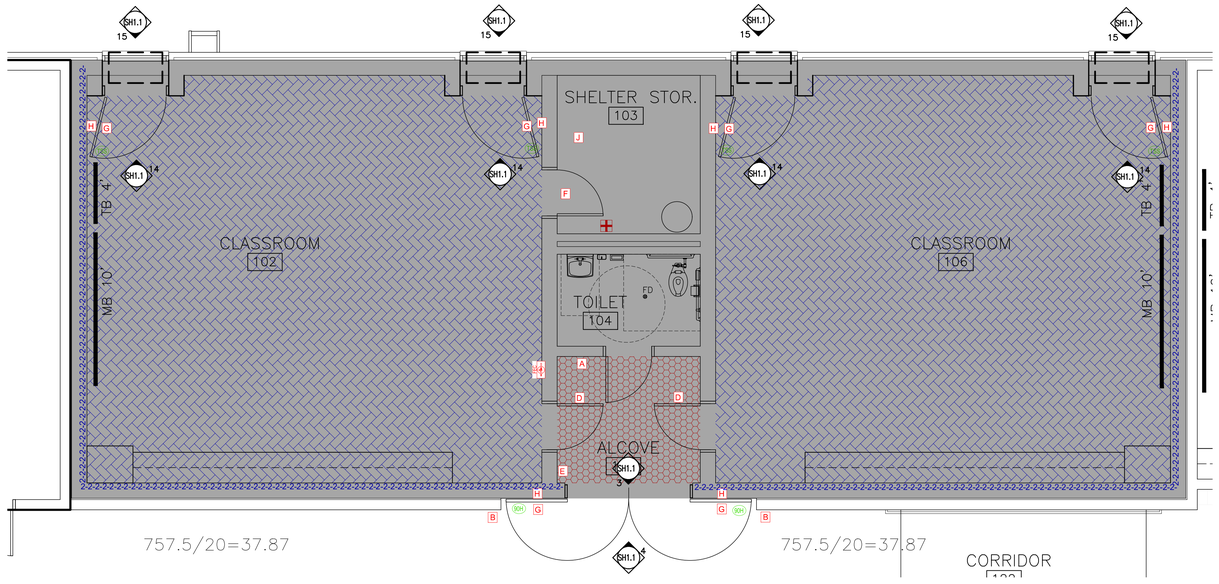
LS1.1
2 OF 6



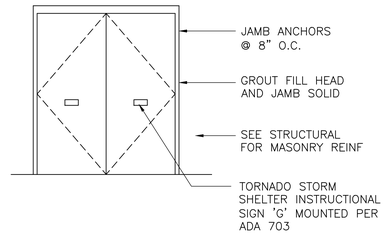
1 TORNADO STORM SHELTER CALCULATIONS/ACCESS PLAN

SCALE: 3/32" = 1'-0"



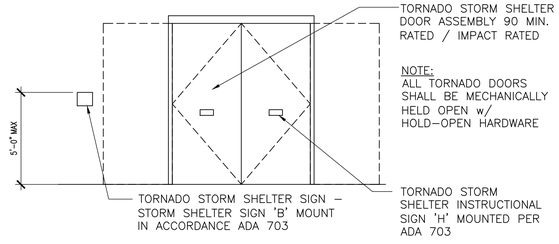
2 TORNADO STORM SHELTER PLAN

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



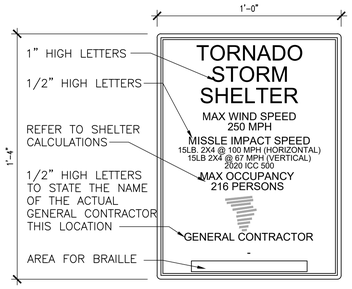
3 TORNADO DOOR ELEVATION

SCALE: 3/8" = 1'-0" INDICATED IN CLOSED POSITION INSIDE SHELTER



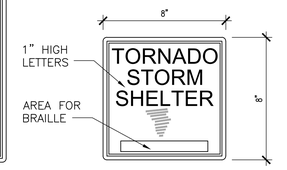
4 TORNADO DOOR ELEVATION

SCALE: 3/8" = 1'-0" INDICATED IN CLOSED POSITION OUTSIDE SHELTER



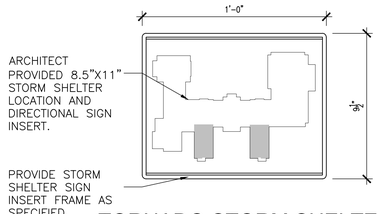
5 TORNADO STORM SHELTER PLAQUE- A

SCALE: 3" = 1'-0"



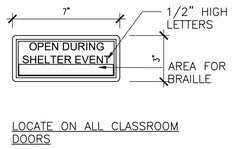
6 TORNADO STORM SHELTER SIGN - B

SCALE: 3" = 1'-0"



7 TORNADO STORM SHELTER LOCATION SIGN FRAME - C

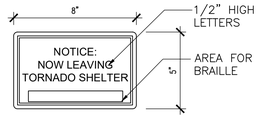
SCALE: 3" = 1'-0"



LOCATE ON ALL CLASSROOM DOORS

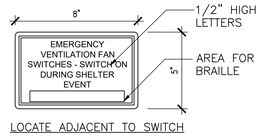
8 TORNADO STORM SHELTER INSTRUCTIONAL SIGN - D

SCALE: 3" = 1'-0"



9 TORNADO STORM SHELTER INSTRUCTIONAL SIGN -E

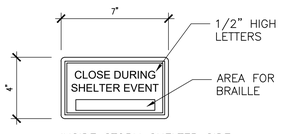
SCALE: 3" = 1'-0"



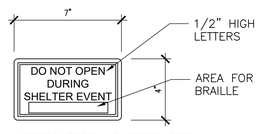
LOCATE ADJACENT TO SWITCH

10 TORNADO STORM SHELTER INSTRUCTIONAL SIGN -F

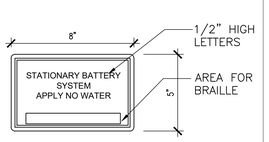
SCALE: 3" = 1'-0"



INSIDE STORM SHELTER SIDE OF DOOR IN CLOSED POSITION



OUTSIDE STORM SHELTER SIDE OF DOOR IN CLOSED POSITION



11 TORNADO STORM SHELTER INSTRUCTIONAL SIGN - G

SCALE: 3" = 1'-0"

12 TORNADO STORM SHELTER INSTRUCTIONAL SIGN - H

SCALE: 3" = 1'-0"

13 TORNADO STORM SHELTER INSTRUCTIONAL SIGN -J

SCALE: 3" = 1'-0"

TORNADO STORM SHELTER CALCULATION

2020 ICC 500 (DCM Bulletin #23-02 Updated Guidance on Tornado Storm Shelter Requirements for Public K-12 School November 22,2022 and Department of Finance DCM Bulletin #23-01 Updated Guidance on Mandatory Tornado Storm Shelters Required by IBC November 21, 2022)

GROSS AREA OF CLASSROOM/INSTRUCTIONAL SPACE: 4,727.34 S.F.
REQUIRED OCCUPANT CAPACITY (STUDENT AND FACULTY): 4,727.34 / 30 = 157.58 STUDENTS + 10% (FACULTY) 15.76 = 173.34(174)
REQUIRED USEABLE SHELTER FLOOR AREA: 173(5) = 865 S.F + 10 S.F. (1- WHEELCHAIR) = 875 S.F.

AREA "G" TORNADO STORM SHELTER

USEABLE SHELTER FLOOR AREA PROVIDED: CLASSROOM SPACE MINUS 35% : 1,543.45 S.F.-35% = 1,003.11 S.F.
CLEAR FLOOR SPACE (100% USEABLE) = 77.02 S.F.
TOTAL USEABLE PROVIDED = 1,080.13 S.F.

CAPACITY OF STORM SHELTER: 214 : 212(5) + 2 WHEELCHAIR (20) = 1,080 S.F.

USEABLE FLOOR AREA LEGEND

CLEAR USEABLE FLOOR SPACE	GROSS FLOOR AREA MINUS 35%	GROSS FLOOR AREA MINUS 50%

SHELTER LEGEND

LOCATION	DOOR TYPE	TRAVEL DISTANCE
	90 MINUTE TORNADO IMPACT RATED DOOR AND FRAME.	START
	TW TORNADO IMPACT RATED WINDOW	PATH
2 HR FIRE BARRIER	2-2-2-2-2-2-2-2-2-2-2-2-2-	DIRECTION
FIRE EXT. & CAB.	FEC	

FLOOR AREA CALCULATION LEGEND

GENERAL INSTRUCTION SPACE AT 30 S.F. GROSS PER STUDENT	AUXILIARY SUPPORT AREA

SHELTER SIGN LEGEND

SYMBOL	DESCRIPTION
A	SECTION 508 STORM SHELTER PLAQUE WALL MOUNTED PER ADA 703
B	SECTION 508 STORM SHELTER SIGN WALL MOUNTED PER ADA 703
C	SECTION 508 STORM SHELTER LOCATION SIGN WALL MOUNTED PER ADA 703
D	SIGN "D" OPEN DURING SHELTER
E	SIGN "E" LEAVING SHELTER SIGN
F	SIGN "F" FAN SWITCH SIGN
G	SIGN "G" CLOSE DURING SHELTER EVENT SIGN
H	SIGN "H" DO NOT OPEN DURING SHELTER EVENT SIGN
J	SIGN "J" APPLY NO WATER
	FIRST AID KIT

NOTE: FINAL PLACEMENT OF ALL SIGNS SHALL BE COORDINATED WITH ARCHITECT AND OWNER PRIOR TO INSTALLATION.

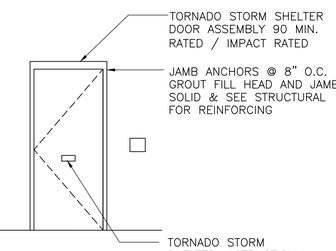
TABLE 702.3 SANITATION FACILITIES

REQUIRED SANITATION FACILITIES COMMUNITY TORNADO STORM SHELTER > 50: CAPACITY OF SHELTER IS 216 PERSONS	
REQUIRED TOILET FACILITIES	1
PROVIDED TOILET FACILITIES	1
REQUIRED LAVATORIES	1
PROVIDED LAVATORIES	1

FIRE RATED WALLS:

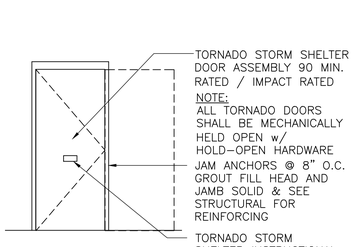
FIRE RATED WALLS INDICATED ON THIS SHEET ARE TORNADO STORM SHELTER WALLS ONLY. SEE LIFE SAFETY PLANS FOR ALL OTHER REQUIRED FIRE RATED WALLS.

NOTE:
1. ALL PENETRATIONS 2" OR GREATER MUST BE PROTECTED WITH A STORM SHELTER BAFFLE OR STORM SHELTER LOUVER SYSTEM. SEE ENGINEER FOR CONDITIONS AND DETAILS.
2. PROVIDE A COLD JOINT AT ALL AREAS WHERE STORM SHELTER SLAB MEETS THE NORMAL SLAB CONDITION, SEE STRUCTURAL.
3. ALL SIGNS SHALL BE IN ACCORDANCE WITH 2010 ADA STANDARD. VERIFY EXACT PLACEMENT WITH ARCHITECT PRIOR TO INSTALLATION.
4.ALL TORNADO REISTANT DOOR, FRAMES, AND WINDOWS SHALL RECIEVE BOTH FEMA 361/ICC-500 2020 LABEL AND THE 90 MINUTE FIRE LABEL.



14 TORNADO DOOR ELEVATION

SCALE: 3/8" = 1'-0" INDICATED IN CLOSED POSITION INSIDE SHELTER



15 TORNADO DOOR ELEVATION

SCALE: 3/8" = 1'-0" INDICATED IN CLOSED POSITION OUTSIDE SHELTER

LATHAN McKEE ARCHITECTS

A NEW CLASSROOM ADDITION FOR
COLUMBIANA MIDDLE SCHOOL
222 JOINERTOWN ROAD, COLUMBIANA, ALABAMA 35051
SHELBY COUNTY BOARD OF EDUCATION

SHEET TITLE: TORNADO SHELTER PLANS

STATE OF ALABAMA
No. 7007
RYAN D. VERNON
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PROJ. MGR.: H.RASCO
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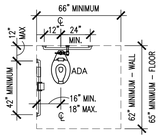
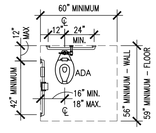
3 OF 6



WATER CLOSET WITH SOLID PARTITIONS TO THE FLOOR (EX: CMU)

WALL MOUNTED:
66" WIDE BY 62" DEEP

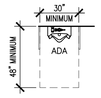
FLOOR MOUNTED:
66" WIDE BY 65" DEEP



WATER CLOSET AT STALL PARTITIONS (12" HIGH TOE KICK)

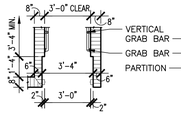
WALL MOUNTED:
60" WIDE BY 56" DEEP

FLOOR MOUNTED:
60" WIDE BY 59" DEEP



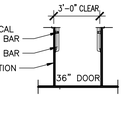
WALL MOUNTED URINAL

30" WIDE BY 48" DEEP
CLEAR FLOOR SPACE



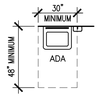
AMBULATORY STALL (CMU)

NOTE:
WHEN THE COMBINED TOTAL OF WATER CLOSETS AND URINALS IN ANY GROUP TOILET IS GREATER THAN 6, AT LEAST 1 AMBULATORY STALL SHALL BE PROVIDED IN ADDITION TO THE WHEELCHAIR ACCESSIBLE STALL.



AMBULATORY STALL (PARTITION)

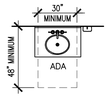
NOTE:
WHEN THE COMBINED TOTAL OF WATER CLOSETS AND URINALS IN ANY GROUP TOILET IS GREATER THAN 6, AT LEAST 1 AMBULATORY STALL SHALL BE PROVIDED IN ADDITION TO THE WHEELCHAIR ACCESSIBLE STALL.



WALL MOUNTED SINK

30" WIDE BY 48" DEEP

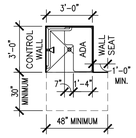
DO NOT PLACE SEMI-RECESSED OR WALL MOUNTED TRASH RECEPTACLES WITHIN CLEAR FLOOR SPACE



COUNTERTOP SINK

30" WIDE BY 48" DEEP

DO NOT PLACE SEMI-RECESSED OR WALL MOUNTED TRASH RECEPTACLES WITHIN CLEAR FLOOR SPACE

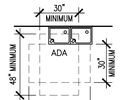


ADA SHOWER STALL

INSIDE STALL:
36" BY 36" FROM THE FACE OF WALL FINISH – VERIFY TILE THICKNESS PRIOR TO INSTALLATION

FLOOR SPACE:
30" WIDE BY 48" DEEP

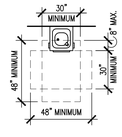
12" TRANSFER TO SEAT SIDE



WALL MOUNTED WATER COOLER

30" WIDE BY 48" DEEP

FRONT OR SIDE APPROACH



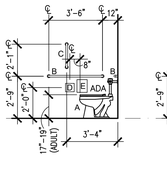
FREESTANDING WATER COOLER

30" WIDE BY 48" DEEP

FRONT OR SIDE APPROACH

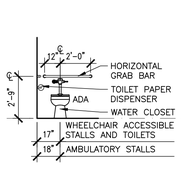
MINIMUM CLEAR FIXTURE AREAS

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

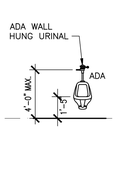


WATER CLOSET (SIDE ELEVATION)

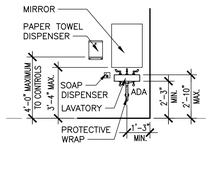
A: ADA WATER CLOSET
B: HORIZONTAL GRAB BAR
C: VERTICAL GRAB BAR
D: TOILET PAPER HOLDER
E: SANITARY NAPKIN DISPOSAL



WATER CLOSET (FRONT ELEVATION)

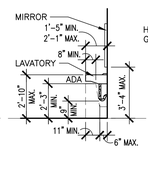


WALL HUNG URINAL



WALL HUNG LAVATORY (FRONT ELEVATION)

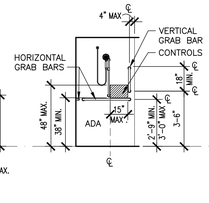
NOTE:
HOT WATER AND DRAINPIPES THAT ARE ACCESSIBLE UNDER LAVATORIES SHALL BE INSULATED OR COVERED. NO SHARP OR ABRASIVE SURFACES SHALL BE PERMISSIBLE.



WALL HUNG LAVATORY (SIDE ELEVATION)

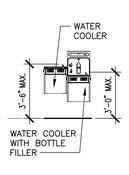
REACH TO FAUCET:
44" MIN. – 48" MAX

MIRROR:
40" MAX TO THE REFLECTIVE SURFACE OF THE MIRROR

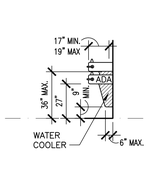


ADA SHOWER STALL

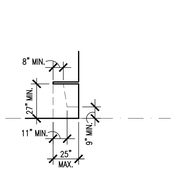
NOTE:
CONTROLS ARE REQUIRED TO BE LOCATED ON CONTROL WALL. THE HORIZONTAL PLACEMENT MUST BE WITHIN 15" OF THE CENTERLINE OF THE SEAT LOCATED ON THE OPPOSING WALL.



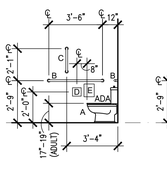
WALL MOUNTED WATER COOLER AND BOTTLE FILLER



WALL MOUNTED WATER COOLER



KNEE CLEARANCE



WATER CLOSET (SIDE ELEVATION)

A: ADA WATER CLOSET
B: HORIZONTAL GRAB BAR
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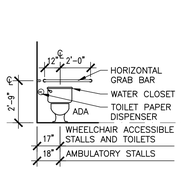
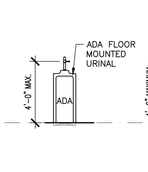
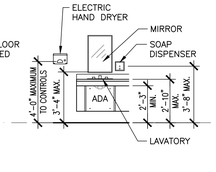


WATER CLOSET (FRONT ELEVATION)

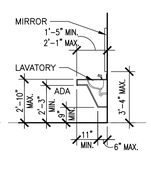


FLOOR MOUNTED URINAL



COUNTERTOP LAVATORY (FRONT ELEVATION)

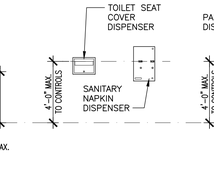
NOTE:
HOT WATER AND DRAINPIPES THAT ARE ACCESSIBLE UNDER LAVATORIES SHALL BE INSULATED OR COVERED. NO SHARP OR ABRASIVE SURFACES SHALL BE PERMISSIBLE.



COUNTERTOP LAVATORY (SIDE ELEVATION)

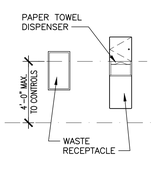
REACH TO FAUCET:
44" MIN. – 48" MAX

MIRROR:
40" MAX TO THE REFLECTIVE SURFACE OF THE MIRROR

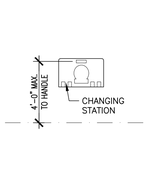


DISPENSERS

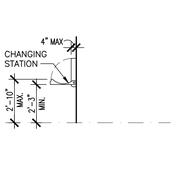
48" MAX TO HANDLE OF OPERATION



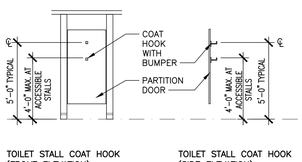
WASTE RECEPTACLES



CHANGING STATION (FRONT ELEVATION)

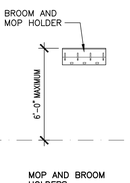


CHANGING STATION (SIDE ELEVATION)

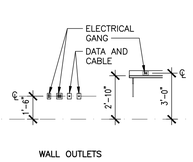


TOILET STALL COAT HOOK (FRONT ELEVATION)

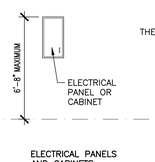
TOILET STALL COAT HOOK (SIDE ELEVATION)



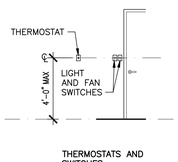
MOP AND BROOM HOLDERS



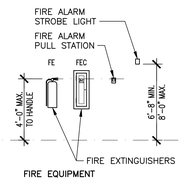
WALL OUTLETS



ELECTRICAL PANELS AND CABINETS



THERMOSTATS AND SWITCHES



FIRE EQUIPMENT

FIRE EXTINGUISHERS, CABINETS, AND PULL STATIONS:
48" MAX TO HANDLE OF OPERATION

STROBE LIGHTS:
6'-8" TO 8'-0" MAX TO BOTTOM OF LIGHT

FIXTURE MOUNTING HEIGHTS

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

GENERAL ACCESSIBILITY NOTES

1. IT IS THE INTENT FOR THE COMPLETED PROJECT TO CONFORM TO CHAPTER 11 OF THE APPLICABLE INTERNATIONAL BUILDING CODE, 2009 ANSI A117.1 AND THE AMERICANS WITH DISABILITIES ACT – ACCESSIBILITY GUIDELINES ADAAG – 2010 EDITION. IF THE OWNER OR ANY OF ITS REPRESENTATIVES DIRECTS THE CONTRACTOR TO INSTALL PRODUCTS IN LOCATIONS OF MANNERS THAT CONFLICT WITH THE REQUIREMENTS OF THIS SHEET, OTHER DOCUMENTS, OR CITED ACCESSIBILITY CODES OR PUBLICATIONS, THE CONTRACTOR SHALL NOTIFY THE OWNER AND ARCHITECT IN WRITING BEFORE COMPLYING WITH SUCH DIRECTIONS.
2. THE DIAGRAMS ILLUSTRATE THE SPECIFIC REQUIREMENTS OF THE ACCESSIBILITY REGULATIONS AND ARE INTENDED ONLY AS AN AID FOR BUILDING DESIGN AND CONSTRUCTION.
3. THIS SHEET IS A STANDARD DRAWING THAT CONTAINS INFORMATION THAT MAY NOT BE APPLICABLE TO THE PROJECT.
4. THE PURPOSE OF THIS SHEET IS TO SHOW DIAGRAMMATICAL INSTALLATION DIMENSIONS THAT MAY NOT BE SHOWN ELSEWHERE IN THE DRAWINGS. WHERE DIMENSIONS ELSEWHERE IN THIS DRAWING CONFLICT WITH DIMENSIONS ON THIS SHEET, THE CONTRACTOR SHALL CONTACT THE ARCHITECT.
5. ALL DIMENSIONS THAT ARE MEASURED FROM A WALL SURFACE OR A FLOOR SURFACE ARE MEASURED FROM FINISHED SURFACES UNLESS OTHERWISE NOTED.
6. ALL AUDIBLE AND VISUAL ALARMS AND OTHER NOTIFICATION DEVICES FOR THE FIRE ALARM SYSTEM SHALL BE DESIGNED AND INSTALLED PER NFPA 72.

PLUMBING ACCESSIBILITY NOTES

1. ALL ACCESSIBLE TOILET COMPARTMENT AND AMBULATORY TOILET COMPARTMENT DOORS SHALL BE EQUIPPED WITH A DOOR THAT HAS AN AUTOMATIC CLOSING DEVICE. THESE DOORS SHALL HAVE A CLEAR, UNOBSTRUCTED OPENING WIDTH OF 32" WHEN LOCATED AT THE END OR 34" WHEN LOCATED AT THE SIDE WITH THE DOOR POSITIONED AT AN ANGLE OF 90 DEGREES FROM ITS CLOSED POSITION.
2. WHERE THE COMBINED TOTAL OF WATER CLOSET COMPARTMENTS AND URINALS PROVIDED IN A TOILET ROOM IS SIX OR MORE, AT LEAST ONE AMBULATORY ACCESSIBLE WATER CLOSET COMPARTMENT SHALL BE PROVIDED IN ADDITION TO THE WHEELCHAIR ACCESSIBLE COMPARTMENT.
3. CONTROLS AND OPERATING MECHANISMS SHALL BE OPERABLE WITH ONE HAND AND SHALL NOT REQUIRE TIGHT GRASPING, PINCHING, OR TWISTING OF THE WRIST.
4. THE FORCE REQUIRED TO ACTIVATE CONTROLS SHALL BE NO GREATER THAN A 5 POUND FORCE.
5. FLUSH VALVE CONTROLS SHALL BE MOUNTED ON THE WIDE SIDE OF TOILET AREAS. CONTROLS FOR FLUSH VALVES FOR BOTH TOILETS AND URINALS SHALL BE MOUNTED NO MORE THAN 44" ABOVE THE FLOOR.
6. WATER CONTROLS WITH SELF-CLOSING VALVES ARE ALLOWED IF THE FAUCET REMAINS OPEN FOR AT LEAST 10 SECONDS.
7. THE STRUCTURAL STRENGTH OF FASTENERS AND MOUNTING DEVICES FOR GRAB BARS, TUBS, SHOWER SEATS, AND DRESSING ROOM BENCHES SHALL BE DESIGNED TO RESIST A SINGLE CONCENTRATED LOAD OF 250 POUNDS IN ANY DIRECTION AT ANY POINT.
8. GRAB BARS SHALL NOT ROTATE WITHIN THEIR FITTINGS.
9. GRAB BARS AND ANY ADJACENT WALL OR SURFACE SHALL BE FREE OF ANY SHARP OR ABRASIVE ELEMENTS. EDGES SHALL HAVE A MINIMUM RADIUS OF ⅛".

ADA ACCESSIBLE PLUMBING HEIGHTS FOR SERVING CHILDREN

	AGES 3–4	AGES 5–8	AGES 9–12
WATER CLOSET CENTERLINE	12"	12" TO 15"	15" TO 18"
TOILET SEAT HEIGHT	11" TO 12"	12" TO 15"	15" TO 17"
GRAB BAR HEIGHT	18" TO 20"	20" TO 25"	25" TO 27"
DISPENSER HEIGHT	14"	14" TO 17"	17" TO 19"

SYMBOLS LEGEND

A200 ROOM NUMBER	DOOR TYPE / DOOR RATING / HARDWARE SYMBOL
FEC RECESSED FIRE EXTINGUISHER CABINET WITH EXTINGUISHER	DOOR TYPE / DOOR RATING / HARDWARE SYMBOL / DOOR ALTERNATE
FE SURFACE MOUNT FIRE EXTINGUISHER	ELEV. MARK / SHEET NUMBER
+ INTERIOR FLOOR ELEVATION	WALL SECT. MARK / SHEET NUMBER
F.D. FLOOR DRAIN	BLDG. SECT. MARK / SHEET NUMBER
EWC ELECTRIC WATER COOLER	ELEV. MARK
TB TACK BOARD	SHEET NUMBER / INT. ELEVATION
MB MARKER BOARD	EXTERIOR WINDOW
OPS OVERHEAD PROJECTOR SCREEN	STOREFRONT
PSM FULLY RECESSED PROJ SCREEN-MOTORIZED	INTERIOR WINDOW
CJ CONTROL JOINT	ARCHITECTURAL LOUVER
EJ EXPANSION JOINT	NEW DOOR AND SWING
AREA OF CONCRETE	EXISTING DOOR
TBC TACKBOARD CABINET	GR GUARDRAILING
SB SMART BOARD	F PARTITION TYPE
WA WIND ANGLE	DB DANCE BARRES
MR MIRROR	
10 ELEV. MARK / A5.1 SHEET NUMBER INT. ELEVATION	

GENERAL NOTES

- SEE ARCHITECTURAL FINISH PLANS AND SPECIFICATIONS FOR AREAS REQUIRING THICKSET OR THINSET CERAMIC TILE INSTALLATION. COORDINATE WITH SUBCONTRACTOR AND DROP CONCRETE FLOOR SLAB IN SUCH AREAS AS REQUIRED AND RECOMMENDED BY THE TILE MANUFACTURER AND THE "TILE COUNCIL OF AMERICA." PROVIDE SLOPE FOR POSITIVE DRAINAGE IN AREAS WITH FLOOR DRAINAGE SYSTEM.
- EXTEND & KEY RATED WALLS TO BOTTOM OF ROOF DECK - SEE LIFE SAFETY DRAWINGS FOR RATED WALL LOCATIONS.
- COORDINATE W/ ELECTRICAL & MECHANICAL AND PROVIDE CONCRETE EQUIPMENT PAD AS REQUIRED
- SEE ELEVATIONS AND ROOF PLAN FOR DOWNSPOUT LOCATIONS
- SEE CIVIL DRAWINGS FOR CONTINUATION OF SIDEWALKS
- ALL PLAN DIMENSIONS ARE TO FACE OF CMU AND TO OUTSIDE OF BRICK , STONE AND TO FACE OF GYP. BD. UNLESS NOTED OTHERWISE
- WINDOWS ARE DIMENSIONED TO THE CENTER LINE
- SLOPE ALL SIDEWALKS AWAY FROM THE BUILDING
- ALL DOWNSPOUTS INTERSECTING CONCRETE PADS AND/OR WALKS SHALL BE PROVIDED WITH BOOTS AND 4" DIAMETER LEADER PIPING EXTENDED AND TIED INTO STORM DRAINAGE SYSTEM
- SLOPE FINISH FLOOR TO FLOOR DRAINS. SEE PLUMBING FOR LOCATIONS OF FLOOR DRAINS.

ADA COMPLIANT DOOR AND FRAME

NOTE:
1. EXIT DOOR OPENING 90 DEGREES MIN.
2. DOOR CLOSER 70 DEGREE MIN.
3. A 60" LEVEL AREA MUST BE PROVIDE ON BOTH SIDES OF THE DOOR.
4. HARDWARE SHALL BE CENTERED BETWEEN 30"–44"
5. THRESHOLD/TRANSITION 1/4" MAX HIGH.

LATHAN McKEE ARCHITECTS

A NEW CLASSROOM ADDITION FOR
COLUMBIANA MIDDLE SCHOOL
222 JOINERTOWN ROAD, COLUMBIANA, ALABAMA 35051
SHELBY COUNTY BOARD OF EDUCATION

SHEET TITLE:
GENERAL NOTES

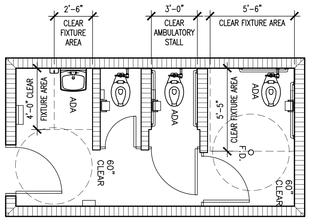
STATE OF ALABAMA
No. 7007
RYAN D. VERNON
REGISTERED ARCHITECT

PROJ. MGR.: H.RASCO
DRAWN: –
DATE: OCTOBER 30, 2026
REVISIONS

JOB NO.
LAA-26-054-00

SHEET NO:
G1.1
4 OF 6

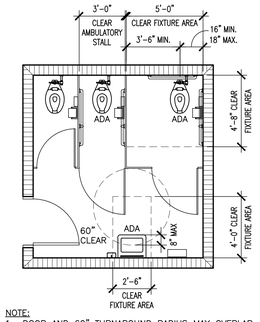
0 1" 2"



NOTE:
1. DOOR AND 60" TURNAROUND RADIUS MAY OVERLAP.
2. DOOR AND CLEAR FIXTURE AREAS MAY NOT OVERLAP.
3. FIXTURE AREA FOR DIFFERENT FIXTURES MAY OVERLAP.
4. AT SOLID PARTITIONS TO THE FLOOR, THE CLEAR FLOOR SPACE FOR WALL MOUNTED TOILETS SHALL BE 62" X 66". THE CLEAR SPACE FOR FLOOR MOUNTED TOILETS SHALL BE 65" X 66" OR SHALL HAVE THE REQUIRED 9" TOE CLEARANCE.
5. IF A GROUP TOILET HAS MORE THAN 6 FIXTURES (TOTAL OF WATER CLOSETS AND URINALS COMBINED), AN AMBULATORY STALL SHALL BE REQUIRED.

GROUP TOILET

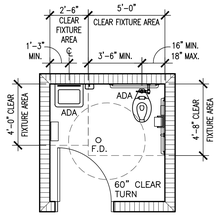
SCALE: 1/4" = 1'-0"



NOTE:
1. DOOR AND 60" TURNAROUND RADIUS MAY OVERLAP.
2. DOOR AND CLEAR FIXTURE AREAS MAY NOT OVERLAP.
3. FIXTURE AREA FOR DIFFERENT FIXTURES MAY OVERLAP.
4. AT STALL PARTITIONS, THE CLEAR FLOOR SPACE FOR WALL MOUNTED TOILETS SHALL BE 56" X 60". THE CLEAR FLOOR SPACE FOR FLOOR MOUNTED TOILETS SHALL BE 59" X 60".
5. IF A GROUP TOILET HAS MORE THAN 6 FIXTURES (TOTAL OF WATER CLOSETS AND URINALS COMBINED), AN AMBULATORY STALL SHALL BE REQUIRED.

GROUP TOILET

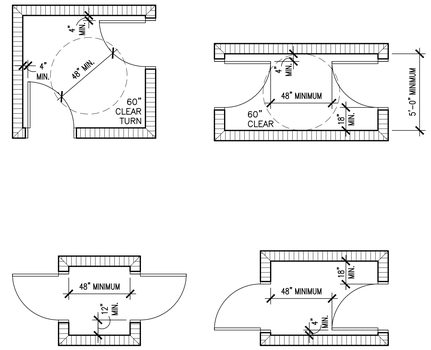
SCALE: 1/4" = 1'-0"



NOTE:
1. DOOR AND 60" TURNAROUND RADIUS MAY OVERLAP.
2. DOOR AND CLEAR FIXTURE AREAS MAY NOT OVERLAP.
3. FIXTURE AREA FOR DIFFERENT FIXTURES MAY OVERLAP.
4. WHERE MULTIPLE SINGLE-USER TOILETS ARE CLUSTERED IN A SINGLE LOCATION, 50% SHALL BE ACCESSIBLE.

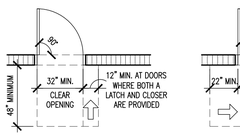
SINGLE USER TOILET

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

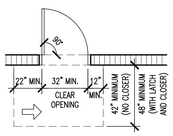


DOORS IN SERIES

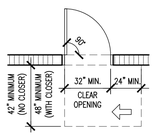
SCALE: 1/4" = 1'-0"



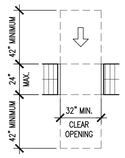
STANDARD FRONT APPROACH – PUSH SIDE



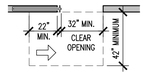
HINGE APPROACH – PUSH SIDE



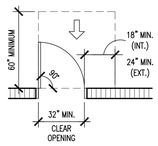
LATCH APPROACH – PUSH SIDE



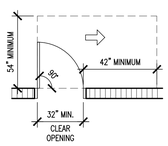
CASED OPENINGS



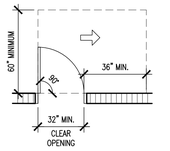
HINGE APPROACH – SLIDING DOORS



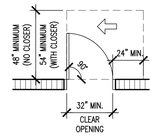
STANDARD FRONT APPROACH – PULL SIDE



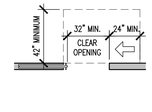
HINGE APPROACH – PULL SIDE



HINGE APPROACH – PULL SIDE



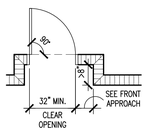
LATCH APPROACH – PULL SIDE



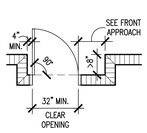
LATCH APPROACH – SLIDING DOORS

DOOR APPROACH CLEARANCES

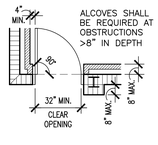
SCALE: 1/4" = 1'-0"



ALCOVE ON PUSH SIDE



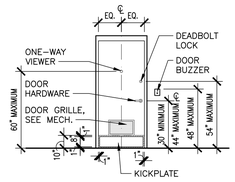
ALCOVE ON PULL SIDE

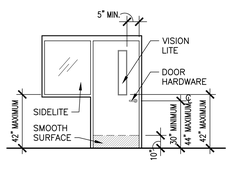


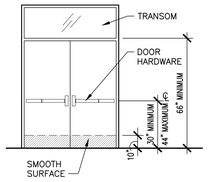
NO ALCOVE REQUIRED

DOOR AT ALCOVES

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



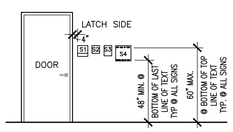




DOOR HEIGHTS

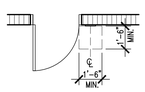
SCALE: 1/4" = 1'-0"

SIGNAGE LEGEND:
S1 – OFFICES, CLASSROOMS, INSTRUCTIONAL AREAS SIGNAGE
S2 – OTHER INTERIOR DOOR SIGNAGE
S3 – RESTROOM SIGNAGE WITH PICTOGRAM
S4 – EXTERIOR SIGNAGE



SIGNAGE (ELEVATION)

NOTE:
1. TYPICAL SIGNAGE LOCATION AND HEIGHTS SHOWN. SEE SPECIFICATIONS FOR SIGN SIZE AND REQUIREMENTS.
2. ALIGN TOP OF ALL SIGNS AS SHOWN, TYPICAL UNLESS OTHERWISE REQUIRED BY THE AMERICANS WITH DISABILITIES ACT.
3. SEE TORNADO SHELTER PLANS FOR SHELTER SIGNAGE IF APPLICABLE.



SIGNAGE (PLAN VIEW)



PICTOGRAM SIZE



CHARACTER SIZE

SIGNAGE LEGEND

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

SIGNAGE DETAILS

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

GENERAL ACCESSIBILITY NOTES

1. IT IS THE INTENT FOR THE COMPLETED PROJECT TO CONFORM TO CHAPTER 11 OF THE APPLICABLE INTERNATIONAL BUILDING CODE, 2009 ANSI A117.1 AND THE AMERICANS WITH DISABILITIES ACT – ACCESSIBILITY GUIDELINES ADAAG – 2010 EDITION. IF THE OWNER OR ANY OF ITS REPRESENTATIVES DIRECTS THE CONTRACTOR TO INSTALL PRODUCTS IN LOCATIONS OF MANNERS THAT CONFLICT WITH THE REQUIREMENTS OF THIS SHEET, OTHER DOCUMENTS, OR CITED ACCESSIBILITY CODES OR PUBLICATIONS, THE CONTRACTOR SHALL NOTIFY THE OWNER AND ARCHITECT IN WRITING BEFORE COMPLYING WITH SUCH DIRECTIONS.
2. THE DIAGRAMS ILLUSTRATE THE SPECIFIC REQUIREMENTS OF THE ACCESSIBILITY REGULATIONS AND ARE INTENDED ONLY AS AN AID FOR BUILDING DESIGN AND CONSTRUCTION.
3. THIS SHEET IS A STANDARD DRAWING THAT CONTAINS INFORMATION THAT MAY NOT BE APPLICABLE TO THE PROJECT.
4. THE PURPOSE OF THIS SHEET IS TO SHOW DIAGRAMMATICAL INSTALLATION DIMENSIONS THAT MAY NOT BE SHOWN ELSEWHERE IN THE DRAWINGS. WHERE DIMENSIONS ELSEWHERE IN THIS DRAWING CONFLICT WITH DIMENSIONS ON THIS SHEET, THE CONTRACTOR SHALL CONTACT THE ARCHITECT.
5. ALL DIMENSIONS THAT ARE MEASURED FROM A WALL SURFACE OR A FLOOR SURFACE ARE MEASURED FROM FINISHED SURFACES UNLESS OTHERWISE NOTED.
6. ALL AUDIBLE AND VISUAL ALARMS AND OTHER NOTIFICATION DEVICES FOR THE FIRE ALARM SYSTEM SHALL BE DESIGNED AND INSTALLED PER NFPA 72.

PLUMBING ACCESSIBILITY NOTES

1. ALL ACCESSIBLE TOILET COMPARTMENT AND AMBULATORY TOILET COMPARTMENT DOORS SHALL BE EQUIPPED WITH A DOOR THAT HAS AN AUTOMATIC CLOSING DEVICE. THESE DOORS SHALL HAVE A CLEAR, UNOBSTRUCTED OPENING WIDTH OF 32" WHEN LOCATED AT THE END OR 34" WHEN LOCATED AT THE SIDE WITH THE DOOR POSITIONED AT AN ANGLE OF 90 DEGREES FROM ITS CLOSED POSITION.
2. WHERE THE COMBINED TOTAL OF WATER CLOSET COMPARTMENTS AND URINALS PROVIDED IN A TOILET ROOM IS SIX OR MORE, AT LEAST ONE AMBULATORY ACCESSIBLE WATER CLOSET COMPARTMENT SHALL BE PROVIDED IN ADDITION TO THE WHEELCHAIR ACCESSIBLE COMPARTMENT.
3. CONTROLS AND OPERATING MECHANISMS SHALL BE OPERABLE WITH ONE HAND AND SHALL NOT REQUIRE TIGHT GRASPING, PINCHING, OR TWISTING OF THE WRIST.
4. THE FORCE REQUIRED TO ACTIVATE CONTROLS SHALL BE NO GREATER THAN A 5 POUND FORCE.
5. FLUSH VALVE CONTROLS SHALL BE MOUNTED ON THE WIDE SIDE OF TOILET AREAS. CONTROLS FOR FLUSH VALVES FOR BOTH TOILETS AND URINALS SHALL BE MOUNTED NO MORE THAN 44" ABOVE THE FLOOR.
6. WATER CONTROLS WITH SELF-CLOSING VALVES ARE ALLOWED IF THE FAUCET REMAINS OPEN FOR AT LEAST 10 SECONDS.
7. THE STRUCTURAL STRENGTH OF FASTENERS AND MOUNTING DEVICES FOR GRAB BARS, TUBS, SHOWER SEATS, AND DRESSING ROOM BENCHES SHALL BE DESIGNED TO RESIST A SINGLE CONCENTRATED LOAD OF 250 POUNDS IN ANY DIRECTION AT ANY POINT.
8. GRAB BARS SHALL NOT ROTATE WITHIN THEIR FITTINGS.
9. GRAB BARS AND ANY ADJACENT WALL OR SURFACE SHALL BE FREE OF ANY SHARP OR ABRASIVE ELEMENTS. EDGES SHALL HAVE A MINIMUM RADIUS OF ⅛".

DOOR ACCESSIBILITY NOTES

1. ALL EXIT DOORS SHALL OPEN A MINIMUM OF 90 DEGREES. WHEN THE DOOR IS OPEN AT 90 DEGREES, THERE SHALL BE A MINIMUM OF 4" BETWEEN THE FACE OF THE DOOR AND THE WALL.
2. DOORWAYS INCLUDING HINGED DOORS, SLIDING DOORS, AND FOLDING DOORS SHALL HAVE A CLEAR OPENING WIDTH OF 32" MINIMUM MEASURED BETWEEN THE FACE OF THE DOOR AND THE OPPOSITE STOP.
3. EACH SIDE OF A DOOR SHALL HAVE A FLOOR OR LANDING THAT IS 60" MINIMUM. THE FLOOR OR LANDING SHALL NOT BE MORE THAN ½" LOWER THAN THE THRESHOLD OF THE DOORWAY. CHANGES IN LEVEL BETWEEN ¼" AND ½" SHALL BE BEVELED WITH A SLOPE NO GREATER THAN ONE VERTICAL UNIT TO 2 HORIZONTAL UNITS. CHANGES IN LEVEL THAT ARE GREATER THAN ½" SHALL BE ACCOMPLISHED BY MEANS OF A RAMP.
4. DOOR HARDWARE SHALL BE CENTERED BETWEEN 30" TO 44" ABOVE THE FLOOR.
5. IF A DOOR HAS A CLOSER, THEN THE SWEEP PERIOD OF THE CLOSER SHALL BE ADJUSTED SO THAT FROM AN OPEN POSITION OF 70 DEGREES, THE DOOR WILL TAKE AT LEAST 3 SECONDS TO MOVE TO A POINT 3" FROM THE LATCH, MEASURED TO THE LEADING EDGE OF THE DOOR.
6. THE BOTTOM 10" OF ALL DOORS, EXCEPT AUTOMATIC AND SLIDING DOORS, SHALL HAVE A SMOOTH, UNINTERRUPTED SURFACE. WHEN NARROW FRAME DOORS ARE USED, A 10" HIGH SMOOTH PANEL SHALL BE INSTALLED ON THE PUSH SIDE OF THE DOOR.
7. FOR DOORS AND SIDELIGHTS ADJACENT TO DOORS THAT CONTAIN ONE OR MORE GLAZING PANELS THAT PERMIT VIEWING THROUGH THE PANELS, EITHER THE DOOR OR AN ADJACENT SIDELIGHT SHALL HAVE THE BOTTOM OF AT LEAST ONE PANEL AT A MAXIMUM OF 43" ABOVE THE FLOOR, OR THE LOWEST PART OF ALL PANELS SHALL BE HIGHER THAN 66" ABOVE THE FLOOR.
8. MAXIMUM EFFORT TO OPERATE DOORS SHALL BE 5 POUNDS PER FOOT FOR EXTERIOR AND INTERIOR DOORS. MAXIMUM EFFORT TO OPERATE A FIRE DOOR SHALL BE 15 POUNDS PER FOOT. COMPENSATING DEVICES OR AUTOMATIC DOOR OPERATORS MAY BE UTILIZED TO MEET THE MAXIMUM OPENING FORCE REQUIREMENT.

SIGNAGE ACCESSIBILITY NOTES

1. SIGNS SHALL BE PROVIDED FOR ALL PERMANENT ROOMS AND SPACES. SIGNS SHALL BE MOUNTED ON THE WALL (NOT DOOR) ADJACENT TO THE LATCH SIDE OF THE DOOR.
2. SIGNS SHALL INCLUDE THE SAME INFORMATION BOTH IN BRAILLE AND WITH RAISED LETTERING THAT FORMS A HIGH CONTRAST WITH THE BACKGROUND OF THE SIGN.
3. SIGNS SHALL NOT BE MADE OF REFLECTIVE MATERIALS SUCH AS BRASS, SILVER, GOLD, GLASS, OR MIRRORED SURFACES UNLESS THERE IS AN ADDITIONAL PROPERLY LOCATED COMPLIANT SIGN.
4. WHERE TACTILE SIGNS ARE PROVIDED AT DOUBLE DOORS WITH ONE INACTIVE LEAF, THE SIGN SHALL BE LOCATED ON THE INACTIVE LEAF.
5. WHERE TACTILE SIGNS ARE PROVIDED AT DOUBLE DOORS WITH TWO ACTIVE LEAVES, THE SIGN SHALL BE LOCATED TO THE RIGHT OF THE RIGHT-HAND DOOR.
6. WHERE THERE IS NO WALL SPACE ON THE LATCH SIDE OF A SINGLE DOOR, SIGNS SHALL BE LOCATED ON THE NEAREST ADJACENT WALL.

LATHAN McKEE ARCHITECTS

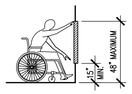
A NEW CLASSROOM ADDITION FOR
COLUMBIANA MIDDLE SCHOOL
222 JOINERTOWN ROAD, COLUMBIANA, ALABAMA 35051
SHELBY COUNTY BOARD OF EDUCATION

SHEET TITLE:
GENERAL NOTES

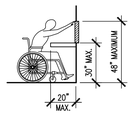
STATE OF ALABAMA
No. 7007
RYAN D. VERNON
REGISTERED ARCHITECT

PROJ. MGR.: H.RASCO
DRAWN: –
DATE: OCTOBER 30, 2026
REVISIONS

JOB NO.
LAA-26-054-00
SHEET NO:
G1.2
5 OF 6
0 1" 2"



UNOBSTRUCTED FORWARD REACH



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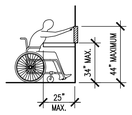

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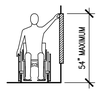
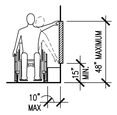


FULLY UNOBSTRUCTED SIDE REACH



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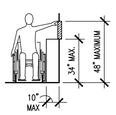
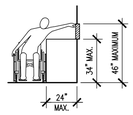


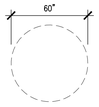
OBSTRUCTED SIDE REACH



OBSTRUCTED SIDE REACH

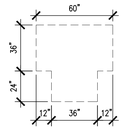
REACH CLEARANCES

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



60" DIAMETER CLEAR TURNING RADIUS

60" DIAMETER CLEAR TURNING RADIUS REQUIRED IN ALL ADA RESTROOMS

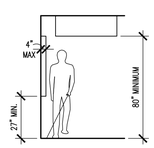


CLEAR T-TURN SPACE

IN LIEU OF 60" TURN AROUND

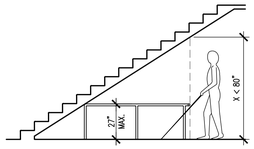
TURNING CLEARANCES

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



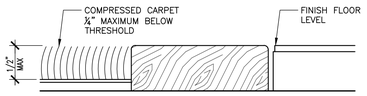
LIMITS OF PROTRUDING OBJECTS

NOTE:
STRUCTURAL ELEMENTS, FIXTURES, FURNISHINGS, ETC. SHALL NOT PROTRUDE HORIZONTALLY FROM EITHER SIDE MORE THAN 4" OVER ANY WALKING SURFACE BETWEEN 27-80" EXCEPT AT STAIR HANDRAILS AND DOOR CLOSERS.

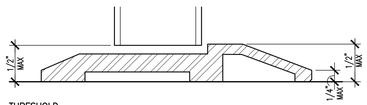


VERTICAL CLEARANCE

NOTE:
GUARDRAILS OR OTHER BARRIERS SHALL BE PROVIDED WHERE THE VERTICAL CLEARANCE IS LESS THAN 80" HIGH



TRANSITION BETWEEN FLOORING TYPES



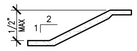
THRESHOLD



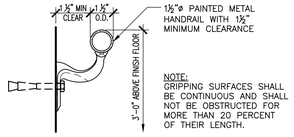
VERTICAL CHANGES



VERTICAL/BEVELED CHANGES



BEVELED CHANGES

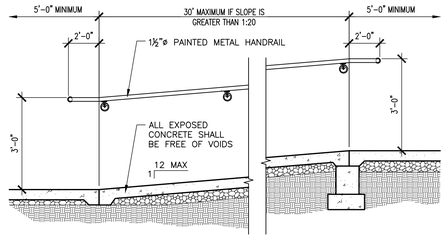


NOTE:
GRIPPING SURFACES SHALL BE CONTINUOUS AND SHALL NOT BE OBSTRUCTED FOR MORE THAN 20 PERCENT OF THEIR LENGTH.

WALL MOUNTED HANDRAIL

PROTRUDING OBJECTS

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

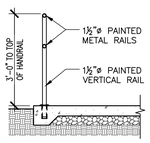


TYPICAL RAMP

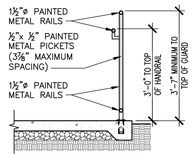
SCALE: 1/2" = 1'-0"

LEVEL CHANGES

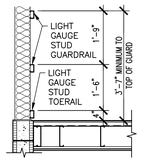
SCALE: 1:1



POST-MOUNTED HANDRAIL



POST-MOUNTED GUARDRAIL

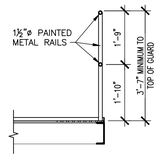


GUARDRAIL (AT ATTICS)

NOTE:
GUARDS MUST BE SPACED TO PREVENT THE PASSAGE OF A 21" SPHERE.

WALL MOUNTED RAILS

SCALE: 3" = 1'-0"



GUARDRAIL (AT EQUIPMENT PLATFORMS)

NOTE:
RAILS MUST BE SPACED TO PREVENT THE PASSAGE OF A 21" SPHERE.

GENERAL ACCESSIBILITY NOTES

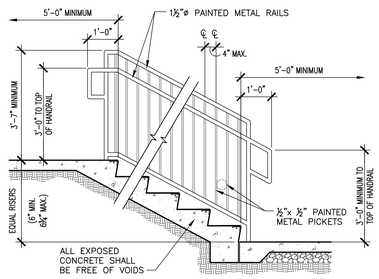
1. IT IS THE INTENT FOR THE COMPLETED PROJECT TO CONFORM TO CHAPTER 11 OF THE APPLICABLE INTERNATIONAL BUILDING CODE, 2009 ANSI A117.1 AND THE AMERICANS WITH DISABILITIES ACT – ACCESSIBILITY GUIDELINES ADAAG – 2010 EDITION. IF THE OWNER OR ANY OF ITS REPRESENTATIVES DIRECTS THE CONTRACTOR TO INSTALL PRODUCTS IN LOCATIONS OF MANNERS THAT CONFLICT WITH THE REQUIREMENTS OF THIS SHEET, OTHER DOCUMENTS, OR CITED ACCESSIBILITY CODES OR PUBLICATIONS, THE CONTRACTOR SHALL NOTIFY THE OWNER AND ARCHITECT IN WRITING BEFORE COMPLYING WITH SUCH DIRECTIONS.
2. THE DIAGRAMS ILLUSTRATE THE SPECIFIC REQUIREMENTS OF THE ACCESSIBILITY REGULATIONS AND ARE INTENDED ONLY AS AN AID FOR BUILDING DESIGN AND CONSTRUCTION.
3. THIS SHEET IS A STANDARD DRAWING THAT CONTAINS INFORMATION THAT MAY NOT BE APPLICABLE TO THE PROJECT.
4. THE PURPOSE OF THIS SHEET IS TO SHOW DIAGRAMMATICAL INSTALLATION DIMENSIONS THAT MAY NOT BE SHOWN ELSEWHERE IN THE DRAWINGS. WHERE DIMENSIONS ELSEWHERE IN THIS DRAWING CONFLICT WITH DIMENSIONS ON THIS SHEET, THE CONTRACTOR SHALL CONTACT THE ARCHITECT.
5. ALL DIMENSIONS THAT ARE MEASURED FROM A WALL SURFACE OR A FLOOR SURFACE ARE MEASURED FROM FINISHED SURFACES UNLESS OTHERWISE NOTED.
6. ALL AUDIBLE AND VISUAL ALARMS AND OTHER NOTIFICATION DEVICES FOR THE FIRE ALARM SYSTEM SHALL BE DESIGNED AND INSTALLED PER NFPA 72.

STAIR AND RAMP ACCESSIBILITY NOTES

1. THE MAXIMUM SLOPE FOR RAMPS SHALL BE 1:12, FOR A MAXIMUM LENGTH OF 30 FEET. PROVIDE A LANDING EQUAL TO THE WIDTH OF THE RAMP. HANDRAILS ARE REQUIRED.
2. LOW SLOPE RAMPS SHALL BE 1:20 FOR ANY DISTANCE, WITH NO REQUIREMENT FOR HANDRAILS.
3. RAMPS SHALL NOT EXCEED A CROSS SLOPE OF 1:48 (¼" PER 12").
4. CHANGES IN LEVEL BETWEEN ¼" AND ½" SHALL BE BEVELED WITH A SLOPE NO GREATER THAN ONE VERTICAL UNIT TO 2 HORIZONTAL UNITS. CHANGES IN LEVEL GREATER THAN ½" SHALL BE ACCOMPLISHED BY MEANS OF A RAMP.
5. THE CLEAR WIDTH OF A RAMP SHALL BE 36" MINIMUM BETWEEN THE HANDRAILS. WHERE RAMPS MAKE 180 DEGREE TURNS, THE CLEAR WIDTH OF THE RAMP SHALL BE 42" MINIMUM AND THE CLEAR WIDTH OF THE LANDING SHALL BE 48" MINIMUM.
6. ALL EXPOSED CONCRETE SHALL BE FREE OF VOIDS.
7. ALL STEPS ON A FLIGHT OF STAIRS SHALL HAVE UNIFORM RISER HEIGHTS AND UNIFORM TREAD DEPTHS. RISERS SHALL BE EQUALLY SPACED AT 6" OR GREATER, NOT TO EXCEED 7". TREADS SHALL BE 11" MINIMUM.
8. OPEN RISERS SHALL NOT BE PERMITTED.
9. NOSINGS SHALL HAVE A RADIUS OF ½" MAXIMUM.
10. NOSINGS THAT PROJECT BEYOND RISERS SHALL CURVE OR BEVEL THE UNDERSIDE OF THE LEADING EDGE. RISERS SHALL SLOPE UNDER THE TREAD AT AN ANGLE OF 30 DEGREES MAXIMUM FROM VERTICAL. THE NOSING SHALL EXTEND 1 ½" MAXIMUM OVER THE TREAD BELOW.
11. HANDRAILS SHALL EXTEND A MINIMUM OF 12" FROM THE LEADING EDGE OF THE HANDRAIL TO THE STAIR NOSING OR RAMP EDGE. HANDRAILS SHALL BE CONTINUOUS AT SWITCHBACK OR DOGLEG STAIRS AND RAMPS.
12. THE TOP OF HANDRAILS SHALL BE 36" ABOVE THE WALKING SURFACE. GUARDRAILS SHALL EXTEND A MINIMUM OF 42" FROM THE WALKING SURFACE.
13. WHERE AN ADDITIONAL HANDRAIL IS PROVIDED FOR CHILDREN, THE TOP THE HANDRAIL SHALL BE 28" MAXIMUM FROM THE WALKING SURFACE, WITH A MINIMUM OF 9" CLEARANCE BETWEEN THE UPPER AND LOWER RAILS TO PREVENT ENTRAPMENT.
14. HANDRAIL GRIPPING SURFACES SHALL BE CONTINUOUS ALONG THEIR LENGTH AND SHALL NOT BE OBSTRUCTED ALONG THEIR TOPS OR SIDES. THE BOTTOMS OF HANDRAIL GRIPPING SURFACES SHALL NOT BE OBSTRUCTED FOR MORE THAN 20 PERCENT OF THEIR LENGTH.
15. THE CLEARANCE BETWEEN HANDRAIL GRIPPING SURFACES AND ADJACENT SURFACES SHALL BE 1 1/2" MINIMUM.
16. AT GUARDRAILS, THE SPACING BETWEEN PICKETS, ALONG WITH THE SPACING BETWEEN THE BOTTOM RAIL AND WALKING SURFACE, SHALL PREVENT A 4" SPHERE TO PASS, EXCEPTION: AT ELEVATED WALKING SURFACES INTENDED FOR ACCESS TO AND USE OF ELECTRICAL/MECHANICAL/PLUMBING SYSTEMS OR EQUIPMENT, GUARDS SHALL NOT HAVE OPENINGS THAT ALLOW A 21" SPHERE TO PASS.

CHILDREN'S REACH RANGES

	AGES 3-4	AGES 5-8	AGES 9-12
HIGH (MAXIMUM)	36"	40"	44"
LOW (MINIMUM)	20"	18"	16"

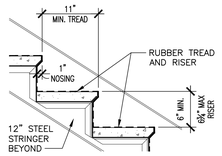


TYPICAL STAIR

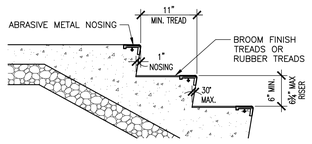
SCALE: 1/2" = 1'-0"

POST MOUNTED RAILS

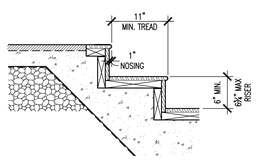
SCALE: 1/2" = 1'-0"



STAIR PAN



CAST-IN-PLACE



WOOD TRIM

TREADS

SCALE: 1" = 1'-0"

NOTE:
ALL EXPOSED CONCRETE SHALL BE FREE OF VOIDS

LATHAN McKEE ARCHITECTS

A NEW CLASSROOM ADDITION FOR
COLUMBIANA MIDDLE SCHOOL
222 JOINERTOWN ROAD, COLUMBIANA, ALABAMA 35051
SHELBY COUNTY BOARD OF EDUCATION

SHEET TITLE:
GENERAL NOTES

STATE OF ALABAMA
No. 7007
RYAN D. VERNON
REGISTERED ARCHITECT

PROJ. MGR.: H.RASCO
DRAWN: –
DATE: OCTOBER 30, 2026
REVISIONS

JOB NO.
LAA-26-054-00

SHEET NO:
G1.3
6 OF 6

0 1" 2"

GENERAL PROJECT NOTES:

1. TTL, INC. SHALL NOT HAVE AUTHORITY OVER THE SITE OR BUILDING CONTRACTOR'S WORK OR RESPONSIBILITIES. TTL IS NOT RESPONSIBLE FOR SITE SAFETY PROCEDURES OR METHODS OF CONSTRUCTION.
2. THE LOCATIONS OF THE EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE MANNER ONLY, AS PROVIDED BY UTILITY OWNERS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT LOCATION OF ALL UNDERGROUND UTILITIES "POTHOLING" THEM BEFORE COMMENCING WORK. THE CONTRACTOR SHALL CONTACT THE ALABAMA ONE-CALL, LOCAL WATER AUTHORITIES, AND UTILITY PROVIDERS, ETC. FOR UTILITY LOCATES. IN THE EVENT OF ANY DAMAGE TO IN-PLACE UTILITIES, THEY SHALL BE REPAIRED AND REPLACED TO THE SATISFACTION OF THE ENGINEER AND THE UTILITY OWNER AT THE CONTRACTOR'S EXPENSE.
3. BOUNDARY AND TOPOGRAPHIC INFORMATION PROVIDED BY THE OWNER AND PERFORMED BY ARRINGTON ENGINEERING. TOPOGRAPHIC INFORMATION WAS PERFORMED VIA GROUND RUN FORMAT DATED 6/17/2026.
4. THE CONTRACTOR SHALL FIELD VERIFY SITE BOUNDARY AND EXISTING TOPOGRAPHY PRIOR TO CONSTRUCTION. NOTIFY TTL OF ANY DISCREPANCIES.
5. THE CONTRACTOR SHALL OBTAIN ALL REQUIRED PERMITS AND PAY ALL PERMIT FEES PRIOR TO CONSTRUCTION.
6. ANY EXISTING PROPERTY CORNERS (I.E.- IRON PIPES,CAPPED PIPES, CAPPED MONUMENTS, ETC). DISPLACED OR DAMAGED DURING CONSTRUCTION SHALL BE RESET. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT AND SHALL BE A FINAL PUNCH LIST/CLOSEOUT ITEM.
7. THE CONTRACTOR MUST MAINTAIN ACCESSIBLE DRIVES AND PUBLIC ROADWAYS. ANY ADDITIONAL STONE, GRADING, INSTALLATION, ETC. TO MAKE SIDEWALKS, DRIVES, AND ROADWAYS ACCESSIBLE DURING CONSTRUCTION SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT AND NO ADDITIONAL COMPENSATION SHALL BE GIVEN.
8. THE CONTRACTOR SHALL KEEP THE PROJECT RIGHTS-OF-WAY CLEAN FROM TRASH AND DEBRIS. PLACEMENT/DISCARDING OF TRASH AND REFUSE IN UTILITY TRENCHES AND/OR OTHER EXCAVATIONS ASSOCIATED WITH THE PROJECT SHALL BE PROHIBITED. THE CONTRACTOR SHALL PROVIDE TRASH RECEPTACLES FOR WORKER USE. THE ROADWAYS AND SIDEWALKS SHALL BE SWEPT AND WASHED DOWN TO LIMIT THE TRACKING OF DIRT FROM THE PROJECT ONTO PUBLIC RIGHTS-OF-WAY DAILY. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT AND NO ADDITIONAL COMPENSATION SHALL BE GIVEN.
9. CONFLICTS MAY ARISE BETWEEN EXISTING AND PROPOSED UNDERGROUND FACILITIES. CROSSINGS OF REQUIRED AND EXISTING GRAVITY UTILITIES SHALL BE EXCAVATED AND ELEVATIONS VERIFIED AT THE BEGINNING OF THE PROJECT BEFORE ANY UTILITIES ARE INSTALLED TO MAKE SURE THERE ARE NO CONFLICTS. WHEN THESE CONFLICTS ARE IDENTIFIED, THE CONTRACTOR SHALL PROMPTLY NOTIFY THE OWNER'S REPRESENTATIVE. ADJUSTMENTS AS SPECIFIED BY THE OWNER'S REPRESENTATIVE SHALL BE MADE IN THE PROPOSED AND/OR EXISTING FACILITIES. IF CONFLICTS OCCUR WHEN INSTALLING GRAVITY UTILITIES AND THE CONTRACTOR DID NOT IDENTIFY ELEVATIONS AT CROSSINGS IN ADVANCE, THEN THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH THE CORRECTIVE ACTION, INCLUDING BUT NOT LIMITED TO, REMOVING AND INSTALLING THE MAIN AND/OR STRUCTURES. WITH THE NUMEROUS EXISTING UTILITIES ON-SITE, IT IS IMPERATIVE THAT THESE BE VERIFIED BEFORE INSTALLATION OF PROPOSED WORK.
10. AT THE END OF THE PROJECT THE CONTRACTOR SHALL POWER WASH ALL CONCRETE SURFACES (I.E., CURB AND GUTTERS, SIDEWALK, DRIVES, STORM SEWER BOXES, BRICK PAVERS, EXISTING BUILDING BRICK, ETC.). SPECIFICALLY EXISTING CONCRETE ABUTTING REQUIRED CONCRETE SURFACES WITHIN THE PROJECT RIGHT-OF-WAY TO ELIMINATE STAINING FROM EARTHEN MATERIAL, CONSTRUCTION EQUIPMENT, OILS, PAINTS, ETC. THIS WORK SHALL BE CONSIDERED INCIDENTAL TO THE CONTRACT AND NO ADDITIONAL COMPENSATION SHALL BE GIVEN.
11. EXISTING LANDSCAPED AREAS PARALLEL TO THE PROJECT IMPACTED/DAMAGED DURING CONSTRUCTION SHALL BE RETURNED TO THEIR ORIGINAL CONDITION. THERE SHALL BE NO ADDITIONAL COMPENSATION FOR THIS WORK.
12. ALL ACCESSIBLE RAMPS AND SIDEWALKS SHALL BE ADA COMPLIANT.
13. ALL TEMPORARY STONE FOR ROADWAY, SIDEWALK, DRIVES, ETC. SHALL BE CONSIDERED INCIDENTAL TO THE PROJECT. NO TEMPORARY STONE SHALL BE WASTED ON THE SITE SPECIFICALLY IN THE FINAL SUBGRADE LAYER AND TOPSOIL. EXCESSIVE STONE WILL INHIBIT THE GROWTH OF THE LANDSCAPE. ALL STONE SHALL BE REMOVED FROM AREAS TO RECEIVE TOPSOIL, NO EXCEPTIONS.
14. THE CONTRACTOR SHALL INSTALL TEMPORARY ASPHALT PATCHING WITHIN 24 HOURS AFTER THE COMPLETED INSTALLATION OF UTILITY CROSSINGS ON ROADWAYS OPEN TO TRAFFIC. IF THE ROADWAY IS CLOSED TO LOCAL TRAFFIC THEN ALL ASPHALT CUT LOCATIONS SHALL BE PATCHED BEFORE THE ROADWAY IS REOPENED. THE CONTRACTOR SHALL NOT BE ALLOWED TO INSTALL ALL UTILITIES AND THEN TEMPORARY ASPHALT PATCH ALL AT ONE TIME. TEMPORARY ASPHALT PATCHING MUST OCCUR PERIODICALLY PHASED AS REFERENCED ABOVE.
15. WHEN TEMPORARY ASPHALT PATCHING OCCURS THE MIX SHALL BE HOT MIXED AS SPECIFIED IN THE PLANS. ASPHALT COLD MIXES SHALL NOT BE ACCEPTED. POORLY PATCHED CROSSINGS DISPLAYING NONUNIFORM, UNSMOOTH FINISHES SHALL NOT BE ACCEPTED AND SHALL BE REMOVED AT ONCE. THE REPATCH OF THE AREA SHALL BE PAID FOR AT THE CONTRACTOR'S EXPENSE.
16. THE CONTRACTOR SHALL NOTE EXISTING STORM DRAIN AND STORM DRAIN STRUCTURES TO BE RETAINED AS PART OF THIS PROJECT. THIS EXISTING INFRASTRUCTURE SHALL BE USED TO DRAIN THE PROJECT DURING PHASES OF CONSTRUCTION. PROPER EROSION CONTROL METHODS SHALL BE USED TO PROTECT THIS INFRASTRUCTURE AT ALL TIMES.
17. THE CONTRACTOR SHALL COORDINATE HIS WORK WITH THE SHELBY COUNTY BOARD OF EDUCATION, COLUMBIANA MIDDLE SCHOOL, PRIVATE UTILITY COMPANIES, AND ANY OTHER OWNER OR GOVERNING AGENCY WITH EXISTING INFRASTRUCTURE OR JURISDICTION IN THIS AREA.

DEMOLITION NOTES:

1. THE PROJECT DEMOLITION, CLEARING AND GRUBBING GENERAL AREAS HAVE BEEN REFLECTED ON THE DEMOLITION PLAN. THE AREA IS GENERAL IN NATURE AND IS INTENDED TO GIVE THE CONTRACTOR AN APPROXIMATE AREA OF DEMOLITION. REGARDLESS OF THE AREA SHOWN, THE CONTRACTOR SHALL DEMOLISH, CLEAN AND GRUB ALL AREAS AND EXISTING INFRASTRUCTURE (ABOVE AND BELOW GROUND) NECESSARY TO COMPLETE AL FINAL IMPROVEMENTS AS SHOWN ON THE CIVIL, ARCHITECTURAL, LANDSCAPE/IRRIGATION, ETC. CONSTRUCTION PLANS.
2. ALL AREAS DISTURBED BY THE CONTRACTOR; INCLUDING BUT NOT LIMITED TO ACTUAL IMPROVED AREAS, LAYDOWN AREAS, AREAS DISTURBED BY MOVING EQUIPMENT SHALL BE IMPROVED PER THE REQUIREMENTS OF THE PLANS, NO EXCEPTIONS.
3. ANY PERMANENT AND/OR CONSTRUCTION FENCING (EXISTING OR REQUIRED PER THE PLANS) REQUIRED TO BE REMOVED/RESET FOR INSTALLATION OF SITE, UTILITY, BUILDING, ETC. IMPROVEMENTS SHALL BE DONE SO AT NO ADDITIONAL COST TO THE PROJECT AND IS CONSIDERED INCIDENTAL. THE PLANS HAVE BEEN NOTED WITH GENERAL AREAS THIS IS TO OCCUR IN. THE REMOVAL AND/OR REPLACEMENT LIMITS WILL BE DETERMINED IN THE FIELD.
4. CONTRACTOR SHALL COORDINATE WITH THE OWNER PRIOR TO ANY DEMOLITION REGARDING ITEMS TO BE SALVAGED, RECYCLED, AND/OR REUSED. CONTRACTOR SHALL REMOVE ITEMS TO BE SALVAGED WITH EXTREME CAUTION TO PREVENT DAMAGE AND RETURN THOSE ITEMS TO THE OWNER.
5. CONTRACTOR SHALL COORDINATE WITH THE OWNER AND UTILITY PROVIDER PRIOR TO DISCONNECTING OR REMOVAL OF ANY UTILITY SERVICE TO EXISTING FACILITIES. 48 HOUR MINIMUM NOTICE REQUIRED. ALL UTILITIES TO BE REMOVED SHALL BE CAPPED OR PLUGGED OR TERMINATED ACCORDING TO THE UTILITY COMPANY'S REQUIREMENTS.

GRADING NOTES:

1. ALL DISTURBED AREAS SHALL HAVE A MINIMUM OF 4" TOPSOIL APPLIED, BE GRASSED AND MULCHED, AND/OR SODDED AS SOON AS FINAL GRADING IS COMPLETE. REFER TO EROSION CONTROL NOTES FOR TEMPORARY GRASSING AND MULCHING DURING GRADING OPERATIONS.
2. ALL ENGINEERED FILL MATERIALS SHALL BE REVIEWED AND APPROVED BY THE OWNER'S REPRESENTATIVE WELL IN ADVANCE OF FILL OPERATIONS. THE CONTRACTOR SHALL IDENTIFY ALL BORROW SOURCES FOR SAMPLES TO BE TAKEN AND EVALUATED. ALL EMBANKMENT FILL AND BORROW EXCAVATION MATERIALS SHALL BE COMPACTED IN LOOSE 8" LIFTS AS PER THE OWNER'S REPRESENTATIVES REQUIREMENTS. SEE THE GEOTECHNICAL REPORT AND/OR PROJECT SPECIFICATIONS FOR THIS INFORMATION.
3. THE CONTRACTOR SHALL CLEAR AND GRUB AS NECESSARY WHERE GRADING OPERATIONS ARE TO BE PERFORMED.
4. BEFORE FINAL GRADING THE CONTRACTOR SHALL MAKE SURE UTILITIES INCLUDING STORM DRAIN, SANITARY, WATER DISTRIBUTION AND FIRE PROTECTION, ELECTRICAL, VIDEO, IRRIGATION, ETC. IMPROVEMENTS HAVE BEEN INSTALLED.
5. THE CONTRACTOR SHALL NOTE CHANGE IN GRADES AND REQUIRED RAMPS WHEN LAYING OUT SCORING AND HANDICAP RAMPS. ALL ADA ACCESSIBLE RAMP GRADES AND SIDEWALK CROSS SLOPE SHALL MEET ADA REQUIREMENTS.
6. GRADING OPERATIONS SHALL INCLUDE TOPSOIL STRIPPING AND REMOVAL THROUGHOUT THE PROJECT SITE, UNCLASSIFIED EXCAVATION, AND BORROW EXCAVATION, ROCK REMOVAL, ETC. TO BRING THE SITE TO FINISHED SUBGRADE (ONLY LEAVING PAVEMENTS AND TOPSOIL TO REACH FINAL FINISHED GRADE) AS SHOWN ON THE CONSTRUCTION PLANS. NO EXTRA PAYMENT WILL BE MADE FOR EXCESS MATERIAL BROUGHT ON-SITE, MATERIAL REQUIRED TO BE MOVED MULTIPLE TIMES BECAUSE OF CONSTRUCTION PHASING, OR EXCESS MATERIAL TO BE REMOVED FROM THE SITE UPON GRADING COMPLETION.
7. THERE SHALL BE NO DEBRIS (ROOTS, ROCKS, ETC.) IN THE TOPSOIL LARGER THAN ½" IN DIAMETER. THERE ALSO SHALL BE NO WASTED TEMPORARY GRAVEL, CONCRETE, OR ANY OTHER BUILDING MATERIALS FOUND IN THE TOPSOIL. ANY FOUND DEBRIS SHALL BE REMOVED IMMEDIATELY.
8. ALL EMBANKMENT FILL AND BORROW EXCAVATION MATERIALS SHALL BE PLACED IN MAXIMUM LOOSE 8" LIFTS TO 98% OF THE STANDARD PROCTOR MAXIMUM (ASTM D 698) DRY DENSITY, AS DIRECTED BY THE GEOTECHNICAL REPRESENTATIVE. SEE THE GEOTECHNICAL REPORT AND/OR PROJECT SPECIFICATIONS FOR ALL COMPACTION REQUIREMENTS.
9. SUBGRADE SHALL BE PROOF-ROLLED WITH A HEAVILY LOADED DUMP TRUCK AND APPROVED BY THE GEOTECHNICAL ENGINEER PRIOR TO PLACING FILL. ANY AREAS SHOWING SIGNS OF PUMPING, RUTTING, OR ANY ORGANIC, SOFT, WET, OR LOOSE MATERIAL FOUND IN PLACE SHALL BE UNDERCUT AND REPLACED, OR MOISTURE CONDITIONED AND COMPACTED PER THE GEOTECHNICAL ENGINEER'S RECOMMENDATIONS.
10. CONTRACTOR SHALL BE RESPONSIBLE FOR RESTORING THE SUBGRADE AFTER IT HAS BEEN INITIALLY PREPPED DUE TO INCLEMENT WEATHER AND CONSTRUCTION TRAFFIC AT NO ADDITIONAL COST.
11. COORDINATING THE SEQUENCING OF ALL GRADING OPERATIONS WITH THE EROSION CONTROL PLAN.
12. PROPOSED GRADES INDICATED ON THE PLANS ARE TO FINISH GRADE. THE CONTRACTOR SHALL MAKE ADJUSTMENTS FOR SUBGRADE OF TOPSOIL, PAVING, BUILDING PAD, ETC.
13. FILL SLOPES SHALL BE BENCHED INTO THE EXISTING SLOPES AND SHALL BE COORDINATED WITH THE GEOTECHNICAL ENGINEER FOR BENCH DETAILS (HEIGHT AND DEPTH OF BENCH INTO THE SLOPE).
14. GRADING ADJACENT TO THE BUILDING SHALL BE COORDINATED WITH THE ARCHITECTURAL AND STRUCTURAL PLANS FOR FOUNDATION WALLS, STEM WALLS, DRAINS, AND OTHER CONDITIONS.
15. DEWATERING SHALL BE SOLELY THE RESPONSIBILITY OF THE CONTRACTOR. PREVENT SURFACE WATER AND GROUNDWATER FROM ENTERING EXCAVATIONS, FROM PONDING ON PREPARED SUBGRADES, AND FROM FLOODING PROJECT SITE AND SURROUNDING AREA. PROTECT SUBGRADES FROM SOFTENING, UNDERMINING, WASHOUT, AND DAMAGE BY RAIN OR WATER ACCUMULATION. REROUTE SURFACE WATER RUNOFF AWAY FROM EXCAVATED AREAS, DO NOT ALLOW WATER TO ACCUMULATE IN EXCAVATIONS. DO NOT USE EXCAVATED TRENCHES AS TEMPORARY DRAINAGE DITCHES. INSTALL A DEWATERING SYSTEM TO KEEP SUBGRADES DRY AND CONVEY GROUNDWATER AWAY FROM EXCAVATIONS. MAINTAIN UNTIL DEWATERING IS NO LONGER REQUIRED. IF GROUNDWATER DEWATERING IS REQUIRED, CONTRACTOR SHALL OBTAIN ANY PERMITS REQUIRED PRIOR TO DISCHARGE OF EFFLUENT FROM DEWATERING.
16. THE CONTRACTOR SHALL REVIEW THE GEOTECHNICAL REPORT AND ALL PROJECT SPECIFICATIONS IN THEIR ENTIRETY FOR THIS PROJECT.

STORM DRAIN NOTES:

1. STORM DRAIN STRUCTURE RINGS AND COVERS AND STEPS SHALL BE INSTALLED ON THE STRUCTURE WALL FREE OF PIPING AND/OR INLET THROAT.
2. STORM DRAIN STRUCTURES MEASURING FOUR (4) FEET OR GREATER IN DEPTH FROM THE FINISHED TOP OF THE STORM STRUCTURE TO THE INVERT OUT ELEVATION SHALL HAVE STEPS INSTALLED.
3. ALL REQUIRED STORM SEWER STRUCTURE RING AND COVER TOPS SHALL MATCH TOP OF CURB, ROADWAY AND/OR VEGETATED FINISHED GRADE ELEVATIONS UNLESS NOTED OTHERWISE ON THE CONSTRUCTION PLANS. ANY ADJUSTMENTS TO LEVEL RING AND COVER TOP ELEVATIONS WITH FINAL ASPHALT, SODDING, ETC. SHALL BE CONSIDERED A SUBSIDIARY OBLIGATION OF THE STORM DRAIN STRUCTURE INSTALLATION. CONTRACTOR SHALL COORDINATE WITH THE LOCAL MUNICIPALITY REGARDING CUSTOM WORDING ON ALL COVERS.
4. THE CONTRACTOR SHALL BE REQUIRED TO MAINTAIN STORMWATER FLOW IN EXISTING AND PROPOSED STORM SEWERS WITHIN THE PROJECT LIMITS AND, IF AFFECTED BY CONSTRUCTION ACTIVITIES, OUTSIDE THE PROJECT LIMITS. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE ANY AND ALL MATERIAL AND LABOR REQUIRED FOR TEMPORARY STORM SEWERS AND/OR PUMPS THAT MAY BE REQUIRED FOR BYPASSING. THE OWNER OR ITS REPRESENTATIVES SHALL NOT ACCEPT ANY RESPONSIBILITY FOR THE ADEQUACY OR ACCURACY, OR ACCEPT ANY RESPONSIBILITY FROM CLAIMS OR DAMAGES RESULTING FROM THE FAILURE OF THE CONTRACTOR'S TEMPORARY STORM SEWER BYPASS FACILITIES.
5. ALL STORM DRAIN STRUCTURES ARE REQUIRED TO HAVE REBAR REINFORCEMENT IN THE WALLS, BOTTOM, AND TOP.
6. WHEN TYING TO EXISTING UTILITY PIPING WITH STORM DRAIN, THE CONTRACTOR SHALL USE EXTREME CARE ONLY EXCAVATING AND REMOVING THE NECESSARY AMOUNT OF PIPING TO INSTALL THE REQUIRED STRUCTURE. DAMAGE TO THE EXISTING UTILITY PIPING DUE TO OVEREXCAVATION OR POOR EXCAVATION WORK SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO REMOVE/REPLACE AT HIS COST.
7. CONTRACTOR SHALL MAKE SURE THAT THERE IS FLEXIBILITY IN EACH STORM STRUCTURE CONICAL SECTION AND RING AND COVER TO ENSURE FINAL RING ELEVATION MATCHES FINAL PAVEMENT ELEVATION. FAILURE TO DO SO WILL REQUIRE REMOVAL OF AS MUCH STRUCTURE AS NECESSARY TO ALLOW TOP RING AND COVER TO BE FLUSH PAVEMENT.
8. THE CONTRACTOR MAY USE PRECAST CONCRETE STORM STRUCTURES FOR THE STANDARD/SPECIAL STRUCTURES REQUIRED ON THE CONSTRUCTION PLANS.
9. THE CONTRACTOR SHALL NOTE EXISTING STORM DRAIN AND STORM DRAIN STRUCTURES TO BE RETAINED AS PART OF THIS PROJECT. THIS EXISTING INFRASTRUCTURE SHALL BE USED TO DRAIN THE PROJECT DURING PHASES OF CONSTRUCTION. PROPER EROSION CONTROL METHODS SHALL BE USED TO PROTECT THIS INFRASTRUCTURE.
10. THE CONTRACTOR SHALL BACKFILL THE SPACE (WHEN BETWEEN 6 INCHES AND 2 FEET) BETWEEN STORM DRAIN AND SANITARY SEWER MAINS WHEN CROSSING WITH NO. 57 STONE MECHANICALLY CONSOLIDATED IN-PLACE TO PREVENT ANY SETTLEMENT AT THE CROSSING. THIS STONE SHALL EXTEND THE WIDTH OF THE UTILITY TRENCH TO APPROXIMATELY FOUR (4) FEET TO EITHER SIDE OF THE CROSSING.
11. THE CONTRACTOR SHALL GROUT OR PLUG AS NECESSARY ALL LIFTING HOLES IN STORM DRAIN PIPING SECTIONS BEFORE BACKFILL. THIS SHALL BE REQUIRED REGARDLESS IF PREFABRICATED LIFTING PLUGS ARE USED OR NOT. THE COMBINATION OF THE TWO (2) IS RECOMMENDED TO ENSURE THAT THE LIFTING HOLES DO NOT REMAIN OPEN ALLOWING EARTHEN MATERIAL TO ENTER THE DRAIN POSSIBLY CAUSING A SINK HOLE AT THE SURFACE.
12. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS ON ALL STORM PIPE MATERIALS PRIOR TO INSTALLATION AND/OR FABRICATION.
13. ALL PROPOSED STORM INLETS SHALL BE LOCATED AT THE LOW POINTS. GRADING SHALL BE TO DIRECT RUNOFF TO THESE INLETS. NOTIFY TTL OF ANY DISCREPANCIES.
14. STORM DRAINAGE SYSTEMS SHALL BE CONSTRUCTED FROM DOWNSTREAM TO UPSTREAM. VERIFY ALL PIPE SLOPES, INVERTS, AND POINTS OF CONNECTION PRIOR TO CONSTRUCTION.

SANITARY SEWER NOTES:

1. THE CONTRACTOR SHALL REFERENCE THE PLUMBING PLANS FOR ANY SEWER PLUMBING BENEATH THE PROPOSED BUILDING FOOTPRINT.
2. THE CONTRACTOR SHALL VERIFY CONNECTIONS FOR FLOW LINE ELEVATIONS OF EXISTING SANITARY SEWER PIPING AND MANHOLE INVERTS BEFORE INSTALLING ANY REQUIRED SANITARY SEWER STRUCTURES AND PIPING.
3. GRAVITY SEWER SYSTEMS SHALL BE CONSTRUCTED FROM DOWNSTREAM TO UPSTREAM. VERIFY ALL PIPE SLOPES, INVERTS, AND POINTS OF CONNECTION PRIOR TO CONSTRUCTION.
4. SANITARY STRUCTURE RINGS AND COVERS AND STEPS SHALL BE INSTALLED ON THE STRUCTURE WALL FREE OF PIPING.
5. SANITARY STRUCTURES MEASURING FOUR (4) FEET OR GREATER IN DEPTH FROM THE FINISHED TOP OF THE SANITARY STRUCTURE TO THE INVERT OUT ELEVATION SHALL HAVE STEPS INSTALLED.
6. ALL REQUIRED SANITARY STRUCTURE TOPS WITHIN A PAVED AREA SHALL MATCH ASPHALT FINISHED GRADES. TOPS NOT INSTALLED FLUSH SHALL BE RESET AT NO ADDITIONAL COST.
7. ANY EXISTING SANITARY STRUCTURES RETAINED AS PART OF THIS PROJECT SHALL BE THOROUGHLY CLEANED, WALLS WIPED WITH GROUT TO MAKE WATER TIGHT, INVERTS FORMED IF NECESSARY, EXISTING PIPING/DRAINS REGROUTING, ETC.
8. WHEN TYING TO EXISTING UTILITY PIPING WITH SANITARY SEWER STRUCTURES, THE CONTRACTOR SHALL USE EXTREME CARE ONLY EXCAVATING AND REMOVING THE NECESSARY AMOUNT OF PIPING TO INSTALL THE REQUIRED STRUCTURE. DAMAGE TO THE EXISTING UTILITY PIPING DUE TO OVEREXCAVATION OR POOR EXCAVATION WORK SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO REMOVE/REPLACE AT HIS COST.
9. THE CONTRACTOR SHALL MAKE SURE THAT THERE IS FLEXIBILITY IN EACH SANITARY SEWER CONICAL SECTION AND RING AND COVER TO ENSURE FINAL RING ELEVATION IS FLUSH WITH FINAL PAVEMENT. FAILURE TO DO SO WILL REQUIRE REMOVAL OF AS MUCH STRUCTURE AS NECESSARY TO ALLOW TOP RING AND COVER TO MATCH PAVEMENT.
10. THE CONTRACTOR SHALL KEEP ALL LIVE SANITARY MAINS AND LATERALS FLOWING CONTINUOUSLY BY WHATEVER MEANS NECESSARY INCLUDING BYPASS PUMPING, TIE-INS AT NIGHT, OR ON WEEKENDS, ETC.
11. ALL MANHOLE AND MAIN INSTALLATIONS SHALL BE TESTED PER THE LOCAL SEWER AUTHORITY'S REQUIREMENTS. TESTING IS CONSIDERED INCIDENTAL TO THE PROJECT.

GENERAL UTILITY NOTES:

1. THE CONTRACTOR SHALL BE PREPARED TO CAMERA ANY DISCOVERED UTILITY MAIN FOUND DURING CONSTRUCTION NOT SHOWN ON THE PLANS TO VERIFY IF THE MAIN SHOULD BE TIED TO THE PROPOSED SYSTEMS OR BE ABANDONED AND/OR REMOVED.
2. ALL STORM DRAIN AND SANITARY SEWER SYSTEM STRUCTURES AND PIPING SHALL REMAIN ACTIVE UNTIL PROPOSED PROJECT UTILITIES ARE INSTALLED AND CAN COME INTO SERVICE. THIS APPLIES TO AREA INLETS IN YARDS AND/OR ROOF DRAINS. ANY WATER OR SEWER DAMAGE TO PRIVATE PROPERTY DUE TO FAILURE OF THE CONTRACTOR TO COORDINATE REMOVAL OF EXISTING UTILITIES AND TIE-INS TO REQUIRED UTILITIES SHALL BE PAID FOR BY THE CONTRACTOR INCLUDING ALL CLEANUP AND ADDITIONAL WORK REQUIRED TO CORRECT THE DAMAGE.
3. THE CONTRACTOR SHALL REMOVE/RESET/RAISE ALL PRIVATE UTILITY COMPANY BOXES, MANHOLE RING AND COVER, ETC. IF THESE ITEMS ARE BEING RETAINED. ANY ITEMS DAMAGED DURING THIS WORK SHALL BE REPLACED AT THE CONTRACTOR'S EXPENSE.
4. THE SITE CONTRACTOR IS RESPONSIBLE FOR COMPLETING ALL UTILITY SERVICES FROM THE POINT THE RESPECTIVE UTILITY COMPANY COMPLETES THEIR WORK TO THE POINT OF CONNECTION AT THE BUILDING.
5. REFER TO ARCHITECTURAL, MECHANICAL, PLUMBING, ELECTRICAL PLANS FOR ALL UTILITY POINTS OF CONNECTION AT THE BUILDING.
6. BACKFLOW PREVENTION AND METERING SHALL BE PROVIDED ON THE FIRE, DOMESTIC, AND IRRIGATION SERVICES IN ACCORDANCE WITH THE LOCAL UTILITY COMPANY AND FIRE DEPARTMENT REQUIREMENTS. CONTRACTOR SHALL PROVIDE A GRAVITY DRAIN LINE FROM ALL BELOW GRADE UTILITY VAULTS TO THE NEAREST STORM DRAIN OR DAYLIGHT AT GRADE.
7. CONTRACTOR IS RESPONSIBLE FOR PROVIDING TAMPER SWITCHES AND ASSOCIATED CONDUIT, WIRING, ETC. ON FIRE SERVICE POST INDICATOR VALVES AND VALVES IN FIRE BACKFLOW PREVENTOR ASSEMBLIES. COORDINATE WITH FIRE PREVENTION AND ELECTRICAL PLANS.
8. WATER MAINS AND SERVICES SHALL BE A MINIMUM OF 10 FEET HORIZONTAL AND 2 FEET VERTICAL FROM ALL SANITARY SEWER MAINS AND LATERALS.
9. WATER MAINS AND SERVICES SHALL BE INSTALLED IN ACCORDANCE WITH LOCAL UTILITY COMPANY REQUIREMENTS. ALL MAINS AND SERVICES SHALL BE INSTALLED WITH A MINIMUM COVER OF 36" UNLESS OTHERWISE NOTED ON THE PLANS.
10. GAS SERVICE SHALL BE PER LOCAL GAS COMPANY REQUIREMENTS. COORDINATE WITH THE MECHANICAL ENGINEER AND GAS COMPANY.
11. WHERE UTILITIES ARE TO BE INSTALLED IN AREAS OF EXISTING PAVING, HARDSCAPE, ETC., CONTRACTOR SHALL SAW CUT AND REMOVE EXISTING PAVING OR HARDSCAPE, BACKFILL FULL DEPTH WITH NO. 57 STONE, AND REPLACE IN LIKE KIND AND RE-STRIPE AS NECESSARY.
12. CONTRACTOR SHALL BE RESPONSIBLE FOR ADJUSTING ELEVATIONS OF ALL AT-GRADE STRUCTURES AND UTILITY VAULTS TO REMAIN TO MATCH PROPOSED FINISHED GRADES.

EROSION CONTROL NOTES:

1. ALL EROSION CONTROL MEASURES SHALL BE IN ACCORDANCE WITH ALL FEDERAL, STATE, AND LOCAL LAWS, CODES, AND REGULATIONS.
2. REGARDLESS IF AN NPDES PERMIT IS REQUIRED OR NOT, THE CONTRACTOR SHALL BE RESPONSIBLE FOR USING BEST MANAGEMENT PRACTICES (BMP'S) FOR EROSION AND SEDIMENT CONTROL THROUGHOUT CONSTRUCTION. AN EROSION CONTROL PLAN IS PROVIDED AS A MINIMUM GUIDE FOR PROVIDING STRUCTURAL BMP'S. PHASING, TEMPORARY GRASSING, AND OTHER METHODS AS PROVIDED IN THE ALABAMA HANDBOOK FOR EROSION CONTROL, SEDIMENT CONTROL, AND STORM WATER MANAGEMENT, SHALL BE UTILIZED TO MINIMIZE EROSION. NO EXTRA COMPENSATION SHALL BE GIVEN TO THE CONTRACTOR FOR MAINTAINING EROSION CONTROL ITEMS OR ADDITIONAL EROSION CONTROL ITEMS REQUIRED TO COMPLY WITH THE NPDES PERMIT.
3. THE DESIGN OF THE CBMPP, IF REQUIRED, SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR'S QCP. IN THE EVENT THAT SEDIMENT BASINS ARE REQUIRED BY THE DESIGN, NO ADDITIONAL COMPENSATION SHALL BE GIVEN TO THE CONTRACTOR FOR STOCKPILING MATERIAL TO LATER FILL THE BASINS, ADDITIONAL GRADING TO FILL THE BASINS, TEMPORARY PIPING, RESEEDING AND REMULCHING, RESTORING PERMANENT DRAINAGE STRUCTURES AND GRADES TO THEIR PERMANENT REQUIREMENTS, OR ANY OTHER ITEMS OF WORK THAT ARE REQUIRED BY THE PHASING OF CONSTRUCTION OR THE CBMPP.
4. ANY FINES INCURRED DUE TO FAILURE TO MAINTAIN EROSION CONTROL MEASURES SHALL BE PAID FOR BY THE CONTRACTOR. ANY ADDITIONAL WORK AND MATERIALS REQUIRED TO COMPLY WITH ANY VIOLATIONS SHALL BE AT THE CONTRACTOR'S EXPENSE.
5. ALL TEMPORARY RIPRAP USED FOR EROSION CONTROL PURPOSES SHALL BE INCLUDED IN THE PRICE OF EROSION CONTROL. TEMPORARY RIPRAP BERMS SHALL BE SPREAD OUT IN AREAS WHERE PERMANENT RIPRAP IS REQUIRED AND SHALL BE SPREAD IN A MANNER TO NOT IMPEDE FLOW OF STORM DRAINS AFTER THE SITE IMPROVEMENTS ARE COMPLETE AND THE PROJECT IS STABILIZED. THERE SHALL BE NO ADDITIONAL COMPENSATION FOR TEMPORARY RIPRAP OR SPREADING IT UPON COMPLETION OF THE SITE IMPROVEMENTS. ALL TEMPORARY RIPRAP THAT IS SPREAD FOR USE AS PERMANENT RIPRAP SHALL BE PLACED ON THE STONE BEDDING AND FILTER FABRIC AS SHOWN IN THE DETAILS. COSTS FOR STONE AND FILTER FABRIC PLACED UNDERNEATH ALL TEMPORARY RIPRAP THAT IS SPREAD IN PERMANENT LOCATIONS SHALL BE INCLUDED IN THE UNIT PRICE BID FOR EROSION CONTROL MANAGEMENT AND MAINTENANCE, OR IF THERE ARE NO UNIT PRICES, THE COST SHALL BE INCIDENTAL TO THE PROJECT.
6. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO MAINTAIN AND KEEP CLEAN ALL EROSION & SEDIMENT CONTROL STRUCTURES UNTIL THE NPDES PERMIT IS ACCEPTED AS COMPLETE BY THE QCP & ADEM. AND IS TERMINATED BY THE CONTRACTOR.
7. SILT FENCES SHALL HAVE SEDIMENT DEPOSITS REMOVED IF THEY REACH A DEPTH OF FIFTEEN INCHES (15") OR 1/2 THE HEIGHT OF THE FENCE. SEDIMENT REMOVED FROM THE SILT FENCE SHALL BE PLACED ONSITE AND STABILIZED.
8. THE PROJECT AREA SHALL REMAIN CLEAN AT ALL TIMES. THE CONTRACTOR SHALL USE WHATEVER MEANS NECESSARY TO KEEP THE PROJECT AREA CLEAN, INCLUDING MOTORIZED STREET SWEEPERS, WATER AND VACUUM TRUCKS, HAND SWEEPING AND SHOVELING, ETC. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ADDRESS THIS ISSUE EACH DAY INCLUDING WEEKENDS AND SPECIFICALLY PRE AND POST RAIN EVENTS.
9. THE CONTRACTOR SHALL IDENTIFY WORK AREA ENTRANCE/EXIT LOCATIONS FOR EQUIPMENT AND INSTALL TEMPORARY GRAVEL DRIVES TO REDUCE TRACKING ONTO PUBLIC RIGHT OF WAY. THE CONTRACTOR SHALL BE RESPONSIBLE FOR KEEPING ALL STREETS CLEAN OF ANY SEDIMENT FROM THE CONSTRUCTION SITE ON A DAILY BASIS, NO EXCEPTIONS.
10. ALL DISTURBED AREAS, INCLUDING THE EARTHEN STOCKPILES, SHALL BE MULCHED UPON COMPLETION OF GRADING OPERATIONS. ADEM REGULATIONS REQUIRE ALL DISTURBED AREAS NOT UNDERGOING ACTIVE DISTURBANCE OR ACTIVE CONSTRUCTION FOR LONGER THAN THIRTEEN (13) DAYS TO BE PROVIDED WITH TEMPORARY GROUND COVER.
11. THE CONTRACTOR SHALL INSTALL WATTLES, SANDBAGS, AND/OR SILT FENCE TRENCHED THROUGH PAVEMENT AFTER SAW-CUTTING THE ASPHALT TO AVOID RUNOFF INTO OTHER ROADWAYS, DRIVES,

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LATHAN McKEE ARCHITECTS

DEMOLITION LEGEND

- APPROXIMATE LIMITS OF ASPHALT & CONCRETE PAVEMENT REMOVAL
- EXISTING BUILDING DEMOLITION
- EXISTING FENCE DEMOLITION
- EXISTING UTILITY DEMOLITION/SLURRY FILL
- APPROXIMATE CLEARING LIMITS

REMOVE EXISTING IMPROVEMENTS AS NEEDED TO INSTALL NEW CANOPY SYSTEM (SEE SHEET C2.0)

EXISTING SANITARY SEWER LATERAL *(RETAIN)*
EXISTING CLEANOUT *(REMOVE)*
EXISTING OVERHEAD COMM. *(REMOVE)*
EXISTING INLET *(REMOVE)*
EXISTING 8" STORM PIPE *(RETAIN)*
EXISTING 8" STORM PIPE *(REMOVE)*
EXISTING CONCRETE SIDEWALK *(REMOVE)*
EXISTING CONCRETE SIDEWALK *(REMOVE)*
EXISTING SANITARY SEWER LATERAL *(REMOVE & REPLACE-SEE SHEET C4.0)*
EXISTING CLEANOUT *(REMOVE)*
EXISTING SANITARY SEWER LATERAL *(RETAIN)*
EXISTING CONCRETE SIDEWALK *(REMOVE)*
EXISTING CONCRETE SIDEWALK *(REMOVE)*
EXISTING ASPHALT PAVEMENT *(RETAIN)*
EXISTING POWER POLE *(REMOVE)*
EXISTING CURB AND GUTTER *(RETAIN)*
EXISTING OVERHEAD POWER *(REMOVE)*
EXISTING 8" STORM PIPE *(REMOVE)*
EXISTING SANITARY SEWER LATERAL *(REMOVE)*
EXISTING ASPHALT PAVEMENT *(RETAIN)*
EXISTING CURB INLET *(REMOVE)*
EXISTING SIGN *(REMOVE)*
EXISTING FLAGPOLE *(REMOVE)*
EXISTING CURB AND GUTTER *(REMOVE)*
EXISTING ASPHALT PAVEMENT *(SAW CUT & REMOVE)*
EXISTING OVERHEAD COMM. *(REMOVE)*
EXISTING ASPHALT PAVEMENT *(RETAIN)*
EXISTING GAS SERVICE *(REMOVE & RELOCATE - SEE SHEET C4.0)*
EXISTING 12" STORM PIPE *(REMOVE)*
EXISTING SIGN *(REMOVE)*
EXISTING ASPHALT PAVEMENT *(RETAIN)*
EXISTING CONCRETE SIDEWALK *(REMOVE)*
EXISTING 2" WATER SERVICE *(RETAIN)*
EXISTING ASPHALT PAVING AND CURB & GUTTER *(SAW CUT & REMOVE AS NEEDED TO INSTALL NEW STORM PIPE - SEE SHEET C3.0)*
EXISTING CONCRETE SIDEWALK *(REMOVE)*
EXISTING SANITARY SEWER LATERAL *(REMOVE)*
EXISTING CONCRETE SIDEWALK *(REMOVE)*
EXISTING 2" WATER METER *(REMOVE & REPLACE-SEE SHEET C4.0)*
EXISTING HEADWALL *(REMOVE)*
EXISTING SANITARY SEWER MAIN *(RETAIN)*
EXISTING SANITARY SEWER MAIN *(RETAIN)*
EXISTING GAS MAIN *(RETAIN)*
EXISTING CONCRETE SIDEWALK RAMP *(REMOVE)*
EXISTING 2" WATER SERVICE *(RETAIN)*
EXISTING UNDERGROUND COMM. *(RETAIN)*
EXISTING GAS MAIN *(RETAIN)*
EXISTING STORM SYSTEM *(RETAIN)*
EXISTING WALL *(RETAIN)*
EXISTING WATER MAIN *(RETAIN)*
EXISTING CURB AND GUTTER *(RETAIN)*
EXISTING CURB AND GUTTER *(RETAIN)*
EXISTING OVERHEAD POWER/COMM *(REMOVE)*

JOINERTOWN ROAD
CR 34
(80' ROW)

NOTES:
1. SEE SHEET C0.1 FOR ALL APPLICABLE NOTES.
2. SEE ELECTRICAL PLANS FOR ALL SITE ELECTRICAL DEMOLITION.

0 10 20 30
SCALE IN FEET

A NEW CLASSROOM ADDITION FOR
COLUMBIANA MIDDLE SCHOOL
222 JOINERTOWN ROAD, COLUMBIANA, ALABAMA 35051
SHELBY COUNTY BOARD OF EDUCATION

SHEET TITLE:
SITE DEMOLITION PLAN

ALABAMA LICENSED PROFESSIONAL ENGINEER No. 24443 CHRISTOPHER ALLEN HOWARD 10/30/26

PROJ. MGR.:	CAH
DRAWN:	LBH
DATE: OCTOBER 30, 2026	
REVISIONS	

JOB NO.
LAA-26-054-00

SHEET NO:
C1.0
2 OF 8

0 1" 2"

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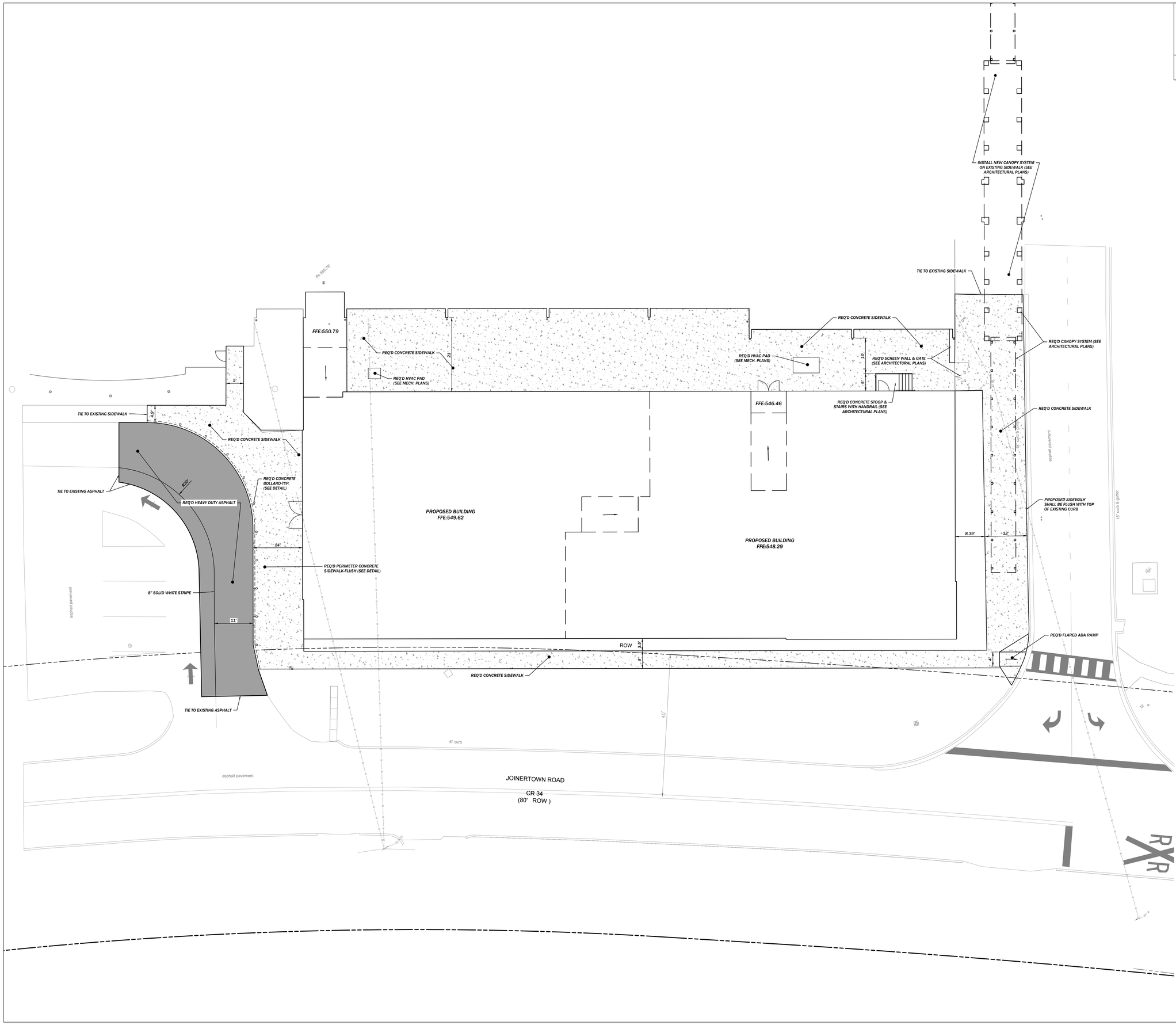
LATHAN McKEE ARCHITECTS

PAVING LEGEND

- REQ'D CONCRETE SIDEWALK (SEE DETAILS)
- REQ'D ASPHALT PAVEMENT (HEAVY DUTY) (SEE DETAILS)



NOTE:
1. SEE SHEET C0.1 FOR ALL APPLICABLE NOTES.

0 10 20 30
SCALE IN FEET

A NEW CLASSROOM ADDITION FOR
COLUMBIANA MIDDLE SCHOOL
222 JOINERTOWN ROAD, COLUMBIANA, ALABAMA 35051
SHELBY COUNTY BOARD OF EDUCATION

SHEET TITLE:
SITE LAYOUT PLAN

ALABAMA LICENSED No. 24443 PROFESSIONAL ENGINEER ALLEN H. 10/30/26

PROJ. MGR.:	CAH
DRAWN:	LBH
DATE:	OCTOBER 30, 2026
REVISIONS	

JOB NO.
LAA-26-054-00

SHEET NO:
C2.0
3 OF 8

0 1" 2"

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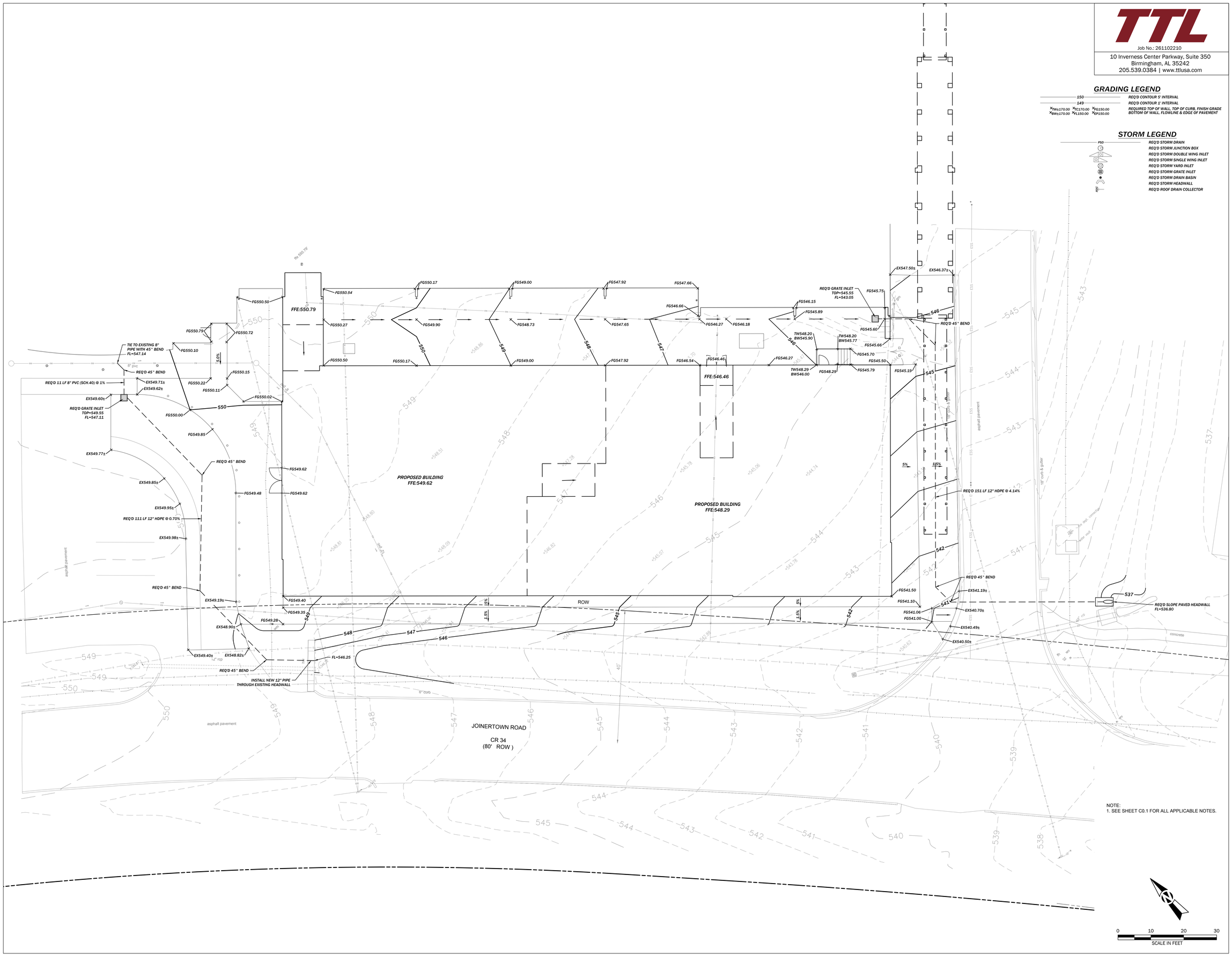
LATHAN McKEE ARCHITECTS

GRADING LEGEND

- 150 — REQ'D CONTOUR 5' INTERVAL
- 149 — REQ'D CONTOUR 1' INTERVAL
- XTW/BW170.00 XTC170.00 XFG/FL150.00 XEP150.00 — REQUIRED TOP OF WALL, TOP OF CURB, FINISH GRADE BOTTOM OF WALL, FLOWLINE & EDGE OF PAVEMENT

STORM LEGEND

- PSD — REQ'D STORM DRAIN
- REQ'D STORM JUNCTION BOX
- REQ'D STORM DOUBLE WING INLET
- REQ'D STORM SINGLE WING INLET
- REQ'D STORM YARD INLET
- REQ'D STORM GRATE INLET
- REQ'D STORM DRAIN BASIN
- REQ'D STORM HEADWALL
- REQ'D ROOF DRAIN COLLECTOR



NOTE:
1. SEE SHEET C0.1 FOR ALL APPLICABLE NOTES.

A NEW CLASSROOM ADDITION FOR
COLUMBIANA MIDDLE SCHOOL
222 JOINERTOWN ROAD, COLUMBIANA, ALABAMA 35051
SHELBY COUNTY BOARD OF EDUCATION

SHEET TITLE:
SITE GRADING & DRAINAGE PLAN

ALABAMA LICENSED No. 24443 PROFESSIONAL ENGINEER CHRISTOPHER ALLEN HOWELL 10/30/26

PROJ. MGR.:	CAH
DRAWN:	LBH
DATE:	OCTOBER 30, 2026
REVISIONS	

JOB NO.
LAA-26-054-00

SHEET NO:
C3.0
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LATHAN McKEE ARCHITECTS

A NEW CLASSROOM ADDITION FOR
COLUMBIANA MIDDLE SCHOOL
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SHELBY COUNTY BOARD OF EDUCATION

SHEET TITLE:
UTILITY PLAN

TIE TO EXISTING SANITARY LATERAL WITH CLEANOUT. CLEANOUT SHALL BE AN INTERIOR CLEANOUT AND SHALL BE INSTALLED FLUSH WITH NEW FLOOR.

FFE:550.79

REQ'D 71 LF 4" PVC SCH 40 SANITARY LATERAL @ 1% MIN.

CLEANOUT (SEE DETAIL)

REQ'D 54 LF 4" PVC SCH 40 SANITARY LATERAL @ 1% MIN.

TIE TO EXISTING LATERAL WITH CLEANOUT (SEE DETAIL) (MATCH EXISTING FLOWLINE)

REQ'D 79 LF 4" PVC SCH 40 SANITARY LATERAL @ 1% MIN.

TIE TO EXISTING GAS METER

MECHANICAL PAD (SEE MECHANICAL PLANS)

TIE TO EXISTING 2" WATER LINE

2" SHUT-OFF VALVE IN BELOW GRADE BOX

REQ'D 2" PVC (SCH40) DOMESTIC WATER SERVICE

SEE PLUMBING PLANS FOR CONTINUATION

FFE:546.46

MECHANICAL PAD (SEE MECHANICAL PLANS)

TIE TO EXISTING SEWER LATERAL WITH A WYE (MATCH EXISTING FLOWLINE)

PROPOSED BUILDING FFE:549.62

PROPOSED BUILDING FFE:548.29

RELOCATE EXISTING 2" GAS SERVICE OUTSIDE OF NEW BUILDING FOOTPRINT. ROUTING SHOWN IS FOR REFERENCE ONLY. COORDINATE WITH THE LOCAL GAS AUTHORITY FOR EXACT ROUTING.

DECREASE WATER LINE TO 2" PRIOR TO TYING TO EXISTING 2" LINE

REQ'D 3" BACKFLOW PREVENTER IN A BELOW GROUND VAULT

REQ'D 3" WATER METER IN A BELOW GROUND VAULT. COORDINATE WITH LOCAL WATER AUTHORITY

INCREASE WATER LINE TO 3" PRIOR TO TYING TO NEW WATER METER

CLEANOUT (SEE DETAIL) FL=539.29

SEE PLUMBING PLANS FOR CONTINUATION

REQ'D 11 LF 4" PVC SCH 40 SANITARY LATERAL @ 51.27%

TIE TO EXISTING SEWER MAIN FL=533.65±

TIE TO EXISTING GAS LINE

EXISTING FIRE HYDRANT

ROW

JOINERTOWN ROAD
CR 34
(80' ROW)

NOTE:
1. SEE SHEET C0.1 FOR ALL APPLICABLE NOTES.

0 10 20 30
SCALE IN FEET

ALABAMA LICENSED PROFESSIONAL ENGINEER ALEXIS HOLMES ALLEN No. 24443
10/30/26

PROJ. MGR.:	CAH
DRAWN:	LBH
DATE:	OCTOBER 30, 2026
REVISIONS	

JOB NO.
LAA-26-054-00

SHEET NO:
C4.0
5 OF 8

0 1" 2"

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EROSION CONTROL LEGEND

- SF — SF — SILT FENCE (SEE DETAIL)
- SL — SL — SEDIMENT CONTROL LOG (SEE DETAIL)
- WIP — WATTLE INLET PROTECTION (SEE DETAIL)
- CDW — WATTLE CHECK DAM (SEE DETAIL)
- TSG — TOPSOILING
- SOD — SODDING
- OP — OUTLET PROTECTION (SEE DETAIL)

FFE:550.79
FFE:546.46
PROPOSED BUILDING
FFE:549.62
PROPOSED BUILDING
FFE:548.29
ROW
JOINERTOWN ROAD
CR 34
(80' ROW)
asphalt pavement
12" rcp
6" curb
14" curb & gutter
concrete
TSG SOD
WIP
CDW
OP
SL
SF

NOTE:
1. SEE SHEET C0.1 FOR ALL APPLICABLE NOTES.

0 10 20 30
SCALE IN FEET

LATHAN McKEE ARCHITECTS

A NEW CLASSROOM ADDITION FOR
COLUMBIANA MIDDLE SCHOOL
222 JOINERTOWN ROAD, COLUMBIANA, ALABAMA 35051
SHELBY COUNTY BOARD OF EDUCATION

SHEET TITLE:
EROSION CONTROL PLAN

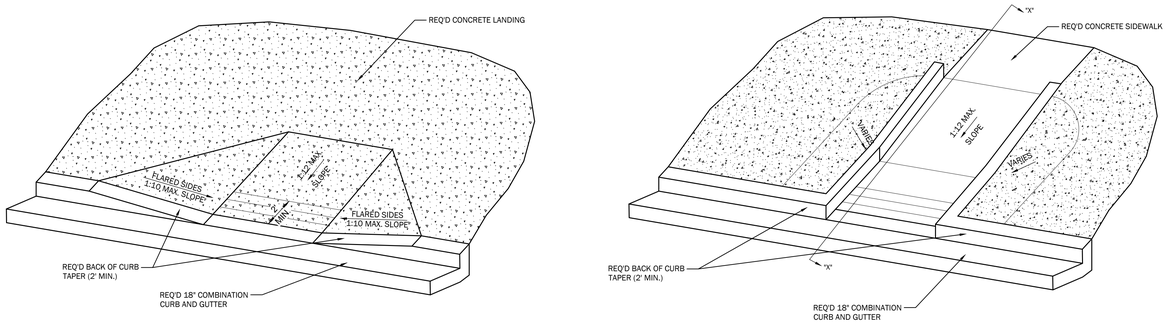
ALABAMA LICENSED PROFESSIONAL ENGINEER ALLEN H. ARNOLD No. 24443
10/30/26

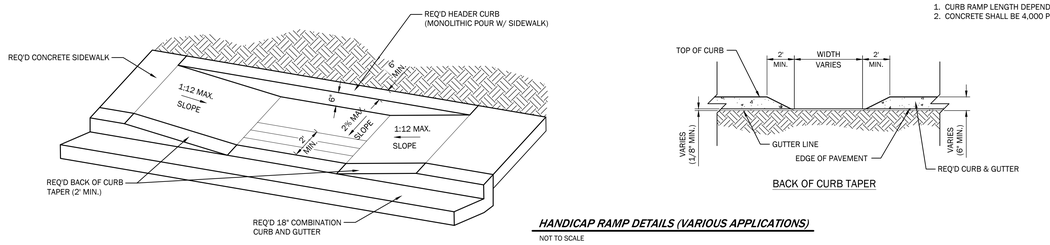
PROJ. MGR.:	CAH
DRAWN:	LBH
DATE: OCTOBER 30, 2026	
REVISIONS	

JOB NO.
LAA-26-054-00

SHEET NO:
C5.0
6 OF 8

0 1" 2"



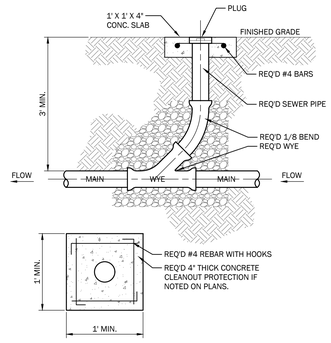


NOTES:
1. CURB RAMP LENGTH DEPENDS ON THE HEIGHT OF CURBING.
2. CONCRETE SHALL BE 4,000 PSI.

BACK OF CURB TAPER

HANDICAP RAMP DETAILS (VARIOUS APPLICATIONS)

NOT TO SCALE

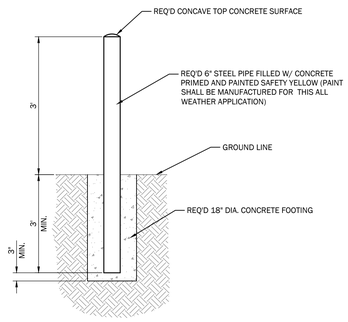


CLEANOUT PROTECTION DETAIL

NOTES:
1. CLEANOUT CONCRETE PROTECTION SHALL BE USED AS NOTED ON THE PLANS.
2. CLEANOUTS LOCATED IN PAVED AREAS (SIDEWALK, ROADWAYS, ETC.) SHALL HAVE TRAFFIC RATED TOPS.

CLEANOUT DETAIL

NOT TO SCALE



STATIONARY BOLLARD

NOT TO SCALE

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LATHAN McKEE ARCHITECTS

A NEW CLASSROOM ADDITION FOR
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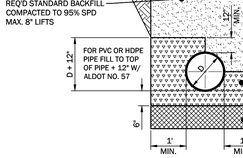
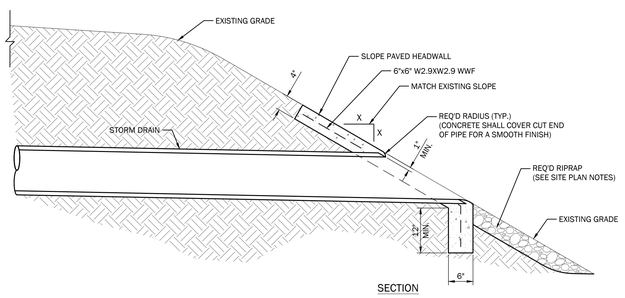
SHEET TITLE:
CIVIL DETAILS



TYPICAL ASPHALT PAVEMENT (HEAVY DUTY)

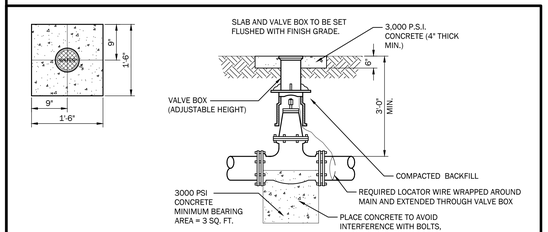
NOT TO SCALE

1. REQ'D: SUPERPAVE BITUMINOUS CONCRETE WEARING SURFACE LAYER, ½" MAXIMUM AGGREGATE SIZE MIX (ALDOT 424A)(1.5" COMPACTED THICKNESS)
2. REQ'D: TACK COAT (TRACKLESS TACK) (ALDOT 405A)(0.10 GAL/SY)
3. REQ'D: SUPERPAVE BITUMINOUS CONCRETE BINDER UPPER LAYER, 3/4" MAXIMUM AGGREGATE SIZE MIX (ALDOT 424B)(2.5" COMPACTED THICKNESS)
4. REQ'D: PRIME COAT "A" (ALDOT SECTION 401D)
5. REQ'D: CRUSHED AGGREGATE STONE BASE COURSE (ALDOT 825B)(8" COMPACTED THICKNESS) (COMPACTED TO 100% ASTM D 698)
6. REQ'D: SUBGRADE (COMPACTED TO 98% ASTM D 698)
7. REQ'D: UNCLASSIFIED/BORROW EXCAVATION (COMPACTED TO 98% ASTM D 698)



SLOPE PAVED HEADWALL DETAIL

NOT TO SCALE

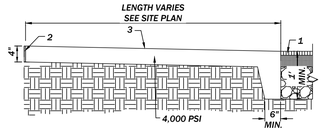


GATE VALVE AND BOX DETAIL

NOT TO SCALE

TRENCH DETAILS - GRAVITY PIPE (SANITARY AND STORM)

NOT TO SCALE

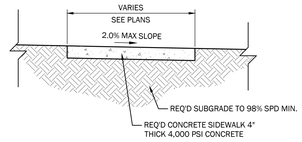


KEYED NOTES:

1. ***PAVEMENT***
2. ***COMPRESSIBLE FILLER, CUT BACK AND PROVIDE SEALANT, TYPICAL, AT ALL JOINTS WITH FILLER.***
3. ***1/8" CONTRACTION JOINT EVERY 5' TO 10'; EXPANSION JOINT EVERY 15 FEET.***

PERIMETER SIDEWALK-FLUSH DETAIL

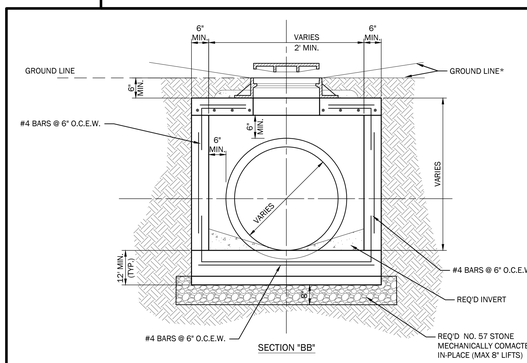
N.T.S.



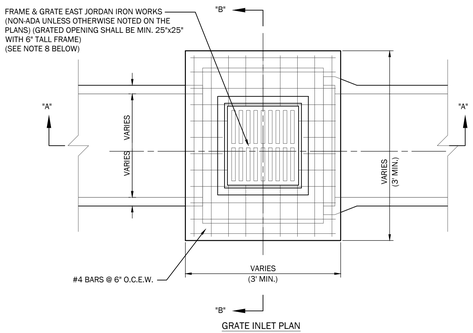
NOTES:
1. EXPANSION JT. REQ'D. @ 40' MAX. INTERVALS BUT NOT LESS THAN 30' WITH EXPANSION JOINT MATERIAL.
2. CONTRACTION JOINTS SHALL BE HAND-TOOLED ONLY IN LOCATIONS AS INDICATED BY THE SCORING PATTERN SHOWN IN THE CONSTRUCTION PLANS. JOINTS SHALL BE INSTALLED AT A DEPTH OF 1/4 THICKNESS OF THE SLAB MIN. NO SAW-CUT OF JOINTS IS ALLOWED.
3. SIDEWALKS SHALL HAVE AN EXPANSION JOINT INSTALLED IN ALL LOCATIONS WHERE NEW IMPROVEMENTS MEET EXISTING INFRASTRUCTURE.
4. SIDEWALK CROSS SLOPE SHALL NOT EXCEED 2%.
5. THE CONTRACTOR SHALL PROVIDE 3 MOCKUP PANELS (AT MINIMUM 3' X 3' IN SIZE) THAT HE FLOATS LIGHT BROOM, MEDIUM BROOM, AND HEAVY BROOM. THE OWNER WILL CHOOSE THE FINISH THEY DESIRE FOR THE PROJECT AND THE CONTRACTOR WILL PROCEED AS DIRECTED.
6. ALL STONE SHALL BE MECHANICALLY COMPACTED IN PLACE, NO EXCEPTIONS.
7. CONTRACTOR SHALL REFERENCE THE PLANS FOR THE CONCRETE SIDEWALK SCORING PATTERN. THE CONTRACTOR SHALL MATCH THIS PATTERN AS SHOWN.
8. EXPANSION JOINT MATERIAL SHALL BE PUSHED DOWN 1/8" FROM TOP OF SIDEWALK.
9. EXPANSION JOINT MATERIAL SHALL BE CONTINUOUS THROUGH THE OVERALL DEPTH OF THE SIDEWALK.

CONCRETE SIDEWALK

NOT TO SCALE



SECTION "BB"



GRATE INLET PLAN

NOTES FOR ALL CONCRETE STORM DRAIN STRUCTURES:
1. USE MIN. 3000 P.S.I. CONCRETE AND DEFORMED REINFORCING STEEL TO CONSTRUCT THIS ITEM.
2. SHAPE BOTTOM TO FLOW LINE OF PIPES.
3. STEPS ARE REQUIRED FOR ALL STRUCTURES OVER 4 FEET IN DEPTH MEASURED FROM TOP OF BOX TO INVERT OUT. STEP SPACING SHALL BE AS DIRECTED BY THE ENGINEER.
4. ALL CONCRETE BOXES SHALL INCLUDE FORMED INVERTS AND RING AND COVERS OF THE TYPE SPECIFIED.
5. GROUND LINE SHALL BE SLOPED TOWARD GRATE INLET TOP. GROUND LINE SHALL BE SLOPED AWAY FROM JUNCTION BOX TOP.
6. THE CONTRACTOR SHALL REFER TO SPECIAL DRAWING NO. JB-620-B OF THE ALDOT SPECIAL AND STANDARD DRAWINGS, LATEST EDITION, FOR DIMENSIONS AND OTHER INFORMATION NECESSARY TO CONSTRUCT THIS ITEM.
7. WHEN INSTALLING A SOLID TOP FOR JUNCTION BOX OR HOLED TOP FOR GRATE INLET ON AN EXISTING STRUCTURE, THE CONTRACTOR SHALL DOWEL INTO THE TOP OF THE EXISTING STRUCTURE WALLS WITH 12" LONG #5 BARS AT 6" O.C. ALONG THE PERIMETER OF THE STRUCTURE TO ATTACH THE NEW TOP. THE CONTRACTOR SHALL APPLY AN APPROVED EPOXY FOR THE DOWEL INSTALLATIONS. THE TOP REINFORCEMENTS SHALL THEN BE TIED TO THESE DOWELS. PREPARATION OF THE EXISTING CONCRETE SHALL FOLLOW THE CONCRETE SPECIFICATIONS.
8. FRAME SHALL BE EJIW MODEL V5626 2-8 GRATE SHALL BE EJIW MODEL V5726, OR APPROVED EQUAL.
9. IF THE CONTRACTOR CHOOSES TO USE A STANDARD PRECAST MANHOLE FOR THE DRAINAGE STRUCTURE, THEN HE SHALL REFERENCE THE STANDARD PRECAST MANHOLE DETAIL FOR ALL REQUIREMENTS.

GRATE INLET

NOT TO SCALE

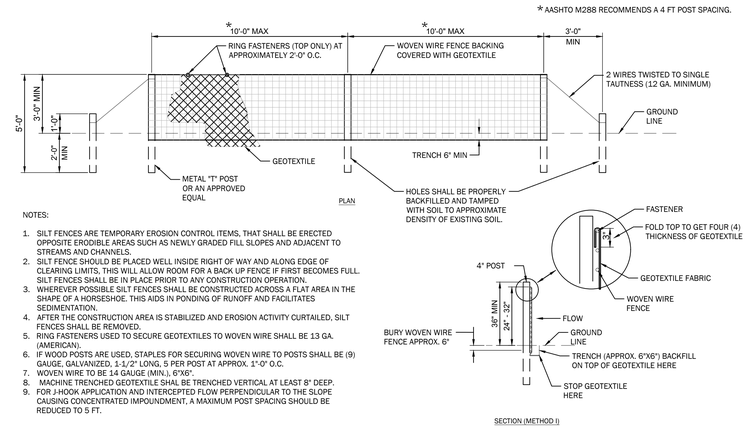
ALABAMA LICENSED No. 24443 PROFESSIONAL ENGINEER JOSEPH HOMER ALLEN, JR. 10/30/26

PROJ. MGR.:	CAH
DRAWN:	LBH
DATE:	OCTOBER 30, 2026
REVISIONS	

JOB NO.
LAA-26-054-00

SHEET NO:
C6.0
7 OF 8

0 1" 2"



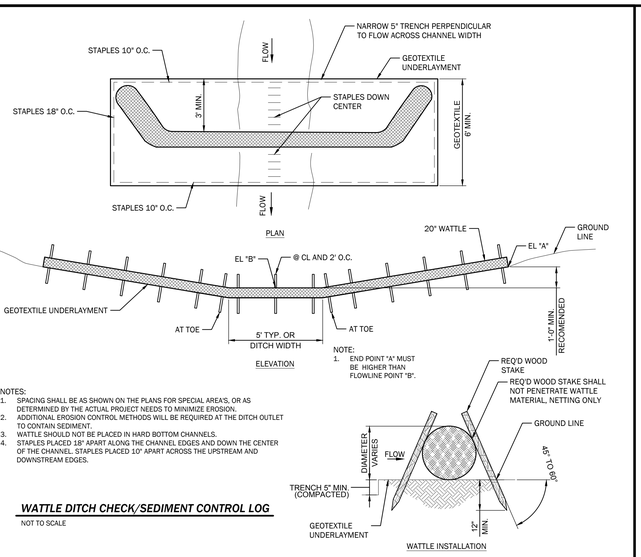
* AASHTO M288 RECOMMENDS A 4 FT POST SPACING.

NOTES:

1. SILT FENCES ARE TEMPORARY EROSION CONTROL ITEMS, THAT SHALL BE ERECTED OPPOSITE ERODIBLE AREAS SUCH AS NEWLY GRADED FILL SLOPES AND ADJACENT TO STREAMS AND CHANNELS.
2. SILT FENCE SHOULD BE PLACED WELL INSIDE RIGHT OF WAY AND ALONG EDGE OF CLEARING LIMITS, THIS WILL ALLOW ROOM FOR A BACK UP FENCE IF FIRST BECOMES FULL. SILT FENCES SHALL BE IN PLACE PRIOR TO ANY CONSTRUCTION OPERATION.
3. WHEREVER POSSIBLE SILT FENCES SHALL BE CONSTRUCTED ACROSS A FLAT AREA IN THE SHAPE OF A HORSESHOE. THIS AIDS IN PONDING OF RUNOFF AND FACILITATES SEDIMENTATION.
4. AFTER THE CONSTRUCTION AREA IS STABILIZED AND EROSION ACTIVITY CURTAILED, SILT FENCES SHALL BE REMOVED.
5. RING FASTENERS USED TO SECURE GEOTEXTILES TO WOVEN WIRE SHALL BE 13 GA. (AMERICAN).
6. IF WOOD POSTS ARE USED, STAPLES FOR SECURING WOVEN WIRE TO POSTS SHALL BE (9) GAUGE, GALVANIZED, 1-1/2" LONG, 5 PER POST AT APPROX. 1'-0" O.C.
7. WOVEN WIRE TO BE 14 GAUGE (MIN.), 6"X6".
8. MACHINE TRENCHED GEOTEXTILE SHAL BE TRENCHED VERTICAL AT LEAST 8" DEEP.
9. FOR J-HOOK APPLICATION AND INTERCEPTED FLOW PERPENDICULAR TO THE SLOPE CAUSING CONCENTRATED IMPOUNDMENT, A MAXIMUM POST SPACING SHOULD BE REDUCED TO 5 FT.

SILT FENCE - TYPE "A"

NOT TO SCALE

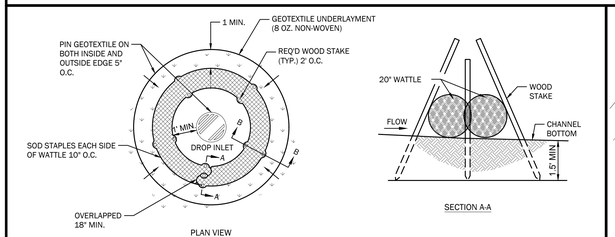


NOTE:
1. END POINT "A" MUST BE HIGHER THAN FLOWLINE POINT "B".

NOTES:
1. SPACING SHALL BE AS SHOWN ON THE PLANS FOR SPECIAL AREA'S, OR AS DETERMINED BY THE ACTUAL PROJECT NEEDS TO MINIMIZE EROSION.
2. ADDITIONAL EROSION CONTROL METHODS WILL BE REQUIRED AT THE DITCH OUTLET TO CONTAIN SEDIMENT.
3. WATTLE SHOULD NOT BE PLACED IN HARD BOTTOM CHANNELS.
4. STAPLES PLACED 18" APART ALONG THE CHANNEL EDGES AND DOWN THE CENTER OF THE CHANNEL. STAPLES PLACED 10" APART ACROSS THE UPSTREAM AND DOWNSTREAM EDGES.

WATTLE DITCH CHECK/SEDIMENT CONTROL LOG

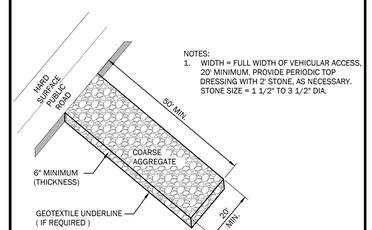
NOT TO SCALE



NOTES:
1. ANCHORING STAKES SHALL BE SIZED, SPACED, AND BE OF A MATERIAL THAT EFFECTIVELY SECURES THE WATTLE. STAKE SPACING SHALL BE A MAXIMUM OF TWO FEET.
2. OVERLAP ENDS OF WATTLES PER MANUFACTURERS RECOMMENDATIONS (18" MIN, 3' MAX).
* 3. SILT FENCE OR SAND BAGS MAY ALSO BE USED FOR THIS APPLICATION. HAY BALES NOT ACCEPTABLE DURING THIS STAGE.

WATTLE INLET PROTECTION

NOT TO SCALE



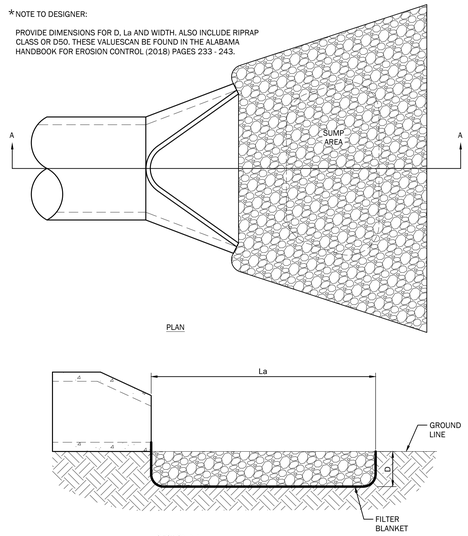
NOTES:
1. WIDTH = FULL WIDTH OF VEHICULAR ACCESS, 20' MINIMUM. PROVIDE PERIODIC TOP DRESSING WITH 2' STONE, AS NECESSARY. STONE SIZE = 1 1/2" TO 3 1/2" DIA.

CONSTRUCTION ENTRANCE/EXIT PAD

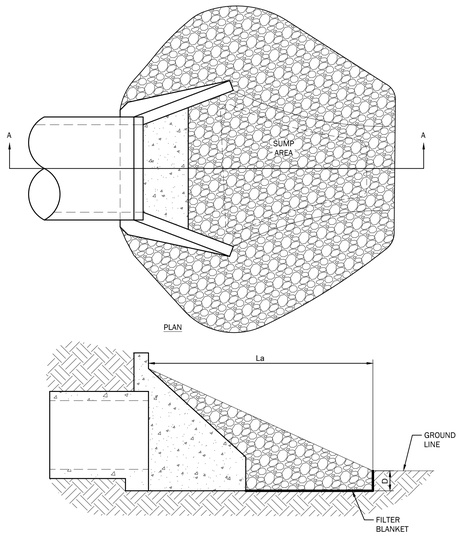
NOT TO SCALE

*NOTE TO DESIGNER:

PROVIDE DIMENSIONS FOR D, La AND WIDTH. ALSO INCLUDE RIPRAP CLASS OR D50. THESE VALUESCAN BE FOUND IN THE ALABAMA HANDBOOK FOR EROSION CONTROL (2018) PAGES 233 - 243.



PIPE OUTLET TO FLAT AREA - NOT WELL-DEFINED CHANNEL



PIPE OUTLET TO WELL-DEFINED CHANNEL

NOTES:
1. La IS THE LENGTH OF THE RIPRAP APRON.
2. D = 1.5 TIMES THE MAXIMUM STONE DIAMETER BUT NOT LESS THAN 6".
3. IN A WELL DEFINED CHANNEL EXTEND THE APRON UP THE CHANNEL BANKS TO AN ELEVATION OF 6" ABOVE THE MAXIMUM TAILWATER DEPTH OR TO THE TOP OF THE BANK, WHICHEVER IS LESS.
4. A FILTER BLANKET OR FILTER FABRIC SHOULD BE INSTALLED BETWEEN THE RIPRAP AND SOIL FOUNDATION. A NON-WOVEN GEOTEXTILE MEETING THE REQUIREMENTS OF AASHTO M288 FOR A CLASS 2 SEPARATION GEOTEXTILE.

OUTLET PROTECTION DURING CONSTRUCTION

NOT TO SCALE

TTL
Job No.: 261102210
10 Inverness Center Parkway, Suite 350
Birmingham, AL 35242
205.539.0384 | www.ttlusa.com

LATHAN McKEE ARCHITECTS

A NEW CLASSROOM ADDITION FOR
COLUMBIANA MIDDLE SCHOOL
222 JOINERTOWN ROAD, COLUMBIANA, ALABAMA 35051
SHELBY COUNTY BOARD OF EDUCATION

SHEET TITLE:
CIVIL DETAILS

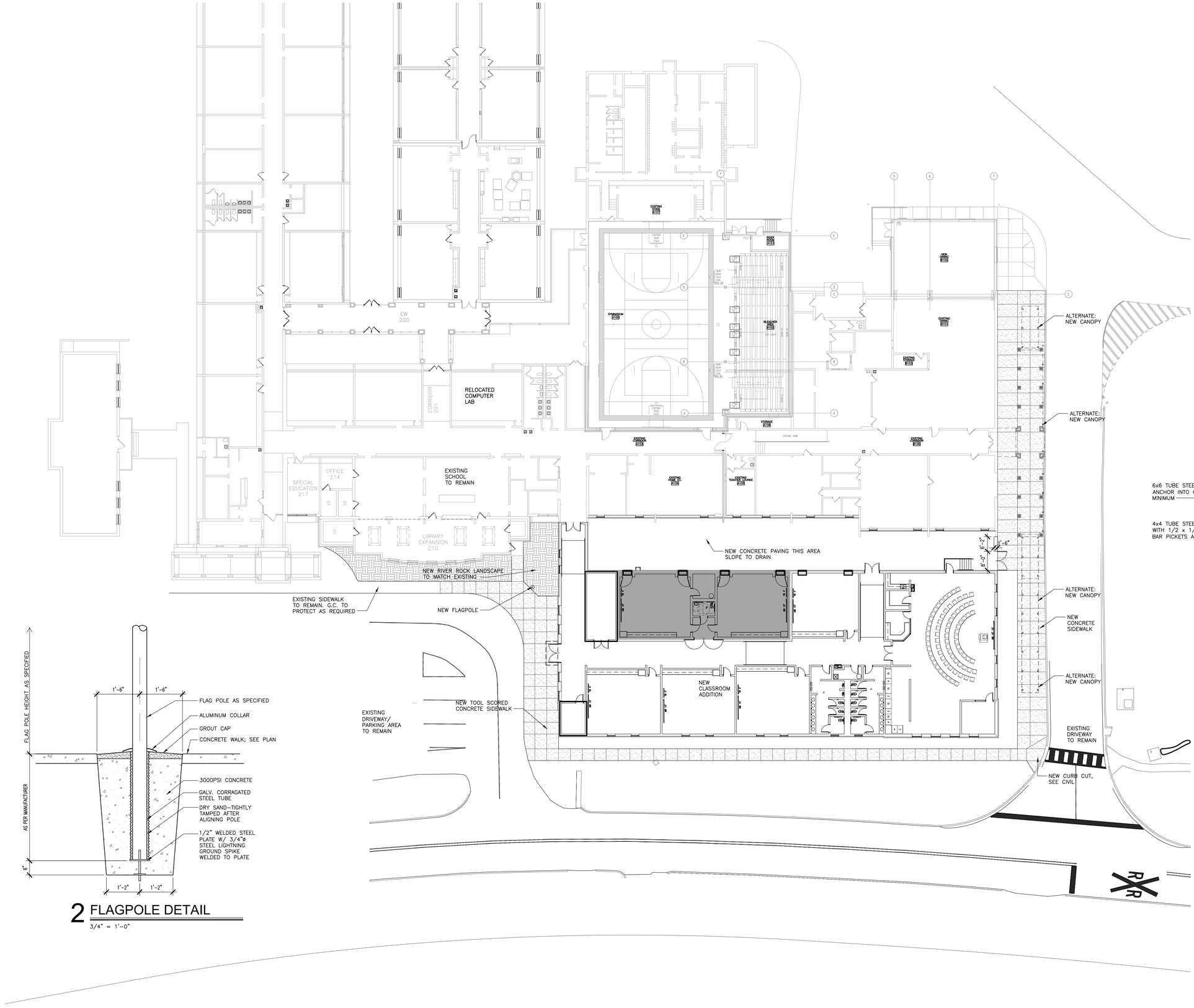
ALABAMA LICENSED PROFESSIONAL ENGINEER CHRISTOPHER ALLEN HOLMES No. 24443
10/30/26

PROJ. MGR.:	CAH
DRAWN:	LBH
DATE: OCTOBER 30, 2026	
REVISIONS	

JOB NO.
LAA-26-054-00

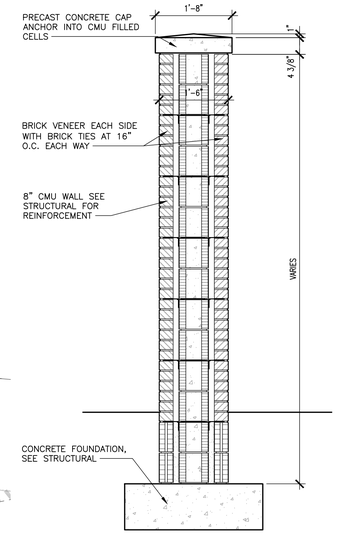
SHEET NO:
C6.1
8 OF 8

0 1" 2"



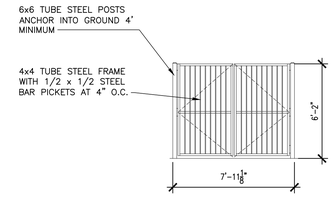
2 FLAGPOLE DETAIL

3/4" = 1'-0"



2 SITE WALL SECTION

SCALE: 3/4" = 1'-0"



3 GATE ELEVATION

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

1 ARCHITECTURAL SITE LAYOUT PLAN

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

LATHAN McKEE ARCHITECTS

A NEW CLASSROOM ADDITION FOR
COLUMBIANA MIDDLE SCHOOL
222 JOINERTOWN ROAD, COLUMBIANA, ALABAMA 35051
SHELBY COUNTY BOARD OF EDUCATION

SHEET TITLE:
ARCHITECTURAL SITE LAYOUT PLAN

STATE OF ALABAMA
No. 7007
RYAN D. VERNON
REGISTERED ARCHITECT

PROJ. MGR.: H.RASCO
DRAWN: ELM
DATE: OCTOBER 30, 2026
REVISIONS

JOB NO.
LAA-26-054-00

SHEET NO:
A1.1
1 OF 22

0 1" 2"

DEMOLITION NOTES

1. DEMOLITION SCOPE OF WORK SHALL INCLUDE, BUT NOT BE LIMITED TO THE FOLLOWING: ALL EXISTING FLOOR FINISHES, ALL CEILING SYSTEMS, GYPSUM BOARD SOFFITS, WALL & ASSOCIATED DOOR AS INDICATED, ALL PLUMBING FIXTURES & ACCESSORIES, MARKER BOARDS, TACK BOARDS, FOLDING PARTITION SYSTEMS, MILLWORK/CASEWORK, ETC. **IT IS THE INTENT OF THESE DOCUMENTS FOR ALL DEMOLITION WORK AS REQUIRED TO PROVIDE NEW CONSTRUCTION TO BE INCLUDED IN BASE BID, WHETHER INDICATED OR NOT.** DASHED LINES INDICATE GENERAL EXISTING CONSTRUCTION TO BE REMOVED. CONTACT ARCHITECT FOR DEMOLITION CLARIFICATION IF UNCLEAR ON WHICH ITEMS ARE TO BE REMOVED.
2. GENERAL CONTRACTOR SHALL REMOVE ALL ABANDONED ARCHITECTURAL, PLUMBING, MECHANICAL , ELECTRICAL CONSTRUCTION. PROTECT ITEMS TO BE RELOCATED OR DESIGNATED AS SALVAGED.
3. CONTRACTOR SHALL PROTECT EXISTING CONSTRUCTION & SYSTEMS TO REMAIN AND CORRECT ANY DAMAGE RESULTING FROM DEMOLITION WORK. PROTECT FIRE ALARM SYSTEM AND MAINTAIN OPERATIONAL. MAINTAIN EXISTING FIRE WALL FUNCTIONAL.
4. COORDINATE WITH FINISH LEGEND AND SCHEDULE TO DETERMINE EXISTING SURFACES TO RECEIVE NEW FINISHES REMOVE EXISTING FINISHES AS REQUIRED AND MAKE EXISTING SURFACES READY TO RECEIVE NEW FINISHES. PATCH AND/OR REPAIR EXISTING ADJACENT CONSTRUCTION TO REMAIN.
5. DISCONNECT & REMOVE ANY EXISTING ABANDONED FLOOR CONDUIT AND OUTLETS. PATCH AND REPAIR SLAB.
6. CONTACT AND COORDINATE W/ ARCHITECT & STRUCTURAL ENGINEER BEFORE REMOVING OR ALTERING ANY STRUCTURAL COMPONENTS. SEE RESPECTIVE CIVIL, STRUCTURAL, PLUMBING, HVAC AND ELECTRICAL DRAWINGS FOR ADDITIONAL DEMOLITION REQUIREMENTS.
7. COORDINATE WITH THE OWNER BEFORE REMOVING ANY SALVAGEABLE MATERIALS & EQUIPMENT.
8. DEMOLITION WORK SHALL NOT CHANGE THE INTEGRITY OF EXISTING STRUCTURE, FIRE ALARM SYSTEM & FIRE RATED CONSTRUCTION TO REMAIN. ANY EXISTING FIRE RATED CONSTRUCTION TO REMAIN WHICH HAS BEEN AFFECTED BY DEMOLITION WORK MUST BE CORRECTED AND MADE TO MEET THE ORIGINAL RATING. COORDINATE WITH ARCHITECTURAL, CIVIL, STRUCTURAL, MECHANICAL,
9. PLUMBING & ELECTRICAL DRAWINGS TO DETERMINE LIMITS OF DEMOLITION REQUIRED FOR NEW CONSTRUCTION.

EXISTING STAGE A107
EXISTING REAR FOLD
NEW REAR FOLD GOAL BASE BD
RISER ROOM A101
FEC
GYMNASIUM A100
BLEACHER AREA A102
ADD SEATS
ALTERNATE 1: REMOVE EXISTING GYM FLOOR AND REPLACE
NEW DINING B102
EXISTING DINING B101
EXISTING STORAGE B103
RELOCATED COMPUTER LAB
STORAGE A106
EXISTING RAMP
EXISTING CORRIDOR A103
EXISTING CORRIDOR B100
EXISTING HOME EC. A104
EXISTING TEACHER LOUNGE A105
REMOVE WINDOW WALL
REMOVE EXISTING STOREFRONT SYSTEM AND PLACE TEMPORARY BARRICADE

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

LATHAN McKEE ARCHITECTS

A NEW CLASSROOM ADDITION FOR
COLUMBIANA MIDDLE SCHOOL
222 JOINERTOWN ROAD, COLUMBIANA, ALABAMA 35051
SHELBY COUNTY BOARD OF EDUCATION

SHEET TITLE:
PARTIAL DEMOLITION FLOOR PLAN

STATE OF ALABAMA
No. 7007
RYAN D. VERNON
REGISTERED ARCHITECT

PROJ. MGR.: H.RASCO
DRAWN: ELM
DATE: OCTOBER 30, 2026
REVISIONS

JOB NO.
LAA-26-054-00
SHEET NO:
A2.0
2 OF 22
0 1" 2"

GYMNASIUM
A100

BLEACHER AREA
A102
400 SEATS

EXISTING DINING
B101

EXISTING STORAGE
B103

RELOCATED COMPUTER LAB

CORRIDOR 201

NEW REAR FOLD GOAL BASE BD

EXISTING REAR FOLD

STORAGE
A106

EXISTING RAMP

EXISTING CORRIDOR
A103

EXISTING CORRIDOR
B100

EXISTING HOME EC.
A104

EXISTING TEACHER LOUNGE
A105

LIBRARY XPANSION
210

SHELTER STOR.
103

CLASSROOM
102

CLASSROOM
106

CLASSROOM
107

MECH.
101

TOILET
104

ALCOVE
105

CORRIDOR
100

CORRIDOR
108

WORKROOM
109

MUSIC
110

OFFICE
111

757.5/20=37.87

757.5/20=37.87

720.11/20=36.00

CORRIDOR
122

BAND ROOM
112

2262/15=150.8

JANITOR
116

JANITOR
118

BOYS
117

GIRLS
115

STORAGE
114

CLASSROOM
120

CLASSROOM
119

CLASSROOM
118

810.44/20=40.52

810.44/20=40.52

833.88/20=41.69

ELECTRICAL
121

PRACTICE
113

5'-4" 16'-4" 27'-4" ± 13'-8" 12'-4" 18'-8" 16'-4" 4'-0"

184'-0"

5'-4" 18'-8" 9'-4" 19'-0"± 4'-8"

8" 10'-0" 8" 114'-4" 8" 10'-0" 8" 46'-0"

17'-1" 23'-4" 17'-8" 23'-4" 9'-3" 19'-4" 10'-0" 32'-8" 19'-0"

136'-8"

47'-4"

184'-4 1/128"

90'-0"

47'-0"

69'-4"

54'-0"

1 PARTIAL DIMENSIONED FLOOR PLAN
SCALE: 1/8" = 1'-0"

LATHAN McKEE ARCHITECTS

A NEW CLASSROOM ADDITION FOR
COLUMBIANA MIDDLE SCHOOL
222 JOINERTOWN ROAD, COLUMBIANA, ALABAMA 35051
SHELBY COUNTY BOARD OF EDUCATION

SHEET TITLE:
PARTIAL DIMENSIONED FLOOR PLAN

STATE OF ALABAMA
No. 7007
RYAN D. VERNON
REGISTERED ARCHITECT

PROJ. MGR.: H.RASCO
DRAWN: –
DATE: OCTOBER 30, 2026
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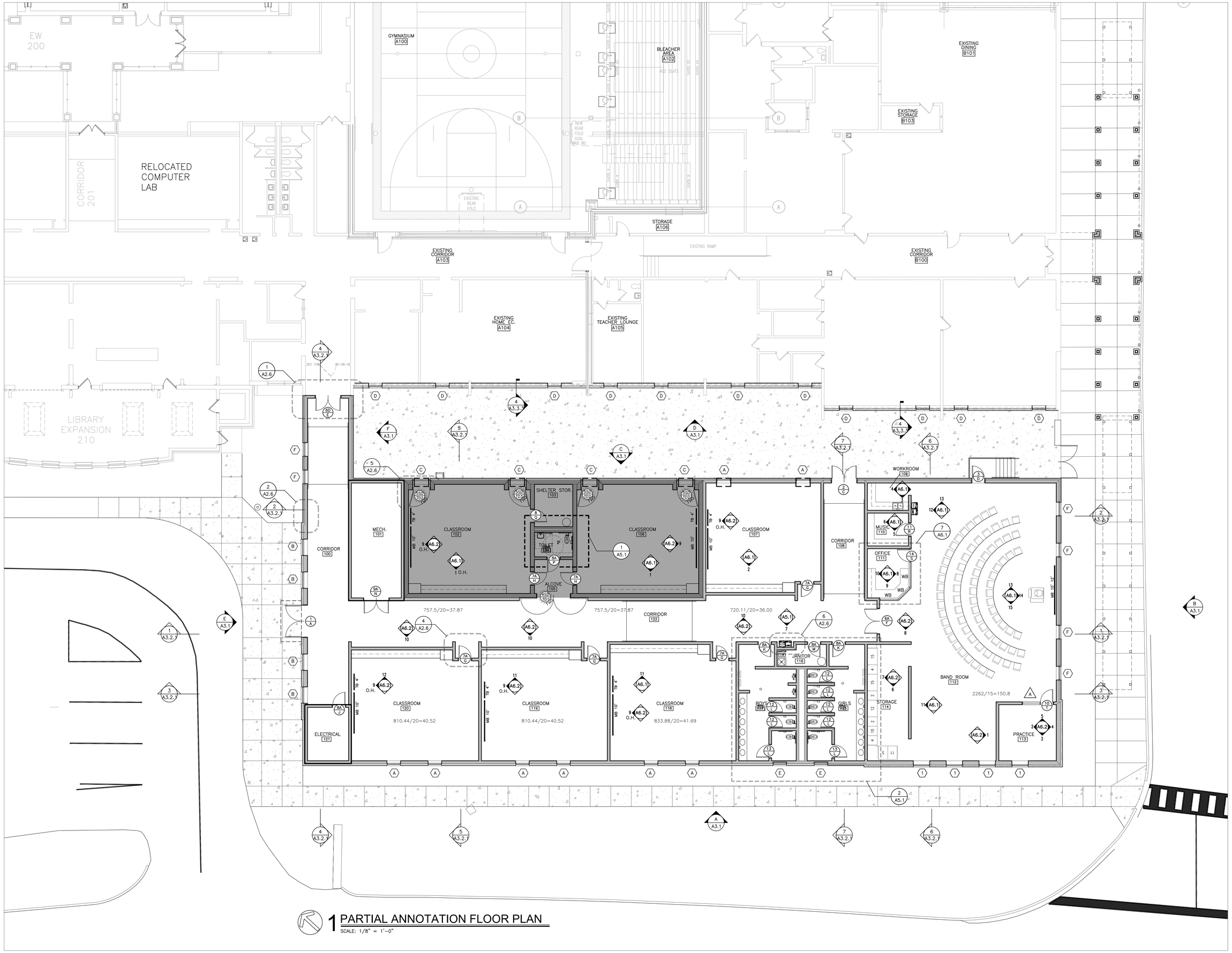
JOB NO.
LAA-26-054-00

SHEET NO:
A2.1
3 OF 22

0 1" 2"



1 PARTIAL ANNOTATION FLOOR PLAN

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

LATHAN McKEE ARCHITECTS

A NEW CLASSROOM ADDITION FOR
COLUMBIANA MIDDLE SCHOOL
222 JOINERTOWN ROAD, COLUMBIANA, ALABAMA 35051
SHELBY COUNTY BOARD OF EDUCATION

SHEET TITLE:
PARTIAL ANNOTATION FLOOR PLAN

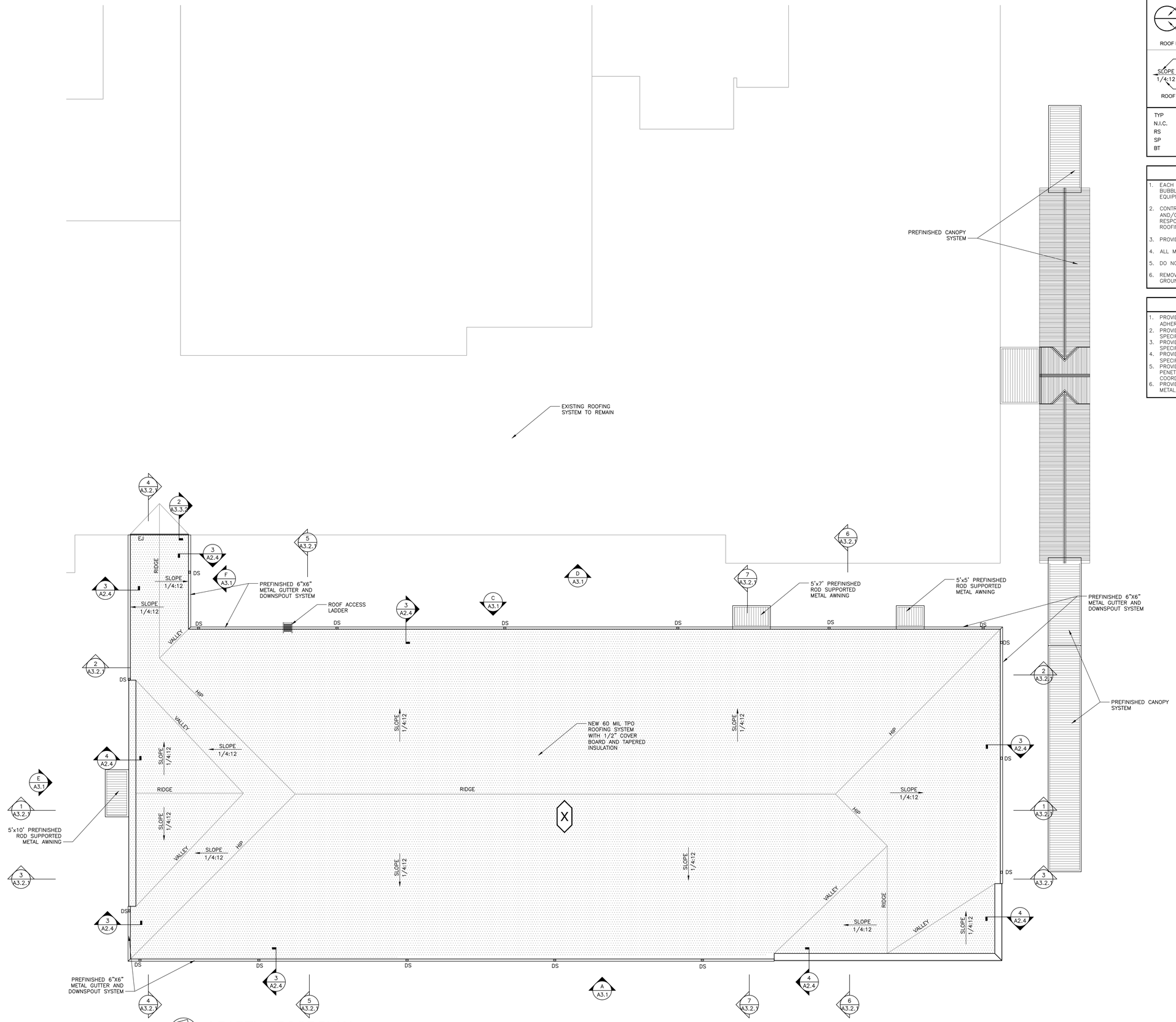
STATE OF ALABAMA
No. 7007
RYAN D. VERNON
REGISTERED ARCHITECT

PROJ. MGR.: H.RASCO
DRAWN: ELM
DATE: OCTOBER 30, 2026
REVISIONS

JOB NO.
LAA-26-054-00

SHEET NO:
A2.2
4 OF 22

0 1" 2"



1 PARTIAL ROOF PLAN

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

ROOF LEGEND

DETAIL NUMBER / SHEET NUMBER — ROOF DETAIL MARKER	X — AREA OF WORK
NEW TPO ROOF SYSTEM	NEW CANOPY SYSTEM
DIRECTION OF DOWNWARD SLOPE; SLOPE 1/4:12; RISE:RUN — ROOF SLOPE MARKER	

TYP	TYPICAL	RD	ROOF DRAIN
N.I.C.	NOT IN CONTRACT	PP	PIPE PENETRATION
RS	ROOF SCUPPER	EJ	EXPANSION JOINT
SP	SPLASH PAN	CR	CRICKET
BT	BOOT		

ROOF GENERAL NOTES

1. EACH INDIVIDUAL EQUIPMENT CONDITION ETC. MAY NOT HAVE A DETAIL DESIGNATION BUBBLE FOR CLARITY PURPOSES, HOWEVER, EACH DETAIL APPLIES TO ALL EQUIPMENT, CONDITIONS, ETC. OF THAT TYPE.
2. CONTRACTOR TO COORDINATE LOCATIONS OF ROOF PENETRATIONS WITH ENGINEERING AND/OR ARCHITECT. ROOFING CONTRACTOR SHALL MAINTAIN SINGLE SOURCE RESPONSIBILITY FOR WEATHER TIGHTNESS OF ROOF PENETRATIONS AS PART OF ROOFING SYSTEM ENVELOPE.
3. PROVIDE CRICKET ON UP-SLOPE SIDE OF ALL CURBS OVER 30".
4. ALL MATERIALS SHALL BE NEW EXCEPT WHERE NOTED OTHERWISE.
5. DO NOT CONCENTRATE MATERIAL LOADS ON THE ROOF.
6. REMOVE AND LEGALLY DISPOSE OF ALL CONSTRUCTION DEBRIS FROM ROOF AND GROUNDS DAILY.

TPO ROOF SCOPE OF WORK

1. PROVIDE POLYISOCYANURATE INSULATION SYSTEM WITH 5" MINIMUM START FULLY ADHERED IN MANUFACTURER'S RECOMMENDED SEALANT AS SPECIFIED.
2. PROVIDE COVER BOARD FULLY ADHERED IN MANUFACTURER'S APPROVED SEALANT AS SPECIFIED.
3. PROVIDE ICE AND WATER SHIELD ALONG PARAPET WALLS AS INDICATED IN SPECIFICATIONS.
4. PROVIDE TPO ROOFING SYSTEM AS SPECIFIED. INSTALL IN ACCORDANCE WITH SPECIFICATIONS AND MANUFACTURER'S RECOMMENDATIONS.
5. PROVIDE FLASHING AS REQUIRED AT ALL MECHANICAL, PLUMBING, AND ELECTRICAL PENETRATIONS WHETHER INDICATED OR NOT. MAKE ALL PENETRATIONS WEATHER TIGHT COORDINATE WITH ENGINEERING.
6. PROVIDE PREFINISHED SHEET METAL AND FLASHING COMPONENTS INCLUDING: EDGE METAL, PIPE FLASHING, EAVE DRIPS, COPING CAPS, REGLET FLASHING, ETC.

LATHAN McKEE ARCHITECTS

A NEW CLASSROOM ADDITION FOR
COLUMBIANA MIDDLE SCHOOL
222 JOINERTOWN ROAD, COLUMBIANA, ALABAMA 35051
SHELBY COUNTY BOARD OF EDUCATION

SHEET TITLE:
PARTIAL ROOF PLAN

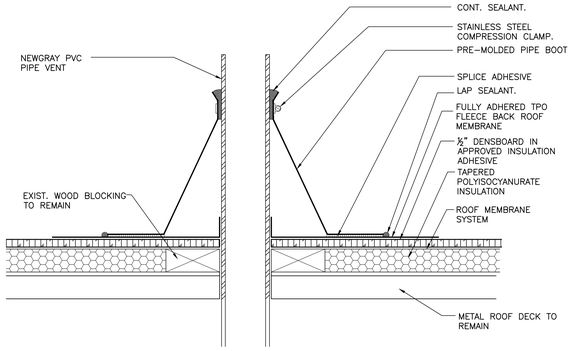
STATE OF ALABAMA
No. 7007
RYAN D. VERNON
REGISTERED ARCHITECT

PROJ. MGR.: H.RASCO
DRAWN: ELM
DATE: OCTOBER 30, 2026
REVISIONS

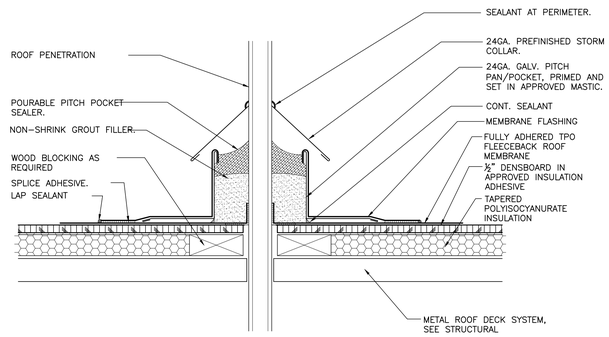
JOB NO.
LAA-26-054-00

SHEET NO:
A2.3
5 OF 22

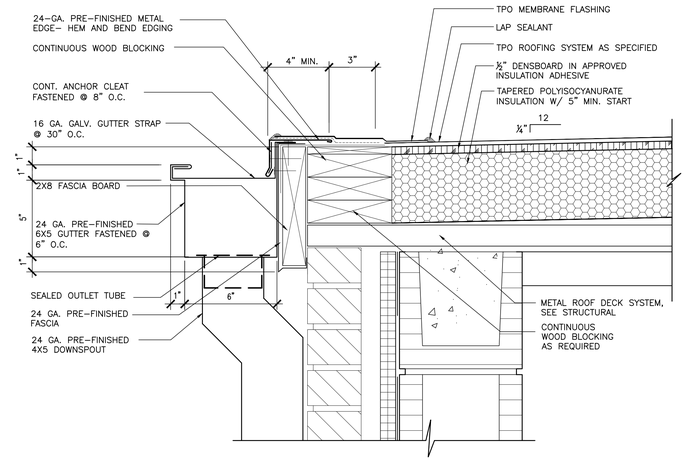
0 1" 2"



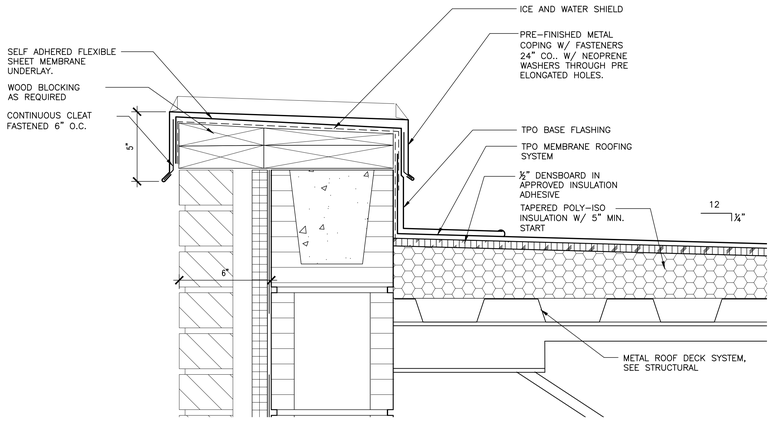
1 PIPE PENETRATION DETAIL
SCALE: 3" = 1'-0"



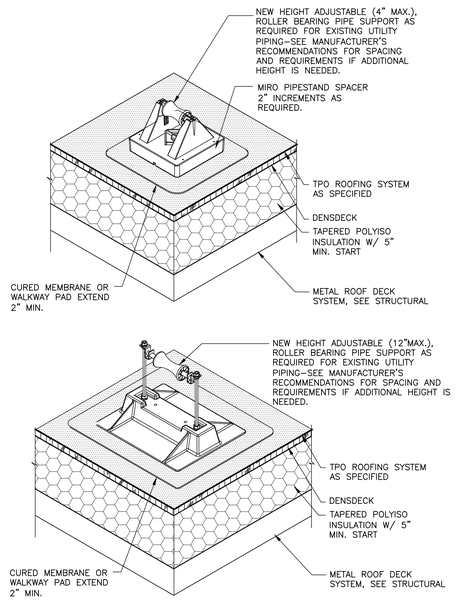
2 POCKET FLASHING DETAIL
SCALE: 3" = 1'-0"



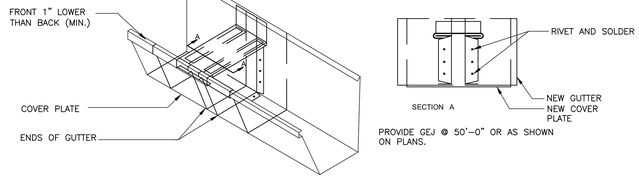
3 GUTTER DETAIL
SCALE: 3" = 1'-0"



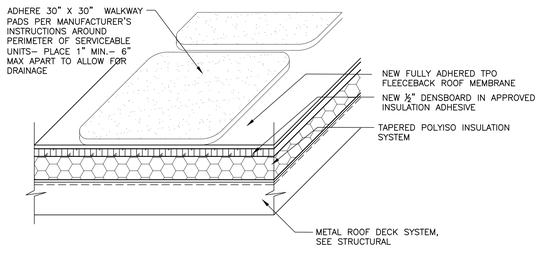
4 LOW PARAPET FLASHING DETAIL
SCALE: 3" = 1'-0"



5 PIPE SUPPORT DETAIL
SCALE: 3" = 1'-0"



6 GUTTER EXPANSION DETAIL
SCALE: 3" = 1'-0"



6 WALK PAD DETAIL
SCALE: 3" = 1'-0"

LATHAN ▪ McKEE ARCHITECTS

A NEW CLASSROOM ADDITION FOR
COLUMBIANA MIDDLE SCHOOL
222 JOINERTOWN ROAD, COLUMBIANA, ALABAMA 35051
SHELBY COUNTY BOARD OF EDUCATION

SHEET TITLE:
TYPICAL ROOF DETAILS

STATE OF ALABAMA
No. 7007
RYAN D. VERNON
REGISTERED ARCHITECT

PROJ. MGR.:	H.RASCO
DRAWN:	ELM
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LAA-26-054-00

SHEET NO:
A2.4
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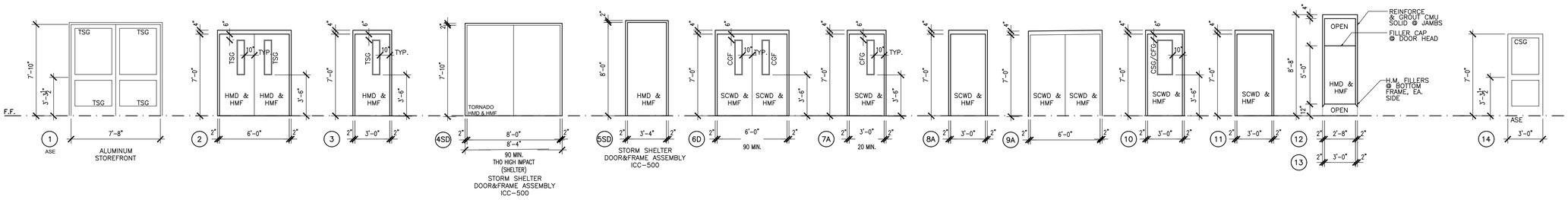
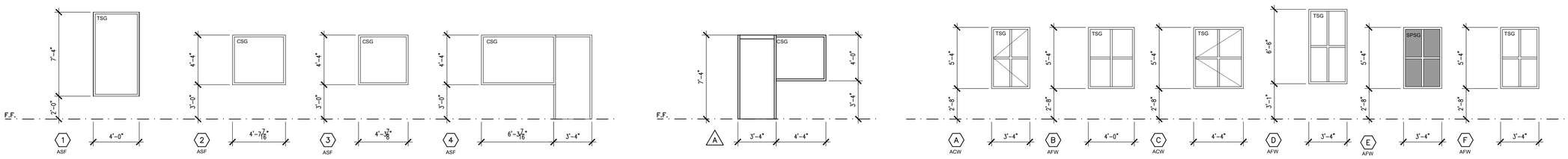
0 1" 2"



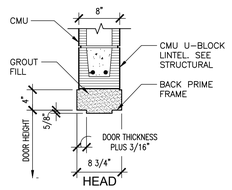
1 DOOR SCHEDULE

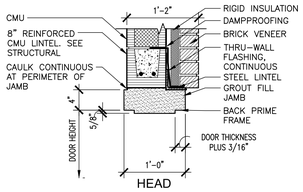
SCALE: 1/4" = 1'-0"

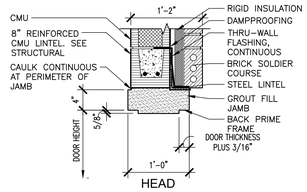


2 STOREFRONT SCHEDULE

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

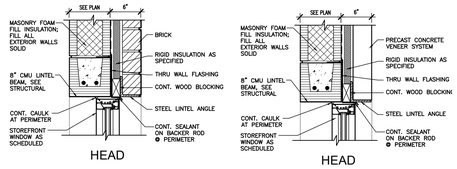






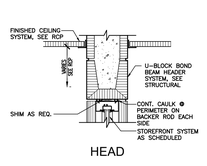
3 HM WINDOW SCHEDULE

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



4 EXT. WINDOW SCHEDULE

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

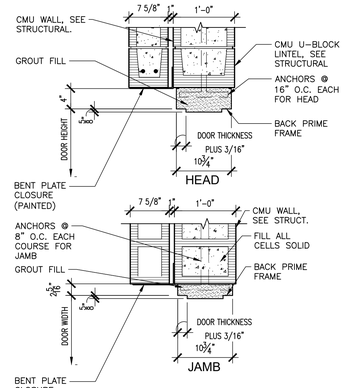


INTERIOR 8" CMU

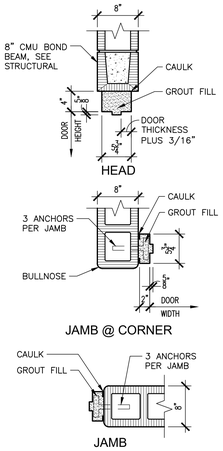
EXTERIOR
8" CMU W/ BRICK VENEER

EXTERIOR
8" CMU W/ BRICK VENEER

NOTE: SEE STRUCTURAL FOR TORNADO STORM SHELTER CMU AND REINFORCING INFORMATION. DOORS AND FRAMES MUST HAVE BOTH THE FEMA 361/ICC-500 2020 LABEL AND THE 90 MIN. FIRE LABEL AS SPECIFIED. MEET ALL TORNADO STORM SHELTER DOOR AND FRAME REQUIREMENTS AS INDICATED IN THE SPECIFICATIONS AND ICC-500 2020.

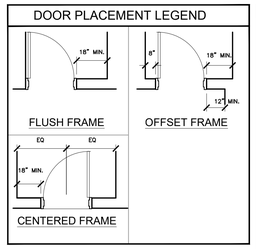


STORM SHELTER
DOORS @ INTERIOR
12" CMU & 8" CMU



INTERIOR
CMU @ TOILET STALLS

DOOR PLACEMENT LEGEND



DOOR AND WINDOW LEGEND

AL	PREFINISHED ALUMINUM LOUVER SYSTEM AS SPECIFIED
CSG	1/4" THICK CLEAR TEMPERED SAFETY GLASS.
CFG	CLEAR FIRE RATED SAFETY GLASS AS SPECIFIED.
TSG	1" TINTED INSULATED LOW-E TEMPERED SAFETY GLASS AS SPEC.
SCWD	SOLID CORE WOOD DOOR
HMD	HOLLOW METAL DOOR
HMF	HOLLOW METAL FRAME
ASE	PREFINISHED ALUMINUM STOREFRONT ENTRANCE SYSTEM AS SPECIFIED.
ASF	PREFINISHED ALUMINUM STOREFRONT FRAME SYSTEM AS SPECIFIED.
CW	PREFINISHED ALUMINUM CURTAINWALL FRAME SYSTEM AS SPECIFIED.
SPSG	1" SPANDREL INSULATED TEMPERED SAFETY GLASS AS SPECIFIED.
THO	TORNADO STORM SYSTEM W/ MECHANICAL HOLD OPENS
EF	EXISTING FRAME TO REMAIN. PATCH AND REPAIR
HO	HOLD OPENS TIED TO FIRE ALARM SYSTEM
MHO	MANUAL HOLD OPEN
AC	ACCESS CONTROL SYSTEM AS SPECIFIED SEE ALSO ELECT.
RI	ROUGH IN ELECTRICAL FOR FUTURE ACCESS CONTROL SYSTEM AS SPECIFIED SEE ELECT.
ACW	PREFINISHED ALUMINUM CASEMENT WINDOW
AFW	PREFINISHED ALUMINUM FIXED WINDOW

NOTES:
1. PROVIDE LOW-E TSG GLAZING AT ALL WESTERN, EASTERN, AND SOUTHERN FACING GLAZING. PROVIDE TSG AT ALL NORTHERN FACING GLAZING.
2. PROVIDE CFG WHERE GLASS IS INDICATED IN RATED DOORS AND WINDOWS.
3. COORDINATE WITH MECHANICAL DRAWINGS FOR DOOR LOUVER LOCATIONS.
4. WINDOW WIDTH AND HEIGHT DIMENSIONS ARE ROUGH OPENING.

5 DETAILS

SCALE: 1" = 1'-0"

6 DETAILS

SCALE: 1" = 1'-0"

7 DETAILS

SCALE: 1" = 1'-0"

8 DETAILS

SCALE: 1" = 1'-0"

9 DETAILS

SCALE: 1" = 1'-0"

10 DETAILS

SCALE: 1" = 1'-0"

11 DETAILS

SCALE: 1" = 1'-0"

12 DETAILS

SCALE: 1" = 1'-0"

LATHAN McKEE ARCHITECTS

A NEW CLASSROOM ADDITION FOR
COLUMBIANA MIDDLE SCHOOL
222 JOINERTOWN ROAD, COLUMBIANA, ALABAMA 35051
SHELBY COUNTY BOARD OF EDUCATION

SHEET TITLE:
DOOR AND WINDOW SCHEDULE AND DETAILS

STATE OF ALABAMA
No. 7007
RYAN D. VERNON
REGISTERED ARCHITECT

PROJ. MGR.: H.RASCO
DRAWN: ELM
DATE: OCTOBER 30, 2026
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A2.5
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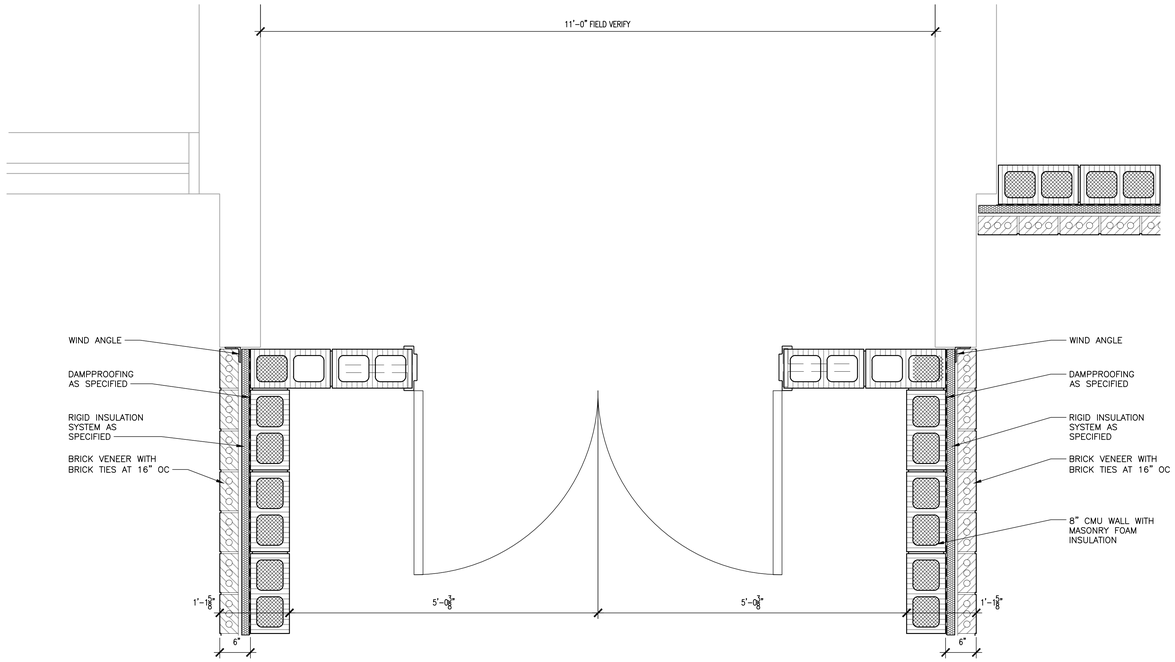
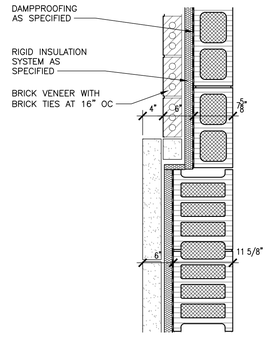
0 1" 2"



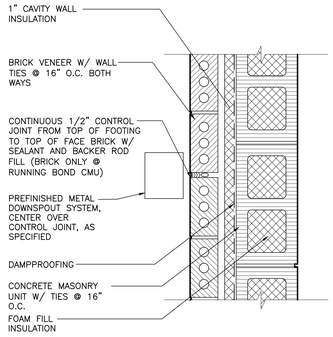
1 PLAN DETAIL

SCALE: 1" = 1'-0"



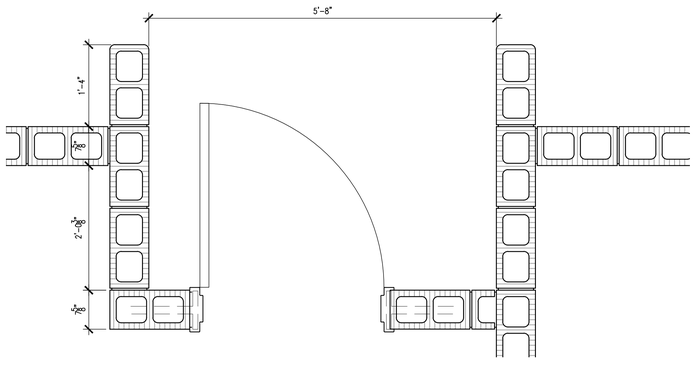
2 PLAN DETAIL

SCALE: 1" = 1'-0"



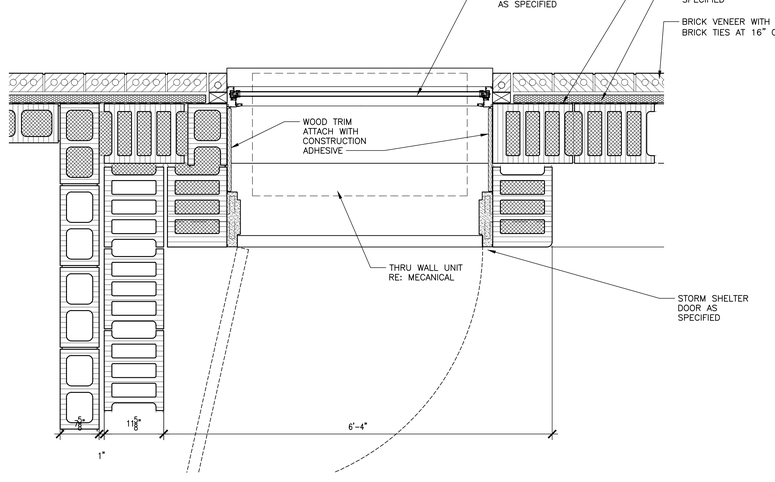
3 CONTROL JOINT DETAIL

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



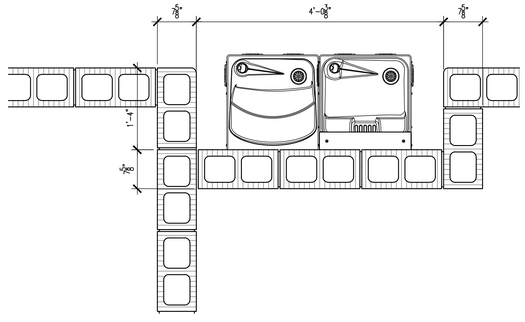
4 PLAN DETAIL

SCALE: 1" = 1'-0"



5 PLAN DETAIL

SCALE: 1" = 1'-0"



6 PLAN DETAIL

SCALE: 1" = 1'-0"

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A NEW CLASSROOM ADDITION FOR
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SHEET TITLE:
PLAN DETAILS

STATE OF ALABAMA
No. 7007
RYAN D. VERNON
REGISTERED ARCHITECT

PROJ. MGR.:	H.RASCO
DRAWN:	ELM
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LAA-26-054-00

SHEET NO:
A2.6
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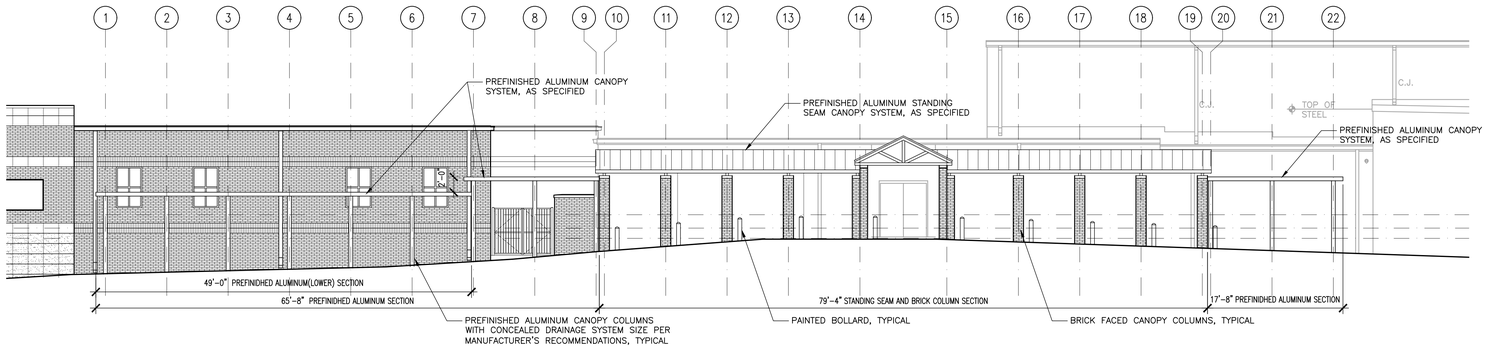
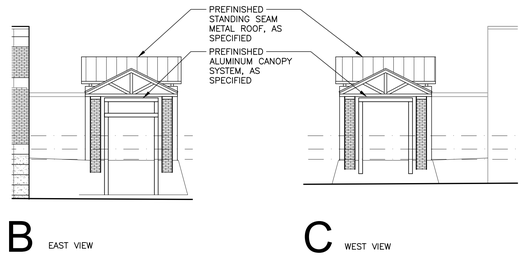
0 1" 2"



A CANOPY ELEVATION

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

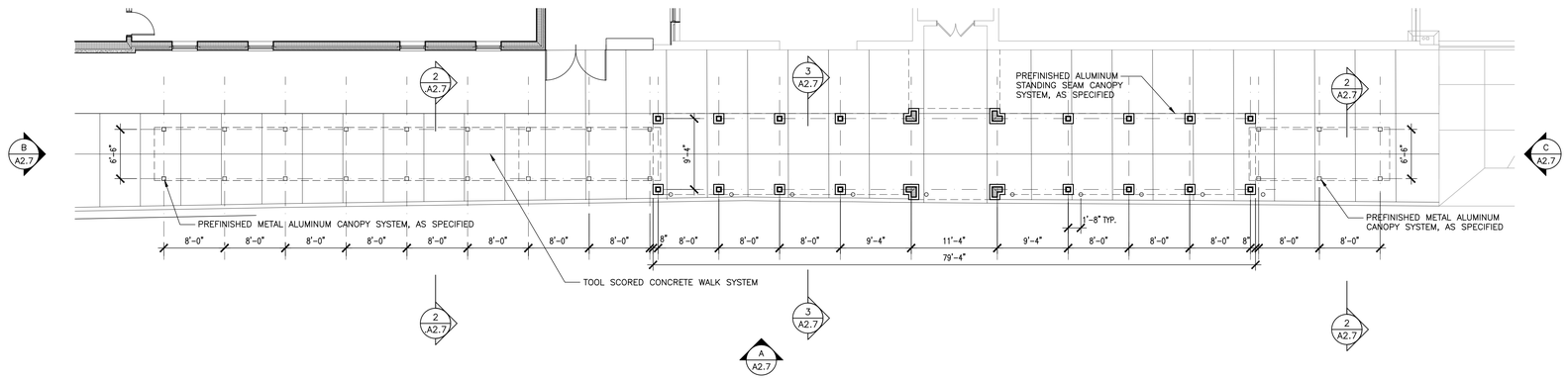


B EAST VIEW

C WEST VIEW

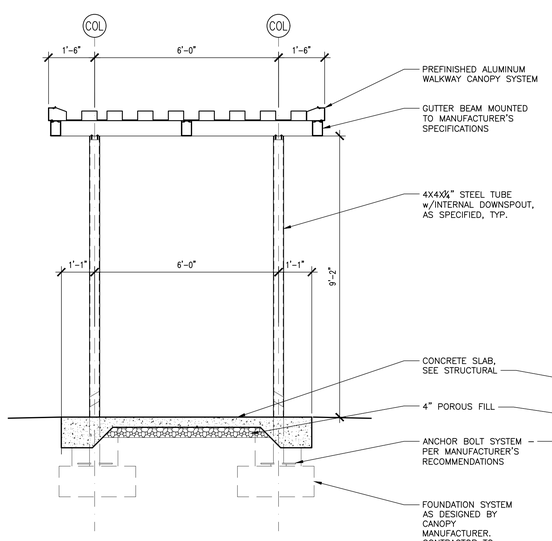
B & C CANOPY ELEVATION

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



1 PARTIAL FLOOR PLAN AT CANOPY

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



2 CANOPY SECTION

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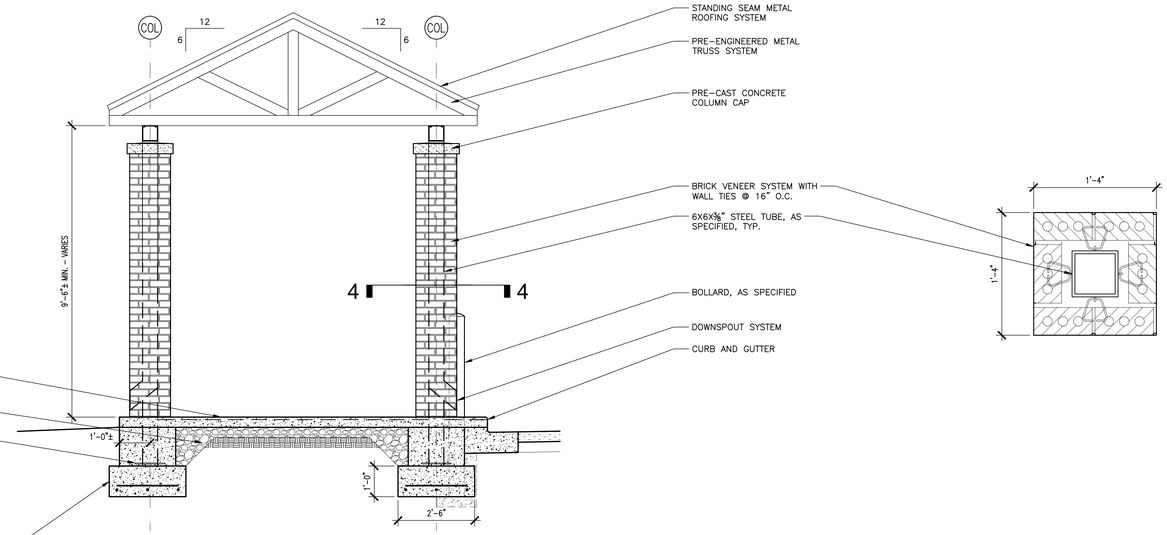

3 CANOPY SECTION

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

4 COLUMN DETAIL

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

LATHAN McKEE ARCHITECTS

A NEW CLASSROOM ADDITION FOR
COLUMBIANA MIDDLE SCHOOL
222 JOINERTOWN ROAD, COLUMBIANA, ALABAMA 35051
SHELBY COUNTY BOARD OF EDUCATION

SHEET TITLE:
CANOPY PLAN, ELEVATIONS, AND DETAILS

STATE OF ALABAMA
No. 7007
RYAN D. VERNON
REGISTERED ARCHITECT

PROJ. MGR.: H.RASCO
DRAWN: ELM/JW
DATE: OCTOBER 30, 2026
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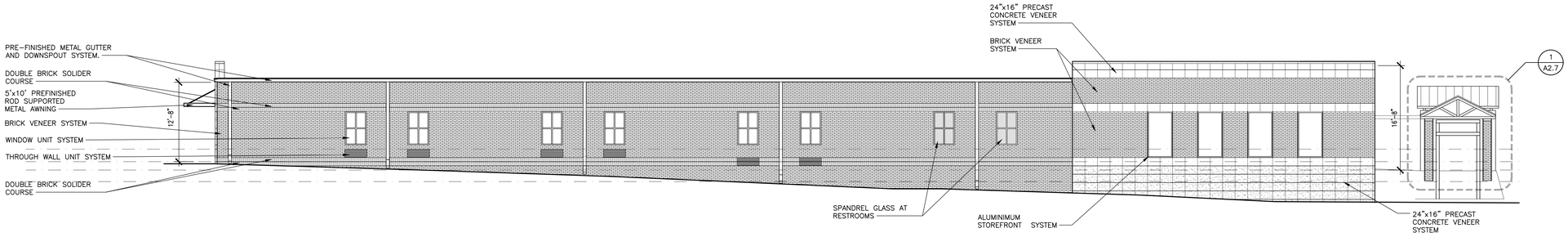
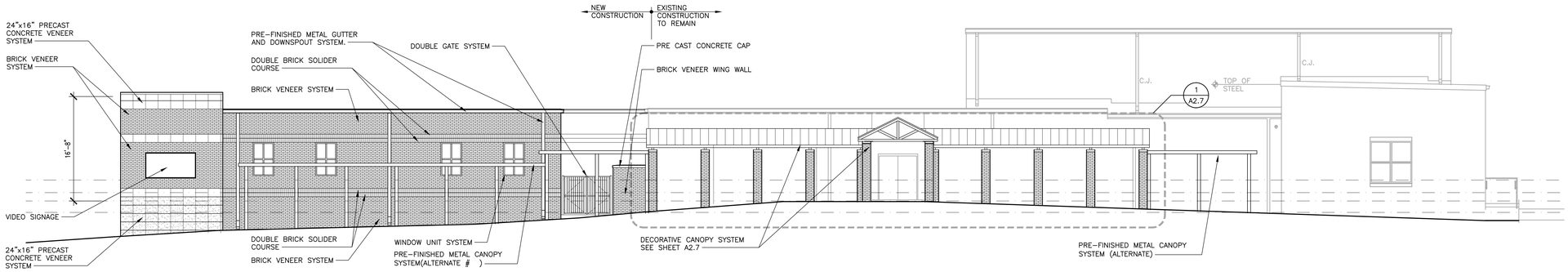
0 1" 2"



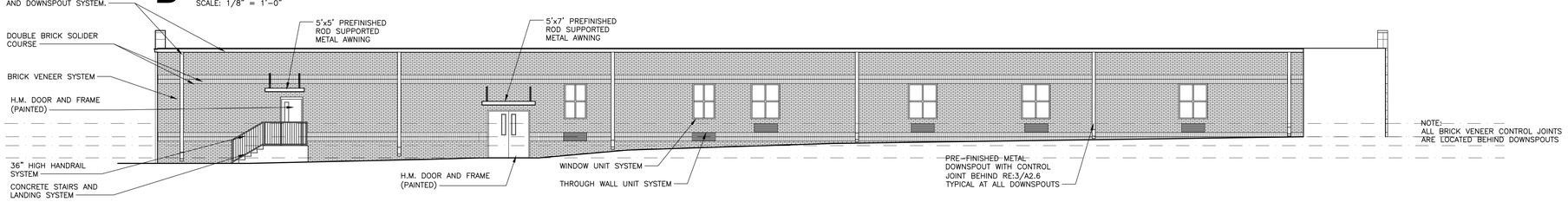
A SOUTH WEST ELEVATION

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



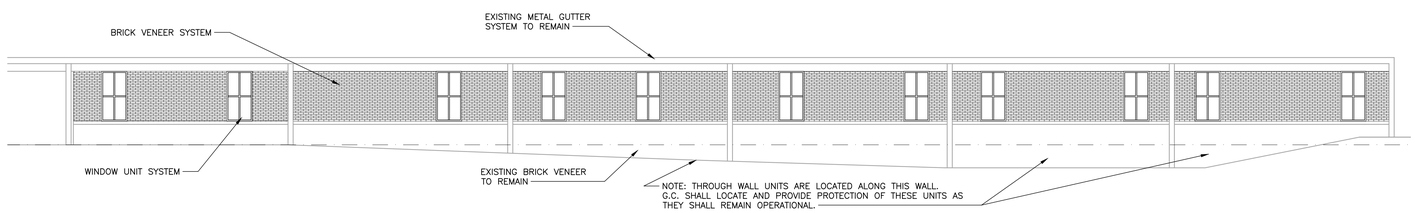
B SOUTH EAST ELEVATION

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



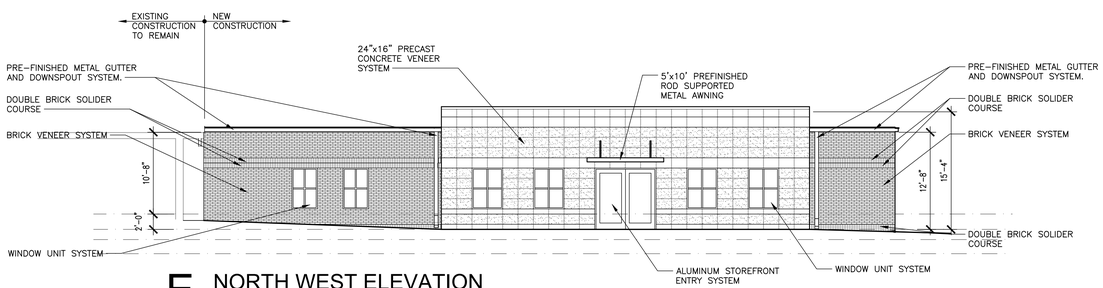
C NORTH EAST ELEVATION

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



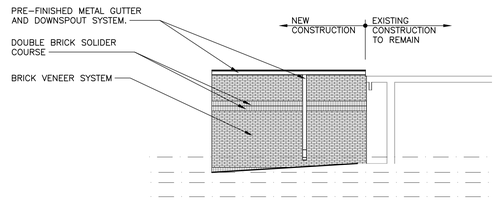
D ELEVATION AT EXISTING BUILDING

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



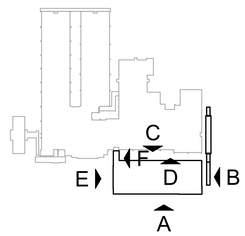
E NORTH WEST ELEVATION

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



F PARTIAL ELEVATION

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



KEY PLAN

SCALE: N.T.S.

LATHAN McKEE ARCHITECTS

A NEW CLASSROOM ADDITION FOR
COLUMBIANA MIDDLE SCHOOL
222 JOINERTOWN ROAD, COLUMBIANA, ALABAMA 35051
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SHEET TITLE:
BUILDING ELEVATIONS

STATE OF ALABAMA
No. 7007
RYAN D. VERNON
REGISTERED ARCHITECT

PROJ. MGR.: H.RASCO
DRAWN: ELM
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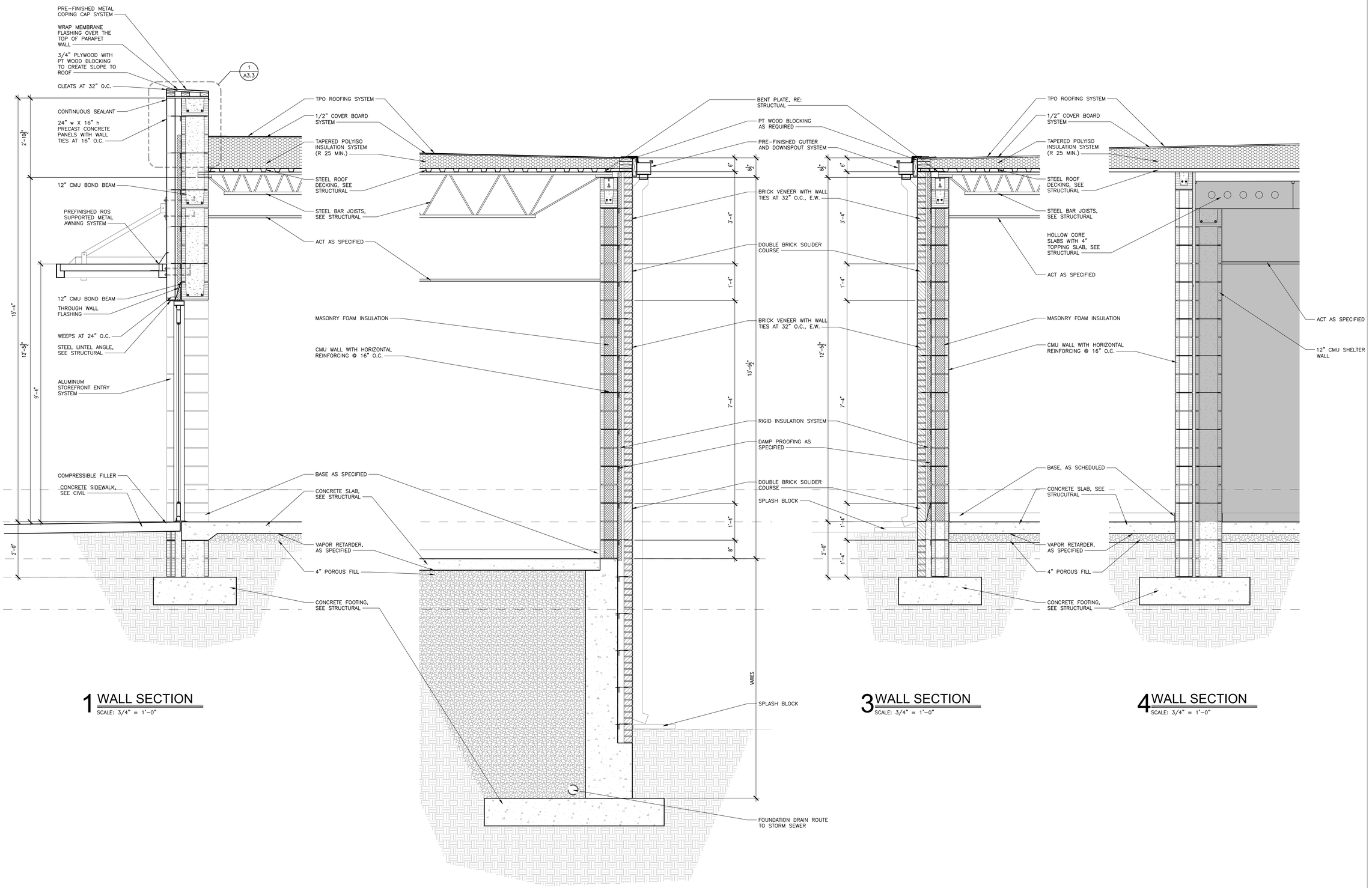

1 WALL SECTION
SCALE: 3/4" = 1'-0"

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

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

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

LATHAN McKEE ARCHITECTS

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SHEET TITLE:
WALL SECTIONS

STATE OF ALABAMA
No. 7007
RYAN D. VERNON
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PROJ. MGR.: H.RASCO
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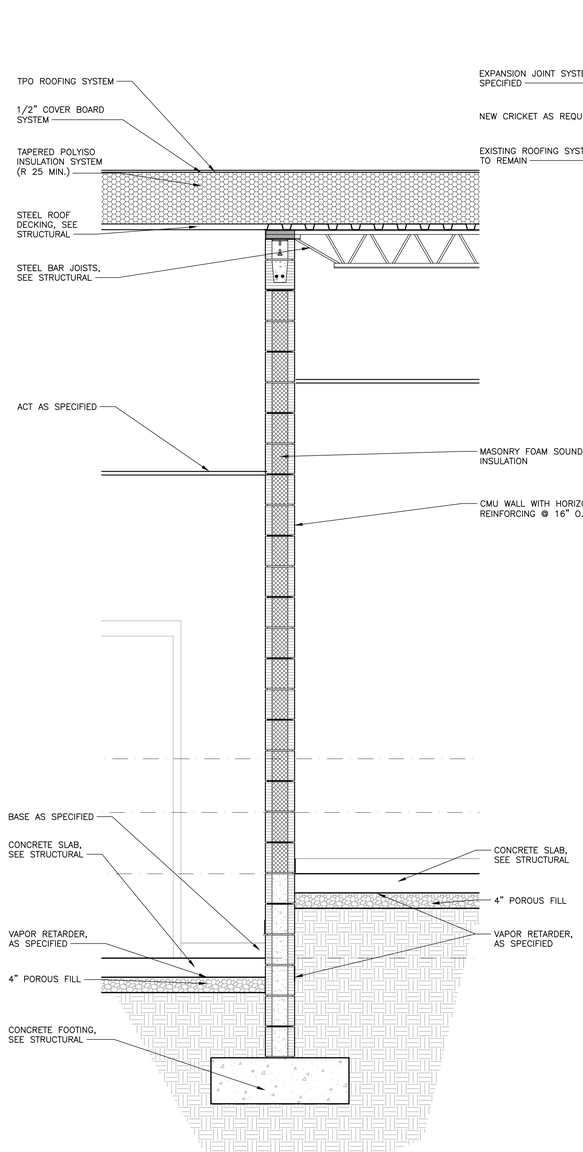
A3.3.1
12 OF 22
0 1" 2"



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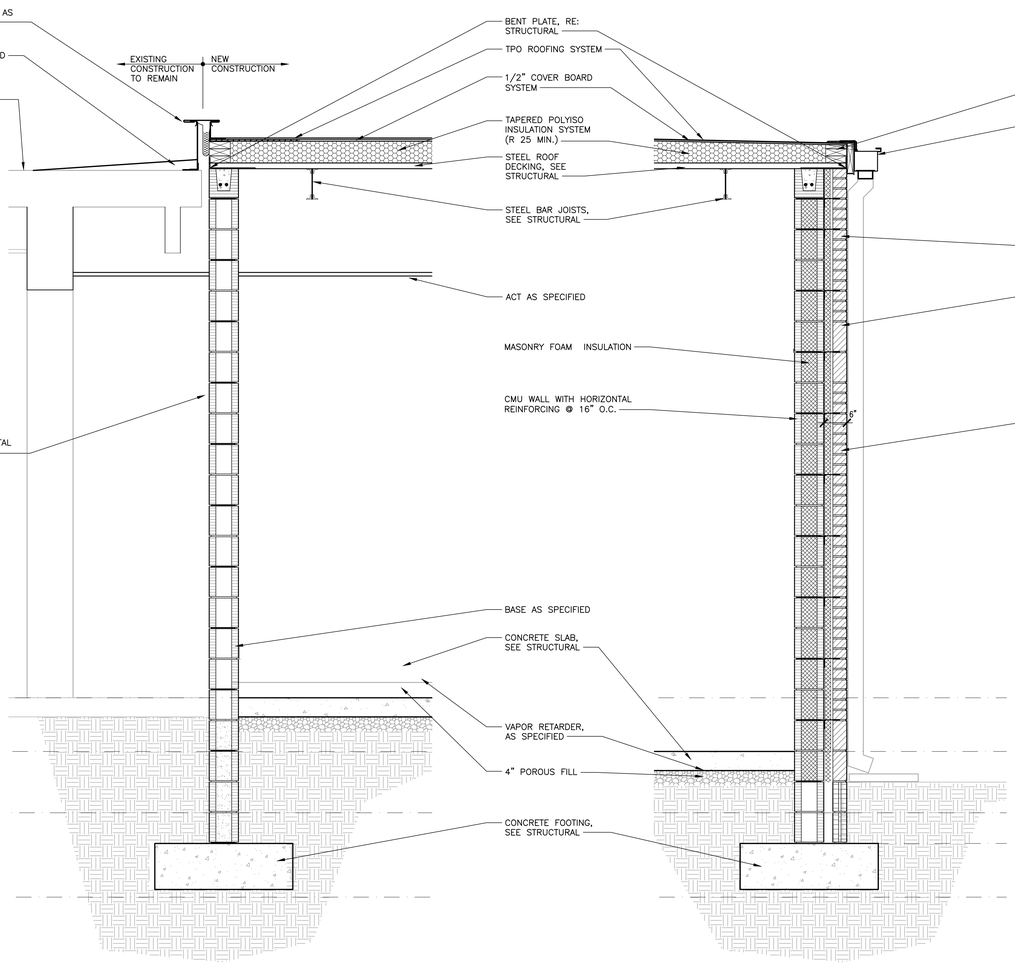
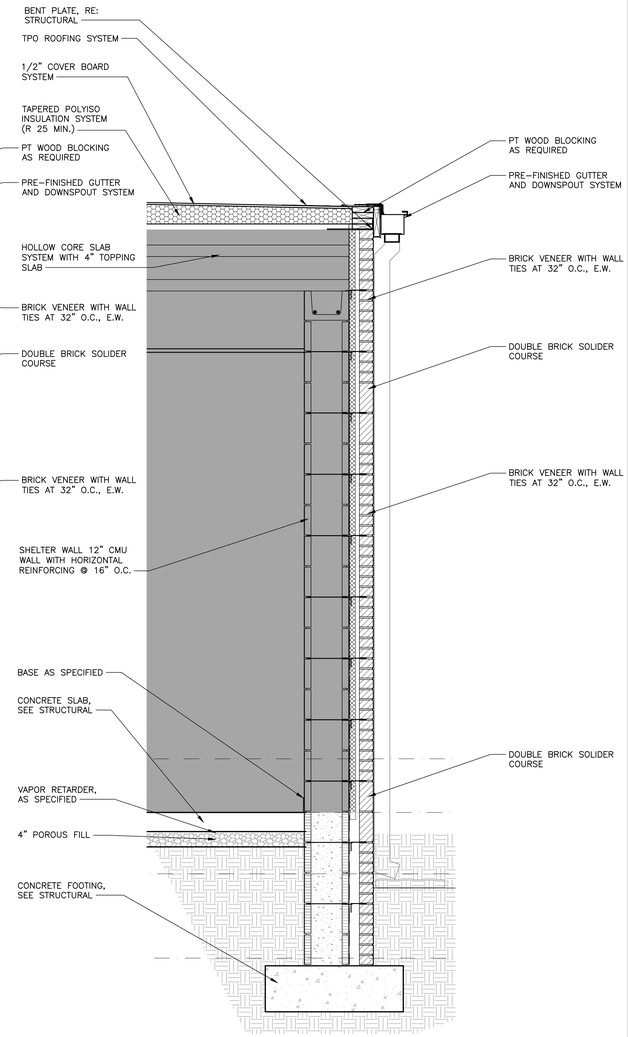


2 WALL SECTION

SCALE: 3/4" = 1'-0"

3 WALL SECTION

SCALE: 3/4" = 1'-0"



4 WALL SECTION

SCALE: 3/4" = 1'-0"

LATHAN McKEE ARCHITECTS

A NEW CLASSROOM ADDITION FOR
COLUMBIANA MIDDLE SCHOOL
222 JOINERTOWN ROAD, COLUMBIANA, ALABAMA 35051
SHELBY COUNTY BOARD OF EDUCATION

SHEET TITLE:
WALL SECTIONS

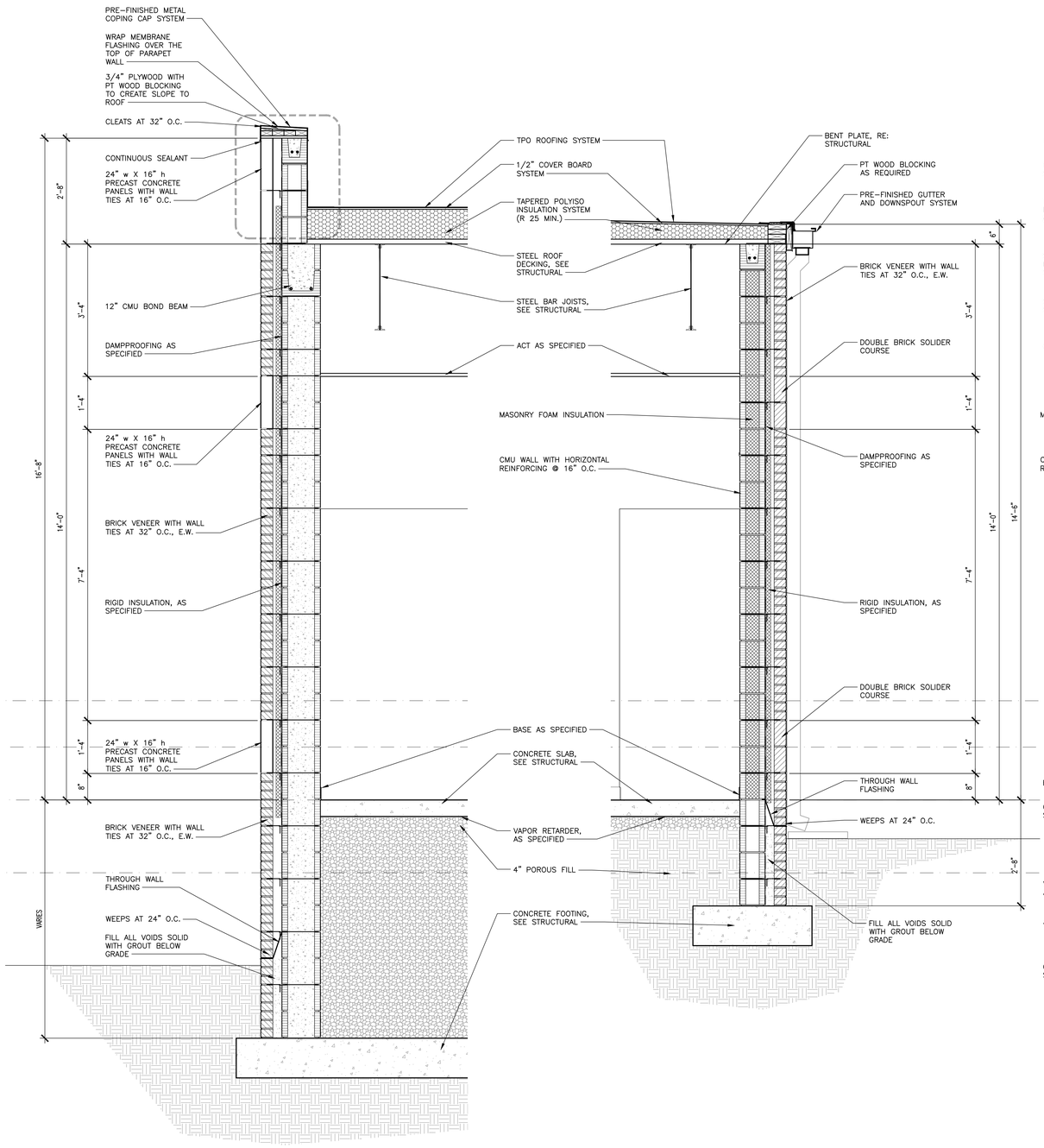
STATE OF ALABAMA
No. 7007
RYAN D. VERNON
REGISTERED ARCHITECT

PROJ. MGR.:	H.RASCO
DRAWN:	ELM
DATE:	OCTOBER 30, 2026
REVISIONS	

JOB NO.
LAA-26-054-00

SHEET NO:
A3.3.2
13 OF 22

0 1" 2"



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

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

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

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

LATHAN McKEE ARCHITECTS

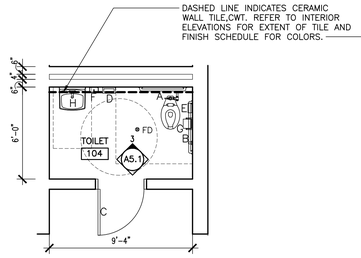
A NEW CLASSROOM ADDITION FOR
COLUMBIANA MIDDLE SCHOOL
222 JOINERTOWN ROAD, COLUMBIANA, ALABAMA 35051
SHELBY COUNTY BOARD OF EDUCATION

SHEET TITLE:
WALL SECTIONS

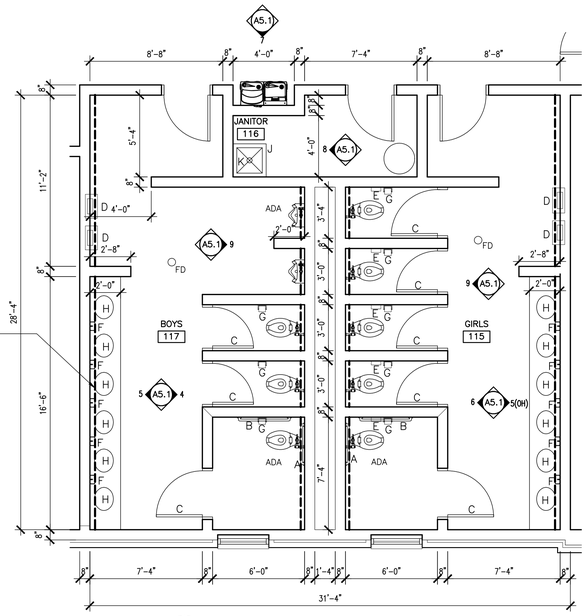
STATE OF ALABAMA
No. 7007
RYAN D. VERNON
REGISTERED ARCHITECT

PROJ. MGR.: H.RASCO
DRAWN: ELM
DATE: OCTOBER 30, 2026
REVISIONS

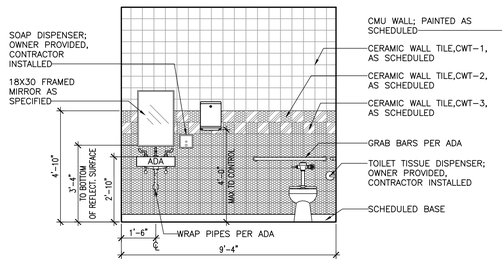
JOB NO.
LAA-26-054-00
SHEET NO:
A3.3.3
14 OF 22
0 1" 2"



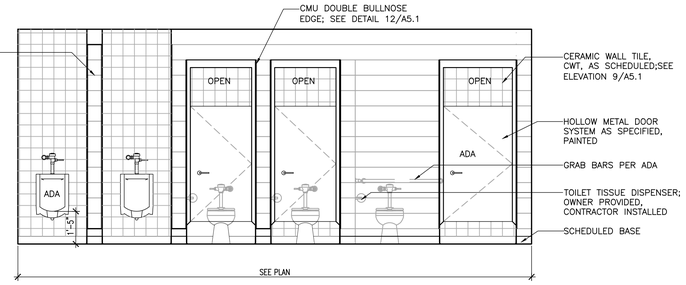
1 ENLARGED TOILET PLAN
SCALE: 1/4" = 1'-0"



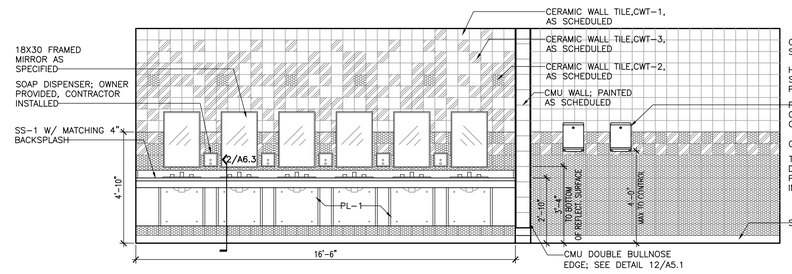
2 ENLARGED TOILET PLAN
SCALE: 1/4" = 1'-0"



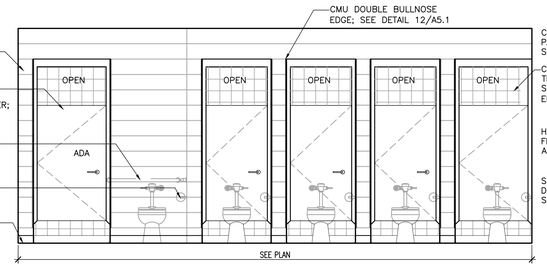
3 INTERIOR ELEVATION @TOILET 104
SCALE: 3/8" = 1'-0"



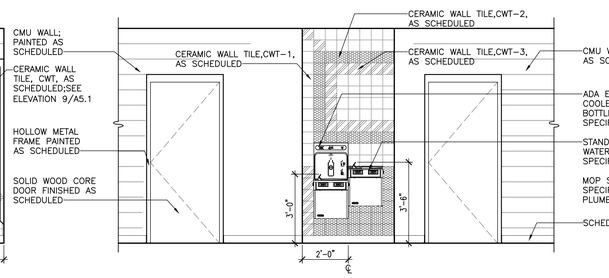
4 INTERIOR ELEVATION @BOYS 117
SCALE: 3/8" = 1'-0"



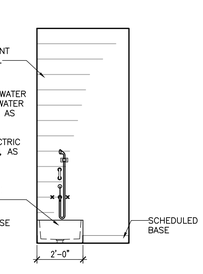
5 INTERIOR ELEVATION @BOYS 117 AND GIRLS 115(OH)
SCALE: 3/8" = 1'-0"



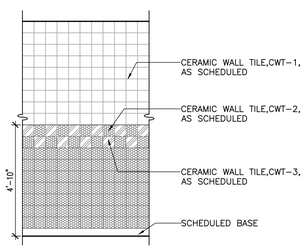
6 INTERIOR ELEVATION @GIRLS 115
SCALE: 3/8" = 1'-0"



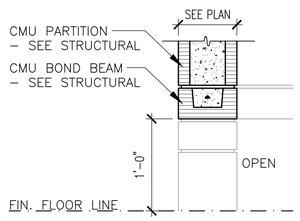
7 INTERIOR ELEVATION @CORRIDOR 122
SCALE: 3/8" = 1'-0"



8 INTERIOR ELEVATION @JANITOR 116
SCALE: 3/8" = 1'-0"

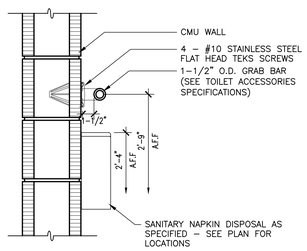


9 DETAIL @TYPICAL TILE PATTERN
SCALE: 1/4" = 1'-0"

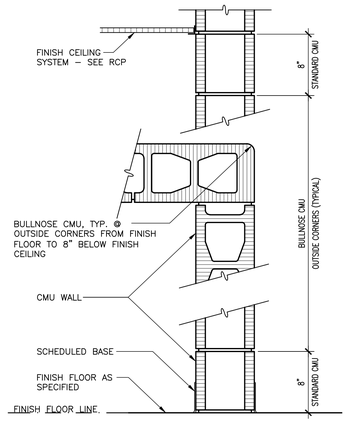


NOTE: PROVIDE AT ALL WATERCLOSET STALL SIDE WALLS. START 8" FROM FRONT WALL OF STALL AND CONTINUE TO THE REAR PLUMBING WALL.

10 DETAIL @CMU STALL
SCALE: 1/4" = 1'-0"



11 DETAIL @GRAB BAR AT CMU
SCALE: 1-1/2" = 1'-0"



12 DETAIL @CMU BULLNOSE EDGE
SCALE: 1-1/2" = 1'-0"

TOILET ACCESSORY LEGEND

A	36" S.S. GRAB BAR
B	42" S.S. GRAB BAR
C	COAT HOOK (MOUNTED ON INTERIOR STALL DOOR)
D	PAPER TOWEL DISPENSER (OWNER PROVIDED, CONTRACTOR INSTALLED)
E	FEMININE NAPKIN DISPOSAL
F	SOAP DISPENSER (OWNER PROVIDED, CONTRACTOR INSTALLED)
G	TOILET TISSUE DISPENSER (OWNER PROVIDED, CONTRACTOR INSTALLED)
H	FRAMED MIRROR 18" X 30"
J	MOP HOLDER
K	MOP SINK

NOTE: 1.DASHED LINE INDICATES CERAMIC WALL TILE, CWT. REFER TO INTERIOR ELEVATIONS FOR HEIGHTS AND FINISH SCHEDULE FOR COLORS.

LATHAN McKEE ARCHITECTS

A NEW CLASSROOM ADDITION FOR
COLUMBIANA MIDDLE SCHOOL
222 JOINERTOWN ROAD, COLUMBIANA, ALABAMA 35051
SHELBY COUNTY BOARD OF EDUCATION

SHEET TITLE:
ENLARGED TOILET PLANS, INTERIOR ELEVATIONS, AND DETAILS

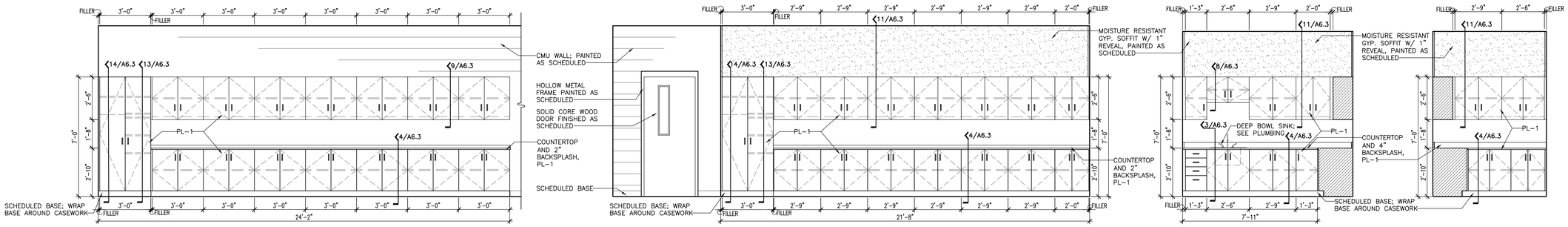
STATE OF ALABAMA
No. 7007
RYAN D. VERNON
REGISTERED ARCHITECT

PROJ. MGR.: H.RASCO
DRAWN: LBK
DATE: OCTOBER 30, 2026
REVISIONS

JOB NO.
LAA-26-054-00

SHEET NO:
A5.1
15 OF 22

0 1" 2"

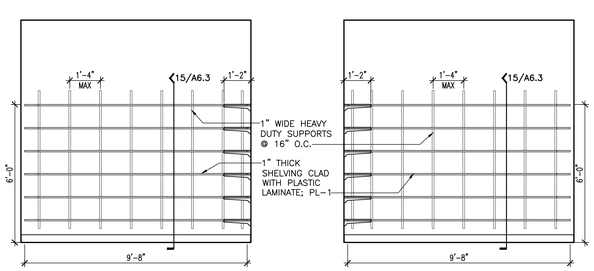


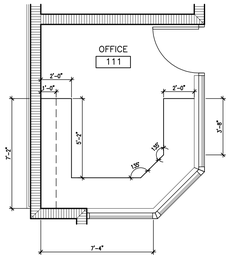
1 INTERIOR ELEVATION @ CLASSROOM 102 AND CLASSROOM 106 (OH)
SCALE: 3/8" = 1'-0"

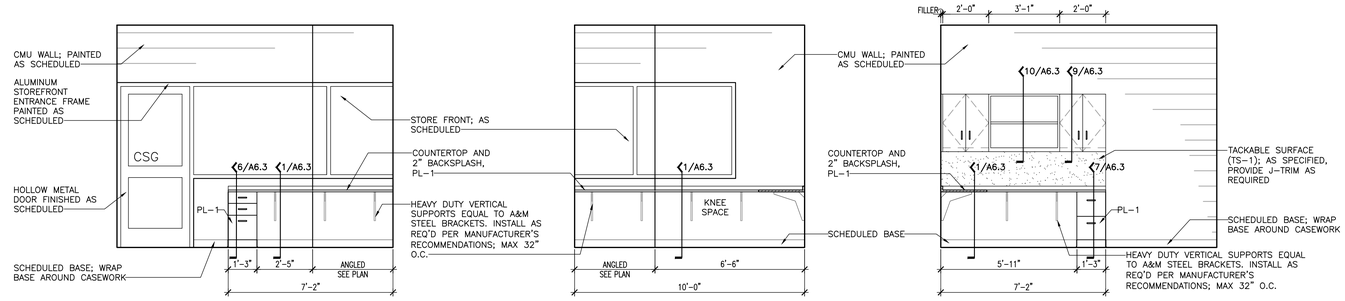
2 INTERIOR ELEVATION @ CLASSROOM 107
SCALE: 3/8" = 1'-0"

3 INTERIOR ELEVATION @ WORKROOM 109
SCALE: 3/8" = 1'-0"

4 INTERIOR ELEVATION @ WORKROOM 109
SCALE: 3/8" = 1'-0"







5 INTERIOR ELEVATION @ MUSIC 110
SCALE: 3/8" = 1'-0"

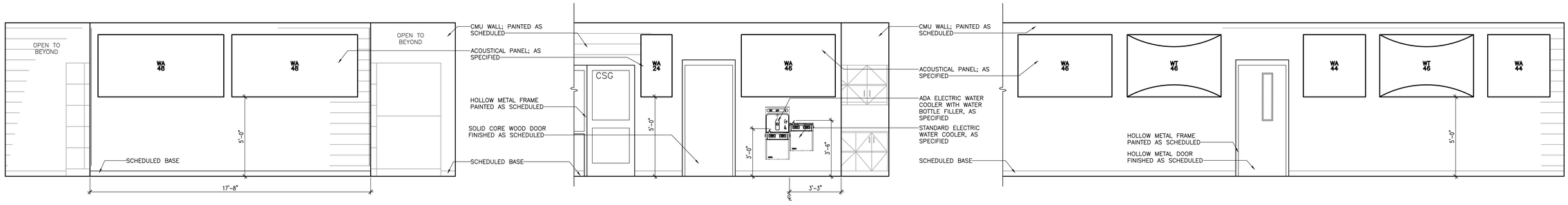
6 INTERIOR ELEVATION @ MUSIC 110
SCALE: 3/8" = 1'-0"

7 ENLARGED PLAN @ OFFICE 111
SCALE: 1/4" = 1'-0"

8 INTERIOR ELEVATION @ OFFICE 111
SCALE: 3/8" = 1'-0"

9 INTERIOR ELEVATION @ OFFICE 111
SCALE: 3/8" = 1'-0"

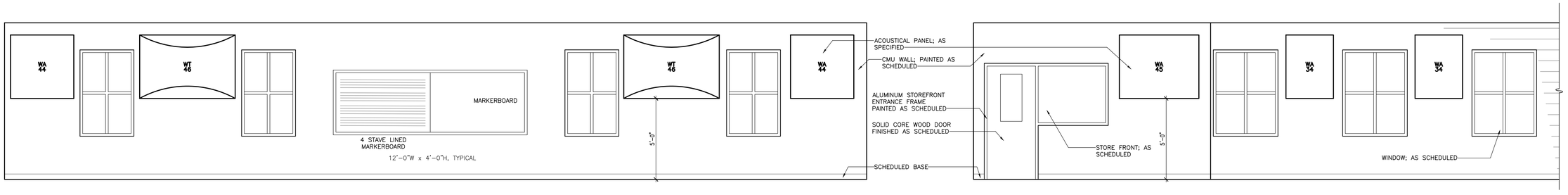
10 INTERIOR ELEVATION @ OFFICE 111
SCALE: 3/8" = 1'-0"



11 INTERIOR ELEVATION @ BAND ROOM 112
SCALE: 3/8" = 1'-0"

12 INTERIOR ELEVATION @ BAND ROOM 112
SCALE: 3/8" = 1'-0"

13 INTERIOR ELEVATION @ BAND ROOM 112
SCALE: 3/8" = 1'-0"



14 INTERIOR ELEVATION @ BAND ROOM 112
SCALE: 3/8" = 1'-0"

15 INTERIOR ELEVATION @ BAND ROOM 112
SCALE: 3/8" = 1'-0"

LATHAN McKEE ARCHITECTS

A NEW CLASSROOM ADDITION FOR
COLUMBIANA MIDDLE SCHOOL
222 JOINERTOWN ROAD, COLUMBIANA, ALABAMA 35051
SHELBY COUNTY BOARD OF EDUCATION

SHEET TITLE:
INTERIOR ELEVATIONS AND ENLARGED PLAN

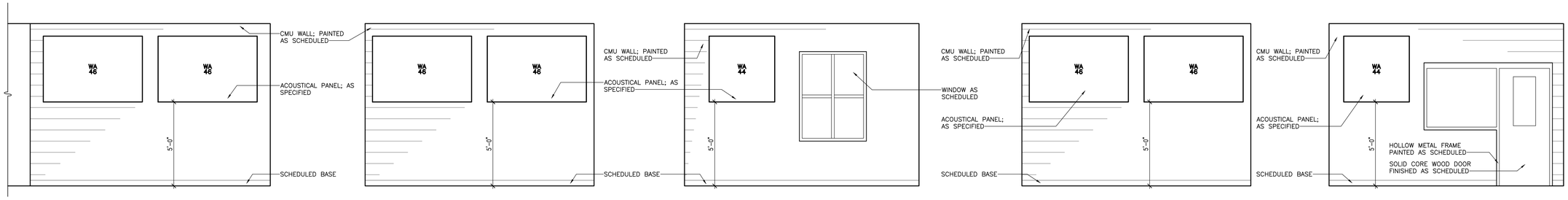
STATE OF ALABAMA
No. 7007
RYAN D. VERNON
REGISTERED ARCHITECT

PROJ. MGR.: H.RASCO
DRAWN: LBK
DATE: OCTOBER 30, 2026
REVISIONS

JOB NO.
LAA-26-054-00

SHEET NO:
A6.1
16 OF 22

0 1" 2"



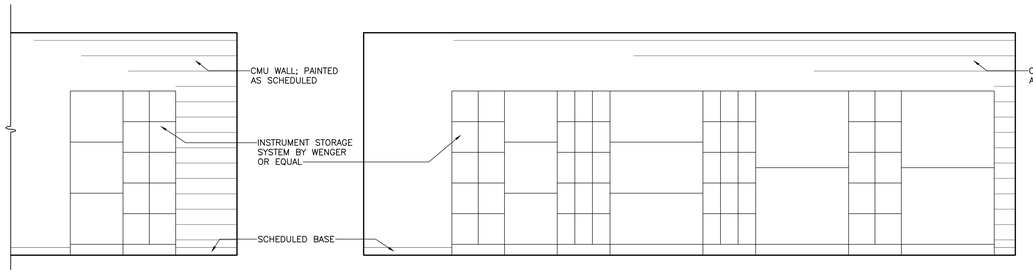
1 INTERIOR ELEVATION @ BAND 112
SCALE: 3/8" = 1'-0"

2 INTERIOR ELEVATION @ PRACTICE 113
SCALE: 3/8" = 1'-0"

3 INTERIOR ELEVATION @ PRACTICE 113
SCALE: 3/8" = 1'-0"

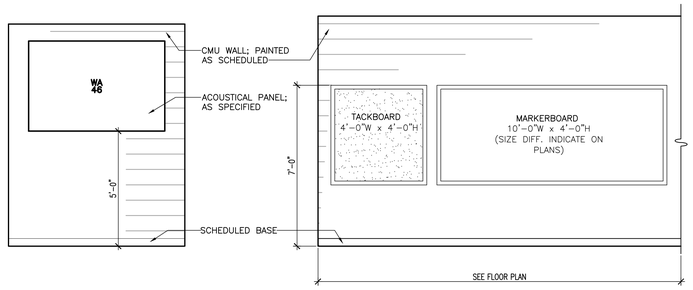
4 INTERIOR ELEVATION @ PRACTICE 113
SCALE: 3/8" = 1'-0"

5 INTERIOR ELEVATION @ PRACTICE 113
SCALE: 3/8" = 1'-0"

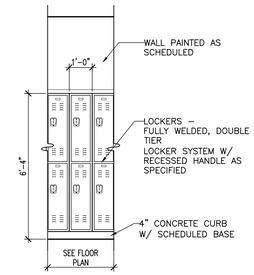


6 INTERIOR ELEVATION @ STORAGE 114
SCALE: 3/8" = 1'-0"

7 INTERIOR ELEVATION @ STORAGE 114
SCALE: 3/8" = 1'-0"

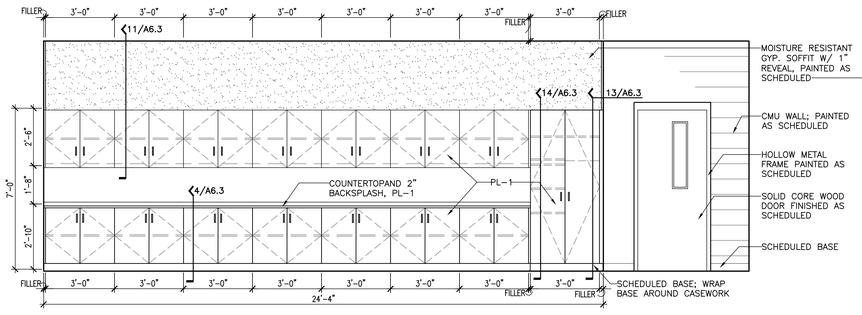


8 INTERIOR ELEVATION @ BAND ROOM 112
SCALE: 3/8" = 1'-0"

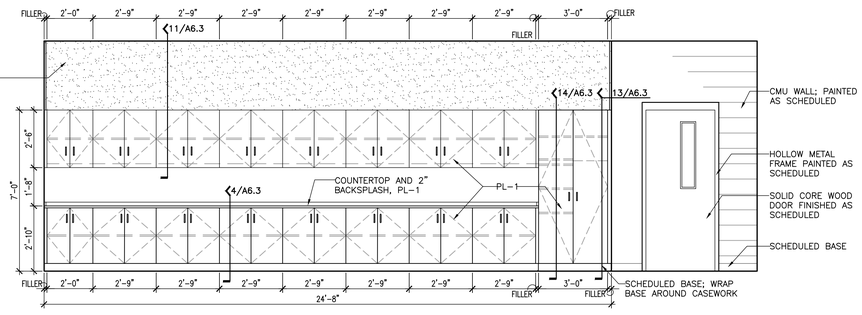


9 INTERIOR ELEVATION @ TYPICAL CLASSROOM MB/TB
SCALE: 3/8" = 1'-0"

10 INTERIOR ELEVATION @ CORRIDOR 122
SCALE: 3/8" = 1'-0"



11 INTERIOR ELEVATION @ CLASSROOM 118 AND CLASSROOM 119
SCALE: 3/8" = 1'-0"



12 INTERIOR ELEVATION @ CLASSROOM 120
SCALE: 3/8" = 1'-0"

LATHAN McKEE ARCHITECTS

A NEW CLASSROOM ADDITION FOR
COLUMBIANA MIDDLE SCHOOL
222 JOINERTOWN ROAD, COLUMBIANA, ALABAMA 35051
SHELBY COUNTY BOARD OF EDUCATION

SHEET TITLE:
INTERIOR ELEVATIONS

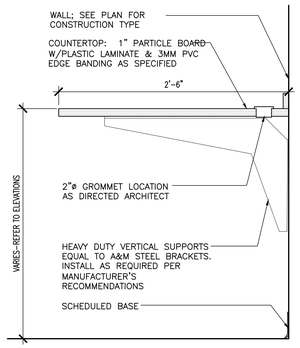
STATE OF ALABAMA
No. 7007
RYAN D. VERNON
REGISTERED ARCHITECT

PROJ. MGR.:	H.RASCO
DRAWN:	LBK
DATE:	OCTOBER 30, 2026
REVISIONS	

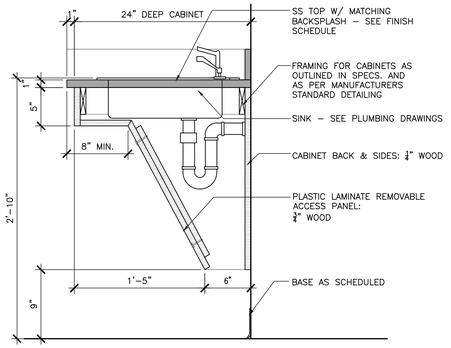
JOB NO.
LAA-26-054-00

SHEET NO:
A6.2
17 OF 22

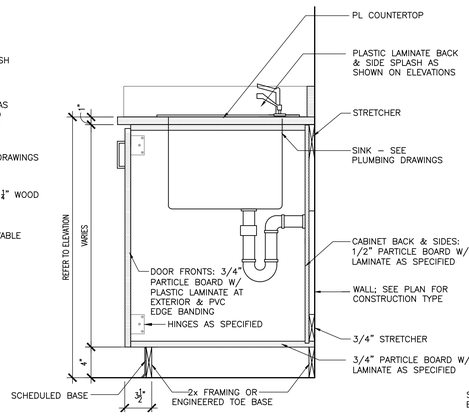
0 1" 2"



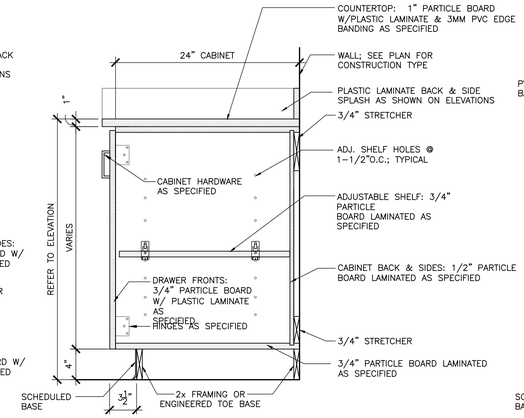
1 DETAIL @ COUNTER TOP
SCALE: 1-1/2" = 1'-0"



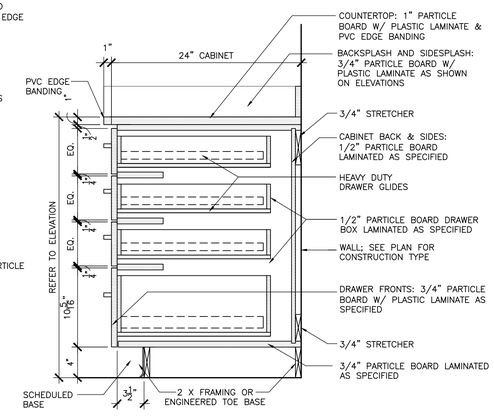
2 DETAIL @ ADA SINK BASE
SCALE: 1-1/2" = 1'-0"



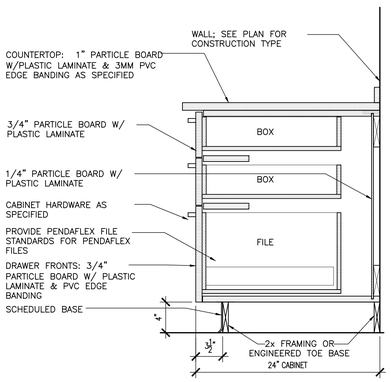
3 DETAIL @ DEEP SINK BASE
SCALE: 1-1/2" = 1'-0"



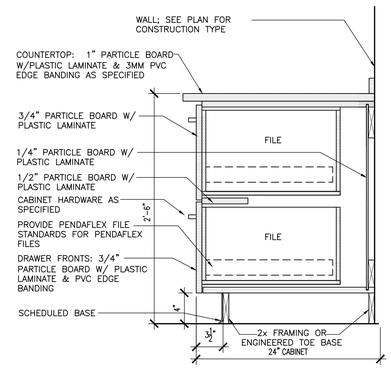
4 DETAIL @ BASE CABINET
SCALE: 1-1/2" = 1'-0"



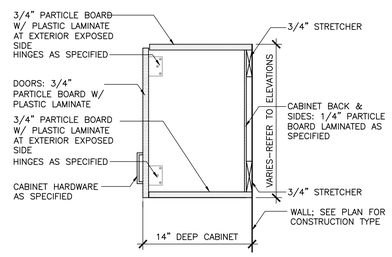
5 DETAIL @ 4-DRAWER BASE
SCALE: 1-1/2" = 1'-0"



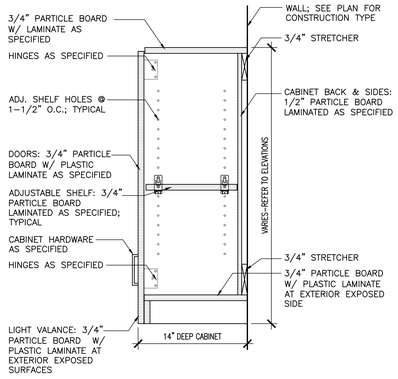
6 DETAIL @ BOX/BOX/FILE
SCALE: 1-1/2" = 1'-0"



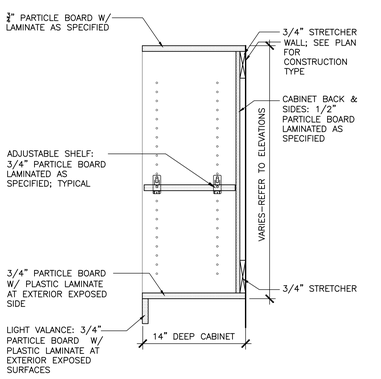
7 DETAIL @ FILE/FILE
SCALE: 1-1/2" = 1'-0"



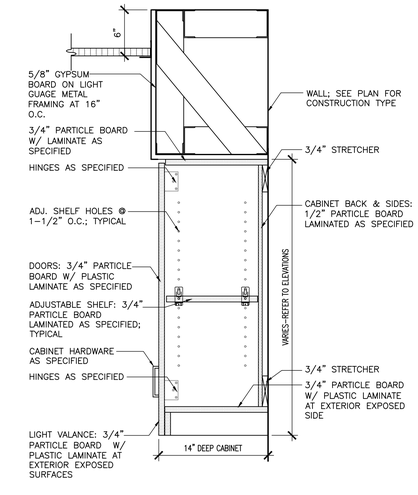
8 DETAIL @ SHORT UPPER CABINET
SCALE: 1-1/2" = 1'-0"



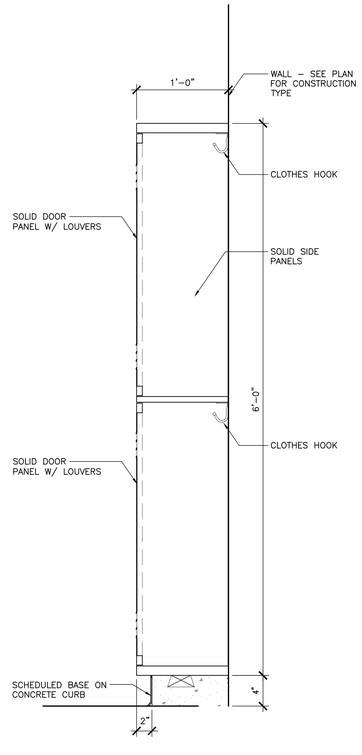
9 DETAIL @ UPPER CABINET
SCALE: 1-1/2" = 1'-0"



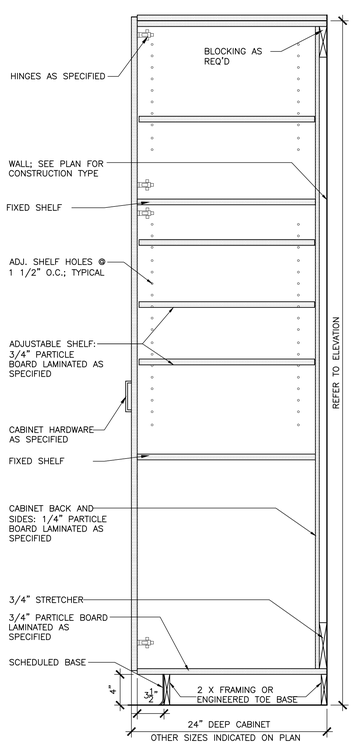
10 DETAIL @ OPEN UPPER CABINET
SCALE: 1-1/2" = 1'-0"



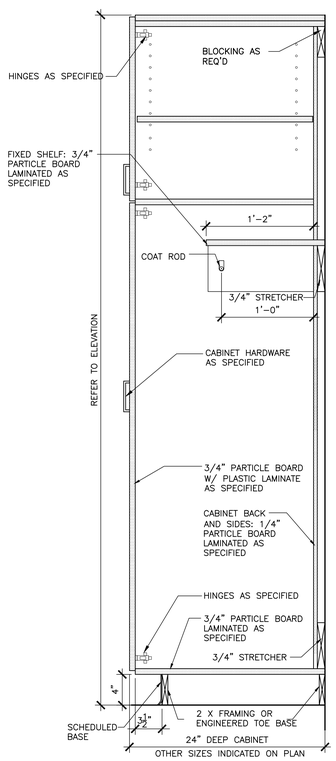
11 DETAIL @ UPPER CABINET WITH SOFFIT
SCALE: 1-1/2" = 1'-0"



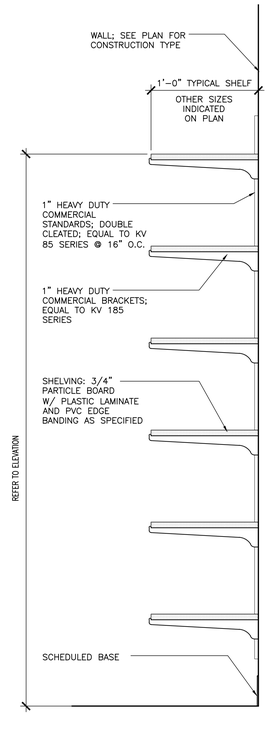
12 DETAIL @ DOUBLE-STACKED LOCKER
SCALE: 1-1/2" = 1'-0"



13 DETAIL @ TALL CABINET
SCALE: 1-1/2" = 1'-0"



14 DETAIL @ TALL CABINET
SCALE: 1-1/2" = 1'-0"



15 DETAIL @ ADJUSTABLE SHELVING
SCALE: 1-1/2" = 1'-0"

LATHAN McKEE ARCHITECTS

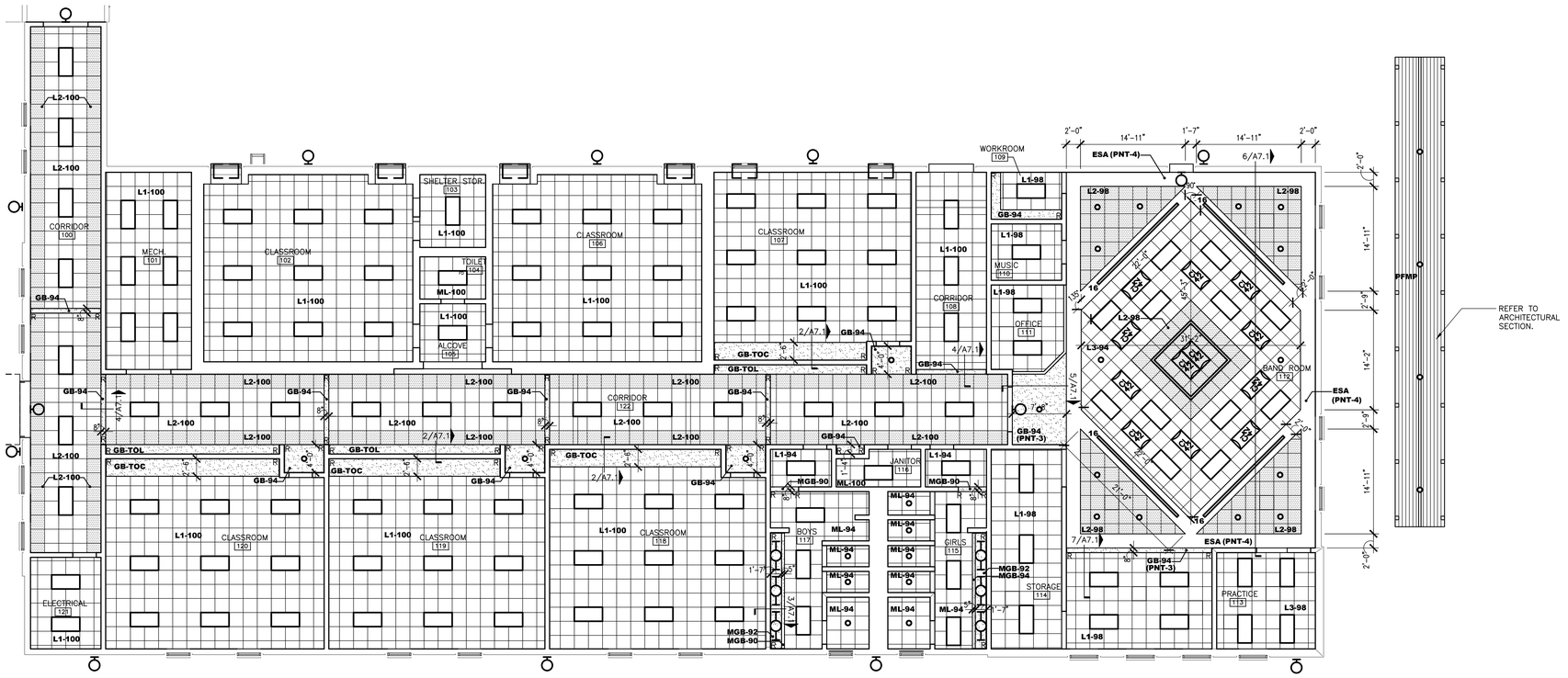
A NEW CLASSROOM ADDITION FOR
COLUMBIANA MIDDLE SCHOOL
222 JOINERTOWN ROAD, COLUMBIANA, ALABAMA 35051
SHELBY COUNTY BOARD OF EDUCATION

SHEET TITLE:
DETAILS

STATE OF ALABAMA
No. 7007
RYAN D. VERNON
REGISTERED ARCHITECT

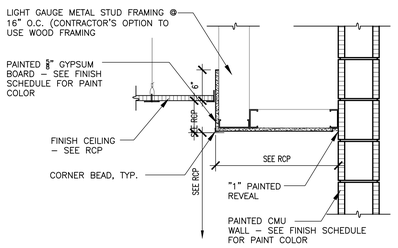
PROJ. MGR.: H.RASCO
DRAWN: LBK
DATE: OCTOBER 30, 2026
REVISIONS

JOB NO.
LAA-26-054-00
SHEET NO:
A6.3
18 OF 22



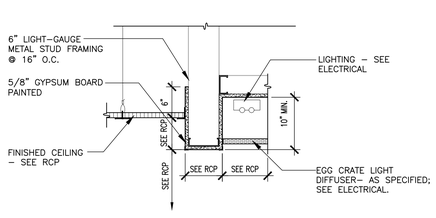
1 REFLECTED CEILING PLAN

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



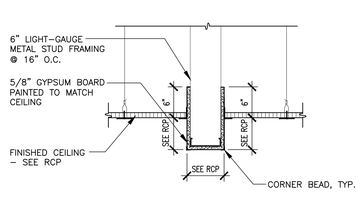
2 DETAIL @GYP SOFFIT

SCALE: 1" = 1'-0"



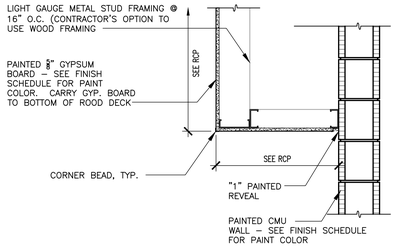
3 DETAIL @GIRLS 115 & BOYS 117

SCALE: 1" = 1'-0"



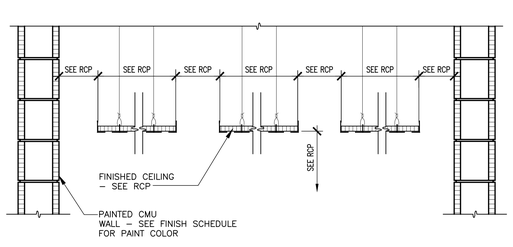
4 DETAIL @GYP SOFFIT W/ LAYIN BOTH SIDES

SCALE: 1" = 1'-0"



5 DETAIL @BAND ROOM 112

SCALE: 1" = 1'-0"



6 DETAIL @BAND ROOM 112

SCALE: 1" = 1'-0"

7 DETAIL @BAND ROOM 112

SCALE: 1" = 1'-0"

CEILING LEGEND	
FIXTURE TYPES - SEE ELECTRICAL	
CEILING TYPE	CEILING HEIGHTS
GB - GYPSUM BOARD	90 = 9'-0" AFF
MGB - MOISTURE RESISTANT GYPSUM BOARD	92 = 9'-2" AFF
L1 - 2 x 2 LAY-IN ACOUSTIC CEILING TILE; SEE SPEC	94 = 9'-4" AFF
L2 - 2 X 2 CALLA COLORED LAY-IN ACOUSTICAL CEILING TILE; SEE SPEC	98 = 9'-8" AFF
L3 - 2 X 2 CALLA HIGH NRC LAY-IN ACOUSTICAL CEILING TILE; SEE SPEC	100 = 10'-0" AFF
R - 1" REVEAL AT ALL GYPSUM SOFFITS; HORIZONTAL AS SHOWN, EXTEND VERTICAL - PAINTED TO MATCH SOFFIT	
PFMP - PREFINISHED METAL PANELS	
TOC - TOP OF CABINET	
TOL - TOP OF LOCKER	
ML - MOISTURE RESISTANT LAY-IN	
EIFS - EXTERIOR INSULATED FINISH SYSTEM	
ESA - EXPOSED STRUCTURE ABOVE; PAINT	
REFER TO FINISH SYMBOLS ON PLAN FOR MATERIALS AND CEILING HEIGHTS CEILING TYPE — L1-90 — CEILING HEIGHT	

CEILING NOTES
AFF = ABOVE FINISH FLOOR
ALL CEILING HEIGHTS ARE FROM ADJACENT FINISHED FLOOR
CEILING HEIGHTS INDICATED ARE MINIMUM HEIGHTS. COORDINATE W/ PLUMBING, MECHANICAL, AND ELECTRICAL TO INSTALL CEILINGS AS HIGH AS POSSIBLE.
ALL CEILING GRIDS ARE TO BE CENTERED IN ROOM UNLESS SHOWN OR NOTED OTHERWISE
USE 2x4 LAY-IN CEILING TILES CUT TO FIT AT ALL LOCATIONS LESS THAN 12" AT PERIMETER OF ROOM. WHERE 2x4 TILES OCCUR THEY SHALL MATCH SPECIFIED TILE AS INDICATED FOR EACH ROOM.
COORDINATE W/ PLUMBING, MECHANICAL AND PLUMBING DRAWINGS AND PROVIDE FRAMING AS REQUIRED TO ACCOMMODATE MECHANICAL AND PLUMBING SYSTEMS
1" REVEAL SHALL BE REQUIRED AT ALL AREAS WHERE GYPSUM INTERSECTS CMU.

LIGHTING/ELECTRICAL NOTES
COORDINATE LIGHTING LAYOUTS WITH ELECTRICAL DRAWINGS. CONTACT ARCHITECT WITH ANY DISCREPANCIES

LATHAN McKEE ARCHITECTS

A NEW CLASSROOM ADDITION FOR
COLUMBIANA MIDDLE SCHOOL
222 JOINERTOWN ROAD, COLUMBIANA, ALABAMA 35051
SHELBY COUNTY BOARD OF EDUCATION

SHEET TITLE:
REFLECTED CEILING PLAN AND DETAILS

STATE OF ALABAMA
No. 7007
RYAN D. VERNON
REGISTERED ARCHITECT

PROJ. MGR.: H.RASCO
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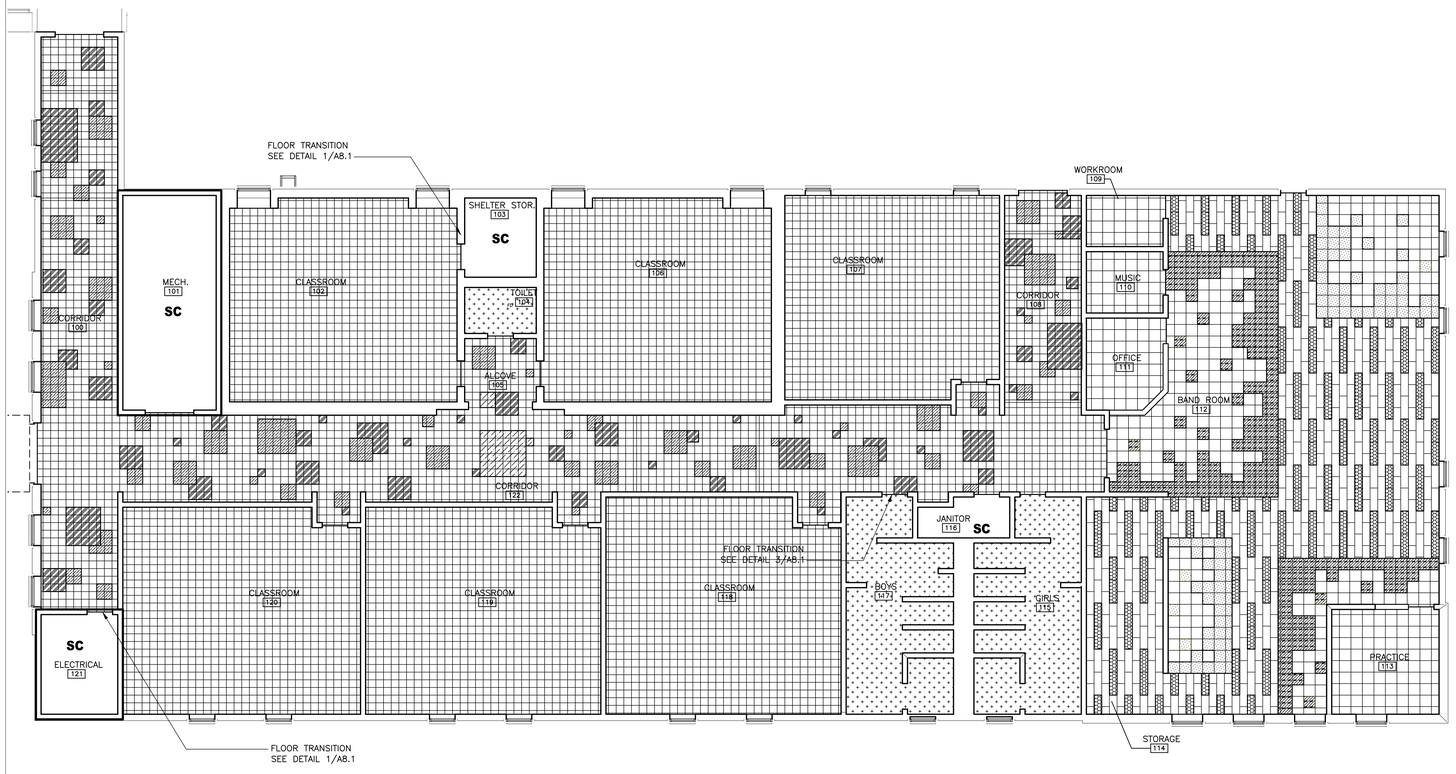
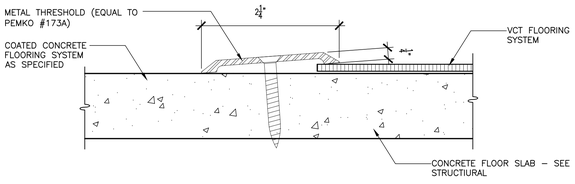
0 1" 2"



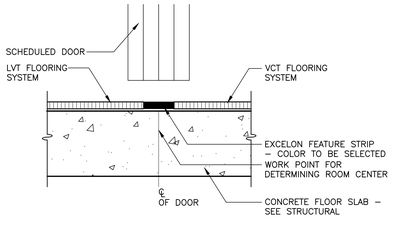
1 FINISH FLOOR PLAN
SCALE: 1/8" = 1'-0"

FINISH PATTERN LEGEND

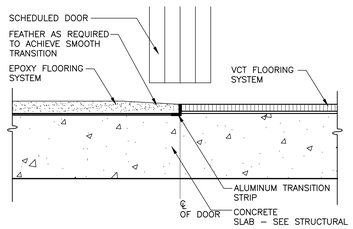
VCT-1 VINYL COMPOSITION TILE	LVT-1 LUXURY VINYL TILE
VCT-2 VINYL COMPOSITION TILE	LVT-2 LUXURY VINYL TILE
VCT-3 VINYL COMPOSITION TILE	LVT-3 LUXURY VINYL TILE
ERF-1 EPOXY RESIN FLOOR	LVT-4 LUXURY VINYL TILE
SC SEALED CONCRETE	LVT-5 LUXURY VINYL TILE



1 TRANSITION DETAIL @CONCRETE TO VCT
NOT TO SCALE



2 TRANSITION DETAIL @LVT TO VCT
NOT TO SCALE



3 TRANSITION DETAIL @EPOXY TO VCT
NOT TO SCALE

FINISH SCHEDULE

ROOM NO.	ROOM NAME	FLOOR	BASE	MILL WORK FACE	MILL WORK TOP	WALLS NORTH	WALLS SOUTH	WALLS EAST	WALLS WEST	DOOR FRAME	CEILING/SOFFIT PAINT	NOTES
LOCKER ROOM / CONCESSIONS												
100	CORRIDOR	LVT-2/LVT-3/LVT-4	RB-1	–	–	PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		
101	MECH.	SC	RB-1	–	–	PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		
102	CLASSROOM	LVT-1	RB-1	PL-1	PL-1	PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		
103	SHELTER STOR.	SC	RB-1	–	–	PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		
104	TOILET	ERF-1	ERB-1	–	–	PNT-1	PNT-1	PNT-1/CWT-1/CWT-2/CWT-3	PNT-1	PNT-2		EPOXY PAINT IN WET AREAS
105	ALCOVE	LVT-2/LVT-3/LVT-4	RB-1	–	–	PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		
106	CLASSROOM	LVT-1	RB-1	PL-1	PL-1	PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		
107	CLASSROOM	LVT-1	RB-1	PL-1	PL-1	PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		
108	CORRIDOR	LVT-2/LVT-3/LVT-4	RB-1	–	–	PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		
109	WORKROOM	LVT-1	RB-1	PL-1	PL-1	PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		EPOXY PAINT IN WET AREAS
110	MUSIC	LVT-3	RB-1	PL-1	PL-1	PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		
111	OFFICE	LVT-3	RB-1	PL-1	PL-1	PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		
112	BAND ROOM	LVT-1/LVT-2/LVT-3/LVT-4/LVT-5	RB-1	–	–	PNT-1	PNT-1	PNT-1	PNT-1	PNT-2	PNT-4	
113	PRACTICE	LVT-3	RB-1	–	–	PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		
114	STORAGE	SC	RB-1	–	–	PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		
115	GIRLS	ERF-1	ERB-1	PL-1	SS-1	PNT-1/CWT-1/CWT-2/CWT-3	PNT-1/CWT-1/CWT-2/CWT-3	PNT-1	PNT-1	PNT-2		EPOXY PAINT IN WET AREAS
116	JANITOR	SC	RB-1	–	–	PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		
117	BOYS	ERF-1	ERB-1	PL-1	SSL-1	PNT-1/CWT-1/CWT-2/CWT-3	PNT-1	PNT-1/CWT-1/CWT-2/CWT-3	PNT-1	PNT-2		EPOXY PAINT IN WET AREAS
118	CLASSROOM	LVT-1	RB-1	PL-1	PL-1	PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		
119	CLASSROOM	LVT-1	RB-1	PL-1	PL-1	PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		
120	CLASSROOM	LVT-1	RB-1	PL-1	PL-1	PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		
121	ELECTRICAL	SC	RB-1	–	–	PNT-1	PNT-1	PNT-1	PNT-1	PNT-2		
122	CORRIDOR	LVT-2/LVT-3/LVT-4	RB-1	–	–	PNT-1	PNT-1	PNT-1		PNT-2		

BASE

ITEM	MANUFACTURER	ITEM NUMBER/NAME	LOCATION
RB-1	JOHNSONITE	4" BURKE BASE COLOR: SHARK FIN CG	SEE FINISH SCHEDULE
ERB-1	TORGINOL	COLOR: MATCH TO ERF-1	SEE FINISH SCHEDULE

PLASTIC LAMINATE

ITEM	MANUFACTURER	ITEM NUMBER/NAME	TYPE/LOCATION
PL-1	WILSONART	COLOR: BLACKBIRD 5024K-12 FINISH: LENO WEAVE EDGEBAND: REHAU #302164-517	SEE FINISH SCHEDULE

SOLID SURFACE

	MANUFACTURER	ITEM NUMBER/NAME	TYPE/LOCATION
SS-1	CORIAN	COLOR: STORM GRAY	SEE FINISH SCHEDULE

CERAMIC WALL TILE

	MANUFACTURER	ITEM NUMBER/NAME	TYPE/LOCATION
CWT-1	AMERICAN OLEAN	COLLECTION: COLOR STORY COLOR: ICE WHITE 0025 SIZE: 6" X 6"	SEE FINISH SCHEDULE
CWT-2	AMERICAN OLEAN	COLLECTION: COLOR STORY COLOR: BLACK 0049 SIZE: 6" X 6"	SEE FINISH SCHEDULE
CWT-3	AMERICAN OLEAN	COLLECTION: COLOR STORY COLOR: PASSION 0019 SIZE: 6" X 6"	SEE FINISH SCHEDULE

LUXURY VINYL TILE

	MANUFACTURER	ITEM NUMBER/NAME	TYPE/LOCATION
LVT-1	INTERFACE	COLLECTION: COLOR ANCHOR STYLE: STRIDE COLOR: LONDON FOG C119 SIZE: 6" X 36"	SEE FINISH SCHEDULE
LVT-2	MANNINGTON	COLLECTION: COLOR ANCHOR STYLE: STRIDE COLOR: CITY MOUSE C165 SIZE: 6" X 36"	SEE FINISH SCHEDULE
LVT-3	INTERFACE	COLLECTION: COLOR ANCHOR STYLE: STRIDE COLOR: LONDON FOG C119 SIZE: 18" X 18"	SEE FINISH SCHEDULE
LVT-4	MANNINGTON	COLLECTION: AMTICO SIGNATURE STYLE: ABSTRACT COLOR: BACK TO BLACK VAMP BB22 SIZE: 18" X 18"	SEE FINISH SCHEDULE
LVT-5	INTERFACE	COLLECTION: COLOR ANCHOR STYLE: STRIDE COLOR: RHUBARB PIE C122 SIZE: 18" X 18"	SEE FINISH SCHEDULE

PAINT

ITEM	MANUFACTURER	ITEM NUMBER/NAME	TYPE/LOCATION
PNT-1	SHERWIN WILLIAMS	COLOR: SW 7649 SILVERPLATE	GENERAL WALLS EPOXY AT WET AREAS
PNT-2	SHERWIN WILLIAMS	COLOR: SW 0077 CLASSIC FRENCH GRAY	GENERAL TRIM
PNT-3	SHERWIN WILLIAMS	COLOR: SW 7007 CEILING BRIGHT WHITE	GYPSUM BOARD SOFFIT
PNT-4	SHERWIN WILLIAMS	COLOR: SW 7585 SUN DRIED TOMATO	@ BAND ROOM 112 ESA

CONCRETE FLOORING

ITEM	MANUFACTURER	ITEM NUMBER/NAME	TYPE/LOCATION
SC	SHERWIN WILLIAMS	SEE SPEC	SEE FINISH SCHEDULE

EPOXY RESIN FLOOR

	MANUFACTURER	ITEM NUMBER/NAME	TYPE/LOCATION
ERF-1	TORGINOL	COLLECTION: COLOR FLAKES COLOR: STONEHENGE SIZE: 1/8"	SEE FINISH SCHEDULE

VINYL COMPOSITION TILE

	MANUFACTURER	ITEM NUMBER/NAME	TYPE/LOCATION
VCT-1	ARMSTRONG	COLLECTION: STANDARD EXCELON STYLE: IMPERIAL TEXTURE COLOR: 51861 WARM GRAY SIZE: 12" X 12"	SEE FINISH SCHEDULE
VCT-2	ARMSTRONG	COLLECTION: STANDARD EXCELON STYLE: IMPERIAL TEXTURE COLOR: 51910 CLASSIC BLACK SIZE: 12" X 12"	
VCT-3	ARMSTRONG	COLLECTION: STANDARD EXCELON STYLE: IMPERIAL TEXTURE COLOR: 51814 POMEGRANATE RED SIZE: 12" X 12"	

FINISH ABBREVIATION LEGEND

APF	ACOUSTIC PANEL FABRIC	PL	PLASTIC LAMINATE	TP	TACKABLE ACOUSTIC PANEL
CC	COATED CONCRETE	PM	PANEL MOULDING	TS	TACBABLE SURFACE
CM	CROWN MOLDING	PNT	PAINT	VCT	VINYL COMP. TILE
CPT	CARPET	PT	PORCELAIN TILE	WB	WOOD BASE
CR	CHAIR RAIL	PTB	PORCELAIN TILE BASE	WC	WALLCOVERING
CWT	CERAMIC WALL TILE	QWT	QUARRY WALL TILE	WF	WOOD FLOORING
ERB	EPOXY RESIN BASE	QTB	QUARRY TILE BASE	WP	WOOD PANELING
ERF	EPOXY RESIN FLOOR	RB	RUBBER BASE	WV	WOOD VENEER
ESD	STATIC CONTROL TILE	RF	RUBBER FLOOR		
GYP	GYPSUM BOARD	SC	SEALED CONCRETE		
IC	IMPRINTED CONCRETE	STC	STAINED CONCRETE		
LVT	LUXURY VINYL TILE	SS	SOLID SURFACE		
		ST	STAIN		

FINISH NOTES

ALL WALLS TO BE PAINTED PNT- 1 UNLESS NOTED OTHERWISE.

ALL WALLS LOCATED IN WET AREAS SHALL HAVE EPOXY BASED PAINT

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A NEW CLASSROOM ADDITION FOR
COLUMBIANA MIDDLE SCHOOL
222 JOINERTOWN ROAD, COLUMBIANA, ALABAMA 35051
SHELBY COUNTY BOARD OF EDUCATION

SHEET TITLE:
FINISH FLOOR PLAN, TRANSITION DETAILS, FINISH SCHEDULE, AND MATERIAL LEGEND

STATE OF ALABAMA
No. 7007
RYAN D. VERNON
REGISTERED ARCHITECT

PROJ. MGR.: H.RASCO
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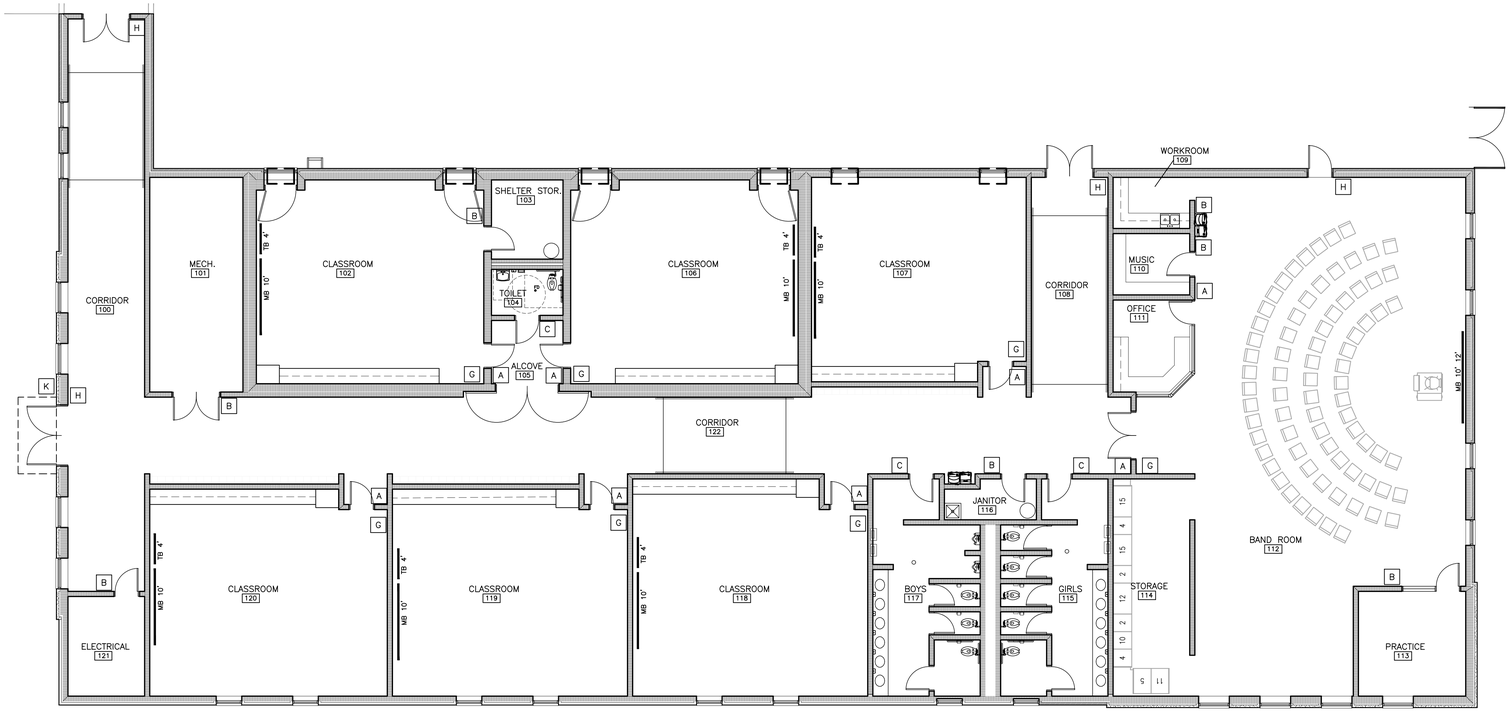
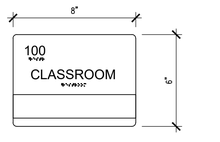


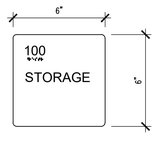
1 SIGNAGE PLAN

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



INTERIOR SIGNAGE (SIGN TYPE - A)

SCALE: 3" = 1'-0"



INTERIOR SIGNAGE (SIGN TYPE - B)

SCALE: 3" = 1'-0"



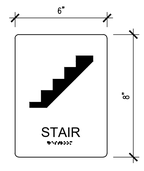
INTERIOR SIGNAGE (SIGN TYPE - C)

SCALE: 3" = 1'-0"



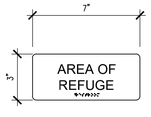
INTERIOR SIGNAGE (SIGN TYPE - D)

SCALE: 3" = 1'-0"



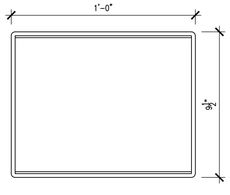
INTERIOR SIGNAGE (SIGN TYPE - E)

SCALE: 3" = 1'-0"



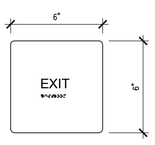
INTERIOR SIGNAGE (SIGN TYPE - F)

SCALE: 3" = 1'-0"



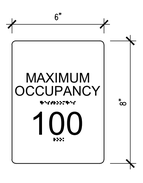
INTERIOR SIGNAGE (SIGN TYPE - G)

SCALE: 3" = 1'-0"



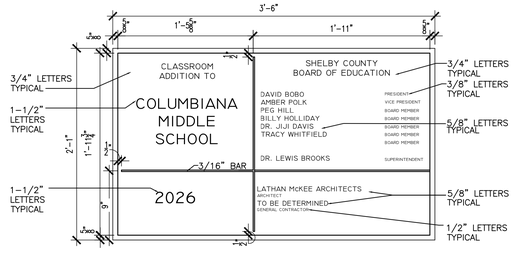
INTERIOR SIGNAGE (SIGN TYPE - H)

SCALE: 3" = 1'-0"



INTERIOR SIGNAGE (SIGN - TYPE J)

SCALE: 3" = 1'-0"



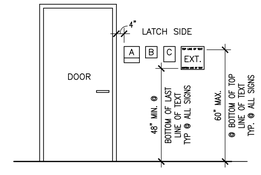
BUILDING PLAQUE (SIGN - TYPE K)

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

FINAL VERBIAGE SHALL BE VERIFIED PRIOR TO FABRICATION

INTERIOR SIGNAGE LEGEND

A	SIGN WITH MESSAGE STRIP (OFFICES/CLASSROOM/INSTRUCTIONAL AREA)
B	ROOM NUMBER AND NAME (STORAGE, ELECTRICAL, ETC)
C	RESTROOM SIGNAGE WITH PICTOGRAM/BRAILLE
D	ELEVATOR SIGNAGE WITH PICTOGRAM/BRAILLE
E	STAIR SIGNAGE WITH PICTOGRAM/BRAILLE
F	AREA OF REFUGE SIGN
G	FRAMED CLEAR VIEW SIGNAGE (8.5X11)
H	TACTILE EXIT SIGN TO EXTERIOR (EXIT)
J	OCCUPANT LOAD SIGN (ASSEMBLY SPACES)
K	BUILDING DEDICATION PLAQUE



SIGNAGE LEGEND:
A – OFFICES, CLASSROOMS, INSTRUCTIONAL AREAS SIGNAGE
B – OTHER INTERIOR DOOR SIGNAGE
C – RESTROOM SIGNAGE W/ PICTOGRAM
EXT – EXTERIOR SIGNAGE

NOTE:
1. TYPICAL SIGNAGE LOCATION AND HEIGHTS SHOWN. SEE SPECIFICATIONS FOR SIGN SIZE AND REQUIREMENTS.
2. ALIGN TOP OF ALL SIGNS AS SHOWN, TYPICAL UNLESS OTHERWISE REQUIRED BY THE AMERICANS WITH DISABILITIES ACT.
3. SEE TORNADO SHELTER PLANS FOR SHELTER SIGNAGE IF APPLICABLE.

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SHEET TITLE:
SIGNAGE PLAN

STATE OF ALABAMA
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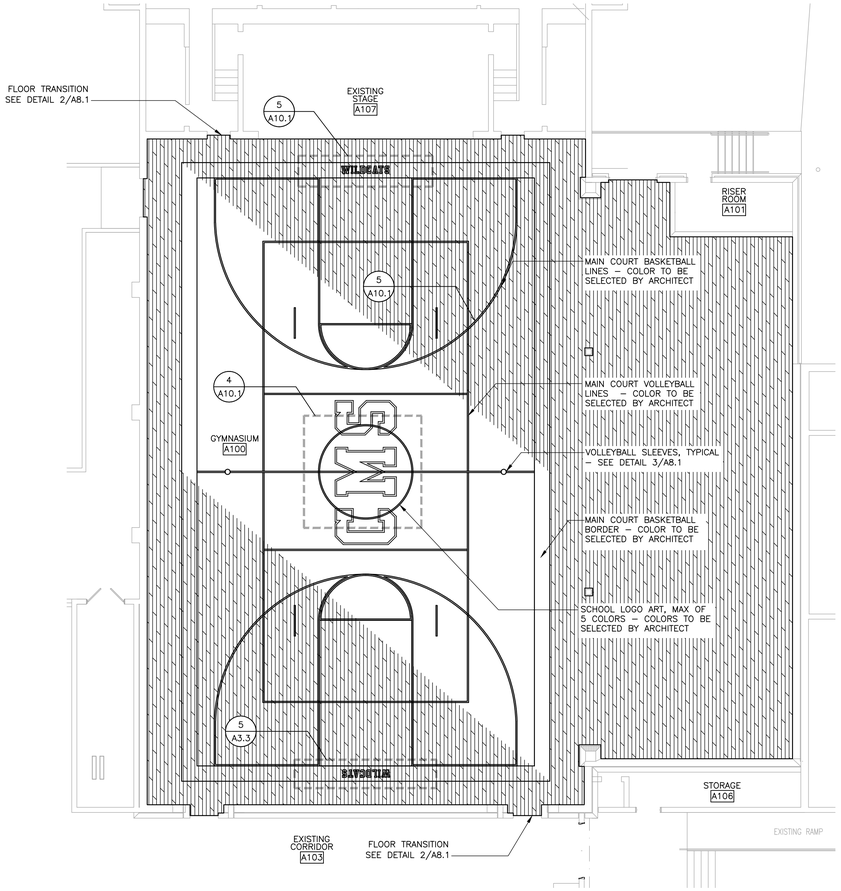
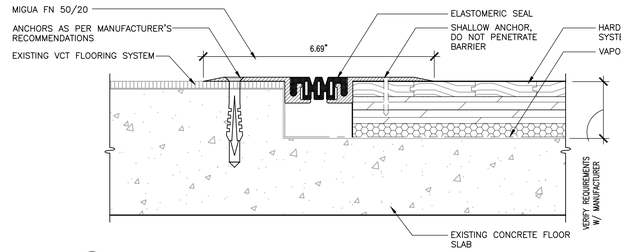


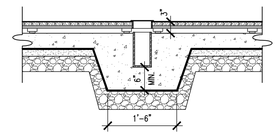
1 ALTERNATE FINISH FLOOR PLAN @GYMNASIUM A100

SCALE: 1/8" = 1'–0"



2 TRANSITION DETAIL @ EXISTING VCT TO NEW WOOD

3/4 = 1'–0"

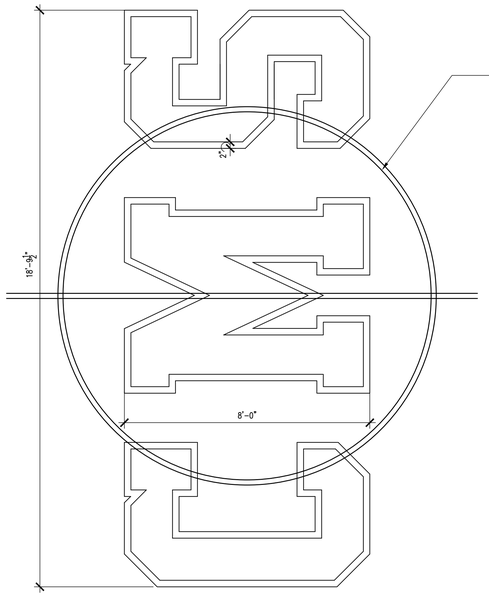


3 DETAIL @ VOLLEYBALL SLEEVE

3/4 = 1'–0"

FINISH PATTERN LEGEND

SWF–1 STAINED WOOD FLOORING



4 PARTIAL ENLARGED PLAN @ GYMNASIUM A100

1/2 = 1'–0"

5 PARTIAL ENLARGED PLAN @ GYMNASIUM A100

1/2 = 1'–0"

FINISH SCHEDULE

ROOM NO.	ROOM NAME	FLOOR	BASE	MILLWORK FACE	MILLWORK TOP	WALLS NORTH	WALLS SOUTH	WALLS EAST	WALLS WEST	DOOR FRAME	CEILING/SOFFIT PAINT	NOTES
LOCKER ROOM / CONCESSIONS												
101	GYMNASIUM	WF–1	RB–1	–	–	PNT–1	PNT–1	PNT–1	PNT–1	PNT–2		

BASE

ITEM	MANUFACTURER	ITEM NUMBER/NAME	LOCATION
RB–1	JOHNSONITE	4" VENTED COVE BASE COLOR: BLACK	SEE SCHEDULE

WOOD FLOORING

ITEM	MANUFACTURER	ITEM NUMBER/NAME	TYPE/LOCATION
WF–1	ROBBINS	COLOR: ----	SEE FINISH SCHEDULE

FINISH ABBREVIATION LEGEND

APF	ACOUSTIC PANEL FABRIC	PL	PLASTIC LAMINATE	TP	TACKABLE ACOUSTIC PANEL
CC	COATED CONCRETE	PM	PANEL MOULDING	TS	TACBABLE SURFACE
CM	CROWN MOLDING	PNT	PAINT	LVT	VINYL COMP. TILE
CPT	CARPET	PT	PORCELAIN TILE	WB	WOOD BASE
CR	CHAIR RAIL	PTB	PORCELAIN TILE BASE	WC	WALLCOVERING
CWT	CERAMIC WALL TILE	QWT	QUARRY WALL TILE	WF	WOOD FLOORING
ERB	EPOXY RESIN BASE	RB	RUBBER BASE	WP	WOOD PANELING
ERF	EPOXY RESIN FLOOR	RF	RUBBER FLOOR	WV	WOOD VENEER
ESD	STATIC CONTROL TILE	SC	SEALED CONCRETE		
GYP	GYPSUM BOARD	STC	STAINED CONCRETE		
IC	IMPRINTED CONCRETE	SS	SOLID SURFACE		
LVT	LUXURY VINYL TILE	ST	STAIN		

PAINT

ITEM	MANUFACTURER	ITEM NUMBER/NAME	TYPE/LOCATION
PNT–1	SHERWIN WILLIAMS	COLOR: SW 0055 LIGHT FRENCH GRAY	GENERAL WALLS EPOXY AT WET AREAS
PNT–2	SHERWIN WILLIAMS	COLOR: SW 7075 MCB GRAY	GENERAL TRIM
PNT–3	SHERWIN WILLIAMS	COLOR: SW 7007 CEILING BRIGHT WHITE	GYPSUM BOARD SOFFIT

FINISH NOTES

ALL WALLS TO BE PAINTED PNT– 1 UNLESS NOTED OTHERWISE.

ALL WALLS LOCATED IN WET AREAS SHALL HAVE EPOXY BASED PAINT.

LATHAN McKEE ARCHITECTS

A NEW CLASSROOM ADDITION FOR
COLUMBIANA MIDDLE SCHOOL
222 JOINERTOWN ROAD, COLUMBIANA, ALABAMA 35051
SHELBY COUNTY BOARD OF EDUCATION

SHEET TITLE:
ALTERNATE FINISH FLOOR PLAN - GYMNASIUM

STATE OF ALABAMA
No. 7007
RYAN D. VERNON
REGISTERED ARCHITECT

PROJ. MGR.: H.RASCO
DRAWN: LKB
DATE: OCTOBER 30, 2026
REVISIONS

JOB NO.
LAA-26-054-00

SHEET NO:
A10.1
22 OF 22

0 1" 2"

GENERAL NOTES

1.0 DESIGN CRITERIA

1.1 CODES AND SPECIFICATIONS:

A. GENERAL BUILDING CODE:
INTERNATIONAL BUILDING CODE, 2021 EDITION

B. CONCRETE:
BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE (ACI 318-19)

C. PRECAST CONCRETE:
PCI DESIGN HANDBOOK, LATEST EDITION

PCI MANUAL FOR QUALITY CONTROL FOR PLANTS AND PRODUCTIONS FOR PRECAST CONCRETE PRODUCTS, LATEST EDITION

D. ARCHITECTURAL PRECAST CONCRETE:
PCI MNL-122 ARCHITECTURAL PRECAST CONCRETE, LATEST EDITION

PCI MANUAL FOR QUALITY CONTROL FOR PLANTS AND PRODUCTION OF ARCHITECTURAL PRECAST CONCRETE PRODUCTS, LATEST EDITION

E. STRUCTURAL STEEL:
SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS, AMERICAN INSTITUTE OF STEEL CONSTRUCTION (ANSI/AISC 360-16)

F. OPEN WEB STEEL JOISTS:
STANDARD SPECIFICATIONS AND LOAD TABLES FOR STEEL JOISTS AND JOIST GIRDERS, STEEL JOIST INSTITUTE, LATEST EDITION

G. STEEL DECK:
STEEL DECK INSTITUTE DESIGN MANUALS FOR COMPOSITE DECKS, NON-COMPOSITE DECKS, AND ROOF DECKS, LATEST EDITIONS

H. MASONRY:
SPECIFICATIONS FOR MASONRY STRUCTURES (TMS 602-16)

BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES (TMS 402-16)

NATIONAL CONCRETE MASONRY ASSOCIATION'S STANDARD PRACTICES AND "SPECIFICATION FOR THE DESIGN AND CONSTRUCTION OF LOAD BEARING CONCRETE MASONRY", LATEST EDITION

I. STORM SHELTER SAFE SPACE:
ICC/NSSA STANDARD FOR THE DESIGN AND CONSTRUCTION OF STORM SHELTERS (ICC 500-2020)

1.2 DESIGN GRAVITY LOADS (PSF):

A. DEAD LOADS:
ANY CHANGES IN CONSTRUCTION MATERIALS FROM THOSE SHOWN ON THE ARCHITECTURAL OR STRUCTURAL DRAWINGS SHALL BE REPORTED BY THE GENERAL CONTRACTOR TO THE STRUCTURAL ENGINEER FOR VERIFICATION OF LOAD-CARRYING CAPACITY OF THE STRUCTURE.

B. FLOOR LIVE LOADS:
NON-REDUCIBLE PARTITION LIVE LOAD OF 20 PSF HAS BEEN INCLUDED PER IBC SECTION 1607.5.

LIVE LOAD REDUCTIONS AS DETERMINED BY IBC SECTION 1607.12 HAVE BEEN TAKEN WHERE PERMITTED.

FLOOR (REDUCIBLE)----------100
STORAGE----------125
CORRIDORS----------100
MECHANICAL ROOM AND ATTIC----------125
EXITWAYS----------100

C. ROOF LIVE LOADS:
WHERE PERMITTED ROOF LIVE LOADS ARE REDUCED FROM THE BASE VALUE SHOWN BELOW IN ACCORDANCE WITH IBC SECTION 1607.14.

ROOF----------20
MECHANICAL----------125
SHELTER ROOF (UNREDUCIBLE)----------100
SHELTER COLLAPSE LOAD (UNREDUCIBLE)----------100

D. ROOF SNOW LOADS:
GROUND SNOW LOAD (Pg)----------5.0
IMPORTANCE FACTOR (I)----------1.1
EXPOSURE FACTOR (Ce)----------1.0
THERMAL FACTOR (Ct)----------1.0

1.3 DESIGN LATERAL LOADS:

A. WIND LOADS:
ULTIMATE DESIGN WIND SPEED (3-SECOND GUST)----------116MPH
NOMINAL WIND SPEED (3-SECOND GUST)----------93MPH
RISK CATEGORY----------III
WIND IMPORTANCE FACTOR (I)----------1.00
WIND EXPOSURE CATEGORY----------C
ENCLOSURE CATEGORY----------ENCLOSED
INTERNAL PRESSURE COEFFICIENTS----------+/-0.18
SEE TYPICAL DETAILS FOR COMPONENT AND CLADDING LOADS

B. SEISMIC LOADS:
OCCUPANCY CATEGORY III
SEISMIC IMPORTANCE FACTOR----------1.25
MAPPED SPECTRAL RESPONSE ACCELERATIONS:
SS----------0.268
S1----------0.093
SITE CLASS----------C
SPECTRAL RESPONSE COEFFICIENTS:
SDS----------0.232
SD1----------0.093
SEISMIC DESIGN CATEGORY----------B
BASIC SEISMIC-FORCE-RESISTING SYSTEM:
INTERMEDIATE REINFORCED MASONRY SHEAR WALLS
DESIGN BASE SHEAR:
CLASSROOM ADDITION----------100 KIPS
SEISMIC RESPONSE COEFFICIENT, Cs----------0.083
RESPONSE MODIFICATION FACTOR, R----------3.5
ANALYSIS PROCEDURE: EQUIVALENT LATERAL FORCE PROCEDURE

C. STORM SHELTER SAFE SPACE WIND LOADS:
TYPE OF SHELTER----------TORNADO
SHELTER DESIGN WIND SPEED----------250 MPH
WIND IMPORTANCE FACTOR (I)----------1.0
WIND EXPOSURE CATEGORY----------C
INTERNAL PRESSURE COEFFICIENTS (GCpi)----------+/-0.55
TOPOGRAPHIC FACTOR (Kzt)----------1.0
DIRECTIONALITY FACTOR (Kd)----------1.0

HOST BUILDING CONNECTIONS TO SHELTER HAVE BEEN DESIGNED PER INTENT OF ICC 500.

STORM SHELTER HAS NOT BEEN CONSTRUCTED IN AN AREA SUSCEPTIBLE TO FLOODING PER ICC 500 SECTION 402.1.

PER ICC 500, SPECIAL INSPECTION AND QUALITY ASSURANCE REQUIREMENTS HAVE BEEN INCLUDED WITHIN THE PROJECT SPECIFICATIONS - REFER TO SPEC. SECTION 01410.

PER ICC 500, THE STORM SHELTER ENVELOPE MEETS THE STATIC AND CYCLIC PRESSURE AND IMPACT TEST REQUIREMENTS. APPLICABLE INFORMATION CAN BE FOUND BASED ON THE FOLLOWING:

WALLS: FULLY GROUTED 12" CMU WALLS WITH #5@8" O.C. (MINIMUM) AND HORIZONTAL REINFORCING AT 16" O.C. TTU'S REPORT "DEBRIS IMPACT RESISTANCE OF BUILDING ASSEMBLIES" SUBMITTED TO N.I.S.T. (AUGUST 2006) -- TABLE A.5 - TEST NO. 1 (PAGE A-32)

ROOF: 12" DEEP PRECAST HOLLOW CORE SLAB PANELS WITH 4" (3" MINIMUM WITH CAMBER) CONCRETE TOPPING SLAB (W/ #4 @12 EW) TTU'S REPORT "DEBRIS IMPACT RESISTANCE OF BUILDING ASSEMBLIES" SUBMITTED TO N.I.S.T. (AUGUST 2006) -- TABLE A.6 - TEST NO. 35 (PAGE A-48) UF MS THESIS "LARGE WIND MISSILE IMPACT PERFORMANCE OF PUBLIC AND COMMERCIAL BUILDING ASSEMBLIES" (CHRISTOPHER P. BRADEN) (2004) -- TABLE 3.7 - TEST NAME "E(6D)M3--8HC" (PAGE 39)

2.0 GENERAL CONDITIONS

2.1 THE STRUCTURAL DRAWINGS AND SPECIFICATIONS ARE A PORTION OF THE CONSTRUCTION DOCUMENTS. THE GENERAL CONTRACTOR AND SUBCONTRACTORS SHALL REFERENCE AND COORDINATE WITH OTHER DISCIPLINE'S DRAWINGS. ANY DISCREPANCIES OR OMISSIONS SHALL BE IMMEDIATELY REPORTED TO THE ARCHITECT AND STRUCTURAL DESIGN GROUP.

2.2 ALL REPORTS, PLANS, SPECIFICATIONS, COMPUTER FILES, FIELD DATA, NOTES, AND OTHER DOCUMENTS AND INSTRUMENTS PREPARED BY STRUCTURAL DESIGN GROUP AS INSTRUMENTS OF SERVICE SHALL REMAIN THE PROPERTY OF STRUCTURAL DESIGN GROUP. STRUCTURAL DESIGN GROUP SHALL RETAIN ALL COMMON LAW, STATUTORY, AND OTHER RESERVED RIGHTS, INCLUDING THE COPYRIGHT THERETO.

2.3 CONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS, ELEVATIONS AND SITE CONDITIONS PRIOR TO FABRICATION/CONSTRUCTION. NOTIFY STRUCTURAL ENGINEER AND ARCHITECT OF ANY DISCREPANCIES PRIOR TO FABRICATION/CONSTRUCTION.

2.4 WHERE SHOP DRAWINGS, CALCULATIONS, OR SUBMITTALS ARE CALLED FOR IN THE PROJECT DOCUMENTS (DRAWINGS AND SPECIFICATIONS) AND ARE NOT PROVIDED BY THE CONTRACTOR, THE CONTRACTOR ASSUMES TOTAL RESPONSIBILITY FOR THE DESIGN AND ASSOCIATED WORK.

2.5 ENGINEER'S SHOP DRAWING REVIEW IS LIMITED TO REVIEW FOR GENERAL CONFORMANCE WITH THE DESIGN INTENT REFLECTED IN THE STRUCTURAL PORTION OF THE CONTRACT DOCUMENTS. THIS REVIEW DOES NOT RELIEVE THE CONTRACTOR FROM COMPLIANCE WITH THE DRAWINGS, SPECIFICATIONS OR OTHER PROJECT CONTRACT DOCUMENTS. NO RESPONSIBILITY IS ASSUMED OR IMPLIED FOR THE CORRECTNESS OF DIMENSIONS OR DETAILS. THIS REVIEW DOES NOT AUTHORIZE CHANGES TO THE CONTRACT SUM UNLESS STATED IN A SEPARATE WRITTEN FORM OR CHANGE ORDER. CONTRACTOR SHALL CONFIRM AND CORRELATE ALL QUANTITIES AND DIMENSIONS, SELECT FABRICATION PROCESSES AND TECHNIQUES OF CONSTRUCTION, COORDINATE HIS WORK WITH THAT OF OTHER TRADES, AND PERFORM HIS WORK IN A SAFE AND SATISFACTORY MANNER. CONTRACTOR SHALL ALSO REFER TO THE REQUIREMENTS OF THE GENERAL AND SUPPLEMENTARY GENERAL CONDITIONS.

2.6 ALL DETAILS SHOWN ARE TYPICAL. SIMILAR DETAILS APPLY TO SIMILAR CONDITIONS, UNLESS NOTED.

2.7 VERIFY ALL DIMENSIONS AND DETAILS SHOWN ON THESE DRAWINGS. ANY DISCREPANCIES OR OMISSIONS FOUND SHALL BE REPORTED TO THE ENGINEER AND OTHER DESIGN PROFESSIONALS AS APPROPRIATE FOR RESOLUTION PRIOR TO PROCEEDING WITH ANY RELATED WORK.

2.8 THESE DRAWINGS DO NOT INCLUDE PROVISIONS TO SATISFY JOB SITE SAFETY REQUIREMENTS. CONTRACTOR IS SOLELY RESPONSIBLE FOR ENSURING SAFETY DURING CONSTRUCTION AND FOR CONFORMANCE TO ALL APPLICABLE OSHA STANDARDS. JOBSITE VISITS BY ENGINEER SHALL NOT CONSTITUTE APPROVAL, AWARENESS OR LIABILITY FOR ANY HAZARDOUS CONDITIONS.

2.9 STRUCTURAL DESIGN GROUP IS NOT RESPONSIBLE FOR CONSTRUCTION MEANS AND METHODS, SAFETY PROCEDURES, CONSTRUCTION SUPERVISION OR SITE SAFETY, AND DOES NOT HAVE THE AUTHORITY TO STOP WORK FOR THESE ITEMS. DRAWINGS FURTHER DO NOT PROVIDE ENGINEERING CONTROLS FOR SILICA STANDARD OR ANY OTHER SAFETY STANDARD.

2.10 THE CONTRACTOR IS SOLELY RESPONSIBLE FOR BRACING AND SHORING ALL EXCAVATIONS, DEWATERING OF EXCAVATION FROM EITHER SURFACE WATER, GROUND WATER OR SEEPAGE, TEMPORARY AND EXISTING STRUCTURES, AND PARTIALLY COMPLETED PORTIONS OF THE WORK TO ASSURE THE SAFETY OF ANY PERSON COMING IN CONTACT WITH THE WORK.

2.11 THE STRUCTURAL INTEGRITY OF THE BUILDING IS DEPENDENT UPON COMPLETION ACCORDING TO THE PLANS AND SPECIFICATIONS. THE STRUCTURAL ENGINEER OF RECORD ASSUMES NO LIABILITY FOR THE STRUCTURE DURING CONSTRUCTION. THE METHOD OF CONSTRUCTION AND SEQUENCE OF OPERATIONS IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL SUPPLY ANY NECESSARY BRACING, GUYS, ETC. TO PROPERLY BRACE THE STRUCTURE AGAINST WIND, DEAD AND LIVE LOADS UNTIL THE BUILDING IS COMPLETED ACCORDING TO THE PLANS AND SPECIFICATIONS. ANY QUESTIONS REGARDING TEMPORARY BRACING REQUIREMENTS SHOULD BE FORWARDED TO A STRUCTURAL ENGINEER FOR REVIEW.

2.12 MECHANICAL UNITS AND ANY OTHER EQUIPMENT SUPPORTED BY THE STRUCTURE WITH WEIGHTS IN EXCESS OF 200 LBS SHALL BE BROUGHT TO THE ATTENTION OF THE STRUCTURAL ENGINEER PRIOR TO INSTALLATION.

2.13 WHERE NOTED IN DRAWINGS AND SPECIFICATIONS TO INSTALL PRODUCTS PER THE MANUFACTURER'S RECOMMENDATIONS, IT SHALL BE REQUIRED THAT THE CONTRACTOR FOLLOWS THE MANUFACTURER'S RECOMMENDATIONS.

2.14 STRUCTURAL OBSERVATION IS VISUAL OBSERVATION OF THE IN PLACE STRUCTURE FOR GENERAL CONFORMANCE TO THE APPROVED CONSTRUCTION DOCUMENTS AT THE TIME OF THE OBSERVATION AND SHALL NOT BE CONSTRUED AS INSPECTION OR APPROVAL OF CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING TESTING AND SPECIAL INSPECTIONS PER THE REQUIREMENTS IN THE PROJECT DOCUMENTS.

2.15 OBSERVATION BY THE STRUCTURAL ENGINEER OF RECORD'S OFFICE DOES NOT REPLACE INSPECTIONS AND TESTING BY THE TESTING AGENCY OR SPECIAL INSPECTOR.

2.16 ALL SUBMITTALS: IF THERE ARE QUESTIONS, CLARIFICATIONS, MODIFICATIONS, OR ITEMS WHERE INFORMATION, A RESPONSE, OR APPROVAL IS REQUESTED, SUCH ITEMS SHALL BE WRITTEN ON THE TRANSMITTAL OR COVER SHEET. INDICATING SUCH ITEMS ON THE SHOP DRAWINGS, WITHIN ANY CALCULATIONS, OR PRODUCT DATA IS NOT SUFFICIENT. WHERE SUCH ITEMS ARE NOT SPECIFICALLY LISTED ON THE TRANSMITTAL OR COVER SHEET IN ACCORDANCE WITH THESE GENERAL NOTES AND THE SPECIFICATIONS, SUCH ITEMS ARE NOT TO BE CONSIDERED APPROVED OR CONSIDERED. IF A QUESTION, CLARIFICATION, MODIFICATION, OR REQUEST FOR INFORMATION IS MADE AND NOT SPECIFICALLY RESPONDED TO BY STRUCTURAL DESIGN GROUP, NO APPROVAL OR CONSENT SHALL BE ASSUMED. THE CONTRACTOR SHALL ASSUME TOTAL LIABILITY AND RESPONSIBILITY IN ALL CASES WHERE SPECIFIC WRITTEN RESPONSE FROM STRUCTURAL DESIGN GROUP IS NOT OBTAINED, REGARDLESS OF ANY OTHER ACTIONS TAKEN BY STRUCTURAL DESIGN GROUP.

3.0 FOUNDATIONS

3.1 GEOTECHNICAL REPORT: FOUNDATION DESIGN IS BASED ON THE GEOTECHNICAL REPORT BY TERRACON TITLED "COLUMBIANA MIDDLE SCHOOL CLASSROOMS ADDITION TERRACON PROJECT NO.1000014218, DATED JUNE 22, 2026 ALONG WITH ANY SUPPLEMENTAL CORRESPONDENCE. THE GENERAL CONTRACTOR SHALL OBTAIN A COPY OF THE GEOTECHNICAL REPORT FROM THE OWNER AND FOLLOW ALL REQUIREMENTS AND RECOMMENDATIONS. GEOTECHNICAL RECOMMENDATIONS SHALL TAKE PRECEDENCE OVER THE ITEMS THAT FOLLOW IN THIS SECTION OF THE STRUCTURAL GENERAL NOTES.

3.2 MAXIMUM ALLOWABLE BEARING PRESSURE PER GEOTECHNICAL REPORT: 2500 PSF.

NOTE: ALL FOOTING BEARING ELEVATIONS SHALL BE BEARING IN APPROVED MATERIAL PER THE GEOTECHNICAL REPORT, EXTEND FOOTINGS AS NECESSARY WITH LEAN CONCRETE OR FLOWABLE FILL.

3.3 ALL FOUNDATION BEARING SURFACES SHALL BE REVIEWED BY THE GEOTECHNICAL ENGINEER PRIOR TO PLACING CONCRETE TO ENSURE THEIR COMPLIANCE WITH PRESSURES NOTED. ALL FOOTING ELEVATIONS ARE ESTIMATED AND MAY BE ADJUSTED IN THE FIELD BY THE GEOTECHNICAL ENGINEER.

3.4 COMPACTED FILL WITHIN THE BUILDING AREA (AND EXTENDING 10'-0" OUTSIDE THE EXTERIOR BUILDING LINE) SHALL MEET THE REQUIREMENTS NOTED IN THE GEOTECHNICAL REPORT.

3.5 BACKFILL FOR FOUNDATION AND RETAINING WALLS SHALL BE A FREE DRAINING GRANULAR MATERIAL, SUCH AS SIZE #57 STONE. BACKFILL SHALL BE COMPACTED SUFFICIENTLY TO PREVENT SUBSIDENCE OF SURFACE ADJACENT TO WALL. THE GRANULAR MATERIAL SHALL BE PLACED IN A 45 DEGREE WEDGE EXTENDING FROM THE BASE OF THE FOOTING TO WITHIN 18" OF FINISH GRADE ON EXTERIOR AND TO UNDERSIDE OF SLAB ON INTERIOR. AT EXTERIOR, CAP GRANULAR BACKFILL WITH 18" OF SOIL.

3.6 GRANULAR BACKFILL SUPPORTING A FOOTING SHALL BE COMPACTED UNDER THE DIRECT SUPERVISION OF THE GEOTECHNICAL ENGINEER OR HIS APPROVED REPRESENTATIVE. PROVIDE A 12" THICK CAP OF PROPERLY COMPACTED CRUSHER RUN STONE BETWEEN THE FOOTING AND THE PROPERLY COMPACTED GRANULAR BACKFILL. EXTEND CRUSHER RUN CAP TWO FEET BEYOND THE PERIMETER OF THE FOOTING OR AS DIRECTED BY THE GEOTECHNICAL ENGINEER.

3.7 FOUNDATION AND RETAINING WALLS SHALL NOT BE BACKFILLED UNTIL CONCRETE HAS ATTAINED THE REQUIRED 28 DAY COMPRESSIVE STRENGTH.

3.8 DO NOT PLACE BACKFILL AGAINST FOUNDATION WALLS UNTIL UPPER BRACING FLOORS ARE IN PLACE FOR AT LEAST SEVEN DAYS AND HAVE ATTAINED 75% OF DESIGN STRENGTH.

3.9 WHERE CONCRETE WALLS SUPPORT EARTH ON BOTH SIDES, BACKFILL EACH SIDE SIMULTANEOUSLY.

3.10 WHERE SPREAD FOOTINGS ARE AT THE SAME ELEVATION AS CONTINUOUS WALL FOOTINGS, REINFORCING STEEL IN CONTINUOUS WALL FOOTINGS SHALL EXTEND THRU SPREAD FOOTINGS. WHERE SPREAD FOOTINGS ARE BELOW CONTINUOUS WALL FOOTINGS, CONTINUOUS WALL FOOTINGS ARE TO STEP DOWN ONTO SPREAD FOOTINGS.

3.11 SUBGRADE AND GRANULAR FILL SUPPORTING SLABS ON GRADE SHALL BE AS RECOMMENDED BY THE GEOTECHNICAL REPORT AND COMPACTED UNDER THE DIRECT SUPERVISION OF THE GEOTECHNICAL ENGINEER OR HIS APPROVED REPRESENTATIVE. SEE SPECIFICATIONS FOR VAPOR RETARDER BENEATH SLABS ON GRADE

3.12 GRANULAR FILL BENEATH SLABS, UNLESS NOTED OTHERWISE, SHALL BE 4" COMPACTED #57 STONE.

3.13 VAPOR RETARDER BENEATH SLABS ON GRADE, UNLESS NOTED, SHALL MEET ASTM E 1745, CLASS A, 15 MIL MINIMUM THICKNESS WITH MANUFACTURER'S RECOMMENDED ADHESIVE OR PRESSURE-SENSITIVE TAPE, PIPE BOOTS, ETC.

3.14 ALL SLOPES FOR EXCAVATIONS SHALL BE COORDINATED WITH GEOTECHNICAL REPORT AND APPROVED BY GEOTECHNICAL ENGINEER.

4.0 CONCRETE

4.1 CONCRETING OPERATIONS SHALL COMPLY WITH ACI STANDARDS.

4.2 CONCRETE STRENGTH AND DURABILITY REQUIREMENTS: MINIMUM CONCRETE COMPRESSIVE STRENGTH AT 28 DAYS (PSI), TYPE OF CONCRETE, MAXIMUM WATER/CEMENTITIOUS RATIO, AIR CONTENT, SLUMP, AND CONCRETE USE:

STRENGTH	TYPE	MAX W/C	AIR	SLUMP	USE	EXPOSURE CATEGORY
3000	NORMAL WT.	0.57	----	3" TO 5"	FOOTINGS	C1
3500	NORMAL WT.	0.50	----	3" TO 5"	SLABS	F0
4000	NORMAL WT.	0.45	4-6%	3" TO 5"	UNLESS NOTED	C0

A. CONCRETE MIX DESIGN SHALL BE WORKABLE WITH LOWEST TOTAL WATER PER CUBIC YARD USING LARGEST PRACTICAL MAXIMUM SIZE OF COURSE AGGREGATE.

B. EXPOSURE CLASS DESCRIPTIONS:

F0: CONCRETE NOT EXPOSED TO FREEZING AND THAWING CYCLES AND PROTECTED FROM MOISTURE.
C0: CONCRETE DRY AND PROTECTED FROM MOISTURE
C1: CONCRETE EXPOSED TO MOISTURE BUT NOT TO DEICING CHEMICALS.

4.3 REINFORCING BARS: ASTM A615 GRADE 60.

4.4 WATERSTOPS: FLEXIBLE PVC WATERSTOPS, CE CRD-C 572, UNLESS NOTED OTHERWISE, WITH FACTORY-INSTALLED METAL EYELETS, FOR EMBEDDING IN CONCRETE TO PREVENT PASSAGE OF FLUIDS THROUGH JOINTS. FACTORY FABRICATE CORNERS, INTERSECTIONS, AND DIRECTIONAL CHANGES. ACCEPTABLE MANUFACTURER IS THE GREENSTREAK GROUP, INC, 800-325-9504, OR EQUAL. PROFILE SHALL BE FLAT, DUMBBELL WITH CENTER BULB WITH DIMENSIONS OF 6 INCHES BY 3/8 INCH THICK.

A. FLEXIBLE WATERSTOP INSTALLATION: INSTALL IN CONSTRUCTION JOINTS AND AT OTHER JOINTS INDICATED TO FORM A CONTINUOUS DIAPHRAGM. INSTALL IN LONGEST LENGTHS PRACTICABLE. SUPPORT AND PROTECT EXPOSED WATERSTOPS DURING PROGRESS OF THE WORK.

4.5 REINFORCING STEEL SHOWN IN SECTIONS AND DETAILS ARE A SCHEMATIC INDICATION THAT REINFORCING EXISTS. SEE SCHEDULES, SECTION NOTES AND GENERAL NOTES FOR ACTUAL REINFORCING REQUIRED.

4.6 REINFORCING BAR PLACING ACCESSORIES IN ACCORDANCE WITH ACI MANUAL OF STANDARD PRACTICE. WHERE CONCRETE IS EXPOSED IN FINISHED BUILDING, PROVIDE ACCESSORIES WITH RUSTPROOF LEGS. WHERE CONCRETE IS SAND-BLASTED OR BUSH-HAMMERED, PROVIDE ACCESSORIES OF STAINLESS STEEL.

4.7 DETAIL REINFORCEMENT IN ACCORDANCE WITH ACI 315. REINFORCEMENT SHALL NOT BE WELDED, UNLESS NOTED OR APPROVED BY THE ENGINEER.

4.8 ALL SPLICES SHALL BE CLASS "B" TENSION LAP SPLICE, UNLESS NOTED.

4.9 ALL REINFORCING MARKED "CONT." INDICATES REINFORCING SHALL BE "CONTINUOUS" AND SHALL BE SPLICED WITH CLASS "B" TENSION LAP SPLICE, UNLESS NOTED.

4.10 PROVIDE CORNER BARS AT ALL CORNERS OF CONTINUOUS REINFORCING IN FOOTINGS, SLABS, OR WALLS. CORNER BARS SHALL BE LONG ENOUGH TO PROVIDE A CLASS "B" LAP SPLICE OF REINFORCING BARS.

4.11 CONCRETE COVERAGE OF REINFORCEMENT, UNLESS NOTED:

FOOTINGS----------2" TOP & 3" BOTTOM & SIDES
SLAB FACES NOT EXPOSED TO WEATHER OR EARTH----------3/4"
SLAB FACES EXPOSED TO WEATHER
A. #5 AND LESS----------1-1/2"
B. #6 AND GREATER----------2"
FOUNDATION RETAINING WALLS----------2" BOTH FACES

NOTE: SLAB ON GRADE WWR OR REINFORCEMENT EACH WAY SHALL BE 2" CLEAR FROM TOP OF SLAB. SEE EARTH SUPPORTED SLABS SECTION BELOW.

4.12 WELDED WIRE REINFORCEMENT (WWR): ASTM A1064, MINIMUM LAP AND EMBEDMENT TO BE THE GREATER OF ONE CROSS WIRE SPACING PLUS 2 INCHES OR 6 INCHES.

4.13 PROVIDE CORNER BARS AT ALL CORNERS OF CONTINUOUS REINFORCING IN FOOTINGS, SLABS OR WALLS. CORNER BARS SHALL BE LONG ENOUGH TO PROVIDE A CLASS "B" LAP SPLICE OF REINFORCING BARS.

4.14 EARTH SUPPORTED SLABS:

4" THICK (UNLESS NOTED), REINFORCED WITH 6X6 W2.9/W2.9 WWR FLAT SHEETS SUPPORTED 2" CLEAR OF TOP OF SLAB, UNLESS NOTED. WWR TO BE CHAIRED AT 36 INCHES EACH WAY MINIMUM. SEE FOUNDATION NOTES FOR SUBGRADE REQUIREMENTS.

PROVIDE CONTROL AND CONSTRUCTION JOINTS AT 3-4 TIMES SLAB THICKNESS IN FEET MAXIMUM OR AS REQUIRED TO PREVENT UNCONTROLLED CRACKING PER ACI RECOMMENDATIONS. AS AN EXAMPLE, FOR A 4" THICK SLAB PROVIDE JOINTS SPACED 12 - 16 FEET MAXIMUM. PANELS TO BE RECTANGULAR WITH LONG SIDE NOT TO EXCEED 1-1/2 TIMES SHORT SIDE. CUTTING SHOULD BE STARTED AS SOON AS CONCRETE HAS HARDENED SUFFICIENTLY TO PREVENT AGGREGATE FROM BEING DISLODGE. CONTRACTOR SUBMIT PLAN SHOWING LOCATION OF CONSTRUCTION AND CONTROL JOINTS.

FLOOR DESIGN AND CONSTRUCTION BASIS IS ACI 302 AND 360, AND IT IS UNREALISTIC TO EXPECT CRACK-FREE OR CURL-FREE FLOORS. IT IS NORMAL TO EXPECT SOME AMOUNT OF CRACKING AND CURLING IN THE SLAB ON GRADE, AND SUCH OCCURRENCE DOES NOT NECESSARILY REFLECT ADVERSELY ON EITHER THE ADEQUACY OF THE FLOOR DESIGN OR THE QUALITY OF ITS CONSTRUCTION.

EARTH SUPPORTED SLABS SHALL BE MOIST CURED FOR A MINIMUM OF SEVEN DAYS. SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION. CURING COMPOUNDS, UNLESS NOTED, SHALL BE A MINIMUM OF CLEAR, WATERBORNE, MEMBRANE-FORMING CURING COMPOUND MEETING ASTM C 309, TYPE 1, CLASS B, SELF-DISSIPATING, CERTIFIED BY CURING COMPOUND MANUFACTURER TO NOT INTERFERE WITH BONDING OF FLOOR COVERING.

WHERE CONTROL JOINTS TERMINATE INTO NON-PARALLEL CONTROL JOINTS, PROVIDE 2#4 X 6'-0" BARS MID DEPTH OF SLAB PERPENDICULAR TO TERMINAL CONTROL JOINT.

PROVIDE 2#4 X 6'-0" BARS MID DEPTH OF SLAB AT REENTRANT CORNERS.

WHERE CONTROL JOINTS TERMINATE AT EMBEDDED STEEL ELEMENTS (SUCH AS EDGE REINFORCEMENT AT LOADING DOCKS), PROVIDE JOINT IN STEEL ELEMENT.

4.15 CONTRACTION JOINTS IN WALLS: WALL JOINTS SHALL NOT BE SPACED FARTHER THAN 15 FEET FOR 8" WALLS, 20 FEET FOR 10" WALLS AND 30 FEET FOR 12" WALLS. WALL JOINTS SHALL ADDITIONALLY NOT BE LOCATED WITHIN 4'-0" OF EMBED PLATES OR CORNERS OF THE WALL. DISCONTINUE 50% OF THE WALL HORIZONTAL REINFORCING THROUGH JOINTS; TRIMMING BACK THE REINFORCING BARS 2" FROM THE CONTROL JOINT LOCATION. LOCATE CONTROL JOINTS EACH SIDE OF THE WALL. SEAL JOINTS WITH ELASTOMERIC SEALANT. SEE WALL CONTRACTION JOINT TYPICAL DETAIL.

4.16 WALL AND SLAB OPENINGS AND SLEEVES SMALLER THAN 12" (IN LARGER DIMENSION) ARE NOT SHOWN ON PLANS. CONTRACTOR SHALL SUBMIT ALL OPENINGS (SIZE AND LOCATIONS) AS A SINGLE COORDINATED SLEEVE PLAN FOR REVIEW AND APPROVAL.

4.17 CAST IN PLACE ALL SLEEVES AND INSERTS.

4.18 SLAB CRACKS THAT DEVELOP ON EXPOSED LEVELS SHOULD BE INJECTED WITH EPOXY TO LIMIT DETERIORATION OF THE REBAR.

4.19 FOR ALL CONCRETE EXPOSED TO VIEW IN THE FINISHED CONFIGURATION OF THE STRUCTURE, PROVIDE RUBBED FINISH AT A MINIMUM. SEE ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION.

5.0 ARCHITECTURAL AND STRUCTURAL PRECAST CONCRETE

5.1 REFER TO ARCHITECT'S DRAWINGS AND SPECIFICATIONS FOR DIMENSIONAL, FINISHING, AND OTHER REQUIREMENTS OF THE ARCHITECTURAL PRECAST.

5.2 PRECAST MANUFACTURER IS TO BE RESPONSIBLE FOR THE DESIGN OF ALL PRECAST MEMBERS AND THEIR CONNECTIONS TO THE STRUCTURE AS WELL AS THE DESIGN OF THE ANY REQUIRED TOPPING SLABS FOR GRAVITY AND LATERAL LOADS. CALCULATIONS AND SHOP DRAWINGS SHALL BE SUBMITTED BEARING THE SEAL OF A PROFESSIONAL ENGINEER REGISTERED IN THE STATE WHERE THE PROJECT IS LOCATED.

5.3 ANY CONNECTIONS SHOWN ON CONTRACT DRAWINGS ARE SHOWN FOR GENERAL ARRANGEMENT ONLY. THE CONTRACTOR SHALL COORDINATE ALL PRECAST CONNECTIONS AND EMBEDDED ITEMS WITH THE PRECAST MANUFACTURER.

A. CONNECTIONS OF THE PRECAST TO THE STRUCTURE SHALL NOT RESTRAIN THE STRUCTURE'S 1" DOWNWARD MOVEMENT AT ALL BEAMS AND 1" UPWARD MOVEMENT AT ROOF BEAMS.

5.4 ERECTOR SHALL BE RESPONSIBLE FOR PROVIDING ALL TEMPORARY BRACING UNTIL ALL CONNECTIONS HAVE BEEN MADE AND TOPPING HAS BEEN CAST.

5.5 PRECAST MANUFACTURER SHALL PROVIDE STABILIZING ANGLES AND SIMILAR MISCELLANEOUS METALS, AS REQUIRED, FOR ALL PRECAST WORK.

5.6 ALL EXPOSED STEEL CONNECTIONS AND SUPPORT ANGLES, PLATES, BARS AND BOLTS IN CONJUNCTION WITH ALL PRECAST CONCRETE SHALL BE HOT-DIP GALVANIZED AFTER FABRICATION AND FIELD TOUCHED UP WITH ZINC RICH PAINT.

5.7 ADJUSTMENT AND POSSIBLY RESETTING OF PRECAST MAY BE REQUIRED TO ALIGN PRECAST DUE TO SUPPORT DEFLECTION AND/OR ROTATION.

5.8 SUPPORTING BEAMS AND STRUCTURE WILL DEFLECT AND/OR ROTATE. PRECAST MANUFACTURER AND ERECTOR SHALL COORDINATE CONNECTION/ERECTION SEQUENCE TO ACCOUNT FOR THIS MOVEMENT AND MAKE FINAL ADJUSTMENTS TO ALIGN AND PLUMB PRECAST. THIS MAY REQUIRE ADJUSTING CONNECTIONS OR RECONNECTING.

6.0 PRECAST CONCRETE HOLLOW CORE SLABS

6.1 PRECAST MANUFACTURER IS TO BE RESPONSIBLE FOR THE DESIGN OF ALL PRECAST MEMBERS AND THEIR CONNECTIONS TO THE STRUCTURE. CALCULATIONS AND SHOP DRAWINGS SHALL BE SUBMITTED BEARING THE SEAL OF A PROFESSIONAL ENGINEER REGISTERED IN THE STATE WHERE THE PROJECT IS LOCATED.

A. PRECAST MANUFACTURER SHALL LIMIT USE TO 2" MAXIMUM OF THE TOPPING SLAB FOR COMPOSITE ACTION IN THE DESIGN OF THE PRECAST PANELS TO ALLOW FOR A 1" MAXIMUM CAMBER IN THE SELF-WEIGHT INSTALLED CONDITION.

1. THE REMAINING 2" OF THE TOPPING SLAB IS TO BE APPLIED AS SUPERIMPOSED DEAD LOAD TO THE PRECAST PANELS.

2. PRECAST MANUFACTURER IS TO PROVIDE ANTICIPATED CAMBER & DEFLECTION CALCULATIONS FOR ALL PRECAST PANELS SO THAT IT CAN BE VERIFIED THAT THE POSITIVE CAMBER IN THE SELF-WEIGHT INSTALLED CONDITION HAS BEEN LIMITED TO 1" MAXIMUM.

3. PRECAST MANUFACTURER IS RESPONSIBLE FOR ADDING AND INCLUDING IN THE BASE BID ANY ADDITIONAL REINFORCING STEEL IN THE TOPPING SLAB AS MAY BE REQUIRED TO CONTROL LONG-TERM CREEP ISSUES WITH THE PRESTRESSED SLAB PANELS.

4. STORM SHELTER PRECAST PANELS SHALL BE DESIGNED FOR 100 PSF SHELTER ROOF LIVE LOAD + SHELTER COLLAPSE LOAD IN ADDITION TO OTHER LOADS (SW, DL, CDL, & WL).

PER ICC 500, THE STORM SHELTER ENVELOPE MEETS THE STATIC AND CYCLIC PRESSURE AND IMPACT TEST REQUIREMENTS. APPLICABLE INFORMATION CAN BE FOUND BASED ON THE FOLLOWING:

ROOF: 12" DEEP PRECAST HOLLOW CORE SLAB PANELS WITH 4" (3" MINIMUM WITH CAMBER) CONCRETE TOPPING SLAB (W/ #4 @12 EW) TTU'S REPORT "DEBRIS IMPACT RESISTANCE OF BUILDING ASSEMBLIES" SUBMITTED TO N.I.S.T. (AUGUST 2006) -- TABLE A.6 - TEST NO. 35 (PAGE A-48) U

GENERAL NOTES CONTINUED

7.10 CONNECTIONS:

A. BEARING TYPE A325-N ACCORDANCE WITH RCSC (LRFD OR ASD VERSION) "SPECIFICATION FOR STRUCTURAL JOINTS USING ASTM A325 OR A490 BOLTS". BOLTS THROUGH 4" WIDE BEAM FLANGES SHALL BE 5/8" DIAMETER. OTHERWISE, BOLTS SHALL BE 3/4" DIAMETER.

B. BOLTS SHOWN IN SECTIONS AND DETAILS ARE A SCHEMATIC INDICATION THAT BOLTS MAY BE USED. ACTUAL NUMBER, UNLESS SPECIFIED, TO BE IN ACCORDANCE WITH AISC.

C. ALL STRUCTURAL STEEL CONNECTIONS NOT SPECIFICALLY DETAILED ON THE DRAWINGS SHALL BE DESIGNED TO RESIST FORCES INDICATED, BY THE CONTRACTOR.

1. WHERE BEAM REACTIONS ARE SHOWN ON THE DRAWINGS, THE CONNECTIONS SHALL DEVELOP THE REACTIONS SHOWN. WHERE CONNECTIONS ARE SUBJECT TO ECCENTRICITY, SUCH ECCENTRICITY SHALL BE TAKEN INTO ACCOUNT WHEN DESIGNING AND DETAILING THE CONNECTION.

2. WHERE BEAM REACTIONS OR DESIGN FORCES ARE NOT SHOWN ON THE DRAWINGS, THE CONTRACTOR SHALL CONTACT STRUCTURAL DESIGN GROUP FOR DIRECTION.

D. DESIGN CALCULATIONS FOR THE CONNECTIONS DESIGNED BY THE CONTRACTOR SHALL BE SUBMITTED FOR THE FILES OF THE ARCHITECT AND ENGINEER. CALCULATIONS SHALL BEAR THE SEAL OF A PROFESSIONAL ENGINEER REGISTERED IN THE STATE WHERE THE PROJECT IS LOCATED. SHOP DRAWINGS CONTAINING CONNECTIONS FOR WHICH CALCULATIONS HAVE NOT BEEN RECEIVED WILL BE RETURNED UNCHECKED AS AN INCOMPLETE SUBMITTAL.

7.11 ALL STRUCTURAL STEEL, INCLUDING EXPOSED BOLTS, NUTS, WASHERS OR ANCHOR RODS, EXPOSED TO WEATHER IN THE FINAL CONFIGURATION OF THE STRUCTURE SHALL BE HOT-DIP GALVANIZED, UNLESS NOTED, PER ASTM A 123/A 123M. VENT HOLES SHALL BE FILLED AND GROUND SMOOTH AFTER GALVANIZING. DAMAGE TO GALVANIZING SHALL BE PAINTED WITH GALVANIZING REPAIR PAINT, SSPC-PAINT 20. SEE 05120 SPECIFICATION FOR PAINT REQUIREMENTS FOR STEEL THAT IS GALVANIZED AND PAINTED.

7.12 WHERE STEEL BEAMS ARE CONTINUOUS OVER COLUMNS, PROVIDE WEB STIFFENER PLATES EACH SIDE OF BEAM WEB, OF THICKNESS EQUAL TO BEAM FLANGE THICKNESS, LOCATED IN ALIGNMENT WITH COLUMN WEB OR FLANGES OR CENTER LINE OF HSS COLUMNS.

7.13 PROVIDE 3/4" THICK CLOSURE PLATES ON THE ENDS OF HSS BEAMS. SHOP WELD ALL AROUND TO BEAM WITH 1/4" PARTIAL PENETRATION WELDS.

7.14 ALL STEEL EXPOSED TO WEATHER, INCLUDING STEEL LINTELS FOR MASONRY OPENINGS, EXCEPT WHERE FABRICATED OF APPROVED CORROSION-RESISTANT STEEL OR OF STEEL HAVING A CORROSION RESISTANT OR OTHER APPROVED COATING, SHALL BE PROTECTED AGAINST CORROSION WITH AN APPROVED COAT OF PAINT, ENAMEL, OR OTHER APPROVED PROTECTION.

7.15 ALL HANDRAILS, GUARDRAILS, AND EMBEDS NOT SPECIFICALLY DETAILED ON THE DRAWINGS SHALL BE DESIGNED IN ACCORDANCE WITH THE APPLICABLE BUILDING CODE NOTED ABOVE, BY THE CONTRACTOR, UNDER THE DIRECT SUPERVISION OF A PROFESSIONAL ENGINEER REGISTERED IN THE STATE WHERE THE PROJECT IS LOCATED. CALCULATIONS SHALL BEAR THE SEAL OF THE PROFESSIONAL ENGINEER REGISTERED IN THE STATE WHERE THE PROJECT IS LOCATED AND SHALL BE SUBMITTED FOR THE FILES OF THE ARCHITECT/ENGINEER AND SHALL BE INCLUDED WITH THE SHOP DRAWINGS.

8.0 STEEL JOISTS

8.1 DESIGN, FABRICATE, AND ERECT STEEL JOISTS IN ACCORDANCE WITH THE SJI.

8.2 PROVIDE A MINIMUM END BEARING ON STEEL SUPPORTS AS REQUIRED BY SJI. STAGGER THE ENDS OF JOIST IF NECESSARY. GENERAL CONTRACTOR COORDINATE METAL DECK SPLICE LOCATION TO CENTER OVER JOIST.

8.3 PROVIDE HORIZONTAL AND DIAGONAL BRIDGING IN ACCORDANCE WITH SJI TO PROVIDE ADEQUATE JOIST CHORD BRACING.

8.4 AT JOIST PARALLEL TO MASONRY WALL, WELD EACH BRIDGING ROW TOP AND BOTTOM TO AN ANGLE 3X3X3/16X0'-6". ANCHOR ANGLE WITH TWO 3/8" DIAMETER SLEEVE ANCHORS WITH A TWO-INCH EMBEDMENT INTO WALL.

8.5 AT JOISTS PARALLEL TO BEAMS, ANCHOR BRIDGING ROWS BY WELDING TO BEAMS.

8.6 DESIGN ROOF JOISTS TO RESIST THE WIND UPLIFT LOADING FROM THE COMPONENT AND CLADDING WIND LOAD TABLE PROVIDED IN THE TYPICAL DETAILS.

8.7 IN ADDITION TO THE LOADS INDICATED IN THE STRUCTURAL DRAWINGS, JOISTS SHALL BE DESIGNED FOR CONCENTRATED LOADS IN EXCESS OF 100 LB HUNG FROM OR SUPPORTED ON JOISTS. REFER TO MECHANICAL, ELECTRICAL AND PLUMBING DRAWINGS AND SPECIFICATIONS FOR LOADING INFORMATION AND LOCATION. LOADING AS REQUIRED BY OTHER SUBCONTRACTORS, SUCH AS FIRE PROTECTION, SHALL BE COORDINATED BY THE GENERAL CONTRACTOR.

8.8 JOIST SEATS FOR JOISTS BEARING ON BEAMS OR WALLS IN LINE WITH LATERAL FRAMES OR SHEAR WALLS SHALL BE DESIGNED FOR A ROLL OVER FORCE EQUAL TO 30% OF THE DEAD LOAD OF THE JOIST REACTION UNLESS NOTED. IN NO CASE SHALL THE ROLLOVER FORCE BE LESS THAN 350 PLF PERPENDICULAR TO THE JOIST.

8.9 JOIST AND JOIST SEATS SHALL BE DESIGNED FOR AXIAL LOAD WHERE INDICATED IN THE STRUCTURAL DRAWINGS.

8.10 DESIGN CALCULATIONS SHALL BE SUBMITTED FOR THE FILES OF THE ARCHITECT AND STRUCTURAL ENGINEER FOR JOISTS WITH CANTILEVERS OR CONCENTRATED LOADS AND FOR JOIST SIZES FOR WHICH STANDARD SJI LOAD TABLES ARE NOT APPLICABLE. CALCULATIONS SHALL BEAR THE SEAL OF A PROFESSIONAL ENGINEER REGISTERED IN THE STATE WHERE THE PROJECT IS LOCATED. SHOP DRAWINGS CONTAINING JOISTS FOR WHICH CALCULATIONS HAVE NOT BEEN RECEIVED WILL BE RETURNED UNCHECKED AS AN INCOMPLETE SUBMITTAL.

8.11 LIGHTGAGE METAL FRAMING, SUSPENDED CEILINGS, LIGHT FIXTURES, DUCTS, PIPING OR OTHER UTILITIES SHALL NOT BE SUPPORTED BY THE JOIST BRIDGING.

9.0 STEEL DECK

9.1 DECK PROPERTIES AND ATTACHMENTS SHALL BE IN ACCORDANCE WITH THE STEEL DECK INSTITUTE (SDI).

9.2 DECK SHALL BE CONTINUOUS OVER THREE OR MORE SPANS. WHERE DECK SPANS LESS THAN THREE SPANS ARE REQUIRED, THEY SHOULD BE CLEARLY MARKED ON THE SHOP DRAWINGS.

9.3 ROOF DECK:

A. WHERE NOTED AS 1-1/2", WIDE RIB TYPE "WR", STEEL ROOF DECK, SEE PLANS FOR GAGE, 1-1/2" DEEP, GALVANIZED

9.4 ROOF DECK SHALL BE CONNECTED TO SUPPORTING STRUCTURE AS SHOWN IN THE TYPICAL DETAILS AND/OR PLAN NOTES.

A. MANUFACTURER SHALL VERIFY ROOF DECK ATTACHMENT IS ADEQUATE TO RESIST THE WIND UPLIFT LOADING FROM THE COMPONENTS AND CLADDING WIND LOAD TABLE PROVIDED IN THE TYPICAL DETAILS.

9.5 WELDED CONNECTIONS: E60XX ELECTRODES: WELDING QUALIFICATION, PROCEDURES AND PERSONNEL SHALL BE CERTIFIED ACCORDING TO AWS D1.3, THE STRUCTURAL WELDING CODE - SHEET STEEL.

9.6 COLD-FORMED STEEL FRAMING, SUSPENDED CEILINGS, LIGHT FIXTURES, DUCTS, PIPING, AND/OR OTHER UTILITIES SHALL NOT BE SUPPORTED BY THE STEEL ROOF DECK.

9.7 CONTRACTOR OPTION TO USE HILTI S-SLC 02 M HWH IN LIEU OF #10 SIDELAP SCREWS AND HILTI FASTENERS IN LIEU OF #12 TEK SCREWS AS FOLLOWS: HILTI S-MD 12-24x1-5/8 HWH5 SCREWS FOR STUDS, JOISTS AND BEAMS 16 GA ≤ tf ≤ 1/4" HILTI X-HSN 24 PINS FOR JOISTS AND BEAM 1/8" ≤ tf ≤ 3/8" HILTI X-ENP 19 L15 PINS FOR BEAMS tf ≥ 1/4".

10.0 MASONRY

10.1 MASONRY CONSTRUCTION SHALL CONFORM TO TMS 602-16 SPECIFICATION.

10.2 ALL MASONRY MATERIALS AND CONSTRUCTION SHALL COMPLY WITH THE RECOMMENDATIONS OF BRICK INSTITUTE OF AMERICA (BIA) AND NATIONAL CONCRETE MASONRY ASSOCIATION (NCMA) AND MINIMUM REQUIREMENTS ESTABLISHED BY THE LOCAL BUILDING CODE.

10.3 MINIMUM COMPRESSIVE STRENGTH OF CONCRETE MASONRY UNIT (f'm) SHALL BE 2000 PSI AT 28 DAYS.

10.4 NET COMPRESSIVE STRENGTH FOR EACH CMU UNIT SHALL MEET OR EXCEED 2000 PSI AT 28 DAYS. FOR TYPE N MORTAR, NET COMPRESSIVE STRENGTH FOR BLOCK SHALL BE GREATER THAN 2650 PSI.

10.5 GROUT COMPRESSIVE STRENGTH SHALL BE 2500 PSI AT 28 DAYS. GROUT SHALL ADDITIONALLY COMPLY WITH TABLE 6 OF TMS 602 FOR DIMENSIONS OF GROUT SPACES AND POUR HEIGHTS. COURSE GROUT SHALL BE USED WHERE POSSIBLE.

A. ALL GROUT (FINE OR COURSE PER ASTM C476) SHALL BE READY-MIX GROUT. SITE-MIXED GROUT IS PROHIBITED.

10.6 ALL MASONRY SHALL BE NORMAL WEIGHT IN ACCORDANCE WITH ASTM C90.

10.7 MORTAR: EXCEPT OTHERWISE SET FORTH HERIN ALL MORTARS AND THE MATERIALS THERIN SHALL CONFORM TO THE STANDARD SPECIFICATIONS FOR MORTAR OF MASONRY UNITS, ASTM C270.

A. THE TYPE OF MORTAR BASED ON CONSIDERATION OF THE LOCATION OF THE UNIT MASONRY CONSTRUCTION SHALL BE AS FOLLOWS:

USE OF LOCATION	TYPE OF MORTAR
BELOW GRADE FOUNDATION AND WALLS	M
RETAINING WALLS	M
FIRE RESISTIVE WALLS RATED 2 HOURS OR MORE	M OR S
EXTERIOR WALLS AND LOAD BEARING WALLS	M OR S
PARTITIONS	M, S OR N
SOLID MASONRY UNITS	ONE CLASSIFICATION LESS THAN THE ABOVE
MORTAR OR GROUT UNDER CONCENTRATED LOADS	M
FENCES OR SITE WALLS	M OR S

10.8 ALL MASONRY SHALL BE STACK BOND, UNLESS NOTED.

10.9 ALL BLOCK CELLS AND CAVITIES BELOW GRADE SHALL BE FILLED WITH CONCRETE OR GROUT.

10.10 MASONRY REINFORCING LAP SPLICE LENGTHS PER SCHEDULE, SEE MASONRY LAP SPLICE LENGTHS TYPICAL DETAIL.

10.11 THE CONTRACTOR SHALL PROVIDE DETAILED SHOP DRAWINGS OF THE CMU REINFORCEMENT.

A. SHOP DRAWINGS SHALL INCLUDE AN ELEVATION VIEW OF EACH REINFORCED (LOAD BEARING OR NON-LOAD BEARING) WALL WITH ALL VERTICAL AND HORIZONTAL REINFORCING AS WELL AS WALL OPENINGS/PENETRATIONS SHOWN. REINFORCING SHOP DRAWINGS NOT CONTAINING THESE ELEVATION DRAWINGS WILL BE RETURNED AS AN INCOMPLETE SUBMITTAL.

B. SHOP DRAWINGS SHALL UNDERGO A QUALITY REVIEW BY THE REBAR DETAILER & (QUALITY CONTROL) SUPERVISOR AS WELL AS THE CONTRACTOR. SUBMITTALS SHALL INCLUDE ALL OPENINGS, REINFORCING, AND ELEVATIONS NOTED. SUBMITTALS REVIEWED MORE THAN A 2ND TIME MAY RESULT IN DELAYS TO THE CONTRACTOR. ANY ADDITIONAL TIME REQUIRED TO REVIEW A SUBMITTAL FOR A 3RD OR MORE TIME WILL BE BILLED TO THE CONTRACTOR AS ADDITIONAL SERVICES.

C. THE CONTRACTOR SHALL OBTAIN THE SERVICES OF A REBAR DETAILER CAPABLE OF HAVING THE SAME TEAM OF REBAR DETAILERS THROUGHOUT THE PROJECT. A LETTER WITH A LIST OF THE REBAR DETAILERS AND THE QUALITY CONTROL SUPERVISOR AND THEIR INITIALS SHALL BE SUBMITTED BEFORE ANY SHOP DRAWINGS HAVE BEEN SUBMITTED. THE INITIALS OF THE REBAR DETAILERS AND THE QUALITY CONTROL SUPERVISOR SHALL BE NOTED ON EACH SHOP DRAWING.

10.12 MODIFY CMU BLOCKS AS REQUIRED TO INSTALL REINFORCING AS NOTED/SHOWN.

10.13 PROVIDE CONTRACTION (CONTROL) JOINTS IN ALL CONCRETE MASONRY WALLS AT LOCATIONS APPROVED BY THE ARCHITECT AT A MAXIMUM SPACING OF 2.0 TIMES THE WALL HEIGHT OR 25'-0", WHICHEVER IS LESS.

A. STACK BOND MASONRY DOES NOT REQUIRE CONTROL JOINTS, UNLESS SPECIFICALLY NOTED ON THE DRAWINGS.

10.14 WHERE CONTROL JOINTS IN CMU WALLS ARE REQUIRED, THEY SHALL BE DISCONTINUOUS AT MASONRY BOND BEAMS. BOND BEAM REINFORCING SHALL EXTEND CONTINUOUS WITH MASONRY LAP SPLICES AND CORNER BARS. SEE TYPICAL DETAILS FOR ADDITIONAL INFORMATION.

10.15 WHEN REINFORCING IS SPECIFIED, PROVIDE REINFORCING AT EACH SIDE OF CONTROL JOINTS, OPENINGS AND WALL ENDS.

10.16 EXTEND REBAR AT WALL OPENINGS A MINIMUM OF 2'-0" PAST THE OPENING AT ALL CORNERS, UNLESS NOTED OTHERWISE. AT WINDOWS, PROVIDE A MINIMUM OF 2#4 BARS AT THE SILLS OF THE WINDOWS, UNLESS NOTED OTHERWISE.

10.17 AT CMU PARTITIONS, SUPPORTED BY SLAB ON GRADE, PROVIDE THICKENED SLAB PER TYPICAL DETAILS.

10.18 PROVIDE TOP OF WALL BRACING / SUPPORT AT 8'-0" O.C. FOR ALL INTERIOR NON-LOAD BEARING CMU WALLS WHERE CONTINUOUS WALL SPAN BETWEEN PERPENDICULAR BRACING WALLS EXCEEDS 20'-0". SEE TYPICAL DETAILS FOR ADDITIONAL INFORMATION.

10.19 PROVIDE HORIZONTAL JOINT REINFORCING IN REINFORCED MASONRY WALLS AS DIRECTED BY THE ARCHITECT. AT WALL CORNERS AND INTERSECTIONS, PROVIDE PREFABRICATED T AND L SHAPES, FIELD BENDING IS NOT PERMITTED. MINIMUM OF LADDER TYPE ZINC COATED CONFORMING TO ASTM A82 HOHMANN & BARNARD 220 LADDER-MESH OR EQUIVALENT AT EVERY OTHER BLOCK COURSE ABOVE FOOTING. REINFORCEMENT SHOULD CONSIST OF TWO OR MORE LONGITUDINAL WIRES, NO. 9 GAUGE OR LARGER, WELDED WITH NO. 9 GAUGE OR LARGER CROSS WIRES. LAP SPLICE HORIZONTAL JOINT REINFORCING A MINIMUM OF 12".

10.20 PROVIDE DOVETAIL ANCHORS AT 16" O.C., UNLESS NOTED OTHERWISE, WHERE MASONRY WALLS ABUT CONCRETE SURFACES.

10.21 PROVIDE GROUT FILLED BOND BEAM AT TOP OF ALL CMU WALLS REINFORCED WITH 2#4 BARS CONTINUOUS, UNLESS NOTED OTHERWISE.

10.22 CONDUITS, REFRIGERANT PIPING (WITH ANY REQUIRED INSULATION INCLUDED), CONDENSATE DRAIN LINES, ETC. UP TO 2" IN OUTSIDE DIAMETER MAY EXTEND CONTINUOUS THRU MASONRY WALLS & BOND BEAMS. COORDINATE WITH MECHANICAL, ELECTRICAL, PLUMBING, ETC. DRAWINGS FOR SIZE AND LOCATION. DO NOT INTERRUPT CONTINUOUS REINFORCING STEEL WHEN INSTALLING / PLACING CONDUITS, PIPING, DRAIN LINES, ETC.

A. AT STORM SHELTER EXTERIOR WALLS, PIPING / CONDUIT MAY BE INSTALLED WITHIN CELLS PROVIDED THAT THERE IS A MINIMUM OF 4" OF GROUT (PLUS BLOCK FACE SHELL) ON THE EXTERIOR SIDE.

10.23 WHERE MASONRY WALLS SUPPORT EARTH ON BOTH SIDES, BACKFILL EACH SIDE SIMULTANEOUSLY.

10.24 WHERE TOP OF FOOTING SUPPORTING MASONRY WALLS IS MORE THAN 2'-8" BELOW FINISH FLOOR, PROVIDE #6 AT 16" O.C., UP TO THE FIRST COURSE ABOVE FINISH FLOOR ELEVATION, IN ADDITION TO THE SPECIFIED REINFORCEMENT, UNLESS NOTED OTHERWISE.

10.25 THE MASONRY WALLS ARE "NON-SELF-SUPPORTING". ADEQUATE TEMPORARY SUPPORT MUST BE PROVIDED BY THE CONTRACTOR UNTIL REQUIRED CONNECTIONS OR ELEMENTS ARE IN PLACE. BRACING SHALL BE PER THE FOLLOWING, AND CONTRACTOR SHALL PROVIDE ADDED REINFORCING AND GROUT IF REQUIRED BY THE BRACING.

A. THE "2012 STANDARD PRACTICE FOR BRACING MASONRY WALLS UNDER CONSTRUCTION".
B. THE "MASONRY WALL BRACING HANDBOOK" AS PUBLISHED BY THE MASON CONTRACTORS ASSOCIATION OF AMERICA (MCAA) SHOULD BE USED IN CONJUNCTION WITH THE "STANDARD PRACTICE".

10.26 PROVIDE 2 COURSES OF GROUT FILLED OPEN BOTTOM BOND BEAM BLOCKS REINFORCED WITH 2#5 BARS CONTINUOUS AT ALL STEEL STAIR ATTACHMENT LOCATIONS, UNLESS NOTED OTHERWISE. CONTRACTOR COORDINATE EXACT LOCATIONS WITH STEEL STAIR DESIGNER.

10.27 TOP OF WALL BEARING / EMBED PLATES TO BE SET FLUSH WITH TOP OF WALL ELEVATION(S). CONTRACTOR IS TO NOTCH MASONRY AS REQUIRED TO INSET PLATES FLUSH WITH TOP OF WALL.

11.0 POST-INSTALLED REINFORCING, ANCHORS AND FASTENERS

11.1 POST-INSTALLED ANCHORS AND/OR REINFORCING SHALL ONLY BE USED WHERE SPECIFIED ON THE CONSTRUCTION DOCUMENTS. THE CONTRACTOR SHALL OBTAIN APPROVAL FROM THE ENGINEER-OF-RECORD PRIOR TO INSTALLING POST-INSTALLED ANCHORS AND/OR REINFORCING IN PLACE OF MISSING OR MISPLACED CAST-IN-PLACE ANCHORS AND/OR REINFORCING.

11.2 THE BELOW PRODUCTS ARE THE DESIGN BASIS FOR THIS PROJECT. PRODUCT DIAMETER AND EMBEDMENT SHALL BE SHOWN IN THE DETAILS.

11.3 FOR ANCHORING INTO CONCRETE:

A. MECHANICAL ANCHORS SHALL HAVE BEEN TESTED IN ACCORDANCE WITH ACI 355.2 AND ICC-ES AC193 FOR CRACKED CONCRETE AND SEISMIC APPLICATIONS. PRE-APPROVED PRODUCTS INCLUDE:

1. SIMPSON STRONG-TIE "TITEN-HD" (ICC-ES ESR-2713 & IAPMO-UES ER-493)
2. SIMPSON STRONG-TIE "STRONG-BOLT 2" (ICC-ES ESR-3037)
3. SIMPSON STRONG-TIE "TITEN-HD ROD HANGER" (ICC-ES ESR-2713)
4. SIMPSON STRONG-TIE "TITEN TURBO" (IAPMO-UES ER-712) - FOR UNCRACKED CONCRETE ONLY
5. HILTI KWIK HUS-EZ (KH-EZ), KH-EZ CRC, KH-EZ SS316, KH-EZ C, KH-EZ E, KH-EZ-I, AND KH-EZ P SCREW ANCHOR SAFE SET SYSTEM WITH HOLLOW DRILL BIT AND VACUUM (ICC ESR-3027)
6. HILTI KWIK BOLT-TZ2 EXPANSION ANCHOR SAFE SET SYSTEM WITH HOLLOW DRILL BIT AND VACUUM AND SI-AT-A22 TOOL WITH ADAPTIVE TORQUE FOR APPLICABLE SIZES (ICC ESR-4266)
7. HILTI KWIK BOLT 1 EXPANSION ANCHOR SAFE SET SYSTEM WITH HOLLOW DRILL BIT AND VACUUM AND SI-AT-A22 TOOL WITH ADAPTIVE TORQUE FOR APPLICABLE SIZES (ICC ESR-678)
8. HILTI HDA UNDERCUT ANCHORS (ICC ESR 1546)
9. HILTI HSL-4 EXPANSION ANCHORS (ICC ESR 4386)
10. DEWALT SCREW-BOLT+ (ICC-ES ESR-3889)
11. DEWALT POWER-STUD+ SD2 (ICC-ES ESR-2502)
12. DEWALT POWER-STUD SD1 (ICC-ES ESR-2818)
13. DEWALT HANGERMATE+ (ICC-ES ESR-3889)
14. DEWALT CCU+ UNDERCUT (ICC-ES ESR-4810)
15. DEWALT POWER-BOLT+ (ICC-ES ESR-3260)

B. MECHANICAL ANCHORS FOR USE IN THE UNDER SIDE OF NORMAL WEIGHT HOLLOW CORE AND POST TENSION SLAB WHERE EMBEDMENT DEPTH MUST NOT EXCEED ¾". PRE-APPROVED PRODUCTS INCLUDE:

1. DEWALT MINI-UNDERCUT+ (ICC-ES ESR-3912)
2. HILTI HDP-P TZ DROP-IN ANCHOR (ICC ESR-4236)

C. ADHESIVE FOR REBAR AND ANCHORS SHALL HAVE BEEN TESTED IN ACCORDANCE WITH ACI 355.4 AND ICC-ES AC308 FOR CRACKED CONCRETE AND SEISMIC APPLICATIONS. DESIGN ADHESIVE BOND STRENGTH HAS BEEN BASED ON ACI 355.4 TEMPERATURE CATEGORY B WITH INSTALLATIONS INTO DRY HOLES DRILLED USING A CARBIDE DRILL BIT INTO CRACKED CONCRETE THAT HAS CURED FOR AT LEAST 21 DAYS. ADHESIVE ANCHORS REQUIRING CERTIFIED INSTALLATIONS, SUCH AS HORIZONTAL TO UPWARD INCLINED ORIENTATION UNDER SUSTAINED TENSION LOADING, SHALL BE INSTALLED BY A CERTIFIED ADHESIVE ANCHOR INSTALLER PER ACI 318-19 26.7.2 & 26.7.2(e). INSTALLATIONS REQUIRING CERTIFIED INSTALLERS SHALL BE INSPECTED PER ACI 318-19 26.7.2 & 26.7.2(e). PRE-APPROVED PRODUCTS INCLUDE:

1. SIMPSON STRONG-TIE "SET-3G" (ICC-ES ESR-4057)
2. SIMPSON STRONG-TIE "AT-XP" (IAPMO-UES ER-263)
3. SIMPSON STRONG-TIE "SET-XP" (ICC-ES ESR-2508)
4. HILTI HIT-HY 200 V3 SAFE SET SYSTEM WITH HILTI HOLLOW DRILL BIT AND VACUUM WITH CONTINUOUSLY DEFORMED REBAR (ICC ESR-4868)
5. HILTI HIT-RE 500 V3 SAFE SET SYSTEM WITH HILTI HOLLOW DRILL BIT AND VACUUM WITH CONTINUOUSLY DEFORMED REBAR (ICC ESR-3814)
6. HILTI KWIK-X DUAL ACTION ANCHOR SAFESET SYSTEM WITH KHC CAPSULE ADHESIVE AND KWIK-HUS EZ (ICC ESR-5065)
7. DEWALT PURE110+ FOR WARM WEATHER/SLOW CURE (ICC-ES ESR-3298); FOR ANCHORS AND REBAR: WHEN DEWALT DUSTX+ EXTRACTION SYSTEM IS USED, TRADITIONAL HOLE CLEANING METHODS USING STEEL BRUSHES AND COMPRESSED DRY AIR MAY BE COMPLETELY OMITTED PER ICC-ES ESR-3298
8. DEWALT AC200+ FOR COLD WEATHER/RAPID CURE (ICC-ES ESR-4027); FOR ANCHORS AND REBAR: WHEN DEWALT DUSTX+ EXTRACTION SYSTEM IS USED, TRADITIONAL HOLE CLEANING METHODS USING STEEL BRUSHES AND COMPRESSED DRY AIR MAY BE COMPLETELY OMITTED PER ICC-ES ESR-4027

D. POWER-ACTUATED FASTENERS SHALL HAVE BEEN TESTED IN ACCORDANCE WITH ICC-ES AC70. PRE-APPROVED PRODUCTS INCLUDE:

1. SIMPSON STRONG-TIE "GAS ACTUATED PINS" (ICC-ES ESR-2811)
2. SIMPSON STRONG-TIE "POWDER ACTUATED PINS" (ICC-ES ESR-2138)
3. HILTI "UNIVERSAL KNURLED SHANK FASTENERS" X-U (ICC ESR-2269)
4. DEWALT "POWER DRIVEN FASTENERS", POWDER ACTUATED (ICC-ES-ESR 2024)
5. DEWALT "TRAK-IT C5", GAS ACTUATED (ICC-ES-ESR 3275)

11.4 FOR ANCHORING INTO MASONRY:

A. SOLID-GROUTED CONCRETE MASONRY

1. MECHANICAL ANCHORS SHALL HAVE BEEN TESTED IN ACCORDANCE WITH ICC-ES AC01 OR ICC-ES AC106. PRE-APPROVED PRODUCTS INCLUDE:

a. SIMPSON STRONG-TIE "TITEN-HD" & "STAINLESS STEEL TITEN HD" (ICC-ES ESR-1056)
b. SIMPSON STRONG-TIE "STRONG-BOLT 2" (IAPMO-UES ER-240)
c. SIMPSON STRONG-TIE "WEDGE-ALL" (ICC-ES ESR-1396)
d. SIMPSON STRONG-TIE "TITEN TURBO" (IAMPO-UES ER-716)
e. HILTI KH-EZ, KH-EZ CRC, KH-EZ SS316, KH-EZ C, AND KH-EZ P SCREW ANCHORS (ICC ESR-3056)
f. HILTI KWIK BOLT-1 EXPANSION ANCHOR (ICC ER-677)
g. HILTI KWIK BOLT-TZ2 EXPANSION ANCHOR (ICC ESR-4561)
h. DEWALT "SCREW-BOLT+" (ICC-ES ESR 4042)
i. DEWALT "POWER-STUD+ SD1" (ICC-ES ESR 2966)

2. ADHESIVE FOR REBAR AND ANCHORS SHALL HAVE BEEN TESTED IN ACCORDANCE WITH ICC-ES AC58. PRE-APPROVED PRODUCTS INCLUDE:

a. SIMPSON STRONG-TIE "AT-XP" (IAPMO-UES ER-281)
b. SIMPSON STRONG-TIE "SET-XP" (IAPMO-UES ER-265)
c. HILTI HIT-HY 270 SAFE SET SYSTEM WITH HILTI HOLLOW DRILL BIT AND VACUUM (ICC ESR-4143); STEEL ANCHOR ELEMENT SHALL BE HILTI-HAS CONTINUOUSLY THREADED ROD OR CONTINUOUSLY DEFORMED STEEL REBAR
d. HILTI HIT-HY 200 V3 SAFE SET SYSTEM WITH HILTI HOLLOW DRILL BIT AND VACUUM (ICC ESR-4878)
e. DEWALT AC100+ GOLD (ICC-ES ESR-3200)

3. POWER-ACTUATED FASTENERS SHALL HAVE BEEN TESTED IN ACCORDANCE WITH ICC-ES AC70. PRE-APPROVED PRODUCTS INCLUDE:

a. SIMPSON STRONG-TIE "GAS ACTUATED PINS" (ICC-ES ESR-2811)
b. SIMPSON STRONG-TIE "POWDER ACTUATED PINS" (ICC-ES ESR-2138)
c. HILTI "UNIVERSAL KNURLED SHANK FASTENERS" X-U (ICC ESR-2269)
d. DEWALT "TRAK-IT C5", GAS ACTUATED (ICC-ES-ESR 3275)

B. HOLLOW CONCRETE MASONRY

1. MECHANICAL ANCHORS SHALL HAVE BEEN TESTED IN ACCORDANCE WITH ICC-ES AC106. PRE-APPROVED PRODUCTS INCLUDE:

a. SIMPSON STRONG-TIE "TITEN-HD" (ICC-ES ESR-1056)
b. SIMPSON STRONG-TIE "TITEN TURBO" (IAPMO-UES ER-716)

2. ADHESIVE FOR REBAR AND ANCHORS WITH SCREEN TUBES SHALL HAVE BEEN TESTED FOR USE IN ACCORDANCE WITH ICC-ES AC58. THE APPROPRIATE SCREEN TUBE SHALL BE USED AS RECOMMENDED BY THE ADHESIVE MANUFACTURER. PRE-APPROVED PRODUCTS INCLUDE:

a. SIMPSON STRONG-TIE "SET-XP" (IAPMO-UES ER-265)
b. HILTI HIT-HY 270 SAFE SET SYSTEM WITH HILTI HOLLOW DRILL BIT AND VACUUM (ICC ESR-4143); STEEL ANCHOR ELEMENT SHALL BE HILTI-HAS CONTINUOUSLY THREADED ROD OR CONTINUOUSLY DEFORMED STEEL REBAR. THE APPROPRIATE SIZE SCREEN TUBE SHALL BE USED PER ADHESIVE MANUFACTURER'S PRINTED INSTALLATION INSTRUCTIONS.
c. DEWALT AC100+ GOLD (ICC-ES ESR-3200)

3. POWER-ACTUATED FASTENERS SHALL HAVE BEEN TESTED IN ACCORDANCE WITH ICC-ES AC70. PRE-APPROVED PRODUCTS INCLUDE:

a. SIMPSON STRONG-TIE "GAS ACTUATED PINS" (ICC-ES ESR-2811)
b. SIMPSON STRONG-TIE "POWDER ACTUATED PINS" (ICC-ES ESR-2138)
c. HILTI "DRYWALL TRACK FASTENERS" X-DW (ICC ESR-1663)

C. UNREINFORCED BRICK MASONRY (URM): ADHESIVE FOR REBAR AND ANCHORS WITH SCREEN TUBES SHALL HAVE BEEN TESTED FOR USE IN ACCORDANCE WITH ICC-ES AC60. THE APPROPRIATE SCREEN TUBE SHALL BE USED AS RECOMMENDED BY THE ADHESIVE MANUFACTURER. PRE-APPROVED PRODUCTS INCLUDE:

1. SIMPSON STRONG-TIE "ET-HP" (ICC-ES ESR-3638)
2. HILTI HIT-HY 270 SAFE SET SYSTEM WITH HILTI HOLLOW DRILL BIT AND VACUUM (ICC ESR-4143); STEEL ANCHOR ELEMENT SHALL BE HILTI-HAS CONTINUOUSLY THREADED ROD OR CONTINUOUSLY DEFORMED STEEL REBAR. THE APPROPRIATE SIZE SCREEN TUBE SHALL BE USED PER ADHESIVE MANUFACTURER'S PRINTED INSTALLATION INSTRUCTIONS.
3. DEWALT "AC100+ GOLD" (ICC-ES ESR-4105)

11.5 FOR FASTENING INTO STEEL: POWER-ACTUATED FASTENERS SHALL HAVE BEEN TESTED IN ACCORDANCE WITH ICC-ES AC70. PRE-APPROVED PRODUCTS INCLUDE:

A. SIMPSON STRONG-TIE "GAS ACTUATED PINS" (ICC-ES ESR-2811)
B. SIMPSON STRONG-TIE "POWDER ACTUATED PINS" (ICC-ES ESR-2138)
C. HILTI FASTENERS IN LIEU OF #12 TEK SCREWS:

1. HILTI S-MD 12-24x1-5/8 HWH5 SCREWS FOR STUDS, JOISTS AND BEAMS 16 GA ≤ TF ≤ 1/4"
2. HILTI X-HSN 24 PINS FOR JOISTS AND BEAM 1/8" ≤ TF ≤ 3/8"
3. HILTI X-ENP 19 L15 PINS FOR BEAMS TF ≥ 1/4".

D. DEWALT "POWER DRIVEN FASTENERS", POWDER ACTUATED (ICC-ES-ESR 2024)
E. DEWALT "TRAK-IT C5", GAS ACTUATED (ICC-ES-ESR 3275)

11.6 REFER TO THE PROJECT BUILDING CODE AND/OR EVALUATION REPORT FOR SPECIAL INSPECTIONS AND PROOF LOAD REQUIREMENTS.

11.7 SUBSTITUTION REQUESTS FOR PRODUCTS OTHER THAN THOSE LISTED MAY BE SUBMITTED BY THE CONTRACTOR TO THE EOR FOR REVIEW NO LESS THAN TWO WEEKS PRIOR TO BID. SUBSTITUTIONS WILL ONLY BE CONSIDERED FOR PRODUCTS HAVING A RESEARCH REPORT RECOGNIZING THE PRODUCT FOR THE APPROPRIATE APPLICATION UNDER THE PROJECT BUILDING CODE. SUBSTITUTION REQUESTS SHALL INCLUDE CALCULATIONS PREPARED & SEALED BY A REGISTERED PROFESSIONAL ENGINEER THAT DEMONSTRATE THE SUBSTITUTED PRODUCT IS CAPABLE OF ACHIEVING THE EQUIVALENT. ADHESIVE ANCHOR EVALUATION WILL ALSO CONSIDER CREEP, IN-SERVICE TEMPERATURE, AND INSTALLATION TEMPERATURE.

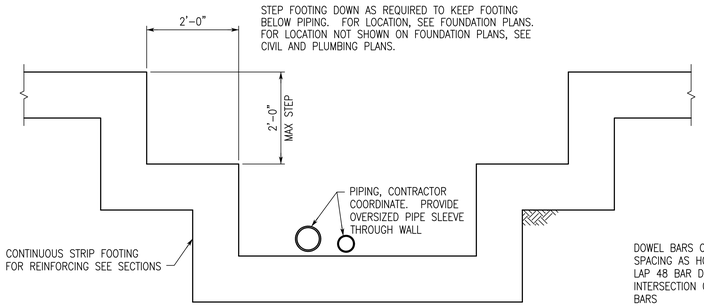
11.8 INSTALL ANCHORS PER THE MANUFACTURER'S PRINTED INSTALLATION INSTRUCTIONS (MPII), OR AS INCLUDED IN THE ANCHOR PACKAGING.

11.9 THERE IS TO BE NO GAP BETWEEN CONNECTED PARTS, UNLESS SHIMS ARE PROVIDED. ANCHORS ARE TO SECURE CONNECTED PARTS TOGETHER SNUGLY AND SECURELY.

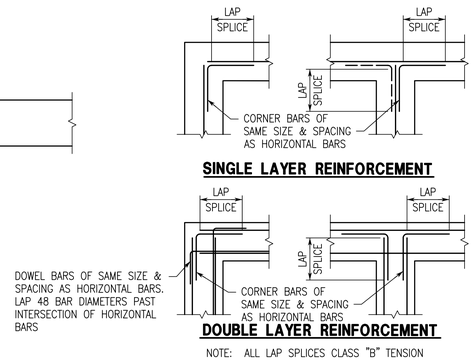
11.10 OVERHEAD ADHESIVE ANCHORS MUST BE INSTALLED USING THE MANUFACTURER'S INSTRUCTIONS AND INSTALLER MUST BE ACI CERTIFIED.

11.11 THE CON

SDG
STRUCTURAL DESIGN GROUP
300 Chase Park South, Suite 125
Hoover, AL 35244
tel 205-824-5200
fax 205-824-5280
Job Number 26-097

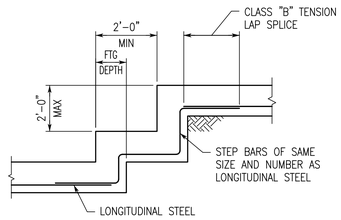


FOOTING/FOUNDATION WALL AT PIPING
TYPICAL

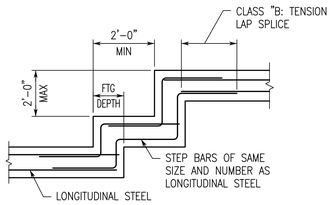


NOTE: ALL LAP SPLICES CLASS "B" TENSION

FOOTING, SLAB OR WALL CORNER REINFORCING DETAIL
TYPICAL



FOOTING STEP DETAIL
TYPICAL

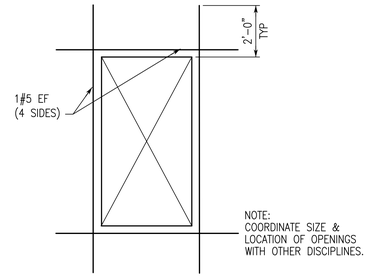


FOOTING STEP DETAIL
TYPICAL

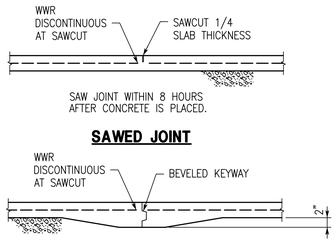
CONCRETE REINFORCING TENSION LAP SPLICE LENGTHS

BAR SIZE	f_C= 3000 PSI				f_C= 4000 PSI			
	TOP BARS		OTHER BARS		TOP BARS		OTHER BARS	
	A	B	A	B	A	B	A	B
#3	22"	28"	17"	22"	19"	24"	15"	19"
#4	29"	37"	22"	29"	25"	32"	19"	25"
#5	36"	47"	28"	36"	31"	40"	24"	31"
#6	43"	56"	33"	43"	37"	48"	29"	37"
#7	63"	81"	48"	63"	54"	70"	42"	54"
#8	72"	93"	55"	72"	62"	80"	48"	62"
#9	81"	105"	62"	81"	70"	91"	54"	70"
#10	91"	118"	70"	91"	79"	102"	61"	79"
#11	101"	131"	78"	101"	87"	113"	67"	87"

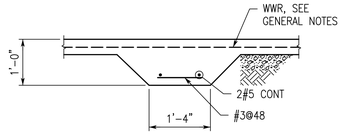
TOP BARS ARE HORIZONTAL REINFORCEMENT WITH MORE THAN 12" OF CONCRETE CAST BELOW THE REINFORCEMENT.



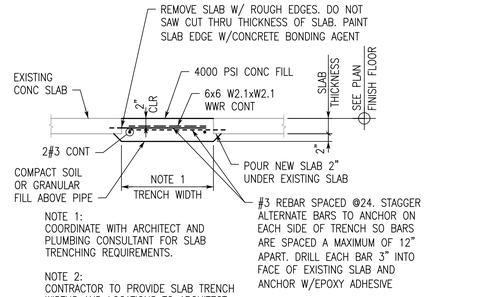
WALL OPENING REINFORCMENT DETAIL
TYPICAL



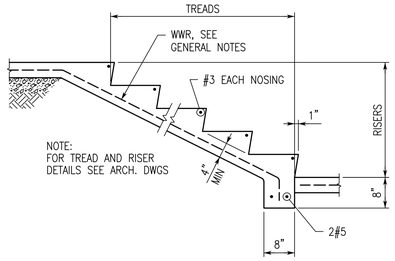
SLAB CONTROL JOINT DETAILS
TYPICAL
JOINT TYPE IS OPTIONAL



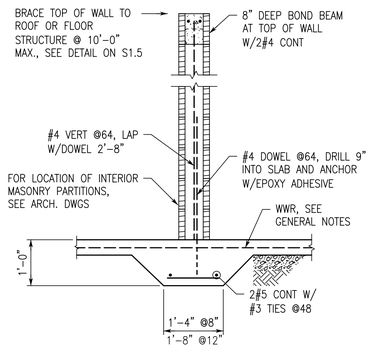
THICKENED SLAB ON GRADE DETAIL
TYPICAL



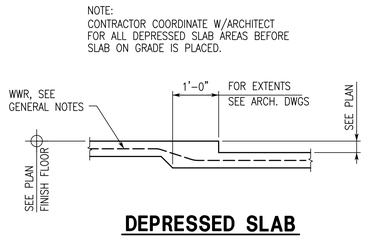
SLAB TRENCHING DETAIL
TYPICAL



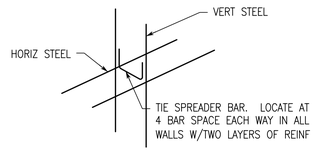
STAIR ON GRADE DETAIL
TYPICAL



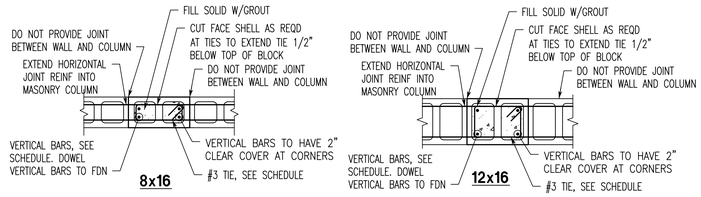
INTERIOR PARTITION WALL ON THICKENED SLAB ON GRADE DETAIL
TYPICAL



DEPRESSED SLAB ON GRADE DETAIL
TYPICAL



WALL STEEL TIE-SPREADER DETAIL
TYPICAL



MASONRY COLUMN (MC)
TYPICAL

MASONRY COLUMN SCHEDULE (MC)

COLUMN DESIGNATION		MC1	MC2	
COLUMN	SIZE	12x16	8x16	
	VERTICALS	4#6	4#5	
	TIES	#3@8	#3@8	
	NOTES	1,2,3	1,2,3	

NOTES:
1. SEE COLUMN TIE DETAILS ON THIS SHEET.
2. DOWEL VERTICAL STEEL INTO FOOTING THE THICKNESS OF THE FOOTING MINUS 3" WITH STANDARD HOOK. LAP DOWELS WITH VERTICALS 72 BAR DIA.
3. EXTEND VERTICALS FULL HEIGHT OF WALL, UNLESS NOTED.

LATHAN ▪ McKEE ARCHITECTS

A NEW CLASSROOM ADDITION FOR
COLUMBIANA MIDDLE SCHOOL
222 JOINERTOWN ROAD, COLUMBIANA, ALABAMA 35051
SHELBY COUNTY BOARD OF EDUCATION

SHEET TITLE:
TYPICAL DETAILS

ALABAMA REGISTERED No. 22596 PROFESSIONAL ENGINEER H. CRAIG WINN
H. Craig Winn, P.E.
10/30/2026

PROJ. MGR.:	HCW
DRAWN:	ABS
DATE:	OCTOBER 30, 2026
REVISIONS	

JOB NO.
LAA-26-054-00

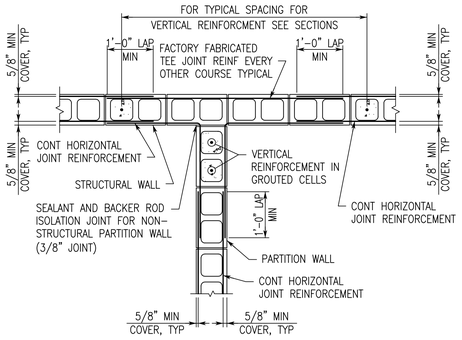
SHEET NO:
S1.2
3 OF 11

0 1" 2"

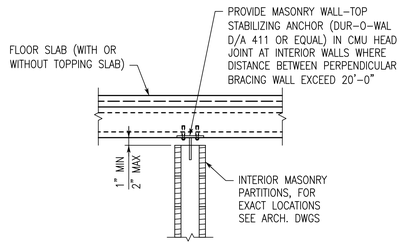
SDG
STRUCTURAL DESIGN GROUP
300 Chase Park South, Suite 125
Hoover, AL 35244
tel 205-824-5200
fax 205-824-5280
Job Number 26-097

LATHAN McKEE ARCHITECTS

A NEW CLASSROOM ADDITION FOR
COLUMBIANA MIDDLE SCHOOL
222 JOINERTOWN ROAD, COLUMBIANA, ALABAMA 35051
SHELBY COUNTY BOARD OF EDUCATION



PARTITION WALLS ABUTTING STRUCTURAL WALLS
TYPICAL



INTERIOR MASONRY WALL BRACING DETAILS
TYPICAL

STORM SHELTER LOAD BEARING STACK BOND MASONRY LINTEL SCHEDULE

MAXIMUM OPENING WIDTH	LINTEL DIMENSIONS AND REINFORCING	
	DEPTH	12" WALL
6'-0"	24	2#5 BOT & 2#5 TOP
10'-0"	--	SEE PLAN AND NOTES

1. PROVIDE 24" MINIMUM BEARING FOR ALL LINTELS. FILL CELLS SOLID AT EACH SIDE OF OPENING AND REINFORCE WITH MINIMUM 1#5 BAR CONTINUOUS. (JAMB BARS OF SAME SIZE AS VERTICAL WALL REINFORCING BARS.)
2. SHORE LINTEL UNTIL MORTAR AND GROUT HAVE SET AND CURED.
3. PROVIDE 16" DEEP BOND BEAM REINFORCED WITH 2#5 CONTINUOUS TOP AND BOTTOM AT THE BOTTOM OF ALL STORM SHELTER OPENINGS (DOORS, WINDOWS, LOUVERS, ETC.). EXTEND 24" PAST OPENING ON EACH SIDE OF OPENING.

LOAD BEARING STACK BOND MASONRY LINTEL SCHEDULE

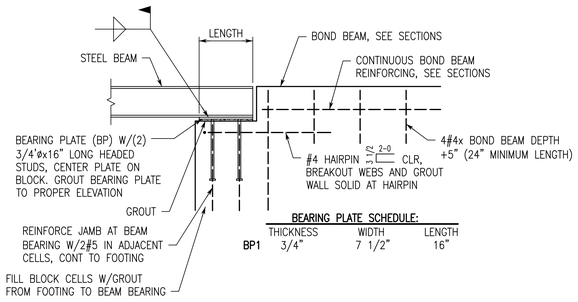
MAXIMUM OPENING WIDTH	LINTEL DIMENSIONS AND REINFORCING		
	DEPTH	8" WALL	12" WALL
4'-0"	24	2#5 BOT & 2#5 TOP	2#5 BOT & 2#5 TOP
6'-0"	32	2#5 BOT & 2#5 TOP	2#6 BOT & 2#6 TOP
8'-0"	32	2#6 BOT & 2#6 TOP	2#6 BOT & 2#6 TOP
10'-0"	48	2#6 BOT & 2#6 TOP	2#6 BOT & 2#6 TOP
12'-0"	48	2#6 BOT & 2#6 TOP	2#6 BOT & 2#6 TOP

1. PROVIDE 24" MINIMUM BEARING FOR ALL LINTELS. FILL CELLS SOLID AT EACH SIDE OF OPENING AND REINFORCE WITH 1#5 BAR CONTINUOUS. (JAMB BARS OF SAME SIZE AS VERTICAL WALL REINFORCING BARS.)
2. SHORE LINTEL UNTIL MORTAR AND GROUT HAVE SET AND CURED.
3. PROVIDE 8" DEEP BOND BEAM REINFORCED WITH 2#5 CONT AT BOTTOM OF ALL OPENINGS. EXTEND 24" PAST OPENING ON EACH SIDE OF OPENING.

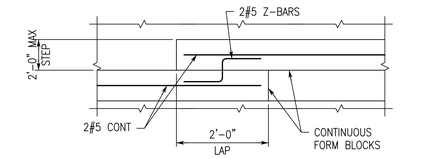
NON-LOAD BEARING STACK BOND MASONRY LINTEL SCHEDULE

MAXIMUM OPENING WIDTH	LINTEL DIMENSIONS AND REINFORCING			
	DEPTH	8" WALL		12" WALL	
		REINFORCING	MAX HEIGHT OF WALL ABOVE LINTEL	REINFORCING	MAX HEIGHT OF WALL ABOVE LINTEL
2'-0"	8	1#4 BOT	20'-0"	1#4 BOT	22'-0"
4'-0"	8	1#4 BOT	10'-0"	2#4 BOT	9'-4"
6'-0"	8	1#5 BOT & 1#4 TOP	4'-0"	2#5 BOT & 2#4 TOP	4'-8"
8'-0"	16	1#6 BOT & 1#5 TOP	15'-4"	2#5 BOT & 2#4 TOP	16'-0"
10'-0"	16	1#7 BOT & 1#5 TOP	10'-0"	2#6 BOT & 2#4 TOP	12'-0"
12'-0"	16	1#8 BOT & 1#5 TOP	7'-4"	2#7 BOT & 2#5 TOP	10'-8"

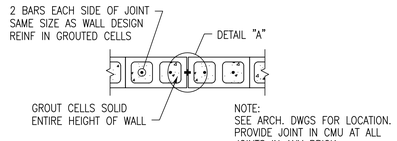
1. DO NOT USE THIS SCHEDULE IF WALL IS LOAD BEARING SUPPORTING ANYTHING OTHER THAN WALL WEIGHT ONLY. IF WALL IS LOAD BEARING USE THE LOAD BEARING STACK BOND MASONRY LINTEL SCHEDULE.
2. PROVIDE 2'-0" MINIMUM BEARING FOR ALL LINTELS. FILL CELLS SOLID AT EACH SIDE OF OPENING AND REINFORCE WITH 1#5 BAR CONTINUOUS.
3. WHERE MAXIMUM HEIGHT OF WALL ABOVE LINTEL IS EXCEEDED, PROVIDE ADDITIONAL LINTELS EQUALLY SPACED ABOVE TO LIMIT WALL HEIGHTS ABOVE LINTEL TO THAT SHOWN IN THE TABLE ABOVE.
4. SHORE LINTEL UNTIL MORTAR AND GROUT HAVE SET AND CURED.
5. PROVIDE 8" DEEP BOND BEAM REINFORCED WITH 2#4 CONT AT BOTTOM OF ALL OPENINGS. EXTEND 2'-0" PAST OPENING ON EACH SIDE OF OPENING.



BEAM BEARING DETAIL IN LINE WITH CMU WALL
TYPICAL



MASONRY BOND BEAM STEP DETAIL
TYPICAL



PLAN MASONRY CONTROL JOINT
3/4"=1'-0'

MASONRY REINFORCING LAP SPLICE LENGTHS

BAR SIZE (#)	CENTERED (IN.)	EDGE (IN.)
3	18.0	18.0
4	24.0	29.0
5	30.0	45.0
6	43.0	54.0
7	60.0	63.0
8	72.0	72.0
9	82.0	82.0

NOTES:
1. LAP SPLICE LENGTHS APPLY TO BOTH HORIZONTAL AND VERTICAL REINFORCING.
2. REINFORCEMENT LARGER THAN NO. 9 BAR SHALL BE SPLICED USING MECHANICAL CONNECTIONS IN ACCORDANCE WITH ACI 530 & ACI 530.1.

PIPING WEIGHTS

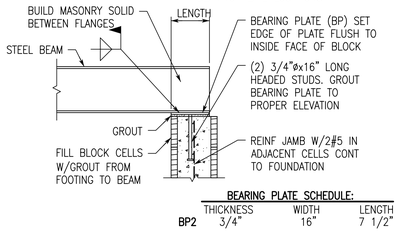
PIPE DIAMETER	PIPE WT PER/FOOT (PLF)	FLUID WT PER/FOOT (PLF)	INSULATION & HANGERS (PLF)	TOTAL WT PER/FOOT (PLF)
4"	10.80	6.10	2.00	18.90
6"	19.00	13.80	3.00	35.80
8"	28.60	23.90	4.00	56.50
10"	40.50	37.50	4.00	82.00
12"	49.60	54.00	5.00	108.60
14"	54.60	65.70	5.00	125.30
16"	62.60	87.10	5.00	154.70

NOTES:
1. FROM ANVIL INTERNATIONAL PIPE FITTERS HANDBOOK.
2. ALL PIPES ASSUMED TO BE SCHEDULE 40.
3. FLUID WEIGHT INCLUDES ALLOWANCE FOR GLYCOL CONCENTRATION.
4. PIPING SUPPORT AND THRUST BRACING REQUIREMENTS SHALL BE COORDINATED BY THE GENERAL CONTRACTOR WITH THE STEEL/JOIST FABRICATOR. SEE MECHANICAL/PLUMBING DRAWINGS FOR PIPING SUPPORT AND THRUST BRACING REQUIREMENTS.
5. FOR PIPE SIZES NOT LISTED, CONTACT STRUCTURAL ENGINEER.

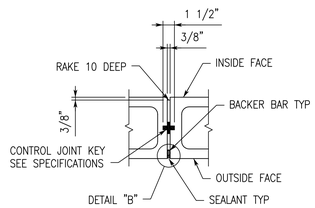
VENEER LINTEL SCHEDULE

MAXIMUM OPENING WIDTH	STEEL FOR EACH 4" OF WALL THICKNESS
2'-0"	L5x5x3/8 MINIMUM
4'-0"	L5x5x3/8 MINIMUM
6'-0"	L5x5x3/8 MINIMUM
8'-0"	L5x5x3/8 MINIMUM
10'-0"	L8x5x3/8 MINIMUM
LARGER	CONTACT ENGINEER

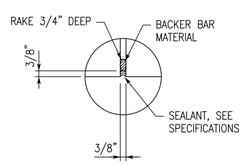
1. PROVIDE 8" MINIMUM BEARING FOR ALL LINTELS.
2. ALL EXPOSED LINTEL ANGLES TO BE HOT DIP GALVANIZED.
3. CONTRACTOR TO COORDINATE DIMENSION OF OUTSTANDING LEG WITH MINIMUM VENEER SUPPORT REQUIREMENT(S) AND WITH DETAILS INDICATED ON ARCH. DWGS.
4. FOR OPENINGS 8' AND OVER, ANCHOR LINTEL TO MASONRY WALL WITH 3/4"ø EXPANSION BOLTS AT 24" O.C.



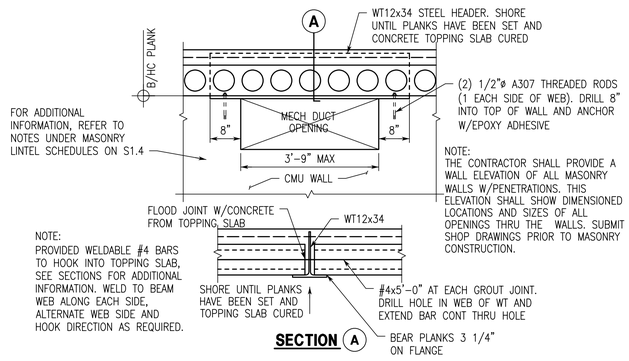
BEAM BEARING DETAIL PERPENDICULAR WITH CMU WALL
TYPICAL



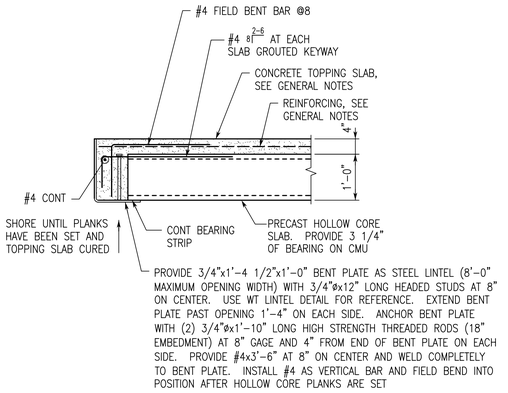
DETAIL "A" MASONRY CONTROL JOINT
1 1/2"=1'-0"



DETAIL "B" MASONRY CONTROL JOINT
3"=1'-0"



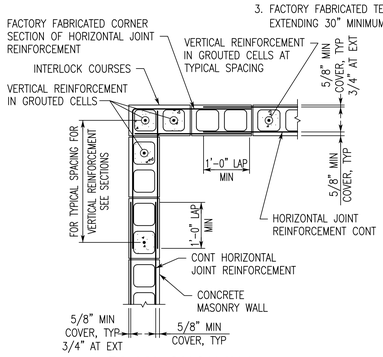
SECTION (A)



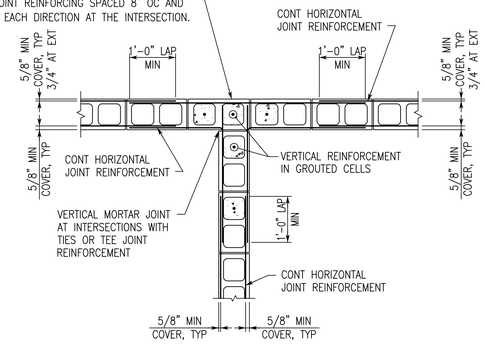
SECTION (A) SIM

DETAIL AT MECH DUCT OPENING BELOW HOLLOW CORE PANELS
NOT TO SCALE

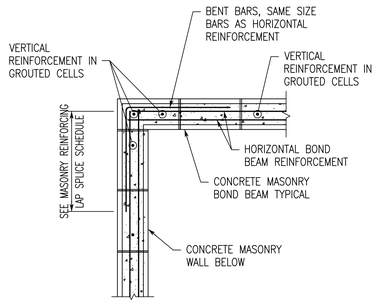
ANCHOR WALLS BY:
1. INTERSECTING 50% OF UNITS OVERLAPPING WITH ALTERNATE UNITS BEARING 3" MINIMUM ON THE UNIT BELOW.
2. GALV PL 1/4x1 1/2x2'-4" TIE @ 4'-0" OC WITH ENDS BENT 2", ALTERNATING ENDS UP AND DOWN.
3. FACTORY FABRICATED TEE JOINT REINFORCING SPACED 8" OC AND EXTENDING 30" MINIMUM IN EACH DIRECTION AT THE INTERSECTION.



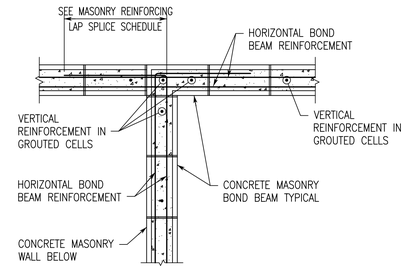
PLAN SHOWING JOINT REINFORCEMENT AT WALL CORNER
TYPICAL



PLAN SHOWING JOINT REINFORCING AT STRUCTURAL WALL INTERSECTION
TYPICAL



PLAN SHOWING BOND BEAM REINFORCEMENT AT WALL CORNER
TYPICAL



PLAN SHOWING BOND BEAM AT STRUCTURAL WALL INTERSECTION
TYPICAL

SHEET TITLE:
TYPICAL DETAILS

ALABAMA REGISTERED No. 22596 PROFESSIONAL ENGINEER H. CRAIG WINN
H. Craig Winn, P.E.
10/30/2026

PROJ. MGR.:	HCW
DRAWN:	ABS
DATE:	OCTOBER 30, 2026
REVISIONS	

JOB NO.
LAA-26-054-00

SHEET NO:
S1.3
4 OF 11

0 1" 2"

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Job Number 26-097

COMPONENTS AND CLADDING WIND LOADS FOR WALLS (PSF)

H = 20'-6" 0:12 Roof Slope	EFFECTIVE WIND AREA (FT^2)	116 MPH VELOCITY (3-SEC GUST) ZONES 4 & 5	ZONES 4 (Int.)	ZONES 5 (Edge)
	10	28.7	-31.1	-38.2
	20	27.4	-29.8	-35.7
	50	25.7	-28.1	-32.4
	100	24.5	-26.8	-29.8
	200	23.2	-25.5	-27.3
	500	21.5	-23.9	-23.9

NOTES:
1. WIDTH OF EDGE STRIP 'a' = 7'-1".
2. VALUES SHOWN ABOVE HAVE BEEN ADJUSTED FOR BUILDING HEIGHT AND EXPOSURE ACCORDING TO ASCE 7-16 STANDARD TABLE 30.3-1. VALUES SHOWN ARE ULTIMATE.
3. PLUS AND MINUS SIGNS SIGNIFY PRESSURES ACTING TOWARD AND AWAY FROM THE BUILDING SURFACES.
4. EFFECTIVE WIND AREA IS THE SPAN LENGTH MULTIPLIED BY AN EFFECTIVE WIDTH THAT NEED NOT BE LESS THAN ONE-THIRD THE SPAN LENGTH. FOR CLADDING FASTENERS, THE EFFECTIVE WIND AREA SHALL NOT BE GREATER THAN THE AREA THAT IS TRIBUTARY TO AN INDIVIDUAL FASTENER.
5. WIND PRESSURES IN THESE TABLES SHALL BE MULTIPLIED BY 0.6 TO OBTAIN NOMINAL WIND PRESSURES.

COMPONENTS AND CLADDING WIND LOADS FOR STORM SHELTER WALLS (PSF)

H = 20'-6" 0:12 Roof Slope	EFFECTIVE WIND AREA (FT^2)	250 MPH VELOCITY (3-SEC GUST) ZONES 4 & 5	ZONES 4 (Int.)	ZONES 5 (Edge)
	10	210.4	-223.5	-262.7
	20	203.5	-216.4	-248.9
	50	194.3	-207.2	-230.6
	100	187.4	-200.2	-216.8
	200	180.4	-193.3	-202.9
	500	171.2	-184.3	-184.3

NOTES:
1. WIDTH OF EDGE STRIP 'a' = 3'-0".
2. VALUES SHOWN ABOVE HAVE BEEN ADJUSTED FOR BUILDING HEIGHT AND EXPOSURE ACCORDING TO ASCE 7-16 STANDARD TABLE 30.3-1. VALUES SHOWN ARE ULTIMATE.
3. PLUS AND MINUS SIGNS SIGNIFY PRESSURES ACTING TOWARD AND AWAY FROM THE BUILDING SURFACES.
4. EFFECTIVE WIND AREA IS THE SPAN LENGTH MULTIPLIED BY AN EFFECTIVE WIDTH THAT NEED NOT BE LESS THAN ONE-THIRD THE SPAN LENGTH. FOR CLADDING FASTENERS, THE EFFECTIVE WIND AREA SHALL NOT BE GREATER THAN THE AREA THAT IS TRIBUTARY TO AN INDIVIDUAL FASTENER.
5. WIND PRESSURES IN THESE TABLES SHALL BE MULTIPLIED BY 0.6 TO OBTAIN NOMINAL WIND PRESSURES.

COMPONENTS AND CLADDING WIND LOADS FOR ROOF (PSF)

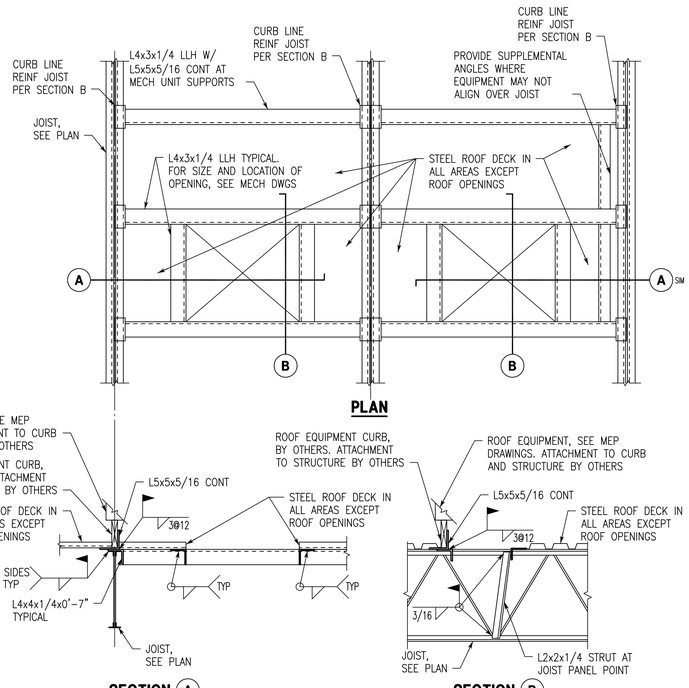
116 MPH VELOCITY (3-SEC GUST)		ROOF					OVERHANG				
H = 20'-6" 0:12 Roof Slope	EFFECTIVE WIND AREA (FT^2)	Positive Max. Net Pressure 'p' (PSF)	Zone 1' (Int.)	Zone 1 (Int.)	Zone 2 (Edge)	Zone 3 (Corner)	Zones 1' & 1 (Int.) - Max. Net Pressure 'p' (PSF)	Zone 2 (Edge) - Max. Net Pressure 'p' (PSF)	Zone 3 (Corner) - Max. Net Pressure 'p' (PSF)		
	10	16.0	-28.7	-49.9	-65.9	-89.8	-45.1	-61.1	-85.0		
	20	16.0	-28.7	-46.6	-61.6	-81.3	-44.3	-55.4	-75.1		
	50	16.0	-28.7	-42.3	-56.0	-70.1	-43.3	-48.0	-62.0		
	100	16.0	-28.7	-39.0	-51.8	-61.6	-42.5	-42.3	-52.2		
	200	16.0	-24.7	-35.7	-47.6	-53.2	-35.6	-36.7	-42.3		
	500	16.0	-19.4	-31.3	-42.0	-42.0	-26.6	-29.2	-29.2		

NOTES:
1. MEAN ROOF HEIGHT 'H' = 20'-6".
2. WIDTH OF EDGE STRIP 'a' = 7'-1".
3. VALUES SHOWN ABOVE HAVE BEEN ADJUSTED FOR BUILDING HEIGHT AND EXPOSURE ACCORDING TO ASCE 7-16 STANDARD TABLE 30.3-1. VALUES SHOWN ARE ULTIMATE.
4. PLUS AND MINUS SIGNS SIGNIFY PRESSURES ACTING TOWARD AND AWAY FROM THE BUILDING SURFACES.
5. EFFECTIVE WIND AREA IS THE SPAN LENGTH MULTIPLIED BY AN EFFECTIVE WIDTH THAT NEED NOT BE LESS THAN ONE-THIRD THE SPAN LENGTH. FOR CLADDING FASTENERS, THE EFFECTIVE WIND AREA SHALL NOT BE GREATER THAN THE AREA THAT IS TRIBUTARY TO AN INDIVIDUAL FASTENER.
6. CONSIDER 5 PSF MINIMUM DEAD LOAD FOR UPLIFT CALCULATIONS FOR ROOF TRUSSES / JOISTS AND 2 PSF MINIMUM DEAD LOAD FOR UPLIFT CALCULATIONS FOR ROOF DECK.
7. WIND PRESSURES IN THESE TABLES SHALL BE MULTIPLIED BY 0.6 TO OBTAIN NOMINAL WIND PRESSURES.

COMPONENTS AND CLADDING WIND LOADS FOR STORM SHELTER ROOF (PSF)

250 MPH VELOCITY (3-SEC GUST)		ROOF					OVERHANG				
H = 20'-6" 0:12 Roof Slope	EFFECTIVE WIND AREA (FT^2)	Positive Max. Net Pressure 'p' (PSF)	Zone 1' (Int.)	Zone 1 (Int.)	Zone 2 (Edge)	Zone 3 (Corner)	Zones 1' & 1 (Int.) - Max. Net Pressure 'p' (PSF)	Zone 2 (Edge) - Max. Net Pressure 'p' (PSF)	Zone 3 (Corner) - Max. Net Pressure 'p' (PSF)		
	10	123.4	-210.4	-326.5	-413.6	-544.2	-246.7	-333.8	-464.4		
	20	119.0	-210.4	-308.5	-390.5	-497.9	-242.3	-302.9	-410.4		
	50	113.2	-210.4	-284.7	-359.9	-436.7	-236.6	-262.1	-339.0		
	100	108.8	-210.4	-266.7	-336.7	-390.4	-232.2	-231.3	-285.0		
	200	108.8	-188.6	-248.7	-313.6	-344.2	-194.7	-200.4	-231.0		
	500	108.8	-159.7	-224.9	-283.0	-283.0	-145.1	-159.6	-159.6		

NOTES:
1. MEAN ROOF HEIGHT 'h' = 'H' = 20'-6".
2. WIDTH OF EDGE STRIP 'a' = 3'-0".
3. VALUES SHOWN ABOVE HAVE BEEN ADJUSTED FOR BUILDING HEIGHT AND EXPOSURE ACCORDING TO ASCE 7-16 STANDARD TABLE 30.3-1. VALUES SHOWN ARE ULTIMATE.
4. PLUS AND MINUS SIGNS SIGNIFY PRESSURES ACTING TOWARD AND AWAY FROM THE BUILDING SURFACES.
5. EFFECTIVE WIND AREA IS THE SPAN LENGTH MULTIPLIED BY AN EFFECTIVE WIDTH THAT NEED NOT BE LESS THAN ONE-THIRD THE SPAN LENGTH. FOR CLADDING FASTENERS, THE EFFECTIVE WIND AREA SHALL NOT BE GREATER THAN THE AREA THAT IS TRIBUTARY TO AN INDIVIDUAL FASTENER.
6. CONSIDER 5 PSF MINIMUM DEAD LOAD FOR UPLIFT CALCULATIONS FOR ROOF TRUSSES / JOISTS AND 2 PSF MINIMUM DEAD LOAD FOR UPLIFT CALCULATIONS FOR ROOF DECK.
7. WIND PRESSURES IN THESE TABLES SHALL BE MULTIPLIED BY 0.6 TO OBTAIN NOMINAL WIND PRESSURES.

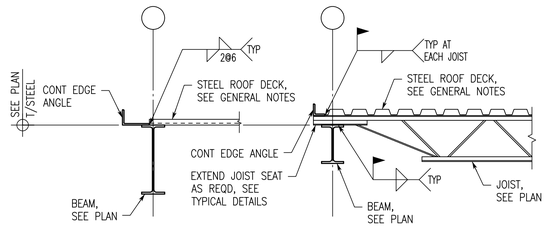


PLAN

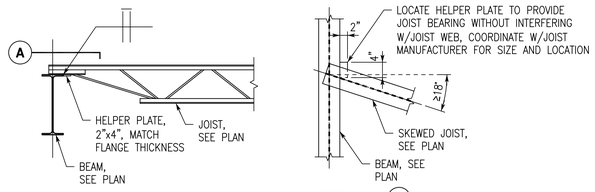
SECTION (A) SECTION (B)

NOTES:
1. PROVIDE L4x3x1/4 LLH FRAMES AT ALL WATER/POWER BOXES.
2. AT ROOF DRAINS SUPPORT, PROVIDE L2x2x1/4 AT JOIST TOP CHORD.
3. CONTRACTOR COORDINATE ROOF EQUIPMENT FRAMES WITH EQUIPMENT MANUFACTURER. DETAIL IS SCHEMATIC DEPICTION AND OTHER CONFIGURATIONS MAY BE REQUIRED.
4. FASTEN STEEL ROOF DECK TO ALL ANGLES PER DECK FASTENING REQUIREMENT.

ROOF EQUIPMENT FRAME DETAIL
TYPICAL AT ALL OPENINGS IN ROOF LARGER THAN 8"

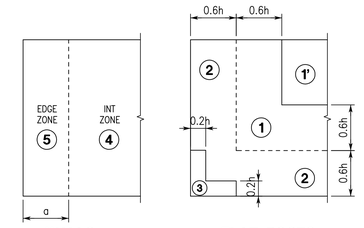


ROOF EDGE ANGLE AND JOIST ATTACHMENT
TYPICAL

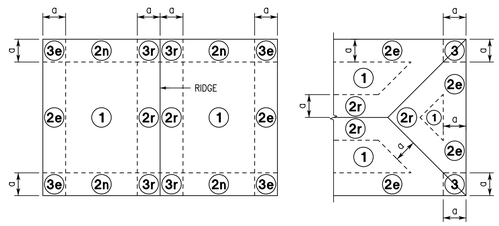


SECTION (A)

SKEWED JOIST HELPER PLATE
TYPICAL



WALLS FLAT ROOFS



GABLE ROOFS HIP ROOFS

WALL AND ROOF WIND PRESSURE ZONE DIAGRAMS
TYPICAL

LATHAN McKEE ARCHITECTS

A NEW CLASSROOM ADDITION FOR
COLUMBIANA MIDDLE SCHOOL
222 JOINERTOWN ROAD, COLUMBIANA, ALABAMA 35051
SHELBY COUNTY BOARD OF EDUCATION

SHEET TITLE:
TYPICAL DETAILS

ALABAMA REGISTERED No. 22596 PROFESSIONAL ENGINEER H. CRAIG WINN
10/30/2026

PROJ. MGR.:	HCW
DRAWN:	ABS
DATE:	OCTOBER 30, 2026
REVISIONS	

JOB NO. LAA-26-054-00

SHEET NO: S1.4
5 OF 11

0 1" 2"

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LATHAN
McKEE
ARCHITECTS

A NEW CLASSROOM ADDITION FOR
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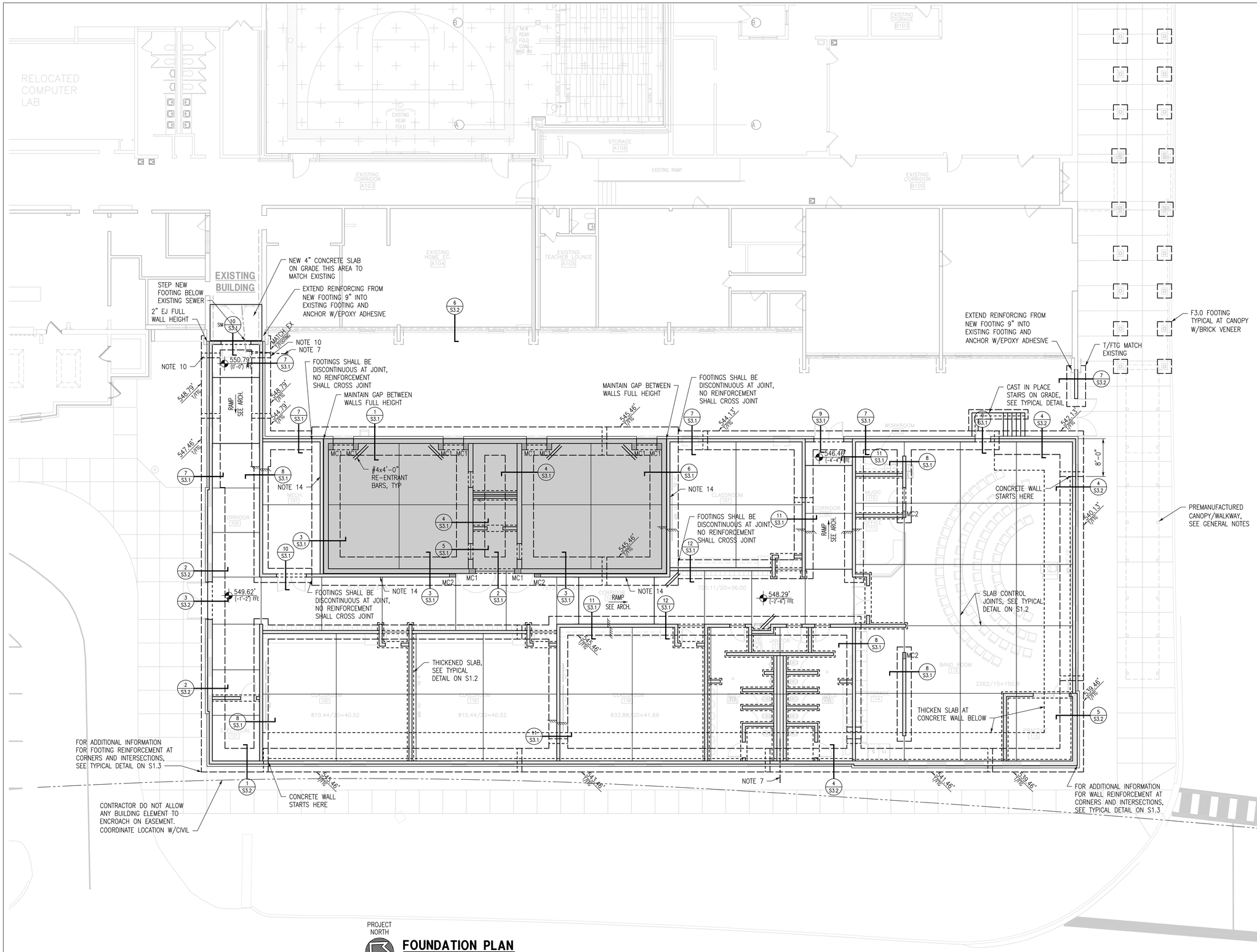
222 JOINERTOWN ROAD, COLUMBIANA, ALABAMA 35051
SHELBY COUNTY BOARD OF EDUCATION

SHEET TITLE:
FOUNDATION PLAN



PROJECT NORTH

FOUNDATION PLAN

1/8"=1'-0"

1. FINISH FLOOR (TOP OF SLAB) ELEVATION (MATCH EXISTING), SEE PLAN (UNLESS NOTED).
2. FOR TOP OF FOOTING ELEVATION, SEE PLAN AND SECTIONS.
3. COORDINATE WITH ARCHITECTURAL DRAWINGS FOR LOCATIONS OF ALL CMU WALLS. NOTE ALL EXTERIOR PLAN DIMENSIONS ARE TO EXTERIOR FACE OF CMU ABOVE WATERTABLE. REINFORCE ALL WALLS AND JAMBS PER SECTIONS AND LINTEL SCHEDULES ON S1.3.
4. FOR SLAB ON GRADE CONSTRUCTION, SEE GENERAL NOTES AND TYPICAL DETAILS.
5. FOR SLAB RECESS, SLOPES TO DRAINS, DEPRESSIONS AND RAMP LOCATIONS, SEE ARCHITECTURAL DRAWINGS AND DETAIL ON S1.2.
6. GENERAL CONTRACTOR SHALL COORDINATE TILE JOINT LOCATIONS WITH CONTROL JOINTS.
7. FOOTING STEP ELEVATIONS AND LOCATIONS ARE APPROXIMATE. GENERAL CONTRACTOR SHALL COORDINATE ALL FOOTING STEPS WITH CIVIL, PLUMBING AND UTILITY DRAWINGS. FOR FOOTING STEP AT UTILITIES PIPING, SEE DETAIL ON S1.2.
8. SEE DETAIL ON S1.2 FOR THICKENED SLAB UNDER MASONRY WALLS NOT SHOWN ON PLAN. COORDINATE LAYOUT WITH ARCHITECTURAL PLAN.
9. SHADED AREA OF PLAN INDICATES TORNADO SHELTER. FOR ADDITIONAL INFORMATION, SEE GENERAL NOTES, PLANS AND SECTIONS.
10. GENERAL CONTRACTOR COORDINATE FOOTING ELEVATIONS AND STEP NEW FOOTINGS AS REQUIRED TO MATCH EXISTING FOOTING ELEVATIONS. DOWEL CONTINUOUS REINFORCING 9" INTO EXISTING FOOTING BY DRILLING AND ANCHORING WITH EPOXY ADHESIVE.
11. FOOTING WIDTHS INDICATED ON PLAN MAY OR MAY NOT BE TO SCALE. COORDINATE WITH SECTION CUTS FOR FOOTING WIDTHS AND ADDITIONAL INFORMATION.
12. FOR PAVEMENT AND HARDSCAPE INFORMATION, SEE ARCHITECTURAL DRAWINGS AND CIVIL DRAWINGS.
13. FOR LOAD BEARING AND NON-LOAD BEARING CMU WALL PLAN DIMENSIONS, SEE ARCHITECTURAL DRAWINGS.
14. VERTICAL DOWELS AT INDICATED LOCATION ARE TO ONLY EXTEND ABOVE TOP OF FOOTING ELEVATIONS BY 1'-0". LAP DOWEL 1'-0" INTO WALL OR MASONRY COLUMN. PROVIDE DECREASED LAP LENGTH WHEN DOWELING NON-STORM SHELTER WALLS OR MASONRY COLUMNS TO STORM SHELTER WALL FOOTINGS.
15. "MC" INDICATES MASONRY COLUMN. SEE SCHEDULE ON S1.2. CONTINUE DOWELS TO FOOTING AND TO WITHIN 2" OF TOP OF WALL.

ALABAMA REGISTERED No. 22596 PROFESSIONAL ENGINEER H. CRAIG WINN
H. Craig Winn, P.E.
10/30/2026

PROJ. MGR.:	HCW
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JOB NO.
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SHEET NO:
S2.1
6 OF 11

0 1" 2"

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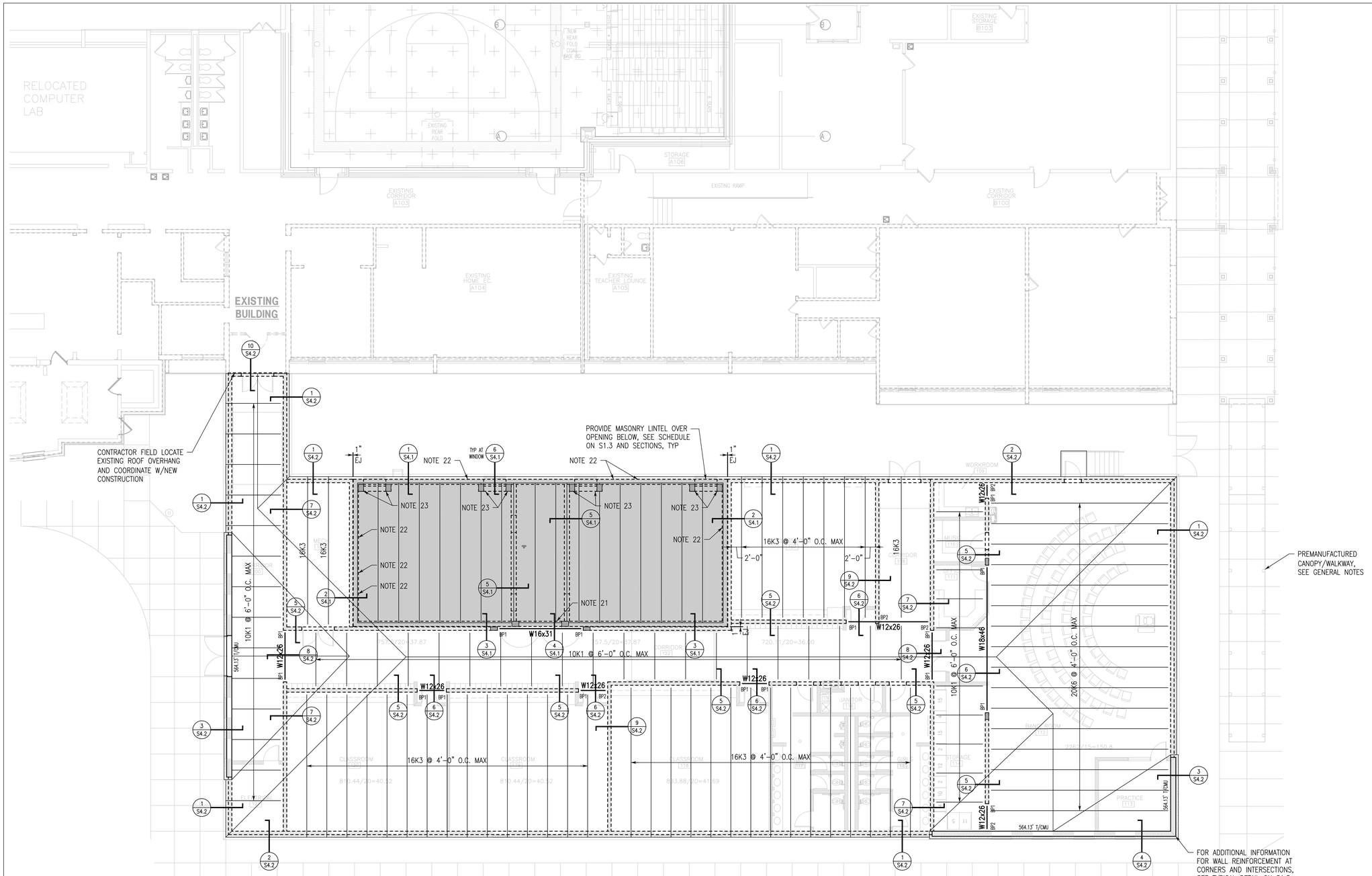
LATHAN
McKEE
ARCHITECTS

A NEW CLASSROOM ADDITION FOR
COLUMBIANA MIDDLE SCHOOL
222 JOINERTOWN ROAD, COLUMBIANA, ALABAMA 35051
SHELBY COUNTY BOARD OF EDUCATION

SHEET TITLE:
ROOF FRAMING PLAN



PROJECT NORTH

ROOF FRAMING PLAN

1/8"=1'-0"

1. FINISH ROOF (TOP OF SHELTER AND DECK BEARING) ELEVATION 562.29', UNLESS NOTED.
   JOIST BEARING ELEVATION: 562.09', UNLESS NOTED.
   TOP OF CMU ELEVATION: 562.09', STORM SHELTER 560.95' (11'-4" AFF), UNLESS NOTED.
   TOP OF STEEL ELEVATION: 562.09', UNLESS NOTED.
2. ROOF SYSTEM:
   PRECAST HOLLOW CORE: 12" THICK PRECAST HOLLOW CORE SLABS WITH 4" STRUCTURAL TOPPING SLAB, SEE GENERAL NOTES.
   STEEL BAR JOISTS: 1 1/2" STEEL ROOF DECK, 20 GAGE, ON STEEL JOISTS AT 6'-0" MAXIMUM ON CENTER, UNLESS NOTED, SEE GENERAL NOTES. ANCHOR METAL DECK TO JOISTS WITH 5/8"ø PUDDLE WELDS IN 36/4 PATTERN WITH 3/10 SIDELAP SCREWS BETWEEN JOISTS.
3. CMU IS EITHER LEVEL OR SLOPING UNIFORMLY BETWEEN NOTED ELEVATIONS.
4. PRECAST HOLLOW CORE SLAB LAYOUT SHOWN IS FOR SCHEMATIC PURPOSES ONLY. PRECAST MANUFACTURER TO VERIFY ACTUAL LAYOUT. HOLLOW CORE MANUFACTURER DESIGN SLABS FOR DEAD LOADS, LIVE LOADS AND WIND LOADS (DOWNWARD AND UPLIFT) AS INDICATED IN GENERAL NOTES AND TYPICAL DETAILS, IN ADDITION TO SELF-WEIGHT DEAD LOAD AND 20 PSF COLLATERAL DEAD LOAD.
5. CUT OR BREAK CORES OF HOLLOW CORE SLABS ONLY AS REQUIRED TO PLACE REINFORCING.
6. THE GENERAL CONTRACTOR SHALL COORDINATE AND VERIFY THE SIZE, WEIGHT AND LOCATION OF ALL CONCENTRATED AND MECHANICAL LOADS WITH THE PRECAST MANUFACTURER.
7. COORDINATE MECHANICAL OPENINGS WITH MECHANICAL DRAWINGS AND UNIT MANUFACTURER. PRECAST SUPPLIER TO SHOW OPENINGS ON SHOP DRAWINGS AND PROVIDE ANY SUPPORT FOR OPENINGS. CONTRACTOR TO PROVIDE PENETRATION PROTECTION AT ANY STORM SHELTER WALL/ROOF PENETRATION.
8. PROVIDE MASONRY AND VENEER LINTELS AT ALL OPENINGS, SEE SCHEDULES ON S1.3.
9. THE [ ] HATCHED AREA ON THE PLAN INDICATES AREA TO BE USED AS STORM SHELTER. FOR ADDITIONAL INFORMATION, SEE GENERAL NOTES, PLANS AND SECTIONS.
10. CONTRACTOR NOTE: DO NOT PROVIDE MASONRY CONTROL JOINTS IN STORM SHELTER CMU WALLS.
11. WHERE MECHANICAL DUCTS EXTEND THRU LOAD BEARING WALLS BELOW HOLLOW CORE SLABS, PROVIDE STEEL HEADER/LINTEL PER DETAIL ON S1.3.
12. CONTRACTOR NOTE: ALL MECHANICAL OPENING SIZES AND LOCATIONS IN LOAD BEARING MASONRY WALLS SHOULD BE COORDINATED BY THE CONTRACTOR AND INDICATED ON THE MASONRY WALL REBAR SHOP DRAWINGS.
13. CONTRACTOR SHALL COORDINATE EMBEDS INTO MASONRY WITH LOUVER OR DOOR MANUFACTURER. PROVIDE MODIFICATIONS TO STRUCTURE AS REQUIRED TO FULLY COMPLY WITH MANUFACTURERS INSTALLATION DETAILS. SUBMIT ANY MODIFICATIONS TO DESIGN TEAM FOR REVIEW.
14. SPACE STEEL JOISTS EQUALLY BETWEEN FACE OF WALLS, UNLESS NOTED.
15. EQUIPMENT LOCATIONS AND WEIGHTS ARE APPROXIMATE. THE GENERAL CONTRACTOR SHALL COORDINATE AND VERIFY THE SIZE, WEIGHT, AND LOCATION OF ALL MECHANICAL UNITS WITH THE JOIST MANUFACTURER. DO NOT SCALE FROM THIS DRAWINGS. PROVIDE ROOF EQUIPMENT FRAME AT MECHANICAL UNITS. SEE DETAIL ON S1.4.
16. HANGER LOCATION FOR PIPING LARGER THAN 3 INCHES IN DIAMETER MUST BE COORDINATED BY THE GENERAL CONTRACTOR WITH THE JOIST MANUFACTURER. FOR PIPING WEIGHTS, SEE TYPICAL DETAILS ON S1.3.
17. AT JOISTS DESIGNATED "SP" JOIST MANUFACTURER SHALL DESIGN JOISTS FOR 25 PSF DEAD LOAD AND 20 PSF LIVE LOAD PLUS ANY ADDITIONAL LOADS SHOWN ON PLANS, NOTED IN PLAN NOTES, AND/OR SHOWN/NOTED IN SECTIONS. LIMIT DEAD LOAD DEFLECTION OF JOISTS TO 0.75" (NET AFTER CAMBER).
18. PROVIDE 2 1/2" JOIST SEAT DEPTHS TYPICAL, UNLESS NOTED.
19. CONTRACTOR COORDINATE ALL HANGER LOADS AND LOCATIONS WITH JOIST MANUFACTURER.
20. GC COORDINATE STEEL JOISTS LAYOUT BASED ON REQUIRED EQUIPMENT LOCATIONS AND ORIENTATIONS AS WELL AS DUCT ROUTING.
21. PROVIDE SPECIAL 40" DEEP MASONRY LINTEL REINFORCED WITH 2#5 EACH COURSE. EXTEND LINTEL 2' PAST OPENING. SEE TYPICAL DETAILS FOR ADDITIONAL INFORMATION.
22. PROVIDE MECHANICAL STORM LOUVER FOR MECHANICAL OPENINGS. FOR ADDITIONAL INFORMATION SEE S1.3 AND MECHANICAL DRAWINGS. WHERE DUCT PASSES THROUGH 12" AND 8" WALL, PROVIDE ANGLE ON BOTH WALLS.
23. PROVIDE HOOK IN LINTEL REINFORCING AT MASONRY COLUMN, EACH END. FOR ADDITIONAL INFORMATION, SEE SCHEDULE ON S1.2.

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JOB NO.
LAA-26-054-00

SHEET NO:
S2.2
7 OF 11

0 1" 2"

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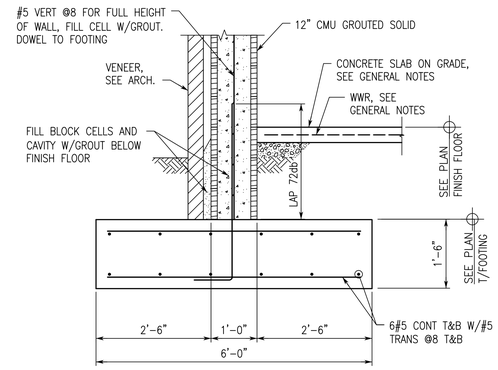
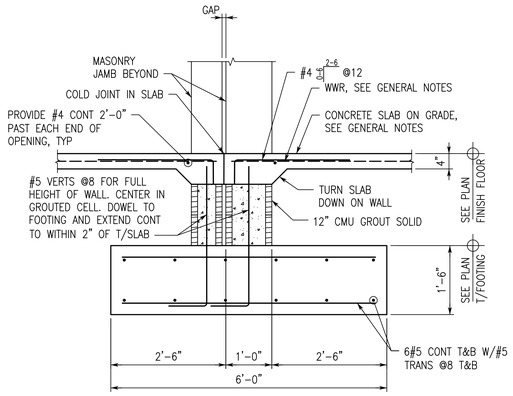
Job Number 26-097

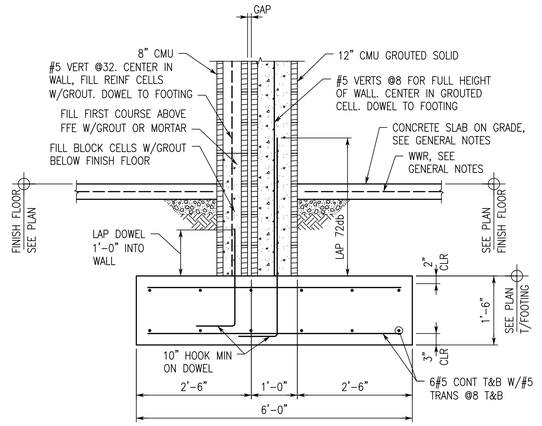


SECTION 1/S3.1
3/4"=1'-0"

NOTE:
WHERE TOP OF FOOTING IS MORE THAN 2'-8" BELOW FINISH FLOOR, PROVIDE #6@16 O.C. UP TO FIRST COURSE ABOVE FINISH FLOOR IN ADDITION TO SPECIFIED REINFORCEMENT SHOWN.

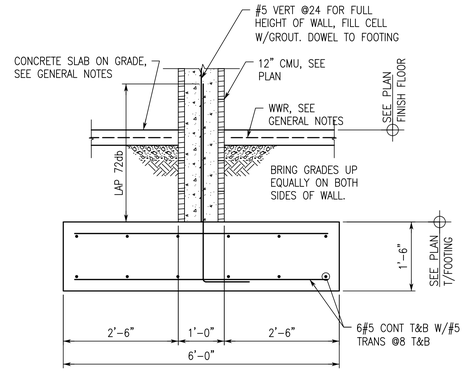


SECTION 2/S3.1
3/4"=1'-0"



SECTION 3/S3.1
3/4"=1'-0"

NOTE:
WALLS SHALL BE DISCONTINUOUS AT JOINT. NO REINFORCING SHALL CROSS JOINT.



SECTION 4/S3.1
3/4"=1'-0"

SECTION 5/S3.1
3/4"=1'-0"

SECTION 6/S3.1
3/4"=1'-0"

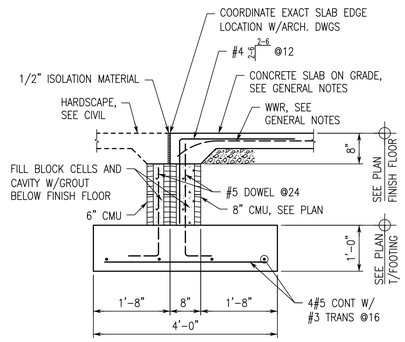
NOTE:
WALLS SHALL BE DISCONTINUOUS AT JOINT. NO REINFORCING SHALL CROSS JOINT.

SECTION 7/S3.1

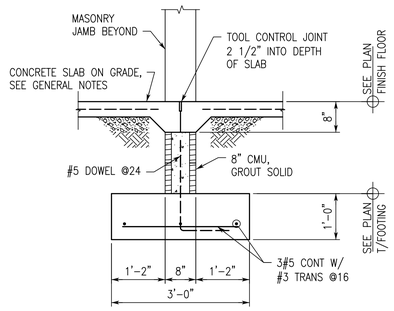
NOTE:
WHERE TOP OF FOOTING IS MORE THAN 2'-8" BELOW FINISH FLOOR, PROVIDE #6@16 O.C. UP TO FIRST COURSE ABOVE FINISH FLOOR IN ADDITION TO SPECIFIED REINFORCEMENT SHOWN.

SECTION 8/S3.1

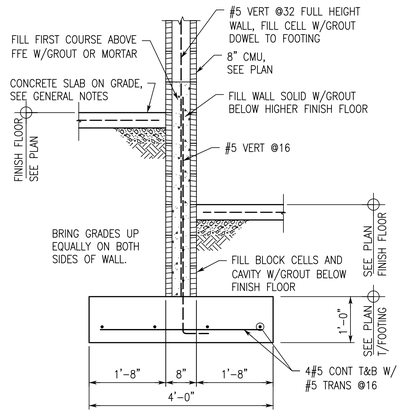
NOTE:
WHERE TOP OF FOOTING IS MORE THAN 2'-8" BELOW FINISH FLOOR, PROVIDE #6@16 O.C. UP TO FIRST COURSE ABOVE FINISH FLOOR IN ADDITION TO SPECIFIED REINFORCEMENT SHOWN.



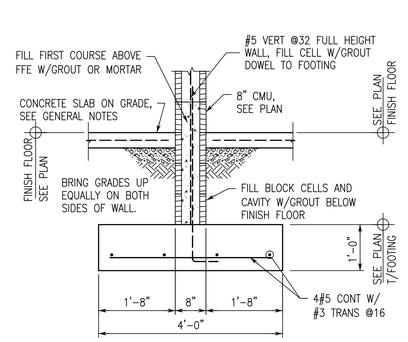
SECTION 9/S3.1
3/4"=1'-0"



SECTION 10/S3.1



SECTION 11/S3.1



SECTION 12/S3.1

NOTE:
WHERE TOP OF FOOTING IS MORE THAN 2'-8" BELOW FINISH FLOOR, PROVIDE #6@16 O.C. UP TO FIRST COURSE ABOVE FINISH FLOOR IN ADDITION TO SPECIFIED REINFORCEMENT SHOWN.

LATHAN McKEE ARCHITECTS

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COLUMBIANA MIDDLE SCHOOL
222 JOINERTOWN ROAD, COLUMBIANA, ALABAMA 35051
SHELBY COUNTY BOARD OF EDUCATION

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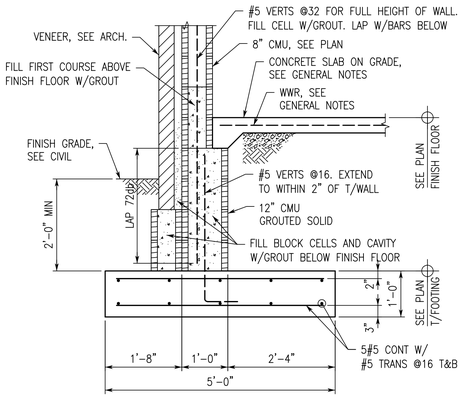
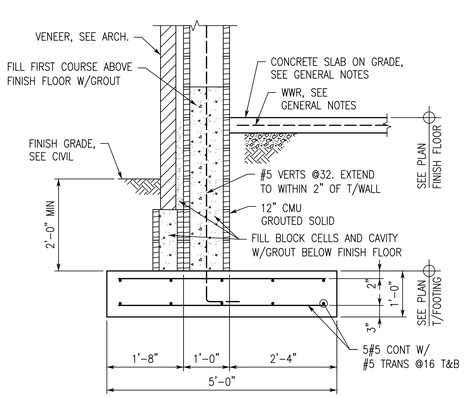
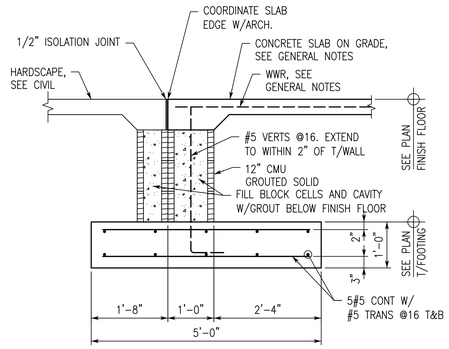


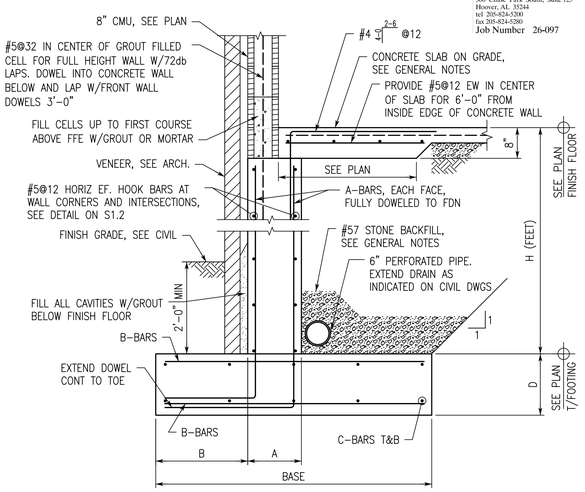
SECTION 1/S3.2
3/4"=1'-0"



SECTION 2/S3.2
3/4"=1'-0"



SECTION 3/S3.2
3/4"=1'-0"

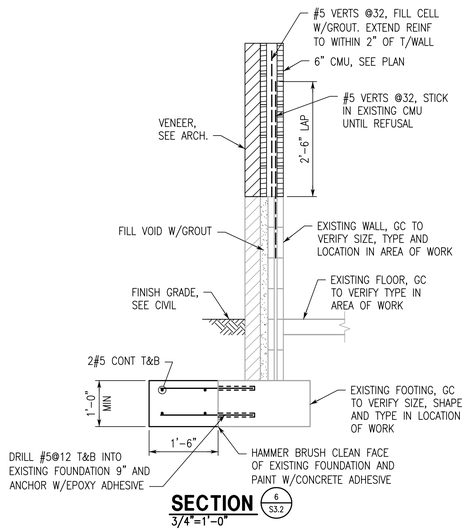


BUILDING RETAINING WALLS							
DIMENSIONS					REINFORCEMENT		
H	A	B	BASE	D	A-BARS	B-BARS	C-BARS
4'-0"	1'-2"	1'-8"	5'-0"	1'-0"	#5@12	#5@12	5#5
6'-0"	1'-2"	1'-8"	5'-0"	1'-0"	#5@12	#5@12	5#5
8'-0"	1'-2"	1'-8"	5'-0"	1'-0"	#5@12	#5@12	5#5
10'-0"	1'-2"	1'-8"	6'-0"	1'-3"	#5@10	#5@10	6#5
12'-0"	1'-2"	1'-8"	8'-0"	1'-6"	#5@8	#5@8	8#5

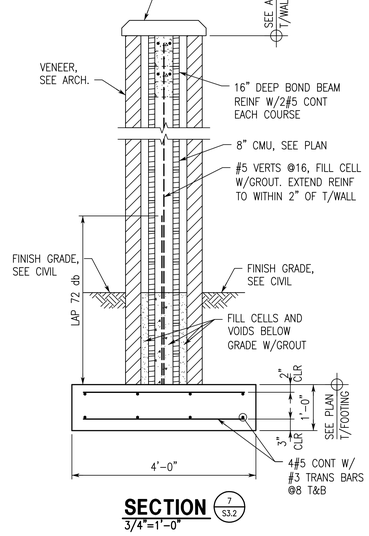
SECTION 4/S3.2
3/4"=1'-0"

BUILDING RETAINING WALLS							
DIMENSIONS					REINFORCEMENT		
H	A	B	BASE	D	A-BARS	B-BARS	C-BARS
4'-0"	1'-4"	1'-8"	5'-0"	1'-0"	#5@10	#5@10	5#5
6'-0"	1'-4"	1'-8"	5'-0"	1'-0"	#5@10	#5@10	5#5
8'-0"	1'-4"	1'-8"	5'-0"	1'-0"	#5@10	#5@10	5#5
10'-0"	1'-4"	1'-8"	6'-0"	1'-3"	#5@10	#5@10	6#5
12'-0"	1'-4"	1'-8"	8'-0"	1'-6"	#5@8	#5@8	8#5

SECTION 5/S3.2
3/4"=1'-0"



SECTION 6/S3.2
3/4"=1'-0"



SECTION 7/S3.2
3/4"=1'-0"

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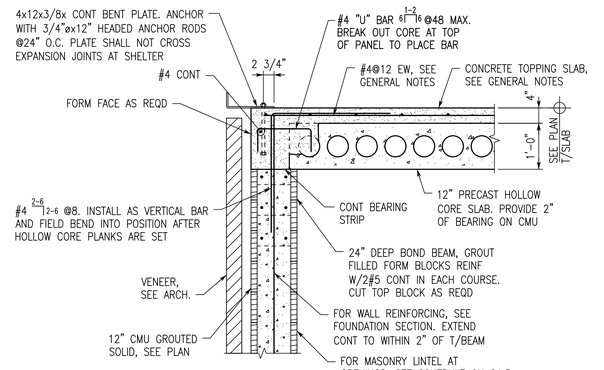
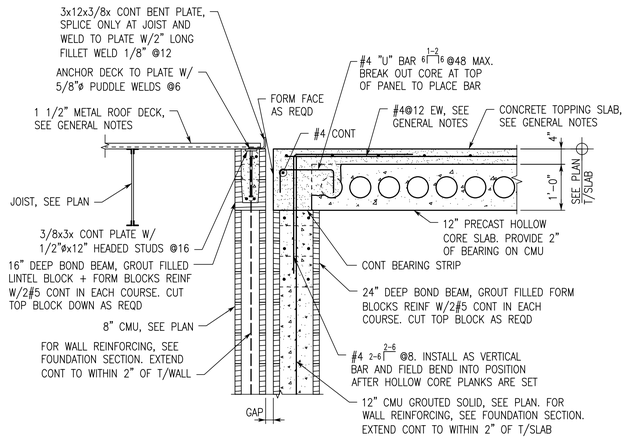
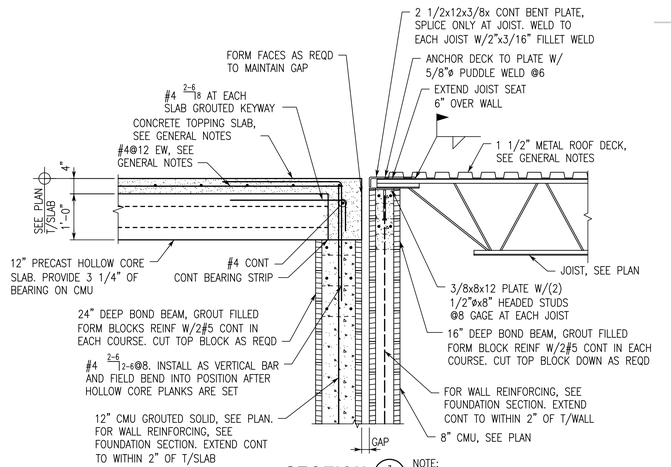


SECTION 1/S4.1
3/4"=1'-0"



SECTION 2/S4.1
3/4"=1'-0"

NOTE:
WALLS SHALL BE DISCONTINUOUS AT JOINT. NO REINFORCING SHALL CROSS JOINT. FORM FACES AS REQUIRED TO PROVIDE JOINT IN SLAB.

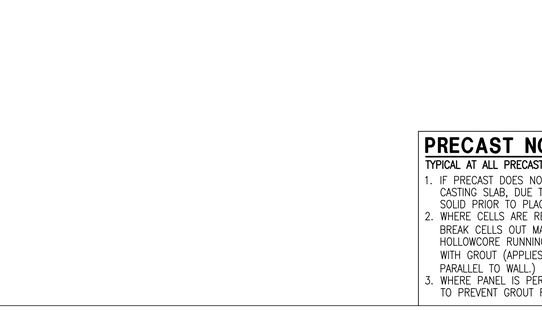


SECTION 3/S4.1
3/4"=1'-0"

NOTE:
WALLS SHALL BE DISCONTINUOUS AT JOINT. NO REINFORCING SHALL CROSS JOINT. FORM FACES AS REQUIRED TO PROVIDE JOINT IN SLAB.

SECTION 4/S4.1
3/4"=1'-0"

SECTION 5/S4.1
3/4"=1'-0"



SECTION 6/S4.1
3/4"=1'-0"

PRECAST NOTES

TYPICAL AT ALL PRECAST

1. IF PRECAST DOES NOT BEAR SOLID ON CMU AFTER CASTING SLAB, DUE TO CAMBER IN PANEL, GROUT GAP SOLID PRIOR TO PLACING REMAINDER OF WALL.
2. WHERE CELLS ARE REQUIRED TO BE BROKEN AT REBAR, BREAK CELLS OUT MAXIMUM 4" WIDE. FLOOD ROUND HOLLOWCORE RUNNING PERPENDICULAR TO REBAR SOLID WITH GROUT (APPLIES TO SECTIONS WHERE PANEL IS PARALLEL TO WALL.)
3. WHERE PANEL IS PERPENDICULAR TO WALL, FILL CORES TO PREVENT GROUT FROM ENTERING HOLLOWCORE.

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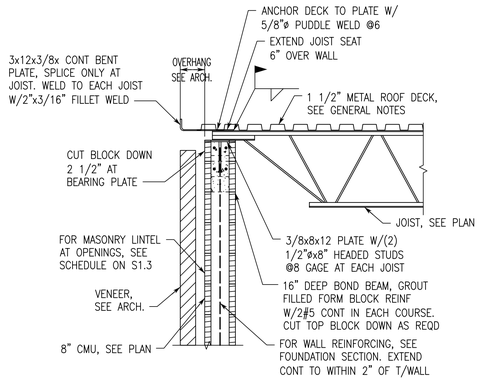
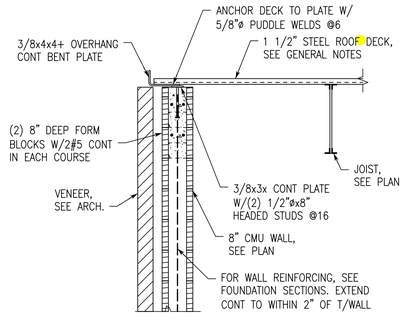
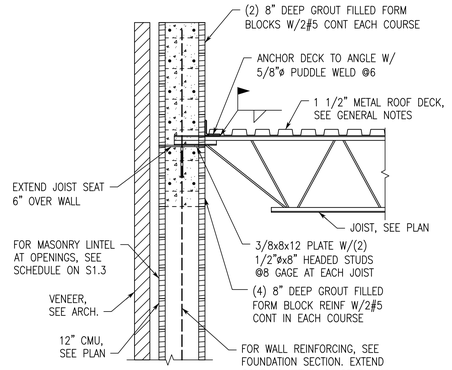


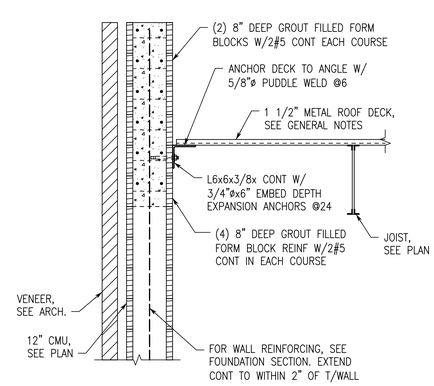
SECTION 1/S4.2
3/4"=1'-0"



SECTION 2/S4.2
3/4"=1'-0"



SECTION 3/S4.2
3/4"=1'-0"



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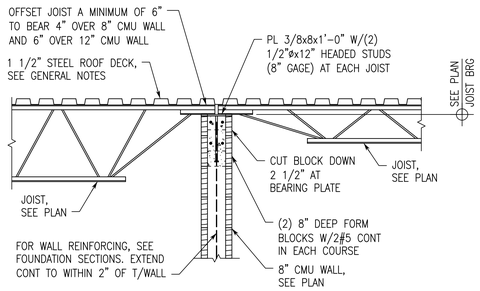
3/4"=1'-0"



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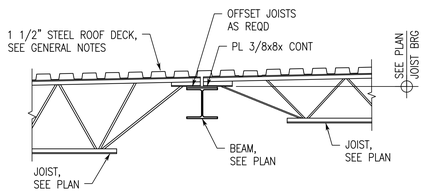
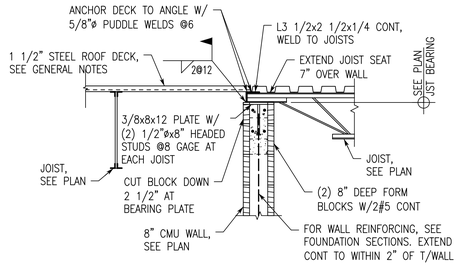
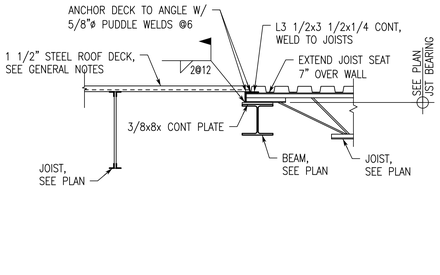
3/4"=1'-0"



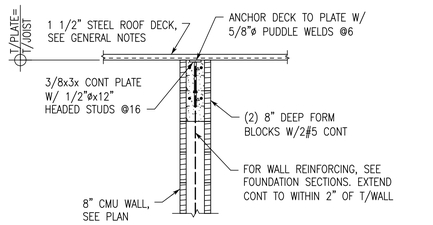
SECTION 6/S4.2
3/4"=1'-0"



SECTION 7/S4.2
3/4"=1'-0"

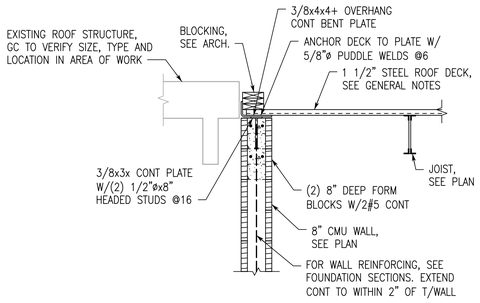


SECTION 8/S4.2
3/4"=1'-0"



SECTION 9/S4.2
3/4"=1'-0"

NOTE:
AT SIMILAR CONDITION, STEEL ROOF DECK IS RUNNING PARALLEL TO PLATE AND WALL. PROVIDE 3/8x6x CONT PLATE W/ 1/2"ø x12" HEADED STUDS @16.



SECTION 10/S4.2
3/4"=1'-0"

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Dewberry
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www.dewberry.com
Project Number :
50194689

LATHAN
McKEE
ARCHITECTS

GENERAL NOTES

1. LOCATIONS OF UTILITIES SHOWN ON PLANS ARE APPROXIMATE. VERIFY WITH LOCAL UTILITY PRIOR TO BIDDING.
2. CONTRACTOR SHALL VERIFY EXACT LOCATION, SIZE, AND ELEVATION OF ALL EXISTING SERVICES PRIOR TO INSTALLING ANY NEW PIPE.
3. ALL OUTSIDE CLEANOUTS SHALL BE BROUGHT TO GRADE AND EMBEDDED IN 18"x18"x6" THICK CONCRETE PAD. (J.R. SMITH 4258 OR EQUAL.)
4. WHEREVER DISSIMILAR METALS ARE CONNECTED ON WATER LINES, A DIELECTRIC UNION SHALL BE USED.
5. ALL HORIZONTAL WATER AND VENT PIPING SHALL BE RUN ABOVE CEILING ON PLAN WHERE SHOWN UNLESS OTHERWISE NOTED.
6. ALL HORIZONTAL SANITARY PIPING IS RUN BELOW FLOOR ON PLAN WHERE SHOWN UNLESS OTHERWISE NOTED.
7. ALL WATER PIPING BELOW SLAB ON GRADE SHALL BE BENT UP AT ENDS SO THAT NO JOINTS OCCUR BELOW FLOOR.
8. ALL WALL HYDRANTS AND HOSE BIBBS SHALL BE MOUNTED 24" ABOVE FINISH GRADE OF FINISH FLOOR UNLESS OTHERWISE NOTED.
9. ALL WATER PIPING INSTALLED IN EXTERIOR WALLS SHALL BE LOCATED ON THE INTERIOR SIDE OF THE EXTERIOR WALL INSULATION.
10. NO VENT THRU ROOF IS TO BE LOCATED WITHIN 10 FEET OF ANY BUILDING AIR INTAKES, PER CODE. COORDINATE WITH MECHANIAL AND GENERAL CONTRACTORS.
11. DOMESTIC WATER PIPING LOCATED ABOVE THE CEILING, SHALL BE INSTALLED BELOW CEILING INSULATION.
12. CONTRACTOR SHALL COORDINATE MECHANICAL FLOOR DRAIN LOCATIONS WITH MECHANICAL EQUIPMENT PRIOR TO INSTALLATION.
13. CONTRACTOR SHALL PROVIDE SHOCK ARRESTORS ON ALL BRANCH LINES.
14. CONTRACTOR SHALL COORDINATE ALL SINKS WITH CASEWORK PRIOR TO ORDERING SINKS.
15. DOMESTIC WATER PIPING SHALL NOT BE INSTALLED IN EXTERIOR WALLS.
16. PROVIDE DISINFECTION OF WATER PIPING SYSTEM WITH CHLORINE SOLUTION AS PER CODE.
17. INSTALLATION OF BACKFLOW PREVENTER SHALL COMPLY WITH CURRENT INTERNATIONAL BUILDING CODE AND CURRENT INTERNATIONAL PLUMBING CODE.
18. ALL OVERHEAD WATER PIPING TO BE RUN BELOW INSULATION AT BOTTOM OF TRUSSES FOR FREEZE PROTECTION.
19. ALL WALL HYDRANTS TO BE FREEZE PROOF AND TO HAVE VACUUM BREAKERS.
20. INSULATION ON ALL PIPING SHALL MEET SMOKE/ FLAME RATING OF 25 & 50.
21. NO JOINTS IN WATER PIPING BELOW SLAB.
22. THE LOCATION OF LAVATORIES AND WATER CLOSETS RELATIVE TO THE FINISHED WALL IS CRITICAL. REFER TO ARCHITECTURAL AND THE SPECIFICATIONS FOR ADDITIONAL INFORMATION. ALL WATER CLOSETS TO BE 18" FROM FINISH WALL TO CENTER OF WATER CLOSET.
23. WATER HAMMER ARRESTORS ARE REQUIRED TO PROTECT WATER PIPING SYSTEMS WHERE QUICK-CLOSING VALVES ARE UTILIZED. WATER HAMMER ARRESTORS SHALL CONFORM TO ASSE 1010.
24. THESE DRAWINGS NOT INTENDED TO SHOW ALL POSSIBLE CONDITIONS. IT IS INTENDED THAT A COMPLETE PLUMBING SYSTEM BE PROVIDED WITH ALL NECESSARY EQUIPMENT, APPURTENANCES AND CONTROLS, COMPLETELY COORDINATED WITH ALL DISCIPLINES. ALL PARAMETERS GIVEN IN THESE DOCUMENTS SHALL BE STRICTLY CONFORMED WITH ANY ITEMS AND LABOR REQUIRED FOR A COMPLETE PLUMBING SYSTEM IN ACCORDANCE WITH ALL APPLICABLE CODES, STANDARDS AND THESE CONTRACT DOCUMENTS SHALL BE FURNISHED WITHOUT INCURRING ANY ADDITIONAL COST TO THE PROJECT, CAREFULLY REVIEW ALL CONTRACT DOCUMENTS AND THE DESIGN OF OTHER TRADES BEFORE PREPARING SHOP DRAWINGS.
25. COORDINATE PLUMBING PIPING WITH STRUCTURAL, PLUMBING, HVAC, AND ELECTRICAL. MAKE OFFSETS AND TRANSITIONS TO COORDINATE WITH OTHER TRADES WITHOUT ANY ADDITIONAL COST TO THE PROJECT.
26. COORDINATE ALL PLUMBING IN SLAB WITH BUILDING FOOTINGS.
27. NO PIPING TO BE RUN ABOVE ELECTRICAL PANELS. MAINTAIN ALL REQUIRED CLEARANCES.
28. CONTRACTOR SHALL VISIT JOB SITE AND VERIFY EXISTING CONDITIONS BEFORE SUBMITTING A PRICE, ORDERING MATERIALS OR PERFORMING ANY WORK. NOTIFY THE ARCHITECT OF ANY DEVIATION FROM PLUMBING PLAN.
29. SUPPORT PIPE AS REQUIRED BY THE CURRENT INTERNATIONAL PLUMBING CODE.
30. ALL FOOTINGS AT PLUMBING CHASE WALLS SHALL BE MIN 24" BELOW FINISHED GRADE TO COORDINATE WITH WASTE PIPING IN SLAB.
31. FIRESTOP ALL RATED WALL AND FLOOR PENETRATIONS. SEE ARCHITECTURAL DRAWINGS FOR RATED WALL AND FLOOR LOCATIONS.
32. OFFSET ALL VTR'S TO BACKSIDE OF ROOF RIDGE.
33. DO NOT BEGIN WORK UNTIL ELEVATION OF FINAL CONNECTION POINT IS VERIFIED AND GRADING OF ENTIRE SYSTEM CAN BE DETERMINED (EVEN IF FINAL CONNECTION IS SPECIFIED UNDER ANOTHER SECTION).

PLUMBING LEGEND

	DOMESTIC COLD WATER	PRV	PRESSURE RELIEF VALVE	GPH	GALLONS PER HOUR
	DOMESTIC HOT WATER SUPPLY	CO	CLEANOUT	GPM	GALLONS PER MINUTE
	DOMESTIC HOT WATER RETURN	FD	FLOOR DRAIN	HW	HOT WATER
	SOIL, WASTE, OR SANITARY SEWER	FS	FLOOR SINK	HWR	HOT WATER RETURN
	VENT	P-#	PLUMBING FIXTURE	TYP	TYPICAL
	PIPE TURNING DOWN	WH	WALL HYDRANT	VS	VENT STACK
	PIPE TURNING UP	ABV	ABOVE	VSTR	VENT THROUGH ROOF
	TEE DOWN	AFF	ABOVE FINISHED FLOOR	MFD	MECHANICAL FLOOR DRAIN
	TEE UP	BFP	BACKFLOW PREVENTER	WS	WASTE STACK
	UNION	BFF	BELOW FINISHED FLOOR	HB	HOSE BIBB
	BALANCE VALVE	CW	COLD WATER	EX	EXISTING
	BALL VALVE	DN	DOWN	WHA	WATER HAMMER ARRESTOR
	CHECK VALVE	WH - #	WATER HEATER	#	RISER NUMBER

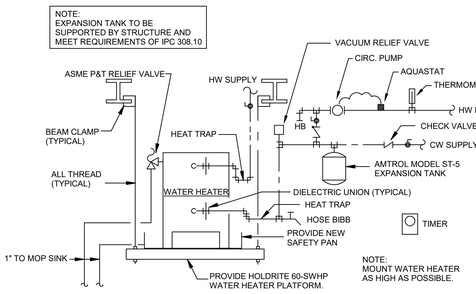
PLUMBING FIXTURE SCHEDULE

MARK	FIXTURE	WASTE	CW	HW	REMARKS
FD	FLOOR DRAIN	3"	-	-	J.R. SMITH #2010 WITH 6" ROUND NICKEL BRONZE GRATE. PROVIDE WITH J.R. SMITH TRAP INSERT
MFD	MECHANICAL FLOOR DRAIN	3	-	-	J.R. SMITH #2240 WITH SEDIMENT BUCKET. PROVIDE WITH J.R. SMITH TRAP INSERT.
P-1	WATER CLOSET - ADA COMPLIANT	4"	1"	-	FLOOR MOUNTED - KOHLER K-96057-SS-0 COMPLETE SLOAN #111 FLUSH VALVE WITH YJ BRACKET AND CHURCH "DURA GUARD" MODEL #2155 SSC SEAT.
P-2	WATER CLOSET	4"	1"	-	FLOOR MOUNTED - KOHLER K-96053-SS-0 COMPLETE SLOAN #111 FLUSH VALVE WITH YJ BRACKET AND CHURCH "DURA GUARD" MODEL #2155 SSC SEAT.
P-3	URINAL - ADA COMPLIANT	2"	1"	-	WALL MOUNTED-KOHLER K-5016-ET COMPLETE, K-9183 STAINLESS STEEL STRAINER, J.R. SMITH #623 FIXTURE SUPPORT, AND SLOAN #186 FLUSH VALVE WITH YJ BRACKET. SET LIP 17" AFF.
P-4	URINAL	2"	1"	-	WALL MOUNTED-KOHLER K-5016-ET COMPLETE, K-9183 STAINLESS STEEL STRAINER, J.R. SMITH #623 FIXTURE SUPPORT, AND SLOAN #186 FLUSH VALVE WITH YJ BRACKET.
P-5	LAVATORY	1 1/4"	1/2"	1/2"	UNDERMOUNT - KOHLER K-2210 COMPLETE, SYMMONS S-20-0 FAUCET, MCGUIRE #8872 P-TRAP. MCGUIRE 165 SUPPLIES WITH STOPS. INSULATE ALL WITH "PRO-WRAP" BY MCGUIRE. PROVIDE LAWLER 570 MIXING VALVE MOUNTED BELOW LAVATORY. RUN 100°F WATER TO FAUCET.
P-6	LAVATORY - ADA COMPLIANT	1 1/4"	1/2"	1/2"	WALL HUNG - KOHLER K-2032 (20" X 18") COMPLETE, SYMMONS S-20-0 FAUCET, K7715 OUTLET WITH TAILPIECE, J.R. SMITH #700-M31-Z FIXTURE SUPPORT, MCGUIRE #165 SUPPLIES WITH STOPS AND MCGUIRE #8872 P-TRAP. INSULATE P-TRAP, STOPS AND SUPPLIES WITH "PRO-WRAP" BY MCGUIRE. MOUNT WITH RIM MAXIMUM 34" AFF. PROVIDE LAWLER 570 THERMOSTATIC MIXING VALVE MOUNTED BELOW LAVATORY. RUN 100° F WATER TO FAUCET. MUST MEET A.D.A. GUIDELINES.
P-7	DOUBLE BOWL SINK	1 1/2"	1/2"	1/2"	JUST DLX1933A-J, J-35 STRAINERS, CHICAGO FAUCET MODEL #201-RSL9E3VPXKABCP FAUCET. MCGUIRE #8912 P-TRAP, CONTINUOUS WASTE OUTLET, AND #165 STOPS WITH SUPPLIES PROVIDE LAWLER 570 THERMOSTATIC MIXING VALVE MOUNTED BELOW SINK. RUN 109F WATER TO FAUCET.
P-8	WATER COOLER - ADA COMPLIANT	1 1/2"	1/2"	-	ELKAY # EZSTL8WSSK BI-LEVEL WATER COOLER WITH BOTTLE FILLER STATION. COMPLETE WITH STAINLESS STEEL CABINET AND WATERWAYS THAT ARE MANUFACTURED OF 100% LEAD FREE MATERIAL, J.R. SMITH #834 FIXTURE SUPPORT EBC TA150 P-TRAP AND EBC LA10 STOP WITH SUPPLY. FULLY INSULATE P-TRAP WITH EBC IK INSULATOR. INSTALL WITH LOWER SPOUT OUTLET MAXIMUM 36" AFF. MUST MEET A.D.A. INSTALL WITH BOTTLE FILLER. INSTALL COMPLETE. PROVIDE WITH ELKAY MODEL #LKAPREZL CANE APRON AS REQUIRED.
P-9	MOP SINK	3"	1/2"	1/2"	STERN WILLIAMS #SBC-1700 (24" X 24") COMPLETE, T-35 HOSE WITH WALL HOOK, STAINLESS STEEL BACKSPLASH AND CHICAGO FAUCET #897 FAUCET.
WH	WALL HYDRANT	-	3/4"	-	J.R. SMITH #5509-QT, WITH INTEGRAL BACKFLOW PREVENTER, LATCHING COVER, FREEZE-PROOF AND OF PROPER LENGTH FOR WALL IN WHICH INSTALLED, ALL BRONZE BOX. VALVE SEAT MUST BE ON BUILDING SIDE OF EXTERIOR WALL INSULATION. INSTALL WITH CENTER LINE 24" ABOVE FINISH GRADE. PROVIDE OWNER WITH ONE (1) LOOSE KEY FOR EACH WALL HYDRANT.

NOTE: TEMPERING VALVES ON LAVATORIES OF ALL PUBLIC LAVATORIES CONFORM TO ASSE 1070/CSA B125.3 2021 IPC 419.5 TEMPERED WATER FOR PUBLIC HAND-WASHING FACILITIES. TEMPERED WATER SHALL BE DELIVERED THROUGH AN APPROVED WATER-TEMPERATURE LIMITING DEVICE THAT CONFORMS TO ASSE 1070/CSA B125.3.

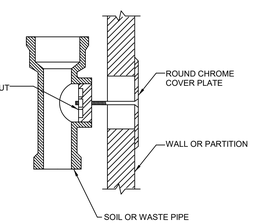
WATER HEATER SCHEDULE

MARK	FIXTURE	ELEC INFO.	REMARKS
CP-1	CIRCULATION PUMP	1/12 HP, 115/1/60	ARMSTRONG COMPASS. PROVIDE WITH TIMER AND AQUASTAT EQUAL TO HONEYWELL L6006A.
ET-1	EXPANSION TANK	-	AMTROL THERM - X-TROL #ST-5 EXPANSION TANK, PRE-CHARGED, WELDED STEEL CONSTRUCTION. ISOLATION BETWEEN WATER AND AIR SHALL BE BY A BUTYL DIAPHRAM.
ET-2	EXPANSION TANK	-	AMTROL THERM - X-TROL #ST-5 EXPANSION TANK, PRE-CHARGED, WELDED STEEL CONSTRUCTION. ISOLATION BETWEEN WATER AND AIR SHALL BE BY A BUTYL DIAPHRAM.
WH-1	ELECTRIC WATER HEATER	208V, 1 PHASE, 2 KW	LOCHINVAR LDJ-20JE, 20 GALLON STORAGE, 19 GALLON RECOVERY AT 100°F RISE. NEW P&T RELIEF VALVE. SET OUTLET TEMPERATURE AT 125°F. INSTALL AS DETAILED ON DRAWINGS. VERIFY VOLTAGE WITH ELECTRICAL SECTION.
WH-2	ELECTRIC WATER HEATER	208V, 1 PHASE, 2 KW	LOCHINVAR LDJ-20JE, 20 GALLON STORAGE, 19 GALLON RECOVERY AT 100°F RISE. NEW P&T RELIEF VALVE. SET OUTLET TEMPERATURE AT 125°F. INSTALL AS DETAILED ON DRAWINGS. VERIFY VOLTAGE WITH ELECTRICAL SECTION.



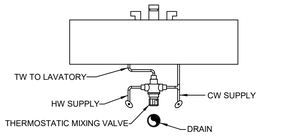
DETAIL OF PIPING AT WATER HEATER - WH-1

NO SCALE



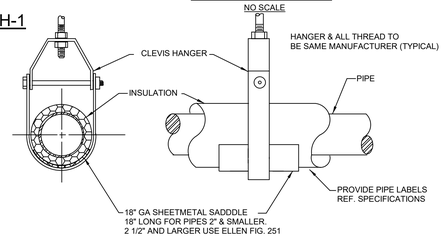
WALL CLEANOUT

NO SCALE



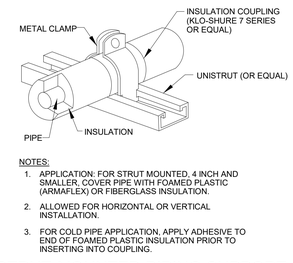
DETAIL OF TMV BELOW LAVATORY

NO SCALE



SUSPENDED PIPE SUPPORT

NO SCALE

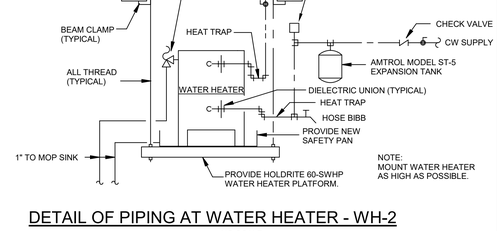


NOTES:

1. APPLICATION: FOR STRUT MOUNTED, 4 INCH AND SMALLER, COVER PIPE WITH FOAMED PLASTIC (ARMAFLEX) OR FIBERGLASS INSULATION.
2. ALLOWED FOR HORIZONTAL OR VERTICAL INSTALLATION.
3. FOR COLD PIPE APPLICATION, APPLY ADHESIVE TO END OF FOAMED PLASTIC INSULATION PRIOR TO INSERTING INTO COUPLING.

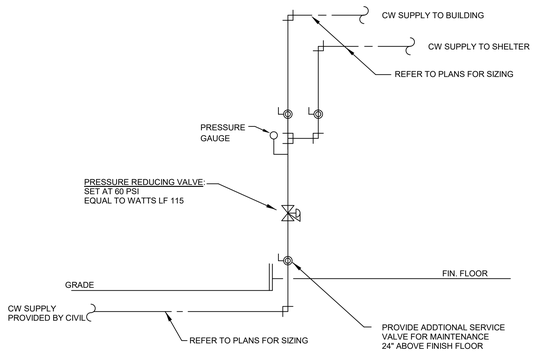
STRUT-MOUNTED PIPING SUPPORT INSULATION COUPLING DETAIL

NO SCALE



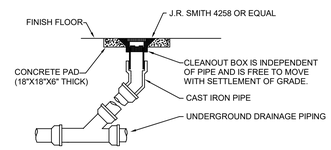
DETAIL OF PIPING AT WATER HEATER - WH-2

NO SCALE



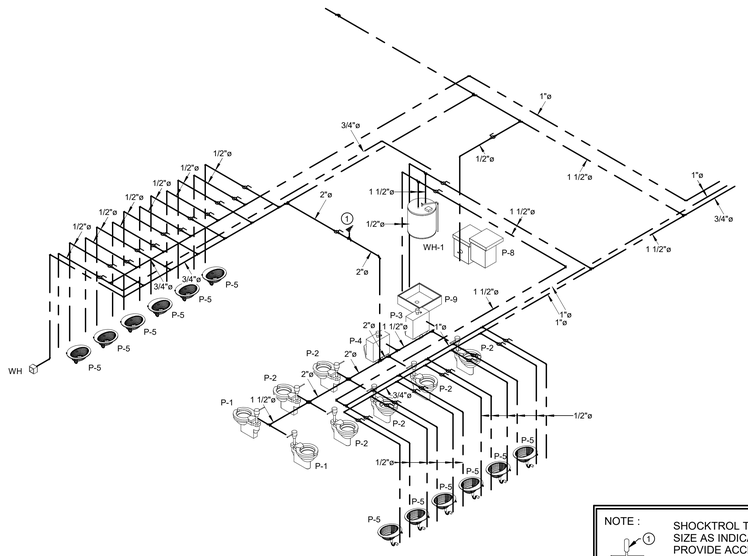
DETAIL OF WATER ENTRY AT SHELTER

NO SCALE



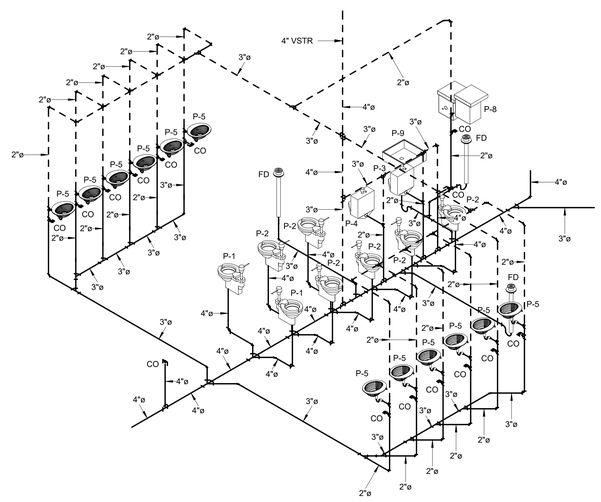
DETAIL OF CLEANOUT TO GRADE

NO SCALE



NOTE :
1 SHOCKTROL TO BE ZURN SERIES Z-1700 OR EQUAL. SIZE AS INDICATED ON WATER RISER DIAGRAM. PROVIDE ACCESS TO ALL SHOCKTROLS THRU ACCESS PANELS OR LAY-IN CEILINGS.

WATER RISER - W1



SANITARY RISER - S1

A NEW CLASSROOM ADDITION FOR
COLUMBIANA MIDDLE SCHOOL
222 JOINERTOWN ROAD, COLUMBIANA, ALABAMA 35051
SHELBY COUNTY BOARD OF EDUCATION

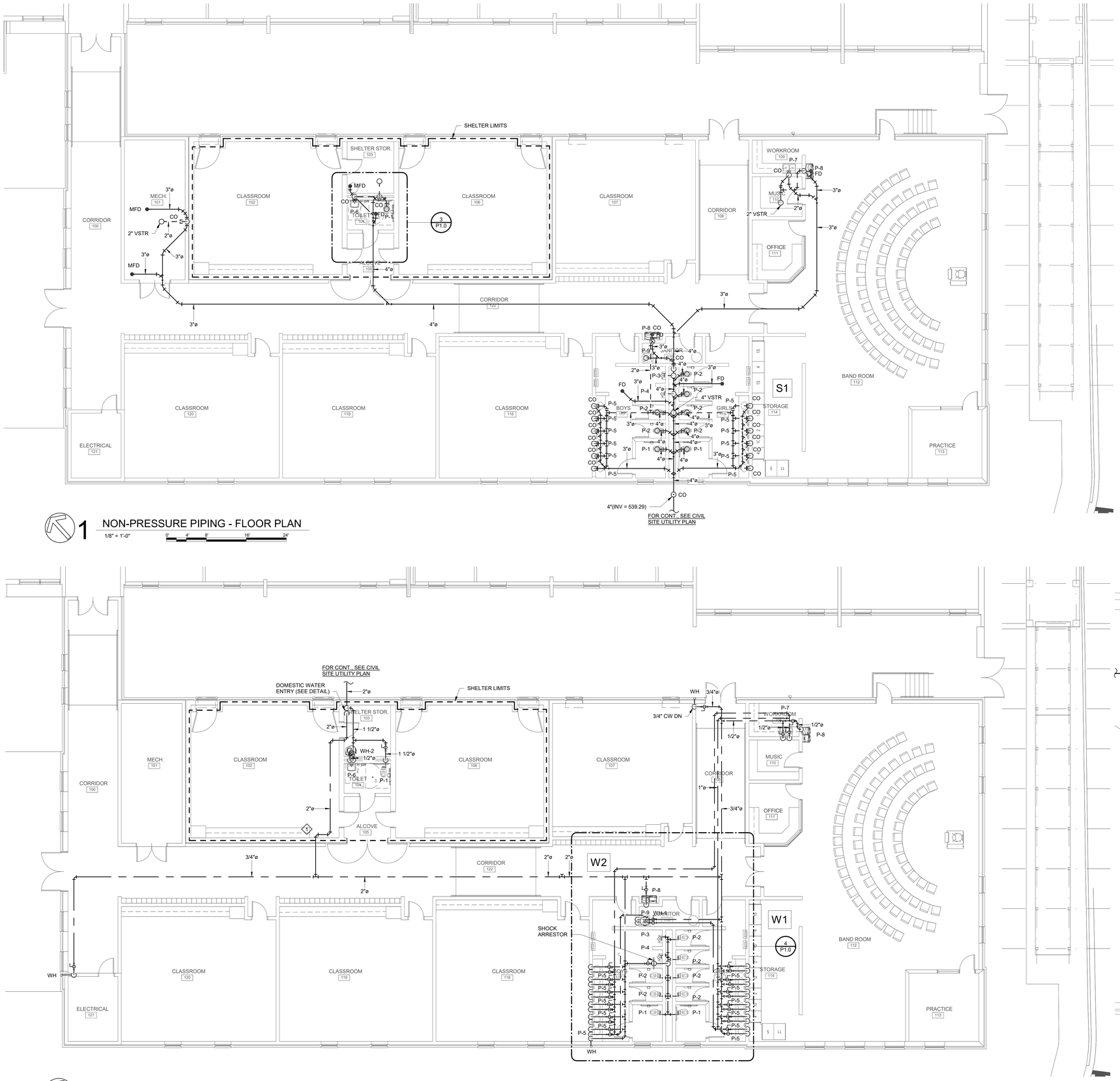
SHEET TITLE:
PLUMBING SCHEDULES, DETAILS AND NOTES

No. 26747
PROFESSIONAL
10-30-2026
ENGINEER
JOHN W. STEWART

PROJ. MGR.:	JWS
DRAWN:	ZDE
DATE:	OCTOBER 30, 2026
REVISIONS	

JOB NO.
LAA-26-054-00

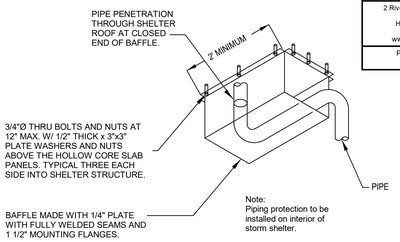
SHEET NO:
P0.1
1 OF 2



1 NON-PRESSURE PIPING - FLOOR PLAN

1/8" = 1'-0"

0' 4' 8' 16' 24'

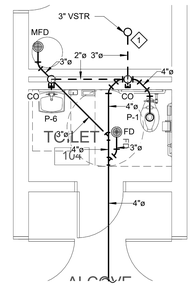


DETAIL OF PIPE PASSING THRU SHELTER FLOOR OR ROOF/WALL

NO SCALE

SHELTER KEY NOTES

1 SHELTER PENETRATION (SEE DETAIL)



3 ENLARGED NON-PRESSURE PIPING - FLOOR PLAN

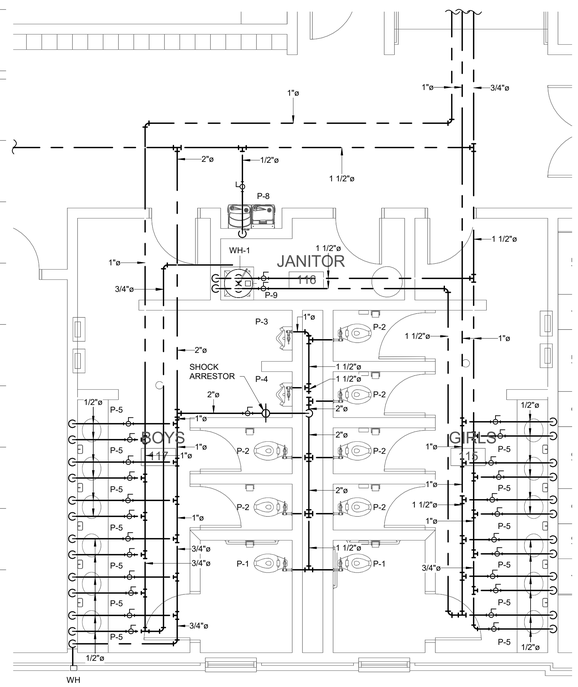
1/4" = 1'-0"

0' 4' 8' 16' 24'

2 PRESSURE PIPING - FLOOR PLAN

1/8" = 1'-0"

0' 4' 8' 16' 24'



4 ENLARGED PRESSURE PIPING - FLOOR PLAN

1/4" = 1'-0"

0' 4' 8' 16' 24'

Dewberry
2 Riverchase Office Plaza
Suite 205
Hoover, AL 35244
(205) 988-2069
www.dewberry.com

Project Number :
50194669

LATHAN McKEE ARCHITECTS

A NEW CLASSROOM ADDITION FOR
COLUMBIANA MIDDLE SCHOOL
222 JOINERTOWN ROAD, COLUMBIANA, ALABAMA 35051
SHELBY COUNTY BOARD OF EDUCATION

SHEET TITLE:
PLUMBING FLOOR PLAN

No. 24747
PROFESSIONAL
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ENGINEER
WADE STEWART

PROJ. MGR.:	JWS
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JOB NO.
LAA-26-054-00

SHEET NO:
P1.0
2 OF 2

DUCTWORK LEGEND

(CFM) S	SUPPLY DIFFUSER
(CFM) R	RETURN GRILLE
(CFM) E	EXHAUST GRILLE
(CFM) T	TRANSFER AIR GRILLE
(CFM) SR	SIDEWALL REGISTER
ø	ROUND DUCT SYMBOL
W X H	RECTANGULAR DUCT (WIDTH X HEIGHT)
	EXISTING DUCTWORK, PIPING, OR EQUIPMENT TO REMAIN.
	EXISTING DUCTWORK, PIPING, OR EQUIPMENT TO BE REMOVED.
	RECTANGULAR SUPPLY DUCT TURNING UP
	RECTANGULAR SUPPLY AIR DUCT TURNING DOWN
	RECTANGULAR RETURN AIR OR EXHAUST DUCT TURNING UP
	RECTANGULAR RETURN AIR OR EXHAUST DUCT TURNING DOWN
	FLAT OVAL TURNING UP.
	FLAT OVAL TURNING DOWN.
	ROUND DUCT TURNING DOWN
	ROUND DUCT TURNING UP
	MAXIMUM 5' FLEXIBLE DUCT ALL BRANCH DUCTS
	RECTANGULAR 90° ELBOW WITH TURNING VANES FOR SUPPLY.
	RISE OR DROP IN DUCT
	RECTANGULAR BRANCH OFF OF RECTANGULAR DUCT WITH MANUAL DAMPER
	CONICAL SPIN-IN WITH MANUAL DAMPER
MD	MANUAL DAMPER
FD	FIRE DAMPER (PROVIDE ACCESS DOOR)
AD	AUTOMATIC DAMPER
SFD	COMBINATION SMOKE/FIRE DAMPER (PROVIDE ACCESS DOOR)
T	TEMPERATURE SENSOR
H	HUMIDITY SENSOR
C	CO2 MONITOR
	CONNECT TO EXISTING, FIELD VERIFY EXACT SIZE AND LOCATION.

HVAC CONTROLS LEGEND

T	TEMPERATURE SENSOR
H	HUMIDITY SENSOR
C	CO2 MONITOR
CP	120V HVAC CONTROLS POWER
TS	AVERAGING TEMPERATURE SENSOR
H	DUCT MOUNTED HUMIDITY SENSOR
AO	ANALOG OUTPUT
AI	ANALOG INPUT
DO	DIGITAL OUTPUT
DI	DIGITAL INPUT
DSD	DUCT MOUNTED SMOKE DETECTOR. SMOKE DETECTOR FURNISHED AND WIRED BY ELECTRICAL CONTRACTOR, INSTALLED IN DUCT BY MECHANICAL CONTRACTOR.
HOA	HAND-OFF-AUTO MAGNETIC STARTER
SP	DUCT STATIC PRESSURE SENSOR
DP	DIFFERENTIAL PRESSURE SENSOR
	INTERLOCK WITH FIRE ALARM SYSTEM
M	FAN/PUMP MOTOR
VFD	VARIABLE FREQUENCY DRIVE
CT	CURRENT TRANSDUCER
FS	FLOW SWITCH
	DIRECTION OF FLOW
TS	PIPE MOUNTED TEMPERATURE SENSOR
	2-WAY AUTOMATIC VALVE
	3-WAY AUTOMATIC VALVE
H-O-A	HAND-OFF-AUTO SWITCH
AFM	AIR FLOW MONITOR. (PROVIDE ACCESS DOOR AT EACH AIR FLOW MONITOR.)

HVAC ABBREVIATIONS

A	AMPS
AFF	ABOVE FINISH FLOOR
AHU	AIR HANDLING UNIT
AMB.	AMBIENT
ARCH.	ARCHITECTURAL
BHP	BRAKE HORSEPOWER
BOD	BOTTOM OF DUCT
BTUH	BRITISH THERMAL UNIT PER HOUR
CFM	CUBIC FEET PER MINUTE
DB	DRY BULB
DN.	DOWN
°F	DEGREES FAHRENHEIT
△P	CHANGE IN PRESSURE
△T	CHANGE IN TEMPERATURE
DIA.	DIAMETER
EA	EXHAUST AIR
ENT.	ENTERING
EAT	ENTERING AIR TEMPERATURE
EMG	EXPANDED METAL GRILLE
EWT	EXTERNAL WATER TEMPERATURE
E.S.P.	EXTERNAL STATIC PRESSURE
EX.	EXISTING
EXT.	EXTERNAL
FPM	FEET PER MINUTE
FT.	FEET
F.V.	FACE VELOCITY
GAL.	GALLONS
GPM	GALLONS PER MINUTE
H	HEIGHT
HP	HORSEPOWER
IN.	INCHES
I.D.	INSIDE DIAMETER
KW	1000 WATTS
L	LENGTH
LBS.	POUNDS
LRA	LOCKED ROTOR AMPS
LVG.	LEAVING
LAT	LEAVING AIR TEMPERATURE
LWT	LEAVING WATER TEMPERATURE
MAX.	MAXIMUM
MAT	MIXED AIR TEMPERATURE
MBH	1000 BTUH
MCA	MINIMUM CIRCUIT AMPACITY
MIN.	MINIMUM
MOCP	MAXIMUM OVER CURRENT PROTECTION
NO	NORMALLY OPEN
NC	NORMALLY CLOSED
NPLV	NON-STAND PART LOAD VALUE
OSA	OUTSIDE AIR
O.D.	OUTSIDE DIAMETER
PSI	POUNDS PER SQUARE INCH
PSIA	PSI ATMOSPHERIC
PSIG	PSI GAUGE
RA	RETURN AIR
RAT	RETURN AIR TEMPERATURE
RH	RELATIVE HUMIDITY
RLA	RATED LOAD AMPS
RPM	REVOLUTIONS PER MINUTE
SA	SUPPLY AIR
SAT	SUPPLY AIR TEMPERATURE
T.S.P.	TOTAL STATIC PRESSURE
TD	TRANSFER DUCT
TOD	TOP OF DUCT
U.N.O.	UNLESS NOTED OTHERWISE
V	VOLUME
VØ/Hz	VOLTS/PHASE/HERTZ
W.G.	WATER GAGE
W	WIDTH
WB	WET BULB

HVAC GENERAL NOTES

1. MECHANICAL DRAWINGS ARE DIAGRAMMATIC AND SUBJECT TO REQUIREMENTS OF ARCHITECTURAL DRAWINGS AND CONDITIONS EXISTING IN THE FIELD. MECHANICAL DRAWINGS INDICATE GENERALLY THE LOCATION OF COMPONENTS AND ARE NOT INTENDED TO SHOW ALL FITTINGS OR ALL DETAILS OF THE WORK TO BE PERFORMED.

2. FOLLOW THE DRAWINGS CLOSELY, COORDINATE DIMENSIONS WITH ARCHITECTURAL DRAWINGS AND FIELD CONDITIONS. DO NOT SCALE MECHANICAL DRAWINGS FOR LOCATIONS OF SYSTEM COMPONENTS.

3. COORDINATE CONSTRUCTION OF ALL MECHANICAL WORK WITH ARCHITECTURAL, STRUCTURAL, CIVIL, ELECTRICAL WORK, ETC., SHOWN ON OTHER CONTRACT DOCUMENT DRAWINGS.

4. MAKE NO CHANGES WITHOUT THE ARCHITECT'S WRITTEN PERMISSION. IN CASE OF DOUBT, OBTAIN ARCHITECT'S DECISION BEFORE PROCEEDING WITH WORK. FAILURE TO FOLLOW THIS INSTRUCTION SHALL MAKE THE CONTRACTOR LIABLE FOR DAMAGE TO OTHER WORK AND RESPONSIBLE FOR REMOVING AND REPAIRING DEFECTIVE OR MISLOCATED WORK IN PROPER MANNER.

5. DO NOT SCALE DRAWINGS TO LOCATE DIFFUSERS AND EQUIPMENT. COORDINATE WITH NEW AND EXISTING LIGHTING, ELECTRICAL CONDUIT, AND ALL EXISTING FIELD CONDITIONS.

6. PRIOR TO PREPARING SUBMITTALS, VERIFY ALL EQUIPMENT VOLTAGES WITH ELECTRICAL DRAWINGS AND ELECTRICAL CONTRACTOR AND REPORT ANY INCONSISTENCIES TO THE ARCHITECT PRIOR TO ORDERING EQUIPMENT. ANY FAILURE TO DO SO WILL MAKE THE MECHANICAL CONTRACTOR RESPONSIBLE FOR ANY EQUIPMENT ORDERED WITH THE INCORRECT VOLTAGE.

7. PROTECT MECHANICAL EQUIPMENT FROM DAMAGE DURING CONSTRUCTION. WHEN INSTALLATION IS COMPLETE, CLEAN EQUIPMENT AS REQUIRED AND PROVIDE ALL NEW FILTERS.

8. INSTALL ALL EQUIPMENT TO PROVIDE NORMAL SERVICE ACCESS TO ALL COMPONENTS. INSTALL IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. IF MANUFACTURER'S RECOMMENDATIONS CONFLICT WITH CONTRACT DOCUMENTS, OBTAIN ARCHITECT'S DECISION BEFORE PROCEEDING.

9. FURNISH ACCESS DOORS FOR VALVES, FIRE DAMPERS, DAMPERS, CONTROLS, AIR VENTS, TRAP CLEAN OUTS, AND OTHER ITEMS LOCATED ABOVE NON-LIFTOUT CEILINGS OR BEHIND PARTITIONS OR WALLS. PROVIDE FIRE DAMPERS IN DUCTWORK, GRILLES, AND REGISTERS WITH FIRE RATING EQUAL TO RATING OF WALL OR CEILING. ALL FIRE DAMPERS MAY OR MAY NOT BE SHOWN ON MECHANICAL DRAWINGS. CONTRACTOR SHALL BE RESPONSIBLE TO COORDINATE ALL FIRE RATED WALL AND CEILING LOCATIONS AND RATINGS WITH ARCHITECTURAL DRAWINGS.

10. ALL WORK SHALL COMPLY WITH ALL APPLICABLE CODES AND STANDARDS (SEE SPECIFICATIONS).

11. MECHANICAL CONTRACTOR TO COORDINATE WITH ELECTRICAL CONTRACTOR FOR EXACT QUANTITY AND LOCATIONS OF 120 V CONTROLS POWER TO NECESSARY CONTROL PANELS.

12. MECHANICAL CONTRACTOR TO COORDINATE WITH ELECTRICAL CONTRACTOR FOR EXACT QUANTITY AND LOCATIONS OF 120 V CONTROL POWER FOR VAV TERMINAL UNIT CONTROLS, AUTOMATIC CONTROL VALVES, AND AUTOMATIC DAMPER ACTUATORS.

13. PROVIDE ALL NECESSARY RELAYS, SWITCHES, SENSORS, LOW VOLTAGE CONTROL WIRING, ACTUATORS, ETC. FOR A COMPLETE AND FUNCTIONAL BAS CONTROLS SYSTEM.

14. COORDINATE EXACT LOCATION OF ALL WALL MOUNTED DEVICES (THERMOSTATS, HUMIDITY SENSORS, ETC.) WITH ARCHITECT PRIOR TO ROUGH IN. ALL WALL MOUNTED DEVICES SHALL BE INSTALLED 48"A.F.F. TO THE TOP OF THE DEVICE.

15. COORDINATE EXACT LOCATION ON WALL OF ALL WALL MOUNTED SUPPLY AND RETURN GRILLES/REGISTERS WITH ARCHITECT. WALL MOUNTED SUPPLY AND RETURN GRILLES/REGISTERS SHALL BE PAINTED BY OTHERS.

16. COORDINATE ALL DUCT DETECTORS, LOW VOLTAGE WIRING TO ASSOCIATED PROGRAMMING WITH FIRE ALARM CONTRACTOR TO PROVIDE A FULLY FUNCTIONING SYSTEM. VERIFY PROPER OPERATION OF ALL EXISTING DUST SMOKE DETECTORS. REPLACE AS REQUIRED. UPON SENSING SMOKE THE DUCT DETECTOR SHALL SHUT DOWN THE RESPECTIVE UNIT.

AIR DEVICE LEGEND

MARK	EXAMPLE	DESCRIPTION	SIZE	BASIS OF DESIGN
"S"	200S / CFM	PLAQUE FACE CEILING DIFFUSER WITH ROUND NECK. ALL CEILING DIFFUSERS TO HAVE A 24X24 CEILING PANEL (EXCEPT WHERE SHOWN AS 12X12). ALL CEILING DIFFUSERS TO HAVE ROUND NECKS.	CFM SHOWN ON PLANS. NECK & RUN-OUT SIZED PER THE FOLLOWING: CFM / NECK SIZE / RUN-OUT SIZE 0 - 100 / 6" / 6" 101 - 200 / 8" / 8" 201 - 300 / 10" / 10" 301 - 500 / 12" / 12" 501 - 750 / 15" / 15" 751 - 1000 / 18" / 18"	TITUS OMNI
"LD"	200LD / CFM	LOUVER FACE CEILING DIFFUSER WITH SQUARE NECK. ALL CEILING DIFFUSERS TO HAVE A 24X24 CEILING PANEL (EXCEPT WHERE SHOWN AS 12X12). ALL CEILING DIFFUSERS TO HAVE SQUARE NECKS.	CFM SHOWN ON PLANS. NECK & RUN-OUT SIZED PER THE FOLLOWING: CFM / NECK SIZE / RUN-OUT SIZE 0 - 100 / 6"x6" / 6" 101 - 200 / 9"x9" / 8" 201 - 300 / 12"x12" / 10" 301 - 500 / 15"x15" / 12" 501 - 750 / 18"x18" / 15" 751 - 1000 / 21"x21" / 18"	TITUS TDCA-AA
"R", "E", "T"	200R / CFM R24 / SQUARE NECK SIZE	CEILING MOUNTED RETURN (R), EXHAUST (E), OR TRANSFER (T) EGGCRATE GRILLE. ALL GRILLES IN A LAY-IN CEILING TO HAVE A 24X24 CEILING PANEL.	CFM SHOWN ON PLANS. NECK SIZED PER THE FOLLOWING: CFM / NECK SIZE 0 - 100 / 6x6 101 - 200 / 8x8 201 - 350 / 10x10 351 - 500 / 12x12 501 - 750 / 14x14 751 - 950 / 16x16 951 - 1200 / 18x18 1201 - 1500 / 20x20 1501 - 2000 / 24x24	TITUS 50F
SR	SR12X6 / 200 / CFM / W x H	SIDEWALL SUPPLY REGISTER.	SIZE (WxH) IN INCHES & CFM SHOWN.	TITUS 272FL
WRG / WTG	WRG12X6 / 200 / CFM / W x H	WALL RETURN GRILLE / WALL TRANSFER GRILLE.	SIZE (WxH) IN INCHES & CFM SHOWN.	TITUS 350FL

NOTES:

1. SEE SPECIFICATIONS FOR FINISH AND CONSTRUCTION MATERIAL FOR EACH AIR DEVICE.
2. COORDINATE WITH ARCHITECT'S CEILING PLAN FOR LAY-IN OR SURFACE MOUNTING OF CEILING MOUNTED AIR DEVICES.
3. COORDINATE LOCATIONS OF CEILING MOUNTED AIR DEVICES WITH LIGHT FIXTURES, SPRINKLER HEADS, AND OTHER CEILING MOUNTED DEVICES. DO NOT SCALE MECHANICAL DRAWINGS FOR LOCATIONS.

OUTDOOR HEAT PUMP (MINI-SPLIT SYSTEM) SCHEDULE

TYPE:
1. OUTDOOR HEAT PUMP

NOTES:
1. REFRIGERANT PIPING SHALL BE SIZED AND ROUTED PER MANUFACTURER'S RECOMMENDATIONS.
2. POWER TO INDOOR UNITS IS PROVIDED THRU OUTDOOR UNITS
3. REFRIGERANT CIRCUIT ACCESS PORTS LOCATED OUTDOORS SHALL BE FITTED WITH LOCKING-TYPE TAMPER-RESISTANT CAPS.
4. UNIT SHALL BE CAPABLE OF MINIMUM LINE LENGTH OF 65FT.

MARK	TYPE	COOLING CAPACITY (MBH)	HEATING CAPACITY (MBH)	ELECTRICAL					EFFICIENCY		BASIS OF DESIGN
				V	PH	HZ	MCA (A)	MOCP (A)	SEER	HSPF	
OHP-1	1	18	23	208	1	60	16	20	24.7	9.8	TRANE
OHP-2	1	18	23	208	1	60	16	20	24.7	9.8	TRANE
OHP-3	1	18	23	208	1	60	16	20	24.7	9.8	TRANE
OHP-4	1	18	23	208	1	60	16	20	24.7	9.8	TRANE
OHP-B	1	18	23	208	1	60	16	20	24.7	9.8	TRANE
OHP-ELEC	1	18	23	208	1	60	16	20	24.7	9.8	TRANE
OHP-G	1	18	23	208	1	60	16	20	24.7	9.8	TRANE

FAN SCHEDULE

FAN TYPE:
1. CEILING MOUNTED EXHAUST FAN.
2. CENTRIFUGAL SQUARE INLINE - DIRECT DRIVE.
3. CENTRIFUGAL SQUARE INLINE - BELT DRIVE.

FAN ACCESSORIES:
1. BACKDRAFT DAMPER.
2. DISCONNECT SWITCH.
3. ALUMINUM CEILING GRILLE.
4. EC MOTOR W/ VFD FOR SOFT START.
5. SPRING VIBRATION ISOLATORS.
6. FLEXIBLE CONNECTIONS.
7. SF-1, 2, & EF-1 SHALL BE ON EMERGENCY POWER.

MARK	FAN TYPE	AIRFLOW (CFM)	E.S.P. (IN.-W.G.)	WHEEL SIZE (INCHES)	SOUND CRITERIA (SONES/dBA)	MOTOR RPM	MOTOR (HP / W)	ELECTRICAL			INTERLOCK WITH	WEIGHT (LBS)	ACCESSORIES	BASIS OF DESIGN
								V	PH	HZ				
EF-1	1	70	0.75	7.6	4 SONNES	1060	0.05	115 V	1	60	LIGHTS	25	1,2,3,4,5,6,7	COOK
SF-1	2	540	0.5	9.5	8.1 SONNES	1550	0.16	115 V	1	60	SWITCH	80	1,2,3,4,5,6,7	COOK
SF-2	2	540	0.5	9.5	8.1 SONNES	1550	0.16	115 V	1	60	SWITCH	80	1,2,3,4,5,6,7	COOK

INDOOR HEAT PUMP (MINI-SPLIT SYSTEM) SCHEDULE

TYPE:
1. INDOOR, WALL MOUNT
2. INDOOR, CEILING CASSETE
3. INDOOR, HORIZONTAL CONCEALED, MEDIUM-STATIC

NOTES:
1. AIRFLOW RATED AT HIGH FAN SPEED.
2. POWER FOR INDOOR UNIT IS FED FROM OUTDOOR UNIT.
3. COOLING CAPACITY RATED AT 95°F.
4. HEATING CAPACITY RATED AT 47°F.

ACCESSORIES:
1. 3-POLE DISCONNECT SWITCH.
2. HARD WIRED UNIT CONTROLLER.
3. FULL PORT BALL VALVES & SCHRADER VALVES WITH FLARED CONNECTIONS.
4. FIELD-INSTALLED CONDENSATE PUMP (120/1/60) - 1 GPH @ 33 FT. HD.
5. INTEGRAL CONDENSATE PUMP.
6. SUPPLY AIR DUCT OUTLET.
7. OUTSIDE AIR DUCT INLET.
8. AIR BLANK-OFF.
9. PROVIDE FACTORY REFRIGERANT LEAK CONTROLS AS DESCRIBED ON CONTROLS.

MARK	TYPE	AIRFLOW (CFM)	NOMINAL TONS	COOLING CAPACITY (MBH)	HEATING CAPACITY (MBH)	DIMENSIONS (IN.) (WxLxH)	ELECTRICAL				WEIGHT (LBS.)	ACCESSORIES	BASIS OF DESIGN
							V	PH	HZ	MCA (A)			
IHP-1	2	600	1.5	18	23	33"x33"x10"	208 V	1	60	1	50	1,2,3,5,6,7,8,9	TRANE
IHP-2	2	600	1.5	18	23	33"x33"x10"	208 V	1	60	1	50	1,2,3,5,6,7,8,9	TRANE
IHP-3	2	600	1.5	18	23	33"x33"x10"	208 V	1	60	1	50	1,2,3,5,6,7,8,9	TRANE
IHP-4	2	600	1.5	18	23	33"x33"x10"	208 V	1	60	1	50	1,2,3,5,6,7,8,9	TRANE
IHP-B	2	600	1.5	18	23	33"x33"x10"	208 V	1	60	1	50	1,2,3,5,6,7,8,9	TRANE
IHP-ELEC	1	600	1.5	18	23	35.5"x64.5"x12"	208 V	1	60	1	50	1,2,3,5,6,7,8,9	TRANE
IHP-G	2	600	1.5	18	23	33"x33"x10"	208 V	1	60	1	50	1,2,3,5,6,7,8,9	TRANE

AIR PURIFICATION SCHEDULE

WHERE REQUIRED	MFG MODEL NO.	QUANTITY	MOUNTING LOCATION	V/Ø	W	NOTES
ALL NEW PACKAGED AND SPLIT SYSTEM UNITS UP TO 4800 CFM TOTAL AIRFLOW	GPS-FC-48	1	UNIT SA FAN INLET	208/1	10	1 THRU 8
ALL NEW PACKAGED AND SPLIT SYSTEM UNITS > 4800 CFM TOTAL AIRFLOW	GPS-FC-48	2	UNIT SA FAN INLET	208/1	10 EACH	1 THRU 8

NOTES:
1. BASIS OF DESIGN: GLOBAL PLASMA SOLUTIONS. APPROVED EQUALS BY AIRGENICS AND BIOXGEN SUBJECT TO SPECIFICATION COMPLIANCE.
2. MOUNT BI-POLAR ION GENERATOR WHERE INDICATED ON SCHEDULE.
3. IF CONTRACTOR SUBSTITUTES BASIS OF DESIGN WITH ANOTHER MFG, CONTRACTOR SHALL COORDINATE ALL ELECTRICAL AND MECHANICAL CHANGES.
4. BI-POLAR IONIZATION SYSTEMS REQUIRING PERISHABLE GLASS TUBES ARE NOT ACCEPTABLE.
5. ALL MFGS MUST PASS UL-867-2007 OZONE CHAMBER TESTING BY EITHER UL OR ETL.
6. PROVIDE MANUFACTURER'S 208V POWER SUPPLY FOR INSTALLATION BY DIV. 23.
7. PROVIDE TRANSFORMER AS REQUIRED. COORDINATE WITH ELECTRICAL.
8. PROVIDE FACTORY INSTALLED DISCONNECT SWITCH.
9. AIR PURIFICATION EQUIPMENT SHALL BE INTERLOCKED TO OPERATE ONLY WHEN THE CORRESPONDING AC UNIT SUPPLY FAN RUNS.
10. BIPOLAR IONIZATION UNIT SHALL DE-ENERGIZE UPON SYSTEM SHUTDOWN.

PACKAGED THRU-WALL AC UNIT

TYPE:
1. PACKAGED THRU-WALL HEAT PUMP WITH ELECTRIC HEAT.

NOTES:
IF ANOTHER APPROVED MANUFACTURER IS USED, THE MECHANICAL CONTRACTOR IS SOLELY RESPONSIBLE FOR COORDINATING ANY DEVIATIONS FROM THE SCHEDULED ELECTRICAL REQUIREMENTS WITH THE ELECTRICAL CONTRACTOR. ALL DEVIATIONS SHALL BE IDENTIFIED ON THE PRODUCT SUBMITTAL DATA.

ACCESSORIES:
1. WALL SLEEVE - COORDINATE SLEEVE DEPTH WITH WALL CONDITIONS.
2. EXTRUDED ALUMINUM ARCH. GRILLE WITH ANODIZED ALUMINUM FINISH. (COORDINATE GRILLE STYLE AND FINISH WITH ARCHITECT PRIOR TO ORDERING.)
3. CONDENSATE DRAIN KIT.
4. SUB-BASE KIT.
5. POWER DISCONNECT SWITCH.
6. REMOTE MOUNTED TWIN THERMOSTAT KIT.

MARK	TYPE	QUANTITY	SUPPLY FAN AIRFLOW (CFM)	OUTSIDE AIR (CFM)	DX COOLING COIL CAPACITY TOTAL (MBH)	DX HEATING CAPACITY TOTAL (MBH)	ELEC HEAT (KW)	ELECTRICAL					SEER/EER	COP	DIMENSIONS (W X L X H)	WEIGHT (LBS.)	ACCESSORIES	BASIS OF DESIGN
								V	PH	HZ	MCA (A)	MOCP (A)						
TWHP-A	1	12	345	0 CFM	14.2	13.3	5	208 V	1	60	27.5	30	10.4	3.1	16"x42"x21"	150	1,2,3,4,5,6	FRIEDRICH

PACKAGED HEAT PUMP

TYPE:
1. PACKAGED HEAT PUMP, HORIZONTAL DISCHARGE.
2. PACKAGED HEAT PUMP, VERTICAL DISCHARGE.

NOTES:
1. COOLING CAPACITY IS NET CAPACITY @ 95°F AMBIENT.

ACCESSORIES:
1. 2" THICK THROWAWAY FILTER, MERV 8.
2. CONDENSER COIL GUARD.
3. HEAD PRESSURE CONTROL TO 10°F AMBIENT.
4. OSA INTAKE HOOD WITH AUTO DAMPER, ECONOMIZER, AND BAROMETRIC RELIEF.
5. STEEL FACTORY FABRICATED INSULATED ROOF CURB.
6. HINGED ACCESS DOORS.
7. MODULATING HOT GAS REHEAT.
8. STAINLESS STEEL DRAIN PAN.
9. PROVIDE FACTORY REFRIGERANT LEAK CONTROLS AS DESCRIBED ON CONTROLS.
10. DUAL ENTHALPY ECONOMIZER W/ BAROMETRIC RELIEF.

MARK	TYPE	SUPPLY FAN			OSA (CFM)	DX COOLING CAPACITY				DX HEATING CAPACITY		ELECTRIC HEAT (KW)	ELECTRICAL					HOT GAS REHEAT (MBH)	EER	WEIGHT (LBS)	ACCESSORIES	BASIS OF DESIGN
		AIRFLOW (CFM)	E.S.P. (IN.-W.G.)	MOTOR (HP)		EAT (DB°F/WB°F)	TOTAL (MBH)	SENS (MBH)	NOM. TONS	TOTAL (MBH)	EAT (DB°F)		V	PH	HZ	MCA (A)	MOCP (A)					
AC-1	1	3600	1	3	425	77.3/64.6	120	90	10	110	55	36	208 V	3	60	154	175	53	11	1170	1,2,3,4,5,6,7,8,9,10	TRANE

ENERGY RECOVERY UNIT

TYPE:
INDOOR SPLIT UNIT WITH DX COOLING COIL, HOT GAS REHEAT COIL, ENERGY RECOVERY WHEEL, AND ELECTRIC HEAT.

NOTES:
1. COOLING CAPACITY IS NET CAPACITY @ 95°F AMBIENT.
2. UNIT SHALL BE ASHRAE 90.1 - 2013 COMPLIANT.
3. CKT1: SPP.
4. CKT2: ELECTRIC HEAT.

ACCESSORIES:
1. 2" THICK THROWAWAY FILTER, MERV 8.
2. INVERTER DUTY MOTORS.
3. DIRECT DRIVE SUPPLY AND EXHAUST FAN.
4. VFD FOR SUPPLY AND EXHAUST FANS.
5. HINGED ACCESS DOORS.
6. STAINLESS STEEL DRAIN PAN.
7. ELECTRIC REHEAT.
8. HOT GAS REHEAT COIL.
9. OUTSIDE AIR AND EXHAUST AUTOMATIC DAMPERS.

MARK	SUPPLY FAN			EXHAUST FAN			SUMMER			WINTER			ELECTRICAL					DX COOLING COIL				ELEC. HEAT		WEIGHT (LBS)	ACCESSORIES	BASIS OF DESIGN
	CFM	E.S.P. (IN.-W.G.)	MOTOR (HP)	CFM	E.S.P. (IN.-W.G.)	MOTOR (HP)	OUTSIDE AIR EAT (DB°F/WB°F)	OUTSIDE AIR LAT (DB°F/WB°F)	EXHAUST ENTERING (DB°F/WB°F)	OUTSIDE AIR EAT (DB°F/WB°F)	OUTSIDE AIR LAT (DB°F/WB°F)	EXHAUST ENTERING (DB°F/WB°F)	V	PH	HZ	CKT1 / CKT2 MCA	CKT1 / CKT2 MOCP	LAT (DB°F/WB°F)	TOTAL (MBH)	SENS (MBH)	NOM. TONS	kW	STAGES			
ERU-1	1705	1	2	1535	1	1	95/78	80.3/67.6	75/62.5	17/15	54.5/47.7	70/58	208 V	3	60	15.4/43.8	20/45	55.1/54.6	69	47	6	12	SCR	2500	1,2,3,4,5,6,7,8,9	TRANE

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Project Number : 50194669

LATHAN McKEE ARCHITECTS

A NEW CLASSROOM ADDITION FOR
COLUMBIANA MIDDLE SCHOOL
222 JOINERTOWN ROAD, COLUMBIANA, ALABAMA 35051
SHELBY COUNTY BOARD OF EDUCATION

SHEET TITLE:
MECHANICAL LEGEND, SCHEDULES AND NOTES



PROJ. MGR.:	JWS
DRAWN:	BTB
DATE:	OCTOBER 30, 2026
REVISIONS	

JOB NO. LAA-26-054-00

SHEET NO: M0.1

1 OF 5

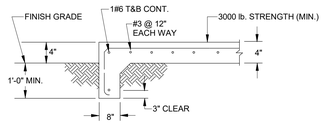
CONDENSING UNIT SCHEDULE

TYPE:
1. AIR COOLED CONDENSING UNIT.

NOTES:
1. CAPACITY TO BALANCE RESPECTIVE INDOOR AC UNIT.
2. COOLING CAPACITY RATED AT 95°F.
3. UL LISTED, AHRI CERTIFIED.
4. REFRIGERANT CIRCUIT ACCESS PORTS LOCATED OUTDOORS SHALL BE FITTED WITH LOCKING TYPE TAMPER-RESISTANT CAPS. ANY ACCESS DEVICE REQUIRED SHALL BE LEFT ON SITE WITH THE OWNER AT PROJECT CLOSE OUT.

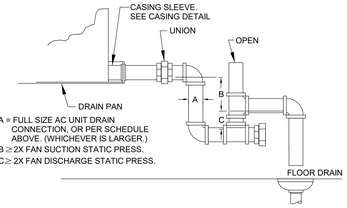
ACCESSORIES:
1. PHASE PROTECTION.
2. MICROPROCESSOR CONTROLS.
3. ISOLATION VALVES.
4. LIQUID LINE REFRIGERANT FILTER DRIER.
5. ANTI SHORT CYCLE TIMER.
6. LOW AMBIENT CONTROL DOWN TO 0°F.
7. HAIL / VANDAL GUARDS.
8. THERMAL EXPANSION VALVE.

MARK	TYPE	NOMINAL TONS	COOLING CAPACITY (MBH)	ELECTRICAL					EFFICIENCY	BASIS OF DESIGN
				V	PH	HZ	MCA (A)	MOCP (A)	COOLING (EER)	
CU-ERU	1	6	69	208 V	3	60	33	45	11.5	TRANE

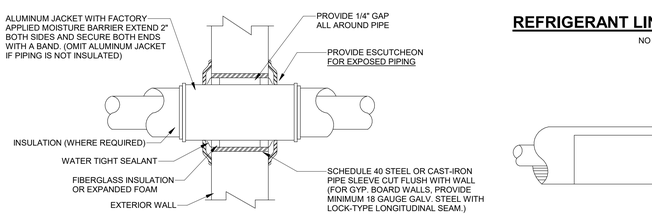


CONCRETE PAD DETAIL
NO SCALE

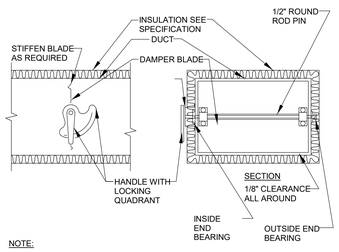
MINIMUM CONDENSATE PIPE SIZE	
AC TONS	MIN. DRAIN SIZE
0 TO 20	1"
21 TO 40	1-1/4"
41 TO 60	1-1/2"
61 TO 100	2"
101 TO 250	3"
251 & LARGER	4"



AC UNIT DRAIN TRAP DETAIL
NO SCALE

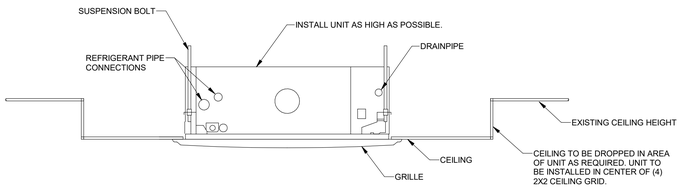


PIPE PENETRATION DETAIL
NO SCALE

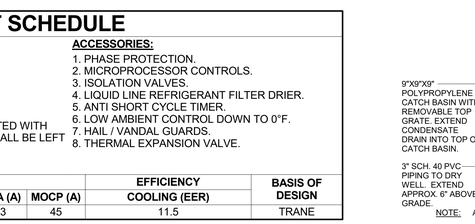


NOTE:
1. DELETE INSULATION STAND-OFF ON DUCTWORK WITHOUT EXTERIOR INSULATION.
2. DETAIL SHOWS SINGLE BLADE DAMPER. DAMPER INSTALLATION SHALL BE SIMILAR FOR MULTI-BLADE DAMPERS & ROUND DAMPERS.
3. MANUAL DAMPERS SHALL BE EQUAL TO RUSKIN MD35 (FOR RECTANGULAR DUCTS) AND SHALL BE EQUAL TO RUSKIN MDRS25 (FOR ROUND DUCTS).

MANUAL DAMPER DETAIL
NO SCALE

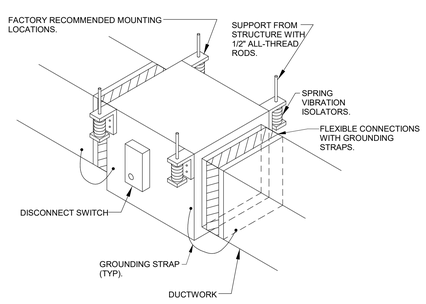


INDOOR CEILING CASSETTE UNIT (MINI-SPLIT) DETAIL
NO SCALE

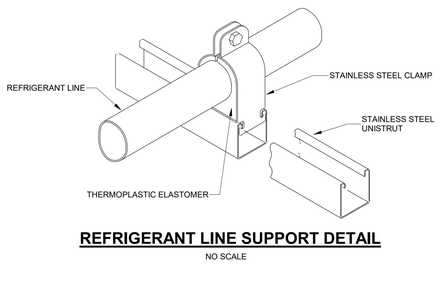


NOTE: ALL WORK SHOWN IS BY THE MECHANICAL CONTRACTOR.

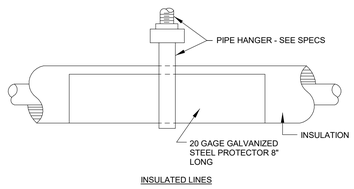
DRY WELL DETAIL
NO SCALE



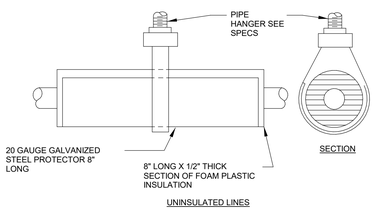
IN-LINE FAN INSTALLATION DETAIL
NO SCALE



REFRIGERANT LINE SUPPORT DETAIL
NO SCALE

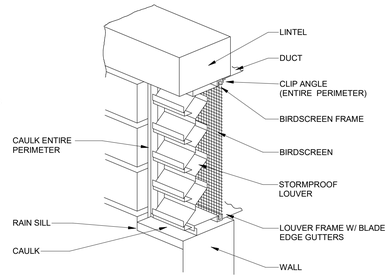


INSULATED LINES

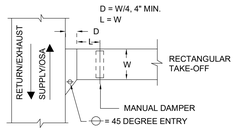


UNINSULATED LINES

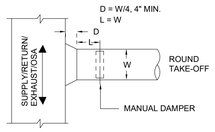
REFRIGERANT PIPING HANGER DETAIL
NO SCALE



HVAC WALL LOUVER
NO SCALE

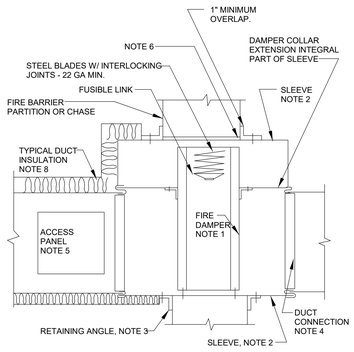


RECTANGULAR DUCT TAKE-OFF



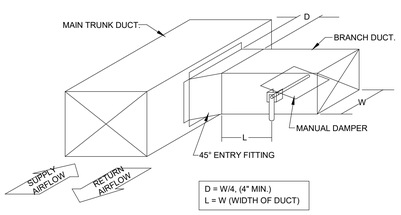
ROUND DUCT TAKE-OFF

DUCT TAKE-OFF CONNECTION DETAIL
NO SCALE



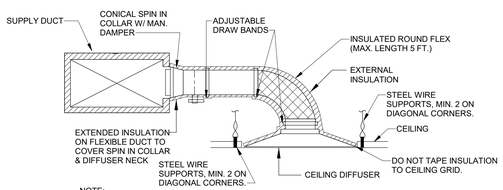
NOTES:
1. A VERTICAL DAMPER IS SHOWN. HORIZONTAL DAMPER INSTALLATION, IS SIMILAR. FOLLOW DAMPER MANUFACTURER'S INSTRUCTIONS AND SMACNA FIRE DAMPER INSTALLATION GUIDELINE, INCLUDING FASTENER OPTIONS AND GAGES FOR SLEEVE AND RETAINING ANGLES. FIRE DAMPERS MUST BE INSTALLED IN THE PARTITION OR FLOOR AND NOT OUTSIDE THE PENETRATION. ALL FIRE DAMPERS SHALL BE UL LISTED.
2. GALVANIZED SLEEVE: GAGE NOT LESS THAN CONNECTING DUCT. FASTEN SLEEVE TO DAMPER FRAME AND TO PERIMETER ANGLES.
3. RETAINING ANGLES: GALVANIZED STEEL, NOT LESS THAN 1-1/2" x 1-1/2", 14 GAGE, TO PROVIDE 1" MINIMUM OVERLAP OF OPENING ON ALL 4 SIDES. RETAINING ANGLES MUST NOT BE ATTACHED TO EACH OTHER AT CORNERS. SECURE RETAINING ANGLES TO FIRE DAMPER SLEEVE ONLY.
4. BREAKAWAY DUCT CONNECTION: CONTRACTOR'S OPTION OF TYPES SHOWN IN SMACNA OR PER MANUFACTURER'S RECOMMENDATIONS.
5. ACCESS DOORS: SIZE AND LOCATION TO PERMIT SERVICING THE FUSIBLE LINK OR LINKS.
6. PROVIDE CLEARANCE TO PERMIT INSTALLATION & EXPANSION. PROVIDE 1/8" PER FOOT LARGER THAN THE OVERALL SIZE OF THE DAMPER/SLEEVE ASSEMBLY. THE MAXIMUM OPENING SIZE SHALL NOT EXCEED 1/8" PER FOOT + 2", NOR SHALL THE OPENING BE LESS THAN 1/4" LARGER THAN THE DAMPER/SLEEVE ASSEMBLY.
7. ALL DUCT WORK RISERS WHICH ARE RUN EXPOSED, SUCH AS THRU ATTIC FLOORS AND MECHANICAL ROOM FLOORS, SHALL BE PROVIDED WITH 4" HIGH CONCRETE CURB AROUND OPENING FOR DUCT.

FIRE DAMPER INSTALLATION DETAIL
NO SCALE



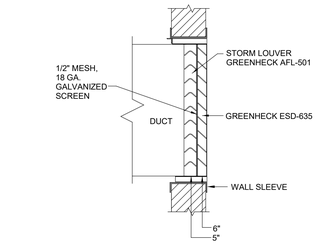
D = W/4, (4" MIN.)
L = W (WIDTH OF DUCT)

DUCT BRANCH CONNECTION
NO SCALE

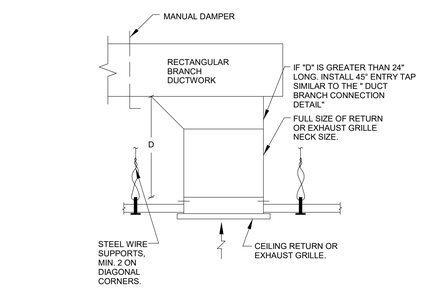


NOTE:
1. WHEREVER THE SUPPLY DUCT HEIGHT IS INSUFFICIENT TO CONNECT THE SPIN-IN, THE SPIN-IN MAY BE CONNECTED TO THE TOP OR BOTTOM OF THE DUCT. IF THE BRANCH DUCT MUST BE CONNECTED TO THE SIDE OF THE MAIN DUCT, USE A RECTANGULAR BRANCH DUCT CONNECTION OF EQUAL AIR VELOCITY AND TRANSITION TO ROUND DUCT. REFER TO SPECIFICATION FOR MAXIMUM TURNS IN FLEX DUCT.
2. PROVIDE EXTERNAL INSULATION ON ALL ROUND BRANCH DUCTWORK. SEE SPECS FOR THICKNESS AND EXTENT.
3. PROVIDE EXTERNAL INSULATION ON BACK SIDE OF CEILING DIFFUSERS. THICKNESS TO MATCH BRANCH DUCT INSULATION THICKNESS.

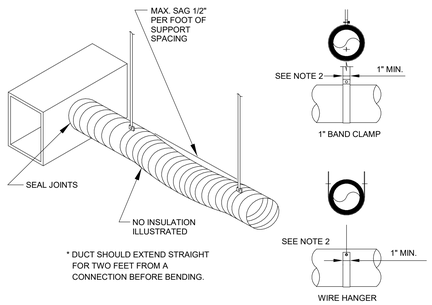
CEILING DIFFUSER INSTALLATION DETAIL
NO SCALE



STORM SHELTER LOUVER DETAIL - OUTSIDE AIR DUCTED OPENINGS
NO SCALE

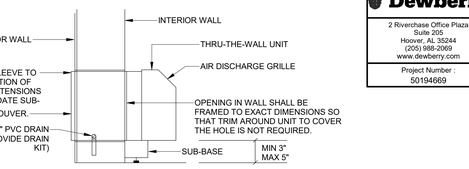


CEILING RETURN/EXHAUST BRANCH CONNECTION DETAIL
NO SCALE



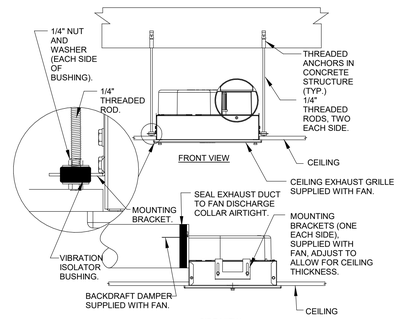
NOTES:
1. SUPPORT SYSTEM MUST NOT DAMAGE DUCT OR CAUSE OUT OF ROUND SHAPE.
2. DUCTS ARE FLEXIBLE WITH EXTERNAL INSULATION AND VAPOR BARRIER JACKETING.
3. MIN. CENTER LINE BEND LINE RADIUS IS ONE DIA. (OR INSIDE RADIUS OF D/2).
4. FLEXIBLE DUCT LENGTH SHALL NOT EXCEED 5 LINEAR FEET.

FLEXIBLE DUCT SUPPORT DETAIL
NO SCALE

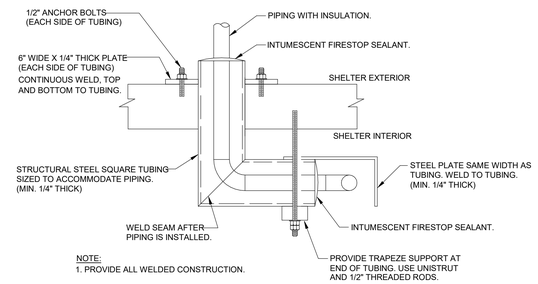


NOTE:
ELECTRICAL CONTRACTOR TO HARDWIRE SUB-BASE. CORD FROM UNIT SHALL PLUG INTO SUB-BASE OUTLET. VERIFY ACTUAL WALL SECTION AND MOUNTING HEIGHT W/ ARCHITECTURAL PLANS.

THRU-WALL AC UNIT DETAIL
NO SCALE

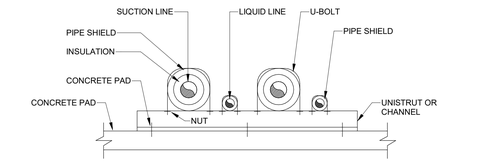


CEILING EXHAUST FAN DETAIL
NO SCALE



NOTE:
1. PROVIDE ALL WELDED CONSTRUCTION.

DETAIL OF PIPE PASSING THRU SHELTER WALL OR ROOF
NO SCALE



REFRIGERANT PIPE SUPPORT FROM CONCRETE PAD DETAIL
NO SCALE

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Project Number : 50194669

LATHAN McKEE ARCHITECTS

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222 JOINERTOWN ROAD, COLUMBIANA, ALABAMA 35051
SHELBY COUNTY BOARD OF EDUCATION

SHEET TITLE:
MECHANICAL DETAILS AND SCHEDULES

ALABAMA
No. 24747
PROFESSIONAL
10-30-2026
ENGINEER
JAMES W. STEWART

PROJ. MGR.:	JWS
DRAWN:	BTB
DATE:	OCTOBER 30, 2026
REVISIONS	

JOB NO.
LAA-26-054-00

SHEET NO:
M0.2
2 OF 5

REFRIGERANT LEAK DETECTION CONTROLS:

1. THE LEAK DETECTION SYSTEM SHALL CONSIST OF ONE OR MORE REFRIGERANT LEAK DETECTION SENSORS INSTALLED IN THE HVAC EQUIPMENT BY THE HVAC EQUIPMENT MANUFACTURER.

   A. UTILIZE A SET POINT, NONADJUSTABLE IN THE FIELD, TO GENERATE AN OUTPUT SIGNAL TO INITIATE MITIGATION ACTIONS.

   B. FIELD RECALIBRATION OF THE REFRIGERANT DETECTION SYSTEM SHALL NOT BE PERMITTED.

   C. BE CAPABLE OF DETECTING THE PRESENCE OF A SPECIFIED REFRIGERANT CORRESPONDING TO THE REFRIGERANT DESIGNATION OF THE REFRIGERANT CONTAINED IN THE REFRIGERATION SYSTEM.

   D. HAVE ACCESS FOR REPLACEMENT OF REFRIGERANT DETECTION SYSTEM COMPONENTS.

   E. HALF SELF-DIAGNOSTICS TO DETERMINE OPERATIONAL STATUS OF THE SENSING ELEMENT.

   F. ENERGIZE AIR CIRCULATION FANS OF THE EQUIPMENT UPON FAILURE OF A SELF DIAGNOSTIC CHECK.

   G. GENERATE AN OUTPUT SIGNAL IN NOT MORE THAN 30 SECONDS WHEN EXPOSED TO A REFRIGERANT CONCENTRATION OF 25% LFL (+0%,-1%).

2. WHEN THE SYSTEM DETECTS A LEAK, THE FOLLOWING MITIGATION ACTIONS WILL BE INITIATED UNTIL REFRIGERANT HAS NOT BEEN DETECTED FOR 5 MINUTES:

   A. SUPPLY FANS SHALL BE ENERGIZED TO RUN AT 100% FAN SPEED.

   B. COMPRESSOR OPERATION SHALL BE DISABLED.

   C. ALL ZONING DAMPERS, SUCH AS VAV TERMINAL UNITS SHALL BE OPENED TO 100%.

   D. ALL ELECTRIC HEAT OR GAS HEAT SHALL BE DISABLED.

3. THE BUILDING FIRE AND SMOKE SYSTEMS SHALL OVERRIDE THIS FUNCTION.

4. IF THE REFRIGERANT SENSOR HAS A FAULT, IS AT THE END OF ITS USEFUL LIFE, OR IS DISCONNECTED, THE AC UNIT WILL INITIATE THE ABOVE MITIGATION ACTIONS. MITIGATION ACTIONS SHALL BE VERIFIED BY DISCONNECTING THE SENSOR.

5. THE REFRIGERANT SENSORS DO NOT NEED ROUTINE MAINTENANCE. USE ONLY MANUFACTURER-APPROVED SENSORS WHEN REPLACEMENT IS REQUIRED.

HVAC EQUIPMENT REFRIGERANT GENERAL NOTES:

1. THIS PROJECT IS DESIGNED WITH HVAC EQUIPMENT WHICH USE A2L REFRIGERANT.

2. THE MECHANICAL DESIGN WILL COMPLY WITH THE 2024 INTERNATIONAL MECHANICAL CODE, ASHRAE 15-2022, AND ASHRAE 34-2022.

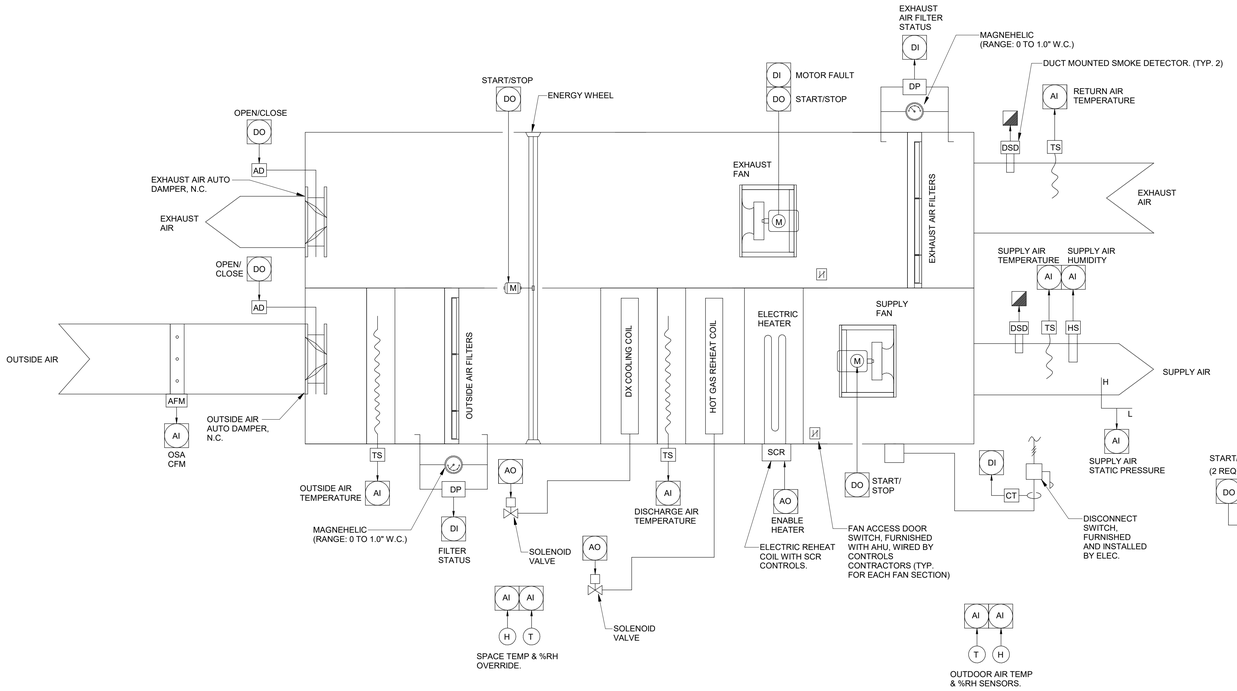
3. THE INSTALLATION SHALL ALSO COMPLY WITH THESE STANDARDS.

4. HVAC EQUIPMENT SHALL BE MANUFACTURED TO COMPLY WITH THESE STANDARDS, AS WELL AS UL 484, UL/CSA 60335-2-40, AND UL/CSA 60335-2-89.

5. REFRIGERANT PIPING LOCATED IN AREAS OTHER THAN THE ROOM OR SPACE WHERE THE REFRIGERATING EQUIPMENT IS LOCATED SHALL BE IDENTIFIED IN ACCORDANCE WITH ANSI/ASME A13.1. THE PIPE IDENTIFICATION SHALL BE LOCATED AT INTERVALS NOT EXCEEDING 20FT OR AT ANY CHANGE IN DIRECTION ON THE REFRIGERANT PIPING OR THE REFRIGERANT PIPING INSULATION. THE MINIMUM HEIGHT OF THE LETTERING SHALL BE 0.05 IN. THE IDENTIFICATION SHALL INDICATE THE REFRIGERANT DESIGNATION AND SAFETY GROUP CLASSIFICATION OF REFRIGERANT USED IN THE PIPING SYSTEM. FOR GROUP A2L REFRIGERANTS, THE IDENTIFICATION SHALL ALSO INCLUDE THE FOLLOWING STATEMENT: "WARNING - RISK OF FIRE. FLAMMABLE REFRIGERANT".

6. THE MECHANICAL CONTRACTOR SHALL PRESSURE TEST ALL REFRIGERANT PIPING PER THE MANUFACTURER'S RECOMMENDATIONS AND PROVIDE A CERTIFICATE OF THE PRESSURE TEST FOR ALL REFRIGERANT PIPING SYSTEMS.

7. THE HVAC EQUIPMENT FACTORY MOUNTED REFRIGERANT DETECTOR AND ANY ASSOCIATED MECHANICAL VENTILATION SHALL BE TESTED BY THE MECHANICAL CONTRACTOR. THE MECHANICAL CONTRACTOR SHALL COORDINATE WITH THE HVAC CONTROLS CONTRACTOR AND EQUIPMENT PROVIDER TO PROVIDE NECESSARY PERSONNEL TO CONDUCT THIS TEST. A REPORT OF THIS TEST SHALL BE PROVIDED IN THE PROJECT CLOSE OUT DOCUMENTS.



OUTSIDE AIR UNIT CONTROLS - ENERGY RECOVERY WHEEL, DX COOLING, WITH ELECTRIC HEAT

NO SCALE

ENERGY RECOVERY UNIT CONTROL SEQUENCE:

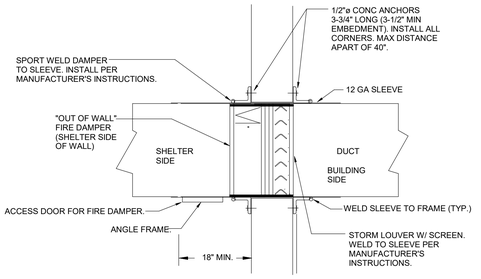
THE ENERGY RECOVERY UNIT (ERU) SHALL BE STARTED AND STOPPED BY THE BUILDING AUTOMATION SYSTEM SUBJECT TO AN OWNER'S OCCUPANCY SCHEDULE AND SUBJECT TO ALL INTERNAL UNIT SAFETIES. OCCUPIED AND UNOCCUPIED HOURS SHALL BE DETERMINED BY THE OWNER AND SHALL BE FULLY ADJUSTABLE AT THE BUILDING AUTOMATION SYSTEM FRONT END BY THE OWNER.

UNOCCUPIED MODE:
DURING UNOCCUPIED MODE, THE EXHAUST AIR AND OUTSIDE AIR AUTO DAMPERS SHALL BE CLOSED AND THE EXHAUST AIR AND OUTSIDE AIR FANS SHALL BE OFF.

OCCUPIED MODE:
DURING OCCUPIED HOURS, THE EXHAUST AIR AND OUTSIDE AIR DAMPERS SHALL OPEN. ONCE THE DAMPERS ARE PROVEN TO BE OPEN, THE SUPPLY FAN AND EXHAUST FAN SHALL BE STARTED BY THE BUILDING AUTOMATION SYSTEM AND SHALL RUN CONTINUOUSLY. TEST AND BALANCE SHALL ADJUST THE FAN SPEED AT THE VARIABLE FREQUENCY DRIVE FOR EACH FAN TO PROVIDE THE SCHEDULED OUTSIDE AIR AND EXHAUST AIR CFM. THIS FAN SPEED SHALL BE SET AND SHALL BE DISPLAYED AT THE BAS FRONT END. THE FAN SPEED FOR THE OUTSIDE AIR AND EXHAUST AIR FANS SHALL NOT VARY.

THE BAS SHALL STAGE ON COMPRESSORS AND OPEN/CLOSE SOLENOID VALVE(S) AT THE DX COIL TO MAINTAIN A 54°F SUPPLY AIR TEMPERATURE AS MEASURED AT THE TEMPERATURE SENSOR DOWNSTREAM OF THE DX COIL. THE HOT GAS REHEAT COIL AND ELECTRIC HEATER IN THE DOAS SHALL MODULATE TO MAINTAIN A TEMPERATURE LEAVING THE ERU OF 72°F (SUMMER) AND 70°F (WINTER) AS MEASURED AT THE DISCHARGE AIR TEMPERATURE SENSOR.

DEHUMIDIFICATION MODE:
IF THE SPACE MOUNTED RELATIVE HUMIDITY SENSOR RISES ABOVE 60% RH FOR LONGER THAN 10 MINUTES DURING OCCUPIED OR UNOCCUPIED MODES, THE ERU SHALL GO INTO DEHUMIDIFICATION MODE. IN DEHUMIDIFICATION MODE, THE EXHAUST AIR AND OUTSIDE AIR DAMPERS SHALL BE OPEN, THE EXHAUST AIR AND OUTSIDE AIR FANS SHALL RUN, THE CONDENSING UNIT SHALL BE ON AND PROVIDING 100% COOLING, AND THE HOT GAS REHEAT COIL AND ELECTRIC HEATER SHALL MODULATE TO MAINTAIN A SPACE TEMPERATURE OF 72°F (SUMMER) AND 70°F (WINTER). ONCE THE HUMIDITY RETURNS TO BELOW 60%RH, THE ERU SHALL RETURN TO NORMAL OCCUPIED OR UNOCCUPIED MODE.



NOTE:

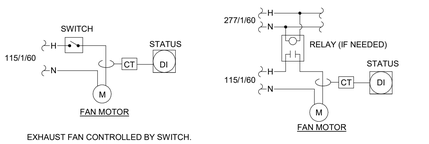
1. COORDINATE ALL PENETRATIONS OF SHELTER WALLS OR ROOF WITH GENERAL CONTRACTOR.
2. SHELTER LOUVERS SHALL BE INSTALLED IN THE SHELTER WALL. SHELTER LOUVERS SHALL BE RUSKIN XP500, GREENHECK MODEL FSG, OR APPROVED EQUAL. HIGH IMPACT LOUVERS SHALL MEET THE IMPACT TESTING CRITERIA FOR TORNADO SHELTERS PER ICC 500 / FEMA 361.
3. INSTALL 1/2" MESH, 18 GA. GALVANIZED SCREEN BETWEEN SHELTER LOUVER AND FIRE DAMPER.
4. INSTALL ACCESS DOOR IN DUCTWORK FOR ACCESS TO FIRE DAMPER. ACCESS DOOR SHALL BE MINIMUM 12" X 12".

SHELTER DUCT PENETRATION DETAIL

NO SCALE

HVAC CONTROLS - GENERAL NOTES

1. MECHANICAL CONTRACTOR TO COORDINATE WITH ELECTRICAL CONTRACTOR FOR EXACT QUANTITY AND LOCATIONS OF 120V CONTROL POWER NECESSARY TO CONTROL PANELS AND EQUIPMENT THROUGHOUT PROJECT.
2. MECHANICAL CONTRACTOR TO COORDINATE WITH ELECTRICAL CONTRACTOR FOR EXACT QUANTITY AND LOCATIONS OF 120V CONTROL POWER NECESSARY TO POWER AUTOMATIC CONTROL VALVES, AUTOMATIC DAMPER ACTUATORS, AND SMOKE DAMPER ACTUATORS.
3. ALL SMOKE DETECTORS ARE PROVIDED AND WIRED BY ELECTRICAL, INSTALLED BY MECHANICAL.
4. PROVIDE ALL NECESSARY RELAYS, SWITCHES, SENSORS, LOW VOLTAGE CONTROL WIRING, ACTUATORS, ETC. FOR A COMPLETE AND FUNCTIONAL CONTROL SYSTEM.
5. FOR ALL ROOFTOP AC UNITS AND ALL ENERGY RECOVERY UNITS, PROVIDE A FULLY FUNCTIONAL BUILDING AUTOMATION SYSTEM. PROVIDE A CONTROL PANEL. THE CONTROL PANEL SHALL HAVE A GRAPHICAL USER INTERFACE FOR EASY ADJUSTMENT OF THE CORRESPONDING AC UNIT, INCLUDING SETPOINT ADJUSTMENTS AND OCCUPIED AND UNOCCUPIED HOURS. SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION.
6. PROVIDE LOCKING COVERS ON ALL THERMOSTATS AND CONTROL DEVICES AS INDICATED ON THE FLOOR PLANS.



EXHAUST FAN CONTROLLED BY SWITCH.

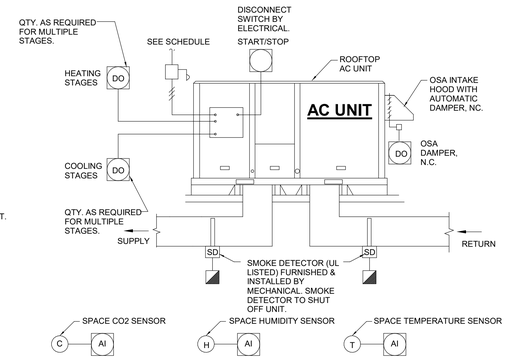
SHELTER VENTILATION

EXHAUST FAN CONTROLLED BY LIGHTING CIRCUIT.

THE BAS SHALL MONITOR FAN STATUS VIA A CURRENT TRANSDUCER.

EXHAUST FAN CONTROLS

NO SCALE



AC UNIT CONTROL SEQUENCE:

OCCUPIED MODE:
THE BAS SHALL START THE SUPPLY FAN, SUBJECT TO INTERNAL AC UNIT SAFETIES AND SMOKE DETECTOR INTERLOCK (WHERE REQUIRED). THE SPACE TEMPERATURE SENSOR SHALL CYCLE ON COMPRESSOR TO MAINTAIN COOLING SETPOINT (75°F - ADJUSTABLE) AND HEATING SETPOINT (70°F ADJUSTABLE). IF THE COMPRESSOR CAN NOT MAINTAIN THE HEATING SETPOINT, THE ELECTRIC HEAT SHALL BE STAGED AS REQUIRED TO MAINTAIN HEATING SETPOINT (70°F - ADJUSTABLE).

DURING OCCUPIED MODE AS DETERMINED BY THE BAS, THE OUTSIDE AIR DAMPER SHALL OPEN TO A MINIMUM POSITION TO PROVIDE THE MINIMUM SCHEDULED OSA CFM. WHERE A SPACE CO2 SENSOR IS SHOWN. WHEN THE SPACE CO2 LEVELS RISE TO 1000 PPM, THE OUTSIDE AIR AUTO DAMPER SHALL OPEN TO PROVIDE THE MAXIMUM SCHEDULED OSA CFM. AUTO DAMPER POSITIONS TO PROVIDE THE MIN & MAX CFM VALUES SHALL BE DETERMINED BY THE TEST AND BALANCE CONTRACTOR.

DEHUMIDIFICATION SEQUENCE:
UPON A RISE IN SPACE HUMIDITY (ABOVE 60% RH), THE AC UNIT SHALL GO INTO FULL COOLING AND STAGE ON THE HOT GAS REHEAT COIL TO MAINTAIN A SPACE TEMPERATURE OF 74°F. (ADJUSTABLE). UPON THE HUMIDITY FALLING BACK BELOW SETPOINT (55% RH) THE UNIT SHALL RETURN TO NORMAL OPERATION.

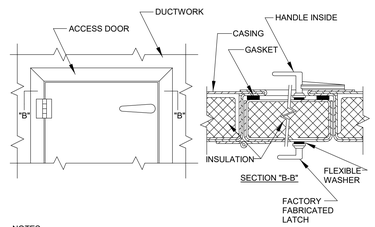
UNOCCUPIED MODE:
THE OUTSIDE AIR DAMPER SHALL REMAIN CLOSED DURING UNOCCUPIED HOURS. THE SPACE TEMPERATURE AND HUMIDITY SENSOR SHALL CYCLE ON COMPRESSOR TO MAINTAIN COOLING SETPOINT (80°F - ADJUSTABLE) AND ELECTRIC HEAT AS REQUIRED TO MAINTAIN HEATING SETPOINT (60°F - ADJUSTABLE) AND HOT GAS REHEAT TO MAINTAIN HUMIDITY SETPOINT (60% RELATIVE HUMIDITY - ADJUSTABLE).

ECONOMIZER:
THE UNIT WILL MEASURE THE INDOOR AIR ENTHAPLY AND THE OUTDOOR AIR ENTHALPY AND ECONOMIZER WILL BE ENABLED WHEN THE OUTDOOR AIR ENTHALPY IS BELOW THE INDOOR AIR ENTHALPY. CHANGE OVER SETPOINT (55°F). WHEN ECONOMIZING IS ENABLED AND THE UNIT IS OPERATING IN COOLING MODE, THE OUTSIDE AIR DAMPER AND RETURN AIR DAMPER WILL BE MODULATED IN TANDEM TO MAINTAIN THE SPACE TEMPERATURE SETPOINT. IF THE ECONOMIZER CANNOT MAINTAIN SPACE TEMPERATURE, THE COMPRESSORS SHALL BE ENABLED.

TO PREVENT SPACE OVER-PRESSURIZATION, THE BAROMETRIC RELIEF DAMPER AT THE AC UNIT SHALL OPEN DURING ECONOMIZER MODE.

PACKAGED AC UNIT CONTROLS

NO SCALE



CONDENSING UNIT INSTALLATION DETAIL

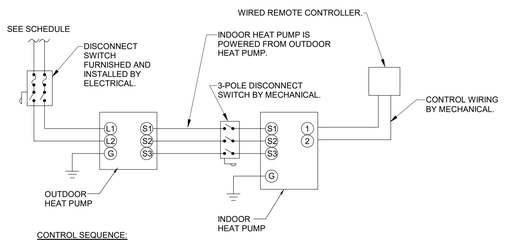
NO SCALE

NOTES:

1. HINGES ON THE ACCESS DOORS SHALL HAVE NON-CORROSIVE PINS.
2. ACCESS DOORS FOR DUCT SMOKE DETECTORS SHALL BE UPSTREAM OF THE RESPECTIVE SAMPLE TUBE.

ACCESS DOOR DETAIL

NO SCALE

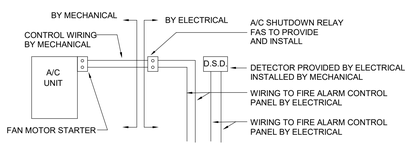


CONTROL SEQUENCE:

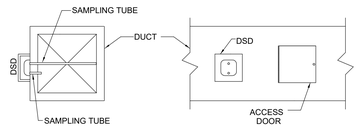
THE AC UNIT SHALL BE CONTROLLED BY A WIRED WALL MOUNTED REMOTE CONTROLLER. THE CONTROLLER SHALL CYCLE ON COMPRESSOR(S) TO MAINTAIN COOLING SETPOINT (74°F - ADJUSTABLE) AND HEATING SETPOINT (70°F - ADJUSTABLE). ALL MINI-SPLIT AC UNITS THAT SERVE ELECTRICAL AND IT ROOMS SHALL NOT SET THEIR TEMPERATURE BACK AT NIGHT. FOR ALL MINI-SPLIT AC UNITS THAT SERVE OFFICES, CLASSROOMS, ETC. SHALL SET THEIR TEMPERATURE BACK TO 4°F ABOVE SETPOINT IN SUMMER AND 4°F BELOW SETPOINT IN THE WINTER. COORDINATE WITH OWNER TO ESTABLISH OCCUPIED / UNOCCUPIED SCHEDULES.

DUCTLESS SPLIT SYSTEM CONTROLS

NO SCALE



DUCT SMOKE DETECTOR CONNECTION



DUCT SMOKE DETECTOR INSTALLATION
ACCESS DOORS FOR DUCT SMOKE DETECTORS SHALL BE UPSTREAM OF THE RESPECTIVE SAMPLE TUBE

DUCT SMOKE DETECTOR DETAIL

NO SCALE

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LATHAN
McKEE
ARCHITECTS

A NEW CLASSROOM ADDITION FOR
COLUMBIANA MIDDLE SCHOOL
222 JOINERTOWN ROAD, COLUMBIANA, ALABAMA 35051
SHELBY COUNTY BOARD OF EDUCATION

SHEET TITLE:
MECHANICAL CALCS

EDVC CALCULATIONS (AC-1) ASHRAE 15-2020 EQ 7-8

Room	Room Square Ft	Room Volume (Ft3)		lbs of Refrigerant	LFL	CF	Pass	EDVC
109 - WORKROOM	67	603		0.4 lbs	0.0185	0.50	Y	5.58
110 - MUSIC	80	720		0.5 lbs	0.0185	0.50	Y	6.66
111 - OFFICE	117	1,053		0.7 lbs	0.0185	0.50	Y	9.74
112 - BAND ROOM	2,262	20,358		13.4 lbs	0.0185	0.50	Y	188.31
113 - PRACTICE	191	1,719		1.1 lbs	0.0185	0.50	Y	15.90
114 - STORAGE	283	2,547		1.7 lbs	0.0185	0.50	Y	23.56
	Total Volume	**27,000**	**Total Charge**	**17.8 lbs**	**0.0185**	**0.50**	**Y**	**249.75**

EDVC CALCULATIONS (ERU-1) ASHRAE 15-2020 EQ 7-8

Room	Room Square Ft	Room Volume (Ft3)		lbs of Refrigerant	LFL	CF	Pass	EDVC
100 - CORRIDOR	747	6,723		1.2 lbs	0.0185	0.50	Y	62.19
102 - CLASSROOM	789	7,101		1.3 lbs	0.0185	0.50	Y	65.68
103 - SHELTER STOR.	96	864		0.2 lbs	0.0185	0.50	Y	7.99
104 - TOILET	56	504		0.1 lbs	0.0185	0.50	Y	4.66
105 - ALCOVE	77	693		0.1 lbs	0.0185	0.50	Y	6.41
106 - CLASSROOM	789	7,101		1.3 lbs	0.0185	0.50	Y	65.68
107 - CLASSROOM	730	6,570		1.2 lbs	0.0185	0.50	Y	60.77
108 - CORRIDOR	287	2,583		0.5 lbs	0.0185	0.50	Y	23.89
118 - CLASSROOM	820	7,380		1.3 lbs	0.0185	0.50	Y	68.27
119 - CLASSROOM	820	7,380		1.3 lbs	0.0185	0.50	Y	68.27
120 - CLASSROOM	820	7,380		1.3 lbs	0.0185	0.50	Y	68.27
122 - CORRIDOR	1,509	13,581		2.4 lbs	0.0185	0.50	Y	125.62
	Total Volume	**70,929**	**Total Charge**	**12.6 lbs**	**0.0185**	**0.50**	**Y**	**656.09**

EDVC CALCULATIONS (TWHP-A) ASHRAE 15-2020 EQ 7-9

Room	Room Square Ft	Room Volume (Ft3)	lbs of Refrigerant	F Ifl	F occ	M def (lbs)	Pass	EDVC
TYPICAL CLASSROOM	789	7,101	3.6 lbs	0.96	1.00	10.1	Y	9.70

EDVC CALCULATIONS (IHP-1) ASHRAE 15-2020 EQ 7-9

Room	Room Square Ft	Room Volume (Ft3)	lbs of Refrigerant	F Ifl	F occ	M def (lbs)	Pass	EDVC
100 - CORRIDOR	747	6,723	4.6 lbs	0.96	1.00	10.1	Y	9.70

EDVC CALCULATIONS (IHP-2) ASHRAE 15-2020 EQ 7-9

Room	Room Square Ft	Room Volume (Ft3)	lbs of Refrigerant	F Ifl	F occ	M def (lbs)	Pass	EDVC
122 - CORRIDOR	1,509	13,581	4.6 lbs	0.96	1.00	14.3	Y	13.73

EDVC CALCULATIONS (IHP-3) ASHRAE 15-2020 EQ 7-8

Room	Room Square Ft	Room Volume (Ft3)		lbs of Refrigerant	LFL	CF	Pass	EDVC
116 - JANITOR	58	522		0.2 lbs	0.0185	0.50	Y	4.83
122 - CORRIDOR	1,509	13,581		4.4 lbs	0.0185	0.50	Y	125.62
	Total Volume	**14,103**	**Total Charge**	**4.6 lbs**	**0.0185**	**0.50**	**Y**	**130.45**

EDVC CALCULATIONS (IHP-4) ASHRAE 15-2020 EQ 7-9

Room	Room Square Ft	Room Volume (Ft3)	lbs of Refrigerant	F Ifl	F occ	M def (lbs)	Pass	EDVC
108 - CORRIDOR	287	2,583	4.6 lbs	0.96	1.00	6	Y	5.76

EDVC CALCULATIONS (IHP-B) ASHRAE 15-2020 EQ 7-9

Room	Room Square Ft	Room Volume (Ft3)	lbs of Refrigerant	F Ifl	F occ	M def (lbs)	Pass	EDVC
117 - BOYS	365	3,285	4.6 lbs	0.96	1.00	7.1	Y	6.82

EDVC CALCULATIONS (IHP-G) ASHRAE 15-2020 EQ 7-9

Room	Room Square Ft	Room Volume (Ft3)	lbs of Refrigerant	F Ifl	F occ	M def (lbs)	Pass	EDVC
115 - BOYS	365	3,285	4.6 lbs	0.96	1.00	7.1	Y	6.82

EDVC CALCULATIONS (IHP-ELEC) ASHRAE 15-2020 EQ 7-9

Room	Room Square Ft	Room Volume (Ft3)	lbs of Refrigerant	F Ifl	F occ	M def (lbs)	Pass	EDVC
121 - ELECTRICAL	130	1,170	4.2 lbs	0.96	1.00	4.7	Y	4.51

OSA CALCULATIONS - ERU 1

Room	Room Type	Rp	Pz	Ra	Az	Vbz	Ez	Voz	Required OSA (IAQP)
		cfm / P	People	cfm/ft²	ft²	cfm		cfm	cfm
100 - CORRIDOR	Corridors	0	0	0.06	747	45	0.80	56	0
101 - MECH	Storage rooms	0	0	0.12	341	41	0.80	51	0
102 - CLASSROOM	Classrooms (ages 9 plus)	10	28	0.12	789	375	0.80	468	140
103 - SHELTER STOR.	Storage rooms	0	0	0.12	96	12	0.80	14	0
104 - TOILET	Toilets-public	0	0	0.00	56	0	0.80	0	0
105 - ALCOVE	Corridors	0	0	0.06	77	5	0.80	6	0
106 - CLASSROOM	Classrooms (ages 9 plus)	10	28	0.12	789	375	0.80	468	140
107 - CLASSROOM	Classrooms (ages 9 plus)	10	28	0.12	730	368	0.80	460	140
108 - CORRIDOR	Corridors	0	0	0.06	287	17	0.80	22	0
115 - GIRLS	Toilets-public	0	0	0.00	365	0	0.80	0	0
116 - JANITOR	Janitor closets, trash rooms, recycling	5	0	0.00	58	0	0.80	0	0
117 - BOYS	Toilets-public	0	0	0.00	365	0	0.80	0	0
118 - CLASSROOM	Classrooms (ages 9 plus)	10	28	0.12	820	378	0.80	473	140
119 - CLASSROOM	Classrooms (ages 9 plus)	10	28	0.12	820	378	0.80	473	140
120 - CLASSROOM	Classrooms (ages 9 plus)	10	28	0.12	820	378	0.80	473	140
121 - ELECTRICAL	Storage rooms	0	0	0.12	130	16	0.80	20	0
122 - CORRIDOR	Corridors	0	0	0.06	1,509	91	0.80	113	0
						Total Required Supply ERU-1:			840
						Total Provided Supply ERU-1:			1,705

OSA CALCULATIONS - AC 1

Room	Room Type	Rp	Pz	Ra	Az	Vbz	Ez	Voz	Required OSA (IAQP)
		cfm / P	People	cfm/ft²	ft²	cfm		cfm	cfm
109 - WORKROOM	Office spaces	5	1	0.06	67	9	0.80	11	5
110 - MUSIC	Office spaces	5	1	0.06	80	10	0.80	12	5
111 - OFFICE	Office spaces	5	1	0.06	117	12	0.80	15	5
112 - BAND ROOM	Multipurpose assembly	5	76	0.06	2,262	516	0.80	645	380
113 - PRACTICE	Office spaces	5	1	0.06	191	16	0.80	21	5
114 - STORAGE	Storage rooms	0	0	0.12	283	34	0.80	42	0
						Total Required Supply AC-1:			400
						Total Provided Supply AC-1:			425



PROJ. MGR.: JWS
DRAWN: BTB
DATE: OCTOBER 30, 2026
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SHEET NO:
M0.4
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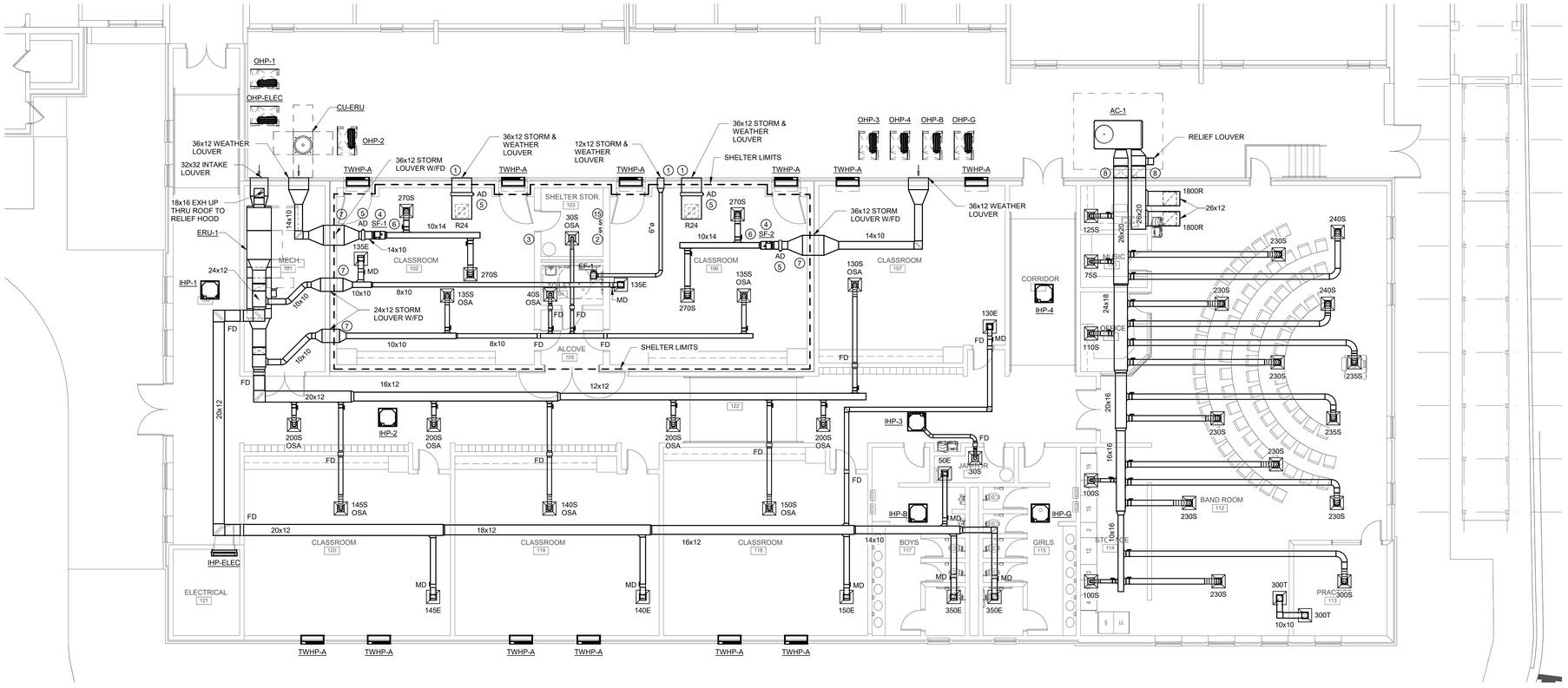
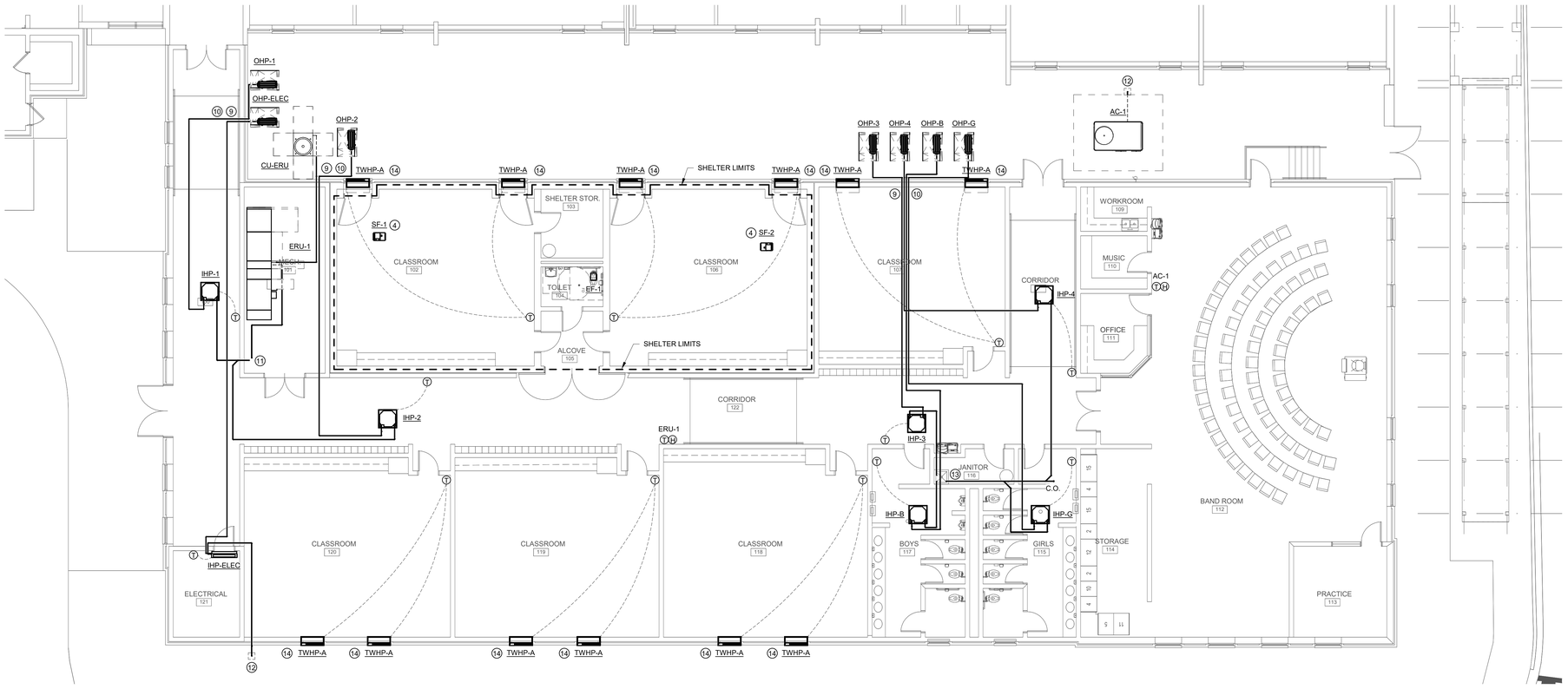


1 MECHANICAL - FLOOR PLAN
1/8" = 1'-0"

KEYED NOTES

1. HIGH IMPACT LOUVERS AND WEATHER LOUVERS. HIGH IMPACT LOUVERS SHALL MEET IMPACT TESTING CRITERIA FOR TORNADO SHELTERS IN 2020 ICC 500/FEMA 361. LOUVER TO BE GREENHECK MODEL AFL-501 OR EQUAL, SEE DETAIL. WEATHER LOUVER SHALL BE INSTALLED ON EXTERIOR WALL WITH HIGH IMPACT LOUVER INSTALLED BEHIND WEATHER LOUVER, (EXTERIOR WALL APPLICATION ONLY), TOP OF STORM LOUVER SHALL BE INSTALLED BELOW BOND BEAMS. INSTALL ACCESS DOOR FOR INSPECTION OF STORM LOUVER LABEL.
2. WALL SWITCH FOR SHELTER SUPPLY FANS TO BE ACTIVATED UPON THE LOSS OF POWER DURING A STORM EVENT, SWITCH SHALL ALSO CUT POWER TO ALL AUTOMATIC INTAKE AND RELIEF DAMPERS TO CAUSE THEM TO OPEN.
3. SIGNAGE FOR EMERGENCY VENTILATION FAN SWITCH (REFER TO ARCHITECTURAL SIGNAGE SPECIFICATIONS FOR SIGN AND TEXT COLOR AND SIZE)(COORDINATE EXACT LOCATION WITH ARCHITECT.)
4. STORM SHELTER SUPPLY FAN TO RUN WHENEVER POWER IS LOST DURING A STORM EVENT BY TURNING THE WALL SWITCH TO THE "ON" POSITION. NORMALLY, THE STORM SHELTER SUPPLY FAN SHALL BE "OFF".
5. AUTOMATIC DAMPER IS NORMALLY POWERED CLOSED AND SHALL OPEN WHEN POWER IS LOST OR BY WALL SWITCH, DAMPER SHALL RETURN TO NORMAL POSITION WHEN POWER IS RESTORED OR SWITCH IS TURNED OFF.
6. SUSPEND FAN FROM STRUCTURE WITH SPRING VIBRATION ISOLATORS. PROVIDE FLEXIBLE CONNECTION (WITH GROUNDING STRAP) ON INLET & OUTLET OF FAN.
7. HIGH IMPACT LOUVERS AND FIRE DAMPER. HIGH IMPACT LOUVERS SHALL MEET IMPACT TESTING CRITERIA FOR TORNADO SHELTERS IN 2020 ICC 500/FEMA 361. LOUVER TO BE GREENHECK MODEL AFL-501 OR EQUAL, SEE DETAIL. FIRE DAMPER TO BE INSTALLED ON SHELTER SIDE. TOP OF STORM LOUVER SHALL BE INSTALLED BELOW BOND BEAMS, INSTALL ACCESS DOOR FOR INSPECTION OF STORM LOUVER LABEL.
8. 26x20 DUCT UP EXTERIOR WALL TO CEILING SPACE.
9. REFRIGERANT LINE SETS SHOWN AS SINGLE LINE FOR CLARITY. SIZE AND ROUTE REFRIGERANT LINES PER MANUFACTURER'S RECOMMENDATIONS.
10. REFRIGERANT LINES ROUTED UP WALL AND INTO ABOVE CEILING SPACE TO INDOOR UNIT. COVER LINES WITH METAL COVERING, COLOR SELECTED BY ARCHITECT.
11. ROUTE 1" CONDENSATE DRAIN TO NEAREST FLOOR DRAIN. (SEE PLBG)
12. ROUTE 1" CONDENSATE DRAIN TO DRY WELL. (SEE DETAIL)
13. ROUTE 1" CONDENSATE DRAIN TO JANITOR SINK.
14. 1" CONDENSATE DRAIN TO DRIP ON GRADE.
15. WALL SWITCH TO BE ACTIVATED DURING A STORM EVENT. SWITCH SHALL CUT POWER TO ALL THRU WALL HEAT PUMPS IN THE SHELTER (TWHP, QTY. 4). SWITCH TO BE DEACTIVATED AFTER STORM EVENT TO ALLOW TWHP'S TO OPERATE AS NORMAL. CONTROL SUB CONTRACTOR TO COORDINATE WITH ELECTRICAL CONTRACTOR.



2 MECHANICAL PIPING - FLOOR PLAN
1/8" = 1'-0"

STORM SHELTER CALCULATIONS

MECHANICAL VENTILATION SHALL BE PROVIDED FOR THE STORM SHELTER. PER ICC-500-2020, CHAPTER 7, PART 702.4.2.

THE MECHANICAL VENTILATION SYSTEM CONSISTS OF USING A SUPPLY FAN TO PROVIDE OUTSIDE AIR AT A RATE THAT IS 5 CFM PER OCCUPANT. 216 PEOPLE x 5 CFM/PERSON = 1,080 CFM.

STORM SHELTER GENERAL NOTES

1. ALL PIPING AND DUCTWORK LOCATED WITHIN THE STORM SHELTER SHALL BE SUPPORTED WITH TRAPEZE HANGERS CONSISTING OF UNISTRUT WITH ALL-THREAD ROAD. ALL THREAD SHALL BE ATTACHED TO THE JOISTS/BEAMS IN THE SHELTER.
2. COORDINATE ALL PENETRATIONS OF SHELTER WALLS OR PROOF WITH GENERAL CONTRACTOR.
3. DO NOT PENETRATE OR CUT BOND BEAMS. WEATHER LOUVERS SHALL BE INSTALLED IN BRICK, IN FRONT OF SHELTER LOUVERS. WEATHER LOUVERS SHALL HAVE DRAINABLE BLADE. WEATHER LOUVERS SHALL BE RUSKIN ELF375 OR APPROVED EQUAL.
4. SHELTER LOUVERS SHALL BE INSTALLED IN THE SHELTER WALL. SHELTER LOUVERS SHALL BE GREENHECK MODEL AFL-501, RUSKIN XP500, OR APPROVED EQUAL. HIGH IMPACT LOUVERS SHALL MEET THE IMPACT TESTING CRITERIA FOR TORNADO SHELTERS PER ICC 500 / FEMA 361 AND SHALL BE LABELED THAT THEY HAVE BEEN TESTED TO MEET THAT REQUIREMENT.
5. SIGNAGE FOR EMERGENCY VENTILATION FAN SWITCHES (REFER TO ARCHITECTURAL SIGNAGE SPECIFICATION FOR SIGN AND TEXT COLOR AND SIZE) (COORDINATED EXACT LOCATION WITH ARCHITECT) SIGNAGE TO SAY THE FOLLOWING:

   "EMERGENCY VENTILATION FANS TO BE SWITCHED ON UPON A LOSS OF POWER IN THE SHELTER DURING A STORM EVENT."

   "ALL INTERIOR DOORS IN SHELTER ARE TO BE OPENED IF EMERGENCY VENTILATION FANS ARE ON."

   "DURING A STORM EVENT ALL AC UNITS ARE TO BE TURNED OFF AND THEIR RESPECTIVE CLOSET DOORS ARE TO BE CLOSED."

   "EMERGENCY VENTILATION FANS ARE TO BE SWITCHED OFF UPON POWER RESTORED."

A NEW CLASSROOM ADDITION FOR
COLUMBIANA MIDDLE SCHOOL
222 JOINERTOWN ROAD, COLUMBIANA, ALABAMA 35051
SHELBY COUNTY BOARD OF EDUCATION

SHEET TITLE:
MECHANICAL FLOOR PLAN



PROJ. MGR.:	JWS
DRAWN:	BTB
DATE:	OCTOBER 30, 2026
REVISIONS	

JOB NO.
LAA-26-054-00
SHEET NO:
M1.0
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LIGHTING FIXTURE SCHEDULE

MARK	MANUFACTURER	CATALOG NO.	LAMPS			MOUNTING HEIGHT	TYPE MOUNTING	RECESS DEPTH	REMARKS
			NO.	WATTS	TYPE				
A	METALUX	24CGT5535C	FURNISHED WITH FIXTURE			CEILING	RECESSED	2-1/8"	
A (EM)	METALUX	24CGT5535C-EL14W	FURNISHED WITH FIXTURE			CEILING	RECESSED	2-1/8"	SEE NOTE 1
A1 (EM)	METALUX	24CGT5535C EBPLED7W3H	FURNISHED WITH FIXTURE			CEILING	RECESSED	2-1/8"	SEE NOTES 1 & 4
B	METALUX	24CGT4535C	FURNISHED WITH FIXTURE			CEILING	RECESSED	2-1/8"	
B (EM)	METALUX	24CGT4535C-EL14W	FURNISHED WITH FIXTURE			CEILING	RECESSED	2-1/8"	SEE NOTE 1
B1 (EM)	METALUX	24CGT4535C EBPLED7W3H	FURNISHED WITH FIXTURE			CEILING	RECESSED	2-1/8"	SEE NOTES 1 & 4
C	PATHWAY LIGHTING	6VLFL2X-3000-35K-DA-6VLEDMD-SCLPF	FURNISHED WITH FIXTURE			CEILING	RECESSED	6"	
D	METALUX	4SNLED-LD4-4600SL-LW-UNV-L835-CD1	FURNISHED WITH FIXTURE			CEILING	SURFACE		
G	MCGRAW-EDISON	ISW-E02-LED-E1-BL4-BZ-TR	FURNISHED WITH FIXTURE			+9'	BRACKET		
G (EM)	MCGRAW-EDISON	ISW-E02-LED-E1-BL4-BZ-TR-BBB	FURNISHED WITH FIXTURE			+9'	BRACKET		SEE NOTE 1
H	MCGRAW-EDISON	TT-D2-740-U-MQ-BZ-F-TR	FURNISHED WITH FIXTURE			CEILING	SURFACE		
H (EM)	MCGRAW-EDISON	TT-D2-740-U-MQ-BZ-F-TR-IBP	FURNISHED WITH FIXTURE			CEILING	SURFACE		SEE NOTE 1
K	LUMENWERX	WA3P-D-HLG-FH-NA-SW-80CRI-100LM-NA-35K-1F-UNV-D1-1C-NA-ACS-X-NA-NA-NA	FURNISHED WITH FIXTURE			HEIGHT AS DIRECT BY ARCH.	PENDANT		
L	LUMENWERX	WA3P-T1-DHLG-FH-NA-SW-80CRI-120LM-NA-35K-3U-HLDGC90-D1-1C-NA-ACS-X-NA-NA-NA	FURNISHED WITH FIXTURE			HEIGHT AS DIRECT BY ARCH.	PENDANT		
X	SURE-LITES	EUX7-R-UNV	FURNISHED WITH FIXTURE			℄ ABOVE DOOR	BRACKET		SEE NOTE 1

NOTES:
1. FEED ALL "EM" FIXTURES WITH SWITCHED AND UNSWITCHED HOT LEGS. UNSWITCHED HOT LEG IS USED FOR VOLTAGE SENSING.
2. VERIFY ALL FIXTURE COLORS AND MOUNTING HEIGHTS WITH ARCHITECT PRIOR TO SUBMITTALS.
3. EQUAL FIXTURES BY LITHONIA, COLUMBIA, AND DAYBRITE WILL BE CONSIDERED APPROVED EQUALS.
4. FIXTURE TYPES A1(EM) AND B1(EM) ARE EMERGENCY LIGHTS LOCATED IN THE STORM SHELTER. THESE LIGHTS ARE SPECIFIED WITH SURE-LITES LED BATTERY PACKS THAT ARE 7 WATTS AND RATED TO RUN FOR 3 HOURS.

GENERAL NOTES

1. SERVICE TO PROJECT IS 120/208 VOLTS, 3 PHASE, 4 WIRE.
2. VERIFY ALL DOOR SWINGS WITH ARCHITECTURAL DRAWINGS BEFORE ROUGHING IN SWITCHES.
3. VERIFY EXACT LOCATION OF ALL MOTORS AND EQUIPMENT BEFORE ROUGHING IN.
4. CONTRACTOR TO VERIFY LOCATION OF ALL OUTLETS PRIOR TO INSTALLATION.
5. THE ELECTRICAL CONTRACTOR SHALL VERIFY THE EXACT LOCATION OF COUNTERTOPS AND BACKSPLASHES ON ARCHITECTURAL DETAILS AND/OR CASEWORK SHOP DRAWINGS AND ADJUST SPECIFIED MOUNTING HEIGHT OF WALL OUTLETS AS REQUIRED TO AVOID CONFLICTS.
6. CONTRACTOR WILL CHECK ALL LIGHTING FIXTURES FOR EXACT TYPE MOUNTING AND SPACE REQUIRED BEFORE ROUGHING IN.
7. FURNISH AND INSTALL PLASTER FRAMES FOR ALL RECESSED FIXTURES AS REQUIRED.
8. SUPPORT OF ALL LIGHTING FIXTURES TO BE THE RESPONSIBILITY OF THIS CONTRACTOR. FIXTURES TO BE SUPPORTED INDEPENDENT OF CEILING FROM STRUCTURAL MEMBERS OF THE BUILDING.
9. ELECTRICAL CONTRACTOR MUST CHECK THE CORRESPONDING MECHANICAL SHEETS AND BE RESPONSIBLE FOR INCLUDING PROPER SERVICE AND CONNECTIONS TO ALL MECHANICAL ITEMS SHOWN THEREON REGARDLESS OF ITS BEING OR NOT BEING SHOWN ON ELECTRICAL SHEETS.
10. ALL CONDUIT CONCEALED UNLESS SPECIFICALLY SHOWN EXPOSED.
11. COORDINATE SERVICES WITH POWER AND COMMUNICATIONS COMPANIES. REMOVE OR RELOCATE ALL POWER AND COMMUNICATIONS CIRCUITS ABOVE OR BELOW GRADE THAT WOULD OBSTRUCT THE CONSTRUCTION OF THE PROJECT OR CONFLICT IN ANY MANNER WITH COMPLETION OF THE PROJECT OR ANY CODE PERTAINING THERETO. IF UTILITY COMPANY REQUIREMENTS ARE AT VARIANCE WITH THESE DRAWINGS AND SPECIFICATIONS, THE CONTRACT PRICE SHALL INCLUDE THE ADDITIONAL COST.
12. IT IS INTENDED THAT SPECIFICATIONS AND PLANS SHALL INCLUDE EVERYTHING REQUIRED AND NECESSARY FOR PROPER AND COMPLETE INSTALLATION OF THE COMPLETE SYSTEMS SHOWN EVEN THOUGH EVERY ITEM MAY NOT BE PARTICULARLY MENTIONED IN DETAIL. THE CONTRACTOR SHALL DELIVER TO OTHER TRADES ANY EQUIPMENT THAT MUST BE INSTALLED DURING CONSTRUCTION. CONTRACTOR SHALL BE RESPONSIBLE FOR FIELD MEASUREMENTS AND COORDINATION OF THE PHYSICAL SIZE OF ALL EQUIPMENT WITH THE ARCHITECTURAL REQUIREMENTS OF THE SPACES INTO WHICH THE EQUIPMENT WILL BE INSTALLED.
13. THIS CONTRACTOR SHALL INSTALL EQUIPMENT GROUNDS THROUGHOUT THIS PROJECT, USING GREEN INSULATED GROUND WIRE. USE OF CONDUIT AS THE ONLY GROUND CONDUCTOR WILL NOT BE ALLOWED. (SIZE GROUND WIRES PER N.E.C.)
14. REMOVE ALL EXISTING PANELBOARDS, DISCONNECTS, FIXTURES, RECEPTACLES, AUXILIARY SYSTEM DEVICES, CONDUIT, CONDUCTORS, ETC. BEING RENDERED OBSOLETE BY THIS PROJECT.
15. WHERE EXISTING REMAINING CIRCUITS ARE BEING INTERRUPTED DUE TO STRUCTURAL AND/OR DESIGN CHANGES, THIS CONTRACTOR WILL EXTEND EXISTING CIRCUITS AS REQUIRED TO MAINTAIN CIRCUIT CONTINUITY TO REMAINING ACTIVE DEVICES.

CODE EXCEPTION NOTE

THIS PROJECT HAS BEEN DESIGNED UNDER ASHRAE 90.1 2013, EXCEPT AS FOLLOWS: WE TAKE EXCEPTION TO SECTION 8.4.2 FOR REQUIRING CONTROLLED RECEPTACLES, AND SECTION 8.4.3 FOR REQUIRING ENERGY MONITORING. WE OFFICIALLY REQUEST THAT THIS PROJECT BE APPROVED WITHOUT THOSE ITEMS.

ELECTRICAL SYMBOLS

A_Q^1	CEILING OUTLET – FIXTURE "A", CIRCUIT 1, SWITCH a.
	CEILING OUTLET – LED FIXTURE.
	CEILING OUTLET – LED INDUSTRIAL OR STRIP TYPE.
	WALL OUTLET – LED BRACKET TYPE.
	WALL OUTLET – LED BRACKET TYPE.
ALL RECEPTACLES SHALL BE TAMPER-RESISTANT STYLE	
	WALL OUTLET – DUPLEX OUTLET, 20A, 125V, GROUNDED, PASS & SEYMOUR PT5362A-GRY WITH PT6STR PLUG TAIL CONNECTOR.
	WALL OUTLET – DUPLEX OUTLET, 20A, 125V, GROUNDED, PASS & SEYMOUR PT5362A-GRY WITH PT6STR PLUG TAIL CONNECTOR – MOUNT AT 6" ABOVE COUNTER.
IG D	WALL OUTLET – ISOLATED GROUND DOUBLE DUPLEX OUTLET, 20A, 125V, GROUNDED, PASS & SEYMOUR PTIG5362 WITH PT6STR PLUG TAIL CONNECTOR. (THESE ARE ORANGE ISOLATED GROUND TYPE RECEPTACLES)
IG D	WALL OUTLET – ISOLATED GROUND DOUBLE DUPLEX OUTLET, 20A, 125V, GROUNDED, PASS & SEYMOUR PTIG5362 WITH PT6STR PLUG TAIL CONNECTOR. (THESE ARE ORANGE ISOLATED GROUND TYPE RECEPTACLES) MOUNT AT 6" ABOVE COUNTER
GFCI	WALL OUTLET – DUPLEX OUTLET, 20A, 125V, GROUNDED, PASS & SEYMOUR PT2095-GRY WITH PT6STR PLUG TAIL CONNECTOR.
WP GFCI	WALL OUTLET – DUPLEX OUTLET, 20A, 125V, GROUNDED, WEATHERPROOF, PASS & SEYMOUR PT2095-GRY WITH PT6STR PLUG TAIL CONNECTOR. INSTALL #WUC10-CAGV WEATHERPROOF COVER. DEVICE SHALL BE LABELED AS "EXTRA DUTY".
	WALL OUTLET – SINGLE OUTLET, 20A, 250V, 3W, BY HUBBELL OR APPROVED EQUAL.
	FLOOR OUTLET – CONDUIT STUB UP.
	CEILING OUTLET – JUNCTION BOX.
	WALL OUTLET – JUNCTION BOX WITH FLEXIBLE CONNECTION TO EQUIPMENT.
$	SWITCH OUTLET – AC TYPE, SINGLE POLE, 20A, 120/277V, HUBBELL #1221 – GREY.("N" DENOTES NARROW)
$D	SWITCH OUTLET – FLUORESCENT DIMMER – LUTRON NOVA-T SERIES #NTF-103P.
$2	SWITCH OUTLET – AC TYPE, TWO POLE, 20A, 120/277V, HUBBELL #1222 – GREY.
$3	SWITCH OUTLET – AC TYPE, THREE WAY, 20A, 120/277V, HUBBELL #1223 – GREY.
$4	SWITCH OUTLET – AC TYPE, FOUR WAY, 20A, 120/277V, HUBBELL #1224 – GREY.
$M	SWITCH MANUAL MOTOR STARTER, SINGLE POLE WITH OVERLOAD PROTECTION.
$P	SWITCH OUTLET – AC TYPE, SINGLE POLE, 20A, 120/277V, HUBBELL #12211LC.
	LIGHTING PANEL – SEE SPECIFICATIONS AND SCHEDULE.
	POWER PANELS – SEE SPECIFICATIONS AND SCHEDULE.
	BRANCH CIRCUIT CONCEALED IN WALL OR CEILING.
	BRANCH CIRCUIT CONCEALED IN FLOOR OR GROUND.
	HOMERUN TO PANELBOARD – ANY CIRCUIT WITHOUT FURTHER DESIGNATION 2 # 12 & 1 # 12(G) – 1/2" CONDUIT. 3 # 12 & 1 # 12(G) – 3/4" CONDUIT. 4 # 12 & 1 # 12(G) – 3/4" CONDUIT.
E	EMPTY CONDUIT – 3/4".
	BRANCH CIRCUIT EXPOSED.
	CONDUIT RUN DOWN WALLS, CONCEALED
	CONDUIT RUN UP WALLS, CONCEALED
	MOTOR SHOWN 5hp (TYPICAL) OR (2) 40 AMPS (TYPICAL).
	EXHAUST FAN MOTOR – FRACTIONAL HORSEPOWER.
	MAGNETIC MOTOR STARTER.
	NON-FUSED DISCONNECT SWITCH. (RT – RAINTIGHT).
	FUSED DISCONNECT SWITCH.
A.F.F.	ABOVE FINISHED FLOOR.
VER.	VERIFY LOCATION.
N.E.C.	NATIONAL ELECTRICAL CODE.
GFCI	GROUND FAULT CIRCUIT INTERRUPTER
WP	WEATHER PROOF
IG	ISOLATED GROUND
	FIRE ALARM – SMOKE DETECTOR – SEE SPEC.
	FIRE ALARM – HEAT DETECTOR – SEE SPEC.
D	FIRE ALARM – DUCT DETECTOR – SEE SPEC.
F	FIRE ALARM – MANUAL PULL STATION – SEE SPEC.
F	FIRE ALARM – STROBE LIGHT – SEE SPEC.
S	FIRE ALARM – SPEAKER STROBE – SEE SPEC.
FACP	FIRE ALARM CONTROL PANEL – EXISTING – SEE SPEC.
S.S.C.	SOUND SYSTEM CONSOLE – EXISTING BEING REPLACED – SEE SPEC.
S	SOUND SYSTEM – CEILING MOUNTED SPEAKER – SEE SPEC.
	SOUND SYSTEM – CALL-IN SWITCH – SEE SPEC.
S	SOUND SYSTEM – COMBINATION CLOCK/SPEAKER – SEE SPEC.
DF	SOUND SYSTEM – WALL CLOCK – SEE SPEC. (DF – DOUBLE FACE)
$MS	WALL SWITCH WITH BUILT IN MOTION SENSOR – COOPER #OSW-P-0451-W WITH WALL PLATE
M	CEILING MOUNTED MOTION DETECTOR – COOPER #OMC-P-1200-R
M	MOTION SENSOR SWITCHPACK – COOPER #SP20-MV (INSTALLED ABOVE LAY-IN CEILING)
M	MOTION SENSOR WIRING – LOW VOLTAGE WIRING (#14 THHN AS REQUIRED)
D	DATA CONDUIT – BELOW GRADE DATA CONDUIT WITH DATA CABLES (3/4" UNLESS OTHERWISE SPECIFIED)
	COMPUTER OUTLET – 3/4" CONDUIT WITH CABLING–SEE SPEC.
	COMPUTER OUTLET – 3/4" CONDUIT WITH CABLING–MOUNT 6" ABOVE COUNTER–SEE SPEC.
	CCTV SYSTEM – FUTURE CAMERA LOCATION – ABOVE CEILING SHALL BE 1 CAT 6 CABLE CONNTECTED TO MDF (IN 3/4" CONDUIT WHEN NOT ABOVE CEILING).
	FLOOR BOX – COMBINATION EMPTY / DATA / POWER OUTLET. PROVIDE WITH TWO DUPLEX OUTLETS (1 ISOLATED GROUND) AND EMPTY COMPARTMENTS FOR DATA AND POWER (WIREMOLD EFB10S BOX WITH EFB10SM COMPARTMENTS EFB10-B, EFB10-DP, EFB10-DEC PLATES AS REQUIRED AND EFB10S-DIVIDERS AS REQUIRED AND EFB610BTBZ COVER). ALL ISOLATED GROUND RECEPTACLES SHALL BE IDENTIFIED WITH ORANGE TRIANGLE ON FACE OR RECEPTACLE

COLOR CODE FOR ELECTRICAL WIRING

1. 120/208 V, 60Hz, 3 PHASE, 4 WIRE SYSTEM
   PHASE A–BLACK
   B–RED
   C–BLUE
   N–WHITE
2. GROUND–GREEN

COLOR CODE FOR JUNCTION BOXES

NOTE:
PAINT ALL JUNCTION BOXES AND COVERS WITH COLORS AS SHOWN BELOW. PAINTING COVERS ONLY IS NOT ACCEPTABLE.

FUNCTION:	COLOR:
LIGHTING	BLUE
POWER	GREEN
FIRE ALARM	RED
MISC. AUXILIARIES	BROWN

FIRE ALARM SYSTEM NOTES

1. PROVIDE FIRE ALARM COMPLETION DOCUMENTS AT THE STATE FINAL INSPECTION. THIS ITEM WILL BE REQUIRED BY STATE BUILDING INSPECTOR AT THE TIME OF FINAL INSPECTION (OLD CERTIFICATION FORM).
2. ADDITIONS AND ALTERATIONS TO THE FIRE ALARM SYSTEM REQUIRE TESTING, A RECORD OF COMPLETION, AND RECERTIFICATION. ALL FIRE ALARM WORK SHALL BE PERFORMED BY QUALIFIED PERSONNEL AS DEFINED IN NFPA-72 (2019) 10.4, 10.5, AND 10.18.
3. ALL WORK SHALL BE PERFORMED BY A CERTIFIED FIRE ALARM CONTRACTOR – SEE SPECS.

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Project Number:
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LATHAN McKEE ARCHITECTS

A NEW CLASSROOM ADDITION FOR
COLUMBIANA MIDDLE SCHOOL
222 JONESTOWN ROAD, COLUMBIANA, ALABAMA 35051
SHELBY COUNTY BOARD OF EDUCATION

SHEET TITLE:
SCHEDULES, SYMBOLS, AND NOTES

ALABAMA LICENSED PROFESSIONAL ENGINEER
No. 51403
10-30-26
ALFRED MICHAEL MAIALA

PROJ. MGR.: S. CRAWFORD
DRAWN: SEC
DATE: OCTOBER 30, 2026
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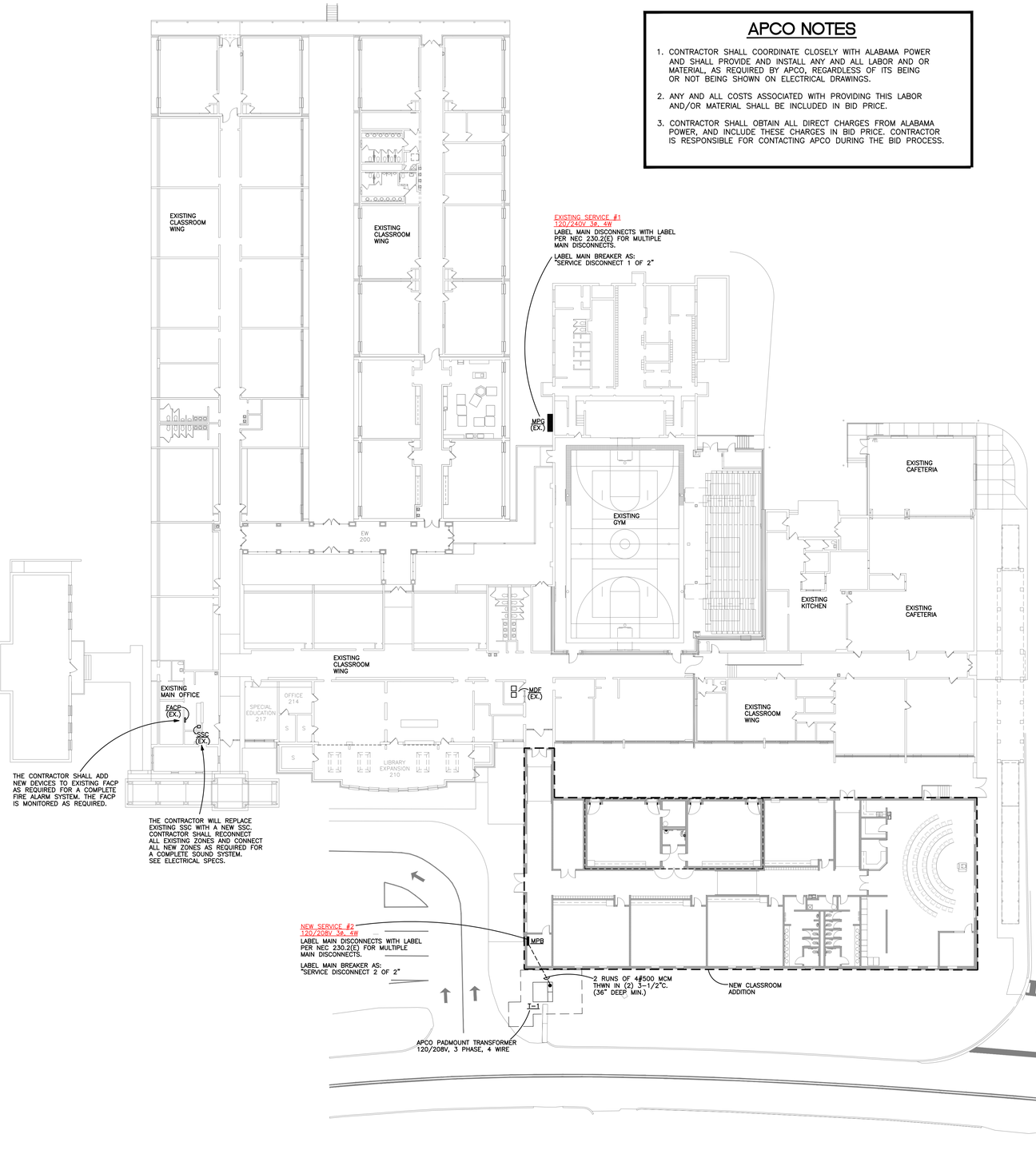
APCO NOTES

1. CONTRACTOR SHALL COORDINATE CLOSELY WITH ALABAMA POWER AND SHALL PROVIDE AND INSTALL ANY AND ALL LABOR AND OR MATERIAL, AS REQUIRED BY APCO, REGARDLESS OF ITS BEING OR NOT BEING SHOWN ON ELECTRICAL DRAWINGS.
2. ANY AND ALL COSTS ASSOCIATED WITH PROVIDING THIS LABOR AND/OR MATERIAL SHALL BE INCLUDED IN BID PRICE.
3. CONTRACTOR SHALL OBTAIN ALL DIRECT CHARGES FROM ALABAMA POWER, AND INCLUDE THESE CHARGES IN BID PRICE. CONTRACTOR IS RESPONSIBLE FOR CONTACTING APCO DURING THE BID PROCESS.



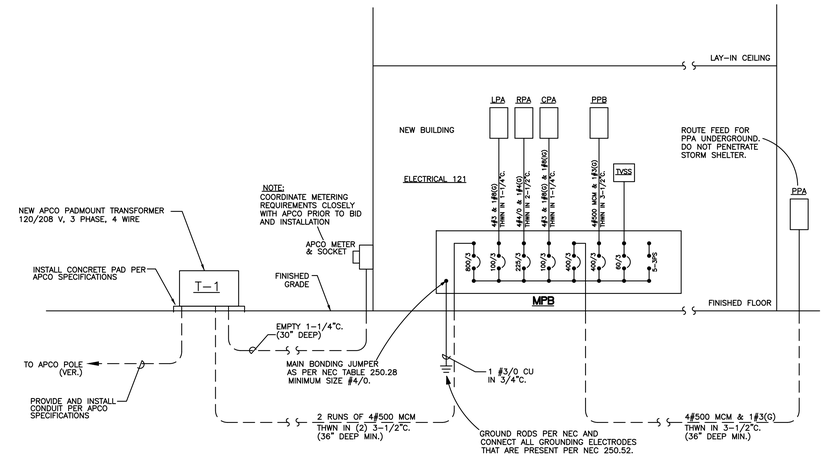
MASTER PLAN
SCALE: 1" = 30'

PANELBOARD SCHEDULE - AREA M

MARK	TYPE	MAINS			BRANCHES					LUG LOCATION	TYPE MOUNTING	AREA PANEL LOCATED	AVAILABLE FAULT CURRENT	REMARKS
		TYPE	AMPS	SERVICE	1 POLE	2 POLE	3 POLE	SPARES	SPACES					
MPB	I-LINE	M/B	800	120/208V 3ø, 4W			1-60 2-100 1-225 2-400		5-3PS	BOTTOM	SURFACE	ELEC 121	38,000	SEE NOTES 1, 2, 3, 4, & 6
LPA	NQOD	LUGS	100	120/208V 3ø, 4W	9-20			6-20/1	15-1PS	BOTTOM	SURFACE	ELEC 121	13,000	SEE NOTES 1, 2, & 4
RPA	NQOD	LUGS	225	120/208V 3ø, 4W	24-20			6-20/1	12-1PS	BOTTOM	SURFACE	ELEC 121	30,000	SEE NOTES 1, 2, & 4
CPA	NQOD	LUGS	100	120/208V 3ø, 4W	10-20		1-60	6-20/1	11-1PS	BOTTOM	SURFACE	ELEC 121	18,000	SEE NOTES 1, 2, 3, 4, & 5
PPA	I-LINE	LUGS	400	120/208V 3ø, 4W		7-20	1-45 1-175		5-3PS	BOTTOM	SURFACE	EXTERIOR	14,000	SEE NOTES 1, 2, & 4 NEMA 3R PANEL
PPB	NQOD	LUGS	400	120/208V 3ø, 4W	1-20	*2-20 12-30	2-20 1-45	6-20/1	10-1PS	BOTTOM	SURFACE	ELEC 121	26,000	SEE NOTES 1, 2, & 4 54 SPACE PANEL * - GFCI BREAKER

NOTES:
1. ALL PANELBOARDS SHALL BE CAPABLE OF WITHSTANDING AND INTERRUPTING THE AVAILABLE FAULT CURRENTS AS LISTED ABOVE.
2. ALL PANELBOARDS SHALL HAVE MICARTA LABELS SHOWING PANELBOARD DESIGNATION, AND OPERATING VOLTAGE. I-LINE PANELBOARDS SHALL ALSO HAVE MICARTA LABELS AT EACH BREAKER.
3. SHALL BE EQUIPPED WITH BUILT-IN SURGE PROTECTION, CAPABLE OF WITHSTANDING A TRANSIENT SURGE OF 160,000 AMPS. (60/3 BREAKER CALLED FOR IN MPA AND CPA FOR THIS PURPOSE).
4. NO SERIES RATING WILL BE ALLOWED ON ANY PANELBOARDS.
5. SHALL HAVE A SECOND EQUIPMENT GROUND BUS, ISOLATED FROM PANELBOARD BOX.
6. SHALL BE RATED FOR SERVICE ENTRANCE EQUIPMENT.

PANELBOARD NOTES:
1. MANUFACTURER OF SWITCHBOARDS AND/OR PANELBOARDS SHALL PERFORM FAULT CURRENT CALCULATIONS, COORDINATION STUDY, AND ARC FLASH HAZARD ANALYSIS, AND LABEL ALL SWITCHBOARDS AND/OR PANELBOARDS, IN ACCORDANCE WITH NFPA 70E-2020 (ARTICLE 130) AND NFPA 70-2021 (ARTICLE 110.16).
2. CONTRACTOR SHALL FIELD MARK ELECTRICAL SERVICE EQUIPMENT WITH A CONSPICUOUS AND PERMANENT LABEL THAT INDICATES THE AVAILABLE FAULT CURRENT PER NEC 110.24.
3. CONTRACTOR SHALL FIELD MARK ELECTRICAL PANELS WITH A CONSPICUOUS AND PERMANENT LABEL THAT INDICATES WHERE PANELS ARE FED FROM PER NEC 408.4(B).



ELECTRICAL SINGLE LINE DIAGRAM (MPB)
N.T.S.

ALUMINUM NOTE

THE CONTRACTOR SHALL HAVE THE CHOICE OF INSTALLING FEEDERS WITH ALL COPPER WIRE AS SPECIFIED, OR INSTALLING ALUMINUM FEEDERS ON ALL WIRE SIZED #3/0 AND LARGER. ALL WIRING SMALLER THAN #3/0 SHALL BE COPPER WITH NO EXCEPTIONS.

COPPER SIZE:	ALUMINUM SIZE:
3/0	250 MCM
4/0	300 MCM
350 MCM	500 MCM
500 MCM	750 MCM
600 MCM	900 MCM

CONTRACTOR SHALL INCREASE CONDUIT SIZES ACCORDINGLY TO MEET N.E.C. FILL REQUIREMENTS.

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Project Number:
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LATHAN McKEE ARCHITECTS

A NEW CLASSROOM ADDITION FOR
COLUMBIANA MIDDLE SCHOOL
222 JONESTOWN ROAD, COLUMBIANA, ALABAMA 35051
SHELBY COUNTY BOARD OF EDUCATION

SHEET TITLE:
MASTER PLAN AND SINGLE LINE DIAGRAM

ALABAMA LICENSED PROFESSIONAL ENGINEER
Alfred Michael Maiola III
No. 51403
10-30-26

PROJ. MGR.: S. CRAWFORD
DRAWN: SEC
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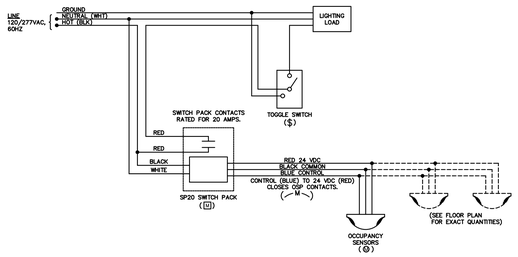
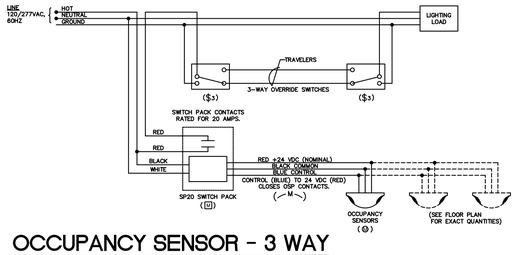


OCCUPANCY SENSOR - 1 WAY

WIRING DIAGRAM — SINGLE POWER PACK APPLICATION

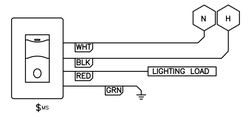
NOT TO SCALE



OCCUPANCY SENSOR - 3 WAY

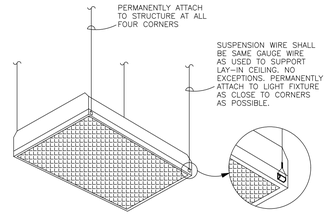
USING POWER PACK SENSORS IN A 3-WAY SWITCHED CIRCUIT

NOT TO SCALE



DETAIL - WALL SWITCH OCCUPANCY SENSOR

NOT TO SCALE

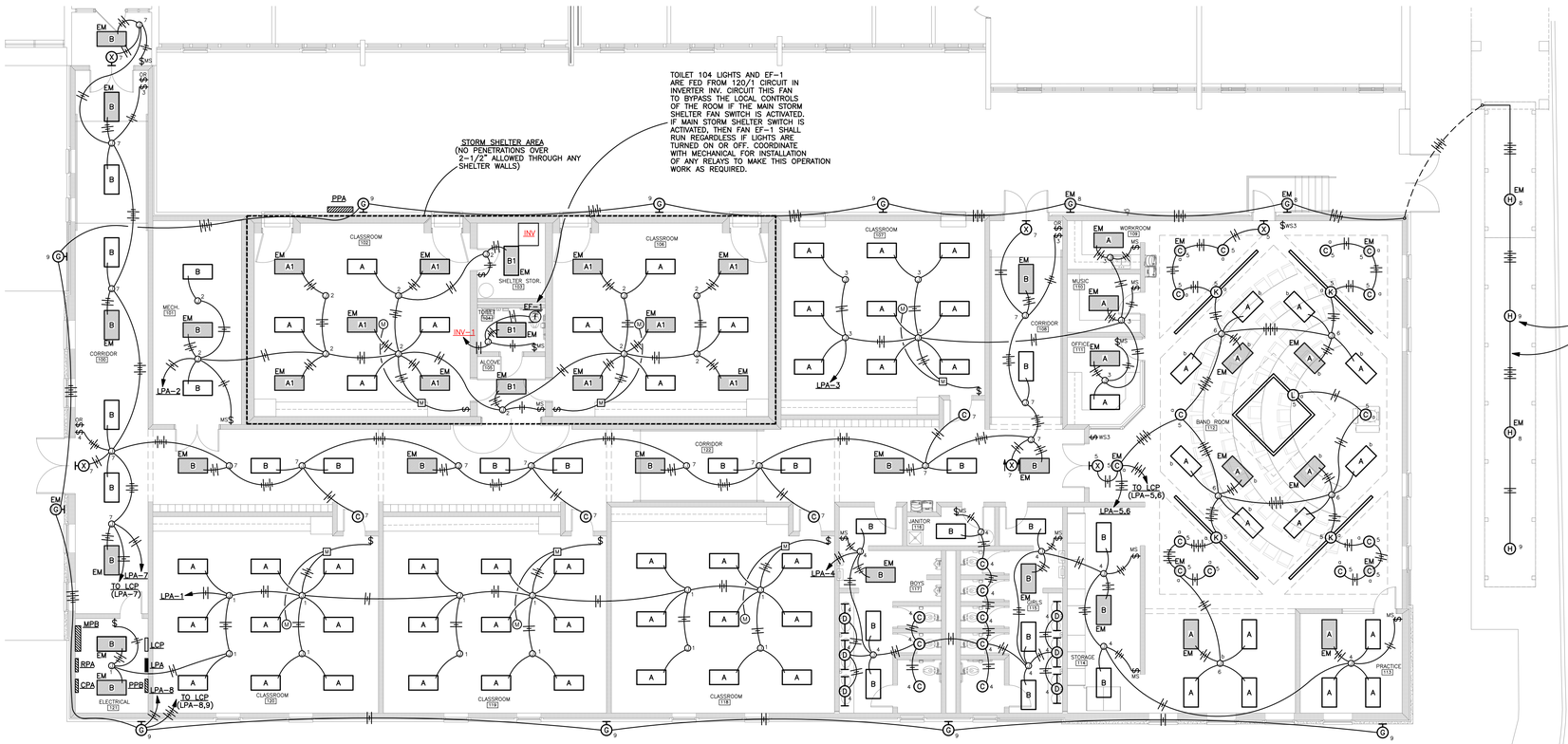


DETAIL - LIGHT FIXTURE SUPPORT

N.T.S.

ENERGY CODE NOTES:

1. LIGHTING INSTALLED WITH ROOM CONTROLS SHALL HAVE THE REQUIRED CONNECTION TO THE WALL SWITCH AND MOTION SENSORS TO ACCOMPLISH PARTIAL-ON AND MANUAL-ON. ROOM CONTROLS AND WALL STATION SHALL ALSO HAVE CONNECTIONS FOR BI-LEVEL LIGHTING WHERE REQUIRED. VERIFY ALL CONTROLS WITH LIGHTING CONTROLS MANUFACTURER DURING SITE VISIT FROM FACTORY TRAINED REPRESENTATIVE.



FLOOR PLAN - LIGHTING

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

NOTES:
1. ALL WIRING SHOWN FEEDING EXTERIOR FIXTURES SHALL BE #10 THWN.
2. ALL WIRING ASSOCIATED WITH LIGHTING CONTROL RELAY PANELS SHALL BE #10 THWN UNLESS OTHERWISE NOTED.

RELAY PANEL LCP

R	PANEL	CIRCUIT	PROGRAM MODE	
1	LPA	5	NORMAL DTD (SWITCH "a")	----- BAND ROOM PUSHBUTTON 1
2	LPA	6	NORMAL DTD (SWITCH "b")	----- BAND ROOM PUSHBUTTON 2
3	LPA	7	NORMAL DAY-TO-DAY	
4	LPA	8	EXTERIOR DUSK TO DAWN	
5	LPA	9	EXTERIOR DUSK TO MIDN.	
6				
7				
8				
9				
10				
11				
12				
13				
14				
15				
16				

COOPER GREENGATE RELAY CABINET (NETWORKABLE)
CONTROLKEEPER 16 (CKT16) WITH 16 RELAYS

SITE VISIT NOTE:
CONTRACTOR SHALL INCLUDE IN BID PRICE A TOTAL OF (3) SITE VISITS FROM FACTORY TRAINED REPRESENTATIVE FOR LIGHTING CONTROL SYSTEM INSTALLATION, PROGRAMMING, AND TRAINING.

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Alabama Reg. 51403

Project Number:
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LATHAN McKEE ARCHITECTS

A NEW CLASSROOM ADDITION FOR
COLUMBIANA MIDDLE SCHOOL
222 JONESTOWN ROAD, COLUMBIANA, ALABAMA 35051
SHELBY COUNTY BOARD OF EDUCATION

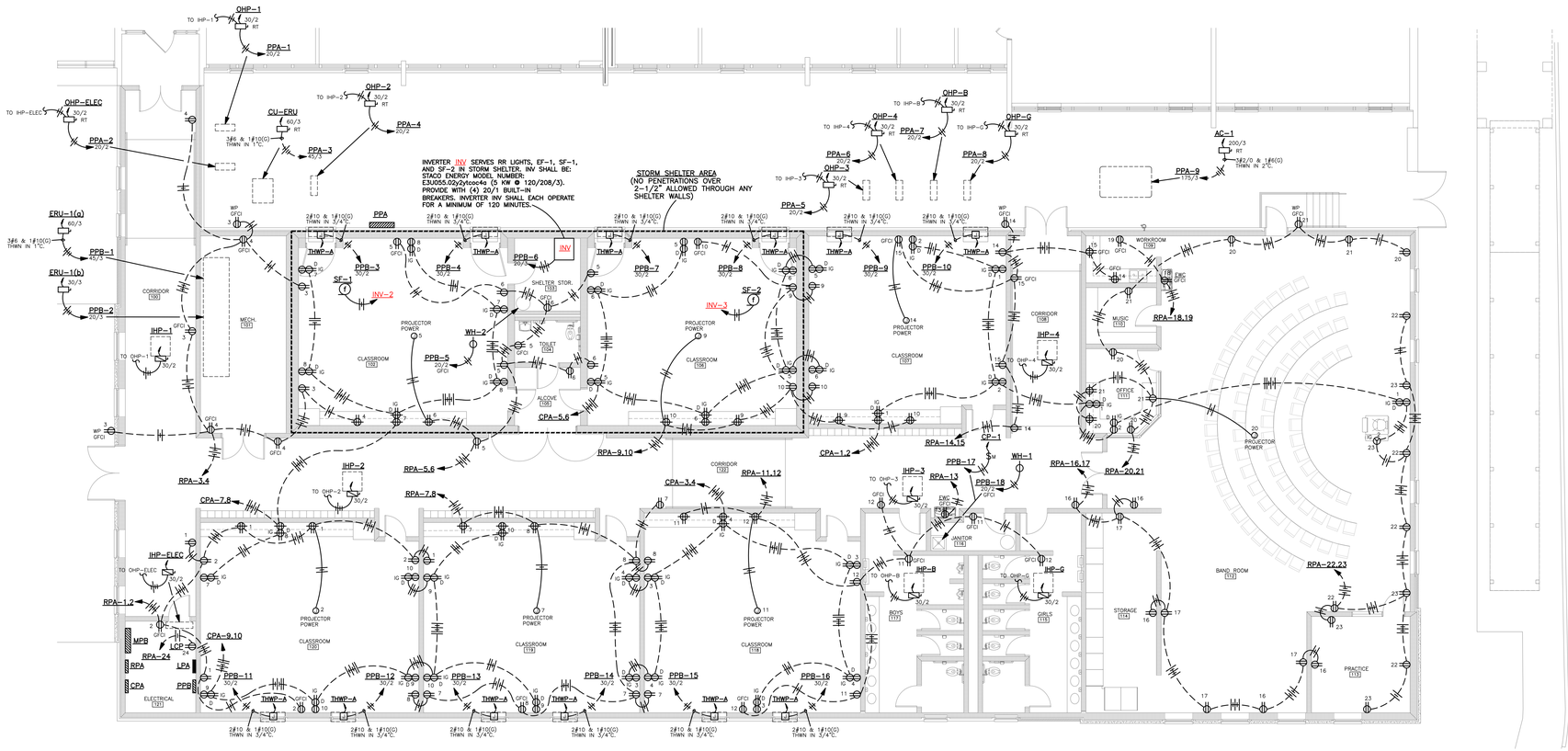
SHEET TITLE: FLOOR PLAN - LIGHTING

ALABAMA
LICENSED
PROFESSIONAL
No. 51403
10-30-26
ENGINEER
ALFRED MICHAEL MAIOLA III

PROJ. MGR.: S. CRAWFORD
DRAWN: SEC
DATE: OCTOBER 30, 2026
REVISIONS

JOB NO.
LAA-26-054-00

SHEET NO:
E3.1
3 OF 5



FLOOR PLAN - POWER

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

NOTES:

1. ALL ISOLATED GROUND TYPE RECEPTACLE OUTLET BRANCH CIRCUITS CONTAIN TWO EQUIPMENT GROUNDING CONDUCTORS. ONE INSULATED GROUND WIRE, CONNECTED TO THE ISOLATED GROUND BUS AT PANELBOARD, CONNECTS TO GROUNDING SCREW ON THE ACTUAL RECEPTACLE. THE OTHER, CONNECTED TO THE "NORMAL" EQUIPMENT GROUND BUS AT PANELBOARD, CONNECTS TO A GROUNDING SCREW IN THE RECEPTACLE OUTLET BOX. ALL ISOLATED GROUND RECEPTACLES SHALL BE IDENTIFIED WITH AN ORANGE TRIANGLE ON FACE OF RECEPTACLE.
2. COORDINATE ALL OUTLETS AT COUNTER AREAS CLOSELY WITH ARCHITECTURAL CASEWORK DRAWINGS. PLACE OUTLETS BELOW COUNTERS, AT STANDARD MOUNTING HEIGHT, WHEN KNEE SPACE PERMITS ACCESS (COORDINATE INSTALLATION OF HOLES WITH RUBBER GROMMETS IN THOSE CASES).
3. COORDINATE INSTALLATION OF OUTLETS CLOSELY WITH FURNITURE SUPPLIER.
4. ALL BRANCH CIRCUIT HOME RUNS THAT EXCEED 100' IN LENGTH SHALL BE #10 THWN.

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SHELBY COUNTY BOARD OF EDUCATION

SHEET TITLE:
FLOOR PLAN - POWER

ALABAMA LICENSED PROFESSIONAL ENGINEER
No. 51403
10-30-26
REGISTERED MICHAEL MAIOLA

PROJ. MGR.:	S. CRAWFORD
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0 1" 2"

AUXILIARY CIRCUIT LEGEND

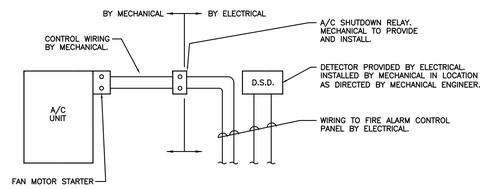
SS1 (S)	SPEAKER – FED FROM COMMON ZONE SS1
2A	DATA OUTLET 2A (1 CAT. 6 CABLE PULLED TO JUNCTION BOX AND TERMINATED, LEAVE 12" SLACK ON EACH CABLE)
SSA8 (S) CPSA (C)	SPEAKER/CLOCK – SPEAKER ON INDIVIDUAL ZONE SSA8 CLOCK FED FROM CPS1

OUTLET NUMBER:	ROOM NUMBER:
2A	104
IDF NUMBER:	PATCH PANEL/PORT #:
MDF	1 / 1

DETAIL – DATA CABLE LABEL

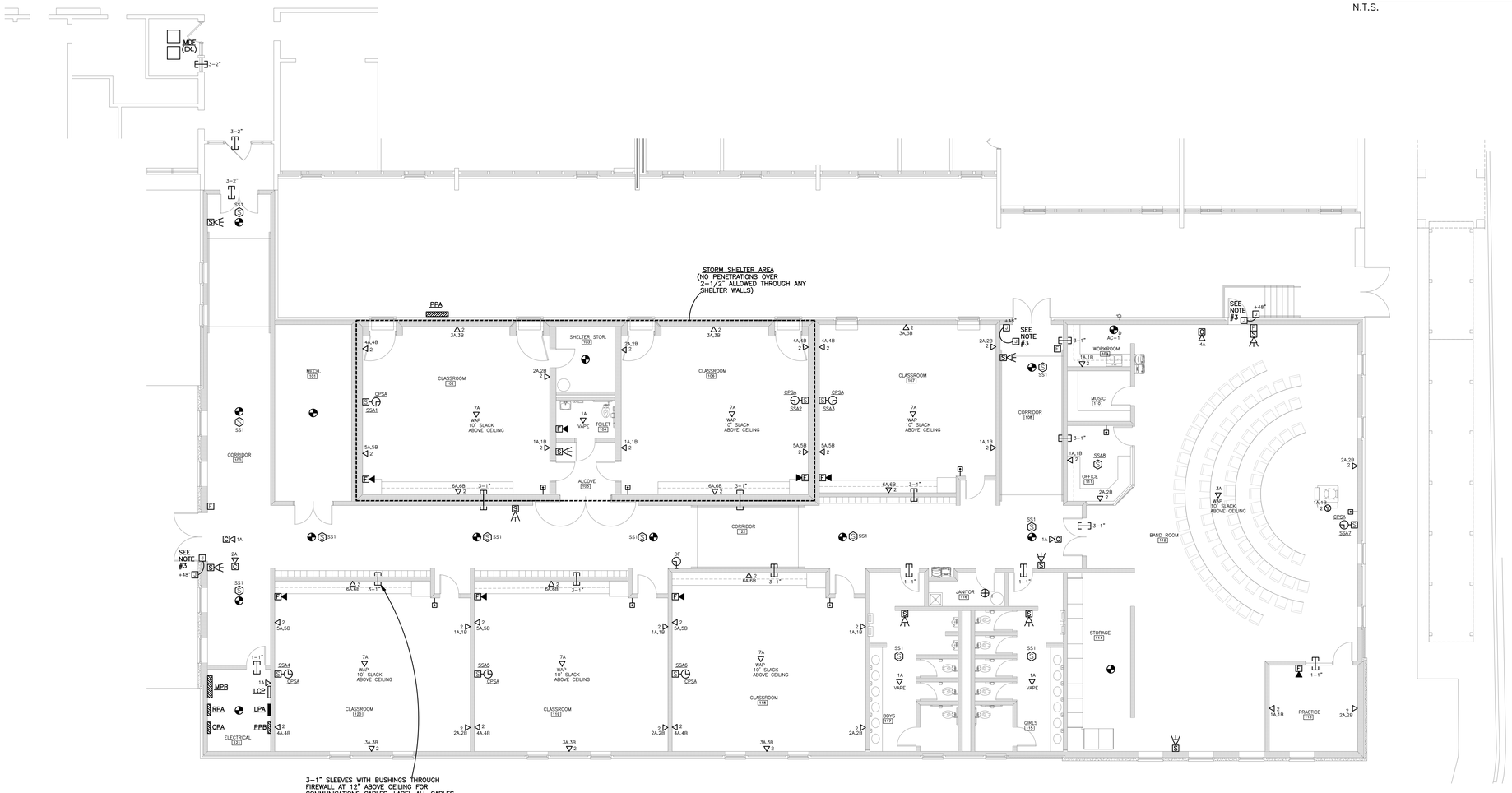
N.T.S.

NOTES:
1. LABEL ALL CABLES EVERY 50' AND AT EACH END.
2. EXACT LABEL METHOD SHALL BE COORDINATED WITH, AND APPROVED BY, ENGINEER PRIOR TO PURCHASE AND INSTALLATION.
3. IF ONLY ONE (1) OUTLET IN A ROOM, LABEL OUTLET AS 1A.
4. ROOM NUMBERS ON LABELS SHALL CORRESPOND TO FINAL ROOM NUMBERS IN FIELD (NOT NECESSARILY SAME AS ON CONSTRUCTION DRAWINGS).



DETAIL – DUCT SMOKE DETECTOR CONNECTION

N.T.S.



FLOOR PLAN – AUXILIARIES

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

NOTES:
1. ALL COMPUTER OUTLETS SHOWN ON THIS PLAN ARE SERVED FROM MDF(EX.).
2. COORDINATE FINAL LOCATIONS OF ALL CEILING SPEAKERS, SMOKE DETECTORS, CAMERAS, ETC. TO AVOID CONFLICT WITH LIGHT FIXTURES AND MECHANICAL DIFFUSERS. PLACE THESE DEVICES AS CLOSE AS POSSIBLE TO LOCATION SHOWN ON THESE DRAWINGS. COORDINATE WITH FIRE ALARM SYSTEM MANUFACTURER WITH REGARD TO APPROPRIATE "MINIMUM" DISTANCE FROM DIFFUSERS.
3. AT THESE DOOR LOCATIONS, CONTRACTOR SHALL INSTALL EMPTY JUNCTION BOX WITH 3/4" EMPTY CONDUIT WITH PULL STRING TO ABOVE LAY-IN CEILING FOR FUTURE CARD ACCESS SYSTEM. COORDINATE CLOSELY WITH ARCHITECT FOR DOOR HARDWARE CONFIGURATION.

LATHAN McKEE ARCHITECTS

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SHEET TITLE: FLOOR PLAN – AUXILIARIES

ALABAMA LICENSED PROFESSIONAL ENGINEER No. 51403 ALFRED MICHAEL MAIOLA 10-30-26

PROJ. MGR.:	S. CRAWFORD
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0 1" 2"