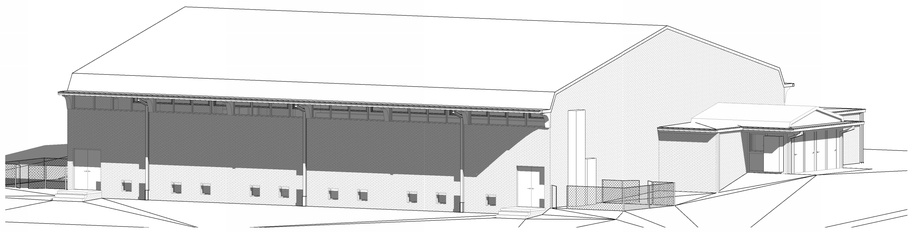
MOORE COUNTY SCHOOLS

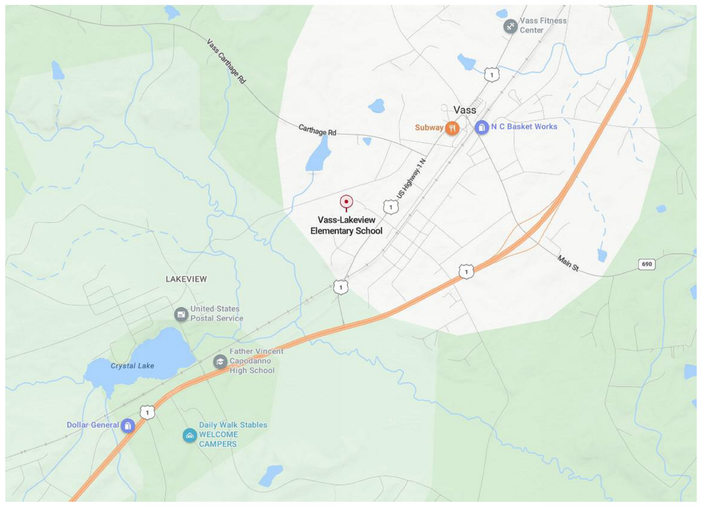
VASS-LAKEVIEW ELEM. GYM. RENO.

141 JAMES ST, VASS NC 28394

RENDERING



VICINITY MAP



DRAWING INDEX

...Becoming the Leading Designer of High Performance Facilities in the Nation with a Specialty in Alternative Delivery Methods

333 Fayetteville St, Ste 225
Raleigh, NC 27601
P: 919.573.6350
F: 919.573.6355
www.sfla.biz

sfL+a ARCHITECTS

CONSULTANTS

PLUMBING/MECHANICAL/ ELECTRICAL ENGINEER

Triad Engineering Consultants, Inc.
2638 Willard Dairy Road, Suite 100
High Point, NC 27265
P. (336) 338-8943

ROOFING ENGINEER

Terracon Consultants, Inc.
2701 Westport Road
Charlotte, NC 28208
P. (704) 594-8931

SET NUMBER:

11/22/23

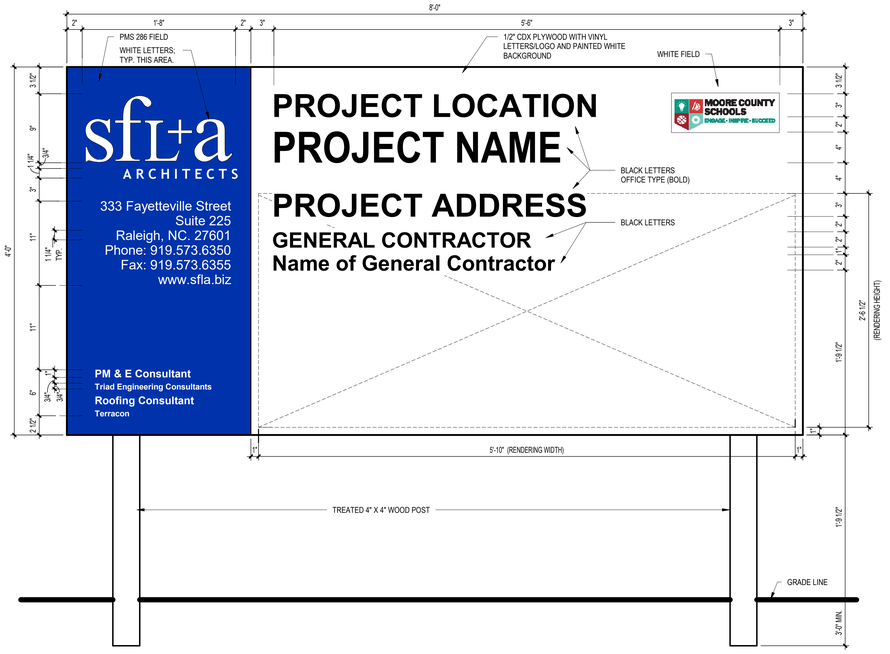
BID SET

MOORE COUNTY SCHOOLS

VASS-LAKEVIEW ELEM. GYM. RENO.

141 JAMES ST, VASS NC 28394

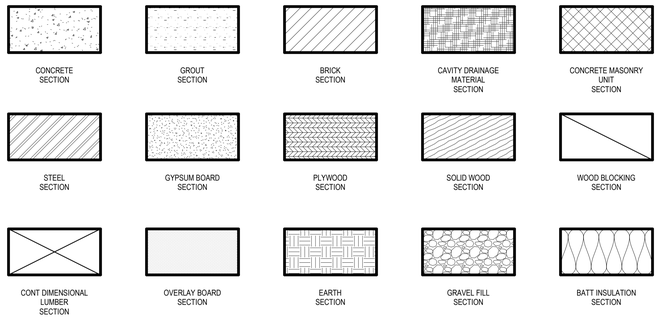
PROJECT NUMBER: 02206.100



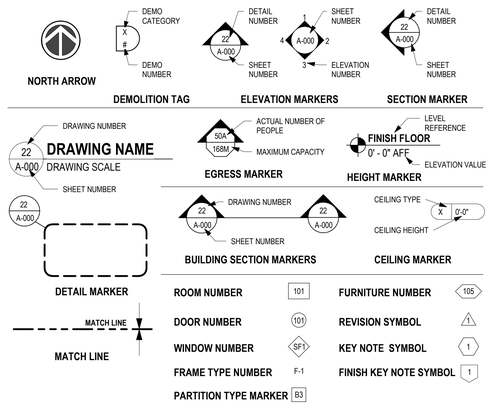
ABBREVIATIONS

A/C	AIR CONDITIONING
AB	ANCHOR BOLT
AD	AREA DRAIN
ADJ	ADJUSTABLE
AFF	ABOVE FINISHED FLOOR
ALT	ALTERNATE
ALUM	ALUMINUM
AMP	AMPERE
APPROX	APPROXIMATE
ARCH	ARCHITECT (URAL)
AUTO	AUTOMATIC
BB	BULLETIN BOARD
BBRG	BEAM BEARING
BD	BOARD
BFF	BELOW FINISHED FLOOR
BIT	BITUMINOUS
BLDG	BUILDING
BLK	BLOCK (ING)
BM	BENCH MARK
BOD	BOTTOM OF DECK
BTM	BOTTOM
BPL	BEARING PLATE
BRG	BEARING
BSMT	BASEMENT
BTW	BETWEEN
BUR	BUILT-UP ROOFING
BW	BOTH WAYS
CB	CATCH BASIN
CAB	CABINET
CEM	CEMENT
CER	CERAMIC
CF	CUBIC FOOT
CI	CAST IRON
CIP	CAST-IN-PLACE
CJ	CONTROL JOINT
CL	CENTERLINE
CLG	CEILING
CLOS	CLOSET
CLR	CLEAR (ANCE)
CMP	COMPOSITE METAL PANEL
CMT	CERAMIC MOSAIC (TILE)
CMU	CONCRETE MASONRY UNIT
COL	COLUMN
CONC	CONCRETE
CONST	CONSTRUCTION
CONTR	CONTRACT (OR)
CORR	CORRIDOR
CPT	CARPET (ED)
CSMT	CASEMENT
CT	CERAMIC TILE
CTR	CENTER
CY	CUBIC YARD
DEMO	DEMOLISH, DEMOLITION
DET	DETAIL
DF	DRINKING FOUNTAIN
DH	DOUBLE HUNG
DIAM	DIAMETER
DIM	DIMENSION
DISP	DISPENSER
DIV	DIVISION
DL	DEAD LOAD
DM	DECORATIVE MASONRY
DPR	DAMPER
DR	DOOR
DS	DOWNSPOUT
DT	DRAIN TILE
DWG	DRAWING
E	EAST
EA	EACH
EC	ELECTRICAL CONTRACTOR
EJ	EXPANSION JOINT
ELEC	ELECTRIC
ELEV	ELEVATION
EMER	EMERGENCY
ENCL	ENCLOSE (URE)
ENG	ENGINEER (ING)
EOD	EMERGENCY OVERFLOW DRAIN
EP	ELECTRIC PANEL
EQ	EQUAL
EQP	EQUIPMENT
EST	ESTIMATE
EWC	ELECTRIC WATER COOLER
EXH	EXHAUST
EXIST	EXISTING
EXP	EXPANSION
EXT	EXTERIOR
FA	FIRE ALARM
FB	FACE BRICK
FD	FLOOR DRAIN
FDN	FOUNDATION
FE	FIRE EXTINGUISHER
FEC	FIRE EXTINGUISHER CABINET
FFE	FINISH FLOOR ELEVATION
FHC	FIRE HOSE CABINET
FIN	FINISH (ED)
FLR	FLOOR (ING)
FLUOR	FLUORESCENT
FLEX	FLEXIBLE
FOB	FACE OF BRICK
FOGB	FACE OF GYPSUM BOARD
FP	FIREPROOF
FR	FRAME (D)
FRMG	FRAMING
FRT	FIRE-RETARDANT
FT	FOOT / FEET
FTG	FOOTING
FUR	FURRED (ING)
GA	GAGE, GAUGE
GALV	GALVANIZED
GB	GRAB BAR
GBL	GLASS BLOCK
GC	GENERAL CONTRACT (OR)
GCMU	GLAZED CONC. MASONRY UNIT
GF	GROUND FACE
GFRC	GLASS FIBER RE. CONC.
GL	GLASS, GLAZING
GP	GALVANIZED PIPE
GYP	GYPSUM
GWB	GYPSUM WALL BOARD
HB	HOSE BIBB
HC	HOLLOW CORE
HD	HEAVY DUTY
HDR	HEADER
HDW	HARDWARE
HM	HOLLOW METAL
HOR	HORIZONTAL JOINT REINFORCEMENT
HJT	
HT	HEIGHT
HTG	HEATING
HWD	HARDWOOD
HWH	HOT WATER HEATER
HVAC	HEATING / VENTILATING / A/C
ID	INSIDE DIAMETER
IN	INCH
INCL	INCLUDE (D), (ING)
INT	INTERIOR
INV	INVERT
IWB	INTERACTIVE WHITE BOARD
JAN	JANITOR
JC	JANITOR'S CLOSET
JT	JOINT
JST	JOIST
KD	KNOCK DOWN
KIT	KITCHEN
KPL	KICK PLATE
L	LENGTH
LAB	LABORATORY
LAD	LADDER
LAV	LAVATORY
LB	LAG BOLT
LBL	LABEL
LBS	POUND (S)
LH	LEFT HAND
LT	LIGHT
LW	LIGHTWEIGHT
LWC	LIGHTWEIGHT CONCRETE
LVL	LAMINATED VENEER LUMBER
MAS	MASONRY
MAT	MATERIAL (S)
MAX	MAXIMUM
MB	MARKER BOARD
MC	MECHANICAL CONTRACTOR
MECH	MECHANICAL
MED	MEDIUM
MFR	MANUFACTURE (R)
MIN	MINIMUM
MIR	MIRROR
MISC	MISCELLANEOUS
MH	MANHOLE
MEMB	MEMBRANE
MO	MASONRY OPENING
MR	MOISTURE RESISTANT
MUL	MULLION
MTL	METAL
N	NORTH
NA	NOT APPLICABLE
NIC	NOT IN CONTRACT
NOM	NOMINAL
NRC	NOISE REDUCTION COEFFICIENT
NTS	NOT TO SCALE
OA	OVERALL
OC	ON CENTER
OD	OUTSIDE DIAMETER
OH	OVERHEAD
OPG	OPENING
OPP	OPPOSITE
OPPH	OPPOSITE HAND
OS	OVERFLOW SCUPPER
PAR	PARALLEL
PBD	PARTICLE BOARD
PC	PLUMBING CONTRACTOR
PCF	POUNDS PER CUBIC FOOT
PCT	PORCELAIN CERAMIC TILE
PERF	PERFORATED
PERIM	PERIMETER
PG	PLATE GLASS
PLAM	PLASTIC LAMINATE
PLAS	PLASTER
PLF	POUNDS PER LINEAL FOOT
PT	PRESSURE TREATED
PRV	POWER ROOF VENT
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PTD	PAPER TOWEL DISPENSER
PTN	PARTITION
PVC	POLYVINYL CHLORIDE
PWD	PLYWOOD
QT	QUARRY TILE
R	RISER
RA	RETURN AIR
RAD	RADIUS
RB	RUBBER BASE
RT	RUBBER TILE
RCP	REINFORCED CONCRETE PIPE
RD	ROOF DRAIN
REIN	REINFORCE (D), (ING)
REF	REFERENCE
REFR	REFRIGERATOR
REG	REGISTER
REQ	REQUIRED
RET	RETURN
REV	REVISION (S), REVISED
RH	RIGHT HAND
RM	ROOM
RO	ROUGH OPENING
S	SOUTH
SAP	SUSPENDED ACOUSTICAL PANELS
SB	SPLASH BLOCK
SC	SOLID CORE
SCH	SCHEDULE
SD	STORM DRAIN
SEC	SECTION
SF	STOREFRONT
SIM	SIMILAR
SND	SANITARY NAPKIN DISPOSAL
SNV	SANITARY NAPKIN VENDOR
SP	SOUNDPROOF
SPKR	SPEAKER
SQ	SQUARE
SS	STAINLESS STEEL
STC	SOUND TRANSMISSION CLASS
STD	STANDARD
STR	STRUCTURAL
SUS	SUSPENDED
SYM	SYMMETRICAL
SYS	SYSTEM
T	TREAD
T&G	TONGUE AND GROOVE
TB	TACK BOARD
TEL	TELEPHONE
TG	TEMPERED GLASS
THR	THRESHOLD
TP	TOILET PARTITION
TOB	TOP OF BEAM
TOF	TOP OF FOOTING
TOM	TOP OF MASONRY
TOS	TOP OF STEEL
TOW	TOP OF WALL
TS	TACK STRIP
TTD	TOILET TISSUE DISPENSER
TYP	TYPICAL
UL	UNDERWRITER'S LABORATORY
UNO	UNLESS NOTED OTHERWISE
UR	URINAL
US	UTILITY SHELF
V	VOLT
VCT	VINYL COMPOSITION TILE
VERT	VERTICAL
VEN	VENEER
VIF	VERIFY IN FIELD
VR	VAPOR RETARDER
VTR	VENT THROUGH ROOF
VWC	VINYL WALL COVERING
W	WEST
WB	WOOD BASE
WC	WATER CLOSET
WD	WOOD
WG	WIRE GLASS
WH	WALL HUNG
WI	WROUGHT IRON
WM	WIRE MESH
W/O	WITHOUT
WP	WATERPROOFING
WT	WEIGHT
WWF	WELDED WIRE FABRIC

SYMBOLS LEGEND



KEY SYMBOLS LEGEND



GENERAL NOTES

1. WALL DIMENSIONS ARE TO FACE OF MASONRY, FACE OF METAL STUD, FACE OF STEEL OR CENTERLINE & STEEL COLUMN, UNLESS OTHERWISE NOTED. DETERMINE LOCATION OF WALLS NOT DIMENSIONED BY THEIR RELATION TO ADJACENT DIMENSIONED WALLS AND COLUMNS.
2. ALL EXTERIOR SIDEWALKS SHALL SLOPE AWAY FROM THE BUILDING AT 1/4" PER FOOT.
3. MAINTAIN INTEGRITY OF ACOUSTIC WALLS AND CEILINGS AT ALL WALL PENETRATIONS AND EQUIPMENT RECESSES.
4. ALL CERAMIC TILE TO HAVE CONTROL JOINTS THAT ALIGN WITH CONTROL JOINTS IN CONCRETE SLAB.
5. THERE SHALL BE NO PENETRATIONS IN THROUGH WALL FLASHING.
6. DOOR JAMB FROM INTERSECTING WALLS: STUD - 4" TYPICAL UNLESS OTHERWISE NOTED.
7. CONTRACT SHALL AVOID THE USE OF DISSIMILAR METALS IN CONTACT WITH ONE ANOTHER AS MUCH AS POSSIBLE AND SHALL PROVIDE FELTS, BOND BREAKERS, TAPE, OR OTHER APPLICABLE MATERIAL SEPARATION WHERE SUCH CONTACT IS UNAVOIDABLE.

...Becoming the Leading Designer of High Performance Facilities in the Nation with a Specialty in Alternative Delivery Methods

333 Fayetteville St, Ste 225
Raleigh, NC 27601
P: 919.573.6350
F: 919.573.6355
www.sfla.biz

sfl+a ARCHITECTS

sfl+a ARCHITECTS, P.A. CERT. NO. 50676 NORTH CAROLINA REGISTERED RALEIGH

NAHAH R. KOCH REGISTERED ACCOUNTANT 31647 NORTH CAROLINA RALEIGH, NC 11/22/2023

BID SET

MOORE COUNTY SCHOOLS

VASS-LAKEVIEW ELEM. GYM. RENO.

141 JAMES ST, VASS NC 28394

No.	Date	Description

ISSUE DATE: 11/22/23

PROJECT #: 02206.100
DRAWN BY: JK
CHECKED BY: MK

GENERAL NOTES, ABBREVIATIONS & LEGENDS

A-001

2018 APPENDIX B
BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS
(EXCEPT 1 AND 2-FAMILY DWELLINGS AND TOWNHOUSES)
(Reproduce the following data on the building plans sheet 1 or 2)

Name of Project: Vass-Lakeview Elementary Gymnasium Improvement
Address: 141 James Street, Vass NC Zip Code: 28394
Owner/Authorized Agent: Jennifer Purvis Phone # E-Mail : jcpurvis@mcmcs.org
Owned By: County
Code Enforcement Jurisdiction: County

CONTACT:

DESIGNER	FIRM	NAME	LICENSE #	TELEPHONE #	E-MAIL
Architectural	sfL+a Architects	Mahan Kick	11847	919-621-4574	mkick@sfla.biz
Civil					
Electrical	Triad Engineering	Perry Gulledge	14498	336-338-8943	PGulledge@TriadEngMEP.com
Fire Alarm	Triad Engineering	Perry Gulledge	14498	336-338-8943	PGulledge@TriadEngMEP.com
Plumbing	Triad Engineering	Perry Gulledge	14498	336-338-8943	PGulledge@TriadEngMEP.com
Mechanical	Triad Engineering	Perry Gulledge	14498	336-338-8943	PGulledge@TriadEngMEP.com
Sprink.-Standpipe					
Structural					
Retaining Walls >5' High					
Other	Roofing Consultant	Kevin Loftus		984-202-7391	kevin.loftus@terracon.com

("Other" should include firms and individuals such as truss, precast, pre-engineered, interior designers, etc.)

2018 NC BUILDING CODE: Renovation
2018 NC EXISTING BUILDING CODE: Alteration Level II N/A N/A
CONSTRUCTED: (date) _____ **CURRENT OCCUPANCY(S)** (Ch. 3): _____
RENOVATED: (date) _____ **PROPOSED OCCUPANCY(S)** (Ch. 3): No Change
RISK CATEGORY (Table 1604.5): **Current:** II **Proposed:** III

BASIC BUILDING DATA
Construction Type: III B
Sprinklers: No N/A
Standpipes: No
Primary Fire District: No **Flood Hazard Area:** Yes
Special Inspections Required: Yes (Contact the local inspection jurisdiction for additional procedures and requirements.)

Gross Building Area Table

FLOOR	EXISTING (SQ FT)	NEW (SQ FT)	SUB-TOTAL
3rd Floor			
2nd Floor			
Mezzanine			
1st Floor	*8,536	0	8,536
TOTAL			8,536

*NO CHANGE IN BUILDING SQUARE FOOTAGE. RENOVATION WORK CONTAINED TO EXIST BLDG FOOTPRINT.

ALLOWABLE AREA

Primary Occupancy Classification(s): Educational Select one Select one Select one Select one Select one
Accessory Occupancy Classification(s): _____
Incidental Uses (Table 509): _____
Special Uses (Chapter 4 – List Code Sections): _____
Special Provisions: (Chapter 5 – List Code Sections): _____
Mixed Occupancy: Select one Separation: Select one Exception: _____
Select one

$$\frac{\text{Actual Area of Occupancy A}}{\text{Allowable Area of Occupancy A}} + \frac{\text{Actual Area of Occupancy B}}{\text{Allowable Area of Occupancy B}} \leq 1$$

_____ + _____ + ... = _____ ≤ 1.00

STORY NO.	DESCRIPTION AND USE	(A) BLDG AREA PER STORY (ACTUAL)	(B) TABLE 506.2[4] AREA	(C) AREA FOR FRONTAGE INCREASE[1,2]	(D) ALLOWABLE AREA PER STORY OR UNLIMITED[2,3]
1	A-3	8,536	9,500	-	9,500

[1] Frontage area increases from Section 506.3 are computed thus:
a. Perimeter which fronts a public way or open space having 20 feet minimum width = (F)
b. Total Building Perimeter = (P)
c. Ratio (F/P) = I (F/P)
d. W = Minimum width of public way = 30 (W)
e. Percent of frontage increase I = 100[(F/P - 0.25) x W/30 = 75 (%)
[2] Unlimited area applicable under conditions of Section 507.
[3] Maximum Building Area = total number of stories in the building x D (maximum 3 stories) (506.2).
[4] The maximum area of open parking garages must comply with Table 406.5.4.
[5] Frontage increase is based on the unsprinklered area value in Table 506.2.

ALLOWABLE HEIGHT

	ALLOWABLE	SHOWN ON PLANS	CODE REFERENCE [1]
Building Height in Feet (Table 504.3) [2]	55'	*No change	
Building Height in Stories (Table 504.4) [3]	2	1	

[1] Provide code reference if the "Shown on Plans" quantity is not based on Table 504.3 or 504.4.
[2] The maximum height of air traffic control towers must comply with Table 412.3.1.
[3] The maximum height of open parking garages must comply with Table 406.5.4.
*NO CHANGE IN BUILDING HEIGHT. RENOVATION WORK CONTAINED TO EXIST BLDG ENVELOPE

FIRE PROTECTION REQUIREMENTS

BUILDING ELEMENT	FIRE SEPARATION DISTANCE (FEET)	RATING REQ'D	RATING PROVIDED (W/ _____ REDUCTION)	DETAIL # AND SHEET #	DESIGN # FOR RATED ASSEMBLY	SHEET # FOR RATED PENETRATION	SHEET # FOR RATED JOINTS
Structural Frame, including columns, girders, trusses		0	0				
Bearing Walls							
Exterior							
North	> 30'	0	*1 (Existing wall)				
East	> 30'	0	*1 (Existing wall)				
West	> 30'	0	*1 (Existing wall)				
South	> 30'	0	*1 (Existing wall)				
Interior		0	0				
Nonbearing Walls and Partitions							
Exterior walls							
North		N/A	N/A				
East		N/A	N/A				
West		N/A	N/A				
South		N/A	N/A				
Interior walls and partitions		0	0				
Floor Construction Including supporting beams and joists		N/A	N/A				
Floor Ceiling Assembly		N/A	N/A				
Columns Supporting Floors		N/A	N/A				
Roof Construction, including supporting beams and joists		0	0				
Roof Ceiling Assembly		N/A	N/A				
Columns Supporting Roof		N/A	N/A				
Shaft Enclosures - Exit		N/A	N/A				
Shaft Enclosures - Other		N/A	N/A				
Corridor Separation		0	0				
Occupancy/Fire Barrier Separation		0	0				
Party/Fire Wall Separation		N/A	N/A				
Smoke Barrier Separation		N/A	N/A				
Smoke Partition		N/A	N/A				
Tenant/Dwelling Unit/ Sleeping Unit Separation		N/A	N/A				
Incidental Use Separation		N/A	N/A				

* Indicate section number permitting reduction

PERCENTAGE OF WALL OPENING CALCULATIONS

FIRE SEPARATION DISTANCE (FEET) FROM PROPERTY LINES	DEGREE OF OPENING PROTECTION (TABLE 705.8)	ALLOWABLE AREA (%)	ACTUAL SHOWN ON PLANS (%)
North: > 30'	UP, NS	No Limit	-
South: > 30'	UP, NS	No Limit	-
West: > 30'	UP, NS	No Limit	-
East: > 30'	UP, NS	No Limit	-

* EXISTING WINDOWS/WALL OPENINGS ARE BEING REPLACED. NO NEW OPENINGS ARE BEING CREATED OR ADDITIONAL OPENINGS BEING PROVIDED.

LIFE SAFETY SYSTEM REQUIREMENTS

Emergency Lighting: Yes
Exit Signs: Yes
Fire Alarm: Yes
Smoke Detection Systems: Yes
Carbon Monoxide Detection: No

LIFE SAFETY PLAN REQUIREMENTS

Life Safety Plan Sheet #: This sheet

- ☐ Fire and/or smoke rated wall locations (Chapter 7)
- ☒ Assumed and real property line locations (if not on the site plan)
- ☒ Exterior wall opening area with respect to distance to assumed property lines (705.8)
- ☒ Occupancy Use for each area as it relates to occupant load calculation (Table 1004.1.2)
- ☒ Occupant loads for each area
- ☒ Exit sign locations (1013)
- ☒ Exit access travel distances (1017)
- ☒ Common path of travel distances (Tables 1006.2.1 & 1006.3.2(1))
- ☐ Dead end lengths (1020.4)
- ☒ Clear exit widths for each exit door
- ☒ Maximum calculated occupant load capacity each exit door can accommodate based on egress width (1005.3)
- ☒ Actual occupant load for each exit door
- ☐ A separate schematic plan indicating where fire rated floor/ceiling and/or roof structure is provided for purposes of occupancy separation
- ☒ Location of doors with panic hardware (1010.1.10)
- ☐ Location of doors with delayed egress locks and the amount of delay (1010.1.9.7)
- ☐ Location of doors with electromagnetic egress locks (1010.1.9.9)
- ☐ Location of doors equipped with hold-open devices
- ☐ Location of emergency escape windows (1030)
- ☒ The square footage of each fire area (202)
- ☐ The square footage of each smoke compartment for Occupancy Classification I-2 (407.5)
- ☐ Note any code exceptions or table notes that may have been utilized regarding the items above

ACCESSIBLE DWELLING UNITS
(SECTION 1107)

UNIT CLASSIFICATION	TOTAL UNITS	ACCESSIBLE UNITS REQUIRED	ACCESSIBLE UNITS PROVIDED	TYPE A UNITS REQUIRED	TYPE A UNITS PROVIDED	TYPE B UNITS REQUIRED	TYPE B UNITS PROVIDED	TOTAL ACCESSIBLE UNITS PROVIDED
N/A								

ACCESSIBLE PARKING
(SECTION 1106)

LOT OR PARKING AREA	TOTAL # OF PARKING SPACES		# OF ACCESSIBLE SPACES PROVIDED		TOTAL # ACCESSIBLE PROVIDED
	REQUIRED	PROVIDED	96" SPACES	132" SPACES	
N/A					
TOTAL					

PLUMBING FIXTURE REQUIREMENTS
(TABLE 2902.1)

USE		WATER CLOSETS			URINALS	LAVATORIES			SHOWERS	DRINKING FOUNTAINS	
		MALE	FEMALE	UNISEX		MALE	FEMALE	UNISEX	/TUBS	REGULAR	ACCESSIBLE
SPACE	New	0	0	1	0	0	0	1	-	0	0
	EXIST.	2	3	0	1	4	3	0	-	1	0

SPECIAL APPROVALS

Special approval: (Local Jurisdiction, Department of Insurance, OSC, DPI, DHHS, etc., describe below)

DPI Review

ENERGY SUMMARY

ENERGY REQUIREMENTS:
The following data shall be considered minimum, and any special attribute required to meet the energy code shall also be provided. Each Designer shall furnish the required portions of the project information for the plan data sheet. If performance method, state the annual energy cost for the standard reference design vs annual energy cost for the proposed design.

Existing building envelope complies with code: Yes (NCECC C505.1)

Exempt Building: No Provide code or statutory reference:

Climate Zone: 3A **Moore County, NC**
Method of Compliance: Energy Code - Prescriptive
(If "Other" specify source here)_____

THERMAL ENVELOPE (Prescriptive method only)

Roof/ceiling Assembly (each assembly)
Description of assembly: 2 ply mod bit
U-Value of total assembly: 0.039
R-Value of insulation: R-25
Skylights in each assembly: Existing skylights to be filled in and cont insulation placed across openings.
U-Value of skylight: _____
total square footage of skylights in each assembly: 16

Exterior Walls (each assembly) *No new exterior walls to be constructed.
Description of assembly: _____
U-Value of total assembly: _____
R-Value of insulation:
Openings (windows or doors with glazing)
U-Value of assembly: E,W,S=Solarban 90 Grey (U-0.29)
N=Solarban 60 Clear (U-0.29)
Solar heat gain coefficient: 0.25
projection factor: < 0.25
Door U-Values: 0.70 swinging, 0.50 fixed

Walls below grade (each assembly)
Description of assembly:
U-Value of total assembly:
R-Value of insulation:

Floors over unconditioned space (each assembly)
Description of assembly: _____
U-Value of total assembly: _____
R-Value of insulation: _____

Floors slab on grade
Description of assembly:
U-Value of total assembly:
R-Value of insulation:
Horizontal/vertical requirement:
slab heated:

2018 APPENDIX B
BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS
STRUCTURAL DESIGN

DESIGN LOADS:

Importance Factors: Snow (I_s) Select one
Seismic (I_E) Select one

Live Loads: Roof _____ psf
Mezzanine _____ psf
Floor _____ psf

Ground Snow Load: _____ psf

Wind Load: Ultimate Wind Speed _____ mph (ASCE-7)
Exposure Category Select one

SEISMIC DESIGN CATEGORY: Select one
Provide the following Seismic Design Parameters:
Risk Category (Table 1604.5) Select one
Spectral Response Acceleration S_s_____ %g S_1_____ %g
Select one
Site Classification (ASCE 7) Select one
Data Source: Select one
Basic structural system Select one
Analysis Procedure: Select one
Architectural, Mechanical, Components anchored? Select one

LATERAL DESIGN CONTROL: Select one

SOIL BEARING CAPACITIES:
Select one _____ psf
Pile size, type, and capacity _____

2018 APPENDIX B
BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS
MECHANICAL DESIGN
SEE MECHANICAL DRAWINGS

MECHANICAL SUMMARY

MECHANICAL SYSTEMS, SERVICE SYSTEMS AND EQUIPMENT

Thermal Zone
winter dry bulb: _____
summer dry bulb: _____

Interior design conditions
winter dry bulb: _____
summer dry bulb: _____
relative humidity: _____

Building heating load: _____

Building cooling load: _____

Mechanical Spacing Conditioning System
Unitary
description of unit: _____
heating efficiency: _____
cooling efficiency: _____
size category of unit: _____
Boiler
Size category. If oversized, state reason.: _____
Chiller
Size category. If oversized, state reason.: _____

List equipment efficiencies: _____

* See sheet E-1.1 for electrical design*

2018 APPENDIX B
BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS
ELECTRICAL DESIGN
SEE ELECTRICAL DRAWINGS

ELECTRICAL SUMMARY

ELECTRICAL SYSTEM AND EQUIPMENT

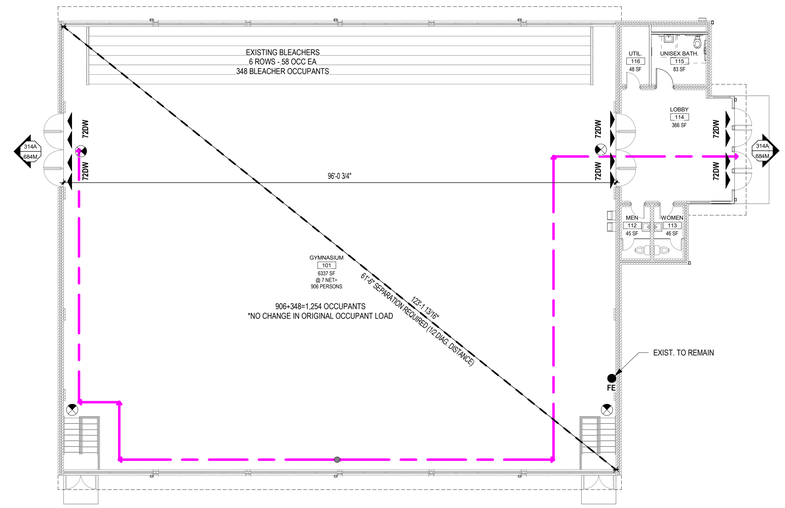
Method of Compliance: Select one

Lighting schedule (each fixture type)
lamp type required in fixture
number of lamps in fixture
ballast type used in the fixture
number of ballasts in fixture
total wattage per fixture
total interior wattage specified vs. allowed (whole building or space by space)
total exterior wattage specified vs. allowed

Additional Efficiency Package Options
(When using the 2018 NCECC; not required for ASHRAE 90.1)
- ☐ C406.2 More Efficient HVAC Equipment Performance
- ☐ C406.3 Reduced Lighting Power Density
- ☐ C406.4 Enhanced Digital Lighting Controls
- ☐ C406.5 On-Site Renewable Energy
- ☐ C406.6 Dedicated Outdoor Air System
- ☐ C406.7 Reduced Energy Use in Service Water Heating

BUILDING SEPERATION DISTANCE DIAGRAM

ROOM	TRAVEL DISTANCE
GYMNASIUM PATH 1	98' - 11"
GYMNASIUM PATH 2	121' - 11"



1 A-002 **LIFE SAFETY PLAN**
SCALE: 3/32" = 1'-0"

LIFE SAFETY LEGEND

SYMBOL	DESCRIPTION
	1 HR FIRE RATED
	2 HR FIRE RATED
20	DOOR FIRE RATING IN MINUTES
	DOOR WITH PANIC HARDWARE
75A / 7M	ACTUAL NUMBER OF OCCUPANTS EGRESSING THROUGH EXIT. / MAXIMUM NUMBER OF OCCUPANTS ALLOWED THROUGH EXIT.
FEC	FIRE EXTINGUISHER CABINET
FE	FIRE EXTINGUISHER - WALL MOUNTED
MHO	MAGNETIC HOLD OPEN
	EXIT SIGN
36DW	36" DOOR WIDTH NOMINAL = 33.5" CLEAR (167 OCCUPANTS PER DOOR AT 0.2-NO SPRINKLER)
48DW	48" DOOR WIDTH NOMINAL = 45.5" CLEAR (227 OCCUPANTS PER DOOR AT 0.2-NO SPRINKLER)
72DW	(PAIR) 36" DOORS WIDTH NOMINAL = 68.5" CLEAR (342 OCCUPANTS PER DOOR AT 0.2-NO SPRINKLER)
80DW	(PAIR) 40" DOORS WIDTH NOMINAL = 76.5" CLEAR (382 OCCUPANTS PER DOOR AT 0.2-NO SPRINKLER)

...Becoming the Leading Designer of High Performance Facilities in the Nation with a Specialty in Alternative Delivery Methods
333 Fayetteville St, Ste 225
Raleigh, NC 27601
P: 919.573.6350
F: 919.573.6355
www.sfla.biz
sfL+a ARCHITECTS
sfL+a ARCHITECTS PA CERT. NO. 50676 RALEIGH, NC
MAHAN R. KICK REGISTERED ARCHITECT 11847 NORTH CAROLINA RALEIGH, NC
11/22/2023
BID SET

MOORE COUNTY SCHOOLS
VASS-LAKEVIEW ELEM. GYM. RENO.
141 JAMES ST, VASS NC 28394

No.	Date	Description

ISSUE DATE: 11/22/23
PROJECT #: 02206.100
DRAWN BY: JK
CHECKED BY: MK

BUILDING CODE SUMMARY

A-002

#1: PLAN WEST FACADE

#2: PLAN SOUTHWEST CORNER/PLAN SOUTH FACADE

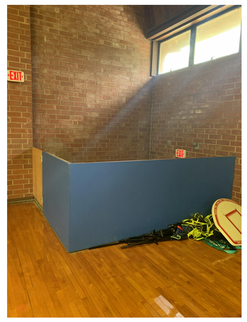
#3: PLAN NORTHEAST CORNER

#4: PLAN EAST ELEVATION

#5: PLAN NORTHEAST CORNER/PLAN NORTH ELEVATION

#6: GYM LOOKING PLAN WEST FROM LOBBY

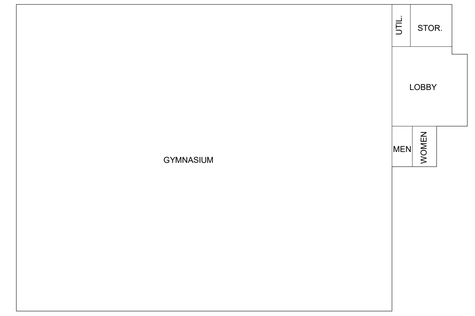
#7: GYM LOOKING PLAN EAST TOWARDS LOBBY



#8: BASEMENT STAIRS AT GYM EAST END

SEE SHEET A-111 DEMO PLAN - AREA OF DEMOLITION

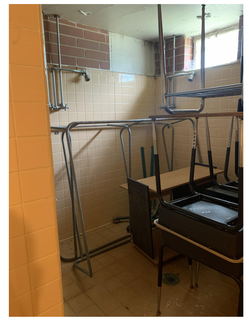
PICTURES ARE FOR INFORMATION ONLY - CONTRACTOR'S SHALL VISIT SITE AND VERIFY EXISTING CONDITIONS FOR PROPER COORDINATION OF DEMOLITION AND NEW WORK FOR THIS PROJECT.



EXIST. BUILDING KEY PLAN
SCALE: 1/16" = 1'-0"

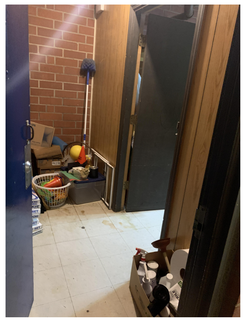
#9: GIRLS LOCKER ROOM IN BASEMENT

#10: BOYS LOCKER ROOM IN BASEMENT

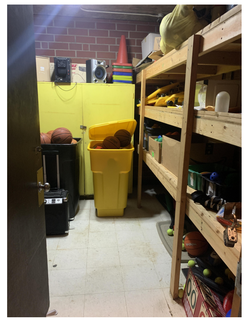


#11: LOBBY

#12: LOBBY UTILITY ROOM

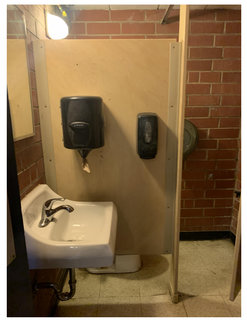


#13: LOBBY STORAGE



#14: LOBBY

#15: LOBBY



#16: LOBBY MENS ROOM

...Becoming the Leading Designer of High Performance Facilities in the Nation with a Specialty in Alternative Delivery Methods

333 Fayetteville St, Ste 225
Raleigh, NC 27601
P: 919.573.6350
F: 919.573.6355
www.sfla.biz

sfl+a ARCHITECTS

BID SET

MOORE COUNTY SCHOOLS

VASS-LAKEVIEW ELEM. GYM. RENO.

141 JAMES ST, VASS NC 28394

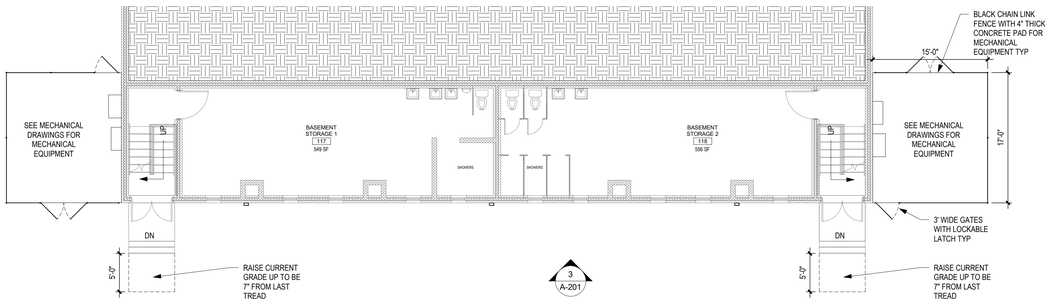
No.	Date	Description

ISSUE DATE: 11/22/23

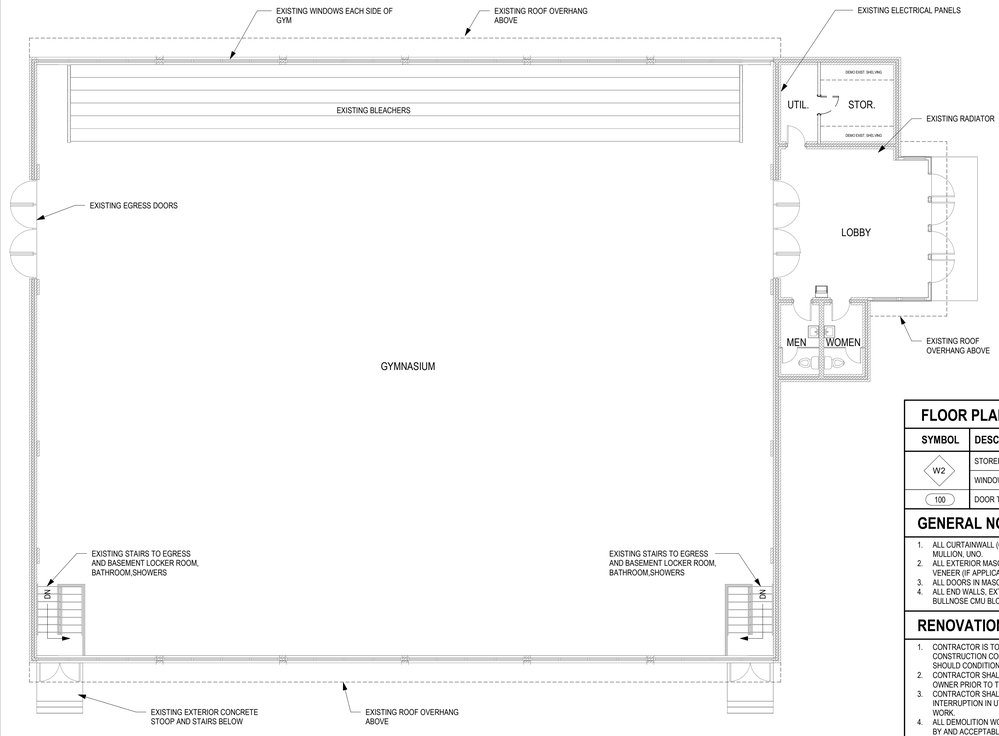
PROJECT #: 02206.100
DRAWN BY: Author
CHECKED BY: Checker

EXISTING BUILDING PICTURES

A-100



1 A-111 **BASEMENT FLOOR PLAN - RENOVATED**
SCALE: 1/8" = 1'-0"



2 A-111 **FLOOR PLAN - DEMOLITION**
SCALE: 1/8" = 1'-0"

FLOOR PLAN LEGEND

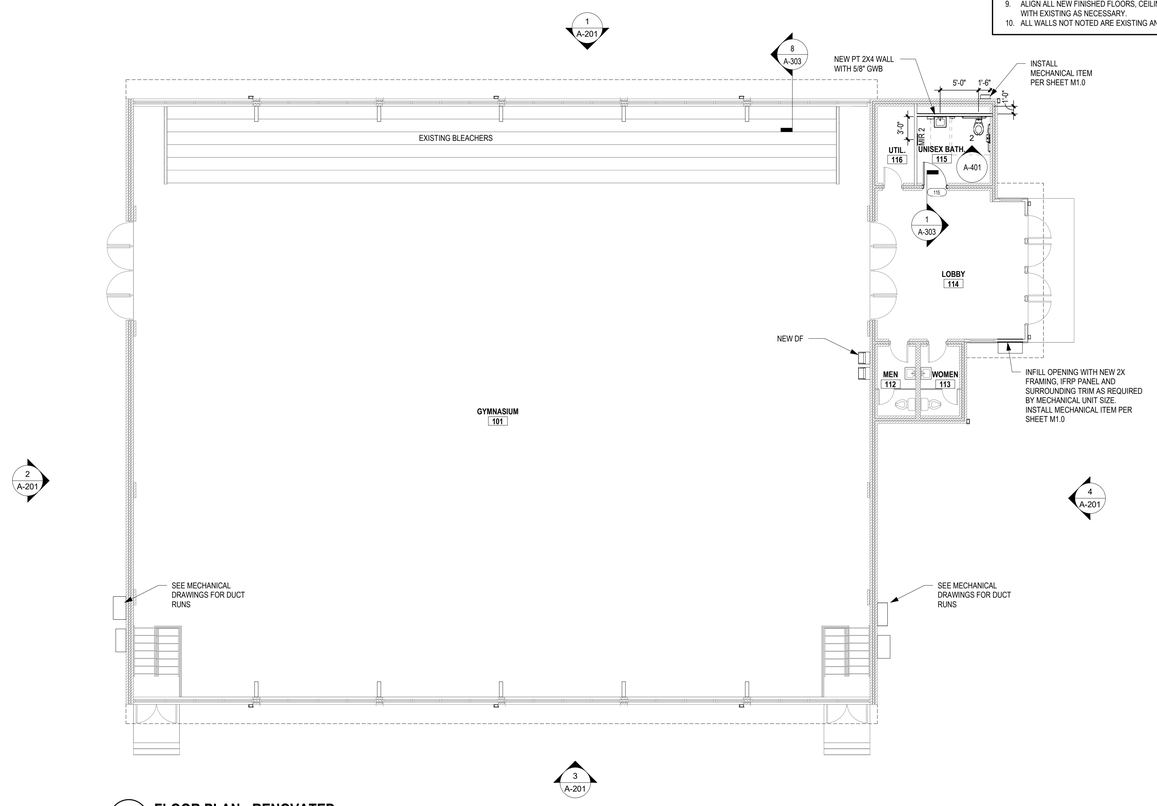
SYMBOL	DESCRIPTION
W2	STOREFRONT (CW WALL) TAG - SEE SHEET A401 AND FLOOR PLANS
W2	WINDOW TAG - SEE SHEET A401 AND FLOOR PLANS
100	DOOR TAG - SEE SHEET A401 AND FLOOR PLANS

GENERAL NOTES:

1. ALL CURTAINWALL (CW) AND STOREFRONT (SF) DIMENSIONED TO FACE OF MULLION, UNO.
2. ALL EXTERIOR MASONRY DIMENSIONED TO EXTERIOR FACE OF BRICK VENEER (IF APPLICABLE). IF NO VENEER, TO EXTERIOR FACE OF CMU, UNO.
3. ALL DOORS IN MASONRY DIMENSIONED TO MASONRY OPENING.
4. ALL END WALLS, EXTERIOR CORNERS AND PILASTERS TO RECEIVE BULLNOSE CMU BLOCK.

RENOVATION NOTES:

1. CONTRACTOR IS TO FIELD VERIFY ALL EXISTING CONDITIONS PRIOR TO CONSTRUCTION COMMENCEMENT. CONTRACTOR TO NOTIFY SFL+A SHOULD CONDITIONS DIFFER THAN WHAT IS DRAWN.
2. CONTRACTOR SHALL COORDINATE ALL DEMOLITION WORK WITH THE OWNER PRIOR TO THE START OF WORK.
3. CONTRACTOR SHALL NOTIFY THE OWNER IN ADVANCE OF ANY INTERRUPTION IN UTILITY SERVICES NECESSARY TO COMPLETE THE WORK.
4. ALL DEMOLITION WORK SHALL BE PERFORMED DURING TIMES APPROVED BY AND ACCEPTABLE TO THE OWNER. CONTRACTOR SHALL MAKE EVERY EFFORT TO MINIMIZE NOISE AND CONTROL DUST/DEBRIS MIGRATION SO AS TO AVOID DISTRUBANCES TO SCHOOL ACTIVITIES, AS MUSH AS POSSIBLE, FOR THE DURATION OF THE WORK.
5. ALL ITEMS WHICH ARE EXISTING AND TO REMAIN SHALL BE PROTECTED FOR THE DURATION OF THE WORK. CONTRACTOR SHALL REPAIR ANY DAMAGE TO EXISTING ITEMS CAUSED BY THE WORK TO LIKE NEW CONDITION AT NO COST TO THE OWNER.
6. ITEMS NOTED TO BE REMOVED SHALL BE REMOVED IN THEIR ENTIRETY, UNO ON THE DRAWINGS. THIS INCLUDES, BUT IS NOT LIMITED TO, ALL SUPPORTS, FASTENERS, FINISHES, TRACKS, TRANSITIONS, ETC. CONTRACTOR SHALL PATHC AND REPAIR SUBSTRATES AS NECESSARY TO RECEIVE NEW FINISHED.
7. PATCH ALL DISTURBED AREAS TO MATCH EXISTING.
8. EXTEND EXISTING UTILITIES AS REQUIRED.
9. ALIGN ALL NEW FINISHED FLOORS, CEILINGS, WALLS, SOFFITS AND ROOFS WITH EXISTING AS NECESSARY.
10. ALL WALLS NOT NOTED ARE EXISTING AND TO REMAIN.



3 A-111 **FLOOR PLAN - RENOVATED**
SCALE: 1/8" = 1'-0"

...Becoming the leading Designer of High Performance Facilities in the Nation with a Specialty in Alternative Delivery Methods

333 Fayetteville St, Ste 225
Raleigh, NC 27601
P: 919.573.6350
F: 919.573.6355
www.sfla.biz

sfl+a ARCHITECTS

SFL+A ARCHITECTS, PA
CERTIFICATE OF AUTHORIZATION
CERT. NO. 50676
RALEIGH

NAHAH R. KOHL
REGISTERED ARCHITECT
21647
NORTH CAROLINA
RALEIGH, NC
11/22/2023

BID SET

MOORE COUNTY SCHOOLS

VASS-LAKEVIEW ELEM. GYM. RENO.

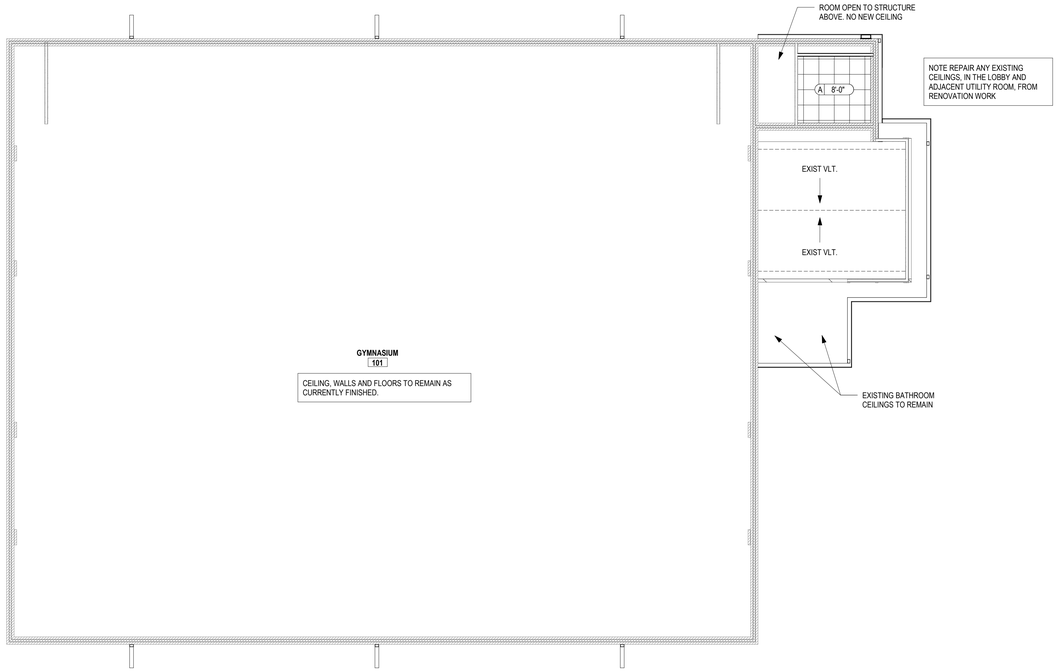
141 JAMES ST, VASS NC 28394

No.	Date	Description

ISSUE DATE: 11/22/23
PROJECT #: 02206.100
DRAWN BY: JK
CHECKED BY: MK

FLOOR PLANS - DEMOLITION AND RENOVATION

A-111



1 / A-121 **REFLECTED CEILING PLAN - NEW ONLY (EXISTING CEILINGS TO REMAIN)**
SCALE: 1/8" = 1'-0"

REFLECTED CEILING PLAN LEGEND

CEILING TYPE — A — 8' - 0" — CEILING HEIGHT

SYMBOL	DESCRIPTION
	2' x 2' ACOUSTICAL CEILING PANELS
	TYPE "A": TYPICAL PANELS (EA INDICATES EXISTING)
	TYPE "B": IMPERVIOUS PANELS (EB INDICATES EXIST)
	2 ' X 2' ACOUSTICAL CEILING PANELS
	TYPE "C": WOOD ACOUSTICAL PANELS
	2 ' X 4' ACOUSTICAL CEILING PANELS
	TYPE "D": TYPICAL PANELS
	TYPE "ED": INDICATES EXIST
	GYPSUM WALL BOARD CEILING
	TYPE "E": TYPICAL CEILING SYSTEM, PAINTED
	TYPE "EE": EXISTING CEILING, PAINTED *
	EXISTING SUSPENDED ACOUSTICAL CEILING PANELS
	TO REMAIN - PAINT CEILING AND GRID PNT-3.
	TYPE "EP": EXISTING PAINTED CEILING PANELS
	EXTERIOR EMERGENCY LIGHT
	LED EXIT SIGN
	EMERGENCY LIGHT
	DOWNLIGHT - SEE ELECTRICAL
R	EXISTING FIXTURE TO BE RELOCATED - SEE ELECT
	DECORATIVE PENDANT
R	EXISTING FIXTURE TO BE RELOCATED - SEE ELECT
	2X2 RECESSED FLUORESCENT
R	EXISTING FIXTURE TO BE RELOCATED - SEE ELECT
	FLUORESCENT STRIP LIGHT
R	EXISTING FIXTURE TO BE RELOCATED - SEE ELECT
	STRAIGHT NARROW FIXTURE
	2X2 ACRYLIC LAY-IN FLUORESCENT
	DECORATIVE LINEAR PENDANT
	2X4 ACRYLIC LAY-IN FLUORESCENT
	DECORATIVE DRUM PENDANT
	DECORATIVE SQUARE PENDANT
	TRACK LIGHTING
	DIFFUSER - SEE ELECTRICAL
	RETURN - SEE ELECTRICAL
	DIFFUSER - SEE ELECTRICAL
SD	SMOKE DETECTOR (SHALL BE 3' - 0" MIN FROM ANY AIR SUPPLY/RETURN) - SEE ELECTRICAL
HD	HEAT DETECTOR (SHALL BE 3' - 0" MIN FROM ANY AIR SUPPLY/RETURN) - SEE ELECTRICAL
S	ADA COMPLIANT FIRE ALARM STROBE LIGHT - SEE ELECTRICAL
FA	ADA COMPLIANT FIRE ALARM STROBE LIGHT - SEE ELECTRICAL
W	DATA OUTLET (WIRELESS ROUTER LOCATION IS ABOVE CEILING) - SEE ELECTRICAL
OC	OCCUPANCY SENSOR - SEE ELECTRICAL
	POWER AND DATA - SEE ELECTRICAL

RCP GENERAL NOTES:

1. REFER TO ELECTRICAL SHEETS FOR LIGHT FIXTURE LOCATIONS, TYPES AND ADDITIONAL INFORMATION.
2. COORDINATE LOCATION OF ACCESS PANELS WITH PLUMBING CONTRACTOR.
3. EXISTING FIXTURES AND CEILING EQUIPMENT TO REMAIN IS INDICATED BY GRAY LINEWORK. SEE ELECTRICAL AND MECHANICAL FOR CLARIFICATION OF EXISTING AND NEW.
4. ALL EXPOSED STRUCTURE, PIPING, DUCT WORK, ELECTRICAL DEVICES, ETC. IN AREAS INDICATED AS EXPOSED STRUCTURE TO BE PAINTED.
5. VIF EXISTING CEILING HEIGHTS.
6. PATCH/REPAIR EXISTING GYP BD PRIOR TO PAINTING.

...Becoming the Leading Designer of High Performance Facilities in the Nation with a Specialty in Alternative Delivery Methods

333 Fayetteville St, Ste 225
Raleigh, NC 27601
P: 919.573.6350
F: 919.573.6355
www.sfla.biz

sfl+a ARCHITECTS

SfL+a ARCHITECTS, PA
CERT. NO. 50676
NORTH CAROLINA
RALEIGH

NAHAH R. NICHOLS
REGISTERED ARCHITECT
21642
NORTH CAROLINA
RALEIGH, NC
11/22/2023

BID SET

MOORE COUNTY SCHOOLS

VASS-LAKEVIEW ELEM. GYM. RENO.

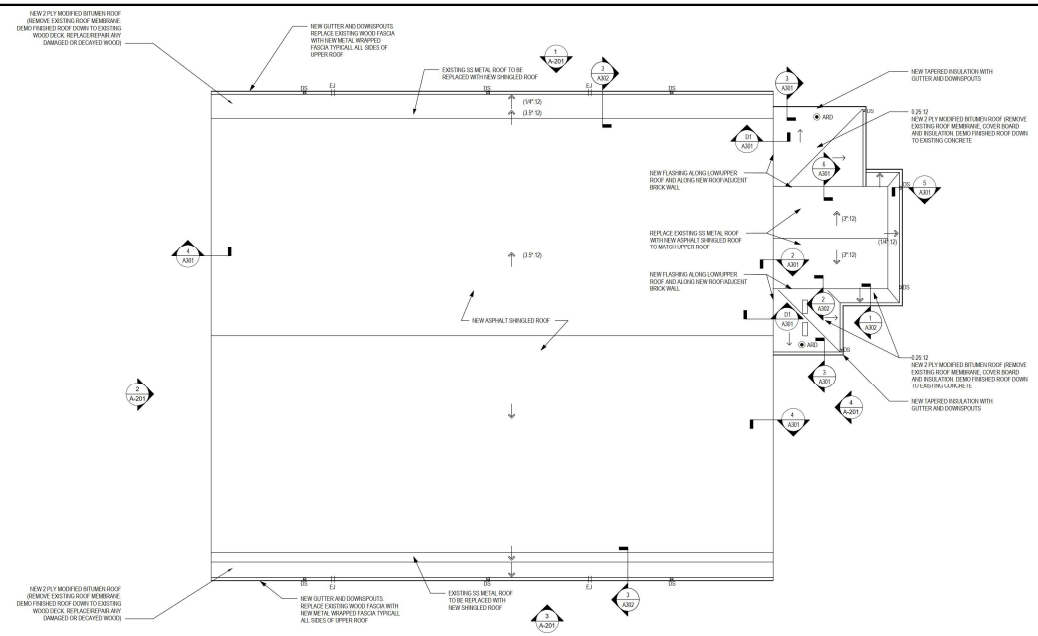
141 JAMES ST, VASS NC 28394

No.	Date	Description

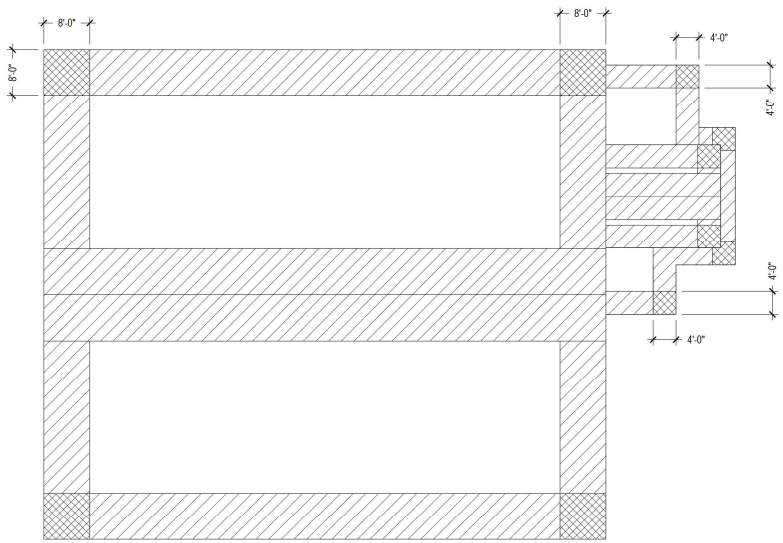
ISSUE DATE: 11/22/23
PROJECT #: 02206.100
DRAWN BY: Author
CHECKED BY: Checker

RENOVATION REFLECTED CEILING PLAN

A-121



1 ROOF PLAN
1/8"=1'-0"



2 WIND ZONE PLAN
1/8"=1'-0"

CONSTRUCTION NOTES

1. DEMOLITION:
   a. REMOVE EXISTING ROOFING DOWN TO DECK AND REPLACE WITH NEW ROOFING SYSTEM.
   b. REMOVE EXISTING GUTTERS AND DOWNSPOUTS AND DISCARD.
   c. AT ABANDONNED EQUIPMENT THAT IS REMOVED, COVER OPENINGS AS DESCRIBED IN SPECIFICATION SECTION 07 00 00 ROOFING PREPARATION.
   d. REMOVE DAMAGED/DETERIORATED WOOD BLOCKING AND WOOD FASCIA, AND DISCARD
   e. REMOVE DAMAGED/DETERIORATED TONGUE AND GROOVE WOOD PLANK DECKING AND DISCARD.
   f. WHERE EXISTING SANITARY VENT PIPE PENETRATIONS ARE WITHIN 12 INCHES OF WALL, MODIFY, EXTEND, AND RELOCATE PENETRATION TO PROVIDE MINIMUM CLEARANCE OF 12 INCHES FROM WALL.
2. NEW ROOFING CONSTRUCTION:
   a. INSTALL NEW 2 PLY MODIFIED BITUMEN ROOFING SYSTEM. REFER TO SPECIFICATION SECTION 07 55 20 SBS-MODIFIED BITUMEN MEMBRANE ROOFING FOR TOTAL SYSTEM INCLUDING COVERBOARD, TAPERED, AND BASE LAYER INSULATION.
   b. PROVIDE NEW GUTTERS AND DOWNSPOUTS. DOWNSPOUTS ARE TO BE CONNECTED TO EXISTING DOWNSPOUT BOOTS.
   c. REPLACE ALL REMOVED DAMAGED/DETERIORATED WOOD BLOCKING AND DECKING.
   d. REFER TO SECTION 07 62 00 SHEET METAL FLASHING AND TRIM.
   e. EXTEND ALL SANITARY PIPES TO ALLOW FOR MINIMUM FLASHING HEIGHT OF 8 INCHES ABOVE NEW FINISHED ROOF LEVEL.
   f. FLASHING HEIGHTS SHALL BE MINIMUM 8 INCHES ABOVE NEW FINISHED ROOF SURFACE.
   g. INSTALL NEW WOOD BLOCKING AT EAVES AS REQUIRED TO FINISH FLUSH WITH THE TOP OF THE COVER BOARD.
   h. REPLACE THROUGH WALL FLASHINGS ON NORTH ELEVATION.

LEGEND

- EJ — GUTTER EXPANSION JOINT
- PARAPET WALL
- DS — GUTTER AND DOWNSPOUT
- SV — SANITARY VENT PIPE
- TAPERED INSULATION SLOPE
- STRUCTURAL SLOPE
- DETAIL No.

CODE SUMMARY

NORTH CAROLINA BUILDING CODE (2018 EDITION) AND ASCE

BASIC WIND SPEED	= 120 MPH
CATEGORY	= III
EXPOSURE CATEGORY	= B
INTERNAL PRESSURE COEF.	= +/- 0.18

THE NEW ROOF SYSTEM SHALL BE DESIGNED AND CONSTRUCTED TO MEET THE FOLLOWING WIND UPLIFT PRESSURES.

1.	CORNER ZONE	= -65.4 PSF
2.	PERIMETER ZONE	= -43.5 PSF
3.	FIELD ZONE	= -25.9 PSF
4.	WALL	= +25.9, -28.1 PSF
5.	WALL CORNER	= +25.9, -34.7 PSF

WIND ZONE

- ZONE 1 — FIELD ZONE
- ZONE 2 — PERIMETER ZONE (PERIMETER IS 4 FEET WIDE)
- ZONE 3 — CORNER ZONE. (CORNERS ARE 4 x 4 FEET)

...Becoming the Leading Designer of High-Performance Facilities in the Nation with a Specialty in Alternative Delivery Methods

333 Fayetteville St, Ste 225
Raleigh, NC 27601
P: 919.573.6100
F: 919.573.9355
www.sfla.biz

sfl+a ARCHITECTS

ARCHITECT — NORTH CAROLINA — SEAL — CERT. NO. 10478 — REGISTERED

BID SET

Terracon
Consulting Engineers and Scientists
2401 Brentwood Road, Suite 107
Raleigh, North Carolina 27604
ph: (919) 873-2211 fax: (919) 873-9555
www.terracon.com

NORTH CAROLINA — SEAL 045268 — 11/22/2023 — ENGINEER — JEFFREY H. POPE, JR.

MOORE COUNTY SCHOOLS

VASS-LAKEVIEW ELEMENTARY GYM RENOVATIONS

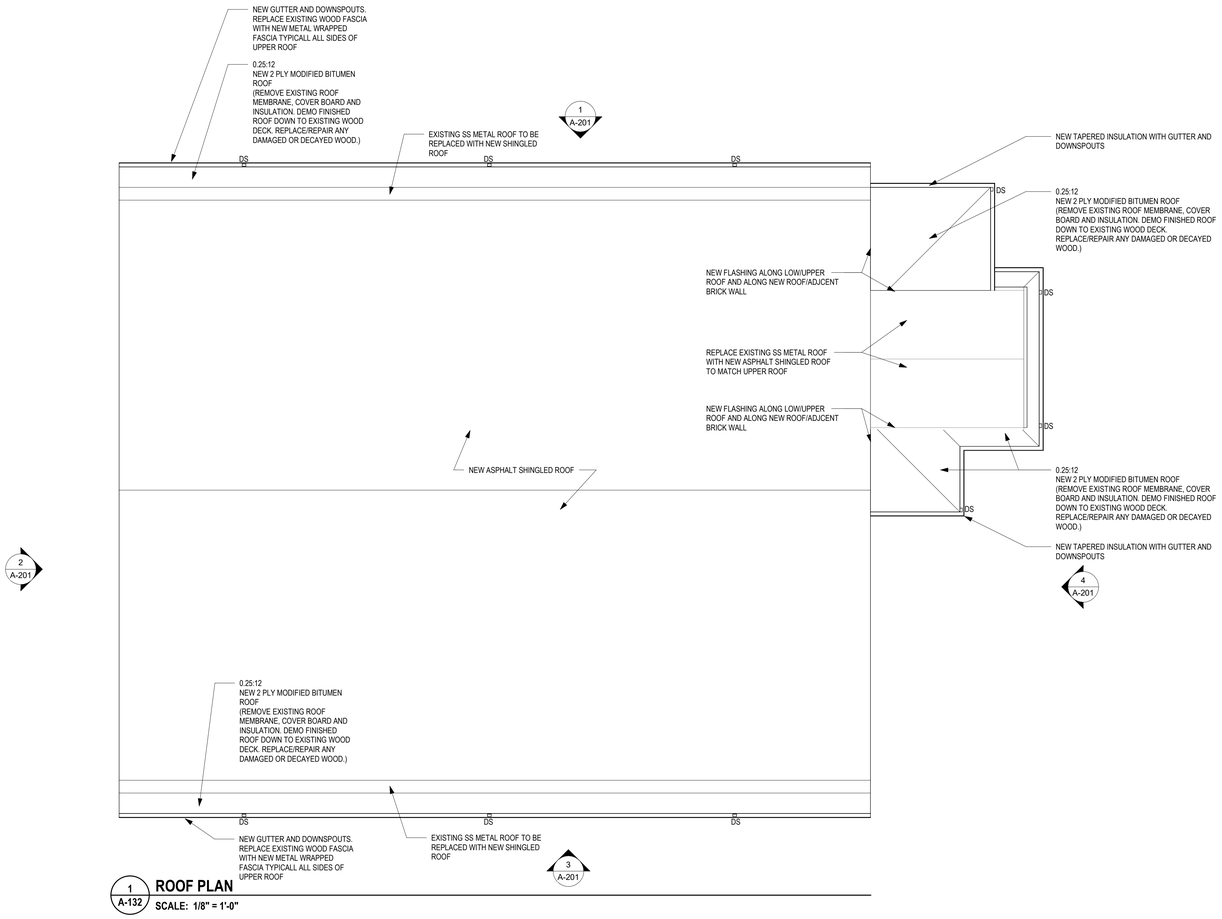
141 JAMES STREET - VASS, NC 28394

No.	Date	Description

ISSUE DATE:	11-22-2023
PROJECT #:	02206.000
DRAWN BY:	SWP
CHECKED BY:	VTN

ROOF PLAN & WIND ZONE PLAN

A-131



1 A-132 **ROOF PLAN**

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

ROOF PLAN LEGEND

SYMBOL	DESCRIPTION
DS	DOWNSPOUT

GENERAL NOTES:

1. SEE PLUMBING AND MECHANICAL DRAWINGS FOR ROOF MOUNTED EQUIPMENT AND ROOF PENETRATIONS.

...Becoming the Leading Designer of High Performance Facilities in the Nation with a Specialty in Alternative Delivery Methods

333 Fayetteville St, Ste 225
Raleigh, NC 27601
P: 919.573.6350
F: 919.573.6355
www.sfla.biz

sfl+a ARCHITECTS

SFL+A ARCHITECTS, PA
CERTIFICATE OF AUTHORIZATION
CERT. NO. 50676
NORTH CAROLINA
RALEIGH

NAHAH R. KICH
REGISTERED ARCHITECT
21647
NORTH CAROLINA
RALEIGH, NC
11/22/2023

BID SET

MOORE COUNTY SCHOOLS

VASS-LAKEVIEW ELEM. GYM. RENO.

141 JAMES ST, VASS NC 28394

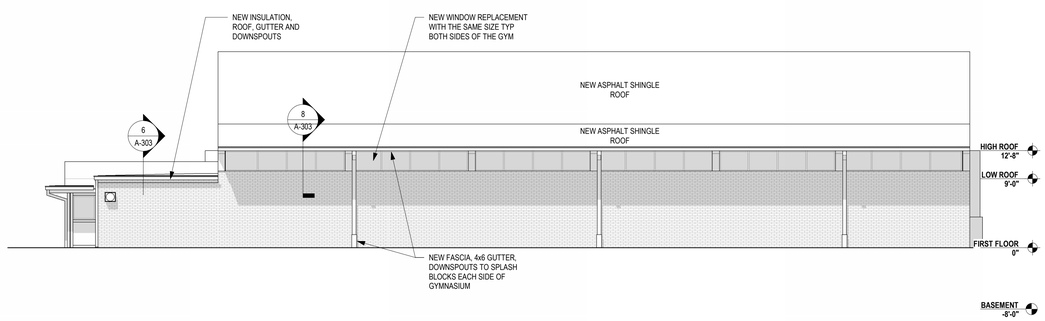
No.	Date	Description

ISSUE DATE: 11/22/23

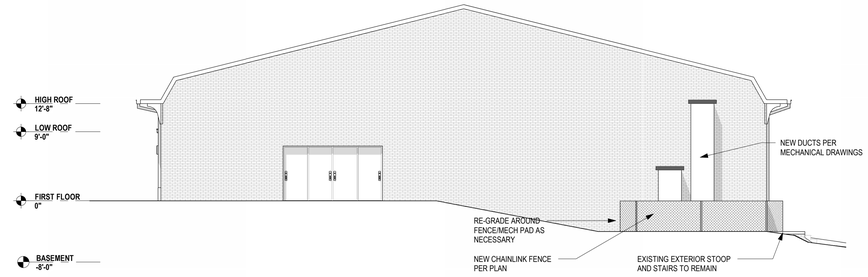
PROJECT #: 02206.100
DRAWN BY: JK
CHECKED BY: MK

ROOF PLANS - DEMOLITION AND RENOVATION

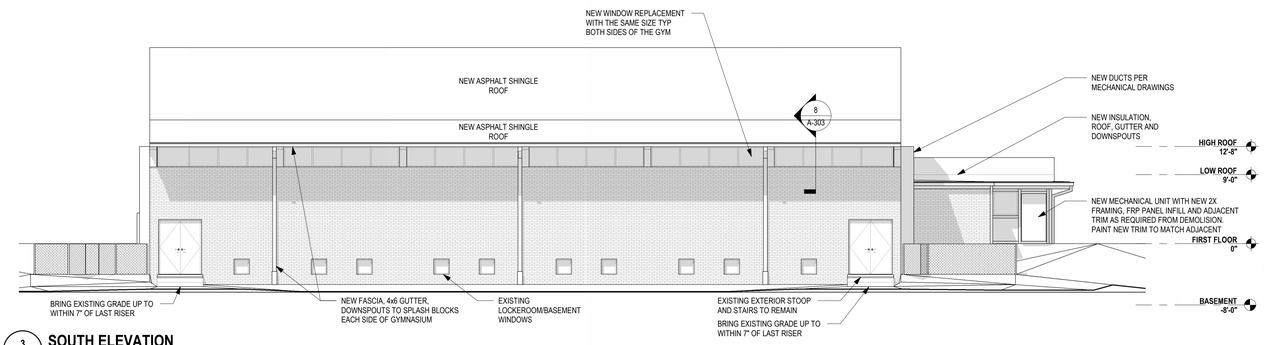
A-132



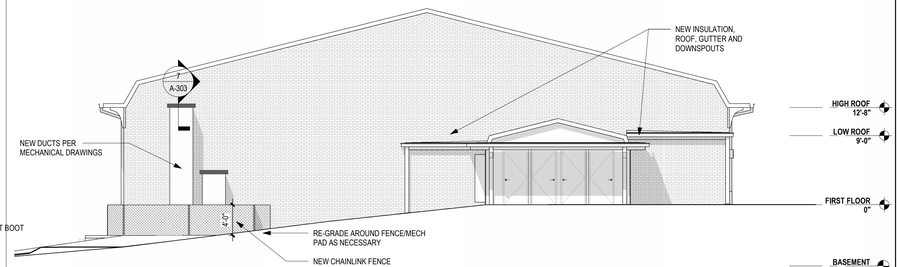
1 A-201 **NORTH ELEVATION**
SCALE: 1/8" = 1'-0"



2 A-201 **WEST ELEVATION**
SCALE: 1/8" = 1'-0"



3 A-201 **SOUTH ELEVATION**
SCALE: 1/8" = 1'-0"



4 A-201 **EAST ELEVATION**
SCALE: 1/8" = 1'-0"

...Becoming the Leading Designer of High Performance Facilities in the Nation with a Specialty in Alternative Delivery Methods

333 Fayetteville St, Ste 225
Raleigh, NC 27601
P: 919.573.6350
F: 919.573.6355
www.sfla.biz

sfl+a ARCHITECTS

S/L/A ARCHITECTS, PA
CERTIFICATE OF AUTHORIZATION
CERT. NO. 50676
NORTH CAROLINA
RALEIGH

HANAH R. KOCH
REGISTERED ARCHITECT
21647
NORTH CAROLINA
RALEIGH, NC
11/22/2023

BID SET

MOORE COUNTY SCHOOLS

VASS-LAKEVIEW ELEM. GYM. RENO.

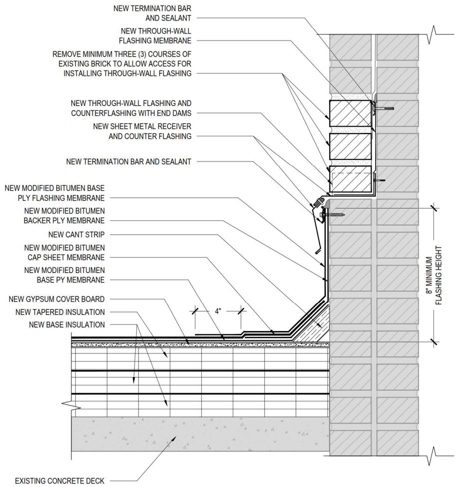
141 JAMES ST, VASS NC 28394

No.	Date	Description

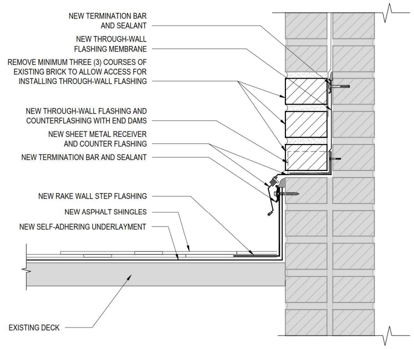
ISSUE DATE: 11/22/23
PROJECT #: 02206.100
DRAWN BY: JK
CHECKED BY: MK

EXTERIOR ELEVATIONS

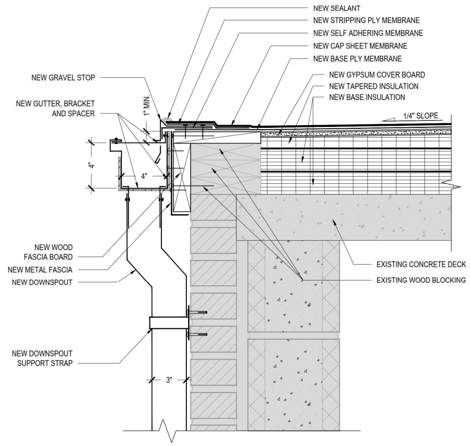
A-201


NEW TERMINATION BAR AND SEALANT
NEW THROUGH-WALL FLASHING MEMBRANE
REMOVE MINIMUM THREE (3) COURSES OF EXISTING BRICK TO ALLOW ACCESS FOR INSTALLING THROUGH-WALL FLASHING
NEW THROUGH-WALL FLASHING AND COUNTERFLASHING WITH END DAMS
NEW SHEET METAL RECEIVER AND COUNTER FLASHING
NEW TERMINATION BAR AND SEALANT
NEW MODIFIED BITUMEN BASE PLY FLASHING MEMBRANE
NEW MODIFIED BITUMEN BACKER PLY MEMBRANE
NEW CANT STRIP
NEW MODIFIED BITUMEN CAP SHEET MEMBRANE
NEW MODIFIED BITUMEN BASE PY MEMBRANE
NEW GYPSUM COVER BOARD
NEW TAPERED INSULATION
NEW BASE INSULATION
4"
8" MINIMUM FLASHING HEIGHT
EXISTING CONCRETE DECK

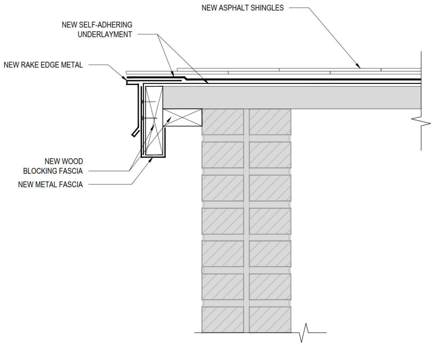
1 LOW-SLOPE/WALL FLASHING DETAIL
3"=1'-0"


NEW TERMINATION BAR AND SEALANT
NEW THROUGH-WALL FLASHING MEMBRANE
REMOVE MINIMUM THREE (3) COURSES OF EXISTING BRICK TO ALLOW ACCESS FOR INSTALLING THROUGH-WALL FLASHING
NEW THROUGH-WALL FLASHING AND COUNTERFLASHING WITH END DAMS
NEW SHEET METAL RECEIVER AND COUNTER FLASHING
NEW TERMINATION BAR AND SEALANT
NEW RAKE WALL STEP FLASHING
NEW ASPHALT SHINGLES
NEW SELF-ADHERING UNDERLAYMENT
EXISTING DECK

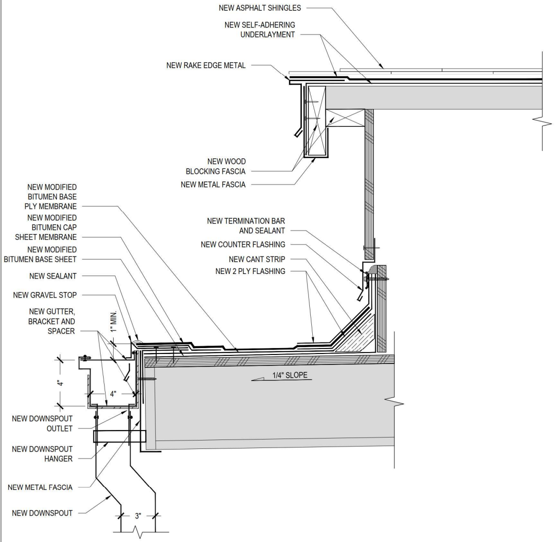
2 SHINGLE ROOF/WALL FLASHING DETAIL
3"=1'-0"


NEW SEALANT
NEW STRIPPING PLY MEMBRANE
NEW SELF ADHERING MEMBRANE
NEW CAP SHEET MEMBRANE
NEW BASE PLY MEMBRANE
NEW GYPSUM COVER BOARD
NEW TAPERED INSULATION
NEW BASE INSULATION
NEW GRAVEL STOP
NEW GUTTER, BRACKET AND SPACER
1" MIN.
1/4" SLOPE
4"
NEW WOOD FASCIA BOARD
NEW METAL FASCIA
NEW DOWNSPOUT
EXISTING CONCRETE DECK
EXISTING WOOD BLOCKING
NEW DOWNSPOUT SUPPORT STRAP
3"

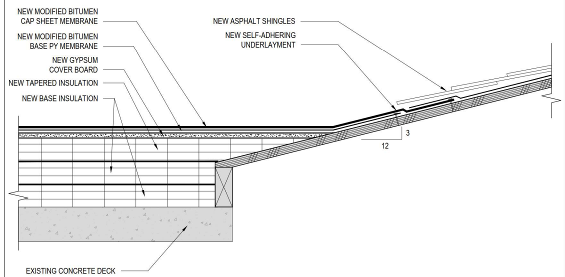
3 EAVE/GUTTER DETAIL
3"=1'-0"



4 RAKE FLASHING DETAIL
3"=1'-0"


NEW ASPHALT SHINGLES
NEW SELF-ADHERING UNDERLAYMENT
NEW RAKE EDGE METAL
NEW WOOD BLOCKING FASCIA
NEW METAL FASCIA
NEW MODIFIED BITUMEN BASE PLY MEMBRANE
NEW MODIFIED BITUMEN CAP SHEET MEMBRANE
NEW MODIFIED BITUMEN BASE SHEET
NEW SEALANT
NEW GRAVEL STOP
NEW GUTTER, BRACKET AND SPACER
1" MIN.
NEW TERMINATION BAR AND SEALANT
NEW COUNTER FLASHING
NEW CANT STRIP
NEW 2 PLY FLASHING
1/4" SLOPE
4"
NEW DOWNSPOUT OUTLET
NEW DOWNSPOUT HANGER
NEW METAL FASCIA
NEW DOWNSPOUT
3"

5 RAKE EDGE/EAVE GUTTER DETAIL
3"=1'-0"



6 LOW-SLOPE/STEEP SLOPE TRANSITION
3"=1'-0"

...Becoming the Leading Designer of High Performance Facilities in the Nation with a Specialty in Alternative Delivery Methods

333 Fayetteville St, Ste 225
Raleigh, NC 27601
P: 919.573.6350
F: 919.573.6355
www.sfla.biz

sfl+a ARCHITECTS

BID SET

Terracon

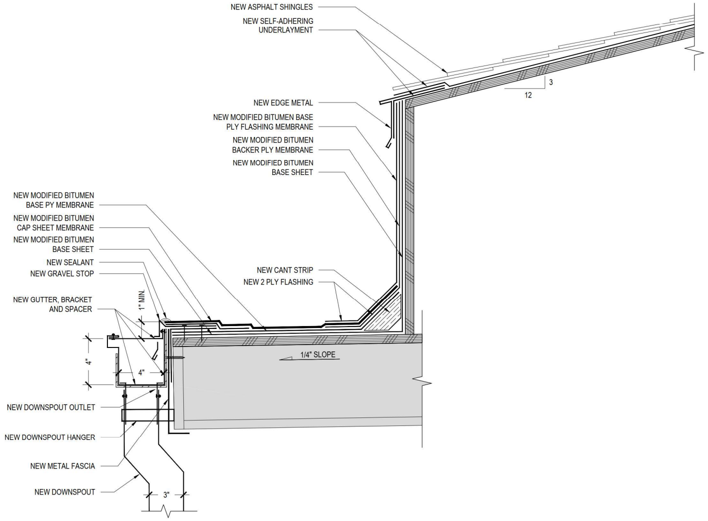
MOORE COUNTY SCHOOLS
VASS-LAKEVIEW ELEMENTARY GYM RENOVATIONS
141 JAMES STREET - VASS, NC 28394

No.	Date	Description

ISSUE DATE: 11-22-2023
PROJECT #: 02206.000
DRAWN BY: SWP
CHECKED BY: VTN

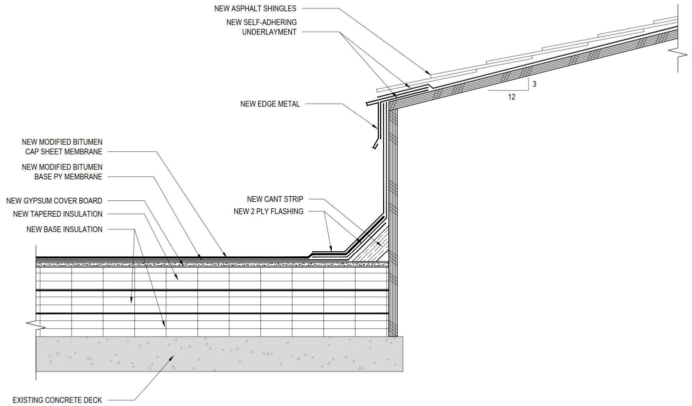
DETAILS

A-301



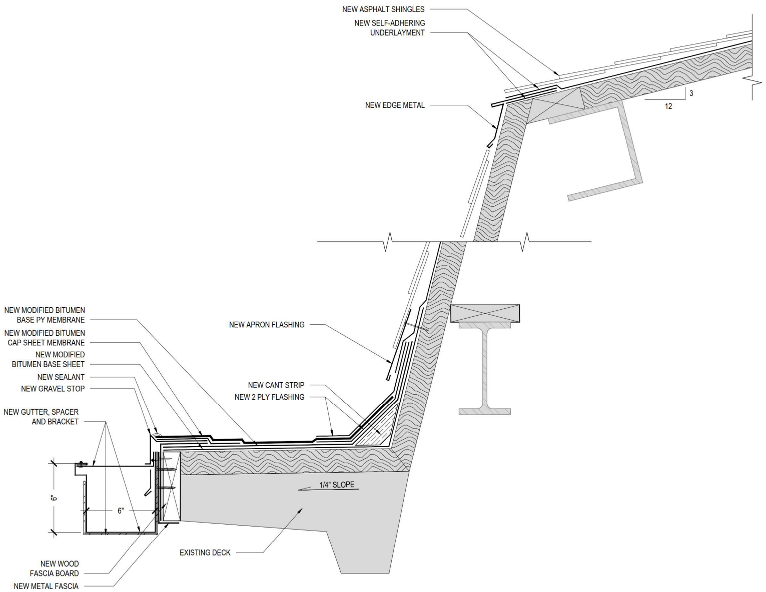
NEW ASPHALT SHINGLES
NEW SELF-ADHERING UNDERLAYMENT
3
12
NEW EDGE METAL
NEW MODIFIED BITUMEN BASE PLY FLASHING MEMBRANE
NEW MODIFIED BITUMEN BACKER PLY MEMBRANE
NEW MODIFIED BITUMEN BASE SHEET
NEW MODIFIED BITUMEN BASE PY MEMBRANE
NEW MODIFIED BITUMEN CAP SHEET MEMBRANE
NEW MODIFIED BITUMEN BASE SHEET
NEW SEALANT
NEW GRAVEL STOP
NEW CANT STRIP
NEW 2 PLY FLASHING
NEW GUTTER, BRACKET AND SPACER
1" MIN.
4"
4"
1/4" SLOPE
NEW DOWNSPOUT OUTLET
NEW DOWNSPOUT HANGER
NEW METAL FASCIA
NEW DOWNSPOUT
3"

1 LOW-SLOPE/STEEP SLOPE TRANSITION
3"=1'-0"



NEW ASPHALT SHINGLES
NEW SELF-ADHERING UNDERLAYMENT
3
12
NEW EDGE METAL
NEW MODIFIED BITUMEN CAP SHEET MEMBRANE
NEW MODIFIED BITUMEN BASE PY MEMBRANE
NEW GYPSUM COVER BOARD
NEW TAPERED INSULATION
NEW BASE INSULATION
NEW CANT STRIP
NEW 2 PLY FLASHING
EXISTING CONCRETE DECK

2 LOW-SLOPE/STEEP SLOPE TRANSITION
3"=1'-0"



NEW ASPHALT SHINGLES
NEW SELF-ADHERING UNDERLAYMENT
3
12
NEW EDGE METAL
NEW MODIFIED BITUMEN BASE PY MEMBRANE
NEW MODIFIED BITUMEN CAP SHEET MEMBRANE
NEW MODIFIED BITUMEN BASE SHEET
NEW SEALANT
NEW GRAVEL STOP
NEW APRON FLASHING
NEW CANT STRIP
NEW 2 PLY FLASHING
NEW GUTTER, SPACER AND BRACKET
6"
6"
1/4" SLOPE
EXISTING DECK
NEW WOOD FASCIA BOARD
NEW METAL FASCIA

3 LOW-SLOPE/STEEP SLOPE TRANSITION
3"=1'-0"

...Becoming the Leading Designer of High Performance Facilities in the Nation with a Specialty in Alternative Delivery Methods

333 Fayetteville St, Ste 225
Raleigh, NC 27601
P: 919.573.6350
F: 919.573.6355
www.sfla.biz

sfL+a ARCHITECTS

SFL+A ARCHITECTS, P.A. CERT. NO. 50676 RALEIGH

BID SET

Terracon
Consulting Engineers and Scientists

SEAL 045268 11/22/2023 ENGINEER JEFFREY H. POE, JR.

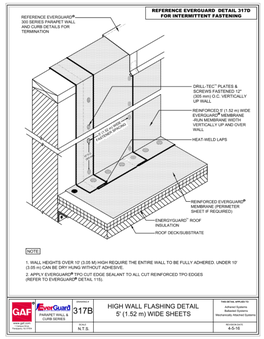
MOORE COUNTY SCHOOLS
VASS-LAKEVIEW ELEMENTARY GYM RENOVATIONS
141 JAMES STREET - VASS, NC 28394

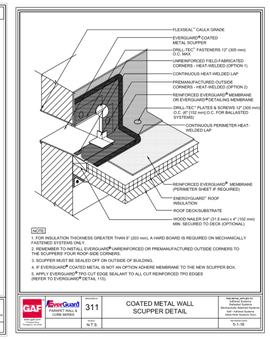
No.	Date	Description

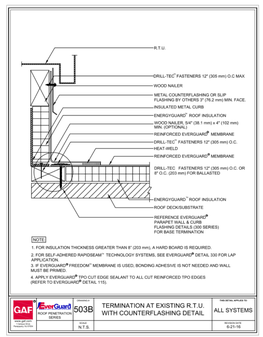
ISSUE DATE: 11-22-2023
PROJECT #: 02206.000
DRAWN BY: SWP
CHECKED BY: VTN

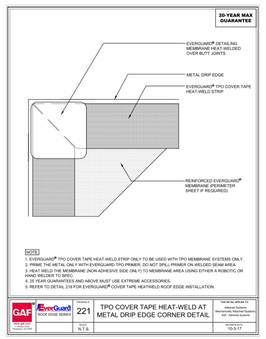
DETAILS

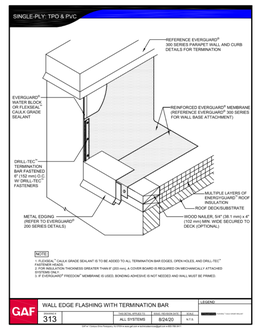
A-302

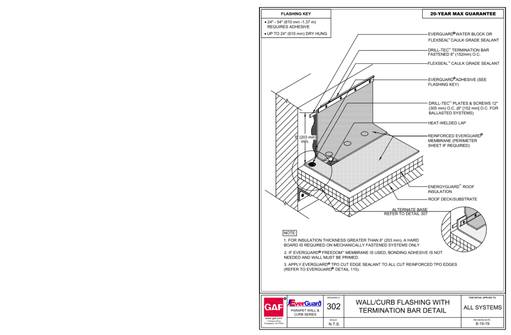


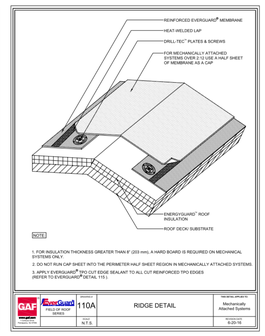


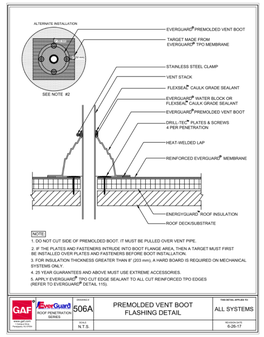


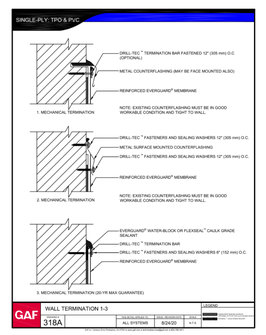








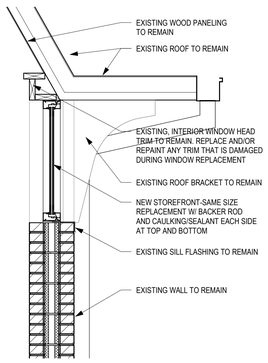




*NOTE: NOT ALL DETAILS MAY BE USED

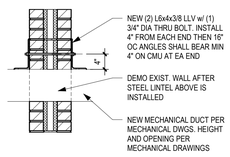
3 A-303 **GAF ROOF DETAILS - BASIS OF DESIGN**

SCALE: 6" = 1'-0"



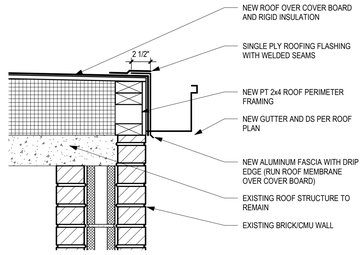
8 A-303 **WINDOW SECTION**

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



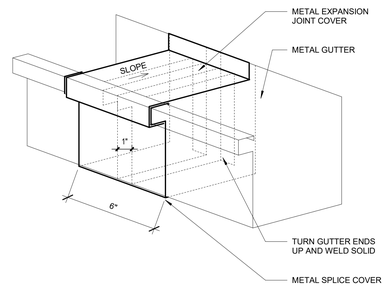
7 A-303 **NEW MECH WALL OPENING**

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



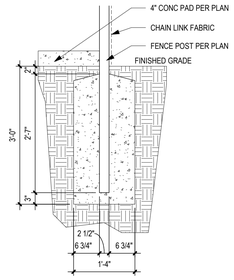
6 A-303 **LOW ROOF FASCIA SECTION**

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



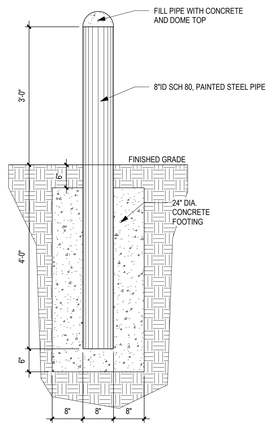
2 A-303 **GUTTER EXPANSION JOINT DETAIL**

SCALE: 3" = 1'-0"



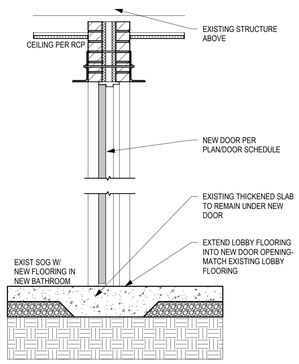
5 A-303 **SITE FENCE POST**

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



4 A-303 **SITE BOLLARD**

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



1 A-303 **NEW DOOR OPENING @ EXIST. WALL**

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

...Becoming the Leading Designer of High Performance Facilities in the Nation with a Specialty in Alternative Delivery Methods

333 Fayetteville St, Ste 225
Raleigh, NC 27601
P: 919.573.6350
F: 919.573.6355
www.sfla.biz

sfl+a ARCHITECTS

SFL+A ARCHITECTS PA CERT. NO. 50676 NORTH CAROLINA RALEIGH

NAHAH R. HICKS REGISTERED AGENT 31647 NORTH CAROLINA RALEIGH, NC 11/22/2023

BID SET

MOORE COUNTY SCHOOLS

VASS-LAKEVIEW ELEM. GYM. RENO.

141 JAMES ST, VASS NC 28394

No.	Date	Description

ISSUE DATE: 11/22/23

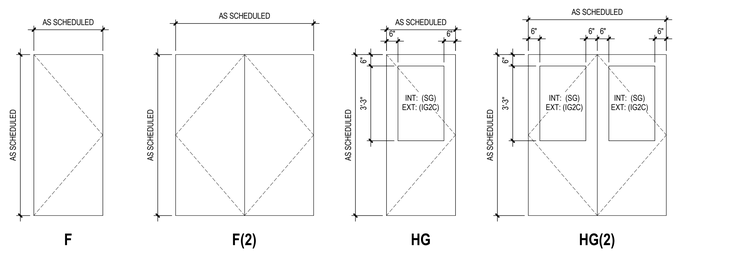
PROJECT #: 02206.100
DRAWN BY: Author
CHECKED BY: Checker

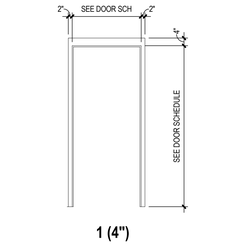
DETAILS

A-303

DOOR & FRAME SCHEDULE

NO.	DOOR SIZE			MAT	TYPE	FRAME		HARDWARE	FIRE RATING	KEYED NOTES
	WIDTH	HEIGHT	THK			FRAME MAT	FRAME TYPE			
115	3'-0"	7'-0"	1 3/4"	WD	F	HM	1	1.5 PR HINGES, PRIVACY SET, CORE, CLOSER, 1 EA STOP, 3 EA SILENCER	0	BRUSHED OR SATIN FINISH, SIGN TYPE D





DOOR LEGEND
SCALE: 3/8" = 1'-0"

FRAME LEGEND
SCALE: 3/8" = 1'-0"

DOOR LOCKSET FUNCTION LEGEND

HARDWARE NOTES:
ENTRY DEADLOCK FUNCTION: DEADBOLT BY KEY OUTSIDE, THUMBTURN INSIDE

BOTH SIDES LOCK FUNCTION: THE INSIDE LEVER IS UNLOCKED BY A KEY AND THE OUTSIDE LEVER IS UNLOCKED BY A KEY. CAN REMAIN UNLOCKED.

STOREROOM FUNCTION: THE INSIDE LEVER IS ALWAYS OPERABLE. THE OUTSIDE LEVER IS ALWAYS LOCKED. ONE MUST ALWAYS HAVE A KEY TO OPEN THE DOOR FROM THE OUTSIDE.

OFFICE FUNCTION: THE INSIDE LEVER IS ALWAYS OPERABLE. THE OUTSIDE LEVER IS LOCKED BY DEPRESSING A BUTTON ON THE INSIDE LEVER. A KEY IS USED TO UNLOCK THE OUTSIDE LEVER FROM THE OUTSIDE WHEN LOCKED.

PRIVACY FUNCTION: THE OUTSIDE LEVER IS LOCKED BY USE OF A PUSH BUTTON ON THE INSIDE LEVER. THE OUTSIDE LEVER CAN BE UNLOCKED (NOT BY A KEY) BY THE USE OF SOME SIMPLE TOOL.

PASSAGE FUNCTION: THE INSIDE AND OUTSIDE LEVERS ARE FREE TO OPERATE AT ALL TIMES.

HARDWARE ABBREVIATIONS:

AST	ASTRAGAL
CLSR	CLOSER
DIA	DIAMETER
FB	FLUSH BOLT
KP	KICK PLATE
OHS	OVERHEAD STOP
SS	STAINLESS STEEL
WMS	WALL MOUNTED STOP
WS	WEATHER STRIPPING

GENERAL DOOR NOTES

1. PROVIDE AND INSTALL WHEATHERSTRIPPING AT ALL NEW EXTERIOR DOORS.
2. PROVIDE AND INSTALL SILENCERS AT ALL NEW H.M. FRAMES.

...Becoming the Leading Designer of High Performance Facilities in the Nation with a Specialty in Alternative Delivery Methods

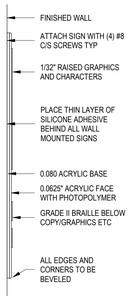
333 Fayetteville St, Ste 225
Raleigh, NC 27601
P: 919.573.6350
F: 919.573.6355
www.sfla.biz

sfl+a ARCHITECTS

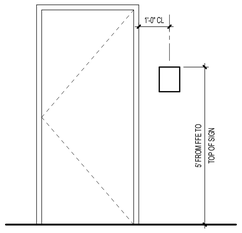
SFL+A ARCHITECTS PA CERT. NO. 50676 NORTH CAROLINA BOARD OF EXAMINERS RALEIGH

NAHAH R. HICKS REGISTERED AGENCY 31647 NORTH CAROLINA RALEIGH, NC 11/22/2023

BID SET



4 / A-401 SIGNAGE DETAIL AT WALL
SCALE: 6" = 1'-0"



SIGNAGE NOTES:

1. ROOM SIGNAGE TO BE LOCATED ON THE WALL ADJACENT TO THE STRIKE SIDE OF THE DOOR.
2. MOUNTING LOCATION AND HEIGHT SHOWN IS TYPICAL.
3. VERIFY NON-TYPICAL SIGN LOCATIONS WITH THE ARCHITECT PRIOR TO INSTALLATION.
4. AT DOORS WITH SIDELIGHTS ON THE STRIKE SIDE OF JAMB, USE DOUBLE SIDED TAPE ONLY. PROVIDE A BLANK SOLID SIGN OF SAME COLOR AND SIZE ON OPPOSITE SIDE OF GLASS.
5. COORDINATE ROOM NAME, NUMBER AND DOOR INVENTORY NUMBER WITH USER.
6. PROVIDE SIGNAGE AT ALL INTERIOR DOOR LOCATION. ROOMS WITH MORE THAN ONE ACCESS POINT SHALL REQUIRE SIGNAGE AT EACH LOCATION.
7. TYPICAL FOR ALL DOOR INVENTORY NUMBERS - SHALL HAVE RAISED NUMBERING AND BE BLACK IN COLOR
8. FIRE EVACUTION MAP HOLDERS TO BE PROVIDED IN ALL HABITABLE ROOMS ADJACENT TO THE EGRESS DOOR.

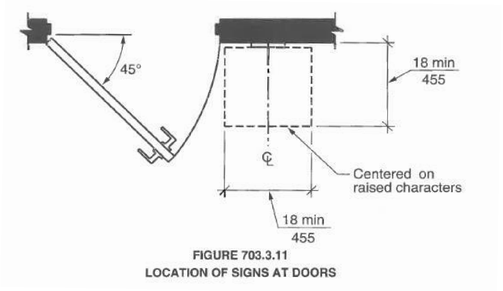
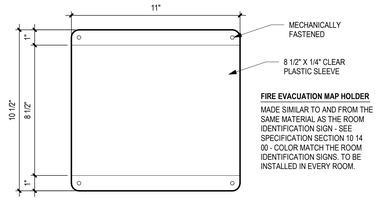


FIGURE 703.3.11
LOCATION OF SIGNS AT DOORS

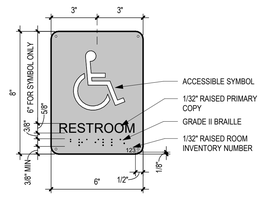
3 / A-401 ADA SIGN AT DOOR
SCALE: 3" = 1'-0"

SIGN TYPE FEM

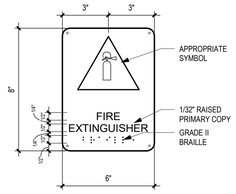


FIRE EVACUATION MAP HOLDER
MADE SIMILAR TO AND FROM THE SAME MATERIAL AS THE ROOM IDENTIFICATION SIGN - SEE SPECIFICATION SECTION 10 14 00 - COLOR MATCH THE ROOM IDENTIFICATION SIGNS. TO BE INSTALLED IN EVERY ROOM.

SIGN TYPE D

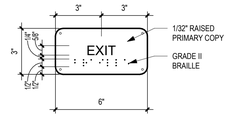


SIGN TYPE F

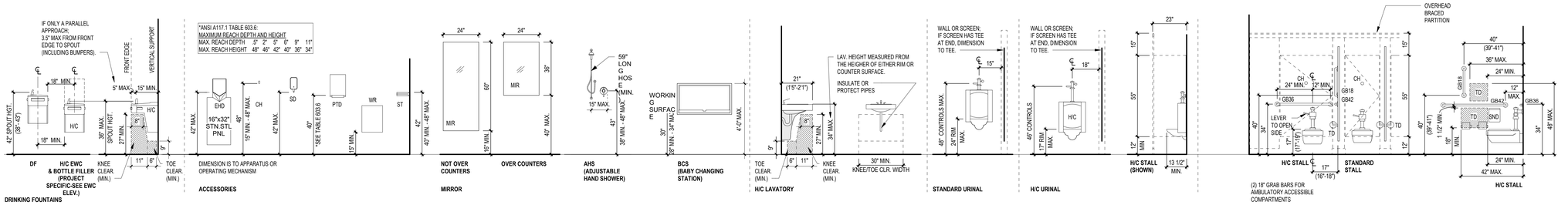


SIGN TYPE J

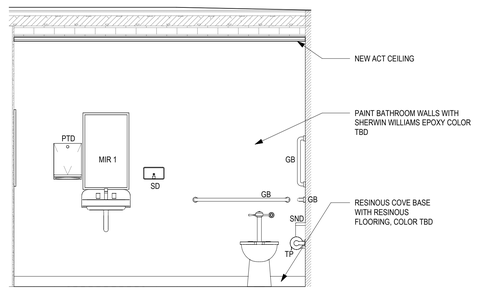
NCBC 1013.4 TACTILE EXIT SIGNS.
A TACTILE EXIT SIGN STATING "EXIT" AND COMPLYING WITH ICC A117.1 SHALL BE PROVIDED ADJACENT TO EACH DOOR TO AN AREA OF REFUGE, AN EXTERIOR AREA OF ASSISTED RESCUE, AN EXIT STAIRWAY, AN EXIT RAMP, AN EXIT PASSAGEWAY AND THE EXIT DISCHARGE.



6 / A-401 SIGNAGE ELEVATIONS
SCALE: 3" = 1'-0"



1 / A-401 ACCESSIBLE + STANDARD FIXTURE MOUNTING HEIGHTS (ADULTS)
SCALE: 3/8" = 1'-0"



2 / A-401 UNISEX BATHROOM ELEVATION
SCALE: 1/2" = 1'-0"

TOILET ACCESSORY LEGEND

NAME	DESCRIPTION
CH	COAT HOOK
EHD	ELECTRIC HAND DRYER
FD	FLOOR DRAIN - SEE PLUMBING
GB	1 1/2" DIA SS GRAB BAR (GB# NOTED IN PLAN INDICATES LENGTH IN INCHES)
H/C	INDICATES TO MOUNT FIXTURE AT HANDICAPPED ACCESSIBLE HEIGHT
MR	SS FRAMED WALL MIRROR ATTACHED WITH CONCEALED FASTENERS
MR2	SS FRAMED WALL MIRROR ATTACHED WITH CONCEALED FASTENERS - 60"
PTD	PAPER TOWEL DISPENSER
SD	WALL MOUNTED GRAVITY FED SOAP DISPENSER
SND	SANITARY NAPKIN DISPOSAL (WOMENS TOILET ROOMS ONLY)
TD	DBL. ROLL TOILET TISSUE DISPENSER; 1 PER STALL IN GROUP TOILETS

GENERAL NOTES:
1. IF URINAL SCREEN = / > 24" DEEP, PROVIDE 3'-0" CLEAR FLOOR SPACE.
2. ACCESSIBLE URINAL TO MAINTAIN 30" CLEAR FLOOR WIDTH; CONFIRM WIDTH IS CLEAR BETWEEN SCREEN FLOOR SUPPORTS.
3. WHERE AN ADMINISTRATIVE AUTHORITY REQUIRES FLUSH CONTROLS FOR FLUSH VALVES TO BE LOCATED IN A POSITION THAT CONFLICTS WITH THE LOCATION OF THE REAR GRAB BAR, THE GRAB BAR SHALL BE PERMITTED TO BE SPLIT OR SHIFTED TO THE OPEN SIDE OF THE TOILET AREA. (ANSI 117.1-604.5.2x2)
4. LOCATE FLUSH CONTROL ON OPEN SIDE OF WATER CLOSET.
5. 30"x48" CLEAR FLOOR SPACE WITHIN ROOM per A117.1-2009 603.2.2x2.
6. 60" DIAMETER CLEAR FLOOR SPACE per A117.1-2009 603.2.1.
7. PTD MUST PROTRUDE 4" OR LESS INTO LAVATORY CLEAR SPACE.
8. 30"x48" FORWARD APPROACH CLEAR SPACE CENTERED ON ELEMENT.
9. 60"x56" CLEAR FLOOR SPACE MEASURED PERPENDICULAR TO ADJACENT SIDE AND REAR WALL OF THE ACCESSIBLE TOILET. (ANSI 117.1-2009 604.3.1+2).
10. DIMENSIONS TO GRAB BARS IS TO TOP OF GRAB SURFACE.
11. DIMENSIONS TO ACCESSORIES IS TO THE OPERABLE PORTION OF THE DEVICE.

MOORE COUNTY SCHOOLS
VASS-LAKEVIEW ELEM. GYM. RENO.
141 JAMES ST, VASS NC 28394

No.	Date	Description

ISSUE DATE: 11/22/23
PROJECT #: 02206.100
DRAWN BY: JK
CHECKED BY: MK

DOOR SCHEDULE & TOILET ACCESSORY LEGEND

A-401

TRIAD ENGINEERING CONSULTANTS, INC
Email: Admin@TriadEngMEP.com
2636-100 Willard Dairy Rd
High Point, NC 27265
(336) 338-8943
Firm License
C-0492
2309
PLUMBING MECHANICAL AND ELECTRICAL ENGINEERING
ENGINEERING THE PIEDMONT TRIAD SINCE 1984

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 14498 11/22/23 ENGINEER PERRY V. GUILLEDGE

...Becoming the Leading Designer of High Performance Facilities in the Nation with a Specialty in Alternative Delivery Methods

333 Fayetteville St, Ste 225
Raleigh, NC 27601
P: 919.573.6350
F: 919.573.6355
www.sfla.biz

sfl+a ARCHITECTS

SILVA ARCHITECTS, PA REGISTERED ARCHITECTURAL CORPORATION CERT. NO. 50676 RENEWAL DATE 12/31/24 RALEIGH

BID SET

PLUMBING LEGEND

	COLD WATER PIPE BELOW GRADE
	COLD WATER PIPE (CW)
	HOT WATER PIPE (HW)
	HOT WATER RETURN PIPE (HWR)
	WASTE PIPE ABOVE FLOOR OR GROUND
	WASTE PIPE BELOW FLOOR OR GROUND
	VENT PIPE
	VENT THROUGH ROOF (VTR)
	FLOOR DRAIN (FD)
	GROUND CLEANOUT (GCO)
	PIPE DROP OR RISER
	RISER WITH SHUTOFF RISER
	SHUT-OFF VALVE
	HOSE BIBB (HB)

PLUMBING CONSTRUCTION NOTES

1. ALL WORK AND MATERIALS SHALL BE IN COMPLIANCE WITH THE CURRENT STATE BUILDING CODE AND LOCAL CODES AND ORDINANCES.
2. FIELD VERIFY EXISTING WASTE INVERTS ARE SUITABLE FOR CONNECTION OF NEW WASTE PIPING BEFORE BEGINNING INSTALLATION OF NEW WORK. CONTACT ENGINEER IF INVERT IS INADEQUATE.
3. ROD EXISTING SEWER LATERAL PIPING TO MANHOLE TO INSURE PIPE IS CLEAR OF CLOGS AND OBSTRUCTIONS.
4. PROVIDE ALL PENETRATIONS REQUIRED FOR NEW PIPING IN EXISTING CONSTRUCTION.
5. WATER PIPING ABOVE GRADE SHALL BE TYPE L HARD COPPER. JOINTS SHALL BE SOLDERED OR MECHANICAL PRESS FIT. SOLDERED JOINTS SHALL BE MADE WITH LEAD FREE SOLDER UP TO 1" PIPE SIZE AND WITH SILVER BRAZING SOLDER FOR PIPE SIZES 1-1/4" AND LARGER.
6. ABOVE GRADE COLD WATER AND INDIVIDUAL HOT WATER RUNOUT PIPING SHALL BE INSULATED WITH 1/2" THICKNESS PREFORMED FIBERGLASS PIPE INSULATION WITH ALL SERVICE JACKET. HOT WATER MAINS AND RECIRCULATION PIPING SHALL BE INSULATED WITH 1" THICK PREFORMED FIBERGLASS PIPE INSULATION WITH ALL SERVICE JACKET.
7. PROVIDE FOAMGLASS INSULATION INSERTS AND GALVANIZED STEEL PIPE SHIELDS AT PIPE SUPPORTS. SECURE PIPE SHIELDS TO PIPE WITH ZIP TIE.
8. LABEL INSULATED PIPING WITH PLASTIC LABELS ENCIRCLING THE ENTIRE CIRCUMFERENCE OF THE INSULATION WITH LETTERING TO IDENTIFY SERVICE AND ARROWS INDICATING FLOW DIRECTION. SECURE TO PIPE INSULATION WITH BLACK ZIP-TYE. SPACE LABELS 12' ON CENTER AND WITHIN 6' OF PENETRATION OF WALLS, CEILINGS, FLOORS, ETC.
9. PROVIDE ONE-PIECE PIPE SLEEVES FOR PIPES PASSING THROUGH FLOORS OR WALLS. SLEEVE SHALL BE SECURED IN WALL CONSTRUCTION WITH STRAPS OR BRACKETS FOR FRAME WALL OR FLOOR CONSTRUCTION. SECURE SLEEVE WITH MORTAR OR GROUT FOR FOUNDATION WALL, MASONRY WALL OR CONCRETE FLOOR SLAB CONSTRUCTION. SLEEVE SHALL EXTEND MINIMUM OF 12" BEYOND FOUNDATION WALLS, 2" BEYOND ABOVE GRADE WALLS, AND 6" ABOVE FLOORS. SLEEVES SHALL BE SIZED TO PROVIDE CLEARANCE FOR PIPE INCLUDING INSULATION WHERE APPLICABLE. SEAL SPACE BETWEEN SLEEVE AND PIPE OR INSULATION WITH ELASTOMERIC SEALANT ABOVE GRADE OR WITH LINK SEAL COMPRESSION SEALS FOR FOUNDATION WALLS.
10. SANITARY AND VENT PIPING SHALL BE SOLID WALL SCHEDULE 40 ASTM D2665 PVC PIPING WITH SOLVENT WELDED DWV PATTERN PVC FITTINGS PROVIDED THE PIPING IS NOT EXPOSED IN ANY RETURN AIR PLENUMS AND THAT LOCAL AUTHORITIES APPROVE. USE CAST IRON WHERE EXPOSED IN PLENUMS OR COVER PVC PIPING WITH METHOD APPROVED BY LOCAL AHJ FOR SEPARATING PVC FROM PLENUM AIR.
11. SUPPORT ABOVE GRADE PIPING FROM BUILDING STRUCTURE USING ALL-THREAD ROD AND MSSP STANDARD PIPING SUPPORTS OR TRAPEZE TYPE CROSS SUPPORTS. SUPPORT PIPING WITHIN 2' (EACH DIRECTION) OF ELBOWS AND SPACED NO FURTHER THAN 8' APART. DO NOT USE FABRIC SUPPORTS, PLASTIC OR STEEL STRAPPING OR STEEL WIRE TO SUPPORT PIPING.
12. BELOW GRADE PIPING SHALL BE LAID IN TRENCH ON SAND OR SOIL FREE OF ORGANIC MATERIAL, ROCKS WITH SHARP EDGES AND CONSTRUCTION DEBRIS. BACKFILL WITH SOIL AFTER PIPE IS COVERED IN 8" LIFTS AND COMPACT TO 95% PROCTOR MINIMUM.
13. WARRANTY ALL WORK FOR A MINIMUM OF 1 YEAR FROM DATE OF ACCEPTANCE BY OWNER.

PLUMBING FIXTURE SCHEDULE - VASS-LAKEVIEW

MARK	DESCRIPTION	FIXTURE MAKE (OR EQUAL)	FIXTURE MODEL #	TRIM 1 MAKE (OR EQUAL)	TRIM 1 MODEL #	TRIM 2 MAKE (OR EQUAL)	TRIM 2 MODEL #	REMARKS	CONNECTION SIZES WASTE	VENT	COLD WATER	HOT WATER
P-1A	WATER CLOSET FLOOR MOUNTED FLUSH VALVE SENSOR OPERATED BATTERY POWER	EQUAL TO AMERICAN STANDARD	"MADERA" 3641.001	AMERICAN STANDARD	5901.110T0 HEAVY DUTY WHITE POLYPROPYLENE WITH EVERCLEAN SURFACE OPEN FRONT SEAT LESS COVER	SLOAN	ROYAL 113 SMO BATTERY SENSOR OPERATED FLUSH VALVE WITH PUSH BUTTON OVERRIDE. GPF TO MATCH FIXTURE FLUSH RATE.	WHITE VITREOUS CHINA BOWL 16.5" HIGH RIM WITH EVERCLEAN SURFACE. BATTERY POWERED FLUSH SENSOR 1.6 GAL PER FLUSH. 1,000 MaP SCORE. CHROME PLATED BRASS SUPPLY TUBE COVER AND SUPPLY CHECK/STOP VALVE. PLUS OPEN FRONT WHITE PLASTIC SEAT W/CHECK HINGES .	3"	2"	1"	-
P-2A	LAVATORY WALL MOUNTED CAST IRON ADA ACCESSIBLE	AMERICAN STANDARD	REGALYN 4869004 20x18	EQUAL TO SLOAN	EBF-650 BATT. SENSOR OPERATED FAUCET 0.5 GPM W/ GRID STRAINER			WHITE CAST IRON WALL MOUNTED SINK WITH FAUCET COMPATIBLE HOLE SPACING. PROVIDE CHROME PLATED BRASS SUPPLIES, STOPS AND P-TRAP. PROVIDE CHROME PLATED BRASS TAILPIECE OUTLET WITH GRID STRAINER. SUPPLY+DRAIN PIPE INSULATION KIT. INSTALL PER ADA.	1-1/2"	1-1/2"	1/2"	-
P-5	BI-LEVEL HC ACCESSIBLE ELECTRIC WATER COOLER DRINKING FOUNTAIN WITH BOTTLE FILLER	ELKAY	EZOOSTL8LC+ LZWSRK	EQUAL TO ELKAY	LKAPREZL EWF172			WALL MOUNTED BI-LEVEL ELECTRIC WATER COOLER WITH HANDS-FREE SENSORS AND WATER FILTER. 8 GPH. 120V. PROVIDE CANE APRON OPTION UNDER HIGH BOWL. PROVIDE SUPPLIES, STOPS, CAST BRASS P-TRAP. INSTALL PER ADA.	1-1/2"	1-1/2"	1/2"	-

NOTES
1. "A" DESIGNATES FIXTURE TO BE INSTALLED AT HANDICAPPED ACCESSIBLE ELEVATION.
2. ROUGH-IN SIZES TO FIXTURES ARE TO BE AS SCHEDUELD UNLESS LARGER SIZE SHOWN ON PLAN.
3. OPERATING HANDLE FOR ACCESSIBLE WATER CLOSETS SHALL BE ON THE ACCESSIBLE (OPEN APPROACH) SIDE OF THE FIXTURE.
4. REFER TO ARCHITECTURAL DRAWINGS FOR FIXTURE MOUNTING HEIGHTS.

List of Drawings Vass-Lakeview

MOORE COUNTY SCHOOLS

VASS-LAKEVIEW GYMNASIUM RENOVATION

141 JAMES ST VASS, NORTH CAROLINA 28394

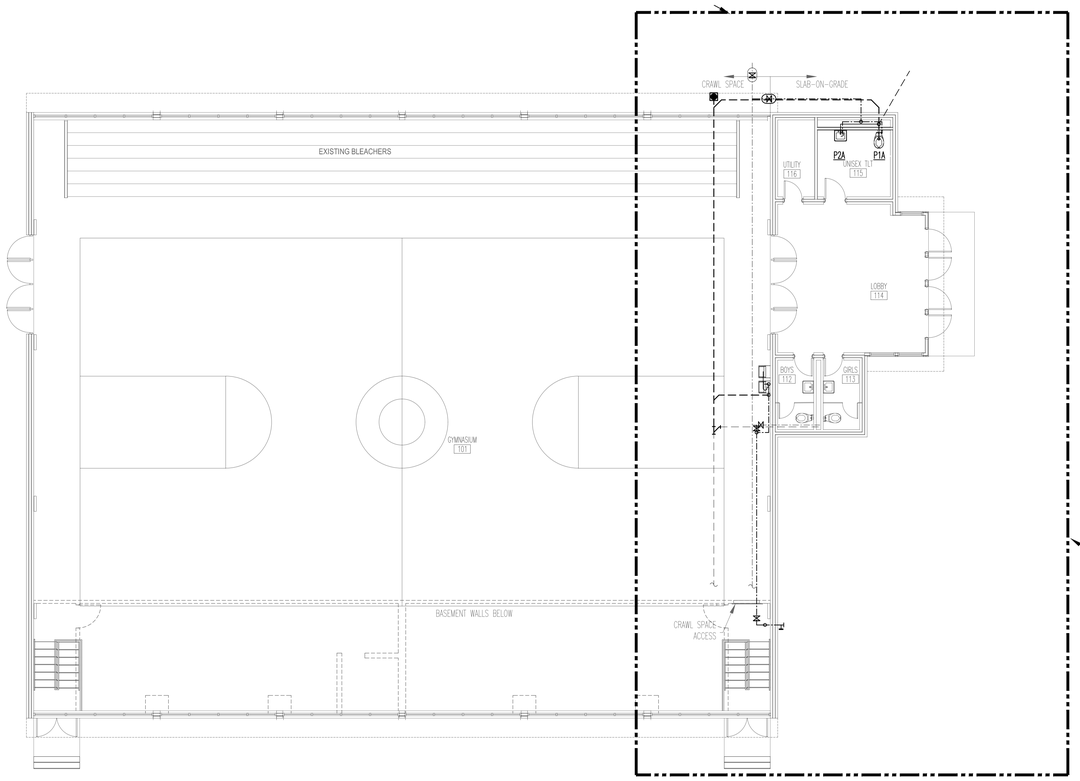
No.	Date	Description

ISSUE DATE: 11/22/23

PROJECT #: 02206.100
DRAWN BY: PVG
CHECKED BY: PVG

PLUMBING LEGEND, NOTES, SCHEDULES

P0.1



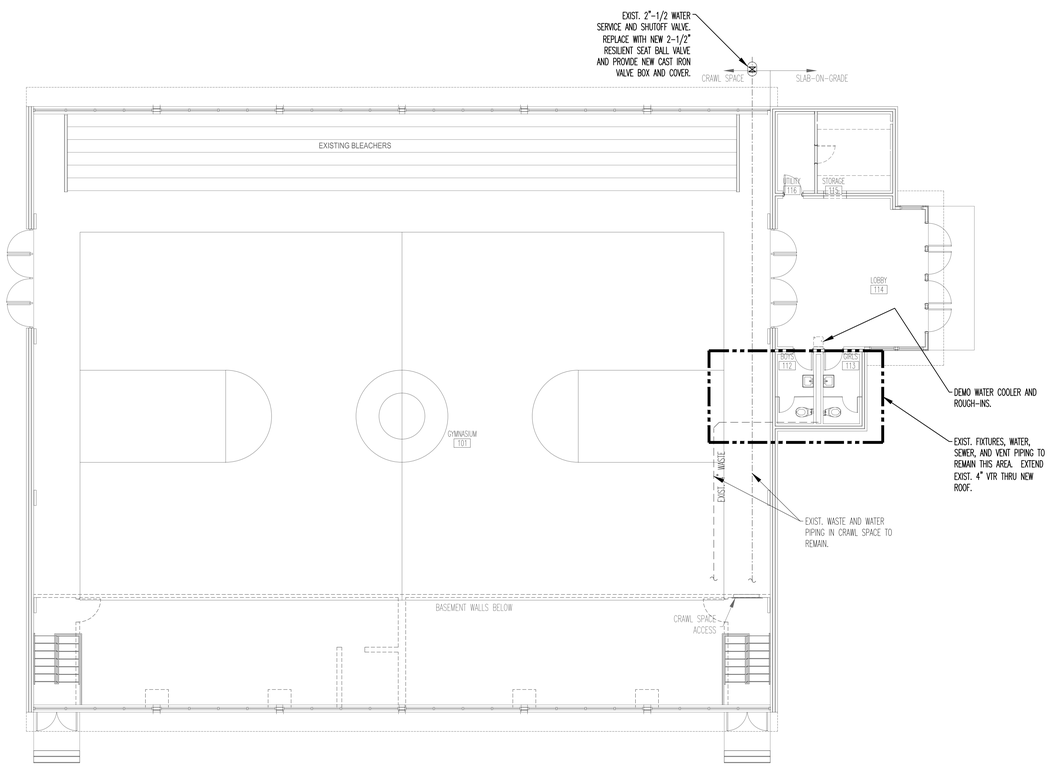
SEE P4.1 FOR ENLARGED PLAN OF NEW WORK THIS AREA

PLUMBING RENOVATION PLAN

2 / P1.0 SCALE: 1/8" = 1'-0"

GENERAL PLUMBING NOTES:

1. SEE ENLARGED PLANS ON P4.1 FOR DETAILS IN WORK AREA.
2. CUT AND TRENCH FLOOR AS REQUIRED FOR NEW UNDERFLOOR WORK. BACKFILL TO 95% COMPACTION AND COORDINATE WITH G.C. TO PATCH VAPOR BARRIER, FLOOR AND FINISH.



PLUMBING DEMOLITION PLAN

1 / P1.0 SCALE: 1/8" = 1'-0"

GENERAL PLUMBING DEMOLITION NOTES:

1. EXISTING WATER PIPING ABOVE AND BELOW FLOOR IS TO REMAIN IN SERVICE UNLESS NOTED OTHERWISE.
2. EXISTING WASTE AND VENT PIPING ABOVE AND BELOW GRADE IS TO REMAIN IN SERVICE UNLESS NOTED OTHERWISE.
3. ROD EXISTING WASTE LINES CLEAR FROM THE MOST REMOTE ACCESS ON A BRANCH TO THE MAIN AND ROD THE MAIN CLEAR TO THE FIRST MANHOLE.
4. EXISTING FIXTURES AND ASSOCIATED ROUGH-INS ARE TO REMAIN UNLESS INDICATED OTHERWISE.
5. PATCH HOLES LEFT WHEN PIPING IS REMOVED FROM WALLS, FLOORS, CEILINGS, ETC. PATCH MATERIAL SHALL BE CONSISTENT WITH EXISTING CONSTRUCTION AND SUITABLE FOR APPLICATION OF FINAL FINISH.

TRIAD ENGINEERING CONSULTANTS, INC
Email: Admin@TriadEngMEP.com
2636-100 Willard Dairy Rd
High Point, NC 27265
(336) 338-8943
Firm License
C-0492
2309
PLUMBING MECHANICAL AND ELECTRICAL ENGINEERING
ENGINEERING THE PIEDMONT TRIAD SINCE 1984

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 14498 11/22/23 ENGINEER PERRY V. GULLEDGE

...Becoming the Leading Designer of High Performance Facilities in the Nation with a Specialty in Alternative Delivery Methods
333 Fayetteville St, Ste 225
Raleigh, NC 27601
P: 919.573.6350
F: 919.573.6355
www.sfla.biz
sfl+a ARCHITECTS

SILVA ARCHITECTS, PA REGISTERED ARCHITECTURAL CORPORATION CERT. NO. 50676 NORTH CAROLINA RALEIGH

BID SET

MOORE COUNTY SCHOOLS
VASS-LAKEVIEW GYMNASIUM RENOVATION
141 JAMES ST VASS, NORTH CAROLINA 28394

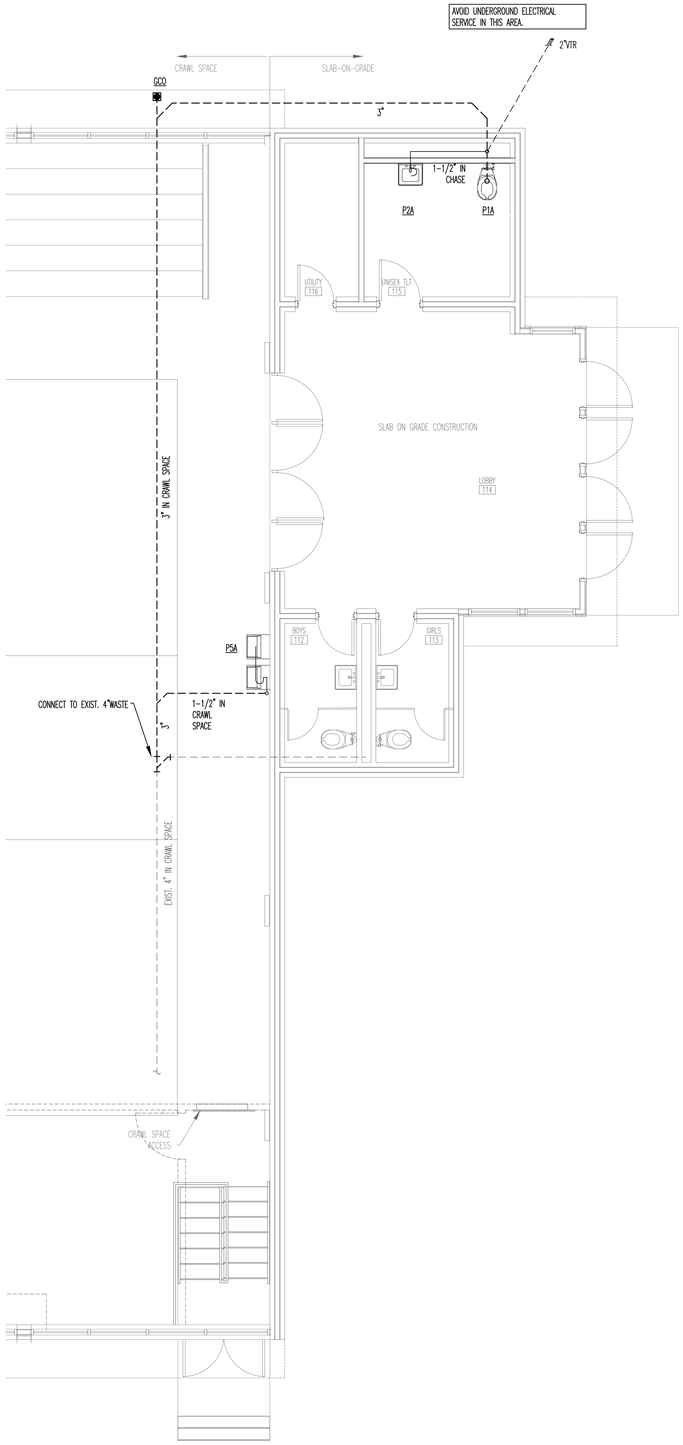
No.	Date	Description

ISSUE DATE: 11/22/23

PROJECT #: 02206.100
DRAWN BY: PVG
CHECKED BY: PVG

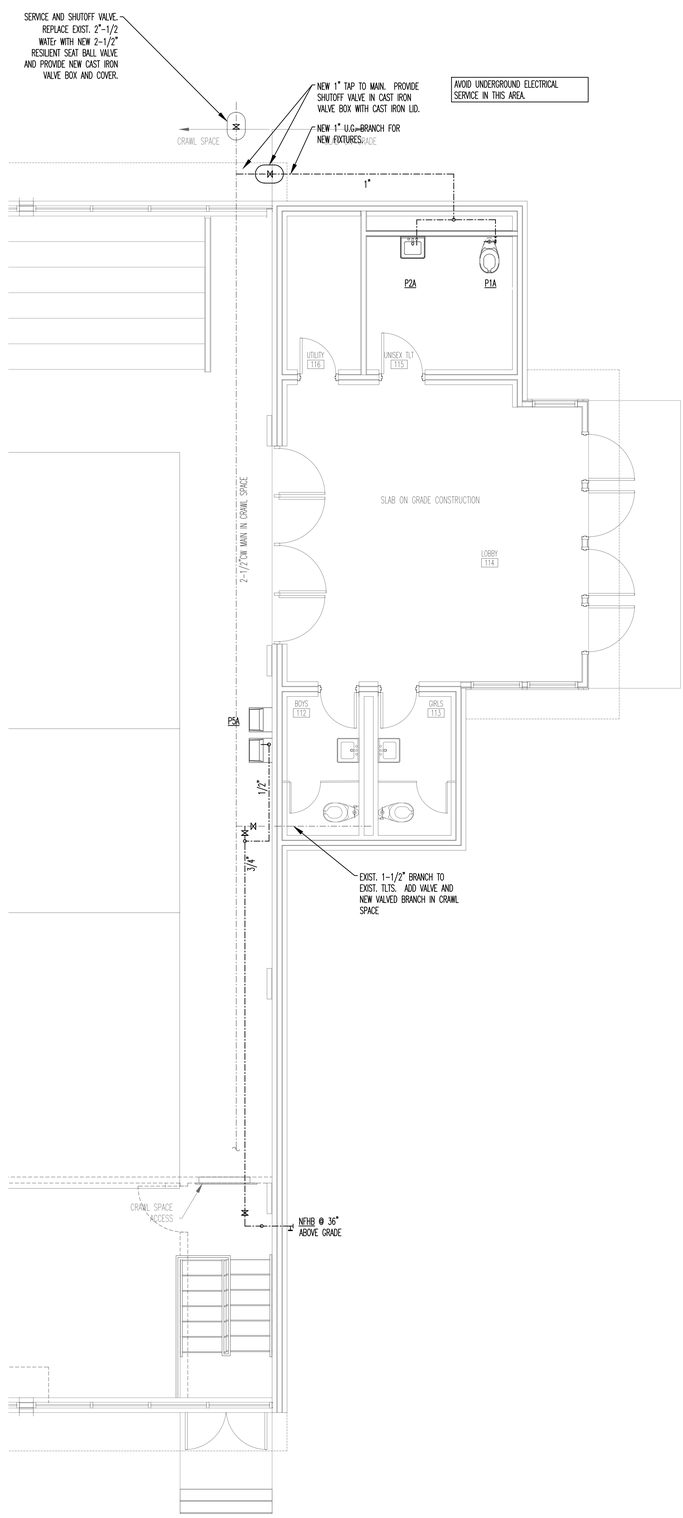
PLUMBING DEMOLITION & RENOVATION PLAN

P1.0



RENOVATION
PLUMBING - ENLARGED
WASTE & VENT PLAN

1 / P4.1 SCALE: 1/4" = 1'-0"



RENOVATION
PLUMBING - ENLARGED
DOMESTIC WATER PIPING PLAN

2 / P4.1 SCALE: 1/4" = 1'-0"

TRIAD ENGINEERING CONSULTANTS, INC
Email: Admin@TriadEngMEP.com
2636-100 Willard Dairy Rd
High Point, NC 27265
(336) 338-8943
Firm License
C-0492
2309
PLUMBING MECHANICAL AND ELECTRICAL ENGINEERING
ENGINEERING THE PIEDMONT TRIAD SINCE 1984

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 14498 11/22/23 ENGINEER PERRY V. GULLEDGE

...Becoming the Leading Designer of High Performance Facilities in the Nation with a Specialty in Alternative Delivery Methods
333 Fayetteville St, Ste 225
Raleigh, NC 27601
P: 919.573.6350
F: 919.573.6355
www.sfla.biz
sfl+a ARCHITECTS

SILVA ARCHITECTS, PA REGISTERED ARCHITECTURAL CORPORATION CERT. NO. 50676 RENEWAL DATE 12/31/24 RALEIGH

BID SET

MOORE COUNTY SCHOOLS
VASS-LAKEVIEW GYMNASIUM RENOVATION
141 JAMES ST VASS, NORTH CAROLINA 28394

No.	Date	Description

ISSUE DATE: 11/22/23

PROJECT #: 02206.100
DRAWN BY: PVG
CHECKED BY: PVG

PLUMBING ENLARGED RENOVATION PLANS

P4.1

GENERAL MECHANICAL NOTES

1. ALL WORK AND MATERIALS SHALL BE IN ACCORDANCE WITH THE APPLICABLE SECTIONS OF THE STATE BUILDING CODE AND LOCAL CODES AND ORDINANCES. MATERIALS SHALL BE NEW UNLESS NOTED OTHERWISE.
2. OBTAIN AND PAY FOR ALL PERMITS, FEES, INSPECTIONS ETC. AS REQUIRED FOR WORK UNDER THIS CONTRACT.
3. SCHEDULE ALL REQUIRED INSPECTIONS WITH LOCAL AHJ AND FURNISH PERSONNEL AND ACCESS REQUIRED BY AHJ FOR INSPECTIONS. MAKE CORRECTIONS AS REQUIRED BY INSPECTIONS REPORTS.
4. NOTE THAT THE TERM "PROVIDE" WHEN USED IN THIS CONTRACT SHALL MEAN TO FURNISH TO THE SITE, INSTALL PER MANUFACTURER'S RECOMMENDATIONS, START AND ADJUST AS REQUIRED FOR SAFE AND EFFICIENT OPERATION.
6. DUCTWORK SHALL BE G-90 GALVANIZED LOCK-FORMING AND PAINT GRADE STEEL FABRICATED AND INSTALLED IN ACCORDANCE WITH THE LATEST PUBLICATION OF SMACNA HVAC DUCT CONSTRUCTION STANDARDS.
7. PAINT EXPOSED DUCTS WITH 2 COATS PAINT TO MATCH EXISTING WALLS.
8. SUPPORT DUCT FROM THE STEEL BUILDING STRUCTURE WITH THREADED RODS AND ANGLE SUPPORTS. ROUND AND FLEX DUCTS MAY BE SUPPORTED WITH GALVANIZED STEEL STRAPS. DO NOT USE ANY FABRIC SUPPORTS FOR SUPPORTING DUCTS. NOTE THAT JOIST BRIDGING AND CROSS BRACING ARE NOT CONSIDERED AS BUILDING STEEL AND SHALL NOT BE USED TO SUPPORT DUCTS OR EQUIPMENT.
9. ELBOWS IN CONCEALED LOCATIONS AND UTILITY ROOMS SHALL BE RADIUSED CONSTRUCTION WHEREVER POSSIBLE WITH A CENTERLINE RADIUS EQUAL TO THE WIDTH OF THE DUCT.
10. ELBOWS FOR EXPOSED TO VIEW DUCT SHALL BE MITERED AND SHALL BE EQUIPPED WITH DOUBLE THICKNESS TURNING VANES.
11. FLEXIBLE DUCT SHALL BE UL LISTED HELICAL WIRE REINFORCED FILM INSULATED WITH FIBERGLASS INSULATION AND METALIZED VAPOR BARRIER JACKET. SECURE FLEX DUCTS TO DUCT TAPS AND COLLARS WITH DRAWBANDS OR SCREW-RATCHETED CLAMPS AND TAPE. LIMIT FLEX RUNS TO A MAXIMUM OF 6'.
12. INDOOR RECTANGULAR DUCTS SHALL BE INSULATED INTERNALLY WITH 1" THICKNESS 1.5 #/CF LOW VOC FIBERGLASS DUCT LINER SECURED TO DUCTS WITH STICK PINS AND LOW VOC ADHESIVE.
13. RECTANGULAR DUCTS EXPOSED TO THE WEATHER SHALL BE INSULATED AS INTERIOR DUCTS PLUS AN ADDITIONAL 1" RIGID DUCT BOARD INSULATION STICK PINNED TO THE EXTERIOR AND COVERED WITH 0.040" THICK ALUMINUM JACKET. HORIZONTAL DUCTS SHALL BE COVERED WITH A 2-PIECE LENGTHS CONSISTING OF A SINGLE SHEET BROKEN TO COVER THE TOP AND SIDES AND EXTENDING 1" BELOW THE BOTTOM INSULATION COVERING. A BOTTOM PANEL WITH 1" FLANGES SHALL BE SECURED WITH TEK SCREWS 12" O.C. THE MATING FLANGES SHALL BE SEALED WITH ALUMINUM COLORED SILICONE SEALANT. JOINTS ON VERTICAL RUNS SHALL OVERLAP 1/2" AND SHALL BE SECURED WITH TEK SCREWS 12" O.C. AND SEALED WITH ALUMINUM COLORED SILICONE SEALANT. .
14. ROUND AND SPIRAL STEEL DUCTS SHALL BE INSULATED WITH 1-1/2" THICKNESS DUCT WRAP WITH VAPOR BARRIER. SEAL VAPOR BARRIER TO DUCTS AND TO FLEX DUCT VAPOR BARRIER.
15. DUCT DIMENSIONS LISTED ON THE PLANS ARE INTERNAL FREE DIMENSIONS. INCREASE DUCT SIZES DURING FABRICATION TO ALLOW FOR DUCT LINER WHERE APPLICABLE.
16. PROVIDE FLEXIBLE DUCT CONNECTORS AT DUCT CONNECTIONS TO ALL MOTORIZED EQUIPMENT.
17. COORDINATE WITH G.C. TO CUT OPENINGS IN BRICK WALLS FOR DUCT PENETRATIONS AND PROVIDE 5x3x1/4 STEEL ANGLE BOX LINTELS AT EACH WYTHE OF MASONRY WALLS (FOR OPENINGS UP TO 4'-0" WIDE).
18. PROVIDE A THIRD PARTY AGENT TEST AND BALANCE FOR ALL NEW HVAC EQUIPMENT. FURNISH CERTIFIED TEST AND BALANCE REPORT LISTING MODEL AND SERIAL NUMBERS FOR EACH FAN, HEATING EQUIPMENT, COOLING EQUIPMENT, AIR HANDLING EQUIPMENT, MOTOR NAMEPLATE DATA, AND MOTOR PERFORMANCE CHARACTERISTICS. REPORT SHALL LIST DESIGN AND FINAL FLOWS FOR FANS AND AIR DISTRIBUTION, HEATING COIL PERFORMANCE, COOLING COIL PERFORMANCE AND SHALL LIST DESIGN VS FINAL SETTING VALUES FOR EACH
19. WARRANTY ALL WORK, EQUIPMENT, AND MATERIALS (PARTS AND LABOR) FOR A MINIMUM OF ONE YEAR FROM THE DATE OF ACCEPTANCE BY THE OWNER. REFRIGERATION COMPRESSORS SHALL CARRY AN ADDITIONAL 4 YEAR (MINIMUM) PARTS WARRANTY.

MECHANICAL LEGEND

20/10	DUCTWORK 20" WIDE x 10" DEEP INTERNAL DIMENSIONS.
	DUCT DROP
	DUCT RISE
	BRANCH TAP WITH AIR EXTRACTOR
	SIDEWALL RETURN OR LOUVER WITH CURVED BLADES FACING DOWN.
	SIDEWALLSUPPLY GRILLE WITH DOUBLE DEFLECTING VANES
	EXHAUST GRILLE OR CEILING EXHAUST FAN.
T 1	PROGRAMMABLE THERMOSTAT WITH LOCKING ACRYLIC GUARD. MOUNT 44" AFF. #=SYSTEM CONTROLLED.
TH #	PROGRAMMABLE THERMOSTAT/HUMIDISTAT WITH LOCKING ACRYLIC GUARD. MOUNT 44" AFF. #=SYSTEM CONTROLLED.

FAN SCHEDULE - VASS

TAG	SERVICE	AIRFLOW	EXTERNAL STATIC PRESSURE	MAKE (OR EQUAL)	MODEL	DRIVE	FAN SPEED	MOTOR SPEED	MAX SOUND	MOTOR POWER	MOTOR HP OR WATTS	VOLTAGE	WEIGHT	REMARKS
		(CFM)	("H2O)				(RPM)	(RPM)	(SONES)			(VOLTS/PH/HZ)	(LBS)	
EF-1	TLT EXHAUST	80	0.25	GREENHECK	SP-A90	DIRECT	900	900	0.4	15	W	120/1/60	12	NOTES 1-4

NOTES
1. UNIT MOUNTED DISCONNECT SWITCH.
2. GRAVITY BACKDRAFT DAMPER.
3. WALL CAP DISCHARGE FITTING.
4. VIBRATION ISOLATION SUPPORTS

GENERAL NOTES:
1. OR EQUAL FANS BY AMERICAN COOLAIR, CARNES, COOK, PENN.

AIR DISTRIBUTION SCHEDULE - VASS

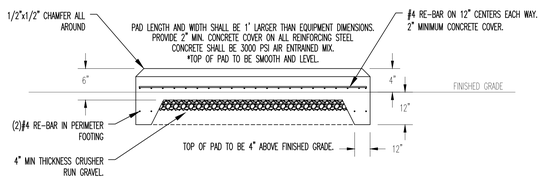
TAG	MANUFACTURER (OR EQUAL)	MODEL	SERVICE	TYPE	MOUNTING	NECK SIZE	AIRFLOW RANGE (CFM)	PANEL SIZE	REMARKS
S1	PRICE	HCD/AL/2B/B12	SUPPLY	SPLIT BLADE INDUSTRIAL DRUM LOUVER	DUCT	60x15	0-5250	N/A	SEE NOTES
S5	PRICE	520/D/F/S//B12	SUPPLY	DOUBLE DEFLECTING	WALL SURFACE	30x10	1000-1750	N/A	SEE NOTES
R3	PRICE	535/F/L/A	RETURN	LOUVERED 45 DEGREE BLADES SPACED 1/2"	WALL SURFACE	20x12	0-600	N/A	SEE NOTES
R5	PRICE	96/S/B12/A/F	RETURN	HEAVY DUTY GYM GRILLE LOUVERED 45 DEGREE BLADES SPACED 3/4"	WALL SURFACE	36x60	0-5250	N/A	SEE NOTES

NOTES
1. EQUAL DEVICES BY METALAIRE, TITUS, TUTTLE & BAILEY ARE ACCEPTABLE.
2. UNLESS NOTED OTHERWISE, FINISH FOR ALL DEVICES IS OFF-WHITE BAKED ENAMEL.
3. SUPPLY AND EXHAUST DEVICES TO BE FURNISHED WITH OPPOSED BLADE DAMPER.

ELECTRIC HEATER SCHEDULE - VASS

TAG	MANUFACTURER (OR EQUAL)	MODEL	TYPE	MOUNTING	FAN AIRFLOW	ELEMENT CAPACITY	VOLTAGE	UNIT CURRENT	MAX M.C.A.	REMARKS
					(CFM)	(KW)	(VOLTS/PH/HZ)	(AMPS)	(AMPS)	
CEH 1,2	BERKO	QCH1101F	FAN FORCED	SURFACE CEILING	65	0.5	120/1/60	4.7	5.9	NOTES 1,2,3
WEH 1	BERKO	CZ1012T	FAN FORCED	SURFACE WALL	65	1.0	120/1/60	8.4	10.5	NOTES 1,2,3
UH 1,2	BERKO	IUH520	FAN FORCED	SURFACE WALL	270	5.0	208/3/60	14	17.5	NOTES 1,4

NOTES
1. OR EQUAL BY MARKEL, MODINE, REZNOR.
2. UNIT MOUNTED TAMPER RESISTANT THERMOSTAT AND 2 POLE DISCONNECT SWITCH.
3. SURFACE MOUNTING BOX
4. WITH WALL/CEILING MOUNTING BRACKET, 3P DISCONNECT SWITCH, BUILT-IN THERMOSTAT. MOUNT AT WITHIN 4" OF CEILING.



1 M0.1 EQUIPMENT PAD DETAIL
SCALE: NONE

PACKAGED EXTERIOR WALL MOUNTED DX HEAT PUMP/ELECTRIC HEATING UNIT SCHEDULE - VASS-LAKEVIEW

									COIL ENTERING		MINIMUM COOLING CAPACITIES AT 95F/76F AMBIENT				REVERSE CYCLE HEATING CAPACITIES AT AHRI CONDITIONS				FAN/HEATER				ELECTRICAL CHARACTERISTICS				WEIGHT	
															HIGH TEMP		LOW TEMP											
UNIT TAG	NOMINAL COOLING CAPACITY	MANUFACTURER (OR EQUAL)	OUTDOOR UNIT	APPLICATION ORIENTATION	INDOOR AIRFLOW	EXTERNAL STATIC PRESSURE	MINIMUM OUTISDE AIRFLOW	MAXIMUM OUTISDE AIRFLOW	DRY BULB TEMP	WET BULB TEMP	NET COOLING CAPACITY	MINIMUM COOLING EFFICIENCY	COMP QTY	COOLING CAPACITY LOADING	HEATING CAPACITY	MINIMUM HEATING EFFICIENCY	HEATING CAPACITY	MINIMUM HEATING EFFICIENCY	FAN MOTOR	DRIVE TYPE	STRIP HEAT	STRIP HEAT STAGES	UNIT VOLTAGE	MAX. M.C.A.	MAX. M.O.C.P.	MAX. WEIGHT	REMARKS
	(TONS)		MODEL #		(CFM)	(" W.C.)	(CFM)	(CFM)	(F)	(F)	(MBH)	(EER)	(#)	(STAGES)	(MBH)	(COP)	(MBH)	(COP)	(HP)		(KW)	(KW)	(V/PH/HZ)	(AMPS)	(AMPS)	(LBS)	
WMHP-1	3	BARD	W36HCD-B 09XP8	EXT. WALL MT.	1150	0.1	200	200	78.5	64.8	36.00	11.1	1	1	33.00	3.3	21.00	2.3	0.75	DIRECT	9	1	208/3/60	47	50	600	NOTES 1-12

NOTES
1. UNIT BY BARD OR MARVAIR WITH SINGLE POINT POWER CONNECTION, R-410A REFRIGERANT.
2. NOMINAL CAPACITY LISTED IS FOR REFERENCE ONLY. SYSTEMS MUST MEET MINIMUM SCHEDULED COOLING AND HEATING CAPACITIES AND EFFICIENCIES AND MAXIMUM ELECTRICAL VALUES.
3. MULTISPEED MOTOR
4. SINGLE POINT POWER CONNECTION WITH INTERNAL WIRING TO HEATERS AND FAN MOTOR.
5. HOT GAS REHEAT COIL AND DEHUMIDIFICATION CONTROLS.
6. PROVIDE 2 SETS OF PLEATED MEDIA FILTERS FOR EACH UNIT. CHANGE FILTERS AT FINAL COMPLETION.
7. BACNET CARD TO INTERFACE WITH EXISTING TRANE SC OPEN PROTOCOL BACNET SYSTEM WITH GRAPHIC FOR SCHEDULING, MONITORING, REPORTING.
8. UPDATE SYSTEM GRAPHICS TO SHOW NEW SYSTEM, CONTROL AND MONITORED DATA POINTS.
9. ROOM TEMP/HUMIDITY SENSOR FOR TEMPERATURE AND HUMIDITY CONTROL TO SETOPOINTS.
10. FURNISH COMPLETE WITH MOUNTING BRACKETS AND FLASHING FOR INSTALLATION TO FRAMED WALL STRUCTURE.
11. WARRANTY COMPLETE UNIT PARTS AND LABOR FOR ONE YEAR.
12. WARRANTY COMPRESSOR PARTS FOR AN ADDITIONAL 4 YEARS.

PACKAGED DX HEAT PUMP WITH ELECTRIC HEAT & HOT GAS REHEAT UNIT SCHEDULE - VASS

										COIL ENTERING		MINIMUM COOLING CAPACITIES AT 95F/76F AMBIENT			REVERSE CYCLE HEATING CAPACITIES AT AHRI CONDITIONS		HOT GAS REHEAT COIL PERFORMANCE				FAN/HEATER				ELECTRICAL CHARACTERISTICS				WEIGHT	
															LOW TEMP														
SYSTEM TAG	NOMINAL COOLING CAPACITY	MANUFACTURER (OR EQUAL)	OUTDOOR UNIT	APPLICATION ORIENTATION	INDOOR AIRFLOW	EXTERNAL STATIC PRESSURE	MINIMUM OUTISDE AIRFLOW	MAXIMUM OUTISDE AIRFLOW	DRY BULB TEMP	WET BULB TEMP	NET COOLING CAPACITY	MINIMUM COOLING EFFICIENCY	COMPR. QTY	COOLING CAPACITY LOADING	HEATING CAPACITY	MINIMUM HEATING EFFICIENCY	RE-HEAT CAPACITY	ENTERING DRY BULB TEMP	LEAVING DRY BULB TEMP	LEAVING DEW POINT TEMP	FAN MOTOR	DRIVE TYPE	STRIP HEAT	STRIP HEAT STAGES	UNIT VOLTAGE	MAX. M.C.A.	MAX.M M.O.C.P.	MAX. WEIGHT	REMARKS
	(TONS)		MODEL #		(CFM)	(" W.C.)	(CFM)	(CFM)	(F)	(F)	(MBH)	(EER)	(#)	(STAGES)	(MBH)	(COP)	(MBH)	(F)	(F)	(F)	(HP)		(KW)	(KW)	(V/PH/HZ)	(AMPS)	(AMPS)	(LBS)	
PHP-1,2	15	TRANE	WHJ180A3S0G	HORIZONTAL	5250	0.5	500	5250	76.9	63.8	174.54	12.0	2	2	99.28	2.09	116.61	52.74	72.15	51.81	2.9	DIRECT PLENUM	18	1	208/3/60	124	125		SEE NOTES

NOTES
1. SYSTEMS BY CARRIER, TRANE, YORK OR DAIKIN WITH SINGLE POINT POWER CONNECTION, R-410A REFRIGERANT.
2. NOMINAL CAPACITY LISTED IS FOR REFERENCE ONLY. SYSTEMS MUST MEET MINIMUM SCHEDULED COOLING AND HEATING CAPACITIES AND EFFICIENCIES AND MAXIMUM ELECTRICAL VALUES.
3. SINGLE POINT POWER CONNECTION WITH INTERNAL WIRING TO HEATERS AND FAN MOTOR.
3. MODULATING HOT GAS REHEAT DEHUMIDIFICATION SEQUENCE TO COOL WHEN SPACE IS ABOVE HUMIDITY SETPOINT AND UTILIZE HOT GAS REHEAT IF TEMP FALLS BELOW SETPOINT WHILE DEHUMIDIFIYING.
4. NOT USED
5. FACTORY SMOKE DETECTOR INSTALLED IN RETURN AIR PATH OF UNIT.
6. PROVIDE 2 SETS OF PLEATED MEDIA FILTERS FOR EACH UNIT. CHANGE FILTERS AT FINAL COMPLETION.
7. PROVIDE LEVEL CONCRETE PAD 12" LARGER THAN UNIT AND MOUNT OUTDOOR UNIT ON PAD.
8. COMPARATIVE ENTHALPY CONTROLLED FAN POWERED ECONOMIZER - MOUNT TO HORIZONTAL RETURN DUCT.
9. PROVIDE WITH PROGRAMMABLE MODULE TO INTEGRATE WITH EXISTING TRANE SC OPEN PROTOCOL BACNET CONTROL SYSTEM FOR CONTROL AND SCHEDULING. UPDATE GRAPHICS TO SHOW NEW SYSTEMS AND INTERNAL DATA POINTS.
10. BACNET CARD TO INTERFACE WITH EXISTING TRANE SC OPEN PROTOCOL BACNET SYSTEM WITH GRAPHIC FOR SCHEDULING, MONITORING, REPORTING.
11. UPDATE SYSTEM GRAPHICS TO SHOW NEW SYSTEM, CONTROL AND MONITORED DATA POINTS.
12. ROOM TEMP/HUMIDITY SENSOR FOR TEMPERATURE AND HUMIDITY CONTROL TO SETOPOINTS.
13. WARRANTY PARTS AND LABOR FOR ENTIRE UNIT FOR 1 YEAR.
14. WARRANTY COMPRESSOR PARTS FOR AN ADDITIONAL 4 YEARS.

List of Drawings Vass-Lakeview

SHEET	DESCRIPTION
M0.1	LEGEND, NOTES, SCHEDULES
M1.0	DEMOLITION PLAN
M1.1	RENOVATION PLAN
M6.1	CONTROLS DIAGRAMS

TRIAD ENGINEERING CONSULTANTS, INC
Email: Admin@TriadEngMEP.com
2636-100 Willard Dairy Rd
High Point, NC 27265
(336) 338-8943
Firm License C-0492 2309
PLUMBING MECHANICAL AND ELECTRICAL ENGINEERING
ENGINEERING THE PIEDMONT TRIAD SINCE 1984

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 14498 11/22/23 ENGINEER PERRY V. GULLEDGE

...Becoming the Leading Designer of High Performance Facilities in the Nation with a Specialty in Alternative Delivery Methods
333 Fayetteville St, Ste 225
Raleigh, NC 27601
P: 919.573.6350
F: 919.573.6355
www.sfla.biz
sfl+a ARCHITECTS

SILVA ARCHITECTS, PA CERT. NO. 50676 RENEWAL 12/31/2024 RALEIGH

BID SET

MOORE COUNTY SCHOOLS

VASS-LAKEVIEW GYMNASIUM RENOVATION

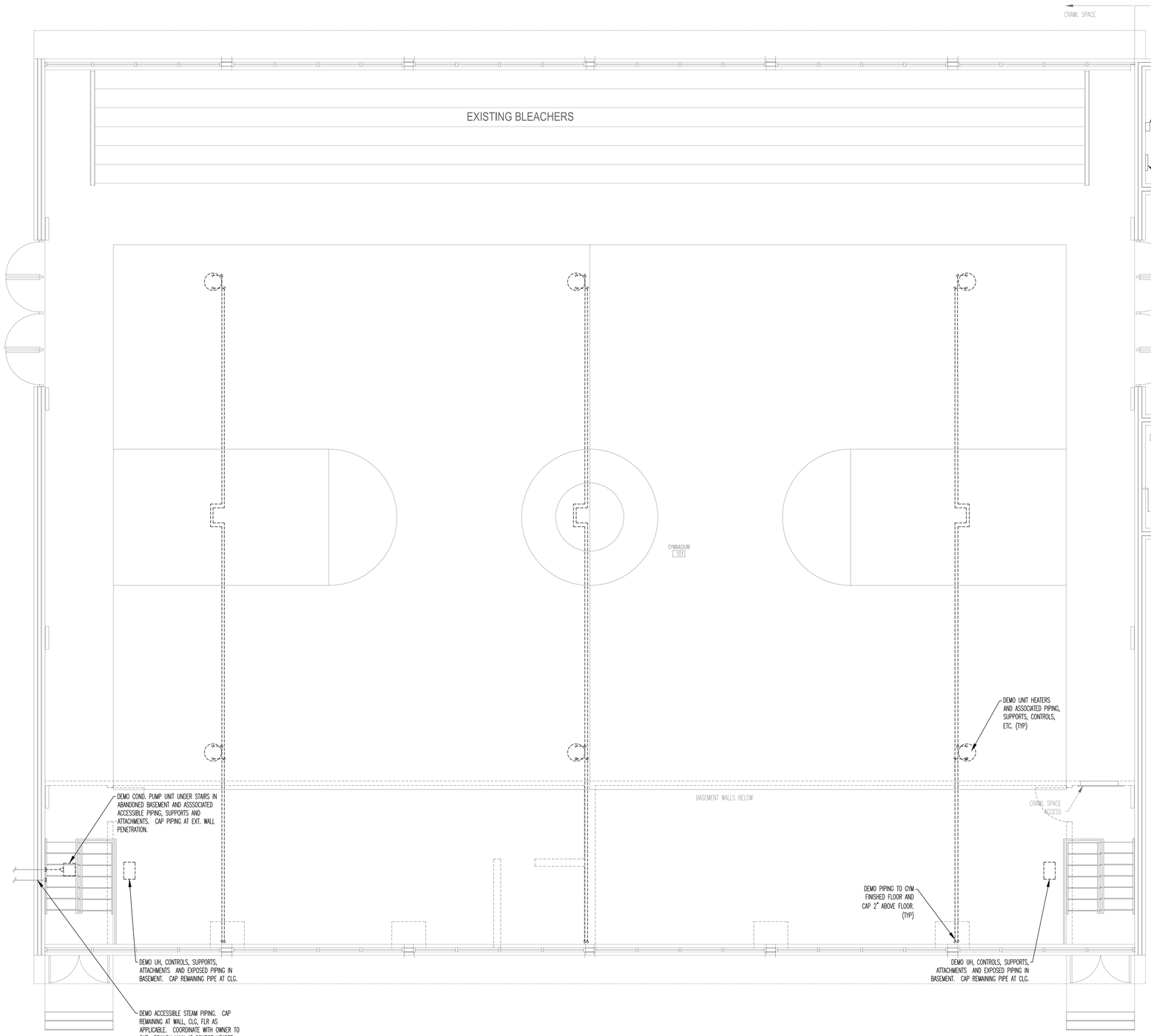
141 JAMES ST VASS, NORTH CAROLINA 28394

No.	Date	Description

ISSUE DATE: 11/22/23
PROJECT #: 02206.100
DRAWN BY: PVG
CHECKED BY: PVG

MECHANICAL LEGEND, NOTES, SCHEDULES

M0.1



1 M1.0 MECHANICAL HVAC DEMOLITION PLAN
SCALE: 1/4" = 1'-0"

PLAN DEMOLITION NOTES:

1. PROTECT GYM FLOOR FROM DAMAGE DURING THE DEMOLITION AND RENOVATION ACTIVITIES. PROVIDE ROSIN PAPER COVER OVER THE FLOOR SURFACE AND 3/4" THICKNESS PLYWOOD OR MDF BOARD TO DISTRIBUTE LOADING FROM ANY LIFT TRAFFIC NEEDED FOR THE WORK.
2. DEMO EQUIPMENT INDICATED AND ALL ASSOCIATED CONCRETE PADS, SUPPORTS, CONTROLS, ATTACHMENTS ETC.
3. DEMO ACCESSIBLE STEAM AND COND. PIPING AND ASSOCIATED SUPPORTS. PIPING WITHIN WALLS THAT REMAIN AND UNDERGROUND OR UNDER-SLAB ARE TO REMAIN UNLESS NOTED OTHERWISE. CUT PIPES AND PLUG BELOW WALL OR FLOOR SURFACE.
4. PATCH HOLES IN WALLS, FLOORS AND CEILINGS THAT REMAIN WHERE PIPES ARE REMOVED. PATCH WITH MATERIAL SUITABLE TO EXISTING CONSTRUCTION AND READY TO RECEIVE FINAL FINISH APPLICATION.
5. STEAM MAINS ARE 4" MAX.
6. COND. MAINS ARE 2" MAX.

TRIAD ENGINEERING CONSULTANTS, INC
Email: Admin@TriadEngMEP.com
2636-100 Willard Dairy Rd
High Point, NC 27265
(336) 338-8943
Firm License
C-0492
2309
PLUMBING MECHANICAL AND ELECTRICAL ENGINEERING
ENGINEERING THE PIEDMONT TRIAD SINCE 1984

NORTH CAROLINA PROFESSIONAL ENGINEER
11/22/23
SEAL
14498
ENGINEER
PERRY V. GULLEDGE

...Becoming the Leading Designer of High Performance Facilities in the Nation with a Specialty in Alternative Delivery Methods
333 Fayetteville St, Ste 225
Raleigh, NC 27601
P: 919.573.6350
F: 919.573.6355
www.sfla.biz
sfl+a ARCHITECTS

SILVA ARCHITECTS, PA
REGISTERED ARCHITECTURAL CORPORATION
CERT. NO. 50676
NORTH CAROLINA
RALEIGH

BID SET

MOORE COUNTY SCHOOLS
VASS-LAKEVIEW GYMNASIUM RENOVATION
141 JAMES ST VASS, NORTH CAROLINA 28394

No.	Date	Description

ISSUE DATE: 11/22/23
PROJECT #: 02206.100
DRAWN BY: PVG
CHECKED BY: PVG

MECHANICAL DEMOLITION PLAN

M1.0

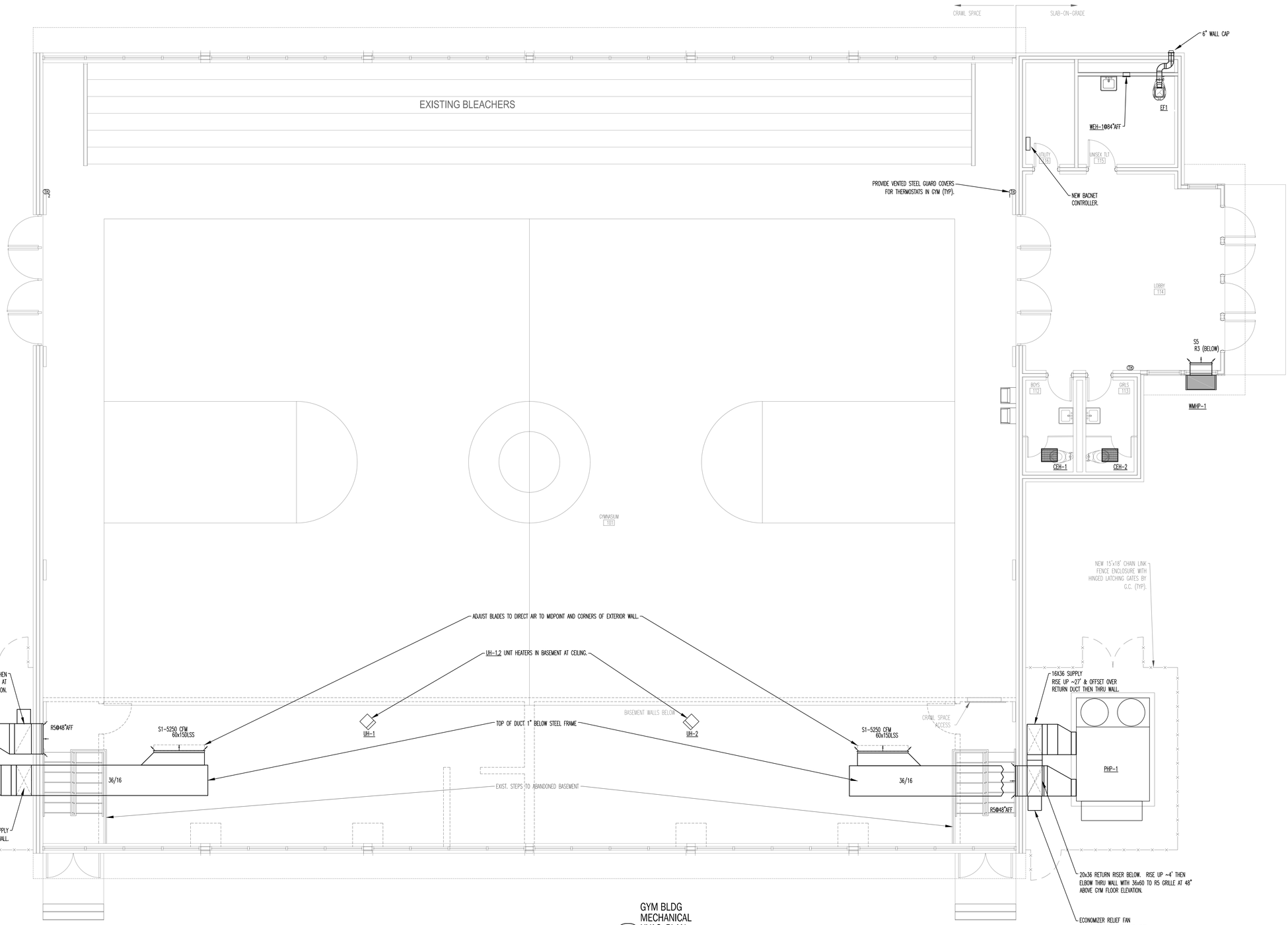
TRIAD ENGINEERING CONSULTANTS, INC
Email: Admin@TriadEngMEP.com
2638-100 Willard Dairy Rd
High Point, NC 27265
(336) 338-8943
Firm License
C-0492
2309
PLUMBING MECHANICAL AND ELECTRICAL ENGINEERING
ENGINEERING THE PIEDMONT TRIAD SINCE 1984

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 14498 11/22/23 ENGINEER PERRY V. GULLEDGE

...Becoming the Leading Designer of High Performance Facilities in the Nation with a Specialty in Alternative Delivery Methods
333 Fayetteville St, Ste 225
Raleigh, NC 27601
P: 919.573.6350
F: 919.573.6355
www.sfla.biz
sfl+a ARCHITECTS

SILVA ARCHITECTS, P.A. REGISTERED ARCHITECTURAL CORPORATION CERT. NO. 50676 NORTH CAROLINA RALEIGH

BID SET



GYM BLDG
MECHANICAL
HVAC PLAN
1 / M1.1 SCALE: 1/4" = 1'-0"

MOORE COUNTY SCHOOLS
VASS-LAKEVIEW GYMNASIUM RENOVATION
141 JAMES ST VASS, NORTH CAROLINA 28394

No.	Date	Description

ISSUE DATE: 11/22/23
PROJECT #: 02206.100
DRAWN BY: PVG
CHECKED BY: PVG

MECHANICAL RENOVATION PLAN

M1.1

TRIAD ENGINEERING CONSULTANTS, INC
Email: Admin@TriadEngMEP.com
2638-100 Willard Dairy Rd
High Point, NC 27265
(336) 338-8943
Firm License
C-0492
2309
PLUMBING MECHANICAL AND ELECTRICAL ENGINEERING
ENGINEERING THE PIEDMONT TRIAD SINCE 1984

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 14498 ENGINEER PERRY V. GULLEDGE 11/22/23

...Becoming the Leading Designer of High Performance Facilities in the Nation with a Specialty in Alternative Delivery Methods

333 Fayetteville St, Ste 225
Raleigh, NC 27601
P: 919.573.6350
F: 919.573.6355
www.sfla.biz

sfl+a ARCHITECTS

SILVA ARCHITECTS PA REGISTERED ARCHITECTURAL CORPORATION CERT. NO. 50676 RENEWAL CARD 2024 RALEIGH

BID SET

OCCUPANCY SCHEDULES	AMBIENT TEMPERATURE SENSOR	AMBIENT CO2 SENSOR	AMBIENT HUMIDITY SENSOR	FIRE ALARM STATUS CONTACT
	T	CO2	H	FA

GLOBAL INFORMATION (EXIST.)

3 M6.1 GLOBAL INFORMATION SCHEMATIC
SCALE: NONE

CONTROLS LEGEND

OA	OUTSIDE AIR
RA	RETURN AIR
SA	SUPPLY AIR
EA	EXHAUST AIR
ALRM	ALARM
CT	CURRENT TRANSFORMER
DP	DIFFERENTIAL PRESSURE SENSOR
H	HUMIDITY SENSOR
WS	WATER DETECTOR SWITCH
M	MOTOR
MOD	MODULATING MOTOR DAMPER ACTUATOR
R	RELAY
SP	STATIC PRESSURE SENSOR
T	TEMPERATURE SENSOR
H O A	HAND-OFF-AUTO SWITCH

REFRIGERANT COOLING COIL (DX)

HOT WATER HEATING COIL

MOTOR STARTER WITH OVERLOADS

VFD CONTROLLER

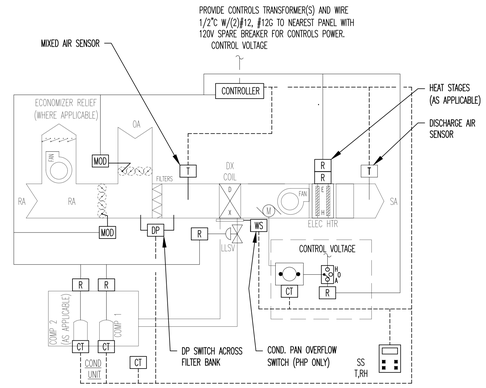
CONTACTOR WITH COIL

SS SPACE SENSOR WITH OCCUPANT ADJUSTMENT.
T=TEMPERATURE
CO2= CARBON DIOXIDE SENSING
RH=RELATIVE HUMIDITY SENSING

2 M6.1 CONTROLS LEGEND
SCALE: NONE

1. INTEGRATE WITH EXISTING TRANE SC OPEN PROTOCOL BACNET SYSTEM OVER IP.
2. LOCATE BUILDING CONTROLLER IN UTILITY ROOM.
3. COORDINATE IP ADDRESS ASSIGNMENT WITH OWNER IT PERSONNEL AT LEAST 30 DAYS BEFORE NEEDED FOR COMMUNICATION.
4. PROVIDE CONTROLLER FOR EACH SYSTEM – SYSTEMS SHALL NOT SHARE INPUT/OUPUT POINTS FROM A COMMON CONTROLLER.
5. PROVIDE CONTROLS NETWORK WIRING TO CONNECT ALL CONTROLLERS.
6. CONTROLS WIRING IN MECHANICAL ROOMS AND OPEN STRUCTURE SHALL BE IN CONDUIT. WIRING ABOVE ACCESSIBLE CEILINGS MAY BE OPEN CABLE PROVIDED THE CABLE IS PLENUM RATED AND IS SUPPORTED FROM THE BUILDING STRUCTURE WITH J-HOOKS OR OTHER APPROVED METHODS PROVIDED UNDER THIS CONTRACT.
7. DEMOLISH OLD CONTROLS SYSTEM COMPONENTS AND SALVAGE EQUIPMENT AND SENSORS TO OWNER FOR REUSE AS BACKUP STOCK FOR OTHER SITES.
8. REFER TO SEQUENCES OF OPERATIONS IN EXIST. DDC CONTROLS SYSTEM DOCUMENTATION FOR A DESCRIPTION OF OPERATIONAL SEQUENCES.
9. PROVIDE OVERALL GRAPHIC DISPLAY OF BUILDING WITH SYSTEM TAG NUMBERS, SENSORS, ROOMS, ZONES, ETC. SHOW ALARM FOR ZONES THAT ARE NOT WITHIN 0.5F OF SETPOINT FOR LONGER THAN 3 MINUTES.
10. PROVIDE GRAPHIC DISPLAY FOR EACH SYSTEM SHOWING ALL INPUT AND OUTPUT POINTS. POINTS SHALL HAVE ON-SCREEN OVERRIDE CAPABILITY AND SHALL INDICATE WHEN MANUAL OVERRIDE IS ACTIVE.

1 M6.1 GENERAL CONTROLS NOTES
SCALE: NONE



TYPICAL FOR WMHP & PHP UNITS.
(SEE SCHEDULES)

PHP AND WMHP
DX HEAT PUMP EQUIPMENT
CONTROL SCHEMATIC

5 M6.1
SCALE: NONE

MOORE COUNTY SCHOOLS
VASS-LAKEVIEW GYMNASIUM RENOVATION
141 JAMES ST VASS, NORTH CAROLINA 28394

No.	Date	Description

ISSUE DATE: 11/22/23
PROJECT #: 02206.100
DRAWN BY: PVG
CHECKED BY: PVG

CONTROLS DIAGRAMS

M6.1

GENERAL ELECTRICAL NOTES

1. ELECTRICAL WORK SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE NATIONAL ELECTRICAL CODE WITH STATE AND LOCAL REVISIONS AND ALL APPLICABLE LOCAL AND STATE CODES AND ORDINANCES.
2. ELECTRICAL PERMITS AND INSPECTION FEES SHALL BE OBTAINED AND PAID FOR BY THE ELECTRICAL CONTRACTOR.
3. GUARANTEE ALL WORK AND MATERIALS FOR ONE YEAR EFFECTIVE THE DAY THE PROJECT IS ACCEPTED BY OWNER.
4. MATERIALS AND EQUIPMENT SHALL BE NEW AND U.L. LISTED UNLESS SPECIFICALLY NOTED OTHERWISE.
5. NOTE THAT THE TERM "PROVIDE" WHEN USED IN THESE DRAWINGS SHALL MEAN TO FURNISH, TRANSPORT TO THE SITE, INSTALL PER THE MANUFACTURER'S RECOMMENDATIONS AND ADJUST FOR SAFE AND EFFICIENT OPERATION.
6. VERIFY EXISTING WIRING CONTINUITY AND NEUTRAL ISOLATION WHEN WIRING NEW DEVICES TO EXISTING WIRING.
7. COORDINATE WITH G.C. FOR SURFACE RACEWAY FINISH. UNLESS NOTED OTHERWISE, PAINT SURFACE RACEWAY TO MATCH WALL OR CEILING TO WHICH IT IS ATTACHED.
8. GENERAL BUILDING WIRING SHALL BE COPPER CONDUCTORS, THHW/THHN INSULATION RATED AT NOT LESS THAN 600 VOLTS. MINIMUM WIRE SIZE IS #12 AWG THHN. CONDUCTORS #6 AND LARGER SHALL BE STRANDED. SIZES #12 THRU #8 SHALL BE SOLID. WIRING TO EQUIPMENT SHALL BE AS REQUIRED BY U.L. LABEL. INSULATION COLOR SHALL BE COLOR CODED BASED ON THE SERVICE VOLTAGE.
9. GENERAL BUILDING WIRING SHALL ONE OF THE FOLLOWING METHODS IN COMPLIANCE WITH NEC REQUIREMENTS:
   - 9.1. INDIVIDUAL CONDUCTORS INSTALLED IN CONDUIT – FOR ALL FEEDERS, BRANCH CIRCUITS, SWITCHING, RECEPTACLES ETC.
   - 9.2. MC CABLE WITH COPPER CONDUCTORS, ALUMINUM ARMOR, SEPARATE GROUND WIRE FOR LIGHT FIXTURE WHIPS AND EQUIPMENT CONNECTIONS ONLY. DO NOT USE MC CABLE FOR FEEDERS, BRANCH CIRCUITS, RECEPTACLES OR SWITCHLEG WIRING.
10. TERMINALS, SPLICING CONNECTORS, LUGS, ETC. FOR CONNECTING CONDUCTORS SHALL BE LISTED FOR USE WITH THE TYPE OF CONDUCTOR CONNECTED AND SHALL BE PROPERLY INSTALLED.
11. NEATLY ROUTE AND TRAIN CONDUCTORS IN PANEL ENCLOSURES AND SECURE BUNDLES OF CONDUCTORS WITH PLASTIC ZIP TIES. CONDUCTOR LEG RUNOUTS TO BREAKER TERMINALS SHALL RUN HORIZONTAL TO A 90 DEGEREE BEND AT THE BUNDLE AND SHALL BE LABELED.
12. CONDUIT SHALL BE INSTALLED WITH LISTED FITTINGS, SUPPORTS, ATTACHMENTS, STRAPS AND/OR CLAMPS. RUN CONDUIT PARALLEL OR PERPENDICULAR TO BUILDING WALLS. PROVIDE SEPARATE SUPPORT SYSTEM FOR CONDUIT.
13. USE EMT CONDUIT INDOORS FOR SIZES 1/2" THRU 4". USE COMPRESSION GLAND FITTINGS AND COUPLINGS.
14. USE RMC OR IMC FOR EXPOSED OUTDOOR APPLICATIONS. USE THREADED FITTINGSG AND COUPLINGS.
15. USE SCHEDULE 40 PVC BELOW GRADE OR FLOOR SLAB EXCEPT FIRST ELBOW WHALL BE RMC. SOLVENT WELD ALL FITTINGS AND COUPLINGS AND ADAPTERS. PROVIDE ADAPTERS TO TRANSITION TO METAL CONDUIT.
16. USE IMC OR RMC WHERE OTHERWISE REQUIRED BY CODE OR WHERE SUBJECT TO PHYSICAL DAMAGE. USE IMC OR RMC FOR CONDUIT INSTALLED IN HAZARDOUS AREAS. USE IMC OR RMC ELBOWS WHERE TRANSITIONING FROM BELOW GRADE TO ABOVE GRADE.
17. LABEL DEVICES AND EQUIPMENT. PROVIDE AN EMBOSSED ADHESIVE TAPE LABEL ON EACH RECEPTACLE, LIGHT SWITCH, EMERGENCY EGRESS LIGHTING FIXTURE, EXIT LIGHTING FIXTURE, CONTROL DEVICE STATION, AND OTHER MISCELLANEOUS ITEMS. INDICATE PANELBOARD AND CIRCUIT NUMBER ON THE LABEL TO READILY IDENTIFY WHERE THE DEVICE IS SERVED FROM. LABELS FOR LIGHT SWITCHES SHALL BE PLACED ON THE BACK OF THE COVERPLATE. THE LETTERING SHALL BE 3/16" WHITE LETTERS ON BLACK BACKGROUND OR BLACK LETTERS ON CLEAR BACKGROUND.
18. LABEL INDIVIDUAL CONDUCTORS IN PANELBOARD, SWITCHBOARDS, JUNCTION BOXES, DEVICE BOXES, ETC. WITH WIRE MARKERS IDENTIFYING THE CIRCUIT POSITION NUMBER TO WHICH THE CONDUCTOR IS CONNECTED.
19. FINAL LABELING FOR PANEL DIRECTORIES SHALL BE PER THE FINAL ROOM NUMBERS OR NAMES. THE PANEL DIRECTORIES SHALL BE TYPED.
20. A COMPLETE GROUNDING SYSTEM IN ACCORDANCE WITH ARTICLE 250 OF THE CURRENT NEC SHALL BE INSTALLED (OR VERIFIED IF AN EXISTING SYSTEM), AND AS SHOWN ON THE DRAWINGS.
21. PROVIDE ALL CUTTING AND PATCHING OF WALLS AND FLOORS AS REQUIRED FOR THE INSTALLATION OF ELECTRICAL EQUIPMENT.
22. PROVIDE NYLON PULL WIRE IN ALL EMPTY CONDUITS.
23. PROTECT ALL ELECTRICAL EQUIPMENT FROM ENTRY OF FOREIGN MATERIAL SUCH AS PAINT, SPACKLE, FIREPROOFING, ETC. DURING CONSTRUCTION. REPLACE ALL EQUIPMENT THAT IS CONTAMINATED BY OVERSPRAY OF PAINT, SPACKLE, FIREPROOFING, ETC.

WIRING DEVICE NOTES

1. WIRING DEVICES SHALL BE EQUAL TO P & S, LEVITON, OR HUBBELL. CATALOG NUMBERS BELOW ARE FOR P&S DEVICES. SUBSTITUTE COLOR CODE FOR "X" EXCEPT WHERE (WHITE) IS INDICATED FOLLOWING THE MODEL #. DEVICE COLOR FOR THIS PROJECT SHALL BE BLACK.
2. SWITCHES SHALL BE HARD USE & COMMERCIAL SPECIFICATION GRADE AS FOLLOWS:

SINGLE POLE 20A.	CSB20AC1-X
3-WAY 20A.	CSB20AC3-X
4-WAY 20A.	CSB20AC4-X
MOTOR STARTER SWITCH	SQUARE D TYPE "K" SERIES

3. RECEPTACLES SHALL BE CONSTRUCTED WITH NYLON FACE, SIDE-WIRE SCREW TERMINALS WITH BRASS STRAP, BRASS BLADE CONTACTS, BRASS PRESSURE PLATE, BRASS TERMINAL SCREWS, AND GREEN COLORED BRASS GROUND HEX HEAD SCREW. FACE IS RESTRAINED TO BODY BY TABS ON STRAP. GFCI RECEPTACLE SHALL INCLUDE A TRIP INDICATOR LIGHT. RECEPTACLES SHALL BE HEAVY-DUTY HARD USE SPECIFICATION GRADE AS FOLLOWS:

20A. DUPLEX	PS5362X
20A. DUPLEX-GFCI	2097TRW (WHITE)
20A. DUPLEX-WEATHER RESISTANT GFCI	2097TRWRW (WHITE)

4. COVERPLATES FOR RECESS MOUNTED DEVICES SHALL BE OVERSIZED STAINLESS STEEL SSJX OR AS DIRECTED BY ARCHITECT.
5. COVERPLATES FOR SURFACE MOUNTED DEVICES IN UTILITY LOCATIONS SHALL BE GALVANIZED STEEL.
6. OUTLET BOXES SHALL NOT BE MOUNTED BACK TO BACK. OFFSET 24" MINIMUM IN FIRE RATED WALL CONSTRUCTION.
7. RECEPTACLES SHALL BE 20A. UNLESS A 15A DEVICE IS REQUIRED BY EQUIPMENT SERVED.
8. WEATHERPROOF IN USE COVERS SHALL BE CLEAR EQUAL TO LEVITON. FOR HORIZONTAL MOUNT COVERS USE PART NO. "5997-CL". FOR VERTICAL MOUNT COVERS USE PART NO. "5977-CL".
9. ALL BOXES (INCLUDING EMPTY, TELEPHONE, AND DATA) SHALL HAVE COVERPLATES INSTALLED.

ELECTRICAL SYMBOL LEGEND

SYMBOL	DESCRIPTION
A	LINEAR LIGHT FIXTURE – LETTER INDICATES FIXTURE TYPE. SEE LIGHTING FIXTURE SCHEDULE FOR DETAILS.
C EB	CIRCULAR LIGHT FIXTURE – FIRST LETTER INDICATES FIXTURE TYPE. "EB" INDICATES EMERGENCY LIGHTING FUNCTION WITH BATTER BACKUP. SEE LIGHTING FIXTURE SCHEDULE FOR DETAILS.
"NL"	DENOTES LIGHTING FIXTURE TO BE USED AS A NIGHTLIGHT. FIXTURE SHALL BE CONNECTED UNSWITCHED TO THE LOCAL LIGHTING CIRCUIT OR DEDICATED EGRESS LIGHTING CIRCUIT.
	UNIVERSAL MOUNT EMERGENCY EXIT FIXTURE (SHADING INDICATES FACES), ARROW INDICATES DIRECTIONAL ARROWS REQUIRED. MOUNT TO CEILING AT LOCATION INDICATED. MOUNT TO WALL IF CEILING IS HIGHER THAN 12'-0". PROVIDE WIRE GUARD COVER ANCHORED TO WALL. CIRCUIT TO LOCAL LIGHTING CIRCUIT AHEAD OF ALL SWITCHING.
	EMERGENCY EGRESS LIGHTING UNIT WITH 90 MINUTE BATTERY POWERED BACKUP AND DUAL LED HEADS. MOUNT 7'6" AFF UNLESS NOTED OTHERWISE. SEE LIGHTING FIXTURE SCHEDULE FOR DETAILS. PROVIDE WIRE GUARD COVER ANCHORED TO WALL.
	WALL MOUNTED EXTERIOR LIGHT FIXTURE. SEE LIGHTING FIXTURE SCHEDULE FOR DETAILS. MOUNT 12' AFF UNLESS NOTED OTHERWISE.
	EXTERIOR EMERGENCY EGRESS LIGHTING UNIT WITH 90 MINUTE BATTERY POWERED BACKUP. MOUNT CENERED ABOVE DOOR UNLESS NOTED OTHERWISE. SEE LIGHTING FIXTURE SCHEDULE FOR DETAILS.
	SURFACE MOUNTED PANELBOARD
WP OR J WP	JUNCTION BOX SIZED PER N.E.C. REQUIREMENTS. "WP" INDICATES WEATHERPROOF.
	WIRING AND RACEWAY CONCEALED IN WALLS AND/OR ABOVE CEILING
	SWITCH LEG WIRING AND RACEWAY CONCEALED IN WALLS AND/OR ABOVE CEILING
	WIRING AND RACEWAY CONCEALED IN/OR UNDER FLOOR OR UNDERGROUND
	INDICATES CONDUIT TURNED DOWN TO FLOOR BELOW
	INDICATES CONDUIT TURNED UP TO FLOOR ABOVE
LP1-2	CIRCUIT HOMERUN WITH PANEL DESIGNATION AND CIRCUIT NUMBER.
	120, 208, 277, OR 480 VOLT MOTOR AS NOTED ON PLANS
CB 240V/3P/200A/NSR/FPN	HEAVY DUTY LOCKABLE DISCONNECT SWITCH – FUSED OR NON-FUSED AS INDICATED – BY E.C. VOLTAGE/#POLES/AMPERAGE/NEMA RATING/FUSE CONDITION FUSE CONDITION AS FOLLOWS: NF=(NON-FUSED), FPN=(FUSE PER EQUIPMENT NAMEPLATE), XXXAFU= FUSED WITH XXX AMP FUSES. FURNISH WITH GROUND BAR. FURNISH WITH SOLID NEUTRAL WHEN A NEUTRAL CONDUCTOR IS INCLUDED IN THE CIRCUIT OR FEEDER.
	COMBINATION STARTER AND FUSED DISCONNECT SWITCH – BY E.C. UNLESS NOTED OTHERWISE
S	SINGLE POLE SWITCH – 20A – 120/277V – MOUNT 44" A.F.F. "3" INDICATES 3-WAY SWITCHING, "D" INDICATES DIMMING FUNCTION, "OS" INDICATES OCCUPANCY SENSOR FUNCTION.
S_M	2-POLE OR 3-POLE MANUAL MOTOR STARTER. PROVIDE WITH OVERLOAD PROTECTION.
XXX 4b	STANDARD 20A. OUTLET – NEMA 5-20R DUPLEX. MOUNT 16" A.F.F. UNLESS NOTED OTHERWISE. "G" DENOTES GFCI NON-FEED THRU TYPE, "GWG" DENOTES GFCI OUTLET FOR ELECTRICAL WATER COOLER – COORDINATE LOCATION WITH PLUMBING CONTRACTOR, "WP" DENOTES WEATHERPROOF IN USE NEMA 5-20R DUPLEX, "ACT" DENOTES MOUNTED ABOVE COUNTER TOP OR BACKSPLASH, "TR" DENOTES TAMPER RESISTANT.
	GROUNDING FOR SERVICE OR SEPARATELY DERIVED SYSTEM PER N.E.C.
	INDICATES CONDUIT STUBBED OUT INTO SPACE – PROVIDE CONDUIT BUSHING
T/D	DATA OUTLET BOX WITH MODULAR COVER PLATE AND 1" CONDUIT TO DATA SERVICE ENTRANCE BOARD. PROVIDE BUSHING ON OPEN END AND (2)CAT 5e CABLES WITH 5' COIL AT EACH END.

LIGHTING FIXTURE SCHEDULE - VASS LAKEVIEW

MARK	MANUFACTURER (OR EQUAL)	MODEL NUMBER	LAMPS QTY.	LAMPS TYPE	LAMPS WATTS	FIXTURE WATTS	VOLTAGE	MOUNTING	REMARKS
B3	LITHONIA	2GTL4 30L A19 EZ1 LP840 BAA	1	3,000 LUMEN, 4000K LED	23.3	23.3	120	SURFACE	2x4 LED GENERAL PURPOSE TROFFER FIXTURE WITH 0.156" THICK ACRYLIC PRISMATIC LENS.
EM	LITHONIA	ELM9L UVOLT LTP SDRT	2	LED 1100 LUMEN/10.6W LAMPS	21.2	3.7	MVOLT	UNIVERSAL MOUNT	LED EMERGENCY EGRESS FIXTURE WHITE HOUSING WITH DUIAL LED LIGHTING HEADS, SELF-DIAGNOSTICS. MOUNT 7'6" AFF. CONNECT TO UNSWITCHED CONDUCTOR ON THE LOCAL LIGHTING CIRCUIT. INSTALL SALVAGED WIRE GUARD OVER FIXTURES IN GYM. NOTE 2.
EX2	LITHONIA	LHQM LED R SD BAA	2	LED	2	2	120/277	UNIVERSAL MOUNT	LED EMERGENCY EXIT WITH DUAL EMERGENCY LIGHT HEADS. WHITE PLASTIC WITH RED LETTERS. NUMBER OF FACES AND DIRECTIONAL ARROWS AS REQUIRED. MOUNT ABOVE DOOR FRAME OR AS INDICATED. CONNECT TO UNSWITCHED CONDUCTOR ON THE LOCAL LIGHTING CIRCUIT. INSTALL SALVAGED WIRE GUARD OVER FIXTURES IN GYM. NOTE 2.

NOTES:
1 OR EQUAL FIXTURES BY COOPER, COLUMBIA, GE, OR HUBBELL.
2 BATTERY BACKUP SHALL PROVIDE A MINIMUM OF 90 MINUTES BACKUP OPERATION ON FAILURE OF NORMAL
3 PROVIDE ACCESSORIES AS REQUIRED FOR MOUNTING CONDITIONS

List of Drawings Vass-Lakeview

TRIAD ENGINEERING CONSULTANTS, INC
Email: Admin@TriadEngMEP.com
2636-100 Willard Dairy Rd
High Point, NC 27265
(336) 338-8943
Firm License
C-0492
2309
PLUMBING MECHANICAL AND ELECTRICAL ENGINEERING
ENGINEERING THE PIEDMONT TRIAD SINCE 1984

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 14498 11/22/23 ENGINEER PERRY V. GULLEDGE

...Becoming the Leading Designer of High Performance Facilities in the Nation with a Specialty in Alternative Delivery Methods
333 Fayetteville St, Ste 225
Raleigh, NC 27601
P: 919.573.6350
F: 919.573.6355
www.sfla.biz
sfl+a ARCHITECTS

SILVA ARCHITECTS PA REGISTERED ARCHITECTURAL CORPORATION CERT. NO. 50676 RENEWAL DATE 12/31/24 RALEIGH

BID SET

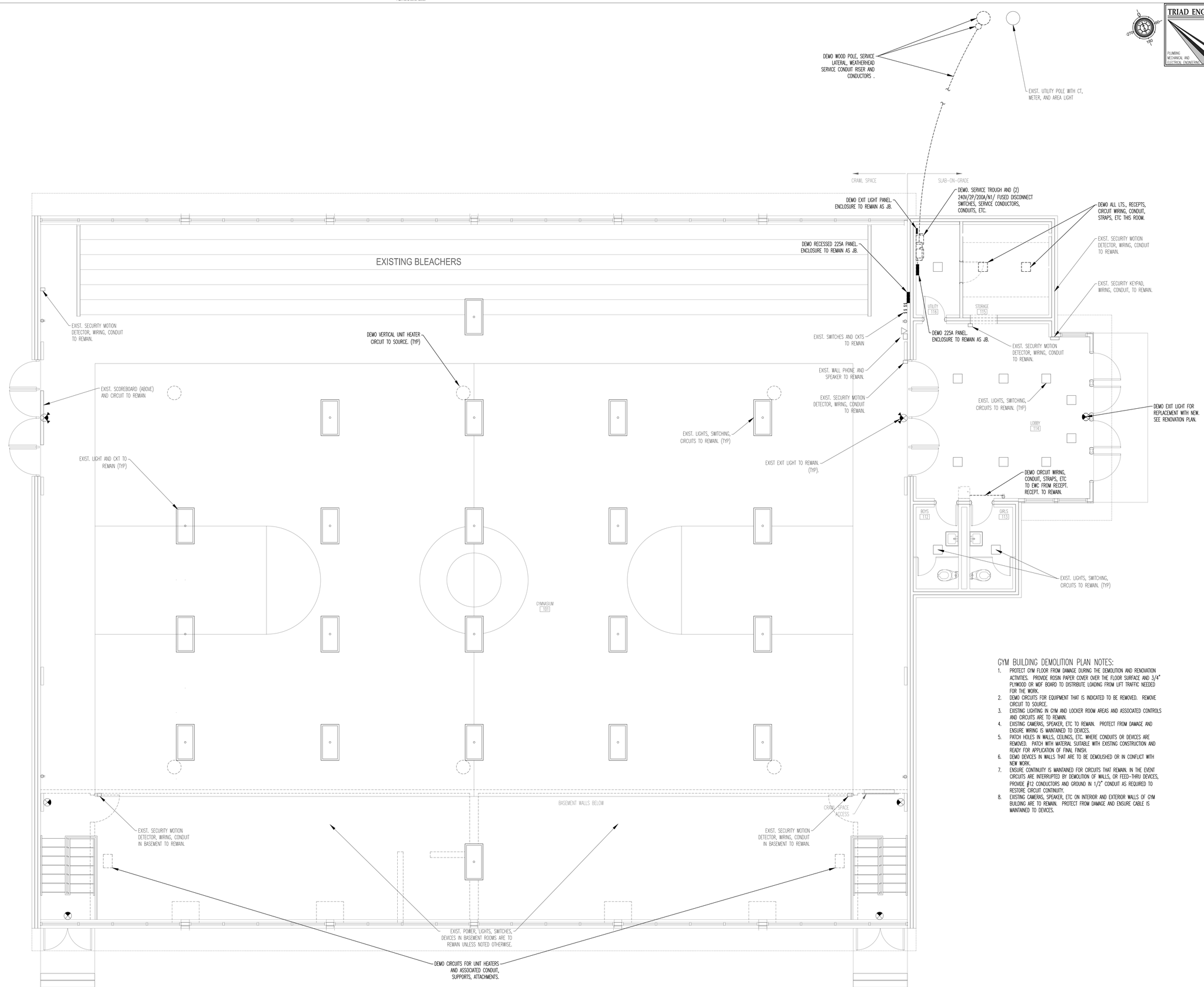
MOORE COUNTY SCHOOLS
VASS-LAKEVIEW GYMNASIUM RENOVATION
141 JAMES ST VASS, NORTH CAROLINA 28394

No.	Date	Description

ISSUE DATE: 11/22/23
PROJECT #: 02206.100
DRAWN BY: PVG
CHECKED BY: PVG

ELECTRICAL LEGEND, NOTES, SCHEDULES

E0.1



1 E1.0 ELECTRICAL DEMOLITION PLAN
SCALE: 1/4" = 1'-0"

GYM BUILDING DEMOLITION PLAN NOTES:

1. PROTECT GYM FLOOR FROM DAMAGE DURING THE DEMOLITION AND RENOVATION ACTIVITIES. PROVIDE ROSIN PAPER COVER OVER THE FLOOR SURFACE AND 3/4" PLYWOOD OR MDF BOARD TO DISTRIBUTE LOADING FROM LIFT TRAFFIC NEEDED FOR THE WORK.
2. DEMO CIRCUITS FOR EQUIPMENT THAT IS INDICATED TO BE REMOVED. REMOVE CIRCUIT TO SOURCE.
3. EXISTING LIGHTING IN GYM AND LOCKER ROOM AREAS AND ASSOCIATED CONTROLS AND CIRCUITS ARE TO REMAIN.
4. EXISTING CAMERAS, SPEAKER, ETC TO REMAIN. PROTECT FROM DAMAGE AND ENSURE WIRING IS MAINTAINED TO DEVICES.
5. PATCH HOLES IN WALLS, CEILINGS, ETC. WHERE CONDUITS OR DEVICES ARE REMOVED. PATCH WITH MATERIAL SUITABLE WITH EXISTING CONSTRUCTION AND READY FOR APPLICATION OF FINAL FINISH.
6. DEMO DEVICES IN WALLS THAT ARE TO BE DEMOLISHED OR IN CONFLICT WITH NEW WORK.
7. ENSURE CONTINUITY IS MAINTAINED FOR CIRCUITS THAT REMAIN. IN THE EVENT CIRCUITS ARE INTERRUPTED BY DEMOLITION OF WALLS, OR FEED-THRU DEVICES, PROVIDE #12 CONDUCTORS AND GROUND IN 1/2" CONDUIT AS REQUIRED TO RESTORE CIRCUIT CONTINUITY.
8. EXISTING CAMERAS, SPEAKER, ETC ON INTERIOR AND EXTERIOR WALLS OF GYM BUILDING ARE TO REMAIN. PROTECT FROM DAMAGE AND ENSURE CABLE IS MAINTAINED TO DEVICES.

TRIAD ENGINEERING CONSULTANTS, INC
Email: Admin@TriadEngMEP.com
2636-100 Willard Dairy Rd
High Point, NC 27265
(336) 338-8943
Firm License
C-0492
2309
PLUMBING MECHANICAL AND ELECTRICAL ENGINEERING
ENGINEERING THE PIEDMONT TRIAD SINCE 1984
NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 14498 ENGINEER PERRY V. GUILLEDGE 11/22/23

...Becoming the Leading Designer of High Performance Facilities in the Nation with a Specialty in Alternative Delivery Methods
333 Fayetteville St, Ste 225
Raleigh, NC 27601
P: 919.573.6350
F: 919.573.6355
www.sfla.biz
sfl+a ARCHITECTS
SILVA ARCHITECTS, PA REGISTERED ARCHITECTURAL CORPORATION CERT. NO. 50676 RENEWAL DATE: 12/31/24 RALEIGH

BID SET

MOORE COUNTY SCHOOLS
VASS-LAKEVIEW GYMNASIUM RENOVATION
141 JAMES ST VASS, NORTH CAROLINA 28394

No.	Date	Description

ISSUE DATE: 11/22/23
PROJECT #: 02206.100
DRAWN BY: PVG
CHECKED BY: PVG

ELECTRICAL DEMOLITION PLAN

E1.0

TRIAD ENGINEERING CONSULTANTS, INC
Email: Admin@TriadEngMEP.com
2636-100 Willard Dairy Rd
High Point, NC 27265
(336) 338-8943
Firm License
C-0492
2309
PLUMBING MECHANICAL AND ELECTRICAL ENGINEERING
ENGINEERING THE PIEDMONT TRIAD SINCE 1984

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 14498 11/22/23 ENGINEER PERRY V. GULLEDGE

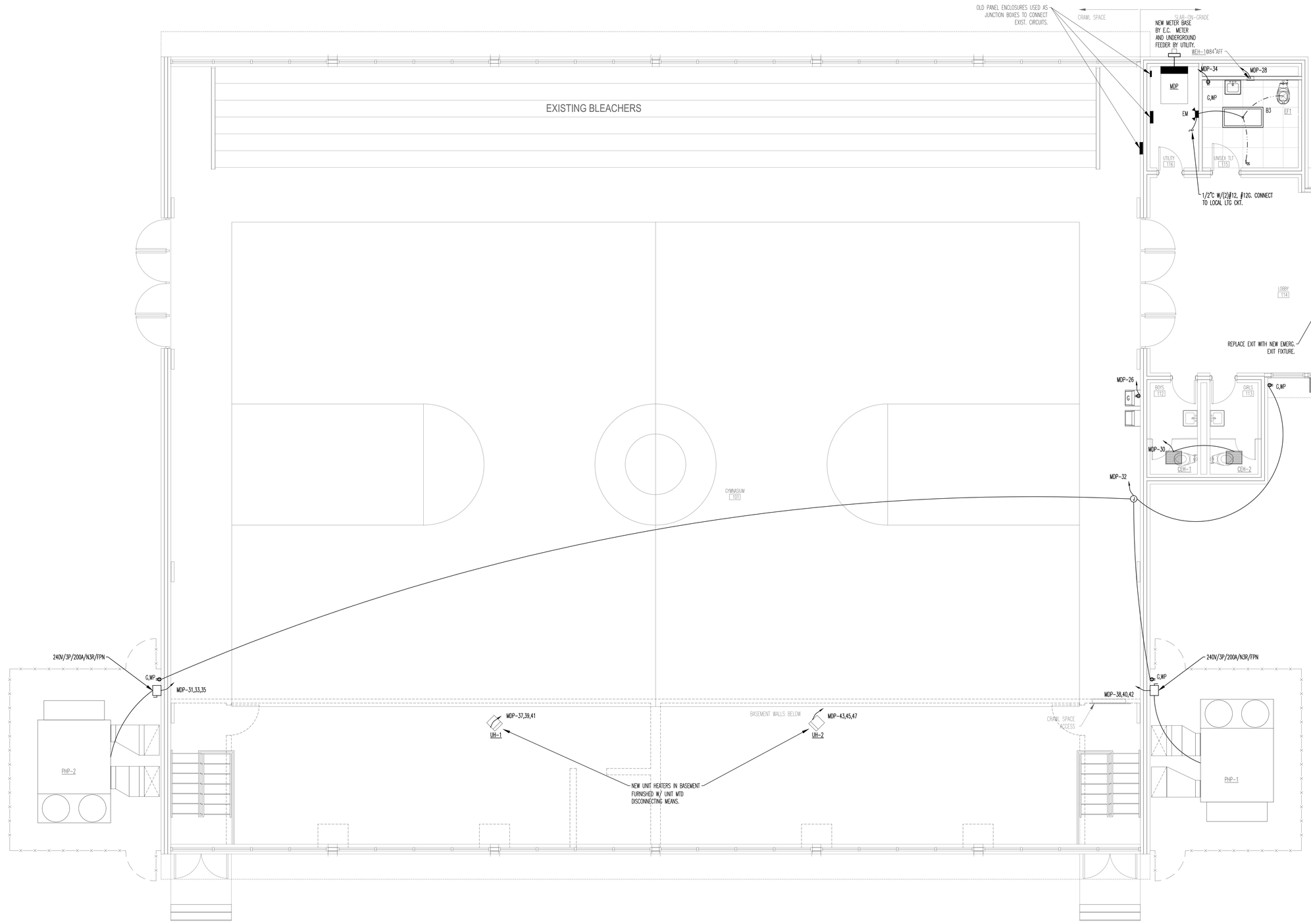
...Becoming the Leading Designer of High Performance Facilities in the Nation with a Specialty in Alternative Delivery Methods

333 Fayetteville St, Ste 225
Raleigh, NC 27601
P: 919.573.6350
F: 919.573.6355
www.sfla.biz

sfl+a ARCHITECTS

SILVA ARCHITECTS, PA REGISTERED ARCHITECTURAL CORPORATION CERT. NO. 50676 RENEWAL DATE: 12/31/24 RALEIGH

BID SET



1 E1.1 RENOVATION ELECTRICAL POWER AND LIGHTING PLAN
SCALE: 1/4" = 1'-0"

MOORE COUNTY SCHOOLS

VASS-LAKEVIEW GYMNASIUM RENOVATION

141 JAMES ST VASS, NORTH CAROLINA 28394

No.	Date	Description

ISSUE DATE: 11/22/23
PROJECT #: 02206.100
DRAWN BY: PVG
CHECKED BY: PVG

ELECTRICAL RENOVATION PLAN

E1.1

NEC 220 SERVICE DEMAND LOAD CALCULATION
OPTIONAL METHOD 220.86 FOR SCHOOLS

BUILDING DATA VASS-LAKEVIEW E.S.

BUILDING AREA (SF)	10000	SF
TOTAL CONNECTED LOAD	151	KVA
RESULTING BLDG VA/SF	15.1	VA/SF

SERVICE DEMAND LOAD CALCULATION

LOAD PORTION	VA/SF	DEMAND FACTOR	LOAD VA/SF	
FIRST 3 VA/SF	3.0	100%	3.0	
OVER 3 THRU 20 VA/SF	12.1	75%	9.08	
OVER 20 VA/SF	0.0	25%	0.0	
RESULTING DEMAND LOAD/SF			**12.1**	VA/SF
CALCULATED BUILDING DEMAND	(VA)			**120,750**
TOTAL	**120.8**	**KVA**		

SERVICE CHARACTERISTICS

	208	VOLTS
	3	PHASE
BUILDING SERVICE DEMAND	**335.2**	**AMPS**

LOCATION: UTILITY
MANUFAC : SQ-D OR EQUAL BY EATON, GE OR SIEMENS
MODEL : NQ WITH BOLT ON BREAKERS
MTG : WALL/SURFACE NEMA 1

PANEL **MDP**
FED FROM: SERVICE
SE LABEL

PROJECT: VASS-LAKEVIEW ES
JOB No: 2309

VOLTAGE 208 / 120 Ph 3 W 4

SCCR RATINGS
FULLY RATED
13,000 AIC SYMM (MIN)

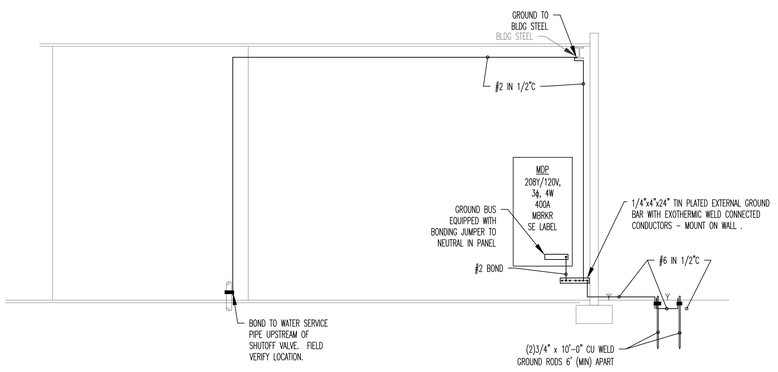
CONN VA	#	LOAD	Ph	N	G	C	BKR	A	B	C	BKR	Ph	N	G	C	LOAD	#	CONN VA
1,500	1	LTG	-	-	-	-	20(5,6)	*			20(5,6)	-	-	-	-	LTG	2	1,500
1,500	3	LTG	-	-	-	-	20(5)		*		20(5)	-	-	-	-	LTG	4	1,500
1,500	5	LTG	-	-	-	-	20(5)			*	20(5)	-	-	-	-	LTG	6	1,500
1,500	7	RECPT	-	-	-	-	20(5)	*			20(5)	-	-	-	-	RECPT	8	1,500
1,500	9	RECPT	-	-	-	-	20(5)		*		20(5)	-	-	-	-	RECPT	10	1,500
1,500	11	RECPT	-	-	-	-	20(5)			*	20(5)	-	-	-	-	RECPT	12	1,500
1,500	13	RECPT	-	-	-	-	20(5)	*			20(5)	-	-	-	-	RECPT	14	1,500
1,500	15	RECPT	-	-	-	-	20(5)		*		20(5)	-	-	-	-	RECPT	16	1,500
1,500	17	RECPT	-	-	-	-	20(5)			*	20(5)	-	-	-	-	RECPT	18	1,500
1,500	19	RECPT	-	-	-	-	20(5)	*			20(5)	-	-	-	-	RECPT	20	1,500
1,500	21	RECPT	-	-	-	-	20(5)		*		20(5)	-	-	-	-	RECPT	22	1,500
1,500	23	RECPT	-	-	-	-	20(5)			*	20(5)	-	-	-	-	RECPT	24	1,500
5,000	25							*			20	12	12	12	1/2	EWC	26	180
5,000	27	WMHP-1	8	-	10	3/4	50		*		20	12	12	12	1/2	WEH-1	28	1,000
5,000	29									*	20	12	12	12	1/2	CEH-1,2	30	1,000
14,400	31							*			20	12	12	12	1/2	SVC RCPT	32	540
14,400	33	PHP2	1	-	6	1 1/2	125		*		20	12	12	12	1/2	RECPT	34	180
14,400	35									*	20	-	-	-	-	SPARE	36	
1,700	37							*									38	14,400
1,700	39	UH-1	12	12	12	1/2	20		*		125	1	-	6	1 1/2	PHP1	40	14,400
1,700	41									*							42	14,400
1,700	43							*			20	-	-	-	-	SPARE	44	
1,700	45	UH-2	12	12	12	1/2	20		*		20	-	-	-	-	SPARE	46	
1,700	47									*	20	-	-	-	-	SPARE	48	
	49							*			20	-	-	-	-	SPARE	50	
	51	TVSS	10	10	10	3/4	30		*		20	-	-	-	-	SPARE	52	
	53									*	20	-	-	-	-	SPARE	54	

240	SUBTOTAL AMPS Ph A	MAIN BREAKER -	400	AMPS		SUBTOTAL AMPS Ph-A	176
240	SUBTOTAL AMPS Ph-B	MAIN LUGS -	400	AMPS	MINIMUM	SUBTOTAL AMPS Ph-B	180
240	SUBTOTAL AMPS Ph-C	BUS AMPACITY =	400	AMPS	MINIMUM	SUBTOTAL AMPS Ph-C	178

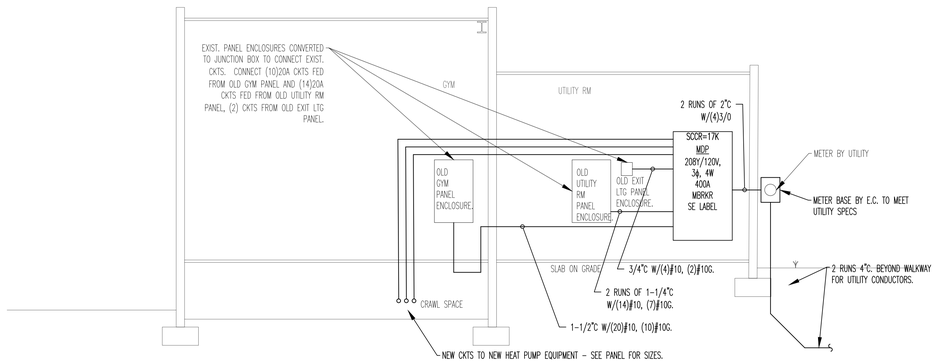
LOAD	CONNECTED VA	DF	DEMAND VA	DEMAND KVA
LIGHTING	9000	100	9000	9.0
A/C	0	100	0	0.0
HEATING	113600	100	113600	113.6
WATER HEATERS	0	100	0	0.0
NON-VENT MOTORS	0	100	0	0.0
VENTILATION	0	100	0	0.0
KITCHEN, REQ = 0	0	100	0	0.0
RECEPTACLES	27900	68	18950	19.0
MISCELLANEOUS	0	100	0	0.0
25% OF LARGEST MOTOR	2792	100	2792	2.8
FUTURE	0	100	0	0.0
TOTAL	153292 (VA)		144342	
	425 (AMPS)		401	

VA ph A	49920	
VA ph B	50380	
VA ph C	50200	
TOTAL	150.5	kVA

NOTES
1. COPPER BUSSES AND FULL SIZE NEUTRAL BUSS.
2. COPPER GROUND BAR.
3. CIRCUITS SHALL BE FED WITH COPPER CONDUCTORS.
4. SEE POWER RISER DIAGRAM FOR FEEDER AND CONDUIT SIZE.
5. BRKR FOR EXIST. CKT - SEE RISER DIAGRAM FOR CONDUCTORS SIZES.
6. PROVIDE LOCK-ON DEVICE



2 E6.1 ELECTRICAL SERVICE GROUNDING & BONDING DETAIL
SCALE: NONE



1 E6.1 ELECTRICAL SERVICE RISER DIAGRAM
SCALE: NONE

SERVICE RISER DIAGRAM NOTES:

1. ALL CONDUCTORS SHALL BE COPPER.
2. SHORT CIRCUIT VALUES ARE BASED ON 100 KVA TRANSFORMER WITH IMPEDANCE VALUE OF 2.0% LOCATED 100' (CONDUCTOR LENGTH) FROM SERVICE GEAR. NOTIFY ENGINEER IF CONDITIONS DIFFER.
3. PROVIDE ARC-FLASH HAZARD WARNING SIGNAGE ON EACH PANEL.
4. FURNISH TVSS SURGE SUPPRESSOR FOR SERVICE PANEL. TVSS PROTECTION UNIT SHALL BE PARALLEL STYLE RATED FOR 120V/208Y, 3ϕ, 4W, 200kA PER PHASE, WITH PROTECTION MODES OF L-N, L-G, L-L, AND N-G. THE UNIT SHALL BE LISTED TO UL 1449 AND UL 1283; SHALL HAVE EMI/RFI FILTERING FOR 60db MAXIMUM FROM 100KHz TO 100MHz; SHALL BE HOUSED IN A NEMA 1 ENCLOSURE; SHALL MAINTAIN A LINE FREQUENCY BETWEEN 47-63 HERTZ, LINE VOLTAGE +/- 15% NOMINAL; SHALL HAVE A TEMPERATURE RATING BETWEEN -40 TO +60 DEGREES C, AN AUDIBLE NOISE LEVEL THAT IS LESS THAN 45dBa, AND THE RESPONSE TIME SHALL BE LESS THAN 0.5ns. EQUAL TO LEA INTERNATIONAL MODEL LEA PLUS 200 SERIES MODEL B3B-40-2003. MOUNT ADJACENT TO MAIN PANEL WITH MINIMAL CONDUCTOR LENGTH BETWEEN BREAKER AND SUPPRESSOR (5' MAXIMUM LENGTH).
5. IDENTIFY EACH PANEL WITH COVER USING ENGRAVED LAMINATED NAMEPLATE SCREW ATTACHED TO PANEL. IDENTIFY EACH BREAKER FOR PANELS OR SWITCHBOARDS WITHOUT A COVER.
6. PROVIDE A COMPLETE MACHINE PRINTED CIRCUIT DIRECTORY FOR EACH PANEL WITH A DOOR IDENTIFYING EACH CIRCUIT. FOR PANELS OR SWITCHBOARDS WITHOUT DOOR, IDENTIFY EACH BREAKER OR SWITCH WITH LAMINATED NAMEPLATE SCREW ATTACHED TO COVER. IDENTIFY LOADS IN DIRECTORIES USING ROOM NAMES OR NUMBERS. UPDATE DIRECTORY IF NAMES OR NUMBERS CHANGE PRIOR TO PROJECT CLOSEOUT.

TRIAD ENGINEERING CONSULTANTS, INC
Email: Admin@TriadEngMEP.com
2636-100 Willard Dairy Rd
High Point, NC 27265
(336) 338-8943
Firm License
C-0492
2309
PLUMBING MECHANICAL AND ELECTRICAL ENGINEERING
ENGINEERING THE PIEDMONT TRIAD SINCE 1984

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 14498 11/22/23 ENGINEER PERRY V. GULLEDGE

...Becoming the Leading Designer of High Performance Facilities in the Nation with a Specialty in Alternative Delivery Methods
333 Fayetteville St, Ste 225
Raleigh, NC 27601
P: 919.573.6350
F: 919.573.6355
www.sfla.biz
sfl+a ARCHITECTS

SILVA ARCHITECTS, PA CERT. NO. 50676 REGISTERED ARCHITECTURAL CORPORATION NORTH CAROLINA RALEIGH

BID SET

MOORE COUNTY SCHOOLS
VASS-LAKEVIEW GYMNASIUM RENOVATION
141 JAMES ST VASS, NORTH CAROLINA 28394

No.	Date	Description

ISSUE DATE: 11/22/23
PROJECT #: 02206.100
DRAWN BY: PVG
CHECKED BY: PVG

PANEL SCHEDULES, RISER DIAGRAMS

E6.1