STUMP SOUND ELEMENTARY SCHOOL
ONSLOW COUNTY
STUMP SOUND, NORTH CAROLINA

GENERAL INFORMATION

A100 COVER SHEET
A101 APPENDIX "B" & CODE DATA - AREAS "A", "B", "C" & "F"
A102 APPENDIX "B" & CODE DATA - AREA "D"
A103 APPENDIX "B" & CODE DATA - AREA "E"
A104 APPENDIX "B" & CODE DATA - AREA "G"
A105 LIFE SAFETY PLAN
A106 OVERALL FLOOR PLAN
A107 WALL TYPES & SPECIALTY DETAILS
A108 ACCESSIBILITY REQUIREMENTS

CIVIL

C100 OVERALL SITE PLAN
C101 SITE PLAN
C102 GRADING PLAN
C103 WATER AND SEWER PLAN
C104 ROOF DRAINAGE PLAN
C105 OFFSITE FORCE MAIN PLAN & PROFILE #1
C106 OFFSITE FORCE MAIN PLAN & PROFILE #2
C107 SPS DETAIL SHEET & SFM PLAN & PROFILE
C108 WATER AND SEWER PLAN & PROFILE
C109 TURN LANE PLAN
C110 STORMWATER WETLANDS #1
C111 STORMWATER WETLANDS #2
C112 STORMWATER WETLANDS #3
C113 GRADING DETAIL SHEET
C114 WATER AND FORCE MAIN DETAIL SHEET
C115 SEWER DETAIL SHEET

ARCHITECTURAL

A200 FLOOR PLAN, NOTES & DETAILS - AREAS "A", "B", "F" & "G"
A201 FLOOR PLAN, NOTES & DETAILS - AREAS "C", "D" & "E"
A202 PARTIAL FLOOR PLANS, NOTES & DETAILS - AREAS "D" & "E"
A203 FLOOR PLANS, NOTES & DETAILS - AREA "G" & PART. SOFFIT PLAN
A204 FLOOR PLANS, NOTES & DETAILS - AREA "C" & MECHANICAL MEZZ.
A205 REFLECTED CEILING PLAN & NOTES - AREAS "A", "B", "F" & "G"
A206 REFLECTED CEILING PLAN & NOTES - AREAS "C", "D" & "E"
A207 REFLECTED CEILING PLAN & NOTES - AREAS "D" & "E"
A208 REFLECTED CEILING PLAN & NOTES - AREA "G"
A209 REFLECTED CEILING PLAN & NOTES - AREA "C" & MECH. MEZZ.
A210 ROOF PLAN, DETAILS & NOTES
A300 OVERALL ELEVATIONS
A301 BUILDING ELEVATIONS
A302 BUILDING ELEVATIONS
A303 BUILDING ELEVATIONS
A304 BUILDING ELEVATIONS
A400 BUILDING SECTIONS
A401 WALL SECTIONS
A402 WALL SECTIONS
A403 WALL SECTIONS
A404 WALL SECTIONS
A405 WALL SECTIONS
A406 WALL SECTIONS & EXTERIOR SIGN DETAILS

ARCHITECTURAL - CON'T

A407 WALL SECTIONS
A408 WALL SECTIONS
A409 ENLARGED DETAILS
A410 ENLARGED DETAILS
A411 COLUMN WRAP DETAILS, PART. ENTRY ELEV., & MECH. PLAT. SECTION
A412 DUMPSTER ENCLOSURE DETAILS
A500 CASEWORK ELEVATIONS & SECTIONS
A501 CASEWORK ELEVATIONS
A600 DOOR SCHEDULE & NOTES
A601 DOOR & WINDOW DETAILS
A602 ROOM FINISH SCHED., ENLARGED TOILET PLANS, DETAILS & NOTES
A603 ENLARGED KITCHEN PLAN & FOOD SERVICE EQUIPMENT SCHEDULE
A604 SERVING LINE PLAN & DETAILS
A605 OVERALL FLOORING PLAN
A700 ALT. #1 - PART. FLOOR PLANS, NOTES & DETAILS - AREA "D", "E" & "G"
A701 ALT. #1 - PART. REFLECTED CEILING PLANS - AREA "D", "E" & "G"

STRUCTURAL

S100 FOUNDATION/ SLAB PLAN - AREA "A", "B", "F" & "G"
S101 FOUNDATION/ SLAB PLAN - AREA "C", "D" & "E"
S102 FOUNDATION/ SLAB PLAN - AREA "D" & "E"
S103 FOUNDATION/ SLAB PLAN - AREA "G"
S104 FOUNDATION/ SLAB PLAN - AREA "C"
S105 ROOF FRAMING PLAN - AREA "A", "B", "F" & "G"
S106 ROOF FRAMING PLAN - AREA "C", "D" & "E"
S107 ROOF FRAMING PLAN - AREA "D" & "E"
S108 ROOF FRAMING PLAN - AREA "G"
S109 ROOF FRAMING PLAN - AREA "C"
S110 PLATFORM FRAMING PLAN - AREA "C"
S200 GENERAL NOTES, SPECIAL INSPECTION REQUIREMENTS
S201 TYPICAL SECTIONS & DETAILS
S202 SECTIONS & DETAILS
S203 SECTIONS & DETAILS
S204 SECTIONS & DETAILS
S205 SECTIONS & DETAILS
S206 SECTIONS & DETAILS
S207 SECTIONS & DETAILS
S208 SECTIONS & DETAILS
S209 SECTIONS & DETAILS
S700 FOUNDATION/ SLAB PLAN - ALT. #1
S701 ROOF FRAMING PLAN - ALT. #1

FIRE PROTECTION

FP100 FIRE PROTECTION FLOOR PLAN
FP101 FIRE PROTECTION NOTES, SPECS. & DETAILS

PLUMBING

P100 FLOOR PLAN - AREAS "A", "B", "F" & "G"
P101 FLOOR PLAN - AREAS "C", "D" & "E"
P102 FLOOR PLAN - AREAS "D" & "E"
P103 FLOOR PLAN - AREA "G"
P200 ENLARGED PLANS
P201 ENLARGED PLANS
P301 SCHEDULES AND DETAILS
P302 SCHEDULES AND DETAILS
P700 ALTERNATE #1

MECHANICAL

M100 FLOOR PLAN - AREAS "A", "B", "F" & "G"
M101 FLOOR PLAN - AREAS "C", "D" & "E"
M102 FLOOR PLAN - AREAS "D" & "E"
M103 FLOOR PLAN - AREA "G"
M104 FLOOR PLAN - AREA "C" & MECH. MEZZ.
M200 SCHEDULE & LEGEND
M300 DETAILS
M700 ALTERNATE #1

ELECTRICAL

E100 SYMBOLS LEGEND, FIXTURE SCHEDULE
E101 DATA SCHEDULES, TELECOM RISER, ELECTRICAL GENERAL NOTES
E102 ELECTRICAL DETAILS
E103 ELECTRICAL DETAILS
E104 FIRE ALARM RISER, FIRE ALARM MATRIX, & FA DEVICE MOUNTING
E105 ELECTRICAL DETAILS
E106 ELECTRICAL DETAILS
E107 ELECTRICAL DETAILS
E200 PARTIAL LIGHTING PLAN AREAS A, B, F & G
E201 PARTIAL LIGHTING PLAN AREAS C, D & E
E202 PARTIAL LIGHTING PLAN AREAS D & E
E203 PARTIAL LIGHTING PLAN AREAS G
E204 PARTIAL LIGHTING PLAN AREAS C
E205 LIGHTING PLAN MEZZANINES A, B, & C
E300 PARTIAL POWER PLAN AREAS A, B, F & G
E301 PARTIAL POWER PLAN AREAS C, D & E
E302 PARTIAL POWER PLAN AREAS D & E
E303 PARTIAL POWER PLAN AREAS G
E304 ENLARGED POWER PLAN AREAS C
E305 FOOD SERVICE EQUIPMENT SCHEDULE
E306 POWER PLANS MEZZANINES A, B & C
E400 FIRE ALARM PLAN AREAS A, B, F & G
E401 PARTIAL FIRE ALARM PLAN AREAS C, D & E
E402 PARTIAL FIRE ALARM PLAN AREAS D & E
E403 PARTIAL FIRE ALARM PLAN AREAS G
E404 PARTIAL FIRE ALARM PLAN AREAS C
E405 PARTIAL FIRE ALARM PLANS MEZZANINE A, B & C
E500 OVERALL SECURITY CABLE TRAY PLAN
E501 ELECTRICAL SITE PLAN
E600 POWER RISER BASE BID
E601 POWER RISER ALTERNATE #4
E602 PANEL SCHEDULES BASE BID
E603 PANEL SCHEDULES BASE BID
E604 PANEL SCHEDULES BASE BID
E605 PANEL SCHEDULES BASE BID & ALTERNATE #4
E700 LIGHTING, POWER & FIRE ALARM PLANS - CLASSROOM ALT. AREAS D & E
E701 LIGHTING, POWER & FIRE ALARM PLANS - CLASSROOM ALT. AREA G

PINNACLE ARCHITECTURE
PROFESSIONAL ASSOCIATION

P.O. BOX 187, 630 TEAM ROAD, SUITE 200
MATTHEWS, NORTH CAROLINA 28106
PH: (704) 847-9851 FAX: (704) 847-9853

701 EAST BAY STREET, SUITE 302
CHARLESTON, SOUTH CAROLINA 29403
PH: (843) 872-5345 FAX: (843) 872-5374

FRANK McCRADY WILLIAMS REGISTERED ARCHITECT 1611 NORTH CAROLINA MATTHEWS, NC

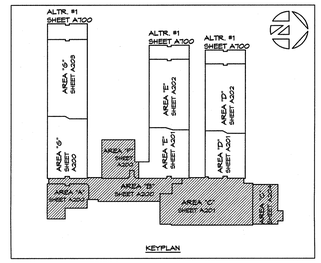
PINNACLE ARCHITECTURE, P.A. REGISTERED ARCHITECTURAL CORPORATION 51264 NORTH CAROLINA 4-30-19 MATTHEWS, NC

REVISION SCHEDULE

	DATE	REFERENCE

A100

JOB TITLE: STUMP SOUND ELEMENTARY SCHOOL
PROJECT# 1821
PROJECT PHASE: CD RELEASE DATE: 04-30-2019



CONTRACTOR TO VERIFY ALL DIMENSIONS.

APPENDIX B
2018 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: STUMP SOUND ELEMENTARY SCHOOL - AREAS "A", "B", "C", & "F"
Address: FOLKSTONE ROAD, STUMP SOUND, NORTH CAROLINA Zip Code: 28445
Owner/Authorized Agent: RANDY BAKER Phone: (704) 511-0112 E-Mail: randy@pinnaclearchitecture.net
Owned By: ■ City/County ☐ Private ☐ State
Code Enforcement Jurisdiction: ☐ City ■ County ONSLOW ☐ State

CONTACT: FRANK M. PELLIAMS, AIA

DESIGNER	FIRM	NAME	LICENSE #	TELEPHONE #	E-MAIL
Architectural	PINNACLE ARCHITECTURE, P.A.	FRANK M. PELLIAMS	1611	(704) 847-9551	melissa@pinnaclearchitecture.net
Civil	PARKER & ASSOCIATES, INC.	TIMOTHY M. STEWART	14575	(910) 455-2414	officeparkerjacksonville.com
Electrical	PROGRESSIVE DESIGN COLLAB.	ROBERT A. CLARK	045439	(704) 790-9984	scampbell@pdcengineers.com
Fire Alarm	PROGRESSIVE DESIGN COLLAB.	ROBERT A. CLARK	045439	(704) 790-9984	scampbell@pdcengineers.com
Plumbing	MCKNIGHT SMITH HARD GRIFFIN	J. CRAIG CHAMPION	17250	(704) 527-2112	cchampion@msug.com
Mechanical	MCKNIGHT SMITH HARD GRIFFIN	J. CRAIG CHAMPION	17250	(704) 527-2112	cchampion@msug.com
Sprinkler-Standpipe	MCKNIGHT SMITH HARD GRIFFIN	J. CRAIG CHAMPION	17250	(704) 527-2112	cchampion@msug.com
Structural	RUGGLES ENGINEERING, PC	RANDY M. RUGGLES	026513	(704) 778-5192	ruggleseng ineering@embarqmail.com
Retaining Walls>5'High	***	***	***	***	***
Other	***	***	***	***	***

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

2018 NC BUILDING CODE: ■ New Construction ☐ Addition ☐ Shell/Core ☐ Phased Construction - Shell Core ☐ 1st Time Interior Completions
2018 NC EXISTING BUILDING CODE: ☐ Prescriptive ☐ Repair ☐ Chapter 14 ☐ Alteration Level I ☐ Alteration Level II ☐ Alteration Level III ☐ Historic Property ☐ Change of Use
CONSTRUCTED: (date) _____
RENOVATED: (date) _____
OCCUPANCY CATEGORY (Table 1640.5): Current: _____ Proposed: _____
CURRENT USE(S) (Ch. 3): _____
PROPOSED USE(S) (Ch. 3): _____

BASIC BUILDING DATA

Construction Type (check all that apply): ☐ I-A ☐ I-B ■ II-B ☐ II-A ☐ III-A ☐ III-B ☐ IV ☐ V-A ☐ V-B
Sprinklers: ☐ No ☐ Partial ■ NFPA 13 ☐ NFPA 13R ☐ NFPA 13D
Standpipes: ■ No Class ☐ I ☐ II ☐ III ☐ Wet ☐ Dry
Primary Fire District: ■ No ☐ Yes Flood Hazard Area: ■ No ☐ Yes
Special Inspections Required: ☐ No ■ Yes

Gross Building Area Table:

FLOOR	EXISTING (SQ FT)	NEW (SQ FT)	SUB-TOTAL
3rd Floor			
2nd Floor			
Mezzanine		2,135 S.F.	2,135 S.F.
1st Floor		42,802 S.F.	42,802 S.F.
Basement			
TOTAL		44,937 S.F.	44,937 S.F.

ALLOWABLE AREA

Primary Occupancy Classification(s):
Assembly ☐ A-1 ■ A-2 ■ A-3 ☐ A-4 ☐ A-5
Business ■
Educational ■
Factory ☐ F-1 Moderate ☐ F-2 Low
Hazardous ☐ H-1 Detonate ☐ H-2 Deflagrate ☐ H-3 Combust ☐ H-4 Health ☐ H-5 HPM
Institutional ☐ I-1 ☐ I-2 ☐ I-3 ☐ I-4
I-1 Condition ☐ 1 ☐ 2
I-2 Condition ☐ 1 ☐ 2
I-3 Condition ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5
Mercantile ☐
Residential ☐ R-1 ☐ R-2 ☐ R-3 ☐ R-4
Storage ☐ S-1 Moderate ☐ S-2 Low ☐ High-Piled ☐ Parking Garage ☐ Open ☐ Enclosed ☐ Repair Garage
Utility and Miscellaneous ☐

Accessory Occupancy Classification(s): N/A
Incidental Uses (Table 509): N/A
This separation is not exempt as a Nonseparated Use (see exceptions).
Special Uses (Chapter 4 - List Code Sections): 410 & 490
Special Provisions (Chapter 5 - List Code Sections): N/A
Mixed Occupancy: ■ No ☐ Yes Separation N/A Hr. Exception: N/A
■ Non-separated Use (508.3)
☐ Separated Use (508.4) - See below for area calculations for each story, the area of the occupancy shall be such that the sum of the rations of the actual floor area of wach use divided by the allowable floor area for each use shall not exceed 1.

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, 5]	(D) ALLOWABLE AREA PER STORY OR UNLIMITED[2, 3]
FIRST FLOOR	EDUCATION	42,802 S.F.	58,000 S.F.	6,480 S.F.	64,960 S.F.

[1] Frontage area increases from Section 506.2 are computed thus:
a. Perimeter which fronts a public way or open space having 20 feet minimum width = 1079 (F)
b. Total Building Perimeter = 1471 (P)
c. Ratio (F/P) = 0.73 (F/P)
d. W = Minimum width of public way = 30 (W)
[2] Unlimited area applicable under conditions of Sections 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. The maximum area of air traffic control towers must comply with Table 412.3.1.
[5] Frontage increase is based on the unsprinklered area value in Table 506.2.

ALLOWABLE HEIGHT

	ALLOWABLE	SHOWN ON PLANS	CODE REFERENCE
Building Height in Feet (Table 504.3)	75	37	N/A
Building Height in Stories (Table 504.4)	3	1	N/A

[1] Provide code reference if the "Shown on Plans" quantity is not based on Table 504.3 or 504.4.

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		N/A					
Bearing Walls							
Exterior							
North	X > 30'	0					
East	X > 30'	0					
West	X > 30'	0					
South	X > 30'	0					
Interior		N/A					
Nonbearing walls and partitions Exterior walls							
North	X > 30'	0					
East	X > 30'	0					
West	X > 30'	0					
South	X > 30'	0					
Interior Walls and partitions		N/A					
Floor Construction including supporting beams and joists		N/A					
Columns Supporting Floors		N/A					
Roof Construction, including supporting beams and joists		N/A					
Roof Ceiling Assembly		N/A					
Columns Supporting Roof		N/A					
Shaft Enclosures - Exit		N/A					
Shaft Enclosures - Other		N/A					
Corridor Separation		N/A					
Occupancy/Fire Barrier Separation		N/A					
Party/Fire Wall Separation		2 HR.		10/A107	UL #U905		
Smoke Barrier Separation		N/A					
Smoke Partition		N/A					
Tenant/Dwelling Unit/ Sleeping Unit Separation		N/A					
Incidental Use Separation		2 HR.		10/A107	UL #U905		

* Indicate section number permitting reduction

FIRE SEPARATION DISTANCE (FEET) FROM PROPERTY LINES	DEGREE OF OPENINGS PROTECTION (TABLE 705.8)	ALLOWABLE AREA (%)	ACTUAL SHOWN ON PLANS (%)
15 (ASSUMED)	UP, S	UNLIMITED (705.8.1 EX. #2)	N/A

LIFE SAFETY SYSTEM REQUIREMENTS

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

LIFE SAFETY PLAN REQUIREMENTS

Life Safety Plan Sheet #: A105

■ 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 load for each area
■ Exit access travel distances (1017)
☐ Common path of travel distances (Table 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)

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	N/A	N/A	N/A	N/A	N/A	N/A	N/A

ACCESSIBLE PARKING (SECTION 1106)

LOT OR PARKING AREA	TOTAL # OF PARKING SPACES		# OF ACCESSIBLE SPACES PROVIDED				TOTAL # ACCESSIBLE PROVIDED
	REQUIRED	PROVIDED	REGULAR WITH 5' ACCESS AISLE	VAN SPACES WITH 132" ACCESS AISLE	VAN SPACES WITH 8' ACCESS AISLE		
***	***	***	***	***	***		***
TOTAL	***	***	***	***	***		***

PLUMBING FIXTURE REQUIREMENTS (TABLE 2902.1) - COMPLETE SCHOOL CALCULATIONS

USE		WATERCLOSETS			URINALS	LAVATORIES			SHOWERS/ TUBS	DRINKING FOUNTAINS	
		MALE	FEMALE	UNISEX		MALE	FEMALE	UNISEX		REGULAR	ACCESSIBLE
STUDENTS	EXISTING	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	NEW	15*	22	N/A	9	10	10	N/A	1	7	7
	REQUIRED	14	14	N/A	N/A	8	8	N/A	N/A	7	7
TEACHERS	EXISTING	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	NEW	2	3	N/A	N/A	2	3	N/A	N/A	1	1
	REQUIRED	1	3	N/A	N/A	1	1	N/A	N/A	1	1
GYMNASIUM	EXISTING	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
(AFTER HOURS)	NEW	3*	6	N/A	3	3	3	N/A	N/A	2	2
	REQUIRED	3	6	N/A	N/A	3	3	N/A	N/A	2	2

* URINALS SUBSTITUTED FOR WATER CLOSETS PER SECTION 403.3.5.3 OF NCSPC (PUBLIC SCHOOLS - EDUCATIONAL)
** URINALS SUBSTITUTED FOR WATER CLOSETS PER SECTION 411.2 OF NCSPC (ALL OTHER OCCUPANCIES)

SPECIAL APPROVALS

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

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 versus the annual energy cost for the proposed design.

Existing building envelope complies with code: ☐ (If checked, the remainder of this section is not applicable.)
Exempt Building: ☐ Provide code or statutory reference: _____
Climate Zone: ■ 3A ☐ 4A ☐ 5A
Method of Compliance:
Energy Code: ☐ Performance ■ Prescriptive
ASHRAE 90.1: ☐ Performance ☐ Prescriptive
Other: ☐ Performance (specify source) _____

THERMAL ENVELOPE (Prescriptive method only)

Roof/ceiling Assembly (each assembly)
Description of assembly: STANDING SEAM ROOF, STEEL ATTIC FRAMING & RIGID INSUL.
U-Value of total assembly: 0.024
R-Value of insulation: 35
Skylights in each assembly: N/A
U-Value of skylights: N/A
total square footage of skylights in each assembly: N/A

Exterior Walls (each assembly)
Description of assembly: BRICK, AIR SPACE, RIGID INSULATION, CMU
U-Value of total assembly: 0.11
R-Value of insulation: 7.6
Opening (windows or doors with glazing)
U-Value of assembly: 0.45
Solar heat gain coefficient: N/A
projection factor: N/A
Door R-values: 3.33

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

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

Floors slab on grade
Description of assembly: SLAB ON GRADE, INF REINF, W/ WASHED STONE
U-Value of total assembly: 1.23
R-Value of insulation: NOT REQUIRED
Horizontal/vertical requirement: N/A
slab heated: NO

EXIT REQUIREMENTS
NUMBER AND ARRANGEMENT OF EXITS

FLOOR, ROOM OR SPACE DESIGNATION	MINIMUM[2] NUMBER OF EXITS		TRAVEL DISTANCE		EXIT ACCESS DOORWAY CONFIGURATION[1,2] (SECTION 1007.1)	
	REQUIRED	SHOWN ON PLANS	ALLOWABLE TRAVEL DISTANCE (TABLE 1017.2)	ACTUAL TRAVEL DISTANCE SHOWN ON PLANS	REQUIRED DISTANCE BETWEEN EXIT DOORS	ACTUAL DISTANCE SHOWN ON PLANS
AREA 'A'	2	2	250'	103'	42'	46'
AREA 'B'	2	2	250'	129'	54'	129'
AREA 'C'	4	5	250'	84'	87'	94'
AREA 'F'	2	2	250'	62'	36'	68'

[1] Corridor dead ends (Section 1020.4)
[2] Stories with single exits (Table 1006.3.2(2); Spaces with one means of egress (Table 1006.2.1)
[3] Common Path of Travel (Section 1006.2.1)

EXIT WIDTH

USE GROUP OR SPACE DESCRIPTION	(a) AREA[1] SQ. FT.	(b) AREA[1] PER OCCUPANT (TABLE 1004.1.2)	CALCULATED OCCUPANT LOAD (a÷b)	(c) EXIT WIDTH (in)[2,3,4,5,6] EGRESS WIDTH PER OCCUPANT (1005.3)		REQUIRED WIDTH (SECTION 1005.3) (a ÷ b) x c		ACTUAL WIDTH SHOWN ON PLANS	
				STAIR	LEVEL	STAIR	LEVEL	STAIR	LEVEL
CLASSROOM	3,870 SF NET	20 SF NET	194						
BUSINESS	4,564 SF GROSS	100 SF GROSS	46						
MEDIA CENTER	3,141 SF NET	50 SF NET	63						
TOTAL			303	0.3	0.2	N/A	61"	N/A	352"
MECH. MEZZANINE	2,135 SF GROSS	300 SF GROSS	8	0.3	0.2	36"	32"	42"	32"
MECH./ ELEC.	418 SF GROSS	300 SF GROSS	4						
TOTAL			10	0.3	0.2	N/A	32"	N/A	48"
BUSINESS	252 SF GROSS	100 SF GROSS	3						
CLASSROOM	734 SF NET	15 SF NET	44						
GYMNASIUM	7,584 SF NET	7 SF NET	1085						
TOTAL			1,137	0.3	0.2	N/A	228"	N/A	256"
DINING AREA	4,371 SF NET	15 SF NET	292	0.3	0.2	N/A	94"	N/A	128"
BUSINESS	130 SF GROSS	100 SF GROSS	2						
KITCHEN	3,236 SF GROSS	200 SF GROSS	17						
TOTAL			19	0.3	0.2	N/A	32"	N/A	44"

[1] See Table 1004.1.2 to determine whether net or gross area is applicable.
[2] Minimum stairway width (Section 1011.2); min. corridor width (Section 1020.2); min. door width (Section 1010.1.1)
[3] Minimum width of exit passageway (Section 1024.2)
[4] See Section 1005.6 for converging exits.
[5] The loss of one means of egress shall not reduce the available capacity to less than 50 percent of the total required (Section 1005.5)
[6] Assembly occupancies (Section 1024)

STRUCTURAL DESIGN (COMPLETE SCHOOL CALCULATIONS)

DESIGN LOADS:

Importance Factors: Snow (I_s) 1.2; Seismic (I_E) 1.5

Live Loads: Roof 20 psf; Mezzanine 125 psf; Floor 100 psf; Stage/Storage 125 psf

Ground Snow Load: 10 psf

Wind Load: Ultimate Wind Speed 146 mph (ASCE-7); Exposure Category C

SEISMIC DESIGN CATEGORY ☐ A ☐ B ■ C ☐ D
Provide the following Seismic Design Parameters:
Risk Category (Table 1604.5) ☐ I ☐ II ☐ III ■ IV
Spectral Response Acceleration S_S .199 %g S_1 .072 %g
Site Classification (ASCE 7) ☐ A ☐ B ☐ C ■ D ☐ E ☐ F
Data Source: ■ Field Test ☐ Presumptive ☐ Historical Data

Basic structural system
■ Bearing Wall ☐ Dual w/Special Moment Frame
☐ Building Frame ☐ Dual w/Intermediate R/C or Special Steel
☐ Moment Frame ☐ Inverted Pendulum

Analysis Procedure ☐ Simplified ■ Equivalent Lateral Force ☐ Dynamic
Architectural, Mechanical, Components anchored? ■ Yes ☐ No

LATERAL DESIGN CONTROL: ■ Earthquake ☐ Wind

SOIL BEARING CAPACITIES:
Field Test (provide copy of test report) 1,500 psf
Presumptive Bearing capacity _____ psf
File size, type, and capacity _____

PINNACLE ARCHITECTURE
PROFESSIONAL ASSOCIATION
P.O. BOX 187, 639 TEAMROAD, SUITE 200 MATTHEWS, NORTH CAROLINA 28106 PH: (704) 847-9551 FAX: (704) 847-9853
701 EAST BAY STREET, SUITE 302 CHARLESTON, SOUTH CAROLINA 29403 PH: ((843) 872-5345 FAX: (843) 872-5374

PINNACLE ARCHITECTURE, P.A. 51264 NORTH CAROLINA REGISTERED CORPORATION MELISSA M. MATTHEWS NOTARY PUBLIC

FRANK M. PELLIAMS, AIA 16711 REGISTERED LICENSED ARCHITECT NORTH CAROLINA

ISSUE DATE: 04.30.2019
DRAWN BY: JR
CHECKED BY: FMW/REB
PROJECT: 1621

STUMP SOUND ELEMENTARY SCHOOL
ONSLOW COUNTY SCHOOLS
STUMP SOUND, NORTH CAROLINA

APPENDIX "B" & CODE DATA
AREAS "A", "B", "C" & "F"

REVISION SCHEDULE

#	DATE	REFERENCE

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A101

2/28/2019 C:\Users\Frank\Documents\Revit Local Files\Central Files\2019 Revit\Stump Sound Elementary School_R19_Frank.rvt 4:08:03 AM

APPENDIX B
2018 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: STUMP SOUND ELEMENTARY SCHOOL - AREA "D"
Address: FOLKSTONE ROAD, STUMP SOUND, NORTH CAROLINA Zip Code: 28445
Owner/Authorized Agent: RANDY BAKER Phone: (704) 517-0172 E-Mail: randy@pinaclearchitecture.net
Owned By: ■ City/County ☐ Private ☐ State
Code Enforcement Jurisdiction: ☐ City ■ County ONSLOW ☐ State

CONTACT: REFER TO SHEET A101

DESIGNER	FIRM	NAME	LICENSE #	TELEPHONE #	E-MAIL
Architectural					
Civil					
Electrical					
Fire Alarm					
Plumbing					
Mechanical					
Sprinkler-Standpipe					
Structural					
Retaining Walls>5'High					
Other					

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

2018 NC BUILDING CODE: ■ New Construction ☐ Addition ☐ Shell/Core ☐ Phased Construction - Shell Core ☐ 1st Time Interior Completions

2018 NC EXISTING BUILDING CODE: ☐ Prescriptive ☐ Repair ☐ Chapter 14 ☐ Alteration Level I ☐ Alteration Level II ☐ Alteration Level III ☐ Historic Property ☐ Change of Use

CONSTRUCTED: (date) _____
RENOVATED: (date) _____
OCCUPANCY CATEGORY (Table 1640.5): Current: _____ Proposed: _____
CURRENT USE(S) (Ch. 3): _____
PROPOSED USE(S) (Ch. 3): _____

BASIC BUILDING DATA

Construction Type: (check all that apply) ☐ I-A ☐ I-B ■ II-B ☐ II-A ☐ III-A ☐ III-B ☐ IV ☐ V-A ☐ V-B
Sprinklers: ☐ No ☐ Partial ■ NFPA 13 ☐ NFPA 13R ☐ NFPA 13D
Standpipes: ■ No ☐ Class ☐ I ☐ II ☐ III ☐ Wet ☐ Dry
Primary Fire District: ■ No ☐ Yes Flood Hazard Area: ■ No ☐ Yes
Special Inspections Required: ☐ No ■ Yes

Gross Building Area Table:

FLOOR	EXISTING (SQ FT)	NEW (SQ FT)	SUB-TOTAL
3rd Floor			
2nd Floor			
Mezzanine			
1st. Floor		20,152 S.F.	20,152 S.F.
Basement			
TOTAL		20,152 S.F.	20,152 S.F.

ALLOWABLE AREA

Primary Occupancy Classification(s):
Assembly ☐A-1 ☐A-2 ☐A-3 ☐A-4 ☐A-5
Business ☐
Educational ■
Factory ☐F-1 Moderate ☐F-2 Low
Hazardous ☐H-1 Detonate ☐H-2 Deflagrate ☐H-3 Combust ☐H-4 Health ☐H-5 HPM
Institutional ☐I-1 ☐I-2 ☐I-3 ☐I-4
I-1 Condition ☐1 ☐2
I-2 Condition ☐1 ☐2
I-3 Condition ☐1 ☐2 ☐3 ☐4 ☐5
Mercantile ☐
Residential ☐R-1 ☐R-2 ☐R-3 ☐R-4
Storage ☐S-1 Moderate ☐S-2 Low ☐High-Piled ☐Parking Garage ☐Open ☐Enclosed ☐Repair Garage
Utility and Miscellaneous ☐

Accessory Occupancy Classification(s): N/A
Incidental Uses (Table 509): N/A
This separation is not exempt as a Nonseparated Use (see exceptions).
Special Uses (Chapter 4 - List Code Sections): 430
Special Provisions (Chapter 5 - List Code Sections): N/A
Mixed Occupancy: ■ No ☐ Yes Separation N/A Hr. Exception: N/A
■ Non-separated Use (508.3)
☐ Separated Use (508.4) - See below for area calculations for each story, the area of the occupancy shall be such that the sum of the rations of the actual floor area of wach use divided by the allowable floor area for each use shall not exceed 1.

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, 5]	(D) ALLOWABLE AREA PER STORY OR UNLIMITED[2, 3]
FIRST FLOOR	EDUCATION	20,152 S.F.	58,000 S.F.	8,845 S.F.	66,845 S.F.

[1] Frontage area increases from Section 506.2 are computed thus:
a. Perimeter which fronts a public way or open space having 20 feet minimum width = 569 (F)
b. Total Building Perimeter = 664 (P)
c. Ratio (F/P) = 0.86 (F/P)
d. W = Minimum width of public way = 30 (W)
[2] unlimited area applicable under conditions of Sections 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. The maximum area of air traffic control towers must comply with Table 412.3.1.
[5] Frontage increase is based on the unsprinklered area value in Table 506.2.

ALLOWABLE HEIGHT

	ALLOWABLE	SHOWN ON PLANS	CODE REFERENCE
Building Height in Feet (Table 504.3)	75	23	N/A
Building Height in Stories (Table 504.4)	3	1	N/A

[1] Provide code reference if the "Shown on Plans" quantity is not based on Table 504.3 or 504.4.

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		N/A					
Bearing Walls							
Exterior							
North	X > 30'	0					
East	X > 30'	0					
West	X > 30'	0					
South	X > 30'	0					
Interior		N/A					
Nonbearing walls and partitions Exterior walls							
North	X > 30'	0					
East	X > 30'	0					
West	X > 30'	0					
South	X > 30'	0					
Interior Walls and partitions		N/A					
Floor Construction including supporting beams and joists		N/A					
Floor Ceiling Assembly		N/A					
Columns Supporting Floors		N/A					
Roof Construction, including supporting beams and joists		N/A					
Roof Ceiling Assembly		N/A					
Columns Supporting Roof		N/A					
Shaft Enclosures - Exit		N/A					
Shaft Enclosures - Other		N/A					
Corridor Separation		N/A					
Occupancy/Fire Barrier Separation		N/A					
Party/Fire Wall Separation		2 HR.		10/A107	UL #U905		
Smoke Barrier Separation		N/A					
Smoke Partition		N/A					
Tenant/Dueling Unit/ Sleeping Unit Separation		N/A					
Incidental Use Separation		2 HR.		10/A107	UL #U905		

* Indicate section number permitting reduction

FIRE SEPARATION DISTANCE (FEET) FROM PROPERTY LINES	DEGREE OF OPENING PROTECTION (TABLE 705.8)	ALLOWABLE AREA (%)	ACTUAL SHOWN ON PLANS (%)
15 (ASSUMED)	UP, S	UNLIMITED (705.8.1 EX. #2)	N/A

LIFE SAFETY SYSTEM REQUIREMENTS

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

LIFE SAFETY PLAN REQUIREMENTS

Life Safety Plan Sheet #: A105

■ 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 load for each area
■ Exit access travel distances (1017)
☐ Common path of travel distances (Table 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 (1010.1.9.8)
■ 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)

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	N/A	N/A	N/A	N/A	N/A	N/A	N/A

ACCESSIBLE PARKING (SECTION 1106) REFER TO SHEET A101

LOT OR PARKING AREA	TOTAL # OF PARKING SPACES		# OF ACCESSIBLE SPACES PROVIDED			TOTAL # ACCESSIBLE PROVIDED
	REQUIRED	PROVIDED	VAN SPACES WITH: REGULAR WITH 5' ACCESS AISLE	VAN SPACES WITH: 132" ACCESS AISLE	VAN SPACES WITH: 8' ACCESS AISLE	
TOTAL						

PLUMBING FIXTURE REQUIREMENTS (TABLE 2902.1) - REFER TO SHEET A101

USE		WATERCLOSETS MALE	WATERCLOSETS FEMALE	WATERCLOSETS UNISEX	URINALS	LAVATORIES MALE	LAVATORIES FEMALE	LAVATORIES UNISEX	SHOWERS/ TUBS	DRINKING FOUNTAINS REGULAR	DRINKING FOUNTAINS ACCESSIBLE
	EXISTING										
	NEW										
	REQUIRED										
	EXISTING										
	NEW										
	REQUIRED										
	EXISTING										
	NEW										
	REQUIRED										

* URINALS SUBSTITUTED FOR WATER CLOSETS PER SECTION 403.5.3 OF NCSPC
** URINALS SUBSTITUTED FOR WATER CLOSETS PER SECTION 419.2 OF NCSPC (EDUCATIONAL / ALL OTHER OCCUPANCIES)

SPECIAL APPROVALS

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

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 versus the annual energy cost for the proposed design.

Existing building envelope complies with code: ☐ (If checked, the remainder of this section is not applicable.)
Exempt Building: ☐ Provide code or statutory reference: _____
Climate Zone: ■ 3A ☐ 4A ☐ 5A
Method of Compliance:
Energy Code: ☐ Performance ■ Prescriptive
ASHRAE 90.1: ☐ Performance ☐ Prescriptive
Other: ☐ Performance (specify source) _____

THERMAL ENVELOPE (Prescriptive method only)

Roof/ceiling Assembly (each assembly)
Description of assembly: STANDING SEAM ROOF, STEEL ATTIC FRAMING, R RIGID INSUL
U-value of total assembly: 0.04
R-value of Insulation: 25
Skylights in each assembly: N/A
U-value of skylight: N/A
total square footage of skylights in each assembly: N/A

Exterior Walls (each assembly)
Description of assembly: BRICK AIR SPACE, RIGID INSUL, EXT. SHEATHING, BATT INSUL, STUD, GYP BD.
U-value of total assembly: 0.059
R-value of Insulation: 18 + 7.5ci
Opening (windows or doors with glazing)
U-value of assembly: 0.48
Solar heat gain coefficient: N/A
projection factor: N/A
Door R-values: 3.23

Walls below grade (each assembly)
Description of assembly: N/A
U-value of total assembly: N/A
R-value of Insulation: N/A

Floors over unconditioned space (each assembly)
Description of assembly: N/A
U-value of total assembly: N/A
R-value of Insulation: N/A

Floors slab on grade
Description of assembly: SLAB ON GRADE, 4" REINF. W/ WASHED STONE
U-value of total assembly: 1.26
R-value of Insulation: NOT REQUIRED
Horizontal/vertical requirement: N/A
slab heated: NO

EXIT REQUIREMENTS
NUMBER AND ARRANGEMENT OF EXITS

FLOOR, ROOM OR SPACE DESIGNATION	MINIMUM [2] NUMBER OF EXITS: REQUIRED	MINIMUM [2] NUMBER OF EXITS: SHOWN ON PLANS	TRAVEL DISTANCE: ALLOWABLE TRAVEL DISTANCE (TABLE 1017.2)	TRAVEL DISTANCE: ACTUAL TRAVEL DISTANCE SHOWN ON PLANS	EXIT ACCESS DOORWAY CONFIGURATION [3] (SECTION 1007.1): REQUIRED DISTANCE BETWEEN EXIT DOORS	EXIT ACCESS DOORWAY CONFIGURATION [3] (SECTION 1007.1): ACTUAL DISTANCE SHOWN ON PLANS
AREA "D"	2	2	250'	147	85'	239'

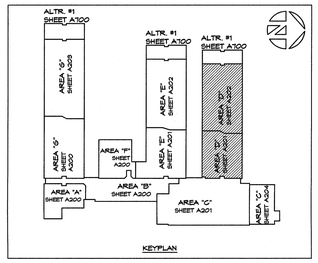
[1] Corridor dead ends (Section 1020.4)
[2] Stories with single exits (Table 1006.3.3(2); Spaces with one means of egress (Table 1006.2.1)
[3] Common Path of Travel (Section 1006.2.1)

EXIT WIDTH

USE GROUP OR SPACE DESCRIPTION	(a) AREA[1] sq. ft.	(b) AREA[1] PER OCCUPANT (TABLE 1004.1.2)	CALCULATED OCCUPANT LOAD (a÷b)	(c) EXIT WIDTH (in)[2,3,4,5,6]: EGRESS WIDTH PER OCCUPANT (1005.3) STAIR	EGRESS WIDTH PER OCCUPANT (1005.3) LEVEL	REQUIRED WIDTH (SECTION 1005.3) (a x b) x c STAIR	REQUIRED WIDTH (SECTION 1005.3) (a x b) x c LEVEL	ACTUAL WIDTH SHOWN ON PLANS STAIR	ACTUAL WIDTH SHOWN ON PLANS LEVEL
CLASSROOM	12,796 SF NET	20 SF NET	640						
STORAGE	643 SF NET	300 SF GROSS	4						
TOTAL			644	0.3	0.2	N/A	128"	N/A	472"

[1] See Table 1004.1.2 to determine whether net or gross area is applicable.
[2] Minimum stairway width (Section 1011.2); min. corridor width (Section 1020.2); min. door width (Section 1010.1.1)
[3] Minimum width of exit passageway (Section 1024.2)
[4] See Section 1025.6 for converging exits.
[5] The loss of one means of egress shall not reduce the available capacity to less than 50 percent of the total required (Section 1005.5)
[6] Assembly occupancies (Section 1029)

PINNACLE ARCHITECTURE
PROFESSIONAL ASSOCIATION
P.O. BOX 187, 630 TEAM ROAD, SUITE 300, MATTHEWS, NORTH CAROLINA 28106, PH: (704) 847-9853 FAX: (704) 847-9851
701 EAST BAY STREET, SUITE 302, CHARLESTON, SOUTH CAROLINA 29403, PH: (843) 872-5345 FAX: (843) 872-5374



CONTRACTOR TO VERIFY ALL DIMENSIONS

FRANK MCCRADY WILLIAMS REGISTERED ARCHITECT NORTH CAROLINA 16947

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ISSUE DATE: 04.30.2019
DRAWN BY: JR
CHECKED BY: PMW/RMW
PROJECT: 1821

STUMP SOUND ELEMENTARY SCHOOL
ONSLOW COUNTY SCHOOLS
STUMP SOUND, NORTH CAROLINA

APPENDIX "B" & CODE DATA
AREA "D"

REVISION SCHEDULE

⚠	DATE	REFERENCE

A102

APPENDIX B
2018 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: STUMP SOUND ELEMENTARY SCHOOL - AREA "E"
Address: FOLKSTONE ROAD, STUMP SOUND, NORTH CAROLINA Zip Code: 28445
Owner/Authorized Agent: RANDY BAKER Phone: (704) 517-0172 E-Mail: randy@pinnaclearchitecture.net
Owned By: ■ City/County ☐ Private ☐ State
Code Enforcement Jurisdiction: ☐ City ■ County ONSLOW ☐ State

CONTACT: REFER TO SHEET A101

DESIGNER	FIRM	NAME	LICENSE #	TELEPHONE #	E-MAIL
Architectural					
Civil					
Electrical					
Fire Alarm					
Plumbing					
Mechanical					
Sprinkler-Standpipe					
Structural					
Retaining Walls>5'High					
Other					

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

2018 NC BUILDING CODE: ■ New Construction ☐ Addition ☐ Shell/Core ☐ Phased Construction - Shell Core ☐ 1st Time Interior Completions
2018 NC EXISTING BUILDING CODE: ☐ Prescriptive ☐ Repair ☐ Chapter 14 ☐ Alteration Level I ☐ Alteration Level II ☐ Alteration Level III ☐ Historic Property ☐ Change of Use

CONSTRUCTED: (date) _____
RENOVATED: (date) _____
OCCUPANCY CATEGORY (Table 1640.5): Current: _____ Proposed: _____

CURRENT USE(S) (Ch. 3): _____
PROPOSED USE(S) (Ch. 3): _____

BASIC BUILDING DATA

Construction Type: (check all that apply) ☐ I-A ☐ I-B ☐ II-A ■ II-B ☐ III-A ☐ III-B ☐ IV ☐ V-A ☐ V-B
Sprinklers: ☐ No ☐ Partial ■ NFPA 13 ☐ NFPA 13R ☐ NFPA 13D
Standpipes: ■ No Class ☐ I ☐ II ☐ III Wet ☐ Dry
Primary Fire District: ■ No ☐ Yes Flood Hazard Area: ■ No ☐ Yes
Special Inspections Required: ☐ No ■ Yes

Gross Building Area Table:

FLOOR	EXISTING (SQ FT)	NEW (SQ FT)	SUB-TOTAL
3rd Floor			
2nd Floor			
Mezzanine			
1st Floor		21,766 S.F.	21,766 S.F.
Basement			
TOTAL		21,766 S.F.	21,766 S.F.

ALLOWABLE AREA

Primary Occupancy Classification(s):
Assembly ☐ A-1 ☐ A-2 ☐ A-3 ☐ A-4 ☐ A-5
Business ☐
Educational ■
Factory ☐ F-1 Moderate ☐ F-2 Low
Hazardous ☐ H-1 Detonate ☐ H-2 Deflagrate ☐ H-3 Combust ☐ H-4 Health ☐ H-5 HPM
Institutional ☐ I-1 ☐ I-2 ☐ I-3 ☐ I-4
I-1 Condition ☐ 1 ☐ 2
I-2 Condition ☐ 1 ☐ 2
I-3 Condition ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5
Mercantile ☐
Residential ☐ R-1 ☐ R-2 ☐ R-3 ☐ R-4
Storage ☐ S-1 Moderate ☐ S-2 Low ☐ High-Piled ☐ Parking Garage ☐ Open ☐ Enclosed ☐ Repair Garage
Utility and Miscellaneous ☐

Accessory Occupancy Classification(s): N/A
Incidental Uses (Table 509): N/A
This separation is not exempt as a Nonseparated Use (see exceptions).
Special Uses (Chapter 4 - List Code Sections): 420
Special Provisions (Chapter 5 - List Code Sections): N/A
Mixed Occupancy: ■ No ☐ Yes Separation N/A Hr. Exception: N/A
■ Non-separated Use (508.3)
☐ Separated Use (508.4) - See below for area calculations for each story, the area of the occupancy shall be such that the sum of the rations of the actual floor area of wach use divided by the allowable floor area for each use shall not exceed 1.

Select one

Actual Area of Occupancy A / Allowable Area of Occupancy A + Actual Area of Occupancy B / Allowable Area of Occupancy B ≤ 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, 5]	(D) ALLOWABLE AREA PER STORY OR UNLIMITED[2, 3]
FIRST FLOOR	EDUCATION	21,766 S.F.	58,000 S.F.	7,975 S.F.	65,975 S.F.

[1] Frontage area increases from Section 506.2 are computed thus:
a. Perimeter which fronts a public way or open space having 20 feet minimum width = 570 (F)
b. Total Building Perimeter = 724 (P)
c. Ratio (F/P) = 0.80 (F/P)
d. W = Minimum width of public way = 30 (W)
[2] Unlimited area applicable under conditions of Sections 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. The maximum area of air traffic control towers must comply with Table 412.3.1.
[5] Frontage increase is based on the unsprinklered area value in Table 506.2.

ALLOWABLE HEIGHT

	ALLOWABLE	SHOWN ON PLANS	CODE REFERENCE
Building Height in Feet (Table 504.3)	75	23	N/A
Building Height in Stories (Table 504.4)	3	1	N/A

[1] Provide code reference if the "Shown on Plans" quantity is not based on Table 504.3 or 504.4.

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		N/A					
Bearing Walls							
Exterior							
North	X > 30'	0					
East	X > 30'	0					
West	X > 30'	0					
South	X > 30'	0					
Interior		N/A					
Nonbearing walls and partitions Exterior walls							
North	X > 30'	0					
East	X > 30'	0					
West	X > 30'	0					
South	X > 30'	0					
Interior Walls and partitions		N/A					
Floor Construction including supporting beams and joists		N/A					
Floor Ceiling Assembly		N/A					
Columns Supporting Floors		N/A					
Roof Ceiling Assembly		N/A					
Columns Supporting Roof		N/A					
Shaft Enclosures - Exit		N/A					
Shaft Enclosures - Other		N/A					
Corridor Separation		N/A					
Occupancy/Fire Barrier Separation		N/A					
Party/Fire Wall Separation		2 HR.		10/A107	UL #U905		
Smoke Barrier Separation		N/A					
Smoke Partition		N/A					
Tenant/Dwelling Unit/ Sleeping Unit Separation		N/A					
Incidental Use Separation		2 HR.		10/A107	UL #U905		

* Indicate section number permitting reduction

FIRE SEPARATION DISTANCE (FEET) FROM PROPERTY LINES	DEGREE OF OPENINGS PROTECTION (TABLE 705.8)	ALLOWABLE AREA (%)	ACTUAL SHOWN ON PLANS (%)
15 (ASSUMED)	UP, S	UNLIMITED (705.8.1 EX. #2)	N/A

LIFE SAFETY SYSTEM REQUIREMENTS

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

LIFE SAFETY PLAN REQUIREMENTS

Life Safety Plan Sheet #: A105

■ 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 load for each area
■ Exit access travel distances (1017)
☐ Common path of travel distances (Table 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 (1010.1.9.4)
■ 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)

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	N/A	N/A	N/A	N/A	N/A	N/A	N/A

ACCESSIBLE PARKING (SECTION 1106) REFER TO SHEET A101

LOT OR PARKING AREA	TOTAL # OF PARKING SPACES		# OF ACCESSIBLE SPACES PROVIDED			TOTAL # ACCESSIBLE PROVIDED
	REQUIRED	PROVIDED	REGULAR WITH 5' ACCESS AISLE	VAN SPACES WITH 132" ACCESS AISLE	VAN SPACES WITH 8' ACCESS AISLE	
TOTAL						

PLUMBING FIXTURE REQUIREMENTS (TABLE 2902.1) - REFER TO SHEET A101

USE		WATERCLOSETS MALE	WATERCLOSETS FEMALE	WATERCLOSETS UNISEX	URINALS	LAVATORIES MALE	LAVATORIES FEMALE	LAVATORIES UNISEX	SHOWERS/ TUBS	DRINKING FOUNTAINS REGULAR	DRINKING FOUNTAINS ACCESSIBLE
	EXISTING										
	NEW										
	REQUIRED										
	EXISTING										
	NEW										
	REQUIRED										
	EXISTING										
	NEW										
	REQUIRED										

* URINALS SUBSTITUTED FOR WATER CLOSETS PER SECTION 403.5.3 OF NCSPC
** URINALS SUBSTITUTED FOR WATER CLOSETS PER SECTION 419.2 OF NCSPC (EDUCATIONAL / ALL OTHER OCCUPANCIES)

SPECIAL APPROVALS

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

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 versus the annual energy cost for the proposed design.

Existing building envelope complies with code: ☐ (If checked, the remainder of this section is not applicable.)
Exempt Building: ☐ Provide code or statutory reference: _____
Climate Zone: ■ 3A ☐ 4A ☐ 5A
Method of Compliance:
Energy Code: ☐ Performance ■ Prescriptive
ASHRAE 90.1 ☐ Performance ☐ Prescriptive
Other: ☐ Performance (specify source) _____

THERMAL ENVELOPE (Prescriptive method only)

Roof/ceiling Assembly (each assembly)
Description of assembly: STANDING SEAM ROOF, STEEL, ATTIC FRAMING & RIGID INSUL.
U-Value of total assembly: 0.04
R-Value of insulation: 38
Skylights in each assembly: N/A
U-Value of skylight: N/A
total square footage of skylights in each assembly: N/A

Exterior Walls (each assembly)
Description of assembly: BRICK AIR SPACE RIGID INSUL. EXT. SHEATHING, BATT INSUL. STUD, GYP. BD.
U-Value of total assembly: 0.058
R-Value of insulation: 18 + 75ci
Opening (windows or doors with glazing)
U-Value of assembly: 0.45
Solar heat gain coefficient: N/A
projection factor: N/A
Door R-values: 9.25

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

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

Floors slab on grade
Description of assembly: SLAB ON GRADE, W/F REINF. W/ WASHED STONE
U-Value of total assembly: 1.25
R-Value of insulation: NOT REQUIRED
Horizontal/vertical requirement: N/A
slab heated: NO

EXIT REQUIREMENTS
NUMBER AND ARRANGEMENT OF EXITS

FLOOR, ROOM OR SPACE DESIGNATION	MINIMUM[2] NUMBER OF EXITS: REQUIRED	MINIMUM[2] NUMBER OF EXITS: SHOWN ON PLANS	TRAVEL DISTANCE: ALLOWABLE TRAVEL DISTANCE (TABLE 1017.2)	TRAVEL DISTANCE: ACTUAL TRAVEL DISTANCE SHOWN ON PLANS	EXIT ACCESS DOORWAY CONFIGURATION[3] (SECTION 1007.1): REQUIRED DISTANCE BETWEEN EXIT DOORS	EXIT ACCESS DOORWAY CONFIGURATION[3] (SECTION 1007.1): ACTUAL DISTANCE SHOWN ON PLANS
AREA "E"	2	2	250'	186'	91'	249'

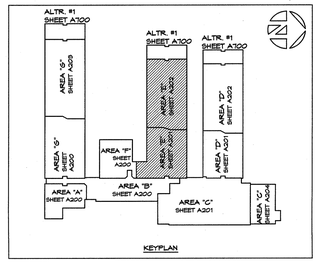
[1] Corridor dead ends (Section 1020.4)
[2] Stories with single exits (Table 1006.3.2(2); Spaces with one means of egress (Table 1006.2.1)
[3] Common Path of Travel (Section 1006.2.1)

EXIT WIDTH

USE GROUP OR SPACE DESCRIPTION	(a) AREA[1] sq. ft.	(b) AREA[1] PER OCCUPANT (TABLE 1004.1.2)	(b) CALCULATED OCCUPANT LOAD (a÷b)	(c) EGRESS WIDTH PER OCCUPANT (1005.3): STAIR	(c) EGRESS WIDTH PER OCCUPANT (1005.3): LEVEL	EXIT WIDTH (in)[2,3,4,5,6]: REQUIRED WIDTH (SECTION 1005.3) (a ÷ b) x c: STAIR	REQUIRED WIDTH (SECTION 1005.3) (a ÷ b) x c: LEVEL	EXIT WIDTH (in)[2,3,4,5,6]: ACTUAL WIDTH SHOWN ON PLANS: STAIR	ACTUAL WIDTH SHOWN ON PLANS: LEVEL
CLASSROOM	14,546 SF NET	20 SF NET	728	0.3	0.2	N/A	146"	N/A	276"

[1] See Table 1004.1.2 to determine whether net or gross area is applicable.
[2] Minimum stairway width (Section 1011.2); min. corridor width (Section 1020.2); min. door width (Section 1010.1.1)
[3] Minimum width of exit passageway (Section 1024.2)
[4] See Section 1005.6 for converging exits.
[5] The loss of one means of egress shall not reduce the available capacity to less than 50 percent of the total required (Section 1005.5)
[6] Assembly occupancies (Section 1024)

KEYPLAN



CONTRACTOR TO VERIFY ALL DIMENSIONS.

PINNACLE ARCHITECTURE PROFESSIONAL ASSOCIATION
P.O. BOX 187, 630 TEAM ROAD, SUITE 200, MATTHEWS, NORTH CAROLINA 28106, PH: (704) 847-9851 FAX: (704) 847-9853
701 EAST BAY STREEET, SUITE 302, CHARLESTON, SOUTH CAROLINA 29403, PH: (843) 872- 5345 FAX: (843) 872- 5374

ISSUE DATE: 04.30.2019
DRAWN BY: JR
CHECKED BY: FMW/RWB
PROJECT: 19221

STUMP SOUND ELEMENTARY SCHOOL
ONSLOW COUNTY SCHOOLS
STUMP SOUND, NORTH CAROLINA

APPENDIX "B" & CODE DATA
AREA "E"

REVISION SCHEDULE

	DATE	REFERENCE

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A103

2/28/2019 6:04:49 PM C:\Users\Randy Baker\Documents\Revit Local Files\Stump Sound Elementary School - Area E_RWB_jrogers.rvt

APPENDIX B
2018 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: STUMP SOUND ELEMENTARY SCHOOL - AREA "G"
Address: FOLKSTON ROAD, STUMP SOUND, NORTH CAROLINA Zip Code: 28445
Owner/Authorized Agent: RANDY BAKER Phone: (704) 513-0172 E-Mail: randy@pinnaclearchitecture.net
Owned By: ■ City/County ☐ Private ☐ State
Code Enforcement Jurisdiction: ☐ City ■ County ONSLOW ☐ State

CONTACT: REFER TO SHEET A101

DESIGNER	FIRM	NAME	LICENSE #	TELEPHONE #	E-MAIL
Architectural					
Civil					
Electrical					
Fire Alarm					
Plumbing					
Mechanical					
Sprinkler-Standpipe					
Structural					
Retaining Walls>5'High					
Other					

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

2018 NC BUILDING CODE: ■ New Construction ☐ Addition ☐ Shell/Core ☐ Phased Construction - Shell Core ☐ 1st Time Interior Completions
2018 NC EXISTING BUILDING CODE: ☐ Prescriptive ☐ Repair ☐ Chapter 14 ☐ Alteration Level I ☐ Alteration Level II ☐ Alteration Level III ☐ Historic Property ☐ Change of Use
CONSTRUCTED: (date) _____
RENOVATED: (date) _____
OCCUPANCY CATEGORY (Table 1640.5): CURRENT USE(S) (Ch. 3): _____ Current: _____ PROPOSED USE(S) (Ch. 3): _____ Proposed: _____

BASIC BUILDING DATA

Construction Type: (check all that apply) ☐ I-A ☐ I-B ☐ II-A ■ II-B ☐ III-A ☐ III-B ☐ IV ☐ V-A ☐ V-B
Sprinklers: ☐ No ☐ Partial ■ NFPA 13 ☐ NFPA 13R ☐ NFPA 13D
Standpipes: ■ No ☐ Class ☐ I ☐ II ☐ III ☐ Wet ☐ Dry
Primary Fire District: ■ No ☐ Yes Flood Hazard Area: ■ No ☐ Yes
Special Inspections Required: ☐ No ■ Yes

Gross Building Area Table:

FLOOR	EXISTING (SQ FT)	NEW (SQ FT)	SUB-TOTAL
3rd Floor			
2nd Floor			
Mezzanine			
1st Floor		24,492 S.F.	24,492 S.F.
Basement			
TOTAL		24,492 S.F.	24,492 S.F.

ALLOWABLE AREA

Primary Occupancy Classification(s):
Assembly ☐ A-1 ☐ A-2 ☐ A-3 ☐ A-4 ☐ A-5
Business ☐
Educational ■
Factory ☐ F-1 Moderate ☐ F-2 Low
Hazardous ☐ H-1 Detonate ☐ H-2 Deflagrate ☐ H-3 Combust ☐ H-4 Health ☐ H-5 HPM
Institutional ☐ I-1 ☐ I-2 ☐ I-3 ☐ I-4
I-1 Condition ☐ 1 ☐ 2
I-2 Condition ☐ 1 ☐ 2
I-3 Condition ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5
Mercantile ☐
Residential ☐ R-1 ☐ R-2 ☐ R-3 ☐ R-4
Storage ☐ S-1 Moderate ☐ S-2 Low ☐ High-Piled ☐ Parking Garage ☐ Open ☐ Enclosed ☐ Repair Garage
Utility and Miscellaneous ☐

Accessory Occupancy Classification(s): N/A
Incidental Uses (Table 509): N/A
This separation is not exempt as a Nonseparated Use (see exceptions).
Special Uses (Chapter 4 - List Code Sections): 420
Special Provisions (Chapter 5 - List Code Sections): N/A
Mixed Occupancy: ■ No ☐ Yes Separation N/A Hr. Exception: N/A
■ Non-separated Use (508.3)
☐ Separated Use (508.4) - See below for area calculations for each story, the area of the occupancy shall be such that the sum of the rations of the actual floor area of wach use divided by the allowable floor area for each use shall not exceed 1.

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, 5]	(D) ALLOWABLE AREA PER STORY OR UNLIMITED[2, 3]
FIRST FLOOR	EDUCATION	24,492 S.F.	58,000 S.F.	9,139 S.F.	67,139 S.F.

[1] Frontage area increases from Section 506.2 are computed thus:
a. Perimeter which fronts a public way or open space having 20 feet minimum width = 673 (F)
b. Total Building Perimeter = 788 (P)
c. Ratio (F/P) = 0.86 (F/P)
d. W = Minimum width of public way = 30 (W)
[2] Unlimited area applicable under conditions of Sections 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. The maximum area of air traffic control towers must comply with Table 412.3.1.
[5] Frontage increase is based on the unsprinklered area value in Table 506.2.

ALLOWABLE HEIGHT

	ALLOWABLE	SHOWN ON PLANS	CODE REFERENCE
Building Height in Feet (Table 504.3)	75	23	N/A
Building Height in Stories (Table 504.4)	3	1	N/A

[1] Provide code reference if the "Shown on Plans" quantity is not based on Table 504.3 or 504.4.

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		N/A					
Bearing Walls							
Exterior							
North	X ≥ 30'	0					
East	X ≥ 30'	0					
West	X ≥ 30'	0					
South	X ≥ 30'	0					
Interior		N/A					
Nonbearing walls and partitions Exterior walls							
North	X ≥ 30'	0					
East	X ≥ 30'	0					
West	X ≥ 30'	0					
South	X ≥ 30'	0					
Interior Walls and partitions		N/A					
Floor Construction including supporting beams and joists		N/A					
Floor Ceiling Assembly		N/A					
Columns Supporting Floors		N/A					
Roof Construction, including supporting beams and joists		N/A					
Roof Ceiling Assembly		N/A					
Columns Supporting Roof		N/A					
Shaft Enclosures - Exit		N/A					
Shaft Enclosures - Other		N/A					
Corridor Separation		N/A					
Occupancy/Fire Barrier Separation		N/A					
Party/Fire Wall Separation		2 HR.		10/A107	UL #U905		
Smoke Barrier Separation		N/A					
Smoke Partition		N/A					
Tenant/Dueling Unit/ Sleeping Unit Separation		N/A					
Incidental Use Separation		2 HR.		10/A107	UL #U905		

* Indicate section number permitting reduction

FIRE SEPARATION DISTANCE (FEET) FROM PROPERTY LINES	DEGREE OF OPENINGS PROTECTION (TABLE 705.8)	ALLOWABLE AREA (%)	ACTUAL SHOWN ON PLANS (%)
15 (ASSUMED)	UP, S	UNLIMITED (705.8.1 EX. #2)	N/A

LIFE SAFETY SYSTEM REQUIREMENTS

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

LIFE SAFETY PLAN REQUIREMENTS

Life Safety Plan Sheet #: A105

■ 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 load for each area
■ Exit access travel distances (1017)
☐ Common path of travel distances (Table 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 (1010.1.9.6)
■ 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)

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	N/A	N/A	N/A	N/A	N/A	N/A	N/A

ACCESSIBLE PARKING (SECTION 1106) REFER TO SHEET A101

LOT OR PARKING AREA	TOTAL # OF PARKING SPACES		# OF ACCESSIBLE SPACES PROVIDED			TOTAL # ACCESSIBLE PROVIDED
	REQUIRED	PROVIDED	REGULAR (WITH 5' ACCESS AISLE	VAN SPACES WITH 132" ACCESS AISLE	VAN SPACES WITH 8' ACCESS AISLE	
TOTAL						

PLUMBING FIXTURE REQUIREMENTS (TABLE 2902.1) - REFER TO SHEET A101

USE		WATERCLOSETS MALE	WATERCLOSETS FEMALE	WATERCLOSETS UNISEX	URINALS	LAVATORIES MALE	LAVATORIES FEMALE	LAVATORIES UNISEX	SHOWERS/ TUBS	DRINKING FOUNTAINS REGULAR	DRINKING FOUNTAINS ACCESSIBLE
	EXISTING										
	NEW										
	REQUIRED										
	EXISTING										
	NEW										
	REQUIRED										
	EXISTING										
	NEW										
	REQUIRED										

* URINALS SUBSTITUTED FOR WATER CLOSETS PER SECTION 403.3.3.3 OF NCSPC
** URINALS SUBSTITUTED FOR WATER CLOSETS PER SECTION 419.2 OF NCSPC (EDUCATIONAL / ALL OTHER OCCUPANCIES)

SPECIAL APPROVALS

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

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 versus the annual energy cost for the proposed design.

Existing building envelope complies with code: ☐ (If checked, the remainder of this section is not applicable.)
Exempt Building: ☐ Provide code or statutory reference: _____
Climate Zone: ■ 3A ☐ 4A ☐ 5A

Method of Compliance:
Energy Code: ☐ Performance ■ Prescriptive
ASHRAE 90.1: ☐ Performance ☐ Prescriptive
Other: ☐ Performance (specify source) _____

THERMAL ENVELOPE (Prescriptive method only)

Roof/ceiling Assembly (each assembly)
Description of assembly: STANDING SEAM ROOF, STEEL ATTIC FRAMING, R RIGID INSUL
U-value of total assembly: 0.04
R-value of insulation: 28
Skylights in each assembly: N/A
U-value of skylight: N/A
Total square footage of skylights in each assembly: N/A

Exterior Walls (each assembly)
Description of assembly: BRICK, AIR SPACE, RIGID INSUL, EXT. SHEATHING, BATT INSUL, STUD, GYP. BD.
U-value of total assembly: 0.059
R-value of insulation: 16 + 7.5ci
Opening (windows or doors with glazing)
U-value of assembly: 0.45
Solar heat gain coefficient: N/A
projection factor: N/A
Door R-values: 3.23

Walls below grade (each assembly)
Description of assembly: N/A
U-value of total assembly: N/A
R-value of insulation: N/A

Floors over unconditioned space (each assembly)
Description of assembly: N/A
U-value of total assembly: N/A
R-value of insulation: N/A

Floors slab on grade
Description of assembly: SLAB ON GRADE, WWF REINF. W/ WASHED STONE
U-value of total assembly: 1.29
R-value of insulation: NOT REQUIRED
Horizontal/vertical requirement: N/A
Slab heated: NO

EXIT REQUIREMENTS
NUMBER AND ARRANGEMENT OF EXITS

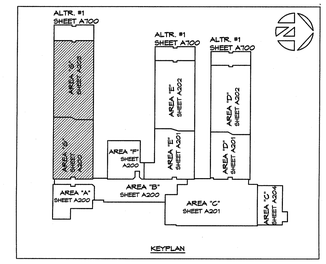
FLOOR, ROOM OR SPACE DESIGNATION	MINIMUM[2] NUMBER OF EXITS: REQUIRED	MINIMUM[2] NUMBER OF EXITS: SHOWN ON PLANS	TRAVEL DISTANCE: ALLOWABLE TRAVEL DISTANCE (TABLE 1017.2)	TRAVEL DISTANCE: ACTUAL TRAVEL DISTANCE SHOWN ON PLANS	EXIT ACCESS DOORWAY CONFIGURATION[3] (SECTION 1007.1): REQUIRED DISTANCE BETWEEN EXIT DOORS	EXIT ACCESS DOORWAY CONFIGURATION[3] (SECTION 1007.1): ACTUAL DISTANCE SHOWN ON PLANS
AREA "G"	2	2	250'	216'	102'	205'

[1] Corridor dead ends (Section 1020.4)
[2] Stories with single exits (Table 1006.3.2(2); Spaces with one means of egress (Table 1006.2.1)
[3] Common Path of Travel (Section 1006.2.1)

EXIT WIDTH

USE GROUP OR SPACE DESCRIPTION	(a) AREA[1] sq. ft.	(b) AREA[1] PER OCCUPANT (TABLE 1004.1.2)	CALCULATED OCCUPANT LOAD (a÷b)	(c) EGRESS WIDTH PER OCCUPANT (1005.3) STAIR	(c) EGRESS WIDTH PER OCCUPANT (1005.3) LEVEL	EXIT WIDTH (in)[2,3,4,5,6] REQUIRED WIDTH (SECTION 1005.3) (a ÷ b) x c STAIR	EXIT WIDTH (in)[2,3,4,5,6] REQUIRED WIDTH (SECTION 1005.3) (a ÷ b) x c LEVEL	EXIT WIDTH (in)[2,3,4,5,6] ACTUAL WIDTH SHOWN ON PLANS STAIR	EXIT WIDTH (in)[2,3,4,5,6] ACTUAL WIDTH SHOWN ON PLANS LEVEL
CLASSROOM	16,554 SF NET	20 SF NET	828						
BUSINESS	114 SF GROSS	100 SF GROSS	2						
TOTAL			830	0.3	0.2	N/A	166"	N/A	600"

[1] See Table 1004.1.2 to determine whether net or gross area is applicable.
[2] Minimum stairway width (Section 1011.2); min. corridor width (Section 1020.2); min. door width (Section 1010.1.1)
[3] Minimum width of exit passageway (Section 1024.2)
[4] See Section 1005.6 for converging exits.
[5] The loss of one means of egress shall not reduce the available capacity to less than 50 percent of the total required (Section 1005.5)
[6] Assembly occupancies (Section 1029)



KEYPLAN

CONTRACTOR TO VERIFY ALL DIMENSIONS

PINNACLE ARCHITECTURE
PROFESSIONAL ASSOCIATION
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NORTH CAROLINA REGISTERED ARCHITECTURAL CORPORATION — PINNACLE ARCHITECTURE, P.A. — 51284 — 4-30-19 — MATTHEWS, NC
FRANK MCGRADY WILLIAMS — REGISTERED LANDSCAPE ARCHITECT — 4611 — NORTH CAROLINA — MATTHEWS, NC

ISSUE DATE: 04.30.2019
DRAWN BY: JR
CHECKED BY: FMW/RKB
PROJECT: 1621

STUMP SOUND ELEMENTARY SCHOOL
ONSLOW COUNTY SCHOOLS
STUMP SOUND, NORTH CAROLINA
APPENDIX "B" & CODE DATA
AREA "G"

REVISION SCHEDULE

△	DATE	REFERENCE

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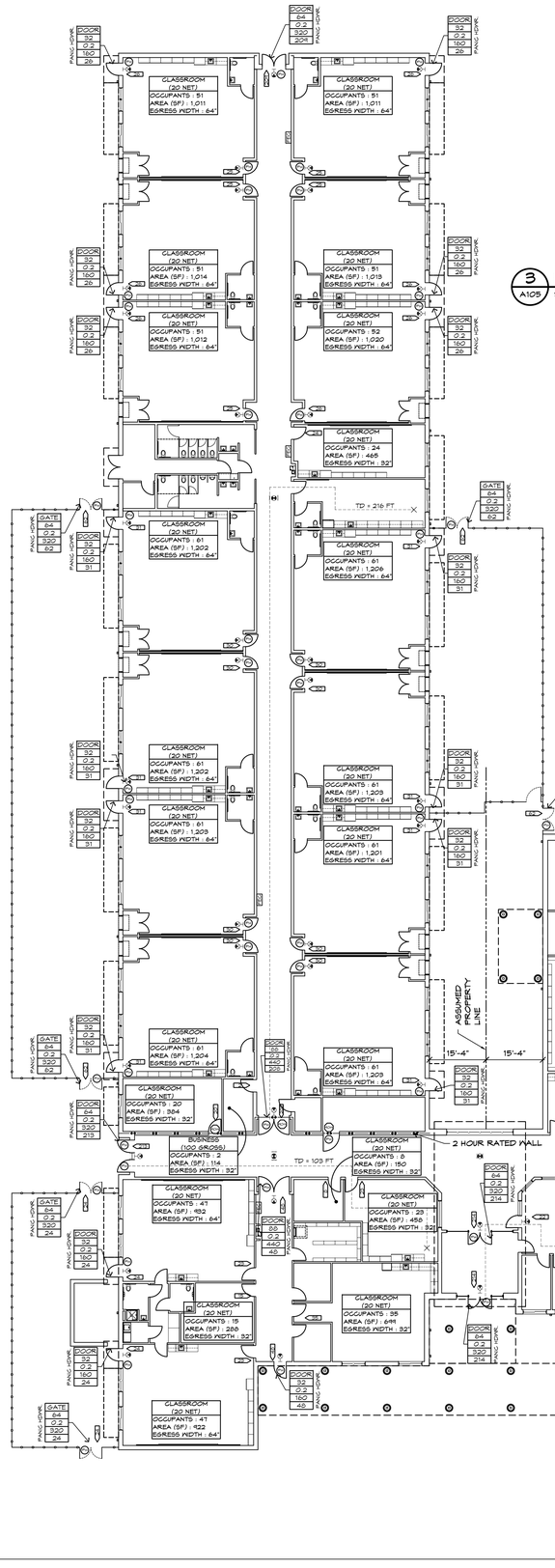
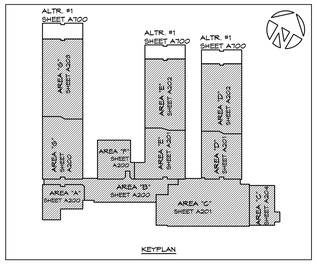
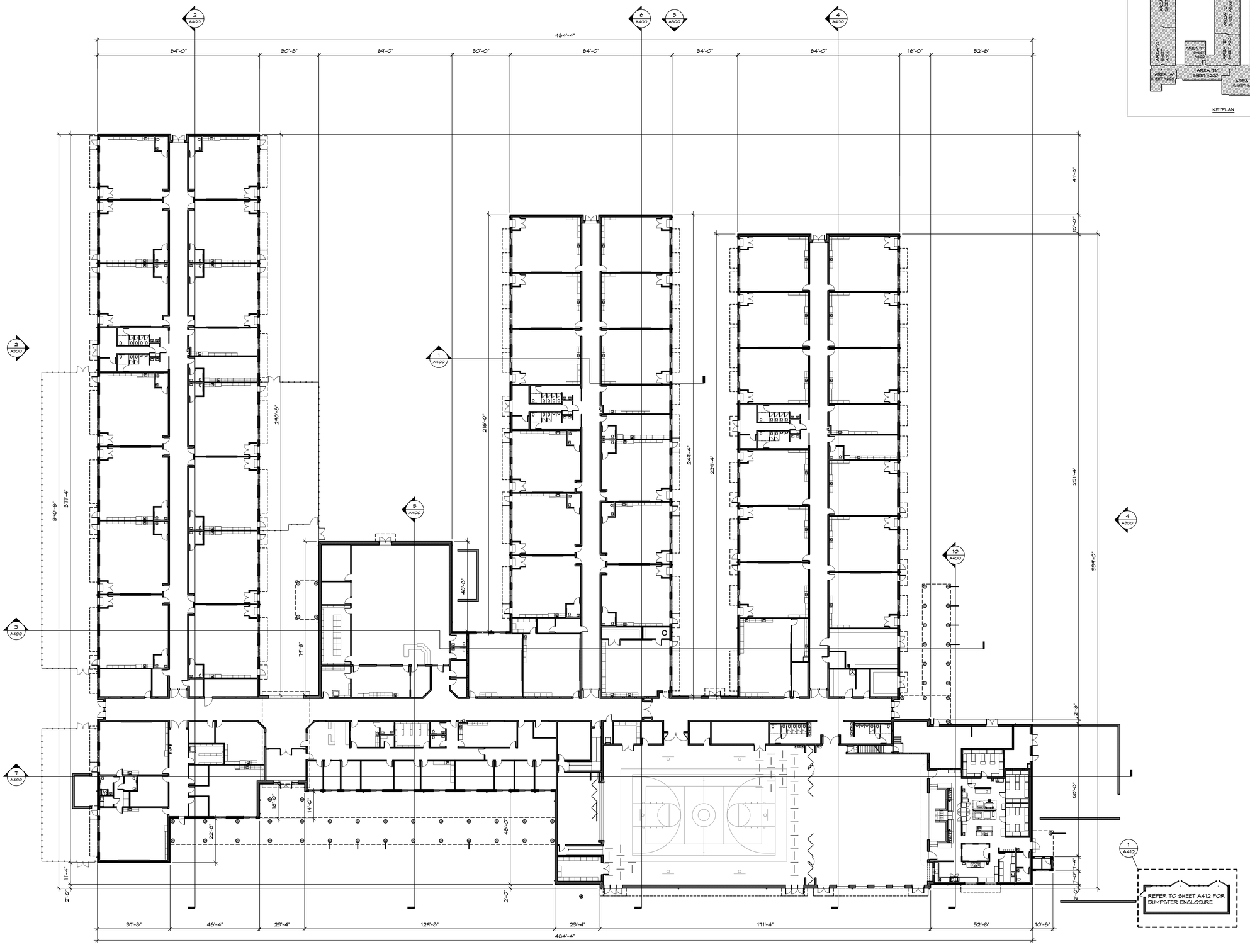
A104


DOOR 64 0.2 320 224
PANIC HDWR
CLASSROOM (20 NET)
OCCUPANTS : 51
AREA (SF) : 1,011
EGRESS WIDTH : 64"
DOOR 32 0.2 160 26
CLASSROOM (20 NET)
OCCUPANTS : 51
AREA (SF) : 1,014
EGRESS WIDTH : 64"
CLASSROOM (20 NET)
OCCUPANTS : 51
AREA (SF) : 1,012
EGRESS WIDTH : 64"
CLASSROOM (20 NET)
OCCUPANTS : 51
AREA (SF) : 1,013
EGRESS WIDTH : 64"
CLASSROOM (20 NET)
OCCUPANTS : 52
AREA (SF) : 1,020
EGRESS WIDTH : 64"
CLASSROOM (20 NET)
OCCUPANTS : 24
AREA (SF) : 465
EGRESS WIDTH : 32"
TD = 216 FT.
GATE 64 0.2 320 62
DOOR 32 0.2 160 31
CLASSROOM (20 NET)
OCCUPANTS : 61
AREA (SF) : 1,202
EGRESS WIDTH : 64"
CLASSROOM (20 NET)
OCCUPANTS : 61
AREA (SF) : 1,206
EGRESS WIDTH : 64"
CLASSROOM (20 NET)
OCCUPANTS : 61
AREA (SF) : 1,203
EGRESS WIDTH : 64"
CLASSROOM (20 NET)
OCCUPANTS : 61
AREA (SF) : 1,203
EGRESS WIDTH : 64"
CLASSROOM (20 NET)
OCCUPANTS : 61
AREA (SF) : 1,201
EGRESS WIDTH : 64"
CLASSROOM (20 NET)
OCCUPANTS : 61
AREA (SF) : 1,204
EGRESS WIDTH : 64"
CLASSROOM (20 NET)
OCCUPANTS : 30
AREA (SF) : 564
EGRESS WIDTH : 32"
BUSINESS (100 GROSS)
OCCUPANTS : 2
AREA (SF) : 114
EGRESS WIDTH : 32"
TD = 109 FT.
CLASSROOM (20 NET)
OCCUPANTS : 61
AREA (SF) : 1,209
EGRESS WIDTH : 64"
CLASSROOM (20 NET)
OCCUPANTS : 47
AREA (SF) : 852
EGRESS WIDTH : 64"
CLASSROOM (20 NET)
OCCUPANTS : 15
AREA (SF) : 288
EGRESS WIDTH : 32"
CLASSROOM (20 NET)
OCCUPANTS : 47
AREA (SF) : 922
EGRESS WIDTH : 64"
CLASSROOM (20 NET)
OCCUPANTS : 23
AREA (SF) : 456
EGRESS WIDTH : 32"
CLASSROOM (20 NET)
OCCUPANTS : 35
AREA (SF) : 699
EGRESS WIDTH : 32"
DOOR 64 0.2 320 214
DOOR 88 0.2 440 48
DOOR 32 0.2 160 48
ASSUMED PROPERTY LINE
15'-4"
2 HOUR RATED WALL
TD = 123 FT.
GATE 64 0.2 320 24
DOOR 32 0.2 160 24
CLASSROOM (20 NET)
OCCUPANTS : 47
AREA (SF) : 922
EGRESS WIDTH : 64"
CLASSROOM (20 NET)
OCCUPANTS : 15
AREA (SF) : 288
EGRESS WIDTH : 32"
CLASSROOM (20 NET)
OCCUPANTS : 47
AREA (SF) : 922
EGRESS WIDTH : 64"
DOOR 64 0.2 320 214
CLASSROOM (20 NET)
OCCUPANTS : 4
AREA (SF) : 78
EGRESS WIDTH : 32"
CLASSROOM (20 NET)
OCCUPANTS : 5
AREA (SF) : 95
EGRESS WIDTH : 32"
FIXED VERT. WALL LADDER TO MEZZ. HATCH W/ SAFETY POST (BILCO OR EQUAL)
BUSINESS (TOTAL ADMIN. AREA) (100 GROSS)
OCCUPANTS : 45
AREA (SF) : 4,410
EGRESS WIDTH : 64"
CLASSROOM (15 NET)
OCCUPANTS : 49
AREA (SF) : 734
DOOR 96 0.2 480 421
DOOR 64 0.2 320 200
DOOR 64 0.2 320 224
DOOR 64 0.2 320 3
DOOR 64 0.2 320 4
DOOR 44 0.2 220 14
CLASSROOM (20 NET)
OCCUPANTS : 48
AREA (SF) : 960
EGRESS WIDTH : 64"
CLASSROOM (20 NET)
OCCUPANTS : 50
AREA (SF) : 991
EGRESS WIDTH : 64"
CLASSROOM (20 NET)
OCCUPANTS : 50
AREA (SF) : 994
EGRESS WIDTH : 64"
CLASSROOM (20 NET)
OCCUPANTS : 50
AREA (SF) : 990
EGRESS WIDTH : 64"
CLASSROOM (20 NET)
OCCUPANTS : 48
AREA (SF) : 964



KEYPLAN



1 OVERALL FLOOR PLAN
A106 SCALE: 1'-0" = 20'-0"

NOTES:
1. THIS DRAWING IS FOR OVERVIEW ONLY. NOT INTENDED TO BE USED FOR CONSTRUCTION
2. REFER TO CIVIL ENGINEERING DRAWINGS TO COORDINATE DRIVES, CURBS, ETC. VERIFY LAYOUT WITH ARCHITECT BEFORE INSTALLATION OF SAME.

CONTRACTOR TO VERIFY ALL DIMENSIONS

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MATTHEWS, NORTH CAROLINA 28106 — CHARLESTON, SOUTH CAROLINA 29403
PH: (704) 847-9853 FAX: (704) 847-9853 — PH: (843) 872-5345 FAX: (843) 872-5374

ISSUE DATE: 04.30.2019
DRAWN BY: JK
CHECKED BY: PMW/REB
PROJECT: 1821

STUMP SOUND ELEMENTARY SCHOOL
ONSLOW COUNTY SCHOOLS
STUMP SOUND, NORTH CAROLINA
OVERALL FLOOR PLAN

REVISION SCHEDULE

△	DATE	REFERENCE

A106

UL Product iQ™

BXUV.U905 - FIRE-RESISTANCE RATINGS - ANSI/UL 263

Design/System/Construction/Assembly Usage Disclaimer

- **Authorities Having Jurisdiction should be consulted in all cases as to the particular requirements covering the installation and use** of UL Certified products, equipment, system, devices, and materials.
- Authorities Having Jurisdiction should be consulted before construction.
- Fire resistance assemblies and products are developed by the design submitter and have been investigated by UL for compliance with applicable requirements. The published information cannot always address every construction nuance encountered in the field.
- When field issues arise, it is recommended the first contact for assistance be the technical service staff provided by the product manufacturer noted for the design. Users of fire resistance assemblies are advised to consult the general Guide Information for each product category and each group of assemblies. The Guide Information includes specifics concerning alternate materials and alternate methods of construction.
- Only products which bear UL's Mark are considered Certified.

BXUV - Fire Resistance Ratings - ANSI/UL 263 Certified for United States
BXUV7 - Fire Resistance Ratings - CAN/ULC-S101 Certified for Canada

See General Information for Fire-resistance Ratings - ANSI/UL 263 Certified for United States
Design Criteria and Allowable Variances

See General Information for Fire Resistance Ratings - CAN/ULC-S101 Certified for Canada
Design Criteria and Allowable Variances

Design No. U905

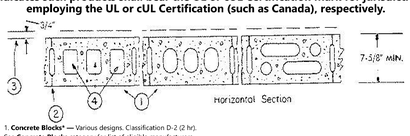
February 18, 2019

Bearing Wall Rating — 2 HR.

Nonbearing Wall Rating — 2 HR

This design was evaluated using a load design method other than the Limit States Design Method (e.g., Working Stress Design Method). For jurisdictions employing the Limit States Design Method, such as Canada, a load restriction factor shall be used — See Guide BXUV or BXUV7

*** Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.**



1. **Concrete Blocks* —** Various designs. Classification D-2 (2 hr).
See **Concrete Blocks** category for list of eligible manufacturers.

2. **Mortar —** Blocks laid in full bed of mortar, nom. 3/8 in. thick, of not less than 2-1/4 and not more than 3-1/2 parts of clean sharp sand to 1 part Portland cement (proportioned by volume) and not more than 50 percent hydrated lime (by cement volume). Vertical joints staggered.

3. **Portland Cement Stucco or Gypsum Plaster —** Add 1/2 hr to classification if used. Where combustible members are framed in wall, plaster or stucco must be applied on the face opposite framing to achieve a max. Classification of 1-1/2 hr. Attached to concrete blocks (Item 1).

4. **Loose Masonry Fill —** If all core spaces are filled with loose dry expanded slag, expanded clay or shale (Rotary Kiln Process), water repellant vermiculite masonry fill insulation, or silicone treated perlite loose fill insulation add 2 hr to classification.

5. **Foamed Plastic* —** (Optional-Not Shown) — 1-1/2 in. thick max, 4 ft wide sheathing attached to concrete blocks (Item 1).
ATLAS ROOFING CORP — "EnergyShield Pro Wall insulation", "EnergyShield Pro 2 Wall Insulation", EnergyShield CGF Pro and EnergyShield Ply Pro

CARLISLE COATINGS & WATERPROOFING INC — Type R2+ SHEATHE

FIRESTONE BUILDING PRODUCTS CO L L C — "Enverge™ C1 Foil Exterior Wall Insulation" and "Enverge™ C1 Glass Exterior Wall Insulation"

HUNTER PANELS — Types Xci-Class A, Xci 286

RMAX OPERATING L L C — Types "TSX-8500", "ECOMAXci FR", "TSX-8510", "ECOMAX xi FR White", "ECOMAXci", "ECOMAXci FR Air Barrier", "Thermasheath-XP", "Thermasheath", "Durasheath", "Thermasheath-3", "Durasheath-3".

THE DOW CHEMICAL CO — Types Thermax Sheathing, Thermax Light Duty Insulation, Thermax Heavy Duty Insulation, Thermax Metal Building Board, Thermax White Finish Insulation, Thermax ci Exterior Insulation, Thermax XARMOR ci Exterior Insulation, Thermax IH Insulation, Thermax Plus Liner Panel, Thermax Heavy Duty Plus (HDP) and TUFF-R™ ci Insulation

5A. **Building Units —** As an alternate to Items 5, min. 1-in thick polyisocyanurate composite foamed plastic insulation boards, nom. 48 by 48 or 96 in.
RMAX OPERATING L L C — "Thermasheath-SI", "ECOBASEci", "ThermaBase-CI", "ECOMAXci FR Ply", "ECOMAXci Ply".

*** Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.**

Last Updated on 2019-02-18

The appearance of a company's name or product in this database does not in itself assure that products so identified have been manufactured under UL's Follow-Up Service. Only those products bearing the UL Mark should be considered to be Certified and covered under UL's Follow-Up Service. Always look for the Mark on the product.

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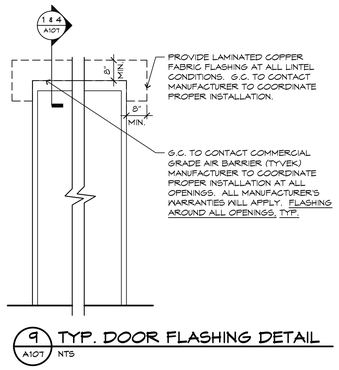
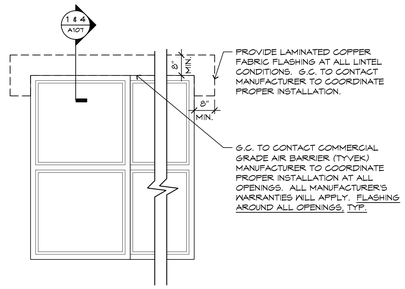
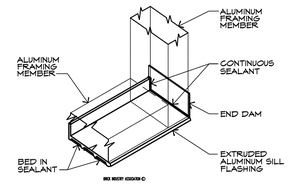
10 / A107 DETAIL BXUV.U905-ANSI/UL 263
NTS



9 / A107 TYP. DOOR FLASHING DETAIL
NTS

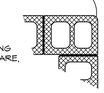


8 / A107 TYP. WINDOW FLASHING DETAIL
NTS



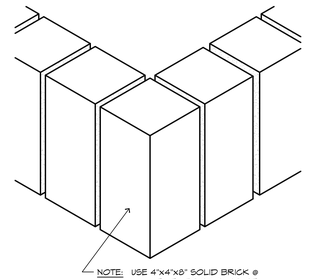
11 / A107 TYP. SILL FLASHING & END DAM DETAIL
SCALE: NTS @ ALUM. WINDOW/CURTAINWALL/STOREFRONT SYSTEM

ALL CORNERS TO BE FACTORY RADIUS TO INCLUDE BUT NOT LIMITED TO WINDOW OPENING(S), DOOR OPENING(S), WALL OPENING(S), WALL(S), ETC...

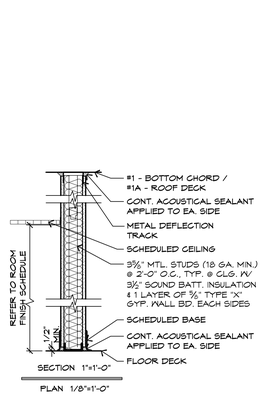


NOTE:
MASONRY COURSE AT CEILING GRID AND BASE TO BE SQUARE, NOT FACTORY RADIUS.

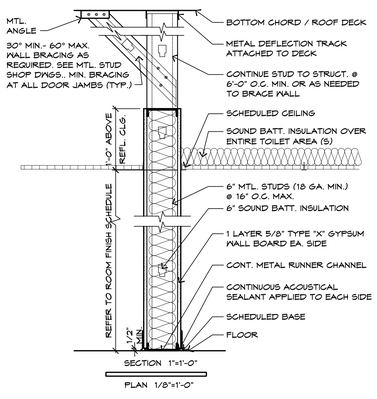
7 / A107 TYP. INTERIOR (270°) CMU CORNERS
SCALE: 1"=1'-0"



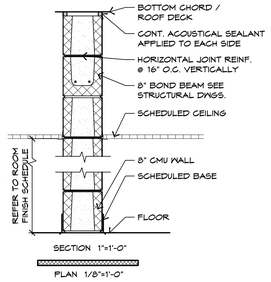
6 / A107 TYP. EXTERIOR SOLDIER COURSE @ CORNERS
SCALE: 1"=1'-0"



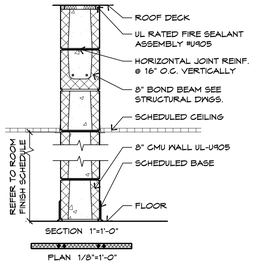
WALL TYPE #1 - WALL TO BOTTOM CHORD
WALL TYPE #1A - WALL TO ROOF DECK



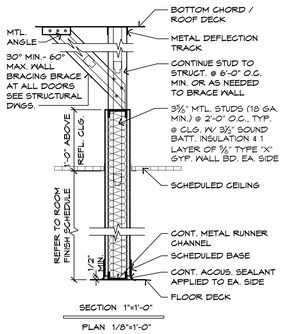
WALL TYPE #2



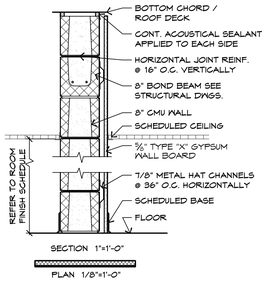
WALL TYPE #3



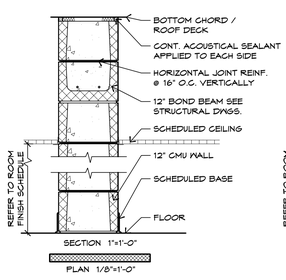
WALL TYPE #4 - 2HR



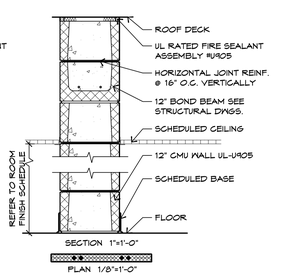
WALL TYPE #5



WALL TYPE #6

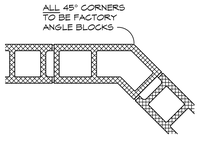


WALL TYPE #7

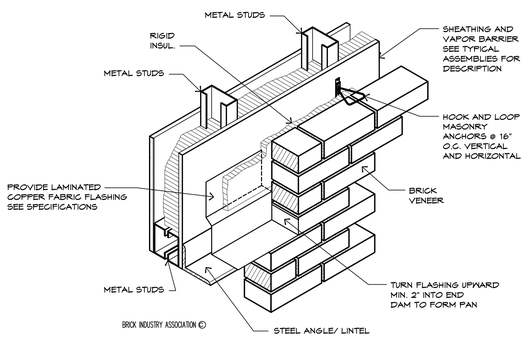


WALL TYPE #8 - 2HR

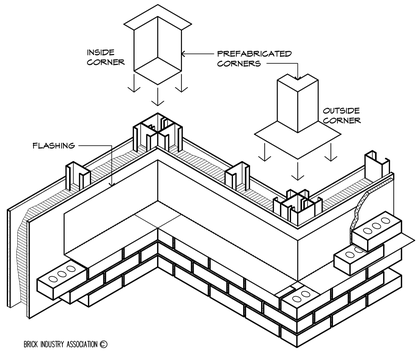
5 / A107 INTERIOR WALL TYPES
SCALE: 1"=1'-0"



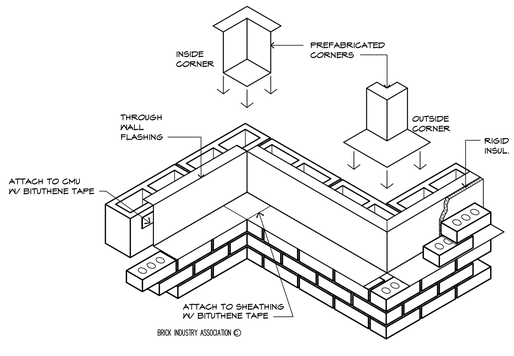
12 / A107 TYP. INTERIOR (225°) CMU CORNERS
SCALE: 1"=1'-0"



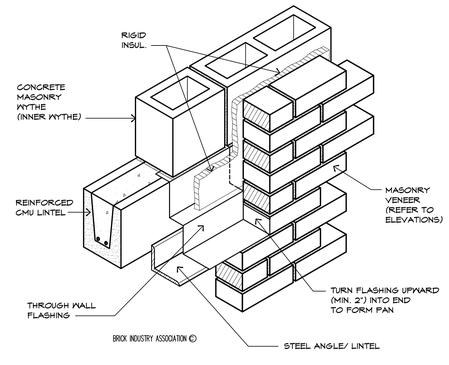
4 / A107 TYP. FLASHING DETAIL
SCALE: NTS @ LINTEL W/END DAM



3 / A107 TYP. FLASHING DETAIL
SCALE: NTS @ CORNERS



2 / A107 TYP. FLASHING DETAIL
SCALE: NTS @ CORNERS



1 / A107 TYP. FLASHING DETAIL
SCALE: NTS @ LINTEL W/ END DAM

CONTRACTOR TO VERIFY ALL DIMENSIONS.

REGISTERED ARCHITECTURAL CORPORATION — NC — PINNACLE ARCHITECTURE, P.A. — 5126 — 4-30-19
REGISTERED ARCHITECT — FRANK WILLIAMS MCGRADY — 10911 — NORTH CAROLINA — NC — FRANK MCGRADY WILLIAMS MATTHEWS

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ISSUE DATE: 04.30.2019
REVISIONS:
CHECKED BY: FMW/KREB
PROJECT: 1821

STUMP SOUND ELEMENTARY SCHOOL
ONSLOW COUNTY SCHOOLS
STUMP SOUND, NORTH CAROLINA

WALL TYPES & SPECIALTY DETAILS

REVISION SCHEDULE

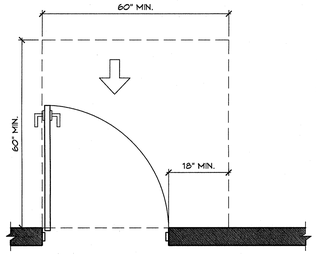
Δ	DATE	REFERENCE

THESE DRAWINGS ARE THE PROPERTY OF THE ARCHITECTS AND CAN NOT BE USED FOR CONSTRUCTION PURPOSES OR REPRODUCED WITHOUT WRITTEN CONSENT OF THE ARCHITECT.

A107

I:\PROJECTS\Stump Sound Elementary School\1821 Stump Sound Elementary School\Drawings\Arch\1821 Stump Sound.pln, 4/30/2019 4:41:47 PM

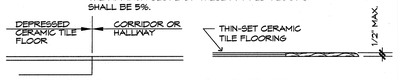
DOORS AND DOORWAYS



MANEUVERING CLEARANCE AT MANUAL SWINGING DOORS

ICC/ANSI A117.1-2009
REF. FIG. 404.2.3.2 (a)
ADAAG-2010 - 404.2

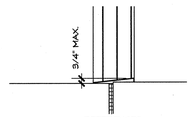
INTERIOR/ EXTERIOR
CERAMIC TILE FLOORS IN SETTING BEDS MAY USE A WARPED FLOOR IN PLACE OF A THRESHOLD. THE MAXIMUM SLOPE OF THESE WARPED FLOORS SHALL BE 5%.



REFERENCES:
ICC/ANSI 117.1-2009 - 404.2.4
ADAAG-2010 - 404.2.5

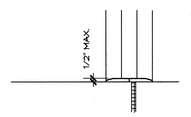
REFERENCES:
ICC/ANSI 117.1-2009 - 303.3
ADAAG-2010 - 303.3

MAXIMUM EXTERIOR THRESHOLD HEIGHT FOR SLIDING GLASS DOORS IS 3/4 INCH.



REFERENCES:
ICC/ANSI 117.1-2009 - 302
ADAAG-2010 - 302

CHANGES IN LEVEL GREATER THAN 1/4" IN HT. AND NOT MORE THAN 1/2" MAX. IN HT. SHALL BE BEVELED WITH A SLOPE NOT STEEPER THAN 1:2.



THE 60" X 60" LEVEL FLOOR REQUIRED ON THE ROOM SIDE OF THE DOOR MAY BEGIN AT THE THRESHOLD

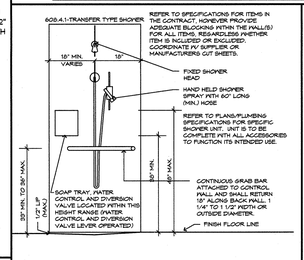


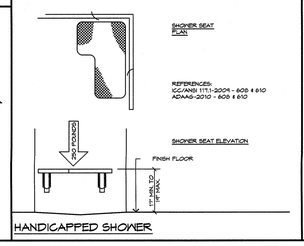
ACCESSIBILITY CODE REQUIREMENTS

WITH REFERENCES TO ANSI 117.1 AND ADAAG

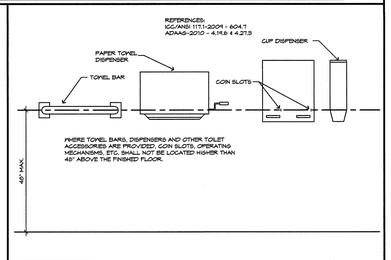
TOILET ACCESSORIES, TOILETS, GRAB BARS,

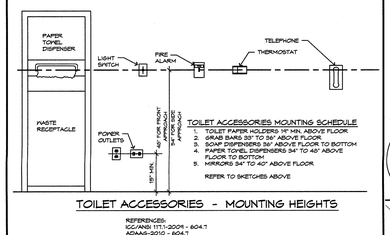
MOUNTING HEIGHTS AND HANDICAPPED DATA





HANDICAPPED SHOWER





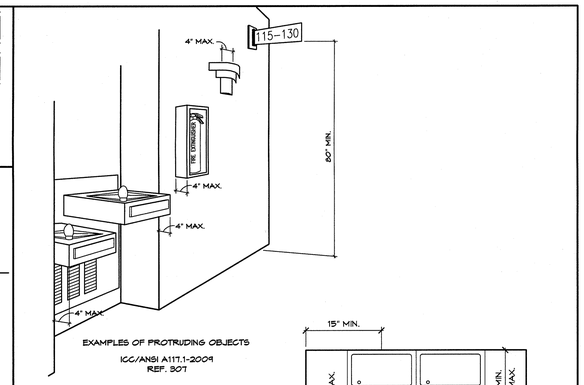
TOILET ACCESSORIES MOUNTING SCHEDULE

1. TOILET PAPER HOLDERS 19" MIN. ABOVE FLOOR
2. GRAB BARS 33" TO 36" ABOVE FLOOR
3. SOAP DISPENSERS 36" ABOVE FLOOR TO BOTTOM
4. PAPER TOWEL DISPENSERS 54" TO 48" ABOVE FLOOR TO BOTTOM
5. MIRRORS 94" TO 40" ABOVE FLOOR

REFER TO SKETCHES ABOVE

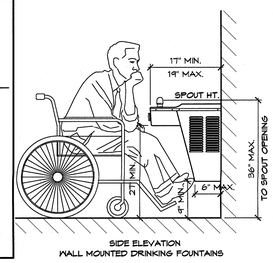
TOILET ACCESSORIES - MOUNTING HEIGHTS

REFERENCES:
ICC/ANSI 117.1-2009 - 604.7
ADAAG-2010 - 604.7



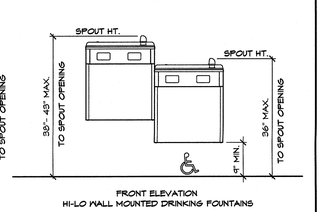
EXAMPLES OF PROTRUDING OBJECTS
ICC/ANSI A117.1-2009
REF. 307

PLAN



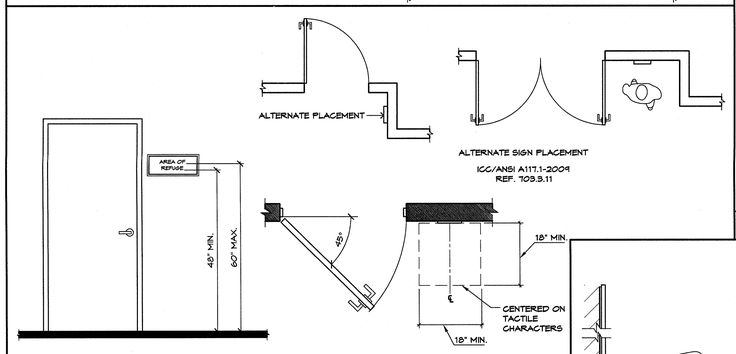
SIDE ELEVATION
WALL MOUNTED DRINKING FOUNTAINS

ICC/ANSI A117.1-2009
REF. SECTION 602.2
DRINKING FOUNTAIN WITH FORWARD APPROACH



FRONT ELEVATION
HI-LO WALL MOUNTED DRINKING FOUNTAINS

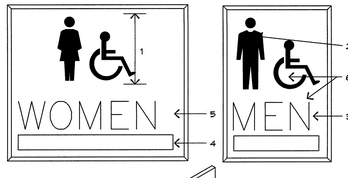
ICC/ANSI A117.1-2009
REF. SECTION 602.4
SPOUT OUTLET HEIGHT
ADAAG-2010
REF. SECTION 602



ALTERNATE SIGN PLACEMENT
ICC/ANSI A117.1-2009
REF. 703.3.11

NOTE: FOR BRAILLE MOUNTING HEIGHT REFER TO SECTION 703.4.5 (48" MIN. TO BASE LINE OF BRAILLE CELL)
ICC/ANSI A117.1-2009
HEIGHT OF TACTILE CHARACTERS ABOVE FLOOR OR GROUND

SIGN PLACEMENT
ICC/ANSI A117.1-2009
REF. FIG. 703.3.11
LOCATION OF TACTILE SIGNS AT DOORS

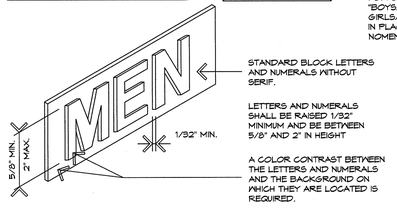


TOILET ROOM IDENTIFICATION SIGNS

NOTES (TYPICAL FOR ALL SIGNS):
1. 6" MIN. BORDER DIMENSION- MALE/FEMALE FIGURES.
2. USE OF MALE/FEMALE CARICATURES IS REQUIRED.
3. RAISED LETTERS/NUMBERS.
4. BRAILLE.
5. CHARACTER PROPORTION.
6. COLOR CONTRAST.

SIGNS ARE LIMITED ONLY TO EXAMPLES SHOWN.

FOR CHILDREN'S FACILITIES "BOYS/BOY'S TOILET" AND GIRLS/GIRL'S TOILET" MAY BE USED IN PLACE OF THE ADULT NOMENCLATURE.



STANDARD BLOCK LETTERS AND NUMERALS WITHOUT SERIF.

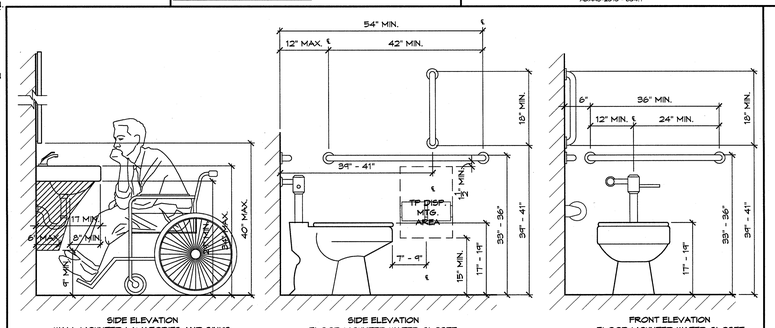
LETTERS AND NUMERALS SHALL BE RAISED 1/32" MINIMUM AND BE BETWEEN 5/8" AND 2" IN HEIGHT

A COLOR CONTRAST BETWEEN THE LETTERS AND NUMERALS AND THE BACKGROUND ON WHICH THEY ARE LOCATED IS REQUIRED.

HAZARDOUS AREAS (SUCH AS EQUIPMENT ROOMS, JANITOR'S CLOSETS ETC.) SHALL HAVE IDENTIFICATION AS AN AID TO THOSE PERSONS WHO ARE BLIND OR VISUALLY HANDICAPPED.

SIGNAGE
ICC/ANSI A117.1-2009
REF. CHAPTER 7, COMMUNICATION ELEMENTS AND FEATURES
ADAAG-2010 - REF. CHAPTER 7

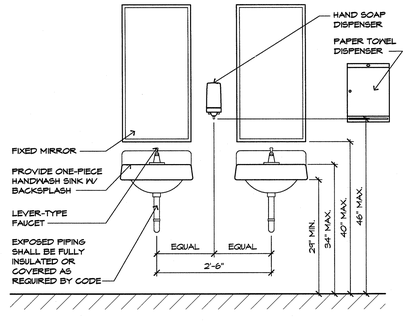
SIGNAGE AND IDENTIFICATION

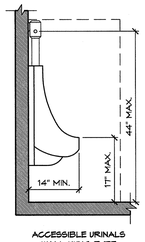


SIDE ELEVATION
WALL MOUNTED LAVATORIES AND SINKS
NOTE: EQUIPMENT PERMITTED IN SHADED AREA UNDER LAVATORY

SIDE ELEVATION
FLOOR MOUNTED WATER CLOSET

FRONT ELEVATION
FLOOR MOUNTED WATER CLOSET



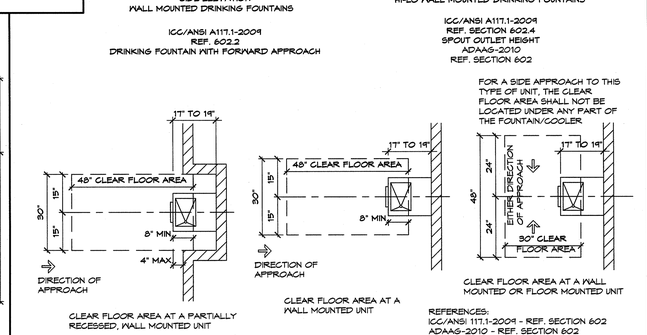


ACCESSIBLE URINALS
WALL HUNG TYPE

ICC/ANSI A117.1-2009
REF. SECTION 605.2

REFERENCES:
ICC/ANSI 117.1-2009 - 603, 604, 605 & 606
ADAAG-2010 - 603, 604, 605 & 606

TOILETS



CLEAR FLOOR AREA AT A PARTIALLY RECESSED, WALL MOUNTED UNIT

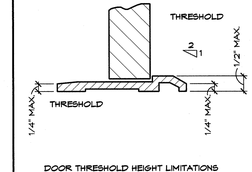
CLEAR FLOOR AREA AT A WALL MOUNTED UNIT

FOR A SIDE APPROACH TO THIS TYPE OF UNIT, THE CLEAR FLOOR AREA SHALL NOT BE LOCATED UNDER ANY PART OF THE FOUNTAIN/COOLER

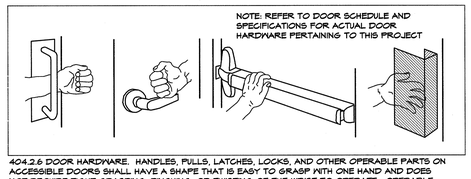
CLEAR FLOOR AREA AT A WALL MOUNTED OR FLOOR MOUNTED UNIT

REFERENCES:
ICC/ANSI 117.1-2009 - REF. SECTION 602
ADAAG-2010 - REF. SECTION 602

HANDICAPPED RATED W.C. UNITS



DOOR THRESHOLD HEIGHT LIMITATIONS
ICC/ANSI A117.1-2009
REF. 404.2.4



NOTE: REFER TO DOOR SCHEDULE AND SPECIFICATIONS FOR ACTUAL DOOR HARDWARE PERTAINING TO THIS PROJECT

404.2.6 DOOR HARDWARE. HANDLES, PULLS, LATCHES, LOCKS, AND OTHER OPERABLE PARTS ON ACCESSIBLE DOORS SHALL HAVE A SHAPE THAT IS EASY TO GRASP WITH ONE HAND AND DOES NOT REQUIRE TIGHT GRASPING, PINCHING, OR TWISTING OF THE WRIST TO OPERATE. OPERABLE PARTS SUCH AS HARDWARE SHALL BE 34" MINIMUM AND 48" MAXIMUM ABOVE THE FLOOR. WHERE SLIDING DOORS ARE IN THE FULLY OPEN POSITION, OPERABLE HARDWARE SHALL BE EXPOSED AND USABLE FROM BOTH SIDES.
EXCEPTION: LOCKS USED ONLY FOR SECURITY PURPOSES AND NOT USED FOR NORMAL OPERATION ARE PERMITTED IN ANY LOCATION.

DOOR HARDWARE
ICC/ANSI A117.1-2009
REF. 404.2.6

DOOR HARDWARE

CONTRACTOR TO VERIFY ALL DIMENSIONS.

PINNACLE ARCHITECTURE, P.A.
NC CORPORATION C-2684
51264
4-7-14
PINNACLE MATTHEWS
NC REGISTERED ARCHITECT
FRANK MCCRADY WILLIAMS
NC REGISTERED ARCHITECT
16111
4-7-14
FRANK MCCRADY WILLIAMS MATTHEWS

PINNACLE ARCHITECTURE
PROFESSIONAL ASSOCIATION
P.O.BOX 187, 630 TEAM ROAD, SUITE 200
MATTHEWS, NORTH CAROLINA 28106
PH: (704) 847-9851 FAX: (704) 847-9853
701 EAST BAY STREET, SUITE 302
CHARLESTON, SOUTH CAROLINA 29403
PH: (843) 872-5345 FAX: (843) 872-5374

ISSUE DATE: 04.30.2014
DRAWN BY: JR, FMW/REB
CHECKED BY: FMW/REB
PROJECT: 1821

STUMP SOUND ELEMENTARY SCHOOL
ONSLOW COUNTY SCHOOLS
STUMP SOUND, NORTH CAROLINA

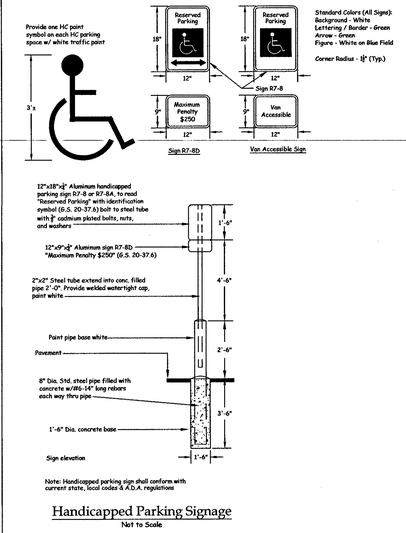
ACCESSIBILITY REQUIREMENTS

REVISION SCHEDULE

	DATE	REFERENCE

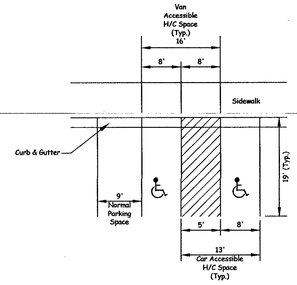
THIS DRAWING IS THE PROPERTY OF THE ARCHITECTS AND CAN NOT BE USED FOR CONSTRUCTION PURPOSES OR REPRODUCED WITHOUT WRITTEN CONSENT OF THE ARCHITECT.

A108



Note: Handicapped parking sign shall conform with current state, local codes & A.D.A. regulations

Handicapped Parking Signage
Not to Scale



Parking Spaces (Typ.)
Not To Scale

Tract Data

Total Acreage	100.6 Ac.
Zone	O&I
Proposed Use	Public Elementary School
Existing Use	Undeveloped / Wooded

Building Data

Proposed Building	124,431 ± S.F.
Proposed Canopies	4,723 ± S.F.
	129,154 ± S.F. (Total)

Parking Data

Parking Required	Two (2) Spaces for Each Classroom and Administrative Office and One (1) Large Space for Each Bus 55 Classrooms x 2 Spaces = 110 Spaces 11 Offices x 2 Spaces = 22 Spaces Total Spaces = 132 Spaces (5 H/C Spaces)
Proposed Parking	145 Spaces (5 H/C Spaces)

Tax Map 761, Parcel 51
Tax Map 761, Parcel 56.10

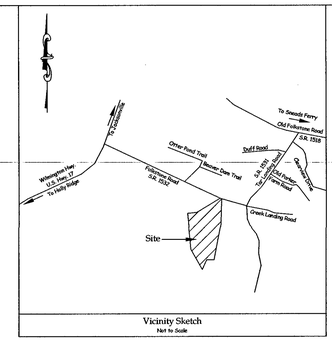
Deed Book: 4876, Pg. 425
4876, Pg. 429
Map Book: 22, Pg. 74
25, Pg. 157

Setbacks:

Front Yard	25'
Side Yard	8'
Rear Yard	15'

Notes:

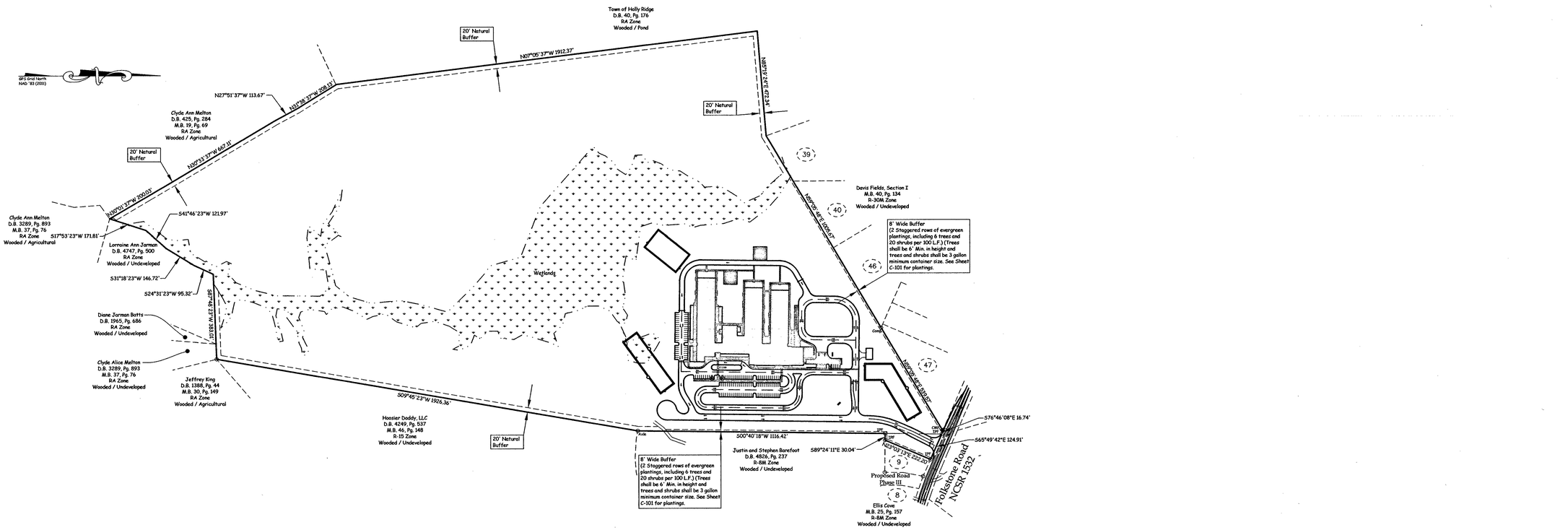
1. Boundary taken from Map Book 22, Page 74 and a partial survey by Parker & Associates, Inc.
2. Topography shown is taken from actual survey by Parker & Associates, Inc. dated February 2019.
3. Wetlands delineation taken from ECS Southeast, LLP dated June 22, 2018.
4. This site is not affected by any special flood hazard per FIRM CPN 370340 4348 J (Onslow County), effective Nov. 3, 2005.
5. All distances are horizontal ground, U.S. survey Feet.
6. All acreages calculated by coordinates.
7. The existence of utilities may imply the existence of an easement.
8. Adjoiner property information per Onslow County Tax Records.
9. No register of deed search done by or furnished to surveyor regarding deed or covenant restrictions.
10. See Rest of Plans for Detailed Design Information.



Vicinity Sketch
Not To Scale

Legend

B-B - Back of Curb to Back of Curb
℄ - Centerline
D.B. - Deed Book
ex - Existing
ecatv - Existing Cable TV Box
eeb - Existing Electric Box
elp - Existing Light Pole
epp - Existing Power Pole
EOP - Edge of Pavement
FFE - Finish Floor Elevation
M.B. - Map Book
MBL - Minimum Building Line
Pg. - Page
R/W - Right-of-way
- Concrete Walk
C1 - Curve Label
- Existing Traffic Flow Arrow
- Proposed Traffic Flow Arrow
- Wetlands Area
- Existing Ditch
ohpl - ohpl - Overhead Power Line
- Wetlands Line



Note:

Contractor shall insure that he and all his workers (contractors, subcontractors and other site personnel) do not damage construction stakes or other measures used in laying out the project whether by the Engineer or another entity including those under the employ of the contractor. Contractor shall cause his workers to observe and verify to the fullest extent practicable that stakes, other measures and grades are, or appear to be, accurate and correct, and immediately, but prior to any associated work, notify the staking entity of any potential conflict, error or question regarding the work. The Engineer shall not be responsible if all of the above measures are not strictly adhered to. The Engineer shall not be responsible where due to damage, his staking can not be verified. For critical or costly components of the work, where the contractor believes that staking may not be preserved, the contractor shall request the staking entity to place staking in an area where its preservation can be insured.

Owner / Developer:
Onslow County Board of Education
200 Broadhurst Road
Jacksonville, North Carolina 28540
(910) 455-2211

Field Book: Misc. #180, Pg. 1-17; Stacy #2, Pg. 27-30
Disk Name: Acad 2821
Filename: NFES-Site.dwg KHW
Job No.: C180510-6782

GRAPHIC SCALE: 1"=200'
0 100 200 400 600
FEET

08-08-19 KHW - Rev. turnlane
07-08-19 KHW - Add buffers per County

THIS DRAWING IS THE PROPERTY OF THE ARCHITECTS AND CAN NOT BE USED FOR CONSTRUCTION PURPOSES OR REPRODUCED WITHOUT WRITTEN CONSENT OF THE ARCHITECT.

CONTRACTOR TO VERIFY ALL DIMENSIONS

PARKER & ASSOCIATES, INC.
Engineers - Surveyors - Planners
Jacksonville - Wilmington - Raleigh
P.O. Box 9756 - 3306 Henville Court - 28540
Phone (910) 455-2414 - www.ParkerAssociates.com
N.C. Firm License No. P-0168

8-08-19
NORTH CAROLINA PROFESSIONAL SEAL 14575 ENGINEER TIMOTHY M. STEWART

PINNACLE ARCHITECTURE
PROFESSIONAL ASSOCIATION
P.O. BOX 187, 630 TEAM ROAD, SUITE 200
MATTHEWS, NORTH CAROLINA 28106
PH: (704) 847-9855 FAX: (704) 847-9853
701 EAST BAY STREET, SUITE 302
CHARLESTON, SOUTH CAROLINA 29403
PH: (843) 872-5565 FAX: (843) 872-5574

ISSUE DATE: 04.30.2019
DESIGNED BY: KHW
CHECKED BY: TMS
PROJECT: 1821

STUMP SOUND ELEMENTARY SCHOOL
ONSLOW COUNTY SCHOOLS
STUMP SOUND, NORTH CAROLINA
OVERALL SITE PLAN

REVISION SCHEDULE

	DATE	REFERENCE
1	07-08-19	See Revision Notes
2	08-08-19	

C100

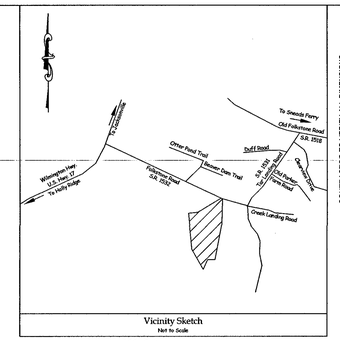
Z:\AutoCAD Civil 3D\2018 Civil 3D\New Folkstone Elementary School\DWG\NFES-Site.dwg, 8/6/2019 2:25:43 PM, KHW

GPS Grid North
NAD '83 (2011)

Legend

B-B - Back of Curb to Back of Curb
℄ - Centerline
Comp - Computed Point
Conc. - Concrete
C&G - Curb & Gutter
D.B. - Deed Book
FFE - Finish Floor Elevation
H/C - Handicap
○ IPF - Iron Pipe Found
○ ISF - Iron Stake Found
○ ISS - Iron Stake Set
L.F. - Linear Feet
M.B. - Map Book
Min. - Minimum
MBL - Minimum Building Line
Pg. - Page
R - Radius
R/W - Right-of-way
Typ. - Typical

- Concrete Walk
- Handicap Parking Space
- Shrubs
- Stop Sign
- Traffic Flow Arrow
- Trees
- Wetlands Area
- Existing Ditch
- ohpl ohpl Overhead Power Line
- Wetlands Line



Vicinity Sketch
Not to Scale

Tract Data

Total Acreage ..... 100.6 Ac.
Zone ..... O&I
Proposed Use ..... Public Elementary School
Existing Use ..... Undeveloped / Wooded

Building Data

Proposed Building ..... 124,431 ± S.F.
Proposed Canopies ..... 4,723 ± S.F.
129,154 ± S.F. (Total)

Parking Data

Parking Required ..... Two (2) Spaces for Each Classroom and Administrative Office and One (1) Large Space for Each Bus
55 Classrooms x 2 Spaces = 110 Spaces
11 Offices x 2 Spaces = 22 Spaces
Total Spaces = 132 Spaces (5 H/C Spaces)

Proposed Parking ..... 145 Spaces (5 H/C Spaces)

Tax Map 761, Parcel 51
Tax Map 761, Parcel 56.10

Deed Book: 4876, Pg. 425
4876, Pg. 429
Map Book: 22, Pg. 74
25, Pg. 157

Setbacks:

Front Yard ..... 25'
Side Yard ..... 8'
Rear Yard ..... 15'

Notes:

1. Boundary taken from Map Book 22, Page 74 and a partial survey by Parker & Associates, Inc.
2. Topography shown is taken from actual survey by Parker & Associates, Inc. dated February 2019.
3. Wetlands delineation taken from ECS Southeast, LLP dated June 22, 2018.
4. This site is not affected by any special flood hazard per FIRM CPN 370340 4348 J (Onslow County), effective Nov. 3, 2005.
5. All distances are horizontal ground, U.S. survey Feet.
6. All acreages calculated by coordinates.
7. The existence of utilities may imply the existence of an easement.
8. Adjoiner property information per Onslow County Tax Records.
9. No register of deed search done by or furnished to surveyor regarding deed or covenant restrictions.
10. See Rest of Plans for Detailed Design Information.

Stormwater Wetlands #3
See Sheet C112

Stormwater Wetlands #2
See Sheet C111

Stormwater Wetlands #1
See Sheet C110

Wetlands Line (Typ.)

Concrete Playground

Concrete Playground

Davis Fields, Section I
M.B. 40, Pg. 134
R-30M Zone
Wooded / Undeveloped

Davis Fields, Section I
M.B. 40, Pg. 134
R-30M Zone
Wooded / Undeveloped

24' Wide Double Swing Gate

Bus Vehicle Path

Bus Loading Zone

Bus Vehicle Path

Staff Parking
44 Spaces

5' Conc. Sidewalk

5 Bay Carpool Loading Zone
26' Long Each

Carpool Stop Bar
1,476' Double Stacking Length to Here. 2,952' Total Stacking

Building Access Point (Typ.)

Canopy

Crosswalk (Typ.)

H/C Ramp (Typ.)

STOP

10 Spaces

16 Spaces - Visitor

12 Spaces - Visitor

Short Term Visitors Parking
10 Spaces

17 Spaces

12 Spaces

Staff Parking
58 Spaces

Double Carpool Path

Double Carpool Path

Traffic Control Device (Cones) During Carpool AM / PM Operations.

Dumpster Area. See Architectural plans for detail

Double Carpool Path

Proposed School Sign

Bus Exit Path

Bus / Car Entrance Path

Sewage Pump Station
See Sheet C107

1,000 Gallon Propane Tank

Concrete Service Area

Bus Vehicle Path

8' Wide Buffer
(2 Staggered rows of evergreen plantings, including 6 trees and 20 shrubs per 100 L.F.) (Trees shall be 6' Min. in height and trees and shrubs shall be 3 gallon minimum container size.

Crosswalk (Typ.)

Davis Fields, Section I
M.B. 40, Pg. 134
R-30M Zone
Wooded / Undeveloped

See Sheet C109
For Proposed Turn Lane

20' Natural Buffer

Hoosier Daddy, LLC
D.B. 4249, Pg. 537
M.B. 46, Pg. 148
R-15 Zone
Wooded / Undeveloped

8' Wide Buffer
(2 Staggered rows of evergreen plantings, including 6 trees and 20 shrubs per 100 L.F.) (Trees shall be 6' Min. in height and trees and shrubs shall be 3 gallon minimum container size.

Justin and Stephen Barefoot
D.B. 4826, Pg. 237
R-8M Zone
Wooded / Undeveloped

8' Wide Buffer
(2 Staggered rows of evergreen plantings, including 6 trees and 20 shrubs per 100 L.F.) (Trees shall be 6' Min. in height and trees and shrubs shall be 3 gallon minimum container size.

Ellis Cove
M.B. 25, Pg. 157
R-8M Zone
Wooded / Undeveloped

Proposed Road
Phase III

Ellis Cove
M.B. 25, Pg. 157
R-8M Zone
Wooded / Undeveloped

Folkstone Road
NCSR 1532

S30°40'18"W 1116.42'
S89°24'11"E 30.04'
S76°46'08"E 16.74'
N57°09'19"E 222.20'
S68°49'40"E 124.01'

All Radii Are From Back of Curb

All Radii are 5' Unless Otherwise Noted

All Dimensions Are From Back of Curb to Back of Curb Unless Otherwise Noted

Canopy Tree Planting Detail
Not to scale

SHRUB PLANTING DETAIL
Not to scale

Note:
Contractor shall insure that he and all his workers (contractors, subcontractors and other site personnel) do not damage construction stakes or other measures used in laying out the project whether by the Engineer or another entity including those under the employ of the contractor. Contractor shall cause his workers to observe and verify to the fullest extent practicable that stakes, other measures and grades are, or appear to be, accurate and correct, and immediately, but prior to any associated work, notify the staking entity of any potential conflict, error or question regarding the work. The Engineer shall not be responsible if all of the above measures are not strictly adhered to. The Engineer shall not be responsible where due to damage, his staking can not be verified. For critical or costly components of the work, where the contractor believes that staking may not be preserved, the contractor shall request the staking entity to place staking in an area where its preservation can be insured.

08-08-19 KHW - Rev. turnlane
07-08-19 KHW - Add Traffic control measures and parking labels

Field Book: Misc. #180, Pg. 1-17; Stacy #2, Pg. 27-30
Disk Name: Acad 2821
Filename: NFES-Site.dwg KHW
Job No.: C180510-6782

GRAPHIC SCALE: 1"=50'
0 50 100 150
FEET

PARKER & ASSOCIATES, INC.
Engineers - Surveyors - Planners
Jacksonville, North Carolina
P.O. Box 1487 Zip 28541-1487
Phone (910) 455-2414 www.ParkerJacksonNC.com
N.C. Firm License Number P-0108

CONTRACTOR TO VERIFY ALL DIMENSIONS

8-08-19

NORTH CAROLINA PROFESSIONAL SEAL 14575 ENGINEER TIMOTHY M. STEWART

PINNACLE ARCHITECTURE
PROFESSIONAL ASSOCIATION
P.O. BOX 187, 630 TEAM ROAD, SUITE 200, MATTHEWS, NORTH CAROLINA 28106, PH: (704) 847-9855 FAX: (704) 847-9853
701 EAST BAY STREET, SUITE 302, CHARLESTON, SOUTH CAROLINA 29403, PH: (843) 872-5345 FAX: (843) 872-5374

ISSUE DATE: 04.30.2019
DRAWN BY: KHW
CHECKED BY: TMS
PROJECT: 1821

STUMP SOUND ELEMENTARY SCHOOL
ONSLOW COUNTY SCHOOLS
STUMP SOUND, NORTH CAROLINA

SITE PLAN

REVISION SCHEDULE

	DATE	REFERENCE
1	07-08-19	See Revision Notes
2	08-08-19	

Owner / Developer:
Onslow County Board of Education
200 Broadhurst Road
Jacksonville, North Carolina 28540
(910) 455-2211

THIS DRAWING IS THE PROPERTY OF THE ARCHITECTS AND CAN NOT BE USED FOR CONSTRUCTION PURPOSES OR REPRODUCED WITHOUT WRITTEN CONSENT OF THE ARCHITECT.

C101

Z:\Autocad Civil 3D\2018 Civil 3D\New Folkstone Elementary School\DWG\NFES-Site.dwg, 8/8/2019 5:27:41 PM, KHW

ROADS & DRAINAGE NOTES:

1. The streets to be constructed for this project are subject to the Department of Transportation Certification Program and Quality Management System Maintenance Version Requirements. The Contractor, at his expense, shall provide test results on 1) Subgrade, 2) Base and 3) Pavement. The Contractor shall insure that all construction and testing is performed in accordance with the N.C. Department of Transportation "Standard Specifications for Roads and Structures", latest edition, 2006 Hot Mix Asphalt Specifications and Manual, and "Quality Management System Maintenance Version", and shall report the testing and /or core locations, test method, results and D.O.T. allowable range or tolerance, as applicable. Subgrade shall be tested for density and shall be proofrolled by the testing Engineer or the Engineer or Surveyor who will issue the Final Certification. Base and pavement shall both be tested for density and thickness. If Parker & Associates is administering the construction they must also proofroll the stone. Twenty-four (24) hour advance scheduling before proofroll. Testing for pavement shall be certified by either a professional Engineer or properly certified QMS technician and shall be in accordance with QMS criteria. Required thickness for this project is as shown on the plans. Note that thickness for widening or turn lanes is greater than that for internal streets.
2. Minimum Densities:
   Subgrade 100%
   Stone Base 100%
   S 9.5B 90%
   I 19.0C 92%
   B 25.0C 92%
3. Notify the Engineer or Surveyor, who will issue the overall Final Certification, of all phases of Roadway Construction.
4. All metal used for any type of catch basin or inlet shall be produced in the USA.
5. A minimum sight distance of 10'X70' shall be maintained along the right-of-way of all internal intersections.
6. 20 foot radii at right-of-way intersections, 30 foot radii at edge of pavement intersections.
7. All culverts under streets shall be reinforced concrete per North Carolina Department of Transportation Specifications, unless otherwise specified and/or approved by the Engineer and/or Department of Transportation.
8. All roads shall be public and built to NCDOT Standards.
9. There shall be no encumbrances within the NCDOT Right-of-way.
10. All materials and practices shall meet North Carolina Department of Transportation Standards.
11. For other detailed construction notes, see plan and profiles.

Note:
During Construction of Site, Stormwater Wetland Area shall be Constructed and used as a Sediment Basin. Skimmer shall be installed.

Upon Completion of Site, and Stabilization of all Disturbed Areas, Stormwater Wetland shall be graded to Final Grades shown and Planted as shown.

Erosion and Sedimentation Control Notes:

1. Construction Sequence:
   A. Notify Owner, Architect, and North Carolina Department of Environmental Quality (NCDEQ) Land Quality Section at (910) 796-7312 prior to beginning construction.
   B. Install stabilized construction entrance prior to beginning construction.
   C. Install silt fence where indicated on plan prior to beginning clearing and construction.
   D. Construct stormwater wetlands to function as sediment basins during construction. Construct other sediment traps and basins shown prior to starting grading.
   E. Install drainage swales and ditches with sediment traps, sediment basins, and rock check dams where indicated prior to grading. Within 15 days, temporary seed swales if not in final condition, or permanent seed and install swale liner, if in final condition.
   F. Grading operations shall begin at low points, points of outfall release or at other locations where sediment control measures are shown on the plan. Sediment control devices (sediment traps, silt fences, diversions, stormwater treatment areas, etc.) shall be installed before or simultaneously with the disturbance of any area tributary to the device.
   G. Clear and grub all areas within Disturbance Limit.
   H. Strip topsoil from building and drive areas and stockpile for later use.
   I. Install sewage pump station, sewer mains and services.
   J. Install storm drainage piping. All utilities under drives and walks shall be back filled with compacted select fill.
   K. Install compacted select fill subgrade and rough grade parking and drive areas. Select fill brought to site shall be from a NCDEQ approved source.
   L. Construct building pad.
   M. Contractor must conduct and pass a proof roll test, on the subgrade prior to installing stone, and on the stone prior to installing asphalt. The proof roll tests shall be conducted in the presence of the Soils Engineer.
   N. Fine grade drives. Place CABC over compacted subgrade. Install curb and gutter, install asphalt surface course.
   O. Complete fine grading of roadside shoulders, swales and all disturbed / graded areas. Place topsoil. See general notes for additional information.
   P. Turn Lane Construction proof rolls and testing must be witnessed during construction by Civil Engineer and Soils Engineer. Testing results shall be provided to the Engineer. Turn Lanes must be constructed and certified per NCDOT requirements. See Roads and Drainage Notes.
   Q. Seed, fertilize, lime, and mulch all disturbed areas within 21 days of completing any phase of the grading work. Apply temporary seeding if area is to be disturbed again and permanent if areas have been final graded and accepted by engineer and owner Architect. Exposed slopes shall be provided groundcover within 21 calendar days following completion of any phase of grading.
2. Seeding Specifications:
   Apply lime and fertilizer and work into seed bed. Seed mixture shall be distributed uniformly and covered with a clean straw mulch. Mulch shall be crimped and tacked to help hold in place. Minimum material and application rates are as follows: See specifications for additional requirements.

Material	Application Rate
Lime	3000 lbs/ac.
Fertilizer (10-10-10)	800 lbs/ac.
Mulch	2 tons/ac.
Asphalt Tack	435 gals/ac. (max.)
Permanent Seeding	
Rebel Fescue	100 lbs/ac.
Common Bermuda	
(Hulled April 1 - Sept. 1)	100 lbs/ac.
(Unhulled Sept. 1 - April 1)	125 lbs/ac.
Rye Grain (Sept. 1 - Sept. 1)	50 lbs/ac.
German Millet (April 1 - Sept. 1)	50 lbs/ac.
Temporary Seeding	
Dec. 1 - April 15	
Koba Lespedeza	50 lbs/ac.
Rye Grain	100 lbs/ac.
April 15- August 15	
German Millet	40 lbs/ac.
August 15 - Dec. 15	
Rye Grain	100 lbs/ac.

3. Contractor is responsible for maintaining all erosion control measures and shall amend measures as required to prevent accelerated erosion from taking place on this site until site is restabilized and accepted by Architect and owner.
4. Contractor shall request inspection, from Architect and NCDEQ, of site work and erosion control measures prior to removal of measures.
5. Upon restabilization of all disturbed areas and swales, and areas are accepted by Architect, contractor shall remove all temporary erosion and control facilities and grade, grass and mulch the areas to restabilize.
6. See Geotechnical Report in specifications for recommendations on Site Work.
7. For additional information, see other plans and specifications.

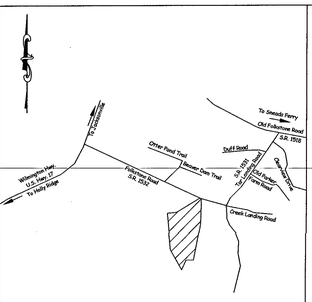
Legend

B-B - Back of Curb to Back of Curb
℄ - Centerline
Comp - Computed Point
Conc. - Concrete
C&G - Curb & Gutter
D.B. - Deed Book
FFE - Finish Floor Elevation
H/C - Handicap
○ IPF - Iron Pipe Found
○ ISF - Iron Stake Found
◎ ISS - Iron Stake Set
L.F. - Linear Feet
M.B. - Map Book
Min. - Minimum
MBL - Minimum Building Line
Pg. - Page
R - Radius
R/W - Right-of-way
RC - Rolled Curb
Typ. - Typical

- Concrete Walk
- Handicap Parking Space
- Shrubs
- Stop Sign
- Traffic Flow Arrow
- Trees
- Wetlands Area
- Existing Ditch
- Overhead Power Line
- Wetlands Line

Vicinity Sketch

Not To Scale



Swale Calculations Chart

Section	Area (acres)	Q10 (cfs)	Q2 (cfs)	Side-Slope	Channel Slope(%)	V10 (bare)(fps)	V10 (grassed)(fps)	V2 (bare)(fps)
1 - 1	0.3	0.7	0.6	5:1	0.008	1.8	0.9	1.7
2 - 2	1.0	2.2	1.8	5:1	0.003	1.6	0.8	1.5
3 - 3	0.6	1.3	1.1	5:1	0.0025	1.4	0.7	1.3
4 - 4	0.7	1.5	1.3	5:1	0.003	1.5	0.8	1.4
5 - 5	2.0	4.4	3.6	5:1	0.003	1.9	1.0	1.9
6 - 6	1.0	2.2	1.8	5:1	0.005	2.0	1.0	1.9

Q=CiA
C=Varies
i10=7.2 in/hr. for tc=5 min.
C=0.3, i2=5.88 in/hr for Q2 & V2

Friction Factors
n=0.02 Bare Earth
n=0.05 Grass
v=1.49 R 2/3 s 1/2
n

Note:
1. See site plan for section locations.
2. Line bottom of ditches and swales with American Excelinor Curlex Blanket, as indicated by ASL - Apply Swale Liner.

Note:
All Curb and Gutter on Site shall be Straight Faced Curb unless otherwise shown as Rolled Curb (RC).

Drainage Pipe Chart

PIPE	AREA (acres)	Q10 (cfs)	DIAMETER (inches)	GRADE (ft / ft)	LENGTH (lf)	OUTLET VELOCITY (fps)
A	0.144	1.0	12" RCP	0.0047	33	--
B	0.226	1.5	12" RCP	0.003	100	--
C	0.280	1.8	12" RCP	0.003	100	--
D	0.280	1.8	12" RCP	0.004	44	--
E	0.110	0.7	12" RCP	0.006	28	--
F	0.227	1.5	12" RCP	0.004	184	--
H	0.507	3.3	15" RCP	0.003	180	--
I	0.922	2.0	15" RCP	0.005	56	--
J	1.025	2.7	15" RCP	0.0038	48	--
K	1.694	7.0	24" RCP	0.0025	40	3.8
L	0.213	0.9	12" RCP	0.003	80	--
M	0.410	2.4	12" RCP	0.005	40	--
N	0.661	3.5	15" RCP	0.003	112	--
O	0.661	3.5	15" RCP	0.003	76	--
P	0.802	4.4	18" RCP	0.003	76	--
Q	0.683	1.5	12" RCP	0.003	160	--
R	1.485	6.5	18" RCP	0.004	70	--
S	1.588	6.9	18" RCP	0.0035	140	--
U	0.933	4.4	18" RCP	0.003	104	--
V	1.117	5.5	18" RCP	0.0035	88	--
W	1.274	6.1	18" RCP	0.0037	48	--
X	1.274	6.1	18" RCP	0.0033	30	--
Y	2.746	12.9	24" RCP	0.005	40	5.7
2A	0.091	0.6	12" RCP	0.005	26	--
2B	0.231	1.3	12" RCP	0.005	20	--
2C	0.413	2.5	15" RCP	0.0025	196	--
2D	0.046	0.3	12" RCP	0.005	26	--
2E	0.562	3.3	15" RCP	0.003	84	--
2F	0.066	0.5	12" RCP	0.008	26	--
2G	0.699	4.2	18" RCP	0.003	104	--
2H	0.802	4.8	18" RCP	0.0028	54	3.5
2I	0.247	1.4	12" RCP	0.003	100	--
2J	0.441	2.3	15" RCP	0.003	100	--
2K	0.634	3.5	15" RCP	0.0034	88	--
2L	0.275	0.6	15" RCP	0.067	16	--
2M	1.379	5.7	18" RCP	0.0033	152	--
2N	1.283	6.2	18" RCP	0.0041	24	--
2O	1.618	7.4	18" RCP	0.0035	24	--
2P	0.428	2.6	15" RCP	0.0037	80	--
2Q	0.225	1.4	12" RCP	0.009	54	--
2R	0.682	4.1	18" RCP	0.008	62	--
2S	1.132	6.7	24" RCP	0.003	200	--
2T	1.304	7.7	24" RCP	0.006	64	--
2U	2.922	15.0	30" RCP	0.003	52	--
2V	0.271	1.6	12" RCP	0.009	60	--
2W	0.44	2.5	15" RCP	0.0037	80	--
2X	3.462	18.0	30" RCP	0.003	48	5.1
3A	0.437	2.6	15" RCP	0.0037	60	--
3B	0.602	3.3	15" RCP	0.0024	88	--
3C	0.694	3.6	15" RCP	0.004	68	--
3D	0.465	2.9	15" RCP	0.0036	110	--
3E	0.846	5.1	18" RCP	0.006	148	--
3F	1.081	5.7	18" RCP	0.008	48	--
3G	0.104	0.5	12" RCP	0.003	88	--
3H	1.307	6.8	24" RCP	0.0034	176	--
3I	0.181	1.2	12" RCP	0.0067	30	--
3J	0.236	1.3	12" RCP	0.003	64	--
3K	0.139	0.8	12" RCP	0.0045	44	--
3L	0.233	1.4	12" RCP	0.017	64	--
3M	0.878	4.4	15" RCP	0.0053	128	--
3N	1.481	7.3	18" RCP	0.0056	76	--
3O	0.078	0.3	12" RCP	0.018	108	--
3P	1.666	8.1	24" RCP	0.008	60	--
3Q	3.119	15.5	30" RCP	0.0035	94	--
3R	3.119	15.5	30" RCP	0.003	64	--
3S	4.148	20.9	30" RCP	0.0035	28	5.6
3T	0.603	1.3	15" RCP	0.006	32	3.4
3U1	5.6	8.4	24" RCP	0.012	128	--
3U2	5.7	8.6	24" RCP	0.014	125	--
3V	6.6	18.9	30" RCP	0.057	28	--
3W1	11.4	22.5	36" RCP	0.004	92	--
3W2	11.5	22.7	36" RCP	0.005	20	--
3X	0.3	0.7	15" RCP	0.112	24	--
3Y1	11.8	22.8	40"x31" UFAAP	0.005	20	6.7
3Y2	11.85	23.4	40"x31" UFAAP	0.0037	82	--
3Y3	12.0	23.7	40"x31" UFAAP	0.0037	82	--
3Z1	2.0	4.5	18" RCP	0.016	32	--
3Z2	2.1	4.7	24" RCP	0.0105	76	--
4A	6.0	13.0	24" RCP	0.075	4	--
4B	20.1	38.9	40"x31" UFAAP	0.0033	46	--

Q=CiA
c=varies
tc=5 min, i10=7.17 in/hr
tc=25 min, i10=4.3 in/hr. for Pipes 3U,3W,3Y and 4B
tc=15 min, i10=5.4 in/hr. for Pipes 3Z and 4A
Pipe 3V flow taken from HydroCAD Model for Stormwater BMP, i10=18.9 cfs

RCP = Class IV Reinforced Concrete Pipe
CFS = Cubic Feet per Second
LF = Linear Feet
FPS = Feet per Second
UFAAP = Ultraflow Aluminum Arch Pipe

NOTE:
1. Contractor shall use invert elevations shown on plans for construction. Grades shown above are rounded.

Skimmer Sediment Basin Chart

Sediment Basin	Disturbed Area (Acres)	Q10 (CFS)	Volume (Cubic Yards)	Surface Area(sf)	General Top Dimension (ft) (Length x Width x Depth)	Qd (cf/Day)	Skimmer Size (in)	Orifice Dia. (in)	Td (Days)
#1	5.6	12.1	374	3933	202'L x 20'W x 2.5'D	3366	2	1.9	3
#2	5.0	10.8	334	3510	180'L x 20'W x 2.5'D	3006	2	1.8	3
#3	4.7	10.2	314	3315	170'L x 20'W x 2.5'D	2826	2	1.7	3
#4	2.0	4.4	134	1430	73'L x 20'W x 2.5'D	1206	2	1.1	3
#5	1.0	2.2	67	715	48'L x 15'W x 2.5'D	603	2	0.8	3
#6	1.0	2.2	67	715	48'L x 15'W x 2.5'D	603	2	0.8	3

Q10=CiA
C=0.3
tc=5 min
i10=7.17 in/hr.

Orifice Dia. (in)=$\sqrt{Qd/(2310*Td)}$
Qd=dewatering rate=V/td (Cf/Day)
V=Volume (Cf)
Td=Draw Down Time (Days=3)
H=0.167 ft For 2" Skimmer
H=0.333 ft For 4" Skimmer

Design Notes:
1. Side slopes from top of bank down to inside bottom of basin are to be 2:1
2. Side slopes from top of bank to ex ground are to be no steeper than 3:1
3. Skimmers shall be Fairoloth Skimmers or approved equal
4. Volume and Surface Area calculated with 1' free board to the top of the basin and 0.5' to spill way.
5. 325 sf minimum surface area per cfs of Q10 peak inflow
6. 66.7 cy minimum volume per acre of disturbed area
7. Upon complete restabilization of all disturbed areas, and approval by Engineer and NCDENR-LQS, remove sediment basin and regrade swale, fertilize, seed and mulch.

Sediment Trap Chart

Sediment Trap	Disturbed Area (Acres)	Volume (Cubic Yards)	Size (Length x Width x Depth)
#1	0.3	40	27'L x 10'W x 4'D
#2	0.6	80	36'L x 10'W x 4'D
#3	0.7	94	43'L x 10'W x 4'D

Design Standard - 133.3 CY Sediment Trap Volume per Disturbed Acre.

General Notes:

1. Topography shown is Taken from actual survey by Parker & Associates, Inc. dated February 2019.
2. Wetlands delineation taken from ECS Southeast, LLP dated June 22, 2018.
3. Boundary taken from Map Book 22, Page 74 and a partial survey by Parker & Associates, Inc.
4. This site is not effected by any special flood hazard per FIRM# CPN 3703404 4258 J (Onslow County), effective Nov. 3, 2005.
5. Entire development area is woods. Most of the site has been timbered, but not cleared and grubbed.
6. Contractor shall limit grading activities to within grading / disturbance limits identified on plan.
7. As of October 1, 2014, anyone digging with mechanized equipment in highway right-of-way, private utility easements, or public spaces will be required by North Carolina law to give notice of the proposed excavation to all existing area utilities at least three to twelve business days before starting to dig. The utility owner is to locate its facilities in the area of the proposed excavation. Any members of North Carolina 811 can be contacted at 1-800-632-4949 or Call 811.
8. Contractor shall verify location of existing water and sewer mains and report any deviations to Architect and Engineer prior to construction.
9. Contractor is responsible for contacting any utility company that is not a member of NC811.
10. Contractor shall verify location of all underground utilities prior to commencement of work.
11. Contractor is responsible for any damages to any existing utilities.
12. Contractor shall strip existing topsoil from area of proposed building pad, drives and parking lots and swales. Topsoil shall be stockpiled on site. Coordinate location with Architect. Upon grading site, topsoil shall be used to backfill cdg, cover swale slopes, elevate and grade lawn areas and dress up final landscaped areas. Topsoil shall be placed on all areas prior to grassing. Rake to remove all unsuitable material from topsoil. See specifications for additional information. All unsuitable undercut material shall be used to build up lawn areas shown to be built up prior to spreading of topsoil. At areas between fire lane and drives and buildings shall be built up to elevations shown with on-site or off-site materials. All excess unsuitable material shall be hauled off site and properly disposed of per NCDEQ Regulations. Contractor shall bring in any additional fill needed to build up parking, drives and lawn areas to the elevations shown.
13. All storm drainage piping shall be reinforced concrete pipe, except as noted. Corrugated plastic pipe (CPP) shall be double walled - smooth interior type N-12 Prolink Ultra Pipe by Advanced Drainage Systems, Inc. with water tight gaskets.
14. The General Contractor shall be responsible for permanent seeding of all lawn areas within grading limits and any other peripheral areas disturbed by his work during construction in accordance with specifications requirements.
15. Contractor is responsible for maintaining all erosion control measures and shall amend measures as required to prevent accelerated erosion from taking place on this site. Contractor shall not remove rock check dams, sediment traps, basins and silt fence until all areas are stabilized and approval is given by the NCDEQ.
16. All lawn areas outside of building pad and parking lots shall be shaped for positive drainage to swales indicated on plan, to assure no standing water.
17. See other plans and project specifications for additional information.

Note:
Contractor shall insure that he and all his workers (contractors, subcontractors and other site personnel) do not damage construction stakes or other measures used in laying out the project whether by the Engineer or another entity including those under the employ of the contractor. Contractor shall cause his workers to observe and verify to the fullest extent practicable that stakes, other measures and grades are, or appear to be, accurate and correct, and immediately, but prior to any associated work, notify the staking entity of any potential conflict, error or question regarding the work. The Engineer shall not be responsible if all of the above measures are not strictly adhered to. The Engineer shall not be responsible where due to damage, his staking can not be verified. For critical or costly components of the work, where the contractor believes that staking may not be preserved, the contractor shall request the staking entity to place staking in an area where its preservation can be insured.

Field Book: Misc. #180, Pg. 1-17; Stacy #2, Pg. 27-30
Dick Names: Acad 2821
Filenames: NFES-Site.dwg KHW
Job No.: C180510-6782

Owner / Developer:
Onslow County Board of Education
200 Broadhurst Road
Jacksonville, North Carolina 28540
(910) 455-2211

GRAPHIC SCALE: 1"=50'
0 50 100 150
FEET

Site Benchmark "C"
Nail Set in 18" Pine Tree
Elev. 33.02; Datum NAVD '88

Site Benchmark "A"
Power Pole
Elev. 33.21
Datum NAVD '88

Note:
For Roof Drain Pipe. See Sheet C104

Note:
For Turn Lane Design See Sheet C109

Building
FFE 38.0

Sewage Pump Station
See Detail on Sheet C107

Stormwater Wetlands #1
See Detail on Sheet C110

Stormwater Wetlands #2
See Detail on Sheet C111

Stormwater Wetlands #3
See Detail on Sheet C112

Note:
Stormwater Wetlands Area shall be used as Sediment Basin #1 During Construction. Upon Completion of Project and Stabilization of all areas, Stormwater Wetlands Construction shall be Completed.

Note:
Stormwater Wetlands Area shall be used as Sediment Basin #3 During Construction. Upon Completion of Project and Stabilization of all areas, Stormwater Wetlands Construction shall be Completed.

Note:
Stormwater Wetlands Area shall be used as Sediment Basin #2 During Construction. Upon Completion of Project and Stabilization of all areas, Stormwater Wetlands Construction shall be Completed.

Trapezoidal Outlet Swale with 10' Bottom and 5:1 Side Slopes. See Detail.

Trapezoidal Outlet Swale with 5' Bottom and 5:1 Side Slopes. See Detail.

Install Silt Fence At Clearing Limits. 5' from Wetlands.

Install Silt Fence At Clearing Limits 10' from Property Line.

Slope away from Slab at 10:1 Slope (Typ.)

Slope away from Drive at 10:1 Slope (Typ.)

Slope Away from Drive at 10:1 Slope (Typ.)

Slope from Drive at 10:1 Slope or Less Steep

Install Rolled Curb This Side of Drive

Fill Area and Grade Uniformly to Yl

Fill and Grade Area to Drain

Fill Area to Drain

Fill Existing Ditch

Regrade Existing Ditch with 3:1 Side Slopes to Property Line

This Drive Shall Be Crowned

Fire Lane Gate

End RC

Start RC

Proposed School Sign

Temporary Stabilized Construction Entrance

Wetlands Line

Folkstone Road NCSR 1532 - 60' R/W

Ex. drive grade

Ex. ditch grade

Ex. 24" CMP

Ex. 18" RCP

Ex. 6" Sanitary Sewer

Ex. 8" Sanitary Sewer

Ex. 6" Water Line

Ex. Gas Line

Ex. Overhead Power Line

Ex. Underground Power Line

Ex. Underground Telephone Line

Ex. Underground Cable Line

Ex. Fiber Optic Line

Ex. Underground Electric Line

Ex. Telephone Pedestal

Ex. Electric Pedestal

Ex. Cable Pedestal

Ex. Fiber Optic Pedestal

Ex. Water Valve

Ex. Water Meter

Ex. Gas Valve

Ex. Gas Meter

Ex. Sanitary Sewer Manhole

Ex. Storm Drainage Manhole

Ex. Light Pole

Ex. Guy Wire

Ex. Sign

Ex. Mailbox

Ex. Tree

Ex. Shrub

Ex. Hedge

Ex. Fence

Ex. Wood Fence

Ex. Chain Link Fence

Ex. Wire Fence

Ex. Iron Pin Found

Ex. Concrete Monument Found

Ex. Control Corner

Ex. Property Line

Ex. Adjoining Property Line

Ex. Right-of-Way

Ex. Centerline

Ex. Building

Ex. Asphalt Drive

Ex. Concrete Drive

Ex. Gravel Drive

Ex. Dirt Drive

Ex. Concrete Walk

Ex. Asphalt Walk

Ex. Brick Walk

Ex. Gravel Walk

Ex. Dirt Walk

Ex. Concrete Curb & Gutter

Ex. Asphalt Curb & Gutter

Ex. Concrete Curb

Ex. Asphalt Curb

Ex. Concrete Pad

Ex. Asphalt Pad

Ex. Gravel Pad

Ex. Dirt Pad

Ex. Concrete Flume

Ex. Asphalt Flume

Ex. Concrete Ditch

Ex. Asphalt Ditch

Ex. Grass Ditch

Ex. Dirt Ditch

Ex. Concrete Swale

Ex. Asphalt Swale

Ex. Grass Swale

Ex. Dirt Swale

Ex. Concrete Berm

Ex. Asphalt Berm

Ex. Grass Berm

Ex. Dirt Berm

Ex. Concrete Island

Ex. Asphalt Island

Ex. Grass Island

Ex. Dirt Island

Ex. Concrete Median

Ex. Asphalt Median

Ex. Grass Median

Ex. Dirt Median

Ex. Concrete Sidewalk

Ex. Asphalt Sidewalk

Ex. Brick Sidewalk

Ex. Gravel Sidewalk

Ex. Dirt Sidewalk

Ex. Concrete Curb & Gutter

Ex. Asphalt Curb & Gutter

Ex. Concrete Curb

Ex. Asphalt Curb

Ex. Concrete Pad

Ex. Asphalt Pad

Ex. Gravel Pad

Ex. Dirt Pad

Ex. Concrete Flume

Ex. Asphalt Flume

Ex. Concrete Ditch

Ex. Asphalt Ditch

Ex. Grass Ditch

Ex. Dirt Ditch

Ex. Concrete Swale

Ex. Asphalt Swale

Ex. Grass Swale

Ex. Dirt Swale

Ex. Concrete Berm

Ex. Asphalt Berm

Ex. Grass Berm

Ex. Dirt Berm

Ex. Concrete Island

Ex. Asphalt Island

Ex. Grass Island

Ex. Dirt Island

Ex. Concrete Median

Ex. Asphalt Median

Ex. Grass Median

Ex. Dirt Median

Ex. Concrete Sidewalk

Ex. Asphalt Sidewalk

Ex. Brick Sidewalk

Ex. Gravel Sidewalk

Ex. Dirt Sidewalk

- 08/08/19 KHW - Revise pipe chart and turnlane
- 07/08/19 KHW - Add curb labels, add pipe Q, remove pipe T and swales, rev. pipe chart and legend
- 05/28/19 KHW - Make stormwater wetlands #2 & 3 bigger
- 05/13/19 TMS - Revise swale chart, label swale(1)-(L)
- 05/06/19 KHW - Revise swales near SPS

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NORTH CAROLINA PROFESSIONAL SEAL 14575 ENGINEER TIMOTHY M. STEWART

ISSUE DATE: 04.30.2019
DRAWN BY: KHW
CHECKED BY: TMS
PROJECT: 1821

STUMP SOUND ELEMENTARY SCHOOL
ONSLOW COUNTY SCHOOLS
STUMP SOUND, NORTH CAROLINA
GRADING PLAN

REVISION SCHEDULE

△	DATE	REFERENCE
1	05/06/19	SEE REVISION NOTES
2	05/13/19	
3	05/28/19	
4	07/08/19	
5	08/08/19	

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C102

Z:\AutoCAD Civil 3D\2018 Civil 3D\New Folkstone Elementary School\DWG\NFES-Site.dwg 8/6/2019 5:47:50 PM KHW

GPS Grid North
NAD '83 (2011)

BMP #3

BMP #2

BMP #1

Concrete Playground

Concrete Playground

Building
FFE 38.0

House

Canopy

See Plumbing Plan For Grease Trap Detail and Water and Sewer Services from Building.

Sewage Pump Station, See Sheet C107 for Details.

Proposed Turn Lane. See Sheet C-109 for Design.

Proposed School Sign

Proposed Road
Phase III

For Continuation of Off-Site SFM See Sheet C105

Site Benchmark "A"
Power Pole
Elev. 33.21
Datum NAVD '88

Folkstone Road
NCSR 1532 - 60' R/W

Davis Fields, Section I
M.B. 40, Pg. 134

Davis Fields, Section I
M.B. 40, Pg. 134

Hoosier Daddy, LLC
D.B. 4249, Pg. 537
M.B. 46, Pg. 148

Justin and Stephen Barefoot
D.B. 4826, Pg. 237

Ellis Cove
M.B. 25, Pg. 157

Ellis Cove
M.B. 25, Pg. 157

Ellis Cove
M.B. 25, Pg. 157

20' Utility Easement Centered on Water Main.

8"x6" Tee
8" G.V.
6" G.V.
6" F.H.
4 - Bollards

8" PVC Water
4' Off Boc

2-22 ½° Bend

45° Bend
22 ½° Bend

6"x6" Tee
8" G.V.
6" G.V.
6" F.H.
4 - Bollards

4" 90° Bend
3"x4" Reducer

3" Water Service

4" PVC Water

2-45° Bend

4" BPZ

3" Water Meter

MH #1

4" PVC Water

6" PVC Fire Line

6" RPDA Backflow Preventer w/ FDC See Detail.

6" Tee
6'-6" G.V.
6" F.H.

90° Bend

8"x4" Tee
8" G.V.
4" G.V.

8"x6" Tee
6" G.V.

Variable Width Utility Easement

8" PVC Water
4' Off Boc

20' Utility Easement Centered on Water Main.

MH #2

MH #3

MH #4

MH #5

MH #6

44 L.F. 4" SS

81 L.F. 4" SS

31 L.F. 4" SS

132 L.F. 8" SS

200 L.F. 8" SS

156 L.F. 8" SS

203 L.F. 8" SS

53 L.F 4" SS

55 L.F. 8" SS

90 L.F. 8" SS

C.O.

8"x6" Tee
8" G.V.
6" G.V.
6" F.H.
4 Bollards

8"x6" Tee
6" G.V.
6" F.H.
4 Bollards

8" Tee
12-8" G.V.

10"

Variable Width Utility Easement

16" PVC SFM
16' off BOC

8" PVC Water
4' Off BOC

2-45° Bends

Install Air Release MH At High Point

6" PVC SFM
4' off BOC

Bore Pit
30'Lx10'Wx6'D

105 L.F. 12" Steel Casing Road Bore

Receiving Pit
30'Lx10'Wx6'D

2-8" - 45° Bend

8" PVC Water
4' Off Boc

8"x6" Tee
8" G.V.
6" G.V.
6" F.H.

6"x8" Tapping Sleeve w/ G.V.

ex. 8" ONWASA water
4' off EOP

ex. 4" ONWASA pvc water

6" PVC SFM

179

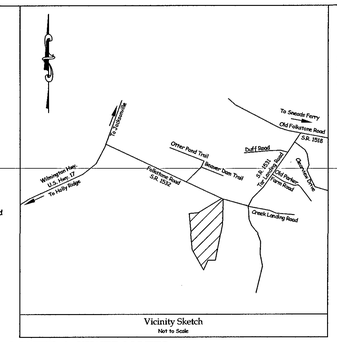
179

177

177

Legend:

BOC - Back of Curb
C.O. - Cleanout
Comp - Computed Point
CMF - Concrete Monument Found
D.B. - Deed Book
EOP - Edge of Pavement
ex. - Existing
egw - Existing Guy Wire
epp - Existing Power Pole
FFE - Finished Floor Elevation
FDC - Fire Department Connection
F.H. - Fire Hydrant
G.V. - Gate Valve
IPF - Iron Pipe Found
L.F. - Linear Feet
MH - Manhole
M.B. - Map Book
NCSR - North Carolina Secondary Road
Pg. - Page
PVC - Polyvinyle Chloride
RPZ - Reduced Pressure Zone
R/W - Right-of-way
SS - Sanitary Sewer
39 - Adjoiner Lot Number
- Flow Arrow
- Easement Line
ohpl - Overhead Power Line
- Property Line
R/W - Right-of-way
- Sewage Force Main
- Waterline



Vicinity Sketch
Not to Scale

WATER & SEWER NOTES:

1. Potable water supply to be by ONWASA, and wastewater treatment to be by Pluris.
2. Contractor shall verify location of existing water & sewer mains & report any deviations to Engineer prior to construction.
3. As of October 1, 2014, anyone digging with mechanized equipment in highway right-of-way, private utility easements, or public spaces will be required by North Carolina law to give notice of the proposed excavation to all existing area utilities at least three to twelve business days before starting to dig. The utility owner is to locate its facilities in the area of the proposed excavation. Utility members of North Carolina 811 can be contacted at 1-800-632-4949.
4. Contractor is responsible for contacting any utility company that is not a member of N.C. 811.
5. Contractor shall verify location of all underground utilities prior to commencement of work.
6. Contractor is responsible for any damages to any existing utilities.
7. All proposed sewer mains shall be SDR PVC 35, PVC C900 or Ductile Iron as shown on plans. Services to be 4-inch Sch. 40 PVC or Ductile Iron. Place 3" to 6" minimum #57 stone bedding under all gravity mains. Place #57 stone haunching to 1" above (min.) above top of pvc pipe and to spring line (min.) for ductile iron. Place 12" compacted select fill above stone to 12" minimum above pipe, then suitable fill compacted in 6" lifts above that.
8. All water mains and force mains 6" through 12" shall be AWWA C-900, Class 150. 2" water mains shall be ASTM D-2241, PVC 1120, SDR 21, 200 PSI pressure rating.
9. Fire hydrants shall be Mueller Centurion Model A421 or American Flow Control Mark 73.
10. Water and force mains shall be buried with a minimum of 36 inches cover, unless otherwise noted.
11. Water mains & sewage mains shall have proper separations. At water & sewer crossings , the water main shall have 18 inches separation above the sewer main or they both shall be constructed of ferrous material for a minimum of 10 feet each side of the crossing. See specifications for further details.
12. Contractor to lay water and force mains at extra depth to avoid conflicts with storm drainage and other facilities.
13. Contractor shall notify The Architect, Certifying Engineer, ONWASA (water) and Pluris (sewer) at least 48 hours prior to commencing any work, inspections, sampling, & pressure tests.
14. Chlorination & pressure tests are required in the presence of The Certifying Engineer and ONWASA (water) and Pluris (sewer).
15. Contractor shall furnish negative bacterial analysis results & 24 hour chlorine residual results to The Certifying Engineer and ONWASA.
16. Contractor shall maintain comprehensive (depth & horizontal locations) field "As Builts" for all installations & submit them to the Certifying Engineer & ONWASA.
17. No construction of either water or sewer mains is to begin prior to receipt of permits to construct from NCDENR in accordance with 15A NCAC18C.03 '05 (a) and 15A NCAC02H.02 '04. 15A NCAC18C.03 '05 (a) and 15A NCAC02H.02 '04.
18. Plumbing contractor shall install all potable water service lines inside building to 5' outside building. Site contractor shall install a temporary plug and block, to aid in testing at the point of tie-in to the building plumbing and tie to building plumbing after testing mains.
19. ONWASA will provide water meter only. Contractor shall provide and install all piping, valves & bypass within the water meter vault and provide and install water meter vault.
20. Plumbing contractor shall install sewer services in buildings and stub-out and plug 5' outside of buildings. Site contractor shall install services from sewer main and tie to stubbed out building service at a minimum of 1.0% grade. Site contractor shall install a cleanout at the point of tie-in to the plumbing. Site contractor will install all manholes and 8-inch mains.
21. Locations of the water and sewer lines shown coming from the building are approximate only. The site contractor shall meet with all other contractors and prepare coordination drawings showing the actual proposed locations and elevations of the water and sewer services, roof drains and all other utilities coming out of the buildings and on-site, and determine how site contractor will tie to them to insure there are no conflicts or problems during construction.
22. Anything disturbed within NCDOT Right-of-way shall be replaced to its original or better condition to satisfaction of Owner, Engineer, Department of Transportation and Pluris.
23. Contractor has the option of pushing / boring uncased ductile iron main under driveways, or open cutting driveways, removing and replacing existing driveways and pipes to original condition.
24. Contractor shall keep all work within D-O-T right-of-way and not disturb any property outside of right-of-way without property owner's permission.
25. Contractor shall coordinate with local utility companies to shore or support existing power / phone poles and all appurtenances. This work is to be included in the bid price.
26. Contractor shall install traffic control devices (lighted barricades, cones, signs, and flagman as required) along all roadways affected by construction per NC DOT and Pluris standards.
27. For other detailed construction notes, see plan & profiles, other plan sheets and specifications.
28. All water system installation materials & practices shall meet ONWASA specifications.
29. All sewer system installation materials & practices shall meet Pluris specifications.

Note:

Contractor shall insure that he and all his workers (contractors, subcontractors and other site personnel) do not damage construction stakes or other measures used in laying out the project whether by the Engineer or another entity including those under the employ of the contractor. Contractor shall cause his workers to observe and verify to the fullest extent practicable that stakes, other measures and grades are, or appear to be, accurate and correct, and immediately, but prior to any associated work, notify the staking entity of any potential conflict, error or question regarding the work. The Engineer shall not be responsible if all of the above measures are not strictly adhered to. The Engineer shall not be responsible where due to damage, his staking can not be verified. For critical or costly components of the work, where the contractor believes that staking may not be preserved, the contractor shall request the staking entity to place staking in an area where its preservation can be insured.

Project Design Summary - For ONWASA Purposes Only:

8" Water Distribution Main	3123 L.F.
6" Water Distribution Main	277 L.F.
4" Water Distribution Main	292 L.F.
Fire Hydrants	6
B.O. Assemblies	0

Owner / Developer:
Onslow County Board of Education
200 Broadhurst Road
Jacksonville, North Carolina 28540
(910) 455-2211

Field Book: Misc. #180, Pg. 1-17; Stacy #2, Pg. 27-30
Disk Name: Acad 2821
Filename: NFES-Site.dwg KHW
Job No.: C180510-6782

GRAPHIC SCALE: 1"=50'
0 50 100 150
FEET

08-08-19 KHW - Add fh, bore pit, receiving pit, and site benchmark info., move fh's behind school, revise legend and project summary
07-08-19 KHW - Add Waterline Easement; rev. legend and L.F. of SFM casing

CONTRACTOR TO VERIFY ALL DIMENSIONS

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08-08-19

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PH: (843) 872-5545 FAX: (843) 872-5574

ISSUE DATE: 04.30.2019
DRAWN BY: KHW
CHECKED BY: TMS
PROJECT: 1821

STUMP SOUND ELEMENTARY SCHOOL
ONSLOW COUNTY SCHOOLS
STUMP SOUND, NORTH CAROLINA
WATER AND SEWER PLAN

REVISION SCHEDULE

	DATE	REFERENCE
2	07-08-19	See Revision Notes
1	08-08-19	

C103

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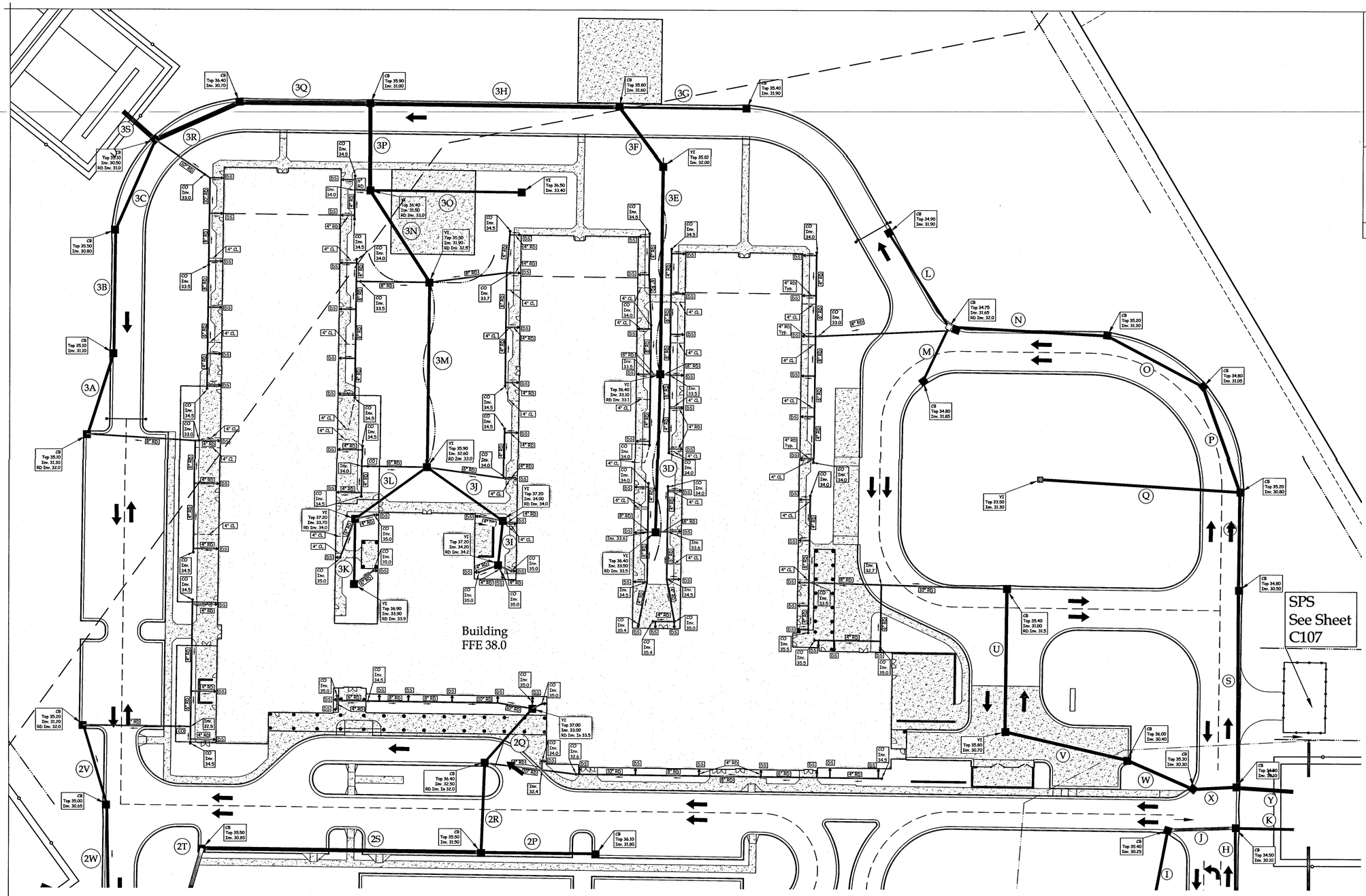
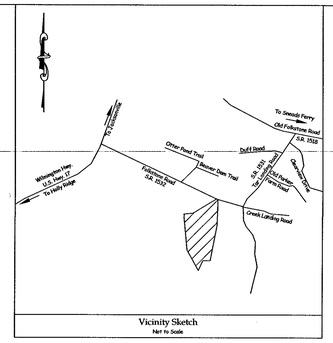




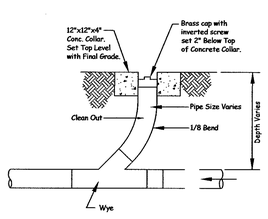
Vicinity Sketch
Not to Scale

Roof Drain and Condensate Piping Notes:

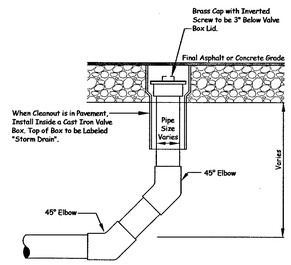
1. Coordinate locations of all roof and canopy drainage piping with the Architectural roof plan, and canopy plan and details associated therewith.
2. All roof drainage piping shall be SCH 40 PVC or approved equal, installed in accordance with manufacturer's recommendations unless otherwise specified as ductile iron (D.I.) on the plan.
3. Ductile iron roof drain pipe shall be used in all areas where cover over the roof drain pipe is less than 2 foot.
4. Minimum cover over SCH 40 pipes shall be 2 foot.
5. All elevations of roof drains shown boxed in, is for the invert elevation of the pipe at that location.
6. Locations of Downspouts are approximate, refer to the roof plans for actual locations and additional information. Site contractor shall meet with all other contractors and prepare coordination drawings showing the actual locations and elevations of the roof drain pipes and all water and sewer and other utility services and mains on-site and determine how the contractor will tie to them to insure there are no conflicts or problems during construction.
7. All connections from downspouts to roof drain pipe shall be constructed in accordance with Architectural detail.
8. Contractor shall install SCH 40 PVC tees, bends and fittings as needed for tieing the downspouts to the roof drain piping and increasing roof drain size.
9. All roof drain piping shall be installed at 1.0% minimum grade, unless otherwise shown. Use invert elevations shown on plan.
10. 1½" Condensate Lines (CL) shall be stubbed out of building by Building Contractor to 5' from building. Site Contractor shall increase CL lines to 4". then install 4" SCH. 40 PVC with 1.0% Slope as shown on plan and tie to Roof Drain Pipe. For exact location of Condensate Lines, See Plumbing Plans.
11. For additional information, see specifications and rest of plans.

Legend

- CB w/TRF - Catch Basin with Temporary Rock Filter
- ℄ - Centerline
- CO - Cleanout
- CL - Condensate Lines
- DS - Downspout
- ex. - Existing
- FFE - Finish Floor Elevation
- Inv. - Invert
- RD - Roof Drain
- YI - Yard Inlet
- Handicap Space
- Flow Arrow
- Ditch or Swale
- Existing Ditch



Cleanout Detail In Ground
Not to Scale



Cleanout Detail In Asphalt or Concrete
Not to Scale

Note:
Contractor shall insure that he and all his workers (contractors, subcontractors and other site personnel) do not damage construction stakes or other measures used in laying out the project whether by the Engineer or another entity including those under the employ of the contractor. Contractor shall cause his workers to observe and verify to the fullest extent practicable that stakes, other measures and grades are, or appear to be, accurate and correct, and immediately, but prior to any associated work, notify the staking entity of any potential conflict, error or question regarding the work. The Engineer shall not be responsible if all of the above measures are not strictly adhered to. The Engineer shall not be responsible where due to damage, his staking can not be verified. For critical or costly components of the work, where the contractor believes that staking may not be preserved, the contractor shall request the staking entity to place staking in an area where its preservation can be insured.

Owner / Developer:
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(910) 455-2211

Field Book: Misc. #180, Pg. 1-17; Stacy #2, Pg. 27-30
Disk Name: Acad 2821
Filename: NFES-Site.dwg KHW
Job No.: C180510-6782

GRAPHIC SCALE: 1"=30'
0 10 20 30 60 90
FEET

⚠ 07-08-19 KHW - Add YI, rev. pipe Q and I, remove pipe T and swales

CONTRACTOR TO VERIFY ALL DIMENSIONS

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7-08-19

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ISSUE DATE: 04.30.2019
DRAWN BY: KHW
CHECKED BY: TMS
PROJECT: 1821

STUMP SOUND ELEMENTARY SCHOOL
ONSLOW COUNTY SCHOOLS
STUMP SOUND, NORTH CAROLINA
ROOF DRAIN PLAN

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REVISION SCHEDULE

	DATE	REFERENCE
⚠	07-08-19	See Revision Notes

C104

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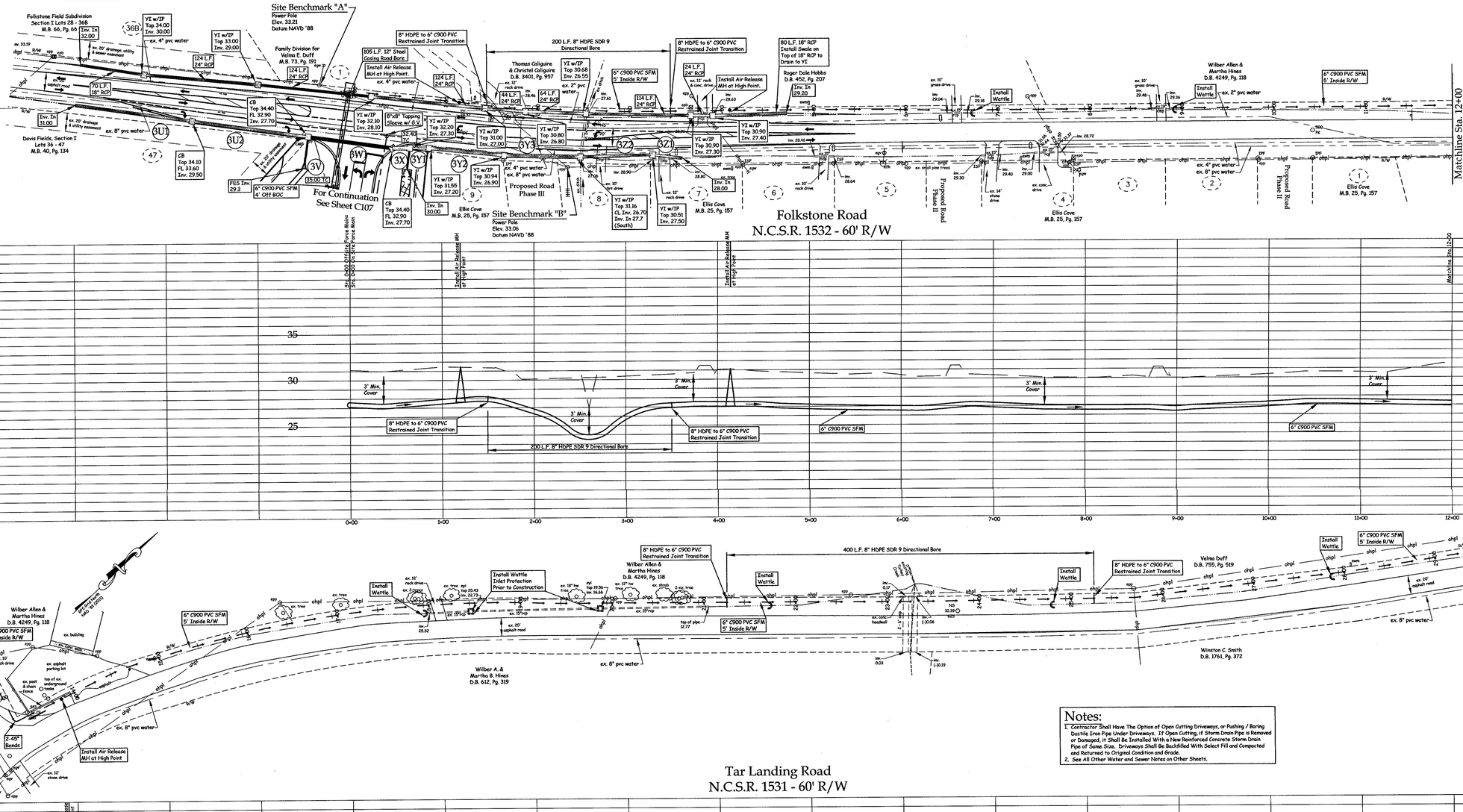

Notes:

1. Contractor Shall Have The Option of Open Cutting Driveways, or Pushing / Boring Ductile Iron Pipe Under Driveways. If Open Cutting, if Storm Drain Pipe is Removed or Damaged, it Shall Be Installed With a New Reinforced Concrete Storm Drain Pipe of Same Size. Driveways Shall Be Backfilled With Select Fill and Compacted and Returned to Original Condition and Grade.
2. See All Other Water and Sewer Notes on Other Sheets.

08-08-19 KHW - Chg. stream crossing to a 10' min. depth; rev. stm and turnlane
07-08-19 KHW - Rev. matchline on top view

Field Book: Misc. #180, Pg. 1-17; Stacy #2, Pg. 27-30
Disk Name: Acad 2821
Filename: NFES-Site.dwg KHW
Job No.: C180510-0762

GRAPHIC SCALE: 1"=50'
0 50 100 150
FEET

Owner / Developer:
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8-8-19

SEAL 14575
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PROFESSIONAL ENGINEER
TIMOTHY M. STEWART

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DRAWN BY: KHW
CHECKED BY: TMS
PROJECT: 1821

STUMP SOUND ELEMENTARY SCHOOL
ONSLOW COUNTY SCHOOLS
STUMP SOUND, NORTH CAROLINA

OFFSITE FORCE MAIN PLAN & PROFILE #1

REVISION SCHEDULE

	DATE	REFERENCE
1	07-08-19	See Revision Notes
2	08-08-19	

C105

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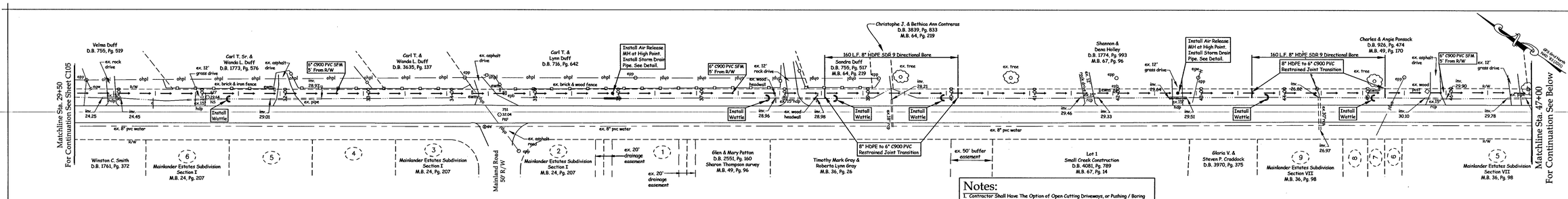
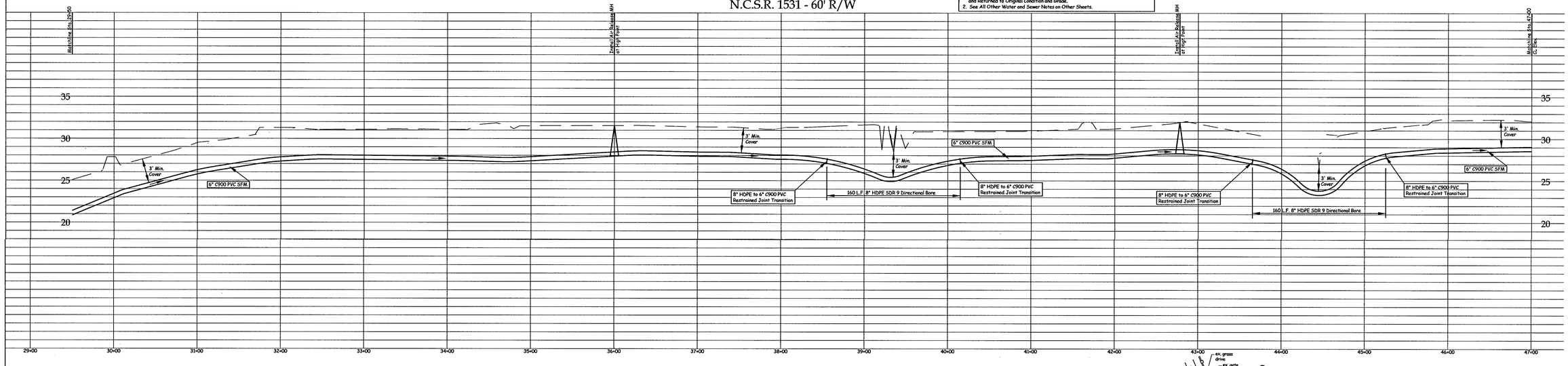
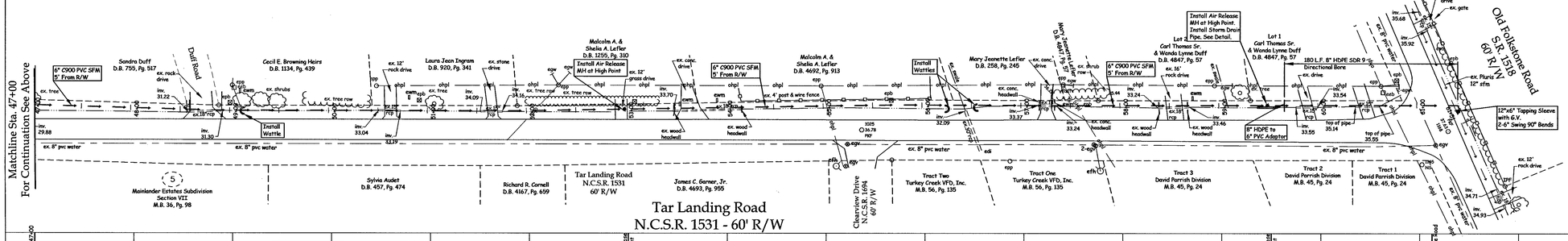
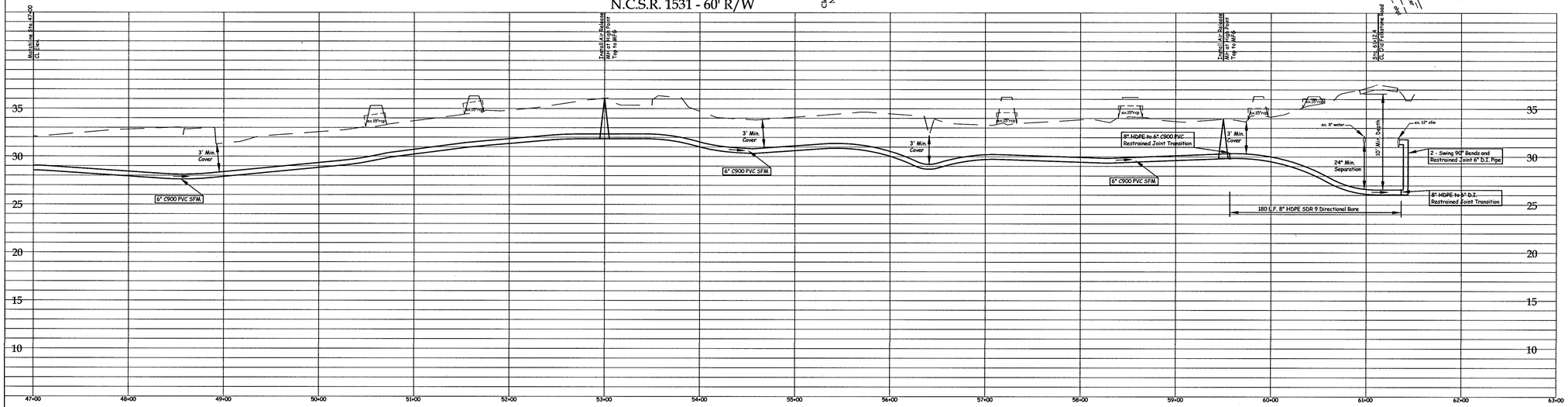


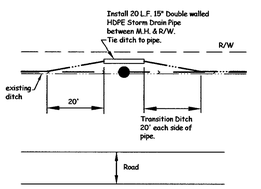
Tar Landing Road
N.C.S.R. 1531 - 60' R/W





Tar Landing Road
N.C.S.R. 1531 - 60' R/W





DITCH REALIGNMENT USING STORM DRAIN AT AIR RELEASE MANHOLE

No Scale

GRAPHIC SCALE: 1"=50'

0 50 100 150

FEET

Field Book: Misc. #180, Pg. 1-17; Stacy #2, Pg. 27-30
Dick Name: Acad 2821
Filename: NFES-Site.dwg KHW
Job No.: C180510-6782

Owner / Developer:
Onslow County Board of Education
200 Broadhurst Road
Jacksonville, North Carolina 28540
(910) 455-2211

⚠ 07-08-19 KHW - Rev. sfm tapping sleeve and swing 90° label

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N.C. Firm License Number: P-0068

08-19

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ISSUE DATE: 04.30.2019
DRAWN BY: KHW
CHECKED BY: TMS
PROJECT: 1821

STUMP SOUND ELEMENTARY SCHOOL
ONSLOW COUNTY SCHOOLS
STUMP SOUND, NORTH CAROLINA
OFFSITE FORCE MAIN PLAN & PROFILE #2

REVISION SCHEDULE

	DATE	REFERENCE
⚠	07-08-19	See Revision Notes

C106

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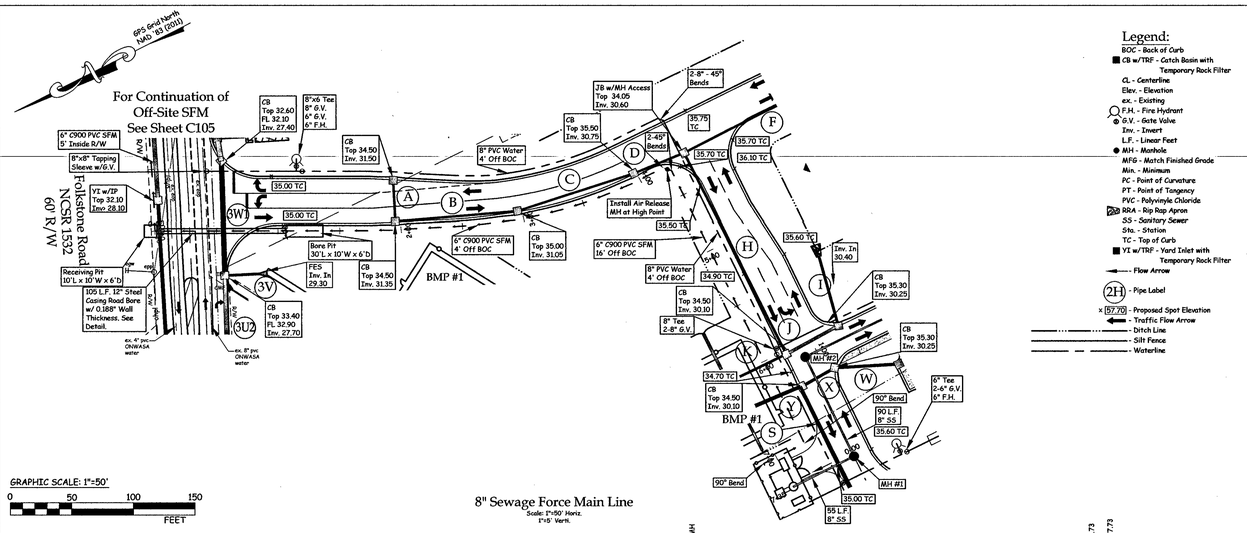
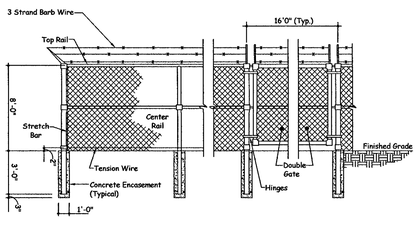
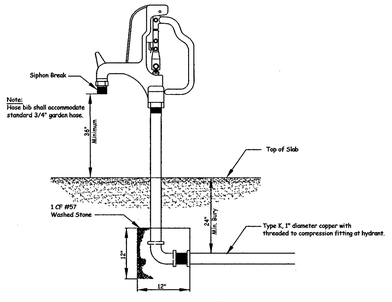


Bore Detail Notes:
1. Contractor to field verify location and depths of existing water mains and any other utilities prior to beginning bore.
2. Casing thickness shall be 0.188" per DOT requirements.
3. Casing to extend approximately to ditch line on the north side of Folkstone Road.
   Casing on the south side of Folkstone Road to extend to Sta. 1+10.
4. Bore and receive pit shall be a minimum of 1'H per 1'V depth away from the edge of pavement.

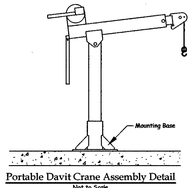


Notes:
1. Double Gate Shall Have a Locking Mechanism, Drop Rod, and Truss Rod.
2. All Fence Component Materials Shall be Thermally Fused and Bonded Vinyl Coated (Green or Black) with a 9 Gauge Core

Chainlink Fence & Gate
(ONWASA Dtl. SS_CLF Rev. May, 2016)
Not to Scale



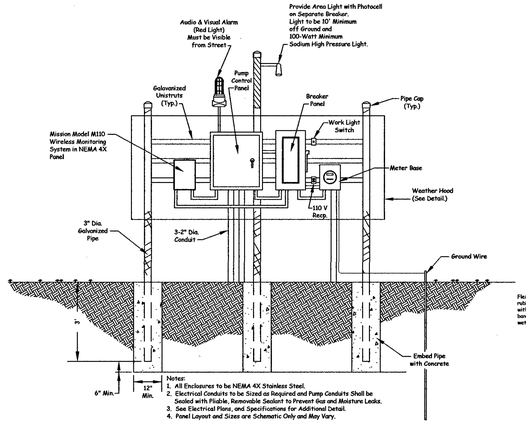
Yard Hydrant Non-Freeze Detail
ONWASA Detail WS_YH (Rev. May, 2016)
NOT TO SCALE



Portable Davit Crane Assembly Detail
Not to Scale

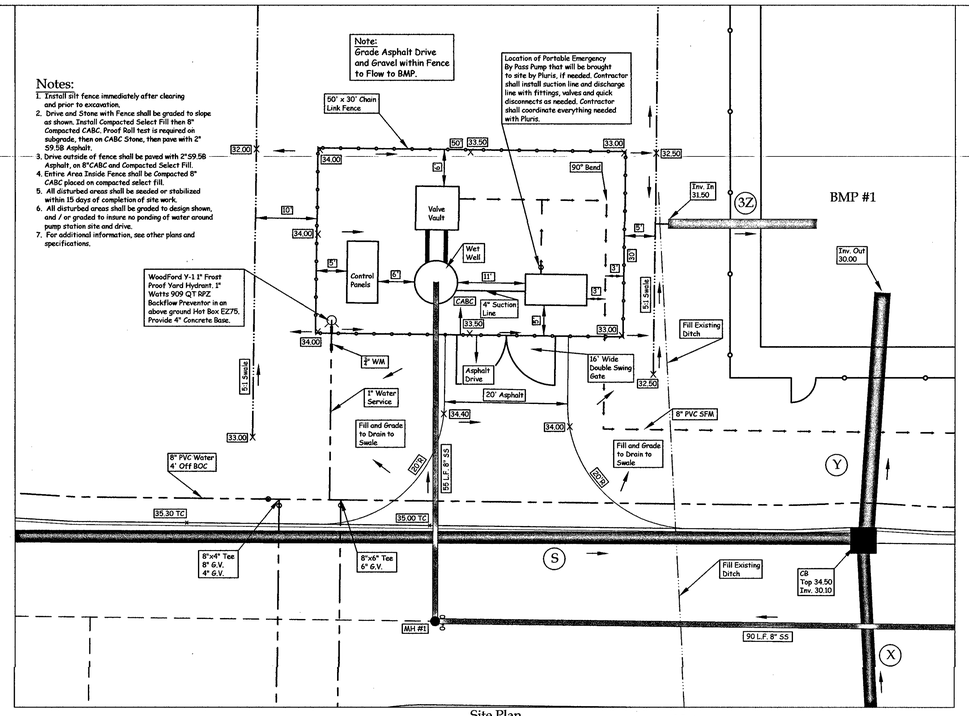
Note:
1. For Pump Removal, Provide and Install a Davit Crane Winch and hoist Assembly Having 500lb. Capacity and Shall Be a Stainless Steel Halliday Products Model or Approved Equal. Anchor base to concrete per Manufacturer's recommendation.

Note:
Contractor shall insure that he and all his workers (contractors, subcontractors and other site personnel) do not damage construction stakes or other measures used in laying out the project whether by the Engineer or another entity including those under the employ of the contractor. Contractor shall cause his workers to observe and verify to the fullest extent practicable that stakes, other measures and grades are, or appear to be, accurate and correct, and immediately, but prior to any associated work, notify the staking entity of any potential conflict, error or question regarding the work. The Engineer shall not be responsible if all of the above measures are not strictly adhered to. The Engineer shall not be responsible where due to damage, his staking can not be verified. For critical or costly components of the work, where the contractor believes that staking may not be preserved, the contractor shall request the staking entity to place staking in an area where its preservation can be insured.



Notes:
1. All Enclosures to be NEMA 4X Stainless Steel.
2. Electrical Conduits to be Sized as Required and Pump Conduits Shall be Sealed with Pliable, Removable Sealant to Prevent Gas and Moisture Leaks.
3. See Electrical Plans, and Specifications for Additional Detail.
4. Panel Layout and Sizes are Schematic Only and May Vary.

Typical Control Panel Detail
Not to Scale



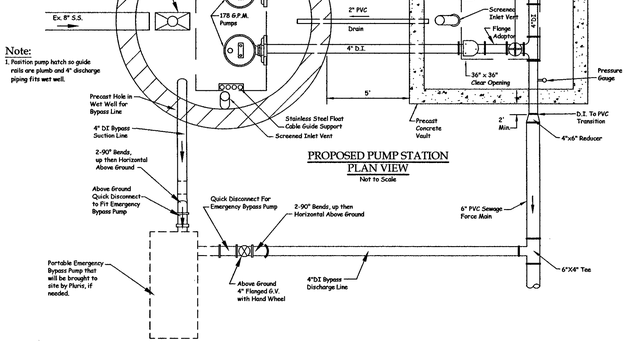
Notes:
1. Install silt fence immediately after clearing and prior to excavation.
2. Drive end Stone with Fence shall be graded to slope as shown. Install Compacted Select Fill then 8" Compacted CABC. Proof Roll test is required on subgrade, then on CABC Stone, then pave with 2" S9.5B Asphalt.
3. Drive outside of fence shall be paved with 2"S9.5B Asphalt, on 8"CABC and Compacted Select Fill.
4. Entire Area Inside Fence shall be Compacted 8" CABC placed on compacted select fill.
5. All disturbed areas shall be seeded or stabilized within 15 days of completion of site work.
6. All disturbed areas shall be graded to design shown, and / or graded to insure no ponding of water around pump station site and drive.
7. For additional information, see other plans and specifications.

WoodFord Y-1 1" Frostt Proof Yard Hydrant. 1" Watts 909 Q1 RPZ Backflow Preventor in an above ground Hot Box EZ75. Provide 4" Concrete Base.

Site Plan
Scale: 1"=10'

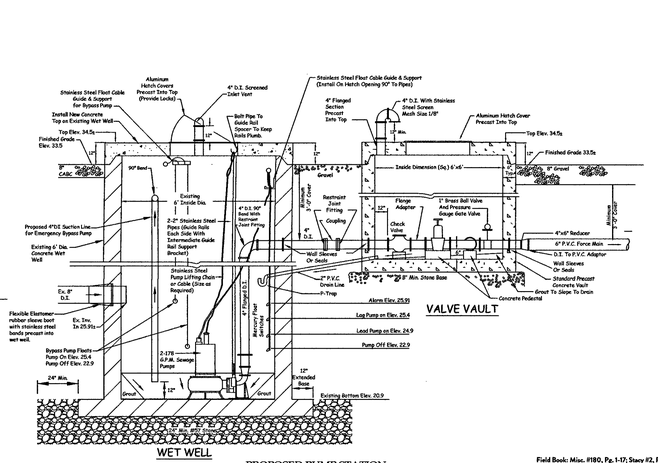
GRAPHIC SCALE: 1" = 10'
0 10 20 30
FEET

Notes:
1. All Sewer System Installation Materials and Practices Shall Meet Pluris LLC Specifications



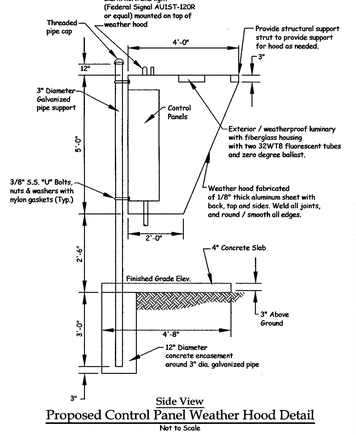
Note:
1. Position pump hatch so guide rails are plumb and 4" discharge piping fits wet well.

PROPOSED PUMP STATION
PLAN VIEW
Not to Scale



WET WELL

PROPOSED PUMP STATION
SECTION VIEW
Not to Scale



Side View
Proposed Control Panel Weather Hood Detail
Not to Scale

Field Book: Misc. #180, Pg. 1-17; Stacy #2, Pg. 27-30
Disk Name: Acad 2021
Filename: NFES-Sitedwg KHW
Job No.: C180510-6782

Owner / Developer:
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8-06-19
NORTH CAROLINA PROFESSIONAL SEAL 14575 ENGINEER TIMOTHY M. STEWART

CONTRACTOR TO VERIFY ALL DIMENSIONS

ISSUE DATE: 04.30.2019
DRAWN BY: KHW
CHECKED BY: TMS
PROJECT: 1821

STUMP SOUND ELEMENTARY SCHOOL
ONSLOW COUNTY SCHOOLS
STUMP SOUND, NORTH CAROLINA
SPS DETAIL SHEET & SFM PLAN & PROFILE

REVISION SCHEDULE

△	DATE	REFERENCE
3	09/06/19	SEE REVISION
2	07/08/19	NOTES
1	06/06/19	

△ 08/08/19 KHW - Add fh and R/W labels; revise turnlane
△ 07/08/19 KHW - Add Recieving and Bore Pit and SFM notes, rev. details
△ 05/06/19 KHW - Revise SPS site plan

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C107

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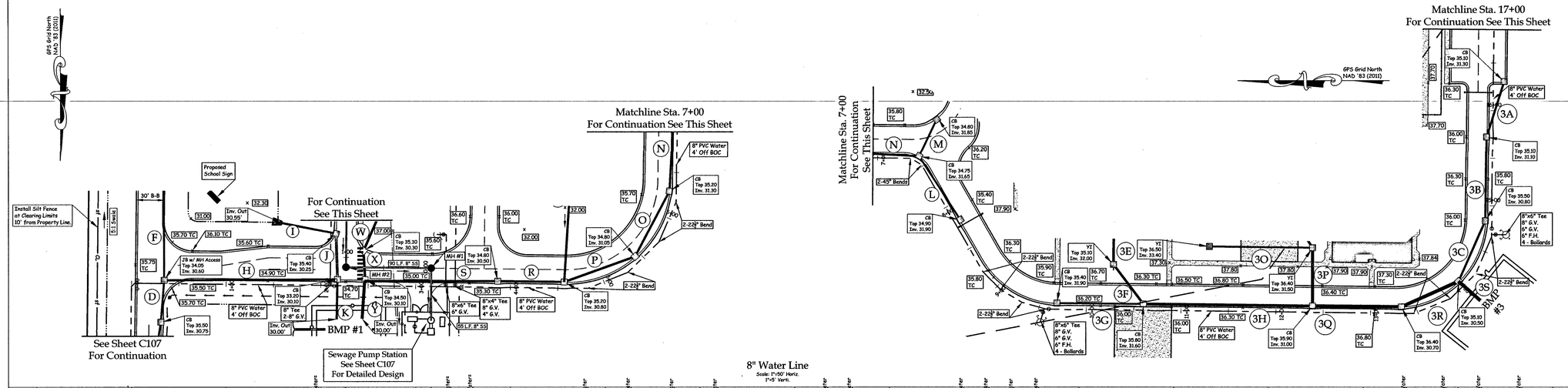

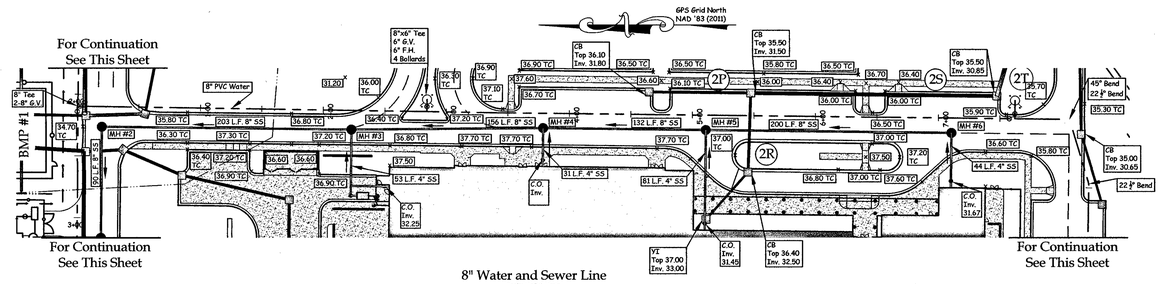

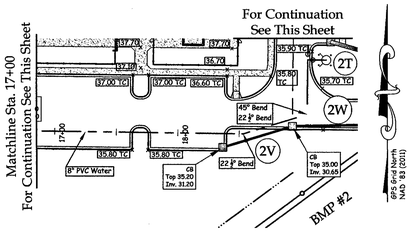

Legend:
BOC - Back of Curb
B-B - Back of Curb to Back of Curb
CB w/TRF - Catch Basin with Temporary Rock Filter
CL - Centerline
C.O. - Cleanout
D.I. - Ductile Iron
Elev. - Elevation
ex. - Existing
F.H. - Fire Hydrant
G.V. - Gate Valve
Inv. - Invert
JB - Junction Box
L.F. - Linear Feet
MH - Manhole
Min. - Minimum
PC - Point of Curvature
PT - Point of Tangency
PVC - Polyvinyle Chloride
RCP - Reinforced Concrete Pipe
RRA - Rip Rap Apron
SS - Sanitary Sewer
Sta. - Station
TC - Top of Curb
YI w/TRF - Yard Inlet with Temporary Rock Filter
Flow Arrow
Pipe Label
Proposed Spot Elevation
Traffic Flow Arrow
Ditch Line
Silt Fence
Waterline

CONTRACTOR TO VERIFY ALL DIMENSIONS

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ISSUE DATE: 04.30.2019
DRAWN BY: KHW
CHECKED BY: TMS
PROJECT: 1821

STUMP SOUND ELEMENTARY SCHOOL
ONSLOW COUNTY SCHOOLS
STUMP SOUND, NORTH CAROLINA
WATER AND SEWER PLAN & PROFILE

REVISION SCHEDULE

△	DATE	REFERENCE
△	07-08-19	See Revision Notes
△	08-08-19	

C108

△ 08-08-19 KHW - Move fh's behind school
△ 07-08-19 KHW - Rev. 45° bend to D.I. and legend

Field Book: Misc. #180, Pg. 1-17; Stacy #2, Pg. 27-30
Disk Name: Aced 2821
Filename: NFES-Site.dwg KHW
Job No.: C180510-0782

GRAPHIC SCALE: 1"=50'
0 50 100 150
FEET

Owner / Developer:
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ROAD & DRAINAGE NOTES:

1. The streets to be constructed for this project are subject to the Department of Transportation Certification Program and Quality Management System Maintenance Version Requirements. The Contractor, at his expense, shall provide test results on 1) Subgrade, 2) Base and 3) Pavement. The Contractor shall insure that all construction and testing is performed in accordance with the with the N.C. Department of Transportation "Standard Specifications for roads and Structures", latest edition, 2006 Hot Mix Asphalt Specifications and Manual, and "Quality Management System Maintenance Version", and shall report the testing and /or core locations, test method, results and D.O.T. allowable range or tolerance, as applicable. Subgrade shall be tested for density and shall be profiled by the testing Engineer or the Engineer or Surveyor who will issue the Final Certification. Base and pavement shall both be tested for density and thickness. If Parker & Associates is administering the construction they must also proofroll the stone. Testing for pavement shall be certified by either a professional Engineer or properly certified QMS technician and shall be in accordance with QMS criteria. Required thickness for this project is as shown on the plans. Note that thickness for widening or turn lanes is greater than that for internal streets.
2. Minimum Densities:
   Subgrade 100%
   Stone Base 100%
   S 9.5B 90%
   I 19.0C 92%
   B 25.0C 92%
3. Notify the Engineer or Surveyor, who will issue the overall Final Certification, of all phases of roadway Construction.
4. All metal used for any type of catch basin or inlet shall be produced in the USA.
5. A minimum sight distance of 10'X70' shall be maintained along the right-of-way of all internal intersections.
6. 20 foot radii at right-of-way intersections, 30 foot radii at edge of pavement intersections.
7. All culverts under streets shall be reinforced concrete per North Carolina Department of Transportation Specifications,unless otherwise specified and/or approved by the Engineer and/or Department of Transportation.
8. All roads shall be public and built to NCDOT Standards.
9. There shall be no encumbrances within the NCDOT Right-of-way.
10. All materials and practices shall meet North Carolina Department of Transportation Standards.
11. For other detailed construction notes, see plan and profiles.

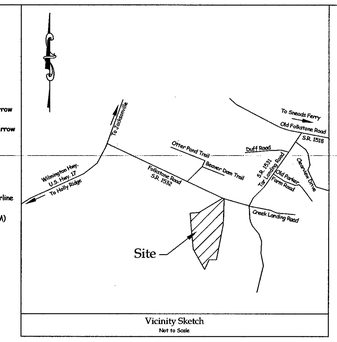
Turn Lane Notes

1. New pavement shall have a 1/4" per foot minimum slope in same direction as existing asphalt. If existing road is crowned, the slope shall continue away from the centerline. In no areas shall the new asphalt be installed without a slope. New turnlane to slope away from centerline of road.
2. Construction of turn lanes to consist of 5" of Superpave B25.0C asphalt base, 3" of Superpave I19.0C and 2" of Superpave S9.5B asphalt surface course.
3. Strip vegetation from existing shoulder and ditch and muck existing ditch, as needed, and fill with compacted select fill.
4. Subgrade shall be proof rolled and tested prior to installation of base course, then base course shall be proof rolled and tested prior to installation of asphalt. All testing shall be conducted by Soils Engineer. For additional testing requirements, see Roads and Drainage notes.
5. Edge of existing asphalt shall be saw cut straight then tacked prior to addition of pavement widening. Mill existing paved shoulder and white line 2" thick, then repave with surface course and restripe.
6. Contractor shall provide traffic control measures per D.O.T. requirements.
7. Contractor shall provide thermoplastic striping, arrows, markings and reflectors per D.O.T. requirements. Contractor shall pre-mark striping plan with chalk and get D.O.T. approval prior to final striping.
8. Contractor shall locate all existing underground utilities prior to beginning any construction.
9. Contractor is responsible for the coordination of the relocation of existing utilities with the utility company such as cable tv lines and boxes, phone cables and boxes, power poles and guy wires.
10. All work shall be performed in accordance with N.C.D.O.T. requirements. (See Road & Drainage Notes For Testing Requirements) Particular attention should be paid to exercising the appropriate traffic control and safety measures during the course of construction. See Driveway Permit for additional requirements.
11. The contractor is responsible for the relocation of any items such as mail boxes, signs, drive markings, etc. in order to accommodate the new pavement and roadside shoulder and ditch section.
12. The contractor shall make every effort to minimize disturbance and disruption of adjoining properties. Any disturbed areas, structures, etc. shall be restored to pre-construction conditions. A neat, dressed up project site will be required before final payment is made.
13. Any shrubs or trees within the right-of-way that are necessary to remove to properly construct turn lanes and roadside ditches, shall be removed and properly disposed of. Contractor shall not disturb any shrubs, trees, signs or other structures that are outside the road right-of-way.

Legend:

B-B - Back to Back
CMF - Concrete Monument Found
cmp - Corrugated Metal Pipe
D.B. - Deed Book
ex. - Existing
ecatv - Existing Cable Television
efh - Existing Fire Hydrant
egw - Existing Guy Wire
EOP - Edge of Pavement
epb - Existing Phone Box
epp - Existing Power Pole
ewm - Existing Watermeter
GV - Gate Valve
GW - Guy Wire
HDPE - High Density Polyethylene
IP - Inlet Protection
Inv. - Invert
IPF - Iron Pipe Found
ITSF - Iron Stake Found
LF. - Linear Feet
NS - Nail Set
Pg. - Page
PP - Power Pole
R - Radius
RCP - Reinforced Concrete Pipe
RRA - Rip Rap Apron
R/W - Right-of-way
Typ. - Typical
UFAAP - Ultra Flow Aluminum Arch Pipe
YI - Yard Inlet

x31.65 - Existing Spot Elevation
x33.3 - Proposed Spot Elevation
▲ - Reducer
- Sign
- Flow Arrow
- Existing Mailbox
- Existing Sign
- Existing Traffic Flow Arrow
- Proposed Traffic Flow Arrow
STOP - Stop Bar
STOP - Stop Sign
- Existing Ditch
ohpl - Existing Overhead Powerline
- Proposed Ditch
- Sewage Force Main (SFM)
- Waterline



Vicinity Sketch
Not to Scale

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90819
NORTH CAROLINA PROFESSIONAL SEAL 14575 ENGINEER TIMOTHY M. STEWART

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PH: (843) 872-5545 FAX: (843) 872-5574

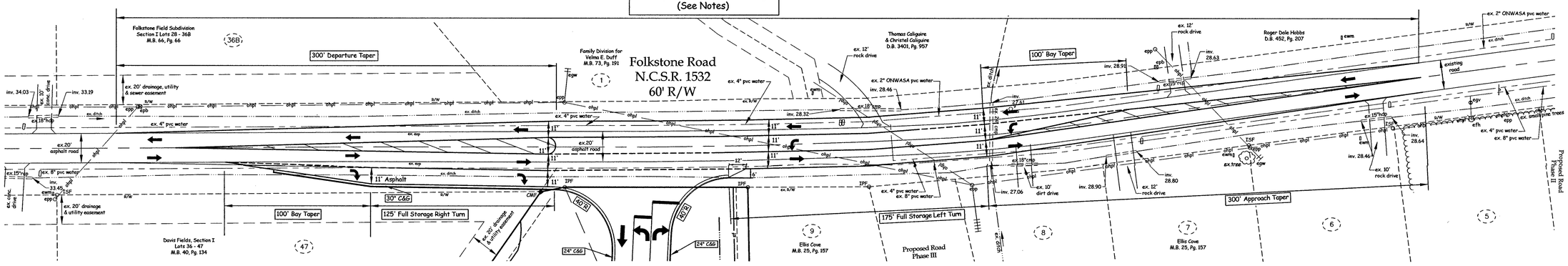
ISSUE DATE: 04.30.2019
DESIGNED BY: KHW
CHECKED BY: TMS
PROJECT: 1821

STUMP SOUND ELEMENTARY SCHOOL
ONSLOW COUNTY SCHOOLS
STUMP SOUND, NORTH CAROLINA
TURN LANE PLAN

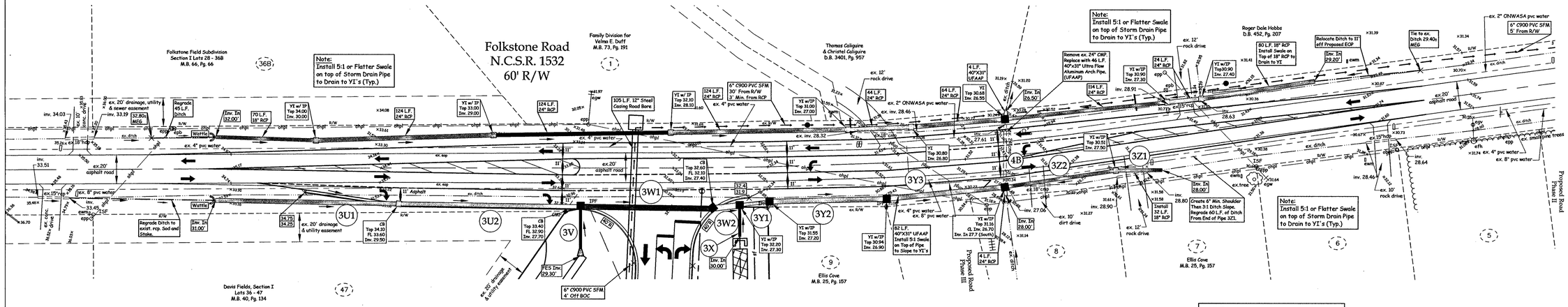
REVISION SCHEDULE

△	DATE	REFERENCE
1	08/08/19	SEE REVISION NOTE BELOW

Overlay All Lanes with 1½" S9.5B, Then Install All Required Pavement Markings (See Notes)



TURN LANE DIMENSIONAL VIEW


Folkstone Road
N.C.S.R. 1532
60' R/W
Folkstone Field Subdivision
Section I Lots 28 - 36B
M.B. 66, Pg. 66
Family Division for
Velma E. Duff
M.B. 73, Pg. 191
Thomas Caliguire
& Christel Caliguire
D.B. 3401, Pg. 957
Roger Dale Hobbs
D.B. 452, Pg. 207
Davis Fields, Section I
Lots 36 - 47
M.B. 40, Pg. 134
Ellis Cove
M.B. 25, Pg. 157
Proposed Road
Phase III
Note:
Install 5:1 or Flatter Swale on top of Storm Drain Pipe to Drain to YI's (Typ.)
Note:
Install 5:1 or Flatter Swale on top of Storm Drain Pipe to Drain to YI's (Typ.)
Note:
Install 5:1 or Flatter Swale on top of Storm Drain Pipe to Drain to YI's (Typ.)
Regrade Ditch to exist. rdp. Sod and Stake
Regrade 40 L.F. Ditch
Relocate Ditch to 11' eff Proposed EOP
Tie to ex. Ditch 29.40±
Remove ex. 24" CMP. Replace with 40 L.F. 40"x31" Ultra Flow Aluminum Arch Pipe. (UFAAP)
Create 6" Min. Shoulder Then 3:1 Ditch Slope. Regrade 60 L.F. of ditch From End of Pipe 3Z1.
Install 32 L.F. 18" RCP
82 L.F. 40"X31" UFAAP Install 5:1 Swale on Top of Pipe to Slope to YI's
6" C900 PVC SFM 4' Off BOC
6" C900 PVC SFM 5' From R/W
105 L.F. 12" Steel Casing Road Bore
3W1
3W2
3W3
3W4
3W5
3W6
3W7
3W8
3W9
3W10
3W11
3W12
3W13
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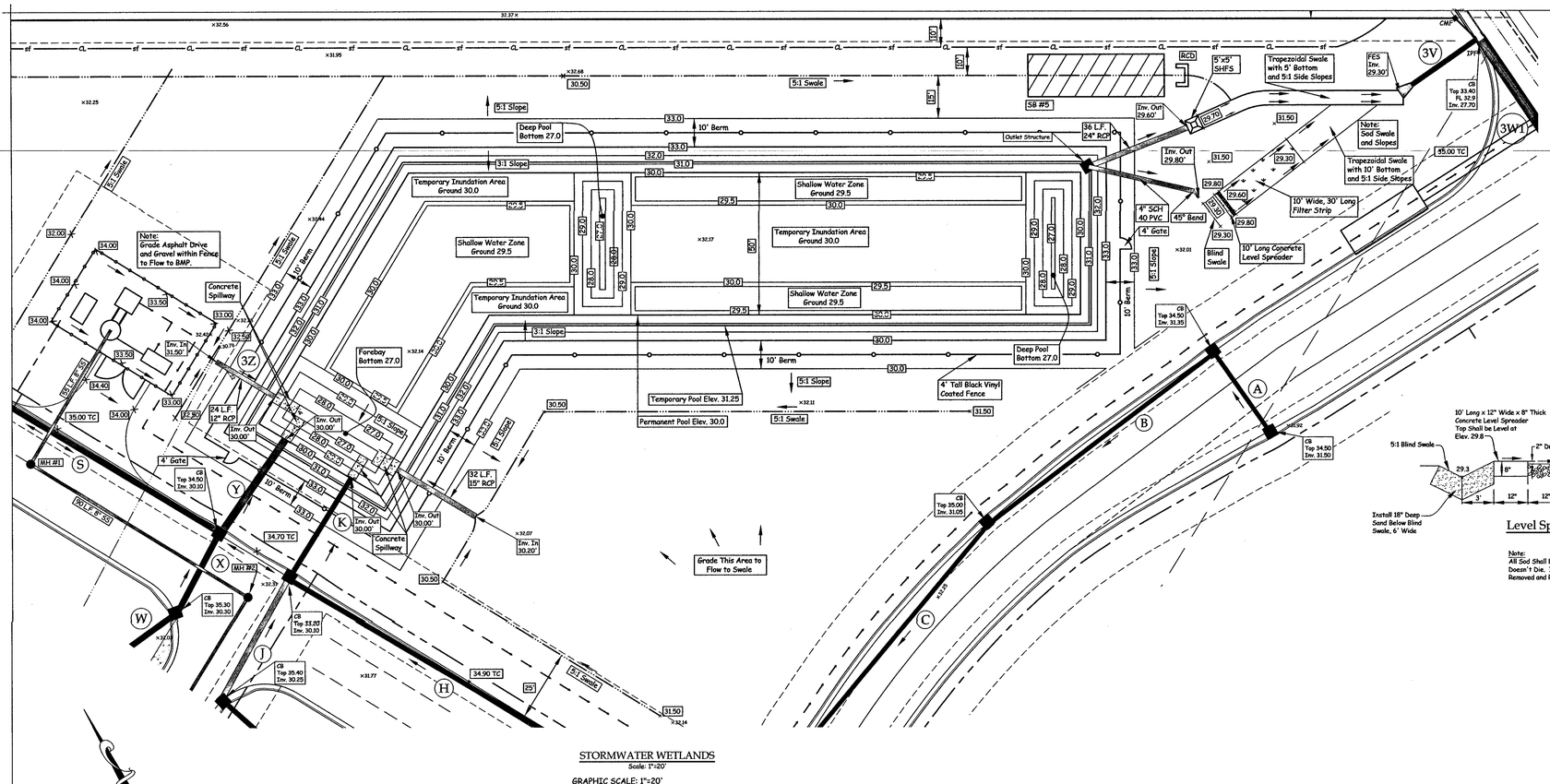
3W40



STORMWATER WETLANDS

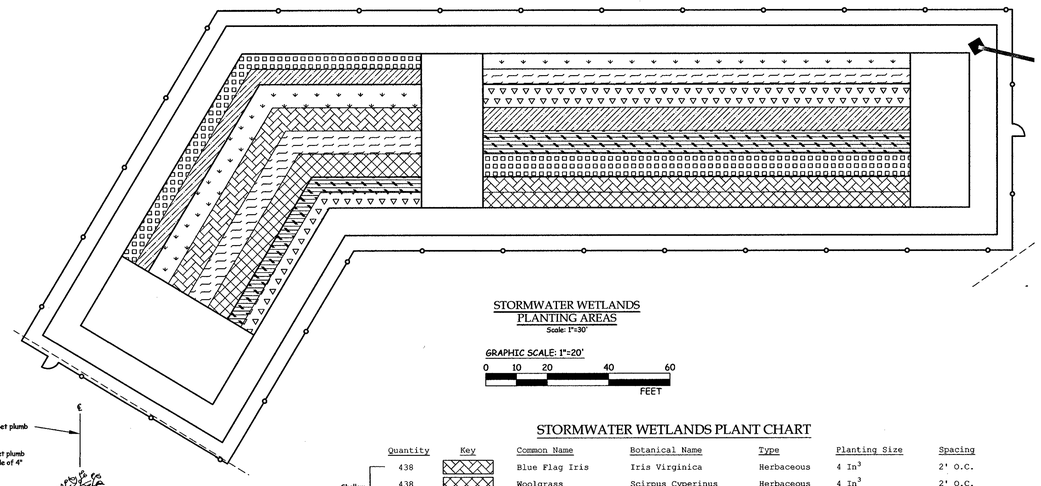
Scale: 1"=20'

GRAPHIC SCALE: 1"=20'

0 10 20 40 60

FEET

Notes:
1. During Construction of Road, Stormwater Wetland Area shall be Constructed and used as a Sediment Basin. Skimmer shall be installed.
2. Upon Completion of Road, and Stabilization of all Disturbed Areas, Stormwater Wetland shall be regraded to 12" below Final Grades shown, than 12" of Topsoil shall be added. Upon Inspection and Acceptance of Grades by Engineer, Wetland shall be planted and sodded as shown.
3. See other notes for more detail.



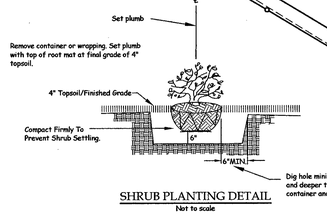
STORMWATER WETLANDS PLANTING AREAS

Scale: 1"=30'

GRAPHIC SCALE: 1"=20'

0 10 20 40 60

FEET



SHRUB PLANTING DETAIL

Not to scale

STORMWATER WETLANDS PLANT CHART

	Quantity	Key	Common Name	Botanical Name	Type	Planting Size	Spacing
Shallow Water Plants	438		Blue Flag Iris	Iris Virginica	Herbaceous	4 In^3	2' O.C.
	438		Woolgrass	Scirpus Cyperinus	Herbaceous	4 In^3	2' O.C.
	438		Pickerel Weed	Pontederia Cordata	Herbaceous	4 In^3	2' O.C.
	438		Soft Rush	Juncus Effusus	Herbaceous	4 In^3	2' O.C.
Temporary Inundation Area	69		Inkberry	Ilex Glabra	Shrub	1 Gallon	3' O.C.
	69		Titi	Cyrilla Racemiflora	Shrub	1 Gallon	3' O.C.
	428		Dwarf Joe Pye Weed	Eupatoriadelphus Dubius	Herbaceous	4 In^3	2' O.C.
	428		Cardinal Flower	Lobelia Cardinalis	Herbaceous	4 In^3	2' O.C.

Note:
1. Cat Tails are not allowed to be planted.
2. All Slopes and Berms Above Temporary Pool Elevation Shall be Sodded to 5' Past Slope Tie in at Existing Ground.

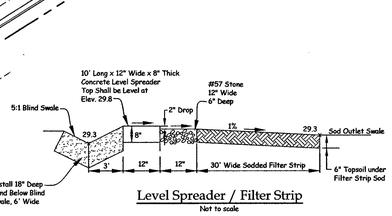
Legend:

CGG - Curb & Gutter
Elev. - Elevation
Inv. - Invert

- 297 - Adjoining Lot Number
- Concrete
- Flow Arrow
- 48.0 / 47.5 - Top of Curb/Walk Elevation / Flow Line Elevation
- Wetlands
- Waterline
- Wetlands Line

Notes:

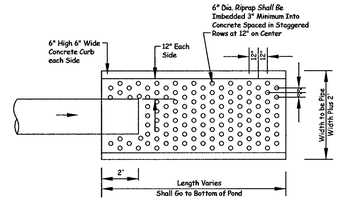
1. Plantings shall be installed in accordance with the details shown. The contractor may substitute locations of wetlands plants only within each zone, i.e. shallow water plants must be in the shallow water zone. Contractor shall submit to and obtain approval From Engineer for any deviation to planting schematic shown.
2. No fertilization is to be used after the initial planting. The landscape contractor is responsible for determining soil characteristics and needed fertilizer application.
3. Construction sequencing should be carefully planned to allow plantings to be installed and the wetlands brought online within 14 days after the completion of grading activities.
4. Should planting be delayed, a temporary wetland seed mix may be planted to stabilize all disturbed soils.
5. If the structure is brought online prior to planting, a portable pump should be used to pump water down 3 days prior to plant delivery/installation.
6. Inlet and outlet devices should be protected from scour that may occur during heavy rain events.
7. The wetland shall be staked to allow for proper construction to the grades as shown on the plan.
8. The optimal planting period is from early April through early June. Plantings may also be installed in early fall depending on the variety.
9. Installation contractor is responsible for all watering, pruning, fertilizing, remulching, and straightening of all plant material for 6 months from date of acceptance. Contractor shall water plants per nursery specification until acceptance.
10. Installation contractor is responsible for keeping all landscaped areas weeded for a period of 6 months from date of completion. Contractor shall use manual means for weed control.
11. Contractor shall warranty all plantings for 12 months after acceptance. Replacements shall be made within 14 days of notification or as soon as seasonably available.
12. Contractor shall request in writing for an inspection and release of maintenance 6 months from final completion.
13. In Lieu of the Listed Plants, Substitutions From The List Of Plants in the NCDEQ Stormwater Design Manual May Be Submitted To Engineer For Approval, Prior To Installation.
14. Contractor shall strip topsoil from area and stockpile for later use.
15. Contractor Shall Spread 12" of Topsoil Over the entire wetland area except for the forebay and deep pool areas. The finished grades shown are to the top of the 12" topsoil (shallow land and shallow water bottom elevations). Contractor shall contact Engineer to verify elevations prior to installing topsoil and plants.
16. The Stormwater Wetland Requires Inspection During Construction By Professional Engineer, Or His Representative, And Upon Completion Requires Certification of Construction to The NCDEQ by a Professional Engineer. Contractor shall contact Engineer at various stages of construction so Engineer can verify and approve work before proceeding with next stage.
17. See Plan View on This Sheet for Additional Information.



Level Spreader / Filter Strip

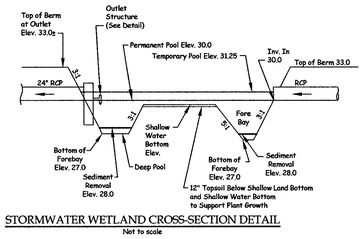
Not to scale

Note:
All Sod Shall be Watered as Needed to Assure it Doesn't Die. If Any Portion Dies, it Shall be Removed and Resodded.



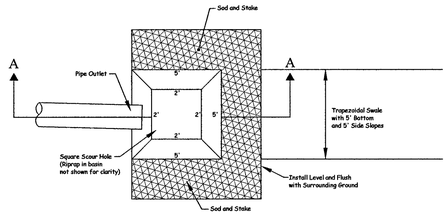
Concrete Spillway With Riprap

Not to scale

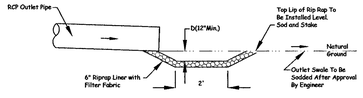


STORMWATER WETLAND CROSS-SECTION DETAIL

Not to scale



Plan View

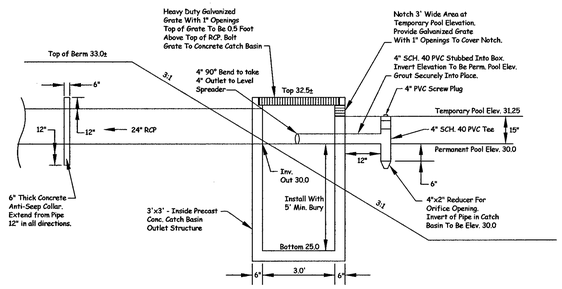


Section A-A

Scour Hole Flow Spreader

Not to Scale

NOTES
1. Scour hole to be excavated 1.5 times the median diameter of the rip rap to be used in hole. Top of Rip Rap should be the bottom elevation of the scour hole.
2. Minimum stone thickness to be two times specified stone diameter.



Stormwater Detention Pond Outlet Structure Detail

Not to scale

Outlet Swale Calculations Chart

Q10 (cfs)	Side-Slope	Channel Slope (Ft/Ft)	Velocity (grassed) (fps)
18.9	5:1	0.013	2.4

Q10=18.9 CFS Taken From Hydrocad Model of Wetlands

Friction Factors
n=0.05 Grass
$v=\frac{1.49}{n} R^{2/3} s^{1/2}$

Note:
1. Outlet Swale Shall Be Trapezoidal Swale With 5' Bottom And 5:1 Side Slopes. Swale And Slopes Shall Be Sodded.

Field Book: Misc. #180, Pg. 1-17; Stacy #2, Pg. 27-30
Disk Name: Acad 2821
Filename: NFES-Site.dwg KHW
Job No.: C180510-6782

Owner / Developer:
Onslow County Board of Education
200 Broadhurst Road
Jacksonville, North Carolina 28540
(910) 455-2211

CONTRACTOR TO VERIFY ALL DIMENSIONS

PARKER & ASSOCIATES, INC.
Engineers - Surveyors - Planners
Jacksonville, North Carolina
Wilmington, North Carolina
P.O. Box 1821, Jacksonville, NC 28540
Phone (910) 455-2414 - www.ParkerJacksonville.com
N.C. Firm Licensure # P0108

8-08-19

NORTH CAROLINA PROFESSIONAL SEAL 14575 ENGINEER TIMOTHY M. STEWART

PINNACLE ARCHITECTURE
PROFESSIONAL ASSOCIATION
P.O. BOX 187, 630 TEAM ROAD, SUITE 200
MATTHEWS, NORTH CAROLINA 28106
PH: (704) 847-9855 FAX: (704) 847-9855
701 EAST BAY STREET, SUITE 302
CHARLESTON, SOUTH CAROLINA 29403
PH: (843) 672-5345 FAX: (843) 672-5374

ISSUE DATE: 04.30.2019
DRAWN BY: KHW
CHECKED BY: TMS
PROJECT: 1821

STUMP SOUND ELEMENTARY SCHOOL
ONSLOW COUNTY SCHOOLS
STUMP SOUND, NORTH CAROLINA
STORMWATER WETLANDS #1

REVISION SCHEDULE

	DATE	REFERENCE
1	05/06/19	SEE REVISION NOTES
2	05/13/19	
3	05/29/19	
4	08/08/19	

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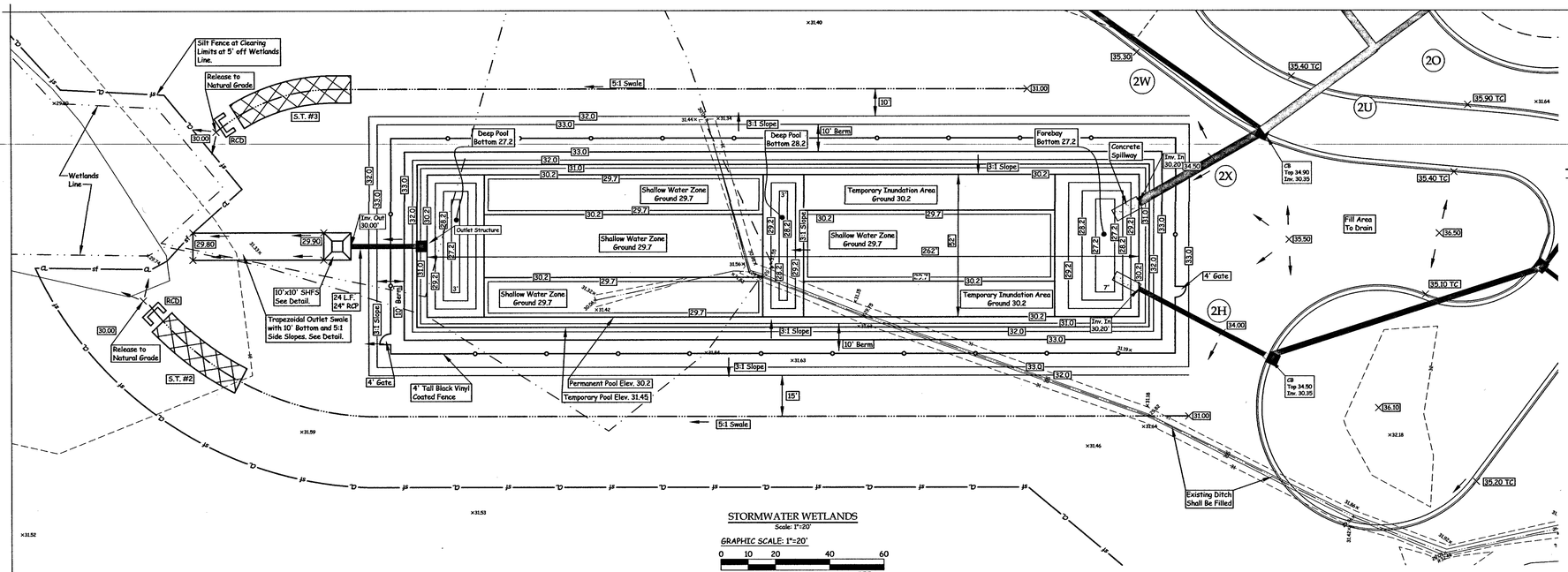
C110

⚠ 08/08/19 KHW - Revise turnlane and pipes 3V, 3W1 and cb
⚠ 05/28/19 KHW - Revise Level Spreader / Filter Strip detail, revise outlet swale calculations chart
⚠ 05/13/19 KHW - Revise Filter Strip
⚠ 05/06/19 KHW - Add fence around pond and 12" rcp, revise notes, stormwater wetlands cross-section detail and outlet swale calculations

Z:\AutoCAD Civil 3D\2018 Civil 3D\New Folkstone Elementary School\DWG\NFES-Site.dwg, 8/8/2019 6:03:03 PM, KHW



STORMWATER WETLANDS

Scale: 1"=20'

GRAPHIC SCALE: 1"=20'

0 10 20 40 60

FEET

Legend:

CGG - Curb & Gutter
Elev. - Elevation
Inv. - Invert

297 - Adjoining Lot Number
- Concrete
- Flow Arrow
46.0 47.0 - Top of Curb/Walk Elevation, Flow Line Elevation
- Wetlands
- Waterline
- Wetlands Line

Notes:

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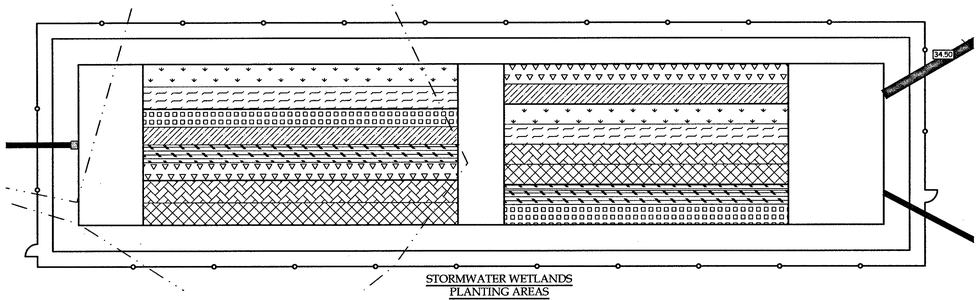
17. See Plan View on This Sheet for Additional Information.



STORMWATER WETLANDS PLANTING AREAS

Scale: 1"=30'

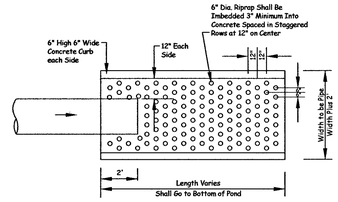
GRAPHIC SCALE: 1"=20'

0 10 20 40 60

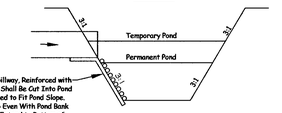
FEET

Notes:
1. During Construction of Road, Stormwater Wetland Area shall be Constructed and used as a Sediment Basin. Skimmer shall be installed.
2. Upon Completion of Road, and Stabilization of all Disturbed Areas, Stormwater Wetland shall be regraded to 12" below Final Grades shown, then 12" of Topsoil shall be added. Upon Inspection and Acceptance of Grades by Engineer, Wetland shall be planted and sodded as shown.
3. See other notes for more detail.





Plan View



Section View

Concrete Spillway With Riprap

Not to scale

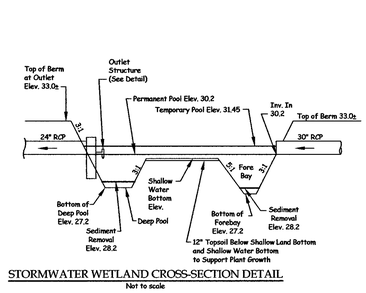
SHRUB PLANTING DETAIL

Not to scale

STORMWATER WETLANDS PLANT CHART

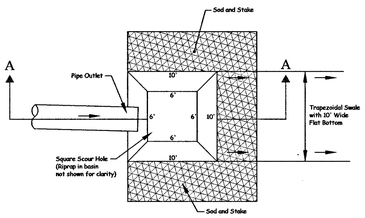
	Quantity	Key	Common Name	Botanical Name	Type	Planting Size	Spacing
Shallow Water Plants	385		Blue Flag Iris	Iris Virginica	Herbaceous	4 In^3	2' O.C.
	385		Woolgrass	Scirpus Cyperinus	Herbaceous	4 In^3	2' O.C.
	385		Pickerel Weed	Pontederia Cordata	Herbaceous	4 In^3	2' O.C.
	385		Soft Rush	Juncus Effusus	Herbaceous	4 In^3	2' O.C.
Temporary Inundation Area	55		Inkberry	Ilex Glabra	Shrub	1 Gallon	3' O.C.
	55		Titi	Cyrilla Racemiflora	Shrub	1 Gallon	3' O.C.
	341		Dwarf Joe Pye Weed	Eupatoriadelphus Dubius	Herbaceous	4 In^3	2' O.C.
	341		Cardinal Flower	Lobelia Cardinalis	Herbaceous	4 In^3	2' O.C.

Note:
1. Cat Tails are not allowed to be planted.
2. All Slopes and Berms Above Temporary Pool Elevation Shall be Sodded to 5' Past Slope Tie in at Existing Ground.

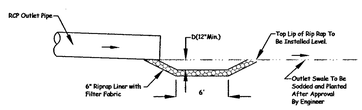


STORMWATER WETLAND CROSS-SECTION DETAIL

Not to scale



Plan View

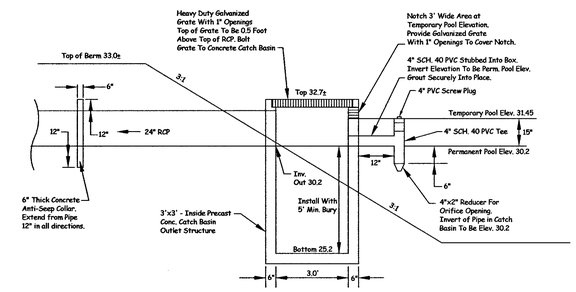


Section A-A

Scour Hole Flow Spreader

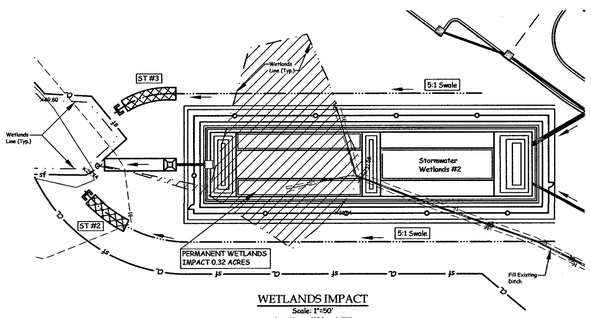
Not to Scale

NOTES
1. Scour hole to be excavated 1.5 times the median diameter of the rip rap to be used in hole. Top of Rip Rap should be the bottom elevation of the scour hole.
2. Minimum stone thickness to be two times specified stone diameter.



Stormwater Detention Pond Outlet Structure Detail

Not to scale



WETLANDS IMPACT

Scale: 1"=50'

See Sheet C102 and C111 For Additional Information

Wetlands Impact Notes:

1. Establish clearing limits per approved plans. Clear and grub area as needed. Immediately install silt fence at the wetlands line. Do not clear or disturb any unpermitted areas.
2. When possible, work in the wetlands shall be done during periods of dry weather.
3. Work in the wetlands shall be completed in the minimum time necessary.
4. During excavation, stockpile the top 12"± of topsoil, and reuse topsoil as the top layer of soil when backfilling.
5. Excavate the temporary sediment traps / basins as shown on sheet C102, then construct the stormwater wetlands and the proposed swales.
6. If wetland areas are disturbed outside of the impact areas, they shall be regraded to original contours using topsoil for the top layer, and shall be seeded, with annual seed.
7. See rest of design plans for additional detail.
8. See wetlands permit for additional requirements.

Outlet Swale Calculations Chart

Q10 (cfs)	Side-Slope	Channel Slope (Ft/Ft)	Velocity (grassed) (fps)
21.0	5:1	0.0025	1.2

Q10=21.0 CFS Taken From Hydrocad Model of Wetlands

Friction Factors
n=0.05 Grass
v=1.49 R 2/3 s 1/2
n

Note:
1. Outlet Swale Shall Be Trapezoidal Swale With 10' Bottom And 5:1 Side Slopes. Swale And Slopes Shall Be Sodded with Bermuda Sod. Swale shall also be planted with Woolgrass and Soft Rush at 2' centers.

07/08/19 KHW - Add wetlands impact detail
05/28/19 KHW - Made stormwater wetlands bigger, revise plant chart, add wetlands impact
05/06/19 KHW - Add fence around pond, revise notes, stormwater wetlands cross-section detail and outlet swale calculations

Field Book: Misc. #180, Pg. 1-17; Stacy #2, Pg. 27-30
Disk Name: Acad 2821
Filename: NFES-Site.dwg KHW
Job No.: C180510-6782

Owner / Developer:
Onslow County Board of Education
200 Broadhurst Road
Jacksonville, North Carolina 28540
(910) 455-2211

PARKER & ASSOCIATES, INC.
Engineers - Surveyors - Planners
Jacksonville, North Carolina
Wilmington, North Carolina 28540
P.O. Box 2826 Phone (910) 455-2414 www.ParkerJacksonville.com
NCLE Firm License Number: P0908

CONTRACTOR TO VERIFY ALL DIMENSIONS

7-08-19

NORTH CAROLINA PROFESSIONAL SEAL 16575 ENGINEER TIMOTHY M. STEWART

PINNACLE ARCHITECTURE
PROFESSIONAL ASSOCIATION
P.O. BOX 187, 630 TEAM ROAD, SUITE 200
MATTHEWS, NORTH CAROLINA 28106
PH: (704) 841-9851 FAX: (704) 841-9853
701 EAST BAY STREET, SUITE 302
CHARLESTON, SOUTH CAROLINA 29403
PH: (843) 872-5345 FAX: (843) 872-5374

ISSUE DATE: 04.30.2019
DRAWN By: KHW
CHECKED By: TMS
PROJECT: 1821

STUMP SOUND ELEMENTARY SCHOOL
ONSLOW COUNTY SCHOOLS
STUMP SOUND, NORTH CAROLINA
STORMWATER WETLANDS #2

REVISION SCHEDULE

	DATE	REFERENCE
3	05/06/19	SEE REVISION NOTES
2	05/28/19	
1	07/08/19	

THIS DRAWING IS THE PROPERTY OF THE ARCHITECTS AND CAN NOT BE USED FOR CONSTRUCTION PURPOSES OR REPRODUCED WITHOUT WRITTEN CONSENT OF THE ARCHITECT.

C111

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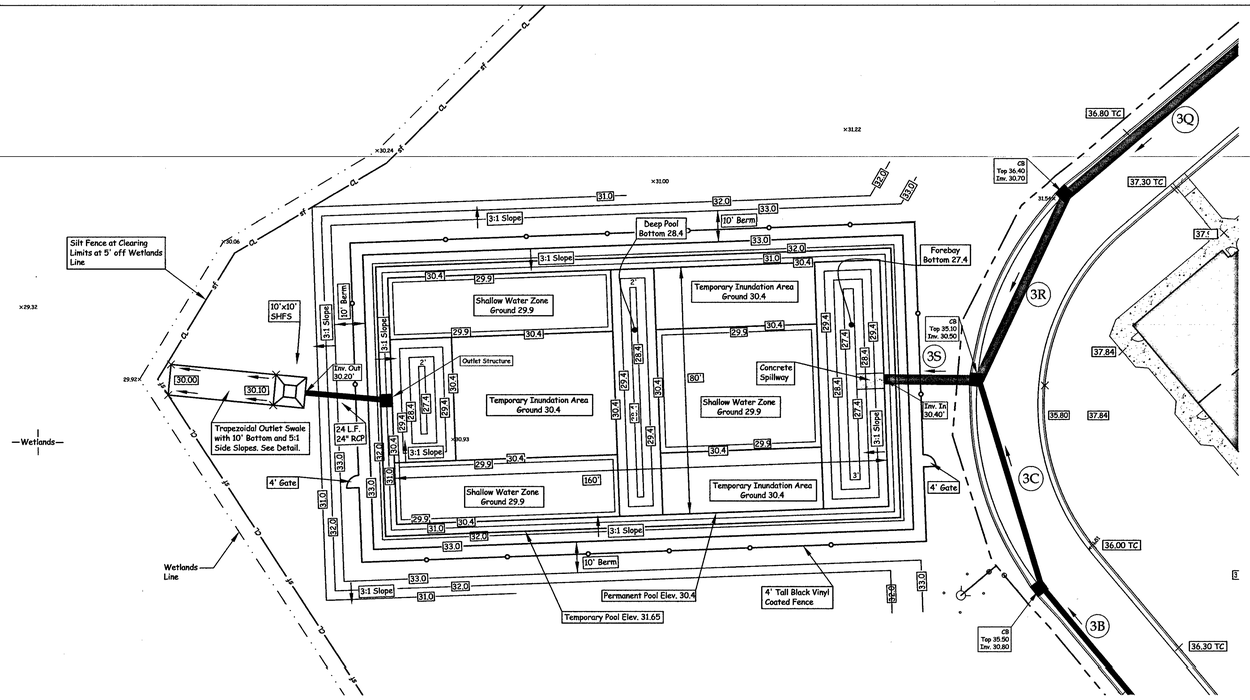


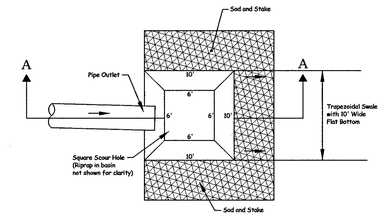
STORMWATER WETLANDS
Scale: 1"=20'

GRAPHIC SCALE: 1"=20'
0 10 20 40 60
FEET

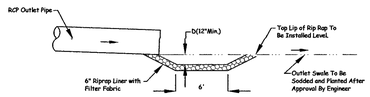
Notes:
1. During Construction of Road, Stormwater Wetland Area shall be Constructed and used as a Sediment Basin. Skimmer shall be installed.
2. Upon Completion of Road, and Stabilization of all Disturbed Areas, Stormwater Wetland shall be regraded to 12" below Final Grades shown, then 12" of Topsoil shall be added. Upon Inspection and Acceptance of Grades by Engineer, Wetland shall be planted and sodded as shown.
3. See other notes for more detail.

Legend:
C&G - Curb & Gutter
Elev. - Elevation
Inv. - Invert
(297) - Adjoining Lot Number
- Concrete
- Flow Arrow
48.0 / 47.5 - Top of Curb/Walk Elevation / Flow Line Elevation
- Wetlands
- Waterline
- Wetlands Line

Notes:
1. Plantings shall be installed in accordance with the details shown. The contractor may substitute locations of wetlands plants only within each zone, i.e. shallow water plants must be in the shallow water zone. Contractor shall submit to and obtain approval From Engineer for any deviation to planting schematic shown.
2. No fertilization is to be used after the initial planting. The landscape contractor is responsible for determining soil characteristics and needed fertilizer application.
3. Construction sequencing should be carefully planned to allow plantings to be installed and the wetlands brought online within 14 days after the completion of grading activities.
4. Should planting be delayed, a temporary wetland seed mix may be planted to stabilize all disturbed soils.
5. If the structure is brought online prior to planting, a portable pump should be used to pump water down 3 days prior to plant delivery/installation.
6. Inlet and outlet devices should be protected from scour that may occur during heavy rain events.
7. The wetland shall be staked to allow for proper construction to the grades as shown on the plan.
8. The optimal planting period is from early April through early June. Plantings may also be installed in early fall depending on the variety.
9. Installation contractor is responsible for all watering, pruning, fertilizing, remulching, and straightening of all plant material for 6 months from date of acceptance. Contractor shall water plants per nursery specification until acceptance.
10. Installation contractor is responsible for keeping all landscaped areas weeded for a period of 6 months from date of completion. Contractor shall use manual means for weed control.
11. Contractor shall warranty all plantings for 12 months after acceptance. Replacements shall be made within 14 days of notification or as soon as seasonably available.
12. Contractor shall request in writing for an inspection and release of maintenance 6 months from final completion.
13. In Lieu of the Listed Plants, Substitutions From The List Of Plants in the NCDEQ Stormwater Design Manual May Be Submitted To Engineer For Approval, Prior To Installation.
14. Contractor shall strip topsoil from area and stockpile for later use.
15. Contractor Shall Spread 12" of Topsoil Over the entire wetland area except for the forebay and deep pool areas. The finished grades shown are to the top of the 12" topsoil (shallow land and shallow water bottom elevations). Contractor shall contact Engineer to verify elevations prior to installing topsoil and plants.
16. The Stormwater Wetland Requires Inspection During Construction By Professional Engineer, Or His Representative, And Upon Completion Requires Certification of Construction to The NCDEQ by a Professional Engineer. Contractor shall contact Engineer at various stages of construction so Engineer can verify and approve work before proceeding with next stage.
17. See Plan View on This Sheet for Additional Information.



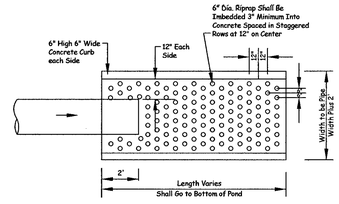
Plan View



Section A-A

Scour Hole Flow Spreader
Not to Scale

NOTES
1. Scour hole to be excavated 1.5 times the median diameter of the rip rap to be used in hole. Top of Rip Rap should be the bottom elevation of the scour hole.
2. Minimum stone thickness to be two times specified stone diameter.



Plan View

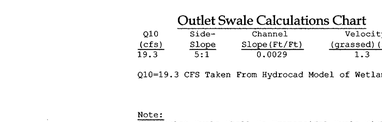
Outlet Swale Calculations Chart

Q10 (cfs)	Side-Slope	Channel Slope (Ft/Ft)	Velocity (grassed) (fps)
19.3	5:1	0.0029	1.3

Q10=19.3 CFS Taken From Hydrocad Model of Wetlands

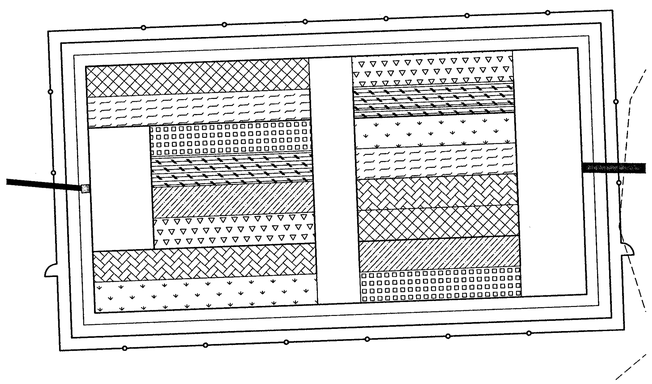
Friction Factors
n=0.05 Grass
v=1.49/n R 2/3 s 1/2

Note:
1. Outlet Swale Shall Be Trapezoidal Swale With 10' Bottom And 5:1 Side Slopes. Swale And Slopes Shall Be Sodded with Bermuda Sod. Swale shall also be planted with Woolgrass and Soft Rush at 2' centers.



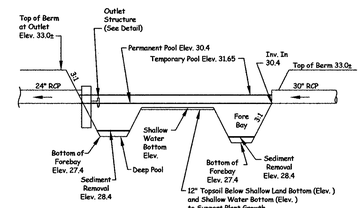
Section View

Concrete Spillway With Riprap
Not to scale

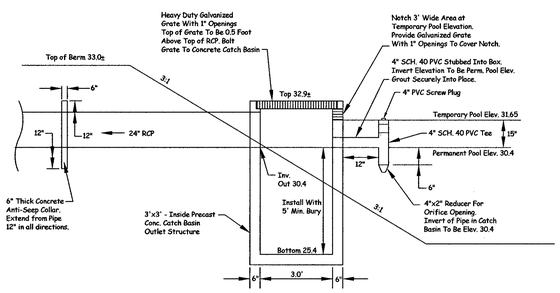


STORMWATER WETLANDS
PLANTING AREAS
Scale: 1"=30'

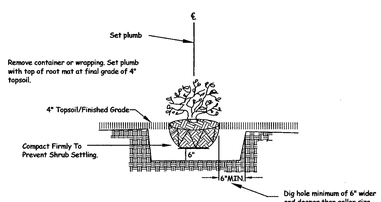
GRAPHIC SCALE: 1"=20'
0 10 20 40 60
FEET



STORMWATER WETLAND CROSS-SECTION DETAIL
Not to scale



Stormwater Detention Pond Outlet Structure Detail
Not to scale



SHRUB PLANTING DETAIL
Not to scale

STORMWATER WETLANDS PLANT CHART

	Quantity	Key	Common Name	Botanical Name	Type	Planting Size	Spacing
Shallow Water Plants	357		Blue Flag Iris	Iris Virginica	Herbaceous	4 In^3	2' O.C.
	357		Woolgrass	Scirpus Cyperinus	Herbaceous	4 In^3	2' O.C.
	357		Pickerel Weed	Pontederia Cordata	Herbaceous	4 In^3	2' O.C.
	357		Soft Rush	Juncus Effusus	Herbaceous	4 In^3	2' O.C.
Temporary Inundation Area	46		Inkberry	Ilex Glabra	Shrub	1 Gallon	3' O.C.
	46		Titi	Cyrilla Racemiflora	Shrub	1 Gallon	3' O.C.
	287		Dwarf Joe Pye Weed	Eupatoriadelphus Dubius	Herbaceous	4 In^3	2' O.C.
	287		Cardinal Flower	Lobelia Cardinalis	Herbaceous	4 In^3	2' O.C.

Note:
1. Cat Tails are not allowed to be planted.
2. All Slopes and Berms Above Temporary Pool Elevation Shall be Sodded to 5' Past Slope Tie in at Existing Ground.

Field Book: Misc. #180, Pg. 1-17; Stacy #2, Pg. 27-30
Disk Name: Acad 2821
Filename: NFES-Stwtnd KHW
Job No.: C180510-6782

Owner / Developer:
Onslow County Board of Education
200 Broadhurst Road
Jacksonville, North Carolina 28540
(910) 455-2211

△ 08/08/19 KHW - Move FH near pond
△ 05/28/19 KHW - Make stormwater wetlands bigger, revise plant chart
△ 05/06/19 KHW - Add fence around pond, revise notes, stormwater wetlands cross-section detail and outlet swale calculations

PARKER & ASSOCIATES, INC.
Engineers - Surveyors - Planners
Jacksonville, North Carolina
P.O. Box 1087 Jacksonville, NC 28541-28540
Phone (910) 455-2414 www.ParkerJacksonville.com
N.C. Firm Licensure Number: P-0908

CONTRACTOR TO VERIFY ALL DIMENSIONS

8-08-19
NORTH CAROLINA PROFESSIONAL SEAL 14575 ENGINEER TIMOTHY M. STEWART

PINNACLE ARCHITECTURE
PROFESSIONAL ASSOCIATION
P.O. BOX 187, 630 TEAM ROAD, SUITE 200
MATTHEWS, NORTH CAROLINA 28106
PH: (704) 847-9851 FAX: (704) 847-9853
701 EAST BAY STREET, SUITE 302
CHARLESTON, SOUTH CAROLINA 29403
PH: (843) 872-5345 FAX: (843) 872-5374

ISSUE DATE: 04.30.2019
DRAWN BY: KHW
CHECKED BY: TMS
PROJECT: 1821

STUMP SOUND ELEMENTARY SCHOOL
ONSLOW COUNTY SCHOOLS
STUMP SOUND, NORTH CAROLINA
STORMWATER WETLANDS #3

REVISION SCHEDULE

	DATE	REFERENCE
△	05/06/19	SEE REVISION NOTES
△	05/28/19	
△	08/08/19	

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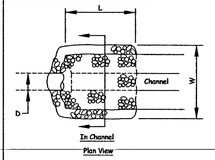
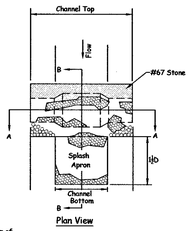


Median Stone Diameter = 6" unless otherwise noted on Erosion and Sedimentation Control Plan.

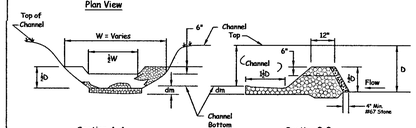
1. D = Inside Diameter or width of culvert.
2. Minimum stone thickness to be two times specified stone diameter.
3. Fabric to be installed under riprap located in swale.
4. Finished grade of riprap shall be at invert elevation of pipe. *Not placed on top of ground at invert.*
5. See Riprap dimensions on Drainage Pipe Chart.

Permanent Riprap Apron

Not to Scale



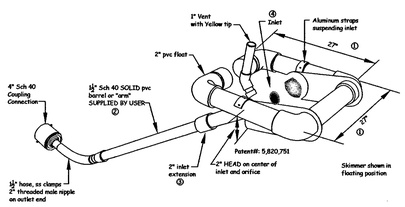
W = Check Dam Width
D= Depth of Channel
dm = Median Diameter of Stone



Note:
Given dimensions are minimum unless otherwise specified by the Engineer for site specific conditions.

Temporary Fortified Rock Check Dam

Not to Scale

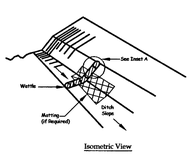


1. Dimensions are approximate.
2. Barrel length (solid, not foam core pipe) should be 1.4 times the depth of water with a minimum length of 6' so the inlet can be pulled to the side for maintenance. If more than 10' long weight may have to be added to inlet to counter the increased buoyancy.
3. Inlet tapers down from 2" maximum inlet to a 1.5" barrel and hose. Barrel is smaller to reduce buoyancy and tendency to lift inlet but is sufficient for flow through inlet because of slope. The inlet orifice can be reduced using the plug and cutter provided to control the outflow rate. See chart for each individual basin's orifice diameter.
4. Inlet is 4" pipe between the straps with slots cut in the inlet and aluminum screen door (smaller than shown is illustration) for access to the inlet and orifice inside).

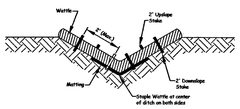
2" Faircloth Skimmer Detail

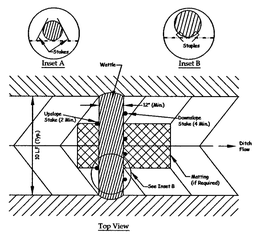
Not to Scale

NOTE: Dimensions for other size skimmers vary from above



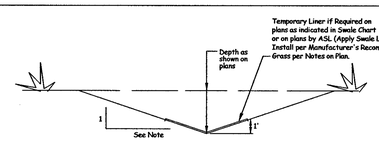
Notes:
1. Use minimum 12 inch diameter Coir Fiber Wattle, 10 L.F. Typical.
2. Use 2 foot wooden stakes with a 2 inch by 2 inch nominal cross section.
3. Only install wattle(s) to a height in ditch so flow will not wash around wattle and scour ditch slopes and as directed.
4. Install a minimum of 2 upslope stakes and 4 downslope stakes at an angle to wedge wattle to bottom of ditch. (See Inset "A").
5. Install staples at the ditch centerline and approximately every 1 linear foot on both sides of wattle and at each end to secure it to the soil.
6. Staples to be made of 0.125 inch diameter steel wire formed into a U shape not less than 12" in length.
7. Install matting (if required) in accordance with manufacturers specifications.





Wattle Detail

Not to Scale



Typical Installation of Temporary Silt Fence

Not to Scale

Swale Detail

Not to Scale

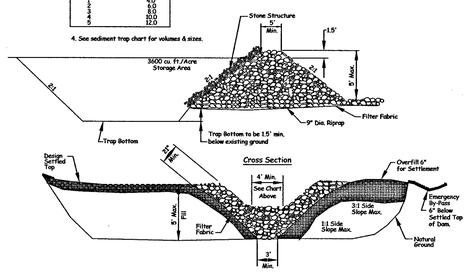
Notes:
1. Side slopes shall be as shown on plans.
2. Grassing shall be as shown on plans.
3. Apply swale liner (ASL) if shown on plans.

NOTES:

1. Sediment shall be removed and the trap restored to its original dimensions when the sediment has accumulated to ½ the design volume of the trap. Sediment removed from the basin shall be deposed in a suitable area and in such a manner that it will not erode.
2. The structur shall be checked regularly to insure that it is structurally sound and has not been damaged by erosion or construction equipment. the height of the outlet should be checked to insure that its center is at least 1.5 feet below the top of the embankment.
3. Weir Length

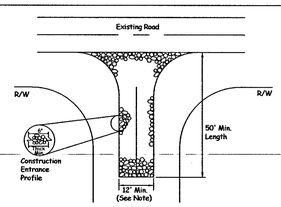
Drainage Area (Acres)	Weir Length (Feet)
1	4.0
2	6.0
3	8.0
4	10.0
5	12.0

4. See sediment trap chart for volumes & sizes.



Temporary Sediment Trap Detail

Not to scale

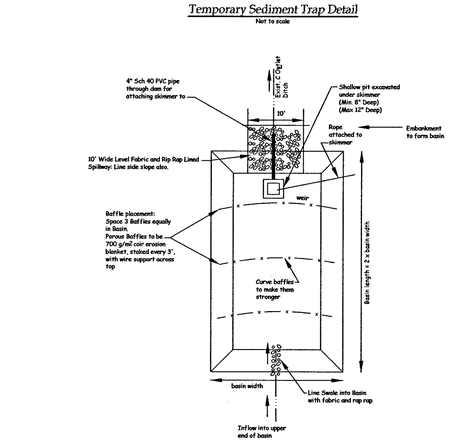


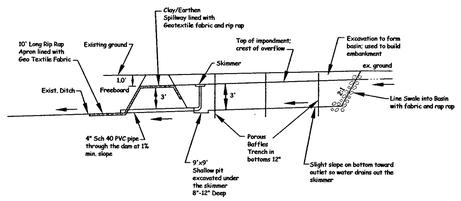
Temporary Stabilized Construction Entrance

Not to Scale

Construction Specifications

1. Aggregate size - Use 2-3 inch washed stone
2. Length - As effective, but not less than 50 feet.
3. Thickness - Not less than six (6) inches.
4. Width - Not less than full width of all points of ingress or egress. Minimum of 12'.
5. Install filter fabric under entire footprint of the construction entrance.
6. Washing - When necessary, wheels shall be cleaned to remove sediment prior to entrance onto public right-of-way. When washing is required, it shall be done on an area stabilized with crushed stone which drains into an approved sediment trap or sediment basin. All sediment shall be prevented from entering any storm drain, ditch, or watercourse through use of sandbags, gravel, boards or other approved methods.
7. Maintenance - The entrance shall be maintained in a condition which will prevent tracking or flowing of sediment onto public rights-of-way. This may require periodic top dressing with additional stone as conditions demand and repair and / or cleanout of any measures used to trap sediment. All sediment, spilled, dropped, washed or tracked onto public rights-of-way must be removed.

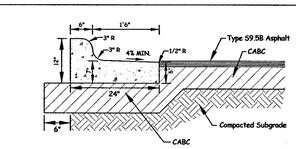




Temporary Sediment Basin Detail

Not to Scale

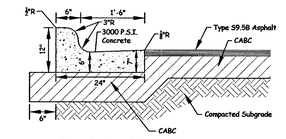
Note: See chart for dimensions.



Typical 24" Spill Gutter

Not to Scale

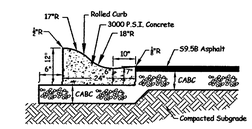
NOTE:
1. Curb and Gutter only to be used in areas shown on plans.
2. Spill Gutter to be used in areas where flow is to go away from gutter.
3. Crown Drives unless grades indicate otherwise.
4. Construction Joints every 10'.
5. Expansion Joints every 90'.



Straight Faced Curb & Gutter and Paving Section

Not To Scale

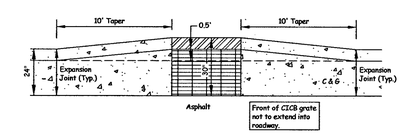
NOTE:
1. Main Drive, Both Entrance Drives, Bus Parking Loop and Fire Lane Drive around the back of School shall be 8" CABC and 3" S9.5B Asphalt.
2. The Car Stacking Lanes and all parking shall be 6" CABC and 2" S9.5B Asphalt.
3. Curb and Gutter To Be Used In Areas Shown On Plans
4. Spill Gutter To Be Used In Areas Where Flow Is To Go Away From Gutter.
5. Crown Drives Unless Grades Indicate Otherwise.
6. Construction Joints Every 10'.
7. Expansion Joints Every 90'.



Rolled Curb And Paving Section

Not To Scale

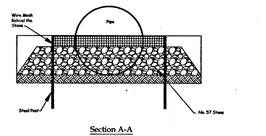
NOTE:
1. Rolled Curb to be Used in areas as shown on plan. Rest of Curb shall be Straight Faced Curb.
2. Spill Gutter To Be Used In Areas Where Flow Is To Go Away From Gutter.
3. Crown Drives Unless Grades Indicate Otherwise.
4. Construction Joints Every 10'.
5. Expansion Joints Every 90'.



Offset Curb Inlet Catch Basin

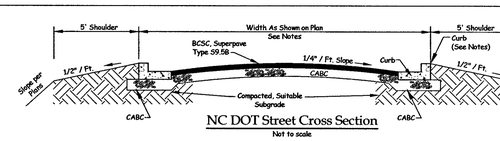
Not to Scale

Notes:
1. Offset Curb to be in accordance with NC DOT Standards. (852.05)



Temporary Rock Filter for Pipe Entrance

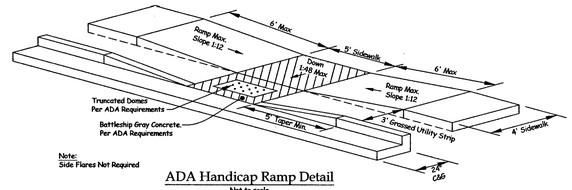
Not to Scale



NC DOT Street Cross Section

Not to scale

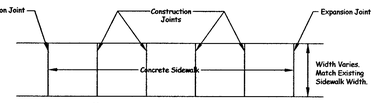
Notes:
1. Streets shall meet NC DOT Standards.
2. See NC DOT Road Notes for more detail.
3. Drives shall be crowned unless otherwise shown on plans.
4. Curb and Gutter shall be Straight Faced Curb unless otherwise shown on plan.



Note:
Side Flares Not Required

ADA Handicap Ramp Detail

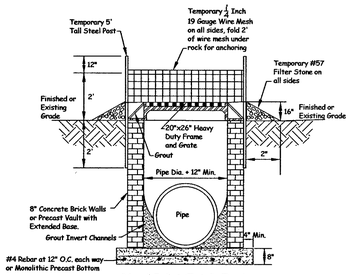
Not to scale



Notes:
1. Concrete to be 3000 PSI.
2. Expansion joints to be at 20' intervals.
3. 1" Deep sawed or scored construction joint every 4 feet.
4. When removing and replacing sidewalk, remove by saw cutting back to nearest construction joint.
5. Sidewalk to be placed on compacted select backfill and be 4 inches minimum thick. Match existing thickness if existing sidewalk is greater than 4 inches.

Sidewalk Joint Detail

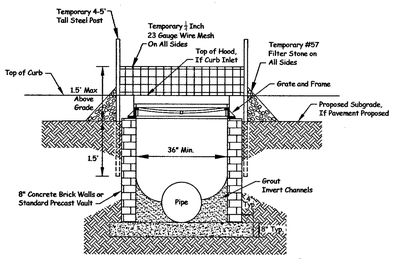
Not to Scale



Yard Inlet Catch Basin With Temporary Rock Filter

Not to Scale

Notes:
1. Box to be in accordance with NC DOT Standards (840.26) When in street right of way. Box to be enlarged to accommodate larger or multiple pipes as required.
2. Frame and grate to be Dewey Brothers, Inc. CH-BN-18 or approved equal.
3. All sediment, wet, mucky, or yielding soil materials shall be removed and replaced with compacted select fill prior to placing base course.



Notes:
1. Box to be in Accordance With N.C.D.O.T. Standards (840.01-.02). Box to be Enlarged to Accommodate Larger or Multiple Pipes as Shown on N.C.D.O.T. Standards (840.01 - .02).
2. Dewey Brothers, Inc. CH-BN 2001 24"x36" Frame and Radius Grate or Equivalent.
3. Steps Shall be Required 1'-2" on Center, on All Catch Basins Over 3'-6" in Depth per N.C.D.O.T. Standards
4. For 8' or Less Deep, Use 8" Walls. If Over 8' Deep, Use 12" Walls to 6' From Top and 8" Walls For The Rest.

Curb Inlet Catch Basin With Temporary Rock Filter

Not to Scale

PINNACLE ARCHITECTURE
PROFESSIONAL ASSOCIATION
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MATTHEWS, NORTH CAROLINA 28106
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CONTRACTOR TO VERIFY ALL DIMENSIONS.

PARKER & ASSOCIATES, INC.
Engineers - Surveyors - Planners
Jacksonville, North Carolina
P.O. Box 2766 Zip 28541-2766 - 28540
Phone (910) 455-2414 - www.ParkerJacksonville.com
N.C. Firm License Number: P-0708

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 14575 TIMOTHY M. STEWART 7-08-19

ISSUE DATE: 04.30.2019
DRAWN BY: KHW
CHECKED BY: TMS
PROJECT: 1821

STUMP SOUND ELEMENTARY SCHOOL
ONSLOW COUNTY SCHOOLS
STUMP SOUND, NORTH CAROLINA

GRADING DETAIL SHEET

REVISION SCHEDULE

⚠	DATE	REFERENCE
⚠	07-08-19	See Revision Notes

THIS DRAWING IS THE PROPERTY OF THE ARCHITECTS AND CAN NOT BE USED FOR CONSTRUCTION PURPOSES OR REPRODUCED WITHOUT WRITTEN CONSENT OF THE ARCHITECT

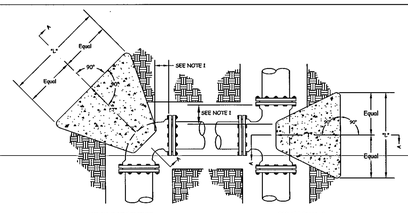
C113

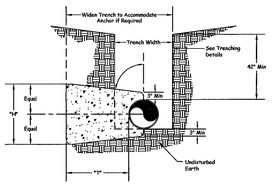
⚠ 07-08-19 KHW - Add rolled curb detail, rev. notes on NC DOT street cross section detail

Field Book: Misc. #180, Pg. 1-17; Stacy #2, Pg. 27-30
Disk Name: Acad 2821
Filename: NFES-Stru.dwg KHW
Job No.: C180510-6782

Owner / Developer:
Onslow County Board of Education
200 Broadhurst Road
Jacksonville, North Carolina 28540
(910) 455-2211

Z:\AutoCAD Civil 3D\2018 Civil 3D\New Folkstone Elementary School\DWG\NFES-Stru.dwg, 7/8/2019 2:52:44 PM, KHW





SECTION A-A

Notes:
1. Concrete Blocking is to be Formed to Ensure Accessibility to Fittings and Poured Against Undisturbed Earth.
2. All Fittings Shall Be Wrapped in Polyethylene to Prevent Concrete From Contacting Fittings, Bolts, or Ends of Mechanical Joint Bends.
3. Concrete to be Minimum 3,000 PSI @ 28 Days.
4. When Sackrete is to be Used, It Shall Be Properly Mixed Per Manufacturer Specifications.
5. For Required Dimensions, See WS_TB2

Thrust Blocking
(ONWASA Dtl. WS_TB1 Rev. 5-19-16)
Not to Scale

TEST PRESSURE = 150 PSI

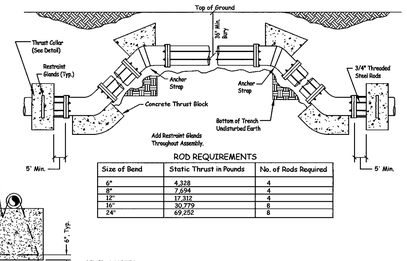
PIPE SIZE	TYPE FITTING	DIMENSIONS (FT) "L"	"H"	"Y"	VOLUME CONCRETE CU. YD.
3	11 1/4°	----	----	----	----
4 DUCTILE IRON	22 1/2°	1.00	1.00	1.50	0.06
	45°	1.00	1.00	1.50	0.06
	90°	1.00	1.00	2.50	0.09
	TEE	1.00	1.00	2.00	0.07
4 PVC	11 1/4°	1.00	1.00	2.50	0.09
6 DUCTILE IRON	22 1/2°	1.00	1.00	2.50	0.09
	45°	1.00	1.00	2.50	0.09
	90°	1.50	1.50	2.50	0.15
	TEE	1.50	1.50	2.00	0.12
6 PVC	11 1/4°	1.50	1.50	2.50	0.15
8 DUCTILE IRON	22 1/2°	1.50	1.50	2.50	0.15
	45°	1.50	1.50	2.50	0.15
	90°	2.00	2.00	3.00	0.28
	TEE	2.00	2.00	2.50	0.23
8 PVC	11 1/4°	2.00	2.00	2.50	0.23
10 DUCTILE IRON	22 1/2°	2.00	2.00	2.50	0.23
	45°	2.00	2.00	2.75	0.25
	90°	3.00	2.00	3.00	0.39
	TEE	3.00	2.00	2.50	0.32
10 PVC	11 1/4°	2.00	2.00	3.00	0.28
12 DUCTILE IRON	22 1/2°	2.00	2.00	3.00	0.28
	45°	3.00	2.00	3.00	0.28
	90°	4.50	3.00	3.50	0.94
	TEE	4.50	3.00	3.50	0.70
12 PVC	11 1/4°	2.00	2.00	3.00	0.28
16 DUCTILE IRON	22 1/2°	3.00	2.00	3.00	0.39
	45°	4.00	3.00	3.50	0.84
	90°	6.50	3.50	3.50	1.54
	TEE	6.50	3.50	3.00	1.32

TEST PRESSURE = 200 PSI

PIPE SIZE	TYPE FITTING	DIMENSIONS (FT) "L"	"H"	"Y"	VOLUME CONCRETE CU. YD.
3	11 1/4°	1.00	1.00	1.00	0.04
4 DUCTILE IRON	22 1/2°	1.00	1.00	1.50	0.06
	45°	1.00	1.00	1.50	0.06
	90°	1.50	1.50	2.50	0.15
	TEE	1.50	1.50	2.00	0.12
4 PVC	11 1/4°	1.00	1.00	2.50	0.09
6 DUCTILE IRON	22 1/2°	1.00	1.00	2.50	0.09
	45°	1.50	1.50	2.50	0.15
	90°	1.50	1.50	2.50	0.15
	TEE	1.50	1.50	2.00	0.12
6 PVC	11 1/4°	1.50	1.50	2.50	0.15
8 DUCTILE IRON	22 1/2°	1.50	1.50	2.50	0.15
	45°	1.50	1.50	2.50	0.15
	90°	2.50	2.00	3.00	0.33
	TEE	2.50	2.00	2.50	0.28
8 PVC	11 1/4°	2.00	2.00	2.50	0.23
10 DUCTILE IRON	22 1/2°	2.00	2.00	2.50	0.23
	45°	2.00	2.00	2.75	0.25
	90°	4.00	2.00	3.00	0.50
	TEE	4.00	2.00	2.50	0.42
10 PVC	11 1/4°	2.00	2.00	3.00	0.28
12 DUCTILE IRON	22 1/2°	3.00	2.00	3.00	0.39
	45°	4.00	2.50	3.00	0.61
	90°	5.50	3.00	3.50	1.13
	TEE	5.50	3.00	3.00	0.97
12 PVC	11 1/4°	2.00	2.00	3.00	0.28
16 DUCTILE IRON	22 1/2°	4.00	2.00	3.00	0.50
	45°	5.50	3.00	3.50	1.13
	90°	7.50	4.00	3.50	2.25
	TEE	7.50	4.00	3.00	1.72

CHART NOTES:
1. If blocking concretion is in tightly compacted fill areas, or in areas where backfare or shoring have been removed, blocking size must be re-sized for the specific location / circumstances by a NC Licensed Professional Engineer.
2. Blocking sizes shown in these tables assume the following:
   a. Test pressure of 150 PSI and 200 PSI (safe as shown in detail)
   b. Soil bearing pressure = 2000 psf
   c. Velocity of flow = 15 fps
3. This detail not applicable to reducing bends.
4. Neither the weight of the concrete blocking nor friction between concrete blocking and soil was added into blocking mass computation. Therefore, blocking size is conservative.

Thrust Blocking
(ONWASA Dtl. WS_TB2 Rev. 5-19-16)
Not to Scale



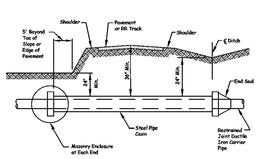
ROD REQUIREMENTS

Size of Bend	Static Thrust in Pounds	No. of Rods Required
6"	4,328	4
8"	7,694	4
12"	17,312	4
16"	30,779	8
24"	69,252	8

BLOCKING CROSS SECTION
NO SCALE

GENERAL NOTES:
1. All Fittings Shall be Wrapped in Polyethylene to Prevent Concrete From Contacting Fittings, Bolts, or Ends of Mechanical Joint Bends.
2. Each Fitting Shall Be Secured by Two Forms of Restraint. Restraining Glands and Concrete Thrust Blocking are Preferred. Wedge-Action Restraint Glands (I.E. Megalugs) are Approved Only For Use on Ductile Iron Pipe. Full-Circumferential Pipe Restraint Glands (I.E. Grip Rings) May be Used on PVC or Ductile Iron Pipe. All Restraint Glands Shall be Specifically Designed For Use on The Type of Pipe For Which They are Being Installed. Other Forms of Restraint Such as Threaded Rod, Bell Restraint Harnesses, Etc. May be Approved by ONWASA on a Case-By-Case Basis.
3. If Approved For Use by ONWASA, Steel Rods and Bolts Shall be 3/4" Hot Dipped Galvanized.
4. Must Use Ductile Iron Eye Bolts Where Necessary.

Thrust Blocking
(ONWASA Dtl. WS_TB3 Rev. 5-19-16)
Not to Scale

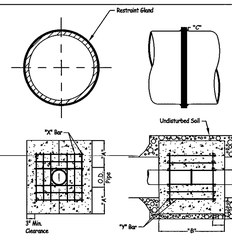


Typical Pipe Crossing

Excavements Shall Extend From Ditch Line to Ditch Line in Cut Sections, Five (5) Feet Beyond The Toe of Slopes in Fill Sections, and Ten (10) Feet Beyond Edge of Pavement in Sections With No Ditch or Fill Area.

Notes:
1. Steel Encasement Pipe Shall Conform to The Requirements of The Project Specifications.
2. Carrier Pipe Shall be Adequately Supported The Entire length Within The Casing by Using Spacers or "Spider" Steel Supports at A Maximum of 9 Foot Centers (One at Each Joint and One Intermediate). Other methods must meet approval of the Engineer.

Dry Bore and Jack Pipe Encasement
(ONWASA Dtl. WS_B&J Rev. May, 2016)
Not to Scale



REINFORCING REQUIREMENTS

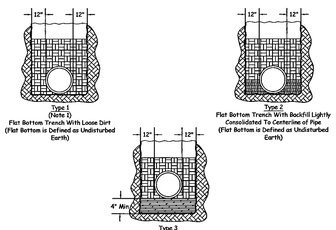
I.D. Pipe	Rebar Size	"A" Bar Length	"A" Bar Weight	"Y" Bar Length	"Y" Bar Weight	No. Required
6" - 36"	#5	2'-2"+ O.D. PIPE	1.043 LBS/FT	1'-1"	1.1 LBS. EACH	X-24, Y-12
48" & greater	#6	3'-0"+ O.D. PIPE	1.502 LBS/FT	1'-3"	1.9 LBS. EACH	X-24, Y-12

THRUST COLLAR, AND THRUST SCHEDULE

I.D. Pipe	"A"	"B"	"C-6"-16", 20"-24", 30"-36", 48"
6" - 36"	1'-4"	1'-7"	2" 3" 4" 6"
48" & greater	1'-8"	1'-9"	

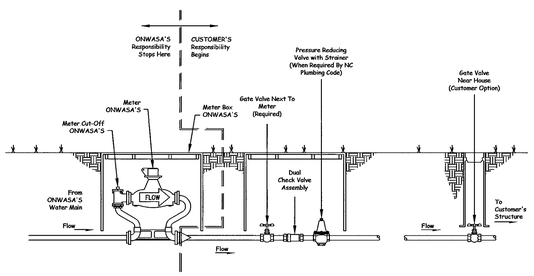
Notes:
1. Concrete Shall be 3000 PSI and Transit Mixed.
2. Reinforcing Bars Shall be Deformed and Tied Together.
3. Trench Bottom Width in Vicinity of Thrust Block Installation Shall be The Minimum Width as Shown on Standard Embedment Detail.
4. Backfill Tamped in 6" Lifts per Standard Embedment Detail.

Thrust Blocking
(ONWASA Dtl. WS_TB4 Rev. 5-19-16)
Not to Scale



Notes:
1. For Normal Pipe Sizes 14 Inch and Larger, Consideration Should Be Given to The Use of Laying Conditions Other Than Type 1.
2. Consideration of The Pipe-Zone Embedment Conditions Included in This Figure May Be Influence By Factors Other Than Pipe Strength. For Additional Information on Pipe Bedding and Backfill, See ANSI/AWWA C600.

Water Main Embedment Detail
(ONWASA Detail WS_ED Rev. 5-19-16)
NOT TO SCALE

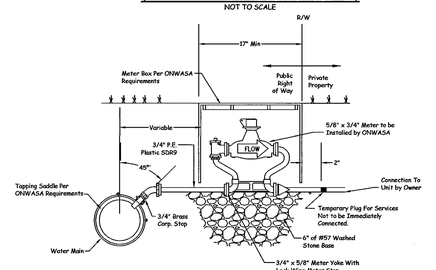


North Carolina Plumbing Code Section 608 requires a gate valve, backflow prevention and a pressure reducing valve on all connections with the Public Water Supply.

1. A gate valve and a pressure reducing valve MUST be installed directly behind the meter (see diagram above).
2. An additional gate valve located near the house is recommended, but not required.
3. All materials shall be pressure rated to one hundred-fifty (150 psi).
4. The water meter will be locked upon installation. Please contact the Onslow Water and Sewer Authority (ONWASA) twenty-four (24) hours in advance to schedule the inspection of the valves.
5. All valves MUST be installed prior to unlocking the meter.

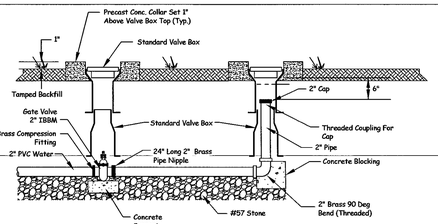
Meter Placement Note:
Place the blue flag approximately thirty (30) feet from the center of the road Utility Right of Way for proper placement of ONWASA's water meter. All efforts will be made to install the meter where it is marked; however, ONWASA reserves the right to place the meter in the most feasible location to all parties involved. If the blue flag is not placed in a feasible location, it may result in a delay of installation.

3/4" to 1" Meter Installation Detail
(ONWASA Dtl. WS_MI Rev. 5-19-16)
NOT TO SCALE



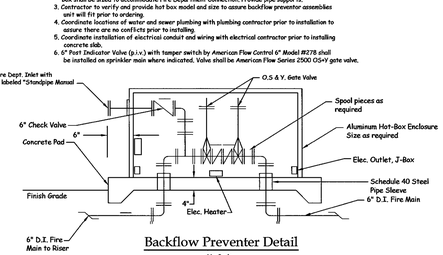
Note: Meter Box to be Supported on Brick or Block

3/4" To 1" Service Connection and Meter
(ONWASA Dtl. WS_SCM Rev. 5-19-16)
Not to Scale



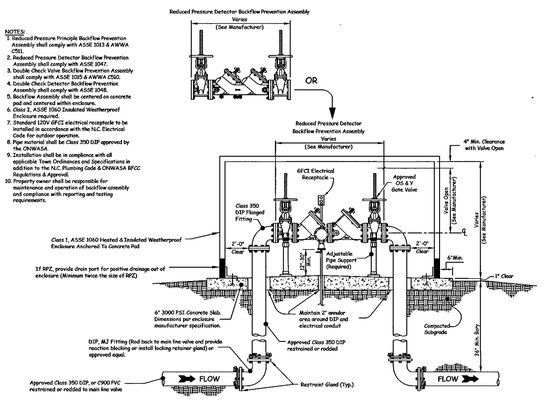
Note: No Plastic or Galvanized Screw Fittings Before Valve

2-Inch Permanent Blow Off Assmbly
(ONWASA Dtl. WS_BO2 Rev. 5-19-16)
Not to Scale

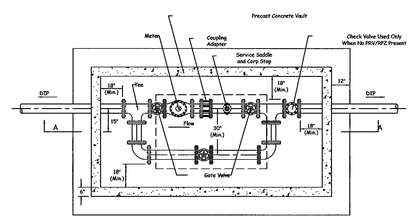


Backflow Preventer Detail
No Scale

NOTES:
1. Reduced Pressure Principle Backflow Prevention Assembly shall comply with ASSE 1013 & AWWA C511.
2. Reduced Pressure Detector Backflow Prevention Assembly shall comply with ASSE 1047.
3. Double Check Valve Backflow Prevention Assembly shall comply with ASSE 1015 & AWWA C510.
4. Double Check Detector Backflow Prevention Assembly shall comply with ASSE 1048.
5. Backflow Assembly shall be centered on concrete pad and centered within enclosure.
6. Class 2, ASSE 1060 Insulated Weatherproof Enclosure required.
7. Standard 120V GFCI electrical receptacle to be installed in accordance with the N.C. Electrical Code for outdoor operation.
8. Pipe material shall be Class 350 DIP approved by the ONWASA.
9. Installation shall be in compliance with all applicable Town Ordinances and Specifications in addition to the N.C. Plumbing Code & ONWASA BFCC Regulations & Approval.
10. Property owner shall be responsible for maintenance and operation of backflow assembly and compliance with reporting and testing requirements.



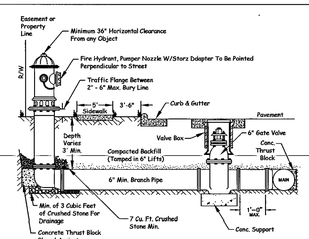
Standard Commercial Outdoor Backflow Assembly (2½" Diameter & Larger)
(ONWASA Dtl. WS_BKF Rev. March, 2012)
Not to Scale



SECTION A-A

NOTES:
1. All piping shown to be ductile iron.
2. Buried fittings to be MJ with restraint glands.
3. It is the contractors responsibility to ensure that all minimum clearance requirements inside the vault are met.
4. ONWASA shall furnish 1.5" and larger meters at the current cost to ONWASA. Contact ONWASA for current pricing.

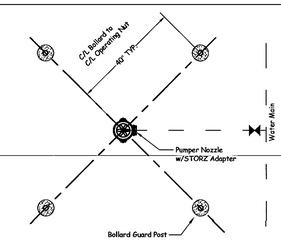
Meter Vault Installation 3-Inch And Larger
(ONWASA Dtl. WS_MV3+ Rev. May, 2016)
Not to Scale

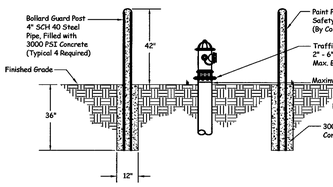


Notes:
1. Fire Hydrant Manufacturer Shall be as Required By Project Specifications.
2. Fire Hydrant Shall be Installed Using Hydrant Tee.
3. Branch Pipe Shall be Ductile Iron.
4. Fire Hydrants Will be Installed in True Vertical Position.
5. All Joints on Fire Hydrant Assemblies Shall be Restrained.
6. All Fire Hydrants Shall be Located Within Dedicated Street Right-of-way or a 20-Foot Publicly Dedicated Permanent Utility Easement to ONWASA.
7. Install Bollard Guard Post as Per Drawings or Conditions Mandate.
8. Hydrant Shall Not Be Installed So That The Finished Elevation of Surrounding Area (Including Landscaping, Mulch, Gravel, Etc.) is Above The Maximum Bury Line of The Hydrant.
9. Maximum Permissible Extension Length is 2-Feet.
10. If Hydrant Leg is Less Than 10-Feet Long, The Hydrant Shall be Rodded Back To The Valve.

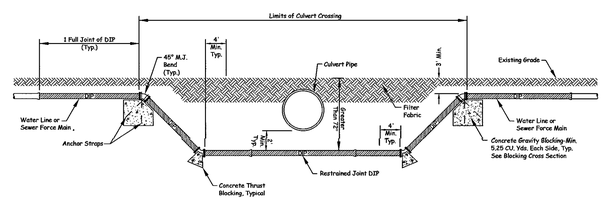
Anytime Site Work, Construction, Road Work, or any Other Work Changes The Grade of The Fire Hydrant, The Contractor is Responsible for Adjusting The Fire Hydrant to Stay Within Compliance.

Fire Hydrant Assembly Curb and Gutter Section
(ONWASA Dtl. WS_FHC Rev. May, 2016)
Not to Scale



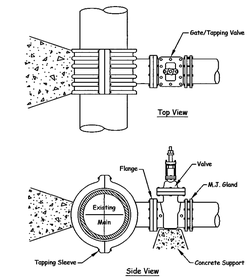


Fire Hydrant Bollard Detail
(ONWASA Dtl. WS_FHB Rev. May, 2016)
Not to Scale



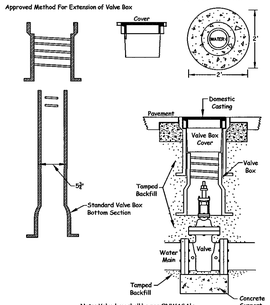
Notes:
1. Only Full 18' or 20' Joints of Ductile Iron Pipe Shall Be Used on Each Side of Upper Bends, Unless Otherwise Approved.
2. If Approved For Use Restraining Rods Shall Be Stainless Steel or Galvanized Rods With Field-Applied Bituminous Coating.
3. Pipe Upstream and Downstream of Upper Bends, Under Creek and Between Upper Bends To Be Restrained Joint D.I.P.
4. Thrust and Gravity Blocking Not Required on Gravity Sewer Line.
5. Each Fitting Shall Be Secured By Two Forms of Restraint. Restraining Glands and Concrete Thrust Blocking Are Preferred. Wedge-Action Restraint Glands (i.e. Megalugs) Are Approved Only For Use on Ductile Iron Pipe. Full-Circumferential Pipe Restraint Glands (i.e. Grip Rings) May Be Used on PVC or Ductile Iron Pipe. All Restraint Glands Shall Be Specifically Designed For Use on The Type of Pipe For Which They Are Being Installed. Other Forms of Restraint Such as Threaded Rod, Bell Restraint, Harnesses, etc. May be Approved by ONWASA on a Case-By-Case Basis.

Culvert Crossing Greater Than 72" of Cover
(ONWASA Dtl. WS_CULC_1 Rev. May, 2016)
Not to Scale

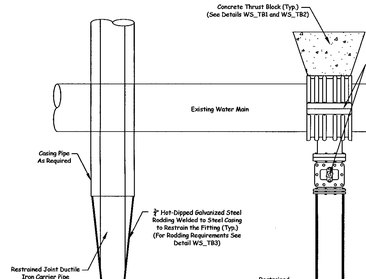


Notes:
1. Concrete Shall not Contact Glands, Bolts or Ends of Mechanical Bolts, or Ends of Mechanical Joint Fittings. Tapping Sleeve and Bottom of Valve Shall be Wrapped in Polyethylene.
2. See Standard Thrust Block Table for Area of Concrete Required.
3. Tapping Sleeve Shall be Tested in Accordance with Owasco Requirements.
4. Taps on SDR26 Pipe Shall Require Long SS Tapping Sleeves.

4" and Larger Tapping Sleeve and Valve Assembly
(ONWASA Dtl. WS_EBC Rev. May, 2016)
Not to Scale

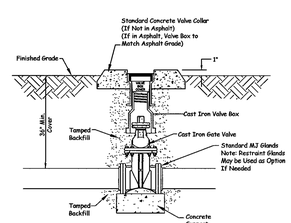


Valve Box Installation
(ONWASA Dtl. WS_VB Rev. 5-19-16)
Not to Scale



Note:
1. All Joints Throughout Entire Assembly Shall be Restrained.
2. Must use Ductile Iron Eye Bolts where Necessary.
3. Angle Fittings as Necessary.

Backside Tap
(ONWASA Dtl. WS_BST Rev. May, 2016)
Not to Scale



Inline Valve Detail
(ONWASA Dtl. WS_ILV Rev. 5-19-16)
Not to Scale

PINNACLE ARCHITECTURE
PROFESSIONAL ASSOCIATION
P.O. BOX 187, 630 TEAM ROAD, SUITE 200
MATTHEWS, NORTH CAROLINA 28106
PH: (704) 847-9833 FAX: (704) 847-9853

PARKER & ASSOCIATES, INC.
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Jacksonville, North Carolina
P.O. Box 1297 Jacksonville, NC 28540
Phone (910) 455-2414 www.Parker-Jacksonville.com
N.C. Firm License Number: P-0908

CONTRACTOR TO VERIFY ALL DIMENSIONS

4-18-19

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 14575 TIMOTHY M. STEWART

STUMP SOUND ELEMENTARY SCHOOL
ONSLOW COUNTY SCHOOLS
STUMP SOUND, NORTH CAROLINA

WATER AND FORCE MAIN DETAIL SHEET

ISSUE DATE: 04.30.2019
DRAWN BY: KHW
CHECKED BY: WS
PROJECT: 1821

REVISION SCHEDULE

Δ	DATE	REFERENCE

C114

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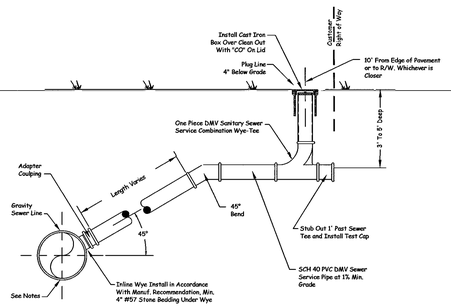
Field Book: Misc. #180, Pg. 1-17; Stacy #2, Pg. 27-30
Disk Name: Acad 2821
Filename: NFES-Stnd.wg KHW
Job No.: C180510-6782

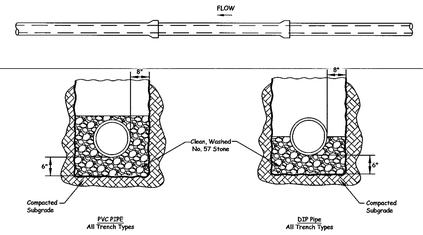
Owner / Developer:
Onslow County Board of Education
200 Broadhurst Road
Jacksonville, North Carolina 28540
(910) 455-2211

Z:\AutoCAD Civil 3D\2018 Civil 3D\New Folkstone Elementary School\DWG\NFES-Stnd.wg, 4/22/2019 2:00:13 PM, KHW

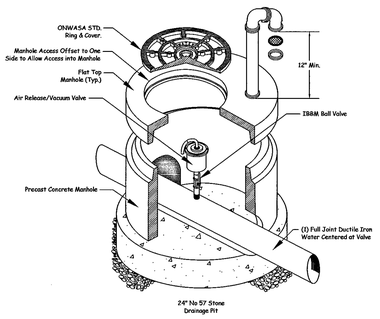


NOTES:
1. Refer to Specifications For Bedding, Backfilling and Compaction Requirements.

Typical Sanitary Sewer Lateral Connection
Not to Scale

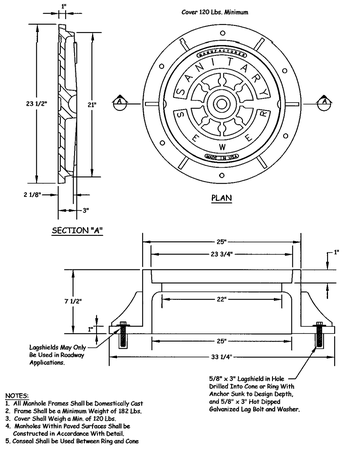


Gravity Sewer Embedment Detail
Not to Scale



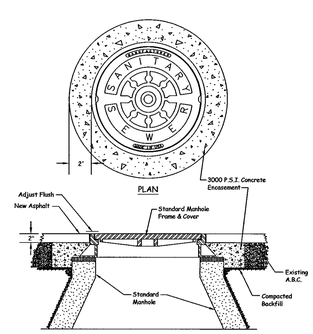
1. When Tapping the Sewer Main, do not Exceed the Pipe Manufacturers Allowances.
2. On all Air Release Valves use Double Strap Service Saddle.
3. Unless Otherwise Indicated on the Plans, Manhole Shall be Flat-Top.
4. Air Release/Vacuum Valve Shall be Crispin S Series or Val-matic Series 300.
5. If Force Main is Ductile Iron Upstream and Downstream of Air Release Valve, 5 Full Section of Ductile Iron Pipe, with Epoxy Lining Per the Project Specifications, Shall be Centered at the Valve.
6. Air Release/Vacuum Valve Manholes Shall be 5' Minimum Inside Diameter.
7. Bottom of Vent Pipe Shall be a Minimum of 12" or 3' Above Flood Elevation, Whichever is Applicable

Air Release/Vacuum Valve
Not to Scale

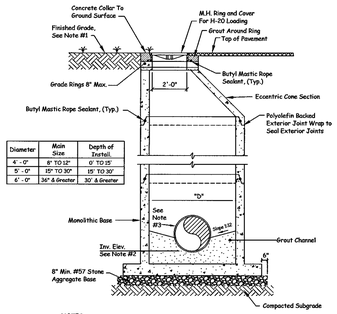


NOTES:
1. All Manhole Frames Shall be Domestically Cast
2. Frame Shall be a Minimum Weight of 182 Lbs.
3. Cover Shall Weigh a Min. of 120 Lbs.
4. Manholes Within Paved Surfaces Shall be Constructed in Accordance With Detail.
5. Conseal Shall be Used Between Ring and Cone

Standard Manhole Cover & Frame
Not to Scale



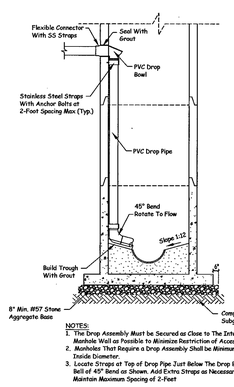
Std. Manhole Frame and Cover Detail Within Paved Surface
Not to Scale



Diameter	Main Size	Depth of Install.
4' - 0"	8" TO 12"	0' TO 25'
5' - 0"	15" TO 30"	25' TO 30'
6' - 0"	36" & Greater	30' & Greater

NOTES:
1. The Distance From The Top of M.H. Ring and Cover May Vary Widely. See Grading Plan, and/or Manhole Schedule.
2. Invert Elev. Shown on The Plans or Manhole Schedule are at The Inlet and Outlet of Manhole Unless Otherwise Noted
3. Carrier Pipe to Manhole Connections Shall be Rubber Sleeve With Dual S.S. Bands
4. All Manholes are to be Extended Base
5. All Interior Joints and Lifting Points Shall be Sealed With Grout
6. Manholes Shall Not Have Steps

Standard Precast Sanitary Sewer Manhole (Eccentric)
Not to Scale



NOTES:
1. The Drop Assembly Must be Secured as Close to The Interior Manhole Wall as Possible to Minimize Restriction of Access
2. Manholes That Require a Drop Assembly Shall be Minimum 5-Foot Inside Diameter.
3. Locate Straps at Top of Drop Pipe Just Below The Drop Bowl and Bell of 45° Bend as Shown. Add Extra Straps as Necessary to Maintain Maximum Spacing of 2-Foot

Gravity Sewer Inside Drop Manhole
Not to Scale

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Field Book: Misc. #180, Pg. 1-17; Stacy #2, Pg. 27-30
Disk Name: Asad 2821
Filename: NFES-Sitedwg KHW
Job No.: C180510-6782

Owner / Developer:
Onslow County Board of Education
200 Broadhurst Road
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(910) 455-2211

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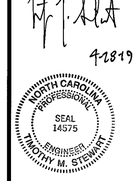
N.C. Firm License Number: P-0708





PINNACLE ARCHITECTURE
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701 EAST BAY STREET, SUITE 302
CHARLESTON, SOUTH CAROLINA 29403
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ISSUE DATE: 04.30.2019
DRAWN BY: KHW
CHECKED BY: TMS
PROJECT: 1821

STUMP SOUND ELEMENTARY SCHOOL
ONSLOW COUNTY SCHOOLS
STUMP SOUND, NORTH CAROLINA

SEWER DETAIL SHEET

REVISION SCHEDULE

	DATE	REFERENCE

C115

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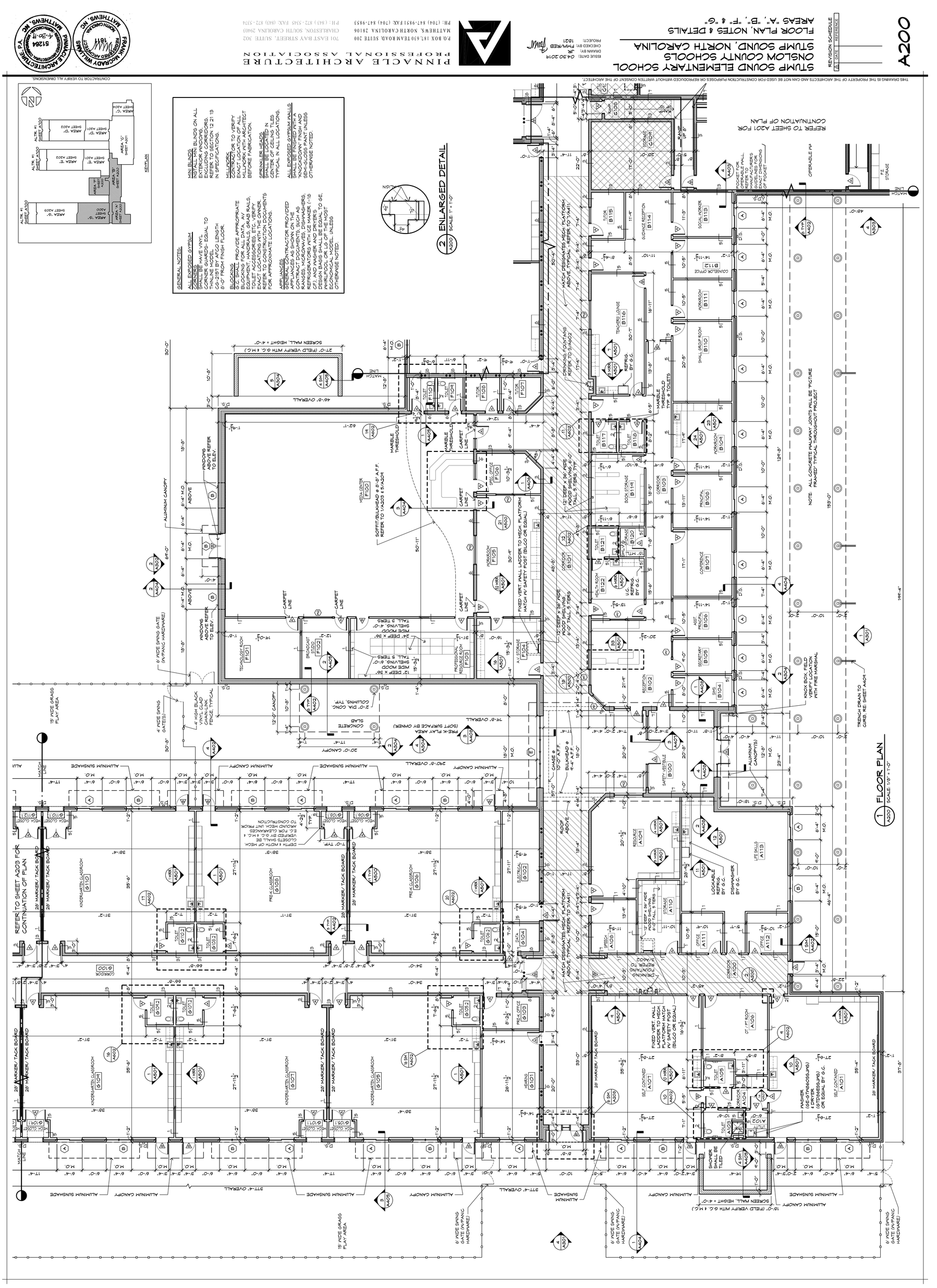

STUMP SOUND ELEMENTARY SCHOOL
ONSLOW COUNTY SCHOOLS
STUMP SOUND, NORTH CAROLINA
FLOOR PLAN, NOTES & DETAILS
AREAS "A", "B", "F" & "G"
A200
PINNACLE ARCHITECTURE
PROFESSIONAL ASSOCIATION
P.O. BOX 187, 630 TEAM ROAD, SUITE 200
MATTHEWS, NORTH CAROLINA 28106
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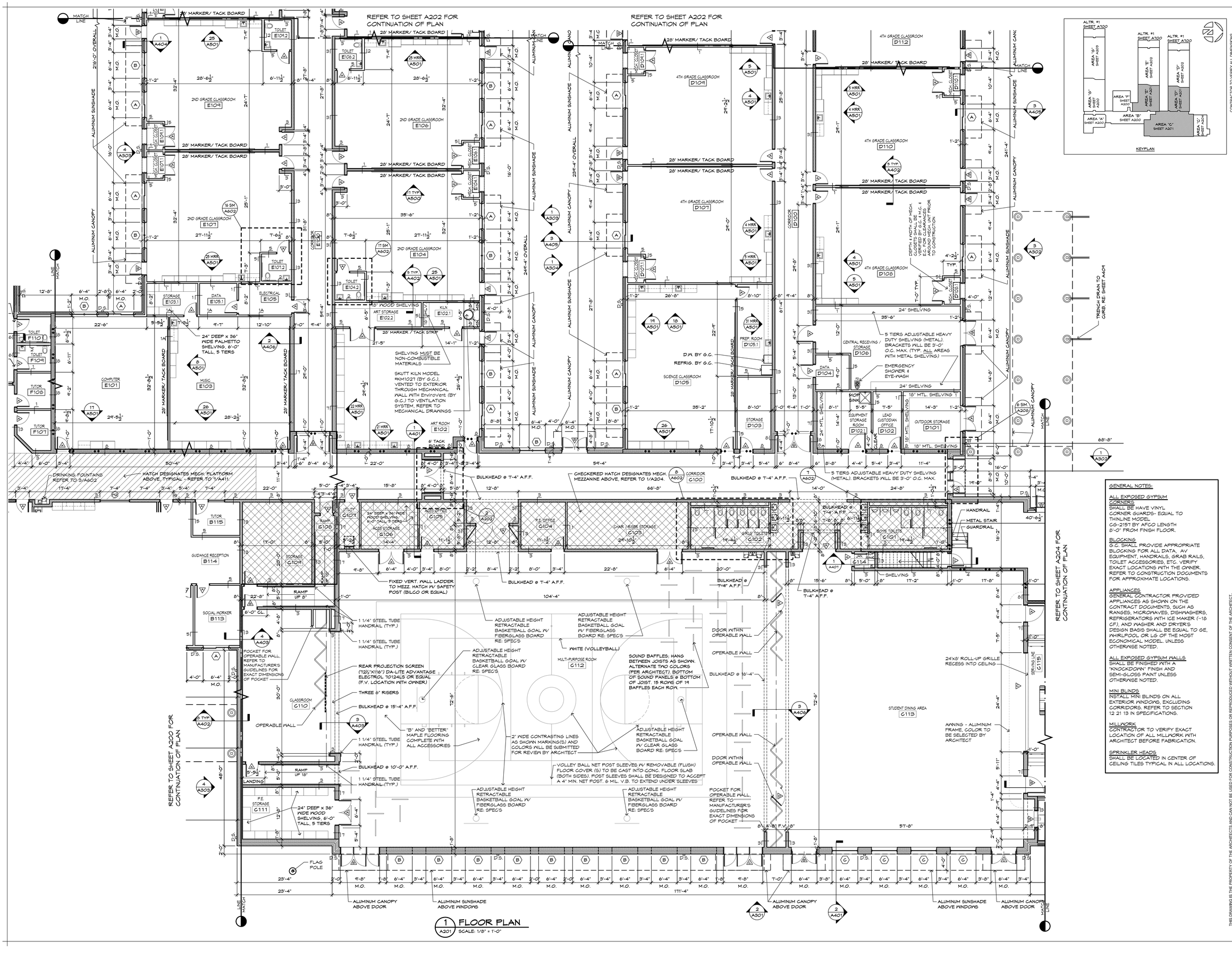
701 EAST BAY STREET, SUITE 302
CHARLESTON, SOUTH CAROLINA 29403
PH: (843) 872-5345 FAX: (843) 872-5374
REVISION SCHEDULE
DATE
REFERENCE
THIS DRAWING IS THE PROPERTY OF THE ARCHITECTS AND CAN NOT BE USED FOR CONSTRUCTION PURPOSES OR REPRODUCED WITHOUT WRITTEN CONSENT OF THE ARCHITECT.
CONTRACTOR TO VERIFY ALL DIMENSIONS.
GENERAL NOTES:
ALL EXPOSED GYPSUM CORNERS
SHALL BE HAVE VINYL CORNER GUARDS EQUAL TO THINLINE MODEL CG-2151 BY AFCO LENGTH 8'-0" FROM FINISH FLOOR.
BLOCKING
G.C. SHALL PROVIDE APPROPRIATE BLOCKING FOR ALL DATA, AV EQUIPMENT, HANDRAILS, GRAB RAILS, TOILET ACCESSORIES, ETC. VERIFY EXACT LOCATIONS WITH THE OWNER. REFER TO CONSTRUCTION DOCUMENTS FOR APPROXIMATE LOCATIONS.
APPLIANCES
GENERAL CONTRACTOR PROVIDED APPLIANCES AS SHOWN ON THE CONTRACT DOCUMENTS, SUCH AS RANGES, MICROWAVES, DISHWASHERS, REFRIGERATORS WITH ICE MAKER (-18 CF), AND WASHER AND DRYERS. DESIGN BASIS SHALL BE EQUAL TO GE, WHIRLPOOL OR LG OF THE MOST ECONOMICAL MODEL, UNLESS OTHERWISE NOTED.
MINI BLINDS
INSTALL MINI BLINDS ON ALL EXTERIOR WINDOWS, EXCLUDING CORRIDORS. REFER TO SECTION 12 21 13 IN SPECIFICATIONS.
MILLWORK
CONTRACTOR TO VERIFY EXACT LOCATION OF ALL MILLWORK WITH ARCHITECT BEFORE FABRICATION.
SPRINKLER HEADS
SHALL BE LOCATED IN CENTER OF CEILING TILES TYPICAL IN ALL LOCATIONS.
ALL EXPOSED GYPSUM WALLS
SHALL BE FINISHED WITH A "KNOCKDOWN" FINISH AND SEMI-GLOSS PAINT UNLESS OTHERWISE NOTED.
2 ENLARGED DETAIL
A200 SCALE: 1" = 1'-0"
1 FLOOR PLAN
A200 SCALE: 1/8" = 1'-0"
REFER TO SHEET A201 FOR CONTINUATION OF PLAN
REFER TO SHEET A203 FOR CONTINUATION OF PLAN
NOTE: ALL CONCRETE WALKWAY JOINTS WILL BE "PICTURE FRAMED" TYPICAL THROUGHOUT PROJECT
KNOX BOX, FIELD VERIFY LOCATION WITH FIRE MARSHAL
TRENCH DRAIN TO CURB, RE: SHEET A409
15' WIDE GRASS PLAY AREA
6' WIDE SWING GATE (W/PANIC HARDWARE)
ALUMINUM CANOPY
ALUMINUM SUNSHADE



1 FLOOR PLAN
A201 SCALE: 1/8" = 1'-0"

GENERAL NOTES:

ALL EXPOSED GYPSUM CORNERS
SHALL BE HAVE VINYL CORNER GUARDS- EQUAL TO THINLINE MODEL CG-2157 BY AFCO LENGTH 8'-0" FROM FINISH FLOOR.

BLOCKING
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SPRINKLER HEADS
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CONTRACTOR TO VERIFY ALL DIMENSIONS.

PINNACLE ARCHITECTURE
PROFESSIONAL ASSOCIATION
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701 EAST BAY STREET, SUITE 302
CHARLESTON, SOUTH CAROLINA 29403
PH: (843) 872-5345 FAX: (843) 872-5374

ISSUE DATE: 04.30.2019
DRAWN BY: JR
CHECKED BY: FMW/REB
PROJECT: 1821

STUMP SOUND ELEMENTARY SCHOOL
ONSLOW COUNTY SCHOOLS
STUMP SOUND, NORTH CAROLINA

FLOOR PLAN, NOTES & DETAILS
AREAS "C", "D" & "E"

REVISION SCHEDULE

△	DATE	REFERENCE

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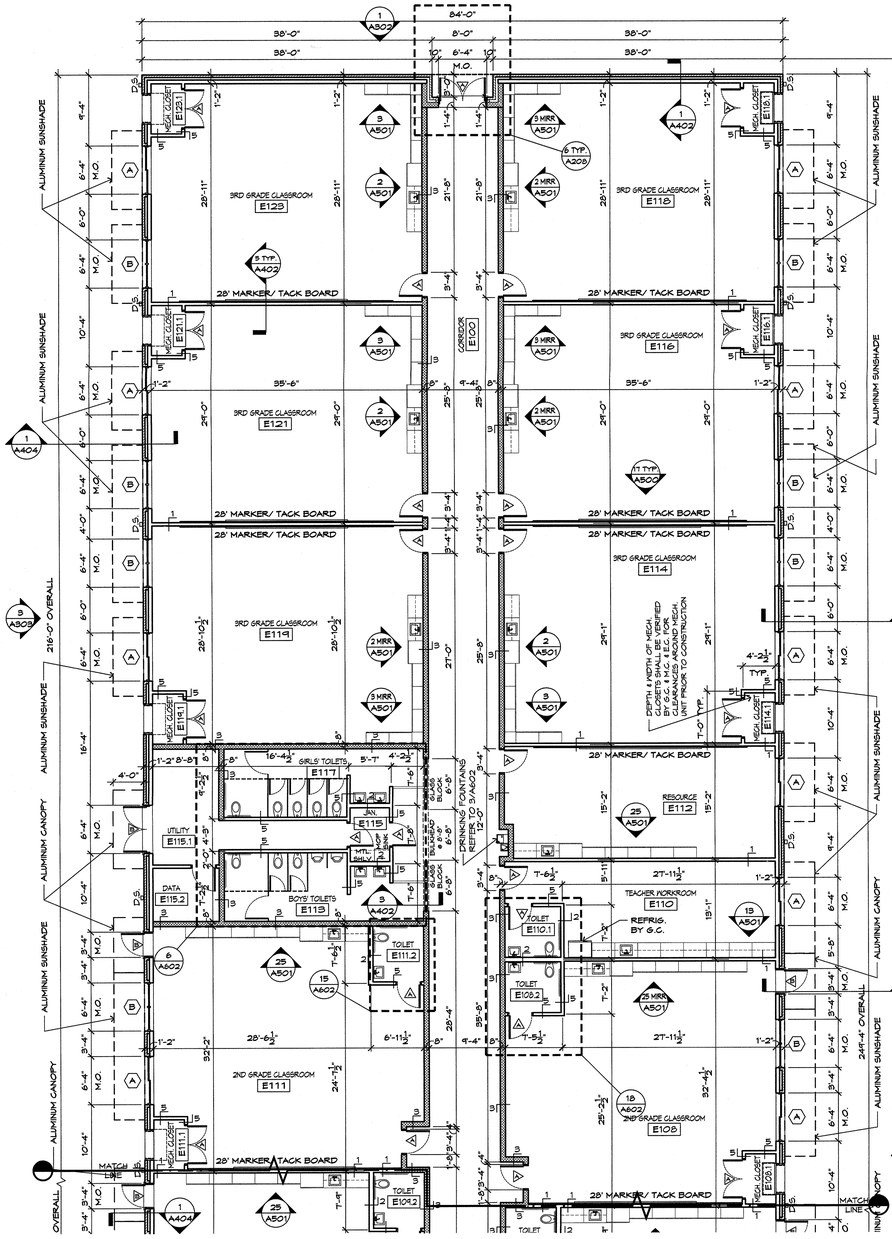
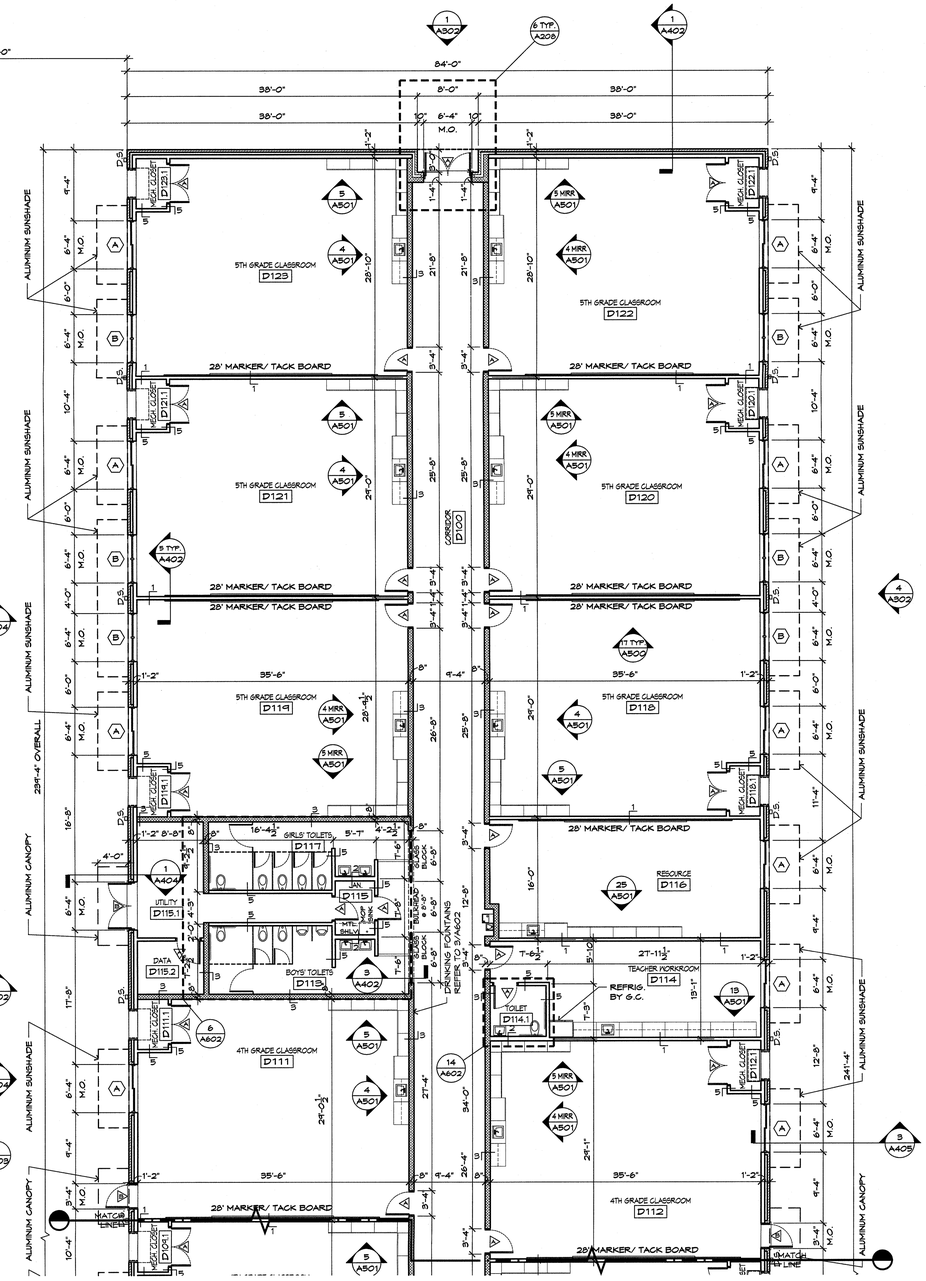
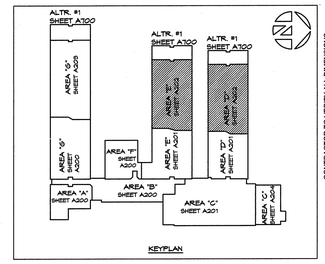
A201

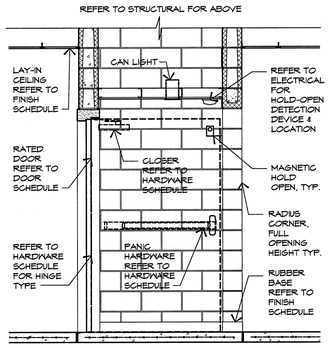


1 A202 PARTIAL FLOOR PLAN
SCALE: 1/8" = 1'-0"

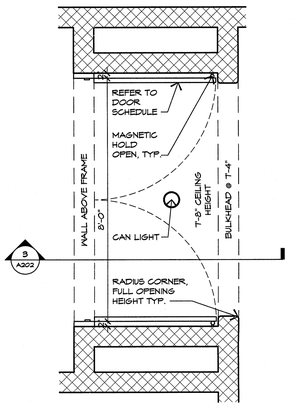




CONTRACTOR TO VERIFY ALL DIMENSIONS.



3 A202 PARTIAL SECTION
SCALE: 1/2" = 1'-0"



2 A202 ENLARGED DOOR ALCOVE
SCALE: 1/2" = 1'-0"

GENERAL NOTES:

ALL EXPOSED GYPSUM CORNERS
SHALL BE HAVE VINYL CORNER GUARDS- EQUAL TO THINLINE MODEL GS-215T BY AFCO LENGTH 8'-0" FROM FINISH FLOOR.

BLOCKING
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MINI BLINDS
INSTALL MINI BLINDS ON ALL EXTERIOR WINDOWS, EXCLUDING CORRIDORS. REFER TO SECTION 12 21 13 IN SPECIFICATIONS.

MILLWORK
CONTRACTOR TO VERIFY EXACT LOCATION OF ALL MILLWORK WITH ARCHITECT BEFORE FABRICATION.

SPRINKLER HEADS
SHALL BE LOCATED IN CENTER OF CEILING TILES TYPICAL IN ALL LOCATIONS.

ALL EXPOSED GYPSUM WALLS
SHALL BE FINISHED WITH A "KNOCKDOWN" FINISH AND SEMI-GLOSS PAINT UNLESS OTHERWISE NOTED.

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PINNACLE ARCHITECTURE
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CHARLESTON, SOUTH CAROLINA 29403
PH: (843) 872-5345 FAX: (843) 872-5374

ISSUE DATE: 04.30.2014
DRAWN BY: PMW/REB
CHECKED BY: PMW
PROJECT: 1821

STUMP SOUND ELEMENTARY SCHOOL
ONSLOW COUNTY SCHOOLS
STUMP SOUND, NORTH CAROLINA

PARTIAL FLOOR PLANS, NOTES & DETAILS
AREA "D" & "E"

REVISION SCHEDULE

Δ	DATE	REFERENCE

A202

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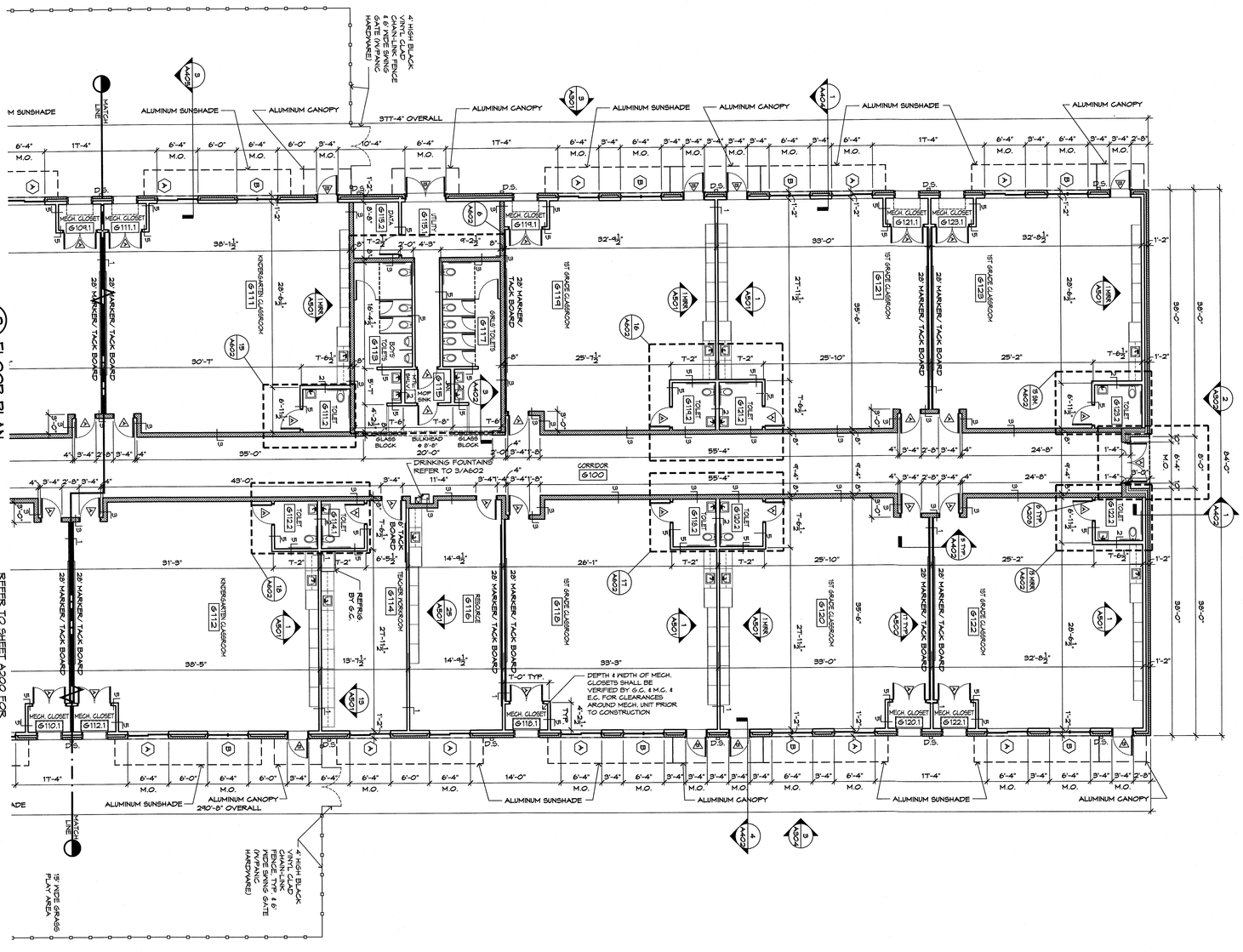
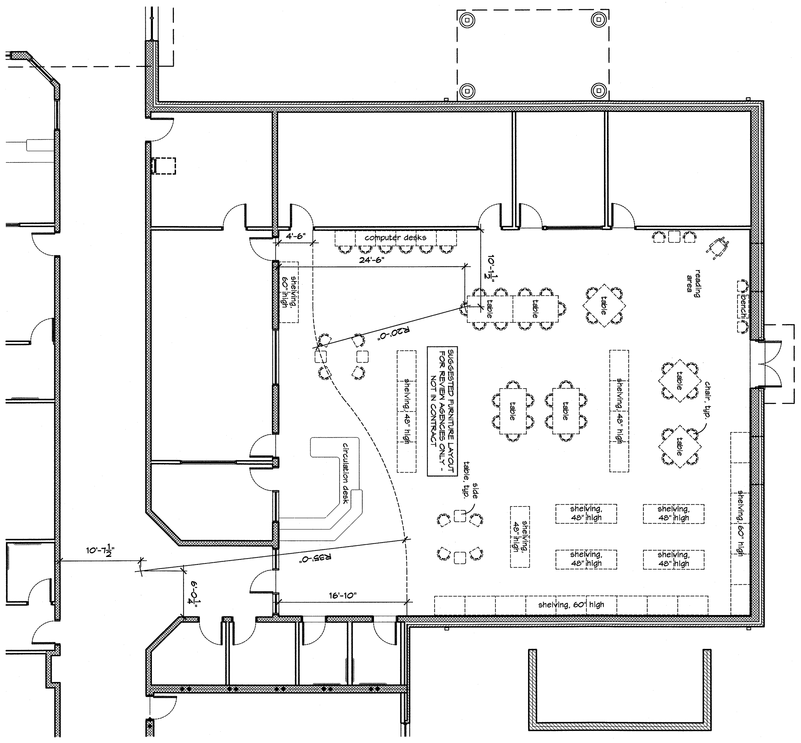
2 FLOOR PLAN
A203 SCALE: 1/8" = 1'-0"



1 PARTIAL SOFFIT PLAN
A203 SCALE: 1/8" = 1'-0"



GENERAL NOTES:

ALL EXPOSED GYPSUM CORNERS SHALL BE WHITE VINYL CORNER BEADS EQUAL TO TRIM-TEX MODEL CB-2121 BY AFCO LENGTH 8'-0" FROM FINISH FLOOR.

BLOCKING BLOCKING TO PROVIDE APPROPRIATE BLOCKING FOR ALL CASEWORK, EQUIPMENT, HANDRAILS, GRAB RAILS, TOILET ACCESSORIES, ETC. VERIFY EXACT LOCATIONS WITH CONTRACTOR. REFER TO CONSTRUCTION DOCUMENTS FOR APPROXIMATE LOCATIONS.

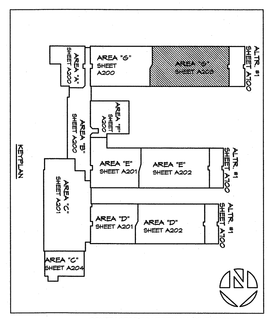
APPLIANCES REFERENCE TO CONTRACTOR PROVIDED APPLIANCES AS SHOWN ON THE CONTRACT DOCUMENTS, SUCH AS REFRIGERATORS WITH ICE MAKERS (18 CF), AND WASHER AND DRYERS DESIGN BASIS SHALL BE EQUAL TO GE, WHIRLPOOL OR LG OF THE MOST ECONOMICAL MODEL UNLESS OTHERWISE NOTED.

ALL EXPOSED GYPSUM WALLS SHALL BE FINISHED WITH A "KNOCKDOWN" FINISH AND SEMI-GLOSS PAINT UNLESS OTHERWISE NOTED.

MINI BLINDS INSTALL MINI BLINDS ON ALL EXTERIOR WINDOWS EXCEPT CORRIDORS. REFER TO SECTION 12 21 13 IN SPECIFICATIONS.

MILLWORK CONTRACTOR TO VERIFY EXACT LOCATION OF ALL MILLWORK WITH ARCHITECT BEFORE FABRICATION.

SPRINKLER HEADS SHALL BE LOCATED IN CENTER OF CEILING TILES TYPICAL IN ALL LOCATIONS.



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A203

REVISION SCHEDULE

NO.	DATE	REFERENCE

STUMP SOUND ELEMENTARY SCHOOL
ONSLOW COUNTY SCHOOLS
STUMP SOUND, NORTH CAROLINA

FLOOR PLAN, NOTES & DETAILS
AREA "G" & PARTIAL SOFFIT PLAN

ISSUE DATE: 04.30.2019
DRAWN BY: JR
CHECKED BY: FMW/REB
PROJECT: 1821

PINNACLE ARCHITECTURE
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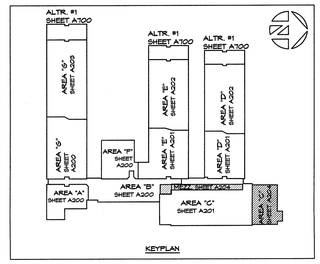
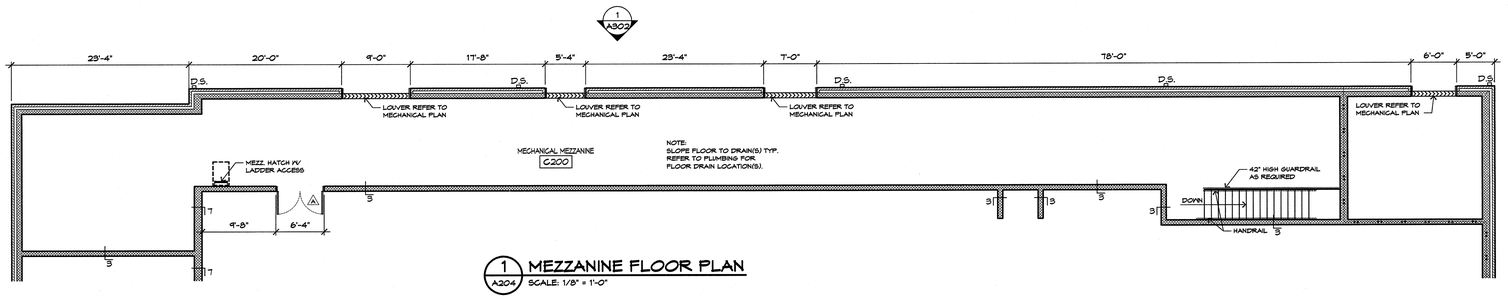
FRANK McGRADY WILLIAMS REGISTERED ARCHITECT 1611 NORTH CAROLINA MATTHEWS, NC

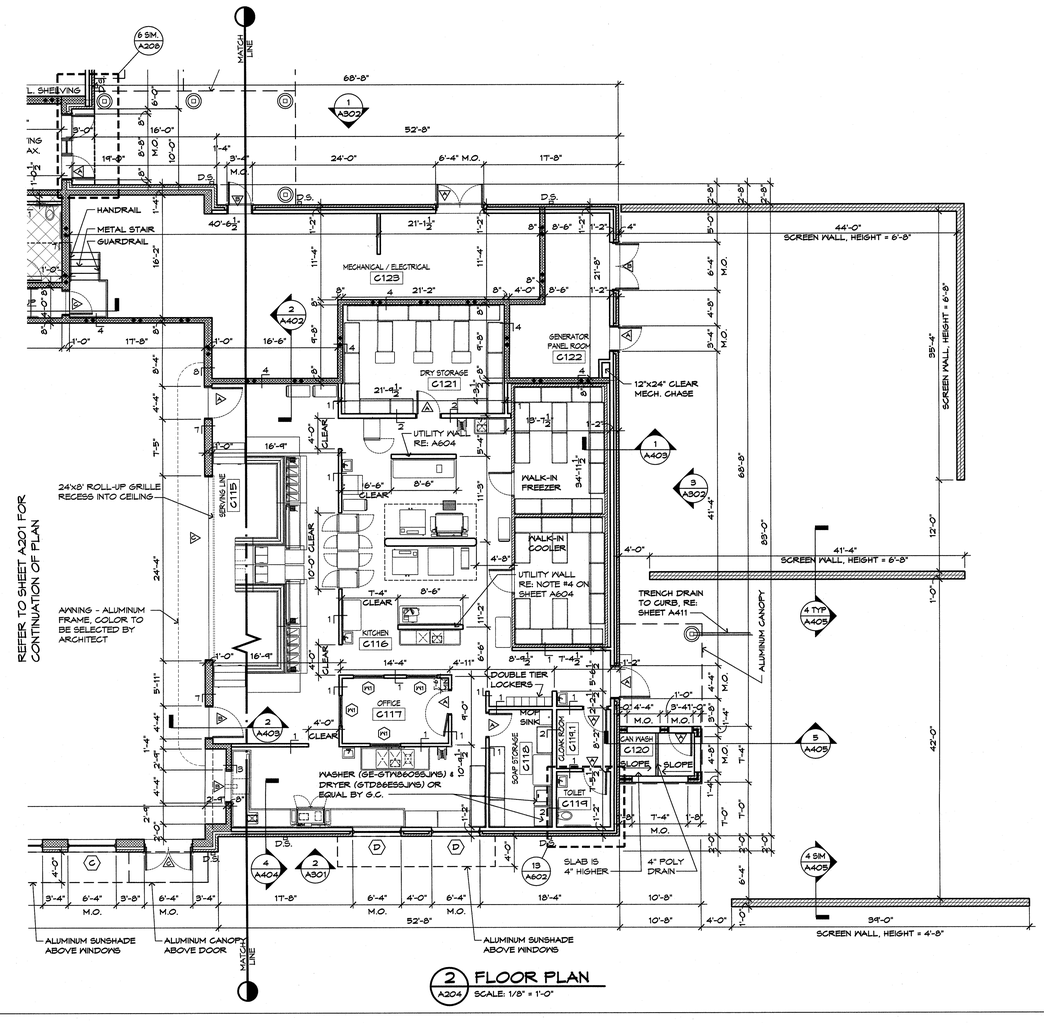
PINNACLE ARCHITECTURE P.A. 51264 4.30.19 REGISTERED ARCHITECTURAL CORPORATION NORTH CAROLINA MATTHEWS, NC



CONTRACTOR TO VERIFY ALL DIMENSIONS.



1 A204 MEZZANINE FLOOR PLAN
SCALE: 1/8" = 1'-0"



2 A204 FLOOR PLAN
SCALE: 1/8" = 1'-0"

GENERAL NOTES:

ALL EXPOSED GYPSUM CORNERS
SHALL BE HAVE VINYL CORNER GUARDS- EQUAL TO THINLINE MODEL CG-2157 BY AFCO LENGTH 8'-0" FROM FINISH FLOOR.

BLOCKING
G.C. SHALL PROVIDE APPROPRIATE BLOCKING FOR ALL DATA, AV EQUIPMENT, HANDRAILS, GRAB RAILS, TOILET ACCESSORIES, ETC. VERIFY EXACT LOCATIONS WITH THE OWNER. REFER TO CONSTRUCTION DOCUMENTS FOR APPROXIMATE LOCATIONS.

APPLIANCES
GENERAL CONTRACTOR PROVIDED APPLIANCES AS SHOWN ON THE CONTRACT DOCUMENTS, SUCH AS RANGES, MICROWAVES, DISHWASHERS, REFRIGERATORS WITH ICE MAKER (~18 CF), AND WASHER AND DRYER'S DESIGN BASIS SHALL BE EQUAL TO GE, WHIRLPOOL OR LG OF THE MOST ECONOMICAL MODEL, UNLESS OTHERWISE NOTED.

MINI BLINDS
INSTALL MINI BLINDS ON ALL EXTERIOR WINDOWS, EXCLUDING CORRIDORS. REFER TO SECTION 12 21 13 IN SPECIFICATIONS.

MILLWORK
CONTRACTOR TO VERIFY EXACT LOCATION OF ALL MILLWORK WITH ARCHITECT BEFORE FABRICATION.

SPRINKLER HEADS
SHALL BE LOCATED IN CENTER OF CEILING TILES TYPICAL IN ALL LOCATIONS.

ALL EXPOSED GYPSUM WALLS
SHALL BE FINISHED WITH A "KNOCKDOWN" FINISH AND SEMI-GLOSS PAINT UNLESS OTHERWISE NOTED.

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ISSUE DATE: 04.30.2019
DRAWN BY: JR
CHECKED BY: FMW/REB
PROJECT: 1821

STUMP SOUND ELEMENTARY SCHOOL
ONSLOW COUNTY SCHOOLS
STUMP SOUND, NORTH CAROLINA

FLOOR PLAN, NOTES & DETAILS
AREA "C" & MECHANICAL MEZZANINE

REVISION SCHEDULE

Δ	DATE	REFERENCE

A204

REFER TO SHEET A208 FOR CONTINUATION OF PLAN

MATCH LINE

MATCH LINE

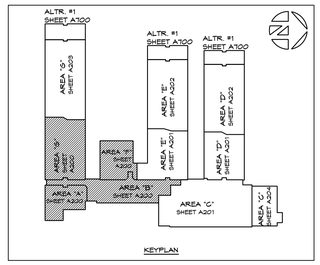
REFLECTED CEILING PLAN SYMBOLS

- 2'X4' ACOUSTICAL LAY-IN CEILING GRID AND TILES
- LAY-IN GRID MOUNTED 2'X4' FLUORESCENT FIXTURE
- DRYWALL CEILING PAINTED
- SUSPENDED 4' FLUORESCENT FIXTURE
- HVAC SUPPLY GRILLE
- HVAC RETURN GRILLE /EXHAUST FAN GRILLE
- WALL MOUNTED LIGHT FIXTURE

2 / A205 — TYP. SYMBOLS
SCALE: NTS

CEILING LEGEND

C-1	24 X 24 X 5/8 LAY-IN PANELS (ARMSTRONG FINE FISSURE/HUMIGUARD)
C-2	NO CEILING, OPEN TO STRUCTURE ABOVE
C-3	EXPOSED METAL SUNSHADE BY PEACHTREE OR APPROVED EQUAL
C-4	DRYWALL CEILING, PAINTED
C-5	PRE-FINISHED ALUMINUM SOFFIT REFER TO SPECS (COLOR/TEXTURE BY ARCHITECT)
C-6	EXPOSED METAL CANOPY BY PEACHTREE OR APPROVED EQUAL



TYPICAL CEILING NOTES:

SEISMIC DESIGN CATEGORY 'C'

BASIC CONNECTIONS, PERIMETER AND BRACING

1. 60 LB. MINIMUM INTERSECTION STRENGTH LIMITS @MT/CT.
2. VERTICAL HANGER WIRE 12 GA. @ 4'-0" O.C.
3. INTERMEDIATE OR HEAVY DUTY MAIN TEE'S.
4. 1 IN 6 MAXIMUM PLUMB OF VERTICAL HANGER WIRES PER ASTM C635.
5. PERIMETER VERTICAL HANGER WIRES NOT MORE THAN 8" FROM WALL UNLESS MOLDING IS LESS THAN 7/8".
6. 3/8" MINIMUM GRID END/WALL CLEARANCE.
7. MINIMUM 7/8" PERIMETER CLOSURE MOLDING WIDTH UNLESS USING PERIMETER WIRES.
8. GRID CONNECTION TO PERIMETER ATTACHED ON TWO WALLS NOT PERMITTED.
9. PERIMETER TEE ENDS REQUIRED TO BE TIED TOGETHER.
10. PARTITION ATTACHMENT ALLOWED ONLY IF CEILING IS CAPABLE OF MOVING LATERALLY.

LIGHTING FIXTURE ATTACHMENT

1. LIGHT FIXTURE (ALL TYPES) MECHANICALLY ATTACHED TO GRID NEC 410-16 (TWO PER FIXTURE UNLESS INDEPENDENTLY SUPPORTED).
2. PENDENT HUNG FIXTURES DIRECTLY SUPPORTED FROM STRUCTURE WITH 9 GA. WIRE (OR APPROVED ALTERNATE).
3. RIGID LAY-IN OR CAN LIGHT FIXTURES:
   - < 10 LBS. - ONE WIRE TO STRUCTURE (MAY BE SLACK).
   - 10-56 LBS. - TWO WIRES FROM HOUSING TO STRUCTURE (MAY BE SLACK).
   - > 56 LBS. - SUPPORTED DIRECTLY TO STRUCTURE BY APPROVED ALTERNATE.
   - < 20 LBS. - POSITIVELY ATTACHED TO GRID.
   - 20-56 LBS. - POSITIVELY ATTACHED TO GRID AND TWO WIRES TO STRUCTURE (MAY BE SLACK).
   - 56 LBS. - DIRECTLY SUPPORTED TO STRUCTURE.

SERVICE APPLICATIONS

1. LESS THAN 20 LBS. POSITIVELY ATTACHED TO GRID.
2. 20 TO 56 LBS. POSITIVELY ATTACHED TO GRID AND TWO WIRES TO STRUCTURE (CAN BE SLACK).
3. MORE THAN 56 LBS. MUST BE DIRECTLY SUPPORTED TO STRUCTURE.
4. MINIMUM 3/8" ON ALL SIDES PERTAINING TO SPRINKLER HEADS AND OTHER PENETRATION CLEARANCES.

SOFFIT/BULKHEAD @ 8'-0" A.F.F. REFER TO 1/A203 & 5/A209

PAINT EXPOSED LINTELS PV HP EXTERIOR EPOXY PAINT COLOR BY ARCHITECT TYPICAL

CHASE @ 10'-0" A.F.F. REFER TO 3/A405

BULKHEAD @ 9'-4" A.F.F. REFER TO 3/A205 (SIM.)

BULKHEAD @ 8'-8" A.F.F. REFER TO 3/A204 (SIM.)

BULKHEAD @ 8'-8" A.F.F. REFER TO 3/A204 (SIM.)

BULKHEAD @ 9'-0" A.F.F. REFER TO 2/A205 SIM.

REFER TO SHEET A206 FOR CONTINUATION OF PLAN

1 / A205 — REFLECTED CEILING PLAN
SCALE: 1/8" = 1'-0"

NOTES:
1. REFER TO ELECTRICAL AND MECHANICAL DRAWINGS FOR EXACT LIGHTING AND DIFFUSER LOCATIONS.
2. CEILING HEIGHTS ARE GIVEN ACCORDING TO THE FINISHED FLOOR ELEVATION DIRECTLY BELOW.

CONTRACTOR TO VERIFY ALL DIMENSIONS.

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ISSUE DATE: 04.30.2019
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PROJECT: 1921

STUMP SOUND ELEMENTARY SCHOOL
ONSLOW COUNTY SCHOOLS
STUMP SOUND, NORTH CAROLINA

REFLECTED CEILING PLAN & NOTES
AREAS "A", "B", "F" & "G"

REVISION SCHEDULE

△	DATE	REFERENCE

A205

THIS DRAWING IS THE PROPERTY OF THE ARCHITECTS AND CAN NOT BE USED FOR CONSTRUCTION PURPOSES OR REPRODUCED WITHOUT WRITTEN CONSENT OF THE ARCHITECT.

REFER TO SHEET A207 FOR CONTINUATION OF PLAN

REFER TO SHEET A207 FOR CONTINUATION OF PLAN

REFER TO SHEET A205 FOR CONTINUATION OF PLAN

REFER TO SHEET A204 FOR CONTINUATION OF PLAN

BULKHEAD @ T'-4" A.F.F. REFER TO 3/A208

BULKHEAD @ T'-4" A.F.F. REFER TO 2/A208

BULKHEAD @ T'-4" A.F.F. REFER TO 3/A208

BULKHEAD @ 10'-0" A.F.F. REFER TO 3/A207

BULKHEAD @ 15'-4" A.F.F. REFER TO 3/A403

BULKHEAD @ 16'-4" A.F.F. REFER TO 2/A406

EXPOSED DUCTWORK SHALL BE LOCATED ABOVE BOTTOM OF JOIST(S) AND BETWEEN JOIST(S), TYP.

HANGING SOUND BAFFLES BETWEEN JOISTS REFER TO FLOOR PLAN A201

PAINT EXPOSED LINTELS W/ HP EXTERIOR EPOXY PAINT COLOR BY ARCHITECT TYPICAL

TYPICAL CEILING NOTES:

SEISMIC DESIGN CATEGORY "C"

BASIC CONNECTIONS, PERIMETER AND BRACING

1. 60 LB. MINIMUM INTERSECTION STRENGTH LIMITS @MT/GT.
2. VERTICAL HANGER WIRE 12 GA. @ 4'-0" O.C.
3. INTERMEDIATE OR HEAVY DUTY MAIN TEES.
4. 1 IN 6 MAXIMUM PLUMB OF VERTICAL HANGER WIRES PER ASTM C635.
5. PERIMETER VERTICAL HANGER WIRES NOT MORE THAN 8" FROM WALL UNLESS MOLDING IS LESS THAN 7/8".
6. 3/8" MINIMUM GRID END/WALL CLEARANCE.
7. MINIMUM 7/8" PERIMETER CLOSURE MOLDING WIDTH UNLESS USING PERIMETER WIRES.
8. GRID CONNECTION TO PERIMETER ATTACHED ON TWO WALLS NOT PERMITTED.
9. PERIMETER TEE ENDS REQUIRED TO BE TIED TOGETHER.
10. PARTITION ATTACHMENT ALLOWED ONLY IF CEILING IS CAPABLE OF MOVING LATERALLY.

LIGHTING FIXTURE ATTACHMENT

1. LIGHT FIXTURE (ALL TYPES) MECHANICALLY ATTACHED TO GRID NEC 410-16 (TWO PER FIXTURE UNLESS INDEPENDENTLY SUPPORTED).
2. PENDENT HUNG FIXTURES DIRECTLY SUPPORTED FROM STRUCTURE WITH 9 GA. WIRE (OR APPROVED ALTERNATE).
3. RIGID LAY-IN OR CAN LIGHT FIXTURES:
   - ‹ 10 LBS. - ONE WIRE TO STRUCTURE (MAY BE SLACK).
   - 10-56 LBS. - TWO WIRES FROM HOUSING TO STRUCTURE (MAY BE SLACK).
   - › 56 LBS. - SUPPORTED DIRECTLY TO STRUCTURE BY APPROVED ALTERNATE.
   - ‹ 20 LBS. - POSITIVELY ATTACHED TO GRID.
   - 20-56 LBS. - POSITIVELY ATTACHED TO GRID AND TWO WIRES TO STRUCTURE (MAY BE SLACK).
   - 56 LBS. - DIRECTLY SUPPORTED TO STRUCTURE.

SERVICE APPLICATIONS

1. LESS THAN 20 LBS. POSITIVELY ATTACHED TO GRID.
2. 20 TO 56 LBS. POSITIVELY ATTACHED TO GRID AND TWO WIRES TO STRUCTURE (CAN BE SLACK).
3. MORE THAN 56 LBS. MUST BE DIRECTLY SUPPORTED TO STRUCTURE.
4. MINIMUM 3/8" ON ALL SIDES PERTAINING TO SPRINKLER HEADS AND OTHER PENETRATION CLEARANCES.

NOTES:
1. REFER TO ELECTRICAL AND MECHANICAL DRAWINGS FOR EXACT LIGHTING AND DIFFUSER LOCATIONS.
2. CEILING HEIGHTS ARE GIVEN ACCORDING TO THE FINISHED FLOOR ELEVATION DIRECTLY BELOW.

1 / A206 REFLECTED CEILING PLAN
SCALE: 1/8" = 1'-0"

KEYPLAN

REFLECTED CEILING PLAN SYMBOLS

- 2X4' ACOUSTICAL LAY-IN CEILING GRID AND TILES
- LAY-IN GRID MOUNTED 2X4' FLUORESCENT FIXTURE
- DRYWALL CEILING PAINTED
- SUSPENDED 4' FLUORESCENT FIXTURE
- HVAC SUPPLY GRILLE
- HVAC RETURN GRILLE /EXHAUST FAN GRILLE
- WALL MOUNTED LIGHT FIXTURE

2 / A206 TYP. SYMBOLS
SCALE: NTS

CEILING LEGEND

C-1	24 X 24 X 5/8 LAY-IN PANELS (ARMSTRONG FINE FISSURE/HUMIGUARD)
C-2	NO CEILING, OPEN TO STRUCTURE ABOVE
C-3	EXPOSED METAL SUNSHADE BY PEACHTREE OR APPROVED EQUAL
C-4	DRYWALL CEILING, PAINTED
C-5	PRE-FINISHED ALUMINUM SOFFIT REFER TO SPECS (COLOR/TEXTURE BY ARCHITECT)
C-6	EXPOSED METAL CANOPY BY PEACHTREE OR APPROVED EQUAL

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PINNACLE ARCHITECTURE, P.A. NC 51264 11-30-18 MATTHEWS

FRANK MCCRADY WILLIAMS REGISTERED ARCHITECT 19811 NC MATTHEWS

ISSUE DATE: 04.30.2019
DRAWN BY: AM
CHECKED BY: FMW/REB
PROJECT: 1821

STUMP SOUND ELEMENTARY SCHOOL
ONSLOW COUNTY SCHOOLS
STUMP SOUND, NORTH CAROLINA

REFLECTED CEILING PLAN & NOTES AREAS "C", "D" & "E"

REVISION SCHEDULE

△	DATE	REFERENCE

A206

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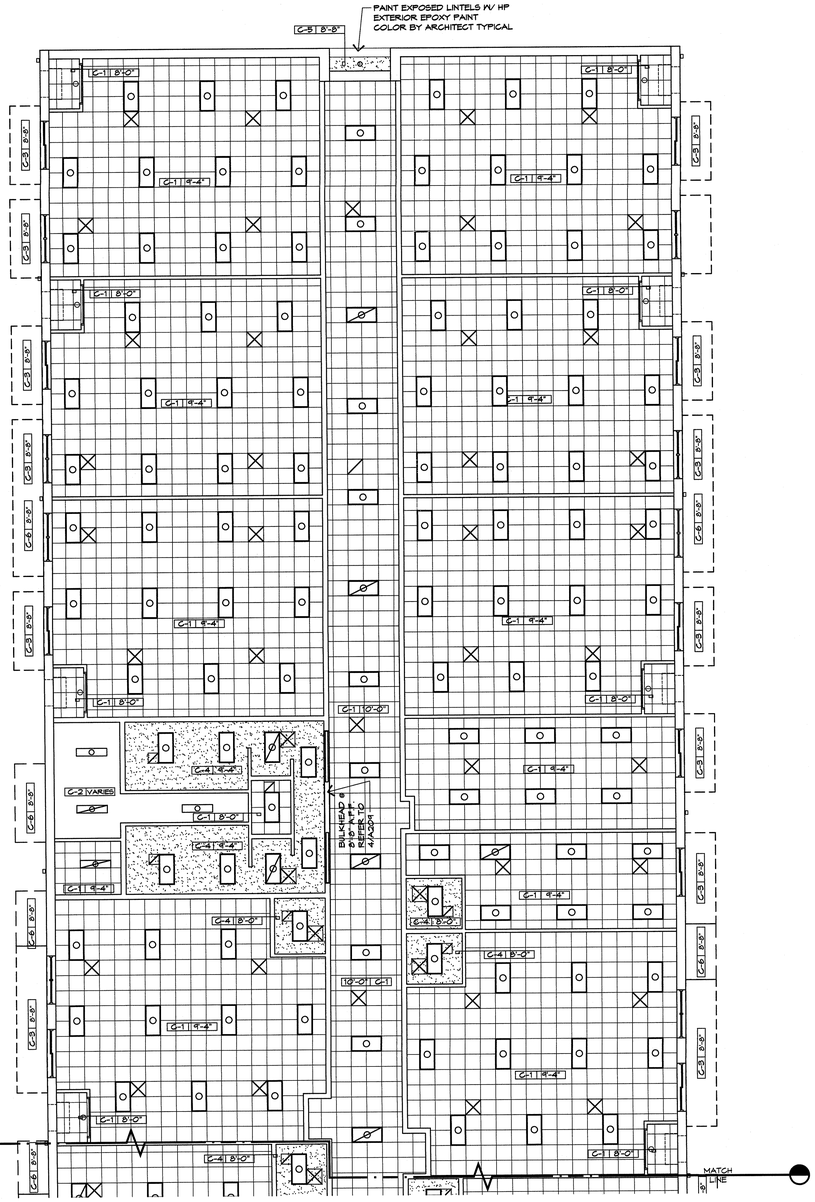
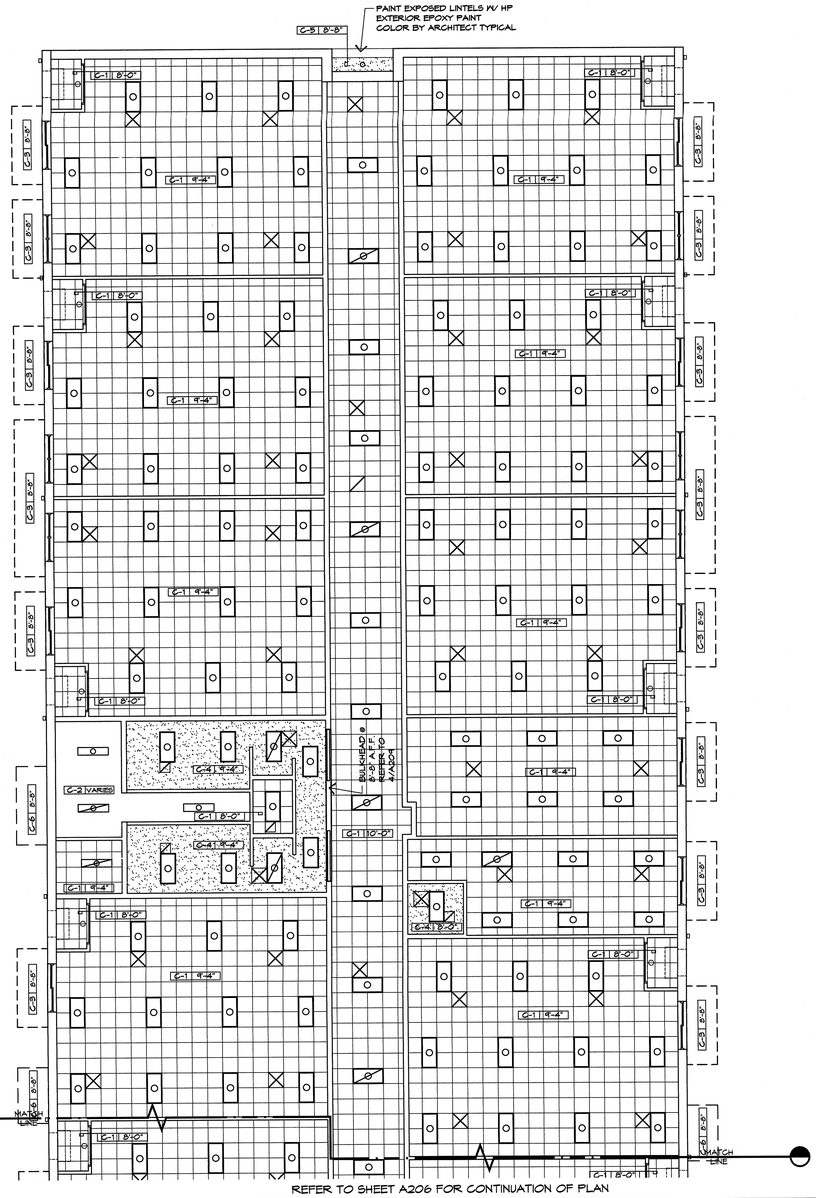


REFER TO SHEET A206 FOR CONTINUATION OF PLAN

NOTES:
1. REFER TO ELECTRICAL AND MECHANICAL DRAWINGS FOR EXACT LIGHTING AND DIFFUSER LOCATIONS.
2. CEILING HEIGHTS ARE GIVEN ACCORDING TO THE FINISHED FLOOR ELEVATION DIRECTLY BELOW.

1 A207 REFLECTED CEILING PLAN
SCALE: 1/8" = 1'-0"



REFER TO SHEET A206 FOR CONTINUATION OF PLAN

TYPICAL CEILING NOTES:

SEISMIC DESIGN CATEGORY 'C'

BASIC CONNECTIONS, PERIMETER AND BRACING

1. 60 LB. MINIMUM INTERSECTION STRENGTH LIMITS @MT/CT.
2. VERTICAL HANGER WIRE 12 GA. @ 4'-0" O.C.
3. INTERMEDIATE OR HEAVY DUTY MAIN TEES.
4. 1 IN 6 MAXIMUM PLUMB OF VERTICAL HANGER WIRES PER ASTM C635.
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7. MINIMUM 7/8" PERIMETER CLOSURE MOLDING WIDTH UNLESS USING PERIMETER WIRES.
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10. PARTITION ATTACHMENT ALLOWED ONLY IF CEILING IS CAPABLE OF MOVING LATERALLY.

LIGHTING FIXTURE ATTACHMENT

1. LIGHT FIXTURE (ALL TYPES) MECHANICALLY ATTACHED TO GRID NEC 410-16 (TWO PER FIXTURE UNLESS INDEPENDENTLY SUPPORTED).
2. PENDENT HUNG FIXTURES DIRECTLY SUPPORTED FROM STRUCTURE WITH 9 GA. WIRE (OR APPROVED ALTERNATE).
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   * < 10 LBS. - ONE WIRE TO STRUCTURE (MAY BE SLACK).
   * 10-56 LBS. - TWO WIRES FROM HOUSING TO STRUCTURE (MAY BE SLACK).
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SERVICE APPLICATIONS

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3. MORE THAN 56 LBS. MUST BE DIRECTLY SUPPORTED TO STRUCTURE.
4. MINIMUM 3/8" ON ALL SIDES PERTAINING TO SPRINKLER HEADS AND OTHER PENETRATION CLEARANCES.

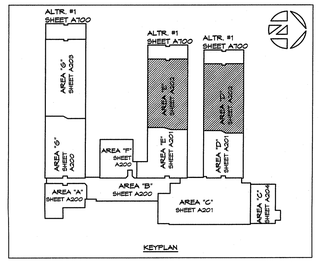
REFLECTED CEILING PLAN SYMBOLS

- 2'X4' ACOUSTICAL LAY-IN CEILING GRID AND TILES
- LAY-IN GRID MOUNTED 2'X4' FLUORESCENT FIXTURE
- DRYWALL CEILING PAINTED
- SUSPENDED 4' FLUORESCENT FIXTURE
- HVAC SUPPLY GRILLE
- HVAC RETURN GRILLE /EXHAUST FAN GRILLE
- WALL MOUNTED LIGHT FIXTURE

3 A207 TYP. SYMBOLS
SCALE: NTS

CEILING LEGEND

C-1	24 X 24 X 5/8 LAY-IN PANELS (ARMSTRONG FINE FISSURE/HUMIGUARD)
C-2	NO CEILING, OPEN TO STRUCTURE ABOVE
C-3	EXPOSED METAL SUNSHADE BY PEACHTREE OR APPROVED EQUAL
C-4	DRYWALL CEILING, PAINTED
C-5	PRE-FINISHED ALUMINUM SOFFIT REFER TO SPECS (COLOR/TEXTURE BY ARCHITECT)
C-6	EXPOSED METAL CANOPY BY PEACHTREE OR APPROVED EQUAL



KEYPLAN

CONTRACTOR TO VERIFY ALL DIMENSIONS.

PINNACLE ARCHITECTURE, P.A. — CORPORATE REGISTERED ARCHITECTURE — 51264 — 4-30-19 — NC — FINNICLE MATTHEWS

FRANK RADY WILLIAMS — REGISTERED ARCHITECT — NC — WILLIAMS MATTHEWS

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ISSUE DATE: 04.30.2019
DRAWN BY: PMW/RBS
CHECKED BY: PMW
PROJECT: 1821

STUMP SOUND ELEMENTARY SCHOOL
ONSLOW COUNTY SCHOOLS
STUMP SOUND, NORTH CAROLINA

REFLECTED CEILING PLAN & NOTES
AREAS "D" & "E"

REVISION SCHEDULE

△	DATE	REFERENCE

A207

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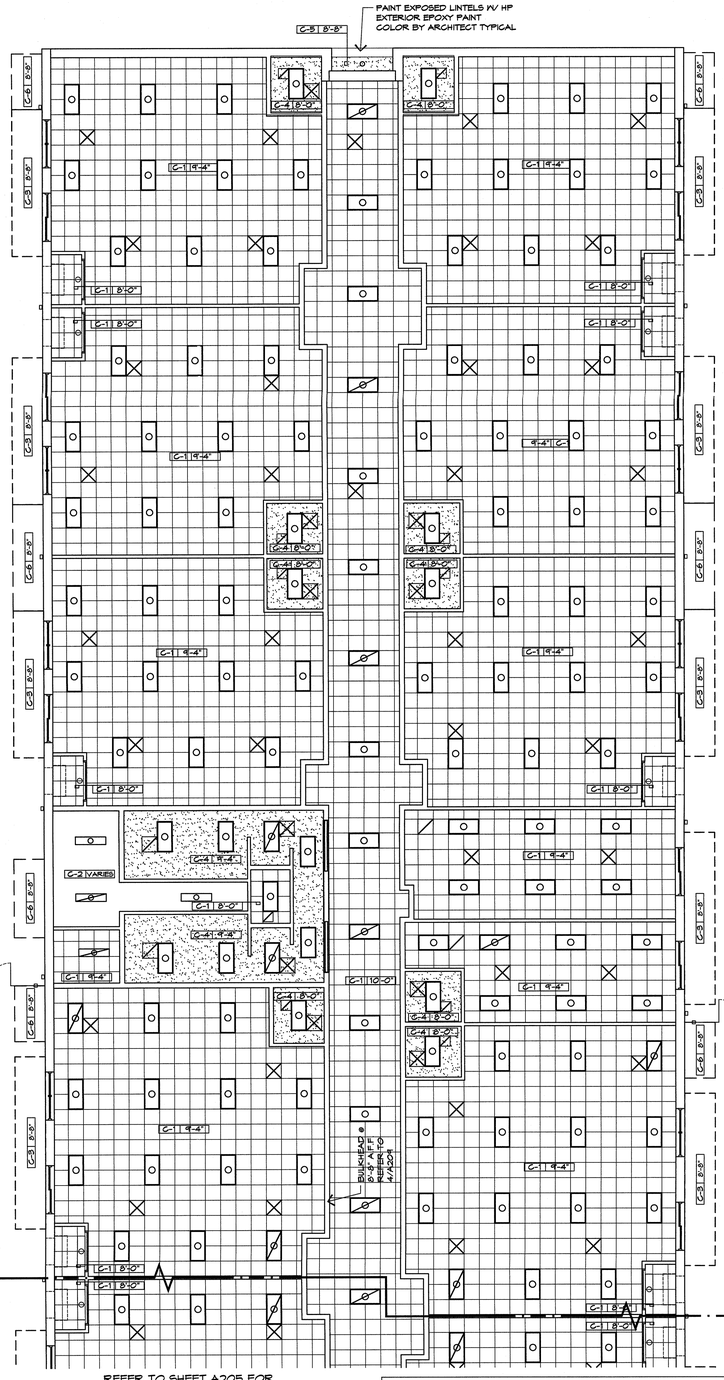
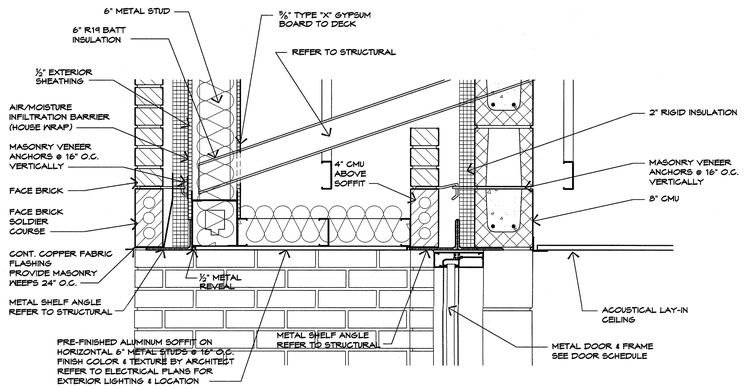


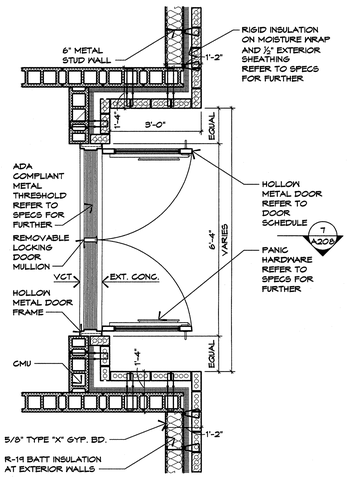
REFER TO SHEET A205 FOR CONTINUATION OF PLAN

NOTES:
1. REFER TO ELECTRICAL AND MECHANICAL DRAWINGS FOR EXACT LIGHTING AND DIFFUSER LOCATIONS.
2. CEILING HEIGHTS ARE GIVEN ACCORDING TO THE FINISHED FLOOR ELEVATION DIRECTLY BELOW.

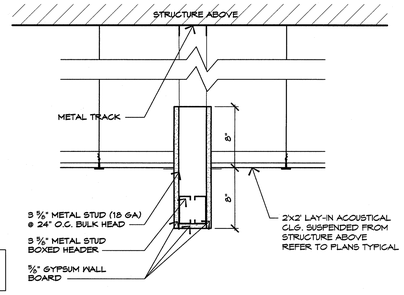
1 A208 REFLECTED CEILING PLAN
SCALE: 1/8" = 1'-0"



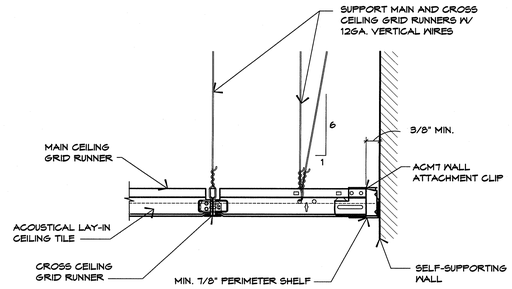
7 A208 DETAIL
SCALE: 1 1/2"=1'-0"



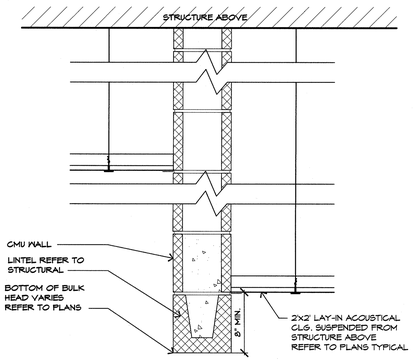
6 A208 ENLARGED DETAIL
SCALE: 1/2"=1'-0"



2 A208 TYPICAL DETAIL
SCALE: 1/8"=1'-0"



5 A208 TYPICAL DETAIL
SCALE: NOT TO SCALE



3 A208 TYPICAL DETAIL
SCALE: 1/8"=1'-0"

TYPICAL CEILING NOTES:
SEISMIC DESIGN CATEGORY "C"

BASIC CONNECTIONS, PERIMETER AND BRACING

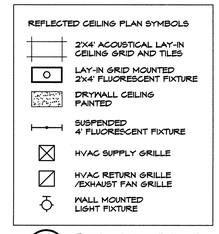
1. 60 LB. MINIMUM INTERSECTION STRENGTH LIMITS @MT/CT.
2. VERTICAL HANGER WIRE 12 GA. @ 4'-0" O.C.
3. INTERMEDIATE OR HEAVY DUTY MAIN TEE'S.
4. 1 IN 6 MAXIMUM PLUMB OF VERTICAL HANGER WIRES PER ASTM C635.
5. PERIMETER VERTICAL HANGER WIRES NOT MORE THAN 8" FROM WALL UNLESS MOLDING IS LESS THAN 7/8".
6. 3/8" MINIMUM GRID END/WALL CLEARANCE.
7. MINIMUM 7/8" PERIMETER CLOSURE MOLDING WIDTH UNLESS USING PERIMETER WIRES.
8. GRID CONNECTION TO PERIMETER ATTACHED ON TWO WALLS NOT PERMITTED.
9. PERIMETER TEE ENDS REQUIRED TO BE TIED TOGETHER.
10. PARTITION ATTACHMENT ALLOWED ONLY IF CEILING IS CAPABLE OF MOVING LATERALLY.

LIGHTING FIXTURE ATTACHMENT

1. LIGHT FIXTURE (ALL TYPES) MECHANICALLY ATTACHED TO GRID NEC 410-16 (TWO PER FIXTURE UNLESS INDEPENDENTLY SUPPORTED).
2. PENDENT HUNG FIXTURES DIRECTLY SUPPORTED FROM STRUCTURE WITH 9 GA. WIRE (OR APPROVED ALTERNATE).
3. RIGID LAY-IN OR CAN LIGHT FIXTURES:
   * ‹ 10 LBS. - ONE WIRE TO STRUCTURE (MAY BE SLACK).
   * 10-56 LBS. - TWO WIRES FROM HOUSING TO STRUCTURE (MAY BE SLACK).
   * › 56 LBS. - SUPPORTED DIRECTLY TO STRUCTURE BY APPROVED ALTERNATE.
   * ‹ 20 LBS. - POSITIVELY ATTACHED TO GRID.
   * 20-56 LBS. - POSITIVELY ATTACHED TO GRID AND TWO WIRES TO STRUCTURE (MAY BE SLACK).
   * 56 LBS. - DIRECTLY SUPPORTED TO STRUCTURE.

SERVICE APPLICATIONS

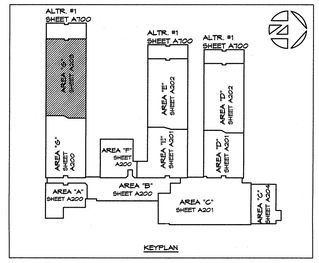
1. LESS THAN 20 LBS. POSITIVELY ATTACHED TO GRID.
2. 20 TO 56 LBS. POSITIVELY ATTACHED TO GRID AND TWO WIRES TO STRUCTURE (CAN BE SLACK).
3. MORE THAN 56 LBS. MUST BE DIRECTLY SUPPORTED TO STRUCTURE.
4. MINIMUM 3/8" ON ALL SIDES PERTAINING TO SPRINKLER HEADS AND OTHER PENETRATION CLEARANCES.



4 A208 TYP. SYMBOLS
SCALE: NTS

CEILING LEGEND

C-1	24 X 24 X 5/8 LAY-IN PANELS (ARMSTRONG FINE FISSURE/HUMIGUARD)
C-2	NO CEILING, OPEN TO STRUCTURE ABOVE
C-3	EXPOSED METAL SUNSHADE BY PEACHTREE OR APPROVED EQUAL
C-4	DRYWALL CEILING, PAINTED
C-5	PRE-FINISHED ALUMINUM SOFFIT REFER TO SPECS (COLOR/TEXTURE BY ARCHITECT)
C-6	EXPOSED METAL CANOPY BY PEACHTREE OR APPROVED EQUAL



CONTRACTOR TO VERIFY ALL DIMENSIONS.

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ISSUE DATE: 04.30.2014
DRAWN BY: JR
CHECKED BY: FMW/REB
PROJECT: 1821

STUMP SOUND ELEMENTARY SCHOOL
ONSLOW COUNTY SCHOOLS
STUMP SOUND, NORTH CAROLINA

REFLECTED CEILING PLAN & NOTES
AREA "G"

REVISION SCHEDULE

Δ	DATE	REFERENCE

A208

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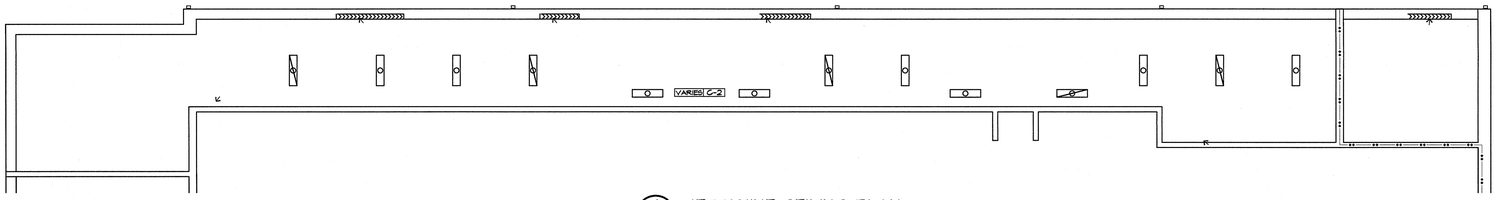
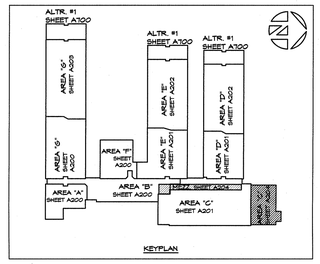
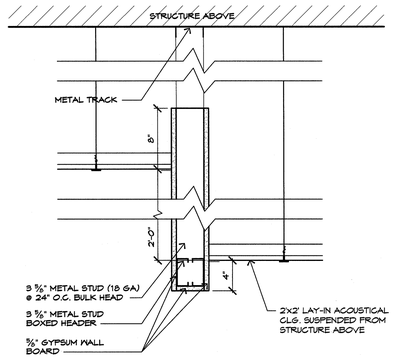


1 A209 **MEZZANINE CEILING PLAN**
SCALE: 1/8" = 1'-0"

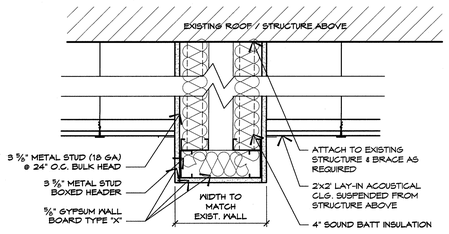


CONTRACTOR TO VERIFY ALL DIMENSIONS.

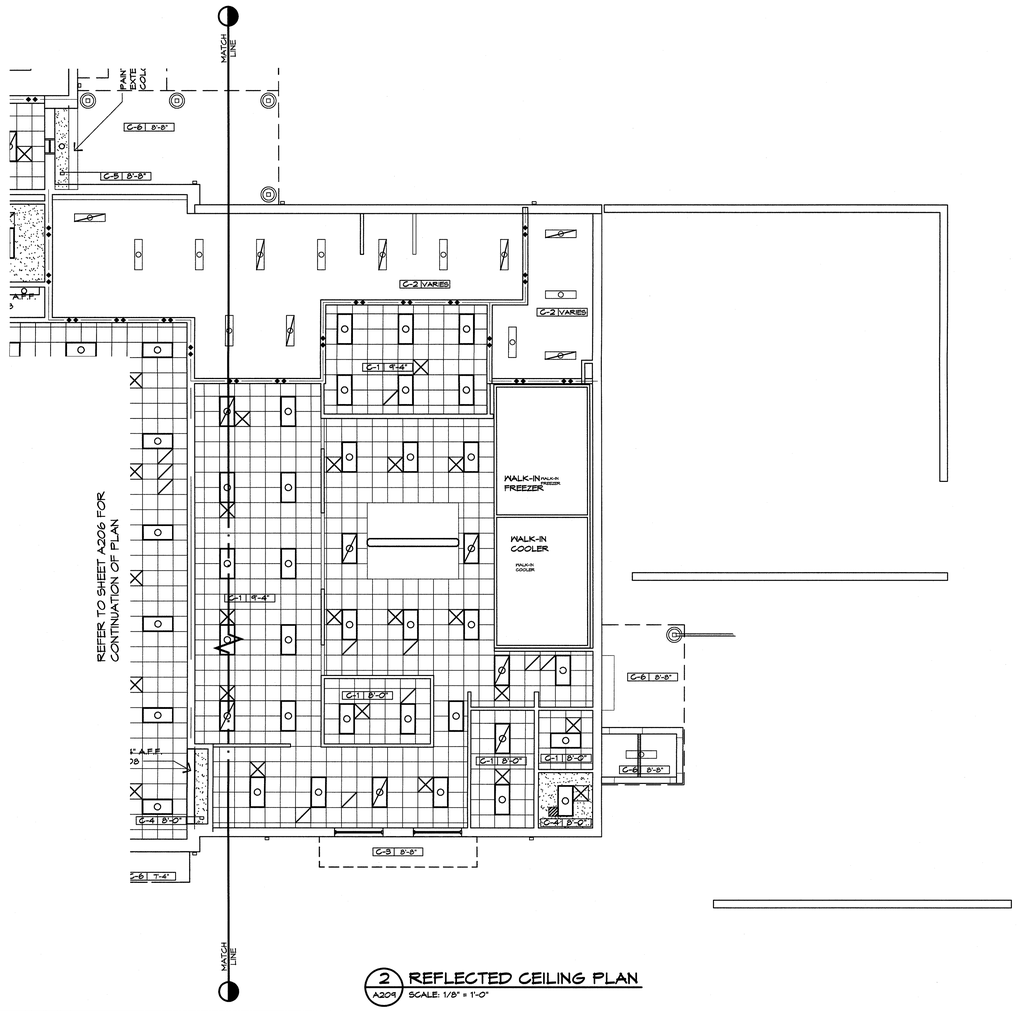
NOTES:
1. REFER TO ELECTRICAL AND MECHANICAL DRAWINGS FOR EXACT LIGHTING AND DIFFUSER LOCATIONS.
2. CEILING HEIGHTS ARE GIVEN ACCORDING TO THE FINISHED FLOOR ELEVATION DIRECTLY BELOW.



5 A209 **TYPICAL DETAIL**
SCALE: N.T.S.



4 A209 **TYPICAL DETAIL**
SCALE: N.T.S.



2 A209 **REFLECTED CEILING PLAN**
SCALE: 1/8" = 1'-0"

TYPICAL CEILING NOTES:

SEISMIC DESIGN CATEGORY 'C'

BASIC CONNECTIONS, PERIMETER AND BRACING

1. 60 LB. MINIMUM INTERSECTION STRENGTH LIMITS @MT/CT.
2. VERTICAL HANGER WIRE 12 GA. @ 4'-0" O.C.
3. INTERMEDIATE OR HEAVY DUTY MAIN TEE'S.
4. 1 IN 6 MAXIMUM PLUMB OF VERTICAL HANGER WIRES PER ASTM C635.
5. PERIMETER VERTICAL HANGER WIRES NOT MORE THAN 8" FROM WALL UNLESS MOLDING IS LESS THAN 7/8".
6. 3/8" MINIMUM GRID END/WALL CLEARANCE.
7. MINIMUM 7/8" PERIMETER CLOSURE MOLDING WIDTH UNLESS USING PERIMETER WIRES.
8. GRID CONNECTION TO PERIMETER ATTACHED ON TWO WALLS NOT PERMITTED.
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10. PARTITION ATTACHMENT ALLOWED ONLY IF CEILING IS CAPABLE OF MOVING LATERALLY.

LIGHTING FIXTURE ATTACHMENT

1. LIGHT FIXTURE (ALL TYPES) MECHANICALLY ATTACHED TO GRID PER 410-16 (TWO PER FIXTURE UNLESS INDEPENDENTLY SUPPORTED).
2. PENDENT HUNG FIXTURES DIRECTLY SUPPORTED FROM STRUCTURE WITH 9 GA. WIRE (OR APPROVED ALTERNATE).
3. RIGID LAY-IN OR CAN LIGHT FIXTURES:
   - * < 10 LBS. - ONE WIRE TO STRUCTURE (MAY BE SLACK).
   - * 10-56 LBS. - TWO WIRES FROM HOUSING TO STRUCTURE (MAY BE SLACK).
   - * > 56 LBS. - SUPPORTED DIRECTLY TO STRUCTURE BY APPROVED ALTERNATE.
   - * < 20 LBS. - POSITIVELY ATTACHED TO GRID.
   - * 20-56 LBS. - POSITIVELY ATTACHED TO GRID AND TWO WIRES TO STRUCTURE (MAY BE SLACK).
   - * 56 LBS. - DIRECTLY SUPPORTED TO STRUCTURE.

SERVICE APPLICATIONS

1. LESS THAN 20 LBS. POSITIVELY ATTACHED TO GRID.
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3. MORE THAN 56 LBS. MUST BE DIRECTLY SUPPORTED TO STRUCTURE.
4. MINIMUM 3/8" ON ALL SIDES PERTAINING TO SPRINKLER HEADS AND OTHER PENETRATION CLEARANCES.

REFLECTED CEILING PLAN SYMBOLS

- 2X4' ACOUSTICAL LAY-IN CEILING GRID AND TILES
- LAY-IN GRID MOUNTED 2X4' FLUORESCENT FIXTURE
- DRYWALL CEILING PAINTED
- SUSPENDED 4' FLUORESCENT FIXTURE
- HVAC SUPPLY GRILLE
- HVAC RETURN GRILLE /EXHAUST FAN GRILLE
- WALL MOUNTED LIGHT FIXTURE

3 A209 **TYP. SYMBOLS**
SCALE: NTS

CEILING LEGEND

C-1	24 X 24 X 5/8 LAY-IN PANELS (ARMSTRONG FINE FISSURE/HUMIGUARD)
C-2	NO CEILING, OPEN TO STRUCTURE ABOVE
C-3	EXPOSED METAL SUNSHADE BY PEACHTREE OR APPROVED EQUAL
C-4	DRYWALL CEILING, PAINTED
C-5	PRE-FINISHED ALUMINUM SOFFIT REFER TO SPECS (COLOR/TEXTURE BY ARCHITECT)
C-6	EXPOSED METAL CANOPY BY PEACHTREE OR APPROVED EQUAL

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ISSUE DATE: 04.30.2014
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PROJECT: 1821

STUMP SOUND ELEMENTARY SCHOOL
ONSLOW COUNTY SCHOOLS
STUMP SOUND, NORTH CAROLINA

REFLECTED CEILING PLAN & NOTES
AREA "C" & MECHANICAL MEZZANINE

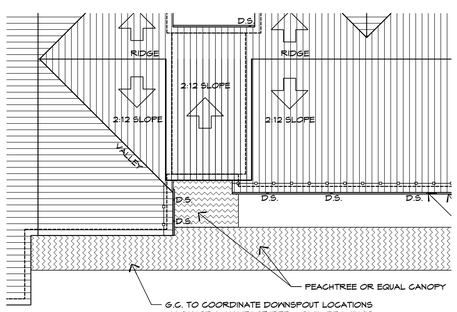
REVISION SCHEDULE

△	DATE	REFERENCE

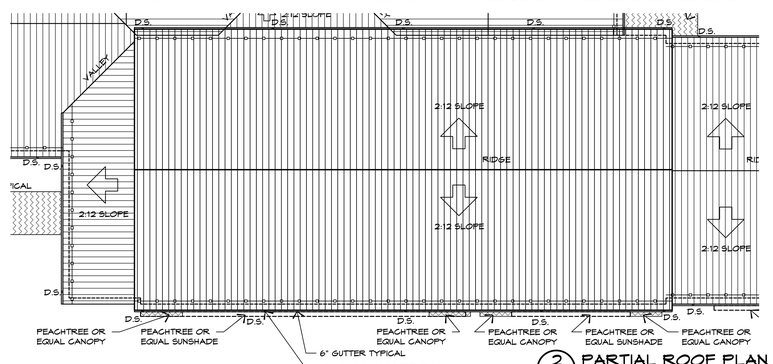
A209



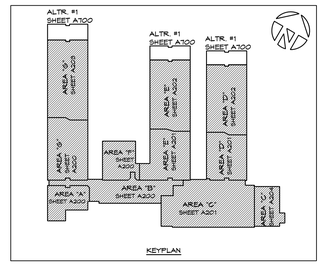
1 A210 **ROOF PLAN**
SCALE: 1" = 20'-0"



3 A210 **PARTIAL ROOF PLAN**
SCALE: 1" = 20'-0"



2 A210 **PARTIAL ROOF PLAN**
SCALE: 1" = 20'-0"



NOTE:
1. ROOFING CONTRACTOR TO PROVIDE CRICKETS/SADDLES TO UPSLOPE SIDES OF ALL ROOF TOP EQUIPMENT TO ENSURE POSITIVE DRAINAGE.
2. OPENINGS REQUIRED FOR MECHANICAL, ELECTRICAL AND PLUMBING ARE SHOWN ONLY FOR INFORMATION PURPOSES. REFER TO MECHANICAL, ELECTRICAL AND PLUMBING DRAWINGS TO CONFIRM EXACT LOCATIONS.
3. ALL ROOF PENETRATIONS WILL HAVE FACTORY PREPARED FLASHING BOOTS AND WILL BE FLASHED BY THE ROOFER.
4. G.C. TO COORDINATE DOWNSPOUT LOCATIONS W/ CANOPY MANUFACTURER & CIVIL DRAINS TO BE CONNECTED TO LEADER SYSTEM TO ENABLE WATER TO BE CARRIED AWAY FROM BUILDING EXCEPT WHERE DRAINED THROUGH CURB. REFER TO CIVIL DRAWINGS. TYPICAL ALL CANOPIES.

KEY

METAL ROOFING
REFER TO SPECIFICATIONS

ALUMINUM CANOPY
REFER TO SPECIFICATIONS

ABBREVIATIONS

DS - DOWNSPOUT

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PINNACLE ARCHITECTURE, P.A. NC 51264 4-30-19 REGISTERED CORPORATION MATTHEWS, NC

FRANK KOCZADY WILLIAMS REGISTERED ARCHITECT 18111 NORTH CAROLINA MATTHEWS, NC

CONTRACTOR TO VERIFY ALL DIMENSIONS.

ISSUE DATE: 04.30.2019
ISSUED TO:
CHECKED BY: FMW/REB
PROJECT: 1821

STUMP SOUND ELEMENTARY SCHOOL
ONSLOW COUNTY SCHOOLS
STUMP SOUND, NORTH CAROLINA

ROOF PLAN, DETAILS & NOTES

REVISION SCHEDULE

△	DATE	REFERENCE

A210

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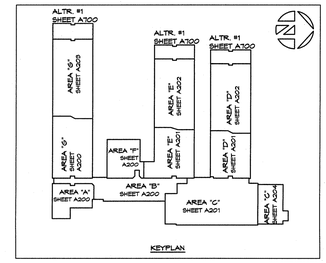
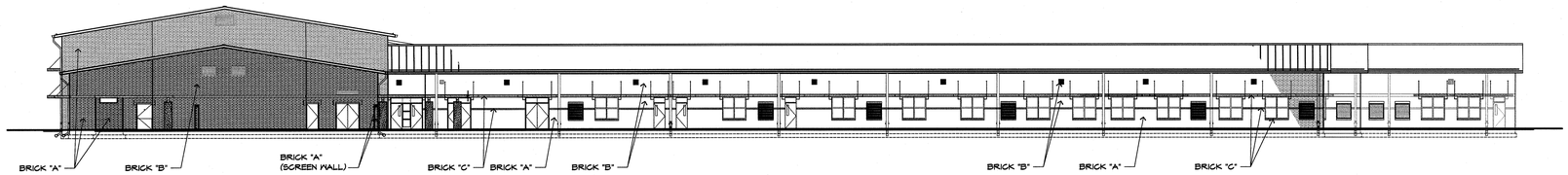
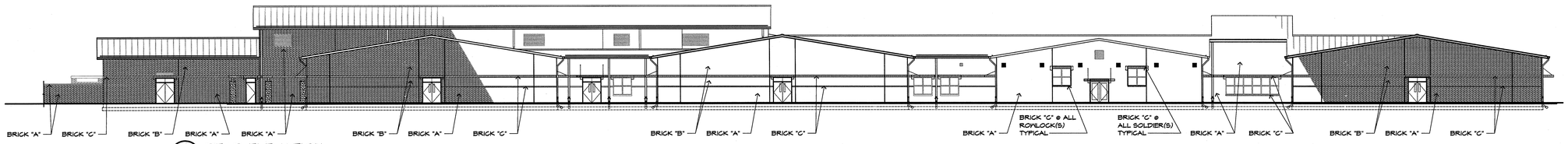
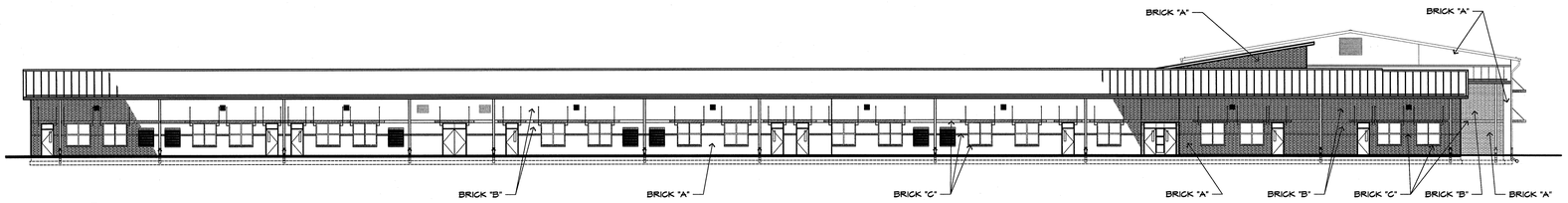




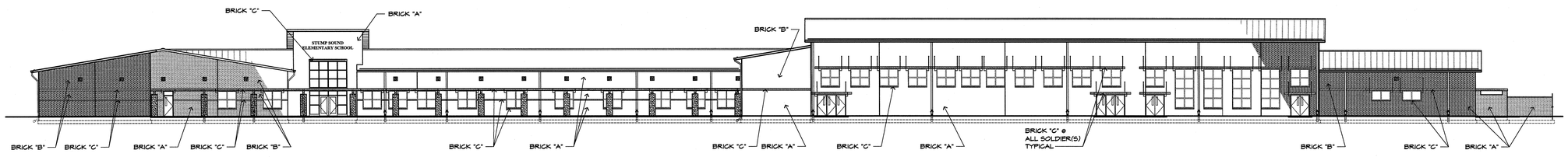
4 RIGHT ELEVATION
A300 SCALE: 1/16" = 1'-0"



3 REAR ELEVATION
A300 SCALE: 1/16" = 1'-0"



2 LEFT ELEVATION
A300 SCALE: 1/16" = 1'-0"



1 FRONT ELEVATION
A300 SCALE: 1/16" = 1'-0"

CONTRACTOR TO VERIFY ALL DIMENSIONS.

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ISSUE DATE: 04.30.2019
DRAWN BY: JR
CHECKED BY: FMW/REB
PROJECT: 1821

STUMP SOUND ELEMENTARY SCHOOL
ONSLOW COUNTY SCHOOLS
STUMP SOUND, NORTH CAROLINA
OVERALL ELEVATIONS

REVISION SCHEDULE

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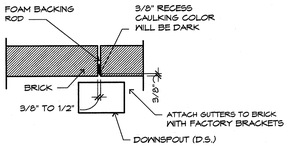
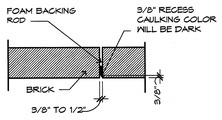
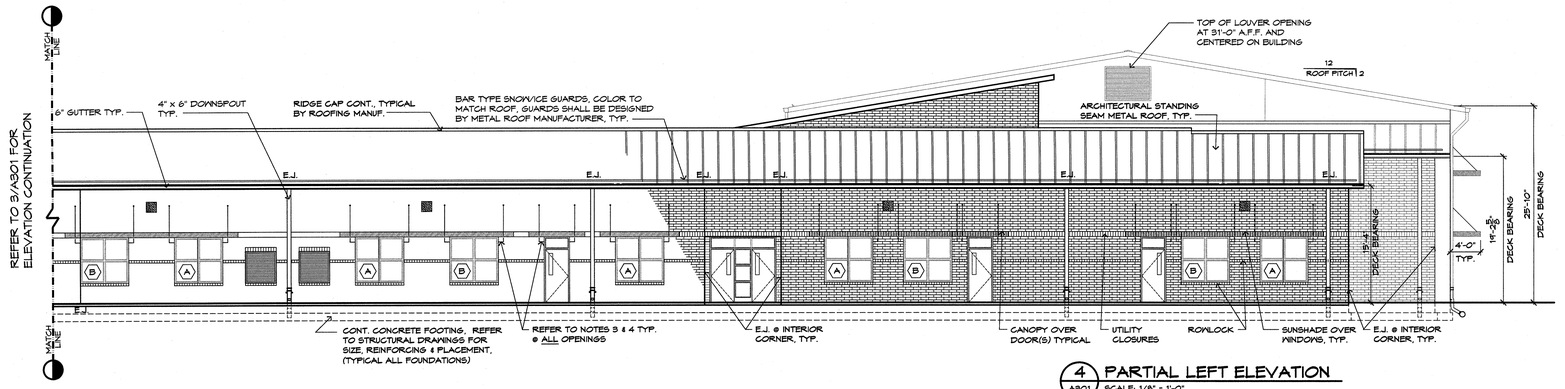


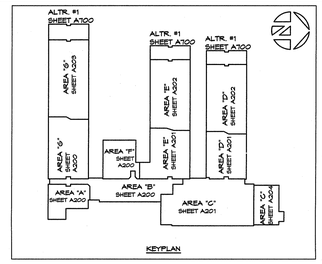
6 A301 **TYP. EXPANSION JOINT**
SCALE: N.T.S.

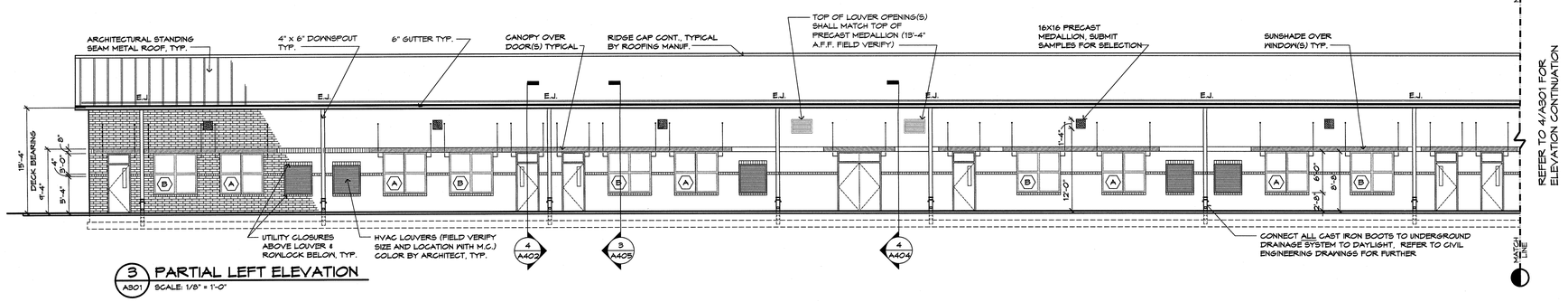


5 A301 **TYP. EXPANSION JOINT**
SCALE: N.T.S.



4 A301 **PARTIAL LEFT ELEVATION**
SCALE: 1/8" = 1'-0"

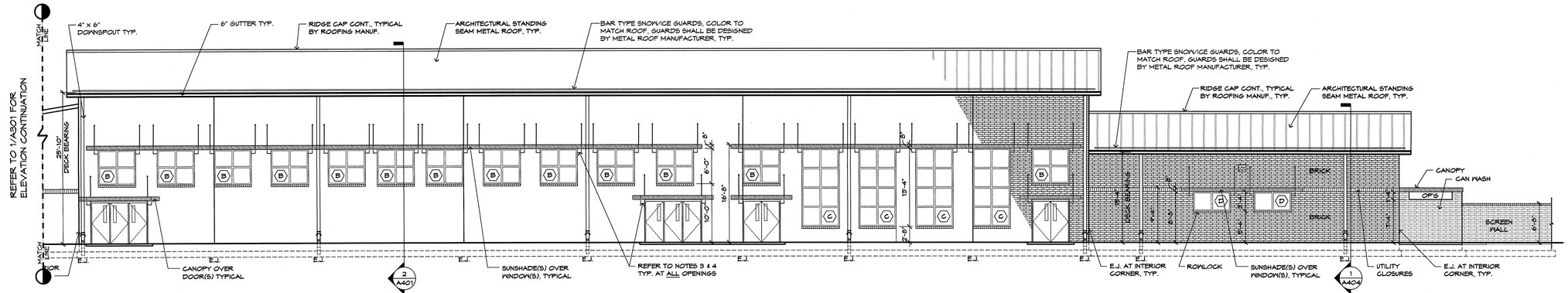




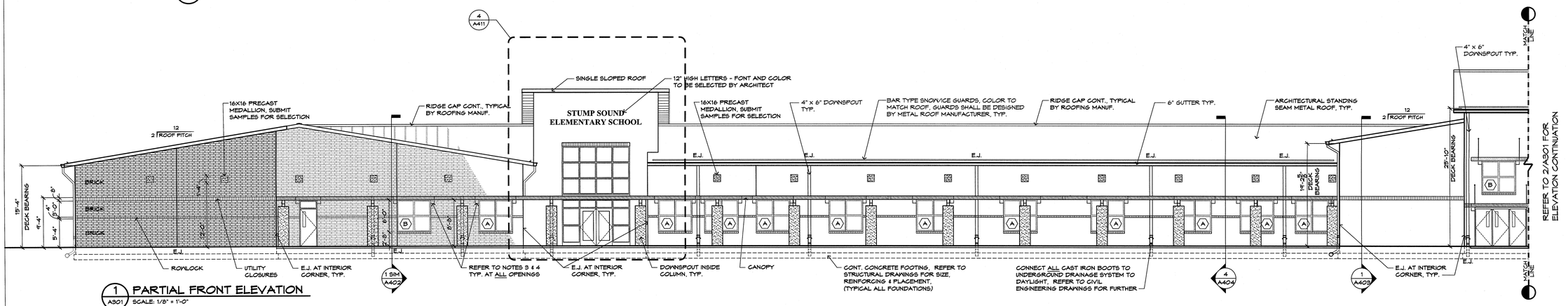
3 A301 **PARTIAL LEFT ELEVATION**
SCALE: 1/8" = 1'-0"

NOTES: TYPICAL ALL BUILDINGS

1. DOWNSPOUT TO MATCH WALL COLOR AS CLOSE AS POSSIBLE.
2. EXPANSION JOINTS BEHIND DOWN SPOUTS.
3. G.C. TO CONTACT COMMERCIAL GRADE AIR BARRIER (TYVEK) MANUFACTURER TO COORDINATE PROPER INSTALLATION AT ALL OPENINGS. ALL MANUFACTURER'S WARRANTIES WILL APPLY. FLASHING AROUND ALL OPENINGS, TYP.
4. PROVIDE LAMINATED COPPER FABRIC FLASHING AT ALL LINTEL CONDITIONS. G.C. TO CONTACT MANUFACTURER TO COORDINATE PROPER INSTALLATION. REFER TO SHEET A107 FOR FURTHER INFORMATION.
5. USE 4"x4"x8" SOLID BRICK @ ALL SOLDIER COURSE CORNERS
6. ALL COLORS AND TEXTURE SHALL BE BY ARCHITECT.
7. ROWLOCK WILL BE A DIFFERENT COLOR.
8. UTILITY CLOSER SOLDIER COURSE WILL BE A DIFFERENT COLOR.
9. FIELD BRICK WILL BE A DIFFERENT COLOR.
10. ROWLOCK, UTILITY CLOSURE SOLDIER, AND FIELD BRICK LISTED ABOVE MAY BE A DIFFERENT TEXTURE.



2 A301 **PARTIAL FRONT ELEVATION**
SCALE: 1/8" = 1'-0"



1 A301 **PARTIAL FRONT ELEVATION**
SCALE: 1/8" = 1'-0"

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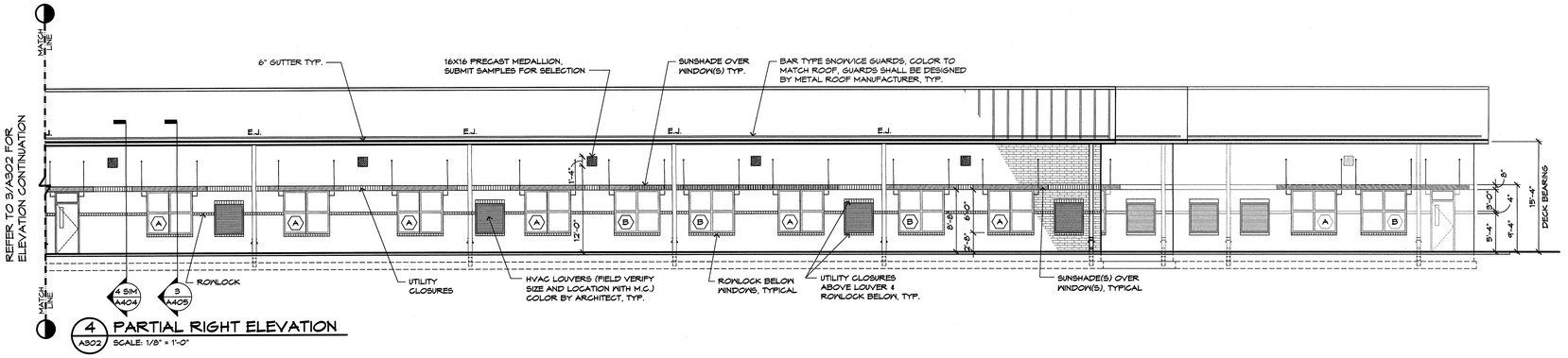
ISSUE DATE: 04.30.2014
DRAWN BY: JR
CHECKED BY: PHM/FWB
PROJECT: 1521

STUMP SOUND ELEMENTARY SCHOOL
ONSLOW COUNTY SCHOOLS
STUMP SOUND, NORTH CAROLINA
BUILDING ELEVATIONS

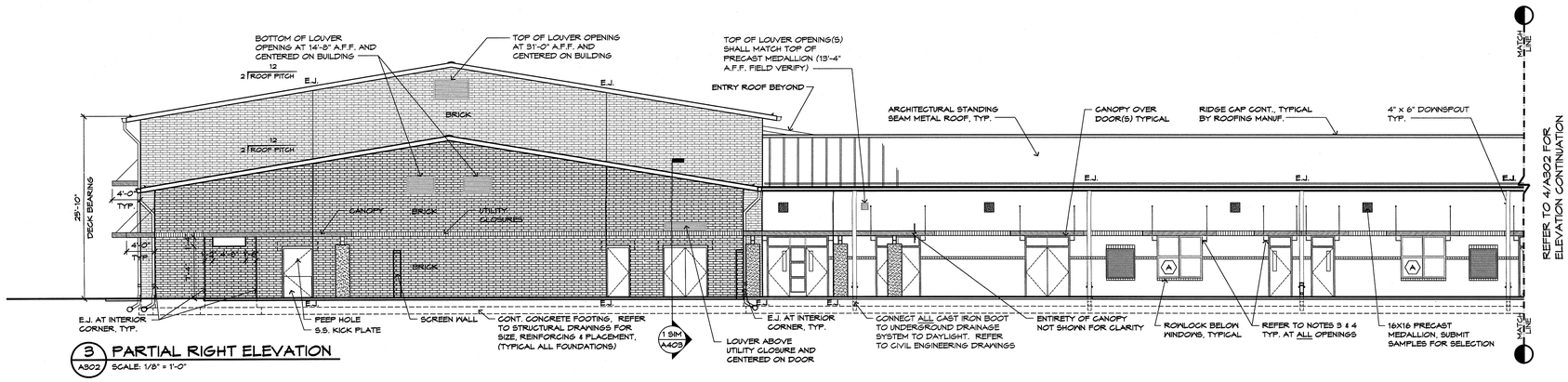
REVISION SCHEDULE

△	DATE	REFERENCE

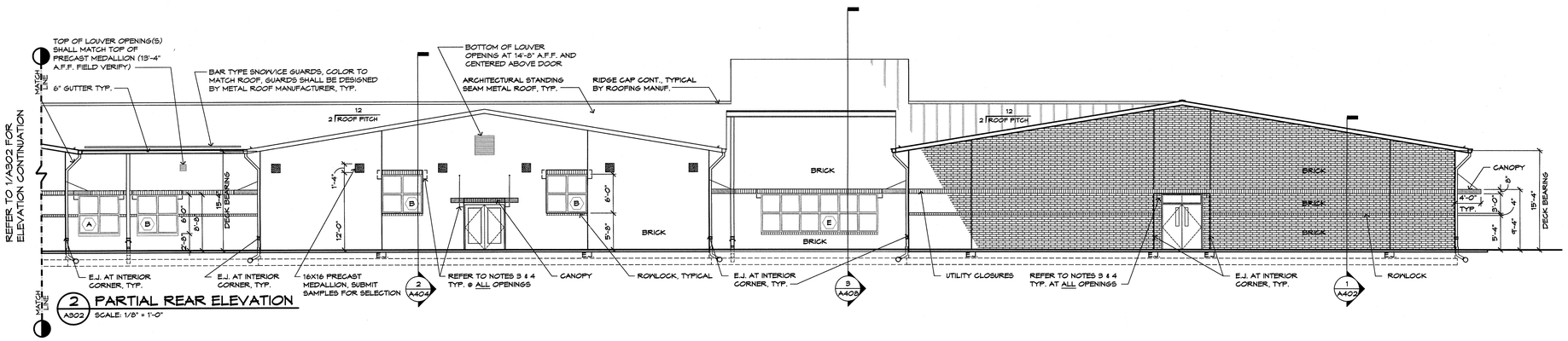
A301



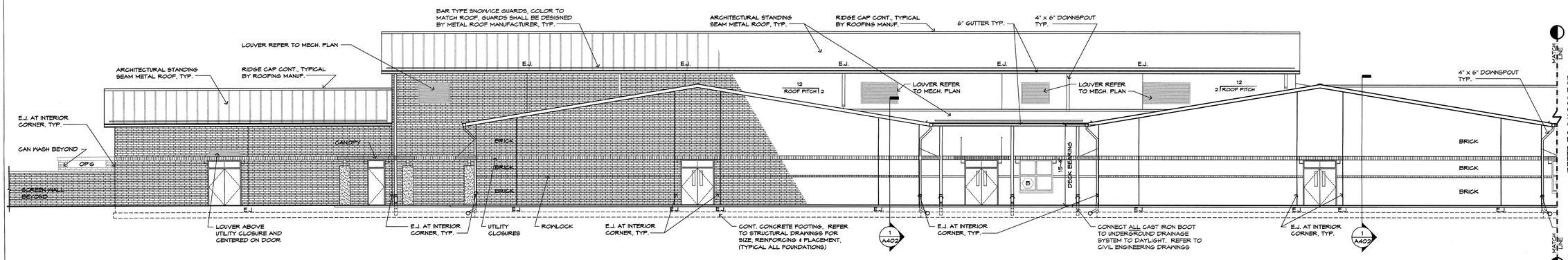
4 A302 PARTIAL RIGHT ELEVATION
SCALE: 1/8" = 1'-0"



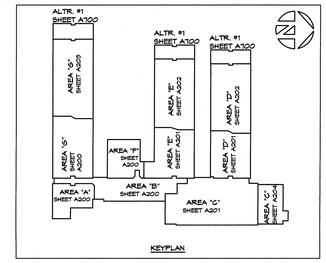
3 A302 PARTIAL RIGHT ELEVATION
SCALE: 1/8" = 1'-0"



2 A302 PARTIAL REAR ELEVATION
SCALE: 1/8" = 1'-0"



1 A302 PARTIAL REAR ELEVATION
SCALE: 1/8" = 1'-0"



CONTRACTOR TO VERIFY ALL DIMENSIONS.

NOTES: TYPICAL ALL BUILDINGS

1. DOWNSPOUT TO MATCH WALL COLOR AS CLOSE AS POSSIBLE.
2. EXPANSION JOINTS BEHIND DOWN SPOUTS.
3. G.C. TO CONTACT COMMERCIAL GRADE AIR BARRIER (TYVEK) MANUFACTURER TO COORDINATE PROPER INSTALLATION AT ALL OPENINGS. ALL MANUFACTURER'S WARRANTIES WILL APPLY. FLASHING AROUND ALL OPENINGS, TYP.
4. PROVIDE LAMINATED COPPER FABRIC FLASHING AT ALL LINTEL CONDITIONS. G.C. TO CONTACT MANUFACTURER TO COORDINATE PROPER INSTALLATION. REFER TO SHEET A101 FOR FURTHER INFORMATION.
5. USE 4"X4"X8" SOLID BRICK @ ALL SOLDIER COURSE CORNERS
6. ALL COLORS AND TEXTURE SHALL BE BY ARCHITECT.
7. ROWLOCK WILL BE A DIFFERENT COLOR.
8. UTILITY CLOSER SOLDIER COURSE WILL BE A DIFFERENT COLOR.
9. FIELD BRICK WILL BE A DIFFERENT COLOR.
10. ROWLOCK, UTILITY CLOSURE SOLIDER, AND FIELD BRICK LISTED ABOVE MAY BE A DIFFERENT TEXTURE.

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701 EAST BAY STREET, SUITE 302
CHARLESTON, SOUTH CAROLINA 29403
PH: (843) 872-5345 FAX: (843) 872-5374

PINNACLE ARCHITECTURE, P.A. NC 51264
REGISTERED CORPORATION
04.30.14
MATTHEWS, NORTH CAROLINA
FRANK WILLIAMS McCRADY, JR. NC 16611
REGISTERED ARCHITECT
MATTHEWS, NORTH CAROLINA

ISSUE DATE: 04.30.2019
DRAWN BY: PMW/REB
CHECKED BY: PMW/REB
PROJECT: 1821

STUMP SOUND ELEMENTARY SCHOOL
ONSLOW COUNTY SCHOOLS
STUMP SOUND, NORTH CAROLINA
BUILDING ELEVATIONS

REVISION SCHEDULE

#	DATE	REFERENCE

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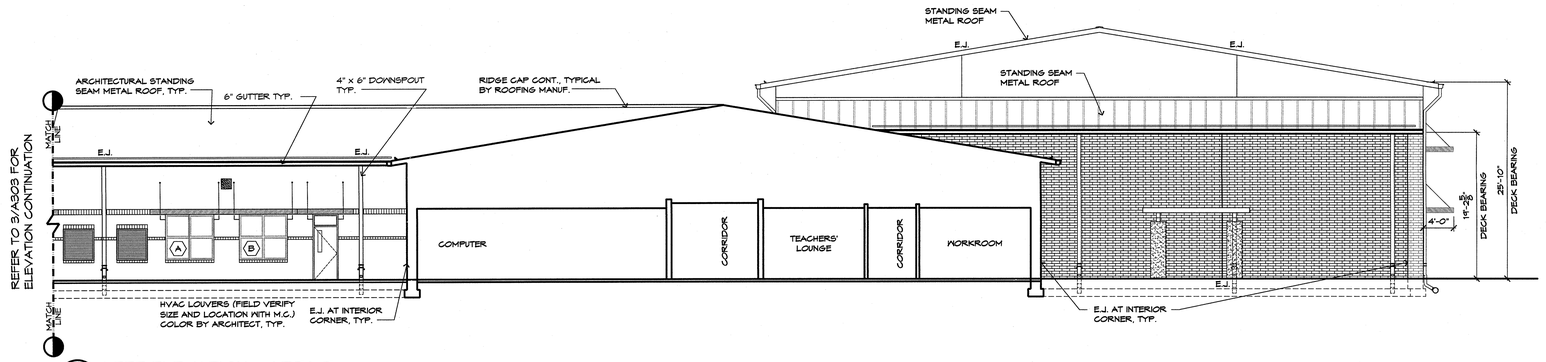
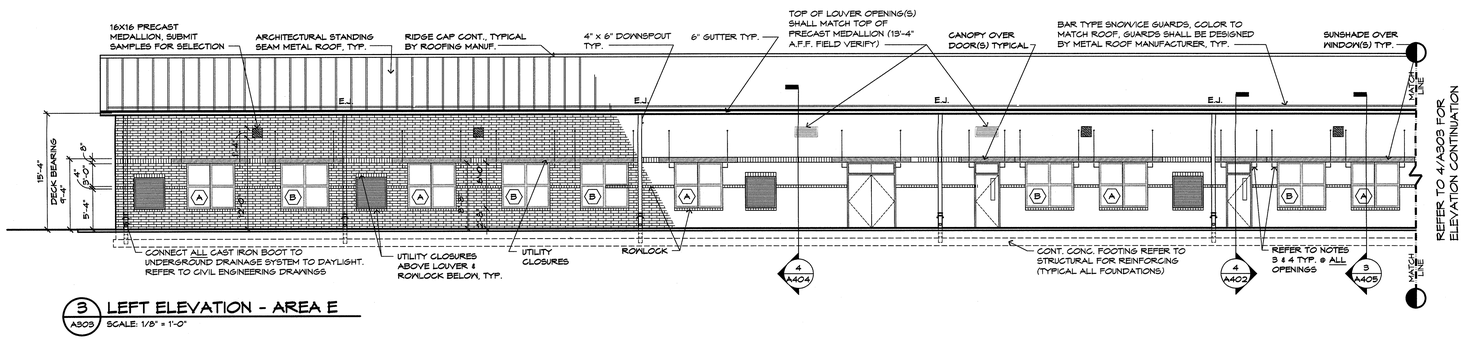
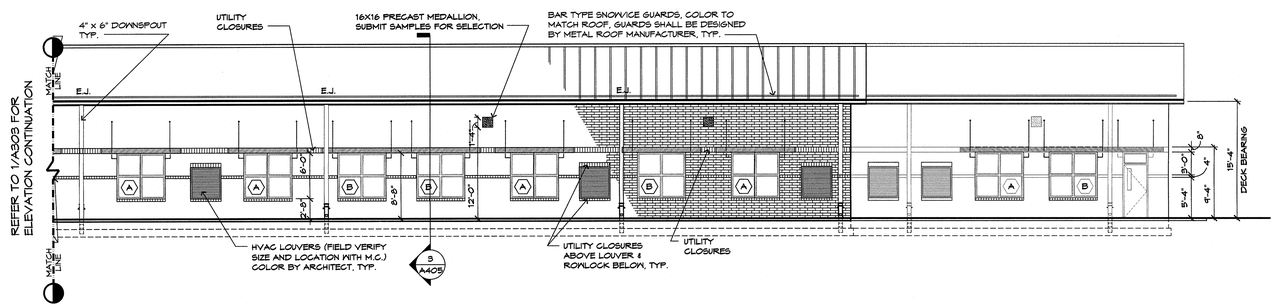
A302



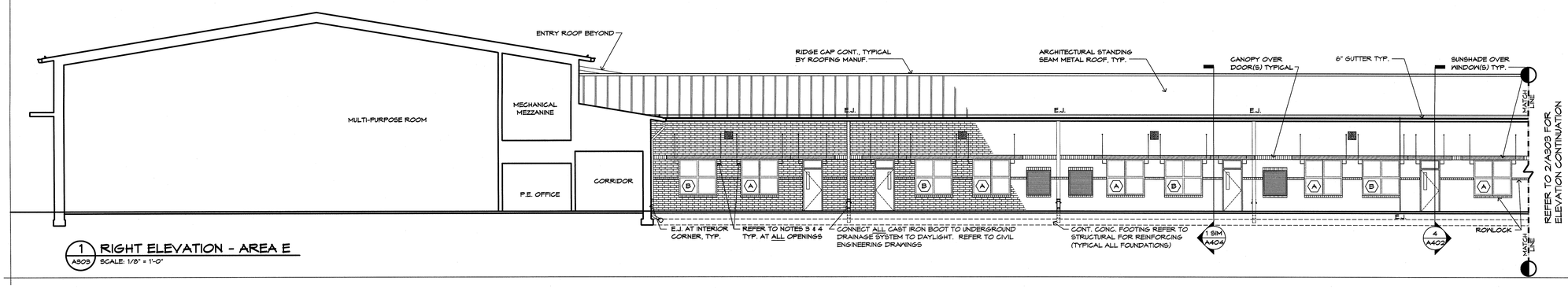
4 A303 **LEFT ELEVATION - AREA E**
SCALE: 1/8" = 1'-0"



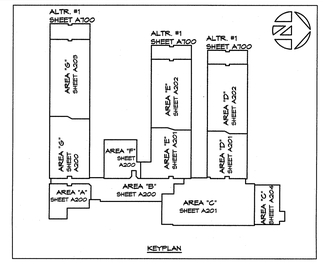
3 A303 **LEFT ELEVATION - AREA E**
SCALE: 1/8" = 1'-0"



2 A303 **RIGHT ELEVATION - AREA E**
SCALE: 1/8" = 1'-0"



1 A303 **RIGHT ELEVATION - AREA E**
SCALE: 1/8" = 1'-0"



NOTES: TYPICAL ALL BUILDINGS

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2. EXPANSION JOINTS BEHIND DOWN SPOUTS.
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7. ROWLOCK WILL BE A DIFFERENT COLOR.
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ISSUE DATE: 04.30.2014
DRAWN BY: JR
CHECKED BY: FMW/RBS
PROJECT: 1821

STUMP SOUND ELEMENTARY SCHOOL
ONSLOW COUNTY SCHOOLS
STUMP SOUND, NORTH CAROLINA

BUILDING ELEVATIONS

REVISION SCHEDULE

	DATE	REFERENCE

A303

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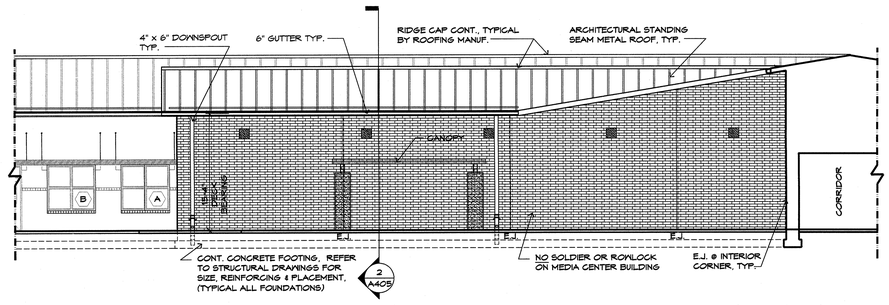
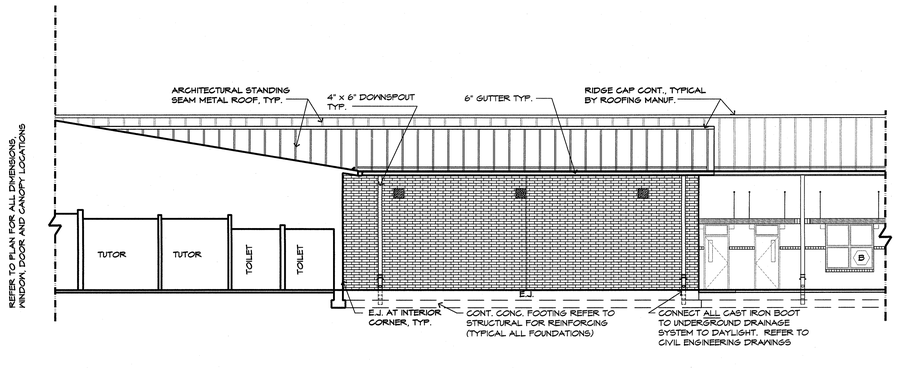
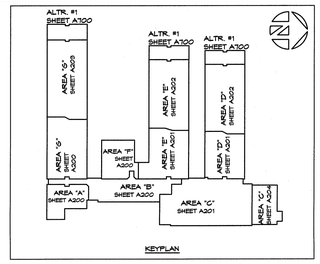


4 A304 **LEFT ELEVATION**
SCALE: 1/8" = 1'-0" AREA F



5 A304 **RIGHT ELEVATION**
SCALE: 1/8" = 1'-0" AREA F



KEYPLAN

NOTES: TYPICAL ALL BUILDINGS

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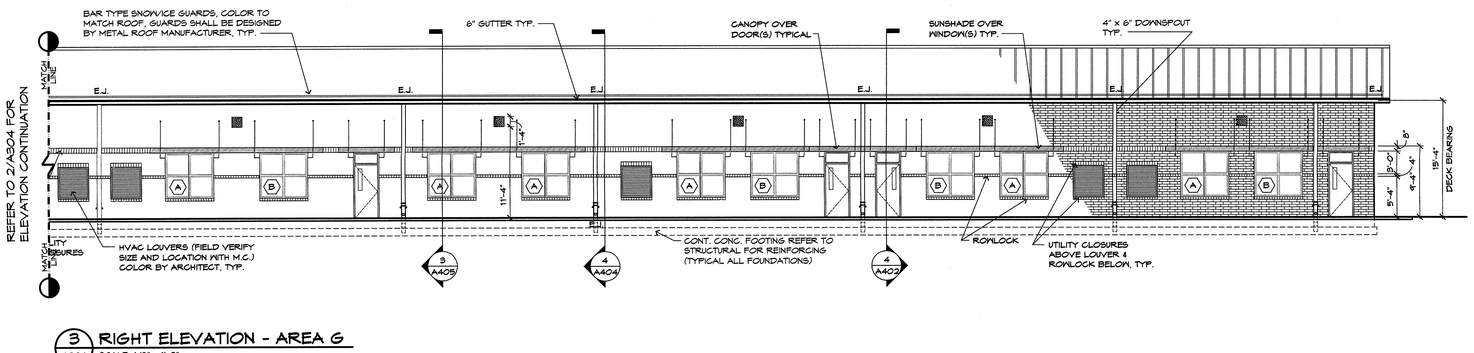
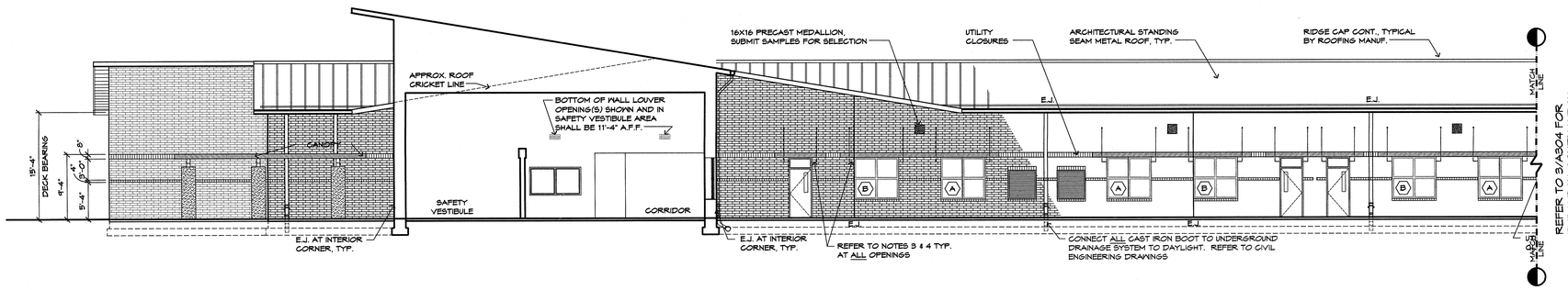
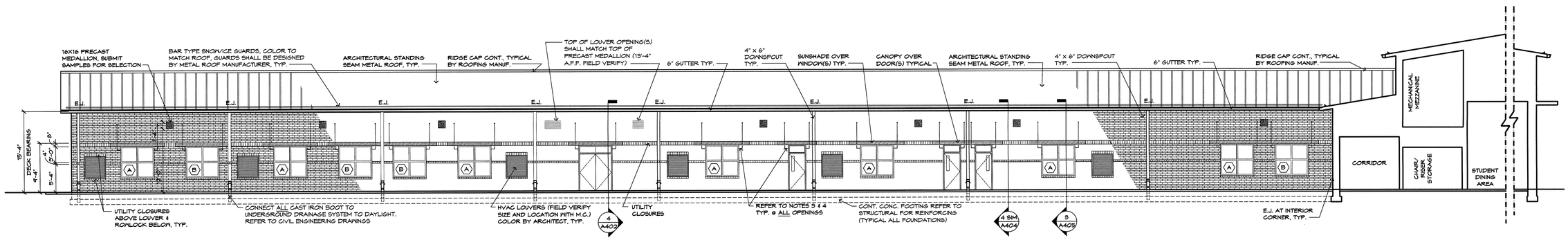


3 A304 **RIGHT ELEVATION - AREA G**
SCALE: 1/8" = 1'-0"



2 A304 **RIGHT ELEVATION - AREA D & AREA G**
SCALE: 1/8" = 1'-0"



1 A304 **LEFT ELEVATION - AREA D**
SCALE: 1/8" = 1'-0"

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CHARLESTON, SOUTH CAROLINA 29403
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PINNACLE ARCHITECTURE, P.A. 51264 4 Jan 19 NC CORPORATION MATTHEWS NC

FRANK W. GRADY WILLIAMS REGISTERED ARCHITECT NORTH CAROLINA MATTHEWS NC

ISSUE DATE: 04.30.2014
DRAWN BY: JR
CHECKED BY: FWWREB
PROJECT: 1821

STUMP SOUND ELEMENTARY SCHOOL
ONSLOW COUNTY SCHOOLS
STUMP SOUND, NORTH CAROLINA

BUILDING ELEVATIONS

REVISION SCHEDULE

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A304

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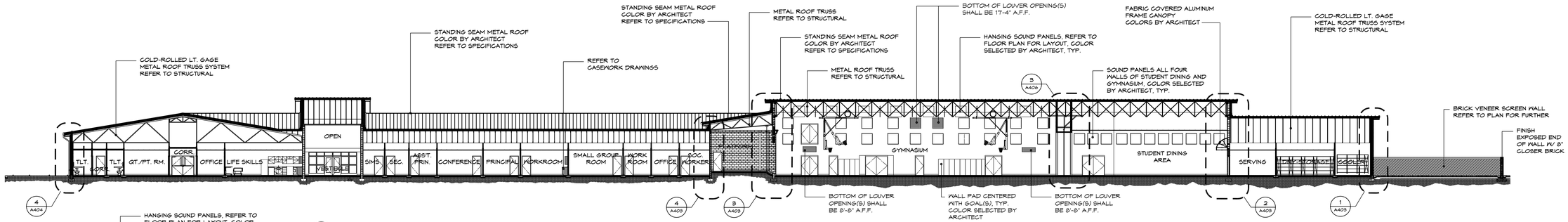
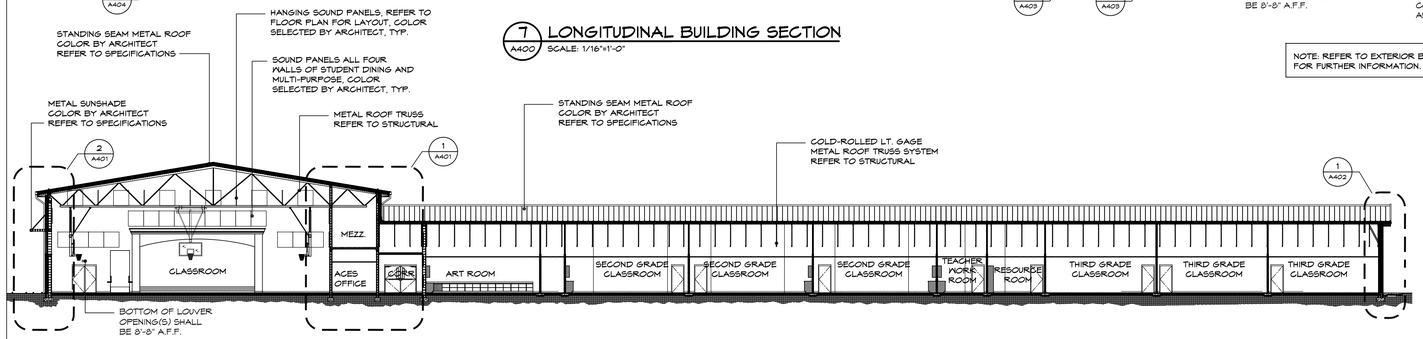
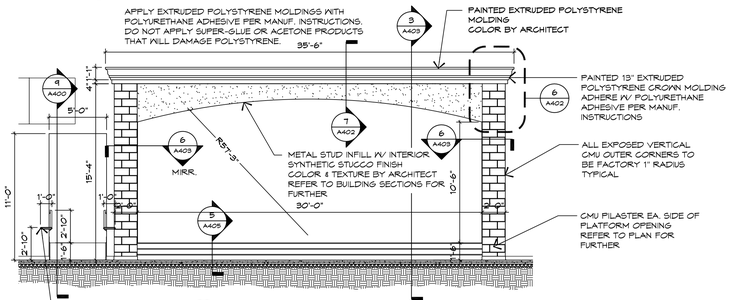


7 A400 LONGITUDINAL BUILDING SECTION
SCALE: 1/16"=1'-0"

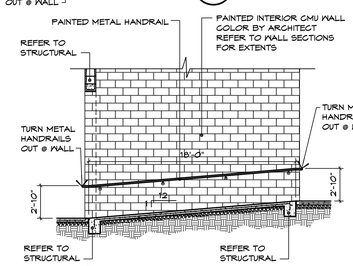
NOTE: REFER TO EXTERIOR BUILDING ELEVATIONS FOR FURTHER INFORMATION.



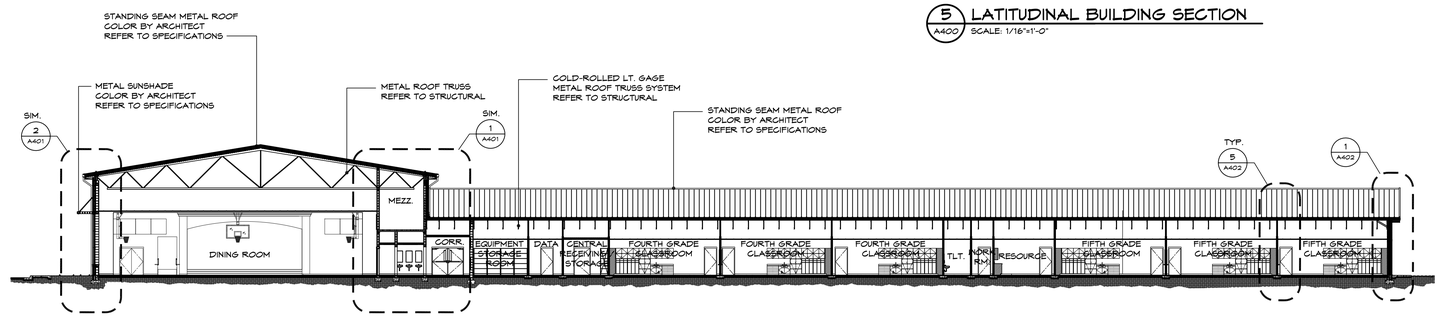
6 A400 LATITUDINAL BUILDING SECTION
SCALE: 1/16"=1'-0"



8 A400 PARTIAL INTERIOR ELEVATION
SCALE: 3/16"=1'-0" @ PLATFORM & RAMP OPENINGS

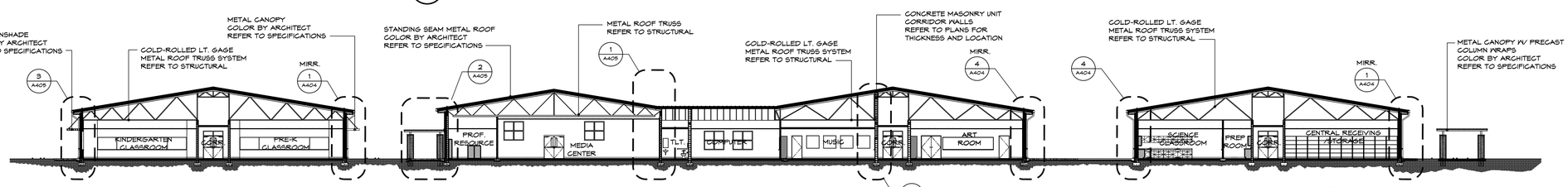


9 A400 PARTIAL SECTION
SCALE: 3/16" @ PLATFORM RAMP

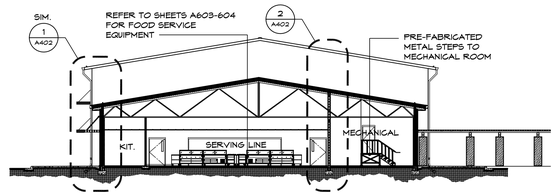


5 A400 LATITUDINAL BUILDING SECTION
SCALE: 1/16"=1'-0"

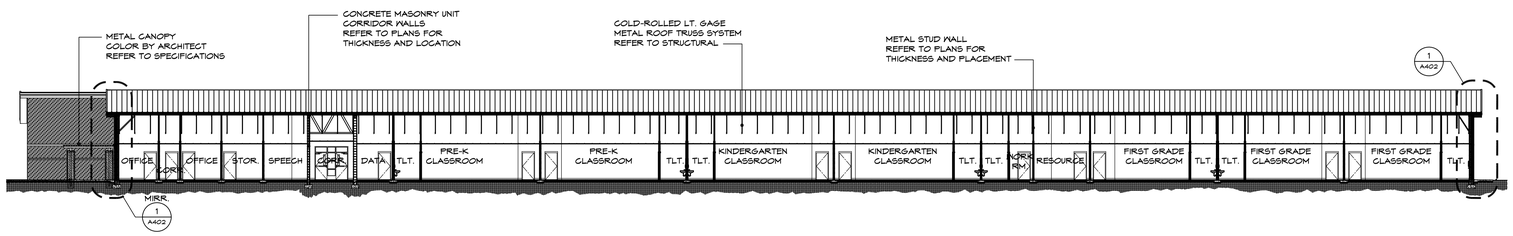
4 A400 LATITUDINAL BUILDING SECTION
SCALE: 1/16"=1'-0"



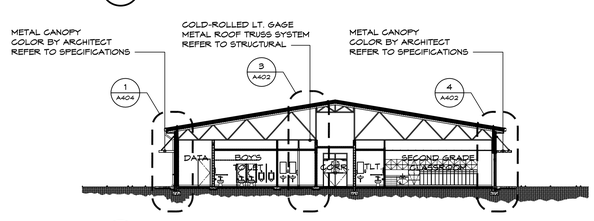
3 A400 LONGITUDINAL BUILDING SECTION
SCALE: 1/16"=1'-0"



10 A400 LONGITUDINAL BUILDING SECTION
SCALE: 1/16"=1'-0"



2 A400 LATITUDINAL BUILDING SECTION
SCALE: 1/16"=1'-0"



1 A400 LONGITUDINAL BUILDING SECTION
SCALE: 1/16"=1'-0"

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ISSUE DATE: 04.30.2019
ISSUED BY: RMW/REB
CHECKED BY: RMW
PROJECT: 1821

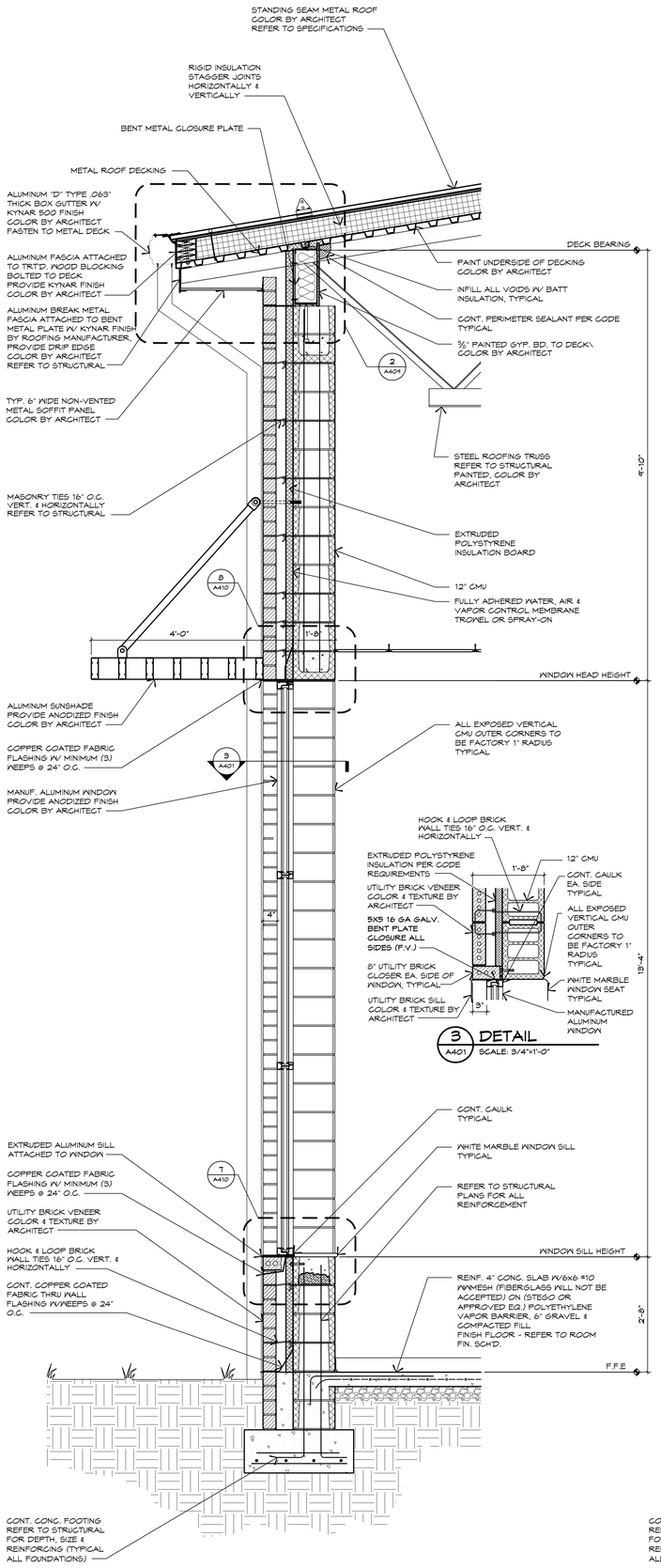
STUMP SOUND ELEMENTARY SCHOOL
ONSLOW COUNTY SCHOOLS
STUMP SOUND, NORTH CAROLINA

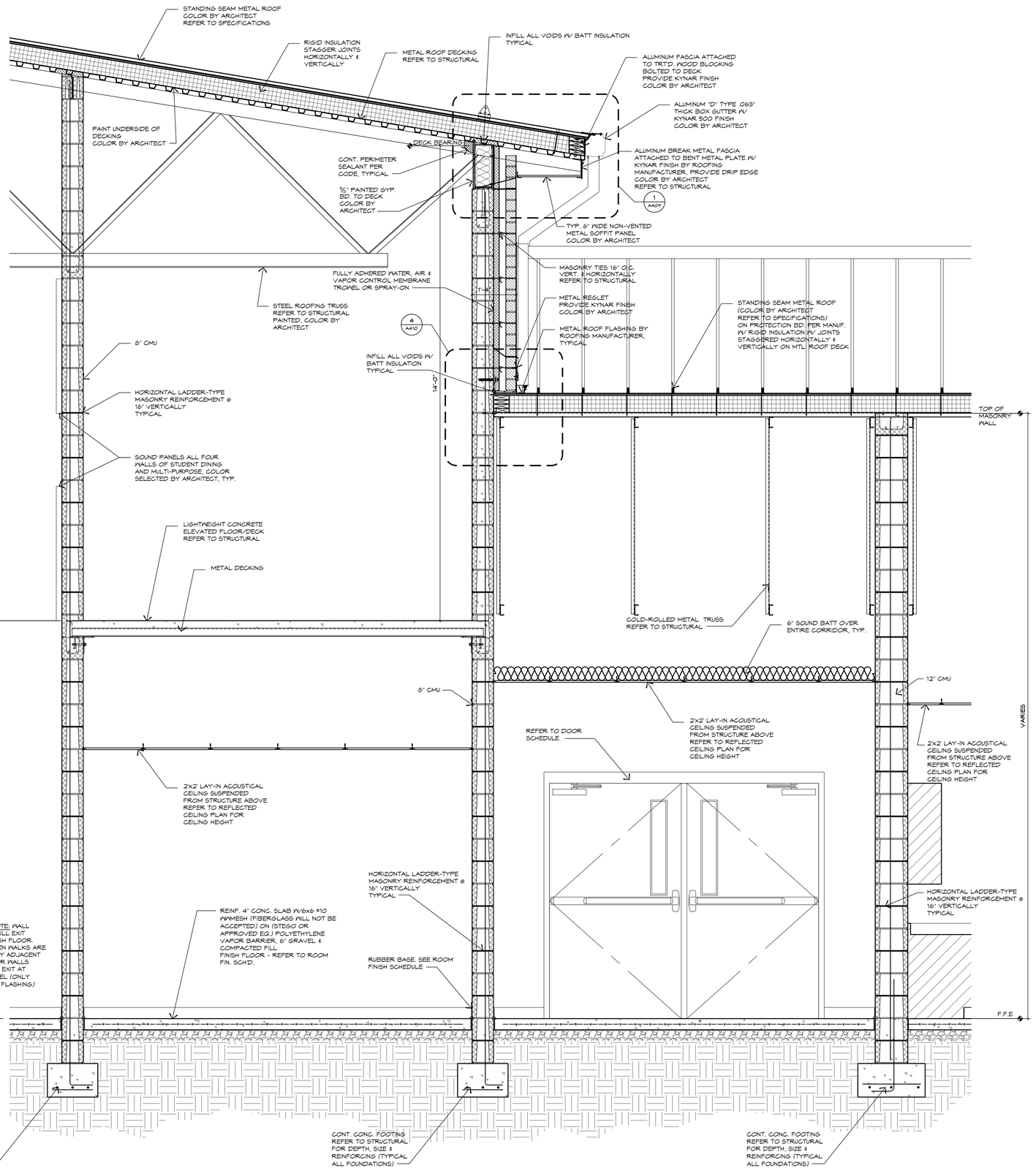
BUILDING SECTIONS

REVISION SCHEDULE

△	DATE	REFERENCE

A400





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STUMP SOUND ELEMENTARY SCHOOL
ONSLOW COUNTY SCHOOLS
STUMP SOUND, NORTH CAROLINA

WALL SECTIONS

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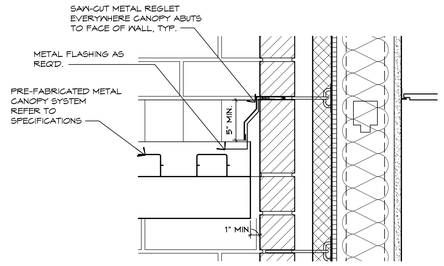
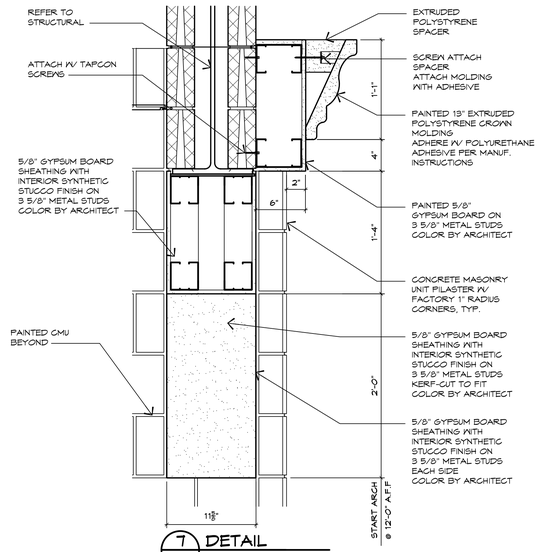
A401

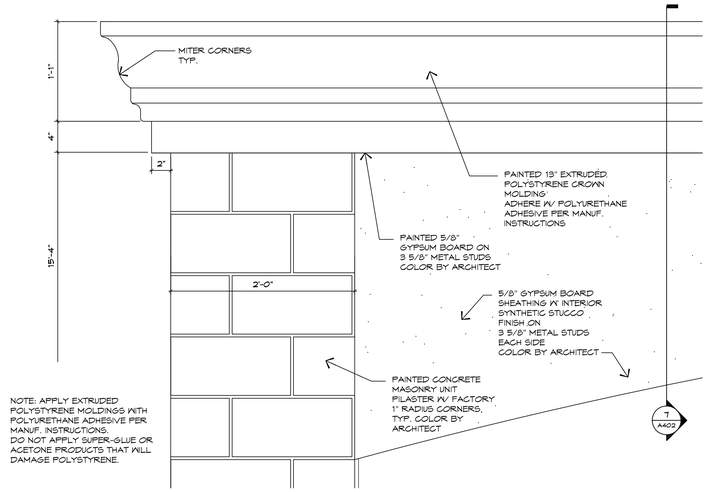


NOTE: PROVIDE KYNAR FINISH FOR REGLETS COLOR BY ARCHITECT

8 TYP. FLASHING DETAIL
A402 SCALE: NTS

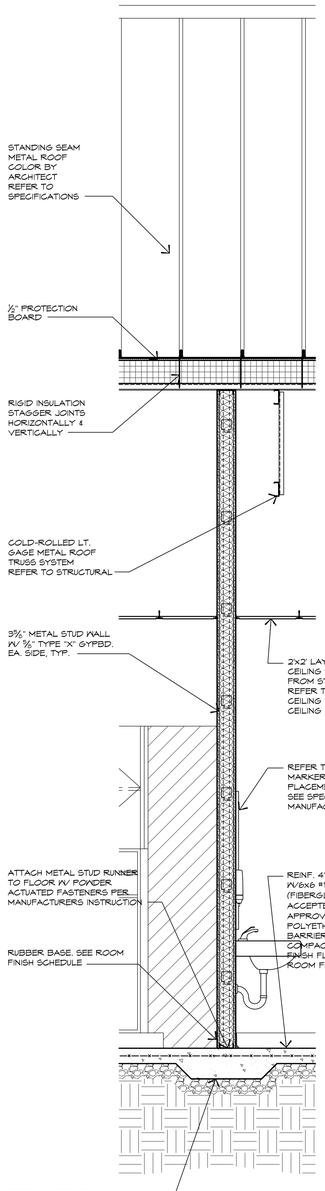


7 DETAIL
A402 SCALE: 1 1/2"=1'-0"

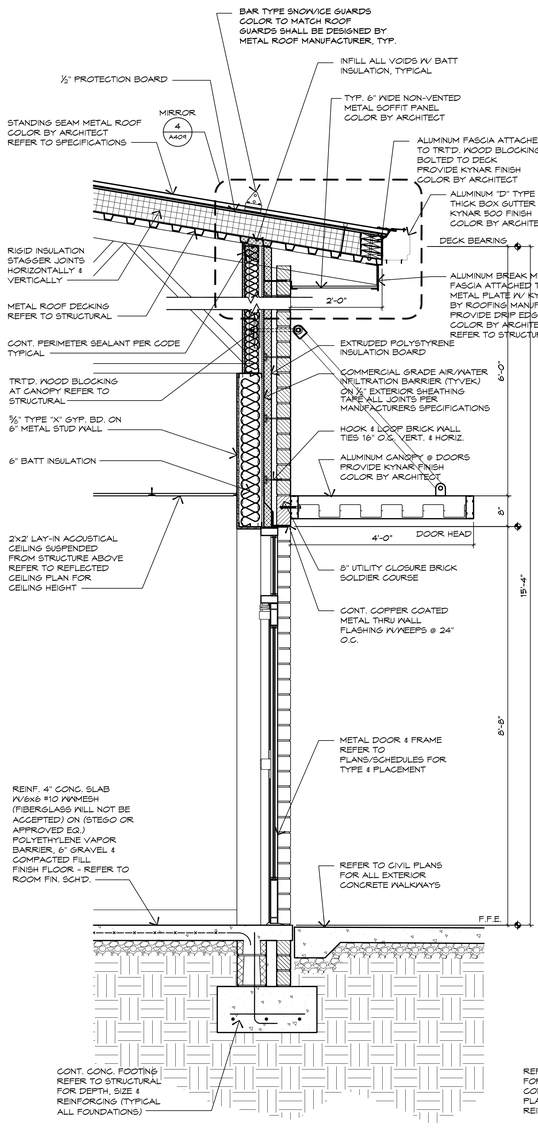


NOTE: APPLY EXTRUDED POLYSTYRENE MOLDINGS WITH POLYURETHANE ADHESIVE PER MANUF. INSTRUCTIONS. DO NOT APPLY SUPER-GLUE OR ACETONE PRODUCTS THAT WILL DAMAGE POLYSTYRENE.

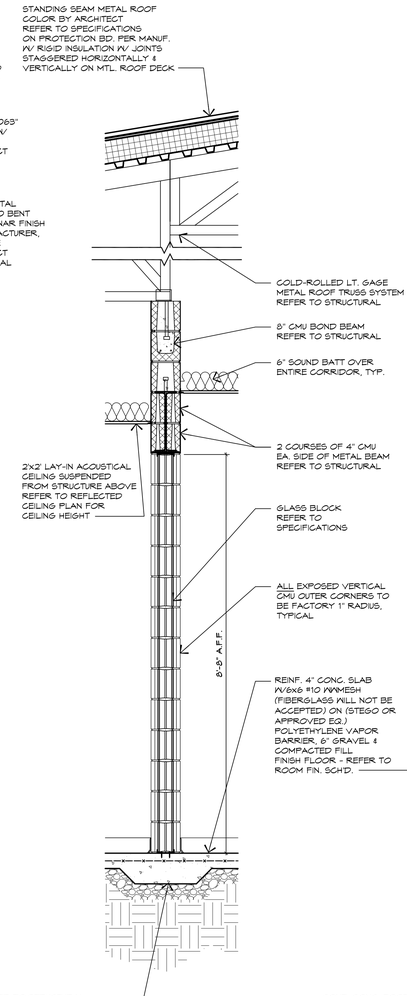
6 DETAIL
A402 SCALE: 1 1/2"=1'-0"



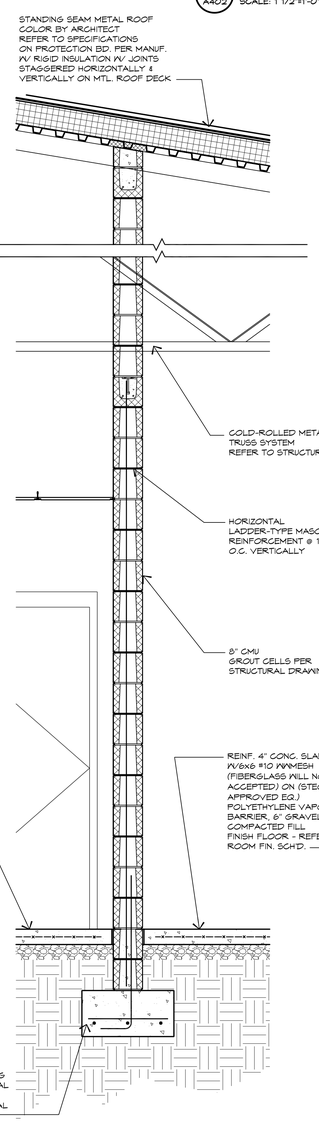
5 WALL SECTION
A402 SCALE: 3/4"=1'-0"



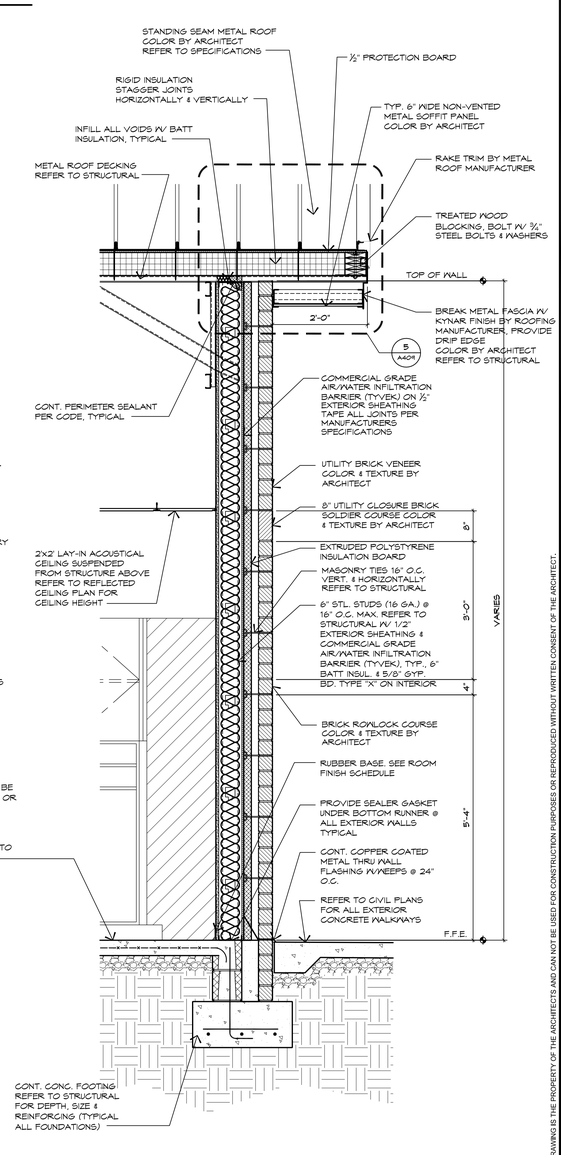
4 WALL SECTION
A402 SCALE: 3/4"=1'-0"



3 WALL SECTION
A402 SCALE: 3/4"=1'-0"



2 WALL SECTION
A402 SCALE: 3/4"=1'-0"



1 WALL SECTION
A402 SCALE: 3/4"=1'-0"

CONTRACTOR TO VERIFY ALL DIMENSIONS.

PINNACLE ARCHITECTURE, P.A. — NC 51264 — 4-30-19
FRANK MCGRADY WILLIAMS — REGISTERED ARCHITECT — 1621 — NORTH CAROLINA — MATTHEWS, NC
PINNACLE ARCHITECTURE
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REVISION SCHEDULE

△	DATE	REFERENCE

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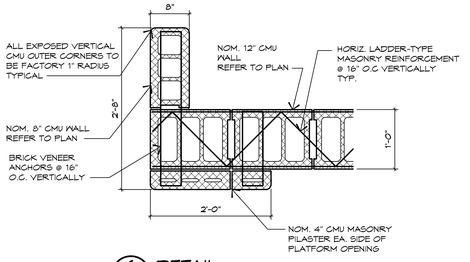
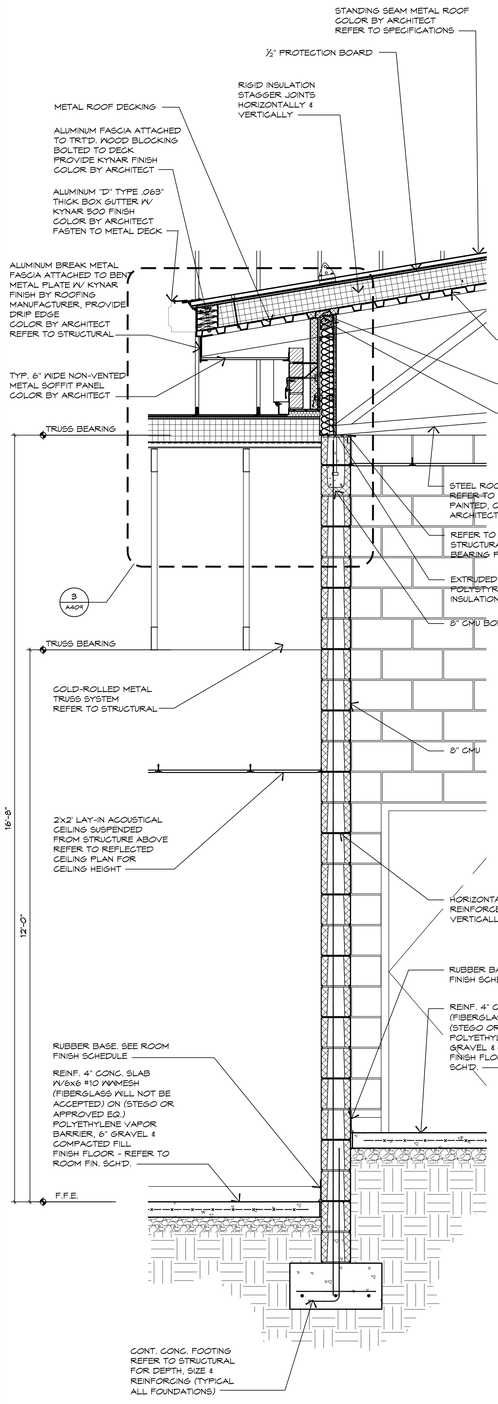
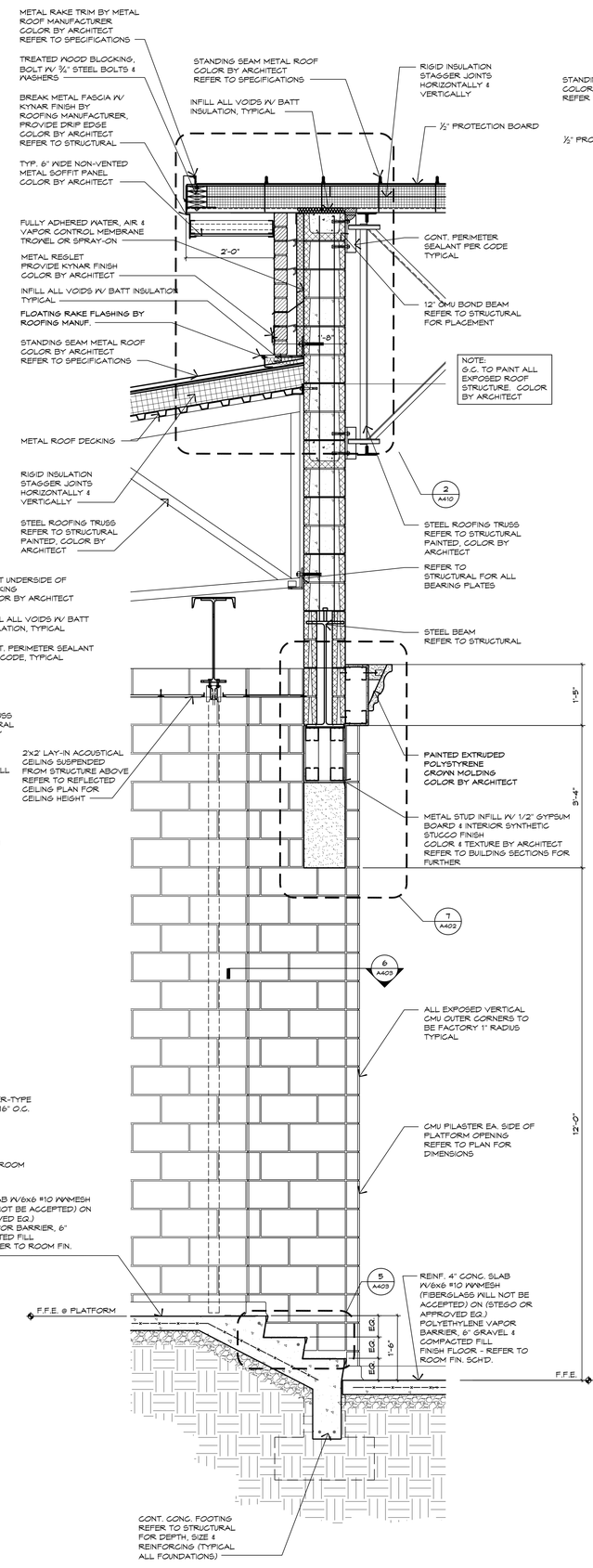
A402



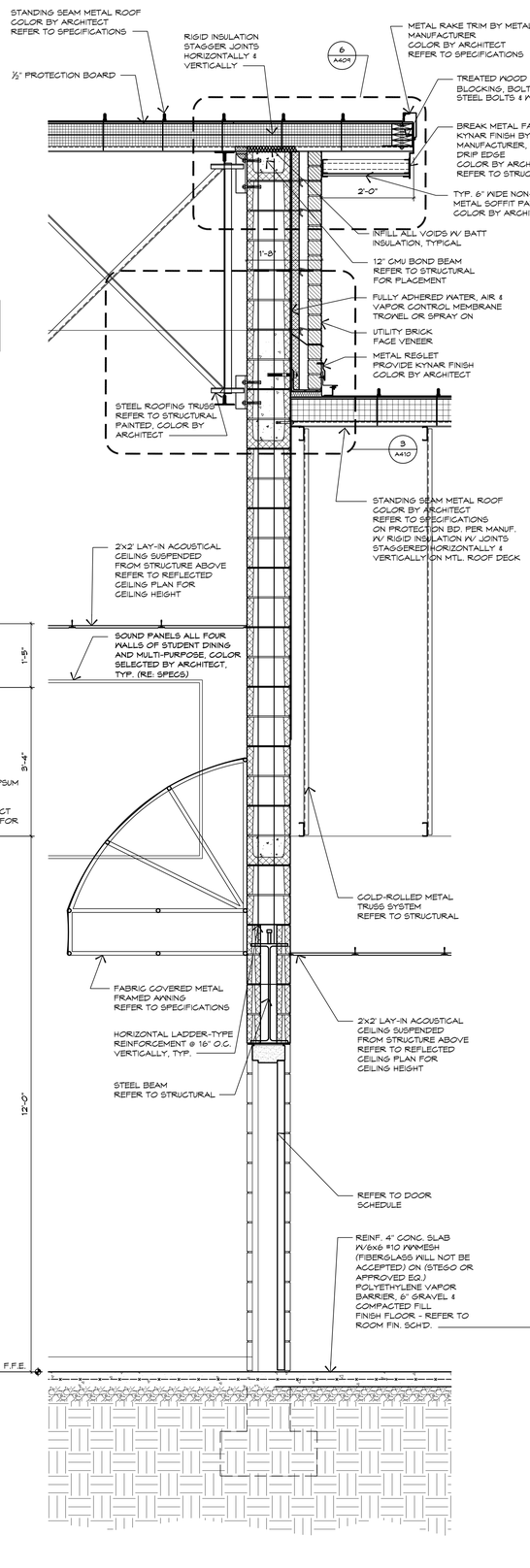
6 A403 **DETAIL**
SCALE: 1"=1'-0"



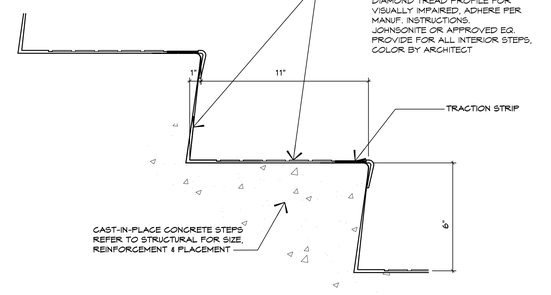
4 A403 **WALL SECTION**
SCALE: 3/4"=1'-0"



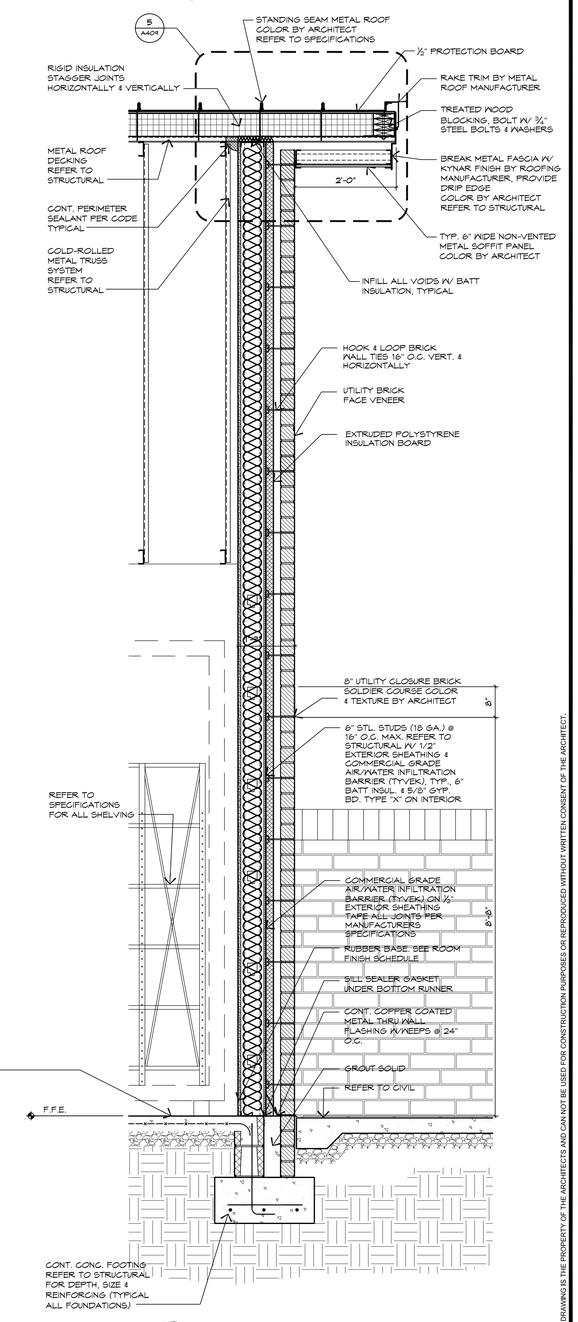
3 A403 **WALL SECTION**
SCALE: 3/4"=1'-0"



2 A403 **WALL SECTION**
SCALE: 3/4"=1'-0"



5 A403 **DETAIL**
SCALE: NOT TO SCALE



1 A403 **WALL SECTION**
SCALE: 3/4"=1'-0"

CONTRACTOR TO VERIFY ALL DIMENSIONS.

PINNACLE ARCHITECTURE
PROFESSIONAL ASSOCIATION
P.O. BOX 187, 630 TEAM ROAD, SUITE 200
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701 EAST BAY STREET, SUITE 302
CHARLESTON, SOUTH CAROLINA 29403
PH: (843) 872-5345 FAX: (843) 872-5374

ISSUE DATE: 04.30.2019
DRAWN BY: PMW/REB
CHECKED BY: PMW/REB
PROJECT: 1821

STUMP SOUND ELEMENTARY SCHOOL
ONSLOW COUNTY SCHOOLS
STUMP SOUND, NORTH CAROLINA

WALL SECTIONS

REVISION SCHEDULE

Δ	DATE	REFERENCE

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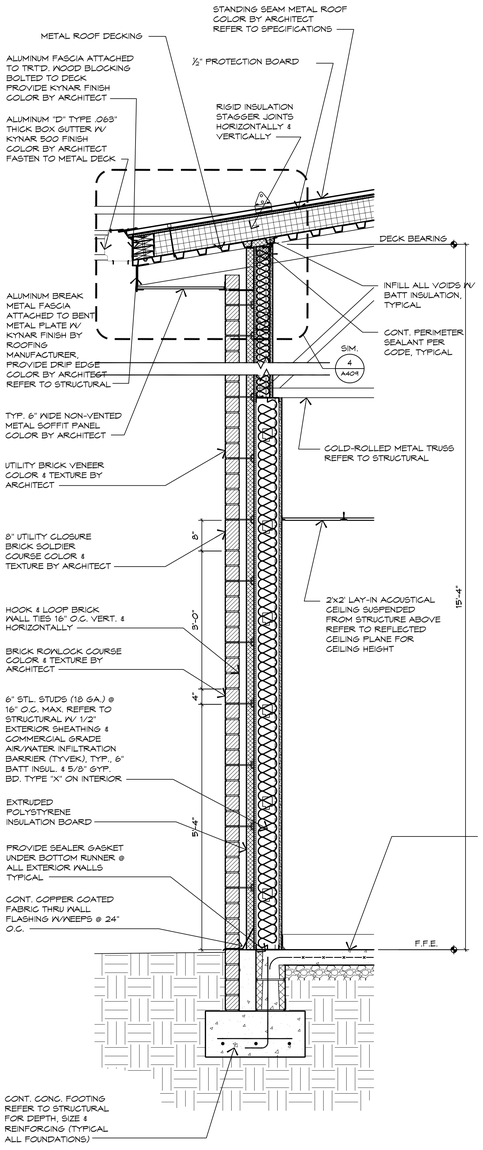
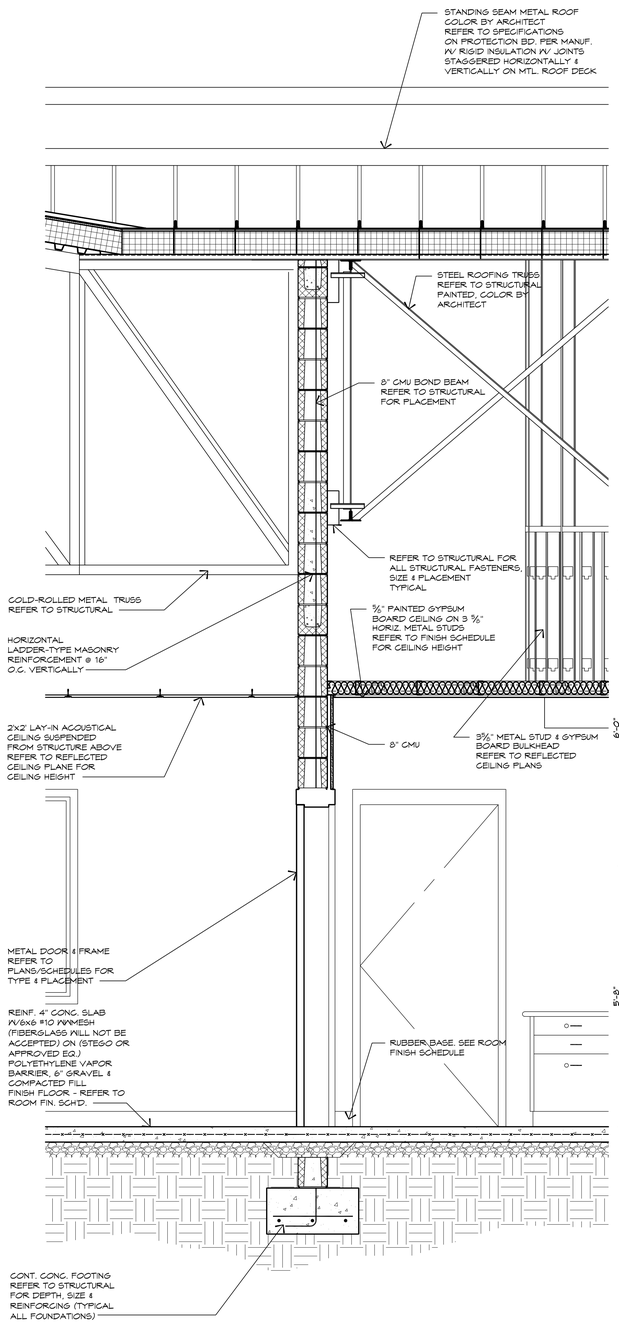
A403



4 A404 WALL SECTION
SCALE: 3/4"=1'-0"



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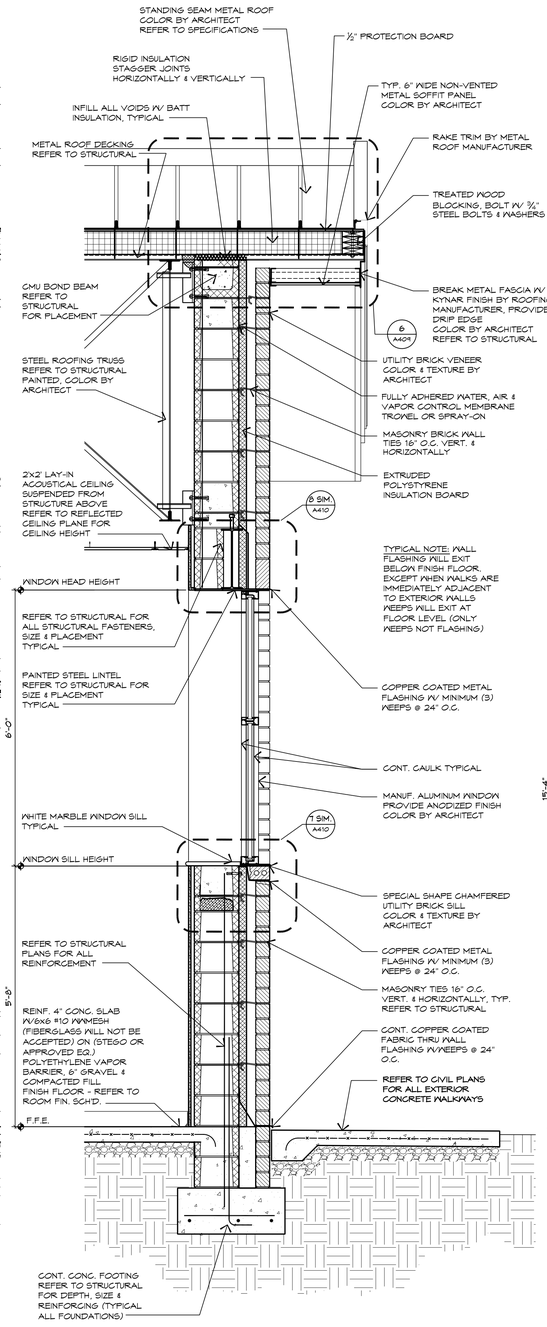
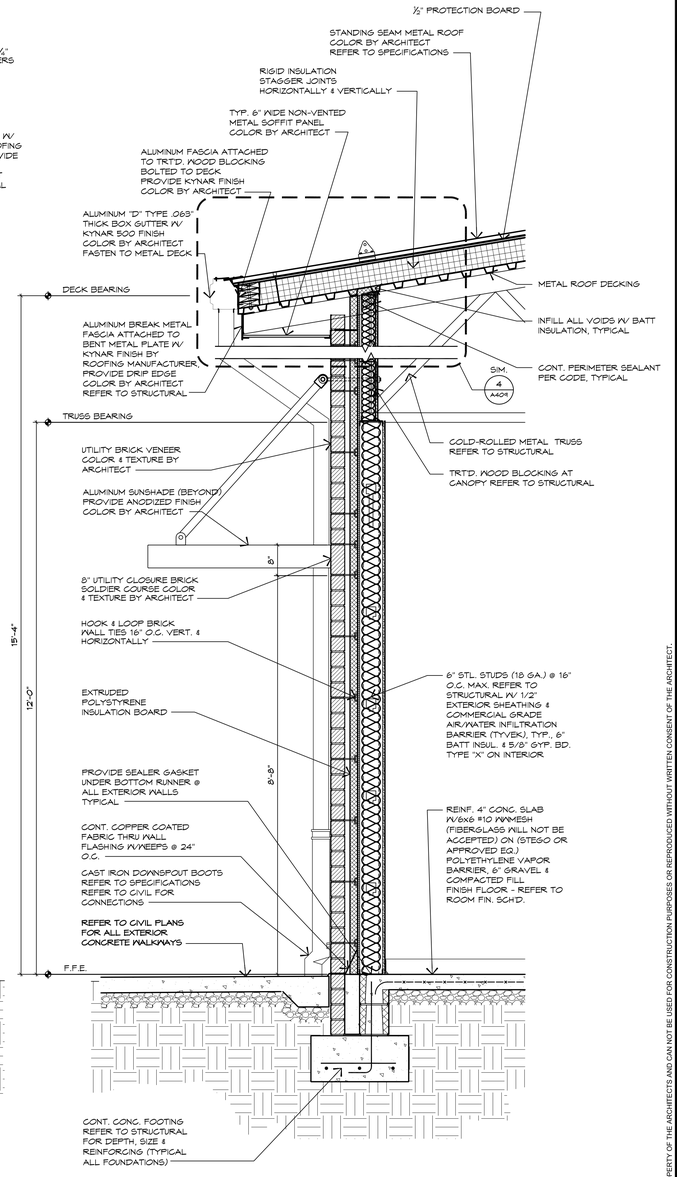


2 A404 WALL SECTION
SCALE: 3/4"=1'-0"



1 A404 WALL SECTION
SCALE: 3/4"=1'-0"

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CONTRACTOR TO VERIFY ALL DIMENSIONS.

PINNACLE ARCHITECTURE, P.A. NC 51264 4-30-19 MATTHEWS, NC
FRANK MCGRADY WILLIAMS REGISTERED ARCHITECT 1621 MATTHEWS, NC

PINNACLE ARCHITECTURE
PROFESSIONAL ASSOCIATION
P.O. BOX 187, 630 TEAM ROAD, SUITE 200 MATTHEWS, NORTH CAROLINA 28106
701 EAST BAY STREET, SUITE 302 CHARLESTON, SOUTH CAROLINA 29403
PH: (704) 847-9853 FAX: (704) 847-9855
PH: (843) 872-5345 FAX: (843) 872-5374

ISSUE DATE: 04.30.2019
DRAWN BY: FMW/REB
CHECKED BY: FMW/REB
PROJECT: 1921

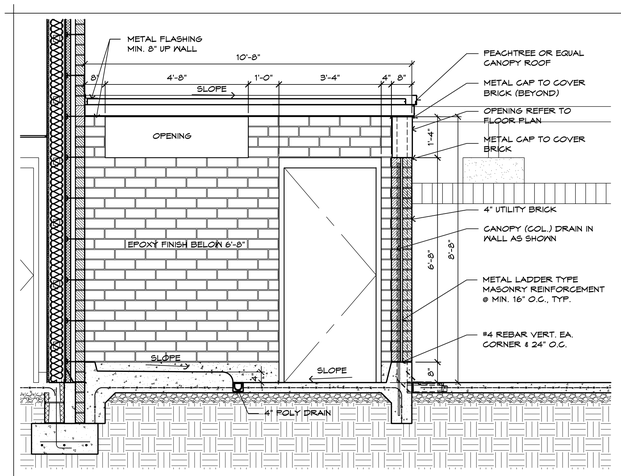
STUMP SOUND ELEMENTARY SCHOOL
ONSLOW COUNTY SCHOOLS
STUMP SOUND, NORTH CAROLINA

WALL SECTIONS

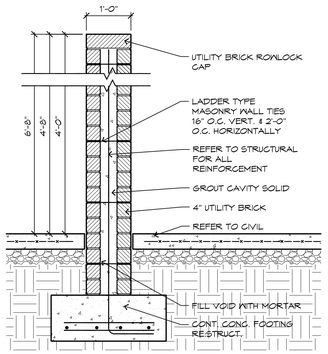
REVISION SCHEDULE

Δ	DATE	REFERENCE

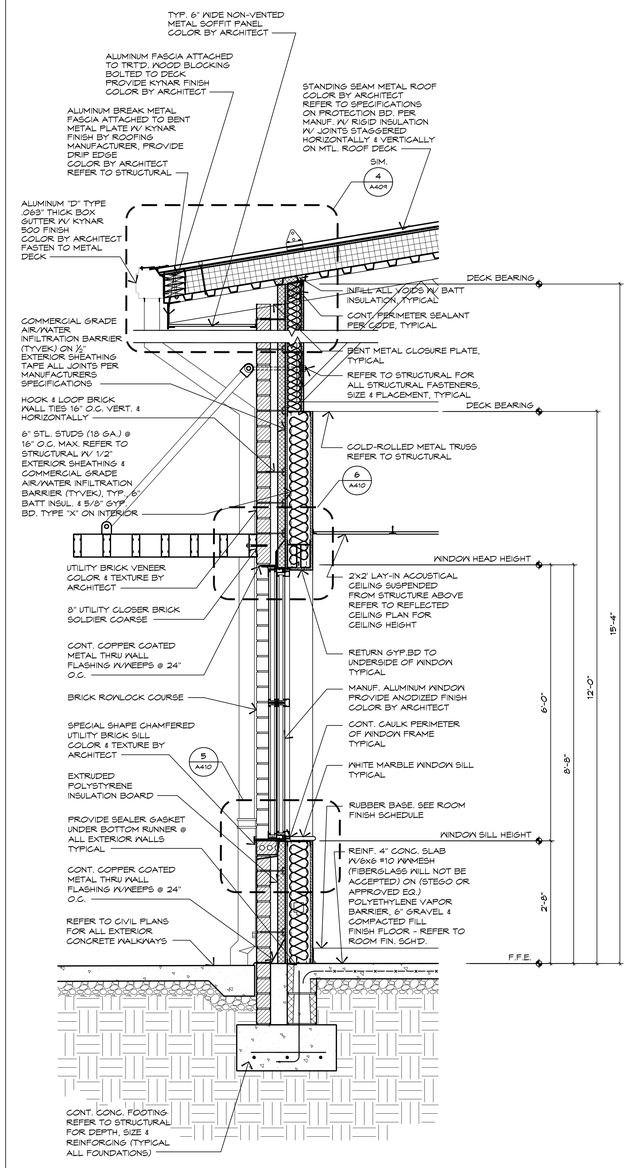
A404



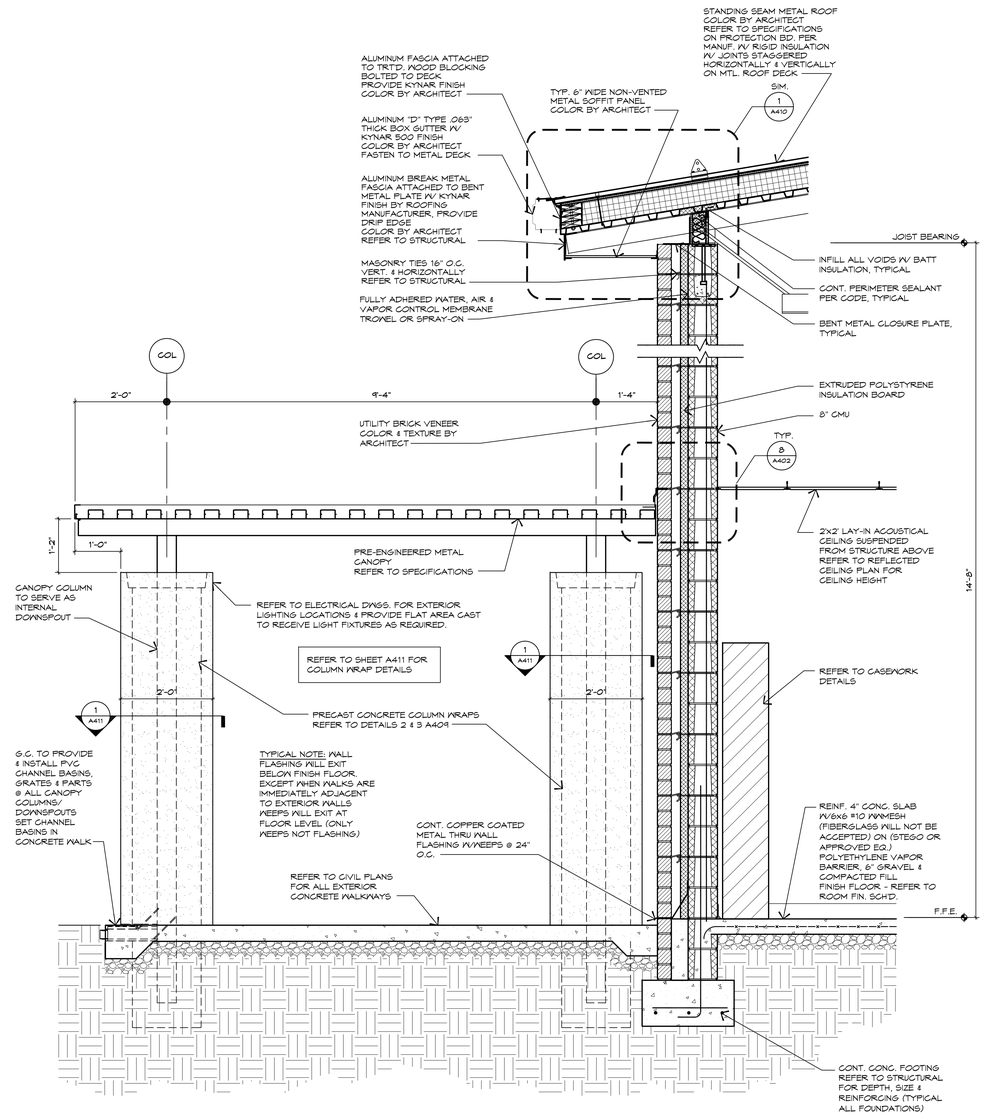
5 A405 SECTION THRU CANWASH
SCALE: 1/2" = 1'-0"



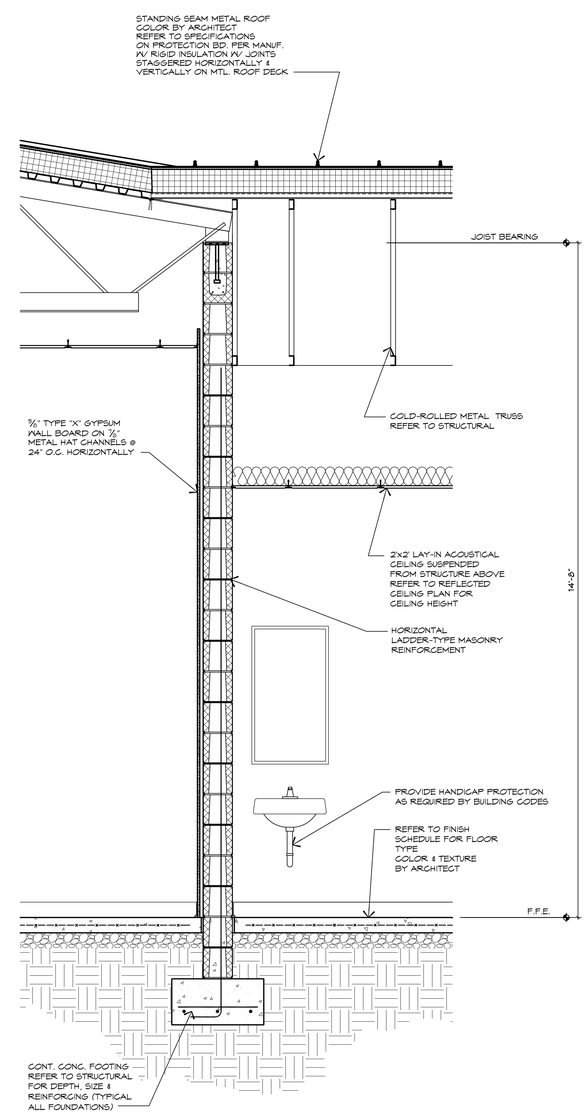
4 A405 SECTION THRU SCREEN WALL
SCALE: 3/4" = 1'-0"



3 A405 WALL SECTION
SCALE: 3/4"=1'-0"



2 A405 WALL SECTION
SCALE: 3/4"=1'-0"



1 A405 WALL SECTION
SCALE: 3/4"=1'-0"

CONTRACTOR TO VERIFY ALL DIMENSIONS.

PINNACLE ARCHITECTURE
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701 EAST BAY STREET, SUITE 302
CHARLESTON, SOUTH CAROLINA 29403
PH: (843) 872-5345 FAX: (843) 872-5374

ISSUE DATE: 04.30.2019
ISSUED BY: BS
CHECKED BY: PMM/REB
PROJECT: 1821

STUMP SOUND ELEMENTARY SCHOOL
ONSLOW COUNTY SCHOOLS
STUMP SOUND, NORTH CAROLINA

WALL SECTIONS

REVISION SCHEDULE

△	DATE	REFERENCE

A405

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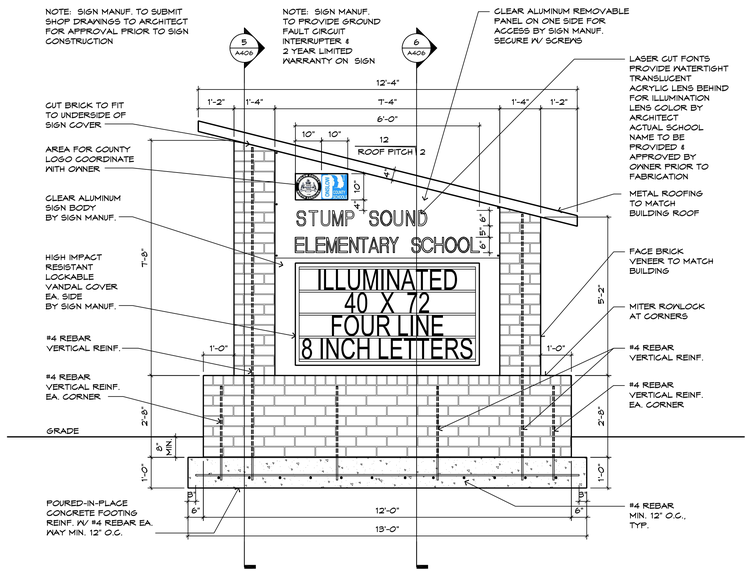
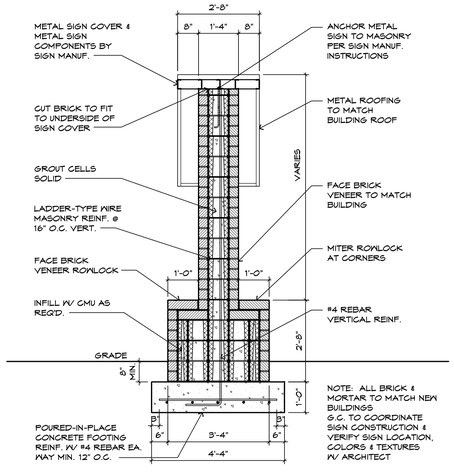
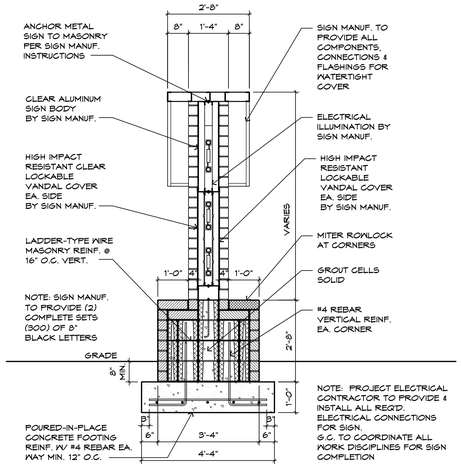


7 A406 **EXTERIOR ELEVATION**
SCALE: 1/2"=1'-0"



5 A406 **SECTION**
SCALE: 1/2"=1'-0"



6 A406 **SECTION**
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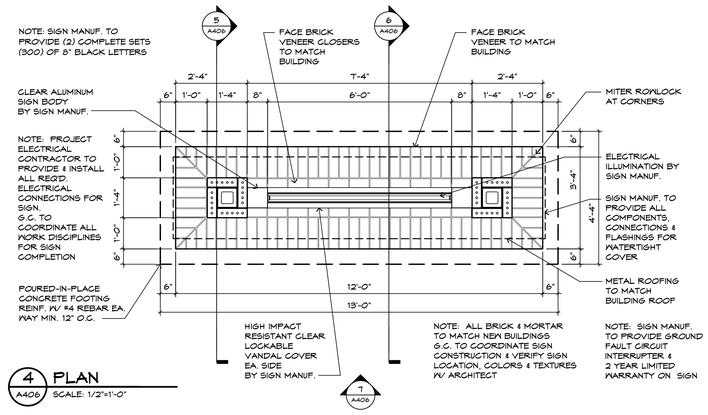
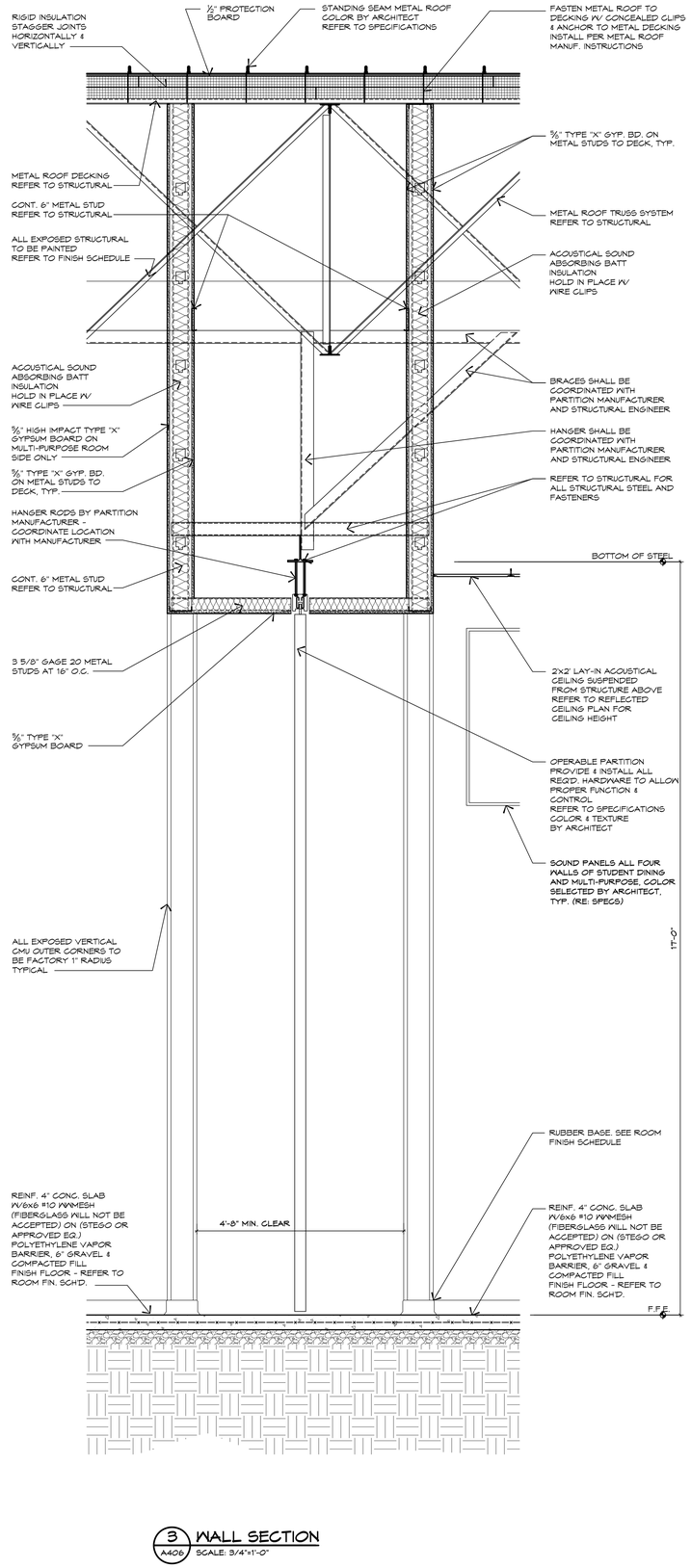
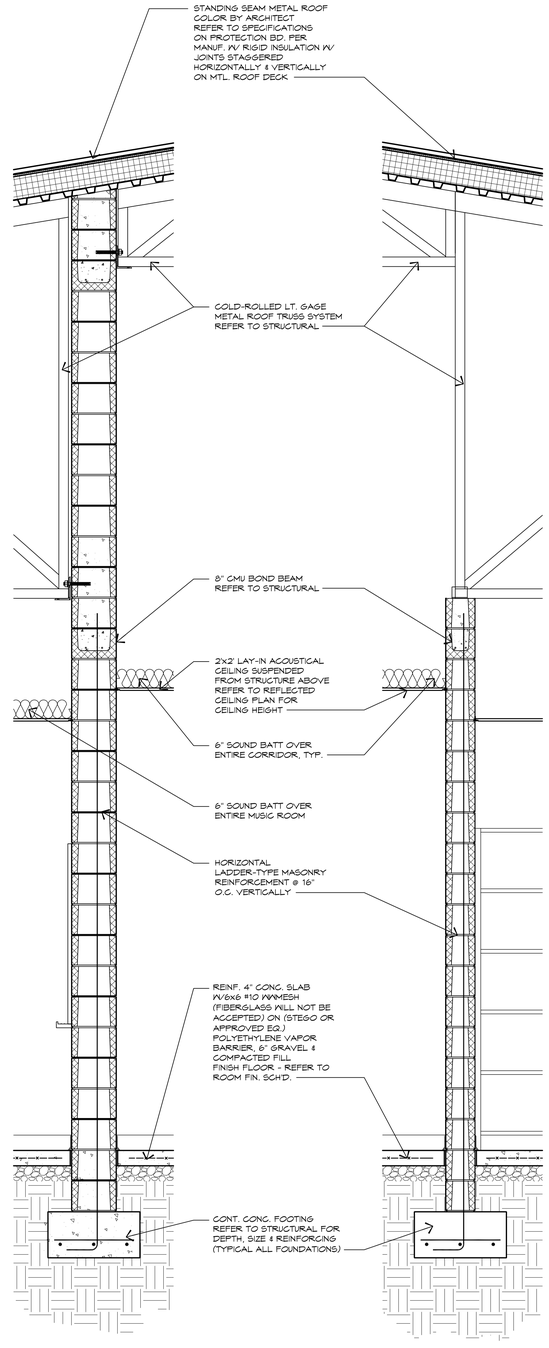


4 A406 **PLAN**
SCALE: 1/2"=1'-0"



3 A406 **WALL SECTION**
SCALE: 3/4"=1'-0"



2 A406 **WALL SECTION**
SCALE: 3/4"=1'-0"

1 A406 **WALL SECTION**
SCALE: 3/4"=1'-0"

CONTRACTOR TO VERIFY ALL DIMENSIONS.

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PROFESSIONAL ASSOCIATION
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PINNACLE ARCHITECTURE, P.A. NC 51264 4-30-19 REGISTERED ARCHITECTURAL CORPORATION MATTHEWS, NC

FRANK McCRADY WILLIAMS REGISTERED ARCHITECT 18211 MATTHEWS, NC

ISSUE DATE: 04.30.2019
DRAWN BY: PMW/REB
CHECKED BY: PMW
PROJECT: 1821

STUMP SOUND ELEMENTARY SCHOOL
ONSLOW COUNTY SCHOOLS
STUMP SOUND, NORTH CAROLINA
WALL SECTIONS & EXTERIOR SIGN DETAILS

REVISION SCHEDULE

△	DATE	REFERENCE

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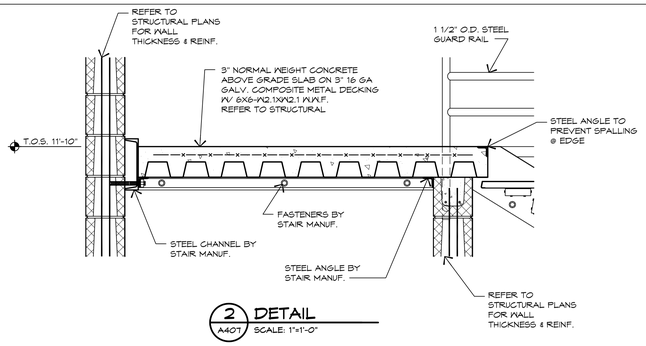
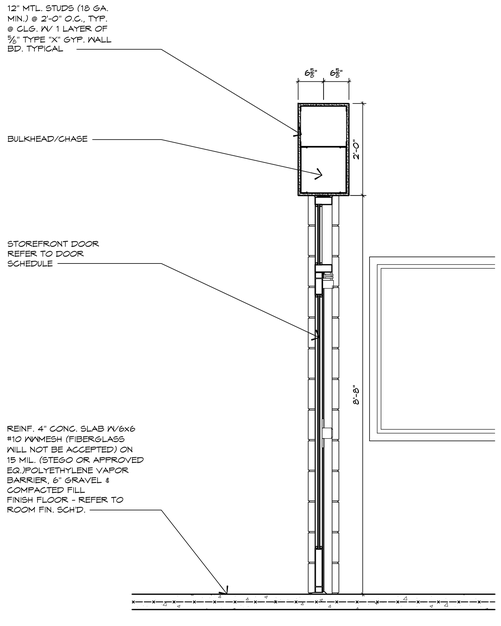
A406



2 A407 DETAIL
SCALE: 1"=1'-0"



3 A407 WALL SECTION
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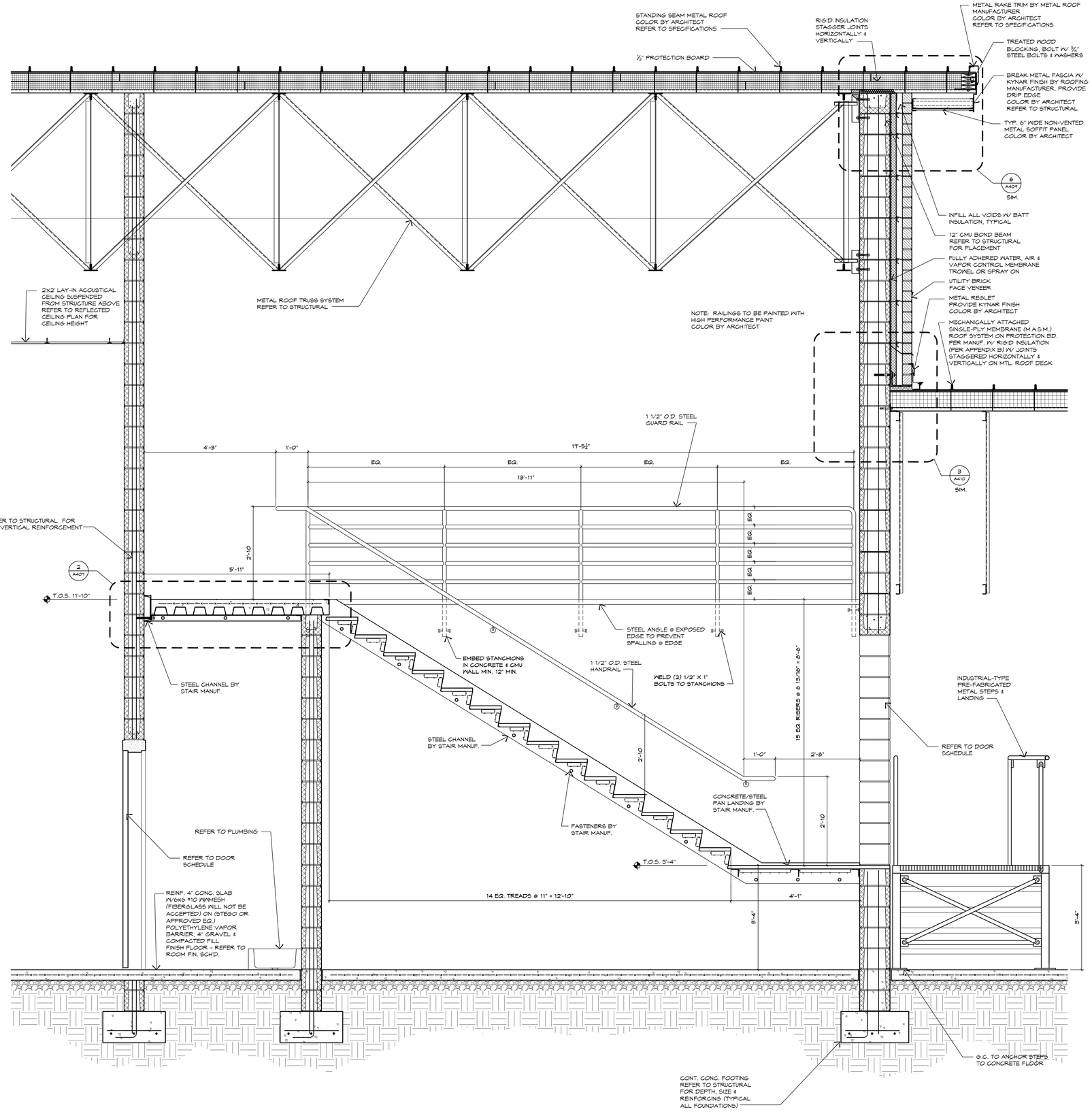

1 A407 WALL SECTION
SCALE: 3/4"=1'-0"

CONTRACTOR TO VERIFY ALL DIMENSIONS.

PINNACLE ARCHITECTURE
PROFESSIONAL ASSOCIATION
P.O. BOX 187, 630 TEAM ROAD, SUITE 200
MATTHEWS, NORTH CAROLINA 28106
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701 EAST BAY STREET, SUITE 302
CHARLESTON, SOUTH CAROLINA 29403
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ISSUE DATE: 04.30.2019
DRAWN BY: PMW/REB
CHECKED BY: PMW
PROJECT: 1821

STUMP SOUND ELEMENTARY SCHOOL
ONSLOW COUNTY SCHOOLS
STUMP SOUND, NORTH CAROLINA

WALL SECTIONS

REVISION SCHEDULE

△	DATE	REFERENCE

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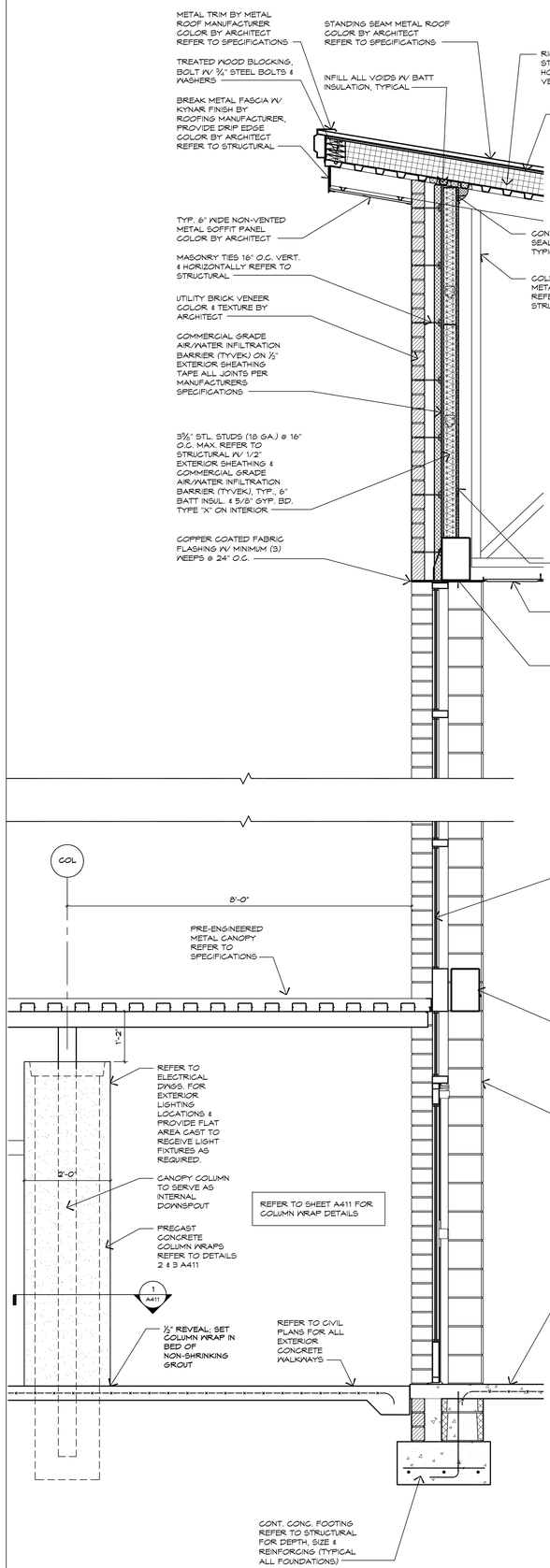
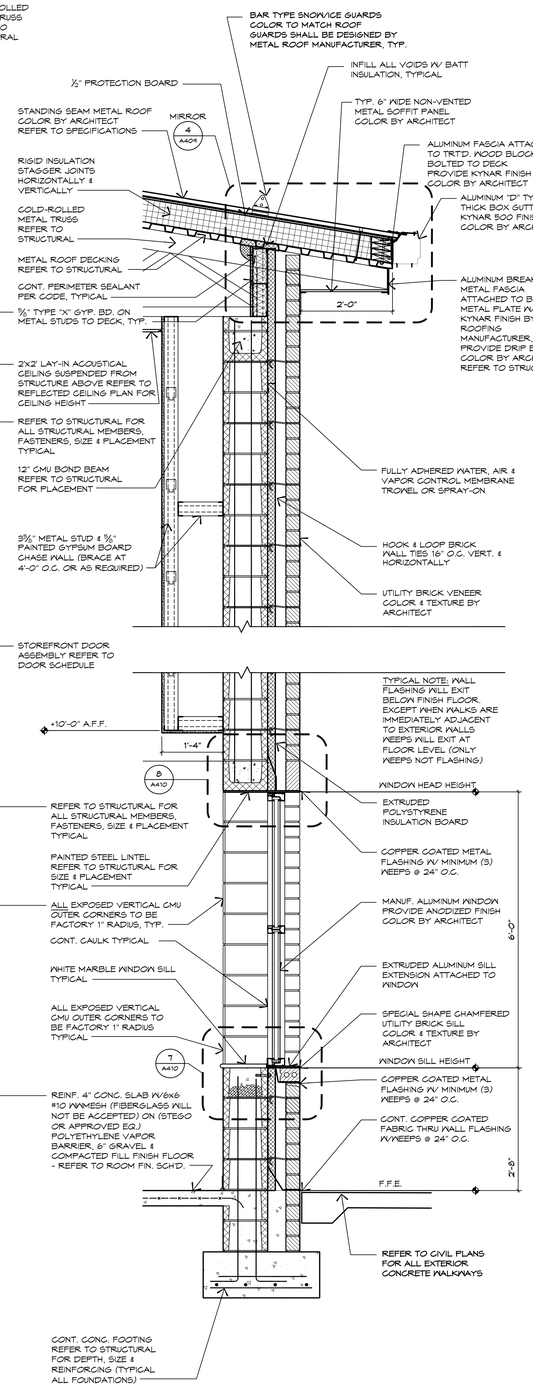
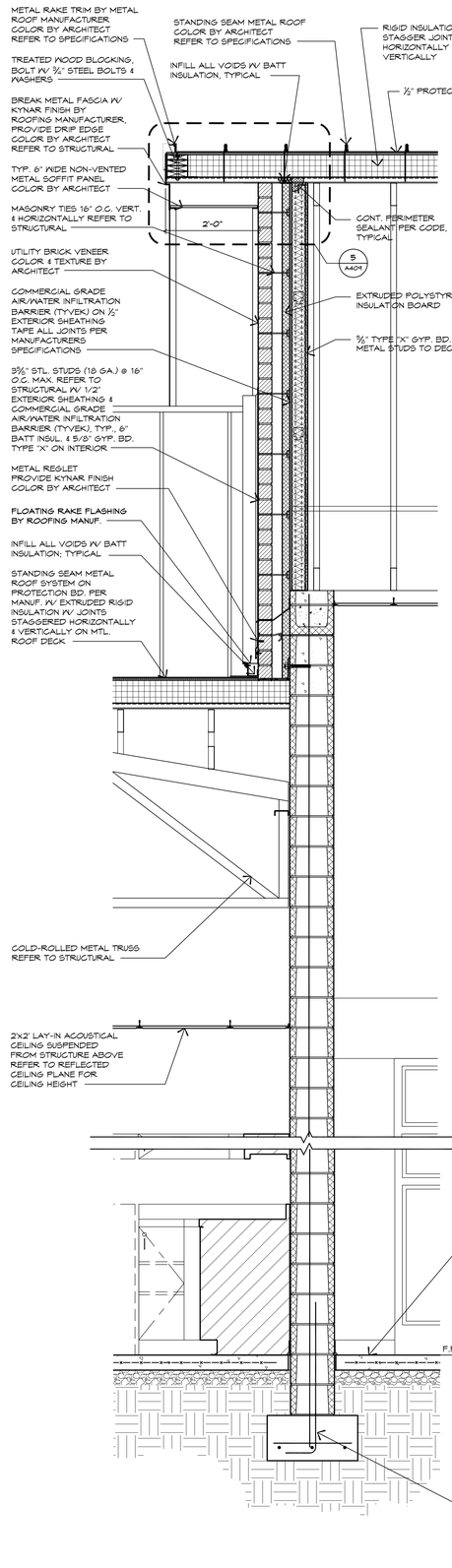
A407



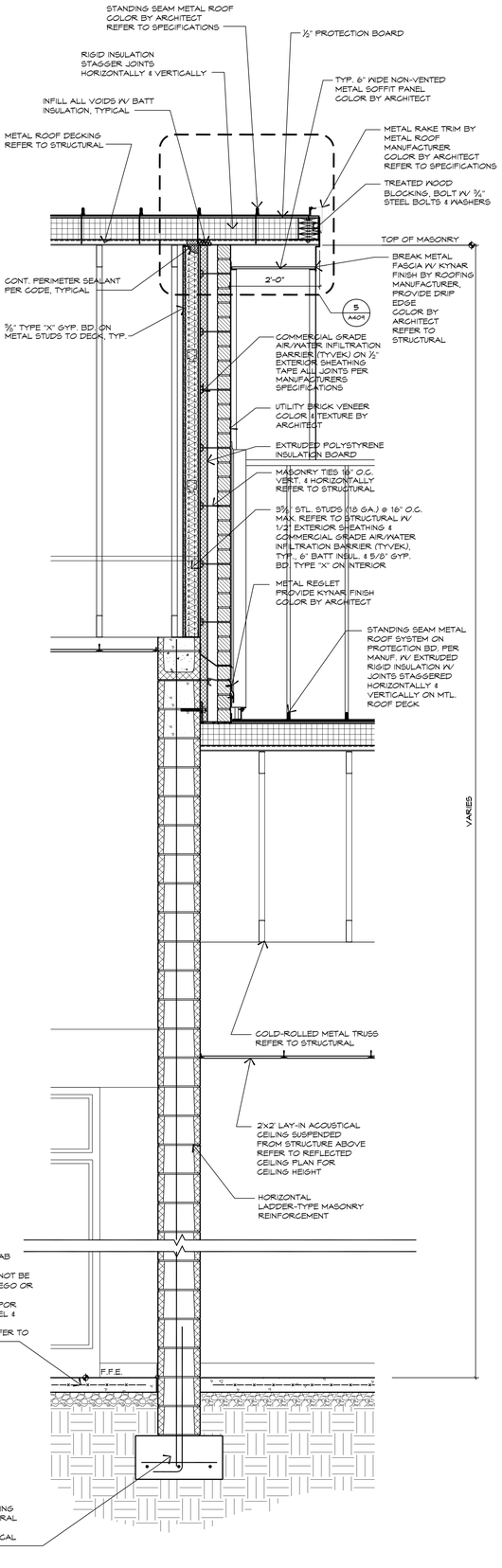
4 WALL SECTION
A408 SCALE: 3/4"=1'-0"



3 WALL SECTION
A408 SCALE: 3/4"=1'-0"



2 WALL SECTION
A408 SCALE: 3/4"=1'-0"



1 WALL SECTION
A408 SCALE: 3/4"=1'-0"

PINNACLE ARCHITECTURE
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MATTHEWS, NORTH CAROLINA 28106
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701 EAST BAY STREET, SUITE 302
CHARLESTON, SOUTH CAROLINA 29403
PH: (843) 872-5345 FAX: (843) 872-5374

REGISTERED ARCHITECT NO. 5126 4-30-19 PINNACLE ARCHITECTURE, P.A. CERTIFICATE OF AUTHORIZATION NO. C-1621 FRANK MATTHEWS

REGISTERED ARCHITECT FRANK KRADY WILLIAMS NO. 10811 CERTIFICATE OF AUTHORIZATION NORTH CAROLINA FRANK MATTHEWS

CONTRACTOR TO VERIFY ALL DIMENSIONS.

ISSUE DATE: 04.30.2019
ISSUED BY: PMM/REB
CHECKED BY: FKW
PROJECT: 1821

STUMP SOUND ELEMENTARY SCHOOL
ONSLOW COUNTY SCHOOLS
STUMP SOUND, NORTH CAROLINA

WALL SECTIONS

REVISION SCHEDULE

△	DATE	REFERENCE

A408

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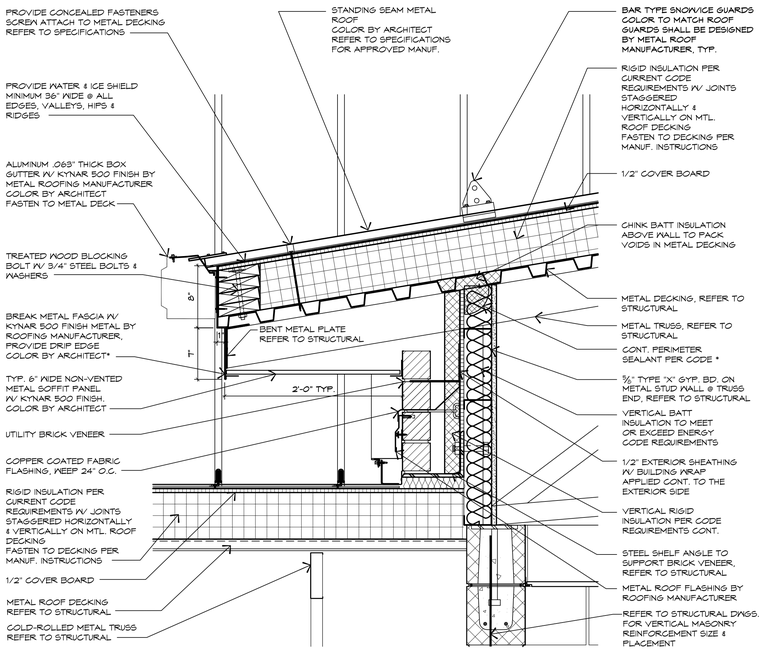
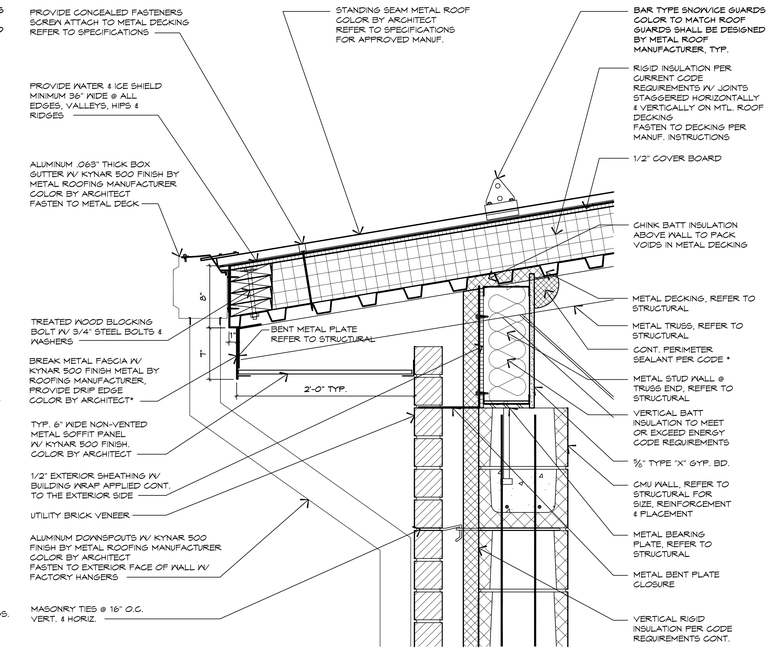


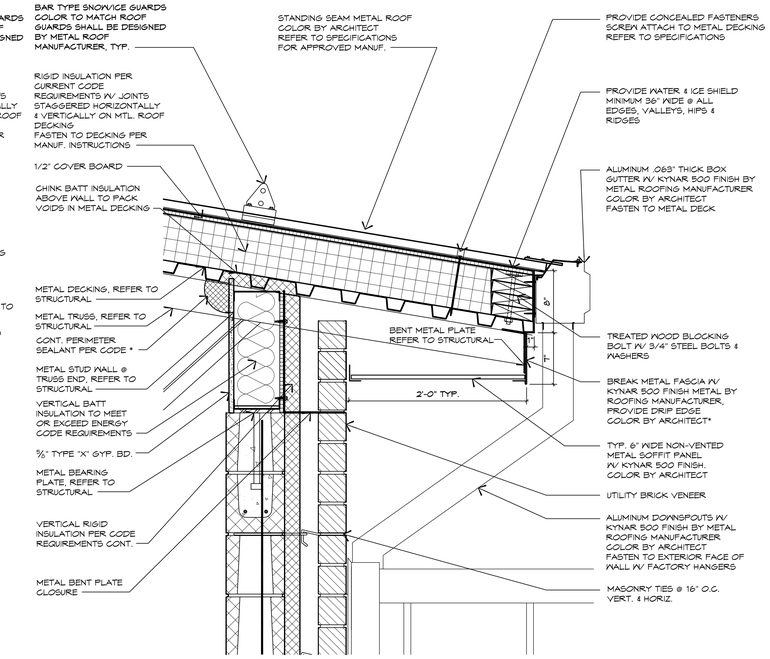
3 ENLARGED DETAIL
A409 SCALE: 1 1/2"=1'-0"

NOTE: G.C. TO VERIFY ACTUAL BREAK METAL FASCIA DIMENSION BASED ON ACTUAL TRUSS COMPONENT DIMENSIONS.



2 ENLARGED DETAIL
A409 SCALE: 1 1/2"=1'-0"

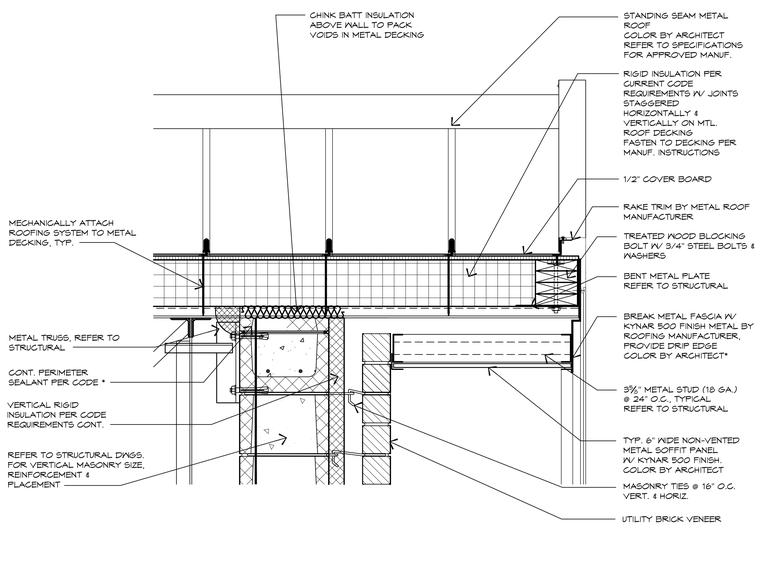
NOTE: ALL BRICK VENEER ANCHORS WILL BE 8" FROM TOP OF MASONRY WALL & BE LOCATED @ 16" O.C. VERTICALLY TO FOOTING



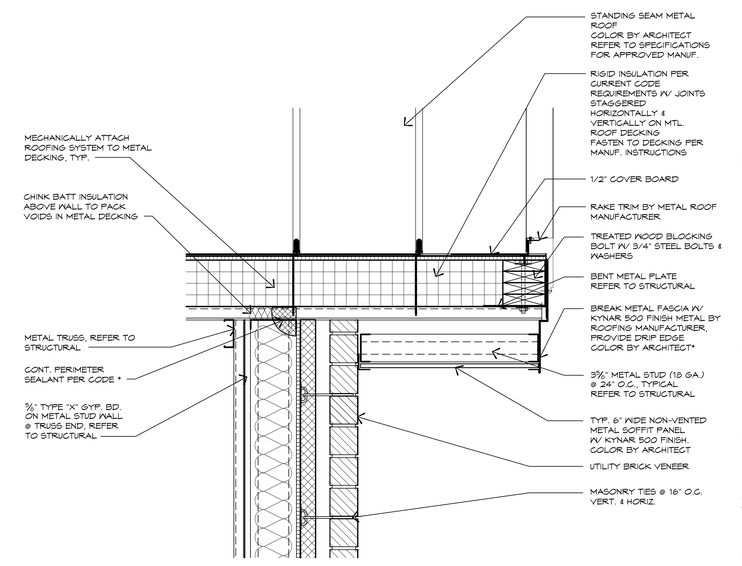
1 ENLARGED DETAIL
A409 SCALE: 1 1/2"=1'-0"

* NOTE: GENERAL CONTRACTOR TO PROVIDE & INSTALL CONTINUOUS PERIMETER SEALANT @ TOP OF INTERIOR/EXTERIOR WALLS PER THE NORTH CAROLINA 2018 ENERGY CONSERVATION CODE, SECTION C402.5 AIR LEAKAGE - THERMAL ENVELOPE

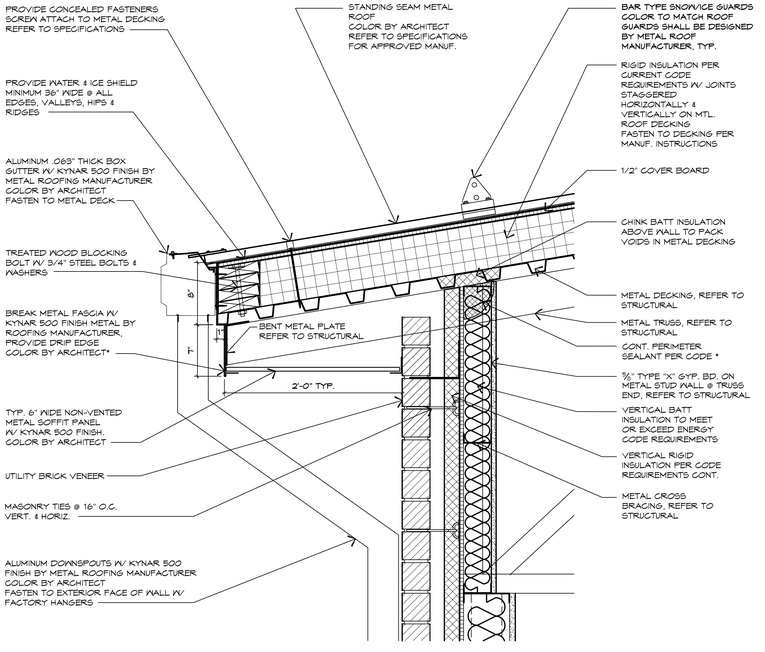
NOTE: REFER TO STRUCTURAL DRAWINGS FOR ALL TOP OF MASONRY AND ROOF TRUSS BEARING HEIGHTS



6 ENLARGED DETAIL
A409 SCALE: 1 1/2"=1'-0"



5 ENLARGED DETAIL
A409 SCALE: 1 1/2"=1'-0"



4 ENLARGED DETAIL
A409 SCALE: 1 1/2"=1'-0"

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CONTRACTOR TO VERIFY ALL DIMENSIONS.

PINNACLE ARCHITECTURE
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CHARLESTON, SOUTH CAROLINA 29403
PH: (843) 872-5345 FAX: (843) 872-5374

ISSUE DATE: 04.30.2019
ISSUED BY: PMK/REB
CHECKED BY: PMK
PROJECT: 1821

STUMP SOUND ELEMENTARY SCHOOL
ONSLOW COUNTY SCHOOLS
STUMP SOUND, NORTH CAROLINA

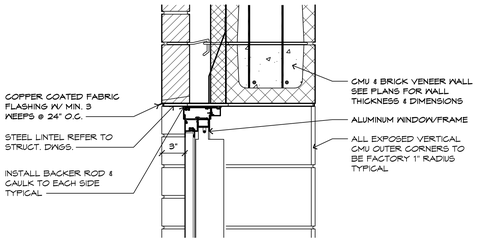
ENLARGED DETAILS

REVISION SCHEDULE

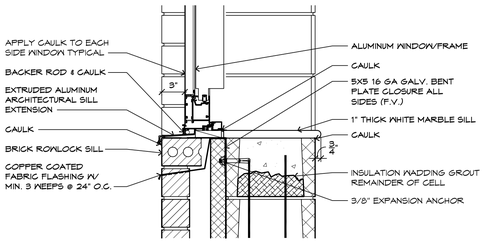
Δ	DATE	REFERENCE

A409

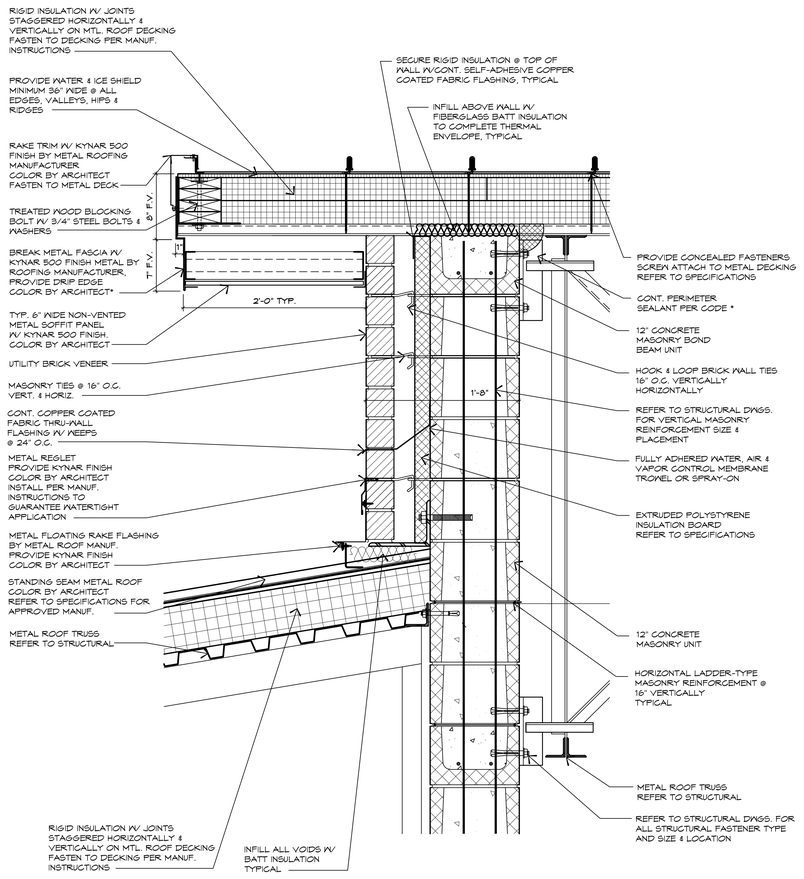
I:\PROJECTS\Stump Sound Elementary School\1821 Drawings\Revit Documents\Sheets\Drawings\A409 Enlarged Details.dwg, 4/30/2019 4:47:42 PM



8 A410 TYP. WINDOW HEAD DETAIL
SCALE: 1 1/2"=1'-0"



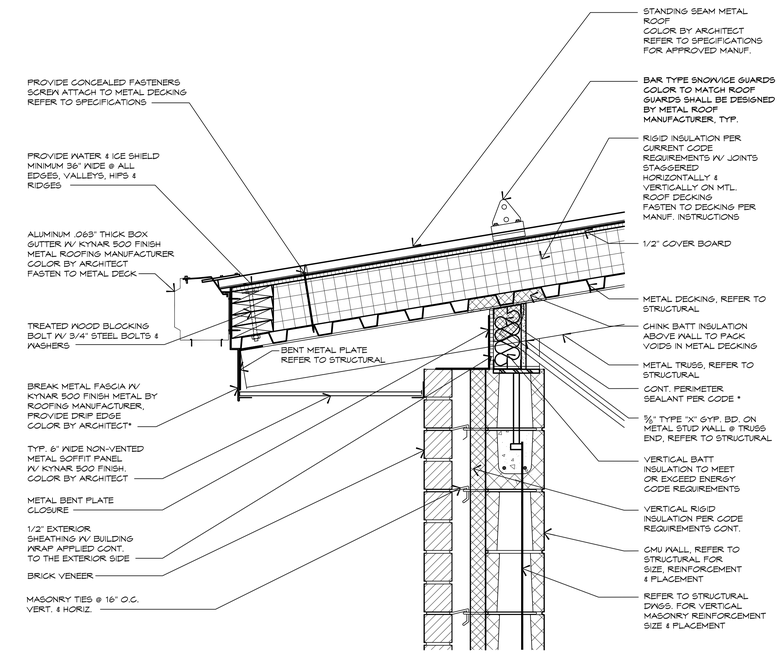
7 A410 TYP. WINDOW SILL DETAIL
SCALE: 1 1/2"=1'-0"



NOTE: ALL BRICK VENEER ANCHORS WILL BE 8" FROM TOP OF MASONRY WALL & BE LOCATED @ 16" O.C. VERTICALLY TO FOOTING

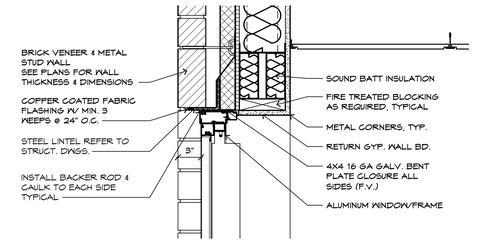
2 A410 ENLARGED DETAIL
SCALE: 1 1/2"=1'-0" @ RAKE

* NOTE: GENERAL CONTRACTOR TO PROVIDE & INSTALL CONTINUOUS PERIMETER SEALANT @ TOP OF INTERIOR/EXTERIOR WALLS PER THE NORTH CAROLINA 2018 ENERGY CONSERVATION CODE, SECTION C402.5 AIR LEAKAGE - THERMAL ENVELOPE

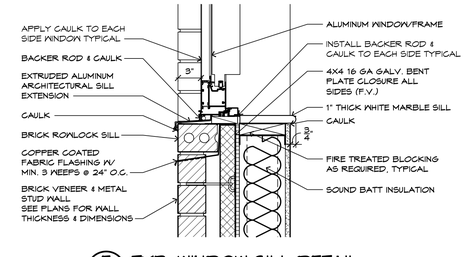


1 A410 ENLARGED DETAIL
SCALE: 1 1/2"=1'-0"

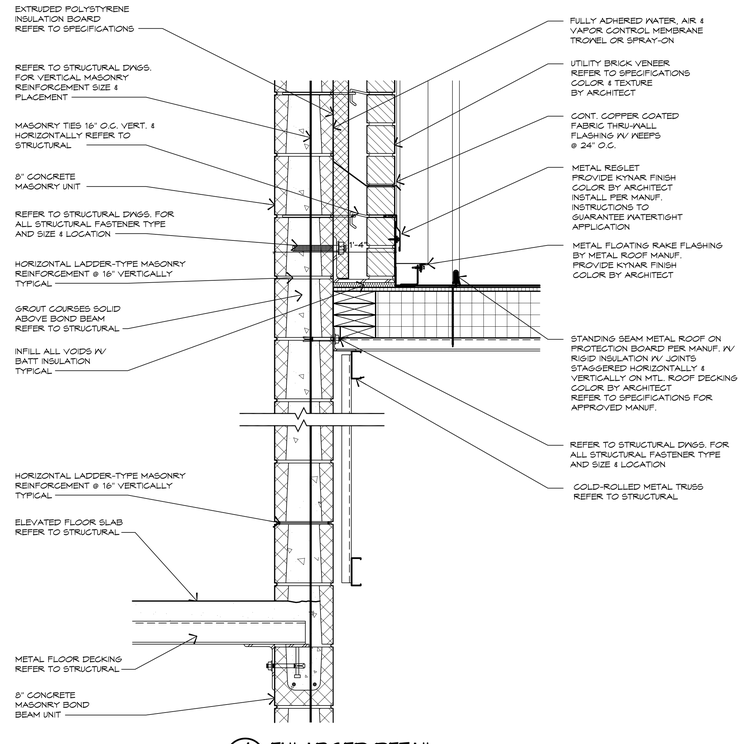
NOTE: REFER TO STRUCTURAL DRAWINGS FOR ALL TOP OF MASONRY AND ROOF TRUSS BEARING HEIGHTS



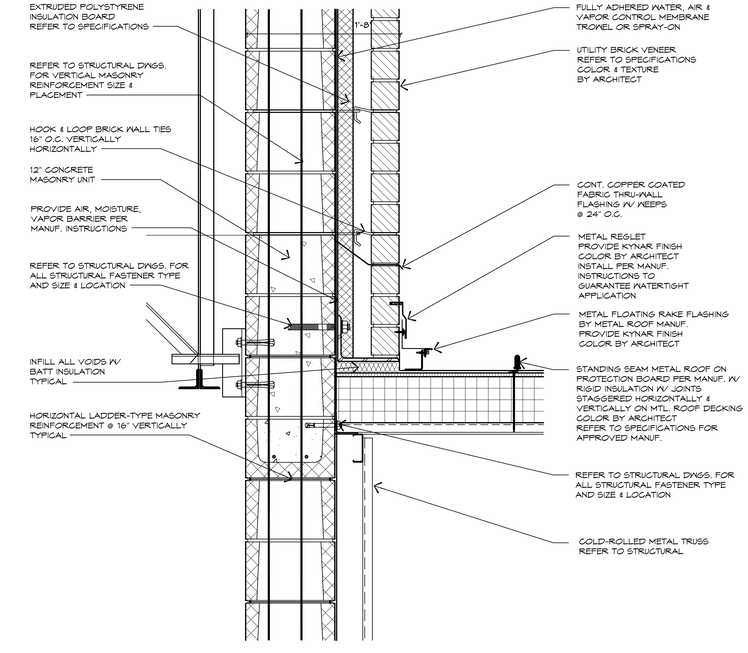
6 A410 TYP. WINDOW HEAD DETAIL
SCALE: 1 1/2"=1'-0"



5 A410 TYP. WINDOW SILL DETAIL
SCALE: 1 1/2"=1'-0"



4 A410 ENLARGED DETAIL
SCALE: 1 1/2"=1'-0"



3 A410 ENLARGED DETAIL
SCALE: 1 1/2"=1'-0"

CONTRACTOR TO VERIFY ALL DIMENSIONS

PINNACLE ARCHITECTURE
PROFESSIONAL ASSOCIATION
P.O. BOX 187, 630 TEAM ROAD, SUITE 200
MATTHEWS, NORTH CAROLINA 28106
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701 EAST BAY STREET, SUITE 302
CHARLESTON, SOUTH CAROLINA 29403
PH: (843) 872-5345 FAX: (843) 872-5374

ISSUE DATE: 04.30.2019
DRAWN BY: RWK/REB
CHECKED BY: RWK/WEB
PROJECT: 1821

STUMP SOUND ELEMENTARY SCHOOL
ONSLOW COUNTY SCHOOLS
STUMP SOUND, NORTH CAROLINA

ENLARGED DETAILS

REVISION SCHEDULE

△	DATE	REFERENCE

A410

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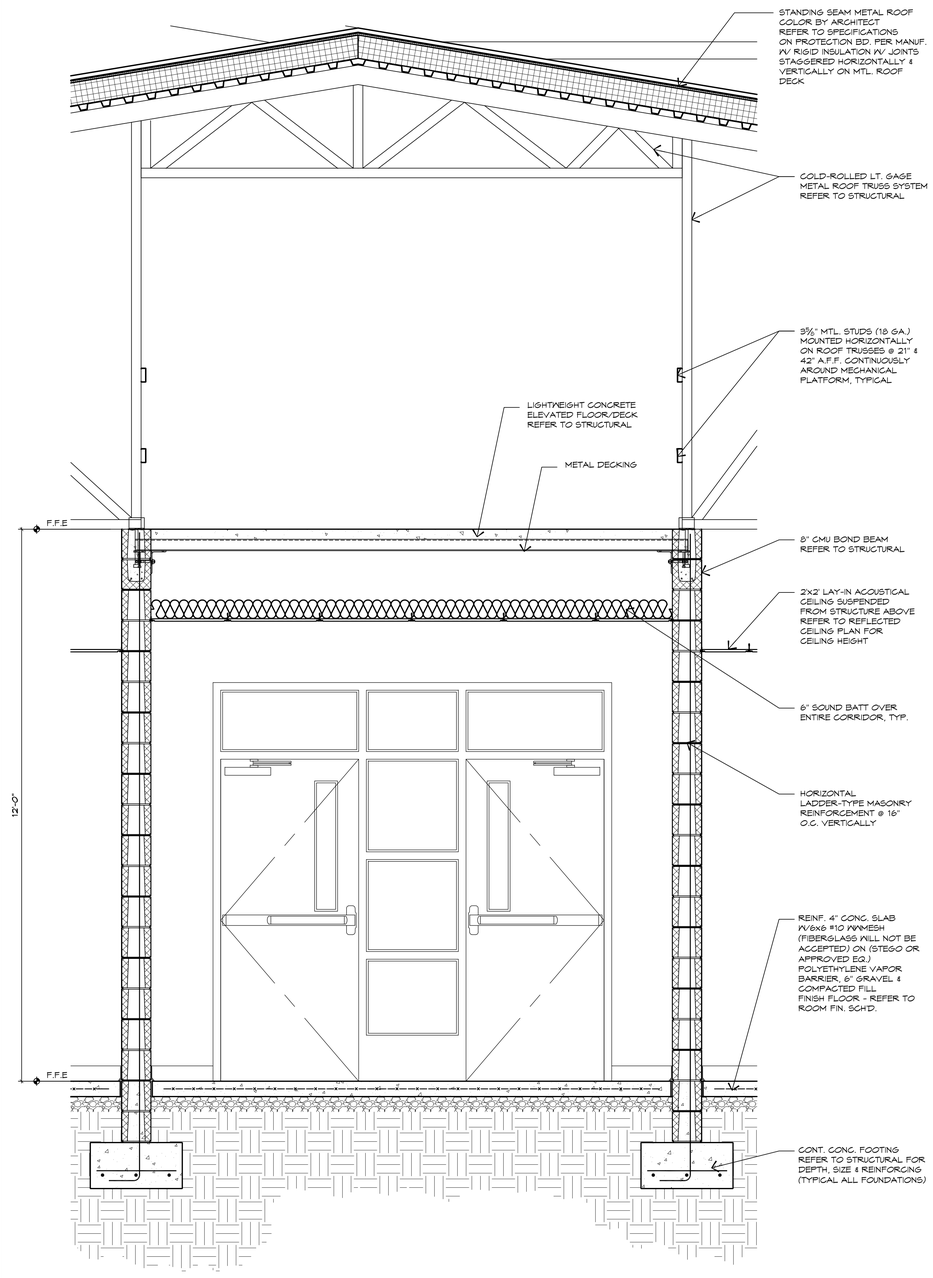
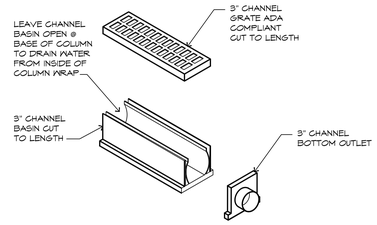
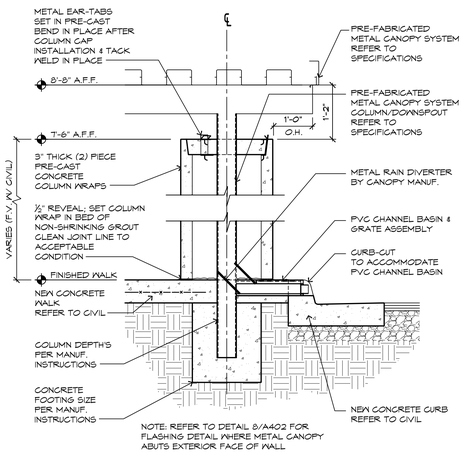


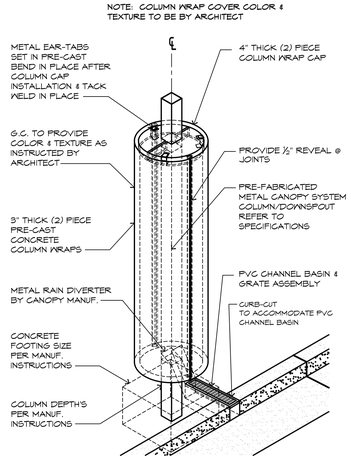
7 A411 MECH. PLATFORM SECTION - TYP.
SCALE: NTS



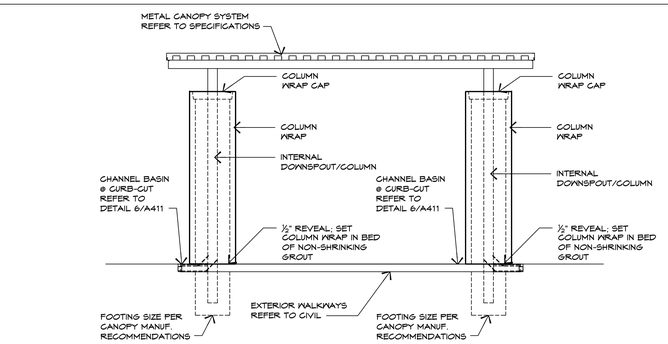
6 A411 CHANNEL BASIN DETAIL
SCALE: NTS



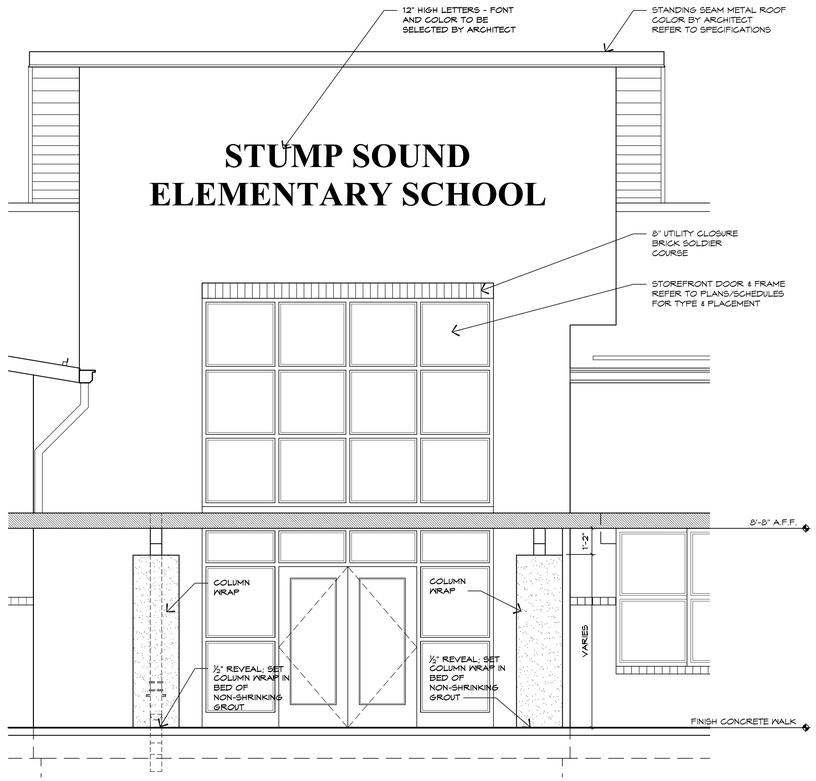
3 A411 COLUMN WRAP DETAIL - TYPICAL
SCALE: NTS



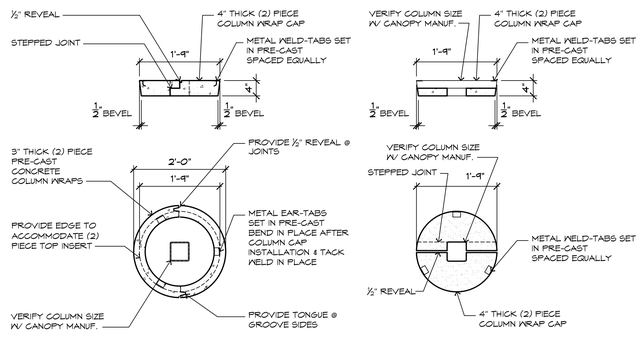
2 A411 COLUMN WRAP DETAIL - TYPICAL
SCALE: NTS



5 A411 TYP. SECTION THRU WALKWAY CANOPY
SCALE: 3/8"=1'-0"



4 A411 PARTIAL ENLARGED ELEVATION
SCALE: 3/8"=1'-0"



1 A411 COLUMN WRAP DETAIL - TYPICAL
SCALE: NTS

CONTRACTOR TO VERIFY ALL DIMENSIONS.

PINNACLE ARCHITECTURE, P.A. — 51264 — 4-30-19 — REGISTERED ARCHITECTURAL CORPORATION — NORTH CAROLINA — PINNACLE MATTHEWS

FRANK KENDRADY WILLIAMS — REGISTERED ARCHITECT — 19611 — NORTH CAROLINA — MATTHEWS

PINNACLE ARCHITECTURE
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MATTHEWS, NORTH CAROLINA 28106 — CHARLESTON, SOUTH CAROLINA 29403
PH: (704) 847-9853 FAX: (704) 847-9853 — PH: (843) 872-5345 FAX: (843) 872-5374

ISSUE DATE: 04.30.2019
REVISIONS:
CHECKED BY: FWM/KREB
PROJECT: 1821

STUMP SOUND ELEMENTARY SCHOOL
ONSLOW COUNTY SCHOOLS
STUMP SOUND, NORTH CAROLINA

COLUMN WRAP DETAILS, PARTIAL ENTRY ELEVATION & MECH. PLATFORM SECTION

REVISION SCHEDULE

Δ	DATE	REFERENCE

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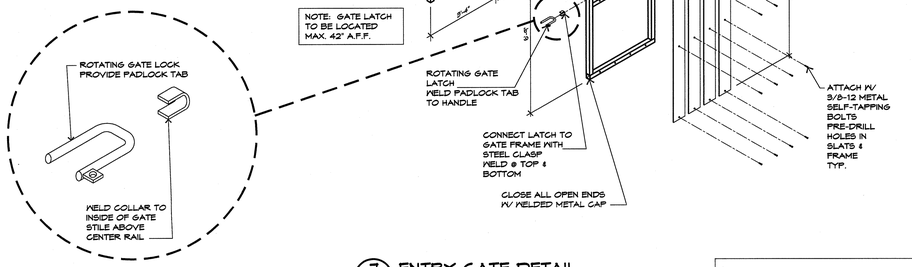
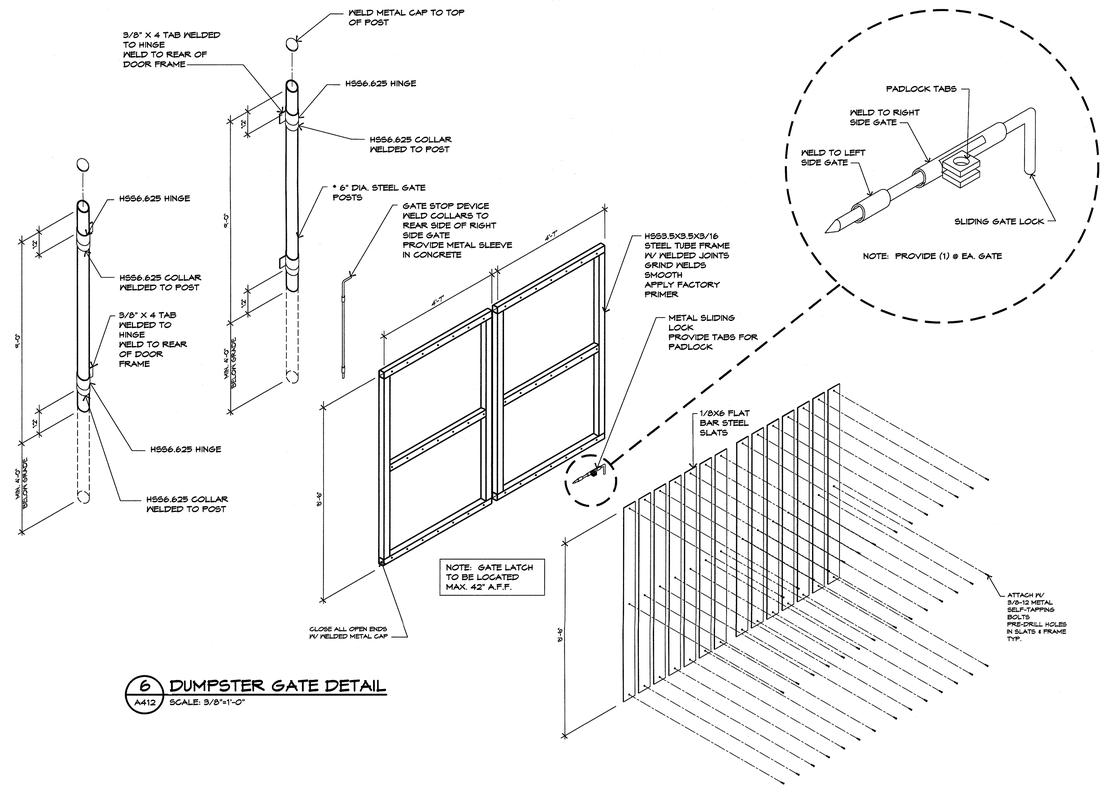
A411

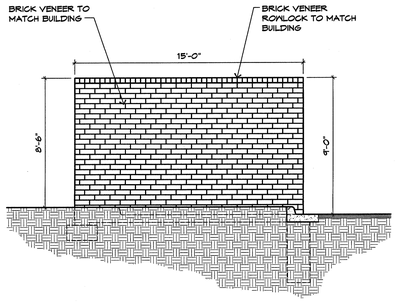


7 A412 **ENTRY GATE DETAIL**
SCALE: 3/8"=1'-0"

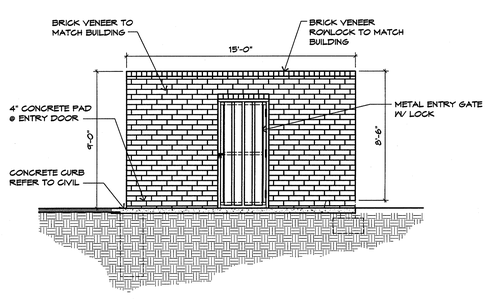
NOTE: G.C. TO PAINT ALL EXPOSED METAL W/ HIGH PERFORMANCE EXTERIOR PAINT. COLOR BY ARCHITECT.



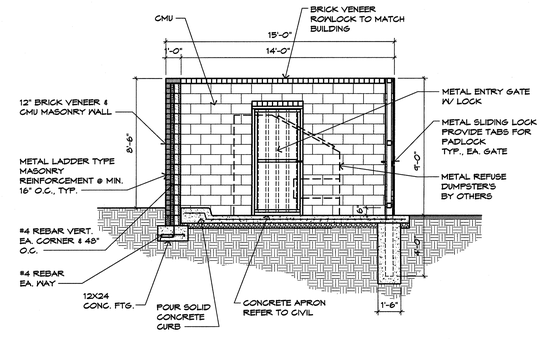
6 A412 **DUMPSTER GATE DETAIL**
SCALE: 3/8"=1'-0"



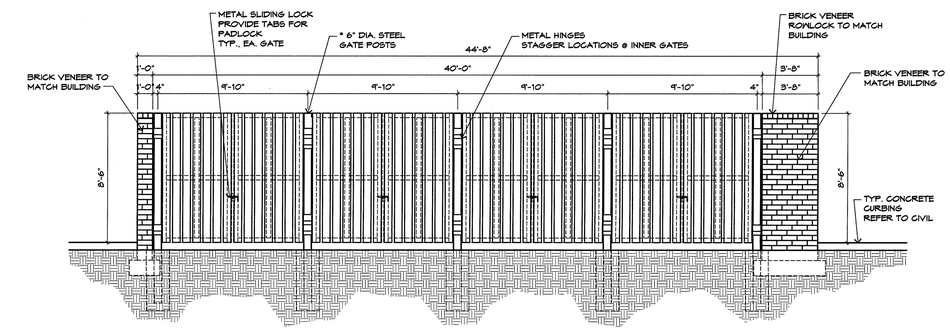
5 A412 **SIDE ELEVATION**
SCALE: 1/4"=1'-0"



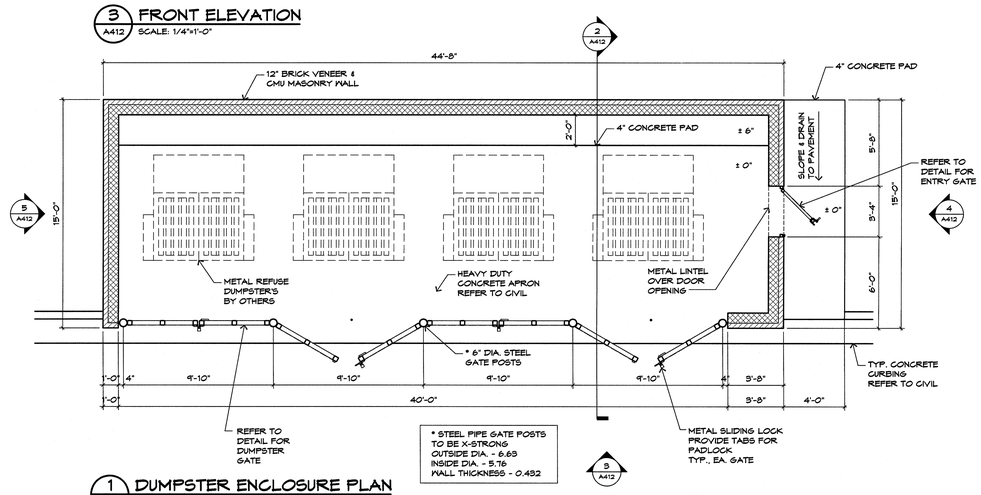
4 A412 **SIDE ELEVATION**
SCALE: 1/4"=1'-0"



2 A412 **SECTION**
SCALE: 1/4"=1'-0"



3 A412 **FRONT ELEVATION**
SCALE: 1/4"=1'-0"



1 A412 **DUMPSTER ENCLOSURE PLAN**
SCALE: 1/4"=1'-0"

CONTRACTOR TO VERIFY ALL DIMENSIONS.

PINNACLE ARCHITECTURE
PROFESSIONAL ASSOCIATION
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ISSUE DATE: 04.30.2019
DRAWN BY: JR
CHECKED BY: PHW/FREB
PROJECT: 1521

STUMP SOUND ELEMENTARY SCHOOL
ONSLOW COUNTY SCHOOLS
STUMP SOUND, NORTH CAROLINA
DUMPSTER ENCLOSURE DETAILS

REVISION SCHEDULE

△	DATE	REFERENCE

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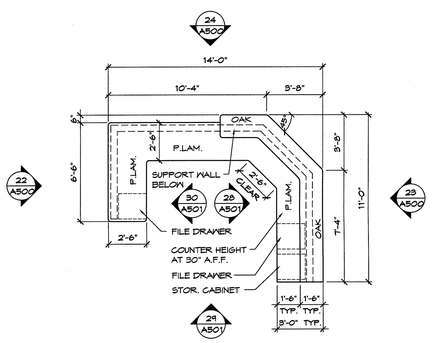
A412

CASEWORK NOTES:

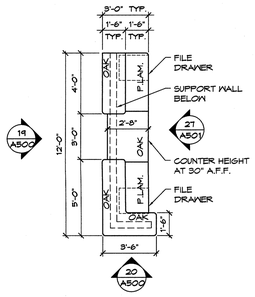
ALL MILLWORK SHALL COMPLY AND BE INSPECTED PER AWI CERTIFICATION PROGRAM.

UNLESS SPECIFICALLY NOTED OTHERWISE THE FOLLOWING IS TO BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR.

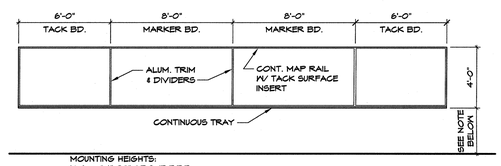
1. CASEWORK CONSTRUCTION TO BE OF 3/4" MULTIPLY WATER RESISTANT PLYWOOD WITH HARDWOOD SELECT RED OAK VENEER SURFACES ON BOTH SIDES AND MATCHING HARDWOOD EDGE-BANDING.
2. DRAWER CONSTRUCTION TO BE 3/4" MULTIPLY WATER RESISTANT PLYWOOD WITH HARDWOOD SELECT RED OAK VENEER SURFACES. DRAWER BOTTOMS TO BE 1/2" FURNITURE GRADE PLYWOOD FASTENED AND TRAPPED IN GROOVES.
3. DRAWERS TO HAVE FULL EXTENSION BALL BEARING SELF-CLOSING SLIDES WITH 100LB DYNAMIC LOAD CAPACITY.
4. ALL DRAWERS AND DOORS INDICATED TO BE KEY LOCKABLE.
5. ALL HINGES TO BE SELF-CLOSING 170° OPENING. SEE SPECIFICATIONS FOR FURTHER.
6. DRAWER PULLS TO BE MINIMUM 128mm. FINISH TO BE DETERMINED BY ARCHITECT.
7. PROVIDE INLAYED ADJUSTABLE METAL SHELVING BRACKETS AS INDICATED ON DRAWINGS.
8. HARDWOOD VENEER AND PLASTIC LAMINATE COLORS AND PATTERNS TO BE DETERMINED BY ARCHITECT.
9. SEE SPECS FOR CABINETWORK/MILLWORK FOR FURTHER INFORMATION.
10. PROVIDE HC ACCESSIBLE KITCHEN SINK AND COUNTER. SEE PLUMBING SPECIFICATIONS FOR FURTHER.
11. PROVIDE PLYWOOD SKIRT WITH HARDWOOD SELECT RED OAK VENEER ON FRONT SIDE AT HC ACCESSIBLE SINK. SCREW FASTEN TO CLEATS TO GIVE A CLEAN AND NEAT APPEARANCE.
12. PROVIDE (1) INTEGRALLY MOUNTED GFI PROTECTED AC DUPLEX ELECTRICAL RECEPTACLE AND 25' EXTENSION CORD FOR MOBILE DEMONSTRATION TABLE.
13. PROVIDE ALL NECESSARY CONNECTOR HOSES FOR SELF-CONTAINED WATER AND WASTE IN MOBILE DEMONSTRATION TABLE.
14. PROVIDE CLEAR CHEMICAL RESISTANT FINISH FOR MOBILE DEMONSTRATION TABLE
15. KEY ALL CASEWORK DOORS AND DRAWERS IN LIKE MANNER. SUPPLY (2) KEYS FOR EACH CLASSROOM. SUPPLY (4) MASTER KEYS FOR ALL. PROPERLY IDENTIFY ALL KEYS AND PRESENT TO ARCHITECT UPON COMPLETION.
16. VERIFY ALL OVERALL ROOM DIMENSIONS PRIOR TO SHOP DRAWING SUBMITTALS.
17. ALL SHELVING TO BE MAXIMUM 36" OR FOR EXAMPLE A 48" UNIT WOULD HAVE (2) 24" SHELVES.
18. ALL MARKER BOARDS AND TACK BOARDS TO BE BY THE SAME MANUFACTURER. PROVIDE ALUMINUM TRIM ON ALL FOUR SIDES. PROVIDE MAP RAILS AS INDICATED ON DRAWINGS. FINISHES TO BE DETERMINED BY ARCHITECT.
19. "PALMETTO" TYPE SHELVING NOT APPROVED FOR THIS PROJECT.



21 A500 ENLARGED PLAN
SCALE: 1/4"=1'-0" (F100)

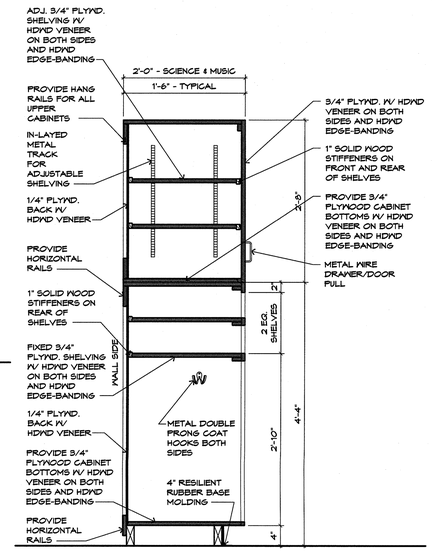


18 A500 ENLARGED PLAN
SCALE: 1/4"=1'-0" (B102)

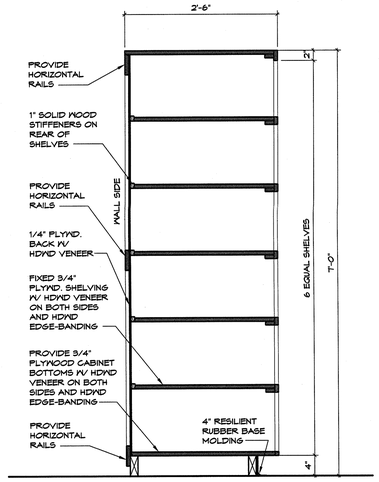


MOUNTING HEIGHTS:
K-6 24"-32" ABOVE F.F.E.
7-12 30"-36" ABOVE F.F.E.
CONFIRM WITH ARCHITECT PRIOR TO PLACEMENT

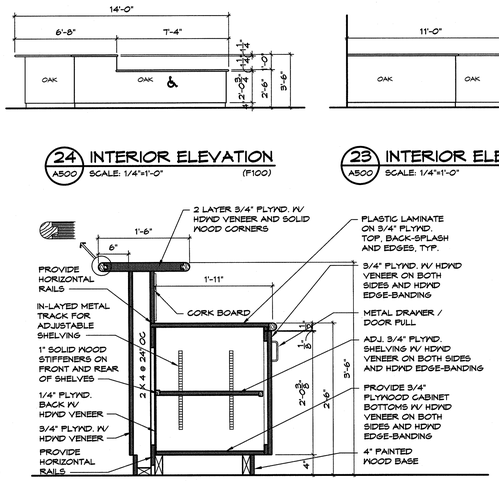
17 A500 INTERIOR ELEVATION
SCALE: 1"=1'-0"



16 A500 CASEWORK SECTION
SCALE: 1"=1'-0"

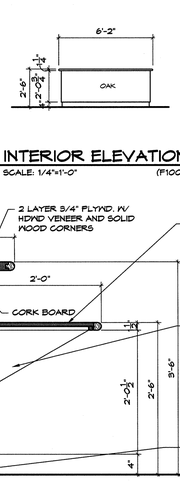


15 A500 CASEWORK SECTION
SCALE: 1"=1'-0"



24 A500 INTERIOR ELEVATION
SCALE: 1/4"=1'-0" (F100)

23 A500 INTERIOR ELEVATION
SCALE: 1/4"=1'-0" (F100)



22 A500 INTERIOR ELEVATION
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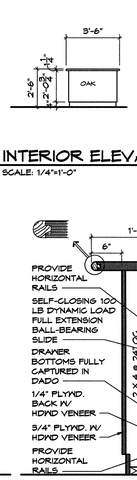

20 A500 INTERIOR ELEVATION
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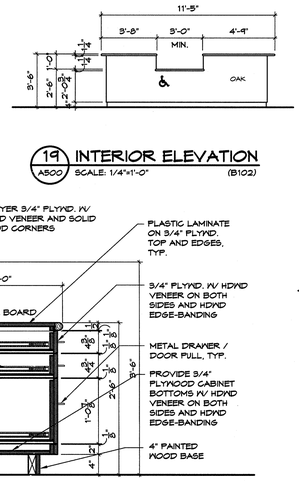
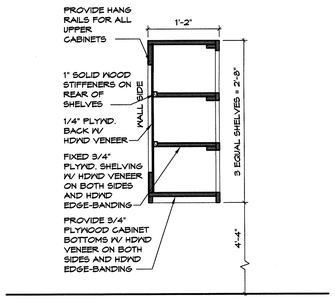


19 A500 INTERIOR ELEVATION
SCALE: 1/4"=1'-0" (B102)

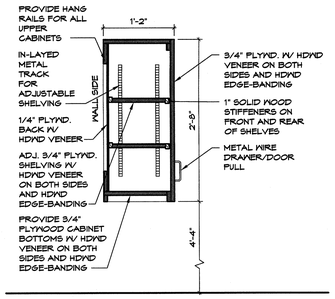
14 A500 CASEWORK SECTION
SCALE: 1"=1'-0"

13 A500 CASEWORK SECTION
SCALE: 1"=1'-0"

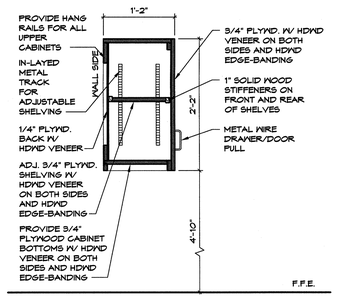
12 A500 CASEWORK SECTION
SCALE: 1"=1'-0"



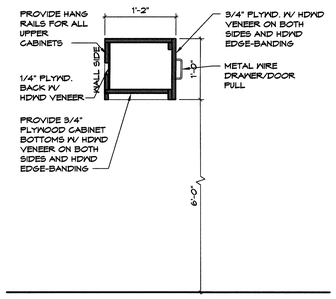
11 A500 CASEWORK SECTION
SCALE: 1"=1'-0"



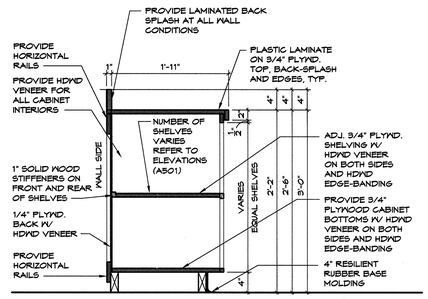
10 A500 CASEWORK SECTION
SCALE: 1"=1'-0"



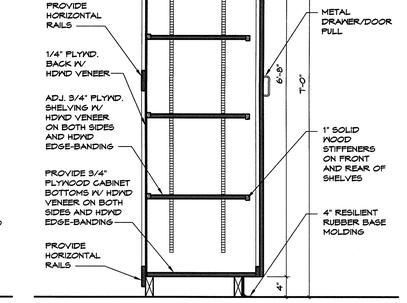
9 A500 CASEWORK SECTION
SCALE: 1"=1'-0"



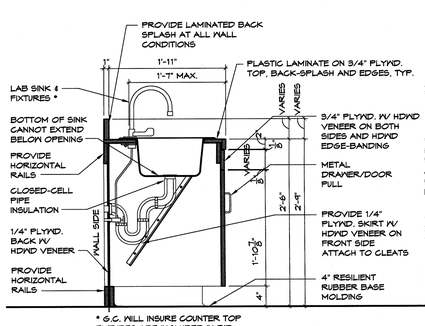
8 A500 CASEWORK SECTION
SCALE: 1"=1'-0"



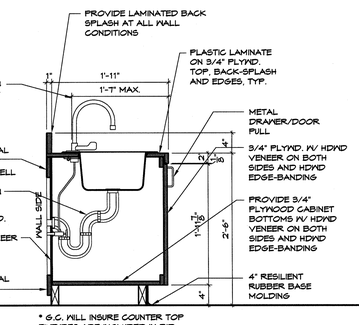
7 A500 CASEWORK SECTION
SCALE: 1"=1'-0"



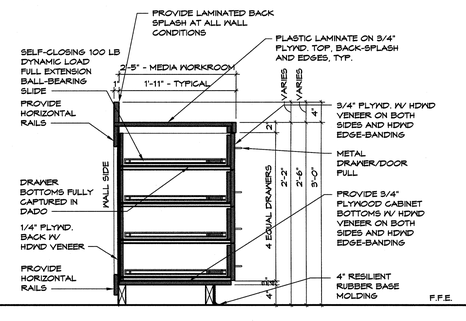
6 A500 CASEWORK SECTION
SCALE: 1"=1'-0"



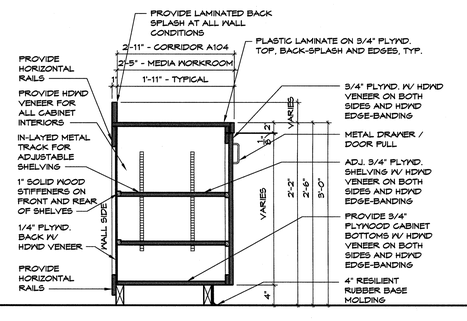
5 A500 CASEWORK SECTION
SCALE: 1"=1'-0"



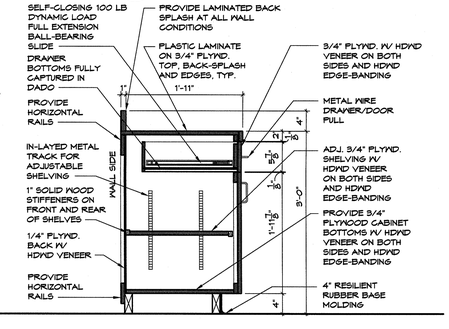
4 A500 CASEWORK SECTION
SCALE: 1"=1'-0"



3 A500 CASEWORK SECTION
SCALE: 1"=1'-0"



2 A500 CASEWORK SECTION
SCALE: 1"=1'-0"



1 A500 CASEWORK SECTION
SCALE: 1"=1'-0"

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CONTRACTOR TO VERIFY ALL DIMENSIONS.

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ISSUE DATE: 04.30.2019
DRAWN BY: JWR
CHECKED BY: PMWRBS
PROJECT: 1821

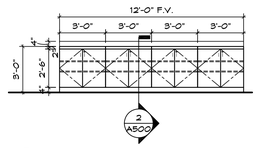
STUMP SOUND ELEMENTARY SCHOOL
ONSLOW COUNTY SCHOOLS
STUMP SOUND, NORTH CAROLINA

CASEWORK ELEVATIONS & SECTIONS

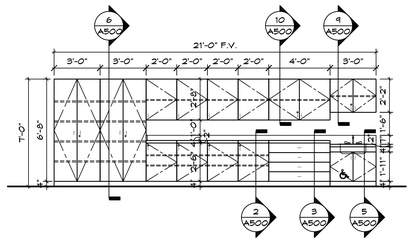
REVISION SCHEDULE

Δ	DATE	REFERENCE

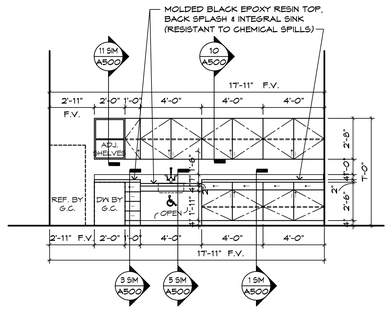
A500



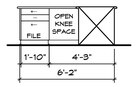
33 A501 CASEWORK ELEVATION
SCALE: 1/4"=1'-0" (B102)



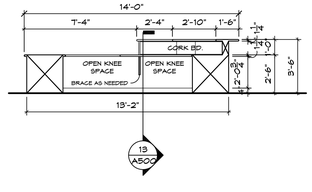
32 A501 CASEWORK ELEVATION
SCALE: 1/4"=1'-0" (F105)



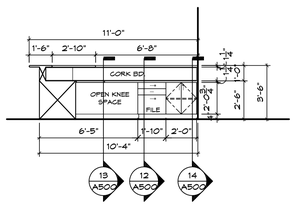
31 A501 CASEWORK ELEVATION
SCALE: 1/4"=1'-0" (D105.1)



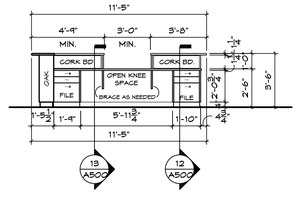
30 A501 CASEWORK ELEVATION
SCALE: 1/4"=1'-0" (F100)



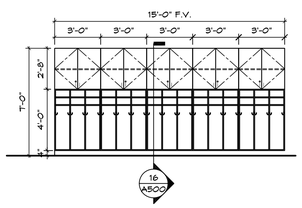
29 A501 CASEWORK ELEVATION
SCALE: 1/4"=1'-0" (F100)



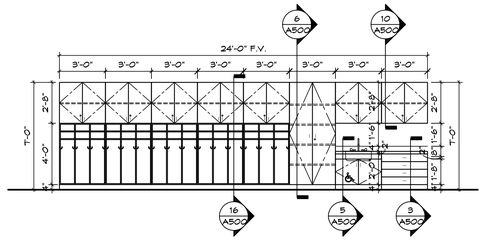
28 A501 CASEWORK ELEVATION
SCALE: 1/4"=1'-0" (F100)



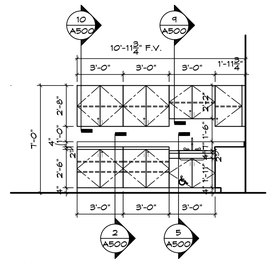
27 A501 CASEWORK ELEVATION
SCALE: 1/4"=1'-0" (B102)



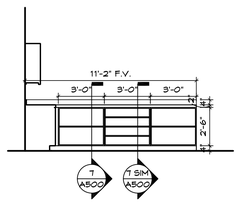
26 A501 CASEWORK ELEVATION
SCALE: 1/4"=1'-0" (E103 & D105)



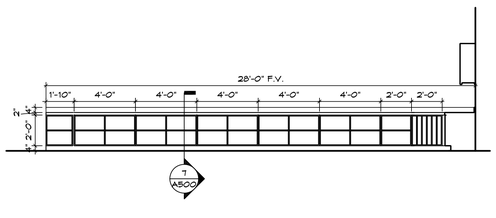
25 A501 CASEWORK ELEVATION
SCALE: 1/4"=1'-0" (D118, E114, G116 & 2ND GRADE)



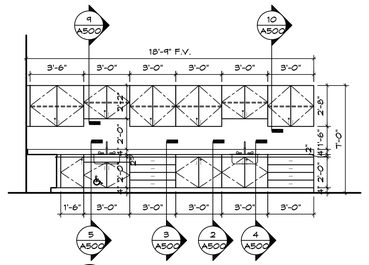
24 A501 CASEWORK ELEVATION
SCALE: 1/4"=1'-0" (B104)



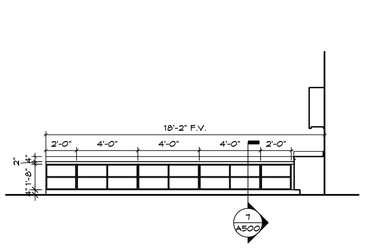
23 A501 CASEWORK ELEVATION
SCALE: 1/4"=1'-0" (B109)



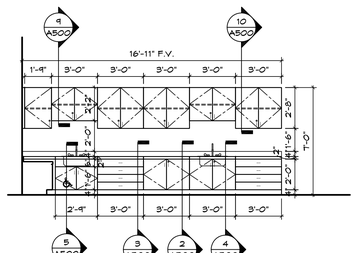
22 A501 CASEWORK ELEVATION
SCALE: 1/4"=1'-0" (E102)



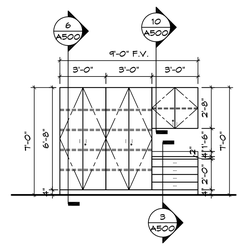
21 A501 CASEWORK ELEVATION
SCALE: 1/4"=1'-0" (E102)



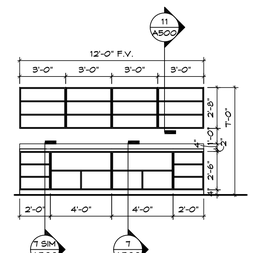
20 A501 NOT USED
SCALE: 1/4"=1'-0"



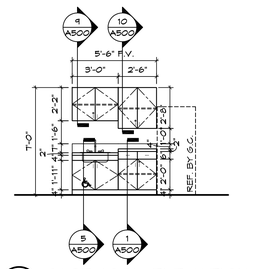
19 A501 CASEWORK ELEVATION
SCALE: 1/4"=1'-0" (D105)



18 A501 CASEWORK ELEVATION
SCALE: 1/4"=1'-0" (D105)

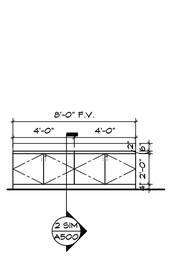


17 A501 CASEWORK ELEVATION
SCALE: 1/4"=1'-0" (E101)

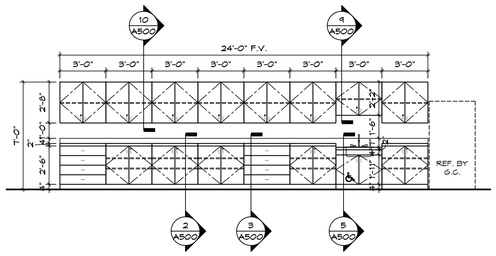


16 A501 CASEWORK ELEVATION
SCALE: 1/4"=1'-0" (F104)

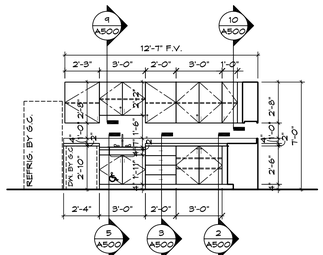
15 A501 CASEWORK ELEVATION
SCALE: 1/4"=1'-0" (B116)



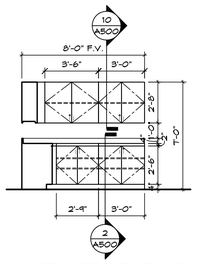
14 A501 CASEWORK ELEVATION
SCALE: 1/4"=1'-0" (A104)



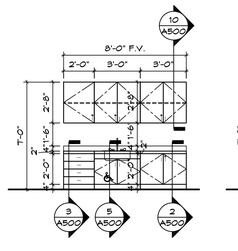
13 A501 CASEWORK ELEVATION
SCALE: 1/4"=1'-0" (D116, E112 & G114)



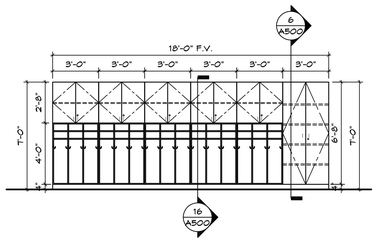
12 A501 CASEWORK ELEVATION
SCALE: 1/4"=1'-0" (A113)



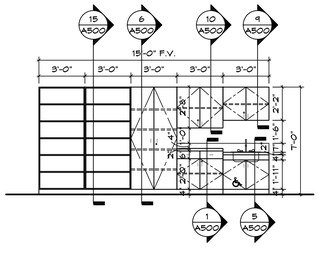
11 A501 CASEWORK ELEVATION
SCALE: 1/4"=1'-0" (A113)



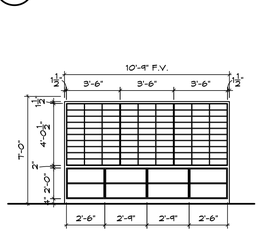
10 A501 CASEWORK ELEVATION
SCALE: 1/4"=1'-0" (A101 & A107)



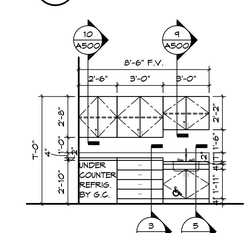
9 A501 CASEWORK ELEVATION
SCALE: 1/4"=1'-0" (A101 & A107)



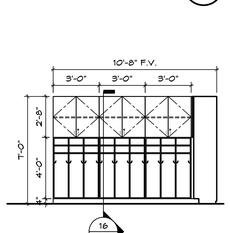
8 A501 CASEWORK ELEVATION
SCALE: 1/4"=1'-0" (E103)



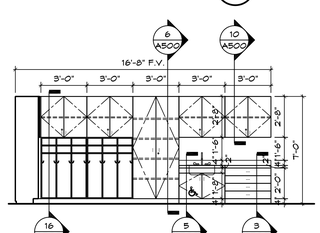
7 A501 CASEWORK ELEVATION
SCALE: 1/4"=1'-0" (B116)



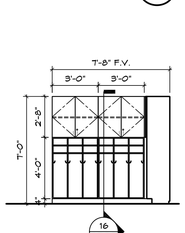
6 A501 CASEWORK ELEVATION
SCALE: 1/4"=1'-0" (B122)



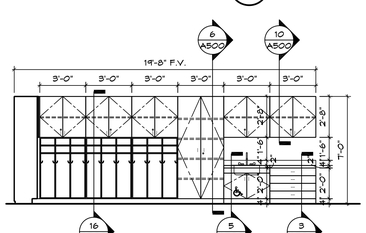
5 A501 CASEWORK ELEVATION
SCALE: 1/4"=1'-0" (A109, 4TH & 5TH GRADE)



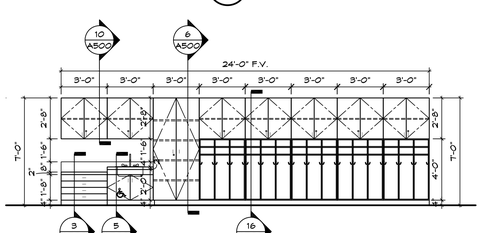
4 A501 CASEWORK ELEVATION
SCALE: 1/4"=1'-0" (A109, 4TH & 5TH GRADE)



3 A501 CASEWORK ELEVATION
SCALE: 1/4"=1'-0" (3RD GRADE)



2 A501 CASEWORK ELEVATION
SCALE: 1/4"=1'-0" (3RD GRADE)



1 A501 CASEWORK ELEVATION
SCALE: 1/4"=1'-0" (PRE-K, K & 1ST GRADE)

CONTRACTOR TO VERIFY ALL DIMENSIONS.

PINNACLE ARCHITECTURE
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ISSUE DATE: 04.30.2019
ISSUED TO:
CHECKED BY: FMM/REB
PROJECT: 1821

STUMP SOUND ELEMENTARY SCHOOL
ONSLOW COUNTY SCHOOLS
STUMP SOUND, NORTH CAROLINA

CASEWORK ELEVATIONS

REVISION SCHEDULE

△	DATE	REFERENCE

A501

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DOOR SCHEDULE

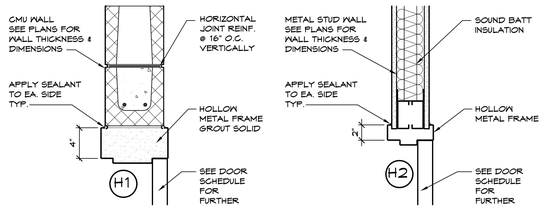
DOOR NUMBER	SIZE	DOOR STYLE	DOOR MATL	FRAME STYLE	FRAME MATL	DETAIL	THRESHOLD	FIRE RATING RATING	CLOSER	REMARKS
AREA A										
A100A	3'-0" x 7'-0"	A	HM	C	HM	H5/J5	ALUMINUM	--	YES	SEE NOTE #2
A100B	FR 4'-0" x 7'-0"	A	WOOD	B	HM	H1/J1	--	--	YES	SEE NOTE #2 & 5
A101A	3'-0" x 7'-0"	A	WOOD	A	HM	H2/J2	--	--	--	--
A101B	3'-0" x 7'-0"	A	HM	C	HM	H5/J5	ALUMINUM	--	YES	SEE NOTE #2
A102A	3'-0" x 7'-0"	B	WOOD	A	HM	H2/J2	--	--	--	--
A103A	3'-0" x 7'-0"	B	WOOD	A	HM	H2/J2	MARBLE	--	YES	SEE NOTE #1
A104A	3'-0" x 7'-0"	A	WOOD	A	HM	H2/J2	--	--	--	--
A104B	3'-0" x 7'-0"	A	WOOD	A	HM	H2/J2	--	--	--	--
A105A	3'-0" x 7'-0"	B	WOOD	A	HM	H2/J2	MARBLE	--	YES	SEE NOTE #1
A106A	3'-0" x 7'-0"	A	WOOD	A	HM	H2/J2	--	--	--	--
A107A	3'-0" x 7'-0"	A	WOOD	A	HM	H2/J2	--	--	--	--
A107B	3'-0" x 7'-0"	A	HM	C	HM	H5/J5	ALUMINUM	--	YES	SEE NOTE #2
A108A	3'-0" x 7'-0"	A	WOOD	A	HM	H1/J1	--	--	--	--
A109A	3'-0" x 7'-0"	A	WOOD	A	HM	H1/J1	--	--	--	--
A110A	3'-0" x 7'-0"	B	WOOD	A	HM	H2/J2	--	--	--	--
A111A	3'-0" x 7'-0"	A	WOOD	A	HM	H2/J2	--	--	--	--
A112A	3'-0" x 7'-0"	A	WOOD	A	HM	H2/J2	--	--	--	--
A113A	3'-0" x 7'-0"	A	WOOD	A	HM	H2/J2	--	--	--	--
AREA B										
B100A	FR 3'-0" x 7'-0"	C	SF	F	SF	H4/J4	ALUMINUM	--	YES	SEE NOTE #2 & 6
B101A	FR 3'-0" x 7'-0"	C	WOOD	J	HM	H1/J1	--	--	YES	SEE NOTE #2
B101B	FR 3'-0" x 7'-0"	A	HM	E	HM	H3/J3	ALUMINUM	45 MINS	YES	SEE NOTE #2
B102A	3'-0" x 7'-0"	A	WOOD	A	HM	H1/J1	--	--	YES	SEE NOTE #6
B102B	3'-0" x 7'-0"	A	WOOD	H	HM	H1/J1	--	--	YES	--
B103A	3'-0" x 7'-0"	B	WOOD	A	HM	H1/J1	--	--	YES	--
B104A	3'-0" x 7'-0"	B	WOOD	A	HM	H2/J2	--	--	--	--
B105A	3'-0" x 7'-0"	B	WOOD	A	HM	H2/J2	--	--	--	--
B106A	3'-0" x 7'-0"	B	WOOD	A	HM	H2/J2	--	--	--	--
B107A	3'-0" x 7'-0"	B	WOOD	A	HM	H2/J2	--	--	--	--
B108A	3'-0" x 7'-0"	B	WOOD	A	HM	H2/J2	--	--	--	--
B109A	3'-0" x 7'-0"	B	WOOD	A	HM	H2/J2	--	--	--	--
B110A	3'-0" x 7'-0"	B	WOOD	A	HM	H2/J2	--	--	--	--
B111A	3'-0" x 7'-0"	B	WOOD	A	HM	H2/J2	--	--	--	--
B112A	3'-0" x 7'-0"	B	WOOD	A	HM	H2/J2	--	--	--	--
B113A	3'-0" x 7'-0"	B	WOOD	A	HM	H2/J2	--	--	--	--
B114A	3'-0" x 7'-0"	A	WOOD	A	HM	H1/J1	--	--	YES	--
B114B	3'-0" x 7'-0"	B	WOOD	A	HM	H2/J2	--	--	--	--
B115A	3'-0" x 7'-0"	A	WOOD	H	HM	H1/J1	--	--	--	--
B116A	3'-0" x 7'-0"	B	WOOD	A	HM	H2/J2	--	--	--	--
B116B	3'-0" x 7'-0"	B	WOOD	A	HM	H2/J2	--	--	--	--
B117A	3'-0" x 7'-0"	B	WOOD	A	HM	H2/J2	MARBLE	--	YES	SEE NOTE #1
B118A	3'-0" x 7'-0"	B	WOOD	A	HM	H2/J2	MARBLE	--	YES	SEE NOTE #1
B119A	3'-0" x 7'-0"	B	WOOD	A	HM	H2/J2	--	--	--	--
B120A	3'-0" x 7'-0"	B	WOOD	A	HM	H2/J2	--	--	--	--
B121A	3'-0" x 7'-0"	B	WOOD	A	HM	H2/J2	MARBLE	--	YES	SEE NOTE #1
B122A	3'-0" x 7'-0"	B	WOOD	A	HM	H2/J2	--	--	--	--
B122B	3'-0" x 7'-0"	B	WOOD	A	HM	H2/J2	--	--	--	--
AREA C										
C100A	FR 3'-0" x 7'-0"	A	HM	E	HM	H3/J3	ALUMINUM	45 MINS	YES	SEE NOTE #2
C100B	FR 3'-0" x 7'-0"	A	HM	D	HM	H3/J3	ALUMINUM	--	YES	SEE NOTE #2
C100C	FR 4'-0" x 7'-0"	A	WOOD	B	HM	H1/J1	--	--	--	SEE NOTE #2 & 5
C103A	FR 3'-0" x 7'-0"	B	WOOD	B	HM	H1/J1	--	--	--	--
C104A	3'-0" x 7'-0"	A	WOOD	A	HM	H1/J1	--	--	--	--
C105A	3'-0" x 7'-0"	A	WOOD	A	HM	H1/J1	--	--	--	--
C106A	FR 3'-0" x 7'-0"	B	WOOD	B	HM	H1/J1	--	--	--	--
C107A	3'-0" x 7'-0"	B	WOOD	A	HM	H1/J1	--	--	--	--
C108A	3'-0" x 7'-0"	B	WOOD	A	HM	H1/J1	--	--	--	--
C108B	3'-0" x 7'-0"	B	WOOD	A	HM	H1/J1	--	--	--	--
C109A	3'-0" x 7'-0"	B	WOOD	A	HM	H1/J1	--	--	--	--
C110A	3'-0" x 7'-0"	B	WOOD	A	HM	H1/J1	--	--	--	--
C111A	FR 3'-0" x 7'-0"	B	WOOD	B	HM	H1/J1	--	--	--	--
C112A	FR 4'-0" x 7'-0"	A	WOOD	B	HM	H1/J1	--	--	--	--
C112B	3'-0" x 7'-0"	A	HM	K	HM	H5/J5	ALUMINUM	--	YES	SEE NOTE #2
C112C	3'-0" x 7'-0"	A	HM	K	HM	H5/J5	ALUMINUM	--	YES	SEE NOTE #2
C113A	FR 4'-0" x 7'-0"	A	WOOD	B	HM	H1/J1	--	--	--	--
C113B	FR 3'-0" x 7'-0"	A	HM	B	HM	H3/J3	ALUMINUM	--	YES	SEE NOTE #2
C113C	FR 3'-0" x 7'-0"	A	HM	B	HM	H3/J3	ALUMINUM	--	YES	SEE NOTE #2
C113D	3'-0" x 7'-0"	--	--	--	--	--	--	--	--	SEE NOTE #2 & 7
C113E	3'-0" x 7'-0"	--	--	--	--	--	--	--	--	SEE NOTE #2 & 7
C114A	3'-0" x 7'-0"	B	WOOD	A	HM	H1/J1	--	--	--	--
C115A	4'-0" x 7'-0"	A	WOOD	A	HM	H1/J1	--	--	--	--
C115B	4'-0" x 7'-0"	A	WOOD	A	HM	H1/J1	--	--	--	--
C115C	24'-0" x 8'-0"	--	--	--	--	--	--	--	--	SEE NOTE #8
C116A	4'-0" x 7'-0"	B	HM	A	HM	H5/J5	ALUMINUM	--	YES	SEE NOTE #9
C116B	4'-0" x 4'-4"	--	--	--	--	--	--	--	--	SEE NOTE #8
C117A	3'-0" x 7'-0"	E	WOOD	A	HM	H2/J2	--	--	--	--
C118A	3'-0" x 7'-0"	B	WOOD	A	HM	H2/J2	--	--	--	--
C119A	3'-0" x 7'-0"	B	WOOD	A	HM	H2/J2	MARBLE	--	YES	SEE NOTE #1
C119.1A	3'-0" x 7'-0"	A	WOOD	A	HM	H2/J2	MARBLE	--	--	--
C120A	3'-0" x 7'-0"	D	HM	A	HM	--	ALUMINUM	--	--	--
C121A	3'-0" x 7'-0"	B	WOOD	A	HM	H2/J2	--	--	--	--
C122A	3'-0" x 7'-0"	B	HM	A	HM	H5/J5	ALUMINUM	--	YES	SEE NOTE #2
C122B	FR 3'-0" x 7'-0"	B	HM	B	HM	H5/J5	ALUMINUM	--	YES	SEE NOTE #2
C123A	FR 3'-0" x 7'-0"	B	HM	B	HM	H5/J5	ALUMINUM	--	YES	SEE NOTE #2
C123B	3'-0" x 7'-0"	B	HM	A	HM	H5/J5	ALUMINUM	--	YES	SEE NOTE #2
C123C	3'-0" x 7'-0"	B	WOOD	A	HM	H1/J1	--	90 MINS	YES	SEE NOTE #2
C200A	FR 3'-0" x 7'-0"	B	WOOD	B	HM	H1/J1	--	--	--	SEE NOTE #3 & 4

DOOR SCHEDULE

DOOR NUMBER	SIZE	DOOR STYLE	DOOR MATL	FRAME STYLE	FRAME MATL	DETAIL	THRESHOLD	FIRE RATING RATING	CLOSER	REMARKS
AREA D										
D100A	FR 3'-0" x 7'-0"	A	HM	D	HM	H3/J3	ALUMINUM	--	YES	SEE NOTE #2
D100B	FR 4'-0" x 7'-0"	A	WOOD	B	HM	H1/J1	--	90 MINS	YES	SEE NOTE #2 & 5
D101A	FR 3'-0" x 7'-0"	B	HM	D	HM	H5/J5	ALUMINUM	--	YES	--
D102A	3'-0" x 7'-0"	B	WOOD	A	HM	H1/J1	--	90 MINS	YES	--
D102.1A	4'-0" x 7'-0"	B	WOOD	A	HM	H1/J1	--	90 MINS	YES	--
D103A	3'-0" x 7'-0"	B	WOOD	A	HM	H1/J1	--	90 MINS	YES	--
D104A	3'-0" x 7'-0"	B	WOOD	A	HM	H1/J1	--	--	--	--
D105A	3'-0" x 7'-0"	A	WOOD	A	HM	H1/J1	--	90 MINS	YES	--
D105.1A	3'-0" x 7'-0"	B	WOOD	A	HM	H2/J2	--	--	--	--
D106A	4'-0" x 7'-0"	B	WOOD	A	HM	H1/J1	--	--	--	--
D106B	FR 3'-0" x 7'-0"	B	HM	D	HM	H5/J5	ALUMINUM	--	YES	--
D107A	3'-0" x 7'-0"	A	WOOD	A	HM	H1/J1	--	--	--	--
D107B	3'-0" x 7'-0"	A	HM	C	HM	H5/J5	ALUMINUM	--	YES	SEE NOTE #2
D107.1A	FR 2'-6" x 8'-0"	D	WOOD	B	HM	H2/J2	--	--	--	SEE NOTE #10
D108A	3'-0" x 7'-0"	A	WOOD	A	HM	H1/J1	--	--	--	--
D108B	3'-0" x 7'-0"	A	HM	C	HM	H5/J5	ALUMINUM	--	YES	SEE NOTE #2
D108.1A	FR 2'-6" x 8'-0"	D	WOOD	B	HM	H2/J2	--	--	--	SEE NOTE #10
D109A	3'-0" x 7'-0"	A	WOOD	A	HM	H1/J1	--	--	--	--
D109B	3'-0" x 7'-0"	A	HM	C	HM	H5/J5	ALUMINUM	--	YES	SEE NOTE #2
D109.1A	FR 2'-6" x 8'-0"	D	WOOD	B	HM	H2/J2	--	--	--	SEE NOTE #10
D110A	3'-0" x 7'-0"	A	WOOD	A	HM	H1/J1	--	--	--	--
D110B	3'-0" x 7'-0"	A	HM	C	HM	H5/J5	ALUMINUM	--	YES	SEE NOTE #2
D110.1A	FR 2'-6" x 8'-0"	D	WOOD	B	HM	H2/J2	--	--	--	SEE NOTE #10
D111A	3'-0" x 7'-0"	A	WOOD	A	HM	H1/J1	--	--	--	--
D111B	3'-0" x 7'-0"	A	HM	C	HM	H5/J5	ALUMINUM	--	YES	SEE NOTE #2
D111.1A	FR 2'-6" x 8'-0"	D	WOOD	B	HM	H2/J2	--	--	--	SEE NOTE #10
D112A	3'-0" x 7'-0"	A	WOOD	A	HM	H1/J1	--	--	--	--
D112B	3'-0" x 7'-0"	A	HM	C	HM	H5/J5	ALUMINUM	--	YES	SEE NOTE #2
D112.1A	FR 2'-6" x 8'-0"	D	WOOD	B	HM	H2/J2	--	--	--	SEE NOTE #10
D114A	3'-0" x 7'-0"	B	WOOD	A	HM	H1/J1	--	--	YES	--
D114.1A	3'-0" x 7'-0"	B	WOOD	A	HM	H2/J2	MARBLE	--	YES	SEE NOTE #1
D115A	3'-0" x 7'-0"	B	WOOD	A	HM	H2/J2	--	--	--	--
D115.1A	3'-0" x 7'-0"	B	WOOD	A	HM	H2/J2	MARBLE	--	--	--
D115.1B	FR 3'-0" x 7'-0"	B	HM	D	HM	H5/J5	ALUMINUM	--	YES	--
D115.2A	3'-0" x 7'-0"	B	WOOD	A	HM	H2/J2	--	--	--	--
D116A	3'-0" x 7'-0"	A	WOOD	A	HM	H1/J1	--	--	--	--
D118A	3'-0" x 7'-0"	A	WOOD	A	HM	H1/J1	--	--	--	--
D118.1A	FR 2'-6" x 8'-0"	D	WOOD	B	HM	H2/J2	--	--	--	SEE NOTE #10
D119A	3'-0" x 7'-0"	A	WOOD	A	HM	H1/J1	--	--	--	--
D119.1A	FR 2'-6" x 8'-0"	D	WOOD	B	HM	H2/J2	--	--	--	SEE NOTE #10
D120A	3'-0" x 7'-0"	A	WOOD	A	HM	H1/J1	--	--	--	--
D120.1A	FR 2'-6" x 8'-0"	D	WOOD	B	HM	H2/J2	--	--	--	SEE NOTE #10
D121A	3'-0" x 7'-0"	A	WOOD	A	HM	H1/J1	--	--	--	--
D121.1A	FR 2'-6" x 8'-0"	D	WOOD	B	HM	H2/J2	--	--	--	SEE NOTE #10
D122A	3'-0" x 7'-0"	A	WOOD	A	HM	H1/J1	--	--	--	--
D122.1A	FR 2'-6" x 8'-0"	D	WOOD	B	HM	H2/J2	--	--	--	SEE NOTE #10
D123A	3'-0" x 7'-0"	A	WOOD	A	HM	H1/J1	--	--	--	--
D123.1A	FR 2'-6" x 8'-0"	D	WOOD	B	HM	H2/J2	--	--	--	SEE NOTE #10
AREA E										
E100A	FR 3'-0" x 7'-0"	A	HM	D	HM	H3/J3	ALUMINUM	--	YES	SEE NOTE #2
E100B	FR 4'-0" x 7'-0"	A	WOOD	B	HM	H1/J1	--	90 MINS	YES	SEE NOTE #2 & 5
E101A	3'-0" x 7'-0"	A	WOOD	A	HM	H1/J1	--	90 MINS	YES	--
E102A	3'-0" x 7'-0"	A	WOOD	A	HM	H1/J1	--	90 MINS	YES	SEE NOTE #2
E102B	3'-0" x 7'-0"	A	HM	C	HM	H5/J5	ALUMINUM	--	YES	SEE NOTE #2
E102.1A	3'-0" x 7'-0"	B	WOOD	A	HM	H2/J2	--	--	--	--
E102.2A	FR 3'-0" x 7'-0"	B	WOOD	B	HM	H2/J2	--	--	--	--
E103A	3'-0" x 7'-0"	A	WOOD	A	HM	H1/J1	--	90 MINS	YES	--
E103.1A	3'-0" x 7'-0"	B	WOOD	A	HM	H2/J2	--	--	--	--
E104A	3'-0" x 7'-0"	A	WOOD	A	HM	H1/J1	--	--	--	SEE NOTE #2
E104B	3'-0" x 7'-0"	A	HM	C	HM	H5/J5	ALUMINUM	--	YES	SEE NOTE #2
E104.1A	FR 2'-6" x 8'-0"	D	WOOD	B	HM	H2/J2	--	--	--	SEE NOTE #10
E104.2A	3'-0" x 7'-0"	B	WOOD	A	HM	H2/J2	MARBLE	--	YES	SEE NOTE #1
E105A	3'-0" x 7'-0"	B	WOOD	A	HM	H1/J1	--	--	--	SEE NOTE #2
E105.1A	3'-0" x 7'-0"	B	WOOD	A	HM	H2/J2	--	--	--	--
E106A	3'-0" x 7'-0"	A	WOOD	A	HM	H1/J1	--	--	--	SEE NOTE #2
E106B	3'-0" x 7'-0"	A	HM	C	HM	H5/J5	ALUMINUM	--	YES	SEE NOTE #2
E106.1A	FR 2'-6" x 8'-0"	D	WOOD	B	HM	H2/J2	--	--	--	SEE NOTE #10
E106.2A	3'-0" x 7'-0"	B	WOOD	A	HM	H2/J2	MARBLE	--	YES	SEE NOTE #1
E107A	3'-0" x 7'-0"	A	WOOD	A	HM	H1/J1	--	--	--	SEE NOTE #2
E107B	3'-0" x 7'-0"	A	HM	C	HM	H5/J5	ALUMINUM	--	YES	SEE NOTE #2
E107.1A	FR 2'-6" x 8'-0"	D	WOOD	B	HM	H2/J2	--	--	--	SEE NOTE #10
E107.2A	3'-0" x 7'-0"	B	WOOD	A	HM	H2/J2	MARBLE	--	YES	SEE NOTE #1
E108A	3'-0" x 7'-0"	A	WOOD	A	HM	H1/J1	--	--	--	SEE NOTE #2
E108B	3'-0" x 7'-0"	A	HM	C	HM	H5/J5	ALUMINUM	--	YES	SEE NOTE #2
E108.1A	FR 2'-6" x 8'-0"	D	WOOD	B	HM	H2/J2	--	--	--	SEE NOTE #10
E108.2A	3'-0" x 7'-0"	B	WOOD	A	HM	H2/J2	MARBLE	--	YES	SEE NOTE #1
E109A	3'-0" x 7'-0"	A	WOOD	A	HM	H1/J1	--	--	--	SEE NOTE #2
E109B	3'-0" x 7'-0"	A	HM	C	HM	H5/J5	ALUMINUM	--	YES	SEE NOTE #2
E109.1A	FR 2'-6" x 8'-0"	D	WOOD	B	HM	H2/J2	--	--	--	SEE NOTE #10
E109.2A	3'-0" x 7'-0"	B	WOOD	A	HM	H2/J2	MARBLE	--	YES	SEE NOTE #1
E110A	3'-0" x 7'-0"	B	WOOD	A	HM	H1/J1	--	--	YES	--
E110.1A	3'-0" x 7'-0"	B	WOOD	A	HM	H2/J2	MARBLE	--	YES	SEE NOTE #1
E111A	3'-0" x 7'-0"	A	WOOD	A	HM	H1/J1	--	--	--	SEE NOTE #2
E111B	3'-0" x 7'-0"	A	HM	C	HM	H5/J5	ALUMINUM	--	YES	SEE NOTE #2
E111.1A	FR 2'-6" x 8'-0"	D	WOOD	B	HM	H2/J2	--	--	--	SEE NOTE #10
E111.2A	3'-0" x 7'-0"	B	WOOD	A	HM	H2/J2	MARBLE	--	YES	SEE NOTE #1
E112A	3'-0" x 7'-0"	A	WOOD	A	HM	H1/J1	--	--	--	--
E114A	3'-0" x 7'-0"	A	WOOD	A	HM	H1/J1	--	--	--	--
E114.1A	FR 2'-6" x 8'-0"	D	WOOD	B	HM	H2/J2	--	--	--	SEE NOTE #10
E115A	3'-0" x 7'-0"	B	WOOD	A	HM	H2/J2	--	--	--	--
E115.1A	3'-0" x 7'-0"	B	WOOD	A	HM	H2/J2	MARBLE	--	--	--
E115.1B	FR 3'-0" x 7'-0"	B	HM	D	HM	H5/J5	ALUMINUM	--	YES	--
E115.2A	3'-0" x 7'-0"	B	WOOD	A	HM	H2/J2	--	--	--	--
E116A	3'-0" x 7'-0"	A	WOOD	A	HM	H1/J1	--	--	--	--
E116.1A	FR 2'-6" x 8'-0"	D	WOOD	B	HM	H2/J2	--	--	--	SEE NOTE #10
E118A	3'-0" x 7'-0"	A	WOOD	A	HM	H1/J1	--	--	--	--
E118.1A	FR 2'-6" x 8'-0"	D	WOOD	B	HM	H2/J2	--	--	--	SEE NOTE #10
E119A	3'-0" x 7'-0"	A	WOOD	A	HM	H1/J1	--	--	--	--
E119.1A	FR 2'-6" x 8'-0"	D	WOOD	B	HM	H2/J2	--	--	--	SEE NOTE #10
E121A	3'-0" x 7'-0"	A	WOOD	A	HM	H1/J1	--	--	--	--
E121.1A	FR 2'-6" x 8'-0"	D	WOOD	B	HM	H2/J2	--	--	--	SEE NOTE #10
E123A	3'-0" x 7'-0"	A	WOOD	A	HM	H1/J1	--	--	--	--
E123.1A	FR 2'-6" x 8'-0"	D	WOOD	B	HM	H2/J2	--	--	--	SEE NOTE #10

DOOR SCHEDULE

DOOR NUMBER	SIZE	DOOR STYLE	DOOR MATL	FRAME STYLE	FRAME MATL	DETAIL	THRESHOLD	FIRE RATING RATING	CLOSER	REMARKS
AREA F										
F100A	3'-0" x 7'-0"	E	WOOD	G	HM	H7/J7	--	--	YES	SEE NOTE #2
F100B	FR 3'-0" x 7'-0"	C	HM	B	HM	H6/J6	ALUMINUM	--	YES	SEE NOTE #2
F101A	3'-0" x 7'-0"	B	WOOD	A	HM	H2/J2	--	--	--	--
F102A	3'-0" x 7'-0"	A	WOOD	A	HM	H2/J2	--	--	--	--
F103A	3'-0" x 7'-0"	A	WOOD	A	HM	H2/J2	--	--	--	--
F103B	3'-0" x 7'-0"	A	WOOD	A	HM	H2/J2	--	--	--	--
F104A	3'-0" x 7'-0"	B	WOOD	A	HM	H1/J1	--	--	YES	--
F104B	3'-0" x 7'-0"	A	WOOD	A	HM	H2/J2	--	--	--	--
F105A	3'-0" x 7'-0"	A	WOOD	A	HM	H7/J7	--	--	--	--
F105B	3'-0" x 7'-0"	A	WOOD	A	HM	H7/J7	--	--	--	--
F106A	3'-0" x 7'-0"	A	WOOD	H	HM	H7/J7	--	--	--	--
F107A	3'-0" x 7'-0"	A	WOOD	A	HM	H1/J1	--	--	--	--
F108A	3'-0" x 7'-0"	A	WOOD	A	HM	H1/J1	--	--	--	--
F109A	3'-0" x 7'-0"	B	WOOD	A	HM	H7/J7	MARBLE	--	YES	SEE NOTE #1
F110A	3'-0" x 7'-0"	B	WOOD	A	HM	H7/J7	MARBLE	--	YES	SEE NOTE #1
AREA G										
G100A	FR 3'-0" x 7'-0"	A	HM	D	HM	H3/J3	ALUMINUM	--	YES	SEE NOTE #2
G100B	FR 4'-0" x 7'-0"	A	WOOD	B	HM	H1/J1	--	90 MINS	YES	SEE NOTE #2 & 5
G101A	3'-0" x 7'-0"	A	WOOD	A	HM	H1/J1	--	90 MINS	YES	--
G102A	4'-0" x 7'-0"	B	WOOD	A	HM	H1/J1	--	90 MINS	YES	SEE NOTE #2
G103A	3'-0" x 7'-0"	A	WOOD	A	HM	H1/J1	--	--	--	--
G104A	3'-0" x 7'-0"	B	WOOD	A	HM	H1/J1	--	--	--	--
G105A	3'-0" x 7'-0"	A	WOOD	A	HM	H1/J1	--	--	--	SEE NOTE #2
G105B	3'-0" x 7'-0"	A	HM	C	HM	H5/J5	ALUMINUM	--	YES	SEE NOTE #2
G105.1A	FR 2'-6" x 8'-0"	D	WOOD	B	HM	H2/J2	--	--	--	SEE NOTE #10
G105.2A	3'-0" x 7'-0"	B	WOOD	A	HM	H2/J2	MARBLE	--	YES	SEE NOTE #1
G106A	3'-0" x 7'-0"	A	WOOD	A	HM	H1/J1	--	--	--	SEE NOTE #2
G106B	3'-0" x 7'-0"	A	HM	C	HM	H5/J5	ALUMINUM	--	YES	SEE NOTE #2
G106.1A	FR 2'-6" x 8'-0"	D	WOOD	B	HM	H2/J2	--	--	--	SEE NOTE #10
G106.2A	3'-0" x 7'-0"	B	WOOD	A	HM	H2/J2	MARBLE	--	YES	SEE NOTE #1
G107A	3'-0" x 7'-0"	A	WOOD	A	HM	H1/J1	--	--	--	SEE NOTE #2
G107B	3'-0" x 7'-0"	A	HM	C	HM	H5/J5	ALUMINUM	--	YES	SEE NOTE #2
G107.1A	FR 2'-6" x 8'-0"	D	WOOD	B	HM	H2/J2	--	--	--	SEE NOTE #10
G107.2A	3'-0" x 7'-0"	B	WOOD	A	HM	H2/J2	MARBLE	--	YES	SEE NOTE #1
G108A	3'-0" x 7'-0"	A	WOOD	A	HM	H1/J1	--	--	--	SEE NOTE #2
G108B	3'-0" x 7'-0"	A	HM	C	HM	H5/J5	ALUMINUM	--	YES	SEE NOTE #2
G108.1A	FR 2'-6" x 8'-0"	D	WOOD	B	HM	H2/J2	--	--	--	SEE NOTE #10
G108.2A	3'-0" x 7'-0"	B	WOOD	A	HM	H2/J2	MARBLE	--	YES	SEE NOTE #1
G109A	3'-0" x 7'-0"	A	WOOD	A	HM	H1/J1	--	--	--	SEE NOTE #2
G109B	3'-0" x 7'-0"	A	HM	C	HM	H5/J5	ALUMINUM	--	YES	SEE NOTE #2
G109.1A	FR 2'-6" x 8'-0"	D	WOOD	B	HM	H2/J2	--	--	--	SEE NOTE #10
G109.2A	3'-0" x 7'-0"	B	WOOD	A	HM	H2/J2	MARBLE	--	YES	SEE NOTE #1
G110A	3'-0" x 7'-0"	A	WOOD	A	HM	H1/J1	--	--	--	SEE NOTE #2
G110B	3'-0" x 7'-0"	A	HM	C	HM	H5/J5	ALUMINUM	--	YES	SEE NOTE #2
G110.1A	FR 2'-6" x 8'-0"	D	WOOD	B	HM	H2/J2	--	--	--	SEE NOTE #10
G110.2A	3'-0" x 7'-0"	B	WOOD	A	HM	H2/J2	MARBLE	--	YES	SEE NOTE #1
G111A	3'-0" x 7'-0"	A	WOOD	A	HM	H1/J1	--	--	--	SEE NOTE #2
G111B	3'-0" x 7'-0"	A	HM	C	HM	H5/J5	ALUMINUM	--	YES	SEE NOTE #2
G111.1A	FR 2'-6" x 8'-0"	D	WOOD	B	HM	H2/J2	--	--	--	SEE NOTE #10
G111.2A	3'-0" x 7'-0"	B	WOOD	A	HM	H2/J2	MARBLE	--	YES	SEE NOTE #1
G112A	3'-0" x 7'-0"	A	WOOD	A	HM	H1/J1	--	--	--	SEE NOTE #2
G112B	3'-0" x 7'-0"	A	HM	C	HM	H5/J5	ALUMINUM	--	YES	SEE NOTE #2
G112.1A	FR 2'-6" x 8'-0"	D	WOOD	B	HM	H2/J2	--	--	--	SEE NOTE #10
G112.2A	3'-0" x 7'-0"	B	WOOD	A	HM	H2/J2	MARBLE	--	YES	SEE NOTE #1
G114A	3'-0" x 7'-0"	B	WOOD	A	HM	H1/J1	--	--	YES	--
G114.1A	3'-0" x 7'-0"	B	WOOD	A	HM	H2/J2	MARBLE	--	YES	SEE NOTE #1
G115A	3'-0" x 7'-0"	B	WOOD	A	HM	H2/J2	--	--	--	--
G115.1A	3'-0" x 7'-0"	B	WOOD	A	HM	H2/J2	MARBLE	--	--	--
G115.1B	FR 3'-0" x 7'-0"	B	HM	D	HM	H5/J5	ALUMINUM	--	YES	--
G115.2A	3'-0" x 7'-0"	B	WOOD	A	HM	H2/J2	--	--	--	--
G116A	3'-0" x 7'-0"	A	WOOD	A	HM	H1/J1	--	--	--	--
G118A	3'-0" x 7'-0"	A	WOOD	A	HM	H1/J1	--	--	--	SEE NOTE #2
G118B	3'-0" x 7'-0"	A	HM	C	HM	H5/J5	ALUMINUM	--	YES	SEE NOTE #2
G118.1A	FR 2'-6" x 8'-0"	D	WOOD	B	HM	H2/J2	--	--	--	SEE NOTE #10
G118.2A	3'-0" x 7'-0"	B	WOOD	A	HM	H2/J2	MARBLE	--	YES	SEE NOTE #1
G119A	3'-0" x 7'-0"	A	WOOD	A	HM	H1/J1	--	--	--	SEE NOTE #2
G119B	3'-0" x 7'-0"	A	HM	C	HM	H5/J5	ALUMINUM	--	YES	SEE NOTE #2
G119.1A	FR 2'-6" x 8'-0"	D	WOOD	B	HM	H2/J2	--	--	--	SEE NOTE #10
G119.2A	3'-0" x 7'-0"	B	WOOD	A	HM	H2/J2	MARBLE	--	YES	SEE NOTE #1
G120A	3'-0" x 7'-0"	A	WOOD	A	HM	H1/J1	--	--	--	SEE NOTE #2
G120B	3'-0" x 7'-0"	A	HM	C	HM	H5/J5	ALUMINUM	--	YES	SEE NOTE #2
G120.1A	FR 2'-6" x 8'-0"	D	WOOD	B	HM	H2/J2	--	--	--	SEE NOTE #10
G120.2A	3'-0" x 7'-0"	B	WOOD	A	HM	H2/J2	MARBLE	--	YES	SEE NOTE #1
G121A	3'-0" x 7'-0"	A	WOOD	A	HM	H1/J1	--	--	--	SEE NOTE #2
G121B	3'-0" x 7'-0"	A	HM	C	HM	H5/J5	ALUMINUM	--	YES	SEE NOTE #2
G121.1A	FR 2'-6" x 8'-0"	D	WOOD	B	HM	H2/J2	--	--	--	SEE NOTE #10
G121.2A	3'-0" x 7'-0"	B	WOOD	A	HM	H2/J2	MARBLE	--	YES	SEE NOTE #1
G122A	3'-0" x 7'-0"	A	WOOD	A	HM	H1/J1	--	--	--	SEE NOTE #2
G122B	3'-0" x 7'-0"	A	HM	C	HM	H5/J5	ALUMINUM	--	YES	SEE NOTE #2
G122.1A	FR 2'-6" x 8'-0"	D	WOOD	B	HM	H2/J2	--	--	--	SEE NOTE #10
G122.2A	3'-0" x 7'-0"	B	WOOD	A	HM	H2/J2	MARBLE	--	YES	SEE NOTE #1
G123A	3'-0" x 7'-0"	A	WOOD	A	HM	H1/J1	--	--	--	SEE NOTE #2
G123B	3'-0" x 7'-0"	A



NOTE: REFER TO STRUCTURAL DRAWINGS FOR LINTEL INFORMATION.
FRAME WIDTH IS ONE INCH PLUS WALL THICKNESS.

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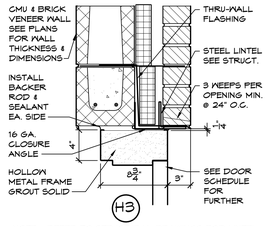
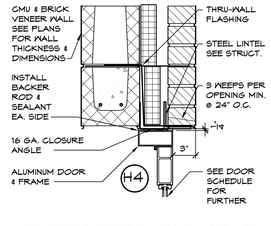
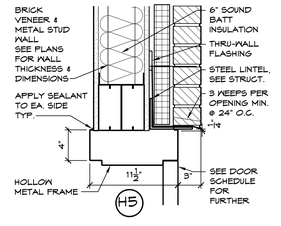


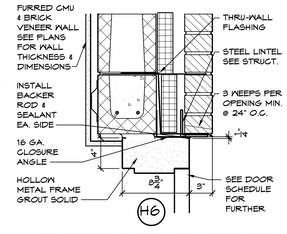
NOTE: REFER TO STRUCTURAL DRAWINGS FOR LINTEL INFORMATION.



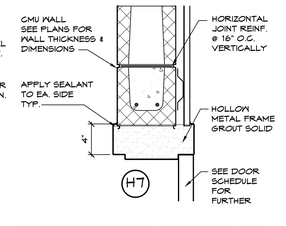
NOTE: REFER TO STRUCTURAL DRAWINGS FOR LINTEL INFORMATION.



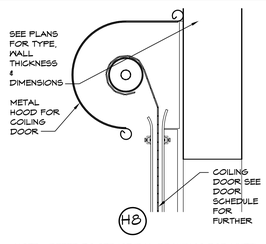
NOTE: REFER TO STRUCTURAL DRAWINGS FOR LINTEL INFORMATION.



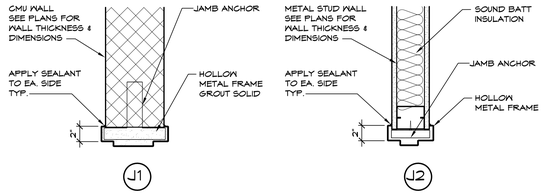
NOTE: REFER TO STRUCTURAL DRAWINGS FOR LINTEL INFORMATION.

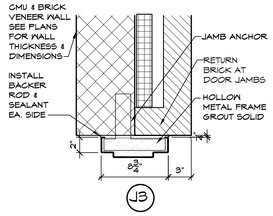


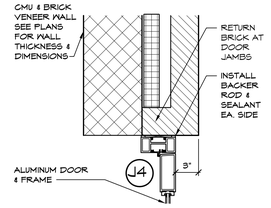
NOTE: REFER TO STRUCTURAL DRAWINGS FOR LINTEL INFORMATION.
FRAME WIDTH IS ONE INCH PLUS WALL THICKNESS.

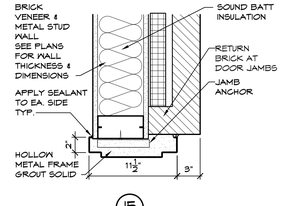


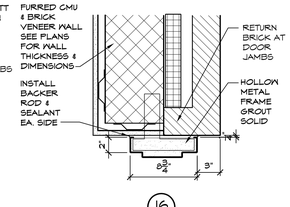
NOTE: REFER TO STRUCTURAL DRAWINGS FOR LINTEL INFORMATION.

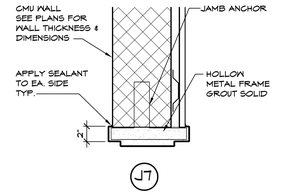


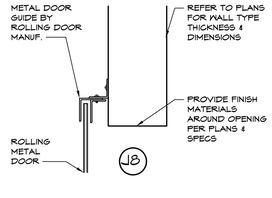




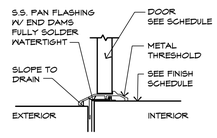




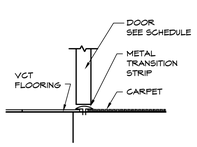




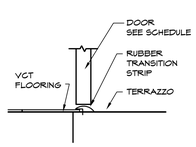
10 FRAME DETAILS
A601 SCALE: 1 1/2" = 1'-0"



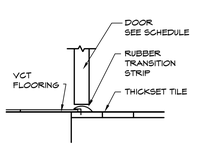
TYPICAL ALUMINUM THRESHOLD TRANSITION



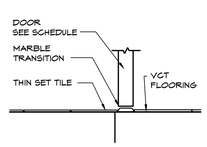
TYPICAL METAL THRESHOLD TRANSITION



TYPICAL RUBBER THRESHOLD TRANSITION

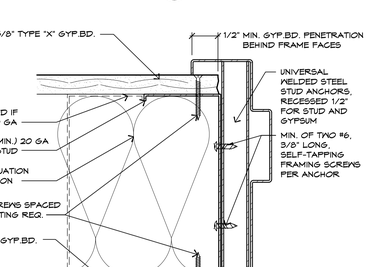


TYPICAL RUBBER THRESHOLD TRANSITION

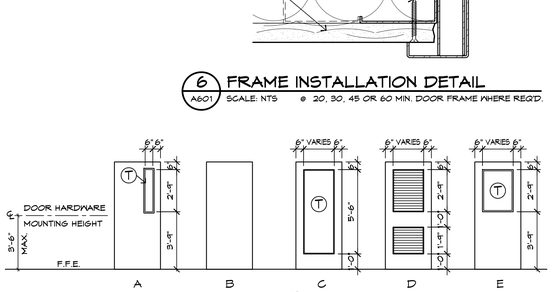


TYPICAL MARBLE THRESHOLD TRANSITION

9 TYP. THRESHOLD DETAILS
A601 SCALE: NOT TO SCALE



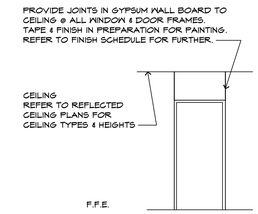
6 FRAME INSTALLATION DETAIL
A601 SCALE: NTS @ 20, 30, 45 OR 60 MIN. DOOR FRAME WHERE REQ'D.



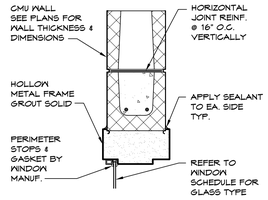
DOOR STYLE NOTES:

1. WOOD LOUVER SIZE TO BE DETERMINED BY MECHANICAL CONTRACTOR.
2. HOLLOW METAL DOORS SHALL BE THE FLUSH SEAMLESS TYPE. (NO CHANNEL HEADS)
3. ALL WOOD DOORS SHALL BE CENTER BALANCE MATCH AND BOOK MATCH FLITCH. ALL DOORS IN SAME AREA TO BE SIMILAR IN GRAIN "SHADE".
4. DOOR TYPE 'F' SHALL BE A MANUAL COUNTER SHUTTER WITH STAINLESS STEEL COUNTER TOP AND INTEGRAL FRAME.
5. ALL PAIRED DOORS WILL BE FROM SAME FLITCH AND BALANCED.

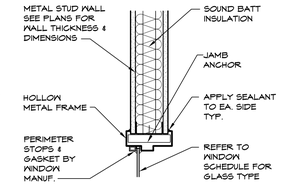
7 DOOR STYLES
A601 SCALE: 1/4" = 1'-0"



1 TYPICAL FRAME DETAIL
A601 SCALE: 1/4" = 1'-0"

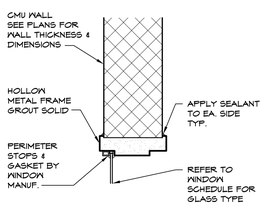


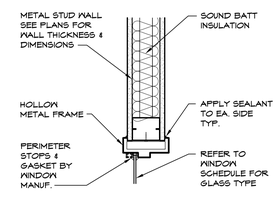
NOTE: REFER TO STRUCTURAL DRAWINGS FOR LINTEL INFORMATION.
FRAME WIDTH IS ONE INCH PLUS WALL THICKNESS.



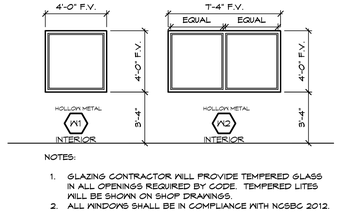
NOTE: REFER TO STRUCTURAL DRAWINGS FOR LINTEL INFORMATION.
FRAME WIDTH IS ONE INCH PLUS WALL THICKNESS.

2 WINDOW HEAD/SILL DETAILS
A601 SCALE: 1 1/2" = 1'-0"



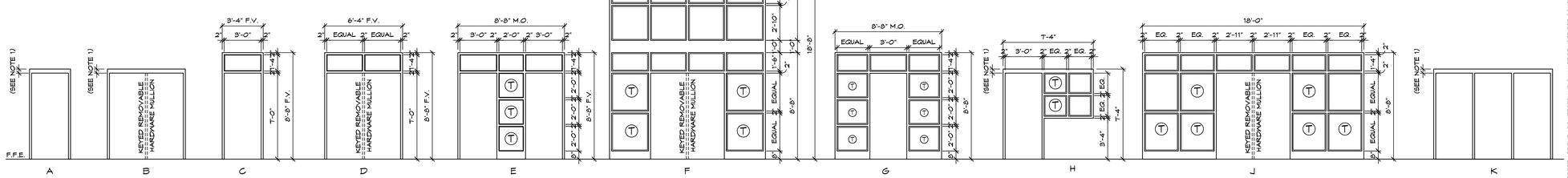


8 WINDOW STYLES
A601 SCALE: 1/4" = 1'-0"



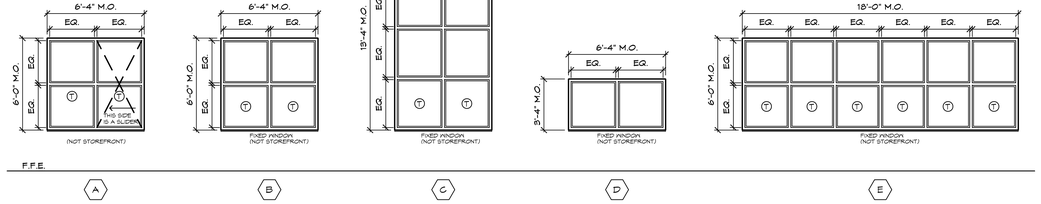
NOTES:

1. GLAZING CONTRACTOR WILL PROVIDE TEMPERED GLASS IN ALL OPENINGS REQUIRED BY CODE. TEMPERED LITES WILL BE SHOWN ON SHOP DRAWINGS.
2. ALL WINDOWS SHALL BE IN COMPLIANCE WITH NCSBC 2012.



3 WINDOW JAMB DETAILS
A601 SCALE: 1 1/2" = 1'-0"

5 INTERIOR WINDOW STYLES
A601 SCALE: 1 1/2" = 1'-0"



EXTERIOR WINDOW STYLE NOTES:

1. ALL EXTERIOR WINDOWS WILL HAVE WHITE MARBLE SILLS AND 1" HORIZONTAL ALUMINUM MINI-BLINDS AS MANUFACTURED BY LEVOLOR - MONACO STYLE.
2. ALL EXTERIOR WINDOWS WILL HAVE AN ALUMINUM SILL EXTENSIONS, 1" INSULATED GLASS, AND THERMAL BREAK UNLESS OTHERWISE NOTED.
3. GLAZING CONTRACTOR WILL PROVIDE TEMPERED GLASS IN ALL OPENINGS REQUIRED BY CODE. TEMPERED LITES WILL BE SHOWN ON SHOP DRAWINGS.
4. ALL EXTERIOR WINDOW FRAME AND GLAZING SHALL BE HURRICANE RATED.

4 FRAME STYLES
A601 SCALE: 1/4" = 1'-0"

DOOR FRAME STYLE NOTES:

1. 4" METAL HEADS AT ALL MASONRY OPENING (2" METAL HEADS @ ALL NON-MASONRY)
2. ADJUSTABLE FOOT ANCHORS
3. THREE JAMB ANCHORS PER JAMB
4. GLAZING CONTRACTOR WILL PROVIDE TEMPERED GLASS IN ALL OPENINGS REQUIRED BY CODE. TEMPERED LITES WILL BE SHOWN ON SHOP DRAWINGS.

CONTRACTOR TO VERIFY ALL DIMENSIONS.

PINNACLE ARCHITECTURE
PROFESSIONAL ASSOCIATION
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MATTHEWS, NORTH CAROLINA 28106
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701 EAST BAY STREET, SUITE 302
CHARLESTON, SOUTH CAROLINA 29403
PH: (843) 872-5345 FAX: (843) 872-5374

ISSUE DATE: 04.30.2019
ISSUED BY: PMM/REB
CHECKED BY: PMM
PROJECT: 1821

STUMP SOUND ELEMENTARY SCHOOL
ONSLOW COUNTY SCHOOLS
STUMP SOUND, NORTH CAROLINA

DOOR & WINDOW DETAILS

REVISION SCHEDULE

△	DATE	REFERENCE

A601

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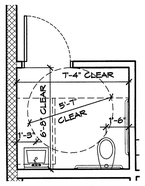
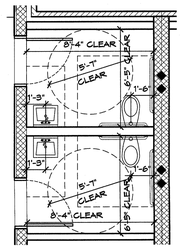
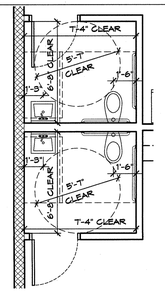


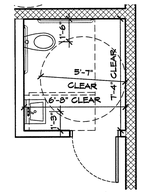
20 A602 ENLGD. TOILET PLAN
SCALE: 1/4" = 1'-0"



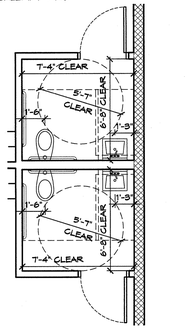
19 A602 ENLGD. TOILET PLAN
SCALE: 1/4" = 1'-0"



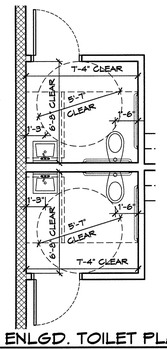
18 A602 ENLGD. TOILET PLAN
SCALE: 1/4" = 1'-0"



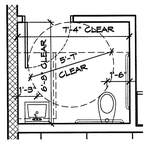
15 A602 ENLGD. TOILET PLAN
SCALE: 1/4" = 1'-0"



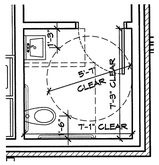
16 A602 ENLGD. TOILET PLAN
SCALE: 1/4" = 1'-0"



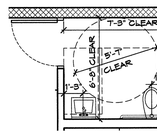
17 A602 ENLGD. TOILET PLAN
SCALE: 1/4" = 1'-0"



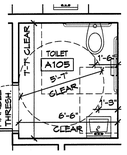
14 A602 ENLGD. TOILET PLAN
SCALE: 1/4" = 1'-0"



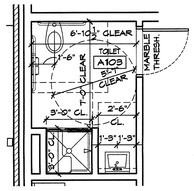
13 A602 ENLGD. TOILET PLAN
SCALE: 1/4" = 1'-0"



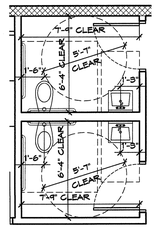
12 A602 ENLGD. TOILET PLAN
SCALE: 1/4" = 1'-0"



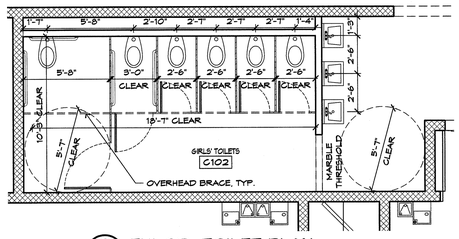
9 A602 ENLGD. TOILET PLAN
SCALE: 1/4" = 1'-0"



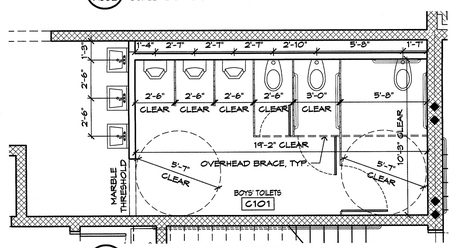
10 A602 ENLGD. TOILET PLAN
SCALE: 1/4" = 1'-0"



11 A602 ENLGD. TOILET PLAN
SCALE: 1/4" = 1'-0"



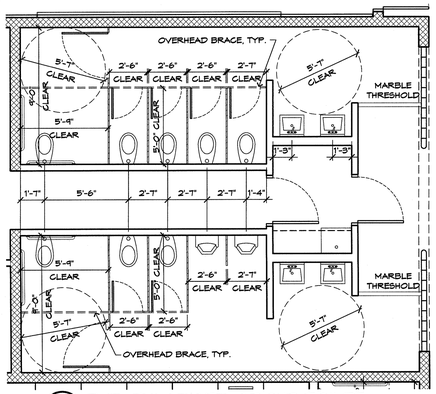
8 A602 ENLGD. TOILET PLAN
SCALE: 1/4" = 1'-0"



7 A602 ENLGD. TOILET PLAN
SCALE: 1/4" = 1'-0"

ROOM FINISH SCHEDULE NOTES:

1. PAINT SHALL BE OF THE MOISTURE/MOLD/MILDEW RESISTANT EPOXY TYPE.
2. ALL EXPOSED METAL STRUCTURE, DUCTS, CONDUIT, ETC. SHALL BE COVERED OR PAINTED (SEE SPECS).
3. COLORS AND PATTERNS TO BE SELECTED BY ARCHITECT. REFER TO FLOOR PLANS FOR TILE PATTERNS.
4. 6" SOUND BATT. INSULATION OVER ENTIRE CEILING.
5. MASONRY WALLS SHALL HAVE WATERPROOF SEALANT APPLIED (MIN 60" HIGH).
6. ½" CEMENT BOARD BEHIND ALL TILE WALL CONDITIONS.
7. NON-ABSORBENT WASHABLE ACOUSTICAL CEILING TILE.



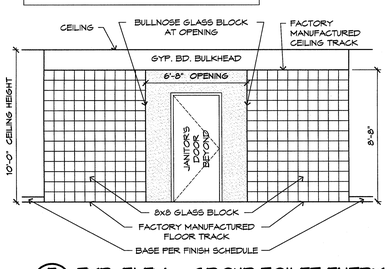
6 A602 TYP. ENLARGED GROUP TOILET
SCALE: 1/4" = 1'-0"

ABBREVIATIONS :

1. ACOUS. - SUSPENDED ACOUSTICAL CEILING
2. VCT - VINYL COMPOSITION TILE
3. DW - DRYWALL
4. CMU - CONCRETE MASONRY UNIT
5. TERR. - EPOXY TERRAZZO
6. CMT BD - CEMENT BOARD
7. CT - CERAMIC TILE
8. QT- QUARRY TILE
9. RSF - RESILIENT SPORTS FLOORING

NOTES:

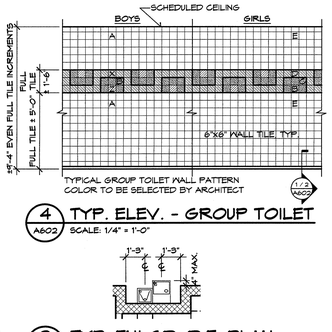
1. REFER TO ACCESSIBILITY SHEET FOR TOILET FIXTURE AND ACCESSORY MOUNTING HEIGHTS
2. ALL EXPOSED CMU CORNERS WILL BE FACTORY RADIUS
3. ALL HANDICAPPED ACCESSIBLE STALLS SHALL RECEIVE HINGES WITH INTEGRAL CLOSERS



5 A602 TYP. ELEV. - GROUP TOILET ENTRY
SCALE: 1/4" = 1'-0"

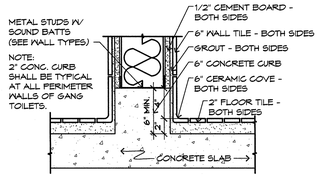
GENERAL NOTES:

1. ALL EXPOSED GYPSUM CORNERS SHALL BE HAVE VINYL CORNER GUARDS- EQUAL TO THINLINE MODEL GS-215FT AFGO LENGTH 8'-0" FROM FINISH FLOOR.
2. INSTALL MINI BLINDS ON ALL EXTERIOR WINDOWS, REFER TO SECTION 12 21 13 IN SPECIFICATIONS.
3. CONTRACTOR TO VERIFY EXACT LOCATION OF ALL MILLWORK WITH ARCHITECT BEFORE FABRICATION.CONTRACTOR TO VERIFY EXACT LOCATION OF ALL MILLWORK WITH ARCHITECT BEFORE FABRICATION.
4. REFER TO SECTION 01 23 00 FOR ALTERNATES.
5. ALL EXPOSED DRYWALL WILL BE FINISHED WITH A "KNOCKDOWN" FINISH AND SEMI-GLOSS PAINT. ALL OTHER WALLS TO BE PAINTED WITH SEMI-GLOSS PAINT UNLESS OTHERWISE NOTED.

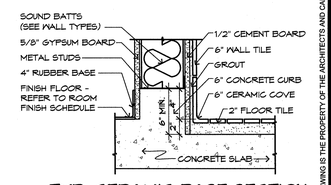


4 A602 TYP. ELEV. - GROUP TOILET
SCALE: 1/4" = 1'-0"

3 A602 TYP. ENLGD. D.F. PLAN
SCALE: 1/4" = 1'-0"



2 A602 TYP. CERAMIC BASE SECTION @ TOILET WALL
SCALE: N.T.S.



1 A602 TYP. CERAMIC BASE SECTION @ TOILET WING WALL
SCALE: N.T.S.

ROOM FINISH SCHEDULE

NO.	NAME	FLOOR	BASE	WALL MAT'L	WALL FINISH	CEILING MAT'L	CEILING HEIGHT	COMMENTS
AREA A								
A100	CORRIDOR	TERR	4" RUBBER	CMU/DW	PAINT	ACOUS.	10'-0"	--
A101	SELF CONTAINED	VCT	4" RUBBER	DW	PAINT	ACOUS.	9'-4"	--
A102	UTILITY	VCT	4" RUBBER	DW	PAINT	DW	8'-0"	SEE NOTE #1
A103	TOILET	2" QT	6" QT W/ COVE	CMU/DW	PAINT	DW	8'-0"	SEE NOTE #1 & 4
A104	CORRIDOR	VCT	4" RUBBER	DW	PAINT	ACOUS.	9'-4"	--
A105	TOILET	2" QT	6" QT W/ COVE	DW	PAINT	DW	8'-0"	SEE NOTE #1 & 4
A106	OT / PT ROOM	VCT	4" RUBBER	DW	PAINT	ACOUS.	9'-4"	--
A107	SELF CONTAINED	VCT	4" RUBBER	CMU/DW	PAINT	ACOUS.	9'-4"	--
A108	SPEECH	VCT	4" RUBBER	CMU/DW	PAINT	ACOUS.	9'-4"	--
A109	RESOURCE	VCT	4" RUBBER	CMU/DW	PAINT	ACOUS.	9'-4"	--
A110	STORAGE	VCT	4" RUBBER	DW	PAINT	ACOUS.	9'-4"	--
A111	OFFICE	VCT	4" RUBBER	DW	PAINT	ACOUS.	9'-4"	--
A112	OFFICE	VCT	4" RUBBER	DW	PAINT	ACOUS.	9'-4"	--
A113	LIFE SKILLS	VCT	4" RUBBER	CMU/DW	PAINT	ACOUS.	9'-4"	--
AREA B								
B100	SAFETY VESTIBULE	TERR	4" RUBBER	GMU	PAINT	--	--	SEE NOTE #2
B101	CORRIDOR	TERR	4" RUBBER	GMU	PAINT	ACOUS.	VARIES	SEE NOTE #2 & 4
B102	RECEPTION	CARPET	4" RUBBER	CMU/DW	PAINT	ACOUS.	9'-4"	--
B103	CORRIDOR	TERR	4" RUBBER	CMU/DW	PAINT	ACOUS.	9'-4"	SEE NOTE #4
B104	SMB	CARPET	4" RUBBER	CMU/DW	PAINT	ACOUS.	9'-4"	--
B105	SECRETARY	CARPET	4" RUBBER	DW	PAINT	ACOUS.	9'-4"	--
B106	ASST. PRINCIPAL	CARPET	4" RUBBER	DW	PAINT	ACOUS.	9'-4"	--
B107	CONFERENCE	CARPET	4" RUBBER	DW	PAINT	ACOUS.	9'-4"	--
B108	PRINCIPAL	CARPET	4" RUBBER	DW	PAINT	ACOUS.	9'-4"	--
B109	WORKROOM	VCT	4" RUBBER	DW	PAINT	ACOUS.	9'-4"	--
B110	SMALL GROUP ROOM	CARPET	4" RUBBER	DW	PAINT	ACOUS.	9'-4"	--
B111	WORKROOM	VCT	4" RUBBER	DW	PAINT	ACOUS.	9'-4"	--
B112	COUNSELOR OFFICE	CARPET	4" RUBBER	DW	PAINT	ACOUS.	9'-4"	--
B113	SOCIAL WORKER	CARPET	4" RUBBER	CMU/DW	PAINT	ACOUS.	9'-4"	--
B114	GUIDANCE RECEPTION	CARPET	4" RUBBER	CMU/DW	PAINT	ACOUS.	9'-4"	--
B115	TUTOR	VCT	4" RUBBER	CMU/DW	PAINT	ACOUS.	8'-0"	--
B116	TEACHERS' LOUNGE	VCT	4" RUBBER	CMU/DW	PAINT	ACOUS.	9'-4"	--
B117	TOILET	2" QT	6" QT W/ COVE	CMU/DW	PAINT	DW	8'-0"	SEE NOTE #1 & 4
B118	TOILET	2" QT	6" QT W/ COVE	DW	PAINT	DW	8'-0"	SEE NOTE #1 & 4
B119	BOOK STORAGE	VCT	4" RUBBER	CMU/DW	PAINT	ACOUS.	9'-4"	--
B120	STORAGE	VCT	4" RUBBER	DW	PAINT	ACOUS.	9'-4"	--
B121	TOILET	2" QT	6" QT W/ COVE	CMU/DW	PAINT	DW	8'-0"	SEE NOTE #1 & 4
B122	HEALTH ROOM	VCT	4" RUBBER	CMU/DW	PAINT	ACOUS.	9'-4"	SEE NOTE #4
AREA C								
C100	CORRIDOR	TERR	4" RUBBER	CMU/DW	PAINT	ACOUS.	10'-0"	SEE NOTE #4
C101	BOYS' TOILETS	2" QT	6" QT W/ COVE	CMU/DW	6" QT	DW	8'-0"	SEE NOTE #1, 4 & 6
C102	GIRLS' TOILETS	2" QT	6" QT W/ COVE	CMU/DW	6" QT	DW	8'-0"	SEE NOTE #1, 4 & 6
C103	CHAIR / RISER STORAGE	VCT	4" RUBBER	CMU/DW	PAINT	ACOUS.	8'-0"	--
C104	P.E. OFFICE	VCT	4" RUBBER	CMU/DW	PAINT	ACOUS.	8'-0"	--
C105	ACES OFFICE	VCT	4" RUBBER	CMU/DW	PAINT	ACOUS.	8'-0"	--
C106	ACES STORAGE	VCT	4" RUBBER	CMU/DW	PAINT	ACOUS.	8'-0"	--
C107	UTILITY	VCT	4" RUBBER	CMU/DW	PAINT	--	--	SEE NOTE #2
C108	RAMP	VCT	4" RUBBER	CMU	PAINT	ACOUS.	10'-0"	SEE NOTE #4
C109	STORAGE	VCT	4" RUBBER	CMU	PAINT	ACOUS.	10'-0"	--
C110	CLASSROOM	VCT	4" RUBBER	CMU/DW	PAINT	ACOUS.	9'-4"	--
C111	P.E. STORAGE	VCT	4" RUBBER	CMU/DW	PAINT	ACOUS.	10'-0"	--
C112	MULTI-PURPOSE ROOM	RSF	4" RUBBER	CMU	PAINT	--	--	SEE NOTE #2
C113	STUDENT DINING AREA	VCT	4" RUBBER	CMU	PAINT	ACOUS.	16'-8"	SEE NOTE #3
C114	JAN.	VCT	4" RUBBER	CMU	PAINT	DW	8'-0"	SEE NOTE #1
C115	SERVING LINE	QT	6" QT W/ COVE	CMU/DW	6" QT	ACOUS.	9'-4"	SEE NOTE #1, 5, & 6 & 7
C116	KITCHEN	QT	6" QT W/ COVE	CMU/DW	6" QT	DW	8'-0"	SEE NOTE #1, 5, & 6 & 7
C117	OFFICE	QT	6" QT W/ COVE	DW	PAINT	ACOUS.	8'-0"	SEE NOTE #1 & 7
C118	SOAP STORAGE	QT	6" QT W/ COVE	DW	PAINT	ACOUS.	8'-0"	SEE NOTE #1 & 7
C119	TOILET	2" QT	6" QT W/ COVE	DW	PAINT	DW	8'-0"	SEE NOTE #1, 4 & 7
C119.1	CLOAK ROOM	2" QT	6" QT W/ COVE	DW	PAINT	ACOUS.	8'-0"	SEE NOTE #1, 4 & 7
C120	CAN WASH	SEALED CONC.	--	BRICK	--	--	--	SEE NOTE #5
C121	DRY STORAGE	QT	6" QT W/ COVE	CMU/DW	PAINT	ACOUS.	9'-4"	SEE NOTE #1 & 7
C122	GENERATOR PANEL ROOM	SEALED CONC.	4" RUBBER	CMU/DW	PAINT	--	--	SEE NOTE #2
C123	MECHANICAL / ELECTRICAL	SEALED CONC.	4" RUBBER	CMU/DW	PAINT	--	--	SEE NOTE #2
AREA D								
D100	CORRIDOR	TERR	4" RUBBER	CMU/DW	PAINT	ACOUS.	10'-0"	SEE NOTE #4
D101	OUTDOOR STORAGE	SEALED CONC.	4" RUBBER	CMU/DW	PAINT	--	--	SEE NOTE #2 & 4
D102	LEAD CUSTODIAN OFFICE	VCT	4" RUBBER	CMU/DW	PAINT	ACOUS.	9'-4"	--
D102.1	EQUIPMENT STORAGE ROOM	VCT	4" RUBBER	CMU/DW	PAINT	ACOUS.	9'-4"	--
D103	STORAGE	VCT	4" RUBBER	CMU/DW	PAINT	ACOUS.	9'-4"	--
D104	DATA	VCT	4" RUBBER	CMU/DW	PAINT	ACOUS.	8'-0"	--
D105	SCIENCE CLASSROOM	VCT	4" RUBBER	CMU/DW	PAINT	ACOUS.	9'-4"	--
D105.1	PREP. ROOM	VCT	4" RUBBER	CMU/DW	PAINT	ACOUS.	9'-4"	--
D106	CENTRAL RECEIVING / STORAGE	SEALED CONC.	4" RUBBER	CMU/DW	PAINT	ACOUS.	10'-0"	--
D107	4TH GRADE CLASSROOM	VCT	4" RUBBER	CMU/DW	PAINT	ACOUS.	9'-4"	--
D107.1	MECH. CLOSET	VCT	4" RUBBER	DW	PAINT	ACOUS.	9'-4"	--
D108	4TH GRADE CLASSROOM	VCT	4" RUBBER	CMU/DW	PAINT	ACOUS.	9'-4"	--
D108.1	MECH. CLOSET	VCT	4" RUBBER	DW	PAINT	ACOUS.	9'-4"	--
D109	4TH GRADE CLASSROOM	VCT	4" RUBBER	CMU/DW	PAINT	ACOUS.	9'-4"	--
D109.1	MECH. CLOSET	VCT	4" RUBBER	DW	PAINT	ACOUS.	9'-4"	--
D110	4TH GRADE CLASSROOM	VCT	4" RUBBER	CMU/DW	PAINT	ACOUS.	9'-4"	--
D110.1	MECH. CLOSET	VCT	4" RUBBER	DW	PAINT	ACOUS.	9'-4"	--
D111	4TH GRADE CLASSROOM	VCT	4" RUBBER	CMU/DW	PAINT	ACOUS.	9'-4"	--
D111.1	MECH. CLOSET	VCT	4" RUBBER	DW	PAINT	ACOUS.	9'-4"	--
D112	4TH GRADE CLASSROOM	VCT	4" RUBBER	CMU/DW	PAINT	ACOUS.	9'-4"	--
D112.1	MECH. CLOSET	VCT	4" RUBBER	DW	PAINT	ACOUS.	9'-4"	--
D113	BOYS' TOILETS	2" QT	6" QT W/ COVE	CMU/DW	6" QT	DW	8'-0"	SEE NOTE #1, 4 & 6
D114	TEACHER WORKROOM	VCT	4" RUBBER	CMU/DW	PAINT	ACOUS.	9'-4"	--
D114.1	TOILET	2" QT	6" QT W/ COVE	CMU/DW	PAINT	DW	8'-0"	SEE NOTE #1 & 4
D115	JAN.	VCT	4" RUBBER	DW	PAINT	ACOUS.	8'-0"	SEE NOTE #1
D115.1	UTILITY	SEALED CONC.	4" RUBBER	CMU/DW	PAINT	--	--	SEE NOTE #1 & 2
D115.2	DATA	VCT	4" RUBBER	CMU/DW	PAINT	ACOUS.	9'-4"	--
D116	RESOURCE	VCT	4" RUBBER	CMU/DW	PAINT	ACOUS.	9'-4"	--
D117	GIRLS' TOILETS	2" QT	6" QT W/ COVE	CMU/DW	6" QT	DW	9'-4"	SEE NOTE #1, 4 & 6
D118	5TH GRADE CLASSROOM	VCT	4" RUBBER	CMU/DW	PAINT	ACOUS.	9'-4"	--
D118.1	MECH. CLOSET	VCT	4" RUBBER	DW	PAINT	ACOUS.	9'-4"	--
D119	5TH GRADE CLASSROOM	VCT	4" RUBBER	CMU/DW	PAINT	ACOUS.	9'-4"	--
D119.1	MECH. CLOSET	VCT	4" RUBBER	DW	PAINT	ACOUS.	9'-4"	--
D120	5TH GRADE CLASSROOM	VCT	4" RUBBER	CMU/DW	PAINT	ACOUS.	9'-4"	--
D120.1	MECH. CLOSET	VCT	4" RUBBER	DW	PAINT	ACOUS.	9'-4"	--
D121	5TH GRADE CLASSROOM	VCT	4" RUBBER	CMU/DW	PAINT	ACOUS.	9'-4"	--
D121.1	MECH. CLOSET	VCT	4" RUBBER	DW	PAINT	ACOUS.	9'-4"	--
D122	5TH GRADE CLASSROOM	VCT	4" RUBBER	CMU/DW	PAINT	ACOUS.	9'-4"	--
D122.1	MECH. CLOSET	VCT	4" RUBBER	DW	PAINT	ACOUS.	9'-4"	--
D123	5TH GRADE CLASSROOM	VCT	4" RUBBER	CMU/DW	PAINT	ACOUS.	9'-4"	--
D123.1	MECH. CLOSET	VCT	4" RUBBER	DW	PAINT	ACOUS.	9'-4"	--

ROOM FINISH SCHEDULE

NO.	NAME	FLOOR	BASE	WALL MAT'L	WALL FINISH	CEILING MAT'L	CEILING HEIGHT	COMMENTS
AREA E								
E100	CORRIDOR	TERR	4" RUBBER	CMU/DW	PAINT	ACOUS.	10'-0"	SEE NOTE #4
E101	COMPUTER	VCT	4" RUBBER	CMU/DW	PAINT	ACOUS.	9'-4"	--
E102	ART ROOM	VCT	4" RUBBER	CMU/DW	PAINT	ACOUS.	10'-0"	--
E102.1	KILN	VCT	4" RUBBER	DW	PAINT	ACOUS.	9'-4"	--
E102.2	ART STORAGE	VCT	4" RUBBER	CMU/DW	PAINT	ACOUS.	9'-4"	--
E103	MUSIC	VCT	4" RUBBER	CMU/DW	PAINT	ACOUS.	9'-4"	--
E103.1	STORAGE	VCT	4" RUBBER	DW	PAINT	ACOUS.	8'-0"	--
E104	2ND GRADE CLASSROOM	VCT	4" RUBBER	CMU/DW	PAINT	ACOUS.	9'-4"	--
E104.1	MECH. CLOSET	VCT	4" RUBBER	DW	PAINT	ACOUS.	9'-4"	--
E104.2	TOILET	2" QT	6" QT W/ COVE	CMU/DW	PAINT	DW	8'-0"	SEE NOTE #1 & 4
E105	ELECTRICAL	VCT	4" RUBBER	CMU/DW	PAINT	--	--	SEE NOTE #2
E105.1	DATA	VCT	4" RUBBER	DW	PAINT	ACOUS.	8'-0"	--
E106	2ND GRADE CLASSROOM	VCT	4" RUBBER	CMU/DW	PAINT	ACOUS.	9'-4"	--
E106.1	MECH. CLOSET	VCT	4" RUBBER	DW	PAINT	ACOUS.	9'-4"	--
E106.2	TOILET	2" QT	6" QT W/ COVE	CMU/DW	PAINT	DW	8'-0"	SEE NOTE #1 & 4
E107	2ND GRADE CLASSROOM	VCT	4" RUBBER	CMU/DW	PAINT	ACOUS.	9'-4"	--
E107.1	MECH. CLOSET	VCT	4" RUBBER	DW	PAINT	ACOUS.	9'-4"	--
E107.2	TOILET	2" QT	6" QT W/ COVE	CMU/DW	PAINT	DW	8'-0"	SEE NOTE #1 & 4
E108	2ND GRADE CLASSROOM	VCT	4" RUBBER	CMU/DW	PAINT	ACOUS.	9'-4"	--
E108.1	MECH. CLOSET	VCT	4" RUBBER	DW	PAINT	ACOUS.	9'-4"	--
E108.2	TOILET	2" QT	6" QT W/ COVE	CMU/DW	PAINT	DW	8'-0"	SEE NOTE #1 & 4
E109	2ND GRADE CLASSROOM	VCT	4" RUBBER	CMU/DW	PAINT	ACOUS.	9'-4"	--
E109.1	MECH. CLOSET	VCT	4" RUBBER	DW	PAINT	ACOUS.	9'-4"	--
E109.2	TOILET	2" QT	6" QT W/ COVE	CMU/DW	PAINT	DW	8'-0"	SEE NOTE #1 & 4
E110	TEACHER WORKROOM	VCT	4" RUBBER	CMU/DW	PAINT	ACOUS.	9'-4"	--
E110.1	TOILET	2" QT	6" QT W/ COVE	CMU/DW	PAINT	DW	9'-4"	SEE NOTE #1 & 4
E111	2ND GRADE CLASSROOM	VCT	4" RUBBER	CMU/DW	PAINT	ACOUS.	8'-0"	--
E111.1	MECH. CLOSET	VCT	4" RUBBER	DW	PAINT	ACOUS.	9'-4"	--
E111.2	TOILET	2" QT	6" QT W/ COVE	CMU/DW	PAINT	DW	8'-0"	SEE NOTE #1 & 4
E112	RESOURCE	VCT	4" RUBBER	CMU/DW	PAINT	ACOUS.	9'-4"	--
E113	BOYS' TOILETS	2" QT	6" QT W/ COVE	CMU/DW	6" QT	DW	9'-4"	SEE NOTE #1, 4 & 6
E114	3RD GRADE CLASSROOM	VCT	4" RUBBER	CMU/DW	PAINT	ACOUS.	9'-4"	--
E114.1	MECH. CLOSET	VCT	4" RUBBER	DW	PAINT	ACOUS.	9'-4"	--
E115	JAN.	VCT	4" RUBBER	DW	PAINT	ACOUS.	8'-0"	SEE NOTE #1
E115.1	UTILITY	SEALED CONC.	4" RUBBER	CMU/DW	PAINT	--	--	SEE NOTE #1 & 2
E115.2	DATA	VCT	4" RUBBER	CMU/DW	PAINT	ACOUS.	9'-4"	--
E116	3RD GRADE CLASSROOM	VCT	4" RUBBER	CMU/DW	PAINT	ACOUS.	9'-4"	--
E116.1	MECH. CLOSET	VCT	4" RUBBER	DW	PAINT	ACOUS.	9'-4"	--
E117	GIRLS' TOILETS	2" QT	6" QT W/ COVE	CMU/DW	6" QT	DW	9'-4"	SEE NOTE #1, 4 & 6
E118	3RD GRADE CLASSROOM	VCT	4" RUBBER	CMU/DW	PAINT	ACOUS.	9'-4"	--
E118.1	MECH. CLOSET	VCT	4" RUBBER	DW	PAINT	ACOUS.	9'-4"	--
E119	3RD GRADE CLASSROOM	VCT	4" RUBBER	CMU/DW	PAINT	ACOUS.	9'-4"	--
E119.1	MECH. CLOSET	VCT	4" RUBBER	DW	PAINT	ACOUS.	9'-4"	--
E120	3RD GRADE CLASSROOM	VCT	4" RUBBER	CMU/DW	PAINT	ACOUS.	9'-4"	--
E120.1	MECH. CLOSET	VCT	4" RUBBER	DW	PAINT	ACOUS.	9'-4"	--
E120.2	TOILET	2" QT	6" QT W/ COVE	CMU/DW	PAINT	DW	8'-0"	SEE NOTE #1 & 4
E121	3RD GRADE CLASSROOM	VCT	4" RUBBER	CMU/DW	PAINT	ACOUS.	9'-4"	--
E121.1	MECH. CLOSET	VCT	4" RUBBER	DW	PAINT	ACOUS.	9'-4"	--
E123	3RD GRADE CLASSROOM	VCT	4" RUBBER	CMU/DW	PAINT	ACOUS.	9'-4"	--
E123.1	MECH. CLOSET	VCT	4" RUBBER	DW	PAINT	ACOUS.	9'-4"	--
AREA F								
F100	MEDIA CENTER	CARPET	4" RUBBER	DW	PAINT	ACOUS.	12'-4"	--
F101	TECHNOLOGY ROOM	VCT	4" RUBBER	CMU/DW	PAINT	ACOUS.	9'-4"	--
F102	BROADCAST STUDIO	CARPET	4" RUBBER	CMU/DW	PAINT	ACOUS.	9'-4"	--
F103	PROFESSIONAL RESOURCE ROOM	CARPET	4" RUBBER	CMU/DW	PAINT	ACOUS.	9'-4"	--
F104	A.V. STORAGE	VCT	4" RUBBER	CMU/DW	PAINT	ACOUS.	9'-4"	--
F105	WORKROOM	VCT	4" RUBBER	CMU/DW	PAINT	ACOUS.	9'-4"	--
F106	SPEC. OFFICE	CARPET	4" RUBBER	CMU/DW	PAINT	ACOUS.	9'-4"	--
F107	TUTOR	VCT	4" RUBBER	CMU/DW	PAINT	ACOUS.	8'-0"	--
F108	TUTOR	VCT	4" RUBBER	CMU/DW	PAINT	ACOUS.	8'-0"	--
F109	TOILET	2" QT	6" QT W/ COVE	CMU/DW	PAINT	DW	8'-0"	SEE NOTE #1 & 4
F110	TOILET	2" QT	6" QT W/ COVE	CMU/DW	PAINT	DW	8'-0"	SEE NOTE #1 & 4
AREA G								
G100	CORRIDOR	TERR	4" RUBBER	CMU/DW	PAINT	ACOUS.	10'-0"	SEE NOTE #4
G101	HEARING	VCT	4" RUBBER	CMU/DW	PAINT	ACOUS.	9'-4"	--
G102	ELECTRICAL	VCT	4" RUBBER	CMU/DW	PAINT	--	--	SEE NOTE #2
G103	PRE-K OFFICE	VCT	4" RUBBER	CMU/DW	PAINT	ACOUS.	9'-4"	--
G104	DATA	VCT	4" RUBBER	CMU/DW	PAINT	ACOUS.	8'-0"	--
G105	KINDERGARTEN CLASSROOM	VCT	4" RUBBER	CMU/DW	PAINT	ACOUS.	9'-4"	--
G105.1	MECH. CLOSET	VCT	4" RUBBER	DW	PAINT	ACOUS.	9'-4"	--
G105.2	TOILET	2" QT	6" QT W/ COVE	CMU/DW	PAINT	DW	8'-0"	SEE NOTE #1 & 4
G106	PRE-K CLASSROOM	VCT	4" RUBBER	CMU/DW	PAINT	ACOUS.	9'-4"	--
G106.1	MECH. CLOSET	VCT	4" RUBBER	DW	PAINT	ACOUS.	9'-4"	--
G106.2	TOILET	2" QT	6" QT W/ COVE	CMU/DW	PAINT	DW	8'-0"	SEE NOTE #1 & 4
G107	KINDERGARTEN CLASSROOM	VCT	4" RUBBER	CMU/DW	PAINT	ACOUS.	9'-4"	--
G107.1	MECH. CLOSET	VCT	4" RUBBER	DW	PAINT	ACOUS.	9'-4"	--
G107.2	TOILET	2" QT	6" QT W/ COVE	CMU/DW	PAINT	DW	8'-0"	SEE NOTE #1 & 4
G108	PRE-K CLASSROOM	VCT	4" RUBBER	CMU/DW	PAINT	ACOUS.

WALK-IN NOTES

EXPOSED EXTERIOR SURFACES:
STAINLESS STEEL

UNEXPOSED EXTERIOR SURFACES:
0.040 STUCCO PATTERN ALUMINUM

INTERIOR WALLS AND CEILING:
0.040 STUCCO PATTERN ALUMINUM

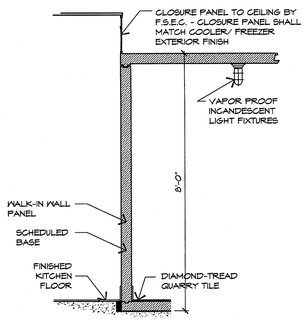
INTERIOR FLOOR: MATCH KITCHEN FLOORING (NON-SKID) LOAD RATING OF FLOOR TO BE A NOMINAL 750 LB./SF

DOORS: NOMINAL 3'-4" X 7'-0" FINISHED TO MATCH EXTERIOR. CHROME PLATED HARDWARE; 30" HIGH 14 GA. STAINLESS STEEL KICKPLATE BOTH SIDES.

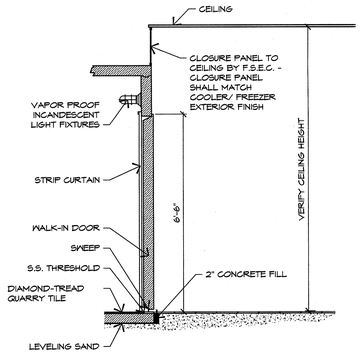
REFRIGERATION: AIR-COOLED REMOTE CONDENSING UNITS WITH ALL-WEATHER HOUSING; HOUSING PAINTED GALVANIZED. CONTROLS FOR OUTDOOR OPERATION, F.S.E.C. SHALL PROVIDE ROOF CURBS AND G.C. SHALL INSTALL.

MISCELLANEOUS: TRIM STRIPS, EVAPORATOR DRAIN LINES, DIAL THERMOMETER TOP CLOSURE PANELS, PLASTIC STRIP CURTAINS, AND BUMPER STRIPS AS SHOWN.

LIGHTS: MANUFACTURER TO FURNISH EXTRA LIGHTS AS REQUIRED TO PROVIDE 50 FT. CANDLES 30" ABOVE FLOOR MINIMUM.

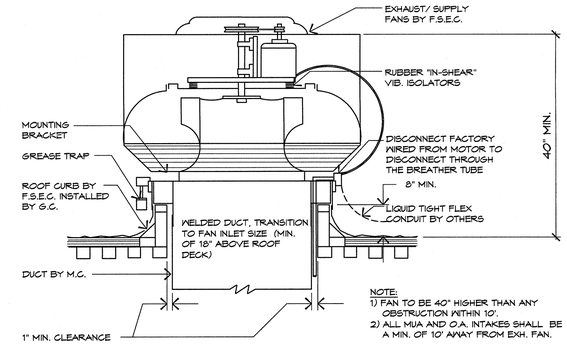


7 A603 **WALK-IN SECTION**
NOT TO SCALE



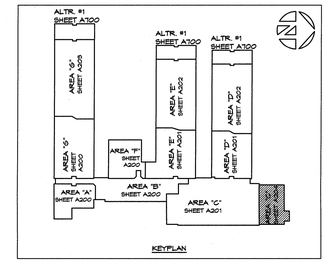
6 A603 **WALK-IN DOOR SECTION**
NOT TO SCALE

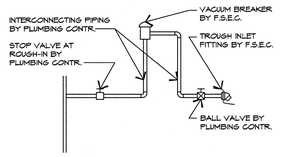
NOTE:
REMOTE CONDENSING UNIT(S) FOR FREEZER & COOLER (BY F.S.E.C.) ON ROOF. CURB(S) SUPPLIED BY F.S.E.C. & INSTALLED BY ROOFING CONTRACTOR.



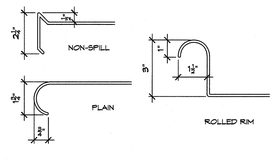
NOTE:
1) FAN TO BE 40" HIGHER THAN ANY OBSTRUCTION WITHIN 10'.
2) ALL MUA AND O.A. INTAKES SHALL BE A MIN. OF 10' AWAY FROM EXH. FAN.

5 A603 **ROOF MTD. EXHAUST FAN DETAIL (SUPPLY FAN DETAIL SIMILAR)**
NOT TO SCALE

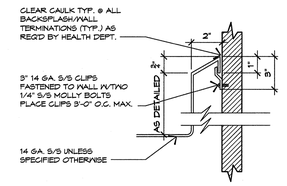




4 A603 **TROUGH INLET DETAILS**
NOT TO SCALE



3 A603 **TABLE EDGE DETAILS**
NOT TO SCALE



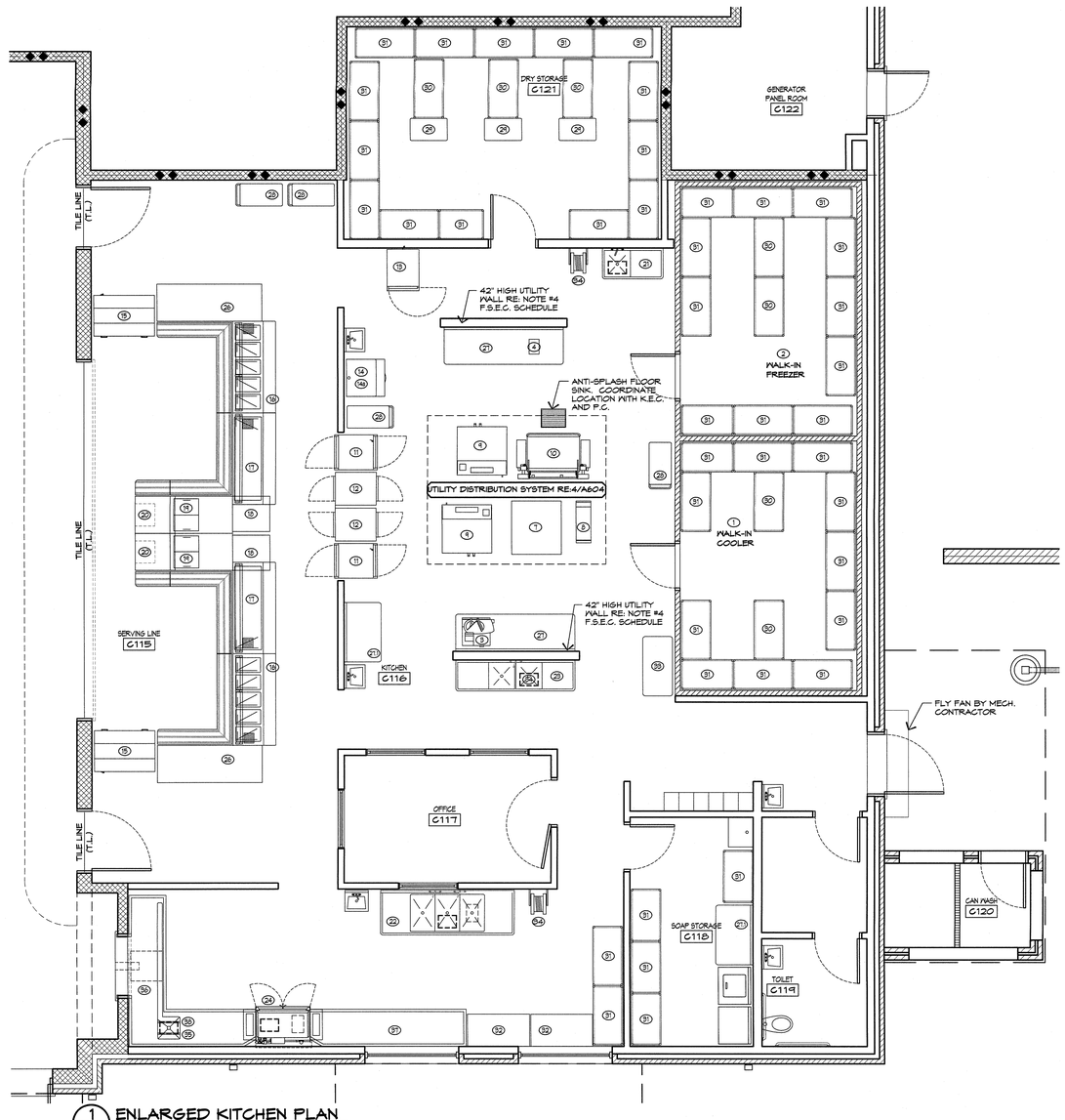
2 A603 **BACK SPLASH DETAIL**
NOT TO SCALE

FOOD SERVICE EQUIPMENT SCHEDULE

ITEM #	NAME	MANUFACTURER/MODEL NO.	QTY	WATER COLD	WATER HOT	WASTE INDR.	WASTE DIR.	ELECTRICAL H.P.	ELECTRICAL K.A.	ELECTRICAL AMP	ELECTRICAL VOLT	ELECTRICAL PH	GAS	REMARKS
1	WALK-IN COOLER	BROWN	1	-	-	-	-	-	-	-	208/115	3/1	-	PRE-ASSEMBLED SYSTEM SEMI HERMETIC, REFER TO NOTE #10 BELOW.
2	WALK-IN FREEZER	BROWN	1	-	-	-	-	-	-	-	208/115	3/1	-	PRE-ASSEMBLED SYSTEM SEMI HERMETIC, REFER TO NOTE #10 BELOW.
3	FOOD CUTTER	HOBART, 84186	1	-	-	-	-	1	-	12	120	1	-	
4	ELECTRIC CAN OPENER	EDLUND, 209	1	-	-	-	-	-	-	-	120	1	-	
5	NOT USED													
6	NOT USED													
7	STEAMER	CLEVELAND, 24CEA10 W/ WATER FILTER	1	3/8"	-	1 1/2"	-	-	-	47.3	208	3	-	LOW WATTAGE TWO DECK STEAMER WITH STAND, 6" CASTERS & 14 FULL SIZE STEAM TABLE PANS
8	HOT PLATE	VULCAN, EV12-1HT208	1	-	-	-	-	-	-	24	208	1	-	6" CASTERS
9	CONVECTION OVEN	SOUTHBEND, EB/208C	2	-	-	-	-	1/3	-	52	208	3	-	6" CASTERS
10	TILTING BRAISING PAN	SOUTHBEND, BECT-40	1	1/2"	-	-	-	-	27	75	208	3	-	6" CASTERS, DUAL TEMP, FILL FAUCET (DF-60), SPRAY HOSE, GMS-40
11	PASS THRU HOT CABINET	CRES COR, H-137-PWSUA-12D	2	-	-	-	-	-	2.0	16	120	1	-	REMOVABLE UNIVERSAL PAN SLIDES, 6" CASTERS, TEMPERED GLASS DOOR WINDOW (ONE SIDE - SERV.)
12	PASS THRU REFRIGERATOR	VICTORY, RS-1D-S1-PT	2	-	-	-	-	1/3	-	8.3	115	1	-	REMOVABLE UNIVERSAL PAN SLIDES, 6" CASTERS, TEMPERED GLASS DOOR WINDOW (ONE SIDE - SERV.)
13	HOT HOLDING CABINET	CRES COR, H-135-WSUA-11	1	-	-	-	-	-	-	10	120	1	-	HUMIDITY PAN
14	ICE MACHINE	HOSHIZAKI, KM-515MAH	1	3/8"	-	3/4"	-	-	5.9	11.7	115	1	-	SCOOP, SLEEVE, WATER AND DE-SCALING FILTER
14a	ICE STORAGE BIN	HOSHIZAKI, B500SF	1	-	-	-	-	-	-	-	-	-	-	6" S.S. LEGS
15	MILK COOLER	TRUE, TMC-44-DS-SS	2	-	-	-	-	1/3	-	4.2	115	1	-	S.S. EXTERIOR, VERTICAL CORNER BUMPERS, 6" CASTERS, EXTERNAL DIAL THERMOMETER
16	HOT FOOD COUNTER	COLOR POINT, EFS-CPA (5 WELLS) W/ SNEEZE GUARD	2	-	-	-	-	-	-	21.6	208	1	-	GLASS TOP, 6" CASTERS, S.S. CARVING BOARD, REFER TO NOTE #1 BELOW, RE: SHEET A604
17	COLD FOOD COUNTER	COLOR POINT, 66-CFMA W/ MIDDLE SHELF AND SNEEZE GUARD	2	-	-	-	-	1/3	-	4.8	120	1	-	GLASS TOP, 6" CASTERS, S.S. CARVING BOARD, REFER TO NOTE #1 BELOW, RE: SHEET A604
18	PLAIN TOP COUNTER	COLOR POINT, 28-ST	2	-	-	-	-	-	-	-	-	-	-	6" CASTERS, S.S. SHELF, RE: SHEET A604
19	ICE CREAM DISPENSER	COLOR POINT, GTAL-5	2	-	-	-	-	1/2	-	16	120	1	-	6" CASTERS, RE: SHEET A604
20	CASHIER COUNTER	COLOR POINT, 28-CSE	2	-	-	-	-	-	-	-	-	-	-	6" CASTERS, RE: SHEET A604
21	PREPARATION SINK	48" 1 COMP. SINK & 1 SIDE BD. W/ (1) T45, B-0230-LN, (1) T45, 065X & STRAINER	1	1/2"	1/2"	2"	-	-	-	-	-	-	-	CUSTOM; S.S. W/24"x24"x14" MIN. SINK COMPART, REFER TO NOTE #2 BELOW
22	POT WASH SINK W/ SPRAY ASSEMBLIES	3 COMP. SINK W/ (1) T45, B-0175-03, (1) T45, B-0290 & STRAINERS	1	1/2" /3/4"	1/2" /3/4"	2"	-	-	-	-	-	-	-	CUSTOM; S.S W/20"x30"x14" SINK COMPART., B-0175-03 TO HAVE VACUUM BREAK
23	PREPARATION SINK	96" 2 COMP. SINK & SIDE BDS. W/ (1) T45, B-0230-LN, (1) T45, 065X & STRAINERS	1	1/2"	1/2"	2"	-	-	-	-	-	-	-	CUSTOM; S.S. W/24"x24"x14" MIN. SINK COMPART, REFER TO NOTE #2 BELOW
24	DISHWASHER	HOBART, CL44E	1	-	-	-	-	-	30	80.2	208	3	-	W/ BOOSTER HEATER, PRE-RINSE UNIT, SILVER SOAK, CUSTOM S.S. DISH TABLES
25	NOT USED													
26	PLAIN TOP COUNTER	COLOR POINT, 84-ST	2	-	-	-	-	-	-	-	-	-	-	6" CASTERS, S.S. SHELF, RE: SHEET A604
27	WORK TABLE	30"W x 96"L x 36" HIGH	2											S.S. W/ 6" CASTERS, (2) LOCKABLE DRAWERS, BACKSPLASH & UNDER COUNTER SHELF
27a	WORK TABLE	30"W x 48"L x 36" HIGH	2											CUSTOM; S.S. W/ (2) LOCKABLE DRAWERS, BACKSPLASH & UNDER COUNTER SHELF
28	UTILITY CART	LAKESIDE, 544	4											STAINLESS STEEL
29	CAN RACK	KELMAX, SPS-4H15TH	3											
30	DUNNAGE RACK	METRO, METROMAX; 1'-0" TALL 24" WIDE, LENGTH VARIES	7											
31	STORAGE SHELVING	METRO, METROMAX; 6'-0" TALL 24" WIDE, LENGTH VARIES	42											
32	DRYING RACK	METRO, METROMAX i, FR48VX3	2											26"x50"x68" W/CASTERS & INCL. (2) DROP-INS & CUTTING BOARD/ TRAY DRYING RACK
33	WIRE SHELVING UNIT	METRO, A2448NS	1											24"x48"x60" W/CASTERS (5 TIER)
34	HOSE REEL	T45 / B-1433-04	2	1/2"	1/2"	-	-	-	-	-	-	-	-	W/ SHROUD, VACUUM BREAK, MIXING VALVE
35	PRE-RINSE UNIT	T45, B-0113-B	1	1/2"	1/2"	-	-	-	-	-	-	-	-	W/ VACUUM BREAK
36	SOILED DISH TABLE	S.S. CUSTOM	1	-	-	-	-	-	-	-	-	-	-	CUSTOM; S.S. W/ SILVER SOAK & ½" COLD WATER NOZZLE W/ SHUT OFF IN TROUGH
37	CLEAN DISH TABLE	S.S. CUSTOM	1	-	-	-	-	-	-	-	-	-	-	CUSTOM; S.S.
38	DISPOSER	HOBART, FD3-200-D2	1	1/2"	-	-	2"	2	-	6.6	208	3	-	-

NOTES:

1) ONE TIER DISPLAY STAND. 1/4" PLATE GLASS SHELVES. GLASS ENDS & HALF HEIGHT FOODSHIELD.
2) DRAINBOARDS MUST BE AT LEAST 24"x24", NSF APPROVED CONSTRUCTION.
3) FOOD SERVICE EQUIPMENT CONTRACTOR SHALL COORDINATE WITH PLUMBING, MECHANICAL, AND ELECTRICAL DRAWINGS AND VERIFY WITH MANUFACTURER'S SHOP DRAWINGS FOR EQUIPMENT UTILITY REQUIREMENTS.
4) UTILITY WALL SHALL BE CONSTRUCTED WITH 6" 16 GA. METAL STUDS, 16" O.C. WITH 1/2" GYPSUM GREEN BOARD AND WRAPPED WITH 4x4 CERAMIC TILE.
5) ALL EXPOSED CORNERS IN KITCHEN AND SERVING LINE AREA SHALL HAVE STAINLESS STEEL CORNER GUARDS.
6) ALL EQUIPMENT, WITH THE EXCEPTION OF TOASTERS, MICROWAVES, HAND MIXERS, AND WATER HEATERS MUST BE NSF/ANSI APPROVED FOR THE INTENDED USE OF THE EQUIPMENT.
7) ENTIRE KITCHEN, OFFICE, SERVING LINE, DRY STORAGE AREA, TOILET & SOAP STORAGE MUST HAVE NON-ABSORBENT, WASHABLE ACOUSTICAL CEILING TILE, REFER TO ROOM FINISH SCHEDULE, SHEET A602.
8) ALL WALLS MUST BE SMOOTH WATER RESISTANT, CLEANABLE SURFACE, REFER TO ROOM FINISH SCHEDULE, SHEET A602.
9) BATHROOM TO HAVE HOT & COLD RUNNING WATER THROUGH A MIXING FAUCET, WASHABLE WALLS, & WASHABLE , NON-ABSORBENT CEILING, HOT WATER TO BE A MINIMUM OF 100°F, REFER TO ROOM FINISH SCHEDULE, SHEET A602.
10) LIGHTING IN WALK-IN COOLER & FREEZER MUST BE A MINIMUM OF 10ft CANDLES 30 INCHES OFF THE FLOOR IN ALL AREAS OF THE WALK-IN UNITS.
11) FOOD PREP AREAS MUST BE A MINIMUM OF 50ft CANDLES.



1 A603 **ENLARGED KITCHEN PLAN**
SCALE: 1/4" = 1'-0"

CONTRACTOR TO VERIFY ALL DIMENSIONS.

PINNACLE ARCHITECTURE
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ISSUE DATE: 04.30.2019
DRAWN BY: JR
CHECKED BY: PMW/REB
PROJECT: 1821

STUMP SOUND ELEMENTARY SCHOOL
ONSLOW COUNTY SCHOOLS
STUMP SOUND, NORTH CAROLINA

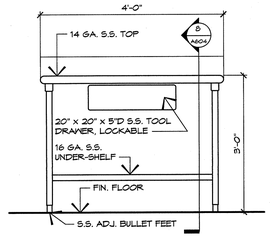
ENLARGED KITCHEN PLAN & FOOD SERVICE EQUIPMENT SCHEDULE

REVISION SCHEDULE

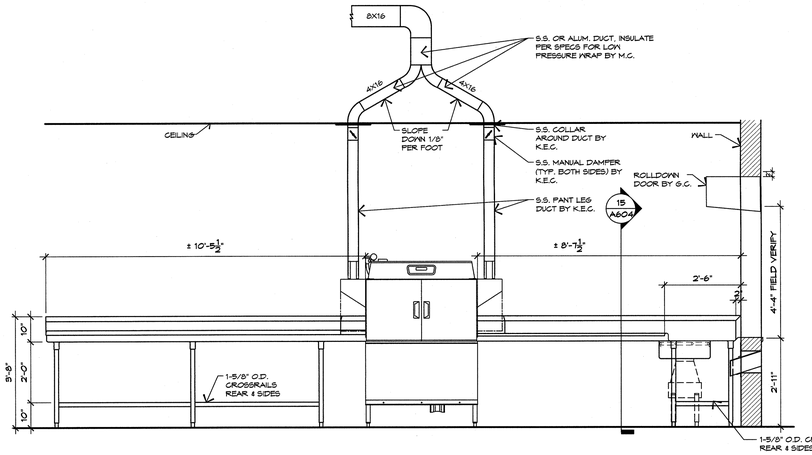
A	DATE	REFERENCE

THIS DRAWING IS THE PROPERTY OF THE ARCHITECTS AND CAN NOT BE USED FOR CONSTRUCTION PURPOSES OR REPRODUCED WITHOUT WRITTEN CONSENT OF THE ARCHITECT.

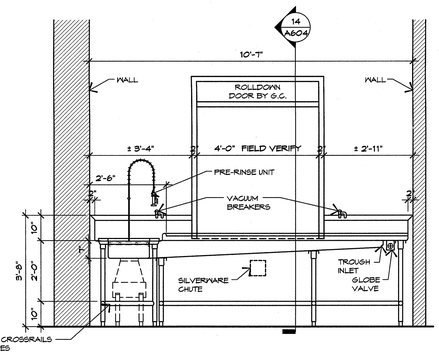
A603



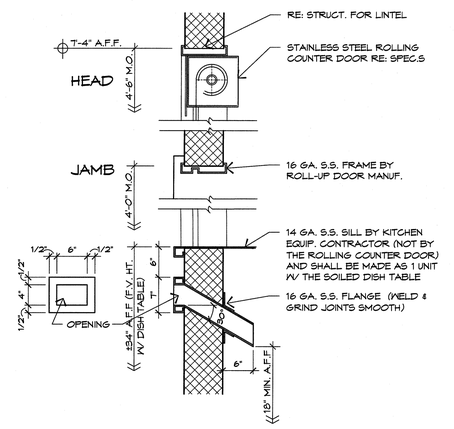
17 A604 **WORK TABLE DETAIL**
SCALE: 3/4" = 1'-0" ITEM# 27.1



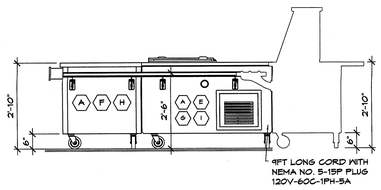
16 A604 **CLEAN & SOILED DISHTABLE DETAIL**
SCALE: 1/2" = 1'-0" ITEM# 36 & 37



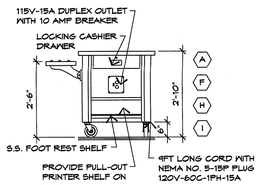
15 A604 **SOILED DISHTABLE DETAIL**
SCALE: 1/2" = 1'-0" ITEM# 36



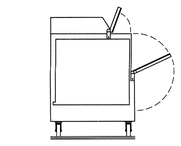
14 A604 **SECTION @ DISH RETURN WINDOW**
SCALE: 1" = 1'-0"



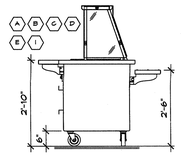
13 A604 **ELEVATION A**
SCALE: 1/2" = 1'-0" ITEMS# 19 & 20



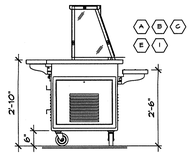
12 A604 **ELEVATION B**
SCALE: 1/2" = 1'-0" ITEM# 20



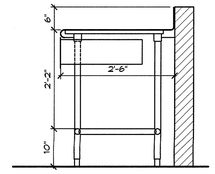
11 A604 **ELEVATION C**
SCALE: 1/2" = 1'-0" ITEM# 15



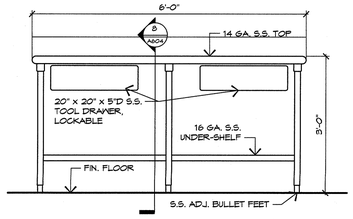
10 A604 **HOT FOOD TABLE SIDE ELEVATION**
SCALE: 1/2" = 1'-0" ITEM# 16



9 A604 **COLD FOOD TABLE SIDE ELEVATION**
SCALE: 1/2" = 1'-0" ITEM# 17



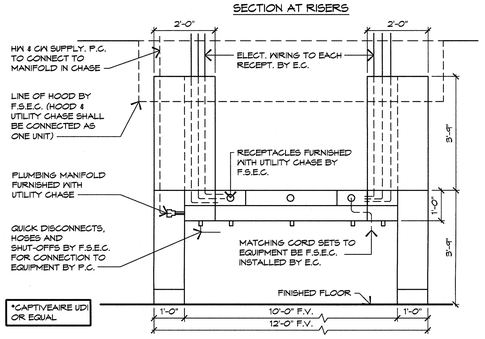
8 A604 **SECT. @ WORK TABLES**
SCALE: 3/4" = 1'-0" ITEM #27 & 27.1



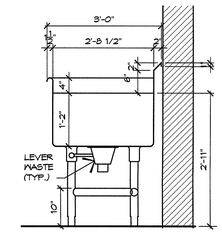
7 A604 **WORK TABLE DETAIL**
SCALE: 3/4" = 1'-0" ITEM# 27



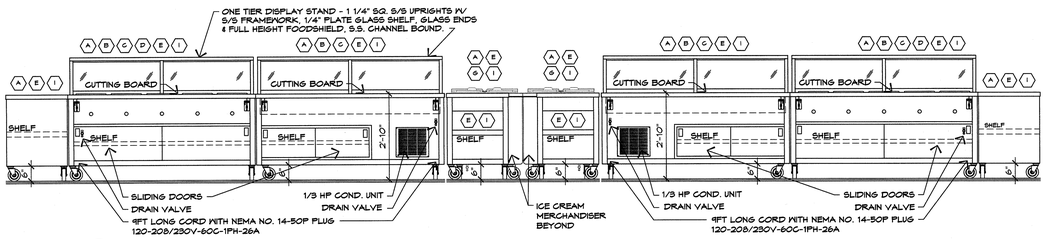
SECTION AT RISERS



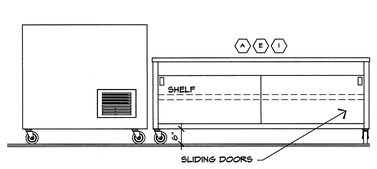
4 A604 **S.S. UTILITY DISTRIBUTION SYSTEM DETAIL**
SCALE: 1/2" = 1'-0"



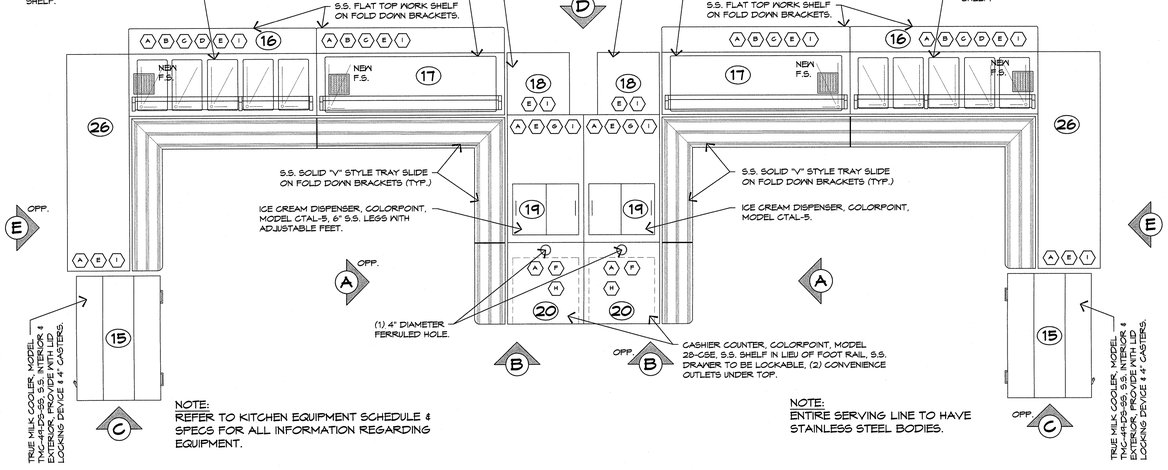
3 A604 **SECTION @ POT WASH SINK**
SCALE: 3/4" = 1'-0" ITEM# 21, 22, 29



6 A604 **ELEVATION D**
SCALE: 1/2" = 1'-0"



5 A604 **ELEVATION E**
SCALE: 1/2" = 1'-0" ITEMS# 15 & 26



NOTE:
REFER TO KITCHEN EQUIPMENT SCHEDULE & SPECS FOR ALL INFORMATION REGARDING EQUIPMENT.

NOTE:
ENTIRE SERVING LINE TO HAVE STAINLESS STEEL BODIES.

2 A604 **ENLARGED SERVING LINE PLAN**
SCALE: 1/2" = 1'-0"

SERVING LINE CONSTRUCTION NOTES:

TOP - 14 GA. S.S. WITH SQ. TURNDOWN ON ALL SIDES W/ CORNERS WELDED & POLISHED TO A #4 SATIN FINISH - ALL EDGES TO HAVE #7 HI-LITE FINISH.

BODY - S.S. W/ SMOOTH SURFACE & ROUNDED CORNERS.

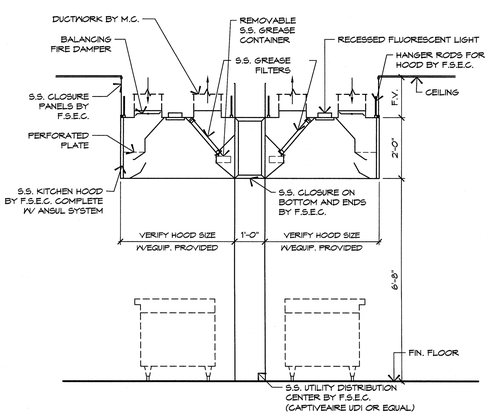
BODY - INTERIOR TO BE REINFORCED W/ 12 GA. GALV. AS TO SUPPORT SHELVING - FURNISH W/ 1" S.S. VERTICAL TRIM AND 1/2" S.S. HORIZONTAL TRIM ALONG BOTTOM EDGES.

BODY SHELVING - 18 GA. S.S. INSERT W/ REMOVABLE TOP FOR ACCESS CORNERS TO BE COVED - FURNISH INTERMEDIATE ADJUSTABLE SHELF MOUNTED ON PILASTER STRIPS WHERE REQUIRED.

CASHIER RECESS - 18 GA. S/S LINER W/ 18 GA S.S. PULL-OUT SHELF MOUNTED ON S.S. ROLLER BEARING SLIDES IN LIEU OF FOOT REST.

- A TRAY SLIDE - 16 GA. S/S W/ THREE (3) INVERTED RIBS (3/16" HIGH). MOUNT ON S/S FOLD-DOWN BRACKETS.
- B CUTTING BOARD - 16 GA. S/S W/ EDGES TURNED DOWN, WELDED & POLISHED. MOUNT ON S/S FOLD-DOWN BRACKETS.
- C ONE TIER DISPLAY STAND - 1 1/4" SQ. S/S UPRIGHTS W/ S/S FRAMEWORK, 1/4" PLATE GLASS SHELVES, GLASS ENDS & FULL HEIGHT FOODSHIELD, S/S CHANNEL BOUND.
- D DRAINS - EACH HOT FOOD WELL SHALL BE PLUMBED TO COMMON MANIFOLD AND EXTENDED TO A SHUT OFF VALVE BELOW THE BODY.
- E LINE-UP LOCKS - BARREL BOLT & SLOT DESIGN W/ CAM LOCKING ACTION. LOCKS TO BE MOUNTED ON OPPOSING CORNERS FOR MAXIMUM VERSATILITY.
- F FLUSH MOUNT OUTLET - ELECTRICAL REQUIREMENTS AS PER SPECIFICATIONS., PREWIRED TO FUSE OR SURGE PROTECTOR AS SPECIFIED. MIN. 72" GROUND SUPPLY CORD AS REQ'D.
- G LID LOCKING ASSEMBLY - 16 GA. S/S INVERTED CHANNEL CONSTRUCTION W/ KEYED "T" HANDLE LOCKING DEVICE AT END.
- H CASHIER'S DRAWER ASSEMBLY - 5" DEEP POWDER COATED STEEL LINER, MOUNTED ON ROLLER SLIDES. W/ LOCK & KEY
- I LEGS - 6" CASTERS.

NOTE: HOOD FANS BY F.S.E.C. HOOD SUPPLY AIR SHALL BE CONDITIONED (HEATED & COOLED). HOOD SHALL BE SHORT CIRCUIT TYPE.



1 A604 **SECTION @ EXHAUST HOOD**
SCALE: 1/2" = 1'-0"

CONTRACTOR TO VERIFY ALL DIMENSIONS.

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ISSUE DATE: 04.30.2014
DRAWN BY: JR
CHECKED BY: FMM/KRB
PROJECT: 1521

STUMP SOUND ELEMENTARY SCHOOL
ONSLOW COUNTY SCHOOLS
STUMP SOUND, NORTH CAROLINA

SERVING LINE PLAN & DETAILS

REVISION SCHEDULE

#	DATE	REFERENCE

A604

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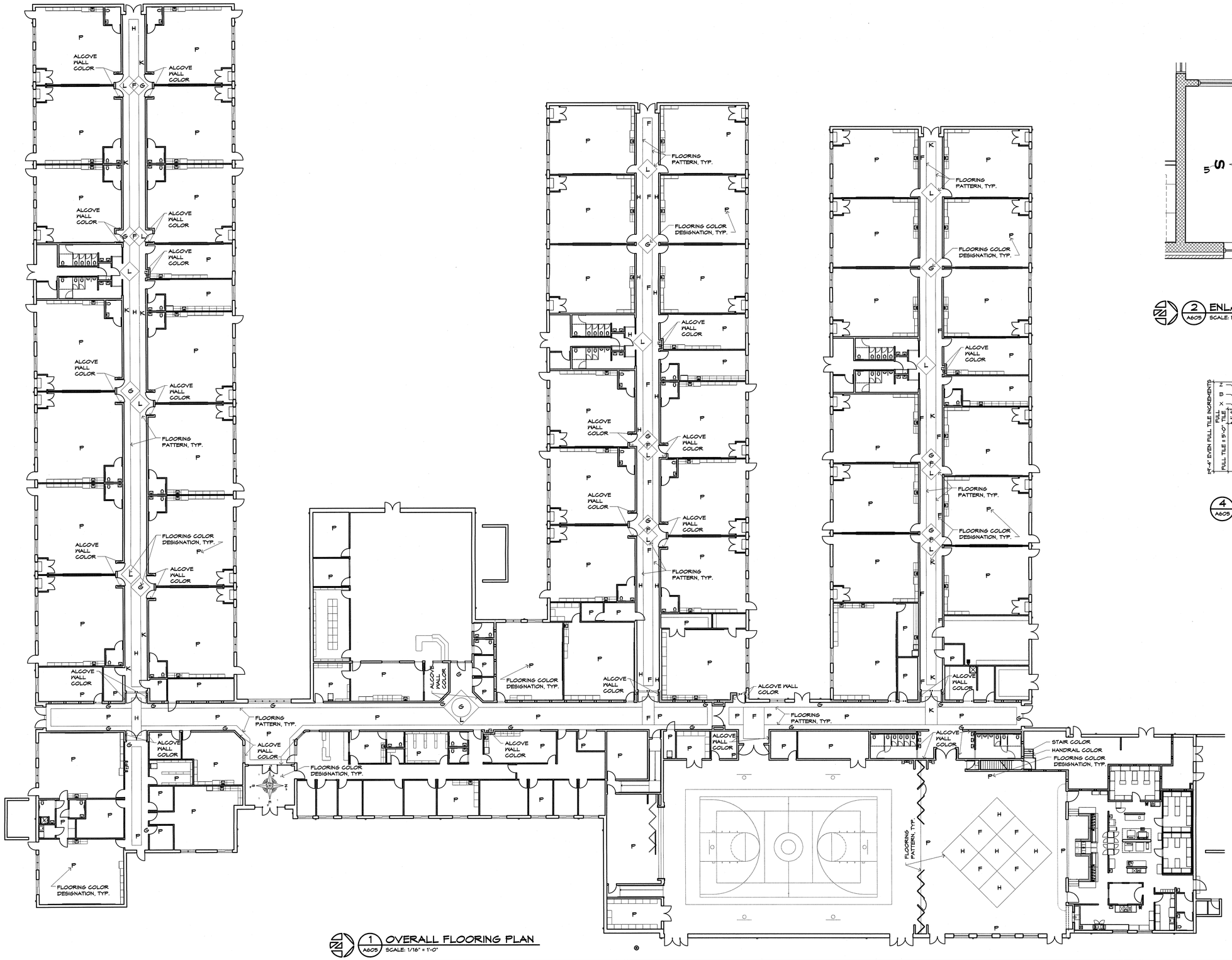
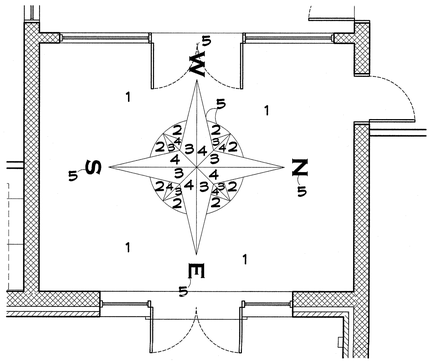
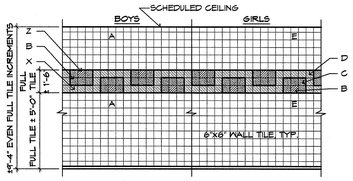


1 A605 OVERALL FLOORING PLAN
SCALE: 1/16" = 1'-0"



2 A605 ENLARGED TERRAZZO FLOOR PLAN
SCALE: NO SCALE



4 A605 TYP. ELEV. - GROUP TOILET
SCALE: 1/4" = 1'-0"

CONTRACTOR TO VERIFY ALL DIMENSIONS.

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4-30-19
NORTH CAROLINA
MATTHEWS, NC

FRANK McCRADY WILLIAMS
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ISSUE DATE: 04.30.2019
DRAWN BY: JR
CHECKED BY: FMW/REB
PROJECT: 1821

STUMP SOUND ELEMENTARY SCHOOL
ONSLOW COUNTY SCHOOLS
STUMP SOUND, NORTH CAROLINA

OVERALL FLOORING PLAN

REVISION SCHEDULE

△	DATE	REFERENCE

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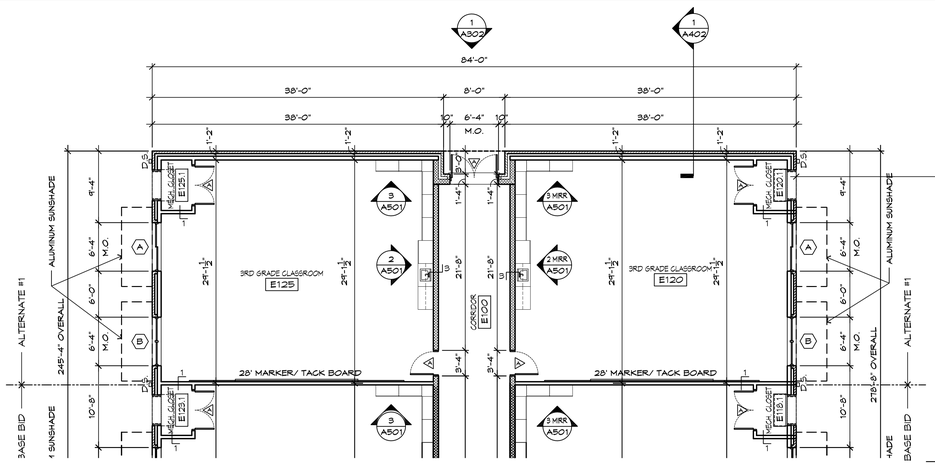
A605



REFER TO SHEET A202 FOR CONTINUATION OF PLAN

ALTERNATE #1
REFER TO SHEET A602 FOR ROOM FINISH SCHEDULE NOTES.

ROOM FINISH SCHEDULE

ALTERNATE #1 - CLASSROOM ADDITION

NO.	NAME	FLOOR	BASE	WALL		CEILING		COMMENTS
				MAT'L	FINISH	MAT'L	HEIGHT	
AREA D								
D124	5TH GRADE CLASSROOM	VCT	4" RUBBER	CMU/DW	PAINT	ACOUS.	9'-4"	--
D124.1	MECH. CLOSET	VCT	4" RUBBER	DW	PAINT	ACOUS.	9'-4"	--
D125	5TH GRADE CLASSROOM	VCT	4" RUBBER	CMU/DW	PAINT	ACOUS.	9'-4"	--
D125.1	MECH. CLOSET	VCT	4" RUBBER	DW	PAINT	ACOUS.	9'-4"	--
AREA E								
E120	3RD GRADE CLASSROOM	VCT	4" RUBBER	CMU/DW	PAINT	ACOUS.	9'-4"	--
E120.1	MECH. CLOSET	VCT	4" RUBBER	DW	PAINT	ACOUS.	9'-4"	--
E125	3RD GRADE CLASSROOM	VCT	4" RUBBER	CMU/DW	PAINT	ACOUS.	9'-4"	--
E125.1	MECH. CLOSET	VCT	4" RUBBER	DW	PAINT	ACOUS.	9'-4"	--
AREA G								
G124	1ST GRADE CLASSROOM	VCT	4" RUBBER	CMU/DW	PAINT	ACOUS.	9'-4"	--
G124.1	MECH. CLOSET	VCT	4" RUBBER	DW	PAINT	ACOUS.	9'-4"	--
G124.2	TOILET	2" CT	6" CT W/COVE	CMU/DW	PAINT	D.W.	8'-0"	SEE NOTE#1 & 4
G125	1ST GRADE CLASSROOM	VCT	4" RUBBER	CMU/DW	PAINT	ACOUS.	9'-4"	--
G125.1	MECH. CLOSET	VCT	4" RUBBER	DW	PAINT	ACOUS.	9'-4"	--
G125.2	TOILET	2" CT	6" CT W/COVE	CMU/DW	PAINT	D.W.	8'-0"	SEE NOTE#1 & 4

ALTERNATE #1
REFER TO SHEET A601 FOR DOOR SCHEDULE NOTES.

DOOR SCHEDULE

ALTERNATE #1 - CLASSROOM ADDITION

DOOR NUMBER	SIZE	DOOR		FRAME		DETAIL	THRESHOLD	FIRE RATING	CLOSER	REMARKS
		STYLE	MAT'L	STYLE	MAT'L			RATING		
AREA D										
D124A	3'-0" x 7'-0"	A	WOOD	A	HM	H1/J1	--	--	--	--
D124.1A	PR 2'-6" x 8'-0"	D	WOOD	B	HM	H2/J2	--	--	--	SEE NOTE #10
D125A	3'-0" x 7'-0"	A	WOOD	A	HM	H1/J1	--	--	--	--
D125.1A	PR 2'-6" x 8'-0"	D	WOOD	B	HM	H2/J2	--	--	--	SEE NOTE #10
AREA E										
E120A	3'-0" x 7'-0"	A	WOOD	A	HM	H1/J1	--	--	--	--
E120.1A	PR 2'-6" x 8'-0"	D	WOOD	B	HM	H2/J2	--	--	--	SEE NOTE #10
E125A	3'-0" x 7'-0"	A	WOOD	A	HM	H1/J1	--	--	--	--
E125.1A	PR 2'-6" x 8'-0"	D	WOOD	B	HM	H2/J2	--	--	--	SEE NOTE #10
AREA G										
G124A	3'-0" x 7'-0"	A	WOOD	A	HM	H1/J1	--	--	--	SEE NOTE #2
G124B	3'-0" x 7'-0"	A	HM	C	HM	H5/J5	ALUMINUM	--	YES	SEE NOTE #2
G124.1A	PR 2'-6" x 8'-0"	D	WOOD	B	HM	H2/J2	--	--	--	SEE NOTE #10
G124.2A	3'-0" x 7'-0"	B	WOOD	A	HM	H2/J2	MARBLE	--	YES	SEE NOTE #1
G125A	3'-0" x 7'-0"	A	WOOD	A	HM	H1/J1	--	--	--	SEE NOTE #2
G125B	3'-0" x 7'-0"	A	HM	C	HM	H5/J5	ALUMINUM	--	YES	SEE NOTE #2
G125.1A	PR 2'-6" x 8'-0"	D	WOOD	B	HM	H2/J2	--	--	--	SEE NOTE #10
G125.2A	3'-0" x 7'-0"	B	WOOD	A	HM	H2/J2	MARBLE	--	YES	SEE NOTE #1

NOTE:
1. ROOFING CONTRACTOR TO PROVIDE CRICKETS/SADDLES TO UPSLOPE SIDES OF ALL ROOF TOP EQUIPMENT TO ENSURE POSITIVE DRAINAGE.
2. OPENINGS REQUIRED FOR MECHANICAL, ELECTRICAL AND PLUMBING ARE SHOWN ONLY FOR INFORMATION PURPOSES. REFER TO MECHANICAL, ELECTRICAL AND PLUMBING DRAWINGS TO CONFIRM EXACT LOCATIONS.
3. ALL ROOF PENETRATIONS WILL HAVE FACTORY PREPARED FLASHING BOOTS AND WILL BE FLASHED BY THE ROOFER.
4. G.C. TO COORDINATE DOWNSPOUT LOCATIONS W/ CANOPY MANUFACTURER & CIVIL. DRAINS TO BE CONNECTED TO LEADER SYSTEM TO ENABLE WATER TO BE CARRIED AWAY FROM BUILDING EXCEPT WHERE DRAINED THROUGH CURB. REFER TO CIVIL DRAWINGS. TYPICAL ALL CANOPIES.

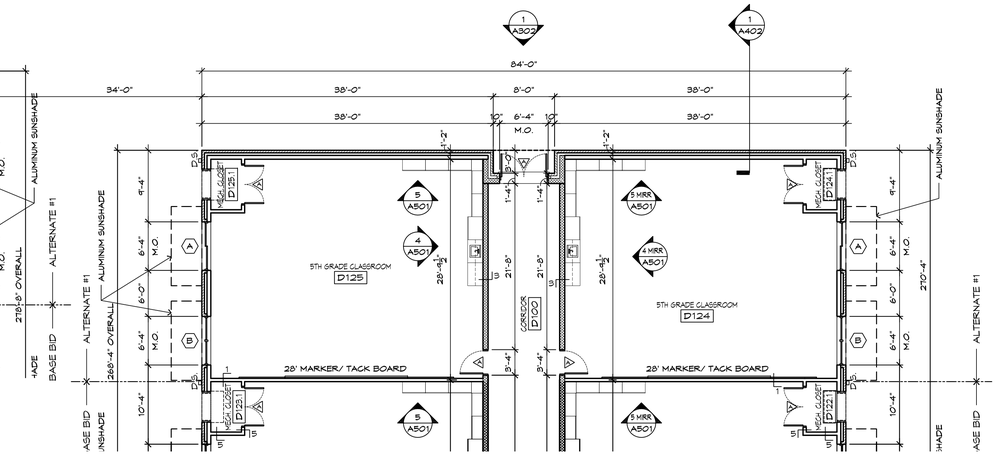
KEY

METAL ROOFING
REFER TO SPECIFICATIONS

ALUMINUM CANOPY
REFER TO SPECIFICATIONS

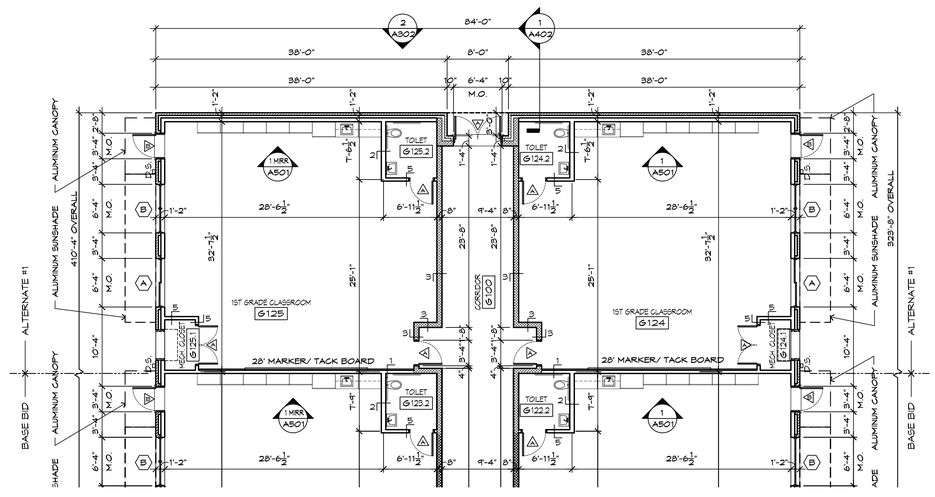
ABBREVIATIONS

DS - DOWNSPOUT



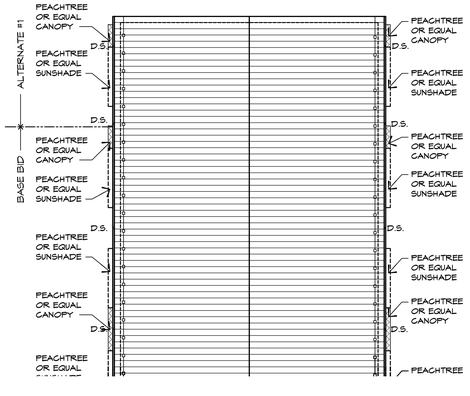
1 A100 PARTIAL FLOOR PLAN - AREA "D" & "E" - ALT. #1
SCALE: 1/8" = 1'-0"

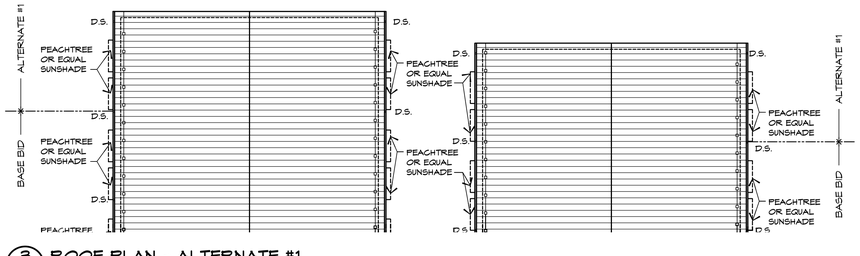
REFER TO SHEET A202 FOR CONTINUATION OF PLAN



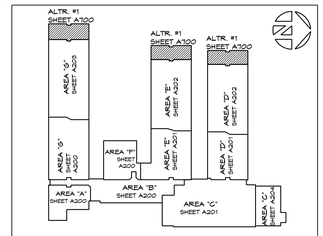
2 A100 PARTIAL FLOOR PLAN - AREA "G" - ALT. #1
SCALE: 1/8" = 1'-0"

REFER TO SHEET A203 FOR CONTINUATION OF PLAN





3 A100 ROOF PLAN - ALTERNATE #1
SCALE: 1" = 20'-0"



GENERAL NOTES:

ALL EXPOSED GYPSUM CORNERS
SHALL BE HAVE VINYL CORNER GUARDS- EQUAL TO THINLINE MODEL GS-215 FT BY AFCO LENGTH 8'-0" FROM FINISH FLOOR.

BLOCKING
G.C. SHALL PROVIDE APPROPRIATE BLOCKING FOR ALL DATA, AV EQUIPMENT, HANDRAILS, GRAB RAILS, TOILET ACCESSORIES, ETC. VERIFY EXACT LOCATIONS WITH THE OWNER. REFER TO CONSTRUCTION DOCUMENTS FOR APPROXIMATE LOCATIONS.

APPLIANCES
GENERAL CONTRACTOR PROVIDED APPLIANCES AS SHOWN ON THE CONTRACT DOCUMENTS, SUCH AS RANGES, MICROWAVES, DISHWASHERS, REFRIGERATORS WITH ICE MAKER (~18 CF), AND WASHER AND DRYER'S DESIGN BASIS SHALL BE EQUAL TO GE, WHIRLPOOL OR LG OF THE MOST ECONOMICAL MODEL UNLESS OTHERWISE NOTED.

MINI BLINDS
INSTALL MINI BLINDS ON ALL EXTERIOR WINDOWS, EXCLUDING CORRIDORS. REFER TO SECTION 12 21 13 IN SPECIFICATIONS.

MILLWORK
CONTRACTOR TO VERIFY EXACT LOCATION OF ALL MILLWORK WITH ARCHITECT BEFORE FABRICATION.

SPRINKLER HEADS
SHALL BE LOCATED IN CENTER OF CEILING TILES TYPICAL IN ALL LOCATIONS.

ALL EXPOSED GYPSUM WALLS
SHALL BE FINISHED WITH A "KNOCKDOWN" FINISH AND SEMI-GLOSS PAINT UNLESS OTHERWISE NOTED.

CONTRACTOR TO VERIFY ALL DIMENSIONS.

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ISSUE DATE: 04.30.2019
DRAWN BY: PMW/REB
CHECKED BY: PMW
PROJECT: 1821

STUMP SOUND ELEMENTARY SCHOOL
ONSLOW COUNTY SCHOOLS
STUMP SOUND, NORTH CAROLINA

ALTERNATE #1 - PARTIAL FLOOR PLANS, NOTES & DETAILS - AREA "D", "E" & "G"

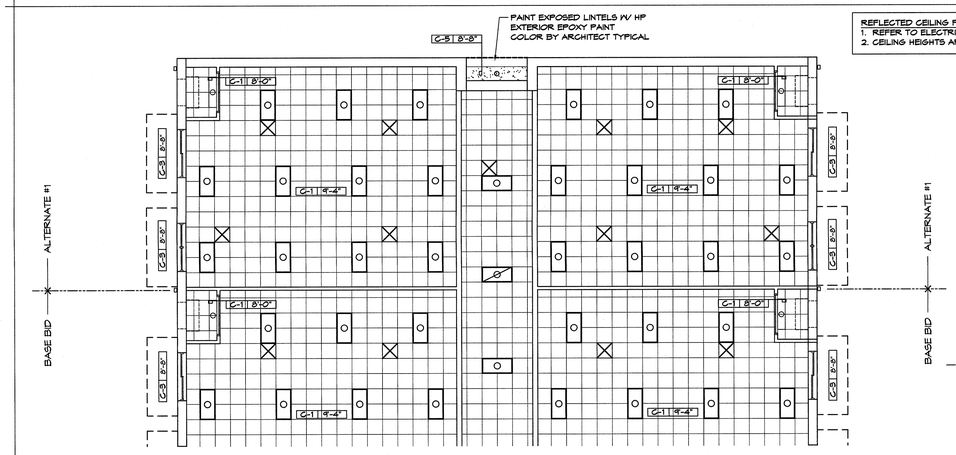
REVISION SCHEDULE

Δ	DATE	REFERENCE

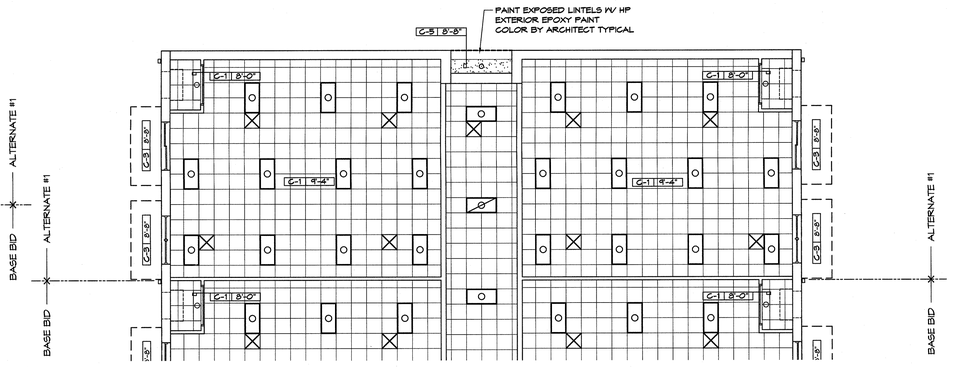
A700

THIS DRAWING IS THE PROPERTY OF THE ARCHITECTS AND CAN NOT BE USED FOR CONSTRUCTION PURPOSES OR REPRODUCED WITHOUT WRITTEN CONSENT OF THE ARCHITECT.

REFLECTED CEILING PLAN NOTES:
1. REFER TO ELECTRICAL AND MECHANICAL DRAWINGS FOR EXACT LIGHTING AND DIFFUSER LOCATIONS.
2. CEILING HEIGHTS ARE GIVEN ACCORDING TO THE FINISHED FLOOR ELEVATION DIRECTLY BELOW.

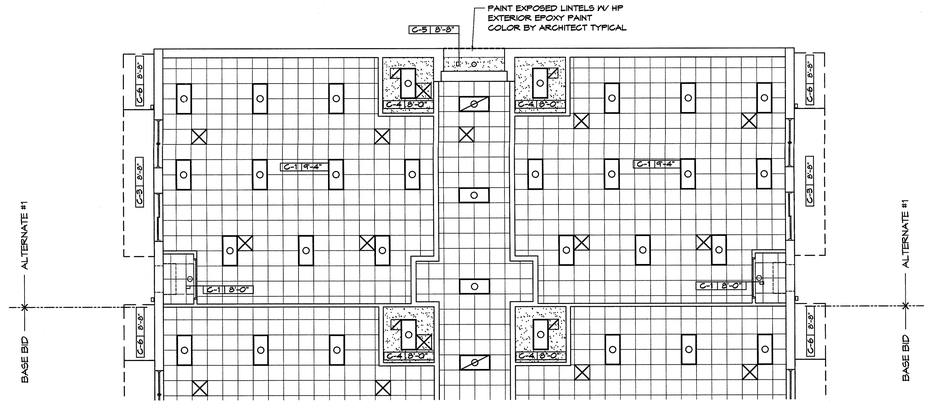


REFER TO SHEET A207 FOR CONTINUATION OF PLAN



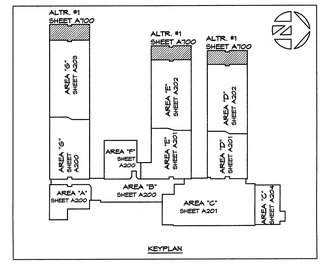
1 A701 PARTIAL REFLECTED CEILING PLAN - AREA "D" & "E" - ALT. #1
SCALE: 1/8" = 1'-0"

REFER TO SHEET A207 FOR CONTINUATION OF PLAN



2 A701 PARTIAL REFLECTED CEILING PLAN - AREA "G" - ALT. #1
SCALE: 1/8" = 1'-0"

REFER TO SHEET A208 FOR CONTINUATION OF PLAN



KEYPLAN

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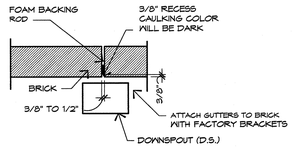
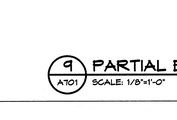


10 A701 TYP. EXPANSION JOINT
SCALE: N.T.S.

REFLECTED CEILING PLAN SYMBOLS

- 2X4' ACOUSTICAL LAY-IN CEILING GRID AND TILES
- LAY-IN GRID MOUNTED 2'x4' FLUORESCENT FIXTURE
- DRYWALL CEILING PAINTED
- SUSPENDED 4' FLUORESCENT FIXTURE
- HVAC SUPPLY GRILLE
- HVAC RETURN GRILLE /EXHAUST FAN GRILLE
- WALL MOUNTED LIGHT FIXTURE

3 A701 TYP. SYMBOLS
SCALE: NTS



9 A701 TYP. EXPANSION JOINT
SCALE: N.T.S.

CEILING LEGEND

C-1	24 X 24 X 5/8 LAY-IN PANELS (ARMSTRONG FINE FISSURE/HUMIGUARD)
C-2	NO CEILING, OPEN TO STRUCTURE ABOVE
C-3	EXPOSED METAL SUNSHADE BY PEACHTREE OR APPROVED EQUAL
C-4	DRYWALL CEILING, PAINTED
C-5	PRE-FINISHED ALUMINUM SOFFIT REFER TO SPECS (COLOR/TEXTURE BY ARCHITECT)
C-6	EXPOSED METAL CANOPY BY PEACHTREE OR APPROVED EQUAL

ELEVATION NOTES: TYPICAL ALL BUILDINGS

1. DOWNSPOUT TO MATCH WALL COLOR AS CLOSE AS POSSIBLE.
2. EXPANSION JOINTS BEHIND DOWN SPOUTS.
3. G.C. TO CONTACT COMMERCIAL GRADE AIR BARRIER (TYVEK) MANUFACTURER TO COORDINATE PROPER INSTALLATION AT ALL OPENINGS. ALL MANUFACTURER'S WARRANTIES WILL APPLY. FLASHING AROUND ALL OPENINGS, TYP.
4. PROVIDE LAMINATED COPPER FABRIC FLASHING AT ALL LINTEL CONDITIONS. G.C. TO CONTACT MANUFACTURER TO COORDINATE PROPER INSTALLATION. REFER TO SHEET A107 FOR FURTHER INFORMATION.
5. USE 4"x4"x8" SOLID BRICK @ ALL SOLDIER COURSE CORNERS
6. ALL COLORS AND TEXTURE SHALL BE BY ARCHITECT.
7. ROWLOCK WILL BE A DIFFERENT COLOR.
8. UTILITY CLOSER SOLDIER COURSE WILL BE A DIFFERENT COLOR.
9. FIELD BRICK WILL BE A DIFFERENT COLOR.
10. ROWLOCK, UTILITY CLOSURE SOLDIER, AND FIELD BRICK LISTED ABOVE MAY BE A DIFFERENT TEXTURE.

TYPICAL CEILING NOTES:

SEISMIC DESIGN CATEGORY "C"

BASIC CONNECTIONS, PERIMETER AND BRACING

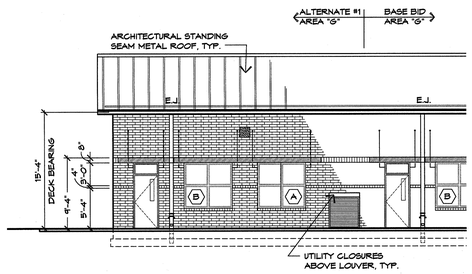
1. 60 LB. MINIMUM INTERSECTION STRENGTH LIMITS @MT/GT .
2. VERTICAL HANGER WIRE 12 GA. @ 4'-0" O.C.
3. INTERMEDIATE OR HEAVY DUTY MAIN TEES.
4. 1 IN 6 MAXIMUM PLUMB OF VERTICAL HANGER WIRES PER ASTM C635.
5. PERIMETER VERTICAL HANGER WIRES NOT MORE THAN 8" FROM WALL UNLESS MOLDING IS LESS THAN 7/8".
6. 3/8" MINIMUM GRID END/WALL CLEARANCE.
7. MINIMUM 7/8" PERIMETER CLOSURE MOLDING WIDTH UNLESS USING PERIMETER WIRES.
8. GRID CONNECTION TO PERIMETER ATTACHED ON TWO WALLS NOT PERMITTED.
9. PERIMETER TEE ENDS REQUIRED TO BE TIED TOGETHER.
10. PARTITION ATTACHMENT ALLOWED ONLY IF CEILING IS CAPABLE OF MOVING LATERALLY.

LIGHTING FIXTURE ATTACHMENT

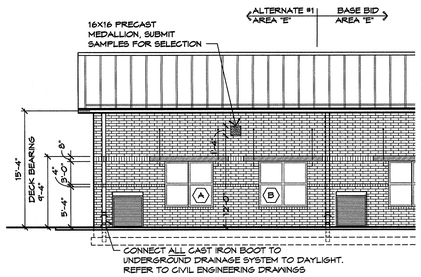
1. LIGHT FIXTURE (ALL TYPES) MECHANICALLY ATTACHED TO GRID NEC 410-16 (TWO PER FIXTURE UNLESS INDEPENDENTLY SUPPORTED).
2. PENDENT HUNG FIXTURES DIRECTLY SUPPORTED FROM STRUCTURE WITH 9 GA. WIRE (OR APPROVED ALTERNATE).
3. RIGID LAY-IN OR CAN LIGHT FIXTURES:
   - < 10 LBS. - ONE WIRE TO STRUCTURE (MAY BE SLACK).
   - 10-56 LBS. - TWO WIRES FROM HOUSING TO STRUCTURE (MAY BE SLACK).
   - > 56 LBS. - SUPPORTED DIRECTLY TO STRUCTURE BY APPROVED ALTERNATE.
   - < 20 LBS. - POSITIVELY ATTACHED TO GRID.
   - 20-56 LBS. - POSITIVELY ATTACHED TO GRID AND TWO WIRES TO STRUCTURE (MAY BE SLACK).
   - 56 LBS. - DIRECTLY SUPPORTED TO STRUCTURE.

SERVICE APPLICATIONS

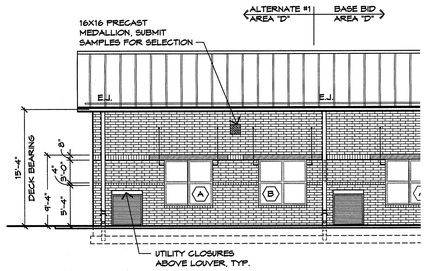
1. LESS THAN 20 LBS. POSITIVELY ATTACHED TO GRID.
2. 20 TO 56 LBS. POSITIVELY ATTACHED TO GRID AND TWO WIRES TO STRUCTURE (CAN BE SLACK).
3. MORE THAN 56 LBS. MUST BE DIRECTLY SUPPORTED TO STRUCTURE.
4. MINIMUM 3/8" ON ALL SIDES PERTAINING TO SPRINKLER HEADS AND OTHER PENETRATION CLEARANCES.



8 A701 PARTIAL EXTERIOR ELEV. - ALTERNATE #1
SCALE: 1/8"=1'-0"



7 A701 PARTIAL EXTERIOR ELEV. - ALTERNATE #1
SCALE: 1/8"=1'-0"



4 A701 PARTIAL EXTERIOR ELEV. - ALTERNATE #1
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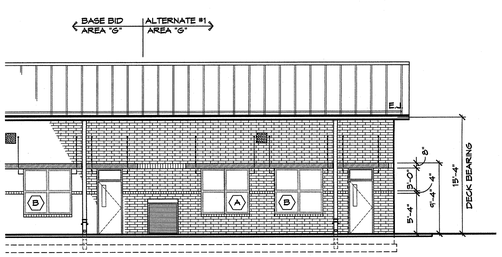

9 A701 PARTIAL EXTERIOR ELEV. - ALTERNATE #1
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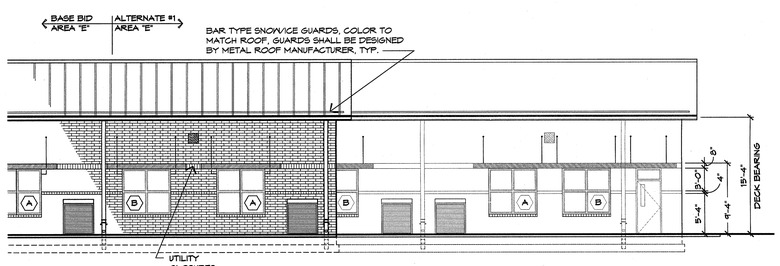

6 A701 PARTIAL EXTERIOR ELEV. - ALTERNATE #1
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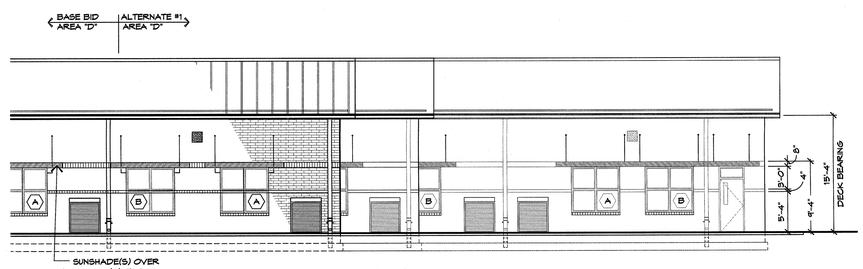

5 A701 PARTIAL EXTERIOR ELEV. - ALTERNATE #1
SCALE: 1/8"=1'-0"

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ISSUE DATE: 04.30.2014
DRAWN BY: JR
CHECKED BY: PHW/REB
PROJECT: 1921

STUMP SOUND ELEMENTARY SCHOOL
ONSLOW COUNTY SCHOOLS
STUMP SOUND, NORTH CAROLINA

ALTERNATE #1 - PARTIAL REFLECTED CEILING PLAN - AREA "D", "E" & "G"

REVISION SCHEDULE

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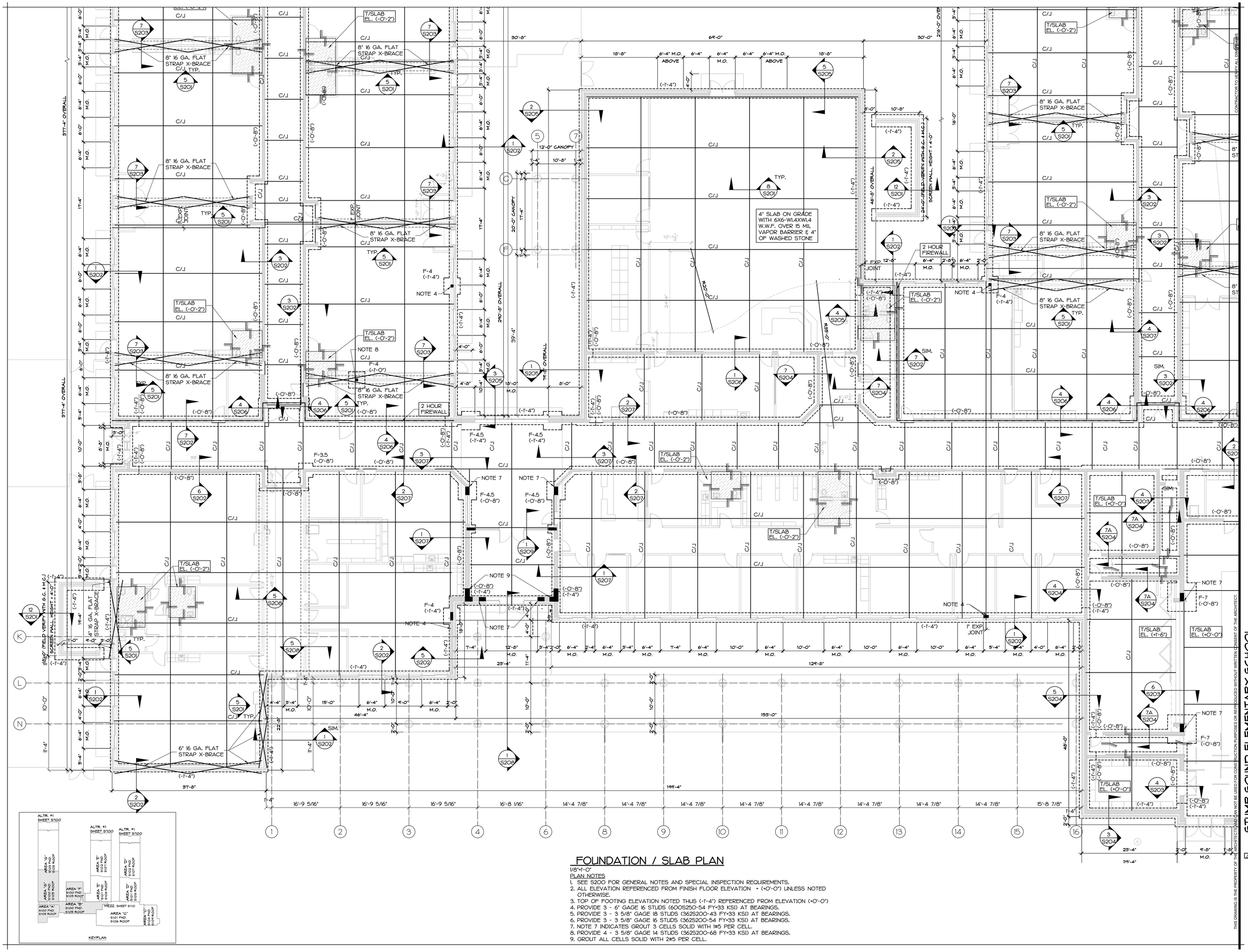
A701



FOUNDATION / SLAB PLAN

1/8"=1'-0"

PLAN NOTES

1. SEE S200 FOR GENERAL NOTES AND SPECIAL INSPECTION REQUIREMENTS.
2. ALL ELEVATION REFERENCED FROM FINISH FLOOR ELEVATION = (+0'-0") UNLESS NOTED OTHERWISE.
3. TOP OF FOOTING ELEVATION NOTED THUS (-1'-4") REFERENCED FROM ELEVATION (+0'-0")
4. PROVIDE 3 - 6" GAGE 16 STUDS (600S250-54 FY=33 KSI) AT BEARINGS.
5. PROVIDE 3 - 3 5/8" GAGE 18 STUDS (362S200-43 FY=33 KSI) AT BEARINGS.
6. PROVIDE 3 - 3 5/8" GAGE 16 STUDS (362S200-54 FY=33 KSI) AT BEARINGS.
7. NOTE 7 INDICATES GROUT 3 CELLS SOLID WITH 1#5 PER CELL.
8. PROVIDE 4 - 3 5/8" GAGE 14 STUDS (362S200-68 FY=33 KSI) AT BEARINGS.
9. GROUT ALL CELLS SOLID WITH 2#5 PER CELL.

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PROJECT: 1821

STUMP SOUND ELEMENTARY SCHOOL
ONSLOW COUNTY SCHOOLS
STUMP SOUND, NORTH CAROLINA

FOUNDATION/SLAB PLAN - AREA "A", "B", "F" & "G"

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S100

FOUNDATION / SLAB PLAN

1/8"=1'-0"

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Russell M. Ruggles, Jr.
8/7/19

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STUMP SOUND ELEMENTARY SCHOOL
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FOUNDATION/SLAB PLAN -
AREA "C", "D" & "E"

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S101

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FOUNDATION / SLAB PLAN

1/8"=1'-0"

PLAN NOTES

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STUMP SOUND ELEMENTARY SCHOOL
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STUMP SOUND, NORTH CAROLINA
FOUNDATION/SLAB PLAN - AREA "D" & "E"

REVISION SCHEDULE

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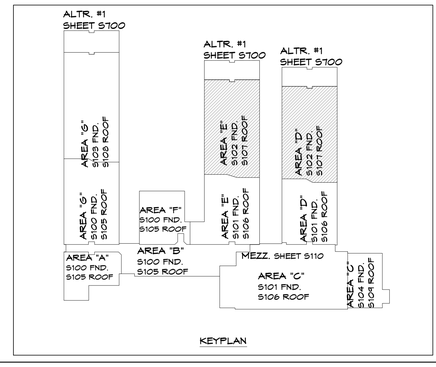
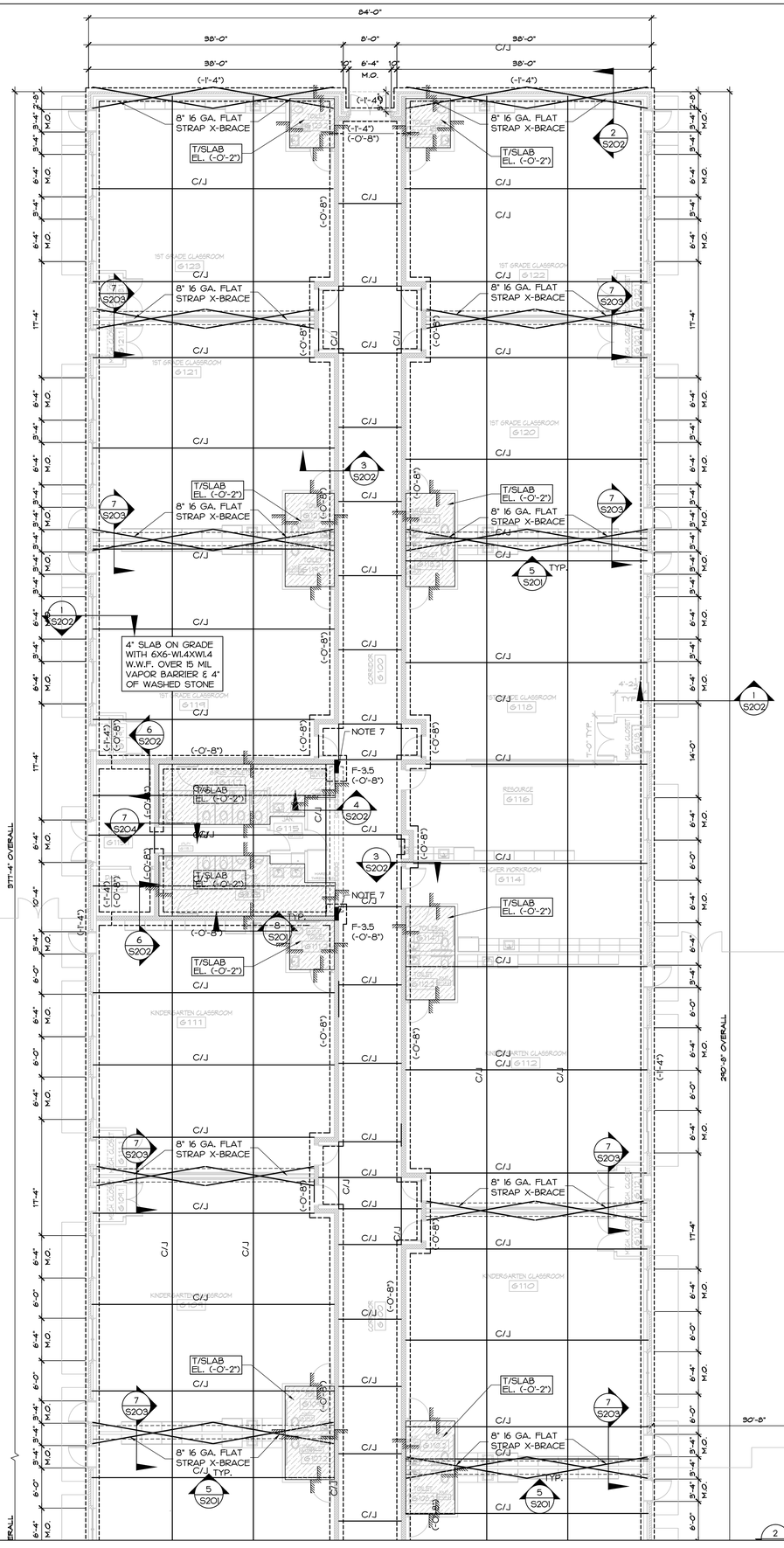


S102



FOUNDATION / SLAB PLAN

1/8"=1'-0"

PLAN NOTES

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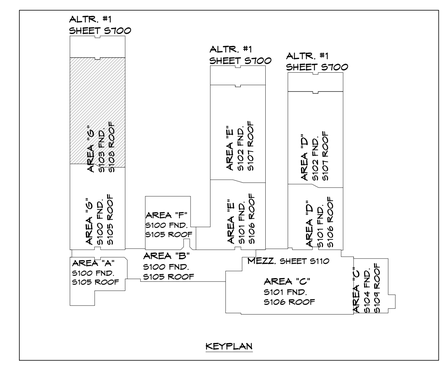

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STUMP SOUND ELEMENTARY SCHOOL
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STUMP SOUND, NORTH CAROLINA
FOUNDATION/SLAB PLAN - AREA "G"

S103

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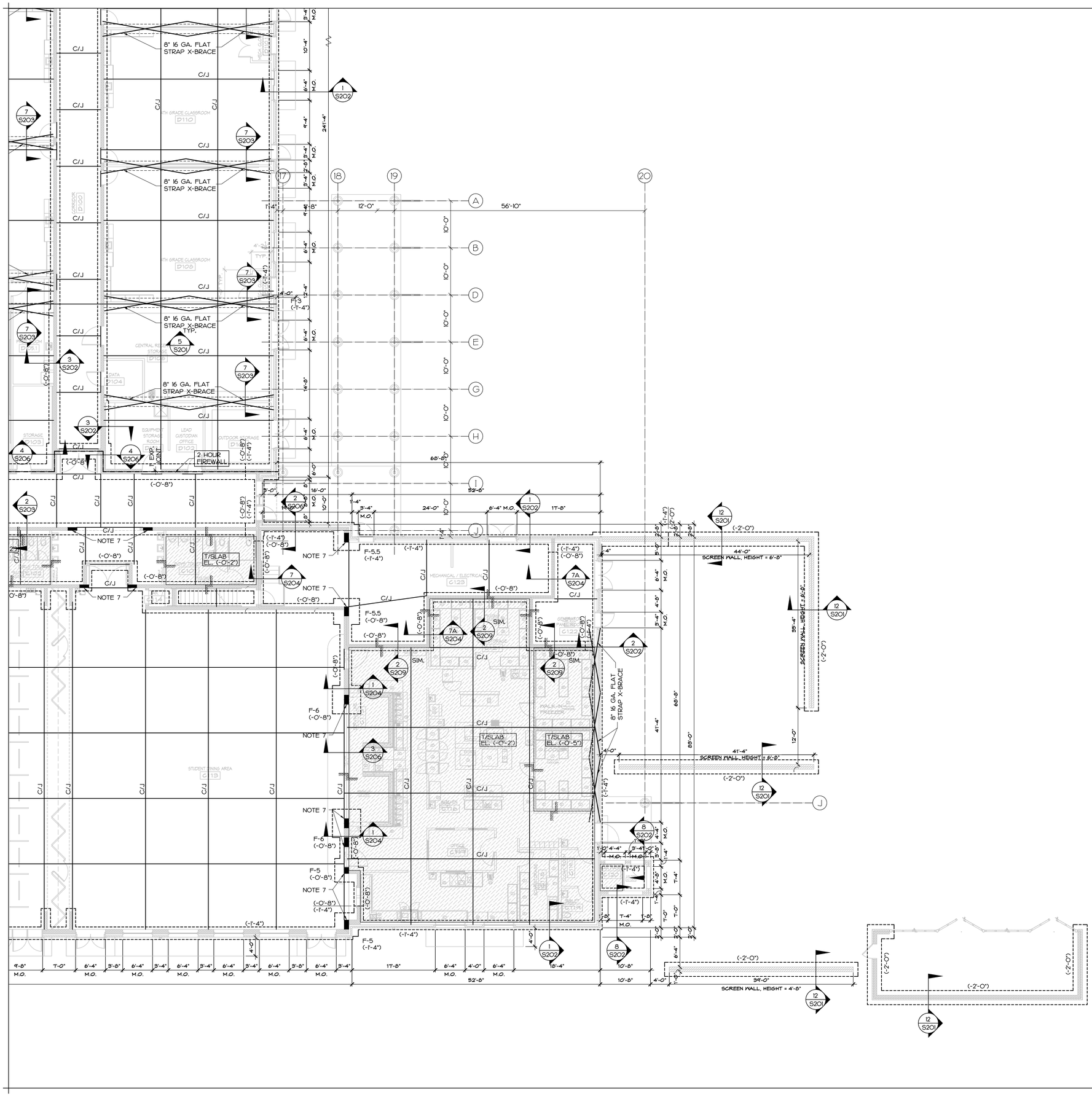
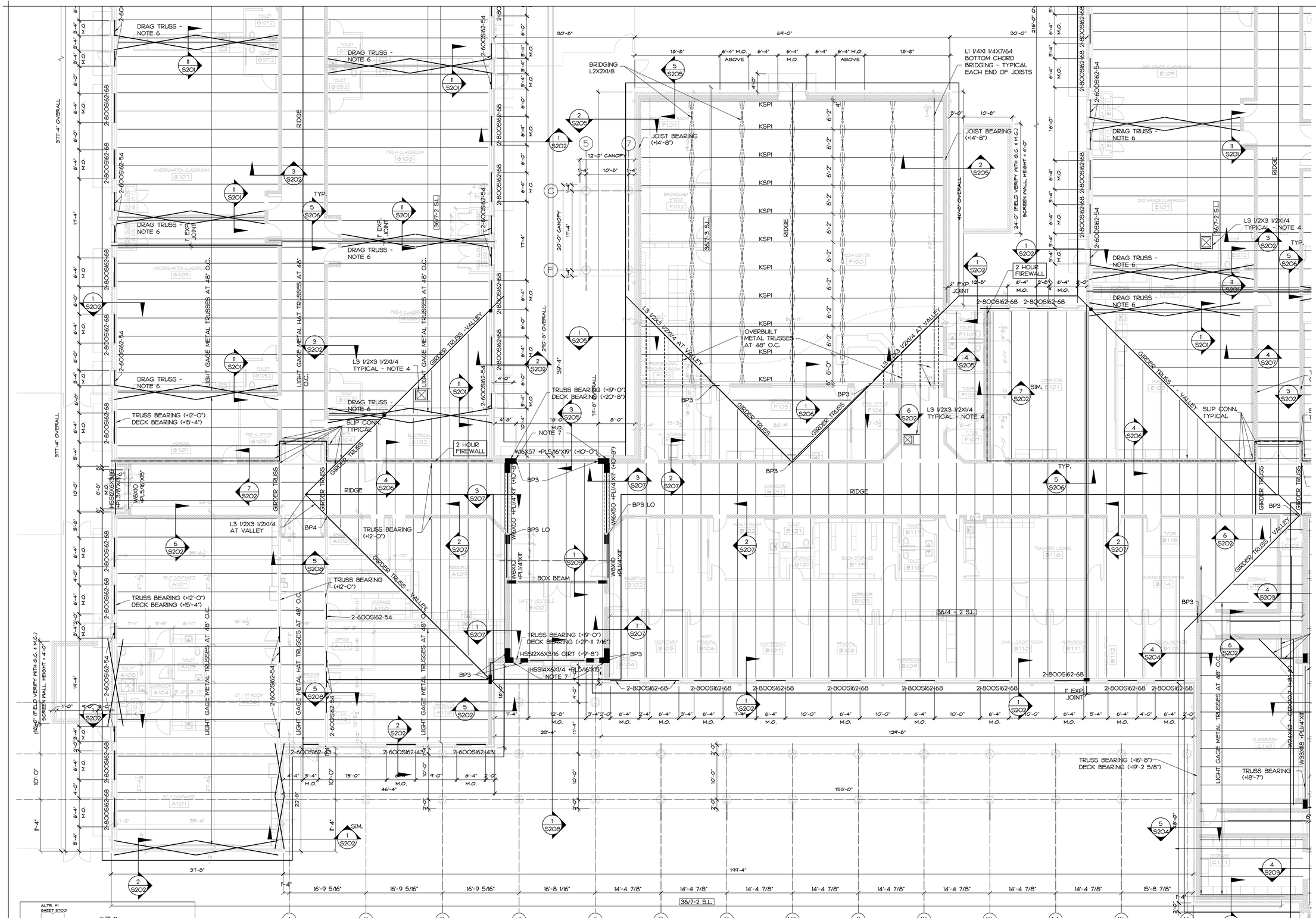

8" 16 GA. FLAT STRAP X-BRACE
8" 16 GA. FLAT STRAP X-BRACE
8" 16 GA. FLAT STRAP X-BRACE TYP.
8" 16 GA. FLAT STRAP X-BRACE
8" 16 GA. FLAT STRAP X-BRACE
2 HOUR FIREWALL
EXP. JOINT
T/SLAB EL. (-0'-2")
T/SLAB EL. (-0'-5")
NOTE 7
SIM.
SCREEN WALL, HEIGHT = 6'-8"
SCREEN WALL, HEIGHT = 4'-8"
56'-10"
241'-4"
52'-8"
68'-8"
41'-4"
89'-0"
95'-4"
44'-0"
41'-4"
39'-0"
12'-0"
24'-0"
17'-8"
18'-4"
10'-8"
68'-8"
6'-4" M.O.
10'-0" M.O.
16'-0" M.O.
3'-4" M.O.
4'-4" M.O.
12'-4" M.O.
14'-8" M.O.
F-5.5 (-1'-4")
F-5.5 (-0'-8")
F-6 (-0'-8")
F-5 (-0'-8")
F-5 (-1'-4")
F3 (-1'-4")
(-0'-8")
(-1'-4")
(-2'-0")
(-2'-0")
(-2'-0



ROOF FRAMING PLAN

1/8"=1'-0"

PLAN NOTES:

1. SEE SHEET S200 FOR GENERAL NOTES AND SPECIAL INSPECTION REQUIREMENTS.
2. SEE PLAN FOR TOP OF STEEL ELEVATION.
3. ROOF DECK SHALL BE 1 1/2" GAGE 22 WIDE RIB ROOF DECK (PAINTED UNLESS NOTED OTHERWISE.
   DECK CONNECTION KEY
   36/7 - 2 S.L.
   NUMBER OF #10 TEK SCREWS PER DECK SPAN
   DECK FASTENER PATTERN WITH #12 TEK SCREWS - SEE 3/S201
4. COORDINATE ALL OPENING SIZES AND LOCATIONS WITH MECHANICAL SUBCONTRACTOR.
5. ALL ROOF SLOPES SHALL BE 2/12 UNLESS NOTED OTHERWISE.
6. CENTER DRAG TRUSS OVER BRACED WALL BELOW. DESIGN TRUSSES FOR A LATERAL SERVICE LOAD OF 270 PLF.
7. GROUT ALL CELLS SOLID AT CORNERS WITH 2#5 PER CELL.
8. SEE S108 FOR SPECIAL JOIST DIAGRAMS.
9. ROOF FRAMING SHALL BE LIGHT GAGE METAL TRUSSES SPACED AT 4'-0" O.C. UNLESS NOTED OTHERWISE.

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ONSLOW COUNTY SCHOOLS
STUMP SOUND, NORTH CAROLINA

ROOF FRAMING PLAN - AREA "A", "D", "F" & "G"

REVISION SCHEDULE

Δ	DATE	REFERENCE

S105

ROOF FRAMING PLAN

1/8"=1'-0"

PLAN NOTES:

1. SEE SHEET S200 FOR GENERAL NOTES AND SPECIAL INSPECTION REQUIREMENTS.
2. SEE PLAN FOR TOP OF STEEL ELEVATION.
3. ROOF DECK SHALL BE 1 1/2" GAGE 22 WIDE RIB ROOF DECK (PAINTED UNLESS NOTED OTHERWISE.
   DECK CONNECTION KEY

   36/7 - 2 S.L.
   - NUMBER OF #10 TEK SCREWS PER DECK SPAN
   - DECK FASTENER PATTERN WITH #12 TEK SCREWS - SEE 3/S201
4. COORDINATE ALL OPENING SIZES AND LOCATIONS WITH MECHANICAL SUBCONTRACTOR.
5. ALL ROOF SLOPES SHALL BE 2/12 UNLESS NOTED OTHERWISE.
6. CENTER DRAG TRUSS OVER BRACED WALL BELOW. DESIGN TRUSSES FOR A LATERAL SERVICE LOA
7. GROUT ALL CELLS SOLID AT CORNERS WITH 2#5 PER CELL.
8. SEE S108 FOR SPECIAL JOIST DIAGRAMS.
9. ROOF FRAMING SHALL BE LIGHT GAGE METAL TRUSSES SPACED AT 4'-0" O.C. UNLESS NOTED OTHER

CONTRACTOR TO VERIFY ALL DIMENSIONS.

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Richard A. McRuggles
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PROFESSIONAL
ENGINEER
8/7/19

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ISSUE DATE: 08.07.2019
DRAWN BY: RVK
CHECKED BY: RVR
PROJECT: 1321

STUMP SOUND ELEMENTARY SCHOOL
ONSLOW COUNTY SCHOOLS
STUMP SOUND, NORTH CAROLINA
ROOF FRAMING PLAN - AREA "C", "D" & "E"

REVISION SCHEDULE

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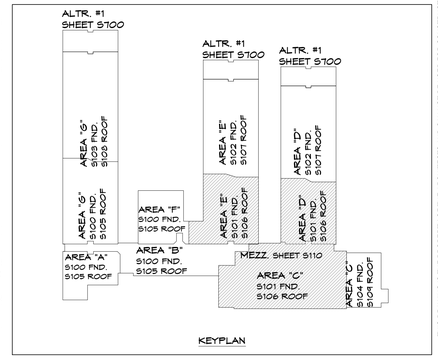
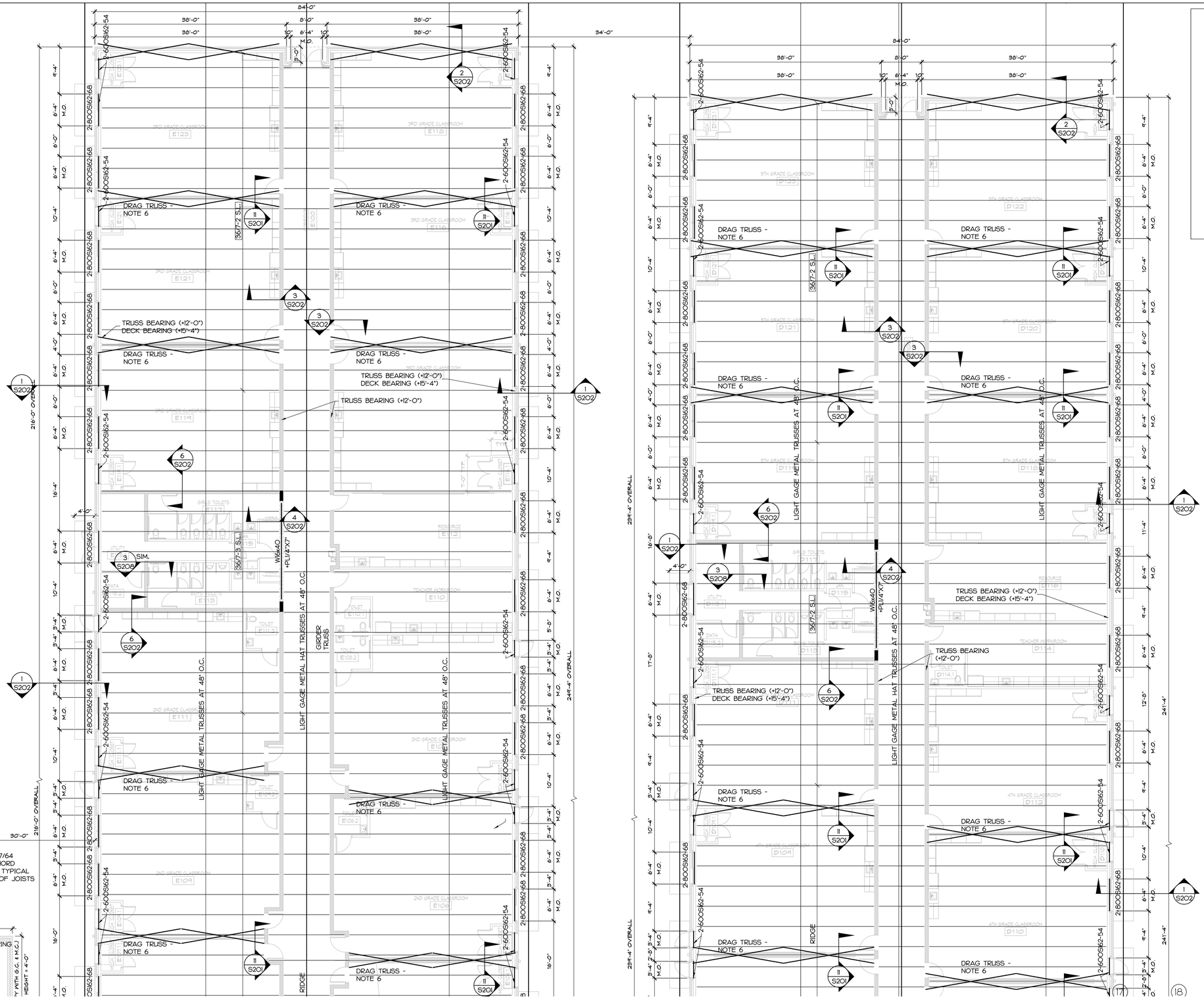
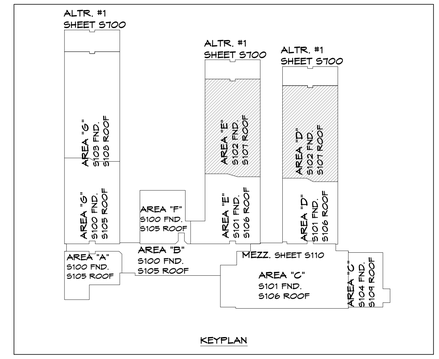


S106





ROOF FRAMING PLAN

1/8"=1'-0"

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   36/7 - 2 S.L.

   - 36/7 = NUMBER OF #10 TEK SCREWS PER DECK SPAN
   - 2 S.L. = DECK FASTENER PATTERN WITH #12 TEK SCREWS - SEE 3/S201
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5. ALL ROOF SLOPES SHALL BE 2/12 UNLESS NOTED OTHERWISE.
6. CENTER DRAG TRUSS OVER BRACED WALL BELOW. DESIGN TRUSSES FOR A LATERAL SERVICE LOAD OF 270 PLF.
7. GROUT ALL CELLS SOLID AT CORNERS WITH 2#5 PER CELL.
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8/7/19

CONTRACTOR TO VERIFY ALL DIMENSIONS

ISSUE DATE: 08.07.2019
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CHECKED BY: RMR
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STUMP SOUND ELEMENTARY SCHOOL
ONSLOW COUNTY SCHOOLS
STUMP SOUND, NORTH CAROLINA

ROOF FRAMING PLAN - AREA "D" & "E"

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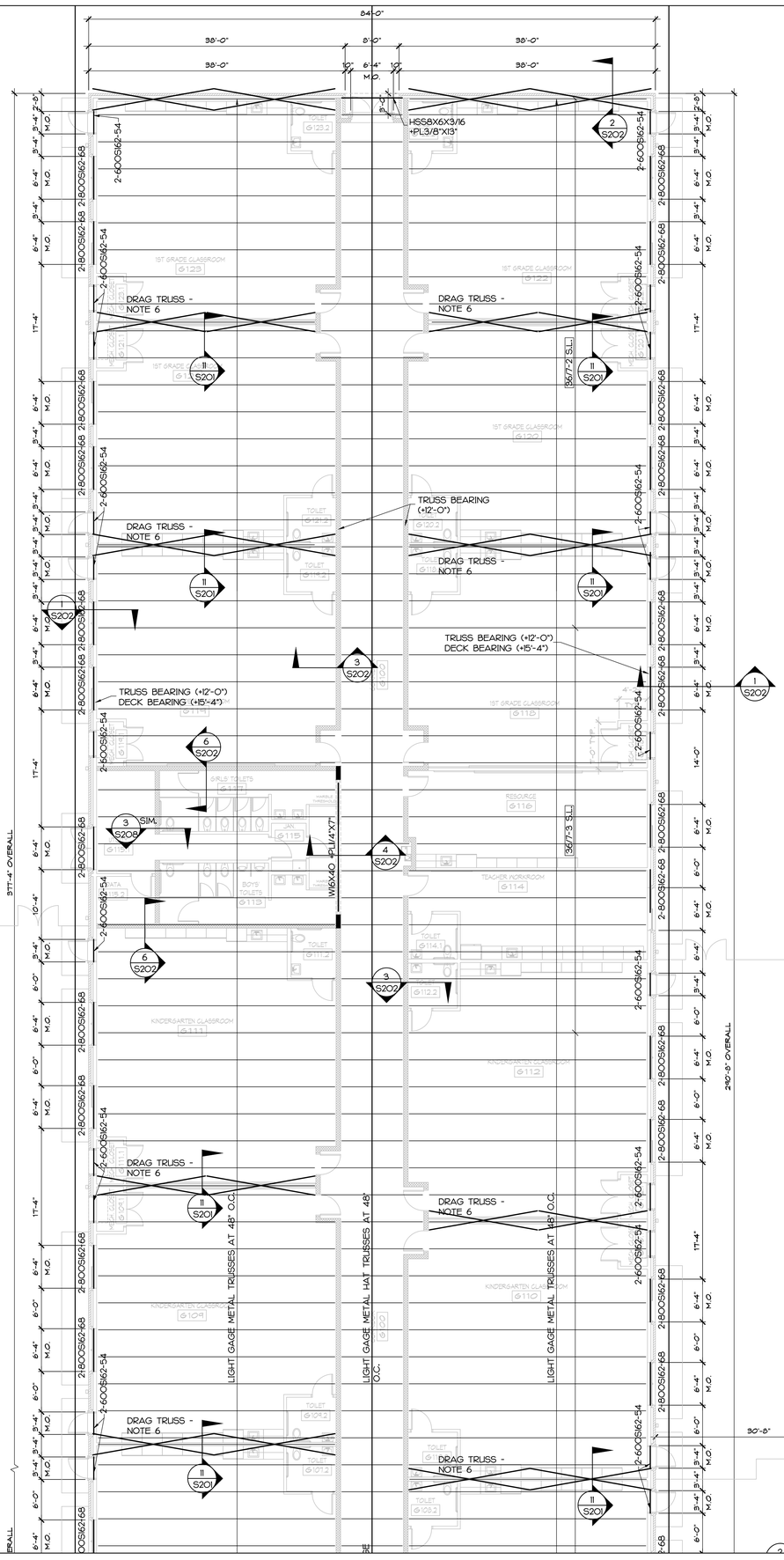
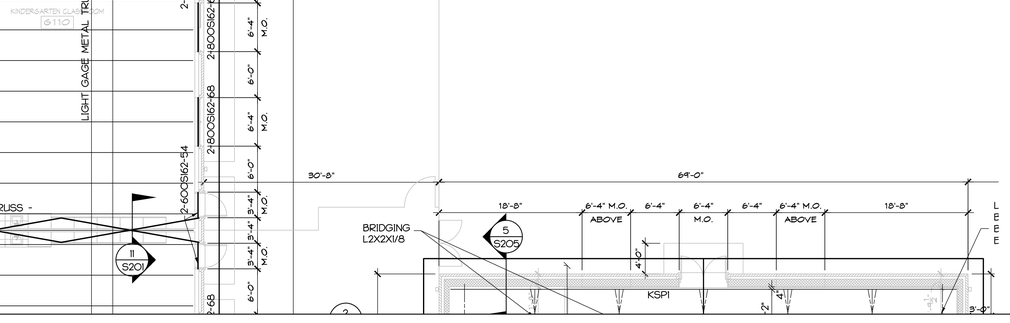
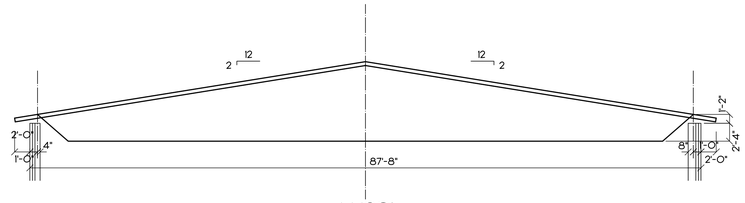




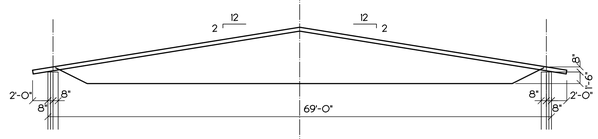


LHSP1

W_D = .152 KLF
W_L = .121 KLF

LHSP2

W_D = .152 KLF
W_L = .512 KLF
PROVIDE CONSTANT SHEAR
CAPACITY OF 46k



KSP1 GABLE

W_D = .154 KLF
W_L = .124 KLF

ROOF FRAMING PLAN

1/8"=1'-0"

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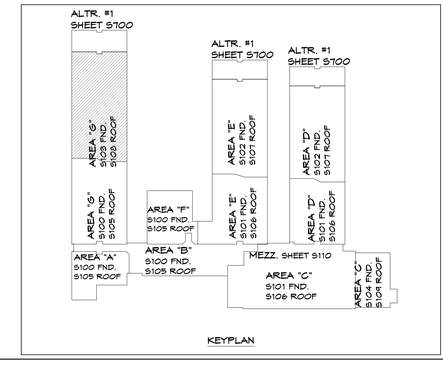

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CONTRACTOR TO VERIFY ALL DIMENSIONS

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STUMP SOUND ELEMENTARY SCHOOL
ONSLOW COUNTY SCHOOLS
STUMP SOUND, NORTH CAROLINA

ROOF FRAMING PLAN - AREA "G"

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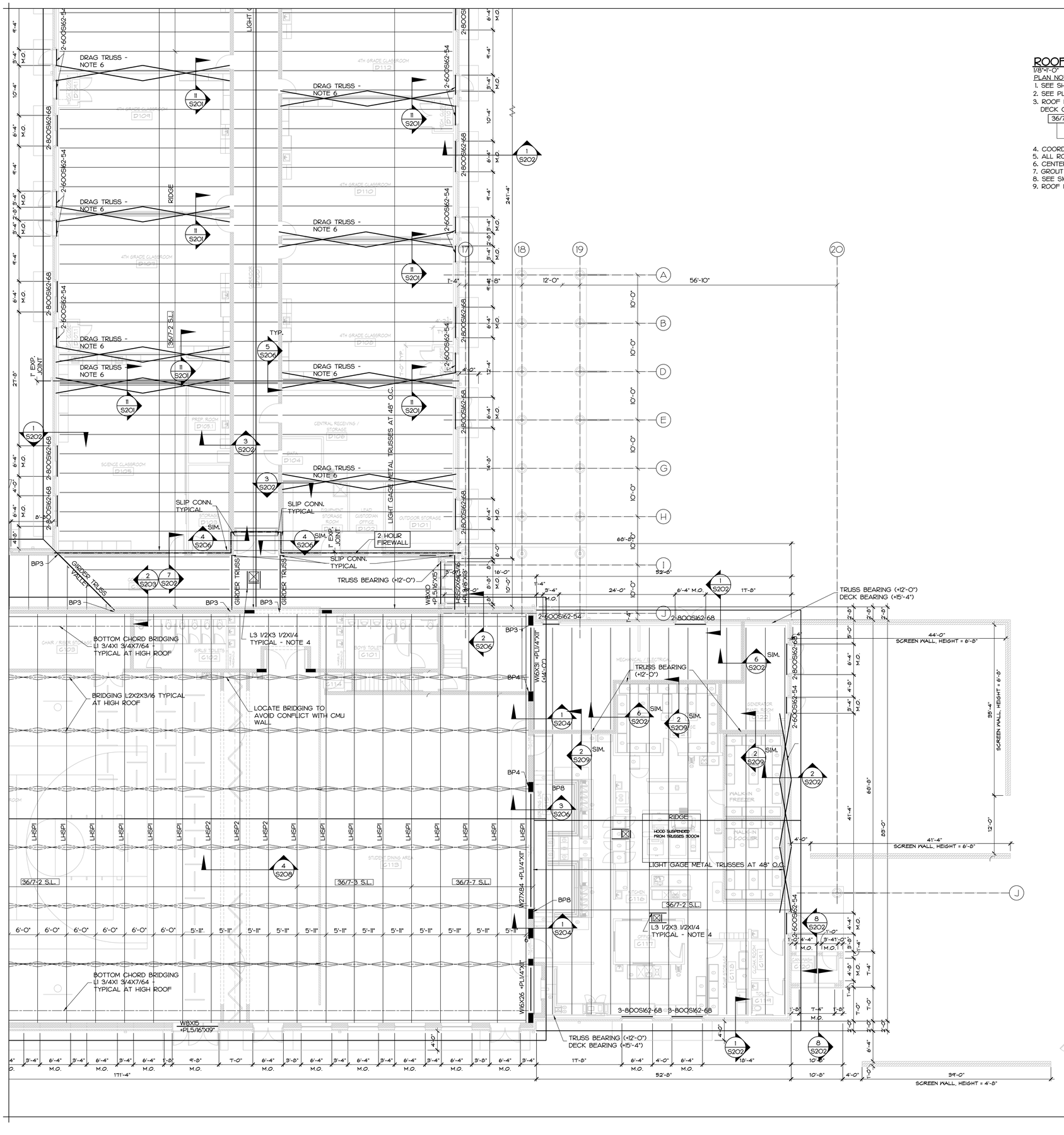
S108



ROOF FRAMING PLAN

1/8"=1'-0"

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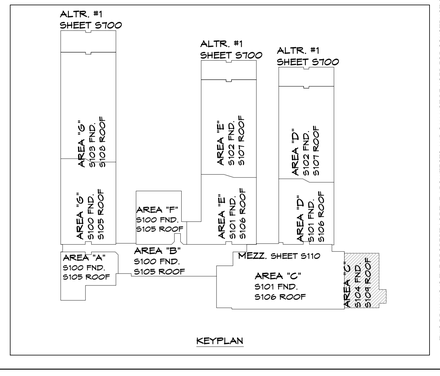

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NORTH CAROLINA PROFESSIONAL SEAL 026543 ENGINEER RICHARD M. RUGGLES
8/7/19

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ISSUE DATE: 08.07.2019
DRAWN BY: RMR
CHECKED BY: RMR
PROJECT: 1821

STUMP SOUND ELEMENTARY SCHOOL
ONSLOW COUNTY SCHOOLS
STUMP SOUND, NORTH CAROLINA

ROOF FRAMING PLAN - AREA "C"

REVISION SCHEDULE

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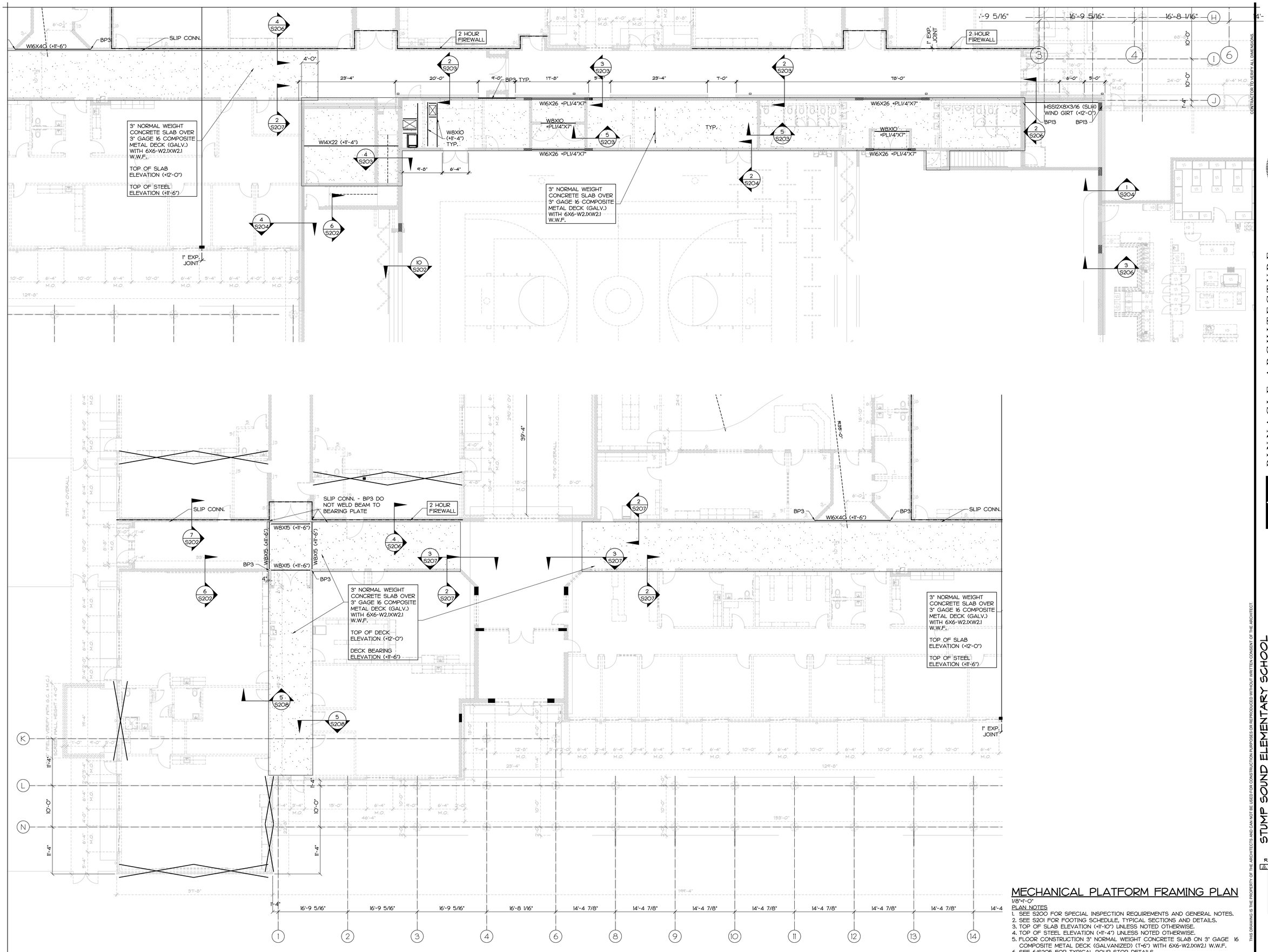

MECHANICAL PLATFORM FRAMING PLAN

1/8"=1'-0"

PLAN NOTES

1. SEE S200 FOR SPECIAL INSPECTION REQUIREMENTS AND GENERAL NOTES.
2. SEE S201 FOR FOOTING SCHEDULE, TYPICAL SECTIONS AND DETAILS.
3. TOP OF SLAB ELEVATION (+11'-10") UNLESS NOTED OTHERWISE.
4. TOP OF STEEL ELEVATION (+11'-4") UNLESS NOTED OTHERWISE.
5. FLOOR CONSTRUCTION 3" NORMAL WEIGHT CONCRETE SLAB ON 3" GAGE 16 COMPOSITE METAL DECK (GALVANIZED) (T=6") WITH 6X6-W2.1XW2.1 W.W.F.
6. SEE 6/S205 FOR TYPICAL POUR STOP DETAILS.

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ISSUE DATE: 08.07.2019
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PROJECT: 1821

STUMP SOUND ELEMENTARY SCHOOL
ONSLOW COUNTY SCHOOLS
STUMP SOUND, NORTH CAROLINA

PLATFORM FRAMING PLAN - AREA "A", "B" AND "C"

REVISION SCHEDULE

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S110

Qualification Requirements for Inspectors and Testing Technicians

PE/SE Structural Engineer – licensed PE or SE specializing in the design of buildings and structures
PE/GE Geotechnical Engineer – licensed PE specializing in soil mechanics and foundations
EIT Engineer-In-Training – graduate engineer who has passed the Fundamentals of engineering examination

American Concrete Institute (ACI) Certification
ACI-CCSI Concrete Construction Special Inspector
ACI-LTT Concrete Laboratory Testing Technician Level 1 or 2
ACI-STT Concrete Strength Testing Technician
ACI-FTT Concrete Field Testing Technician – Grade I

American Society of Non-Destructive Testing (ASNT) Certification
Non-Destructive Testing Technician – Level II or III

American Welding Society (AWS) Certification
AWS-CWI Certified Welding Inspector

Exterior Design Institute (EDI) Certification
EDI-EIFS Certified EIFS inspector

International Code Council (ICC) Certification
ICC-PCSI Prestressed Concrete Special Inspector
ICC-RCSI Reinforced Concrete Special Inspector
ICC-SSI Soils Special Inspector
ICC-SFSI Spray-applied Fireproofing Special Inspector
ICC-SMSI Structural Masonry Special Inspector
ICC-SSBSI Structural Steel and Bolting Special Inspector
ICC-SWSI Structural Welding Special Inspector

National Institute for Certification in Engineering Technologies (NICET) Certification
NICET-CT Concrete Technician – Levels I, II, III and IV
NICET-GET Geotechnical Engineering Technician - Levels I, II, III and IV
NICET-ST Soils Technician - Levels I, II, III and IV

Listing of Required Structural Tests and Special Inspections

Required?	Structural Test or Special Inspection	Continuous	Periodic	Frequency of Periodic Test or Inspection
Steel Construction (ref: IBC-15 Section 1705.2, AISC 360-10 Chapter N, AISC 341-10 Chapter J)				
	Prior to Welding (AISC 360-10 Table N5.4-1)			
	1. Welding procedure specifications (WPSs) available		X	
	2. Manufacturer certifications for welding consumables available		X	
X	3. Material identification (type/grade)		X	
X	4. Welder identification system		X	
	5. Fit-up of groove welds (including joint geometry)			
	a. Joint preparation		X	
	b. Dimensions (alignment, root opening, root face, bevel)		X	
	c. Cleanliness (condition of steel surfaces)		X	
	d. Tacking (tack weld quality and location)		X	
	e. Backing type and fit (if applicable)		X	
	6. Configuration and finish of access holes		X	
X	7. Fit-up of fillet welds			
X	a. Dimensions (alignment, gaps at root)		X	
X	b. Cleanliness (condition of steel surfaces)		X	
X	c. Tacking (tack weld quality and location)		X	
X	8. Check welding equipment		X	
	During Welding (AISC 360-10 Table N5.4-2)			
X	1. Use of qualified welders		X	
	2. Control and handling of welding consumables			
X	a. Packaging		X	
X	b. Exposure control		X	
X	3. No welding over cracked tack welds		X	
	4. Environmental conditions			
X	a. Wind speed within limits		X	
X	b. Precipitation and temperature		X	
	5. WPS followed			
X	a. Settings on welding equipment		X	
X	b. Travel speed		X	
X	c. Selected welding materials		X	
X	d. Shielding gas type/flow rate		X	
X	e. Preheat applied		X	
X	f. Interpass temperature maintained (min. /max.)		X	
X	g. Proper position (F, V, H, OH)		X	
	h. Intermix of filler metals avoided unless approved (ref: AISC 341-10)		X	
	6. Welding techniques			
X	a. Interpass and final cleaning		X	
X	b. Each pass within profile limitations		X	
X	c. Each pass meets quality requirements		X	
	After Welding (AISC 360-10 Table N5.4-3)			
	1. Welds cleaned		X	
	2. Size, length and location of welds	X		
	3. Welds meet visual acceptance criteria			
	a. Crack prohibition	X		
	b. Weld/base-metal fusion	X		
	c. Crater cross section	X		
	d. Weld profiles	X		
	e. Weld size	X		
	f. Undercut	X		
	g. Porosity	X		
	4. Arc strikes	X		
	5. k-area	X		
	6. Backing removed and weld tabs removed (if required)	X		
	7. Repair activities	X		
	8. Document acceptance or rejection of welded joint or member	X		
	9. Placement of reinforcing or contouring fillet welds (if required) (ref: AISC 341-10)	X		
	10. Backing removed, weld tabs removed and finished, and fillet welds added (if required) (ref: AISC 341-10)	X		
	Nondestructive Testing (AISC 360-10 Section N5.5)			
	1. Risk Category II Structures - Perform Ultrasonic Testing on 10% of CJP groove welds in butt, T- and corner joints subject to transversely applied tension loading, in materials 5/16 in. thick or greater.		X	
	2. Risk Category III or IV Structures - Perform Ultrasonic Testing on all CJP groove welds subject to transversely applied tension loading in butt, T- and corner joints, in materials 5/16 in. thick or greater.	X		
	3. Access Holes – Perform Magnetic Particle Testing or Liquid Penetrant Testing when the flange thickness exceeds 2 in. for rolled shapes, or when the web thickness exceeds 2 in. for built-up shapes.	X		
	4. Welded Joints Subject to Fatigue	X		

Required?	Structural Test or Special Inspection	Continuous	Periodic	Frequency of Periodic Test or Inspection
Steel Construction (ref: IBC-15 Section 1705.2, AISC 360-10 Chapter N, AISC 341-10 Chapter J) (CONTINUED)				
	Nondestructive Testing (AISC 341-10 Section J6.2)			
	1. k-area	X		
	2. CJP Groove weld		X	
	3. Lamellar tearing		X	
	4. Beam cope and access hole		X	
	5. Reduced beam section repair		X	
	6. Weld tab removal		X	
	Prior to Bolting (AISC 360-10 Table N5.6-1)			
	These inspections are not required for snug-tight joints			
X	1. Manufacturer's certifications available for fastener materials	X		
X	2. Fasteners marked in accordance with ASTM requirements		X	
X	3. Proper fasteners selected for the joint detail (grade, type, bolt length if threads are to be excluded from shear plane)		X	
X	4. Proper fasteners selected for the joint detail (grade, type, bolt length if threads are to be excluded from shear plane)		X	
X	5. Connecting elements, including the appropriate faying surface condition and hole preparation, if specified, meet applicable requirements		X	
X	6. Pre-installation verification testing by installation personnel observed and documented for fastener assemblies and methods used		X	
X	7. Proper storage provided for bolts, nuts, washers and other fastener components		X	
	During Bolting (AISC 360-10 Table N5.6-2)			
	These inspections are not required for snug-tight joints. These inspections are not required for pretensioned joints and slip-critical joints, when the installer is using the turn-of-nut method with match marking techniques, the direct-tension-indicator method, or the twist-off-type tension control bolt method.			
	1. Fastener assemblies, of suitable condition, placed in all holes and washers (if required) are positioned as required		X	
	2. Joint brought to the snug-tight condition prior to the pretensioning operation		X	
	3. Fastener component not turned by the wrench prevented from rotating		X	
	4. Fasteners are pretensioned in accordance with the RCSC Specification, progressing systematically from the most rigid point toward the free edges		X	
	After Bolting (AISC 360-10 Table N5.6-3)			
X	Document acceptance or rejection of bolted connections	X		
	Other Inspection Tasks (AISC 360-10 Section N5.7)			
X	1. Verify compliance of fabricated steel with the details shown on the approved shop drawings.		X	
X	2. Verify compliance of the erected steel frame with the details shown on the approved erection drawings, including braces, stiffeners, member locations and joint details.		X	
X	3. Anchor rods and other embedments support structural steel			
	a. Verify the diameter, grade, type and length of the anchor rod or embedded item.		X	
X	b. Verify the extent or depth of embedment into the concrete.		X	
	4. RBS requirements, if applicable (ref: AISC 341-10)			
X	a. Contour and finish		X	
X	b. Dimensional tolerances		X	
	5. Protected zone—no holes and unapproved attachments made by fabricator or erector, as applicable (ref: AISC 341-10)		X	
	6. H-piles - Protected zone—no holes and unapproved attachments made by the responsible contractor, as applicable. (ref: AISC 341-10)		X	
	Cold-formed Steel Deck (IBC-15 1705.2.2)			
X	1. Special inspections in accordance with QA/QC-2011 Standard for Quality control and Quality assurance for Installation of Steel Deck		X	
	Open-Web steel Joists and Joist Girders (IBC-15 Table 1705.2.3)			
	1. Installation of open-web steel joists and joist girders			
X	a. End connections – welding or bolted		X	
	b. Bridging – horizontal or diagonal			
X	1. Standard bridging		X	
X	2. Bridging that differs from the SJI specifications listed in Section 2207.1		X	
	Inspection of Composite Structures Prior to Concrete Placement (AISC 341-10 Table J9-1)			
X	1. Material identification of reinforcing steel (Type/Grade)		X	
X	2. Determination of carbon equivalent for reinforcing steel other than ASTM A706		X	
X	3. Proper reinforcing steel size, spacing and orientation		X	
X	4. Reinforcing steel has not been rebent in the field		X	
X	5. Reinforcing steel has been tied and supported as required		X	
X	6. Required reinforcing steel clearances have been provided		X	
X	7. Composite member has required size		X	
	Inspection of Composite Structures During Concrete Placement (AISC 341-10 Table J9-2)			
X	1. Concrete: Material identification (mix design, compressive strength, maximum large aggregate size, maximum slump)		X	
X	2. Limits on water added at the truck or pump		X	
X	3. Proper placement techniques to limit segregation		X	
	Inspection of Composite Structures After Concrete Placement (AISC 341-10 Table J9-3)			
X	1. Achievement of minimum specified concrete compressive strength at specified age		X	
	Cold-formed Steel Trusses Spanning 60-feet or Greater (ref: IBC-15 Section 1705.2.4)			
X	1. Verify temporary installation restraint/bracing installed in accordance with the approved shop drawings.		X	
X	2. Verify permanent individual truss member restraint/bracing installed in accordance with the approved shop drawings.		X	

Required?	Structural Test or Special Inspection	Continuous	Periodic	Frequency of Periodic Test or Inspection
Concrete Construction (ref: IBC-15 Table 1705.3)				
X	1. Inspect reinforcing steel, including prestressing tendons, and placement.		X	
	2. Inspection of reinforcing steel welding in accordance with Steel Construction section above.		X	
X	3. Inspection of anchors cast in concrete.		X	
X	4. Inspection of anchors post-installed in hardened concrete members.	X		
X	5. Verify use of approved design mix.		X	
X	6. Prior to placement fabricate specimens for strength tests, perform slump and air content tests, and determine the temperature of the concrete.	X		
X	7. Inspect concrete and shotcrete placement for proper application techniques.	X		
X	8. Inspect for maintenance of specified curing temperature and techniques.		X	
	9. Inspection of prestressed concrete:			
	a. Application of prestressing forces	X		
	b. Grouting of bonded prestressing tendons in the seismic-force-resisting system.	X		
	10. Erection of precast structural members		X	
	11. Verification of in-situ concrete strength, prior to stressing of tendons in post-tensioned concrete and prior to removal of shores and forms from beams and structural slabs.		X	
X	12. Inspection formwork for shape, location and dimensions of the concrete member being formed.		X	

Required?	Structural Test or Special Inspection	Continuous	Periodic	Frequency of Periodic Test or Inspection
Masonry Construction (ref: IBC-15 Section 1705.4)				
	1. Inspect masonry construction in accordance with IBC-15 Section 1705.4 and TMS 602-13/ACI 530.1-13/ASCE 6-13 Article 1.6.			
	Level C Quality Assurance			
	Tests:			
	1. Verify f'm and f'aac in accordance with TMS 602-13/ACI 530.1-13/ ASCE 6-13 Specification Article 1.4B prior to construction, and for every 5000 square feet during construction.			
	2. Verify proportions of materials in premixed or pre-blended mortar, prestressing grout, and grout other than self-consolidating grout as delivered to the project site.			
	3. Verify slump flow and Visual Stability Index (VSI) as delivered to the project site in accordance with TMS 602-13/ACI 530.1-13/ASCE 6-13 Specification Article 1.5B.1.b.3 for self-consolidating grout			
	Inspection:			
X	1. Verify compliance with the approved submittals and project specifications.		X	
	2. Verify:			
X	a. Proportions of site-prepared mortar, grout and prestressing grout for bonded tendons		X	
X	b. Grade, type and size of reinforcement and anchor bolts, and prestressing tendons and anchorages		X	
X	c. Placement of masonry units and construction of mortar joints.		X	
X	d. Placement of reinforcement, connectors and prestressing tendons and anchorages.	X		
X	e. Grout space prior to grouting.	X		
	f. Placement of grout and prestressing grout for bonded tendons.	X		
X	g. Size and location of structural elements.		X	
X	h. Type, size and location of anchors, including other details of anchorage of masonry to structural members, frames or other construction.	X		
	i. Welding of reinforcement.	X		
X	j. Preparation, construction and protection of masonry during cold weather (temperature below 40°F) or hot weather (temperature above 90°F).		X	
	k. Application and measurement of prestressing force.	X		
	l. Placement of AAC masonry units and construction of thin-bed mortar joints.	X		
	m. Properties of thin-bed mortar for AAC masonry.	X		
X	3. Observe preparation of grout specimens, mortar specimens and/or prisms		X	

Required?	Structural Test or Special Inspection	Continuous	Periodic	Frequency of Periodic Test or Inspection
Soils (ref: IBC-15 Table 1705.6)				
X	1. Verify materials below shallow foundations are adequate to achieve the required bearing capacity.		X	
X	2. Verify excavations are extended to proper depth and have reached proper material.		X	
X	3. Perform classification and testing of compacted fill materials.		X	
X	4. Verify use of proper materials, densities and lift thickness during placement and compaction of compacted fill.	X		
X	5. Prior to placement of controlled fill, observe sub-grade and verify that site has been prepared properly.		X	

Required?	Structural Test or Special Inspection	Continuous	Periodic	Frequency of Periodic Test or Inspection
Wind Resistance (ref: IBC-15 Section 1705.11)				
X	1. Provide inspections when required by Section 1705.11.			

Required?	Structural Test or Special Inspection	Continuous	Periodic	Frequency of Periodic Test or Inspection
Seismic Resistance (ref: IBC-15 Section 1705.12)				
X	1. Provide inspections when required by Section 1705.12.			

Required?	Structural Test or Special Inspection	Continuous	Periodic	Frequency of Periodic Test or Inspection
Cold-formed Steel Light-frame (ref: IBC-15 Section 1705.12.3)				
	1. Welding operations of elements of the seismic force resisting system		X	
X	2. Screw attachments, bolting, anchoring and other fastening of elements of the seismic force resisting system, including shear walls, braces, diaphragms, collectors (drag struts) and hold downs		X	

Required?	Structural Test or Special Inspection	Continuous	Periodic	Frequency of Periodic Test or Inspection
Testing and Qualification for Seismic Resistance (ref: IBC-15 Section 1705.13)				
X	1. Test and qualify seismic resistance in accordance with IBC-15 Section 1705.13 and the project specifications.			

Required?	Structural Test or Special Inspection	Continuous	Periodic	Frequency of Periodic Test or Inspection
Fire-resistant Penetrations and Joints (ref: IBC-15 Section 1705.17)				
X	1. Perform inspections in accordance with project specifications and IBC-15 Section 1705.17.		X	

GENERAL NOTES

1. GENERAL

A. THE STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH AND COORDINATED WITH THE ARCHITECTURAL DRAWINGS.

B. THE CONTRACTOR WILL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES AND SHALL AT ALL TIMES TAKE ALL REASONABLE PRECAUTIONS FOR THE SAFETY OF ITS EMPLOYEES ON THE PROJECT. THE CONTRACTOR SHALL COMPLY WITH ALL APPLICABLE PROVISIONS OF FEDERAL, STATE AND MUNICIPAL SAFETY LAWS AND BUILDING CODES.

C. FOUNDATIONS ARE DESIGNED BASED ON THE GEO-TECHNICAL REPORT PREPARED BY ECS SOUTH EAST LLC. DATED MARCH 28, 2018. FOOTINGS ARE DESIGNED FOR 1500 PSF BEARING. BEARING PRESSURE SHALL BE VERIFIED BY GEO-TECHNICAL ENGINEER PRIOR TO POURING FOUNDATIONS.)

D. IF EXISTING CONDITIONS MAKE IT NECESSARY TO REVISE STRUCTURAL DETAILS. ADVISE STRUCTURAL ENGINEER BEFORE PROCEEDING WITH ANY CHANGE.

2. DESIGN CRITERIA:

A. BUILDING DESIGNED IN ACCORDANCE WITH THE 2018 NORTH CAROLINA STATE BUILDING CODE.

B. FLOOR LIVE LOADS:
1. ASSEMBLY / STAIRS / 1ST FLOOR -100 PSF
2. STAGE / MECHANICAL / STORAGE -125 PSF

C. ROOF LIVE LOAD 20 PSF

D. ROOF SNOW LOAD
1. GROUND SNOW LOAD Pg=10 PSF
2. FLAT-ROOF SNOW LOAD Pf=12.0 PSF
3. SNOW EXPOSURE FACTOR Ce=1.0
4. THERMAL FACTOR Ct=1.0
5. SNOW LOAD IMPORTANCE FACTOR Is=1.2

E. WIND LOADS DESIGNED IN ACCORDANCE WITH 2018 NORTH CAROLINA STATE BUILDING CODE AND ANSI/ASCE 7-10
1. BASIC WIND SPEED (3-SECOND GUST) ULT. 152 MPH
BASIC WIND SPEED (3-SECOND GUST) ASD. 118 MPH
2. WIND EXPOSURE C
3. INTERNAL PRESSURE COEFFICIENT GCpi=±.18
4. COMPONENTS AND CLADDING SHALL BE DESIGNED FOR THE ULTIMATE WIND PRESSURE TABULATED BELOW:
5. WIND BASE SHEAR: Vwx=52k Vwy=44.0k

ZONE PER FIG. 30.5-1	EFFECTIVE WIND AREA	POSITIVE PRESSURE PSF	NEGATIVE PRESSURE PSF
1	50	+26.6	-49.8
2	50	+26.6	-75.6
3	50	+26.6	-116.6
4	10	+58.3	-63.2
4	20	+55.7	-60.6
4	50	+52.1	-57.2
4	100	+49.5	-54.2
5	10	+58.3	-78.0
5	20	+55.7	-72.7
5	50	+52.1	-65.6
5	100	+49.5	-60.6

F. EARTHQUAKE DESIGN DATA
1. RISK CATEGORY IV
2. SEISMIC IMPORTANCE FACTOR : Ie = 1.5
3. SPECTRAL RESPONSE ACCELERATIONS : Ss = .165 S1 = .076
4. SPECTRAL RESPONSE COEFFICIENTS: Sds =.18 Sd1 = .12
5. SEISMIC SITE CLASS D
6. BASIC SEISMIC-FORCE-RESISTING-SYSTEM : INTERMEDIATE REINFORCED MASONRY SHEAR WALLS
7. SEISMIC BASE SHEAR : Vex = 537k Vey = 537k
8. SEISMIC RESPONSE COEFFICIENT : Cs = .0754
9. RESPONSE MODIFICATION COEFFICIENT : R = 3.5
10. ANALYSIS PROCEDURE - EQUIVALENT LATERAL FORCE
11. SEISMIC DESIGN CATEGORY C

3. CONCRETE

A. REINFORCING STEEL ASTM A615 GRADE 60
WELDED WIRE FABRIC ASTM A185 MESH
B. UNLESS OTHERWISE NOTED ON THE DRAWINGS. LAP SPLICES SHALL BE A CLASS B SPLICE.
C. CONCRETE LOCATION 28 DAY STRENGTH
FOOTINGS, SLABS, MISC. 3000 PSI NORMAL WEIGHT (MAX. W/C RATIO = .50)
BLOCK FILL 3000 PSI NORMAL WEIGHT COARSE GROUT (ASTM C476)

4. STRUCTURAL STEEL

A. ALL WIDE FLANGE AND STRUCTURAL TEES SHALL BE ASTM A992 (Fy=50 KSI). ALL OTHER STEEL SHALL BE ASTM A36 UNLESS NOTED OTHERWISE. TUBE STEEL SHALL CONFORM TO ASTM A500, GRADE B (Fy=46 KSI) PIPE STEEL SHALL BE ASTM A53 GRADE B, OR ASTM 501 (Fy=36 KSI) ALL STEEL SHALL BE FABRICATED AND ERECTED IN ACCORDANCE WITH AISC LATEST EDITION. ALL BOLTED CONNECTIONS ARE TO BE WITH A325 HIGH STRENGTH BOLTS. CONNECTIONS ARE TO DEVELOP THE REACTIONS SHOWN IN THE ALLOWABLE UNIFORM LOAD TABLES OF THE AISC MANUAL OR 6 KIPS WHICHEVER IS GREATER. FIELD WELDS SHALL ONLY BE MADE BY OPERATORS CERTIFIED BY TEST DESCRIBED IN AWS D1.1 SEE SPECIFICATIONS.

B. FABRICATORS SHOP DRAWINGS SHALL SHOW AND NOTE ALL MATERIAL REQUIRED WITH RELATIVE LOCATIONS AND SUFFICIENT DETAILS FOR PROPER FABRICATION AND ERECTION IN ACCORDANCE WITH ALL CONTRACT DRAWINGS AND DOCUMENTS. SEPIAS OF STRUCTURAL DRAWINGS SHALL NOT BE USED IN PREPARATION OF SHOP DRAWINGS.

C. METAL DECK SIZE AND GAGE SHALL BE AS INDICATED ON PLANS. ALL DECK SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS' RECOMMENDATION. THREE SPAN MIN. NO EQUIPMENT TO HANG FROM METAL DECK. RESPECTIVE CONTRACTOR TO PROVIDE SUPPORT AS REQUIRED. CEILING, LIGHTS AND DUCT MAY BE HUNG FROM DECK WITH CONCRETE SLAB.

D. ROOF OPENINGS NOT SHOWN ON PLANS SHALL BE FRAMED WITH 3-1/2 X 3-1/2-1/4 ANGLES. FLOOR OPENINGS NOT SHOWN ON PLANS SHALL BE FRAMED WITH W8X10 BEAM.

E. JOIST SHALL BE DESIGNED FOR A NET UPLIFT SERVICE LOAD PRESSURES (ASD) OF 30 PSF ZONE 1, 46 PSF ZONE 2, AND 70 PSF ZONE 3, DUE TO WIND (α=10°-6"). PROVIDE A SINGLE LINE OF BOTTOM CHORD BRIDGING AT THE FIRST BOTTOM CHORD PANEL POINT AS RECOMMENDED BY S.J.I.

F. ALL EXTERIOR EXPOSED STEEL LINTELS, BEAMS, STUDS AND PLATES SHALL BE HOT DIPPED GALVANIZED.

G. EPOXY ANCHORS SHALL BE ONE OF THE FOLLOWING OR APPROVED EQUAL:
a. HILTI HIT ADHESIVE ANCHORS
b. ITW RAMSET/REDHEAD: EPCON ADHESIVE ANCHORS
c. RAWL POWER FAST ADHESIVE ANCHORS

5. MASONRY

A. SPECIFIED COMPRESSIVE STRENGTH OF MASONRY : f'm 1500 psi MASONRY MORTAR TO BE TYPE S. PROVIDE STANDARD (9 GAGE) HORIZONTAL JOINT REINFORCING AT 16" O.C. AT ALL BLOCK WALLS. JOINT REINFORCEMENT AT EXTERIOR WALLS SHALL BE HOT DIPPED GALVANIZED AS PER SPECIFICATIONS. PROVIDE 1 # 4 BAR WITH CELL GROUTED SOLID AT ENDS, INTERSECTIONS, AND OPENINGS OF CMU WALLS.

B. GROUT FOR HOLLOW UNIT SHALL HAVE A 28 DAY COMPRESSIVE STRENGTH OF 3000 PSI AND SHALL CONFORM TO ASTM C476 FOR COARSE GROUT. SLUMP SHALL BE 10" PLUS OR MINUS 1".

C. ALL EXTERIOR WALLS AND INTERIOR CORRIDOR WALLS SHALL BE LAID TIGHT TO BOTTOM OF ROOF DECK.

D. LAP SPLICES FOR REBAR IN MASONRY WALLS
#4 - 36"
#5 - 45"
#6 - 54"
#7 - 63"

E. SEISMIC REINFORCING SHALL BE PROVIDED IN ALL CMU WALLS, SEE DETAIL VS201

F. MASONRY CONTROL JOINTS SHALL BE AS SHOWN ON ARCH. DRAWING, BUT SHALL NOT EXCEED 30 FEET ON CENTER.

G. PROVIDE 2 PIECE ADJUSTABLE BRICK TIES WITH 1/4" DIAMETER HOT DIPPED GALVANIZED STEEL WIRE AND HOT DIPPED GALVANIZED SHEET STEEL ANCHORS. SPACE TIES AT A MAXIMUM SPACING OF 16" VERTICALLY AND 24" HORIZONTALLY.

H. INSTALL WEEP HOLES IN HEAD JOINTS IN EXTERIOR WYTHES OF THE FIRST COURSE OF MASONRY IMMEDIATELY ABOVE EMBEDDED FLASHING . SPACE WEEP HOLES AT 24" O.C.

I. EPOXY ADHESIVE SHALL BE ONE OF THE FOLLOWING OR APPROVED EQUAL:
a. HILTI - HVA ADHESIVE SYSTEM
b. ITW RAMSET/REDHEAD - EPCON SYSTEM
c. RAWL - POWER FAST SYSTEM

6. METAL STUDS-PERFORMANCE REQUIREMENTS

A. PROVIDE COLD-FORMED METAL FRAMING CAPABLE OF WITH STANDING DESIGN LOADS WITHIN LIMITS AND UNDER CONDITIONS INDICATED, BUT NOT LESS THAN THE SIZES SHOWN ON THE DESIGN DOCUMENTS. ALL STRUCTURAL METAL STUD FRAMING SHALL BE GRADE 50 (FY=50 KSI) UNLESS NOTED OTHERWISE.

B. METAL FRAMING AND CONNECTIONS SHALL BE DESIGNED IN ACCORDANCE WITH THE 2018 NORTH CAROLINA STATE BUILDING CODE AS WELL AS THE LOADS INDICATED ON THE DESIGN DOCUMENTS.

C. EXTERIOR WALL FRAMING SHALL BE DESIGNED FOR A MAXIMUM HORIZONTAL DEFLECTION OF L/600 WITHOUT REGARD FOR THE CONTRIBUTION OF THE SHEATHING MATERIALS. PROVIDE MINIMUM 18 GA. STUDS.

D. METAL FRAMING SHALL BE DESIGNED AND SEALED BY AN ENGINEER LICENSED IN THE STATE OF NORTH CAROLINA. SEALED DRAWINGS AND CALCULATIONS SHALL BE SUBMITTED FOR REVIEW.

E. SHOP DRAWINGS SHALL CLEARLY SHOW LAYOUT, SPACING, SIZES, THICKNESS, AND TYPES OF COLD-FORMED FRAMING AS WELL AS FASTENING AND ANCHORAGE DETAILS. SHOW REINFORCING CHANNELS, OPENING FRAMING, SUPPLEMENTAL FRAMING, STRAPPING, BRACING, BRIDGING, SPLICES, ACCESSORIES, CONNECTION DETAILS AND ATTACHMENTS TO ADJOINING WORK.

F. ALL METAL FLAT STRAP BRACING SHALL BE CONTINUOUS WITHOUT ANY SPLICES.

G. PROVIDE HORIZONTAL BRIDGING ON ALL LOAD BEARING STUDS AT 4'-0" O.C. MAX.

7. COLD FORMED METAL TRUSSES

A. 1. STEEL ROOF TRUSSES SHALL BE DESIGNED IN ACCORDANCE WITH THE 2018 NORTH CAROLINA BUILDING CODE AND ANSI-ASCE 7-10. TRUSS MANUFACTURER SHALL SUBMIT SHOP DRAWINGS AND CALCULATIONS SEALED BY AN ENGINEER LICENSED IN THE STATE OF NORTH CAROLINA.

2. DESIGN LOADS:
TOP CHORD 20 PSF LL + 10 PSF DL
BOTTOM CHORD 10 PSF DL
UPLIFT FOR UPLIFT RESISTANCE DL IS NOT TO EXCEED 10 PSF.
SNOW DRIFT LOAD USE THE GREATER OF DRIFT OR 20 PSF

3. ALL TRUSS HANGERS, HURRICANE CLIPS, AND BRACING SHALL BE CLEARLY SHOWN ON THE SHOP DRAWINGS.

4. LIGHT GAGE TRUSSES SHALL BE SHOP FABRICATED.

REFERENCE DRAWINGS

S100	FOUNDATION/SLAB PLAN - AREA "A","B", "F" & "G"
S101	FOUNDATION/SLAB PLAN - AREA "C", "D" & "E"
S102	FOUNDATION/SLAB PLAN - AREA "D" & "E"
S103	FOUNDATION/SLAB PLAN - AREA "G"
S104	FOUNDATION/SLAB PLAN - AREA "C"
S105	ROOF FRAMING PLAN - AREA "A","B", "F" & "G"
S106	ROOF FRAMING PLAN - AREA "C", "D" & "E"
S107	ROOF FRAMING PLAN - AREA "D" & "E"
S108	ROOF FRAMING PLAN - AREA "G"
S109	ROOF FRAMING PLAN - AREA "C"
S110	MEZZANINE FRAMING PLAN - AREA "A", "B" AND "C"
S200	GENERAL NOTES, SPECIAL INSPECTION REQUIREMENTS
S201	TYPICAL SECTIONS AND DETAILS
S202	SECTIONS AND DETAILS
S203	SECTIONS AND DETAILS
S204	SECTIONS AND DETAILS
S205	SECTIONS AND DETAILS
S206	SECTIONS AND DETAILS
S207	SECTIONS AND DETAILS
S208	SECTIONS AND DETAILS
S209	SECTIONS AND DETAILS
S700	FOUNDATION/SLAB PLANS - ALTERNATE #1
S701	ROOF FRAMING PLANS - ALTERNATE #1

RUGGLES ENGINEERING PC
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Jacksonville, NC 28546
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NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 036487 RYAN M. RUGGLES 8/7/19

PINNACLE ARCHITECTURE
PROFESSIONAL ASSOCIATION
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CONTRACTOR TO VERIFY ALL DIMENSIONS

ISSUE DATE 08.07.2019
DRAWN BY RMK
CHECKED BY RMR
PROJECT: 1321

STUMP SOUND ELEMENTARY SCHOOL
ONSLOW COUNTY SCHOOLS
STUMP SOUND, NORTH CAROLINA

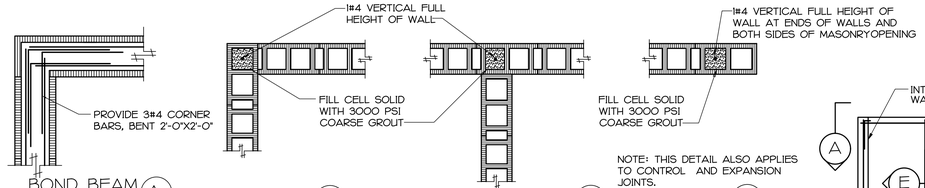
GENERAL NOTES, SPECIAL INSPECTION REQUIREMENTS

REVISION SCHEDULE

Δ	DATE	REFERENCE

THIS DRAWING IS THE PROPERTY OF THE ARCHITECTS AND CAN NOT BE USED FOR CONSTRUCTION PURPOSES OR REPRODUCED WITHOUT WRITTEN CONSENT OF THE ARCHITECT

S200

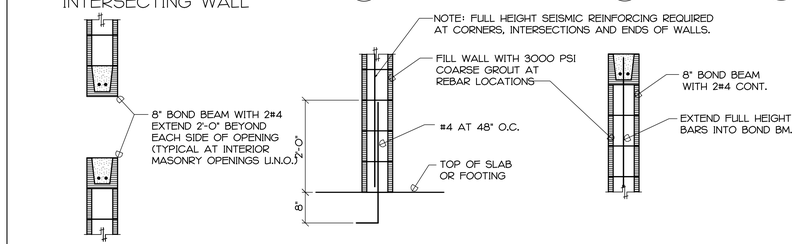


BOND BEAM AT CORNER (A) INTERSECTING WALL

CORNER (B)

INTERSECTION (C)

END (D)

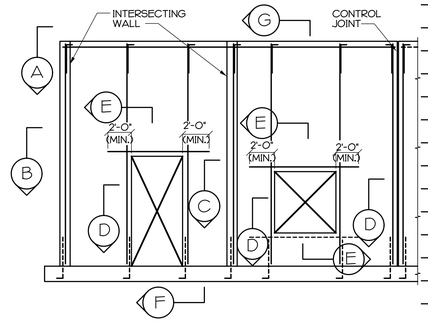


SECTION AT MASONRY OPENINGS (E)

DETAIL AT BASE OF WALL (F)

DETAIL AT TOP OF WALL (G)

NOTE: UNLESS SHOWN OTHERWISE, ALL CMU WALLS



SEISMIC REINFORCING IS MINIMUM - IF LARGER BAR SIZES ARE SHOWN ON SECTIONS AND DETAIL, USE LARGER BAR SIZE

COLUMN FOOTING SCHEDULE

1500 PSF BEARING

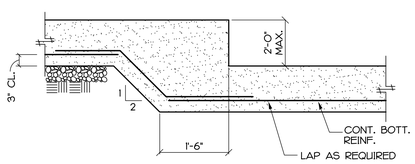
MARK	SIZE	DEPTH	REINFORCING (EACH WAY BOTTOM)	SERVICE LOAD CAP.	REMARKS
F-2	2'-0"X2'-0"	12"	3#4	6K	
F-2.5	2'-6"X2'-6"	12"	4#4	9.4K	
F-3	3'-0"X3'-0"	12"	4#4	13.5K	
F-3.5	3'-6"X3'-6"	12"	4#4	18.4K	
F-4	4'-0"X4'-0"	12"	4#4	24K	
F-4.5	4'-6"X4'-6"	12"	4#4	30.4K	
F-5	5'-0"X5'-0"	12"	6#4	37.5K	
F-5.5	5'-6"X5'-6"	12"	5#5	45.4K	
F-6	6'-0"X6'-0"	12"	5#6	54K	
F-6.5	6'-6"X6'-6"	13"	8#5	63.4K	
F-7	7'-0"X7'-0"	14"	6#6	78.9K	
F-7.5	7'-6"X7'-6"	15"	7#6	84.4K	
F-8	8'-0"X8'-0"	16"	6#7	96K	
F-8.5	8'-6"X8'-6"	17"	9#6	108.4K	
F-9	9'-0"X9'-0"	18"	7#7	130.4K	
F-9.5	9'-6"X9'-6"	18"	12#6	135.4K	
F-10	10'-0"X10'-0"	19"	9#7	150K	

BEARING PLATE SCHEDULE

MARK	PLATE SIZE	SHEAR STUDS	ALLOWABLE LOAD
BP1	PL. 3/8"X7"X7"	1-1/2" DIA. X 6"	18k
BP2	PL. 1/2"X6"X9"	2-3/4" DIA. X 10"	20k
BP3	PL. 1/2"X7 1/2"X9"	2-3/4" DIA. X 10"	25k
BP4	PL. 7/8"X7 1/2"X12"	2- 3/4" DIA. X 8"	34k
BP5	PL. 1 1/4"X7 1/2"X16"	3-3/4" DIA. X 8"	45k
BP6	PL. 1 5/8"X7 1/2"X24"	3-3/4" DIA. X 8"	68k
BP7	PL. 2"X7 1/2"X28"	3-3/4" DIA. X 8"	79k
BP8	PL. 3/4"X10"X12"	2-3/4" DIA. X 8"	45k
BP9	PL. 3/8"X5"X10'-0"	3/4" DIA. X 10" STUDS AT 16"O.C.	-
BP10	PL. 1"X6"X16"	2-3/4" DIA. X 10"	36k
BP11	PL. 2"X6"X28"	3-3/4" DIA. X 10"	63k
BP12	PL. 3/4"X6"X12"	2-3/4" DIA. X 10"	27k
BP13	PL. 1 1/8"X11"X16"	4- 3/4" DIA. X 10"	66K
BP14	PL. 3/8"X7"X10'-0"	3/4" DIA. X 10" STUDS AT 16"O.C.	-

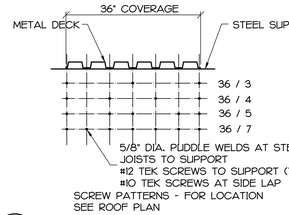
(1) S201 TYPICAL SEISMIC REINFORCING DETAILS - TYPICAL AT 6", 8" AND 12" CMU WALLS

3/4"=1'-0"



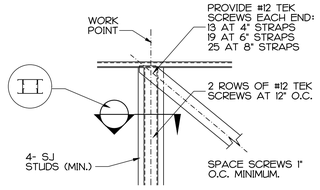
(2) S201 TYP. STEP FOOTING DETAIL

3/4"=1'-0"



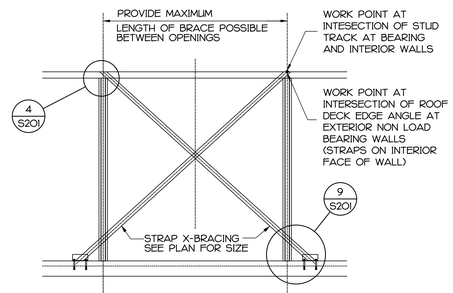
(3) S201 DECK WELD PATTERNS

3/4"=1'-0"



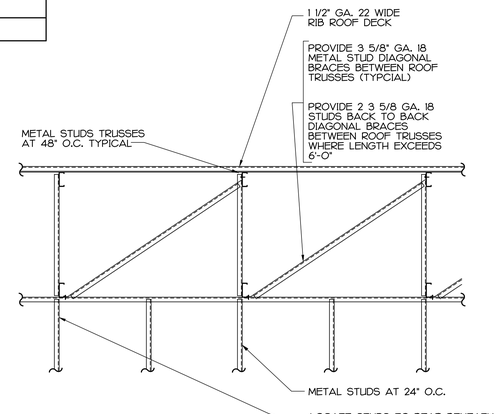
(4) S201 SECTION

3/4"=1'-0"



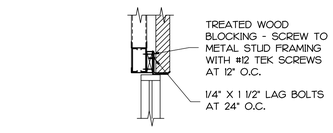
(5) S201 TYP. BRACING ELEVATION

1/4"=1'-0"



(6) S201 SECTION

3/4"=1'-0"



TYPICAL LINTEL DETAIL

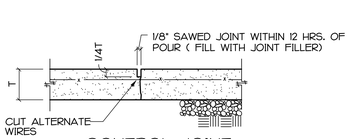
NO SCALE

LOOSE LINTEL SCHEDULE	
ROUGH OPENING	ANGLE SIZE
≤ 6'-4"	L4X3 1/2X1/4 (LLH)
≤ 10'-0"	L6X4X5/16 (LLV)
≤ 12'-0"	L7X4X3/8 (LLV)

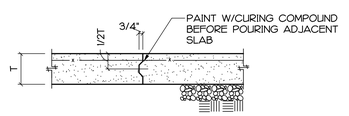
NOTE: BEAR 8" EACH END OF OPENING
ALL EXTERIOR LINTELS TO BE GALVANIZED

(7) S201 TYP. LINTEL DETAIL

3/4"=1'-0"



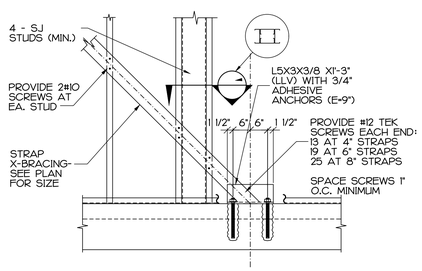
CONTROL JOINT



CONSTRUCTION JOINT

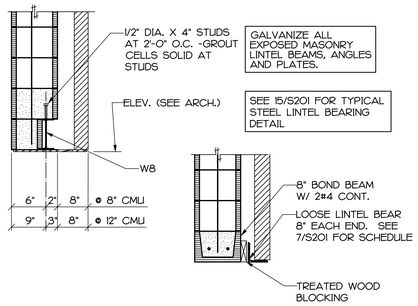
(8) S201 TYP. SLAB JOINTS

3/4"=1'-0"



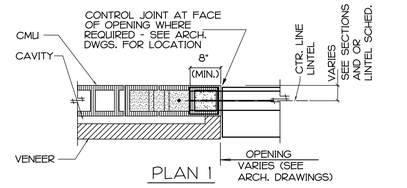
(9) S201 SECTION

3/4"=1'-0"

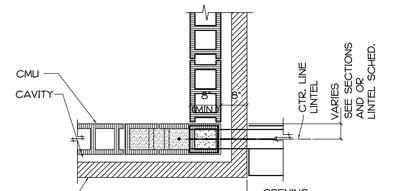


(10) S201 TYP. LINTEL DETAILS

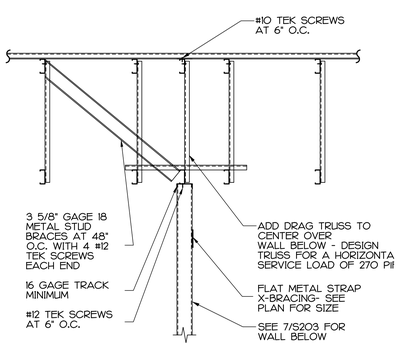
3/4"=1'-0"



PLAN 1

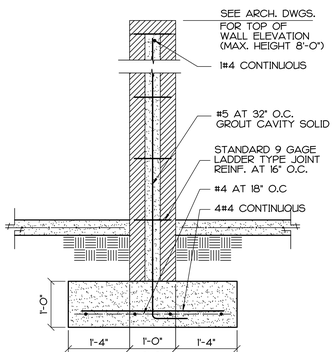


PLAN 2



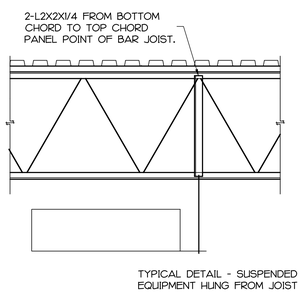
(11) S201 TYP. LINTEL DETAIL

3/4"=1'-0"



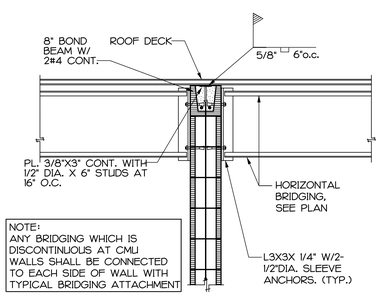
(12) S201 SCREEN WALL SECTION

3/4"=1'-0"



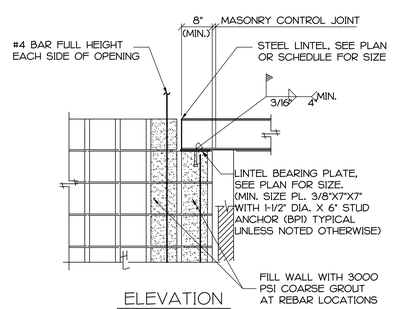
(13) S201 TYP. JOIST REINFORCING

3/4"=1'-0"



(14) S201 TYP. BRIDGING DETAIL

3/4"=1'-0"



ELEVATION

(15) S201 TYP. LINTEL BEARING DETAIL

3/4"=1'-0"

CONTRACTOR TO VERIFY ALL DIMENSIONS

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Robert M. Ruggles
8/1/19

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ISSUE DATE: 05.07.2019
ISSUED BY: RMR
CHECKED BY: RMR
PROJECT: 1621

STUMP SOUND ELEMENTARY SCHOOL
ONSLOW COUNTY SCHOOLS
STUMP SOUND, NORTH CAROLINA

TYPICAL SECTIONS AND DETAILS

REVISION SCHEDULE

Δ	DATE	REFERENCE

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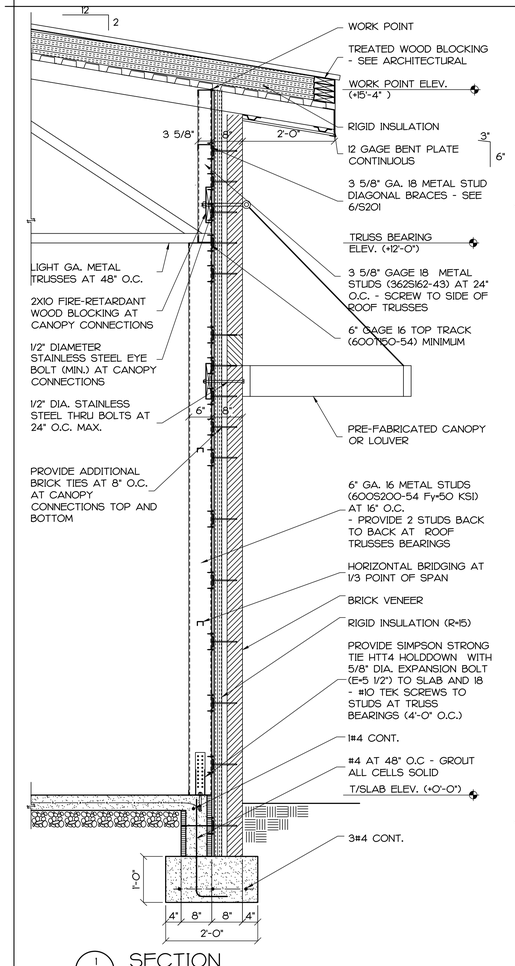
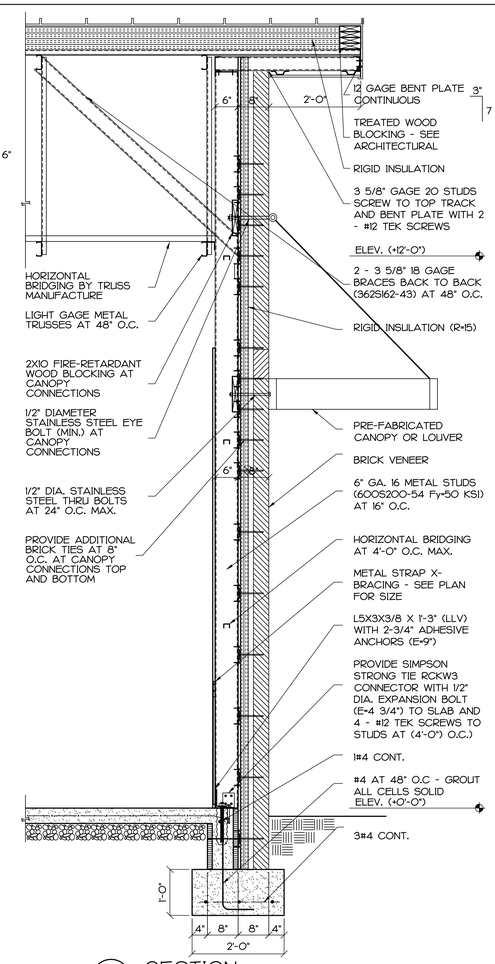
S201



1 S202 SECTION
3/4"=1'-0"



2 S202 SECTION
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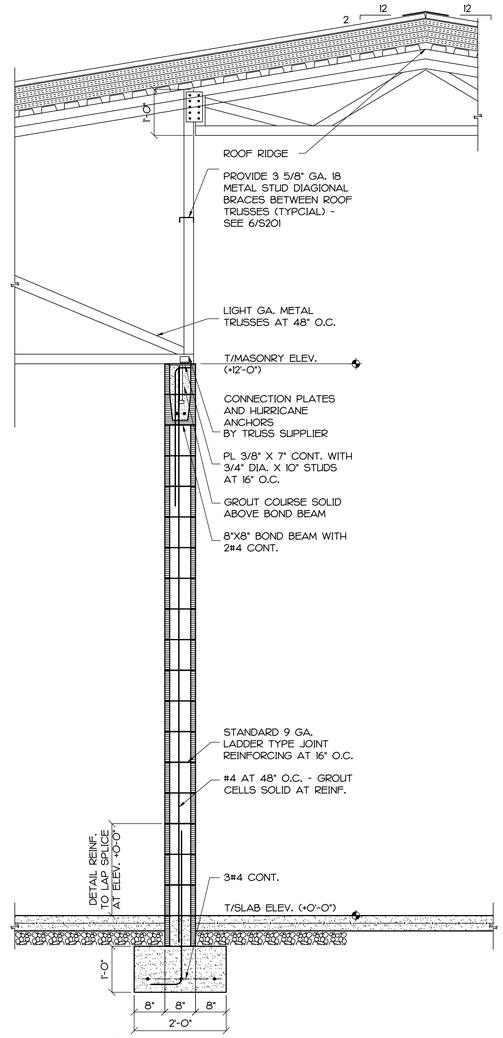
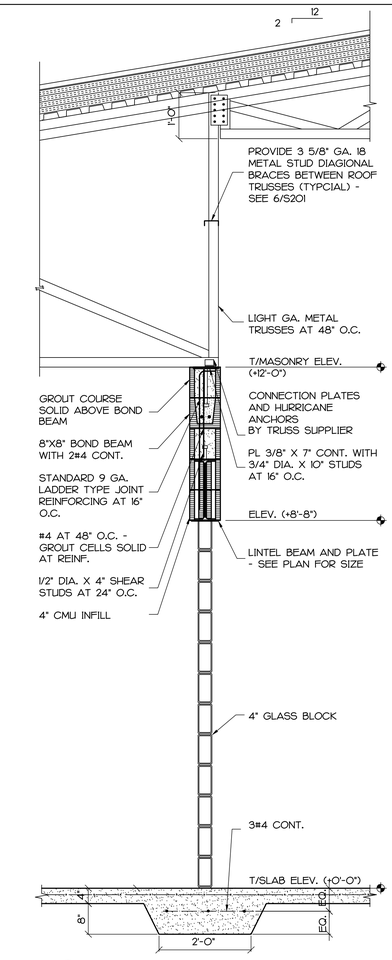
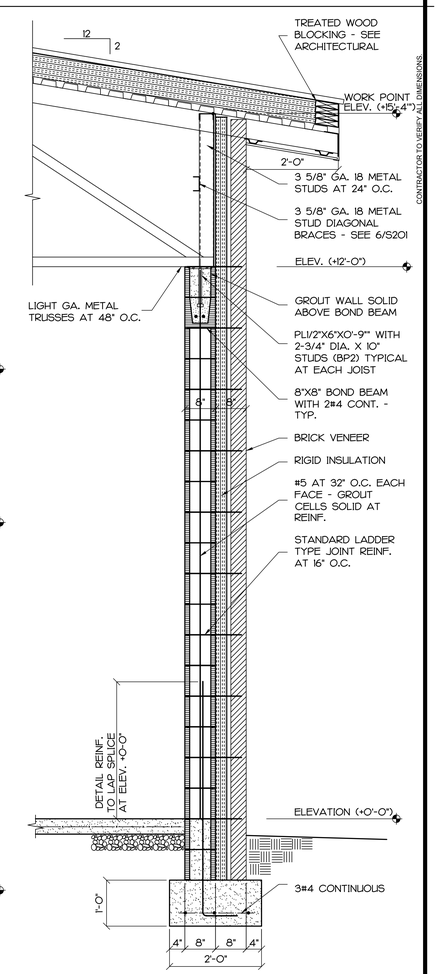


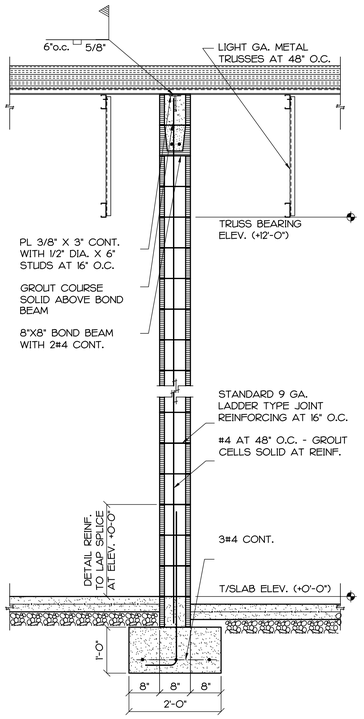
3 S202 SECTION
3/4"=1'-0"



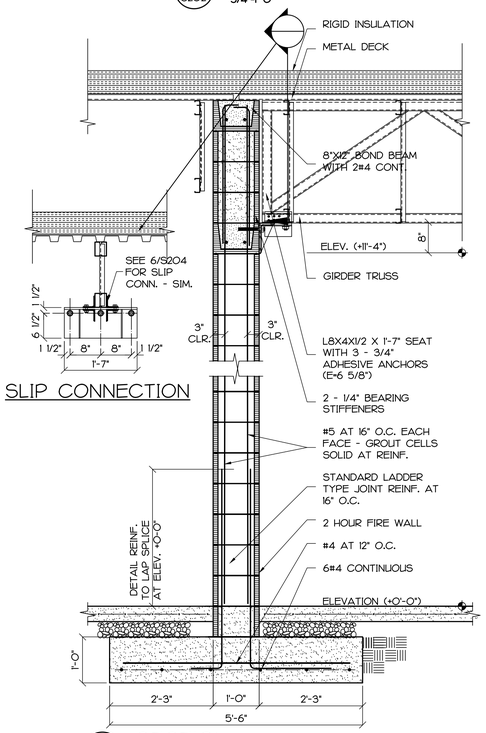
4 S202 SECTION
3/4"=1'-0"



5 S202 SECTION
3/4"=1'-0"

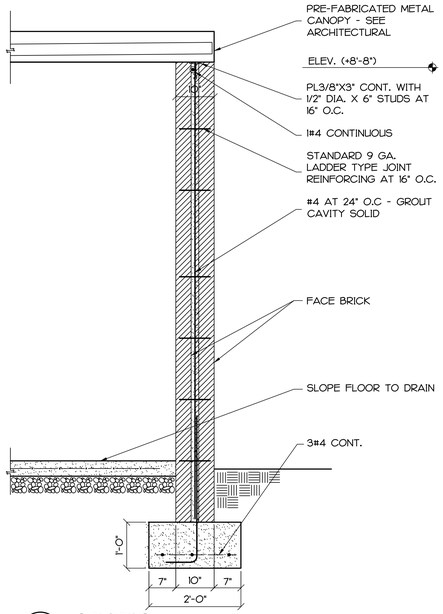


6 S202 SECTION
3/4"=1'-0"

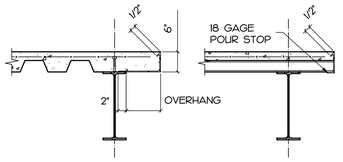


SLIP CONNECTION

7 S202 SECTION
3/4"=1'-0"



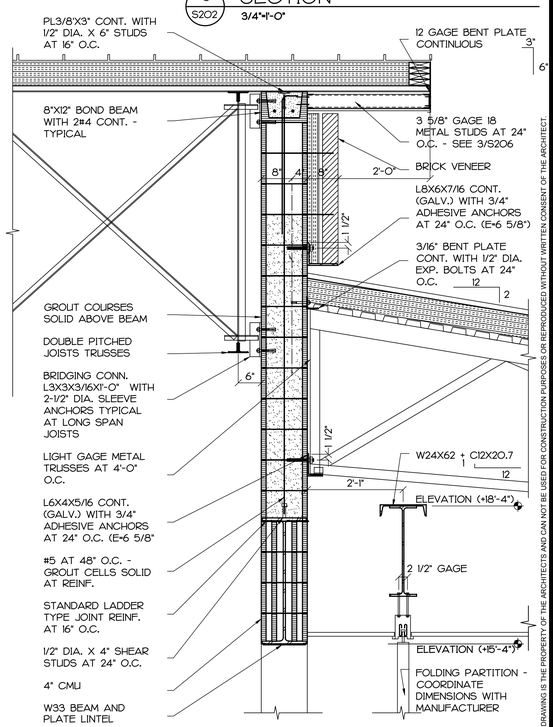
8 S202 SECTION
3/4"=1'-0"



POUR STOP GAGE:
UNLESS SHOWN OTHERWISE

OVERHANG	GAUGE
0" TO 1"	18 GAUGE
2" TO 3"	16 GAUGE
4" TO 5"	14 GAUGE
6" TO 9"	12 GAUGE
10" TO 11"	10 GAUGE
12" TO 16"	1/4" PLATE

9 S202 TYP. POUR STOP DETAIL
3/4"=1'-0"



10 S202 SECTION
3/4"=1'-0"

CONTRACTOR TO VERIFY ALL DIMENSIONS

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SEAL
Robert M. Ruggles
NUMBER 24892
REGISTERED PROFESSIONAL ENGINEER
8/7/14

ISSUE DATE: 08.07.2014
ISSUED FOR: PERMIT
CHECKED BY: RMR
PROJECT: 1021

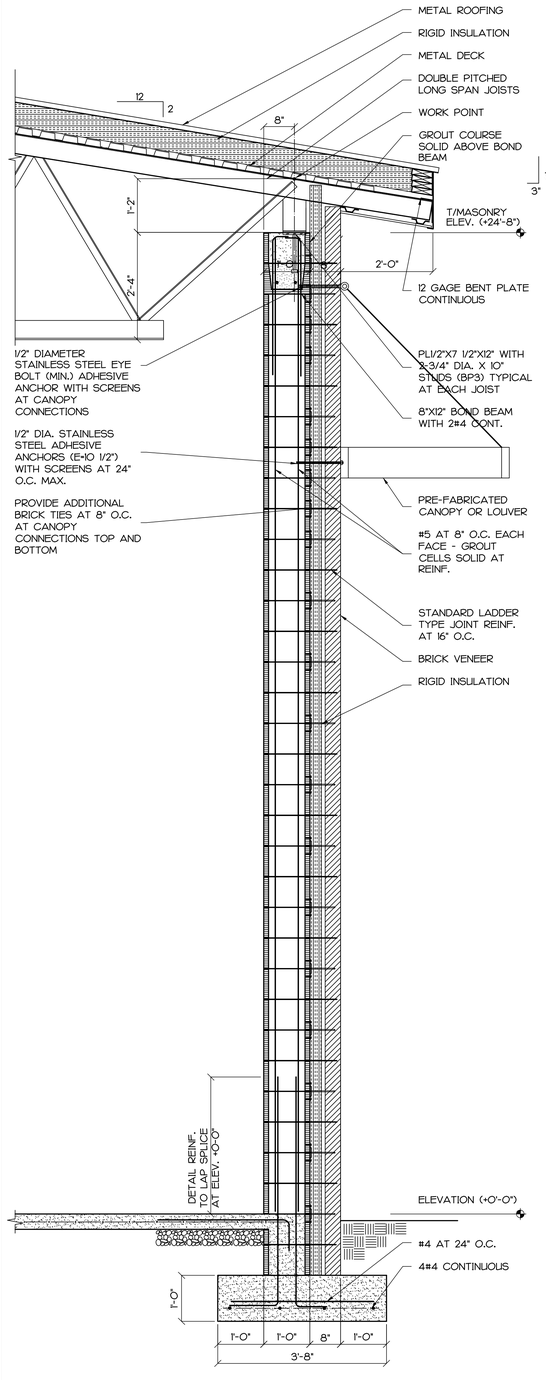
STUMP SOUND ELEMENTARY SCHOOL
ONSLOW COUNTY SCHOOLS
STUMP SOUND, NORTH CAROLINA

SECTIONS AND DETAILS

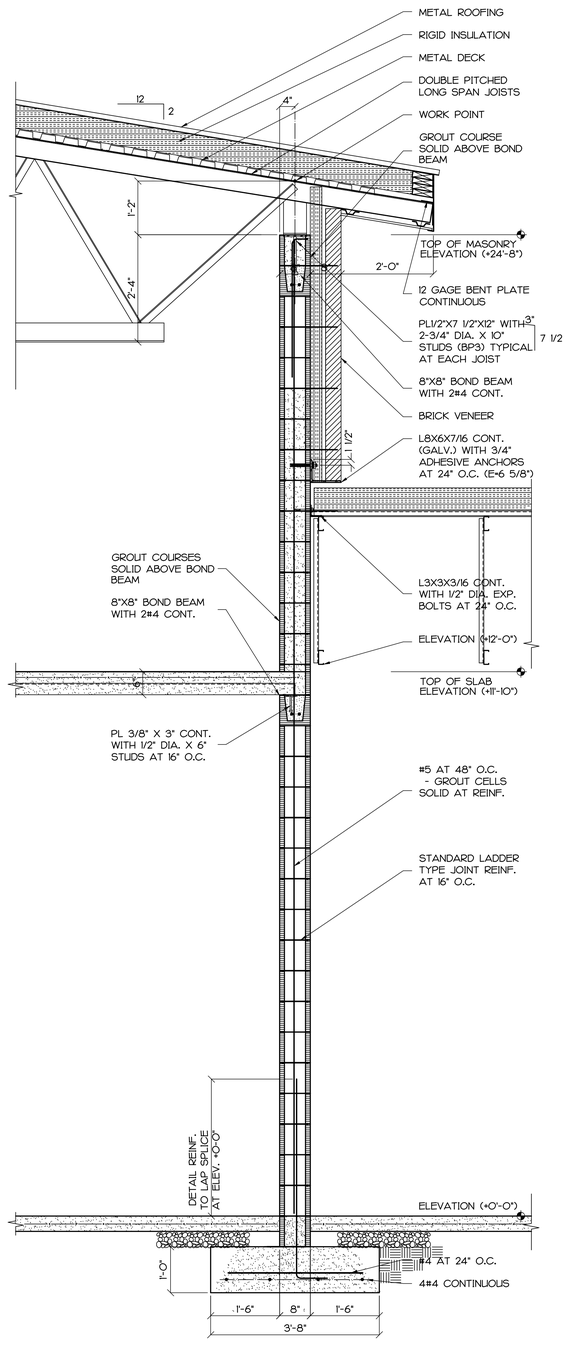
REVISION SCHEDULE

Δ	DATE	REFERENCE

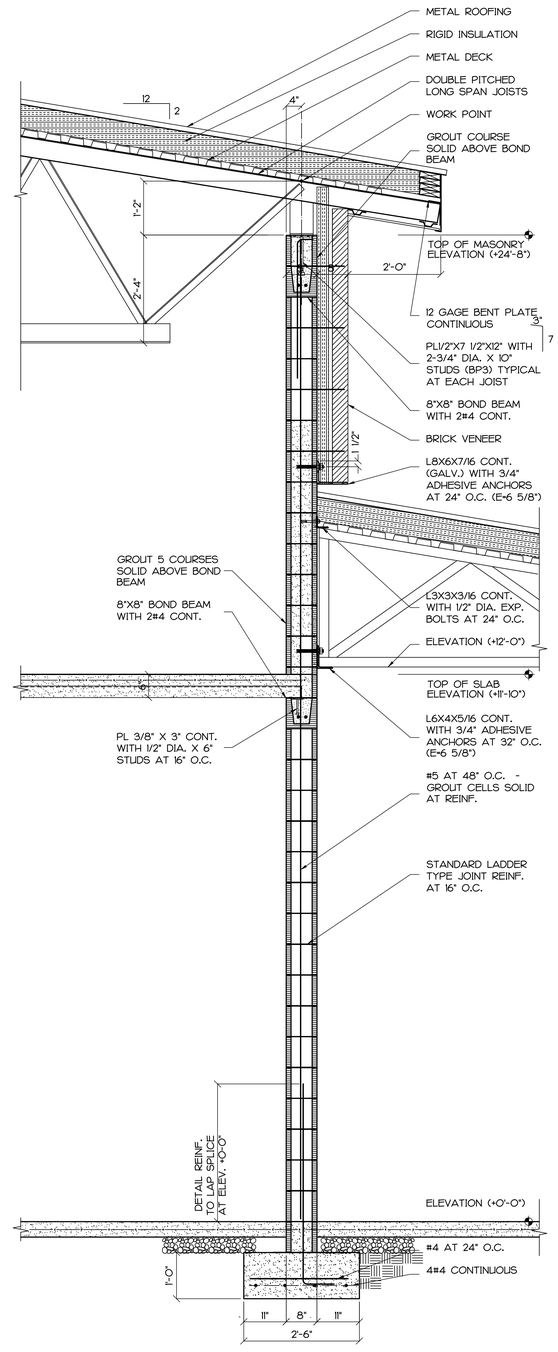
S202



1 S203 SECTION
3/4"=1'-0"



2 S203 SECTION
3/4"=1'-0"



3 S203 SECTION
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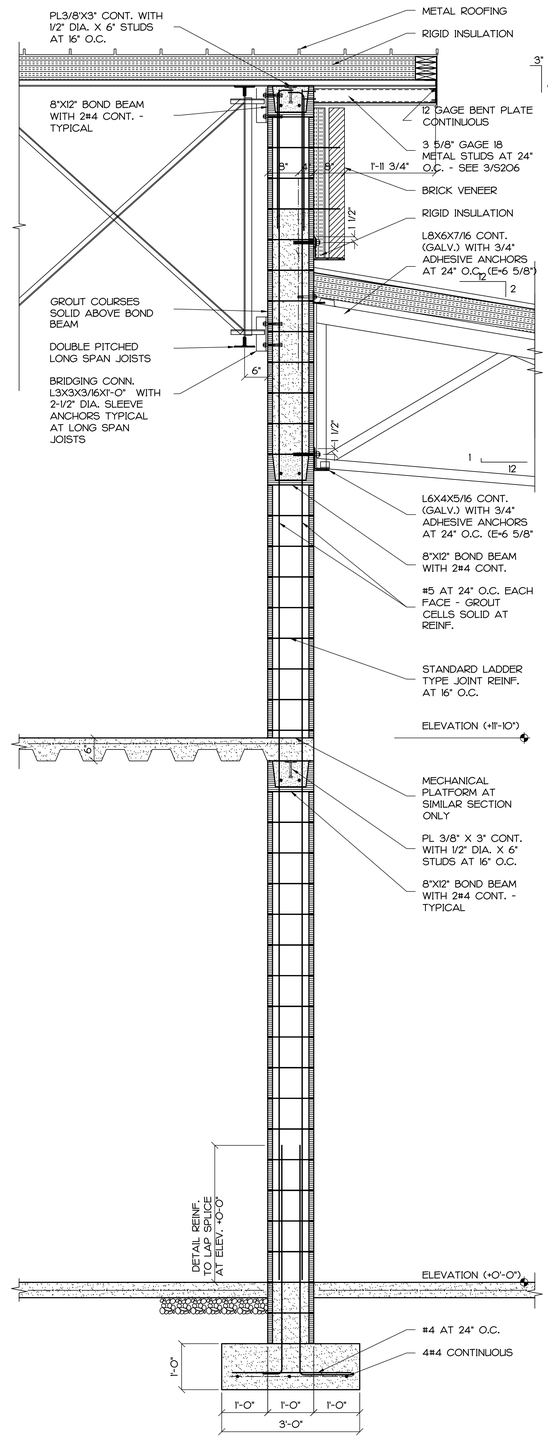

4 S203 SECTION
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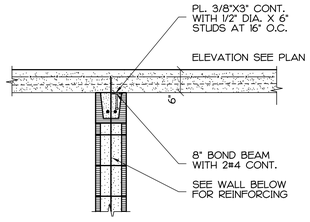

5 S203 SECTION
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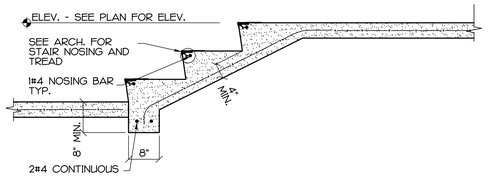

6 S203 SECTION
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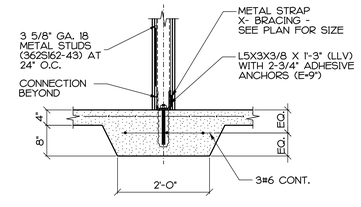

7 S203 SECTION
3/4"=1'-0"

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CHARLESTON, SOUTH CAROLINA 29403
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ISSUE DATE: 09.27.2019
DRAWN BY: RMR
CHECKED BY: RMR
PROJECT: 1821

STUMP SOUND ELEMENTARY SCHOOL
ONSLOW COUNTY SCHOOLS
STUMP SOUND, NORTH CAROLINA

SECTIONS AND DETAILS

REVISION SCHEDULE

	DATE	REFERENCE

S203

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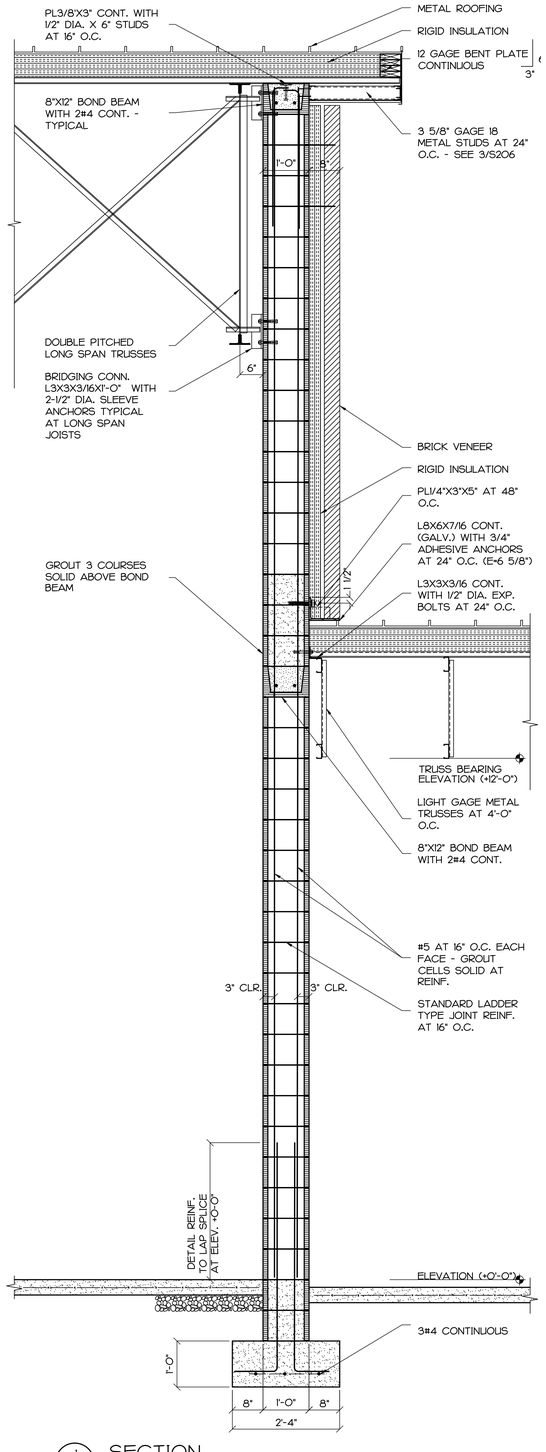

1 S204 SECTION
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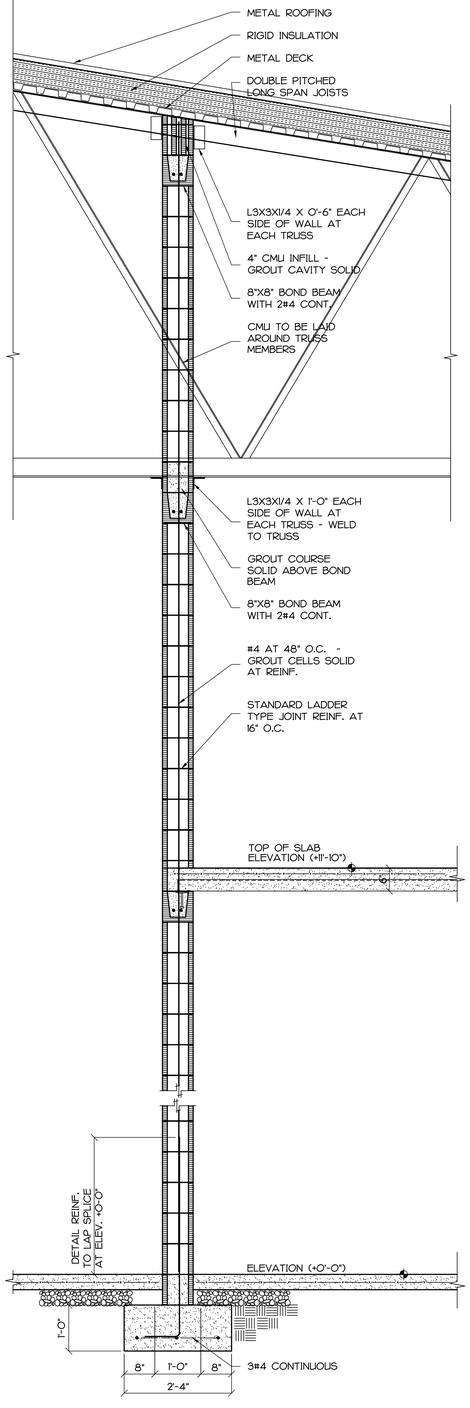

2 S204 SECTION
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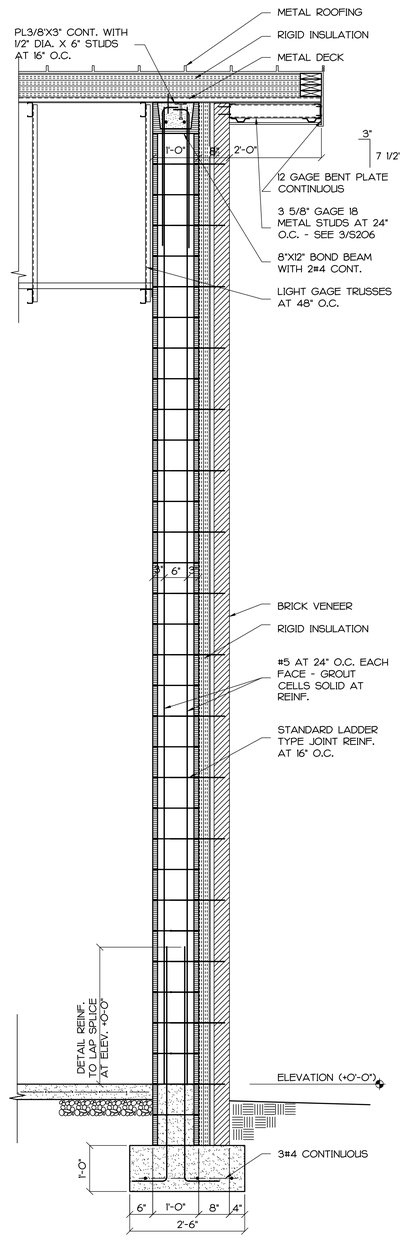

3 S204 SECTION
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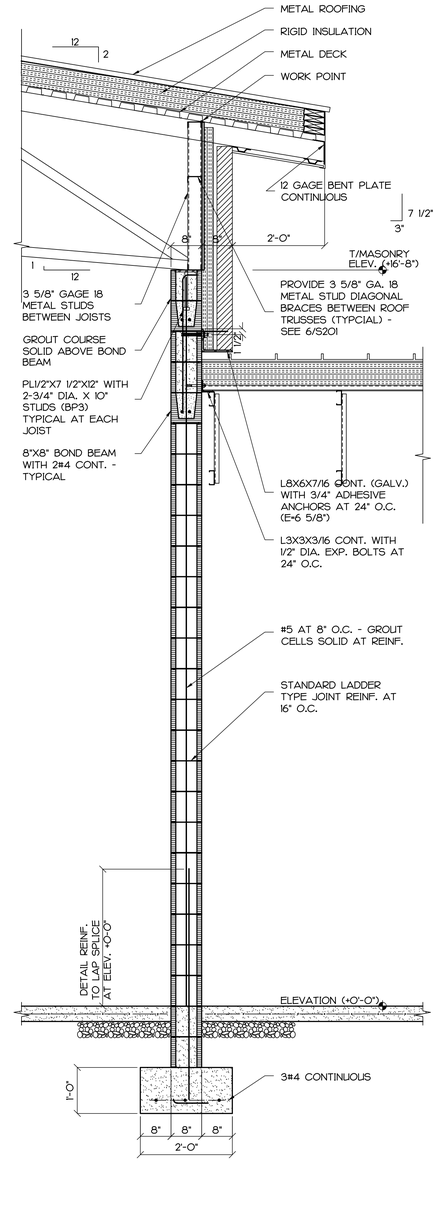

4 S204 SECTION
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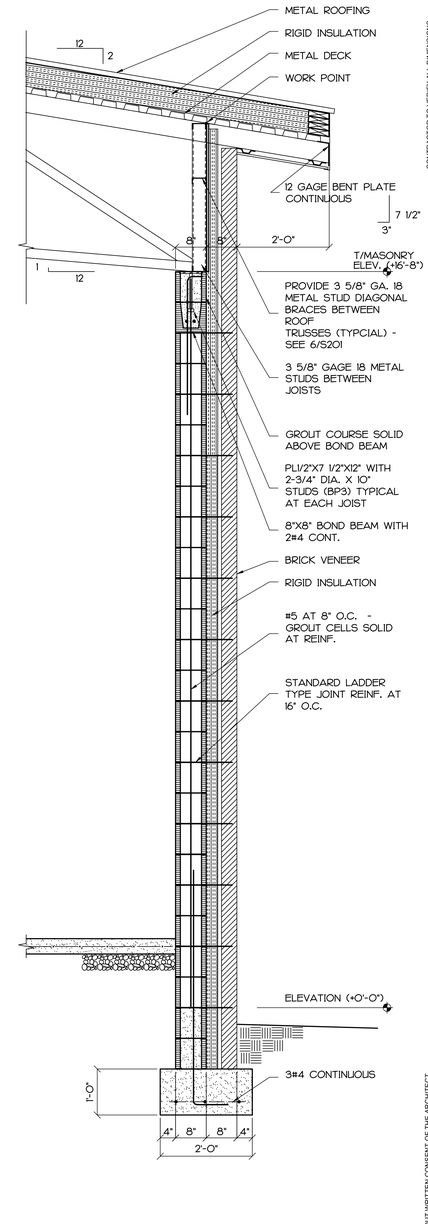
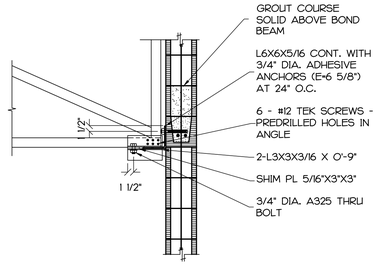


5 S204 SECTION
3/4"=1'-0"



6 S204 SECTION
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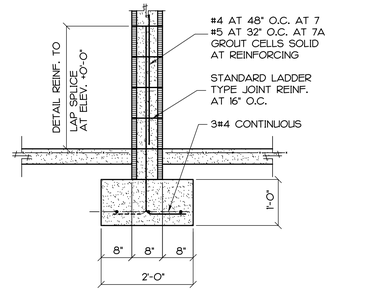
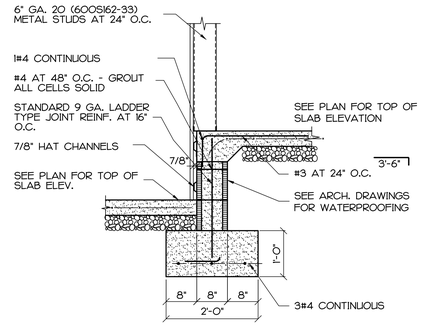


7 S204 7A S204 SECTION
3/4"=1'-0"



8 S204 SECTION
3/4"=1'-0"

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701 EAST BAY STREET, SUITE 302
CHARLESTON, SOUTH CAROLINA 29403
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ISSUE DATE: 03.07.2019
DRAWN BY: RWK
CHECKED BY: RWR
PROJECT: 1321

STUMP SOUND ELEMENTARY SCHOOL
ONSLOW COUNTY SCHOOLS
STUMP SOUND, NORTH CAROLINA
SECTIONS AND DETAILS

REVISION SCHEDULE

△	DATE	REFERENCE

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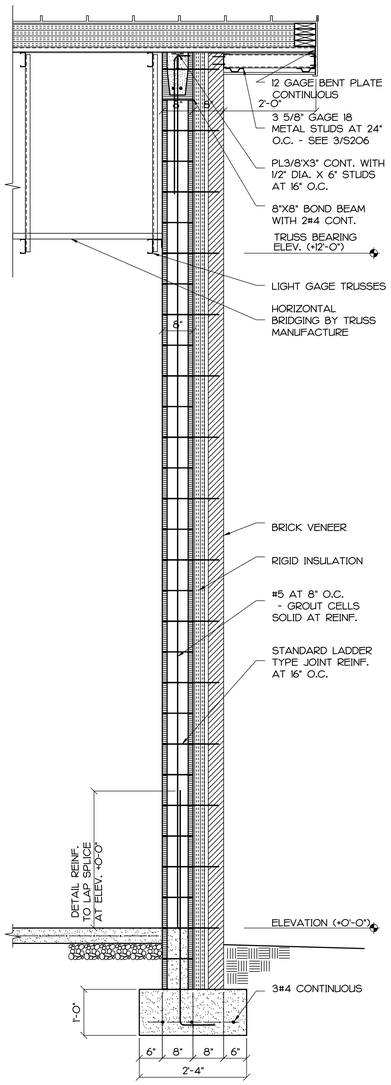
S204



1 S205 SECTION
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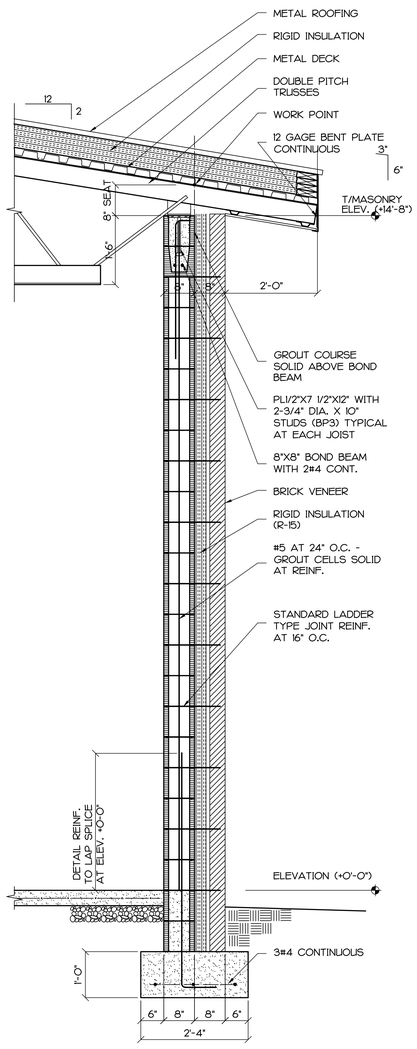
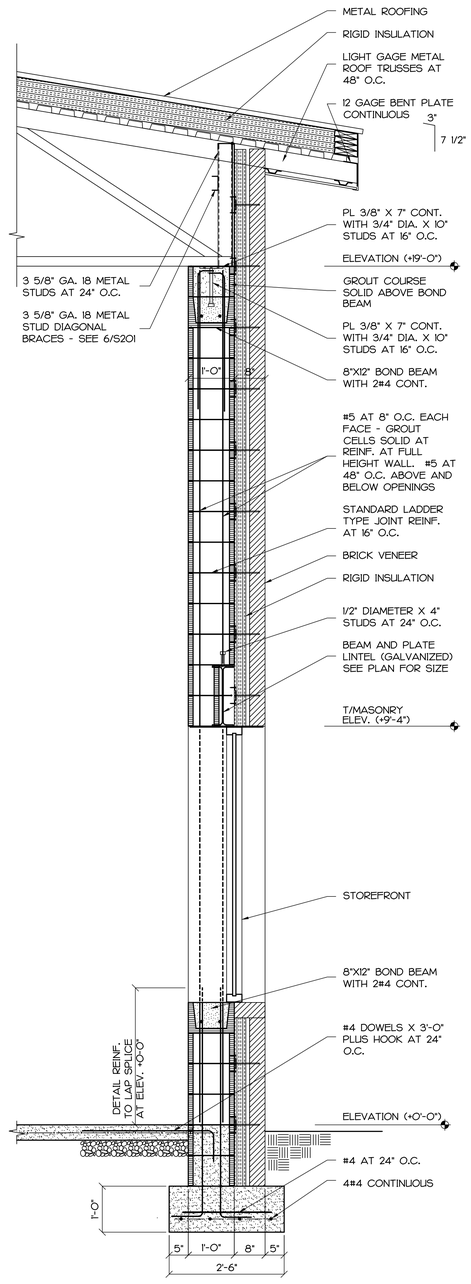
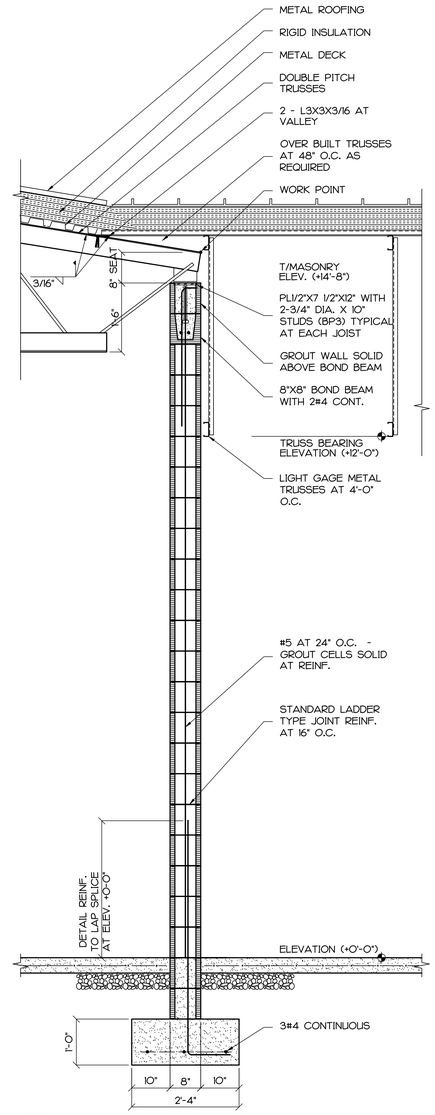


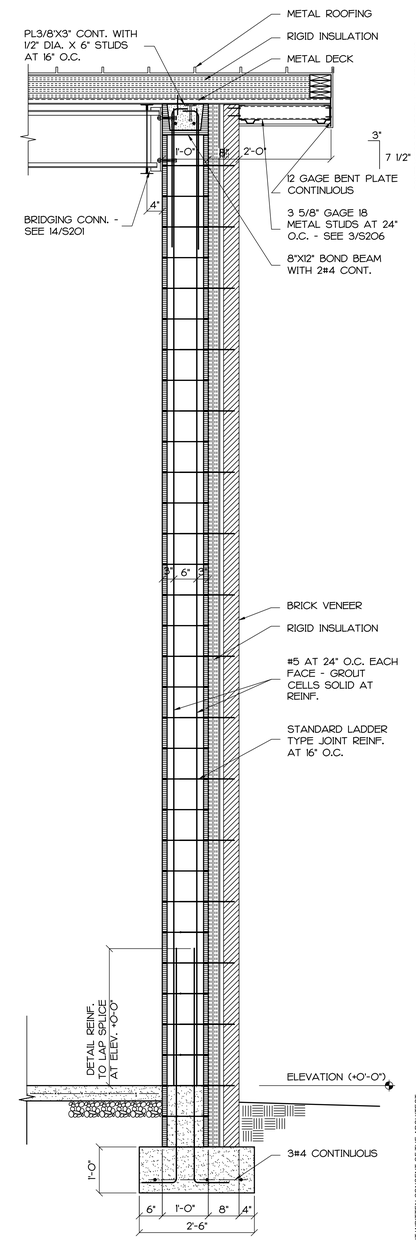
2 S205 SECTION
3/4"=1'-0"



3 S205 SECTION
3/4"=1'-0"



4 S205 SECTION
3/4"=1'-0"



5 S205 SECTION
3/4"=1'-0"

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ISSUE DATE: 25.07.2014
ISSUED BY: RMR
CHECKED BY: RMR
PROJECT: 1321

STUMP SOUND ELEMENTARY SCHOOL
ONSLOW COUNTY SCHOOLS
STUMP SOUND, NORTH CAROLINA

SECTIONS AND DETAILS

REVISION SCHEDULE

	DATE	REFERENCE

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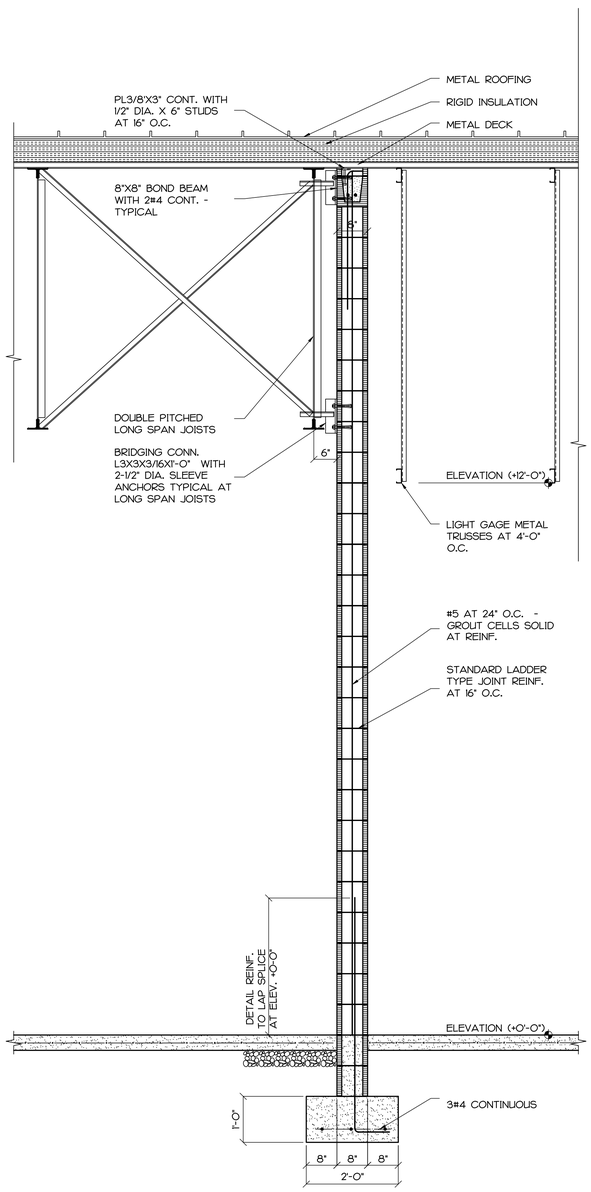
S205



1 S206 SECTION
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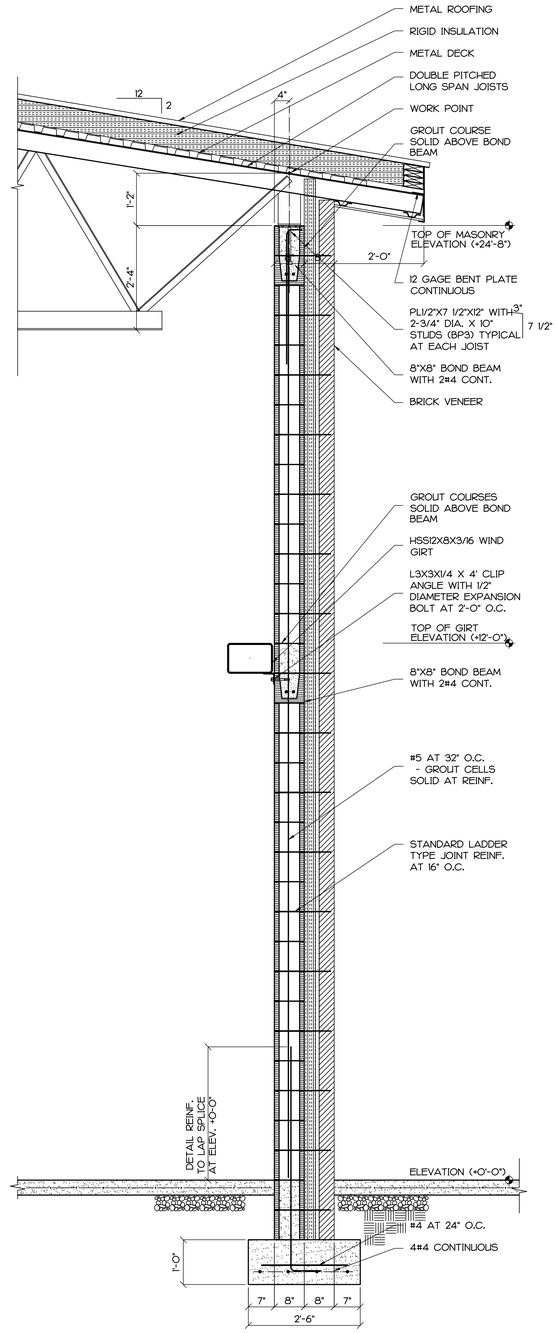

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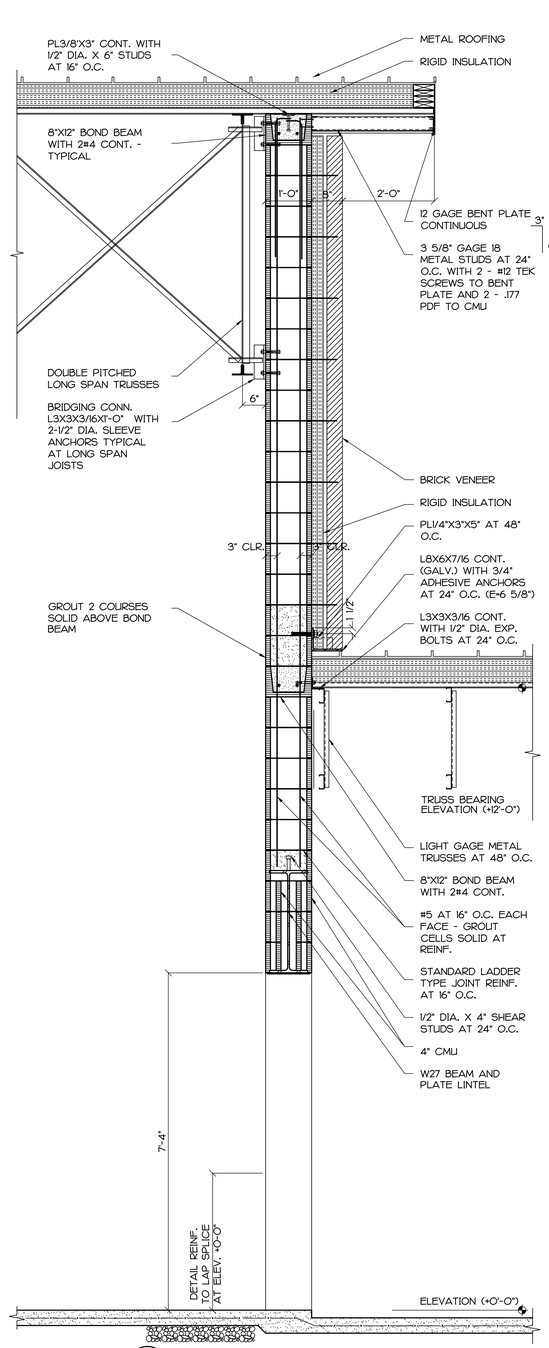

3 S206 SECTION
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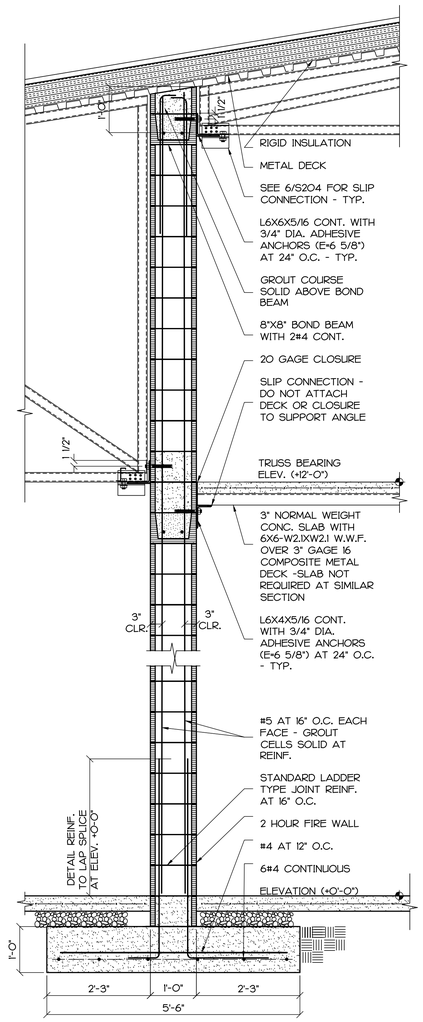

4 S206 SECTION
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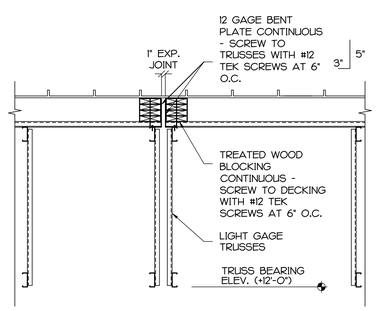

5 S206 SECTION AT EXP. JOINT
3/4"=1'-0"

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STUMP SOUND ELEMENTARY SCHOOL
ONSLOW COUNTY SCHOOLS
STUMP SOUND, NORTH CAROLINA
SECTIONS AND DETAILS

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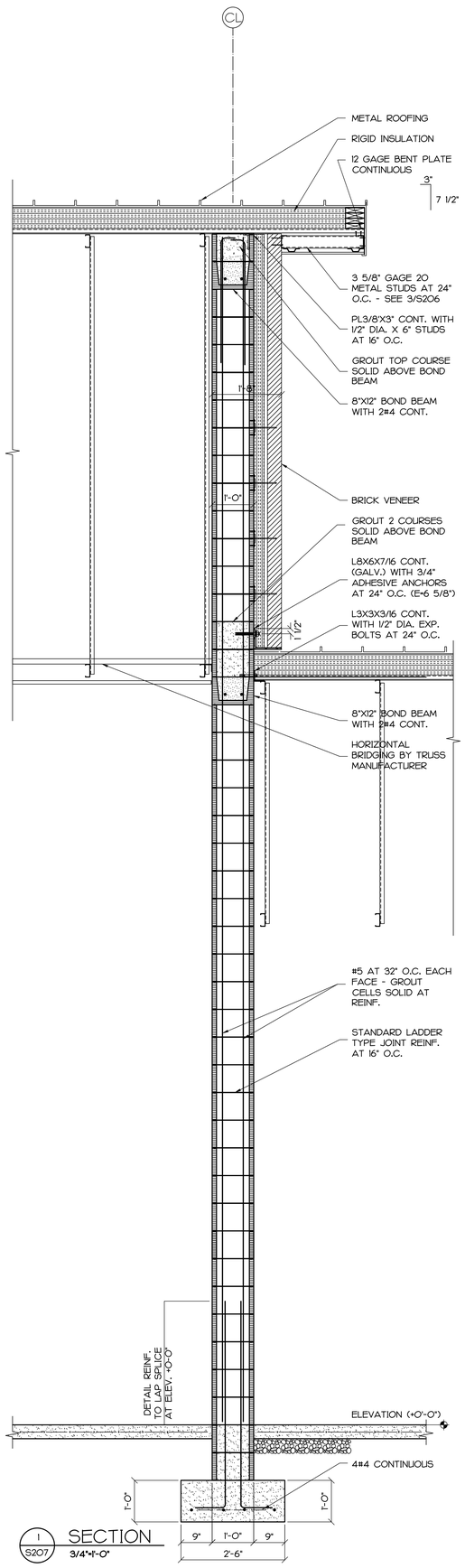
S206



1 S207 SECTION
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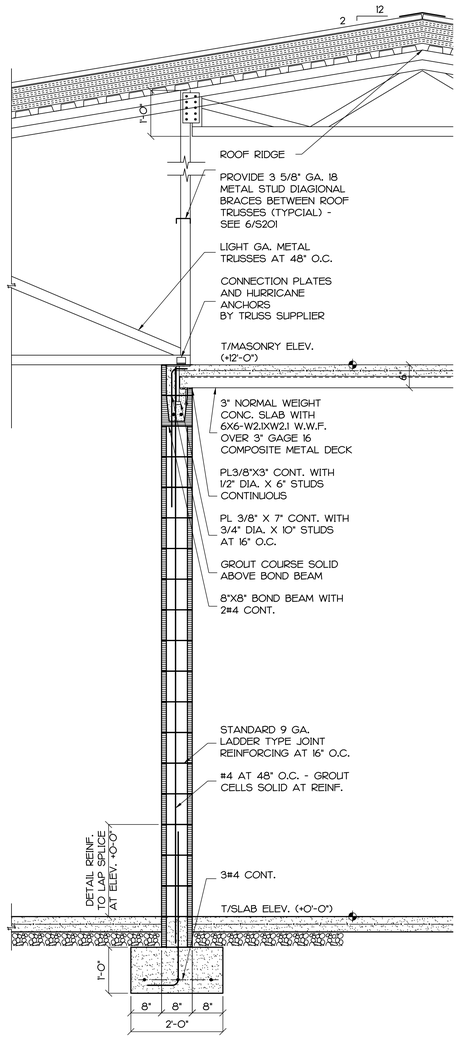
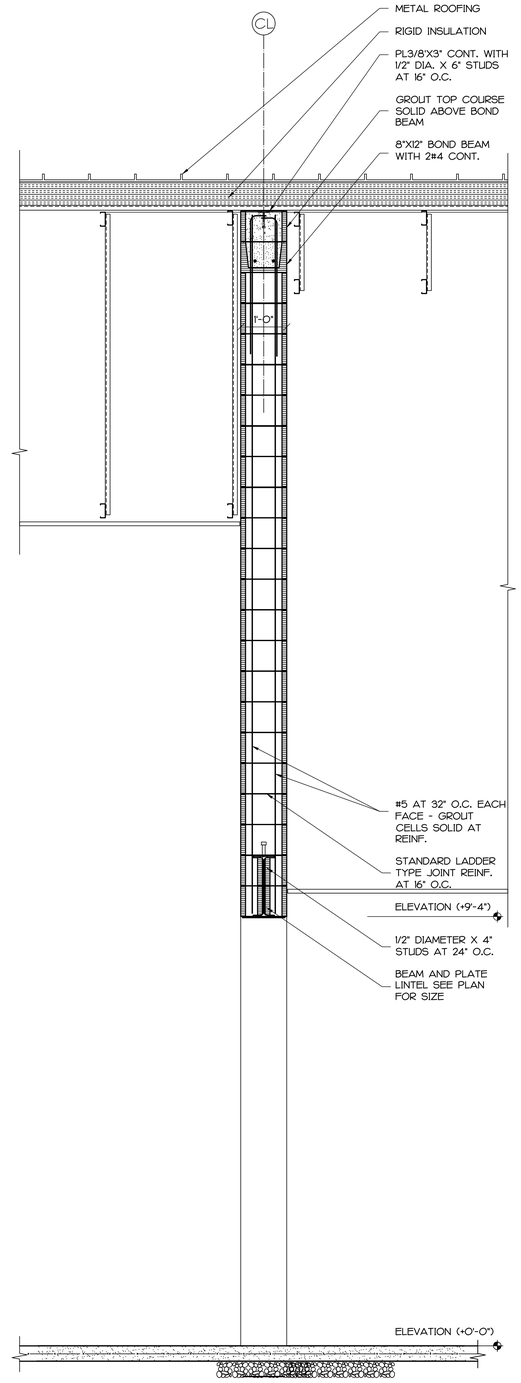
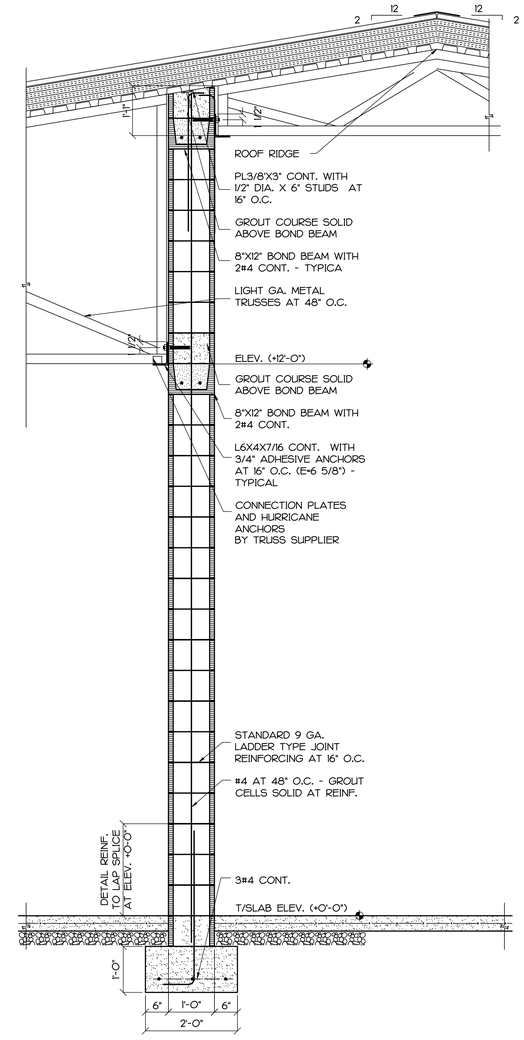


2 S207 SECTION
3/4"=1'-0"



3 S207 SECTION
3/4"=1'-0"



4 S207 SECTION
3/4"=1'-0"

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CHECKED BY: RMR
PROJECT: 1621

STUMP SOUND ELEMENTARY SCHOOL
ONSLOW COUNTY SCHOOLS
STUMP SOUND, NORTH CAROLINA

SECTIONS AND DETAILS

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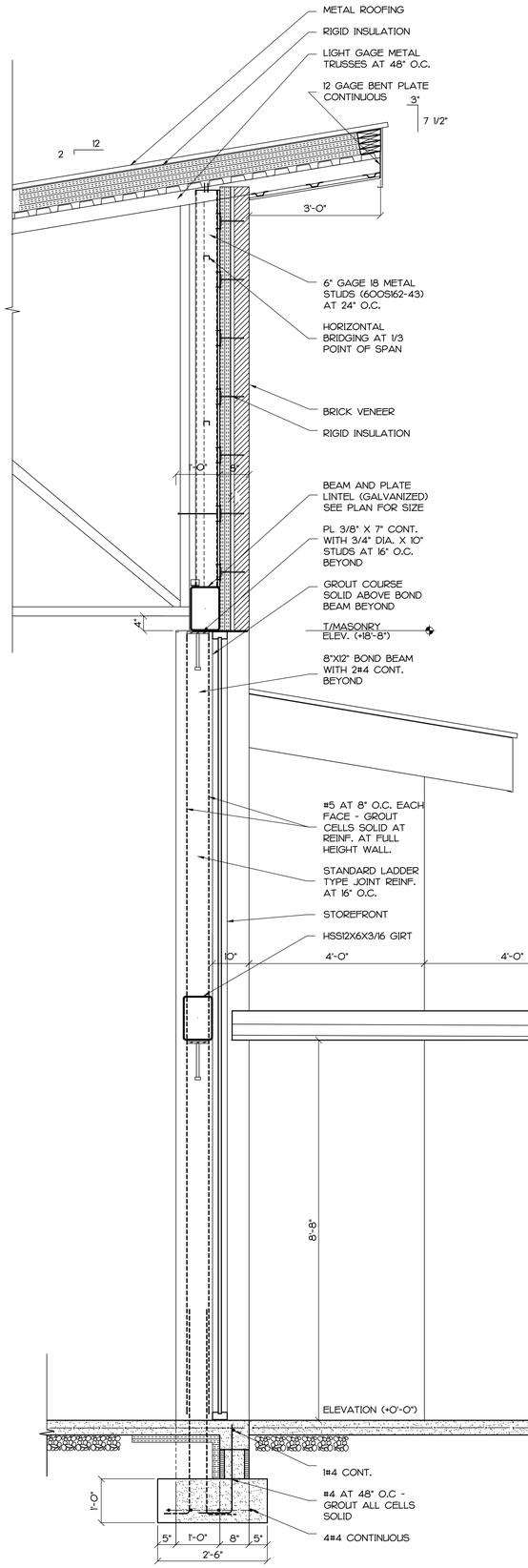
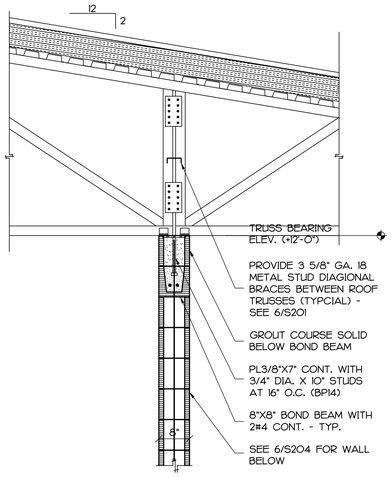
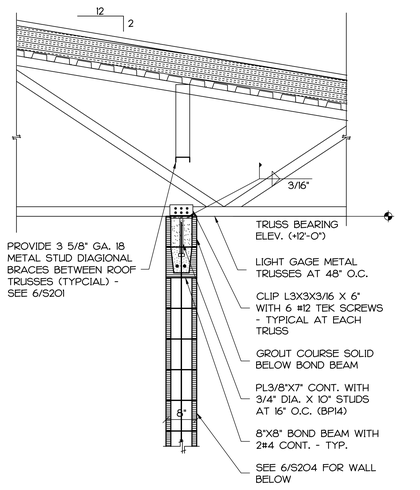
S207



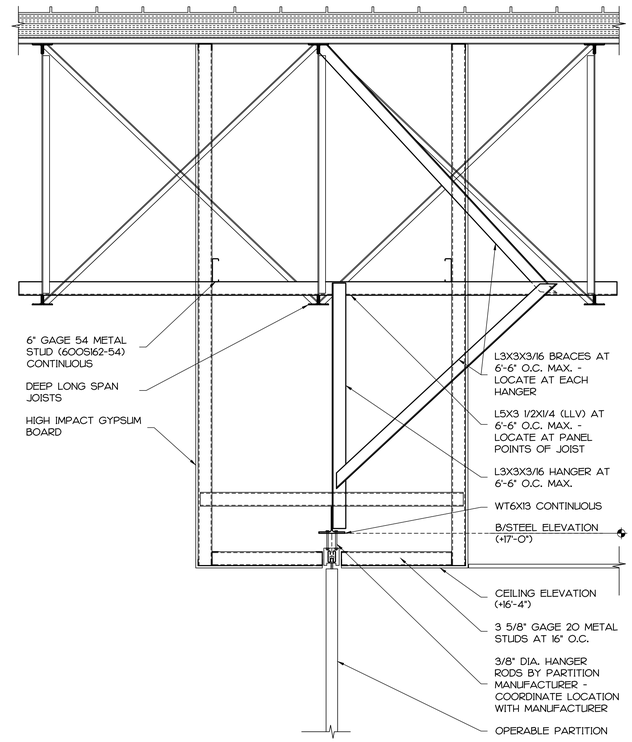
1 S208 SECTION
3/4"=1'-0"



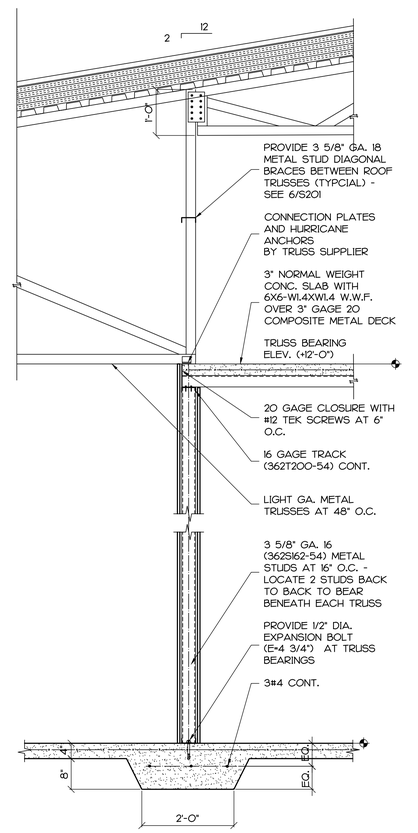
2 S208 SECTION
3/4"=1'-0"



3 S208 SECTION
3/4"=1'-0"



4 S208 SECTION
3/4"=1'-0"



5 S208 SECTION
3/4"=1'-0"

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STUMP SOUND ELEMENTARY SCHOOL
ONSLOW COUNTY SCHOOLS
STUMP SOUND, NORTH CAROLINA
SECTIONS AND DETAILS

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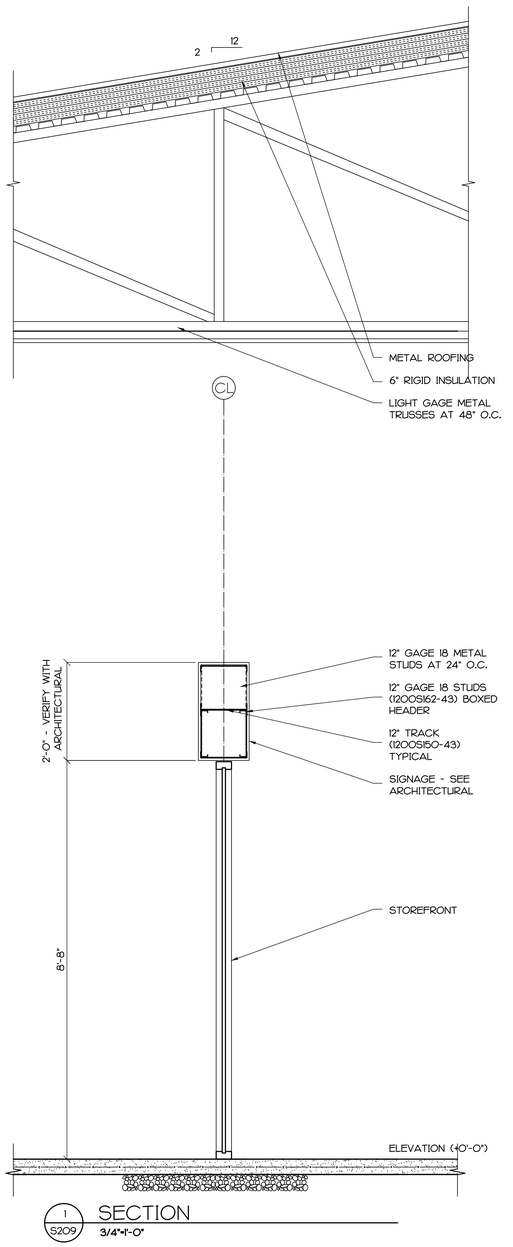
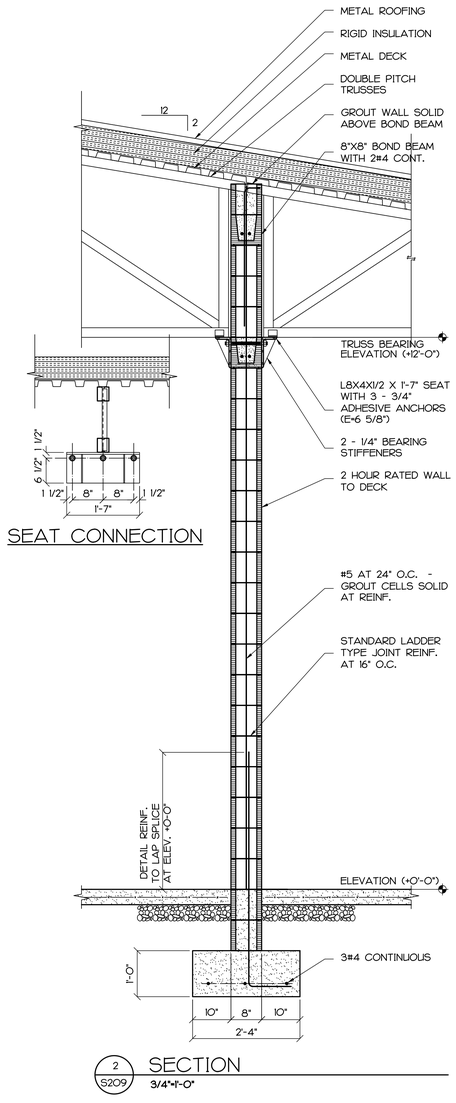
S208



1 S209 SECTION
3/4"=1'-0"



2 S209 SECTION
3/4"=1'-0"

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PROJECT: 1821

STUMP SOUND ELEMENTARY SCHOOL
ONSLOW COUNTY SCHOOLS
STUMP SOUND, NORTH CAROLINA
SECTIONS AND DETAILS

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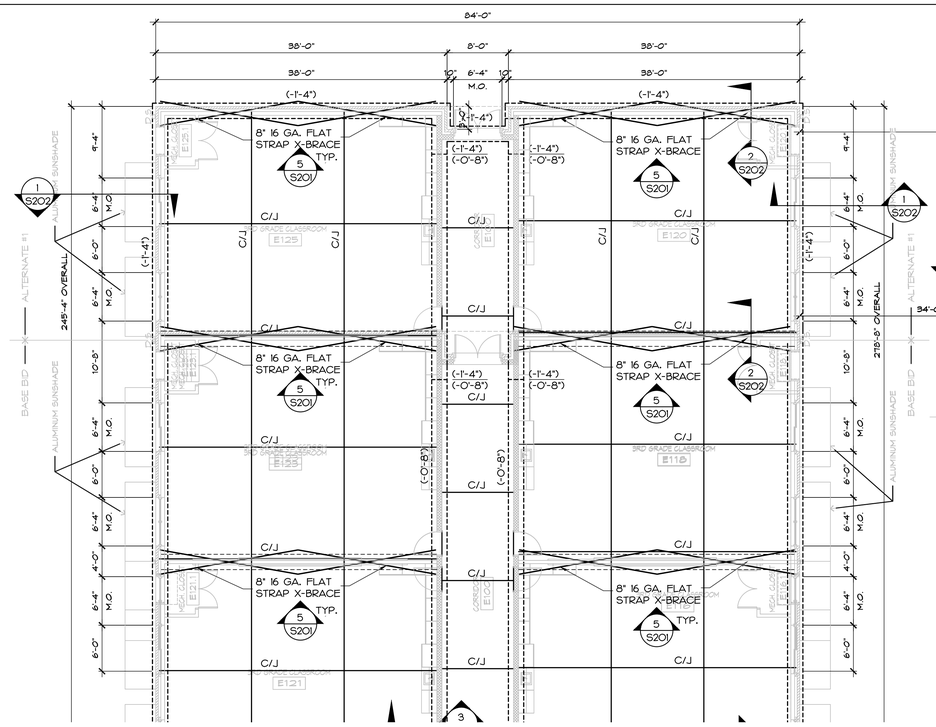
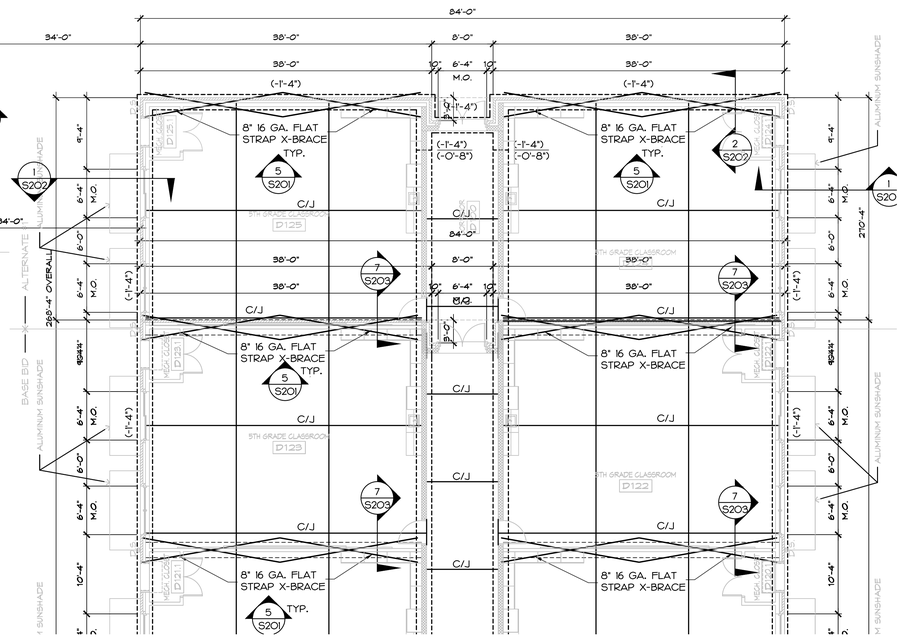
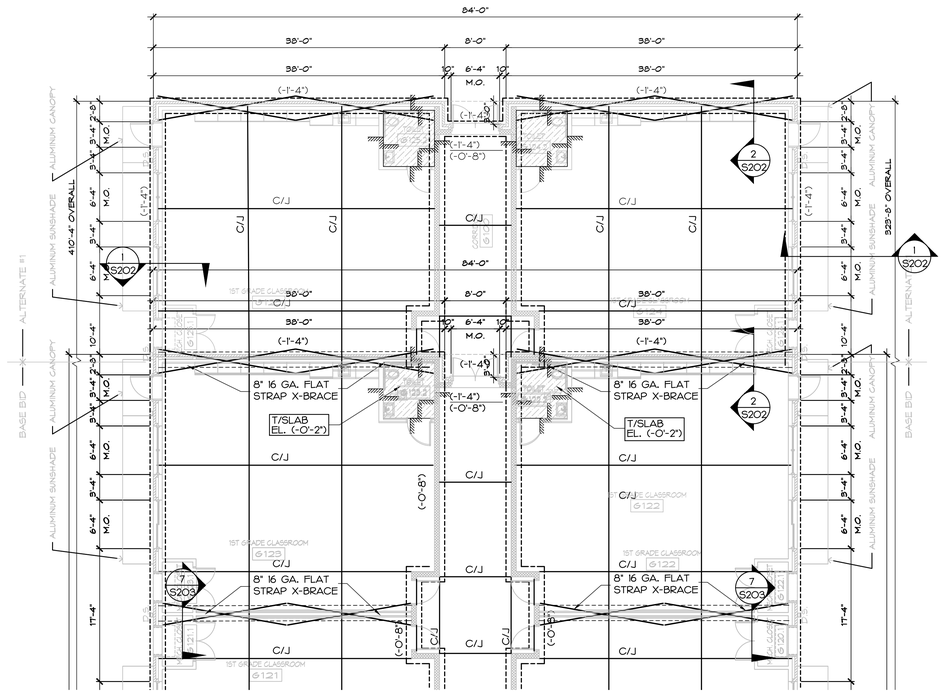
S209



ALTERNATE #1 - AREA "E"



ALTERNATE #1 - AREA "D"



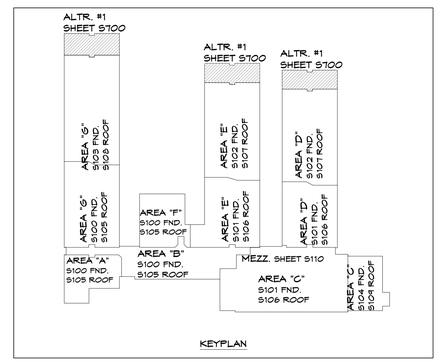
ALTERNATE #1 - AREA "G"

FOUNDATION / SLAB PLAN

1/8"=1'-0"

PLAN NOTES

1. SEE S200 FOR GENERAL NOTES AND SPECIAL INSPECTION REQUIREMENTS.
2. ALL ELEVATION REFERENCED FROM FINISH FLOOR ELEVATION = (+0'-0") UNLESS NOTED OTHERWISE.
3. TOP OF FOOTING ELEVATION NOTED THUS (-1'-4") REFERENCED FROM ELEVATION (+0'-0")
4. PROVIDE 3 - 6" GAGE 16 STUDS (600S250-54 FY=33 KSI) AT BEARINGS.
5. PROVIDE 3 - 3 5/8" GAGE 18 STUDS (362S200-43 FY=33 KSI) AT BEARINGS.
6. PROVIDE 3 - 3 5/8" GAGE 16 STUDS (362S200-54 FY=33 KSI) AT BEARINGS.
7. NOTE 7 INDICATES GROUT 3 CELLS SOLID WITH 1#5 PER CELL.
8. PROVIDE 4 - 3 5/8" GAGE 14 STUDS (362S200-68 FY=33 KSI) AT BEARINGS.
9. GROUT ALL CELLS SOLID WITH 2#5 PER CELL.



KEYPLAN

CONTRACTOR TO VERIFY ALL DIMENSIONS.

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STUMP SOUND ELEMENTARY SCHOOL
ONSLOW COUNTY SCHOOLS
STUMP SOUND, NORTH CAROLINA

FOUNDATION/SLAB PLAN - ALT. #1

REVISION SCHEDULE

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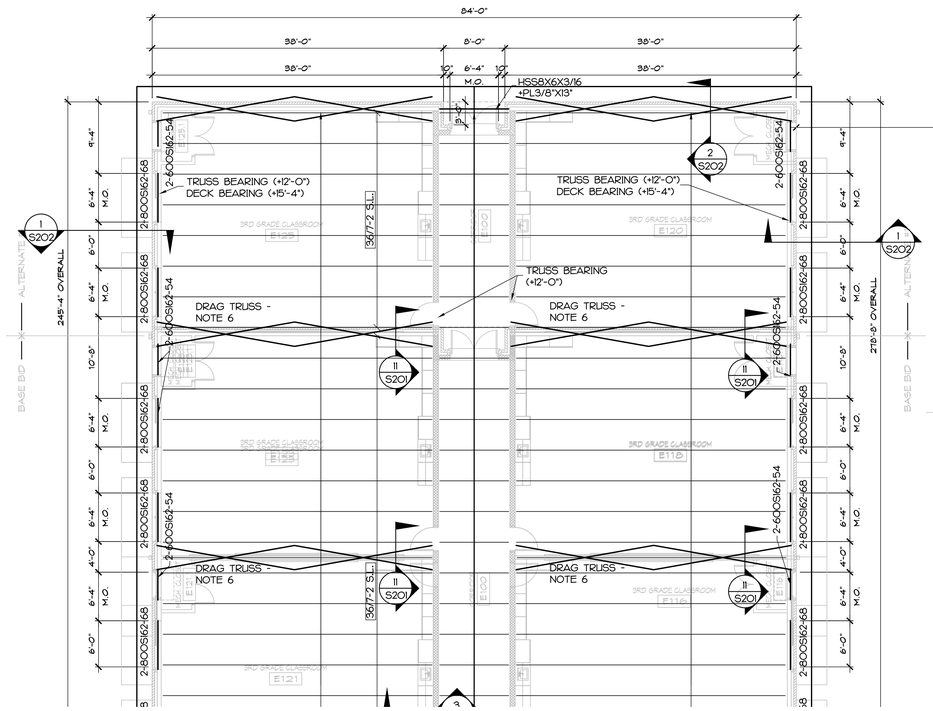
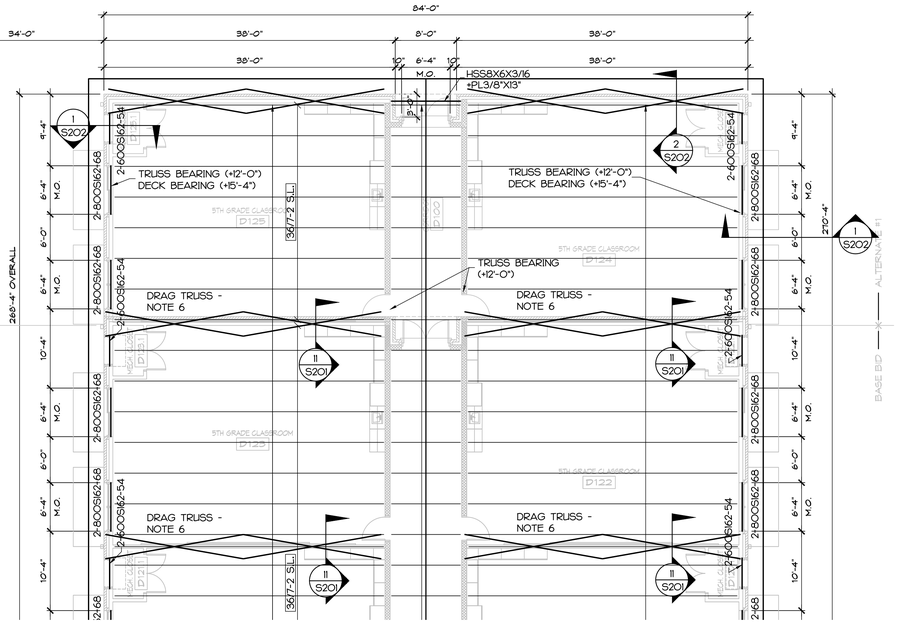
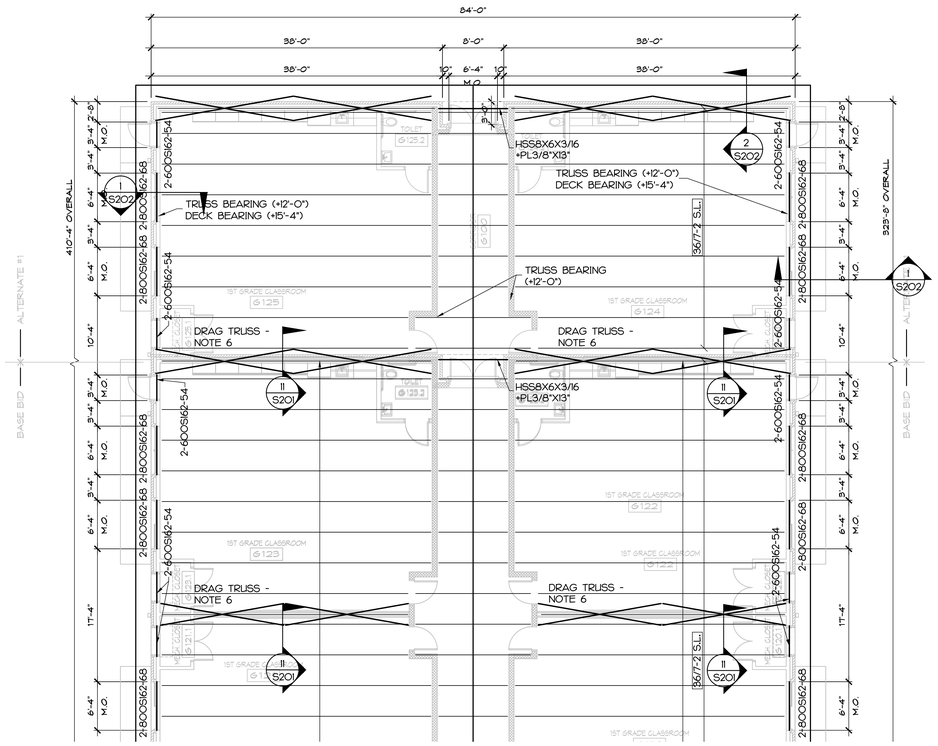


ALTERNATE #1 - AREA "E"



ALTERNATE #1 - AREA "D"



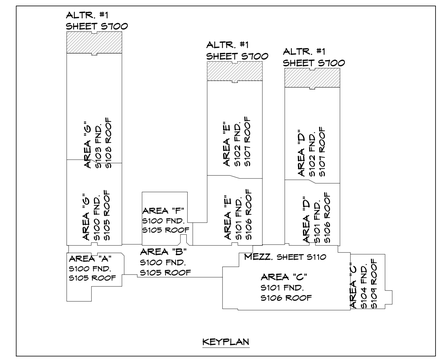
ALTERNATE #1 - AREA "G"

ROOF FRAMING PLAN

1/8"=1'-0"

PLAN NOTES:

1. SEE SHEET S200 FOR GENERAL NOTES AND SPECIAL INSPECTION REQUIREMENTS.
2. SEE PLAN FOR TOP OF STEEL ELEVATION.
3. ROOF DECK SHALL BE 1 1/2" GAGE 22 WIDE RIB ROOF DECK (PAINTED UNLESS NOTED OTHERWISE.
   DECK CONNECTION KEY
   36/7 - 2 S.L.
   NUMBER OF #10 TEK SCREWS PER DECK SPAN
   DECK FASTENER PATTERN WITH #12 TEK SCREWS - SEE 3/S201
4. COORDINATE ALL OPENING SIZES AND LOCATIONS WITH MECHANICAL SUBCONTRACTOR.
5. ALL ROOF SLOPES SHALL BE 2/12 UNLESS NOTED OTHERWISE.
6. CENTER DRAG TRUSS OVER BRACED WALL BELOW. DESIGN TRUSSES FOR A LATERAL SERVICE LOAD OF 270 PLF.
7. GROUT ALL CELLS SOLID AT CORNERS WITH 2#5 PER CELL.
8. SEE S108 FOR SPECIAL JOIST DIAGRAMS.
9. ROOF FRAMING SHALL BE LIGHT GAGE METAL TRUSSES SPACED AT 4'-0" O.C. UNLESS NOTED OTHERWISE.



KEYPLAN

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PROJECT: 1821

STUMP SOUND ELEMENTARY SCHOOL
ONSLOW COUNTY SCHOOLS
STUMP SOUND, NORTH CAROLINA

ROOF FRAMING PLAN - ALT. #1

REVISION SCHEDULE

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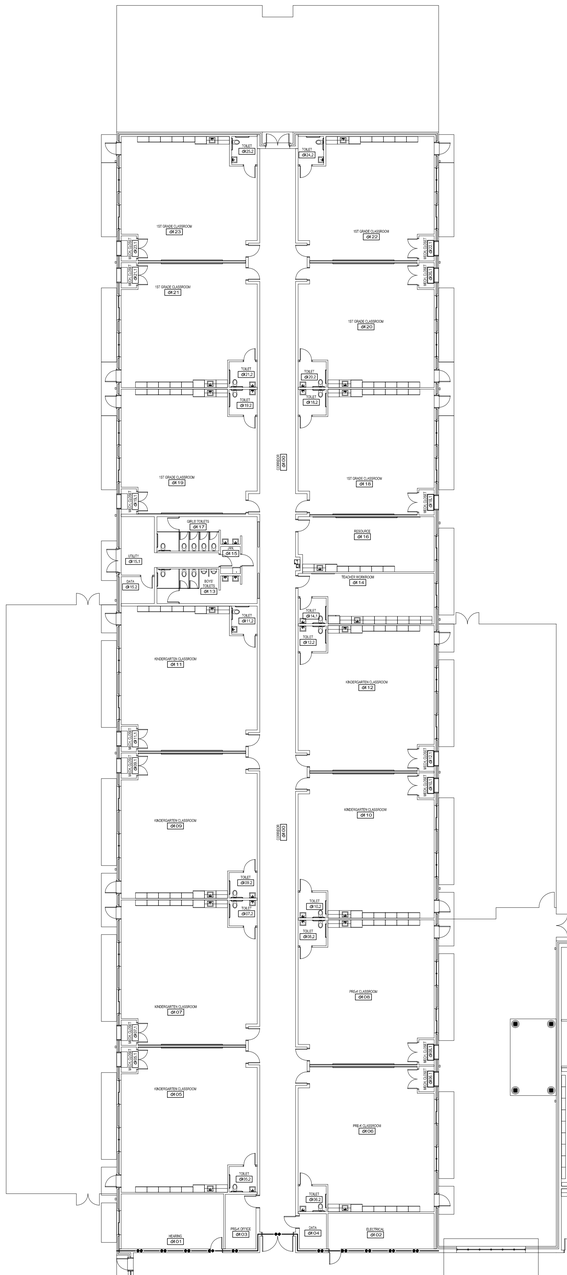
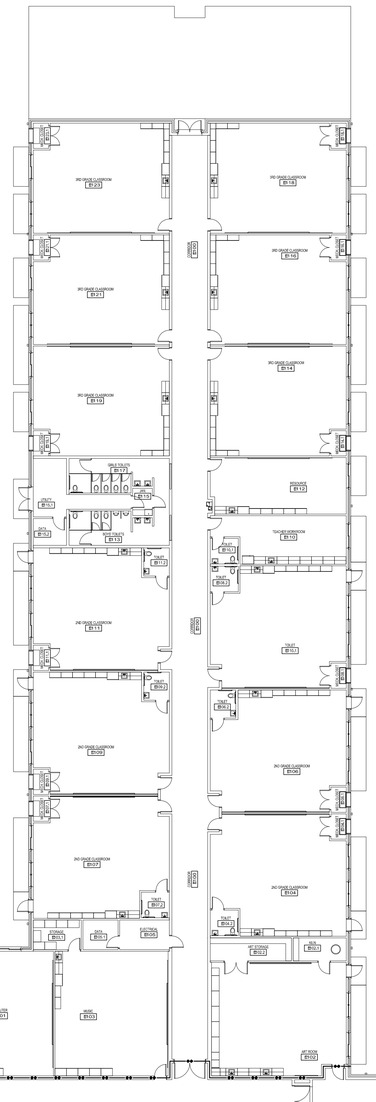
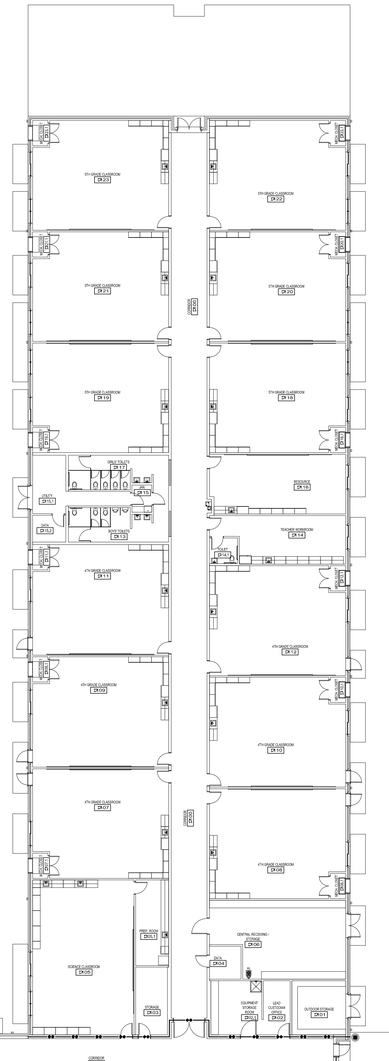
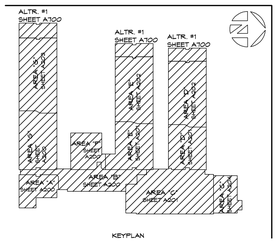
S701









KEYPLAN

CONTRACTOR TO VERIFY ALL DIMENSIONS.

FIRE RATED WALLS

—◆—◆—◆—◆—	1 HOUR WALL
—◆◆—◆◆—◆◆—	2 HOUR WALL

IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO APPLY THE PROPER FIRE-SAFING DETAIL FOR ALL DUCT AND PIPE PENETRATIONS THRU RATED & NON-RATED WALL AND FLOOR/CEILING ASSEMBLIES.

FOR BIDDING PURPOSES ONLY, ASSUME A WATER SUPPLY OF 790 GPM @ 20 PSI AT THE BASE OF THE RISER. THE SUCCESSFUL BIDDER SHALL BE REQUIRED TO OBTAIN AN ACTUAL, CURRENT, VERIFIED FLOW TEST PRIOR TO PERFORMING HYDRAULIC CALCULATIONS.

FIRE SPRINKLER RISERS. PROVIDE A MINIMUM OF THREE (3) RISERS.

FDC

6" FIREMAIN CONT'D ON CIVIL DWGS; FPC BEGINS 12"AFF

PROVIDE SPKR COVERAGE (TO PROVIDE FOR A FULLY SPRINKLERED BUILDING) IN ALL SPACES PER NFPA & ALL APPLICABLE LOCAL AND STATE CODES.

1 FP100 FLOOR PLAN
SCALE: 1/16" = 1'-0"

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ISSUE DATE: 04.30.2019
DRAWN BY: MW/KK
CHECKED BY: JCC
PROJECT: 1821

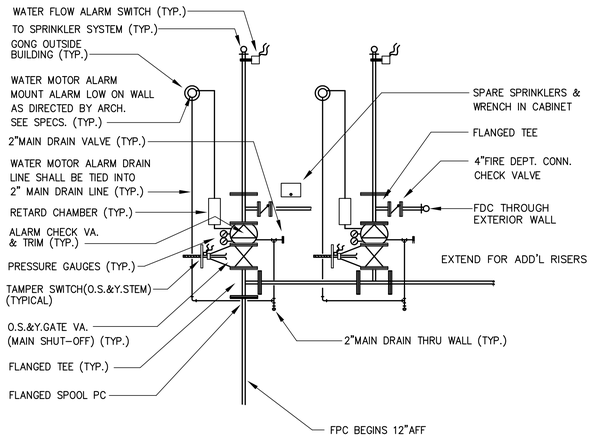
STUMP SOUND ELEMENTARY SCHOOL
ONSLOW COUNTY SCHOOLS
STUMP SOUND, NORTH CAROLINA

FIRE PROTECTION FLOOR PLAN

REVISION SCHEDULE

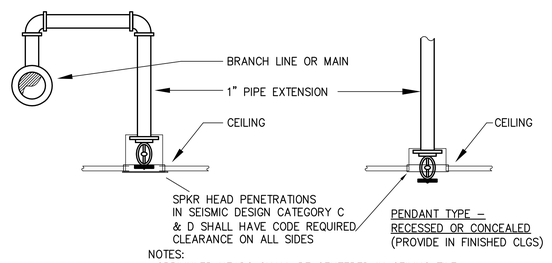
Δ	DATE	REFERENCE

FP100



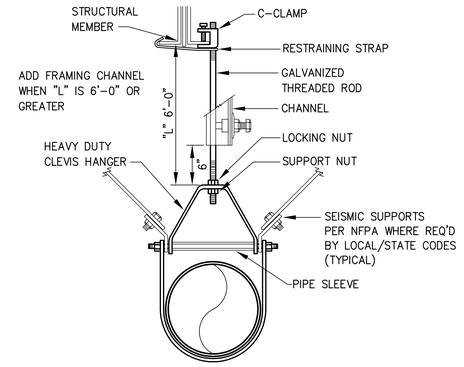
NOTE: A MINIMUM OF THREE RISERS ANTICIPATED BASED ON FLOOR AREA.

1 FP101 SPRINKLER RISER DETAIL
NTS



NOTES:
-SPRINKLER HEADS SHALL BE CENTERED IN CEILING TILE; COORDINATE WITH ARCHITECT.
-PROVIDE APPROVED SPKR HEAD PROTECTION IN AREAS SUSCEPTIBLE TO DAMAGE; COORDINATE WITH A/E.

2 FP101 TYPICAL DROP TO SPRINKLER HEAD
NTS



3 FP101 PIPE HANGER DETAIL
NTS

GENERAL NOTES & LEGEND

1. THESE DRAWINGS (CONTRACT DOCUMENTS) ARE FOR THE PURPOSE OF ESTABLISHING CRITERIA AND SUGGESTING PIPE ROUTING SOLUTIONS. THEY ARE NOT TO BE TAKEN AS SPRINKLER CONSTRUCTION DRAWINGS. FIRE PROTECTION CONTRACTOR (FPC) DESIGNER SHALL: MEET ALL NFPA, STATE & LOCAL CODE REQUIREMENTS AND ANY CRITERIA SET FORTH WITHIN THE ARCHITECTURAL/ENGINEERING (A/E) CONSTRUCTION DOCUMENTS THAT EXCEED CODE MINIMUMS.

2. CONTRACTOR IS REQUIRED TO OBTAIN A COMPLETE SET OF A/E DESIGN AND CONSTRUCTION DOCUMENTS AND BE FAMILIAR WITH ALL ASPECTS OF THE A/E DESIGN BEFORE SUBMITTING A BID. NO CHANGES WILL BE ALLOWED DUE TO CONTRACTOR'S LACK OF KNOWLEDGE OF BLDG CONSTRUCTION AND NFPA REQUIREMENTS. COORDINATE ALL PIPE ROUTING WITH P, M, &E CONTRACTORS

3. WHERE SPRINKLER LAYOUT SHOWN IS FOR A/E CEILING COORDINATION PURPOSES; FPC SHALL INCORPORATE A/E RCP COORDINATION IN SPRINKLER DESIGN. FPC IS RESPONSIBLE FOR DESIGN ADJUSTMENTS IN SPRINKLER HEAD LOCATIONS, SPRINKLER QUANTITY, AND PIPING REQUIRED FOR FULL COMPLIANCE WITH THE STATE & LOCAL BUILDING CODE, NFPA STANDARDS (SECTION 13:4.1), PROJECT PLANS AND SPECIFICATIONS.

4. FPC SHALL OBTAIN AN UP TO DATE RCP PLAN FROM A/E. SPRINKLER HEAD LOCATIONS SHALL BE LOCATED IN CENTER OF TILE, UNLESS NOTED OTHERWISE, AND MAINTAIN A COORDINATED DESIGN EFFORT WITH OTHER CEILING COMPONENTS AND REVIEWED BY A/E FOR COMPLIANCE.

5. THE CONTRACTOR SHALL FURNISH ALL PARTS, MATERIALS AND LABOR REQUIRED FOR A COMPLETE AND OPERATING SYSTEM IN ACCORDANCE WITH ALL APPLICABLE REQUIREMENTS, EVEN IF NEEDED ITEM IS NOT SPECIFICALLY INCLUDED IN PLANS OR SPECIFICATIONS.

6. THE CONTRACTOR MUST BE LICENSED BY THE STATE BOARD OF EXAMINERS AND MAY BE REQUIRED TO FURNISH EVIDENCE OF SATISFACTORY PERFORMANCE OF PREVIOUS AND COMPARABLE SPRINKLER SYSTEM DESIGN AND INSTALLATION. FPC DESIGNER SHALL HAVE A MINIMUM OF NICET III CERTIFICATION WITH STAMP AND SIGNATURE INDICATED ON SUBMITTED SHOP DWGS.

7. THE MINIMUM DESIGN CLASSIFICATION FOR THIS BLDG IS LIGHT HAZARD WITH 0.10GPM/SQFT WITH 1500 SQFT MINIMUM REMOTE AREA (225 SQFT PER HD).

STORAGE, MECHANICAL, KITCHEN AREAS SHALL BE OH-1 WITH 0.15GPM/SQFT WITH 1500 SQFT MINIMUM REMOTE AREA (130 SQFT PER HD).

REMOTE AREA (1500 SQFT) OF DESIGN MAY BE MODIFIED AS ALLOWED AND/OR REQUIRED PER NFPA 13:11.2.3.

8. BEFORE DESIGN & INSTALLATION, FPC MUST VERIFY WATER SUPPLY BY TEST (PER NFPA 291 OR AS DIRECTED BY AHJ), USING 2 HYDRANTS AS CLOSE TO THE POINT OF CONNECTION AS POSSIBLE, PREFERABLY WITNESSED OR PERFORMED BY A FIRE OFFICIAL. FOR BIDDING PURPOSES ONLY, ASSUME A WATER SUPPLY OF 790 GPM @ 20 PSI AT THE BASE OF THE RISER.

CONTACT WATER AUTHORITIES BEFORE TEST TO VERIFY NORMAL SYSTEM STATUS AND DETERMINE TYPICAL FLUCTUATIONS IN AVAILABLE PRESSURE/FLOW AT THAT LOCATION DUE TO TANK FILL, MUNICIPAL PUMP STATUS, LOCAL DEMAND, ETC.

BASE DESIGN ON A SAFETY FACTOR TO ACCOUNT FOR FLUCTUATIONS IN WATER SUPPLY. A MINIMUM 10% SAFETY FACTOR OR AS DIRECTED BY LOCAL AHJ WHERE LARGER MARGIN REQUIRED.

FPC CALCULATIONS TO START AT WATER MAIN CONNECTION UNDER STREET (UTILITY MAIN WHERE HYDRANT TESTS ARE PREFORMED) AND MUST INCLUDE ALL VALVES, FITTINGS, ETC. SHOP DRAWING SUBMITTAL MUST INCLUDE SITE PLAN REFERENCE INDICATING RELATIVE DISTANCE & ELEVATIONS OF TEST HYDRANTS FROM B.O.R. AND FINISH FLOOR OF BUILDING.

NOTE: FLOW DATA ON A/E DOCUMENTS ARE FOR BIDDING PURPOSES ONLY & SHALL NOT BE USED FOR THE FPC DESIGN. SHOP DWGS WILL NOT BE APPROVED WITHOUT AN UPDATED FLOW TEST OBTAINED BY THE FPC FOR THEIR DESIGN AND CALCULATION. INCLUDE A PARTIAL SITE PLAN INDICATING LOCATIONS OF HYDRANTS AND RELATIVE ELEVATIONS TO BASE OF RISER. FLOW TEST OBTAINED BY FPC/GC SHALL BE NO MORE THAN 90 DAYS OLD FROM TIME OF SUBMITTAL TO A/E & AHJ FOR REVIEW.

9. ONLY STEEL PIPING SHALL BE USED (CRR OF 1.0 OR GREATER) FOR THIS PROJECT. SCHEDULE 5 PIPING IS NOT ALLOWED.

10. REFER TO 'A'& 'S'DWGS FOR BUILDING SEISMIC DESIGN CODE INFORMATION:

SEISMIC DESIGN CATEGORY 'C'& 'D'REQUIREMENTS: HANGING, BRACING, & RESTRAINT OF FIRE SPRINKLER PIPING SHALL BE IN ACCORDANCE WITH SECTION 13.1.3 OF ASCE/SEI-7-05, APPLICABLE LOCAL & STATE BLDG CODES AND SECTION 9.3 OF NFPA 13.

11. IF FPC ELECTS TO PREFABRICATE PIPING, ANY CHANGES BECAUSE OF CONFLICTS TO ACCOMMODATE EXISTING OR NEW CONSTRUCTION CONDITIONS SHALL BE CORRECTED AT NO COST TO THE OWNER. ANY WORK THAT IS INSTALLED PRIOR TO SPRINKLER PERMITTING & AHJ APPROVAL AND MUST BE REVISED BASED ON AHJ REVIEW, SHALL BE CORRECTED AT NO ADDITIONAL COST TO THE OWNER.

12. FPC IS REQUIRED TO VERIFY AND COORDINATE WITH ELECTRICAL CONTRACTOR ALL REQUIRED CONNECTIONS AND ELECTRICAL REQUIREMENTS FOR COMPLETE SPRINKLER SYSTEM.

13. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO APPLY THE PROPER FIRE-SAFING DETAIL FOR ALL PIPE PENETRATIONS THRU RATED & NON-RATED WALL AND FLOOR/CEILING ASSEMBLIES. SEE SHEET CD101.

14. A) PROVIDE CONCEALED (W/FLUSH COVER) PENDANT SPRINKLER HEADS IN ALL FINISHED CLGS.

B) SPRINKLER HEADS SHALL BE CENTERED IN TILE; COORDINATE WITH A/E CEILING PLAN.

C) WHERE SUSCEPTIBLE TO CORROSION OR MECHANICAL DAMAGE, PROVIDE APPROVED HEAD PROTECTION PER NFPA & SPRINKLER LISTING. AREAS INCLUDE; BUT NOT LIMITED; JANITORS CLOSETS, DATA/TELEPHONE ROOMS, TRASH, LINEN, MECHANICAL/ELECTRICAL SPACES. HEADS SUSCEPTIBLE TO OUTSIDE ENVIRONMENTAL CORROSIVE CONDITIONS SHALL BE CORROSIVE RESISTANT.

D) SPRINKLERS IN MECHANICAL ROOMS & UNCONDITIONED ATTIC SPACE SHALL BE AT LEAST 200-DEG F.

E) PROVIDE RETURN BEND FOR SPRINKLER CONNECTIONS.

F) FLEXIBLE PIPING TO HEADS ARE ALLOWED WHEN MEETING THE FOLLOWING MINIMUM REQUIREMENTS:

1) FM 1637 OR UL LISTED FLEXIBLE STAINLESS STEEL HOSE WITH THREADED FITTINGS.

2) STAINLESS STEEL BRAIDED JACKET. UNBRAIDED WILL NOT BE ACCEPTED.

3) MINIMUM 1-INCH TRUE BORE INTERNAL CORRUGATED HOSE DIAMETER.

4) SHALL STRICTLY ADHERE TO MFR'S INSTALLATION REQUIREMENTS AND LIMITS; PIPING SHALL BE TAKEN OFF TOP OF BRANCH LINE/MAIN SAME AS A RETURN BEND.

15. FPC SHALL LOCATE ALL DEVICES, VALVES, DRAINS, EQUIPMENT, ETC. IN AN EASILY ACCESSIBLE LOCATION. WHERE ABOVE CEILING; FPC SHALL DESIGN PIPE ROUTING SUCH THAT ANY DEVICE, DRAIN, ETC. IS LOCATED ABOVE A LAY-IN OR ACCESSIBLE CEILING. WHENEVER SUCH DEVICE IS LOCATED WITHIN OR ABOVE A NON-ACCESSIBLE SPACE (CHASE, WALL, CLG, ETC.) FPC IS RESPONSIBLE FOR FURNISHING AND INSTALLATION OF ACCESS PANEL (COORDINATE LOCATION & A/P REQUIREMENTS WITH A/E SPECS & DWGS).

16. ALL DROPS FOR AUXILIARY DRAINS/TEST CONNECTIONS ARE TO SPILL TO GRADE. LOCATIONS SHALL NOT TO BE EXPOSED IN FINISHED AREAS & NOT ACCESSIBLE TO PUBLIC. PROVIDE FOR & COORDINATE DROPS IN WALLS, FURRED SPACES AS NEEDED AND PROVIDE ANY REQ'D ACCESS PANELS AS NOTED ABOVE.

17. AT RISER, FPC SHALL PROVIDE TEST HEADER (OR OTHER AHJ APPROVED METHOD) AS A MEANS FOR THE FORWARD FLOW BACKFLOW PREVENTION ASSEMBLY (PER NFPA 13 SECTION 8.17.4.6.1) TO BE DISCHARGED FOR ITS INITIAL AND ANNUAL FULL FLOW TESTS REQUIRED BY SECTION 10.10.2.5. THIS REQUIRED TEST IS PERFORMED TO SHOW THAT THERE IS NOTHING IN THE LINE IMPEDING FLOW THROUGH THE BACKFLOW PREVENTER, AND THE LARGE FLOW WHICH OCCURS DURING THESE TESTS NEEDS TO BE ABLE TO RUN OFF, OR BE DRAINED.

CONTRACTOR TO VERIFY ALL DIMENSIONS.

THIS DRAWING IS THE PROPERTY OF THE ARCHITECTS AND CAN NOT BE USED FOR CONSTRUCTION PURPOSES OR REPRODUCED WITHOUT WRITTEN CONSENT OF THE ARCHITECT.

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NORTH CAROLINA REGISTERED LANDSCAPE ARCHITECT 1785 J. CRAIG ETHERIDGE 08-04-11

ISSUE DATE: 04.30.2019
DRAWN BY: MWK
CHECKED BY: JCC
PROJECT: 1821

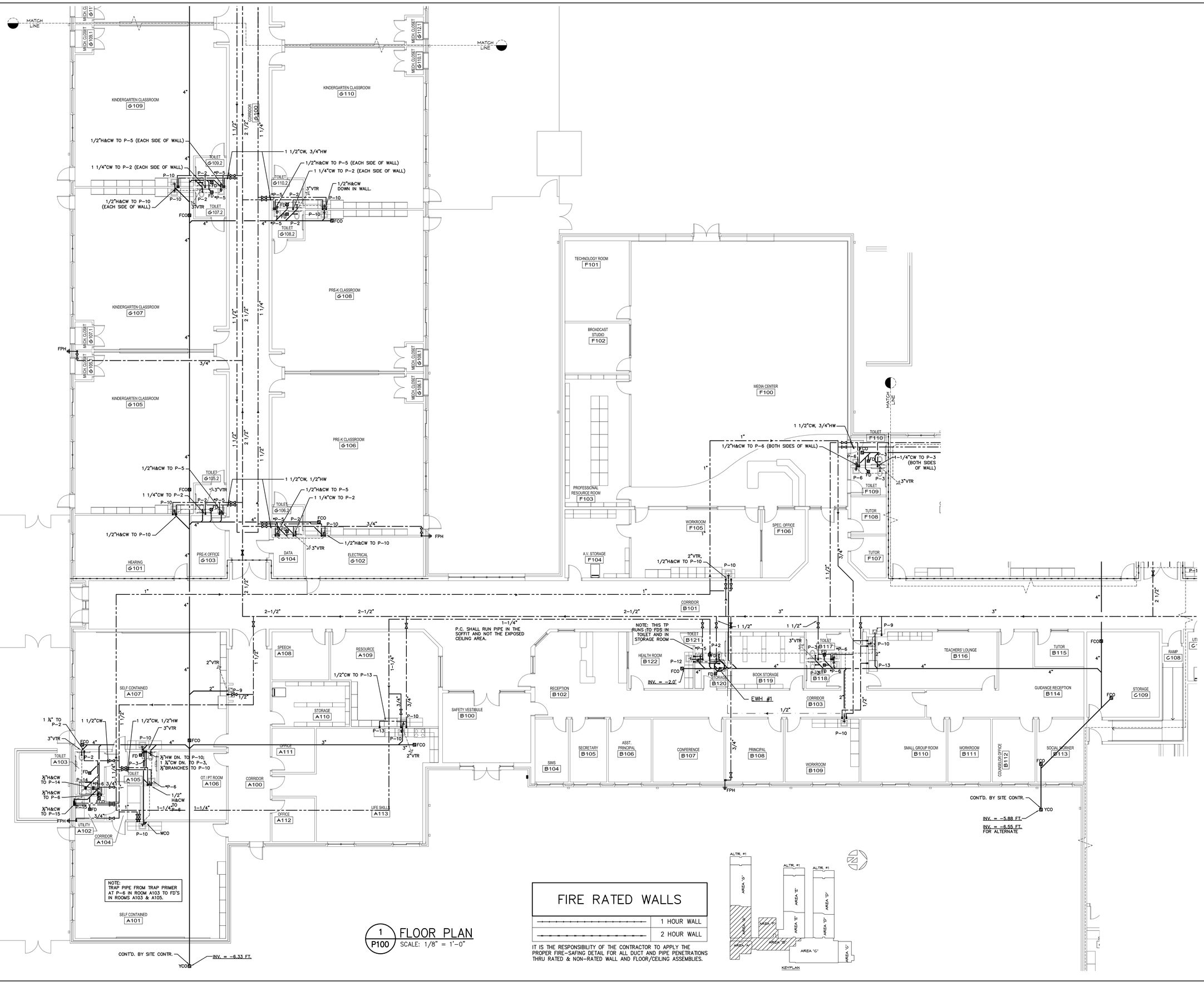
STUMP SOUND ELEMENTARY SCHOOL
ONSLOW COUNTY SCHOOLS
STUMP SOUND, NORTH CAROLINA

FIRE PROTECTION NOTES, SPECS, & DETAILS

REVISION SCHEDULE

	DATE	REFERENCE

FP101



1 / P100 FLOOR PLAN
SCALE: 1/8" = 1'-0"

FIRE RATED WALLS

	1 HOUR WALL
	2 HOUR WALL

IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO APPLY THE PROPER FIRE-SAFING DETAIL FOR ALL DUCT AND PIPE PENETRATIONS THRU RATED & NON-RATED WALL AND FLOOR/CEILING ASSEMBLIES.

CONTRACTOR TO VERIFY ALL DIMENSIONS.

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ISSUE DATE: 04.30.2019
DRAWN BY: MWK
CHECKED BY: JCC
PROJECT: 1821

STUMP SOUND ELEMENTARY SCHOOL
ONSLOW COUNTY SCHOOLS
STUMP SOUND, NORTH CAROLINA

FLOOR PLAN - AREAS A,B,F,&G

REVISION SCHEDULE

Δ	DATE	REFERENCE

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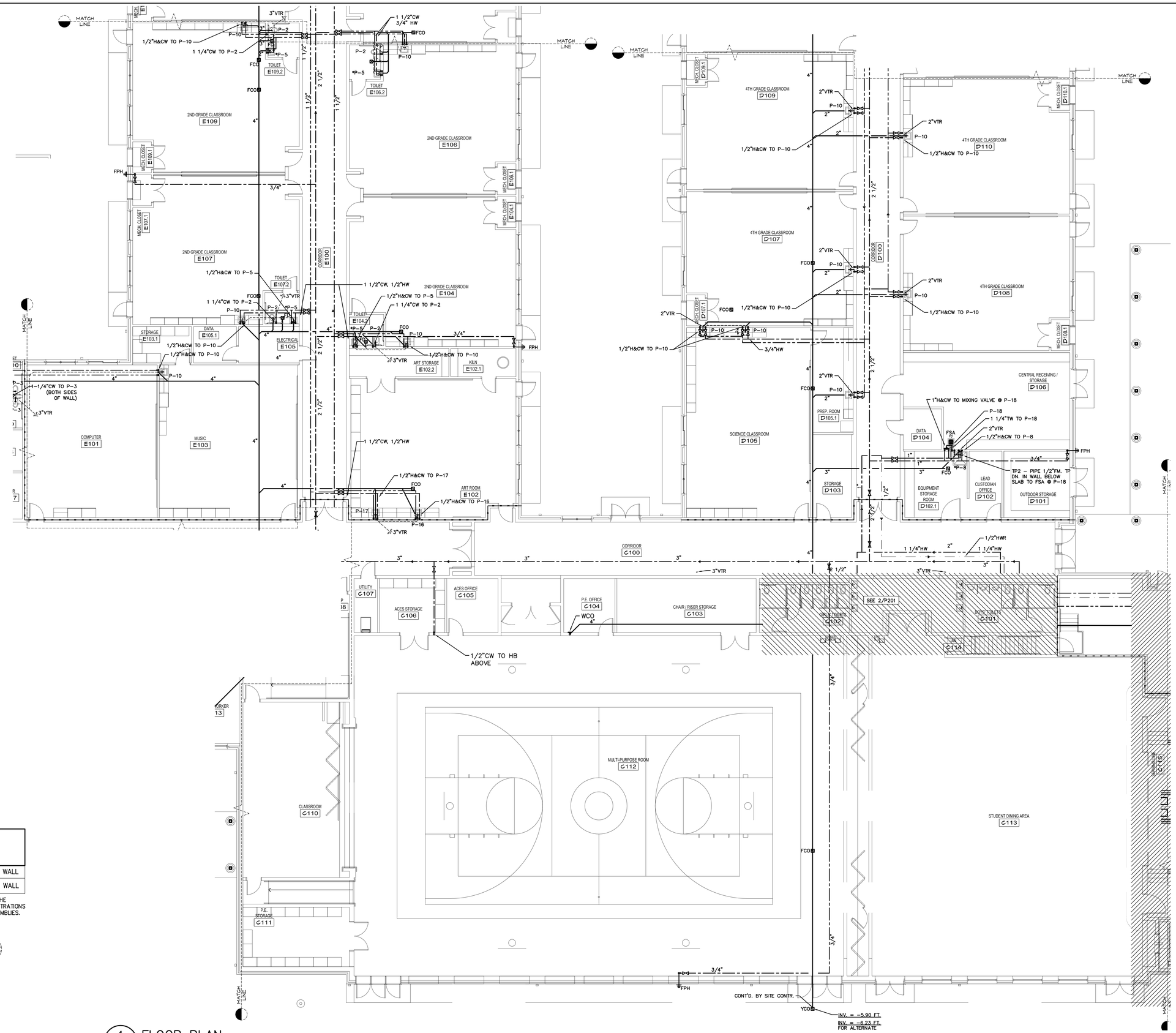
P100



FIRE RATED WALLS

	1 HOUR WALL
	2 HOUR WALL

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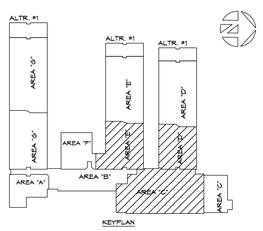

1 / P101 FLOOR PLAN
SCALE: 1/8" = 1'-0"

CONTRACTOR TO VERIFY ALL DIMENSIONS.

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ISSUE DATE: 04.30.2019
DRAWN BY: MWK
CHECKED BY: JCC
PROJECT: 1821

STUMP SOUND ELEMENTARY SCHOOL
ONSLOW COUNTY SCHOOLS
STUMP SOUND, NORTH CAROLINA

FLOOR PLAN - AREAS C,D,&E

REVISION SCHEDULE

△	DATE	REFERENCE

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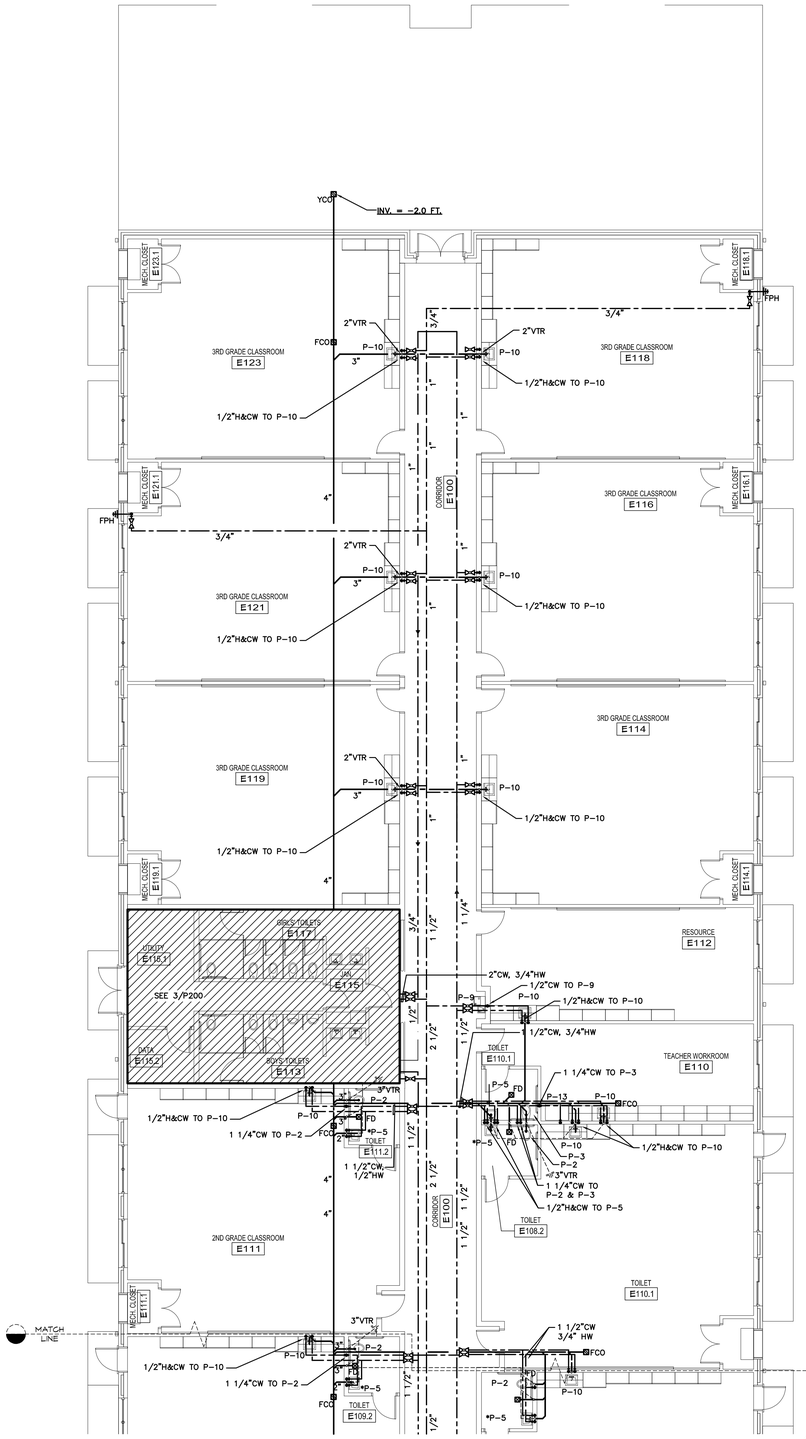
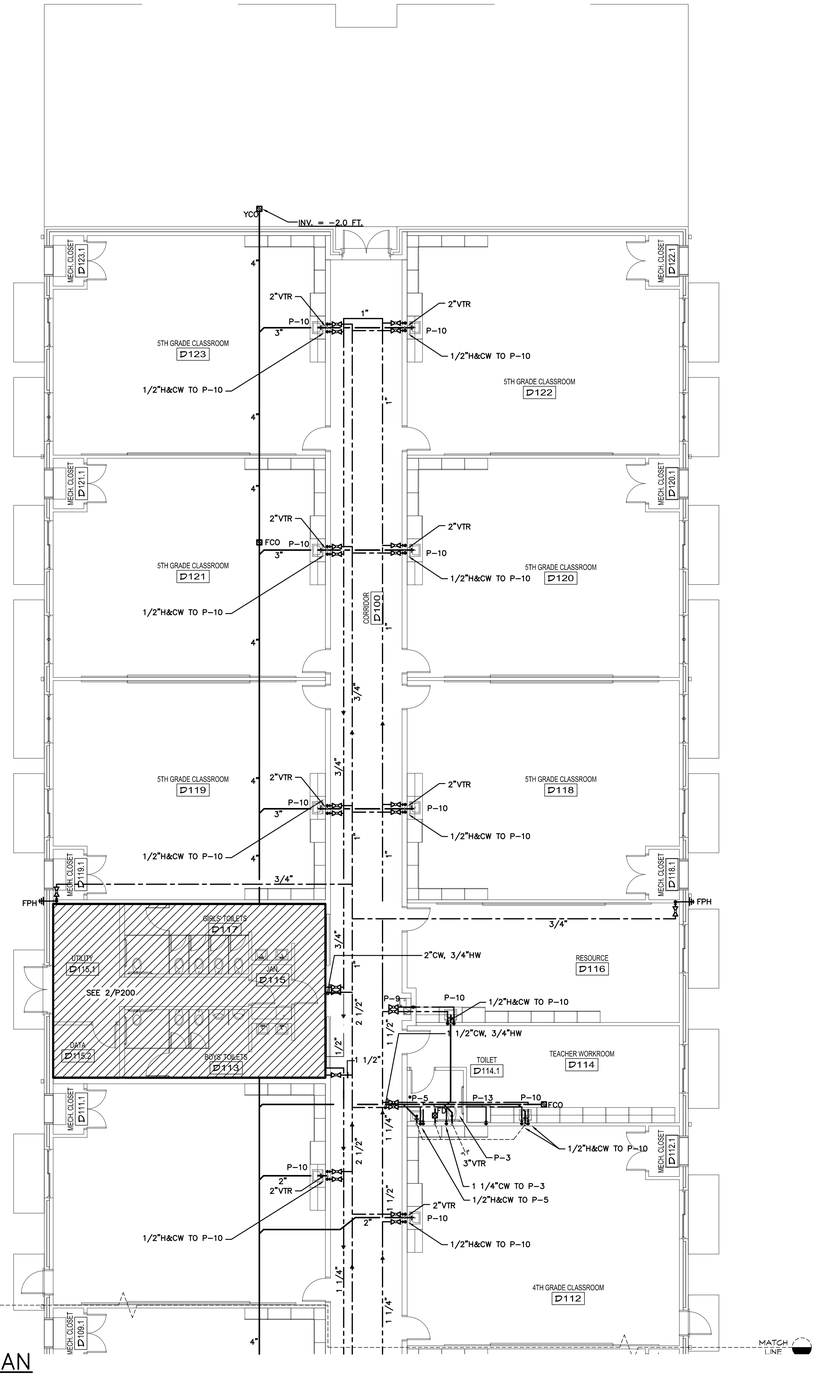
P101



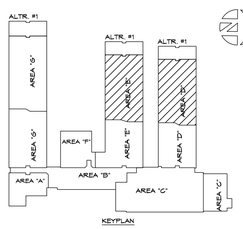


1 P102 FLOOR PLAN
SCALE: 1/8" = 1'-0"

FIRE RATED WALLS

	1 HOUR WALL
	2 HOUR WALL

IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO APPLY THE PROPER FIRE-SAFING DETAIL FOR ALL DUCT AND PIPE PENETRATIONS THRU RATED & NON-RATED WALL AND FLOOR/CEILING ASSEMBLIES.



CONTRACTOR TO VERIFY ALL DIMENSIONS.

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ISSUE DATE: 04.30.2019
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PROJECT: 1821

STUMP SOUND ELEMENTARY SCHOOL
ONSLOW COUNTY SCHOOLS
STUMP SOUND, NORTH CAROLINA

FLOOR PLAN - AREAS D&E

REVISION SCHEDULE

Δ	DATE	REFERENCE

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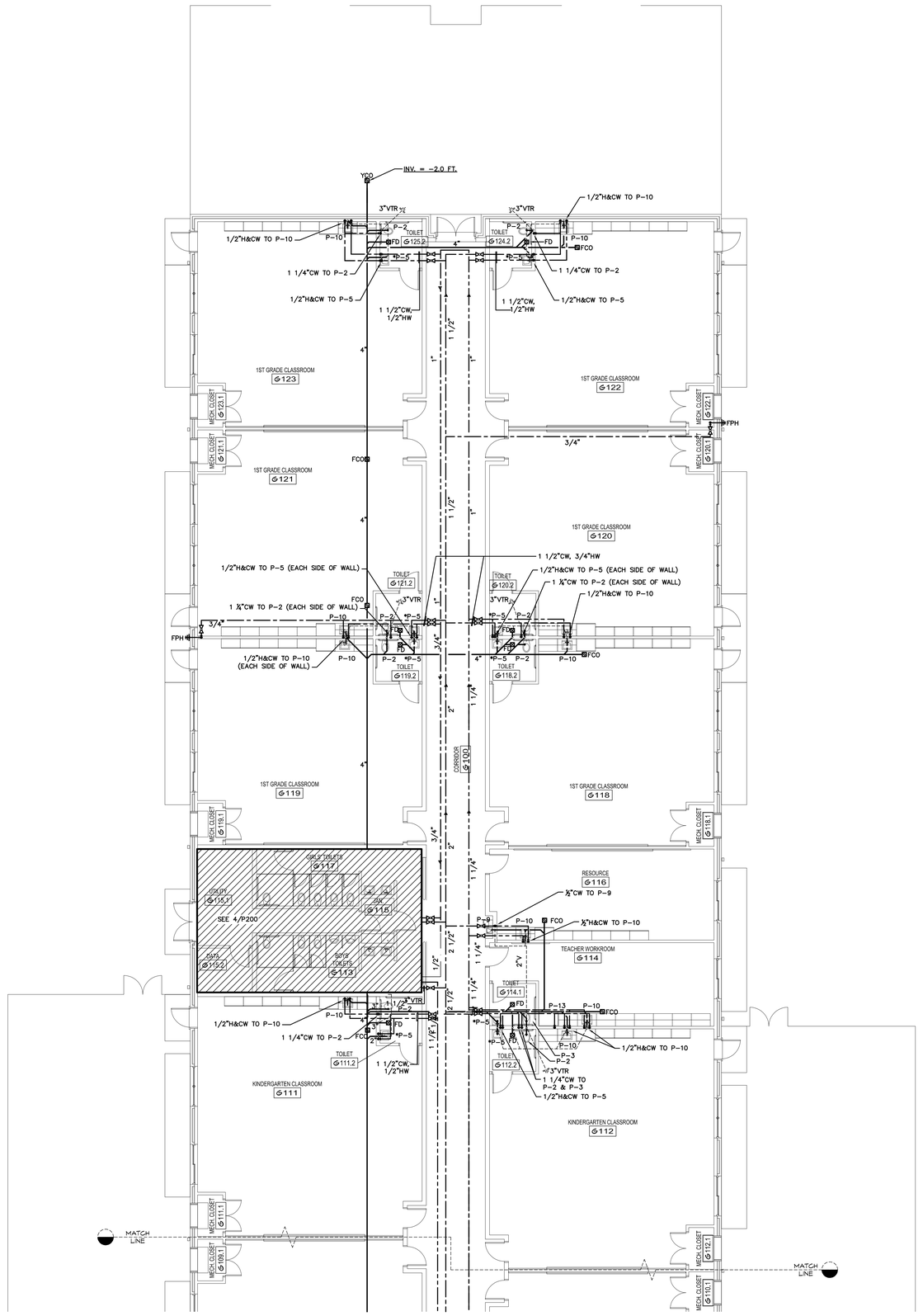
P102

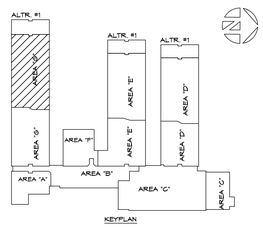


1 P103 FLOOR PLAN
SCALE: 1/8" = 1'-0"

FIRE RATED WALLS

	1 HOUR WALL
	2 HOUR WALL

IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO APPLY THE PROPER FIRE-SAFING DETAIL FOR ALL DUCT AND PIPE PENETRATIONS THRU RATED & NON-RATED WALL AND FLOOR/CEILING ASSEMBLIES.



CONTRACTOR TO VERIFY ALL DIMENSIONS.

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ISSUE DATE: 04.30.2019
DRAWN BY: MWK
CHECKED BY: JCC
PROJECT: 1821

STUMP SOUND ELEMENTARY SCHOOL
ONSLOW COUNTY SCHOOLS
STUMP SOUND, NORTH CAROLINA

FLOOR PLAN - AREA G

REVISION SCHEDULE

Δ	DATE	REFERENCE

P103

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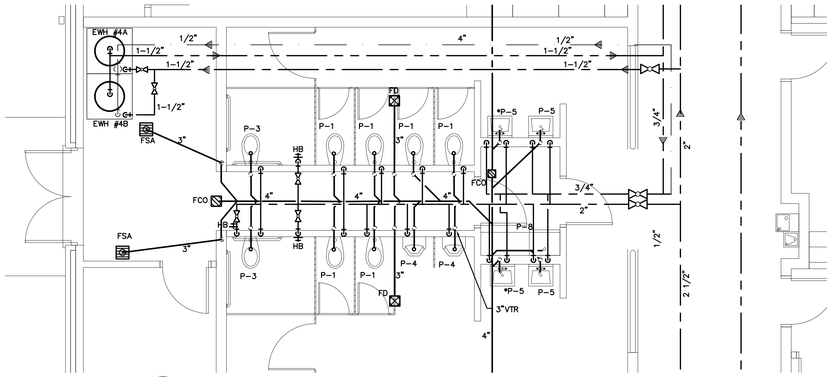
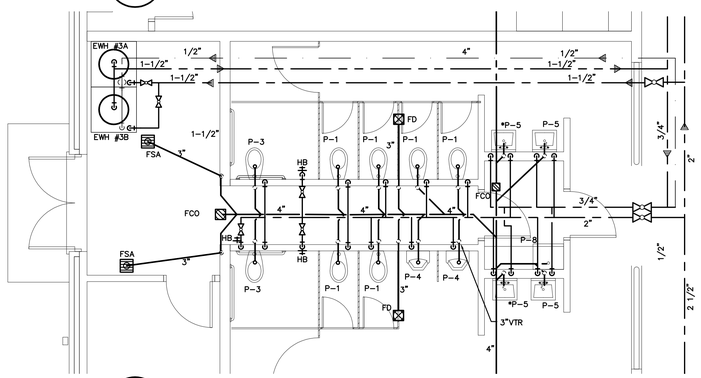
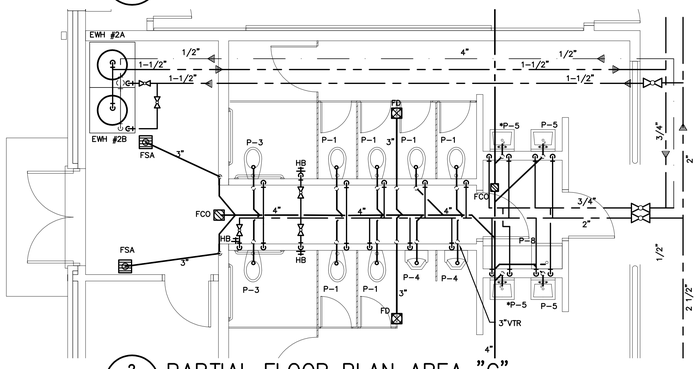


4 P200 PARTIAL FLOOR PLAN AREA "D"
SCALE: 1/4" = 1'-0"



3 P200 PARTIAL FLOOR PLAN AREA "E"
SCALE: 1/4" = 1'-0"



2 P200 PARTIAL FLOOR PLAN AREA "G"
SCALE: 1/4" = 1'-0"

KITCHEN EQUIPMENT SCHEDULE

SYM	NAME	CW	HW	140° HW	WASTE	IW	V	GAS	DESCRIPTION
7	STEAMER	1/2"	–	–	–	1-1/2"	–	–	KITCHEN EQUIPMENT BY OTHERS, P.C. TO MAKE FINAL CONNECTIONS FOR WASTE, WATER, VENT PIPING
10	TILTING BRAISING PAN	1/2"	–	–	–	TD	–	–	KITCHEN EQUIPMENT BY OTHERS, P.C. TO MAKE FINAL CONNECTIONS FOR WASTE, WATER, VENT & GAS PIPING
14	ICE MACHINE	1/2"	–	–	–	FD	–	–	P.C. TO PROVIDE VALVE & BOX CONNECTIONS W/OATEY MODEL 38608, MAKE FINAL CONNECTION
21	1-COMPT. PREP SINK	1/2"		1/2"	–	FS	–	–	KITCHEN EQUIPMENT BY OTHERS, P.C. TO MAKE FINAL CONNECTIONS FOR WASTE, WATER, VENT PIPING
22	3-COMPT. SINK WITH PRE-RINSE	1@1/2" 1@3/4"	–	1@1/2" 1@3/4"	–	FS	–	–	KITCHEN EQUIPMENT BY OTHERS, P.C. TO MAKE FINAL CONNECTIONS FOR WASTE, WATER, VENT PIPING
23	2-COMPT. PREP SINK	1/2"	–	1/2"	–	FS	–	–	KITCHEN EQUIPMENT BY OTHERS, P.C. TO MAKE FINAL CONNECTIONS FOR WASTE, WATER, VENT PIPING
24	DISHWASHER	–	–	3/4"	–	2" FSDW	–	–	KITCHEN EQUIPMENT BY OTHERS, P.C. TO MAKE FINAL CONNECTIONS FOR WATER PIPING
35	PRE RINSE UNIT	1/2"	–	1/2"	–	FS	–	–	KITCHEN EQUIPMENT BY OTHERS, P.C. TO MAKE FINAL CONNECTIONS FOR WATER PIPING
38	DISPOSER	1/2"	–	–	–	2" FSDW	–	–	KITCHEN EQUIPMENT BY OTHERS, P.C. TO MAKE FINAL CONNECTIONS FOR WATER PIPING
TD	TRENCH DRAIN	–	–	–	4"	–	–	–	KITCHEN EQUIPMENT BY KITCHEN EQUIPMENT SUPPLIER. PC SHALL MAKE FINAL CONNECTION

1. P.C. SHALL PROCURE A KITCHEN CONTRACTOR DRAWING BEFORE BEGINNING ROUGH-IN
2. P.C. SHALL PROVIDE ALL TRAPS, VALVES, SUPPLIES & MAKE ALL NECESSARY PLUMBING CONNECTIONS.

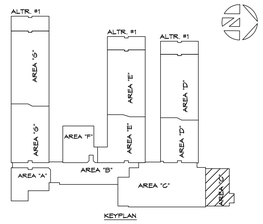
FIRE RATED WALLS

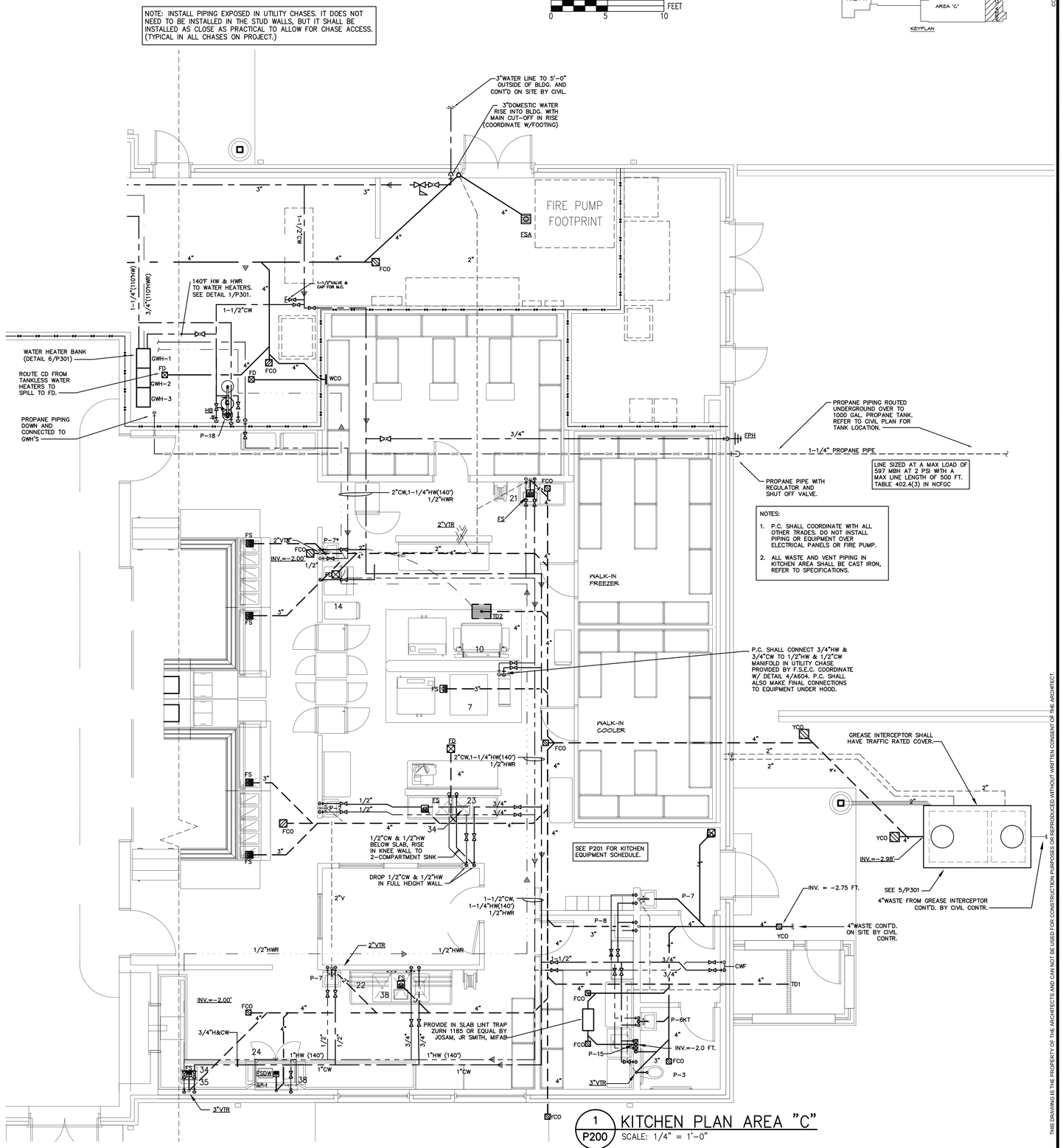
	1 HOUR WALL
	2 HOUR WALL

IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO APPLY THE PROPER FIRE-SAFING DETAIL FOR ALL DUCT AND PIPE PENETRATIONS THRU RATED & NON-RATED WALL AND FLOOR/CEILING ASSEMBLIES.

1/4" = 1'-0"
0 5 10 FEET

NOTE: INSTALL PIPING EXPOSED IN UTILITY CHASES. IT DOES NOT NEED TO BE INSTALLED IN THE STUD WALLS, BUT IT SHALL BE INSTALLED AS CLOSE AS PRACTICAL TO ALLOW FOR CHASE ACCESS. (TYPICAL IN ALL CHASES ON PROJECT.)





1 P200 KITCHEN PLAN AREA "C"
SCALE: 1/4" = 1'-0"

CONTRACTOR TO VERIFY ALL DIMENSIONS.

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ISSUE DATE: 04.30.2019
DRAWN BY: MWK
CHECKED BY: JCC
PROJECT: 1821

STUMP SOUND ELEMENTARY SCHOOL
ONSLOW COUNTY SCHOOLS
STUMP SOUND, NORTH CAROLINA

ENLARGED PLANS

REVISION SCHEDULE

Δ	DATE	REFERENCE

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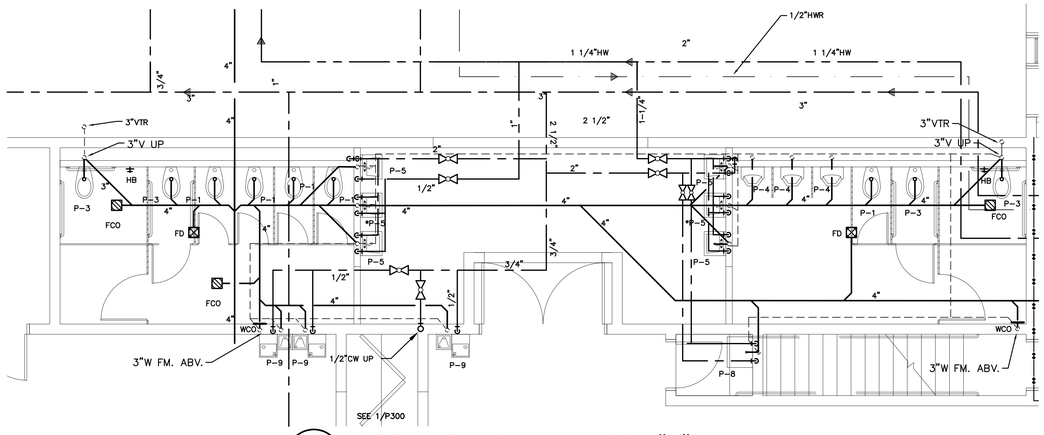
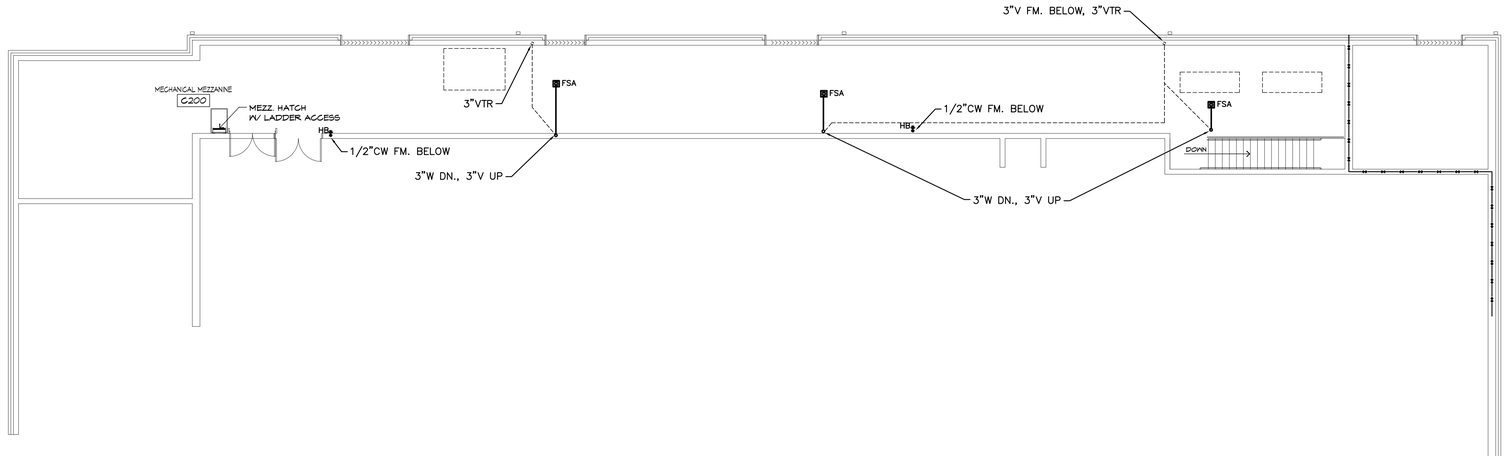
P200



2 P201 PARTIAL FLOOR PLAN AREA "C"
SCALE: 1/4" = 1'-0"

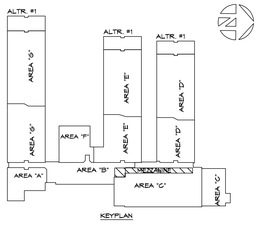


1 P201 MEZZANINE PLAN
SCALE: 1/8" = 1'-0"

FIRE RATED WALLS

	1 HOUR WALL
	2 HOUR WALL

IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO APPLY THE PROPER FIRE-SAFING DETAIL FOR ALL DUCT AND PIPE PENETRATIONS THRU RATED & NON-RATED WALL AND FLOOR/CEILING ASSEMBLIES.



KEYPLAN

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STUMP SOUND ELEMENTARY SCHOOL
ONSLOW COUNTY SCHOOLS
STUMP SOUND, NORTH CAROLINA

ENLARGED PLANS

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P201

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CHECKED BY: JCG
PROJECT: 1821

STUMP SOUND ELEMENTARY SCHOOL
ONSLOW COUNTY SCHOOLS
STUMP SOUND, NORTH CAROLINA

SCHEDULES AND DETAILS

REVISION SCHEDULE

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"P" TRAP DIMENSION	
SIZE	X
2	9 1/2
3	12
4	14

1 P301 MINIMUM TRAP DIMENSIONS NTS

2 P301 VENT THRU METAL ROOF DETAIL NTS (SEE ARCH. FOR INSTALLATION SPECIFICS)

3 P301 YARD CLEANOUT DETAIL NTS

TANKLESS GWH NOTES:
CONTRACTOR SHALL REVIEW MFR'S INSTALLATION REQUIREMENTS FOR UNITS PROVIDED AND INSTALL STRICTLY PER THAT MFR'S RECOMMENDATIONS & LOCAL CODE REQUIREMENTS:

INCLUDING: FUEL SHALL BE LIQUID PROPANE

1. VENT SIZE, MATERIAL, LENGTH, ETC.
2. PROVIDE PRESSURE REGULATOR AND VENT REGULATOR TO EXTERIOR.
3. MINIMUM CLEARANCES FOR OPERATION & MAINTENANCE TO STRUCTURE, EQUIPMENT, OTHER GAS APPLIANCES, ETC.
4. CONTACT THE MFR'S REP FOR INSPECTION AND STARTUP.
5. PIPING ARRANGEMENT SHALL BE PER WATER HEATER MFG. RECOMMDNATIONS.

EQUALS BY RINNAI, NORITZ

4 P301 WATER HEATER DETAIL NTS NOTE: PIPING ARRANGEMENT SHALL BE PER MFR'S RECOMMENDATIONS

6 P301 WATER HEATER DETAIL NTS

5 P301 GREASE INTERCEPTOR DETAIL NTS 1500 GALLON TANK AS MFG. BY STAY–RIGHT PRECAST CONCRETE (OR EQUAL)

P301

PLUMBING FIXTURE SCHEDULE

SYM	DESCRIPTION	CW	HW	W	V	MODEL NUMBER	REMARKS
P-1	WATER CLOSET (STUDENT)	1-1/4"	–	3"	2"	AMERICAN STANDARD "MADERA" 2234.015; BENEKE 527SS SEAT; SLOAN REGAL 115-1.6-YK FLUSH VALVE	1,4,5,6
P-2	WATER CLOSET (ADA STUDENT)	1-1/4"	–	3"	2"	AMERICAN STANDARD "MADERA" 2234.015; BENEKE 527SS SEAT; SLOAN REGAL 111 FLUSH VALVE	1,4,5,6,7,8
P-3	WATER CLOSET (ADA ADULT)	1-1/4"	–	3"	2"	KOHLER "HIGHCLIFF" K-96057-0; BENEKE 527SS SEAT; SLOAN REGAL 111 FLUSH VALVE	1,4,5,6,7,8
P-4	URINAL	3/4"	–	2"	2"	KOHLER "DEXTER" K-5016-ET W/SLOAN REGAL 186-1 FLUSH VALVE	1,3,4,6
P-5	LAVATORY	1/2"	1/2"	2"	2"	KOHLER "HUDSON" K-2861; MOEN 8301 FAUCET (NOTE 25); K-7607 SUPPLY; K-8998 TRAP; K-7715 DRAIN.	1,2,3,9,14, 15,18
P-6	LAVATORY	1/2"	1/2"	2"	2"	KOHLER "HUDSON" K-2861; MOEN 8301 FAUCET (NOTE 25); K-7607 SUPPLY; K-8998 TRAP; K-7715 DRAIN.	1,2,3,9,14, 15,18
P-6KT	LAVATORY (KITCHEN TOILET)	1/2"	1/2"	2"	2"	KOHLER "HUDSON" K-2861, K-7607 SUPPLY, K-8998 TRAP, K-7715 DRAIN; T&S LEVER FAUCET; SYMMONS 5-210-CK MIXING VALVE BELOW LAV	1,2,3,9,14, 15,18,23
P-7	LAVATORY (KITCHEN)	1/2"	1/2"	2"	2"	KOHLER "HUDSON" K-2861, K-7607 SUPPLY, K-8998 TRAP, K-7715 DRAIN; T&S LEVER FAUCET; SYMMONS 5-210-CK MIXING VALVE BELOW LAV	1,2,3,9,14, 18,23
P-8	MOP BASIN	1/2"	1/2"	3"	2"	FIAT MSB-2424 W/830-AA FAUCET, 832-AA HOSE BRACKET (INCLUDES SS RIM GUARD) & SEALANT AS REQUIRED.	4,9,13,19
P-9	WATER COOLER	1/2"	–	2"	2"	HALSEY TAYLOR HTHB-HBRGRNBBL-WF; PROVIDE ACCESSORY APRON ON UPPER UNIT. PROVIDE STOP & TRAP. ALL STAINLESS STEEL FINISH.	1,3,12,21
P-10	SQL. COMPT. SINK (ADA)	1/2"	1/2"	2"	2"	ELKAY LRAD-2219-55 W/LK-335 STRAINER; T&S LEVER HANDLE FAUCET; KOHLER K-7607 SUPPLY, K-9000 TRAP	1,2,10,17
P-11	OMITTED						
P-12	HEALTH ROOM SINK (ADA)	1/2"	1/2"	2"	2"	ELKAY LRAD-2219-55 (WITH HOLE DRILLED FOR EYEWASH), LK-335 STRAINER; T&S LEVER HANDLE FAUCET; KOHLER K-7607 SUPPLY, K-9000 TRAP; GUARDIAN G1849LH-TMV EYEWASH	1,2,9,10,24
P-13	UTILITY BOX	1/2"	–	–	–	GUY GRAY W9700HA	22
P-14	SHOWER TRIM (H/C)	1/2"	1/2"	–	–	SYMMONS 96-500-B30-X-V W/ CHROME PLATED BRASS ESCUTCHEON PROVIDE SHOWER PAN AS NEEDED	11
P-15	WASHER CONNECTION BOX	1/2"	1/2"	2"	2"	GUY GRAY WB200HA	22
P-16	ARTROOM SINK	1/2"	1/2"	2"	2"	ELKAY LR-3122 W/LK-335 STRAINER; T&S LEVER HANDLE FAUCET; KOHLER K-7607 SUPPY; ZURN Z-1180 CLAY TRAP	1,2,10,17
P-17	ARTROOM SINK (ADA)	1/2"	1/2"	2"	2"	ELKAY LRAD-3122-55 W/LK-335 STRAINER; T&S LEVER HANDLE FAUCET; KOHLER K-7607 SUPPY; ZURN Z-1180 CLAY TRAP	1,2,10,17
P-18	EMERG. SHOWER & EYEWASH	1-1/4" TW		2"	2"	HAWS 8300-8309 CRP COMB. SHWR/EYE WASH W/TWBS.SH	16

1. SEE ARCHITECTURAL PLANS FOR EXACT LOCATION AND MOUNTING HEIGHTS OF ALL FIXTURES.
2. PROVIDE TRUEBRO MODEL 102 INSULATION KIT, PLUMBEREX MODEL PRO-2000 OR McGUIRE PWB902 PREWRAPPED CAST P-TRAP ASSEMBLY KIT ON ALL HANDICAP ACCESSIBLE LAVATORIES AND/OR SINKS.
3. PROVIDE CARRIERS FOR ALL WALL MOUNTED FIXTURES. FOR LAVATORY CARRIERS, PROVIDE CONCEALED ARMS FOR GYPBOARD WALLS, SINGLE HANGER FOR BLOCK WALLS.
4. EQUAL CHINA FIXTURE BY AMERICAN STANDARD, ZURN & SLOAN.
5. EQUAL TOILET SEAT BY BEMIS, OLSONITE & BENEKE.
6. EQUAL FLUSH VALVES BY ZURN & TOTO.
7. TOP OF FLUSH VALVE SHALL BE LOCATED MINIMUM 3" BELOW BOTTOM OF GRAB BAR. P.C. TO CUT OUTLET TUBE AS REQUIRED.
8. FLUSH VALVE MECHANISM SHALL BE LOCATED OPPOSITE OF HAND RAIL AS PER ADA REQUIREMENT.
9. EQUAL FAUCETS BY SYMMONS, CHICAGO FAUCETS, DELTA, MOEN & AMERICAN STANDARD.
10. EQUAL STAINLESS STEEL SINKS FRANKE & JUST.
11. EQUAL SHOWER TRIM BY BY LEONARD, ZURN & SPEAKMAN.
12. EQUAL WATER COOLERS/DRINKING FOUNTAINS BY OASIS, SUNROC, HAWS & ELKAY.
13. EQUAL MOP BASINS BY SWANSTONE, E.L.MUSTEE.
14. WHEN ASTERISK ("*") PREFIX IS USED, PROVIDE TRAP PRIMER AND PIPE 1/2" LINE BELOW SLAB TO FLOOR DRAIN.
15. PROVIDE VANDAL-PROOF AERATORS ON LAVATORY FAUCETS (E26-05-05).
16. EQUAL SAFETY SHOWER/EYEWASH BY BRADLEY & GUARDIAN.
17. EQUAL FAUCETS BY CHICAGO FAUCETS, T&S, ELKAY, ZURN & AMERICAN STANDARD. SINGLE SINK = RIGID SPOUT; DOUBLE SINK = RESTRICTED SPOUT.
18. EQUAL CAST IRON LAVATORIES BY CECO & ZURN.
19. PROVIDE TRAP AND TAILPIECE (FIRE RETARDANT POLYPROPYLENE – ACID RESISTANT).
20. PROVIDE INTEGRAL CHECK STOPS AT ALL WALL FAUCETS.
21. ACCESSORY APRON MAY BE OMITTED IF WATER COOLER IS RECESSED.
22. EQUAL SPECIALTY FIXTURES BY OATEY, SIOUX CHIEF.
23. MIXING VALVE TEMPERS 140° WATER TO 110°. EQUALS VALVES BY LAWLER, LEONARD
24. EXTRA HOLE DRILLED IN RIGHT SIDE OF SINK FOR EYEWASH. EQUAL EYEWASH BY BRADLEY, ENCON. (EYEWASH MIXING VALVE BELOW COUNTER)
25. MOEN FAUCET FOR AC CONNECTION. TRANSFORMER 104630 (UP TO 8 DEVICES), 182538 CONNECTOR FOR EACH DEVICE.

BLDG. LOAD SUMMARY

WATER FU	847
WATER GPM	192
WASTE FU	519
HW GPH (110°F)	600
HW GPH (140°F)	306

PLUMBING SPECIALTIES SCHEDULE

SYM	DESCRIPTION	MODEL NUMBER	REMARKS
FD	FLOOR DRAIN	ZURN ZN-415-S (-P WHERE TRAP PRIMER REQ'D)	1
SFD	SHOWER FLOOR DRAIN	ZURN Z-415-B WITH POLISHED CHROME TOP	1
FCO	FLOOR CLEANOUT	ZURN ZN-1400-T WITH NIKALOY TOP, CARPET MARKERS AS REQUIRED, SEE ARCHITECTURAL FINISH SCHEDULE FOR CARPETED AREAS.	1
YCO	YARD CLEANOUT	ZURN Z-1406-HD WITH CAST IRON TOP	1
FPH	FROST-PROOF HYDRANT	WOODFORD #65 WITH VACUUM BREAKER	2,3
HB	HOSE BIBB	WOODFORD #24 WITH LOOSE KEY, CHROME PLATED, VACUUM BREAKER.	2,3
WCO	WALL CLEANOUT	ZURN Z-1446 W/STAINLESS STEEL COVER	1
◯	SHOCK ABSORBER	SIOUX CHIEF, A=652-A, B=653-B, C=654-C, D=655-D	1
TP	TRAP PRIMER	ZURN Z-1022 @ TRAP TO Z-1023 @ FLOOR DRAIN.	1
TP2	TRAP PRIMER	PRECISION PRODUCTS MODEL PR-500 W/SS-X & DU-X.	1
FS	FLOOR SINK	ZURN ZN-1901-2 W/ 1/2 GRATE & SEDIMENT BUCKET.	1
FSA	FLOOR SINK	ZURN ZN-1901 W/SEDIMENT BUCKET & NICKEL BRONZE GRATE.	1
FSB	FLOOR SINK	BY KITCHEN EQUIPMENT SUPPLIER. P.C. TO ROUGH-IN AND MAKE FINAL CONNECTION	
CWF	CANWASH FITTING	WOODFORD MODEL HC67 SERIES	2,3
TD1	TRENCH DRAIN	ABT POLYDRAIN 6"W x 6'L	1
TD2	TRENCH DRAIN	ZURN MODEL Z893 SIZE 18 (20.3"X24"X4")	1

1. EQUALS BY JOSAM, JAY R. SMITH & WADE.
2. EQUALS BY JOSAM, JAY R. SMITH, WADE & PRIER.
3. PROVIDE INTEGRAL CHECK STOPS AT ALL WALL FAUCETS.

PLUMBING LEGEND

SYMBOL	ABBREVIATION	DESCRIPTION
—— - ——	CW	COLD WATER
—— - - ——	HW (110°F)	HOT WATER
—— - - - ——	HW (140°F)	HOT WATER
—— ——	HWR (110°F)	HOT WATER RETURN
—— ——	HWR (140°F)	HOT WATER RETURN
——	W	WASTE
- - - - - -	GW	GREASE LADEN WASTE LINE
----------	V	VENT
——G——	G	GAS
	VTR	VENT THRU ROOF
		GLOBE VALVE
		BALL VALVE
		CHECK VALVE
		UNION
		PRESSURE REDUCING VALVE
	FPH	FROST PROOF HYDRANT
	HB	HOSE BIBB
		SHOCK ABSORBER
	FCO	FLOOR CLEANOUT
	FCO/YCO	FLOOR OR YARD CLEANOUT
	FS/FD	FLOOR SINK OR SQUARE FL. DRAIN
		VACUUM BREAKER
		AQUASTAT

GREASE INTERCEPTOR NOTES:

A. INTERIOR BAFFLES SHALL DISTRIBUTE FLOWS. BAFFLES SHALL EXTEND SIX (6) INCHES ABOVE WATER LINE BUT, CANNOT FLOOD THE INLET PIPE.

B. MINIMUM 2:1 LENGTH TO WIDTH RATIO.

C. LOW VELOCITY FLOW NEAR OUTLET.

D. BAFFLE WALL BE LOCATED A DISTANCE FROM INLET WALL OF 2/3 TO 3/4 OF THE TOTAL LENGTH OF THE INTERCEPTOR

E. NINE (9) INCHES OF FREEBOARD AT GREASE INTERCEPTOR TOP.

F. EACH GREASE INTERCEPTOR SHALL HAVE INLET AND OUTLET TEES. THE OUTLET TEE SHALL EXTEND 50% INTO THE LIQUID DEPTH. THE INLET TEE SHALL EXTEND 25% INTO THE LIQUID DEPTH. INLET AND OUTLET TEE MUST BE PLUGGED AT THE TOP OF THE SANITARY TEE AND BE A MINIMUM OF THREE (3) INCHES IN DIAMETER.

G. ACCESS OPENINGS OVER THE INLET, OUTLET, AND EACH COMPARTMENT WITHIN THE GREASE INTERCEPTOR. EACH OPENING SHALL BE TWENTY-FOUR (24) INCHES IN DIAMETER AND CONTAIN PICK HOLES. ALL COVERS SHALL BE CONSTRUCTED OF CAST IRON OR EQUIVALENT TRAFFIC BEARING MATERIAL. MANHOLES/COVERS MUST EXTEND TO THE FINISHED GRADE AND SHALL BE INSTALLED TO EXCLUDE THE ENTRANCE OF SURFACE OR STORM WATER INTO THE INTERCEPTOR.

H. FULL SIZE CLEANOUTS SHALL BE INSTALLED ON THE INLET AND OUTLET SIDES OF THE INTERCEPTOR AND EXTENDED TO GRADE.

I. GREASE INTERCEPTORS MUST BE VENTED IN ACCORDANCE WITH THE NC STATE PLUMBING CODE WITH A MINIMUM 2" DIAMETER VENT PIPING. VENT CONNECTIONS MAY BE MADE THROUGH THE TOP OF THE INTERCEPTOR, IN WHICH CASE THE BOTTOM OF THE VENT SHALL EXTEND NO CLOSER THAN 6" TO THE STATIC WATER LEVEL, OR MAY BE MADE THROUGH THE SIDE OF THE INTERCEPTOR'S ACCESS OPENING.

J. MINIMUM CONCRETE COMPRESSIVE STRENGTH OF 3,500 PSI.

K. JOINTS SHOULD BE PROPERLY SEALED TO PREVENT INFILTRATION OR EXFILTRATION.

L. GREASE INTERCEPTORS MUST MEET A MINIMUM STRUCTURAL DESIGN OF 150-POUNDS/SQUARE FOOT FOR NON TRAFFIC INSTALLATIONS. FOR VEHICULAR TRAFFIC CONDITIONS THE GREASE INTERCEPTOR SHALL BE DESIGNED TO WITHSTAND A H-20 WHEEL LOAD.

M. GREASE INTERCEPTORS SHALL MEET THE FOLLOWING STANDARDS: ASTM C-1227 FOR SEPTIC TANKS, C-913 FOR PRECAST CONCRETE WATER AND WASTEWATER STRUCTURES, ACI-318 FOR DESIGN AND ASTM C-890 FOR ESTABLISHING MINIMUM STRUCTURAL DESIGN LOADING.

N. A NORTH CAROLINA DESIGN PROFESSIONAL WILL SPECIFICALLY DESIGN CAST IN PLACE OR MASONRY TANKS. TANKS MUST BE MANUFACTURED AS A GREASE INTERCEPTOR.

ELECTRIC WATER HEATER SCHEDULE

Unit Tag	Capacity: Input (KW)	Capacity: Volt/Phase	Capacity: Recovery (GPH)	Capacity: Tank Volume (Gallons)	Capacity: Temp Rise (F)	Recirc Pump	Expansion Tank	Location	Model	Remarks	Detail
EWH #1	4.5	240/1	20.7	50	90	Yes	Yes	Storage B120	AO Smith E6-50R45DV	1-5	4/P301
EWH #2A	4.5	240/1	20.7	50	90	Yes	Yes	Utility G115.1	AO Smith E6-50R45DV	1-2, 4-6	4/P301
EWH #2B	4.5	240/1	20.7	50	90	Yes	Yes	Utility G115.1	AO Smith E6-50R45DV	1-2, 4-6	4/P301
EWH #3A	4.5	240/1	20.7	50	90	Yes	Yes	Utility E115.1	AO Smith E6-50R45DV	1-2, 4-6	4/P301
EWH #3B	4.5	240/1	20.7	50	90	Yes	Yes	Utility E115.1	AO Smith E6-50R45DV	1-2, 4-6	4/P301
EWH #4A	4.5	240/1	20.7	50	90	Yes	Yes	Utility D115.1	AO Smith E6-50R45DV	1-2, 4-6	4/P301
EWH #4B	4.5	240/1	20.7	50	90	Yes	Yes	Utility D115.1	AO Smith E6-50R45DV	1-2, 4-6	4/P301

1. EQUALS BY STATE, A.O. SMITH, RHEEM.
2. RECIRCULATION PUMPS ARE BELL & GOSSET NBF-22, 92 WATTS, 115V/1-PH, ALL BRONZE; EQUALS BY AURUORA, GRUNDFOS
3. EXPANSION TANKS ARE AMTROL ST-5 OR EQUALS BY STATE, TACO
4. NON-SIMULTANEOUS ELEMENTS
5. DISCONNECT BY E.C. WATER HEATERS TO BE PROVIDED WITH 208V POWER.
6. PROVIDE ONE EXPANSION TANK (AMTROL ST-12) AND RECIRCULATION PUMP FOR WATER HEATERS IN SERIES. REFER TO PLANS TO IDENTIFY UNITS IN SERIES TOGETHER.

LIQUID PROPANE TANKLESS WATER HEATER SCHEDULE

Unit Tag	Capacity: Input (MBH)	Capacity: Efficiency	Capacity: GPM	Capacity: Temp Rise (F)	Flue Size	Recirc Pump	Electrical Data: HP	Electrical Data: Volt	Electrical Data: Phase	Expansion Tank	Location	Model	Remarks	Detail
GWH-1 GWH-2 GWH-3	19.9 MIN 199 MAX VARIABLE	96%	5.6	67	NOTE 4	YES	–	120	1	YES	SEE PLANS	NAVIEN NPE-240A	1-6	5/P301

1. EQUALS BY RINNAI, INTELLIHOT.
2. EXPANSION TANKS ARE AMTROL OR EQUALS BY STATE, TACO; MODEL ST-5
3. HOT WATER, COLD WATER, GAS, COMBUSTION AIR, AND VENT PIPE MANIFOLDS BY WATER HEATER MFG.
4. CONCENTRIC WALL VENT BY WATER HEATER MFG.
5. CONTROLS FOR ALL THREE WATER HEATERS TO OPERATE AS ONE SYSTEM.
6. ALL ITEMS FOR COMPLETE SYSTEM BY WATER HEATER MFG.

CONTRACTOR TO VERIFY ALL DIMENSIONS.

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ONSLOW COUNTY SCHOOLS
STUMP SOUND, NORTH CAROLINA

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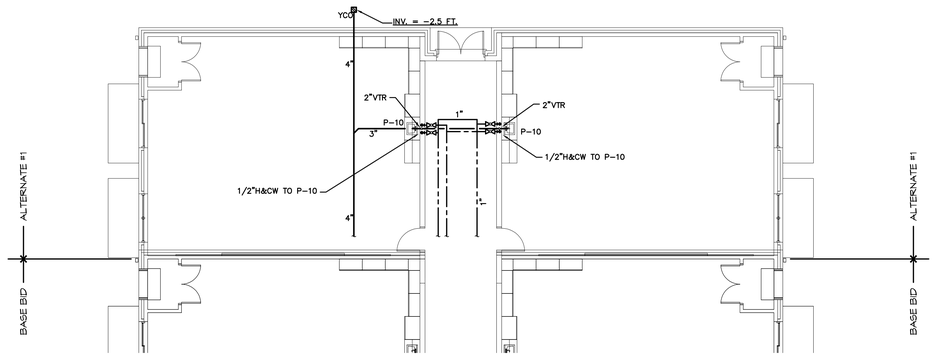
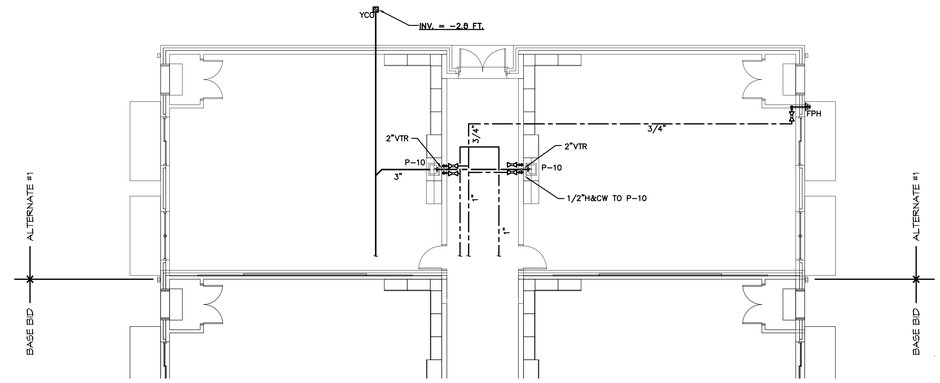
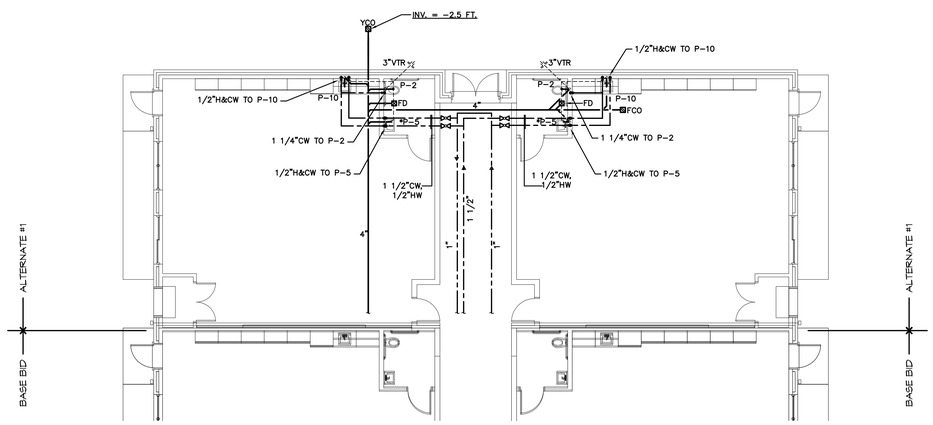


3 / P700 D-WING - ALT #1
SCALE: 1/8" = 1'-0"



2 / P700 E-WING - ALT #1
SCALE: 1/8" = 1'-0"

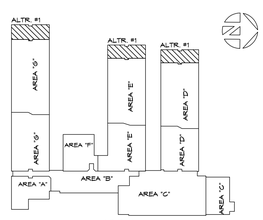


1 / P700 G-WING - ALT #1
SCALE: 1/8" = 1'-0"

FIRE RATED WALLS

	1 HOUR WALL
	2 HOUR WALL

IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO APPLY THE PROPER FIRE-SAFING DETAIL FOR ALL DUCT AND PIPE PENETRATIONS THRU RATED & NON-RATED WALL AND FLOOR/CEILING ASSEMBLIES.



CONTRACTOR TO VERIFY ALL DIMENSIONS.

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C-0252
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NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 17259 J. CRAIG CHRISTIAN 08-09-19

PINNACLE ARCHITECTURE
PROFESSIONAL ASSOCIATION
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MATTHEWS, NORTH CAROLINA 28106
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ISSUE DATE: 04.30.2019
DRAWN BY: MHK
CHECKED BY: JCC
PROJECT: 1821

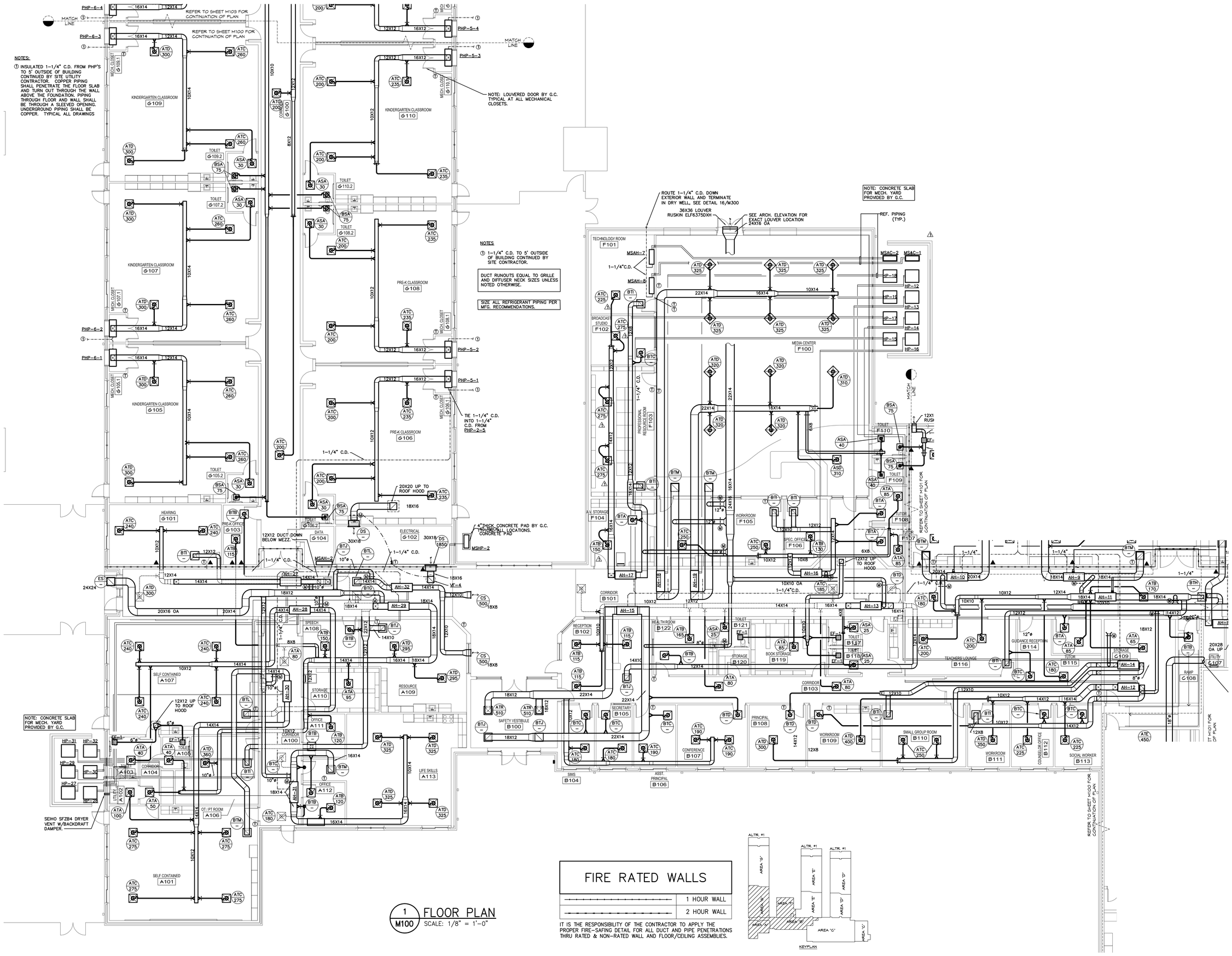
STUMP SOUND ELEMENTARY SCHOOL
ONSLOW COUNTY SCHOOLS
STUMP SOUND, NORTH CAROLINA

ALTERNATE #1

REVISION SCHEDULE

△	DATE	REFERENCE

P700



1 M100 FLOOR PLAN
SCALE: 1/8" = 1'-0"

FIRE RATED WALLS

	1 HOUR WALL
	2 HOUR WALL

IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO APPLY THE PROPER FIRE-SAFING DETAIL FOR ALL DUCT AND PIPE PENETRATIONS THRU RATED & NON-RATED WALL AND FLOOR/CEILING ASSEMBLIES.

CONTRACTOR TO VERIFY ALL DIMENSIONS.

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NORTH CAROLINA PROFESSIONAL ENGINEER 17250 J. CRAIG CHANDLER 08-08-19

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STUMP SOUND ELEMENTARY SCHOOL
ONSLOW COUNTY SCHOOLS
STUMP SOUND, NORTH CAROLINA

FLOOR PLAN - AREAS A,B,F,&G

REVISION SCHEDULE

△	DATE	REFERENCE

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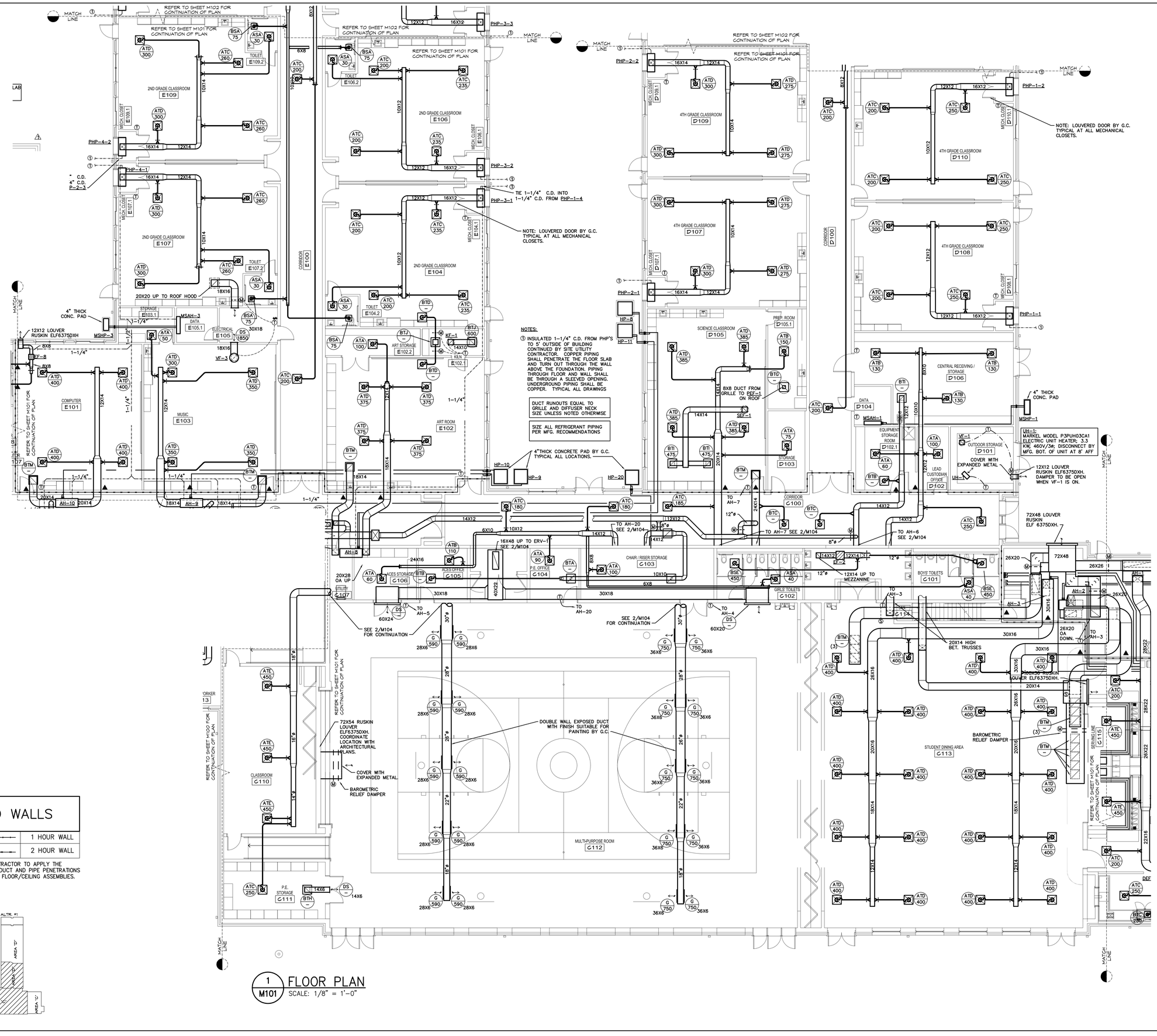
M100



FIRE RATED WALLS

	1 HOUR WALL
	2 HOUR WALL

IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO APPLY THE PROPER FIRE-SAFING DETAIL FOR ALL DUCT AND PIPE PENETRATIONS THRU RATED & NON-RATED WALL AND FLOOR/CEILING ASSEMBLIES.

1 / M101 FLOOR PLAN
SCALE: 1/8" = 1'-0"

CONTRACTOR TO VERIFY ALL DIMENSIONS.

McKNIGHT-SMITH WARD • GRIFFIN
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Mechanical Electrical Plumbing
Charlotte, NC
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C-1219
L-219

NORTH CAROLINA REGISTERED PROFESSIONAL ENGINEER 17859 J. CRAIG MCKNIGHT 06-04-19

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STUMP SOUND ELEMENTARY SCHOOL
ONSLOW COUNTY SCHOOLS
STUMP SOUND, NORTH CAROLINA

FLOOR PLAN - AREAS C,D,&E

REVISION SCHEDULE

Δ	DATE	REFERENCE

M101

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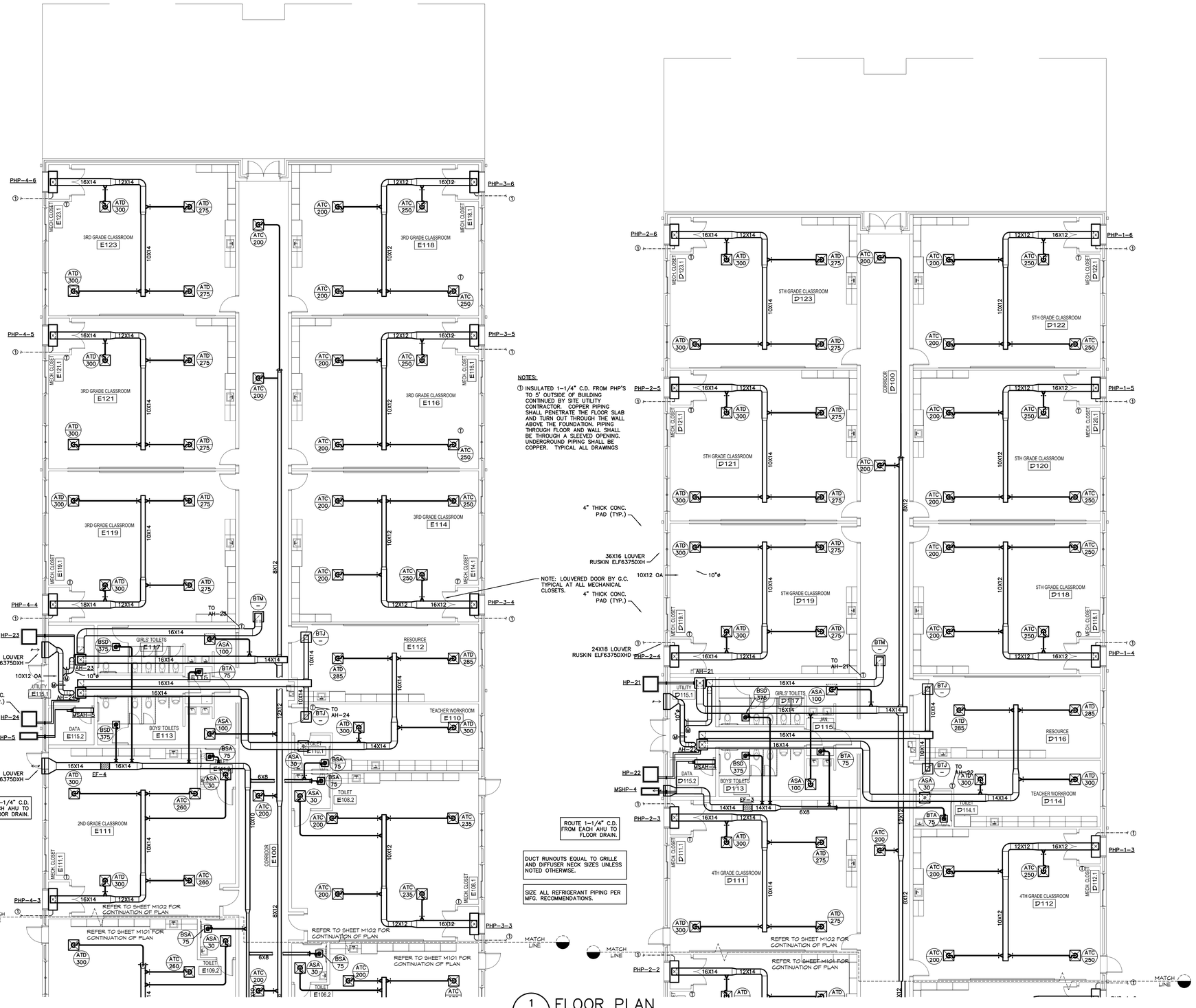


NOTES:

① INSULATED 1-1/4" C.D. FROM PHP'S TO 5' OUTSIDE OF BUILDING CONTINUED BY SITE UTILITY CONTRACTOR. COPPER PIPING SHALL PENETRATE THE FLOOR SLAB AND TURN OUT THROUGH THE WALL ABOVE THE FOUNDATION. PIPING THROUGH FLOOR AND WALL SHALL BE THROUGH A SLEEVED OPENING. UNDERGROUND PIPING SHALL BE COPPER. TYPICAL ALL DRAWINGS

NOTE: LOUVERED DOOR BY G.C. TYPICAL AT ALL MECHANICAL CLOSETS.

ROUTE 1-1/4" C.D. FROM EACH AHU TO FLOOR DRAIN.

DUCT RUNOUTS EQUAL TO GRILLE AND DIFFUSER NECK SIZES UNLESS NOTED OTHERWISE.

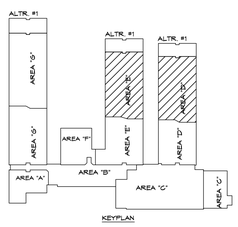
SIZE ALL REFRIGERANT PIPING PER MFG. RECOMMENDATIONS.

1 / M102 FLOOR PLAN
SCALE: 1/8" = 1'-0"

FIRE RATED WALLS

	1 HOUR WALL
	2 HOUR WALL

IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO APPLY THE PROPER FIRE-SAFING DETAIL FOR ALL DUCT AND PIPE PENETRATIONS THRU RATED & NON-RATED WALL AND FLOOR/CEILING ASSEMBLIES.



CONTRACTOR TO VERIFY ALL DIMENSIONS.

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NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 17259 J. CRAIG TURNER 08-04-19

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PROJECT: 1821

STUMP SOUND ELEMENTARY SCHOOL
ONSLOW COUNTY SCHOOLS
STUMP SOUND, NORTH CAROLINA

FLOOR PLAN - AREAS D&E

REVISION SCHEDULE

Δ	DATE	REFERENCE

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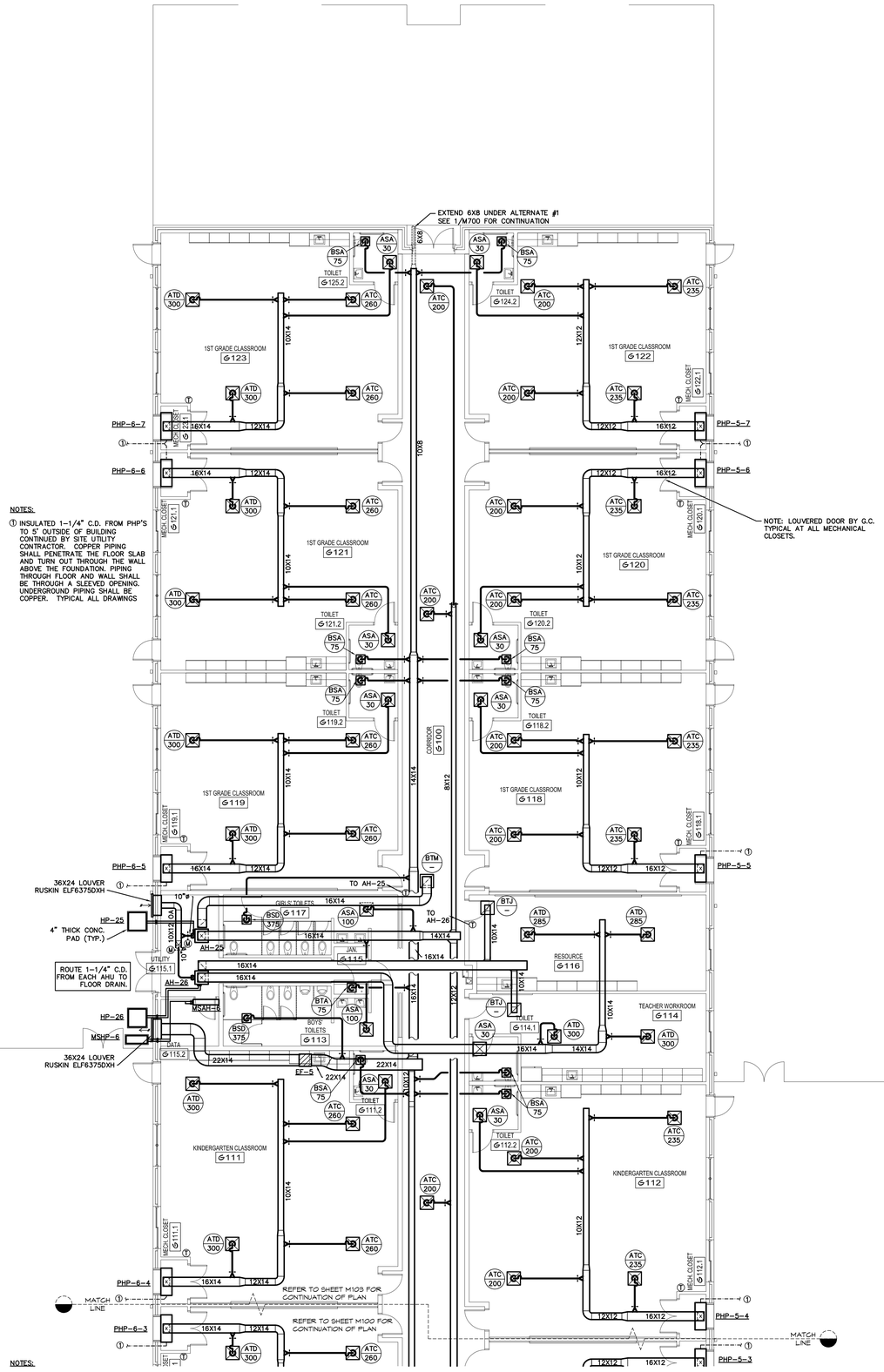
M102



NOTES:

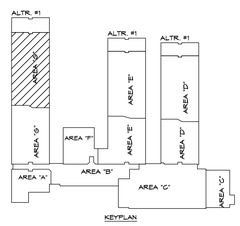
① INSULATED 1-1/4" C.D. FROM PHP'S TO 5' OUTSIDE OF BUILDING CONTINUED BY SITE UTILITY CONTRACTOR. COPPER PIPING SHALL PENETRATE THE FLOOR SLAB AND TURN OUT THROUGH THE WALL ABOVE THE FOUNDATION. PIPING THROUGH FLOOR AND WALL SHALL BE THROUGH A SLEEVED OPENING. UNDERGROUND PIPING SHALL BE COPPER. TYPICAL ALL DRAWINGS

NOTES:

1 M103 FLOOR PLAN
SCALE: 1/8" = 1'-0"

FIRE RATED WALLS	
	1 HOUR WALL
	2 HOUR WALL

IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO APPLY THE PROPER FIRE-SAFING DETAIL FOR ALL DUCT AND PIPE PENETRATIONS THRU RATED & NON-RATED WALL AND FLOOR/CEILING ASSEMBLIES.



CONTRACTOR TO VERIFY ALL DIMENSIONS.

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Charlotte, NC 704/357-2172
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NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 17551 J. CRAIG THOMPSON 08-04-19

PINNACLE ARCHITECTURE
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ISSUE DATE: 04.30.2019
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PROJECT: 1821

STUMP SOUND ELEMENTARY SCHOOL
ONSLOW COUNTY SCHOOLS
STUMP SOUND, NORTH CAROLINA

FLOOR PLAN - AREA G

REVISION SCHEDULE

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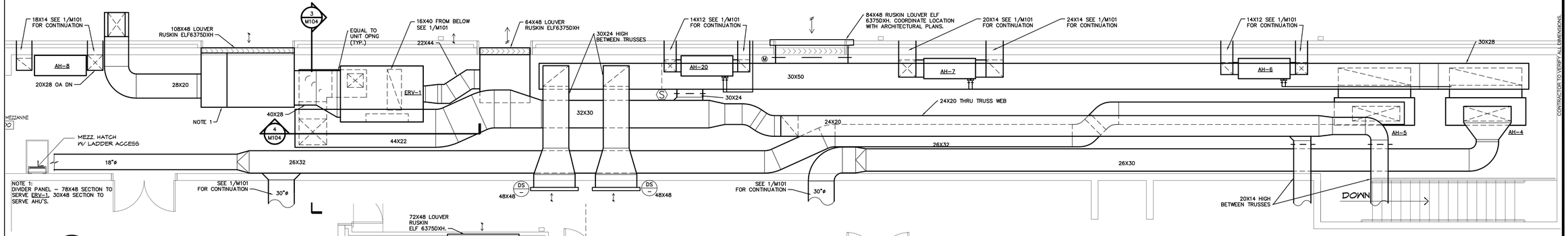
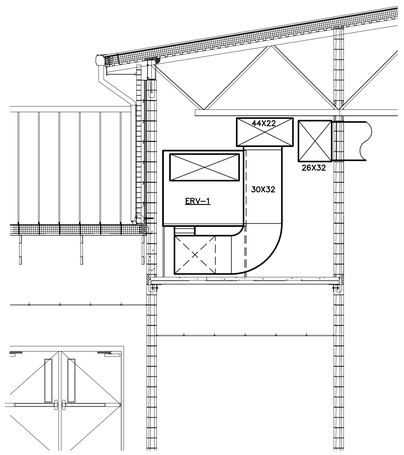
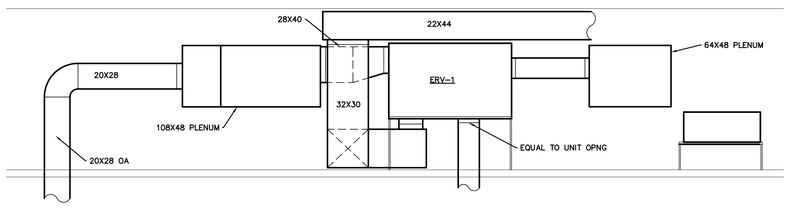
M103



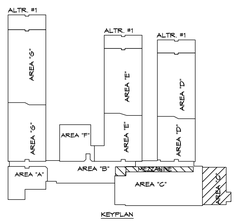
2 M104 MEZZANINE PLAN
SCALE: 1/4" = 1'-0"



3 M104 SECTION AT ERV-1
SCALE: 1/4" = 1'-0"



4 M104 SECTION AT ERV-1
SCALE: 1/4" = 1'-0"



KEYPLAN

FIRE RATED WALLS	
	1 HOUR WALL
	2 HOUR WALL

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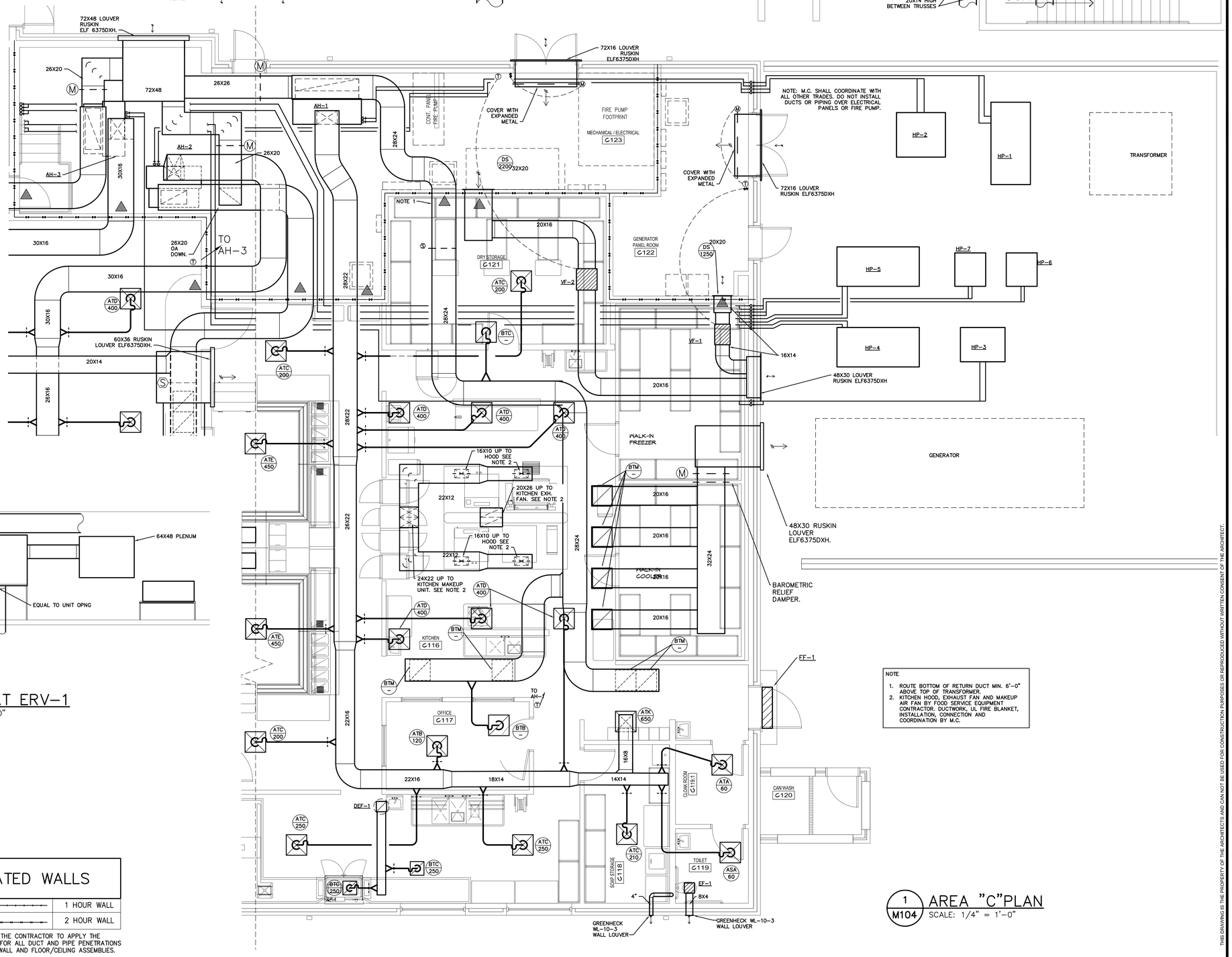

NOTE
1. ROUTE BOTTOM OF RETURN DUCT MIN. 6'-0" ABOVE TOP OF TRANSFORMER.
2. KITCHEN HOOD, EXHAUST FAN AND MAKEUP AIR FAN BY FOOD SERVICE EQUIPMENT CONTRACTOR. DUCTWORK, UL FIRE BLANKET, INSTALLATION, CONNECTION AND COORDINATION BY M.C.

1 M104 AREA "C" PLAN
SCALE: 1/4" = 1'-0"

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NORTH CAROLINA REGISTERED PROFESSIONAL ENGINEER J. CRAIG MCKNIGHT 030-04-11

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ISSUE DATE: 04.30.2019
DRAWN BY: MMK
CHECKED BY: JCC
PROJECT: 1821

STUMP SOUND ELEMENTARY SCHOOL
ONSLOW COUNTY SCHOOLS
STUMP SOUND, NORTH CAROLINA

FLOOR PLAN - AREA C

REVISION SCHEDULE

Δ	DATE	REFERENCE

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M104

MECHANICAL EQUIPMENT LEGEND

SYMBOL: SINGLE LINE	SYMBOL: DOUBLE LINE	DESCRIPTION
LOW PRESSURE DUCTWORK		
10 X 12	10 X 12	DUCT SECTION--1ST FIGURE WIDTH, 2ND DEPTH
		SQUARE TO ROUND TRANS.
		FLEX DUCTWORK
		ELBOW W/TURNING VANES
		LONG RADIUS ELBOW
EXH		EXHAUST DUCT SECTION
SA		SUPPLY DUCT SECTION
OA		OUTSIDE AIR DUCT SECTION
RA		RETURN/RELIEF AIR DUCT SECTION
N/A		EXPOSED DUCT
		CONICAL DUCT TAKE--OFF
		RECTANGULAR--TO--ROUND TAKE--OFF WITH DAMPER
		RECTANGULAR--TO--ROUND TAKE--OFF WITHOUT DAMPER
		RECTANGULAR TAKE--OFF
		FIRE DAMPER "A" OR "B"
MISCELLANEOUS		
T	T	THERMOSTAT
CO2	CO2	CARBON DIOXIDE SENSOR
S	S	SMOKE DETECTOR
CD	CD	CONDENSATE DRAIN
B.D.	B.D.	BACKDRAFT DAMPER
M	M	MOTOR OPERATED DAMPER
		DAMPER
$	$	MANUAL SWITCH

GRILLE & DIFFUSER SCHEDULE

SYM	TYPE	USE	CFM RANGE	NECK SIZE	OVER-ALL SIZE	DMPR	FINISH	FRAME	PRICE MODEL NO	REMARKS
A--	LOUVER FACE	SUPPLY 4-WAY	SEE PLANS & RMK 5	RMK 5	RMK 4	OBD	OFF WHITE	RMK 3	SMDA	1-6
BT-	PERF.	RETURN/ EXHAUST	SEE PLANS & RMK 6	RMK 7	RMK 4	RMK 9	OFF WHITE	RMK 3	PDDR	1-4, 7-10
BS-	PERF.	RETURN/ EXHAUST	SEE PLANS & RMK 6	RMK 7	RMK 4	RMK 9	OFF WHITE	RMK 3	PDDR	1-4, 7-10
C-	SIDEWALL	SUPPLY	SEE PLANS	SEE PLANS	RMK 4	OBD	RMK 12	SEE PLANS	520D	1-4, 11-13
D-	SIDEWALL	RETURN/ EXHAUST	SEE PLANS	SEE PLANS	RMK 4	RMK 9	RMK 12	SEE PLANS	530	1-4, 9, 12, 13

REMARKS
1. EQUALS: METALAIRE, TITUS, KRUEGER, TUTTLE & BAILEY, NAIL-OR, CARNES. SCHEDULE IS GENERAL, SOME MAY NOT BE USED. PAINT ALL INSIDE VISIBLE SURFACES FLAT BLACK.
2. SYMBOL EXPLANATION
   XXX/CFM = SYMBOL, FRAME (RMK 3), NECK (RMK 5,7)/CFM
3. FRAME TYPES:
   S = FLUSH SURF. MTD. T = T-BAR
   TYPE 1 FRAME. E = DUCT MOUNTED: V-BEVELED
   G = TEGULAR. DROP SURF. (TYPE "A" DIFFUSER)
   NOTE: VERIFY FRAME/CEILING COMPATIBILITY. D = DROPPED FRAME
4. OVERALL SIZE: LAY-IN = 2'x2', OTHER GRILLES = NECK + 2"+/-.
5. LOUVER FACE SUPPLY NECK SIZES

NO.	ROUND NK SIZE	CFM	NO.	SQUARE NK SIZE	CFM
A	6"	100	H	6x6	125
B	8"	175	I	9x9	280
C	10"	275	J	12x12	500
D	12"	400	K	15x15	780
E	14"	535	L	18x18	1125
F	16"	700	M	21x21	1530
G	18"	885	N	24x24	2000

NOTE: VERIFY CFM / NECK SIZE
6. ADJUSTABLE: HORIZONTAL/VERTICAL. "PIANO HINGED" TYPE VANES.
7. "B" & "E" EXH/RETURN NECK SIZES ("E" = SQ. NK. ONLY)

NO.	ROUND NK SIZE	CFM	NO.	SQUARE NK SIZE	CFM
A	6"	100	G	8x8	220
B	8"	175	H	10x10	345
C	10"	275	I	12x12	500
D	12"	400	J	14x14	680
E	14"	535	K	16x16	885
F	16"	700	L	18x18	1125
NOTE: VERIFY CFM / NECK SIZE.			M	22x22	1680
			N	22x46	2600

8. NO NECK SIZE INDICATES NON-DUCTED, LAY-IN PANEL.
9. OBD IF USED AS EXHAUST.
10. ALL ALUM. CONSTRUCTION (INCLUDING BACKPAN) IF SHOWN ON PLANS.
11. VOLUME EXTRACTOR WHERE SHOWN ON PLANS.
12. SURFACE MTD: PAINT TO MATCH WALL.
13. VERTICAL FRONT BLADES.

SPLIT SYSTEM HEAT PUMP SCHEDULE

Unit Tag	Nom. Tons	SEER (EER)	CFM	OA	ESP	Air Handling Unit: Fan Motor HP	Fan Motor Volts	Fan Motor Phase	Electric Heating Coil kW	Steps	Volts	Phase	MCA	MOCP	Model	DX Coil Performance EAT	MBH Total	MBH Sens.	Heating Performance EAT	LAT	Capacity MBH@47 F	Electrical Data (Outdoor Unit) Fan No.	Fan FLA	Compressor No.	Compressor LRA	Compressor RLA	Volts	Phase	MCA	MOCP	Model	Remarks
AH/HP-1	15	(10.6)	5500	1250	0.7	3	460	3	49.84	2	460	3	70	98.6	81	90	TWE180	80/70	183	134.4	70	98.4	168.5	2	2.5	2	100	12.6	460	3	33.4	40	TWA180	1 - 3
AH/HP-2	10	(11)	4000	1830	0.6	2	460	3	24.92	2	460	3	70	89.7	35	35	TWE120	80/67	124	99.3	70	93.4	100.9	1	2.5	2	52	7.8	460	3	20	25	TWA120	1 - 3
AH/HP-3	10	(11)	4000	1830	0.6	2	460	3	24.92	2	460	3	70	89.7	35	35	TWE120	80/67	124	99.3	70	93.4	100.9	1	2.5	2	52	7.8	460	3	20	25	TWA120	1 - 3
AH/HP-4	20	(10.6)	7500	3160	0.75	5	460	3	49.84	2	460	3	70	91	83	90	TWE240	80/70	255	190	70	100	245.5	2	2.5	2	125	18	460	3	46	60	TWA240	1 - 3
AH/HP-5	20	(10.6)	7500	3160	0.75		460	3	49.84	2	460	3	70	91	83	90	TWE240	80/70	255	190	70	100	245.5	2	2.5	2	125	18	460	3	46	60	TWA240	1 - 3
AH/HP-6	2	14	800	115	0.6	1/3	208	1	5.76	1	208	1	70	92.7	38	40	GAM5B0A24	80/67	24	16.7	70	96.4	22.8	1	0.64	1	62.9	10.9	208	1	14	25	4TWR4024	1 - 4
AH/HP-7	4	14	1600	450	0.5	3/4	208	1	10.8	1	208	3	70	91.3	44	45	GAM5B0C48	80/67	47.5	35.1	70	96.3	45.5	1	0.6	1	41	6.2	460	3	8	15	4TWA4048	1 - 4
AH/HP-8	4	14	1600	460	0.5	3/4	208	1	10.8	1	208	3	70	91.3	44	45	GAM5B0C48	80/67	47.5	35.1	70	96.3	45.5	1	0.6	1	41	6.2	460	3	8	15	4TWA4048	1 - 4
AH/HP-9	3.5	14	1400	350	0.4	1/2	208	1	10.8	1	208	3	70	94.4	42	45	GAM5B0C42	80/67	42	30.8	70	96.8	40.5	1	0.6	1	41	6.1	460	3	8	15	4TWA4042	1 - 4
AH/HP-10	4	14	1600	350	0.5	3/4	208	1	10.8	1	208	3	70	91.3	44	45	GAM5B0C48	80/67	47.5	35.1	70	96.3	45.5	1	0.6	1	41	6.2	460	3	8	15	4TWA4048	1 - 4
AH/HP-11	3.5	14	1400	255	0.4	1/2	208	1	10.8	1	208	3	70	94.4	42	45	GAM5B0C42	80/67	42	30.8	70	96.8	40.5	1	0.6	1	41	6.1	460	3	8	15	4TWA4042	1 - 4
AH/HP-12	3	14	1200	100	0.4	1/2	208	1	10.8	1	208	3	70	98.4	42	45	GAM5B0B36	80/67	34	25.7	70	96.8	34.8	1	0.6	1	38	5.8	460	3	8	15	4TWA4036	1 - 4
AH/HP-13	3	14	1200	210	0.4	1/2	208	1	10.8	1	208	3	70	98.4	42	45	GAM5B0B36	80/67	34	25.7	70	96.8	34.8	1	0.6	1	38	5.8	460	3	8	15	4TWA4036	1 - 4
AH/HP-14	2	14	800	170	0.6	1/3	208	1	5.76	1	208	1	70	92.7	38	40	GAM5B0A24	80/67	24	16.7	70	96.4	22.8	1	0.64	1	62.9	10.9	208	1	14	25	4TWR4024	1 - 4
AH/HP-15	5	14	1950	120	0.4	1	208	1	10.8	1	208	3	70	87.5	46	50	GAM5B0C60	80/67	59	42.3	70	97	57	1	0.6	1	52	7.8	460	3	10	15	4TWA4060	1 - 4
AH/HP-16	2	14	800	105	0.6	1/3	208	1	5.76	1	208	1	70	92.7	38	40	GAM5B0A24	80/67	24	16.7	70	96.4	22.8	1	0.64	1	62.9	10.9	208	1	14	25	4TWR4024	1 - 4
AH/HP-17	3	14	1200	260	0.4	1/2	208	1	10.8	1	208	3	70	98.4	42	45	GAM5B0B36	80/67	34	25.7	70	96.8	34.8	1	0.6	1	38	5.8	460	3	8	15	4TWA4036	1 - 4
AH/HP-18	5	14	1950	480	0.4	1	208	1	10.8	1	208	3	70	87.5	46	50	GAM5B0C60	80/67	59	42.3	70	97	57	1	0.6	1	52	7.8	460	3	10	15	4TWA4060	1 - 4
AH/HP-19	5	14	1980	480	0.4	1	208	1	10.8	1	208	3	70	87.2	46	50	GAM5B0C60	80/67	59	42.3	70	97	57	1	0.6	1	52	7.8	460	3	10	15	4TWA4060	1 - 4
AH/HP-20	2	14	800	135	0.6	1/3	208	1	5.76	1	208	1	70	92.7	38	40	GAM5B0A24	80/67	24	16.7	70	96.4	22.8	1	0.64	1	62.9	10.9	208	1	14	25	4TWR4024	1 - 4
AH/HP-21	3	14	1200	250	0.4	1/2	208	1	10.8	1	208	3	70	98.4	42	45	GAM5B0B36	80/67	34	25.7	70	96.8	34.8	1	0.6	1	38	5.8	460	3	8	15	4TWA4036	1 - 4
AH/HP-22	3	14	1200	205	0.4	1/2	208	1	10.8	1	208	3	70	98.4	42	45	GAM5B0B36	80/67	34	25.7	70	96.8	34.8	1	0.6	1	38	5.8	460	3	8	15	4TWA4036	1 - 4
AH/HP-23	3	14	1200	250	0.4	1/2	208	1	10.8	1	208	3	70	98.4	42	45	GAM5B0B36	80/67	34	25.7	70	96.8	34.8	1	0.6	1	38	5.8	460	3	8	15	4TWA4036	1 - 4
AH/HP-24	3	14	1200	205	0.4	1/2	208	1	10.8	1	208	3	70	98.4	42	45	GAM5B0B36	80/67	34	25.7	70	96.8	34.8	1	0.6	1	38	5.8	460	3	8	15	4TWA4036	1 - 4
AH/HP-25	3	14	1200	250	0.4	1/2	208	1	10.8	1	208	3	70	98.4	42	45	GAM5B0B36	80/67	34	25.7	70	96.8	34.8	1	0.6	1	38	5.8	460	3	8	15	4TWA4036	1 - 4
AH/HP-26	3	14	1200	205	0.4	1/2	208	1	10.8	1	208	3	70	98.4	42	45	GAM5B0B36	80/67	34	25.7	70	96.8	34.8	1	0.6	1	38	5.8	460	3	8	15	4TWA4036	1 - 4
AH/HP-27	4	14	1600	180	0.5	3/4	208	1	10.8	1	208	3	70	91.3	44	45	GAM5B0C48	80/67	47.5	35.1	70	96.3	45.5	1	0.6	1	41	6.2	460	3	8	15	4TWA4048	1 - 4
AH/HP-28	2.5	14	1000	245	0.5	1/3	208	1	7.2	1	208	3	70	92.7	28	30	GAM5B0B30	80/67	30.2	21.5	70	97.2	29.4	1	0.92	1	68.2	11.3	208	1	15	25	4TWB4030	1 - 4
AH/HP-29	4	14	1600	420	0.7	3/4	208	1	10.8	1	208	3	70	91.3	44	45	GAM5B0C48	80/67	47.5	35.1	70	96.3	45.5	1	0.6	1	41	6.2	460	3	8	15	4TWA4048	1 - 4
AH/HP-30	3	14	1200	240	0.5	1/2	208	1	10.8	1	208	3	70	98.4	42	45	GAM5B0B36	80/67	34	25.7	70	96.8	34.8	1	0.6	1	38	5.8	460	3	8	15	4TWA4036	1 - 4
AH/HP-31	4	14	1600	270	0.5	3/4	208	1	10.8	1	208	3	70	91.3	44	45	GAM5B0C48	80/67	47.5	35.1	70	96.3	45.5	1	0.6	1	41	6.2	460	3	8	15	4TWA4048	1 - 4
AH/HP-32	2.5	14	1000	250	0.5	1/3	208	1	7.2	1	208	3	70	92.7	28	30	GAM5B0B30	80/67	30.2	21.5	70	97.2	29.4	1	0.92	1	68.2	11.3	208	1	15	25	4TWB4030	1 - 4

1. MODEL NUMBERS BASED ON TRANE. EQUALS BY CARRIER AND LENNOX.
2. CONTRACTOR SHALL VERIFY SERVICE CLEARANCES FOR ALL SUBSTITUTIONS.
3. SINGLE POINT ELECTRICAL CONNECTION AT AIR HANDLING UNIT.
4. FOR LINE SETS BETWEEN 50 AND 175 FEET, INCLUDE THE FOLLOWING:
   CRANKCASE HEATER
   COMPRESSOR START ASSIST CAPACITOR AND RELAY
   LIQUID - LINE SOLENOID VALVE OR HARD SHUTOFF TXV

MECHANICAL SYSTEMS, SERVICE SYSTEMS AND EQUIPMENT METHOD OF COMPLIANCE

Prescriptive — Energy Cost Budget

Thermal Zone Onslow County 3A

Exterior Design Conditions

Winter Dry Bulb: 23
Summer Dry Bulb: 94

Interior Design Conditions

Winter Dry Bulb: 70
Summer Dry Bulb: 75
Relative Humidity: 50%

Building Heating Load: 1620 mbh

Building Cooling Load: 245.3 tons

Mechanical Space Conditioning System

Unitary:
Description of Unit: vertical heat pump units
split system heat pumps
mini-split units
Heat Output of Unit: 2817 mbh
Cooling Output of Unit: 247 tons

List Equipment Efficiencies:

Equipment Schedules with Motors (Mechanical Systems)
Motor Horsepower: Specs Require Compliance w/ NC Energy Code.
Number of Phases: Specs Require Compliance w/ NC Energy Code.
Minimum Efficiency: Specs Require Compliance w/ NC Energy Code.
Motor Type: Specs Require Compliance w/ NC Energy Code.
Number of Poles: Specs Require Compliance w/ NC Energy Code.

Designer Statement:
To the best of my knowledge and belief, the design of this building complies with the mechanical systems, service systems and equipment requirements of the 2012 NC Energy Code. Compliance with Section 506 shall be by "Reduced Lighting Power Density" (506.2.2).

FAN SCHEDULE

Unit Tag	CFM	ESP (in.)	Fan RPM	Sones (dBA)	Drive	HP (W)	Volts	Phs	Type	GREENHECK Model No.	Rmks.
EF-1	75	0.3	756	1.1	DIRECT	(80)	115	1	C	SP-B110	1-6, 14
EF-2	825	0.35	1638	14.5	DIRECT	1/4	115	1	IL	SQ-99-VG	1-5, 7
EF-3	900	0.4	1366	7.5	DIRECT	1/4	115	1	IL	SQ-100-VG	1-5, 7
EF-4	1350	0.5	1463	11.3	BELT	1/3	115	1	IL	BSQ-120-3	1,2,4,5,7
EF-5	1950	0.5	1252	12.7	BELT	1/2	115	1	IL	BSQ-140-5	1,2,4,5,7
EF-6	(TAG NOT USED)		-	-	-	-	-	-	-	-	-
EF-7	(TAG NOT USED)		-	-	-	-	-	-	-	-	-
EF-8	150	0.35	1651	5.2	DIRECT	1/10	115	1	IL	SQ-70-VG	1-5, 7
DEF-1	500	0.3	1688	8.4	DIRECT	1/10	115	1	RE	G-085-VG	1-5, 8
PEF-1	150	0.25	1712	4.6	DIRECT	1/10	115	1	RE	G-060-VG	1-5, 10
SEF-1	950	0.3	1473	10.5	DIRECT	1/4	115	1	RE	G-099-VG	1-5, 9
KF-1	600	0.3	1551	7.4	DIRECT	1/10	115	1	RE	G-090-VG	1-5, 11
VF-1	1250	0.4	1736	15.1	BELT	1/2	115	1	IL	BSQ-100-5	1,2,4,5,13
VF-2	2200	0.4	1324	13.5	BELT	1/2	115	1	IL	BSQ-140-5	1,2,4,5,13
VF-3, VF-4	1850	0.4	1461	15.0	BELT	1/3	115	1	RE	GB-131-3	1,2,4,5,13

1. EQUALS BY PENN, ILG, LOREN COOK.
2. TYPES: IL = INLINE, C = CEILING, RE = ROOF EXHAUSTER, SW = SIDEWALL EXHAUSTER.
3. 'VARIGREEN' MOTOR.
4. VERIFY FAN INLET/OUTLET SIZE, TRANSITION TO FIRST DUCT SIZE IF NECESSARY.
5. DISCONNECT SWITCH (OR PLUG) BY MFGR. FOR ALL SINGLE PHASE MOTORS (U.N.O.).
6. INTERLOCK WITH LIGHT SWITCH.
7. INTERLOCK WITH BAS.
8. INTERLOCK WITH DISHWASHER OPERATION.
9. INTERLOCK WITH WALL SWITCH.
10. CONTINUOUS OPERATION. FAN SHALL HAVE SPARK-PROOF HOUSING.
11. INTERLOCK WITH TSTAT.
12. SOLID STATE SPEED CONTROL.
13. INTERLOCK WITH TSTAT AND TIMED WALL SWITCH.
14. 'TAG' IS USED ON PLAN MULTIPLE TIMES. CONTRACTOR RESPONSIBLE FOR CORRECT QUANTITY.

MINI-SPLIT SYSTEM SCHEDULE

Unit Tag	CFM High	CFM Low	Fan Motor FLA	Fan Motor Volts	Fan Motor Phase	Cooling Performance EAT	MBH Total	Efficiency SEER	Heating Performance EAT	Capacity MBH	Outdoor Unit: Unit Tag	Fan No.	Fan FLA(ea)	Compressor No.	Compressor LRA	Compressor RLA	MCA	MOCP	Volts	Phase	Model (Outdoor Unit)	Model (Indoor Unit)	Remarks
MSAH-1	380	290	0.33	208/230	1	80/67	18	15.3	70	19	MSHP-1	1	0.35	1	14	12	13	20	208/230	1	PUZ-A18NHA4	PKA-A18HA4	1-5
MSAH-2	380	290	0.33	208/230	1	80/67	18	15.3	70	19	MSHP-2	1	0.35	1	14	12	13	20	208/230	1	PUZ-A18NHA4	PKA-A18HA4	1-5
MSAH-3	380	290	0.33	208/230	1	80/67	18	15.3	70	19	MSHP-3	1	0.35	1	14	12	13	20	208/230	1	PUZ-A18NHA4	PKA-A18HA4	1-5
MSAH-4	380	290	0.33	208/230	1	80/67	18	15.3	70	19	MSHP-4	1	0.35	1	14	12	13	20	208/230	1	PUZ-A18NHA4	PKA-A18HA4	1-5
MSAH-5	380	290	0.33	208/230	1	80/67	18	15.3	70	19	MSHP-5	1	0.35	1	14	12	13	20	208/230	1	PUZ-A18NHA4	PKA-A18HA4	1-5
MSAH-6	380	290	0.33	208/230	1	80/67	18	15.3	70	19	MSHP-6	1	0.35	1	14	12	13	20	208/230	1	PUZ-A18NHA4	PKA-A18HA4	1-5
MSAH-7	775	635	0.36	208/230	1	80/67	24	21.4	-	-	MSAC-1	1	0.4	1	11	7	19	26	208/230	1	PUY-A24NHA7	PKA-A24KA7	1 - 6
MSAH-8	775	635	0.36	208/230	1	80/67	24	21.4	-	-	MSAC-2	1	0.4	1	11	7	19	26	208/230	1	PUY-A24NHA7	PKA-A24KA7	1 - 6

1. MODELS BY MITSUBISHI. EQUALS BY LG, SANYO.
2. MOUNT INDOOR SECTION TIGHT TO BOTTOM OF CEILING AND WALL.
3. INDOOR UNIT IS POWERED FROM OUTDOOR UNIT. M.C. SHALL COORDINATE POWER REQUIREMENTS FOR ALL SUBSTITUTIONS.
4. REFRIGERANT LINES AND ACCESSORIES PER SPECS AND AS RECOMMENDED BY UNIT MFG.
5. PROVIDE FACTORY CONDENSATE PUMP.
6. COOLING ONLY UNIT.

ENERGY RECOVERY VENTILATOR SCHEDULE

UNIT	O.A./ S.A. CFM	ESP INTAKE SIDE	R.A./ E.A. CFM	ESP DISCH. SIDE	INTAKE FAN MOTOR HP	INTAKE FAN MOTOR VOLTS	INTAKE FAN MOTOR PHASE	DISCHARGE FAN MOTOR HP	DISCHARGE FAN MOTOR VOLTS	DISCHARGE FAN MOTOR PHASE	PERFORMANCE SEASON	O.A. EAT	S.A. LAT	EFFICIENCY %	UNIT ELECTRICAL FLA	MCA	MOCP	VOLT/PHS	MODEL	WEIGHT (LBS)	REMARKS
ERV-1	9980	0.5	9200	0.5	15	460	3	15	460	3	SUMMER	95/78	82.8/68.9	68	42.5	47.6	60	460/3	FV-9000	1950	1 - 10

1. MODEL BY SEMCO. EQUALS BY GREENHECK, VENMAR AND APPROVED EQUALS.
2. SINGLE POINT CONNECTION TO UNIT.
3. CONSTANT VOLUME FANS.
4. PROVIDE OA DAMPER, EA DAMPER.
5. PROVIDE ROTATION SENSOR.
6. INTERLOCK WITH AIR HANDLING UNITS.
7. FILTERS MERV 8.
8. VERIFY UNIT DIMENSIONS. UNIT MUST FIT IN ALLOTED SPACE WITH RECOMMENDED CLEARANCES MAINTAINED.
9. VERTICAL CONFIGURATION.
10. STOP/JOG ECONOMIZER WHEEL CONTROL.

FLY FAN SCHEDULE

UNIT	UNIT WIDTH (IN.)	MAX NOZZLE FPM	MAX NOZZLE CFM	VOLTAGE/PHASE	HP PER MOTER	AMP DRAW	NUMBER OF MOTORS	WEIGHT (LBS)	BERNER MODEL NO.	REMARKS
FF-1	48	3274	1360	115 / 1	1/5	3.4	1	42	SLC07-1048A	1-4

1. MODEL NUMBERS BASED ON BERNER. EQUALS BY MARS AIR SYSTEMS AND POWERED AIRE.
2. PROVIDE DOOR LIMIT SWITCH. SWITCH TO BE MOUNTED SO THE AIR CURTAIN TURNS ON AS THE DOOR BEGINS TO OPEN.
3. PROVIDE ADJUSTABLE TIME RELAY. MINUMUM MOUNTING HEIGHT EQUALS 7'-0" AFF.
4. CABINET FINISH SELECTED BY ARCHITECT PRIOR TO ORDERING.

VERTICAL INTERIOR HEAT PUMP SCHEDULE

Unit Tag	Qty	EER	Nom. Tons	Evaporator Fan (remark 1) SA CFM	OA CFM	ESP	HP	Cooling Performance EAT	MBH Total	MBH Sens.	Amb. Temp.	Heating Performance MBH @ 47 F	EAT (F)	C.O.P. @47 F	Electric Heating Coil KW Total	KW/ Step	Steps	Volts	Phs	Compressor No.	Volt	Phs	LRA	RLA	Condenser Fan No.	Volt	Phs	FLA (ea)	Filter Area (sf)	Unit Electrical Volt	Phs.	# of Conn.	MCA	MOP MFS	Bard I/Tec	Weight Lbs.	Remarks
PHP-1	6	11.7	2.5	900	450	0.3	1/3	80/67	27.8	20.5	95	26.6	70	3.6	9	9	1	460	3	1	460	3	28	4.2	1	460	3	1.7	4.0	460	3	1	22	25	I30H1DC09RP1	1150	1-10
PHP-2	6	12	3	1150	450	0.3	1/3	80/67	36	27.3	95	32.8	70	3.7	9	9	1	460	3	1	460	3	38	4.9	1	460	3	2.6	4.0	460	3	1	24	25	I36H1DC09RP1	1200	1-10
PHP-3	6	11.7	2.5	900	450	0.3	1/3	80/67	27.8	20.5	95	26.6	70	3.6	9	9	1	460	3	1	460	3	28	4.2	1	460	3	1.7	4.0	460	3	1	22	25	I30H1DC09RP1	1150	1-10
PHP-4	6	12	3	1150	450	0.3	1/3	80/67	36	27.3	95	32.8	70	3.7	9	9	1	460	3	1	460	3	38	4.9	1	460	3	2.6	4.0	460	3	1	24	25	I36H1DC09RP1	1200	1-10
PHP-5	7	11.7	2.5	900	450	0.3	1/3	80/67	27.8	20.5	95	26.6	70	3.6	9	9	1	460	3	1	460	3	28	4.2	1	460	3	1.7	4.0	460	3	1	22	25	I30H1DC09RP1	1150	1-10
PHP-6	7	12	3	1150	450	0.3	1/3	80/67	36	27.3	95	32.8	70	3.7	9	9	1	460	3	1	460	3	38	4.9	1	460	3	2.6	4.0	460	3	1	24	25	I36H1DC09RP1	1200	1-10

1. MFR'S FAN DATA INCLUDES WET COIL, CLEAN FLTRS, AND UNIT CASING. ESP IS PRESSURE DROP EXTERNAL TO UNIT. ALL UNITS SHALL BE PROVIDED WITH ENERGY RECOVERY.
2. UNIT MTD. DISCONNECT BY MFG.
3. HEATING/COOLING T'STAT/HUMIDISTAT BY MFR.
4. LOUVER BY MC, COLOR SELECTED BY ARCHITECT.
5. ONE (460/3) ELECTRICAL CONNECTION TO UNIT
6. CONDENSATE DRAIN KIT W/TRAP BY MFR.
7. ACCESS DOOR ATTACHED W/SCREWS (NOT HINGED).
8. LOW AMBIENT.
9. HOT GAS REHEAT.
10. MODELS BY BARD OR APPROVED EQUAL BASED ON PRE-APPROVAL OF SUBMITTAL.

CONTRACTOR TO VERIFY ALL DIMENSIONS.

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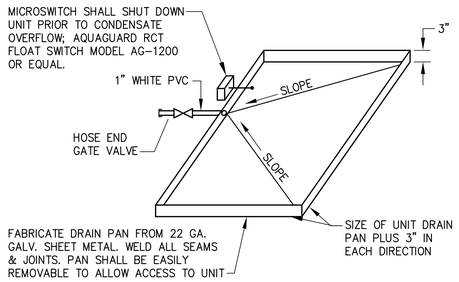
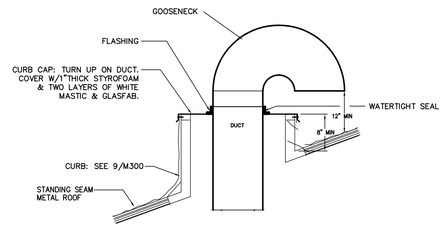
ISSUE DATE: 04.30.2019
DRAWN BY: JCC
CHECKED BY: JCC
PROJECT: 1821

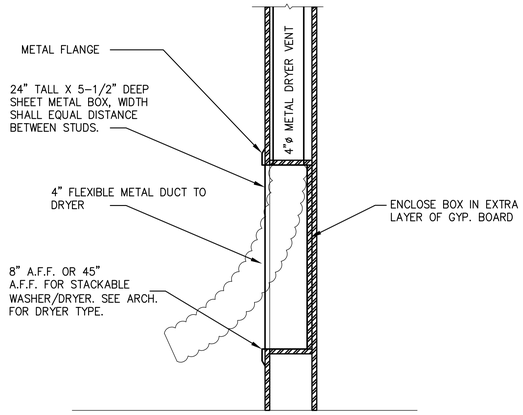
STUMP SOUND ELE



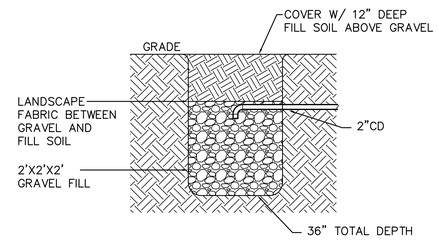
14 M300 AUXILIARY DRAIN PAN DETAIL
NTS



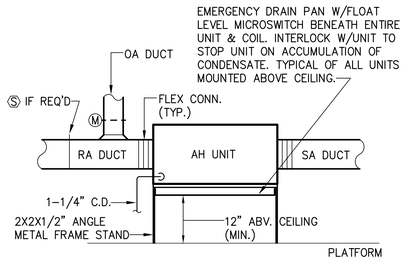
15 M300 GOOSENECK DETAIL
NTS
NOTE: M.C. & G.C. TO COORDINATE SIZE & LOCATION OF ROOF OPENING.



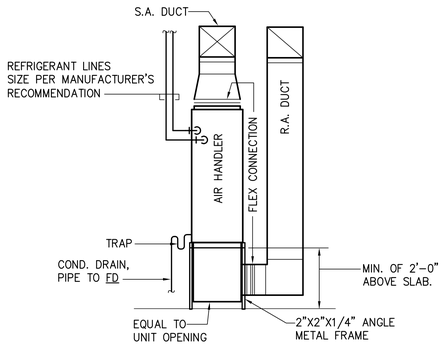
16 M300 DRYER VENT BOX DETAIL
NTS



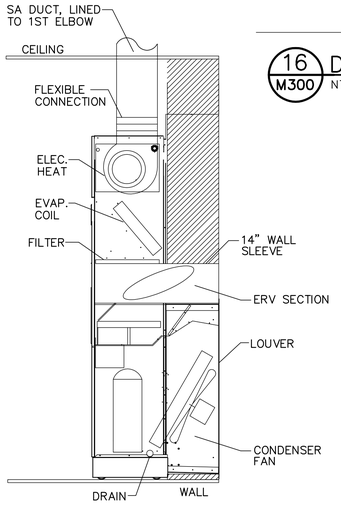
17 M300 DRYWELL DETAIL
NTS



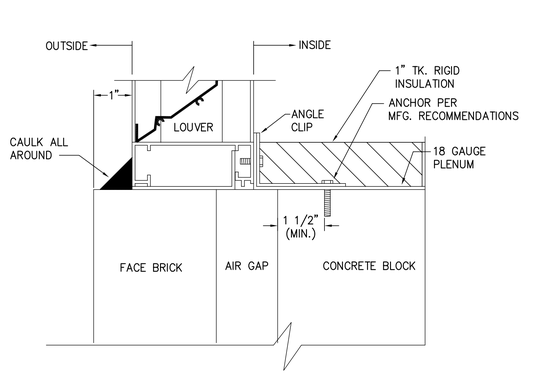
10 M300 SECTION AT AHU
NTS



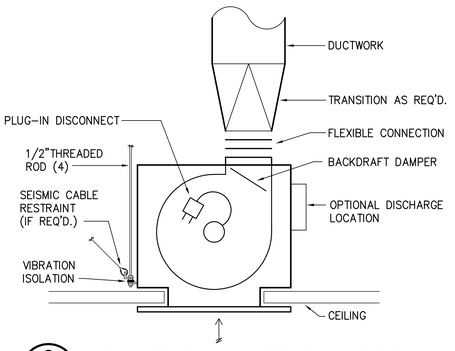
11 M300 SECTION @ VERTICAL AIR HANDLING UNIT
NTS



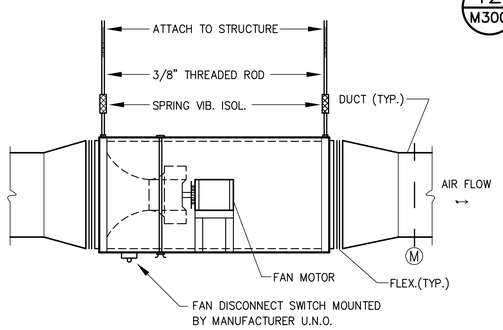
12 M300 SECTION AT PHP UNIT
NTS



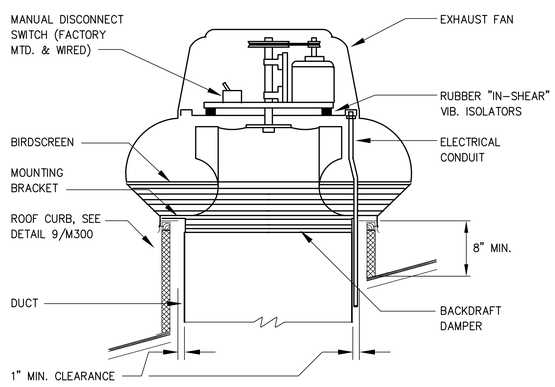
13 M300 LOUVER ATTACHMENT DETAIL
NTS



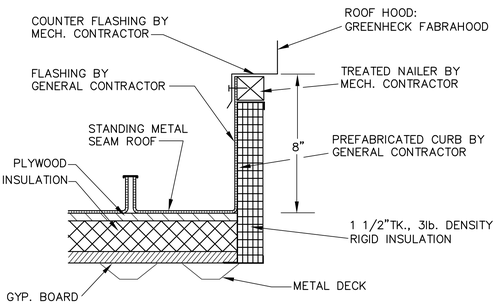
6 M300 CEILING EXHAUST FAN DETAIL
NTS



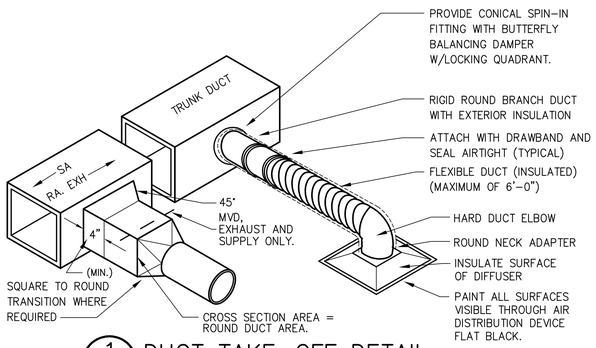
7 M300 INLINE FAN DETAIL
NTS



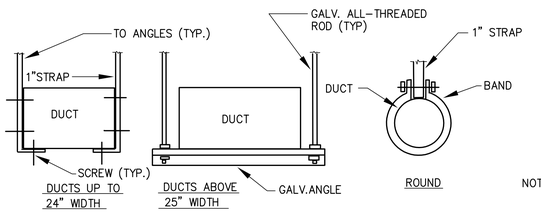
8 M300 ROOF MTD. EXHAUST FAN DETAIL
NTS



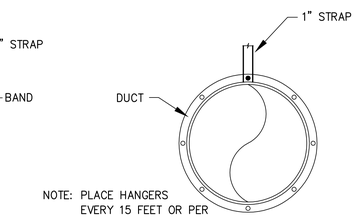
9 M300 STANDING METAL SEAM ROOF CURB DETAIL
NTS



1 M300 DUCT TAKE-OFF DETAIL
NTS

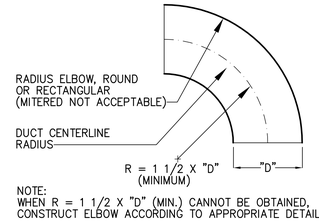


2 M300 DUCTWORK HANGER DETAILS
NTS



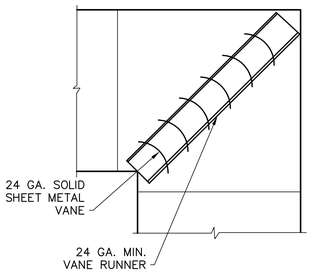
NOTE: PLACE HANGERS EVERY 15 FEET OR PER MFG RECOMMENDATIONS

3 M300 ROUND DUCT HANGER DETAIL
NTS



NOTE: WHEN R = 1 1/2 X "D" (MIN.) CANNOT BE OBTAINED, CONSTRUCT ELBOW ACCORDING TO APPROPRIATE DETAIL.

4 M300 RADIUS ELBOW DETAIL
NTS



5 M300 TURNING VANE DETAIL
NTS
PERMITTED ONLY WHERE RADIUS ELL WILL NOT FIT.

CONTRACTOR TO VERIFY ALL DIMENSIONS.

McKNIGHT-SMITH WARD • GRIFFIN
ENGINEERS, INCORPORATED
Charlotte, NC
Charlotte, NC
P-0505
C-1255
P-0219
PM/2021-2012

NORTH CAROLINA REGISTERED PROFESSIONAL ENGINEER SEAL 17259 J. CRAIG GRIFFIN 08-04-19

PINNACLE ARCHITECTURE
PROFESSIONAL ASSOCIATION
P.O. BOX 187, 630 TEAM ROAD, SUITE 200
MATTHEWS, NORTH CAROLINA 28106
PH: (704) 847-9851 F: (704) 847-9853

ISSUE DATE: 04.30.2019
DRAWN BY: MWK
CHECKED BY: JCC
PROJECT: 1821

STUMP SOUND ELEMENTARY SCHOOL
ONSLOW COUNTY SCHOOLS
STUMP SOUND, NORTH CAROLINA

DETAILS

REVISION SCHEDULE

Δ	DATE	REFERENCE

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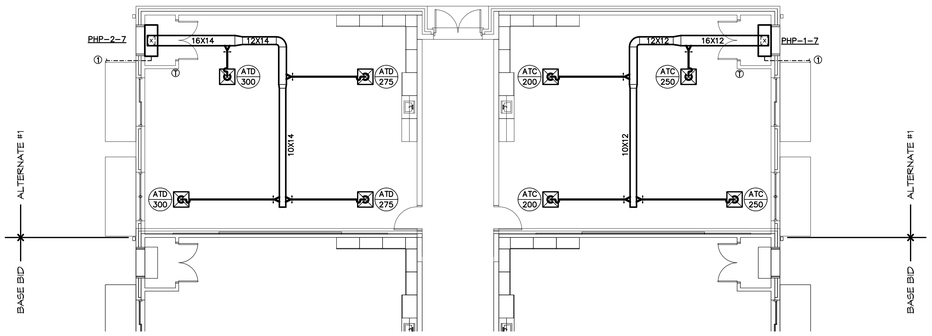
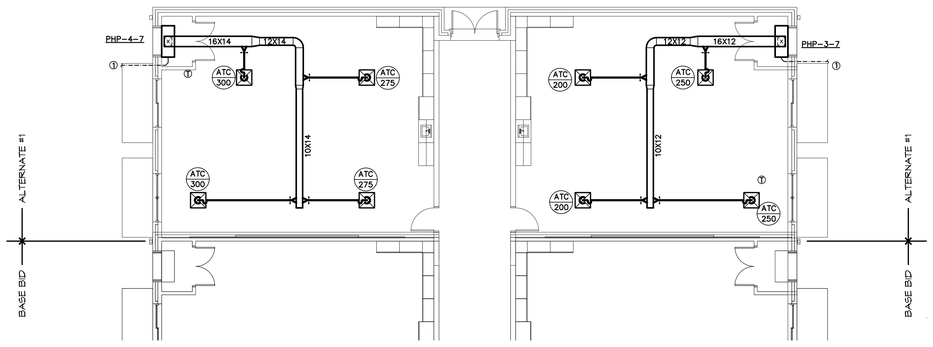
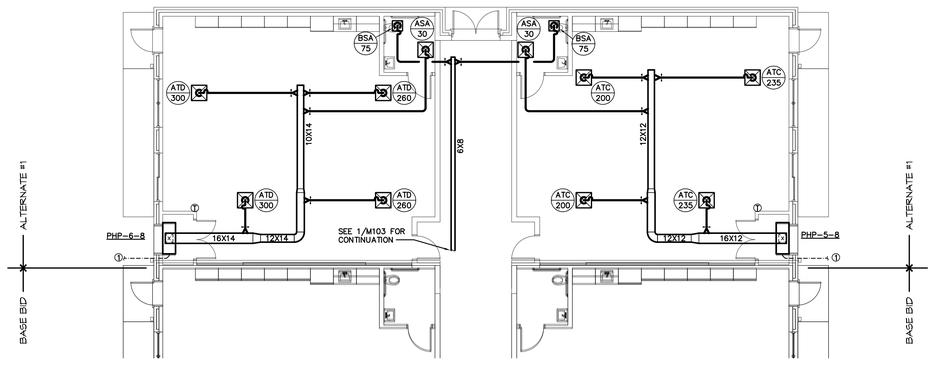
M300



3 / M700 D-WING – ALT #1
SCALE: 1/8" = 1'-0"



2 / M700 E-WING – ALT #1
SCALE: 1/8" = 1'-0"

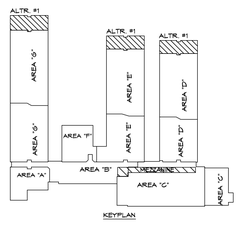


1 / M700 G-WING – ALT #1
SCALE: 1/8" = 1'-0"

FIRE RATED WALLS

	1 HOUR WALL
	2 HOUR WALL

IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO APPLY THE PROPER FIRE-SAFING DETAIL FOR ALL DUCT AND PIPE PENETRATIONS THRU RATED & NON-RATED WALL AND FLOOR/CEILING ASSEMBLIES.



CONTRACTOR TO VERIFY ALL DIMENSIONS.

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STUMP SOUND ELEMENTARY SCHOOL
ONSLOW COUNTY SCHOOLS
STUMP SOUND, NORTH CAROLINA

ALTERNATE #1

REVISION SCHEDULE

A	DATE	REFERENCE

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M700

SHEET INDEX - ELECTRICAL

Sheet Number	Sheet Name
E100	SYMBOLS LEGEND, FIXTURE SCHEDULE
E101	DATA SCHEDULES, TELECOM RISER, ELECTRICAL GENERAL NOTES
E102	ELECTRICAL DETAILS
E103	ELECTRICAL DETAILS
E104	FIRE ALARM RISER, FIRE ALARM MATRIX & F/A DEVICE MOUNTING
E105	ELECTRICAL DETAILS
E106	ELECTRICAL DETAILS
E107	ELECTRICAL DETAILS
E200	PARTIAL LIGHTING PLAN AREAS A, B, F & G
E201	PARTIAL LIGHTING PLAN AREAS C, D & E
E202	PARTIAL LIGHTING PLAN AREAS D & E
E203	PARTIAL LIGHTING PLAN AREA G
E204	PARTIAL LIGHTING PLAN AREA C
E205	LIGHTING PLANS MEZZANINES A, B & C
E300	PARTIAL POWER PLAN AREAS A, B, F & G
E301	PARTIAL POWER PLAN AREAS C, D & E
E302	PARTIAL POWER PLAN AREAS D & E
E303	PARTIAL POWER PLAN AREA G
E304	ENLARGED POWER PLAN AREAS C
E305	FOOD SERVICE EQUIPMENT SCHEDULE
E306	POWER PLANS MEZZANINES A, B & C
E400	PARTIAL FIRE ALARM PLAN AREAS A, B, F & G
E401	PARTIAL FIRE ALARM PLAN AREAS C, D & E
E402	PARTIAL FIRE ALARM PLAN AREAS D & E
E403	PARTIAL FIRE ALARM PLAN AREA G
E404	PARTIAL FIRE ALARM PLAN AREA C
E405	FIRE ALARM PLANS MEZZANINES A,B & C
E500	OVERALL SECURITY AND CABLE TRAY PLAN
E501	ELECTRICAL SITE PLAN
E600	POWER RISER BASE BID
E601	POWER RISER ALTERNATE #4
E602	PANEL SCHEDULES BASE BID
E603	PANEL SCHEDULES BASE BID
E604	PANEL SCHEDULES BASE BID
E605	PANEL SCHEDULES BASE BID
E606	PANEL SCHEDULES BASE BID & ALTERNATE #4
E700	LIGHTING, POWER & FIRE ALARM PLANS CLASSROOM ALTERNATE AREAS D & E
E701	LIGHTING, POWER & FIRE ALARM PLANS CLASSROOM ALTERNATE AREA G

ELECTRICAL ENERGY FORM

ELECTRICAL SYSTEM AND EQUIPMENT

METHOD OF COMPLIANCE:

ENERGY CODE: PRESCRIPTIVE__X__ PERFORMANCE_____

ASHRAE 90.1: PRESCRIPTIVE_____ PERFORMANCE_____

LIGHTING SCHEDULE

Lamp type required in fixture – See Fixture Schedule.
Number of lamps in fixture – See Fixture Schedule.
Ballast type used in the fixture – See Specifications.
Number of ballasts in fixture – See Specifications.
Total wattage per fixture – Varies – See Fixture Schedule
Total interior wattage specified versus allowed: 69252watts versus 96438 watts (whole building)
Total exterior wattage specified versus allowed: 4008 watts versus 5810 watts

ADDITIONAL PRESCRIPTIVE COMPLIANCE

X 406.1.1 More Efficient HVAC Performance
X 406.1.2 Reduced Lighting Power Density
___ 406.1.3 Enhanced Lighting Controls
___ 406.1.4 On-Site Supply of Renewable Energy
___ 406.1.5 Provision of Dedicated Outdoor HVAC Air System
___ 406.1.6 High Efficiency Service Water Heating

DESIGNER STATEMENT:
To the best of my knowledge and belief, the design of this building complies with the electrical system and equipment requirements of the 2018 North Carolina State Building Code, Energy Conservation Code.

NAME: Robert A. Clark, P.E.

FIXTURE SCHEDULE

REMARKS	MARK	DESCRIPTION	MANUFACTURER & CATALOG #	LAMPS	VOLTAGE	WATTS	EQUAL MANUFACTURER'S	LUMENS	DRIVERS	LAMP COLOR
	A	2'x4' LED LAY-IN PRISMATIC TROFFER	COLUMBIA #LJT24-35HLG-FS-A12125-ED-U	LED	120/277V	45	WILLIAMS, LITHONIA	5441	1	3500K
	AE	SAME AS "A" EXCEPT WITH INTERNAL GENERATOR TRANSFER DEVICE		LED	120/277V	45	WILLIAMS, LITHONIA	5441	1	3500K
	AG	2'x4' LED LAY-IN PRISMATIC TROFFER, DOUBLE GASKETED FOR KITCHEN USE.	COLUMBIA #LJT24-35HLG-FS-A12125-ED-U-G2	LED	120/277V	45	WILLIAMS, LITHONIA	5441	1	3500K
	AGE	SAME AS "AG" EXCEPT WITH INTERNAL GENERATOR TRANSFER DEVICE		LED	120/277V	45	WILLIAMS, LITHONIA	5441	1	3500K
	AF	1'x4' LED LAY-IN FLANGED TROFFER	COLUMBIA #LJT14-35HL-FS-A12125-ED-U-FX24	LED	120/277V	45	WILLIAMS, LITHONIA	5441	1	3500K
	AFE	SAME AS "AF" EXCEPT WITH INTERNAL GENERATOR TRANSFER DEVICE		LED	120/277V	45	WILLIAMS, LITHONIA	5441	1	3500K
	A2	2'x4' LED LAY-IN PRISMATIC TROFFER	COLUMBIA #LJT24-35MLG-FS-A12125-ED-U	LED	120/277V	38	WILLIAMS, LITHONIA	4718	1	3500K
	A2E	SAME AS "A2" EXCEPT WITH INTERNAL GENERATOR TRANSFER DEVICE		LED	120/277V	38	WILLIAMS, LITHONIA	4718	1	3500K
	A2F	2'x4' LED LAY-IN FLANGED TROFFER	COLUMBIA #LJT24-35MLG-FS-A12125-ED-U-FX24	LED	120/277V	38	WILLIAMS, LITHONIA	4718	1	3500K
	A2FE	SAME AS "A2F" EXCEPT WITH INTERNAL GENERATOR TRANSFER DEVICE		LED	120/277V	38	WILLIAMS, LITHONIA	4718	1	3500K
	AL	2'x4' LED LAY-IN PRISMATIC TROFFER	COLUMBIA #LJT-24-35-VL-G-FS-A12125-ED-U	LED	120/277V	68	WILLIAMS, LITHONIA	7200	1	3500K
	ALE	SAME AS "AL" EXCEPT WITH INTERNAL GENERATOR TRANSFER DEVICE		LED	120/277V	68	WILLIAMS, LITHONIA	7200	1	3500K
	C	4' LED WALL STRIPLIGHT WITH LENS & WIREGUARD	LITHONIA# ZL1N-L48-5000LM-FST-MVOLT-WG-35K-80CRI-WH	LED	120/277V	34	COLUMBIA, WILLIAMS	4515	1	3500K
	CE	SAME AS "C" EXCEPT WITH INTERNAL GENERATOR TRANSFER DEVICE		LED	120/277V	34	COLUMBIA, WILLIAMS	415	1	3500K
	D	LED RECESSED 1800 LUMENS DOWNLIGHT	PRESCOLITE# LC6SL-6LCSL-18L-35K-8-WF-B24/B6	LED	120/277V	23	WILLIAMS, LITHONIA	1500	1	3500K
	E	LED RECESSED 2400 LUMENS DOWNLIGHT WET LABEL LISTED	PRESCOLITE# LC6ML-6LCML-24L-40K-8-WF-B24/B6	LED	120/277V	32	WILLIAMS, LITHONIA	2000	1	4000K
(1)	F	4FT LED CHAIN HUNG WITH WIRE GUARD	WILLIAMS# 80-4-L63/835-WG-8014-VBY-CHAIN LENGTH AS NEEDED	LED	120/277V	52	COLUMBIA, LITHONIA	6300		3500K
	FE	SAME AS "F" EXCEPT WITH INTERNAL GENERATOR TRANSFER DEVICE		LED	120/277V	52	COLUMBIA, LITHONIA	6300		3500K
(1)(2)	FL	LED GROUND MOUNTED FLOOD FOR FLAG POLE	KIM #CFL1-275KUV-CC-FH-CFL-JB1	LED	120/277V	56	LITHONIA, COOPER	4000		4000K
(1)(2)	G	LED EXTERIOR FULL CUT-OFF WITH 2-DRIVERS WET LOCATION LISTED	LITHONIA #WSTLED-2-10A/700/40K-MVOLT--XX (ARCHITECT TO SELECT CUSTOM COLOR)	LED	120/277V	47	WILLIAMS, COOPER	3851	2	4000K
(1)(2)	H	EXTERIOR DIRECT/INDIRECT LED WALL MOUNT WET LABEL LISTED	JUNO# CDD-A226-4K-UN	LED	120/277V	35/35	COLUMBIA, LITHONIA	5587	2	4000K
(1)(2)	K	WALL MOUNT FLOOD, MOUNT ABOVE LOWER CANOPY, 6 X 6 DISTRIBUTION, WET LABEL	HUBBELL# MHS-Y-30L-U-4K-W-XX	LED	120/277V	35/35	SPECTRUM, PHILLIPS	5587	2	4000K
(1)(2)	M	LED HIGHBAY GYM INDUSTRIAL WITH WIRE GUARD	LITHONIA# IBHST-24000LM-SD080-MD-MVOLT-40K-90CRI-WGIBH4-WH	LED	120/277V	216	COLUMBIA, WILLIAMS	24000	1	4000K
(1)	N	2 FT WALL MOUNT FIXTURE, WET LABEL	LITHONIA# WL2-18L-D20	LED	120/277V	24	WILLIAMS, COLUMBIA	1796	1	3500K
(1)(4)	Q	40" DIAMETER LED PENDANT FIXTURE COORDINATE MOUNTING HEIGHT WITH ARCHITECT	ADVENT# AIP-8208, BRUSHED ALUMINUM & WHITE ACRYLIC DIFFUSER, AIRCRAFT CABLE SUSPENSION	LED	120/277V	115	SPI, SCOTT	5558	1	3500K
(1)(2)	T	2 CIRCUIT TRACK WITH 12 FIXTURES, COLOR FILTERS, BARN DOORS, ETC. LENGTH AS SHOWN ON PLANS.	TRACK: CAPRI #CT (ARCHITECT SELECT COLOR) TRACK HEADS: #CT2440-CH3-CL3-CF33-CF-39-CB3 (SET OF COLOR FILTERS PER HEAD)	PAR38 LED	120V	60W	COLUMBIA, COOPER		NA	2700K
(1)(2)	X1	SINGLE FACE LED EXIT SIGN WITH UNIVERSAL MOUNT, GENERATOR BACK-UP, WIRE GUARD IN GYM	EMERGILITE #DXN-1-R-N	LED	120/277V	5	DUALITE, CHLORIDE			
(1)(2)	X2	DOUBLE FACE LED EXIT SIGN WITH UNIVERSAL MOUNT, GENERATOR BACK-UP	EMERGILITE #DXN-2-R-N	LED	120/277V	10	DUALITE, CHLORIDE			
(1)(2)	Z	TWO HEAD EMERGENCY WALL PACK WITH LEAD CALCIUM BATTERY BACK-UP. PROVIDE AT GENERATOR EQUIPMENT.	EMERGILITE #12JCM36-2-10-LJ	LED	120/277V	30	DUALITE, CHLORIDE			

REMARKS:
(1) MOUNTING HEIGHT DETERMINED BY ARCHITECT.
(2) COLOR SELECTIONS SHALL BE SELECTED BY ARCHITECT.

GENERAL NOTES:
A. ALL LIGHT FIXTURES IN GYMNASIUM AREAS SHALL HAVE WIRE GUARDS.
B. ALL DIMMER SWITCHES SHALL BE COMPATIBLE WITH FIXTURES.
C. ALL FIXTURES THAT ARE IN AREAS WHERE DOUBLE SWITCHING IS SHOWN EITHER BY 3-POSITION SWITCHES OR DOUBLE SWITCHING SHALL BE PROVIDED WITH STEP DIMMING DRIVER.

ABBREVIATIONS

ABBREV.	DEFINITION
A	AMPS, AMPERE, AMPERAGE
AC	ABOVE COUNTER
A/C	ALTERNATING CURRENT
ADA	AMERICANS WITH DISABILITIES ACT
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AIC	AMPERE INTERRUPTING CURRENT
AL	ALUMINUM
ANSI	AMERICAN NATIONAL STANDARD INSTITUTE
ATSC	AUTOMATIC TRANSFER SWITCH CONTROL
ATS	AUTOMATIC TRANSFER SWITCH
A/V	AUDIO/VISUAL
AWG	AMERICAN WIRE GAUGE
BAS	BUILDING AUTOMATION SYSTEM
BFC	BELOW FINISHED CEILING
C	CONDUIT
CB	CIRCUIT BREAKER
CCTV	CLOSED CIRCUIT TELEVISION
CKT	CIRCUIT
CT	CURRENT TRANSFORMER
CU	COPPER
D	DIMMING OR DIMMER
DB	DISTRIBUTION BOARD
DC	DIRECT CURRENT
DL	DAY-LIGHTING
DISC	DISCONNECT SWITCH
E	EMERGENCY
ECB	ENCLOSED CIRCUIT BREAKER
EWC	ELECTRIC WATER COOLER
EX	EXISTING
FUT	FUTURE
FA	FIRE ALARM
FACP	FIRE ALARM CONTROL PANEL
FATC	FIRE ALARM TERMINAL CABINET
FDR	FEEDER
GAA	GENERATOR ALARM ANNUNCIATOR
GAP	GENERATOR ALARM PANEL
GEN	GENERATOR
GEC	GROUNDING ELECTRODE CONDUCTOR
GFI	GROUND FAULT INTERRUPTER
GFCI	GROUND FAULT CIRCUIT INTERRUPTER
GFEP	GROUND FAULT EQUIPMENT PROTECTION
GFP	GROUND FAULT PROTECTION
GND	GROUND
GRS	GALVANIZED RIGID STEEL
HH	HAND HOLE
HOA	HAND-OFF AUTOMATIC
HP	HORSEPOWER
IEEE	INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS
IG	ISOLATED GROUND
KCMIL	THOUSAND CIRCULAR MILS
KV	KILOVOLT
KVA	KILOVOLT AMPS
KW	KILOWATT
KWH	KILOWATT HOURS
LC	LIGHTING CONTACTOR
LS	LOUD SPEAKER
LSIC	LONG TIME, SHORT TIME, INSTANTANEOUS AND GROUND FAULT PROTECTION
MAX	MAXIMUM
MCB	MAIN CIRCUIT BREAKER
MCC	MOTOR CONTROL CENTER
MDP	MAIN DISTRIBUTION PANEL
MIN	MINIMUM
MH	MAN HOLE
MLO	MAIN LUGS ONLY
MTS	MANUAL TRANSFER SWITCH
N/A	NOT APPLICABLE
NC	NORMALLY CLOSED
NEC	NATIONAL ELECTRIC CODE
NEMA	NATIONAL ELECTRICAL MANUFACTURER'S ASSOCIATION
N or NEUT	NEUTRAL
NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
NIC	NOT IN CONTRACT
NO	NORMALLY OPEN
O/H	OVER HEAD
P	POLE
PA	PUBLIC ADDRESS
PB	PULL BOX
PC	PHOTOCELL
PH	PHASE POTENTIAL TRANSFORMER
PT	POTENTIAL TRANSFORMER
RC	RECEPTACLE CONTACTOR
RSC	RIGID STEEL CONDUIT
SEC	SECURITY
SPD	SURGE PROTECTIVE DEVICE
SW	SWITCH
SWBD	SWITCHBOARD
SWGR	SWITCHGEAR
TC	TIME CLOCK
TEMP	TEMPORARY
TGB	TECHNOLOGY GROUND BAR
TGMB	TECHNOLOGY MAIN GROUND BAR
TTB	TELEPHONE TERMINAL BOARD
TV	TELEVISION
TYP.	TYPICAL
U/C	UNDER COUNTER
U/G	UNDERGROUND
UGE	UNDERGROUND ELECTRIC
UL	UNDERWRITERS' LABORATORIES
UON	UNLESS OTHERWISE NOTED
UPS	UNINTERRUPTIBLE POWER SUPPLY
V	VOLTS, VOLTAGE
VFD	VARIABLE FREQUENCY DRIVE
WG	WIRE GUARD
WP	WEATHERPROOF
XFER	TRANSFER
XFMR	TRANSFORMER

SYMBOL LEGEND

SYMBOL	DESCRIPTION	REMARKS
WP	WEATHERPROOF	
AFF	ABOVE FINISHED FLOOR	
BAS	BUILDING AUTOMATION SYSTEM (BAS) BY HVAC CONTROLS CONTRACTOR.	
	LIGHT FIXTURE – LETTER DESIGNATES TYPE	SEE FIXTURE SCHEDULE
	NIGHT LIGHT OR EMERGENCY FIXTURE – LETTER DESIGNATES TYPE	SEE FIXTURE SCHEDULE
OR	LIGHT FIXTURE – LETTER DESIGNATES TYPE	SEE FIXTURE SCHEDULE
	EXTERIOR EMERGENCY LIGHT FIXTURE – LETTER DESIGNATES TYPE	SEE FIXTURE SCHEDULE
	BATTERY POWERED EMERGENCY LIGHT FIXTURE – WALL MOUNTED	SEE FIXTURE SCHEDULE
	EXIT LIGHT – SHADING INDICATES ILLUMINATED FACE	SEE FIXTURE SCHEDULE
S	SINGLE POLE TOGGLE SWITCH – +48" ABOVE FINISHED FLOOR TO TOP OF OUTLET, UNLESS OTHERWISE NOTED.	HUBBELL 1221-X W/97071 EQUALS (COOPER, P&S)
S_P	3– POSITION SWITCH, DOUBLE POLE/DOUBLE THROW SWITCH ON 50%/OFF/100%, MOUNT AT +48" AFF TO TOP OF OUTLET BOX.	HUBBELL 1226-X W/97071 EQUALS (COOPER, P&S)
S_3	3–WAY SWITCH – INSTALL AT +48" AFF TO TOP OF OUTLET	HUBBELL 1223-X W/97071 EQUALS (COOPER, P&S)
S_4	4–WAY SWITCH – INSTALL AT +48" AFF TO TOP OF OUTLET	HUBBELL 1224-X W/97071 EQUALS (COOPER, P&S)
S_K	SINGLE POLE KEYED SWITCH – INSTALL AT +48" AFF TO TOP OF OUTLET	HUBBELL 1221K-X W/97071 EQUALS (COOPER, P&S)
S_{3K}	3–WAY KEYED SWITCH – INSTALL AT +48" AFF TO TOP OF OUTLET	HUBBELL 1223K-X W/97071 EQUALS (COOPER, P&S)
S_D	0–10V LED COMPATIBLE DIMMER SWITCH AS INDICATED ON PLANS. DIMMER SHALL BE COMPATIBLE WITH FIXTURES. INSTALL AT +48" AFF TO TOP.	LUTRON MAESTRO SERIES, EQUALS BY LEVITON OR P&S
LC#	MECHANICALLY HELD LIGHTING CONTACTOR. # INDICATES CONTACTOR NUMBER. PROVIDE NUMBER OF CONTACTS AS REQUIRED. PROVIDE HAND OFF AUTO SWITCH FOR EACH LIGHTING CONTACTOR.	SQUARE D, EATON OR GE PROVIDE # CONTACTS AS NEEDED
WT1105	CEILING MOUNTED ULTRASONIC OCCUPANCY SENSOR WITHOUT ISOLATED RELAY, 1100 SQ. FT., 360°, TWO SIDED COVERAGE. IN GANG TOILETS, MOUNT CENTRAL TO THE STALL AREA WITH RECEIVER AIMED TOWARD THE ENTRANCE. TIME DELAYS OF NO LESS THAN 15 MINUTES.	SEE WIRING DIAGRAMS E103–01 – WATTSTOPPER, HUBBELL OR SENSOR SWITCH
WT1605	CEILING MOUNTED ULTRASONIC OCCUPANCY SENSOR WITH ISOLATED RELAY, 600 SQ. FT., 360°, ONE SIDED COVERAGE. TIME DELAYS OF NO LESS THAN 15 MINUTES.	SEE WIRING DIAGRAMS E103–01 – WATTSTOPPER, HUBBELL OR SENSOR SWITCH
DT200	CORNER WALL MOUNTED DUAL TECHNOLOGY OCCUPANCY SENSOR WITH ISOLATED RELAY AND WIDE ANGLE LENS. TIME DEKLAYS OF NO LESS THAN 15 MINUTES. INSTALL AS PER MANUFACTURER'S INSTRUCTIONS.	SEE WIRING DIAGRAMS E103–01 – WATTSTOPPER DT200 OR EQUAL
CX100	CORNER MOUNTED PASSIVE INFRARED OCCUPANCY SENSOR WITH ISOLATED RELAY AND WIDE ANGLE LENS. MOUNT ON SAME WALL AS CORRIDOR WITH TIME DELAY OF NO LESS THAN 15 MINUTES. INSTALL AS PER MANUFACTURER'S INSTRUCTIONS.	SEE WIRING DIAGRAMS E103–01 – WATTSTOPPER, HUBBELL OR SENSOR SWITCH
WPIR	CEILING MOUNTED PASSIVE INFRARED OCCUPANCY SENSOR – CORNER MOUNT ON SAME WALL AS CORRIDOR. TIME DELAY OF NO LESS THAN 15 MINUTES. INSTALL AS PER MANUFACTURER'S INSTRUCTIONS.	SEE WIRING DIAGRAMS E103–01 – WATTSTOPPER, HUBBELL OR SENSOR SWITCH
S_{OS}	PASSIVE INFRARED WALL SWITCH SENSOR – COVERAGE: MAJOR MOTION 35'x30', MINOR MOTION 20'x15'. TIME DELAYS OF NO LESS THAN 15 MINUTES. MOUNT AT +48" TO TOP OF OUTLET BOX. INSTALL AS PER MANUFACTURER'S INSTRUCTIONS.	SEE WIRING DIAGRAMS E103–01 – WATTSTOPPER, HUBBELL OR SENSOR SWITCH
S_{DR}	TWO–BUTTON LIGHTING OVERRIDE SWITCH PROVIDED AND INSTALLED BY THE BUILDING AUTOMATION SYSTEM (BAS) CONTRACTOR. CONTRACTOR SHALL COORDINATE INSTALLATION AND PROGRAMMING WITH CONTROLS CONTRACTOR.	MOUNTED @ +48" AFF. TO TOP OF OUTLET
◀ #V	TELEPHONE OUTLET – VOICE OUTLET FOR FIRE ALARM, SECURITY AND ELEVATOR. REFER TO PLANS FOR LOCATIONS. #V – REPRESENTS CAT–6 VOICE DROP QTY. AT OUTLET LOCATION.	SEE SPECIFICATION
◁ #D	DATA OUTLET – SEE DETAIL E102–02, #D – REPRESENTS PLENUM CAT–6 DROP QTY. AT OUTLET LOCATION	
MH	PRECAST CONCRETE MANHOLE , REFER TO DETAIL E106–01	
HH	COMPOSITE HANDHOLE, REFER TO DETAIL E106–02.	
PS	CEILING MOUNT DUAL–TECHNOLOGY SENSOR – TIME DELAYS OF NO LESS THAN 15 MINUTES. COVERAGE 2000 SQ FT, PROVIDE WITH UNIVERSAL VOLTAGE POWER PACK.	WATTSTOPPR OR EQUAL BY HUBBELL OR LEVITON
	RIGID STEEL CONDUIT	
R	SHUTDOWN RELAY FOR AHU'S	SEE SPECIFICATION
FACP	NEW ADDRESSABLE VOICE–EVAC FIRE ALARM CONTROL PANEL	SEE SPECIFICATION
F	MANUAL FIRE ALARM PULL STATION – INSTALL AT +48" ABOVE FINISHED FLOOR TO TOP OF DEVICE (DOUBLE ACTION). PROVIDE STOPPER II LEXAN COVER W/HORN AT ALL PULL STATION LOCATIONS.	SEE SPECIFICATION
V #CD	FIRE ALARM SPEAKER/STROBE – SPEAKER WITH VISUAL ALARM – WALL MOUNTED AT +88" ABOVE FINISHED FLOOR WITH XENON STROBE. "#CD" INDICATES CANDELA RATING OF STROBE.	SEE SPECIFICATION
CO	CARBON MONOXIDE DETECTOR WITH TEMPORAL 4 SOUNDER BASE	SEE SPECIFICATION
SD	PHOTO ELECTRIC SMOKE DETECTOR	SEE SPECIFICATION
H	HEAT DETECTOR – FIXED TEMPERATURE, USE RATE OF RISE IN KILN ROOM	SEE SPECIFICATION
V #CD	CEILING MOUNTED SPEAKER WITH VISUAL FIRE ALARM SIGNAL. "#CD" INDICATES CANDELA RATING OF STROBE.	SEE SPECIFICATION
V	CEILING MOUNTED VOICE EVACUATION SPEAKER	SEE SPECIFICATION
S #CD	CEILING MOUNTED STROBE – "#CD" INDICATES CANDELA RATING OF STROBE	SEE SPECIFICATION
V #CD	CEILING MOUNTED SPEAKER WITH VISUAL FIRE ALARM SIGNAL. "#CD" INDICATES CANDELA RATING OF STROBE.	SEE SPECIFICATION
V	OVERHEAD FIRE ALARM SPEAKER IN GYMNASIUM	SEE SPECIFICATION

SYMBOL LEGEND CONT'D

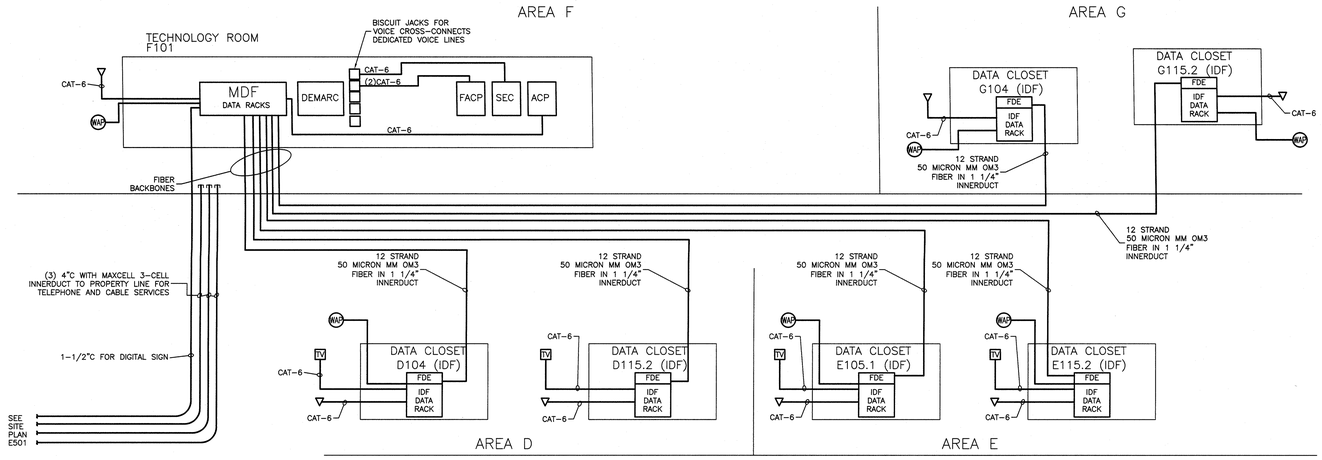
SYMBOL	DESCRIPTION	REMARKS
	120/208V, 3ϕ, 4W, ELECTRICAL PANEL, COPPER BUS,	SEE SPECIFICATIONS
	277/480V, 3ϕ, 4W, ELECTRICAL PANEL, COPPER BUS,	SEE SPECIFICATIONS
	277/480V, 3ϕ, 4W, ELECTRICAL SWITCHBOARD, COPPER BUS	SEE SPECIFICATIONS
T#	480–120/208V, 3ϕ, 4W, DRY TYPE TRANSORMER, COPPER, K9 RATED	SEE SPECIFICATIONS
WG	WIRE GUARD	
	12" CABLE LADDER RUNWAY TRAY IN DATA ROOMS, 18" CABLE LADDER RUNWAY IN MAIN TELECOM F101. PROVIDE ALL SUPPORTS AND ACCESSORIES AS REQUIRED.	B–LINE, CABLOFIL, COOPER
ATS	480/277V, 3 PHASE 4W 4–POLE, AUTOMATIC TRANSFER SWITCH	SEE SPECIFICATION
M	MICROPHNE XLR OUTLET, WIRING, JACKS, COVERPLATE INCLUDED IN SYSTEM PROVIDED BY OWNER.	SEE SPECIFICATION
GS	MULTIPURPOSE SOUND SYSTEM SPEAKER, OWNER FURNISHED AND INSTALLED	SEE RISER E105–08
MDF	MAIN DISTRIBUTION FRAME, DATA RACKS	SEE SPECIFICATIONS
IDF	INTERMEDIATE DISTRIBUTION FRAME, DATA RACKS	SEE SPECIFICATIONS
I	PAGING–INTERCOM WALL HANDSET, +48" AFF. TO TOP OF OUTLET BOX, PROVIDE 3/4"C STUBBED ABOVE ACCESSIBLE CEILING FOR INTERCOM SYSTEM	SEE SPECIFICATIONS
I M	PAGING–INTERCOM MASTER STATION DESKSET, +16" AFF., PROVIDE 3/4"C STUBBED ABOVE CEILING FOR INTERCOM WIRING.	SEE SPECIFICATIONS
AV	PROJECTOR "INSTRUCTORS INPUT PLATE", MOUNT AT +16" AFF. COORDINATE CONDUIT REQUIREMENTS WITH PLANS.	TWO–GANG DEEP OUTLET BOX
	TAMPER RESISTANT DUPLEX GROUNDING TYPE RECEPTACLE – MOUNT +16" AFF. TO BOTTOM OF OUTLET, UNLESS OTHERWISE NOTED	HUBBELL 5362–X–TR EQUALS (LEVITON, P&S)
	TWO TAMPER RESISTANT DUPLEX GROUNDING TYPE RECEPTACLE – MOUNT +16". TO BOTTOM OF 2–GANG OUTLET, UNLESS OTHERWISE NOTED	HUBBELL 5362–X–TR EQUALS (LEVITON, P&S)
GFI	TAMPER RESISTANT DUPLEX RECEPTACLE – GROUND FAULT INTERRUPTION TYPE MOUNT +16" ABOVE FINISHED FLOOR TO BOTTOM OF OUTLET, UNLESS OTHERWISE NOTED.	HUBBELL GF–5362–X–TR EQUALS (LEVITON, P&S)
GFI WP	TAMPER RESISTANT/WEATHER RESISTANT DUPLEX GROUND FAULT INTERRUPTION TYPE RECEPTACLE. MOUNT AT +16" ABOVE GRADE TO BOTTOM OF OUTLET BOX, UNLESS OTHERWISE NOTED.	HUBBELL GF–5362–X–WRTR EQUALS (LEVITON, P&S)
S_{DW}	DISHWASHER SWITCH, 20A, 1 POLE TOGGLE TYPE, MOUNT ABOVE COUNTERTOP	HUBBELL 1223–X W/97071 EQUALS (COOPER, P&S)
S_{OS2}	DUAL SWITCH PASSIVE INFRARED WALL SWITCH SENSOR – COVERAGE: 35'x30', MINOR MOTION 20'x15'. TIME DELAYS OF NO LESS THAN 15 MINUTES. MOUNT AT +48" TO TOP OF OUTLET BOX. INSTALL AS PER MANUFACTURER'S INSTRUCTIONS.	SEE WIRING DIAGRAMS E103–01 – WATTSTOPPER, HUBBELL OR SENSOR SWITCH
	18" WIDE BASKET TRAY, 4" SIDE RAILS, PROVIDE ALL SUPPORTS, ACCESSORIES FOR A COMPLETE INSTALLATION. TRAY SHALL BE GROUNDED IN ACCORDANCE WITH THE NEC.	CABLOFIL, B–LINE, COOPER

SYMBOL LEGEND CONT'D

SYMBOL	DESCRIPTION	REMARKS
LS	CEILING LOUDSPEAKER	SEE SPECIFICATIONS
LS WP	WALL MOUNTED LOUD SPEAKER, WP – INDICATES WEATHERPROOF OUTDOOR	SEE SPECIFICATIONS
VC	WALL MOUNTED VOLUME CONTRL, +48" AFF TO TOP OF OUTLET	SEE SPECIFICATIONS
SEC	INTRUSION DETECTION SECURITY PANEL	SEE SPECIFICATIONS
KP	KEYPAD FOR INTRUSION DETECTION SYSTEM, SEE SPECIFICATION FOR MOUNTING HEIGHT.	SEE SPECIFICATIONS
WP	WIDE ANGLE MOTION SENSOR FOR INTRUSION DETECTION SYSTEM	SEE SPECIFICATIONS
LR	LONG RANGE MOTION SENSOR FOR INTRUSION DETECTION SYSTEM	SEE SPECIFICATIONS
911	EMERGENCY 911 BUTTON, COORDINATE LOCATION AT RECEPTIONS DESK WITH OWNER. CONNECT INTO INTRUSION DETECTION SYSTEM. PROVIDE ROUGH–IN AS NEEDED.	SEE SPECIFICATIONS
ACP	ACCESS CONTROL SECURITY PANEL – ROUGH–IN ONLY. COORDINATE DETAILS WITH OWNERS SECURITY ACCESS CONTROL CONTRACTOR.	SEE SPECIFICATIONS
CR	CARD READER FOR ACCESS CONTROL SYSTEM – ROUGH–IN ONLY	SEE SPECIFICATIONS
REX	REQUEST TO EXIT FOR ACCESS CONTROL SYSTEM – ROUGH–IN ONLY	SEE SPECIFICATIONS
DPS	DOOR POSITION SWITCH – ROUGH–IN ONLY	SEE SPECIFICATIONS
WAP #D	WIRELESS ACCESS POINT, CEILING MOUNTED, CAT–6 PLENUM CABLING, NETWORK ELECTRONICS BY OWNER	SEE SPECIFICATIONS
WAP +144" #D	WIRELESS ACCESS POINT, WALL MOUNTED, CAT–6 PLENUM CABLING, NETWORK ELECTRONICS BY OWNER. RE–VERIFY MOUNTING HEIGHT WITH OWNER'S IT DEPARTMENT.	SEE SPECIFICATIONS
M	MOTORIZED DAMPER, PROVIDED AND INSTALLED BY MECHANICAL CONTRACTOR, WIRED BY ELECTRICAL CONTRACTOR.	
AMS	VIDEO–INTERCOM MASTER STATION	SEE DETAIL E105–06
ARS	VIDEO–INTERCOM REMOTE STATION	SEE DETAIL E105–06
DRB	DOOR RELEASE PUSH–BUTTON FOR ACCESS CONTROL	
DS	DOOR BELL SWITCH, +48" AFF. TO TOP OF OUTLET BOX.	THOMAS & BETTS OR EQUAL
	DOOR BELL, PROVIDE TRANSFORMER AND ASSOCIATED WIRING.	THOMAS & BETTS OR EQUAL
ELB10	20 AMP EMERGENCY LIGHTING TRANSFER DEVICE, UL924	BODINE GTD20 OR EQUAL
S_{SCREEN}	PROJECTION SCREEN 3–POSITION SWITCH, +48" AFF. TO TOP OF OUTLET BOX. SWITCH PROVIDED WITH SCREEN, INSTALLED AND WIRED BY ELECTRICAL CONTRACTOR.	
GAP	GENERATOR REMOTE ANNUNCIATOR, LOCATE IN SCHOOL RECEPTIONS AREA	SEE SPECIFICATION
PB	HANDICAP ACTUATED DOOR PUSH PAD – PROVIDED BY DOOR HARDWARE CONTRACTOR. INSTALLED AND WIRED BY THE ELECTRICAL CONTRACTOR. COORDINATE FINAL LOCATION WITH GENERAL CONTRACTOR AND ARCHITECT.	

SYMBOL LEGEND CONT'D

SYMBOL	DESCRIPTION	REMARKS
AHU#	REMOTE ALARM INDICATOR LIGHT "RAIL" W/TEST SWITCH	SEE SPECIFICATION
R	AHU/FCU SHUTDOWN RELAY	SEE SPECIFICATION
EMH	ELECTROMAGNETIC DOOR HOLDER	SEE SPECIFICATION
	4' x 8' x 3/4" FIRE RETARDANT PLYWOOD BACKBOARD FOR EQUIPMENT MOUNTING AND CROSS–CONNECTS	
CAM	INTERIOR CAMERA ROUGH–IN LOCATION, CAT–6 WIRING INCLUDED. EQUIPMENT AND MOUNTS BY OWNER/OTHERS. COIL 10' SERVICE LOOP ABOVE CEILING AT CAMERA LOCATION.	SEE TO DETAIL E106–09
TGB	IDF DATA ROOM TELECOMMUNICATIONS GROUND BAR	SEE TO DETAIL E102–04
TMGB	TELECOM F101 TELECOMMUNICAIONS GROUND BAR	SEE TO DETAIL E102–04
SPD	SURGE PROTECTION DEVICE	SEE SPECIFICATION
	DISCONNECT SWITCH, HEAVY DUTY.	SEE SPECIFICATION
	WIRING AND CONDUIT INSTALLED CONCEALED IN WALL SPACE OR ABOVE FINISHED CEILING	SEE SPECIFICATION
	UNSWITCHED WIRING AND CONDUIT LEG ON LIGHTING PLANS. UNDER FLOOR WIRING AND CONDUIT ON POWER PLANS. UNDER GROUND WIRING AND CONDUIT ON SITE PLANS.	SEE SPECIFICATION



DETAIL

NOT TO SCALE

TELECOMMUNICATION RISER

01

ELECTRICAL GENERAL NOTES

1. THE CONTRACTOR SHALL REFER TO THE ARCHITECTURAL PLANS FOR FLOOR PLAN DIMENSIONS. DO NOT SCALE THESE DRAWINGS.
2. PRIOR TO INSTALLATION OF EQUIPMENT CONTRACTOR SHALL COORDINATE ALL WORK INVOLVED IN THE PROJECT TO MINIMIZE CONFLICTS AND TO ALLOW FOR WORKING SPACE.
3. ALL LIGHT FIXTURES SHALL BE SUPPORTED INDEPENDENTLY OF THE SUSPENDED CEILING SYSTEM. REFER TO SPECIFICATIONS AND DETAILS FOR MORE INFORMATION.
4. USE OF THE CONDUIT SYSTEM FOR PRIMARY EQUIPMENT GROUNDING SHALL NOT BE ACCEPTABLE. A DEDICATED GREEN Cu GROUND WIRE SHALL BE RUN WITH THE CIRCUIT CONDUCTORS FOR EACH BRANCH CIRCUIT.
5. ALL PENETRATIONS SHALL BE PROPERLY SEALED WITH ENGINEER APPROVED MATERIALS AND METHODS IN ORDER TO MAINTAIN THE RATINGS OF THE BUILDING CONSTRUCTION.
6. ALL FUSES, DISCONNECT SWITCHES, AND BREAKER SIZES SHALL BE VERIFIED WITH THE MECHANICAL/PLUMBING/ FIRE PROTECTION/OTHER CONTRACTOR'S EQUIPMENT BEFORE THE PURCHASE OR INSTALLATION OF THAT EQUIPMENT. IMPORTANT NOTE: ALL DISCONNECT SWITCHES, LINE AND LOAD SIDE CONDUIT & WIRING TO THE EQUIPMENT SHALL BE PROVIDED AND INSTALLED BY THE ELECTRICAL CONTRACTOR. ALL FINAL CONNECTIONS SHALL BE BY THE ELECTRICAL CONTRACTOR COORDINATING CLOSELY WITH THAT EQUIPMENT SUPPLIER.
7. THE CONTRACTOR SHALL VERIFY ALL CEILING TYPES AND FINISHES BEFORE PURCHASE OF ANY LIGHT FIXTURES SO THAT THE PROPER TRIM WILL BE PROVIDED FOR THE CEILING TO BE INSTALLED. ANY DIFFERENCES SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR.
8. EACH CONTRACTOR SHALL PROVIDE HIS OWN SUPPORT OF ALL DEVICES AND EQUIPMENT PROVIDED BY HIM AND SHALL SUPPORT SUCH EQUIPMENT PER APPROVED GOVERNING CODES OR PER APPROVAL OF THE ENGINEER. UNACCEPTABLE WORKMANSHIP OR MATERIALS SHALL BE REPLACED AT THE REQUEST OF THE ENGINEER AT THE CONTRACTOR'S EXPENSE.
9. ALL JUNCTION BOXES AND CONDUIT RUNS (WITH OR WITHOUT WIRES) SHALL BE COLOR CODED WITH PAINT, IN ACCORDANCE WITH SPECIFICATIONS.
10. THE MOUNTING HEIGHTS AND LOCATIONS OF ALL CASEWORK AND MILLWORK MOUNTED DEVICES SHALL BE REVIEWED AND COORDINATED WITH THE ARCHITECT PRIOR TO INSTALLATION.
11. ALL BRANCH BREAKERS SERVING EMERGENCY LIGHTS SHALL BE PROVIDED WITH LOCKS TO PREVENT TURNING BREAKER OFF ACCIDENTALLY.
12. THE CONTRACTOR SHALL COORDINATE WITH THE UTILITY POWER COMPANY FOR THE WORK REQUIRED FOR CONNECTION TO THE UTILITY'S NEW TRANSFORMER METERING, ETC.
13. WHERE MULTIPLE LIGHT SWITCHES ARE SHOWN ADJACENT TO EACH OTHER THEY SHALL BE CONTAINED WITHIN A SINGLE BOX. PROVIDE BARRIERS AS REQUIRED BY CODE.
14. ALL EXTERIOR BUILDING LIGHTS AND EMERGENCY LIGHTING SHALL BE WIRED WITH #10 AWG. ANY CONDUITS BELOW GRADE SHALL BE A MINIMUM OF 1".
15. THE ELECTRICAL CONTRACTOR SHALL COORDINATE THE LOCATION OF ALL CHAIN HUNG FIXTURES LOCATED IN MECHANICAL OR OTHER SPACES WITH OTHER TRADES, SO AS NOT TO CONFLICT WITH OTHER EQUIPMENT.
16. WIRE EMERGENCY LIGHTS AHEAD OF ALL SWITCHES.
17. ALL CONDUITS AND JUNCTION BOXES IN FINISHED SPACES SHALL BE CONCEALED IN WALLS, ABOVE CEILINGS OR IN FLOORS UNLESS OTHERWISE NOTED.
18. OUTLET BOXES ON OPPOSITE SIDES OF A FIRE RESISTANT WALL OR SHAFT ENCLOSURE RATED TWO HOURS OR LESS SHALL BE SEPARATED BY A HORIZONTAL DISTANCE OF NOT LESS THAN 24".
19. ALL UNDERGROUND CONDUITS SHALL BE IDENTIFIED ON ASBUILT PLANS WITH DIMENSIONS LOCATING THE CONDUITS AND THEIR RESPECTIVE BURIAL DEPTHS.
20. CONDUCTORS FOR BRANCH CIRCUITS SHALL BE SIZED TO PREVENT VOLTAGE DROP EXCEEDING 3% AT THE FARTHEST OUTLET OF POWER, HEATING AND LIGHTING LOADS, OR ANY COMBINATION OF SUCH LOADS. THE MAXIMUM TOTAL VOLTAGE DROP ON BOTH FEEDERS AND BRANCH CIRCUITS TO THE FARTHEST OUTLET SHALL NOT EXCEED 5%.
    A. WHERE THE BRANCH CIRCUIT CONDUCTOR LENGTH FROM THE PANEL TO THE FIRST OUTLET ON A 277V CIRCUIT EXCEEDS 125'-0" THE BRANCH CIRCUIT CONDUCTORS FROM THE PANEL TO THE FIRST OUTLET SHALL NOT BE SMALLER THAN #10AWG. INCREASE THE BRANCH CIRCUIT CONDUCTOR SIZE AN ADDITIONAL WIRE SIZE FOR EACH ADDITIONAL 125' FOR THE ENTIRE CIRCUIT. THE GROUND CONDUCTOR SIZE SHALL BE INCREASED PROPORTIONALLY TO THE INCREASED PHASE CONDUCTORS AS PER NEC 2017 250.122 (B).
    B. WHERE THE CONDUCTOR LENGTH FROM THE PANEL TO THE FIRST OUTLET ON A 120V CIRCUIT EXCEED 50'-0" THE BRANCH CIRCUIT CONDUCTORS FROM THE PANEL TO THE FIRST OUTLET SHALL NOT BE SMALLER THAN #10AWG. INCREASE THE BRANCH CIRCUIT CONDUCTOR SIZE AN ADDITIONAL WIRE SIZE FOR EACH ADDITIONAL 125' FOR THE ENTIRE CIRCUIT. THE GROUND CONDUCTOR SIZE SHALL BE INCREASED PROPORTIONALLY TO THE INCREASED PHASE CONDUCTORS AS PER NEC 2017250.122 (B).
21. THE CONTRACTOR SHALL PROVIDE AND MOUNT ONE COPY OF THE FIRE ALARM ZONE CHART UNDER GLASS (OR PLEXIGLAS) BESIDE THE FIRE ALARM CONTROL PANEL (FACP) AND THE REMOTE ALARM CONTROL PANEL (RACP).
22. ELECTRICAL BOXES LISTED AND LABELLED FOR THE WALLS IN WHICH THEY ARE INSTALLED SHALL BE USED. FIRE SEALING SUCH PENETRATIONS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
23. THE CONTRACTOR SHALL CLOSELY VERIFY ROOM NUMBERS ASSIGNMENTS IN WRITING WITH OWNER PRIOR TO LABELLING OR PROGRAMMING PANELS, FIRE ALARM, SECURITY OR DDC/BAS SYSTEMS.
24. THE CONTRACTOR SHALL PROVIDE SURFACE MOUNTED CONDUITS AND DEVICES IN BOILER, MECHANICAL AND ELECTRICAL ROOMS. COORDINATE LOCATIONS OF DEVICES AND CONDUIT TO AVOID CONFLICT AND ENSURE ACCESS TO ALL DEVICES.
25. RECEPTACLES FED FROM THE STANDBY EMERGENCY PANEL (I.E. SBL#) SHALL BE "GREEN".
26. RECEPTACLES FED FROM THE UNINTERRUPTIBLE PANEL "UPP" AT TECHNOLOGY ROOM SHALL BE "RED".
27. WHERE 0-10V DIMMING IS USED ALL 0-10V DIMMING CONDUCTORS SHALL BE ROUTED IN SEPARATE RACEWAY FROM THE LINE VOLTAGE CONDUCTORS.
28. CONTRACTOR SHALL REVIEW DIVISION 01 "ALLOWANCES" SECTION 01 21 00 FOR LOW VOLTAGE SYSTEMS. THE CONDUITS (POWER/LOW VOLTAGE), POWER WIRING, OUTLET BOXES, PULLCORDS AND ALL ROUGH-IN FOR THESE SYSTEMS SHALL BE PROVIDED AND INSTALLED AS PER THE BASE BID.
29. CONTRACTOR SHALL REVIEW DIVISION 01 "ALTERNATES SECTION 01 23 00 FOR BUILDING ALTERNATES, OWNER PREFERRED EQUIPMENT AND GENERATOR ALTERNATE.

CAT. 6 DROPS

INFORMATION OUTLET & CABLE SCHEDULE (CONT)

AREA	ROOM #	TOTAL DROPS	# OF 4 PAIR CABLES	TERMINATION
G	G114	6	6	IDF-RMG115.2
G	G115.2	1	1	IDF-RMG115.2
G	G116	6	6	IDF-RMG115.2
G	G118	9	9	IDF-RMG115.2
G	G119	9	9	IDF-RMG115.2
G	G120	9	9	IDF-RMG115.2
G	G121	9	9	IDF-RMG115.2
G	G122	9	9	IDF-RMG115.2
G	G123	9	9	IDF-RMG115.2
G	G124	9	9	IDF-RMG115.2
G	G125	9	9	IDF-RMG115.2

TOTAL: 921

GENERAL NOTES:

A. DATA CABLE SCHEDULE IS SHOWN FOR REFERENCE TO AIDE IN PRICING THE GENERAL AMOUNT OF DATA CABLES REQUIRED FOR THIS PROJECT. THE CONTRACTOR IS REQUIRED TO VERIFY THE EXACT QUANTITIES REQUIRED AS INDICATED ON THE FLOOR PLANS, NOTES, SPECIFICATIONS, AND ELSEWHERE IN THE CONTRACT DOCUMENTS.

CAT. 6 DROPS

INFORMATION OUTLET & CABLE SCHEDULE (CONT)

AREA	ROOM #	TOTAL DROPS	# OF 4 PAIR CABLES	TERMINATION
C	EXTERIOR	1/2	1/2	IDF-RMD104/IDF-RME105.1
E	EXTERIOR	4	4	IDF-RME115.2
E	E100	3/6	3/6	IDF-RME105.1/IDF-RME115.2
E	E101	28	28	IDF-RME105.1
E	E102	9	9	IDF-RME105.1
E	E103	10	10	IDF-RME105.1
E	E103.1	3	3	IDF-RME105.1
E	E104	9	9	IDF-RME105.1
E	E105	1	1	IDF-RME105.1
E	E105.1	1	1	IDF-RME105.1
E	E106	9	9	IDF-RME105.1
E	E107	9	9	IDF-RME105.1
E	E108	9	9	IDF-RME115.2
E	E109	9	9	IDF-RME105.1
E	E111	9	9	IDF-RME115.2
C	EXTERIOR	4	4	IDF-RMD104
C	C100	6	6	IDF-RMD104
C	C101	1	1	IDF-RMD104
C	C113	6	6	IDF-RMD104
C	C115	2	2	IDF-RMD104
C	C117	6	6	IDF-RMD104
C	MEZZANINE C (C200)	4	4	IDF-RMD104
D	EXTERIOR	1/5	1/5	IDF-RMD104/IDF-RMD115.2
D	D100	3/5	3/5	IDF-RMD104/IDF-RMD115.2
D	D101	1	1	IDF-RMD104
D	D102	3	3	IDF-RMD104
D	D102.1	3	3	IDF-RMD104
D	D103	5	5	IDF-RMD104
D	D104	1	1	IDF-RMD104
D	D105	10	10	IDF-RMD104
D	D105.1	3	3	IDF-RMD104
D	D106	6	6	IDF-RMD104
D	D107	9	9	IDF-RMD104
D	D108	9	9	IDF-RMD104
D	D109	9	9	IDF-RMD104
D	D110	9	9	IDF-RMD104
D	D111	9	9	IDF-RMD115.2
D	D112	9	9	IDF-RMD115.2
E	E110	6	6	IDF-RME115.2
E	E112	7	7	IDF-RME115.2
E	E114	9	9	IDF-RME115.2
E	E115.2	1	1	IDF-RME115.2
E	E116	9	9	IDF-RME115.2
E	E118	9	9	IDF-RME115.2
E	E119	9	9	IDF-RME115.2
E	E120	9	9	IDF-RME115.2
E	E121	9	9	IDF-RME115.2
E	E122	9	9	IDF-RME115.2
E	E123	9	9	IDF-RME115.2
E	E125	9	9	IDF-RME115.2
D	D114	6	6	IDF-RMD115.2
D	D115.2	1	1	IDF-RMD115.2
D	D116	7	7	IDF-RMD115.2
D	D118	9	9	IDF-RMD115.2
D	D119	9	9	IDF-RMD115.2
D	D120	9	9	IDF-RMD115.2
D	D121	9	9	IDF-RMD115.2
D	D122	9	9	IDF-RMD115.2
D	D123	9	9	IDF-RMD115.2
D	D124	9	9	IDF-RMD115.2
D	D125	9	9	IDF-RMD115.2

CAT. 6 DROPS

INFORMATION OUTLET & CABLE SCHEDULE

AREA	ROOM #	TOTAL DROPS	# OF 4 PAIR CABLES	TERMINATION
A	A100	2	2	IDF-RMG104
A	A101	9	9	IDF-RMG104
A	A106	5	5	IDF-RMG104
A	A107	9	9	IDF-RMG104
A	A108	5	5	IDF-RMG104
A	A109	9	9	IDF-RMG104
A	A110	3	3	IDF-RMG104
A	A111	5	5	IDF-RMG104
A	A112	5	5	IDF-RMG104
A	A113	6	6	IDF-RMG104
A	EXTERIOR	2	2	IDF-RMG104
A	MEZZANINE A	4	4	IDF-RMG104
G	G100	3/6	3/6	IDF-RMG104/RMG115.2
G	G101	8	8	IDF-RMG104
G	G103	3	3	IDF-RMG104
G	G104	1	1	IDF-RMG104
G	G105	9	9	IDF-RMG104
G	G106	9	9	IDF-RMG104
G	G107	9	9	IDF-RMG104
G	G108	9	9	IDF-RMG104
G	G109	9	9	IDF-RMG104
G	G110	9	9	IDF-RMG104
G	G111	9	9	IDF-RMG115.2
G	G112	9	9	IDF-RMG115.2
G	EXTERIOR	1/5	1/5	IDF-RMG104/IDF-RMG115.2
B	EXTERIOR	1/1	1/1	MDF-RMF101/IDF-RMG104
B	B100 (G AREA)	3	3	IDF-RMG104
B	B100	1	1	MDF-RMF101
B	B101 (MEDIA)	5	5	MDF-RMF101
B	B102	10	10	MDF-RMF101
B	B103	1	1	MDF-RMF101
B	B104	7	7	MDF-RMF101
B	B105	7	7	MDF-RMF101
B	B106	5	5	MDF-RMF101
B	B107	10	10	MDF-RMF101
B	B108	6	6	MDF-RMF101
B	B109	8	8	MDF-RMF101
B	B110	7	7	MDF-RMF101
B	B111	5	5	MDF-RMF101
B	B112	5	5	MDF-RMF101
B	B113	5	5	MDF-RMF101
B	B114	10	10	MDF-RMF101
B	B115	5	5	MDF-RMF101
B	B116	9	9	MDF-RMF101
B	B119	7	7	MDF-RMF101
B	B122	5	5	MDF-RMF101
B	MEZZANINE B	4	4	MDF-RMF101
C	C109	5	5	MDF-RMF101
F	F100	16	16	MDF-RMF101
F	F101	3V/3D	3V/3D	MDF-RMF101
F	F102	5	5	MDF-RMF101
F	F103	6	6	MDF-RMF101
F	F104	6	6	MDF-RMF101
F	F105	13	13	MDF-RMF101
F	F106	5	5	MDF-RMF101
F	F107	5	5	MDF-RMF101
F	F108	5	5	MDF-RMF101
C	C100	4	4	IDF-RMD104
C	C103	4	4	IDF-RMD104
C	C104	5	5	IDF-RMD104
C	C105	5	5	IDF-RME105.1
C	C106	3	3	IDF-RME105.1
C	C110	9	9	IDF-RME105.1
C	C111	3	3	IDF-RME105.1
C	C112	10	10	IDF-RMD104

GENERAL NOTES:

A. QUANTITY AND LOCATIONS AS SHOWN ON PLANS.

B. ALL CAT-6 (PLENUM)CABLING SHALL BE SUPPORTED VIA CABLE TRAY AND OR J-HOOKS AS APPLICABLE.

C. ALL PATCH PANELS, RACKS, REBOXES, PATCH CABLES, WIRE MANAGERS, 120V AC SURGE STRIPS, FIRE RETARDANT PLYWOOD BACKBOARDS, GROUND BARS, TESTING, ETC. SHALL BE PROVIDED FOR COMPLETE AND COMPLIANT INFRASTRUCTURE. ALL NETWORK ELECTRONICS SHALL BE PROVIDED AND INSTALLED BY THE OWNER.

D. SEE SPECIFICATION 270001

E. SEE CAMERA RISER FOR CAT-6 CABLES FOR I/P CAMERA SYSTEM. THE CAMERA CAT-6 (PLENUM) CABLES SHALL BE PROVIDED, INSTALLED AND TESTED BY THE STRUCTURED WIRING CONTRACTOR.

F. WIRELESS ACCESS POINTS LOCATIONS ARE IDENTIFIED ON THE PLANS, STRUCTURED WIRING CONTRACTORS SHALL PROVIDE A SMB CONNECTOR AND A 10FT SERVICE LOOP AT THESE LOCATIONS. THE CEILING LOCATION BELOW THE ACCESS POINT SHALL BE IDENTIFIED WITH A COLORED DOT TO ALLOW OWNER TO ADD ELECTRONICS AT A LATER DATE. COORDINATE ALL LOCATIONS WITH OWNER PRIOR TO ROUGH-IN.

G. CABLE TRAY SHALL BE PROVIDED AS SHOWN ON PLANS AND AS SHOWN IN NETWORK CLOSETS.

H. ALL CONDUIT SLEEVES SHALL BE PROVIDED, INSTALLED AND SEALED BY THE ELECTRICAL CONTRACTOR, IF ADDITIONAL CONDUIT SLEEVES ARE REQUIRED TO AIDE IN THE INSTALLATION OF THE CABLING THE ELECTRICAL CONTRACTOR SHALL PROVIDE AS NEEDED AT NO ADDITIONAL EXPENSE TO THE PROJECT. THE ELECTRICAL AND STRUCTURED WIRING CONTRACTORS SHALL PRE-PLAN ALL WORK ACCORDINGLY.

I. A PRE-INSTALLATION MEETING SHALL BE REQUIRED BETWEEN STRUCTURED WIRING, SECURITY, ELECTRICAL CONTRACTOR, OWNER AND ENGINEER PRIOR TO INSTALLATION ROUGH-INS

J. ALL WORK SHALL BE NEAT AND COORDINATED WITH OTHER TRADES ACCORDINGLY. IF THE ENGINEER REVIEWS AND FINDS THAT THE INSTALLATION IS NOT NEAT, HE SHALL REQUEST THE CONTRACTOR TO REMOVE AND OR REDO THE WORK AT THE CONTRACTORS EXPENSE.

K. ALL FIBER BACKBONE WIRING SHALL BE ROUTED IN INNERDUCT. FIBER PATCH CORDS SHALL BE PROVIDED FOR ALL FIBER CONDUCTORS . ALL FIBER CONDUCTORS SHALL BE TERMINATED USING "SC" CONNECTORS. CAT-6 CABLE TERMINATIONS SHALL BE MADE IN ACCORDANCE WITH THE OWNERS STANDARDS, COORDINATE WITH OWNERS IT DEPARTMENT PRIOR TO MAKING ANY TERMINATIONS.

L. ALL RACK ARRANGEMENTS SHALL BE COORDINATED WITH THE OWNER PRIOR TO PLACING/ARRANGING RACKS. THERE SHALL BE SUFFICIENT SPACE IN RACKS FOR OWNER'S NETWORK ELECTRONICS.

M. ALL FIBER AND COPPER CABLING SHALL BE TESTED, TEST RESULTS SHALL BE PROVIDED TO THE ENGINEER FOR REVIEW AND FINAL ACCEPTANCE.

N. ALL FIBER SHALL BE PLENUM RATED, 50 MICRON, OM3 AND ROUTED IN 1 1/4" PLENUM RATED INNER-DUCT. INNER-DUCT TO BE ROUTED AND SUSPENDED INDEPENDENTLY OF CAT-6 CABLING.

CONTRACTOR TO VERIFY ALL DIMENSIONS.

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PDC Project #19003

NORTH CAROLINA PROFESSIONAL SEAL 049113 ENGINEER ROBERT A. CLARK

4/29/19

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ISSUE DATE: 04.30.2019
DRAWN BY: JPT
CHECKED BY: RAC
PROJECT: 1821

STUMP SOUND ELEMENTARY SCHOOL
ONSLOW COUNTY SCHOOLS
STUMP SOUND, NORTH CAROLINA

DATA SCHEDULES, TELECOM RISER
ELECTRICAL GENERAL NOTES

REVISION SCHEDULE

	DATE	REFERENCE

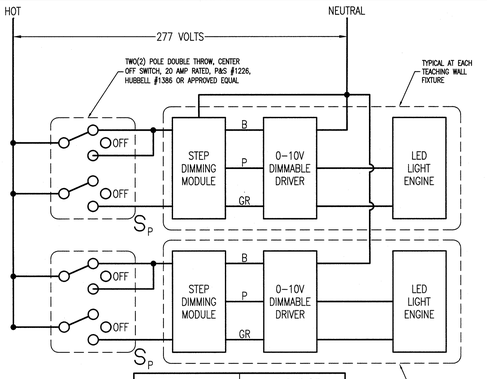
THIS DRAWING IS THE PROPERTY OF THE ARCHITECTS AND CAN NOT BE USED FOR CONSTRUCTION PURPOSES OR REPRODUCED WITHOUT WRITTEN CONSENT OF THE ARCHITECT.

E101

Project # 192002
Sheet # E101
Plotted By: dara
Plotted: Apr 29, 2019 @ 3:07 PM

NOT USED

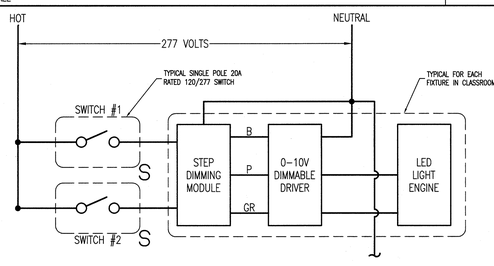
DETAIL 10
NOT TO SCALE



SWITCH POSITION	LED FIXTURE
CENTER	OFF
UP	50%
DOWN	100%

CLASSROOM (S_PS_P)
SWITCHING DETAIL
TWO(2) LEVEL
50%/OFF/100%
FOR EACH SWITCH

DETAIL 11
NOT TO SCALE

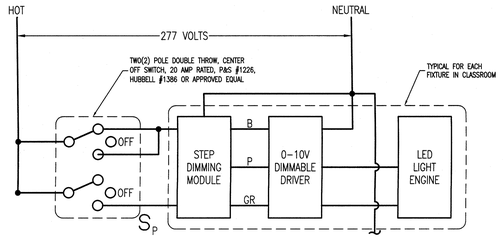


SWITCH #	POSITION	LED FIXTURE
1	UP	50% ON
1	DOWN	50% OFF
2	UP	50% ON
2	DOWN	50% OFF

IF BOTH SWITCHES ARE IN THE "ON" POSITION, LIGHTING IS AT 100%

OFFICE/OTHER (SS)
SWITCHING DETAIL TWO(2) LEVEL
50%/OFF FOR EACH SWITCH

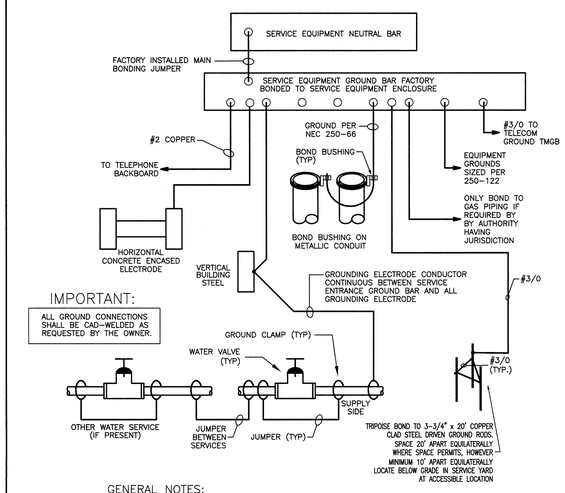
INTERCOM-PAGING RISER
NOT TO SCALE — 12



SWITCH POSITION	LED FIXTURE
CENTER	OFF
UP	50%
DOWN	100%

CLASSROOM (S_P)
SWITCHING DETAIL
TWO(2) LEVEL
50%/OFF/100%

DETAIL 07
NOT TO SCALE



IMPORTANT:
ALL GROUND CONNECTIONS SHALL BE CAD-WELDED AS REQUESTED BY THE OWNER.

GENERAL NOTES:

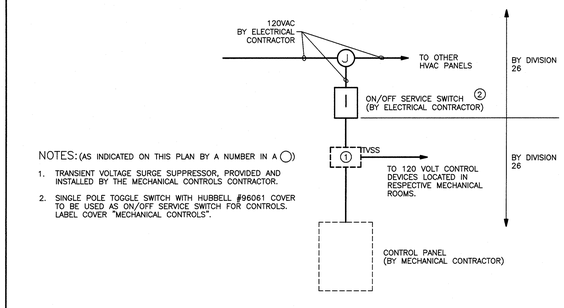
A. THIS SCHEMATIC IS NOT INTENDED TO SHOW ALL NEC AND OTHER CODE REQUIRED BONDING AND GROUNDING. RATHER, IT IS INTENDED TO ALERT THE CONTRACTOR TO TYPICAL MISAPPLICATIONS AND/OR OVERSIGHTS THAT OCCUR IN THE FIELD. THE CONTRACTOR IS A LICENSED PROFESSIONAL AND REMAINS RESPONSIBLE FOR ADHERENCE TO ALL INSTALLATION CODES WHETHER SHOWN OR NOT.

B. ALL CONDUCTORS SHOWN ON THIS SCHEMATIC SHALL BE SIZED PER NEC 250-66 UNLESS NOTED OTHERWISE.

C. ALL GROUNDING AND BONDING SHOWN IS REQUIRED TO BE INSTALLED IF PRESENT ON THE PROJECT.

D. SEE OTHER DETAILS FOR ADDITIONAL GROUNDING AND BONDING OF OTHER EQUIPMENT AND/OR SYSTEMS.

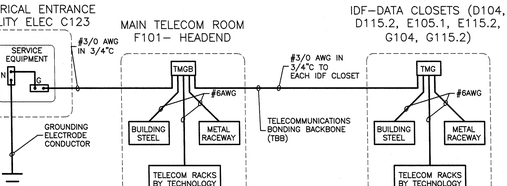
DETAIL
NOT TO SCALE — BONDING AND GROUNDING SCHEMATIC — 08



NOTES: (AS INDICATED ON THIS PLAN BY A NUMBER IN A ◯)

1. TRANSIENT VOLTAGE SURGE SUPPRESSOR, PROVIDED AND INSTALLED BY THE MECHANICAL CONTROLS CONTRACTOR.
2. SINGLE POLE TOGGLE SWITCH WITH HUBBELL #96061 COVER TO BE USED AS ON/OFF SERVICE SWITCH FOR CONTROLS. LABEL COVER "MECHANICAL CONTROLS".

DETAIL
NOT TO SCALE — CONTROLS SURGE PROTECTION — 09



GENERAL NOTES:

A. IT IS THE INTENT FOR THE TELECOMMUNICATION GROUNDING SYSTEM TO UTILIZE THE "GROUND ELECTRODE CONDUCTOR (GEC)" ASSOCIATED WITH THE ELECTRICAL SERVICE ENTRANCE TO THE PROJECT SITE.

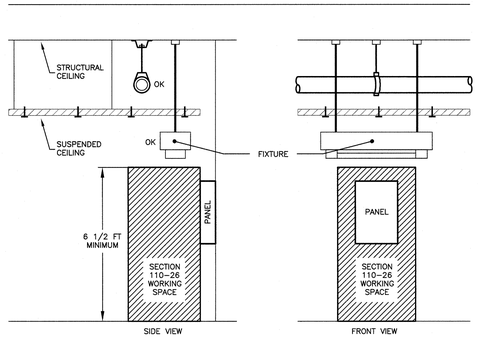
B. FROM THE GEC, THE ELECTRICAL CONTRACTOR WILL INSTALL A BONDING CONDUCTOR WHICH WILL CONNECT THE GEC TO A TELECOMMUNICATIONS MAIN GROUNDING BUS BAR (TMGB) LOCATED IN TELECOMMUNICATIONS ROOM (TR). THE BONDING CONDUCTOR WILL BE BONDED TO THE GEC AND THE TMGB. ADDITIONALLY, THE TMGB WILL BE BONDED TO THE CLOSEST PART OF THE BUILDING STEEL AND STEEL CONDUIT RACEWAY OR CABLE TRAY DESIGNATED FOR TELECOMMUNICATIONS USE.

C. A BONDING CONDUCTOR (THE TELECOMMUNICATIONS BONDING BACKBONE) WILL CONNECT THE TMGB TO ALL TELECOMMUNICATION CLOSETS (TC) WITHIN THE FACILITY, SPECIFICALLY TO A TELECOMMUNICATIONS GROUNDING BUSBAR (TGB) LOCATED IN EACH TC. ADDITIONALLY, THE TGB WILL BE BONDED TO THE CLOSEST AVAILABLE STEEL AND STEEL CONDUIT RACEWAY OR CABLE TRAY DESIGNATED FOR TELECOMMUNICATIONS USE.

D. COMPONENTS CRITERIA:
1. BUSBARS
   A. PREDRILLED ELECTROTIN PLATED COPPER BUSBAR PROVIDED WITH STANDARD NEMA BOLT HOLE SIZING AND SPACING FOR TWO HOLE COMPRESSION CONNECTORS OR EXOTHERMIC TYPE WELDED CONNECTORS.
   B. SIZE: WILL BE A MINIMUM OF 6mm THICK, 50mm WIDE AND 200mm LONG.
   C. THE BUSBAR WILL BE INSULATED FROM ITS SUPPORT. MINIMUM 50mm SEPARATION IS RECOMMENDED.
2. BONDING CONDUCTOR
   A. TELECOMMUNICATIONS BONDING BACKBONE WILL BE A MINIMUM OF #3/0 AWG STRANDED AND INSULATED CONDUCTOR.
   B. THE CONDUCTOR WILL BE CONTINUOUS AND ROUTED IN THE SHORTEST POSSIBLE STRAIGHT LINE PATH FROM THE TR TO TCs.

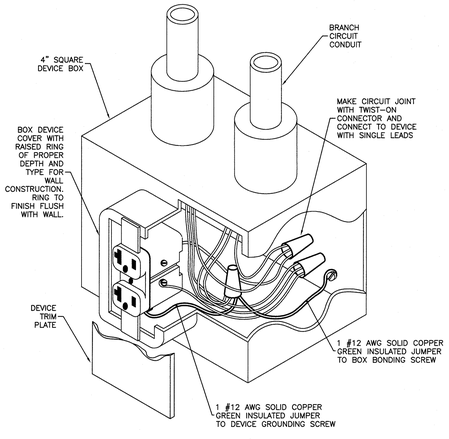
TELECOMMUNICATIONS GROUNDING SYSTEM TO BE INSTALLED BY THE ELECTRICAL CONTRACTOR

DETAIL
NOT TO SCALE — TELECOMMUNICATIONS GROUNDING — 04

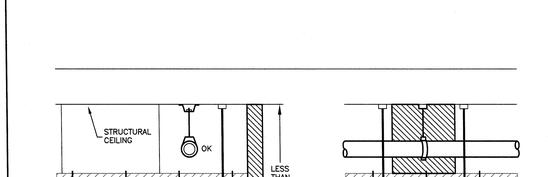


WORKING CLEARANCE FOR ELECTRICAL EQUIPMENT
N.E.C ARTICLE 110-26

DETAIL
NOT TO SCALE — 05

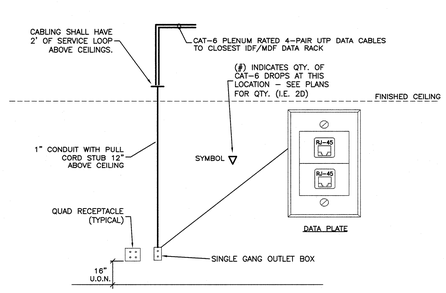


DETAIL
NOT TO SCALE — RECEPTACLE GROUNDING — 06



DEDICATED SPACE FOR ELECTRICAL EQUIPMENT
N.E.C ARTICLE 110-26(f)(1)

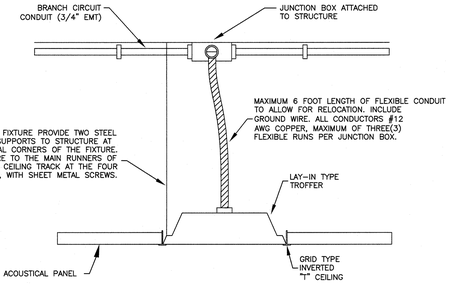
DETAIL
NOT TO SCALE — 01



GENERAL NOTES:

1. REFER TO SPECIFICATIONS 270001 FOR TELECOMMUNICATIONS DISTRIBUTION SYSTEM REQUIREMENTS.

DETAIL
NOT TO SCALE — DATA OUTLET — 02



DETAIL
NOT TO SCALE — LAY-IN FIXTURE MOUNTING — 03

CONTRACTOR TO VERIFY ALL DIMENSIONS

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PDC Project #19003

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 045439 ROBERT A. CLARK
4/28/19

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ISSUE DATE: 04.30.2019
DRAWN BY: JPT
CHECKED BY: RAC
PROJECT: 1821

STUMP SOUND ELEMENTARY SCHOOL
ONSLOW COUNTY SCHOOLS
STUMP SOUND, NORTH CAROLINA
ELECTRICAL DETAILS

REVISION SCHEDULE

⚠	DATE	REFERENCE

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E102

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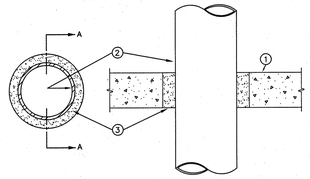
Plotted: April 28, 2019 @ 1:37 PM
Project #: 1900002
Sheet: E102



SECTION A–A

1. NON–RATED FLOOR OR WALL.
2. THROUGH PENETRANTS – ONE PIPE, OR CONDUIT.
3. FILL, VOID, OR CAVITY MATERIAL: SILICON CAULK.

NON–RATED WALL PIPE PENETRATION

System No. C-AJ-1044

March 15, 2007

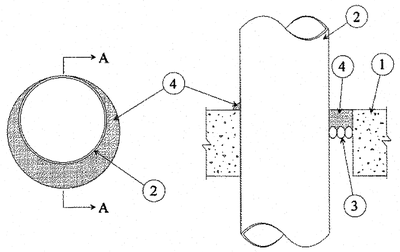
F Ratings — 2, 3, and 4 Hr (See Items 2A and 4)

T Rating — 0 Hr

L Rating At Ambient — 2 CFM/sq ft

L Rating At 400 F — less than 1 CFM/sq ft

W Rating — Class 1 (See Item 4)



SECTION A-A

1. **Floor or Wall Assembly —** Lightweight or normal weight (100-150 pcf or 1600-2400 kg/m³) concrete. Except as noted in table under Item 4, min thickness of solid concrete floor or wall assembly is 4-1/2 in. (114 mm). Floor may also be constructed of any min 6 in.(152 mm) thick UL Classified hollow core **Precast Concrete Units***. When floor is constructed of hollow core precast concrete units, packing material (Item 3) and caulk fill material (Item 4) to be installed symmetrically on both sides of floor, flush with floor surface. Wall assembly may also be constructed of any UL Classified **Concrete Blocks***. Max diam of opening in solid lightweight or normal weight concrete floor is 32 in. (813 mm). Max diam of opening in floor constructed of hollow-core precast concrete units is 7 in. (178 mm)

See **Concrete Blocks** (CAZT) and **Precast Concrete Units** (CFTV) categories in the Fire Resistance Directory for names of manufacturers.

1A. **Steel Sleeve —** (Optional, Not Shown) - Nom 16 in. (406 mm) diam (or smaller) Schedule 10 (or heavier) steel sleeve cast or grouted into floor or wall assembly. Sleeve may extend a max of 2 in. (51 mm) above top of floor or beyond either surface of wall. As an alternate, nom 16 in. (406 mm) diam (or smaller) min 0.028 (0.71 mm) thick galvanized sheet steel sleeve cast or grouted into floor or wall assembly flush with floor or wall surfaces.

2. **Through Penetrants —** One metallic pipe, conduit or tubing to be installed either concentrically or eccentrically within the firestop system. Max annular space between pipe, conduit or tubing and edge of through opening or sleeve is dependent on the parameters shown in Item 4. Min annular space between pipe or conduit and edge of through opening is 0 in. (point contact). Max annular space to be as shown in the table in Item 4. Pipe, conduit or tubing to be rigidly supported on both sides of floor or wall assembly. The following types and sizes of metallic pipes, conduits or tubing may be used:

A. **Steel Pipe —** Nom 30 in. (762 mm) diam (or smaller) Schedule 10 (or heavier) steel pipe.

B. **Iron Pipe —** Nom 30 in. (762 mm) diam (or smaller) cast or ductile iron pipe.

C. **Conduit —** Nom 6 in. (152 mm) diam (or smaller) rigid steel conduit.

D. **Conduit —** Nom 4 in. (102 mm) diam (or smaller) steel electrical metallic tubing.

E. **Copper Tubing —** Nom 6 in. (152 mm) diam (or smaller) Type L (or heavier) copper tube.

F. **Copper Pipe —** Nom 6 in. (152 mm) diam (or smaller) Regular (or heavier) copper pipe.

3. **Packing Material —** Polyethylene backer rod or nom 1 in. (25 mm) thickness of tightly-packed mineral wool batt or glass fiber insulation firmly packed into opening as a permanent form. Packing material to be recessed from top surface of floor or from both surfaces of wall as required to accommodate the required thickness of caulk fill material (Item 4).

3A. **Forming Material* —** As an alternate to the packing material in Item 3, nom 4 in. (102 mm) wide strips of min 1/2 in (13 mm) thick compressible mat to be stacked to a thickness greater than the width of the annular space and compression-fitted, edge-first, to fill the annular space to a min 4 in. (102 mm) depth. As an option, the strips of min 1/2 in. (13mm) thick compressible mat may be folded in half, lengthwise, and stacked to a thickness greater than the width of the annular space and compression-fitted, edge-first, to fill the annular space to a min 2 in. (51 mm) depth. Top of forming material to be recessed from top surface of floor or from both surfaces of wall as necessary to accommodate the required thickness of caulk fill material.

3M COMPANY — Fire Barrier Packing Material

4. **Fill, Void or Cavity Material* — Caulk, Sealant —** Applied to fill the annular space flush with top surface of floor. In wall assemblies, required caulk thickness to be installed symmetrically on both sides of wall, flush with wall surface. At point contact location between penetrant and sleeve or between penetrant and concrete, a min 1/4 in. (6 mm) diam bead of caulk shall be applied at top surface of floor and at both surfaces of wall. The hourly F Ratings and the min required caulk thicknesses are dependent upon a number of parameters, as shown in the following table:

Min Floor or Wall Thkns In.	Nom Pipe Tube or Conduit Diam In.	Max Annular Space In.	Min Caulk Thkns In.	F Rating Hr
2-1/2 (64)	1/2-12 (13-305)	1-3/8 (35)	1/2 (13)	2
2-1/2 (64)	1/2-12 (13-305)	3-1/4 (83)	1 (25)	2
4-1/2 (114)	1/2-6 (13-152)	1-3/8 (35)	1/4 (6) (a)	2
4-1/2 (114)	1/2-12 (13-305)	1-1/4 (32)	1/2 (13)	3
4-1/2 (114)	1/2-20 (13-508)	2 (51)	1 (25)	3
4-1/2 (114)	1/2-20 (13-508)	2 (51)	1 (25)	3
4-1/2 (114)	1/2-12 (13-305)	3-1/4 (83)	1 (25)	3
4-1/2 (114)	22-30 (558-762)	2 (51)	2 (51)	3
5-1/2 (140)	1/2-6 (13-152)	1-3/8 (35)	1 (25) (b)	4

(a)Min 2 in (51 mm) thickness of mineral wool batt insulation or forming material (Item 3A) required in annular space.

(b)Min 1 in. (25 mm) thickness of mineral wool batt insulation required in annular space on both sides of floor or wall assembly. Min 1 in.(25 mm) thickness of caulk to be installed flush with each surface of floor or wall assembly.

3M COMPANY — CP 25WB+ or FB-3000 WT.

(Note - W Rating applies only when FB-3000 WT is used.)

*Bearing the UL Classification Mark

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Last Updated on 2007-03-15

System No. C-AJ-1013

December 07, 1999

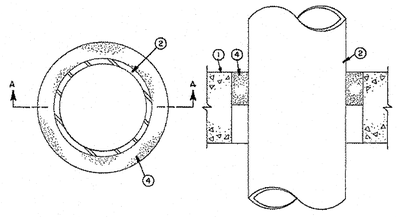
(Formerly System No. 120)

F Rating — 1 Hr

T Rating — 0 Hr

L Rating At Ambient — Less Than 1 CFM/sq ft (See Item 4)

L Rating At 400 F — Less Than 1 CFM/sq ft (See Item 4)



Section A-A

1. **Floor or Wall Assembly —** Min 5 in. thick reinforced normal weight (140-155) pcf) concrete. Wall may also be constructed of any UL Classified **Concrete Blocks*.** Max diam of opening is 6 in.

See **Concrete Block** (CAZT) category in the Fire Resistance Directory.

2. **Through Penetrants —** One metallic pipe, or conduit to be centered within the firestop system. Pipe or conduit to be rigidly supported on both sides of floor or wall assembly. The following types and sizes of metallic pipes or conduits may be used:

A. **Steel Pipe —** Nom 4 in. diam (or smaller) Schedule 5 (or heavier) steel pipe. A nom annular space of 3/4 in. is required within the firestop system.

B. **Conduit —** Nom 4 in. diam (or smaller) steel electrical metallic tubing or steel conduit. A nom annular space of 3/4 in. is required within the firestop system.

3. **Packing Material —** (Not Shown) — Nom 1 in. diam open cell polyurethane foam backer rod friction-fitted into the opening as a permanent form. Packing material to be recessed from top surface of floor or from both surfaces of wall as required to accommodate the required thickness of fill material.

4. **Fill, Void or Cavity Material* — Sealant —** Min 3/4 in. thickness of fill material applied within annulus, flush with top surface of floor or with both surfaces of wall.

3M COMPANY — Types FB-2000 or FB-2000+ . (Note: L Ratings apply only when FB-2000+ is used.)

*Bearing the UL Classification Mark

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Last Updated on 1999-12-07

System No. W-L-1001

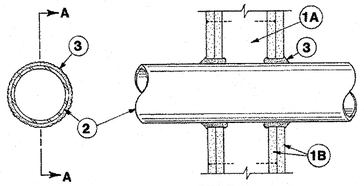
June 15, 2005

F Ratings — 1, 2, 3 and 4 Hr (See Items 2 and 3)

T Ratings — 0, 1, 2, 3, and 4 Hr (See Item 3)

L Rating At Ambient — less than 1 CFM/sq ft

L Rating At 400 F — less than 1 CFM/sq ft



SECTION A-A

1. **Wall Assembly —** The 1, 2, 3 or 4 hr fire-rated gypsum wallboard/stud wall assembly shall be constructed of the materials and in the manner described in the individual U300 or U400 Series Wall or Partition Designs in the UL Fire Resistance Directory and shall include the following construction features:

A. **Studs —** Wall framing may consist of either wood studs (max 2 h fire rated assemblies) or steel channel studs. Wood studs to consist of nom 2 by 4 in. (51 by 102 mm) lumber spaced 16 in. (406 mm) OC with nom 2 by 4 in. (51 by 102 mm) lumber end plates and cross braces. Steel studs to be min 3-5/8 in. (92 mm) wide by 1-3/8 in. (35 mm) deep channels spaced max 24 in. (610 mm) OC.

B. **Gypsum Board* —** Nom 1/2 or 5/8 in. (13 or 16 mm) thick, 4 ft. (122 cm) wide with square or tapered edges. The gypsum wallboard type, thickness, number of layers, fastener type and sheet orientation shall be as specified in the individual U300 or U400 Series Design in the UL Fire Resistance Directory. Max diam of opening is 26 in. (660 mm).

2. **Through-Penetrant —** One metallic pipe, conduit or tubing installed either concentrically or eccentrically within the firestop system. The annular space between pipe, conduit or tubing and periphery of opening shall be min of 0 in / (0 mm). (point contact) to max 2 in. (51 mm) Pipe, conduit or tubing to be rigidly supported on both sides of wall assembly. The following types and sizes of metallic pipes, conduits or tubing may be used:

A. **Steel Pipe —** Nom 24 in. (610 mm) diam (or smaller) Schedule 10 (or heavier) steel pipe.

B. **Iron Pipe —** Nom 24 in. (610 mm) diam (or smaller) service weight (or heavier) cast iron soil pipe, nom 12 in (305 mm) diam (or smaller) or Class 50 (or heavier) ductile iron pressure pipe.

C. **Conduit —** Nom 6 in. (152 mm) diam (or smaller) steel conduit or nom 4 in (102 mm) diam (or smaller) steel electrical metallic tubing

D. **Copper Tubing —** Nom 6 in. (152 mm) diam (or smaller) Type L (or heavier) copper tubing

E. **Copper Pipe —** Nom 6 in. (152 mm) diam (or smaller) Regular (or heavier) copper pipe.

F. **Through Penetrating Product* —** Flexible Metal Piping The following types of steel flexible metal gas piping may be used:

1. Nom 2 in. (51 mm) diam (or smaller) steel flexible metal gas piping. Plastic covering on piping may or may not be removed on both sides of floor or wall assembly.

OMEGA FLEX INC

2. Nom 1 in. (25 mm) diam (or smaller) steel flexible metal gas piping. Plastic covering on piping may or may not be removed on both sides of floor or wall assembly.

GASTITE, DIV OF TITEFLEX

3. Nom 1 in. (25 mm) diam (or smaller) steel flexible metal gas piping. Plastic covering on piping may or may not be removed on both sides of floor or wall assembly.

WARD MFG L L C

3. **Fill, Void or Cavity Material* — Caulk or Sealant —** Min 5/8 , , 1-1/4,1-7/8 and 2-1/2 in. (16, 32, 48 and 64 mm) thickness of caulk for 1, 2, 3 and 4 hr rated assemblies, respectively, applied within annulus, flush with both surfaces of wall. Min 1/4 in. (6 mm) diam bead of caulk applied to gypsum board/penetrant interface at point contact location on both sides of wall. The hourly F Rating of the firestop system is dependent upon the hourly fire rating of the wall assembly in which it is installed, as shown in the following table. The hourly T Rating of the firestop system is dependent upon the type or size of the pipe or conduit and the hourly fire rating of the wall assembly in which it is installed, as tabulated below:

Max Pipe or Conduit Diam In (mm)	F Rating Hr	T Rating Hr
1 (25)	1 or 2	0+, 1 or 2
1 (25)	3 or 4	3 or 4
4 (102)	1 or 2	0
6 (152)	3 or 4	0
12 (305)	1 or 2	0

+When copper pipe is used, T Rating is 0 h.

3M COMPANY — CP 25WB+ or FB-3000 WT.

*Bearing the UL Classification Mark

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Last Updated on 2005-06-15

GENERAL NOTES:

A. ALL SENSOR LOCATIONS ARE APPROXIMATE. REFER TO MANUFACTURER'S INSTALLATION INSTRUCTIONS PRIOR TO INSTALLATION.

B. ULTRASONIC CEILING MOUNTED SENSORS SHALL NOT BE LOCATED WITHIN 6'–0" OF SUPPLY/RETURN GRILLES.

C. CONTRACTOR IS RESPONSIBLE FOR PROPER SENSITIVITY AND TIME DELAY SETTINGS. VERIFICATION OF MANUFACTURER'S RECOMMENDED PLACEMENT AND FIELD VERIFICATION OF CIRCUITS WITH RESPECT TO POWER PACK PLACEMENT.

D. CONTRACTOR IS RESPONSIBLE FOR FIELD VERIFICATION OF REQUIRED NUMBER OF POWER PACKS. POWER PACKS SHALL BE INSTALLED IN A 4" SQUARE JUNCTION BOX.

E. ONE POWER PACK IS REQUIRED FOR EACH CIRCUIT THAT IS TO BE CONTROLLED.

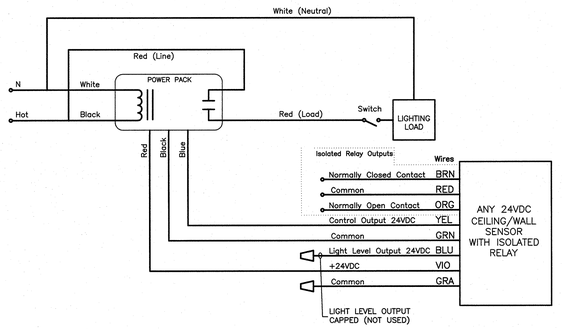
F. MAXIMUM NUMBER OF SENSORS THAT CAN BE WIRED IN PARALLEL TO A SINGLE POWER PACK IS DEPENDENT ON SENSOR MODEL. (SEE INDIVIDUAL DATA SHEETS FOR mA CONSUMPTION.)

G. SENSOR LAYOUT DRAWINGS AND PRODUCT DATA SHEETS ARE REQUIRED AS PART OF SHOP DRAWING SUBMITTALS.

H. ALL OCCUPANCY SENSOR WIRING SHALL BE WIRED IN ACCORDANCE WITH MANUFACTURERS INSTALLATION INSTRUCTIONS.

I. REFER TO SPECIFICATION 260923.

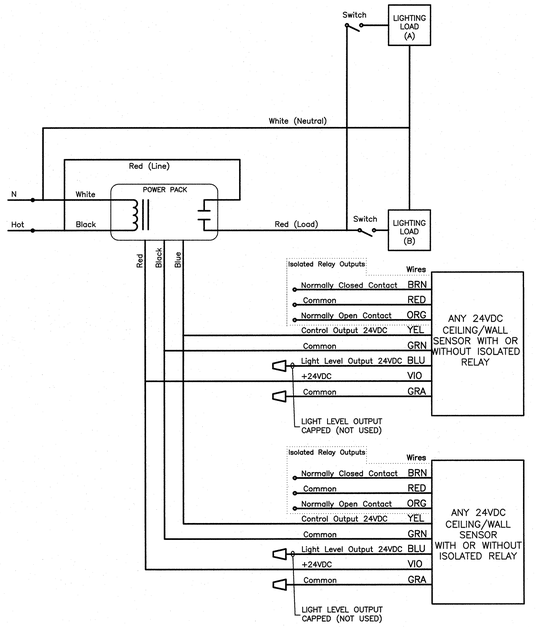
J. ALL EXPOSED WIRING SHALL BE PLENUM RATED.



DT–200

DUAL TECHNOLOGY OCCUPANCY SENSOR, 2000 SQ. FT. COVERAGE, WITH ISOLATED RELAY, WIDE ANGLE LENS

OCCUPANCY SENSOR WITH ISOLATED RELAY WIRING DIAGRAM
(EQUALS: WATTSTOPPER, HUBBELL, PASS & SEYMOUR, LEVITON)



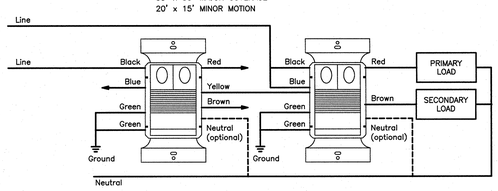
TWO OCCUPANCY SENSORS ON ONE CIRCUIT WIRING DIAGRAM
(EQUALS: WATTSTOPPER, HUBBELL, PASS & SEYMOUR)

DT–200

DUAL TECHNOLOGY OCCUPANCY SENSOR, 2000 SQ. FT. COVERAGE, WITH ISOLATED RELAY, WIDE ANGLE LENS

PW–100 (S$_{PB}$)

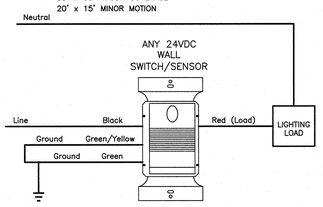
PASSIVE INFRARED WALL SWITCH SENSOR
35' x 30' MAJOR COVERAGE
20' x 15' MINOR MOTION



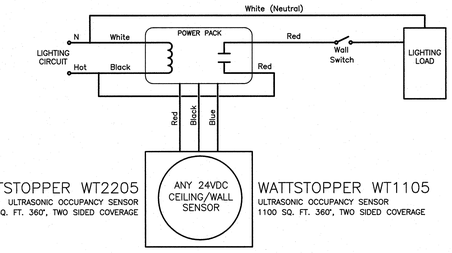
OCCUPANCY SENSOR BI–LEVEL WIRING DIAGRAM
(EQUALS: WATTSTOPPER, HUBBELL, SENSOR SWITCH)

PW–100 (S$_{SE}$)

PASSIVE INFRARED WALL SWITCH SENSOR
35' x 30' MAJOR COVERAGE
20' x 15' MINOR MOTION



OCCUPANCY SENSOR SINGLE LEVEL WIRING DIAGRAM
(EQUALS: WATTSTOPPER, HUBBELL, SENSOR SWITCH)



OCCUPANCY SENSORS WITHOUT ISOLATED RELAY WIRING DIAGRAM
(EQUALS: HUBBELL, SENSOR SWITCH)

CONTRACTOR TO VERIFY ALL DIMENSIONS.

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PDC Project #19003

NORTH CAROLINA PROFESSIONAL SEAL 015439 ENGINEER ROBERT A. CLARK
4/28/19

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ISSUE DATE: 04.30.2019
DRAWN BY: JPT
CHECKED BY: RAC
PROJECT: 1821

STUMP SOUND ELEMENTARY SCHOOL
ONSLOW COUNTY SCHOOLS
STUMP SOUND, NORTH CAROLINA

ELECTRICAL DETAILS

REVISION SCHEDULE

△	DATE	REFERENCE

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E103

Project #: 190002
Sheet: E103
Plotted By: chris
Plotted: April 28, 2019 @ 3:11 PM

PENETRATION DETAILS
NOT TO SCALE

02

OCCUPANCY SENSOR WIRING DIAGRAMS
NOT TO SCALE

01

NOTES: (AS INDICATED ON THIS MATRIX BY A NUMBER IN A ◯)

① VERIFY OPERATION WITH LOCAL AHU PRIOR TO PROGRAMMING.

SYSTEM INPUTS

		ACTUATE GENERAL ALARM SPEAKER/STROBES	ACTUATE AUDIBLE ALARM SIGNAL	ACTUATE SUPERVISORY SIGNAL INDICATOR	ACTUATE AUDIBLE SUPERVISORY SIGNAL	ACTUATE COMMON TROUBLE SIGNAL INDICATOR	ACTUATE AUDIBLE COMMON TROUBLE SIGNAL	ACTUATE ALL EVACUATION SIGNALS	TRANSMIT FIRE ALARM SIGNAL TO SUPERVISING STATION	TRANSMIT TROUBLE SIGNAL TO SUPERVISING STATION	TRANSMIT SUPERVISORY SIGNAL TO SUPERVISING STATION	RECALL ELEVATORS TO PRIMARY RECALL FLOOR	RECALL ELEVATORS TO ALTERNATE RECALL FLOOR	DISPLAY CHANGE OF STATUS AT FACP	SHUTDOWN ALL AIR HANDLING UNITS	ACTUATE AUDIBLE CARBON MONOXIDE ALARM SIGNAL	TRANSMIT CO ALARM SIGNAL TO SUPERVISING STATION	ACTUATE CARBON MONOXIDE ALARM SIGNAL	UNLOCK ACCESS CONTROLLED EGRESS DOORS	ACTIVATE ELEVATOR FIREMANS HAT	SHUNT TRIP POWER TO ELEVATOR	MATE MULTIPURPOSE DINING SOUND SYSTEM	RELEASE MAGNETICALLY HELD DOOR OPENS	
		A	B	C	D	E	F	G	H	I	J	K	L	M	O	P	Q	R	S	T	U	V	W	
1	MANUAL PULL STATIONS	o	o					o	o					o	o				o			o	o	1
2	SMOKE DETECTORS	o	o					o	o					o	o				o			o	o	2
3	HEAT DETECTORS	o	o					o	o					o	o				o			o	o	3
4	HEAT DETECTORS MECHANICAL MEZZANINES	o	o					o	o					o	o				o			o	o	4
5	DUCT DETECTORS	o	o					o	o					o	o				o			o	o	5
6	AHU OVERRIDE SWITCH			o	o						o			o										6
7	TAMPER SWITCH @ PIV			o	o						o			o										7
8	TAMPER SWITCHES AT SPRINKLER RISERS			o	o						o			o										8
9	FLOW SWITCH AT SPRINKLER RISER	o	o					o	o					o										9
10	FIRE ALARM SYSTEM AC POWER FAILURE					o	o			o				o									o	9
11	FIRE ALARM SYSTEM LOW BATTERY					o	o			o				o										10
12	NAC PANELS LOW BATTERY					o	o			o				o										11
13	OPEN CIRCUIT					o	o			o				o										12
14	GROUND FAULT					o	o			o				o										13
15	NOTIFICATION APPLIANCE SHORT CIRCUIT					o	o			o				o										14
16	TEMPERATURE SENSOR					o	o			o				o										15
17	EMERGENCY RESPONDER BDA SUPERVISION			o							o			o										16
18	KITCHEN HOOD FIRE SUPPRESSION ACTIVATION	o	o					o						o	o									17
19	KITCHEN EQUIPMENT UDS SHUNT TRIP POWER LOSS					o	o			o				o										18
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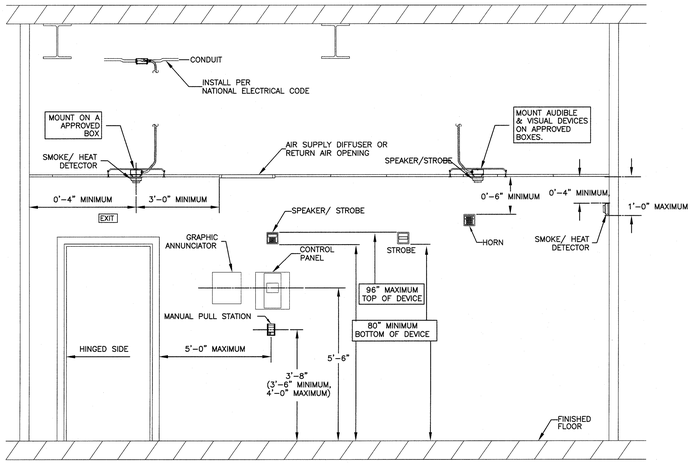
FIRE ALARM SYSTEM OPERATIONAL MATRIX

02

NFPA 72 AND ADA DEVICE INSTALLATION REQUIREMENTS



DETAIL

NOT TO SCALE

03

GENERAL FIRE ALARM RISER NOTES:

A. REFER TO ARCHITECT'S SPECIFICATION 01 23 00 FOR ALTERNATES FOR OWNER'S PREFERRED MANUFACTURER'S: FIRE ALARM SYSTEMS BY NOTIFIER.

B. SEE PLANS FOR LOCATIONS AND QUANTITIES OF ALL DEVICES.

C. ALL WIRING SHALL BE IN MINIMUM 3/4" CONDUIT.

D. BATTERY CALCULATIONS ARE REQUIRED WITH ALL SUBMITTALS.

E. TEST RESULTS ARE REQUIRED FOR ALL DEVICES.

F. PROVIDE SHUT-DOWN DEVICES FOR ALL AIR HANDLERS AND SUPPLY FANS OF ALL MECHANICAL EQUIPMENT.

G. VERIFY ROOM NUMBERS WITH ARCHITECT PRIOR TO PROGRAMMING SYSTEM.

H. ALL NAC PANELS AND AMPLIFIER PANELS SHALL HAVE A SMOKE DETECTOR MOUNTED WITHIN 15'-0" OF PANEL.

I. A SMOKE DETECTOR SHALL BE MOUNTED WITHIN 15'-0" OF FACP, RACP, RAAP AND NAC PANELS.

J. IF ANY ARCHITECTURAL CHANGES ARE MADE THAT SHALL AFFECT ANY DEVICE PLACEMENT, THIS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO INSTALLATION.

K. THE MANUFACTURER'S AUTHORIZED REPRESENTATIVE SHALL BE NICET LEVEL 2 CERTIFIED AND HAVE AT LEAST 2 YEARS OF EXPERIENCE INSTALLING FIRE ALARM SYSTEMS.

L. THE MANUFACTURER'S AUTHORIZED REPRESENTATIVE SHALL BE NICET LEVEL 2 CERTIFIED AND HAVE AT LEAST 2 YEARS OF EXPERIENCE INSTALLING FIRE ALARM SYSTEMS.

M. THE SHOP DRAWINGS SUBMITTALS FOR DEVICE LOCATIONS SHALL BE SUBMITTED TO ENGINEER AND LOCAL (AHJ) FIRE MARSHALL PRIOR TO ANY INSTALLATION/ROUGH-IN FOR FIRE ALARM DEVICES.

N. WIRING DIAGRAMS, LOCATION DRAWINGS, DEVICE CUT SHEETS AND VOLTAGE DROP CALCULATIONS ARE REQUIRED WITH ALL SUBMITTALS.

O. THE FIRE ALARM SYSTEM PROVIDER SHALL PROVIDE ALL DOCUMENTATION AS SPECIFIED IN THE INTERNATIONAL FIRE CODE SECTION 907 REQUIREMENTS AS PART OF HIS SHOP DRAWING SUBMITTALS.

THIS INCLUDES:
1. LOCATION DRAWINGS OF ALARM INITIATING AND NOTIFICATION DEVICES.
2. WIRING DIAGRAMS WITH CONDUCTOR TYPE AND SIZES.
3. LOCATIONS OF ALARM CONTROL AND TROUBLE SIGNALLING EQUIPMENT.
4. POWER CONNECTION DETAILS AND WIRING SCHEMATICS
5. BATTERY CALCULATIONS
6. VOLTAGE DROP CALCULATIONS
7. MANUFACTURER'S MODEL NUMBERS, LISTING INORMATION FOR EQUIPMENT, DEVICES AND MATERIALS.
8. THE INTERFACE OF FIRE SAFETY CONTROL FUNCTIONS.

P. REFER TO SPECIFICATION 28 31 12.

Q. FIRE ALARM SIGNAL LINE CIRCUITS SHALL BE WIRED CLASS "A" AND NOTIFICATION CIRCUITS SHALL BE WIRED CLASS "B" WITH THE END OF LINE RESISTOR CLEARLY AND PERMANENTLY MARKED ON THE LAST DEVICE.

R. PROVIDE SPARE PARTS AS DEFINED IN SPECIFICATION 283112.

S. ALL FIRE ALARM SYSTEM WORK SHALL BE APPROVED BY THE ONSLOW COUNTY FIRE MARSHALL PRIOR TO COMMENCING ANY FIRE ALARM WORK.

T. THE FIRE ALARM SYSTEM WIRING SHALL BE ROUTED IN CONDUIT.

U. FIRE ALARM SYSTEM SHALL BE PROVIDED IN ACCORDANCE WITH NFPA 72, 2013.

V. COORDINATE WITH THE FIRE PROTECTION CONTRACTOR FOR VOLTAGE, RELAY, ETC. FOR CONNECTIONS OF SPRINKLER BELL. ALL WIRING, CONDUIT, RELAY, AND INTERCONNECTIONS SHALL BE BY THE ELECTRICAL & FIRE ALARM CONTRACTORS.

W. SPEAKER AMPLIFIER CABINETS SHALL BE ADDED AS NEEDED. ALL 120VAC POWER FOR CABINET SHALL BE PROVIDED FROM THE NEAREST 120V PANEL. BREAKER HASPS SHALL BE PROVIDED ON BREAKER SERVING CABINET.

X. ELECTRICAL CONTRACTOR SHALL COORDINATE CLOSELY WITH FIRE ALARM SUB-CONTRACTOR FOR ALL 120V AC POWER REQUIRED FOR THIS SYSTEM. IF ANY ADDITIONAL CIRCUITS ARE REQUIRED THAT ARE NOT IDENTIFIED ON PLANS, THE ELECTRICAL CONTRACTOR SHALL PROVIDE THAT CIRCUIT FROM THE NEAREST 120V PANEL. AS-BUILTS SHALL BE UPDATED TO REFLECT THE INSTALLED CONDITION. THIS SHALL BE DONE AT NO ADDITIONAL COST TO THE PROJECT.

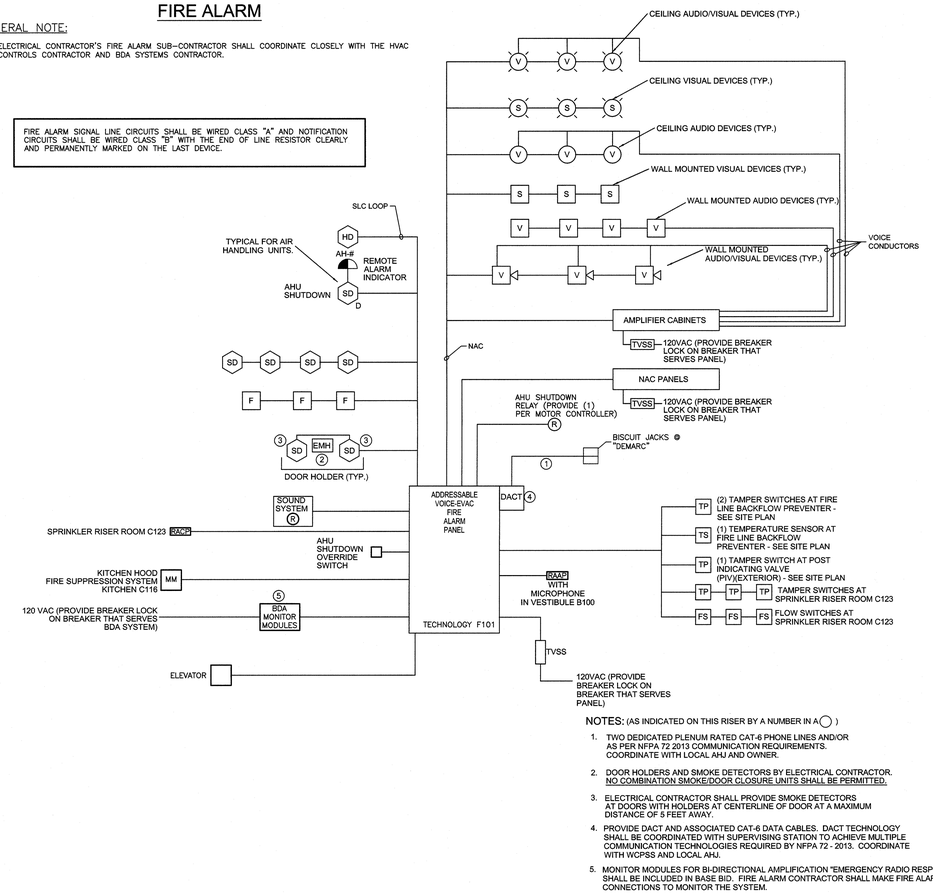
Y. THE FIRE ALARM SYSTEM SHALL BE INTERCONNECTED WITH THE GYMNASIUM/ DINING ROOM SOUND SYSTEM SUCH THAT UPON ALARM CONDITION THE SOUND SYSTEM MUTES.

FIRE ALARM

GENERAL NOTE:

1. ELECTRICAL CONTRACTOR'S FIRE ALARM SUB-CONTRACTOR SHALL COORDINATE CLOSELY WITH THE HVAC CONTROLS CONTRACTOR AND BDA SYSTEMS CONTRACTOR.

FIRE ALARM SIGNAL LINE CIRCUITS SHALL BE WIRED CLASS "A" AND NOTIFICATION CIRCUITS SHALL BE WIRED CLASS "B" WITH THE END OF LINE RESISTOR CLEARLY AND PERMANENTLY MARKED ON THE LAST DEVICE.



NOTES: (AS INDICATED ON THIS RISER BY A NUMBER IN A ◯)

1. TWO DEDICATED PLENUM RATED CAT-6 PHONE LINES AND/OR AS PER NFPA 72 2013 COMMUNICATION REQUIREMENTS. COORDINATE WITH LOCAL AHJ AND OWNER.
2. DOOR HOLDERS AND SMOKE DETECTORS BY ELECTRICAL CONTRACTOR. NO COMBINATION SMOKE/DOOR CLOSURE UNITS SHALL BE PERMITTED.
3. ELECTRICAL CONTRACTOR SHALL PROVIDE SMOKE DETECTORS AT DOORS WITH HOLDERS AT CENTERLINE OF DOOR AT A MAXIMUM DISTANCE OF 5 FEET AWAY.
4. PROVIDE DACT AND ASSOCIATED CAT-6 DATA CABLES. DACT TECHNOLOGY SHALL BE COORDINATED WITH SUPERVISING STATION TO ACHIEVE MULTIPLE COMMUNICATION TECHNOLOGIES REQUIRED BY NFPA 72 - 2013. COORDINATE WITH WCPSS AND LOCAL AHJ.
5. MONITOR MODULES FOR BI-DIRECTIONAL AMPLIFICATION "EMERGENCY RADIO RESPONSE" SHALL BE INCLUDED IN BASE BID. FIRE ALARM CONTRACTOR SHALL MAKE FIRE ALARM CONNECTIONS TO MONITOR THE SYSTEM.

FIRE ALARM RISER

01

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PDC Project #19003

NORTH CAROLINA PROFESSIONAL SEAL 045439 ENGINEER HERBERT A. CLARK
4/28/19

CONTRACTOR TO VERIFY ALL DIMENSIONS.

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ISSUE DATE: 04.30.2019
DRAWN BY: JPT
CHECKED BY: RAC
PROJECT: 1821

STUMP SOUND ELEMENTARY SCHOOL
ONSLOW COUNTY SCHOOLS
STUMP SOUND, NORTH CAROLINA
FIRE ALARM RISER, FIRE ALARM MATRIX, & FA DEVICE MOUNTING

REVISION SCHEDULE

⚠	DATE	REFERENCE

E104

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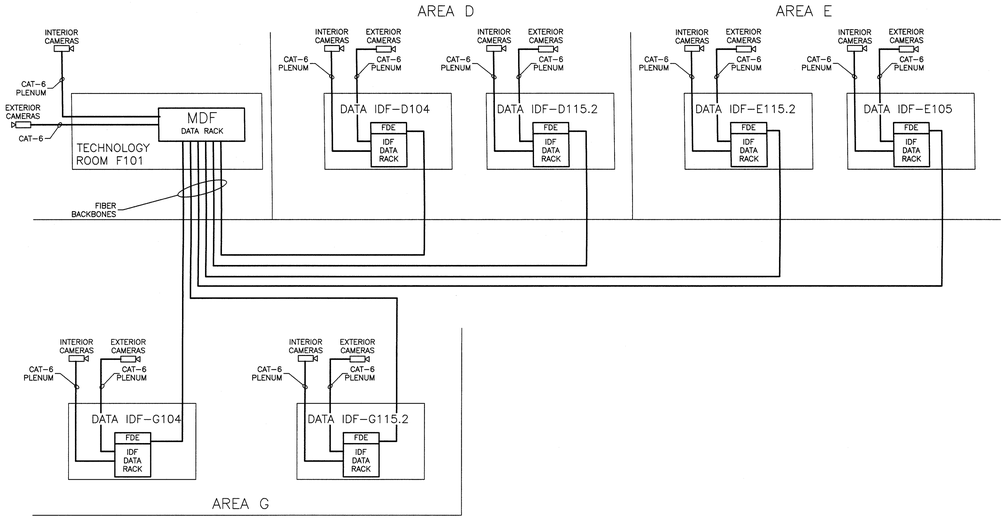
Project #: 190002
Sheet #: E104
Plotted By: chris
Plotted: Apr 28, 2019 @ 3:07 PM



IMPORTANT NOTE:

THE DIVISION 28 I/P CAMERA SYSTEM WHICH INCLUDES CAMERAS, MOUNTS, PROGRAMMING/SETUP, AIMING, LICENSEES, AND FINAL CONNECTIONS SHALL BE PROVIDED UNDER AN ALLOWANCE. REFER TO ARCHITECT'S LIST OF ALLOWANCES SECTION 01 21 00.

ALL CONDUIT (POWER/LOW VOLTAGE), POWER WIRING AND OUTLET BOXES SHALL BE PROVIDED BY THE ELECTRICAL CONTRACTOR AS PART OF THE BASE BID.

ALSO NOTE: THE CAT-6 STRUCTURED WIRING, SMB CONNECTORS, PATCH PANELS, WIRE MANAGERS AND CABLE TESTING FOR THE CAMERAS SHALL BE PROVIDED AND INSTALLED BY THE DIVISION 27 CONTRACTOR AS PART OF THE BASE BID.

GENERAL NOTES:

A. QUANTITIES AND LOCATIONS SHOWN ON PLANS.

B. ALL CAMERA EQUIPMENT INCLUDING: CAMERAS, MOUNTS, FINAL CONNECTIONS AND SYSTEM TESTING SHALL BE PROVIDED AND INSTALLED BY OWNER/OTHERS USING PROJECT ALLOWANCE. REFER TO ARCHITECT'S ALLOWANCE SECTION.

C. ALL CAMERA LOCATIONS SHALL BE COORDINATED WITH ONSLOW SECURITY DEPARTMENT PRIOR TO ROUGH-IN.

D. SEE SPECIFICATION 28 23 00.

E. ALL CAT-6 PLENUM CABLES FOR THE CAMERA SYSTEM SHALL HAVE GREEN JACKET. NETWORK CLOSET END OF CABLES SHALL BE TERMINATED ON THEIR OWN DESIGNATED PATCH PANELS. COORDINATE CLOSELY FOR ARRANGEMENTS AND LABELING. ALL POE SWITCHES SHALL BE OWNER PROVIDED. ALL CABLING SHALL BE TESTED AND DOCUMENTED UNDER THE REQUIREMENTS OF THE DIVISION 27 SPECIFICATIONS.

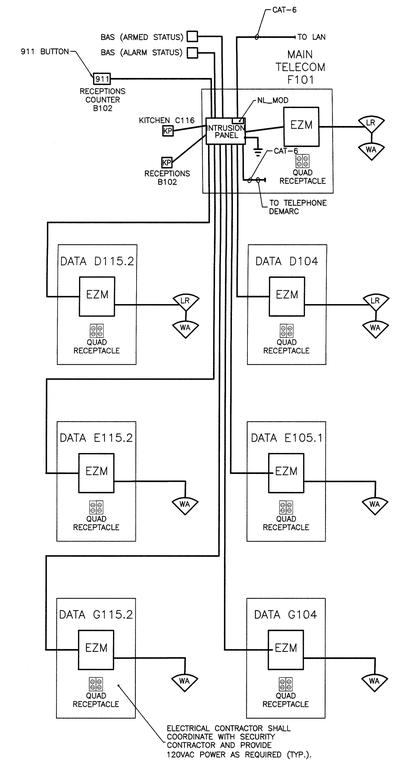
F. A SMB QUICKPORT BOX SHALL BE PLACED AT CAMERA END WITH A 3FT GREEN PATCH CORD BY STRUCTURED WIRING CONTRACTOR FOR OWNER/OTHERS TO MAKE FINAL CONNECTIONS.

G. CAMERA DATA CABLES SHALL MEET DATA CABLE LENGTH REQUIREMENTS IN SPECIFICATIONS 270001. IF LENGTH IS EXCEEDED, CABLE SHALL BE REPULLED WITH SHORTER LENGTH AT NO ADDITIONAL COST TO OWNER.

H. REFER TO DETAIL E106-09.

I. REFER TO E101 FOR FIBER BACKBONE QUANTITIES AND CABLE SCHEDULES.

DETAIL NOT TO SCALE — CAMERA SYSTEM RISER — **04**



IMPORTANT NOTE: THE INTRUSION DETECTION SYSTEM COMPONENTS AND LOW VOLTAGE WIRING SHALL BE PROVIDED UNDER AN ALLOWANCE. REFER TO ARCHITECT'S LIST OF ALLOWANCES SECTION 01 21 00. ALL CONDUIT (POWER/LOW VOLTAGE), POWER WIRING AND OUTLET BOXES SHALL BE PROVIDED BY THE ELECTRICAL CONTRACTOR AS PART OF THE BASE BID.

GENERAL NOTES:

A. BASIS OF DESIGN IS NAPCO X255. PROVIDE BASIS OF DESIGN SYSTEM OR APPROVED EQUIVALENT.

B. COMPLY WITH SPECIFICATION 281600.

C. ALL WORK SHALL BE PERFORMED BY A LICENSED SECURITY SYSTEM CONTRACTOR.

D. WHEN COMPLETE, SYSTEM SHALL BE 100% OPERATIONAL AND APPROVED BY ONSLOW COUNTY SCHOOLS.

E. ALL WIRING AND DEVICE HEIGHT/MOUNTING SHALL BE PER MANUFACTURER'S SPECIFICATIONS.

F. PROVIDE A MINIMUM OF FOUR HOURS OF OWNER TRAINING FOR OPERATION AND MAINTENANCE PROCEDURES.

G. FINAL ZONING OF SYSTEM SHALL BE COORDINATED WITH ONSLOW SCHOOLS SECURITY DEPARTMENT.

H. WALL MOUNT DETECTORS AT CEILING HEIGHT OR 12'-0" MAX.

I. ALL RECEPTACLE POWER FOR SECURITY COMPONENTS SHALL BE COORDINATED CLOSELY BETWEEN ELECTRICAL AND SECURITY CONTRACTORS PRIOR TO ROUGH-IN.

J. GROUND IN ACCORDANCE WITH MANUFACTURER'S REQUIREMENTS.

K. THE SECURITY SYSTEM SHALL BE INTERCONNECTED WITH FACILITY BUILDING AUTOMATION SYSTEM (BAS) TO MONITOR ARMED AND ALARM STATUS OF THE SECURITY SYSTEM.

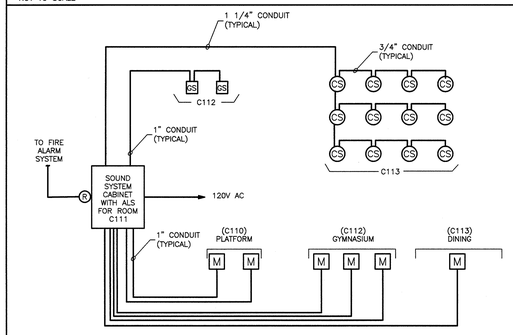
L. ALL WIRING SHALL BE PLENUM RATED.

M. SYSTEM MONITORING VIA A MONITORING SERVICE SHALL BE INCLUDED AS PART OF THE SYSTEM.

N. PROVIDE INTRUSION DETECTION BACKBONE CABLING AND INFRASTRUCTURE TO EACH IDF AS NEEDED. COORDINATE DEVICE LOCATIONS AND QUANTITIES AS IDENTIFIED ON PLANS.

O. SEE PLANS FOR LOCATIONS AND QUANTITIES.

DETAIL NOT TO SCALE — SECURITY INTRUSION DETECTION SYSTEM RISER — **02**



GYMNASIUM/DINING ROOM SOUND SYSTEM RISER

GENERAL NOTES:

A. REFER TO SPECIFICATION 26 77 62 FOR SOUND SYSTEM REQUIREMENTS.

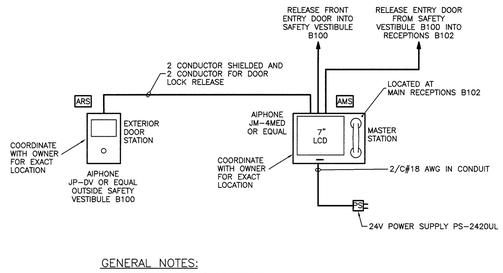
B. ASSISTED LISTENING SYSTEM SHALL BE PROVIDED AS PART OF SOUND SYSTEM. REFER TO SPECIFICATIONS FOR QUANTITY OF RECEIVERS REQUIRED.

C. SYSTEM SHALL BE 100% COMPLETE AND OPERATIONAL PRIOR TO TURNOVER TO OWNER.

D. OWNER TRAINING AND OPERATIONAL MANUALS REQUIRED AT COMPLETION.

IMPORTANT NOTE: THE SOUND SYSTEM COMPONENTS AND LOW VOLTAGE WIRING SHALL BE PROVIDED UNDER AN ALLOWANCE. REFER TO ARCHITECT'S LIST OF ALLOWANCES SECTION 01 21 00. ALL CONDUIT (POWER/LOW VOLTAGE), POWER WIRING, AND OUTLET BOXES SHALL BE PROVIDED BY THE ELECTRICAL CONTRACTOR AS PART OF THE BASE BID.

DETAIL NOT TO SCALE — GYMNASIUM/DINING ROOM SOUND SYSTEM RISER — **08**



GENERAL NOTES:

A. WIRING SHALL BE IN 3/4"C MINIMUM.

B. LOCATION FOR THE MASTER/DOOR STATION SHALL BE COORDINATED WITH OWNER PRIOR TO ROUGH-IN.

C. THE ELECTRICAL CONTRACTOR SHALL COORDINATE THE PLACEMENT OF A RECEPTACLE IN THE VICINITY OF THE MASTER STATION, SO POWER SUPPLY AND CORD CAN BE PLUGGED INTO MASTER STATION.

D. SYSTEM SHALL BE 100% TESTED AND OPERABLE PRIOR TO FINAL TURNOVER TO OWNER.

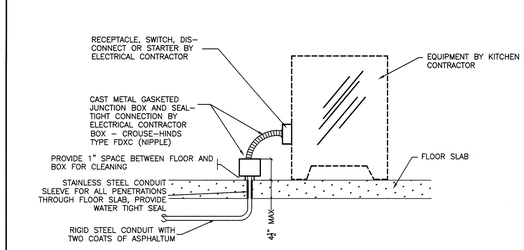
E. OWNER SHALL BE TRAINED IN THE USE OF THIS SYSTEM AT PROJECT COMPLETION.

F. MANUFACTURER'S: AIPHONE OR EQUAL BY PAXTON, ALPHA. ⚠1

G. REFER TO SPECIFICATION 28 16 00.

IMPORTANT NOTE: THE VIDEO-INTERCOM SYSTEM COMPONENTS AND LOW VOLTAGE WIRING SHALL BE PROVIDED UNDER AN ALLOWANCE. REFER TO ARCHITECT'S LIST OF ALLOWANCES SECTION 01 21 00. ALL CONDUIT (POWER/LOW VOLTAGE), POWER WIRING AND OUTLET BOXES SHALL BE PROVIDED BY THE ELECTRICAL CONTRACTOR AS PART OF THE BASE BID.

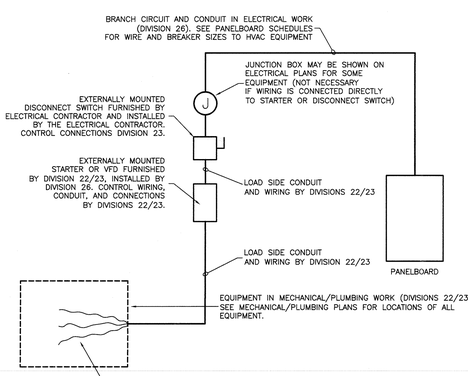
DETAIL NOT TO SCALE — VIDEO INTERCOM ENTRY SYSTEM — **06**



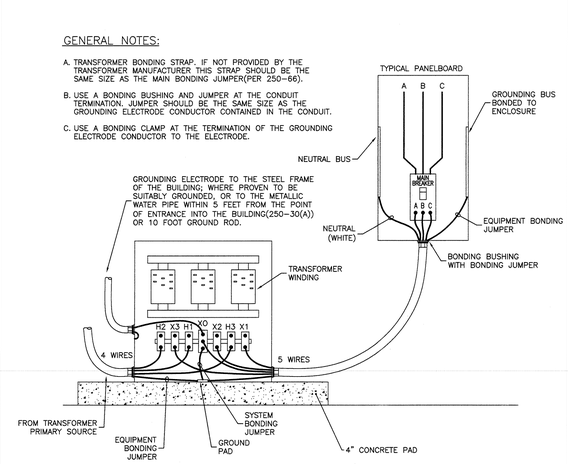
GENERAL NOTE:

THE ELECTRICAL CONTRACTOR SHALL PROVIDE ALL NECESSARY RECEPTACLES, SWITCHES, DISCONNECTS AND STARTERS ASSOCIATED WITH THE KITCHEN EQUIPMENT. PROVIDE ALL LINE AND LOAD SIDE WIRING AND MAKE FINAL CONNECTIONS TO THE EQUIPMENT. PROVIDE STAINLESS STEEL CONDUIT SLEEVES FOR ALL CONDUITS IN KITCHEN AND SERVING AREA THAT PENETRATE FLOOR SLAB. COORDINATE FINAL LOCATIONS WITH FOOD SERVICE EQUIPMENT SUPPLIER.

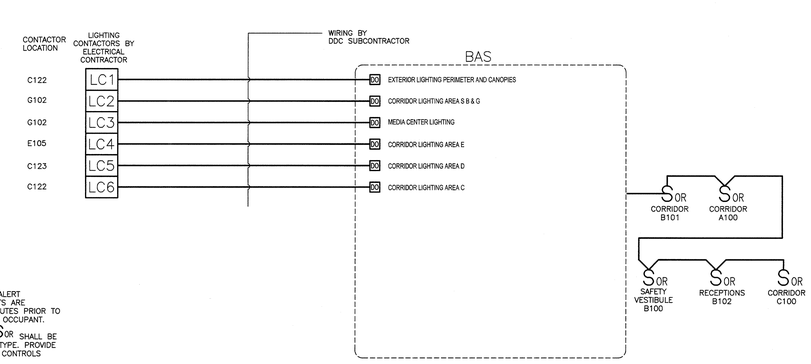
DETAIL NOT TO SCALE — KITCHEN EQUIPMENT CONNECTIONS — **03**



DETAIL NOT TO SCALE — TYPICAL EQUIPMENT CONNECTIONS — **07**



DETAIL NOT TO SCALE — DRY TYPE TRANSFORMER GROUNDING DETAIL — **05**



GENERAL NOTES:

A. BAS SYSTEM SHALL PROVIDE BLINK/ALERT CAPABILITIES SUCH THAT WHEN LIGHTS ARE PROGRAMMED TO SHUT-OFF, 10 MINUTES PRIOR TO SHUT-OFF, LIGHTS BLINK TO NOTIFY OCCUPANT.

B. THE LIGHTING OVERRIDE SWITCHES S OR SHALL BE LOW VOLTAGE TYPE SINGLE BUTTON TYPE. PROVIDE AND INSTALLED BY THE DIVISION 23 CONTROLS CONTRACTOR.

C. THE LIGHTING CONTACTORS ARE MECHANICALLY HELD TYPE. THE BAS SYSTEM SHALL BE INTEGRATED INTO THE CONTACTORS TO ALLOW LIGHTS IN CORRIDORS AND EXTERIOR YTO BE TURNED ON/OFF AT PRE-SCHEDULED TIMES.

D. REFER TO SPECIFICATION 260923.

E. ALL POWER WIRING BY THE ELECTRICAL CONTRACTOR AND ALL LOW VOLTAGE WIRING BY THE DIVISION 23 CONTROLS CONTRACTOR.

DETAIL NOT TO SCALE — LIGHTING / BAS CONTROL — **01**

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PDC Project #19003

NORTH CAROLINA PROFESSIONAL SEAL 048439 ENGINEER ROBERT A. CLARK 6/26/19

CONTRACTOR TO VERIFY ALL DIMENSIONS

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ISSUE DATE: 04.30.2019
DRAWN BY: JPT
CHECKED BY: RAC
PROJECT: 1821

STUMP SOUND ELEMENTARY SCHOOL
ONSLOW COUNTY SCHOOLS
STUMP SOUND, NORTH CAROLINA
ELECTRICAL DETAILS

REVISION SCHEDULE

	DATE	REFERENCE
⚠1	06/25/19	DPI COMMENTS

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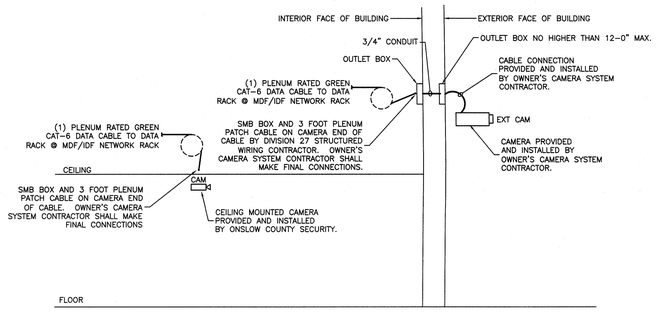
E105

Plotted By: chris
Plotted: June 25, 2019 @ 5:30 PM
Project #: 190202
Sheet: E105



GENERAL NOTES:

A. ALL CONDUIT AND OUTLET BOXES BY ELECTRICAL CONTRACTOR.

B. ALL CAT-6 PLENUM RATED CAMERA CABLING SHALL BE GREEN AND PROVIDED AND INSTALLED BY THE DIVISION 27 STRUCTURED WIRING CONTRACTOR.

C. SEE SPECIFICATIONS 27 00 01 AND 28 23 00.

D. PROVIDE 10'-0" SERVICE LOOP AT CAMERA LOCATION.

E. ELECTRICAL AND STRUCTURED WIRING CONTRACTORS SHALL COORDINATE ALL WORK ASSOCIATED WITH CAMERAS WITH ONSLOW COUNTY SCHOOLS SECURITY/OTHERS PRIOR TO ANY ROUGH-IN.

F. CAMERA CABLES SHALL BE TERMINATED ON SEPARATE PATCH PANELS @ DATA RACKS. NETWORK POE SWITCHES SHALL BE PROVIDED BY ONSLOW COUNTY IT/SECURITY DEPARTMENT. AT THE CAMERA END OF THE CABLE THE DIVISION 27 CONTRACTOR SHALL PROVIDED A SMB CONNECTOR AND A 3 FOOT PLENUM RATED PATCH CORD.

G. GREEN CAT-6 PLENUM RATED CAMERA DATA CABLE LENGTHS SHALL NOT EXCEED 90 METERS. CONTRACTOR SHALL TAKE CARE IN MAINTAINING THESE LENGTHS.

H. ALL CAMERA CABLES SHALL BE TESTED IN COMPLIANCE WITH THE DATA CABLE REQUIREMENTS.

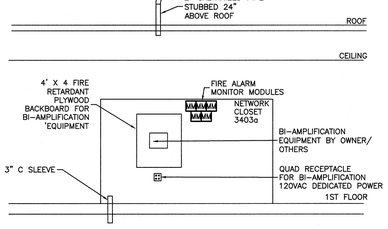
IMPORTANT NOTE:

THE DIVISION 28 I/P CAMERA SYSTEM WHICH INCLUDES CAMERAS, MOUNTS, PROGRAMMING/SETUP, AIMING, LICENSEES, AND FINAL CONNECTIONS SHALL BE PROVIDED UNDER AN ALLOWANCE. REFER TO ARCHITECT'S LIST OF ALLOWANCES SECTION 01 21 00.

ALL CONDUIT (POWER/LOW VOLTAGE), POWER WIRING AND OUTLET BOXES SHALL BE PROVIDED BY THE ELECTRICAL CONTRACTOR AS PART OF THE BASE BID.

ALSO NOTE: THE CAT-6 STRUCTURED WIRING, SMB CONNECTORS, PATCH PANELS, WIRE MANAGERS AND CABLE TESTING FOR THE CAMERAS SHALL BE PROVIDED AND INSTALLED BY THE DIVISION 27 CONTRACTOR AS PART OF THE BASE BID.

DETAIL NOT TO SCALE — SECURITY I/P CAMERA WIRING / INSTALLATION DETAIL — **09**



GENERAL NOTES:

A. ELECTRICAL CONTRACTOR SHALL PROVIDE 4' x'4 FIRE RETARDANT PLYWOOD BACKBOARD FOR EQUIPMENT MOUNTING.

B. ALL BI-AMPLIFICATION EQUIPMENT AND ASSOCIATED CABLING SHALL BE PROVIDED BY OWNER/OTHERS. CABLING SHALL BE PLENUM RATED.

C. THE ELECTRICAL CONTRACTOR SHALL PROVIDE A QUAD RECEPTACLE BELOW THE BACKBOARD.

D. PROVIDE 2" CONDUIT (COMMUNICATION) FROM BACKBOARD LOCATION TO ABOVE ACCESSIBLE CEILING.

E. PROVIDE 2" CONDUIT (COMMUNICATION) FROM TECHNOLOGY ROOM F101 TO ROOF ANTENNA. THE CONDUIT THRU ROOF SHALL BE 2" RGS WITH WEATHERHEAD. CONDUIT SHALL EXTEND 24" ABOVE ROOF. CONDUIT SHALL BE SECURED TO STRUCTURE BELOW. FINAL LOCATION SHALL BE COORDINATED PRIOR TO ROUGH-IN.

F. IF CONDUIT IS NOT USED BY OWNER/OTHERS, PROVIDE SEAL AND CAP FOR FUTURE USE. COORDINATE WITH OWNER/OTHERS PRIOR TO ROUGH-IN.

G. PROVIDE MONITOR MODULES FOR FIRE ALARM SYSTEM SUPERVISORY. FIRE ALARM CONTRACTOR SHALL COORDINATE CLOSELY WITH BDA SYSTEM CONTRACTOR FOR FINAL FIRE ALARM CONNECTIONS TO EQUIPMENT.

H. CIRCUIT BREAKER THAT SERVES QUAD RECEPTACLE SHALL BE FED FROM GENERATOR DEDICATED CIRCUIT AND SHALL BE PROVIDED WITH BREAKER LOCK TO PREVENT THE BREAKER FROM BEING TURNED "OFF".

IMPORTANT NOTE:

THE BI-DIRECTIONAL AMPLIFICATION SYSTEM (EMERGENCY RESPONDER RADIO) SHALL BE PROVIDED UNDER AN ALLOWANCE. REFER TO ARCHITECT'S LIST OF ALLOWANCES SECTION 01 21 00.

ALL CONDUIT, POWER WIRING AND OUTLET BOXES SHALL BE PROVIDED BY THE ELECTRICAL CONTRACTOR AS PART OF THE BASE BID.

THE FACILITY UNDER THE ALLOWANCE WILL REQUIRE A SITE SURVEY TO SEE IF THE RADIO SYSTEM IS NEEDED. THAT SURVEY IS PROVIDED BY A RESPONDER RADIO SYSTEMS CONTRACTOR. IF THE SURVEY INDICATES THAT THE SYSTEM IS NEEDED, THE SYSTEM SHALL BE DESIGNED AND PROVIDED BY A COMPANY THAT SPECIALIZES IN THE RESPONDER RADIO SYSTEMS.

THE LOCAL FIRE MARSHALL (AHJ) SHALL BE CONSULTED PRIOR TO ANY WORK AND/OR SURVEY BEING PERFORMED AT THIS SCHOOL.

DETAIL NOT TO SCALE — **BI-DIRECTIONAL AMPLIFICATION SYSTEM (BDA)** — **08**

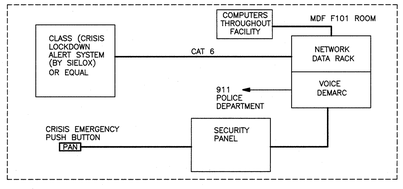
NOTES:

1. THIS SIELOX CLASS LOCKDOWN SYSTEM SHALL BE PROVIDED FROM ALLOWANCE. REFER TO ALLOWANCE SECTION 01 21 00.
3. CONTRACTOR SHALL LOCATE HEAD-END CRISIS ELECTRONIC EQUIPMENT AT IDF/MDF ROOM FOR BEST ACCESSIBLE LOCATION.
4. CONTRACTOR SHALL COORDINATE CLOSELY WITH OWNERS SECURITY DEPARTMENT FOR PHONE LINES FOR 911 CALLOUT.
5. THE SYSTEM GRAPHICAL ZONE MAP ACCESSIBLE FROM THE NETWORK SECURITY SOFTWARE SHALL REFLECT THE LATEST FLOOR PLAN AS PROVIDED BY THE ARCHITECT.
6. PRIOR TO FINAL COMPLETION AND TURN OVER TO OWNER THE SYSTEM SHALL BE 100% OPERATIONAL AND APPROVED BY THE OWNERS SECURITY DEPARTMENT.
8. THE SECURITY CONTRACTOR SHALL BE LICENSED IN THE STATE OF NORTH CAROLINA.

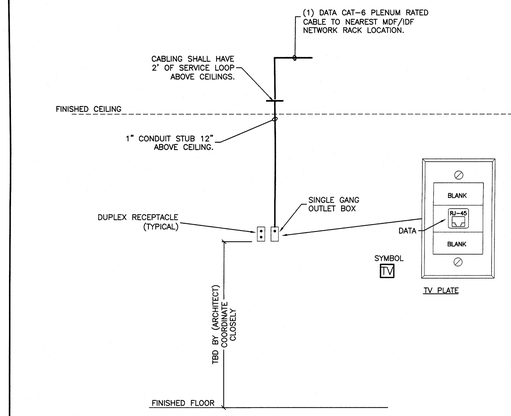
IMPORTANT NOTE:

THE SIELOX (CLASS) CRISIS LOCKDOWN ALERT STATUS SYSTEM EQUIPMENT, SOFTWARE, LICENSING AND WIRING SHALL BE PROVIDED AND INSTALLED AS PER THE ALLOWANCE. REFER TO ARCHITECT'S LIST OF ALLOWANCES SECTION 01 21 00.

THE ELECTRICAL CONTRACTOR SHALL PROVIDE 3/4" CONDUIT AND OUTLET BOX AS DIRECTED BY THE OWNER'S CONTRACTOR FOR THE PANIC PUSH BUTTON. ROUTE CONDUIT FROM OUTLET BOX TO ABOVE ACCESSIBLE CEILING THE CONDUIT AND OUTLET BOX SHALL BE PART OF THE BASE BID.



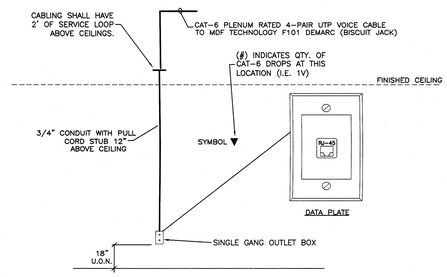
DETAIL NOT TO SCALE — **LOCKDOWN SYSTEM RISER** — **07**



GENERAL NOTES:

A. REFER TO SPECIFICATION 270001 FOR DATA CONNECTION FOR TV.

DETAIL NOT TO SCALE — TYPICAL TV "FLAT PANEL" OUTLET — **06**



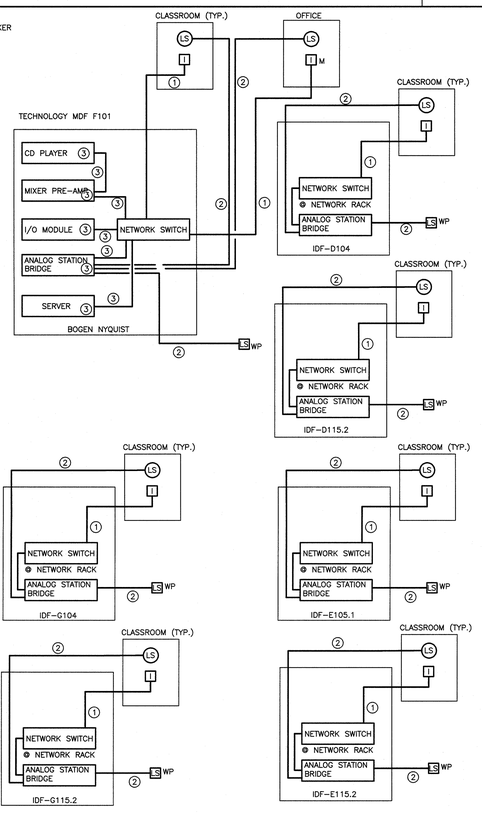
GENERAL NOTES:

A. REFER TO SPECIFICATIONS 270001 FOR TELECOMMUNICATIONS DISTRIBUTION SYSTEM REQUIREMENTS.

B. VOICE OUTLETS FOR ELEVATORS, FIRE ALARM, AND SECURITY SYSTEMS SHALL BE COORDINATED CLOSELY WITH THOSE SYSTEM PROVIDERS FOR EXACT LOCATION.

DETAIL NOT TO SCALE — VOICE OUTLET — **03**

LS ANALOG SPEAKER
T STAFF PHONE
IP IP MODULE



NOTES: (AS INDICATED ON THIS PLAN BY A NUMBER IN A ⬡)

1. CABLING SHALL BE CAT-6 PLENUM RATED. THIS CABLING SHALL BE PROVIDED AND INSTALLED BY THE DIVISION 27 STRUCTURED WIRING CONTRACTOR AS PART OF THE BASE BID.
2. CABLING SHALL BE 2/C OS PLENUM RATED PROVIDED AND INSTALLED BY THE PA SYSTEM CONTRACTOR AS PART OF AN ALLOWANCE, REFER TO PAGING INTERCOM SYSTEM ALLOWANCE IN ARCHITECTS ALLOWANCE SECTION 01 21 00.
3. ALL COMPONENTS AND CABLING BETWEEN THE NETWORK SWITCHES, ANALOG BRIDGES, ETC INTERNAL TO TECHNOLOGY MDF ROOM F101 SHALL BE BY THE PAGING INTERCOM SYSTEM CONTRACTOR AS PART OF THE ALLOWANCE.
4. REFER TO SPECIFICATIONS 27 51 13.

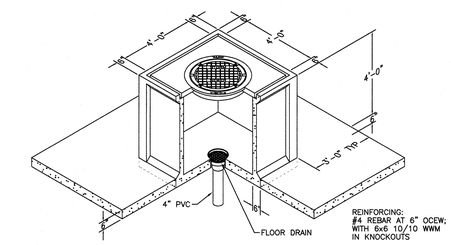
IMPORTANT NOTE:

THE INTERCOM PAGING SYSTEM EQUIPMENT, DEVICES, ANALOG 2/C OS CABLING AND ITS INSTALLATION SHALL BE PROVIDED UNDER AN ALLOWANCE. REFER TO ARCHITECT'S ALLOWANCE SECTION 01 21 00.

ALL CONDUIT (POWER/LOW VOLTAGE), POWER WIRING AND OUTLET BOXES SHALL BE PROVIDED BY THE ELECTRICAL CONTRACTOR AS PART OF THE BASE BID.

ALSO NOTE: THE CAT-6 STRUCTURED WIRING, PATCH PANELS, WIRE MANAGERS AND CABLE TESTING FOR THE STAFF PHONES SHALL BE PROVIDED AND INSTALLED BY THE DIVISION 27 CONTRACTOR AS PART OF THE BASE BID.

DETAIL NOT TO SCALE — **I/P PAGING INTERCOM SYSTEM RISER** — **04**

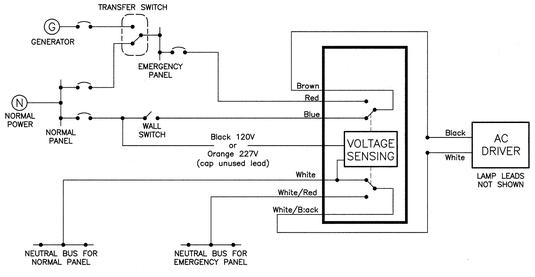


NOTES:

1. THE ELECTRICAL CONTRACTOR IS TO PROVIDE MANHOLE WITH EAST JORDAN IRON WORKS MODEL #V-2810-5 25" OR EQUAL WATERTIGHT MANHOLE FRAME AND COVER. FLOOR DRAIN IN BOTTOM OF MANHOLE SHALL BE ZURN #Z-507 OR EQUAL 7" DIAMETER CAST IRON TOP AND BODY WITH #Z-1099 BACK WATER VALVE. THE CONTRACTOR SHALL RUN THIS 4" PVC DRAINAGE LINE TO DRY WELL.
2. MANHOLE SHALL BE SUPPLIED WITH 3'-0" EXTRA REINFORCEMENT FOR BALLAST PAD ON ALL SIDES OF MANHOLE. THE ELECTRICAL CONTRACTOR SHALL POUR 6" THICK WHEN MANHOLE IS SET INTO GROUND. CONCRETE SHALL BE 4000 psi AT 28 DAYS.

MANHOLE CONSTRUCTION

DETAIL NOT TO SCALE — **02**



NORMAL OPERATION (Shown Above)
AC LIGHTING BALLAST SUPPLIED BY NORMAL PANEL & CONTROLLED BY WALL SWITCH

GENERATOR OPERATION
AC LIGHTING DRIVER SUPPLIED BY GENERATOR THROUGH EMERGENCY PANEL AND INDEPENDENT OF WALL SWITCH POSITION

WHERE GTD SERVES 0-10V DIMMABLE FIXTURES PROVIDE AUXILIARY CONTACTS TO DRIVE -010V CONTROLS TO FULL BRIGHTNESS IN THE EVENT OF A POWER FAILURE.

DETAIL NOT TO SCALE — GENERATOR TRANSFER DEVICE — **01**

CONTRACTOR TO VERIFY ALL DIMENSIONS.

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PDC Project #19003

NORTH CAROLINA PROFESSIONAL SEAL 015439 ENGINEER HERBERT A. CLARK 4/28/19

PINNACLE ARCHITECTURE
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ISSUE DATE: 04.30.2019
DRAWN BY: JPT
CHECKED BY: RAC
PROJECT: 1821

STUMP SOUND ELEMENTARY SCHOOL
ONSLOW COUNTY SCHOOLS
STUMP SOUND, NORTH CAROLINA
ELECTRICAL DETAILS

REVISION SCHEDULE

	DATE	REFERENCE

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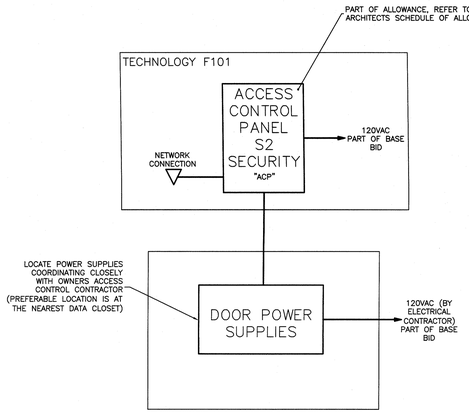
E106

Project # 1900/02
Sheet # E106
Plotted By: chris
Plotted: April 29, 2019 @ 3:09 PM



GENERAL NOTES:

A. ALL WORK SHALL BE COORDINATED BETWEEN OWNER, ARCHITECT, ELECTRICAL CONTRACTOR, ACCESS CONTROL CONTRACTOR AND DOOR HARDWARE CONTRACTOR PRIOR TO ROUGH-IN. A PRE-INSTALLATION MEETING SHALL OCCUR PRIOR TO INSTALLATION. ALL ROUGH-INS, CONDUIT, OUTLET BOXES, 120VAC SHALL BE PROVIDED AS PART OF THE BASE BID.

B. REFER TO DOOR HARDWARE SPECIFICATION.

C. ALL ROUGH-INS SHALL BE COORDINATED WITH THE OWNER AND ACCESS CONTROL SYSTEM CONTRACTOR HIRED BY THE OWNER.

D. AS-BUILT DRAWINGS SHALL BE SUBMITTED AS PART OF O&M MANUALS.

E. POWER SUPPLIES SHALL BE LOCATED AT IDF/MDF CLOSETS AS REQUIRED FOR EASE OF MAINTENANCE BY ONSLOW MAINTENANCE.

F. ALL 120VAC POWER THAT IS REQUIRED FOR SYSTEM SHALL BE COORDINATED AND PROVIDED BY THE ELECTRICAL CONTRACTOR.

G. DOOR DETAILS ON THIS SHEET ARE FOR REFERENCE ONLY. THE INSTALLATION REQUIREMENTS SHALL BE AS PER DOOR HARDWARE REQUIREMENTS. CARD READERS, STRIKES, POWER SUPPLIES, REX MOTIONS AND ASSOCIATED CONDUIT AND WIRING SHALL BE COORDINATED CLOSELY BETWEEN TRADES. THIS ALSO INCLUDES THE OWNER'S SECURITY CONTRACTOR.

H. CARD READERS MOUNTED IN SINGLE GANG BOX WITH 3/4" CONDUIT TO JUNCTION BOX AND/OR CEILING VOID, COORDINATE CLOSELY.

I. ALL REX LOCATIONS AND DOOR POSITION SWITCHES SHALL BE COORDINATED AND ROUGHED-IN BY THE ELECTRICAL CONTRACTOR.

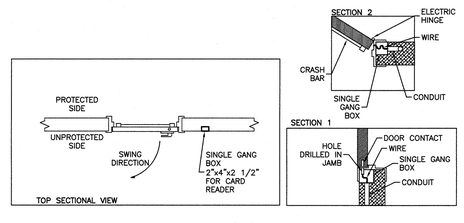
J. REFER TO ARCHITECTURAL DOOR SCHEDULE AND ELECTRICAL PLANS FOR CARD READER/DOOR ACCESS CONTROL LOCATIONS.

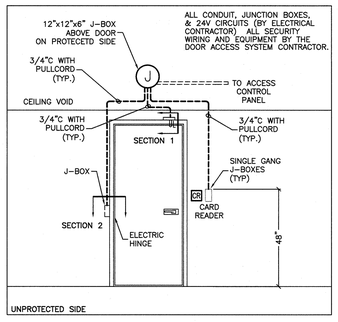
IMPORTANT NOTE:

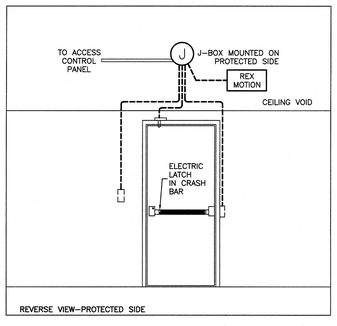
THE DIVISION 28 ACCESS CONTROL SYSTEM SHALL BE PROVIDED UNDER AN ALLOWANCE. THE SYSTEM SHALL PROVIDE ALL THE COMPONENTS (I.E. CARD READERS, ACCESS CONTROL EQUIPMENT, LOW VOLTAGE WIRING) AND ANY OTHER ACCESSORIES REQUIRED FOR A COMPLETE SYSTEM. REFER TO ARCHITECT'S ALLOWANCE SECTION 01 21 00.

ALL CONDUIT (POWER/LOW VOLTAGE), POWER WIRING AND OUTLET BOXES SHALL BE PROVIDED BY THE ELECTRICAL CONTRACTOR AS PART OF THE BASE BID.

DETAIL NOT TO SCALE — DOOR ACCESS CONTROL SYSTEM RISER — **05**







GENERAL NOTES:

A. REFER TO DOOR HARDWARE SPECIFICATION FOR DOOR HARDWARE.

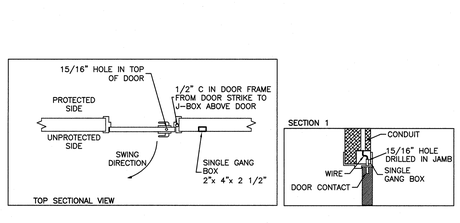
B. THE INSTALLATION OF ALL CONDUIT, WIRING, JUNCTION BOXES, TERMINATIONS, CARD READERS AND EQUIPMENT SHALL BE COORDINATED BETWEEN THE ELECTRICAL, SECURITY AND DOOR HARDWARE CONTRACTORS PRIOR TO INSTALLATION.

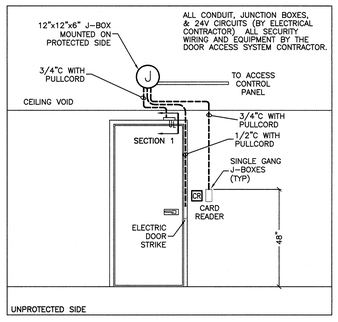
C. POWER SUPPLIES SHALL BE LOCATED IN READILY ACCESSIBLE LOCATION AT NEAREST NETWORK CLOSET, NOT ABOVE CEILINGS.

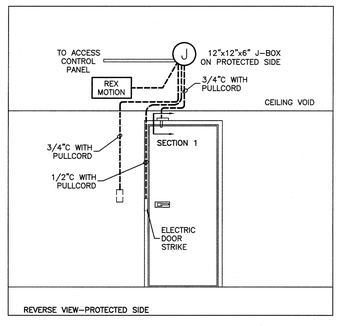
D. THIS DOOR DETAIL IS A GENERAL DETAIL AND DOES NOT REFLECT THE ACTUAL DOOR PROVIDED. THE CONTRACTORS SHALL COORDINATE WITH ALL APPLICABLE TRADES AND INCORPORATE ALL REQUIRED ACCESS CONTROLS FOR A COMPLETE AND 100% OPERATIONAL DOOR.

E. INSTALLATION SHALL BE COORDINATED CLOSELY, PRIOR TO ROUGH-IN WITH THE DOOR HARDWARE AND OWNERS SECURITY CONTRACTOR.

DETAIL NOT TO SCALE — EXTERIOR SINGLE DOORS W/CRASH BAR — **06**







GENERAL NOTES:

A. REFER TO DOOR HARDWARE SPECIFICATION FOR DOOR HARDWARE.

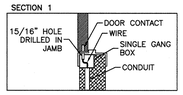
B. THE INSTALLATION OF ALL CONDUIT, WIRING, JUNCTION BOXES, TERMINATIONS, CARD READERS AND EQUIPMENT SHALL BE COORDINATED BETWEEN THE ELECTRICAL, SECURITY AND DOOR HARDWARE CONTRACTORS PRIOR TO INSTALLATION.

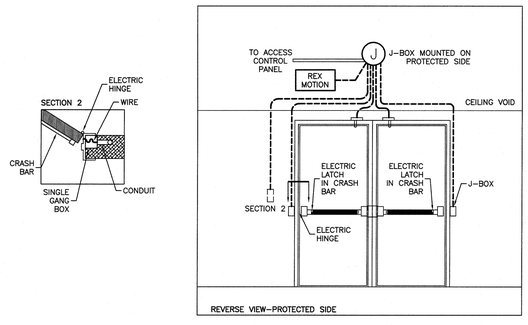
C. POWER SUPPLIES SHALL BE LOCATED IN READILY ACCESSIBLE LOCATION AT NEAREST NETWORK CLOSET, NOT ABOVE CEILINGS.

D. THIS DOOR DETAIL IS A GENERAL DETAIL AND DOES NOT REFLECT THE ACTUAL DOOR PROVIDED. THE CONTRACTORS SHALL COORDINATE WITH ALL APPLICABLE TRADES AND INCORPORATE ALL REQUIRED ACCESS CONTROLS FOR A COMPLETE AND 100% OPERATIONAL DOOR.

E. INSTALLATION SHALL BE COORDINATED CLOSELY, PRIOR TO ROUGH-IN WITH THE DOOR HARDWARE AND OWNERS SECURITY CONTRACTOR.

DETAIL NOT TO SCALE — EXTERIOR SINGLE DOORS W/ELECTRICK STRIKE — **04**





GENERAL NOTES:

A. REFER TO DOOR HARDWARE SPECIFICATION FOR DOOR HARDWARE.

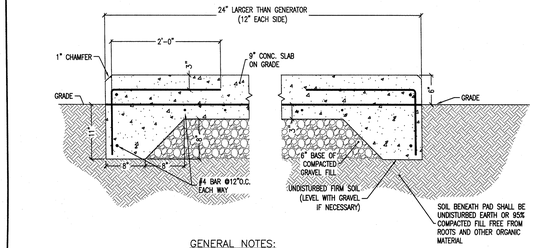
B. THE INSTALLATION OF ALL CONDUIT, WIRING, JUNCTION BOXES, TERMINATIONS, CARD READERS AND EQUIPMENT SHALL BE COORDINATED BETWEEN THE ELECTRICAL, SECURITY AND DOOR HARDWARE CONTRACTORS PRIOR TO INSTALLATION.

C. POWER SUPPLIES SHALL BE LOCATED IN READILY ACCESSIBLE LOCATION AT NEAREST NETWORK CLOSET, NOT ABOVE CEILINGS UNLESS OTHERWISE APPROVED.

D. THIS DOOR DETAIL IS A GENERAL DETAIL AND DOES NOT REFLECT THE ACTUAL DOOR PROVIDED. THE CONTRACTORS SHALL COORDINATE WITH ALL APPLICABLE TRADES AND INCORPORATE ALL REQUIRED ACCESS CONTROLS FOR A COMPLETE AND 100% OPERATIONAL DOOR.

E. INSTALLATION SHALL BE COORDINATED CLOSELY, PRIOR TO ROUGH-IN WITH THE DOOR HARDWARE AND OWNERS SECURITY CONTRACTOR.

DETAIL NOT TO SCALE — EXTERIOR DOUBLE DOORS W/CRASH BARS — **03**



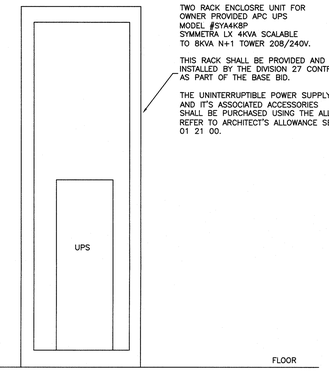
GENERAL NOTES:

A. REINFORCING STEEL SHALL BE ASTM A-165 GRADE 60.

B. CONCRETE SHALL BE TYPE "C", AIR-ENTRAINED, 3000 P.S.I. @28 DAYS. SURFACE SHALL BE LEVEL AND TROWELLED SMOOTH.

GENERATOR PAD DETAIL

DETAIL NOT TO SCALE — GENERATOR PAD — **02**



GENERAL NOTES:

A. REFER TO DRAWING E300 FOR TECHNOLOGY ROOM F101. THE UPS IS IDENTIFIED IN THE RACK LINE-UP. THE DIVISION 27 CONTRACTOR SHALL PROVIDE THE RACK AS PART OF THE BASE BID FOR THE OWNER'S EQUIPMENT.

B. THE OWNER SHALL PURCHASE THE "UPS" AND IT ASSOCIATED ACCESSORIES USING THE ALLOWANCE. THE EQUIPMENT SHALL BE TURNED OVER TO THE ELECTRICAL & DIVISION 27 CONTRACTOR FOR INSTALLATION.

C. ALL ELECTRICAL WORK SUCH AS: CONDUIT/WIRING, RECEPTACLES, INSTALLING UPS/RACK INSTALLATION SHALL BE PART OF THE BASE BID.

D. ELECTRICAL CONTRACTOR SHALL ALSO REFER TO THE POWER RISER ON THE ELECTRICAL DISTRIBUTION ASSOCIATED WITH THE UPS. THIS INSTALLATION SHALL BE COORDINATED CLOSELY WITH THE OWNER PRIOR TO COMMENCING WORK.

E. THE OWNER HAS REQUESTED THAT THE RECEPTACLES TAHT ARE SERVED FROM THE "UPS" ARE "RED".

DETAIL NOT TO SCALE — TECHNOLOGY ROOM F101 UNINTERRUPTIBLE POWER SUPPLY (UPS) — **01**

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PDC Project #19003

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8/28/19

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ISSUE DATE: 04.30.2019
DRAWN BY: JPT
CHECKED BY: RAC
PROJECT: 1821

STUMP SOUND ELEMENTARY SCHOOL
ONSLOW COUNTY SCHOOLS
STUMP SOUND, NORTH CAROLINA
ELECTRICAL DETAILS

REVISION SCHEDULE

⚠	DATE	REFERENCE

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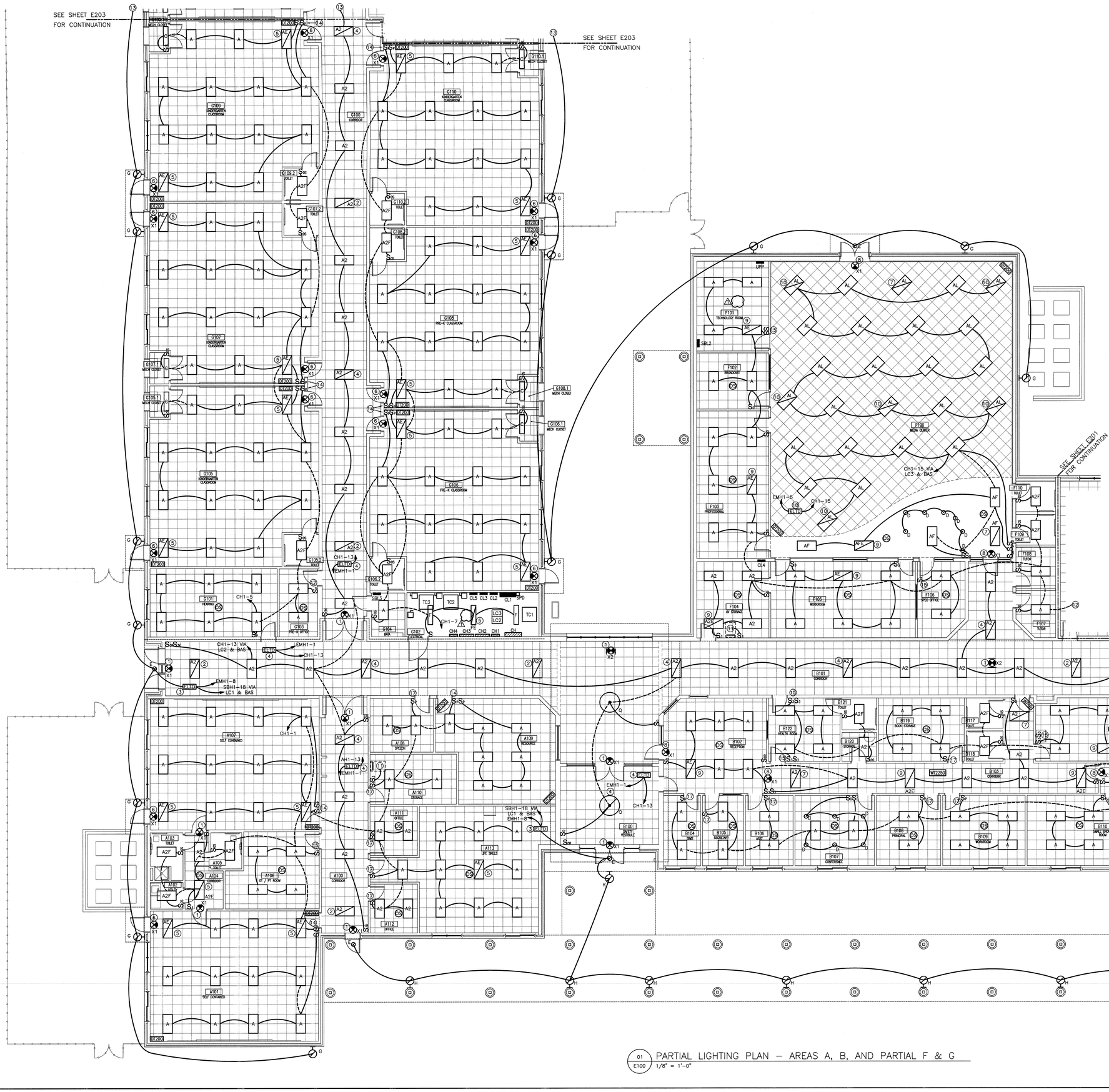
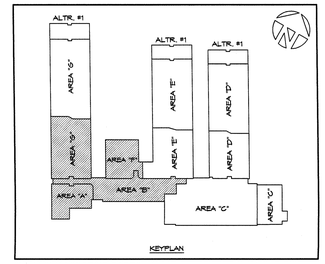
E107

Project # 190002
Plotted By: John
Plotted: Apr 26, 2019 @ 3:06 PM
Sheets: 1 of 1





NOTES: (AS INDICATED ON THIS PLAN BY A NUMBER IN A ◯)

1. EMERGENCY FIXTURE – WIRE AHEAD OF SWITCHES AND/OR BAS. CONNECT TO EMERGENCY CIRCUIT EMH1-1.
2. NIGHT LIGHT – WIRE AHEAD OF SWITCHES AND/OR BAS. CONNECT TO EMERGENCY CIRCUIT EMH1-1.
3. EMERGENCY EXTERIOR FIXTURE – WIRE THROUGH UL924 ELTD TO NORMAL/EMERGENCY CIRCUITS AS SHOWN. FIXTURE SHALL TURN ON/OFF WITH BAS, BUT UPON LOSS OF NORMAL POWER, FIXTURE SHALL ILLUMINATE.
4. EMERGENCY FIXTURE IN CORRIDOR – WIRE THROUGH REMOTE UL924 ELTD TO NORMAL/EMERGENCY CIRCUITS AS SHOWN. FIXTURE SHALL TURN ON/OFF WITH BAS, BUT UPON LOSS OF NORMAL POWER, FIXTURE SHALL ILLUMINATE.
5. EMERGENCY FIXTURE – WIRE THROUGH INTERNAL UL924 ELTD TO NORMAL CIRCUIT SHOWN. WIRE INTERNAL ELTD TO EMERGENCY CIRCUIT EMH1-3.
6. EMERGENCY FIXTURE IN CLASSROOM. WIRE AHEAD OF SWITCHES AND/OR BAS. CONNECT TO EMERGENCY CIRCUIT EMH1-3.
7. NIGHT LIGHT – WIRE AHEAD OF SWITCHES. CONNECT TO EMERGENCY CIRCUIT EMH1-5.
8. EMERGENCY FIXTURE – WIRE AHEAD OF SWITCHES AND/OR BAS. CONNECT TO EMERGENCY CIRCUIT EMH1-5.
9. EMERGENCY FIXTURE – WIRE THROUGH INTERNAL UL924 ELTD TO NORMAL CIRCUIT AS SHOWN, EMERGENCY CIRCUIT EMH1-5. FIXTURE SHALL TURN ON/OFF WITH SWITCHES AND BAS, BUT UPON LOSS OF NORMAL POWER, FIXTURE SHALL ILLUMINATE.
10. EMERGENCY FIXTURES IN MEDIA CENTER – WIRE THROUGH UL924 ELTD TO NORMAL/EMERGENCY CIRCUITS AS SHOWN. FIXTURE SHALL TURN ON/OFF WITH SWITCHES AND BAS, BUT UPON LOSS OF NORMAL POWER, FIXTURE SHALL ILLUMINATE.
11. WIRE FROM SWITCH TO LIGHT FIXTURES ON MEZZANINE A ABOVE.
12. CONTINUED TO DRAWING E201.
13. CONTINUED ON DRAWING E203.
14. REFER TO DETAIL E102–11.
15. REFER TO DETAIL E102–12.
16. WIRE SWITCHES FOR 50% LIGHT OUTPUT ON ONE SWITCH AND 50% LIGHT OUTPUT ONOTHER SWITCH FOR 100% LIGHT OUTPUT WITH BOTH SWITCHES IN "ON" POSITION.
17. REFER TO DEATIL E102–07.

01 E100 PARTIAL LIGHTING PLAN – AREAS A, B, AND PARTIAL F & G
1/8" = 1'-0"

8' 4' 0 8' 16'
SCALE 1/8"=1'-0"

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PDC Project #19003

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6/26/19

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ISSUE DATE: 04.30.2019
DRAWN BY: JPT
CHECKED BY: RAC
PROJECT: 1821

STUMP SOUND ELEMENTARY SCHOOL
ONSLOW COUNTY SCHOOLS
STUMP SOUND, NORTH CAROLINA
PARTIAL LIGHTING PLAN AREAS A, B, F & G

REVISION SCHEDULE

	DATE	REFERENCE
1	06/25/19	DPI COMMENTS

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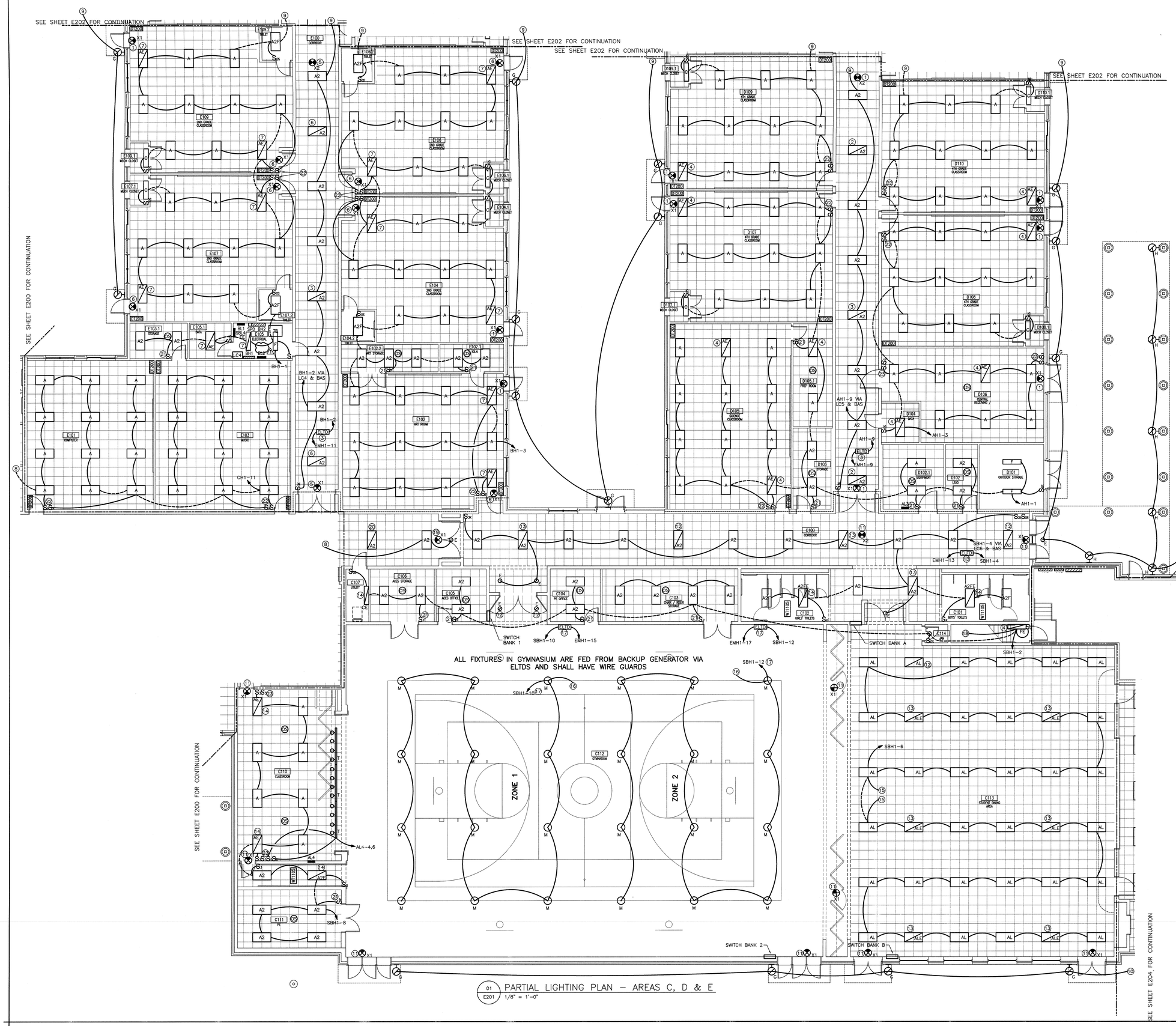
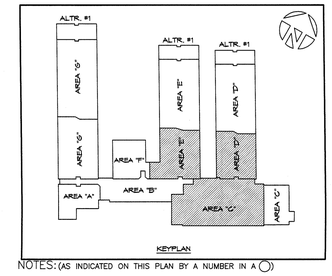
E200

Project #: 190202
Sheet: E200
Plotted By: dhris
Plotted: June 25, 2019 @ 5:00 PM

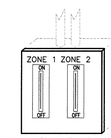


01 E201 PARTIAL LIGHTING PLAN – AREAS C, D & E
1/8" = 1'-0"



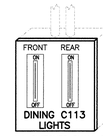
NOTES: (AS INDICATED ON THIS PLAN BY A NUMBER IN A ◯)

1. EMERGENCY FIXTURE – WIRE AHEAD OF SWITCHES AND/OR BAS. CONNECT TO EMERGENCY CIRCUIT EMH1–9.
2. NIGHT LIGHT/EMERGENCY LIGHT – WIRE AHEAD OF SWITCHES AND/OR BAS. CONNECT TO EMERGENCY CIRCUIT EMH1–9.
3. EMERGENCY FIXTURE IN CORRIDOR – WIRE THROUGH UL924 ELTD TO NORMAL/EMERGENCY CIRCUITS AS SHOWN. FIXTURE SHALL TURN ON/OFF WITH SWITCHES AND BAS, BUT UPON LOSS OF NORMAL POWER, FIXTURE SHALL ILLUMINATE.
4. EMERGENCY FIXTURE – WIRE THROUGH INTERNAL UL924 ELTD TO NORMAL LIGHTING CIRCUIT AS SHOWN. WIRE INTERNAL ELTD TO EMERGENCY CIRCUIT EMH1–9. FIXTURE SHALL TURN ON/OFF WITH OTHER FIXTURES IN ROOM, BUT UPON LOSS OF NORMAL POWER, FIXTURES SHALL ILLUMINATE.
5. EMERGENCY FIXTURE – WIRE AHEAD OF SWITCHES AND/OR BAS. CONNECT TO EMERGENCY CIRCUIT EMH1–11.
6. NIGHT LIGHT/EMERGENCY LIGHT – WIRE AHEAD OF SWITCHES AND/OR BAS. CONNECT TO EMERGENCY CIRCUIT EMH1–11.
7. EMERGENCY FIXTURE – WIRE THROUGH INTERNAL UL924 ELTD TO NORMAL LIGHTING CIRCUIT AS SHOWN. WIRE INTERNAL ELTD TO EMERGENCY CIRCUIT EMH1–11. FIXTURE SHALL TURN ON/OFF WITH OTHER FIXTURES IN ROOM, BUT UPON LOSS OF NORMAL POWER, FIXTURES SHALL ILLUMINATE.
8. CONTINUED ON DRAWING E200.
9. CONTINUED ON DRAWING E202.
10. CONTINUED ON DRAWING E204.
11. EMERGENCY FIXTURE – WIRE AHEAD OF SWITCHES AND/OR BAS. CONNECT TO EMERGENCY CIRCUIT EMH1–13.
12. NIGHT LIGHT/EMERGENCY LIGHT – WIRE AHEAD OF SWITCHES AND/OR BAS. CONNECT TO EMERGENCY CIRCUIT EMH1–13.
13. EMERGENCY FIXTURE – WIRE THROUGH REMOTE UL924 ELTD TO NORMAL LIGHTING CIRCUIT AS SHOWN. WIRE ELTD TO EMERGENCY CIRCUIT EMH1–13. FIXTURE SHALL TURN ON/OFF WITH OTHER FIXTURES IN ROOM, BUT UPON LOSS OF NORMAL POWER, FIXTURES SHALL ILLUMINATE.
14. EMERGENCY FIXTURE – WIRE THROUGH INTERNAL UL924 ELTD TO NORMAL LIGHTING CIRCUIT AS SHOWN. WIRE INTERNAL ELTD TO EMERGENCY CIRCUIT EMH1–13. FIXTURE SHALL TURN ON/OFF WITH OTHER FIXTURES IN ROOM, BUT UPON LOSS OF NORMAL POWER, FIXTURES SHALL ILLUMINATE.
15. CONNECT TO SWITCHBANKS A AND B. REFER TO DETAIL E201–02 ON THIS SHEET.
16. CONNECT TO SWITCHBANKS 1 AND 2. REFER TO DETAIL E201–03 ON THIS SHEET.
17. WIRE ALL FIXTURES IN SPACE VIA ELTD. WIRE TO CIRCUITS AS SHOWN.
18. CONTINUED TO DRAWING E205 MEZZANINE C LIGHTING PLAN.
19. EMERGENCY FIXTURE – WIRE AHEAD OF SWITCHES AND/OR BAS. CONNECT TO EMERGENCY CIRCUIT EMH1–1.
20. NIGHT LIGHT/EMERGENCY LIGHT – WIRE AHEAD OF SWITCHES AND/OR BAS. CONNECT TO EMERGENCY CIRCUIT EMH1–1.
21. REFER TO DETAIL E102–07..
22. REFER TO DETAIL E102–11.
23. REFER TO DETAIL E102–12.



GYMNASIUM C112 LIGHTS
ALL SWITCHES SHALL BE 3-WAY KEYED SWITCHES

03 E201 SWITCH BANKS 1 & 2
NOT TO SCALE



DINING C113 LIGHTS
ALL SWITCHES SHALL BE 3-WAY KEYED SWITCHES

02 E201 SWITCH BANKS A & B
NOT TO SCALE

8' 4' 0 8' 16'
SCALE 1/8"=1'-0"

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PDC Project #19003

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ISSUE DATE: 04.30.2019
DRAWN BY: JPT
CHECKED BY: RAC
PROJECT: 1821

STUMP SOUND ELEMENTARY SCHOOL
ONSLOW COUNTY SCHOOLS
STUMP SOUND, NORTH CAROLINA
PARTIAL LIGHTING PLAN
AREAS C, D & E

REVISION SCHEDULE

	DATE	REFERENCE
1	06/25/19	DPI COMMENTS

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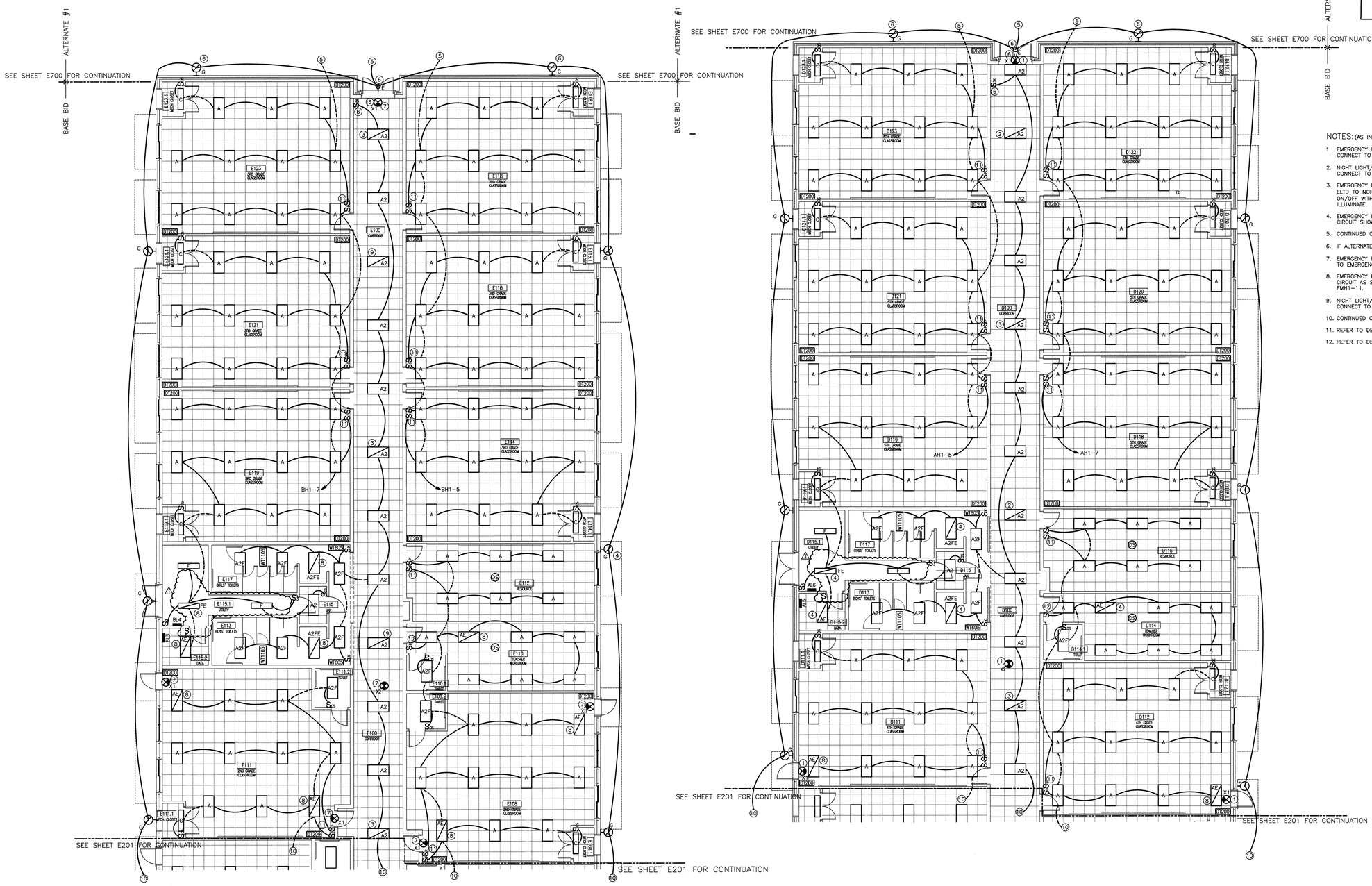
E201

Project #: 190002
Sheet: E201
Plotted By: chris
Plotted: June 25, 2019 @ 5:30 PM


SEE SHEET E700 FOR CONTINUATION
ALTERNATE #1
BASE BID
SEE SHEET E201 FOR CONTINUATION
SEE SHEET E700 FOR CONTINUATION
SEE SHEET E700 FOR CONTINUATION
SEE SHEET E201 FOR CONTINUATION
SEE SHEET E201 FOR CONTINUATION
SEE SHEET E201 FOR CONTINUATION
D123 5TH. GRADE CLASSROOM
D122 5TH. GRADE CLASSROOM
D121 5TH. GRADE CLASSROOM
D120 5TH. GRADE CLASSROOM
D119 5TH. GRADE CLASSROOM
D118 5TH. GRADE CLASSROOM
D117 GIRLS' TOILETS
D116 RESOURCE
D115.1 UTILITY
D115 JAN.
D115.2 DATA
D114 TEACHER WORKROOM
D114.1 TOILET
D113 BOYS' TOILETS
D111 4TH. GRADE CLASSROOM
D112 4TH. GRADE CLASSROOM
D100 CORRIDOR
E123 3RD. GRADE CLASSROOM
E122 3RD. GRADE CLASSROOM
E121 3RD. GRADE CLASSROOM
E120 3RD. GRADE CLASSROOM
E119 3RD. GRADE CLASSROOM
E118 3RD. GRADE CLASSROOM
E117 GIRLS' TOILETS
E115.1 UTILITY
E115 JAN.
E115.2 DATA
E113 BOYS' TOILETS
E114 3RD. GRADE CLASSROOM
E112 RESOURCE
E110 TEACHER WORKROOM
E110.1 TOILET
E110.2 TOILET
E111 2ND. GRADE CLASSROOM
E111.2 TOILET
E108 2ND. GRADE CLASSROOM
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AH1-5
AH1-7
BH1-5
BH1-7
D100 CORRIDOR
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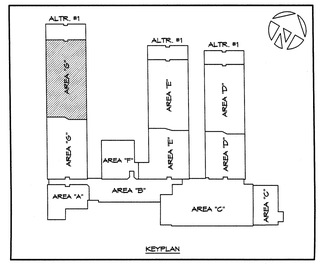

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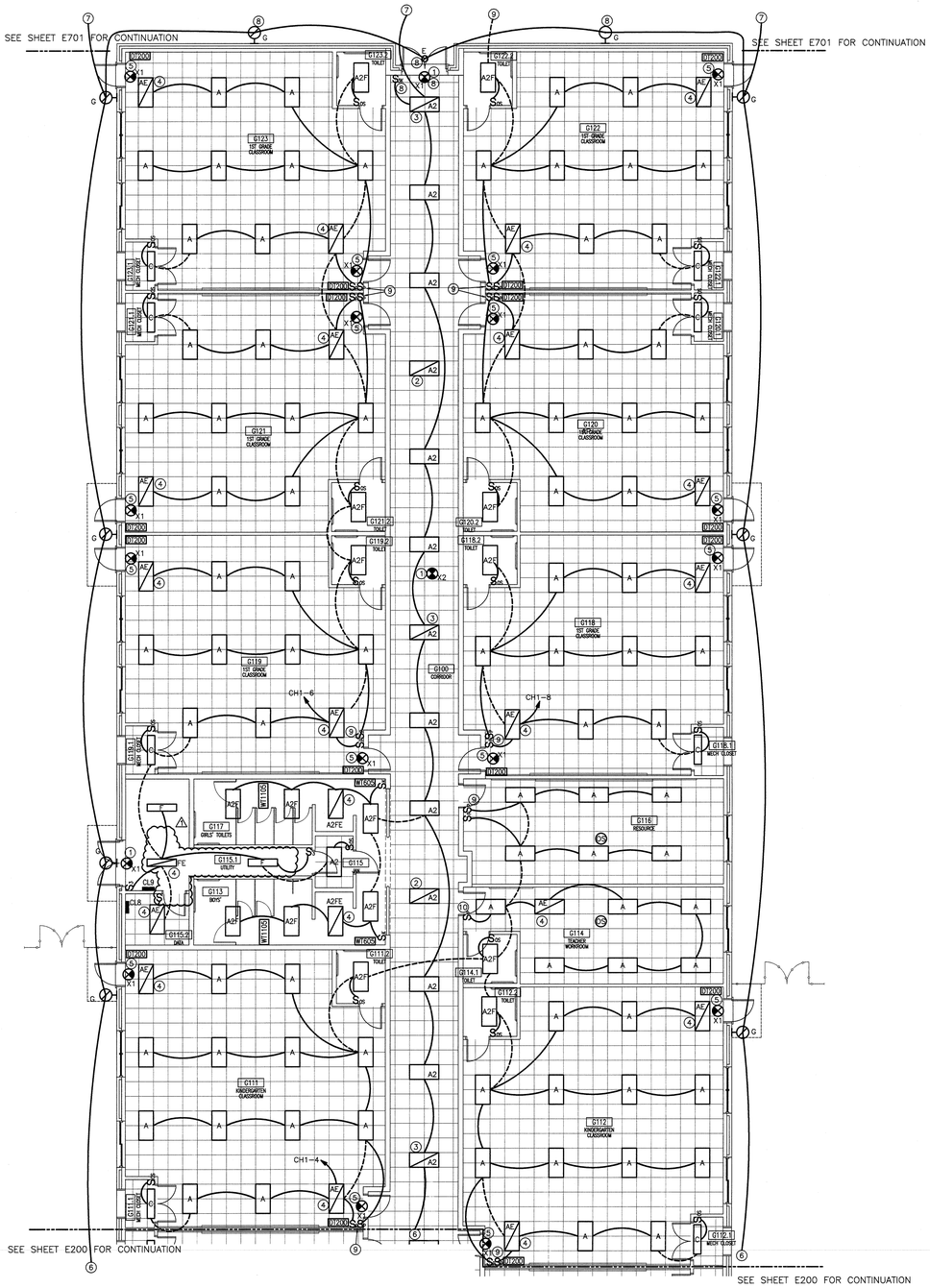
PDC Project #19003

NORTH CAROLINA PROFESSIONAL SEAL 048439 ENGINEER ROBERT A. CLARK
6/26/19



01 E203 PARTIAL LIGHTING PLAN – AREA G
1/8" = 1'-0"

NOTES: (AS INDICATED ON THIS PLAN BY A NUMBER IN A ◯)

1. EMERGENCY FIXTURE – WIRE AHEAD OF SWITCHES AND/OR BAS. CONNECT TO EMERGENCY CIRCUIT EMH1-1.
2. NIGHT LIGHT – WIRE AHEAD OF SWITCHES AND/OR BAS. CONNECT TO EMERGENCY CIRCUIT EMH1-1.
3. EMERGENCY FIXTURE IN CORRIDOR – WIRE THROUGH REMOTE UL924 ELTD TO NORMAL/EMERGENCY CIRCUITS AS SHOWN. FIXTURE SHALL TURN ON/OFF WITH BAS, BUT UPON LOSS OF NORMAL POWER, FIXTURE SHALL ILLUMINATE.
4. EMERGENCY FIXTURE – WIRE THROUGH INTERNAL UL924 ELTD TO NORMAL CIRCUIT SHOWN. WIRE INTERNAL ELTD TO EMERGENCY CIRCUIT EMH1-3.
5. EMERGENCY FIXTURE IN CLASSROOM. WIRE AHEAD OF SWITCHES AND/OR BAS. CONNECT TO EMERGENCY CIRCUIT EMH1-3.
6. CONTINUED ON DRAWING E200.
7. IF ALTERNATE #1 IS ACCEPTED, CONTINUED ON DRAWING E701.
8. IF ALTERNATE #1 IS ACCEPTED, THEN DO NOT INSTALL THIS DEVICE. REFER TO DRAWING E701.
9. REFER TO DETAIL E102-11.
10. REFER TO DETAIL E102-07.

8' 4' 0 8' 16'
SCALE 1/8"=1'-0"

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ISSUE DATE: 04.30.2019
DRAWN BY: JPT
CHECKED BY: RAC
PROJECT: 1821

STUMP SOUND ELEMENTARY SCHOOL
ONSLOW COUNTY SCHOOLS
STUMP SOUND, NORTH CAROLINA

PARTIAL LIGHTING PLAN
AREA G

REVISION SCHEDULE

	DATE	REFERENCE
1	06/25/19	DPI COMMENTS

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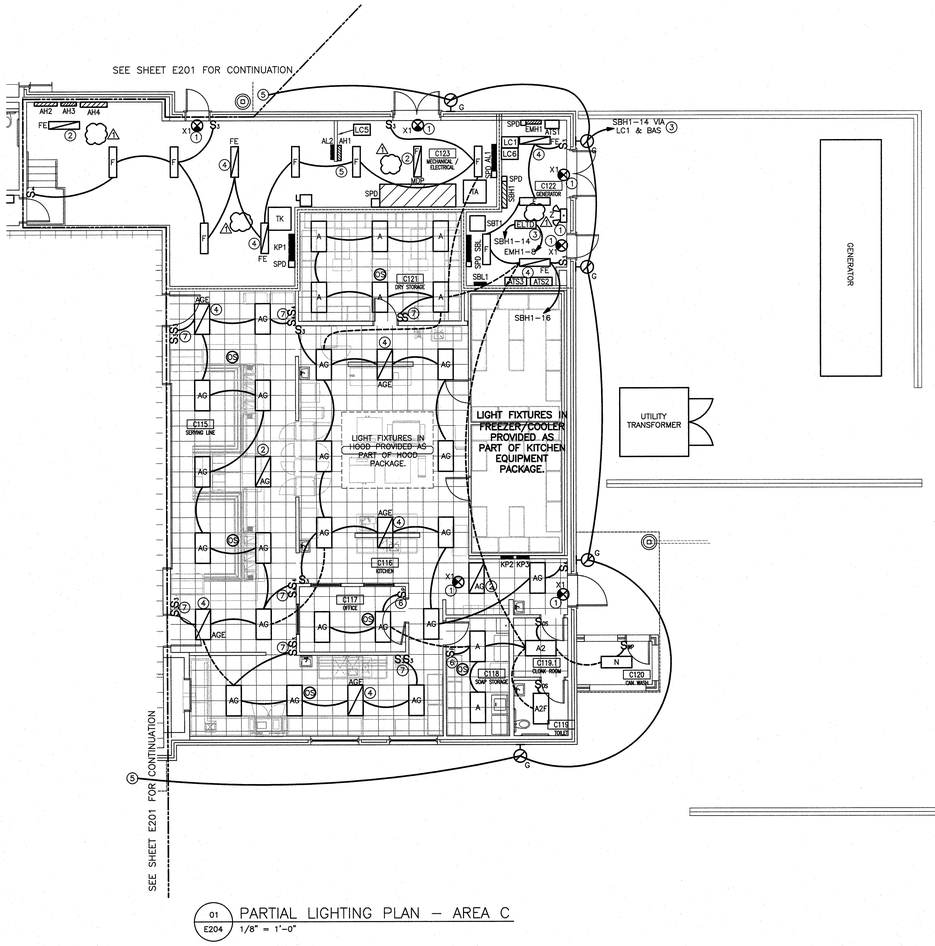
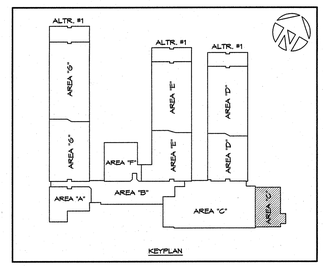
E203

Project #: 190002 Plotted By: chris
Sheet: E203 Plotted: June 25, 2019 @ 5:30 PM



01 E204 PARTIAL LIGHTING PLAN – AREA C
1/8" = 1'-0"



NOTES: (AS INDICATED ON THIS PLAN BY A NUMBER IN A ◯)

1. EMERGENCY FIXTURE – WIRE AHEAD OF SWITCHES AND/OR BAS. CONNECT TO EMERGENCY CIRCUIT EMH1–10.
2. NIGHT LIGHT – WIRE AHEAD OF SWITCHES AND/OR BAS. CONNECT TO EMERGENCY CIRCUIT EMH1–10.
3. EMERGENCY EXTERIOR FIXTURES – WIRE THROUGH UL924 ELTD TO NORMAL/EMERGENCY CIRCUITS AS SHOWN. FIXTURE SHALL TURN ON/OFF WITH BAS, BUT UPON LOSS OF NORMAL POWER, FIXTURE SHALL ILLUMINATE.
4. EMERGENCY FIXTURE – WIRE THROUGH INTERNAL UL924 ELTD TO NORMAL CIRCUIT SHOWN. WIRE INTERNAL ELTD TO EMERGENCY CIRCUIT EMH1–10.
5. CONTINUED TO DRAWING E201.
6. REFER TO DETAIL E102–07.
7. REFER TO DETAIL E102–12.

8' 4' 0 8' 16'
SCALE 1/8"=1'-0"

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CHECKED BY: RAC
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STUMP SOUND ELEMENTARY SCHOOL
ONSLOW COUNTY SCHOOLS
STUMP SOUND, NORTH CAROLINA

PARTIAL LIGHTING PLAN AREA C

REVISION SCHEDULE

	DATE	REFERENCE
1	06/25/19	DR1 COMMENTS

E204

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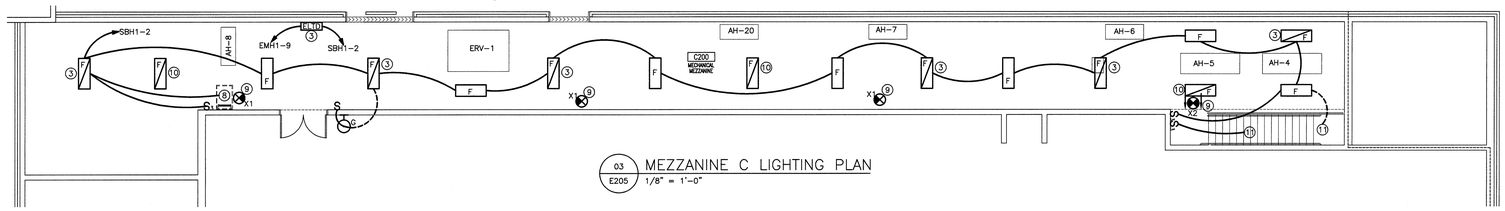
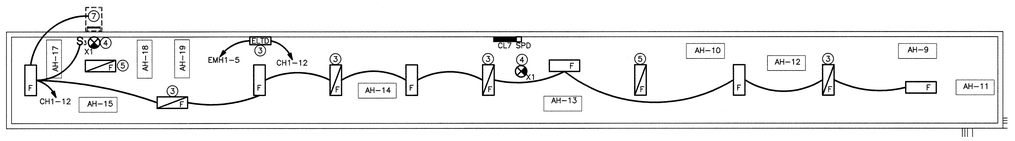
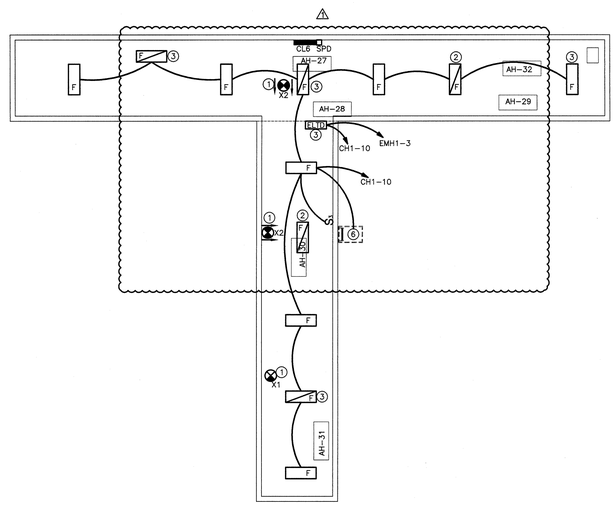
Project #: 190202
Sheet: E204
Plotted By: chris
Plotted: June 25, 2019 @ 5:47 PM



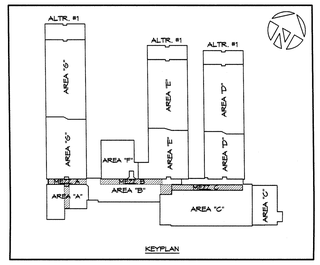
03 E205 MEZZANINE C LIGHTING PLAN
1/8" = 1'-0"



02 E205 MEZZANINE B LIGHTING PLAN
1/8" = 1'-0"



01 E205 MEZZANINE A LIGHTING PLAN
1/8" = 1'-0"



KEYPLAN

NOTES: (AS INDICATED ON THESE PLANS BY A NUMBER IN A ◯)

1. EMERGENCY FIXTURE – WIRE AHEAD OF SWITCHES AND/OR BAS. CONNECT TO EMERGENCY CIRCUIT EMH1-3.
2. NIGHT LIGHT – WIRE AHEAD OF SWITCHES AND/OR BAS. CONNECT TO EMERGENCY CIRCUIT EMH1-3.
3. EMERGENCY FIXTURE – WIRE THROUGH UL924 ELTD TO NORMAL/EMERGENCY CIRCUITS AS SHOWN. FIXTURE SHALL TURN ON/OFF WITH SWITCHES AND/OR BAS, BUT UPON LOSS OF NORMAL POWER, FIXTURE SHALL ILLUMINATE.
4. EMERGENCY FIXTURE – WIRE AHEAD OF SWITCHES AND/OR BAS. CONNECT TO EMERGENCY CIRCUIT EMH1-5.
5. NIGHT LIGHT/EMERGENCY LIGHT – WIRE AHEAD OF SWITCHES. CONNECT TO EMERGENCY CIRCUIT EMH1-5.
6. WIRE FROM LIGHT FIXTURES DOWN TO 3-WAY SWITCH IN STORAGE A110.
7. WIRE FROM LIGHT FIXTURES DOWN TO 3-WAY SWITCH IN STORAGE F104..
8. WIRE FROM LIGHT FIXTURES DOWN TO 3-WAY SWITCH IN UTILITY C107.
9. EMERGENCY FIXTURE – WIRE AHEAD OF SWITCHES AND/OR BAS. CONNECT TO EMERGENCY CIRCUIT EMH1-9.
10. NIGHT LIGHT/EMERGENCY LIGHT – WIRE AHEAD OF SWITCHES AND/OR BAS. CONNECT TO EMERGENCY CIRCUIT EMH1-9.
11. WIRE FROM SWITCH DOWN TO FIXTURE AND 3-WAY SWITCH IN STAIRWELL BELOW.

8' 4' 0 8' 16'
SCALE 1/8"=1'-0"

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STUMP SOUND ELEMENTARY SCHOOL
ONSLOW COUNTY SCHOOLS
STUMP SOUND, NORTH CAROLINA

LIGHTING PLANS
MEZZANINES A, B & C

REVISION SCHEDULE

	DATE	REFERENCE
1	06/25/19	DPI COMMENTS

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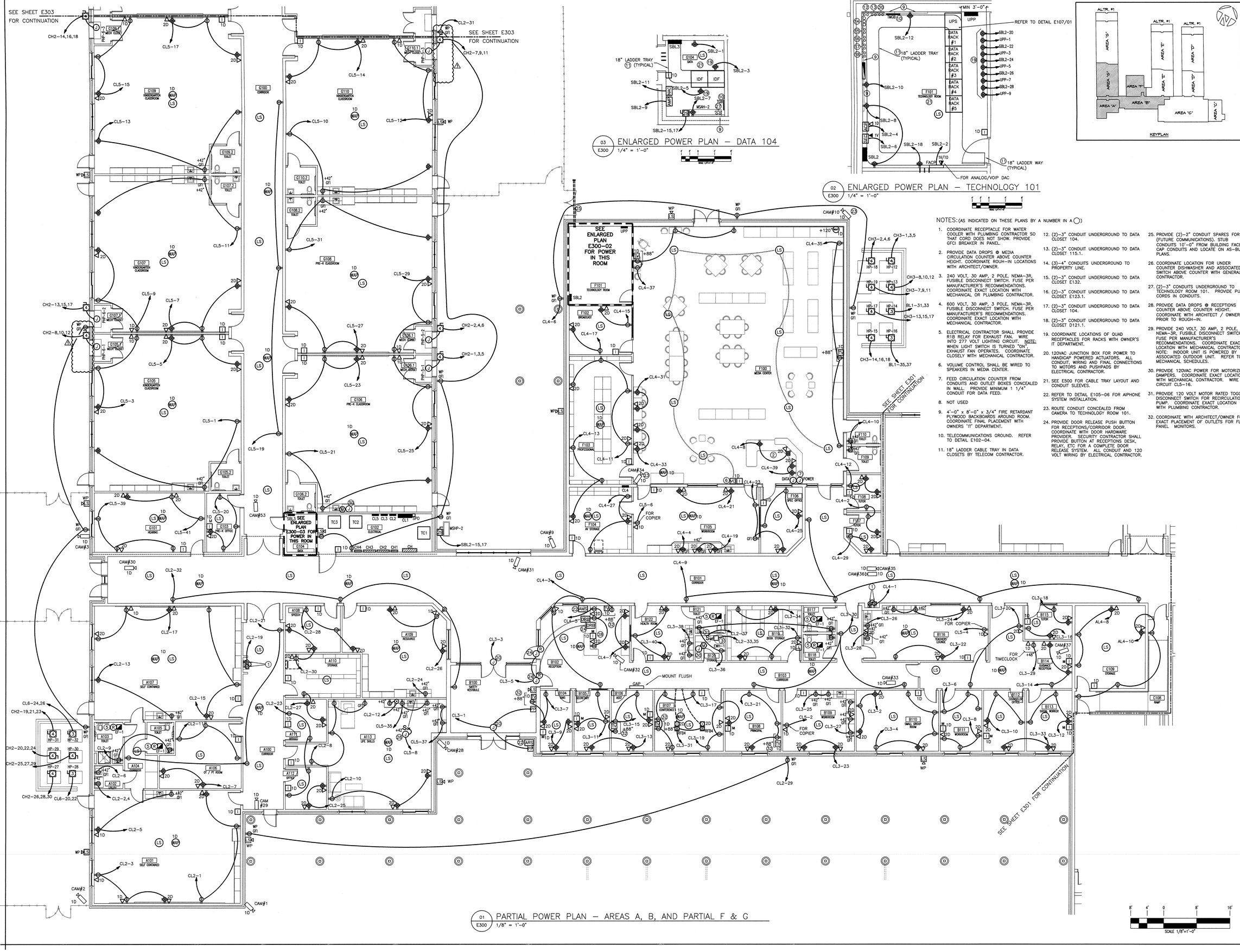
E205

Project #: 190002 Plotted By: chris
Sheet: E205 Plotted: June 25, 2019 @ 5:30 PM



01 E300 PARTIAL POWER PLAN – AREAS A, B, AND PARTIAL F & G
1/8" = 1'-0"

03 E300 ENLARGED POWER PLAN – DATA 104
1/4" = 1'-0"

02 E300 ENLARGED POWER PLAN – TECHNOLOGY 101
1/4" = 1'-0"

SCALE 1/8"=1'-0"

NOTES: (AS INDICATED ON THESE PLANS BY A NUMBER IN A ◯)

1. COORDINATE RECEPTACLE FOR WATER COOLER WITH PLUMBING CONTRACTOR SO THAT CORD DOES NOT SHOW. PROVIDE GFCI BREAKER IN PANEL.
2. PROVIDE DATA DROPS @ MEDIA CIRCULATION COUNTER ABOVE COUNTER HEIGHT. COORDINATE ROUH-IN LOCATIONS WITH ARCHITECT/OWNER.
3. 240 VOLT, 30 AMP, 2 POLE, NEMA-3R, FUSIBLE DISCONNECT SWITCH. FUSE PER MANUFACTURER'S RECOMMENDATIONS. COORDINATE EXACT LOCATION WITH MECHANICAL OR PLUMBING CONTRACTOR.
4. 600 VOLT, 30 AMP, 3 POLE, NEMA-3R, FUSIBLE DISCONNECT SWITCH. FUSE PER MANUFACTURER'S RECOMMENDATIONS. COORDINATE EXACT LOCATION WITH MECHANICAL CONTRACTOR.
5. ELECTRICAL CONTRACTOR SHALL PROVIDE R1B RELAY FOR EXHAUST FAN. WIRE INTO 277 VOLT LIGHTING CIRCUIT. NOTE: WHEN LIGHT SWITCH IS TURNED "ON", EXHAUST FAN OPERATES. COORDINATE CLOSELY WITH MECHANICAL CONTRACTOR.
6. VOLUME CONTROL SHALL BE WIRED TO SPEAKERS IN MEDIA CENTER.
7. FEED CIRCULATION COUNTER FROM CONDUITS AND OUTLET BOXES CONCEALED IN WALL. PROVIDE MINIMUM 1 1/4" CONDUIT FOR DATA FEED.
8. NOT USED
9. 4'-0" x 8'-0" x 3/4" FIRE RETARDANT PLYWOOD BACKBOARDS AROUND ROOM. COORDINATE FINAL PLACEMENT WITH OWNERS 'IT' DEPARTMENT.
10. TELECOMMUNICATIONS GROUND. REFER TO DETAIL E102-04.
11. 18" LADDER CABLE TRAY IN DATA CLOSETS BY TELECOM CONTRACTOR.
12. (2)-3" CONDUIT UNDERGROUND TO DATA CLOSET 104.
13. (2)-3" CONDUIT UNDERGROUND TO DATA CLOSET 115.1.
14. (3)-4" CONDUITS UNDERGROUND TO PROPERTY LINE.
15. (2)-3" CONDUIT UNDERGROUND TO DATA CLOSET E132.
16. (2)-3" CONDUIT UNDERGROUND TO DATA CLOSET E123.1.
17. (2)-3" CONDUIT UNDERGROUND TO DATA CLOSET 104.
18. (2)-3" CONDUIT UNDERGROUND TO DATA CLOSET D121.1.
19. COORDINATE LOCATIONS OF QUAD RECEPTACLES FOR RACKS WITH OWNER'S IT DEPARTMENT.
20. 120VAC JUNCTION BOX FOR POWER TO HANDICAP POWERED ACTUATORS. ALL CONDUIT, WIRING AND FINAL CONNECTIONS TO MOTORS AND PUSHPADS BY ELECTRICAL CONTRACTOR.
21. SEE E500 FOR CABLE TRAY LAYOUT AND CONDUIT SLEEVES.
22. REFER TO DETAIL E105-06 FOR AIPHONE SYSTEM INSTALLATION.
23. ROUTE CONDUIT CONCEALED FROM CAMERA TO TECHNOLOGY ROOM 101.
24. PROVIDE DOOR RELEASE PUSH BUTTON FOR RECEPTIONS/CORRIDOR DOOR. COORDINATE WITH DOOR HARDWARE PROVIDER. SECURITY CONTRACTOR SHALL PROVIDE BUTTON AT RECEPTIONS DESK, RELAY, ETC FOR A COMPLETE DOOR RELEASE SYSTEM. ALL CONDUIT AND 120 VOLT WIRING BY ELECTRICAL CONTRACTOR.
25. PROVIDE (2)-2" CONDUIT SPARES FOR (FUTURE COMMUNICATIONS). STUB CONDUITS 10"-0" FROM BUILDING FACE. CAP CONDUITS AND LOCATE ON AS-BUILT PLANS.
26. COORDINATE LOCATION FOR UNDER COUNTER DISHWASHER AND ASSOCIATED SWITCH ABOVE COUNTER WITH GENERAL CONTRACTOR.
27. (2)-3" CONDUITS UNDERGROUND TO TECHNOLOGY ROOM 101. PROVIDE PULL CORDS IN CONDUITS.
28. PROVIDE DATA DROPS @ RECEPTIONS COUNTER ABOVE COUNTER HEIGHT. COORDINATE WITH ARCHITECT / OWNER PRIOR TO ROUGH-IN.
29. PROVIDE 240 VOLT, 30 AMP, 2 POLE, NEMA-3R, FUSIBLE DISCONNECT SWITCH. FUSE PER MANUFACTURER'S RECOMMENDATIONS. COORDINATE EXACT LOCATION WITH MECHANICAL CONTRACTOR. NOTE: INDOOR UNIT IS POWERED BY ASSOCIATED OUTDOOR UNIT. REFER TO MECHANICAL SCHEDULES.
30. PROVIDE 120VAC POWER FOR MOTORIZED DAMPERS. COORDINATE EXACT LOCATION WITH MECHANICAL CONTRACTOR. WIRE TO CIRCUIT CL5-16.
31. PROVIDE 120 VOLT MOTOR RATED TOGGLE DISCONNECT SWITCH FOR RECIRCULATION PUMP. COORDINATE EXACT LOCATION WITH PLUMBING CONTRACTOR.
32. COORDINATE WITH ARCHITECT/OWNER FOR EXACT PLACEMENT OF OUTLETS FOR FLAT PANEL MONITORS.

CONTRACTOR TO VERIFY ALL DIMENSIONS.

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PDC Project #19003

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PROJECT: 1821

STUMP SOUND ELEMENTARY SCHOOL
ONSLOW COUNTY SCHOOLS
STUMP SOUND, NORTH CAROLINA

PARTIAL POWER PLAN
AREAS A, B, F & G

REVISION SCHEDULE

△	DATE	REFERENCE
1	06/25/19	DPI COMMENTS

E300

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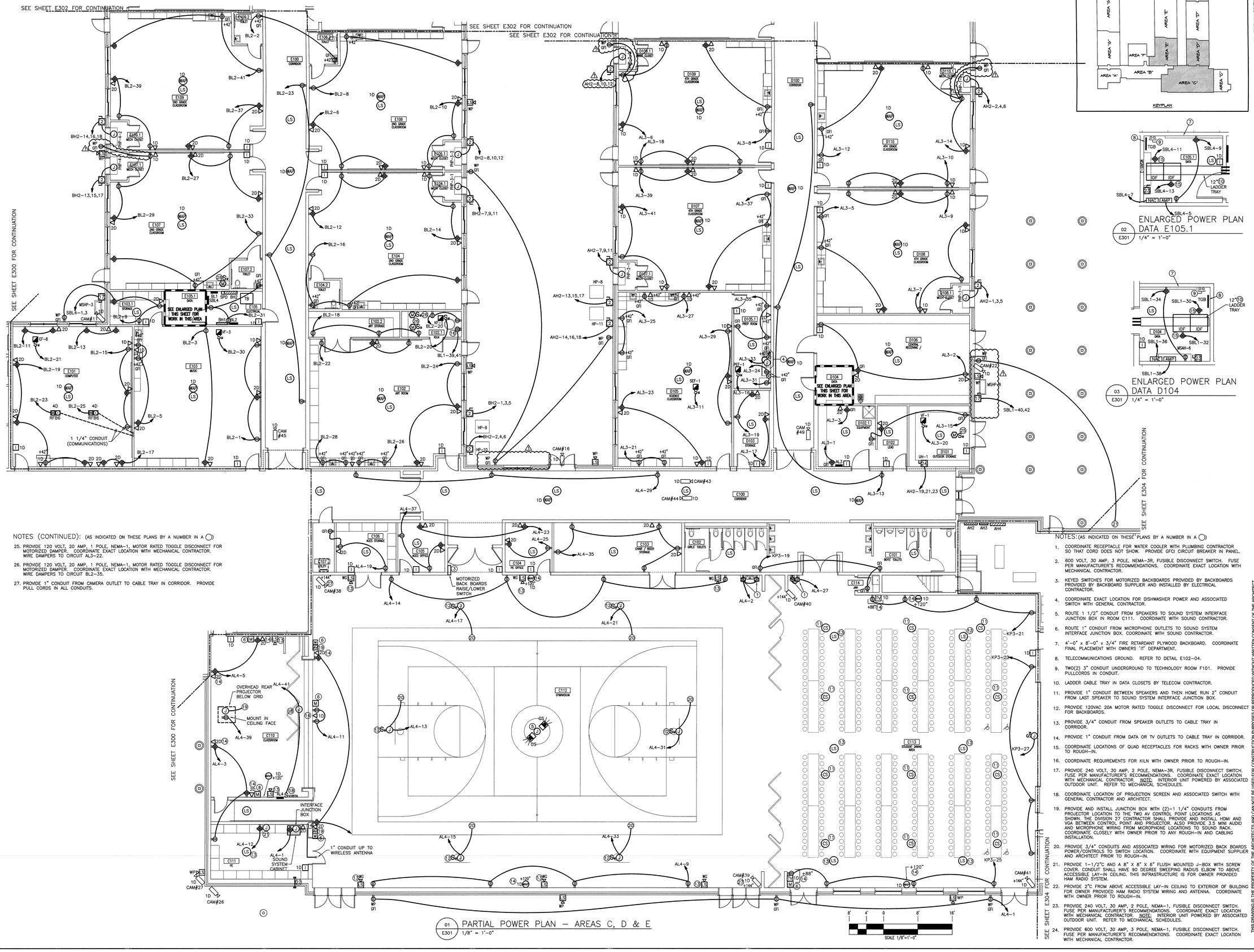
Project #: 190002
Sheet: E300
Plotted By: chris
Plotted: June 25, 2019 @ 5:30 PM



01 E301 PARTIAL POWER PLAN – AREAS C, D & E
1/8" = 1'-0"

02 E301 ENLARGED POWER PLAN DATA E105.1
1/4" = 1'-0"

03 E301 ENLARGED POWER PLAN DATA D104
1/4" = 1'-0"

NOTES (CONTINUED): (AS INDICATED ON THESE PLANS BY A NUMBER IN A ◯)

25. PROVIDE 120 VOLT, 20 AMP, 1 POLE, NEMA-1, MOTOR RATED TOGGLE DISCONNECT FOR MOTORIZED DAMPER. COORDINATE EXACT LOCATION WITH MECHANICAL CONTRACTOR. WIRE DAMPERS TO CIRCUIT AL3-22.
26. PROVIDE 120 VOLT, 20 AMP, 1 POLE, NEMA-1, MOTOR RATED TOGGLE DISCONNECT FOR MOTORIZED DAMPER. COORDINATE EXACT LOCATION WITH MECHANICAL CONTRACTOR. WIRE DAMPERS TO CIRCUIT BL2-35.
27. PROVIDE 1" CONDUIT FROM CAMERA OUTLET TO CABLE TRAY IN CORRIDOR. PROVIDE PULL CORDS IN ALL CONDUITS.

NOTES: (AS INDICATED ON THESE PLANS BY A NUMBER IN A ◯)

1. COORDINATE RECEPTACLE FOR WATER COOLER WITH PLUMBING CONTRACTOR SO THAT CORD DOES NOT SHOW. PROVIDE GFCI CIRCUIT BREAKER IN PANEL.
2. 600 VOLT, 30 AMP, 3 POLE, NEMA-3R, FUSIBLE DISCONNECT SWITCH. FUSE PER MANUFACTURER'S RECOMMENDATIONS. COORDINATE EXACT LOCATION WITH MECHANICAL CONTRACTOR.
3. KEYED SWITCHES FOR MOTORIZED BACKBOARDS PROVIDED BY BACKBOARDS PROVIDED BY BACKBOARD SUPPLIER AND INSTALLED BY ELECTRICAL CONTRACTOR.
4. COORDINATE EXACT LOCATION FOR DISHWASHER POWER AND ASSOCIATED SWITCH WITH GENERAL CONTRACTOR.
5. ROUTE 1 1/2" CONDUIT FROM SPEAKERS TO SOUND SYSTEM INTERFACE JUNCTION BOX IN ROOM C111. COORDINATE WITH SOUND CONTRACTOR.
6. ROUTE 1" CONDUIT FROM MICROPHONE OUTLETS TO SOUND SYSTEM INTERFACE JUNCTION BOX. COORDINATE WITH SOUND CONTRACTOR.
7. 4'-0" x 8'-0" x 3/4" FIRE RETARDANT PLYWOOD BACKBOARD. COORDINATE FINAL PLACEMENT WITH OWNERS 'IT' DEPARTMENT.
8. TELECOMMUNICATIONS GROUND. REFER TO DETAIL E102-04.
9. TWO(2) 3" CONDUIT UNDERGROUND TO TECHNOLOGY ROOM F101. PROVIDE PULLCORDS IN CONDUIT.
10. LADDER CABLE TRAY IN DATA CLOSETS BY TELECOM CONTRACTOR.
11. PROVIDE 1" CONDUIT BETWEEN SPEAKERS AND THEN HOME RUN 2" CONDUIT FROM LAST SPEAKER TO SOUND SYSTEM INTERFACE JUNCTION BOX.
12. PROVIDE 120VAC 20A MOTOR RATED TOGGLE DISCONNECT FOR LOCAL DISCONNECT FOR BACKBOARDS.
13. PROVIDE 3/4" CONDUIT FROM SPEAKER OUTLETS TO CABLE TRAY IN CORRIDOR.
14. PROVIDE 1" CONDUIT FROM DATA OR TV OUTLETS TO CABLE TRAY IN CORRIDOR.
15. COORDINATE LOCATIONS OF QUAD RECEPTACLES FOR RACKS WITH OWNER PRIOR TO ROUGH-IN.
16. COORDINATE REQUIREMENTS FOR KILN WITH OWNER PRIOR TO ROUGH-IN.
17. PROVIDE 240 VOLT, 30 AMP, 2 POLE, NEMA-3R, FUSIBLE DISCONNECT SWITCH. FUSE PER MANUFACTURER'S RECOMMENDATIONS. COORDINATE EXACT LOCATION WITH MECHANICAL CONTRACTOR. NOTE: INTERIOR UNIT POWERED BY ASSOCIATED OUTDOOR UNIT. REFER TO MECHANICAL SCHEDULES.
18. COORDINATE LOCATION OF PROJECTION SCREEN AND ASSOCIATED SWITCH WITH GENERAL CONTRACTOR AND ARCHITECT.
19. PROVIDE AND INSTALL JUNCTION BOX WITH (2)-1 1/4" CONDUITS FROM PROJECTOR LOCATION TO THE TWO AV CONTROL POINT LOCATIONS AS SHOWN. THE DIVISION 27 CONTRACTOR SHALL PROVIDE AND INSTALL HDMI AND VGA BETWEEN CONTROL POINT AND PROJECTOR. ALSO PROVIDE 3.5 MINI AUDIO AND MICROPHONE WIRING FROM MICROPHONE LOCATIONS TO SOUND RACK. COORDINATE CLOSELY WITH OWNER PRIOR TO ANY ROUGH-IN AND CABLING INSTALLATION.
20. PROVIDE 3/4" CONDUITS AND ASSOCIATED WIRING FOR MOTORIZED BACK BOARDS POWER/CONTROLS TO SWITCH LOCATION. COORDINATE WITH EQUIPMENT SUPPLIER AND ARCHITECT PRIOR TO ROUGH-IN.
21. PROVIDE 1-1/2"C AND A 8" X 8" X 6" FLUSH MOUNTED J-BOX WITH SCREW COVER. CONDUIT SHALL HAVE 90 DEGREE SWEEPING RADIUS ELBOW TO ABOVE ACCESSIBLE LAY-IN CEILING. THIS INFRASTRUCTURE IS FOR OWNER PROVIDED HAM RADIO SYSTEM.
22. PROVIDE 2"C FROM ABOVE ACCESSIBLE LAY-IN CEILING TO EXTERIOR OF BUILDING FOR OWNER PROVIDED HAM RADIO SYSTEM WIRING AND ANTENNA. COORDINATE WITH OWNER PRIOR TO ROUGH-IN.
23. PROVIDE 240 VOLT, 30 AMP, 2 POLE, NEMA-1, FUSIBLE DISCONNECT SWITCH. FUSE PER MANUFACTURER'S RECOMMENDATIONS. COORDINATE EXACT LOCATION WITH MECHANICAL CONTRACTOR. NOTE: INTERIOR UNIT POWERED BY ASSOCIATED OUTDOOR UNIT. REFER TO MECHANICAL SCHEDULES.
24. PROVIDE 600 VOLT, 30 AMP, 3 POLE, NEMA-1, FUSIBLE DISCONNECT SWITCH. FUSE PER MANUFACTURER'S RECOMMENDATIONS. COORDINATE EXACT LOCATION WITH MECHANICAL CONTRACTOR.

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PDC Project #19003

NORTH CAROLINA PROFESSIONAL SEAL 040439 ENGINEER ROBERT A. RAC — 4/2/19

CONTRACTOR TO VERIFY ALL DIMENSIONS.

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STUMP SOUND ELEMENTARY SCHOOL
ONSLOW COUNTY SCHOOLS
STUMP SOUND, NORTH CAROLINA
PARTIAL POWER PLAN
AREAS C, D & E

REVISION SCHEDULE

	DATE	REFERENCE
1	06/25/19	DPI COMMENTS

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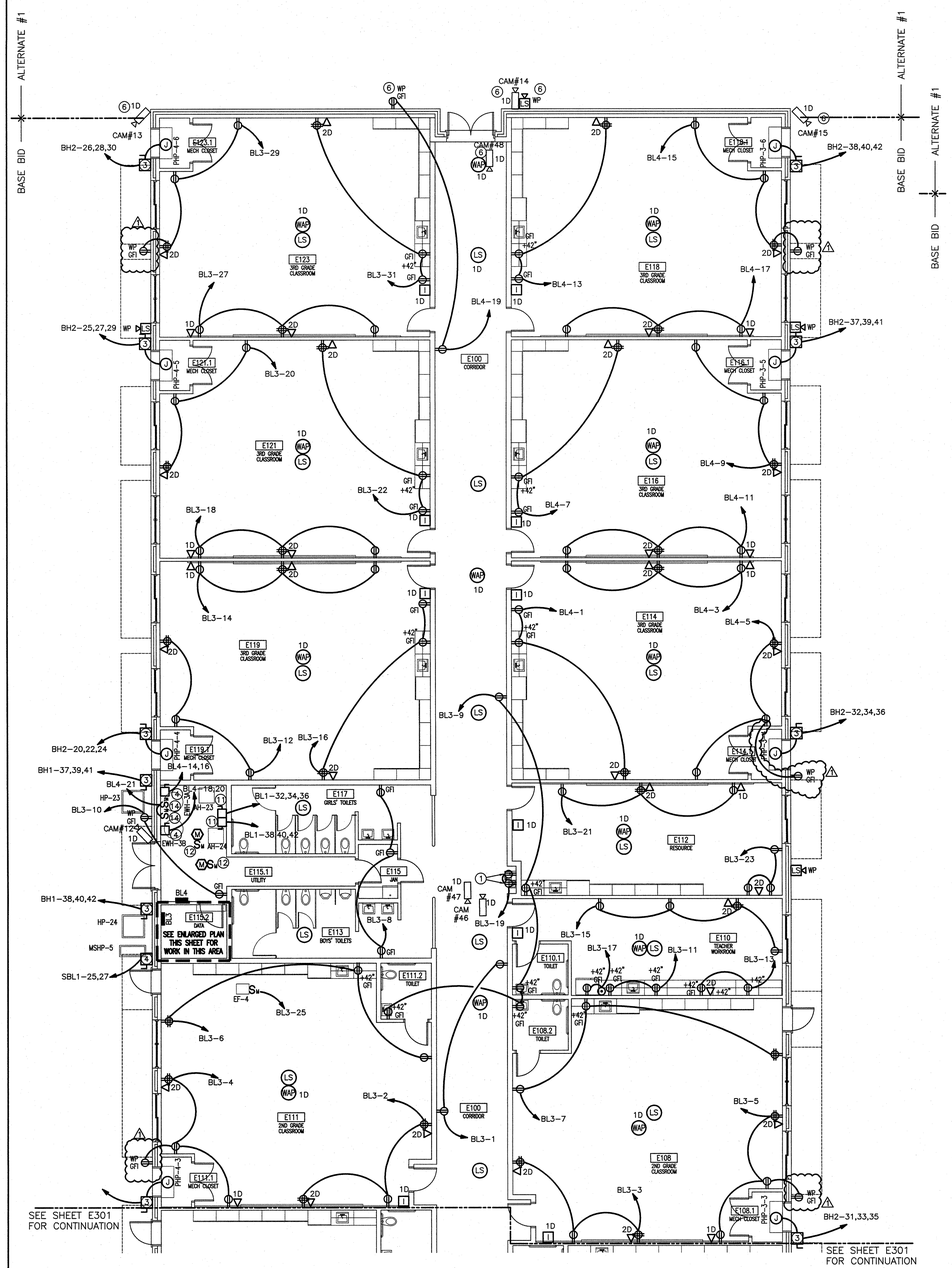
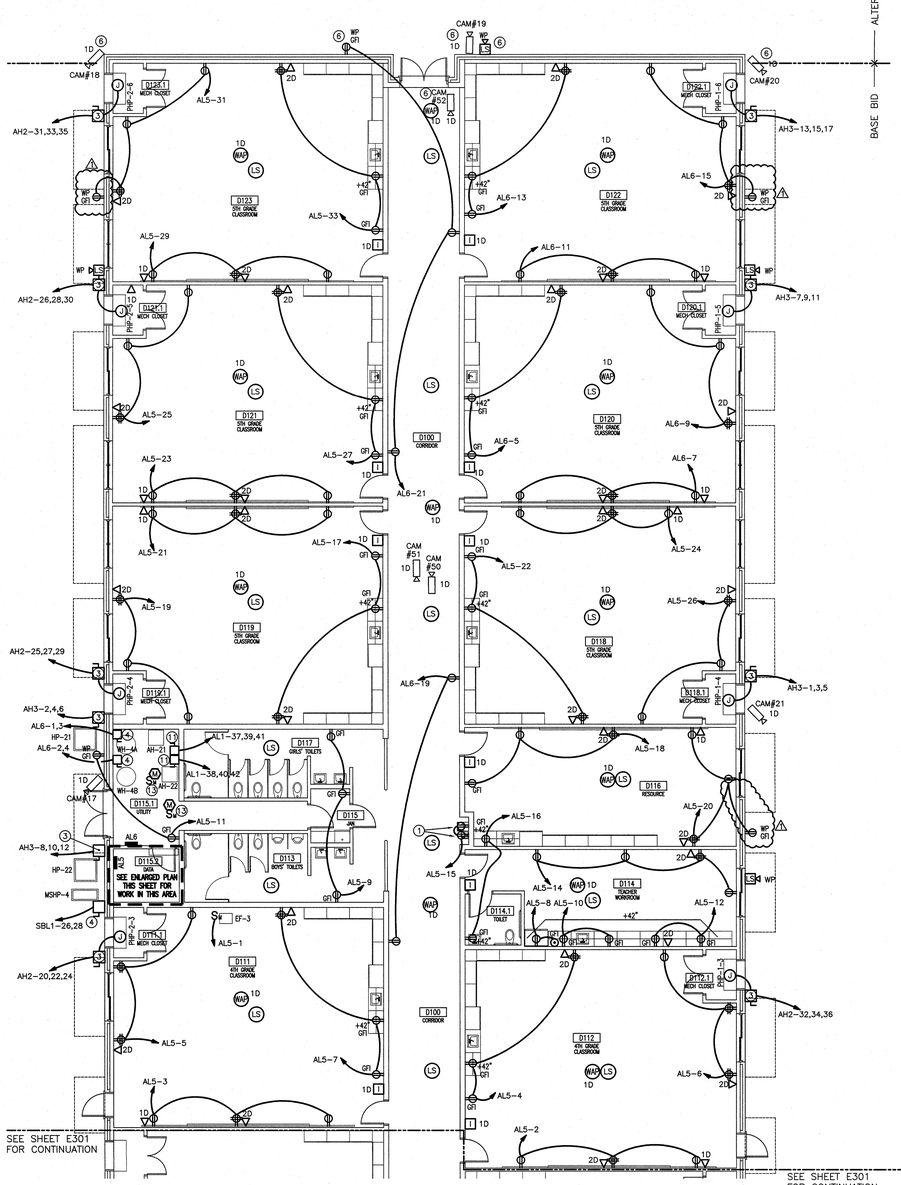
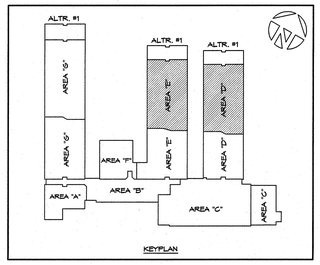
E301

Project #: 190202
Sheet: E301
Plotted By: chris
Plotted: June 25, 2019 @ 5:30 PM

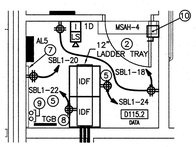




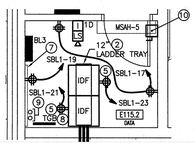


01 E302 PARTIAL AREAS D & E POWER PLANS
1/8" = 1'-0"

SCALE 1/8"=1'-0"



02 E302 ENLARGED POWER PLAN DATA D115.2
1/4" = 1'-0"



03 E302 ENLARGED POWER PLAN DATA E115.2
1/4" = 1'-0"

GENERAL NOTES:

A. ALL RECEPTACLES SHALL BE TAMPER RESISTANT.

NOTES: (AS INDICATED ON THIS PLAN BY A NUMBER IN A ◯)

1. COORDINATE RECEPTACLE FOR WATER COOLER WITH PLUMBING CONTRACTOR SO THAT CORD DOES NOT SHOW. PROVIDE GFCI CIRCUIT BREAKER AT PANEL.
2. LADDER CABLE TRAY IN DATA CLOSETS BY TELECOM CONTRACTOR.
3. PROVIDE 600 VOLT, 30 AMP, 3 POLE, NEMA-3R, FUSIBLE DISCONNECT SWITCH. FUSE PER MANUFACTURER'S RECOMMENDATIONS. COORDINATE EXACT LOCATION WITH MECHANICAL OR PLUMBING CONTRACTORS.
4. PROVIDE 240 VOLT, 30 AMP, 2 POLE, NEMA-3R, FUSIBLE DISCONNECT SWITCH. FUSE PER MANUFACTURER'S RECOMMENDATIONS. COORDINATE EXACT LOCATION WITH MECHANICAL OR PLUMBING CONTRACTOR.
5. COORDINATE LOCATION OF QUAD RECEPTACLES FOR RACKS WITH OWNER'S IT DEPARTMENT.
6. IF ALTERNATE #1 IS ACCEPTED THEN DO NOT INSTALL THESE DEVICES.
7. 4'-0" x 8'-0" x 3/4" FIRE RETARDANT PLYWOOD BACKBOARD. COORDINATE FINAL PLACEMENT WITH OWNERS 'IT' DEPARTMENT.
8. TELECOMMUNICATIONS GROUND. REFER TO DETAIL E102-04.
9. (2)-3" CONDUITS UNDERGROUND TO TECHNOLOGY ROOM F101. PROVIDE PULLCORDS IN CONDUIT.
10. PROVIDE 240 VOLT, 30 AMP, 2 POLE, NEMA-1, FUSIBLE DISCONNECT SWITCH. FUSE PER MANUFACTURER'S RECOMMENDATIONS. COORDINATE EXACT LOCATION WITH MECHANICAL OR PLUMBING CONTRACTOR. INDOOR UNIT IS POWERED FROM ASSOCIATED OUTDOOR UNIT. SEE MECHANICAL SCHEDULES.
11. PROVIDE 240 VOLT, 60 AMP, 3 POLE, NEMA-1, FUSIBLE DISCONNECT SWITCH. FUSE PER MANUFACTURER'S RECOMMENDATIONS. COORDINATE EXACT LOCATION WITH MECHANICAL OR PLUMBING CONTRACTOR. INDOOR UNIT POWERED FROM ASSOCIATED OUTDOOR UNIT. SEE MECHANICAL SCHEDULES.
12. PROVIDE 120 VOLT, 20 AMP, MOTOR RATED TOGGLE DISCONNECT SWITCH FOR MOTORIZED DAMPER. COORDINATE EXACT LOCATION WITH MECHANICAL CONTRACTOR. WIRE TO CIRCUIT BL3-33.
13. PROVIDE 240 VOLT, 60 AMP, 3 POLE, NEMA-1, FUSIBLE DISCONNECT SWITCH. FUSE PER MANUFACTURER'S RECOMMENDATIONS. COORDINATE EXACT LOCATION WITH MECHANICAL OR PLUMBING CONTRACTOR. INDOOR UNIT POWERED FROM ASSOCIATED OUTDOOR UNIT. SEE MECHANICAL SCHEDULES. WIRE CIRCUIT TO AL6-17.
14. PROVIDE 120 VOLT, MOTOR RATED TOGGLE DISCONNECT SWITCH FOR RECIRCULATION PUMP. COORDINATE EXACT LOCATION WITH PLUMBING CONTRACTOR.

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STUMP SOUND ELEMENTARY SCHOOL
ONSLOW COUNTY SCHOOLS
STUMP SOUND, NORTH CAROLINA

PARTIAL POWER PLAN
AREAS D & E

REVISION SCHEDULE

	DATE	REFERENCE
1	06/25/19	DPI COMMENTS

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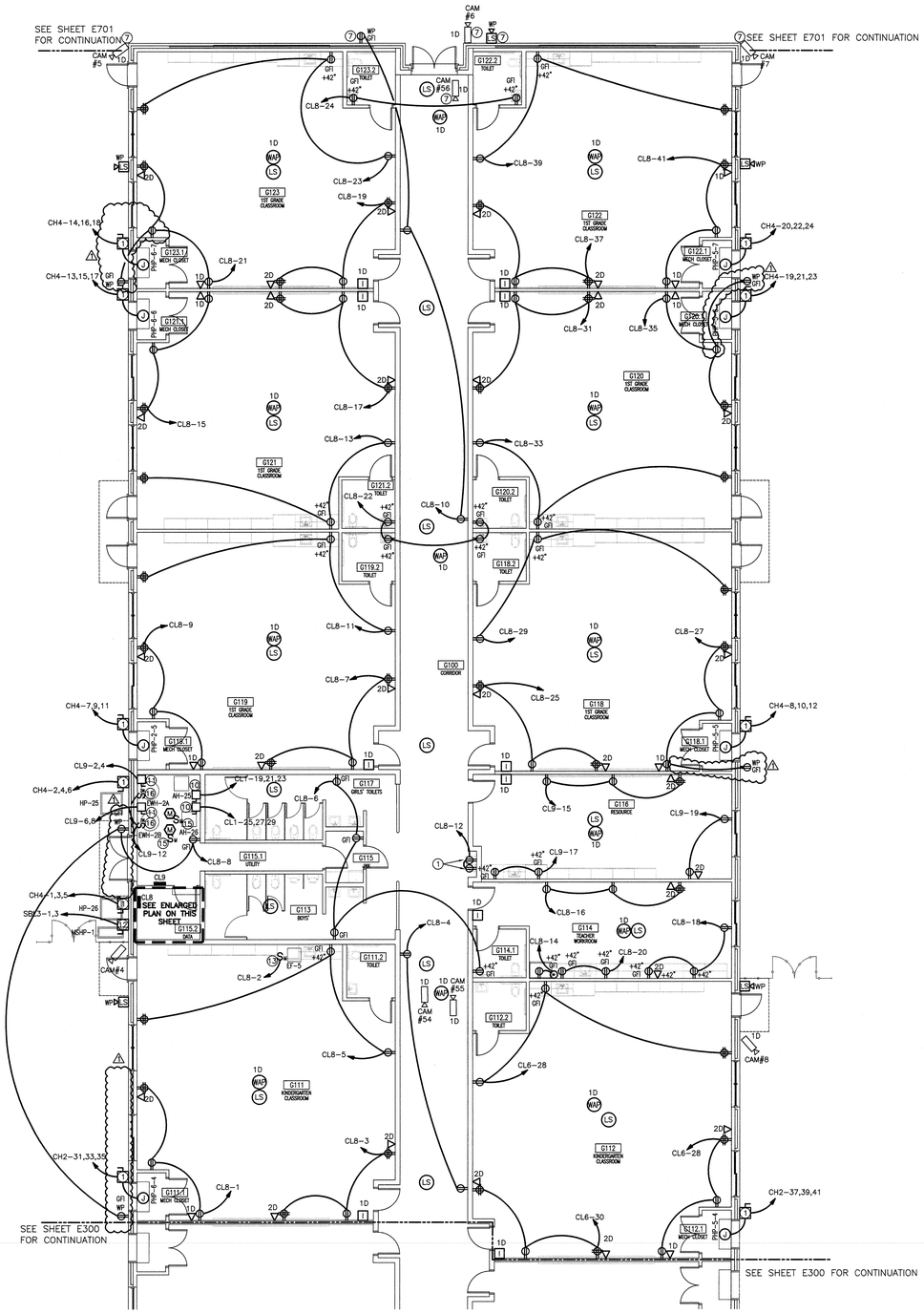
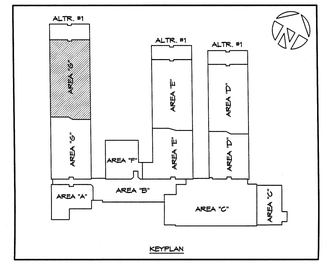
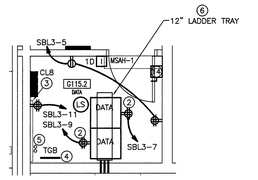
E302

Project #: 19000Z
Sheet: E302
Plotted By: chris
Plotted: June 25, 2019 @ 5:47 PM



01 E303 PARTIAL POWER PLAN – AREA G
1/8" = 1'-0"





02 E303 ENLARGED POWER PLAN – DATA G115.2
1/8" = 1'-0"

NOTES: (AS INDICATED ON THESE PLANS BY A NUMBER IN A ◯)

1. 600 VOLT, 30 AMP, 3 POLE, NEMA-3R, FUSIBLE DISCONNECT SWITCH. FUSE PER MANUFACTURER'S RECOMMENDATIONS. COORDINATE FINAL LOCATION WITH MECHANICAL OR PLUMBING CONTRACTOR.
2. COORDINATE PLACEMENT OF RECEPTACLES AT DATA RACK WITH OWNER'S IT DEPARTMENT.
3. 4'-0" x 8'-0" x 3/4" FIRE RETARDANT PLYWOOD BACKBOARD. COORDINATE FINAL PLACEMENT WITH OWNERS 'IT' DEPARTMENT.
4. TELECOMMUNICATIONS GROUND, REFER TO DETAIL E102-04.
5. TWO(2) 3" CONDUITS UNDERGROUND TO TECHNOLOGY ROOM 101. PROVIDE PULLCORDS IN CONDUIT.
6. LADDER CABLE TRAY IN DATA CLOSETS BY TELECOM CONTRACTOR.
7. IF ALTERNATE #1 IS ACCEPTED, DO NOT INSTALL THESE DEVICES.
8. IF ALTERNATE #1 IS ACCEPTED, CONTINUE TO DRAWING E701.
9. COORDINATE PLACEMENT OF RECEPTACLES FOR WATER COOLERS WITH PLUMBING CONTRACTOR SO CORD DOES NOT SHOW. PROVIDE GFCI BREAKER IN PANEL SERVING WATER COOLERS.
10. PROVIDE 240 VOLT, 60 AMP, 3 POLE, NEMA-1, FUSIBLE DISCONNECT SWITCH. FUSE PER MANUFACTURER'S RECOMMENDATIONS. COORDINATE EXACT LOCATION WITH MECHANICAL CONTRACTOR.
11. PROVIDE 240 VOLT, 30 AMP, 2 POLE, NEMA-1, FUSIBLE DISCONNECT SWITCH. FUSE PER MANUFACTURER'S RECOMMENDATIONS. COORDINATE EXACT LOCATION WITH PLUMBING CONTRACTOR.
12. PROVIDE 240 VOLT, 30 AMP, 2 POLE, NEMA-3R, FUSIBLE DISCONNECT SWITCH. FUSE PER MANUFACTURER'S RECOMMENDATIONS. COORDINATE EXACT LOCATION WITH MECHANICAL CONTRACTOR.
13. PROVIDE 120 VOLT MOTOR RATED TOGGLE DISCONNECT SWITCH FOR EXHAUST FAN. COORDINATE EXACT LOCATION WITH MECHANICAL CONTRACTOR.
14. PROVIDE 240 VOLT, 30 AMP, 2 POLE, NEMA-1, FUSIBLE DISCONNECT SWITCH. FUSE PER MANUFACTURER'S RECOMMENDATIONS. COORDINATE EXACT LOCATION WITH MECHANICAL CONTRACTOR. NOTE: INDOOR UNIT IS POWERED BY ASSOCIATED OUTDOOR UNIT.
15. PROVIDE 120 VOLT MOTOR RATED TOGGLE DISCONNECT SWITCH FOR MOTORIZED DAMPERS. COORDINATE EXACT LOCATION WITH MECHANICAL CONTRACTOR. WIRE DAMPERS TO CIRCUIT CL9-10.
16. PROVIDE 120 VOLT MOTOR RATED TOGGLE DISCONNECT SWITCH FOR RECIRCULATION PUMP. COORDINATE EXACT LOCATION WITH PLUMBING CONTRACTOR.

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PROJECT: 1821

STUMP SOUND ELEMENTARY SCHOOL
ONSLOW COUNTY SCHOOLS
STUMP SOUND, NORTH CAROLINA
PARTIAL POWER PLAN AREA G

REVISION SCHEDULE

	DATE	REFERENCE
1	06/25/19	DPI COMMENTS

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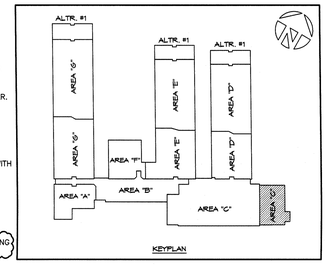
E303

Project # 180002
Sheet: E303
Plotted By: chris
Plotted: June 25, 2019 @ 5:30 PM

NOTES: (AS INDICATED ON THIS PLAN BY A NUMBER IN A ◯)

1. ELECTRICAL CONTRACTOR SHALL PROVIDE CONTROL WIRING FOR FREEZER DEFROST. COORDINATE REQUIREMENTS WITH FOOD SERVICE EQUIPMENT SUPPLIER.
2. EQUIPMENT SERVED BY GFCI BREAKER.
3. PROVIDE 240VAC, 20 AMP, MOTOR RATED TOGGLE DISCONNECT SWITCH FOR ICE MACHINE. COORDINATE LOCATION WITH FOOD SERVICE EQUIPMENT SUPPLIER.
4. PROVIDE 1 1/4" CONDUIT (SPARE) TO PANEL 'KP3' FOR FUTURE USE.
5. COORDINATE MOUNTING HEIGHT OF OUTLETS FOR TIME CLOCK WITH OWNER.
6. REFER TO HOOD CONTROL & WIRING DIAGRAM ON DRAWING E305.
7. STUB-OUT ABOVE LAY-IN CEILING IN KITCHEN.
8. 240 VOLT, 30 AMP, 2 POLE, NEMA-3R, FUSIBLE DISCONNECT SWITCH FOR FREEZER EVAPORATOR. FUSE PER MANUFACTURER'S RECOMMENDATIONS. COORDINATE EXACT LOCATION WITH FOOD SERVICE EQUIPMENT SUPPLIER.
9. 120 VOLT, 20 AMP, MOTOR RATED TOGGLE DISCONNECT SWITCH FOR COOLER EVAPORATOR. COORDINATE EXACT LOCATION AND REQUIREMENTS WITH FOOD SERVICE EQUIPMENT SUPPLIER.
10. SEE DRAWING E301 FOR CONTINUATION.
11. 120VAC POWER FOR HEAT TRACE. COORDINATE LOCATION WITH PLUMBING CONTRACTOR.
12. 240 VOLT, 60 AMP, 3 POLE, NEMA-3R, FUSIBLE DISCONNECT SWITCH FOR CONDENSING UNIT. FUSE PER MANUFACTURER'S RECOMMENDATIONS. COORDINATE EXACT LOCATION WITH ARCHITECT.
13. 240 VOLT, 30 AMP, 3 POLE, NEMA-3R, FUSIBLE DISCONNECT SWITCH FOR CONDENSING UNIT. FUSE PER MANUFACTURER'S RECOMMENDATIONS. COORDINATE EXACT LOCATION WITH ARCHITECT.
14. PROVIDE PHENOLIC LABEL AT EQUIPMENT INDICATING CIRCUIT. THE CIRCUIT BREAKERS IN PANELS KP1 OR KP3 SHALL BE CAPABLE OF BEING LOCKED IN OFF POSITION.
15. PROVIDE RIB RELAY TO TIE 120 VOLT EXHAUST FAN INTO 277 VOLT LIGHTING CIRCUIT. FAN SHALL OPERATE WHEN LIGHT IN ON.
16. 120 VOLT, 20 AMP, MOTOR RATED TOGGLE DISCONNECT SWITCH FOR MOTORIZED DAMPER. COORDINATE EXACT LOCATION WITH MECHANICAL CONTRACTOR. WIRE DAMPERS TO CIRCUIT KP3-17.
17. 240 VOLT, 30 AMP, 2 POLE, NEMA-3R, FUSIBLE DISCONNECT SWITCH. FUSE PER MANUFACTURER'S RECOMMENDATIONS. COORDINATE EXACT LOCATION WITH MECHANICAL CONTRACTOR.
18. 600 VOLT, 30 AMP, 3 POLE, NEMA-3R, FUSIBLE DISCONNECT SWITCH. FUSE PER MANUFACTURER'S RECOMMENDATIONS. COORDINATE EXACT LOCATION WITH MECHANICAL CONTRACTOR.
19. 600 VOLT, 60 AMP, 3 POLE, NEMA-3R, FUSIBLE DISCONNECT SWITCH. FUSE PER MANUFACTURER'S RECOMMENDATIONS. COORDINATE EXACT LOCATION WITH MECHANICAL CONTRACTOR.
20. 600 VOLT, 100 AMP, 3 POLE, NEMA-1, FUSIBLE DISCONNECT SWITCH. FUSE PER MANUFACTURER'S RECOMMENDATIONS. COORDINATE EXACT LOCATION WITH MECHANICAL CONTRACTOR.
21. 600 VOLT, 60 AMP, 3 POLE, NEMA-1, FUSIBLE DISCONNECT SWITCH. FUSE PER MANUFACTURER'S RECOMMENDATIONS. COORDINATE EXACT LOCATION WITH MECHANICAL CONTRACTOR.
22. 120 VOLT, 20 AMP, NEMA-1, MOTOR RATED TOGGLE DISCONNECT SWITCH FOR GAS WATER HEATER. COORDINATE EXACT LOCATION WITH PLUMBING CONTRACTOR.
23. COORDINATE WIRELESS OUTLET LOCATION FOR FREEZER WITH KITCHEN EQUIPMENT SUPPLIER.
24. 240 VOLT, 30 AMP, 3 POLE, NEMA-3R, FUSIBLE DISCONNECT SWITCH. FUSE PER MANUFACTURER'S RECOMMENDATIONS. COORDINATE EXACT LOCATION WITH KITCHEN EQUIPMENT SUPPLIER.
25. 240 VOLT, 30 AMP, 2 POLE, NEMA-1, FUSIBLE DISCONNECT SWITCH FOR RECIRCULATION PUMP. FUSE PER MANUFACTURER'S RECOMMENDATIONS. COORDINATE EXACT LOCATION WITH PLUMBING CONTRACTOR.
26. 120 VOLT, 20 AMP, MOTOR RATED TOGGLE DISCONNECT SWITCH FOR VENTILATION FAN. COORDINATE EXACT LOCATION WITH MECHANICAL CONTRACTOR.
27. REFER TO ALTERNATE #4 POWER RISER ON DRAWING E601.
28. PROVIDE 1 1/4" CONDUIT FOR GENERATOR CONTROLS. COORDINATE ROUGH-IN AND WIRING WITH GENERATOR PROVIDER.



GENERAL NOTES:

A. FOOD SERVICE EQUIPMENT CONTRACTOR SHALL COORDINATE WITH PLUMBING, MECHANICAL AND ELECTRICAL DRAWINGS AND VERIFY WITH MANUFACTURER'S SHOP DRAWINGS FOR EQUIPMENT UTILITY REQUIREMENTS.

B. LIGHTING IN WALK-IN COOLER & FREEZER MUST BE A MINIMUM OF 10ft CANDLES 30 INCHES OFF THE FLOOR IN ALL AREAS OF THE WALK-IN UNITS.

C. FOOD PREP AREAS SHALL BE A MINIMUM OF 50ft CANDLES.

D. ELECTRICAL CONTRACTOR SHALL PROVIDE ALL REQUIRED CORDS AND PLUGS TO MATCH EQUIPMENT AS REQUIRED.

E. ELECTRICAL CONTRACTOR SHALL PROVIDE AND INSTALL REQUIRED DISCONNECTS, STARTERS, CONDUIT/WIRING, FIRE ALARM, SHUNT TRIP, CONTROLS, ETC. CONNECTIONS FOR A FUNCTIONAL UDS, KITCHEN HOOD, FREEZERS, COOLERS, ETC. REFER TO HOOD/UDS/ALL KITCHEN RELATED SHOP DRAWINGS.

F. ALL RECEPTACLES SHALL BE TAMPER RESISTANT.

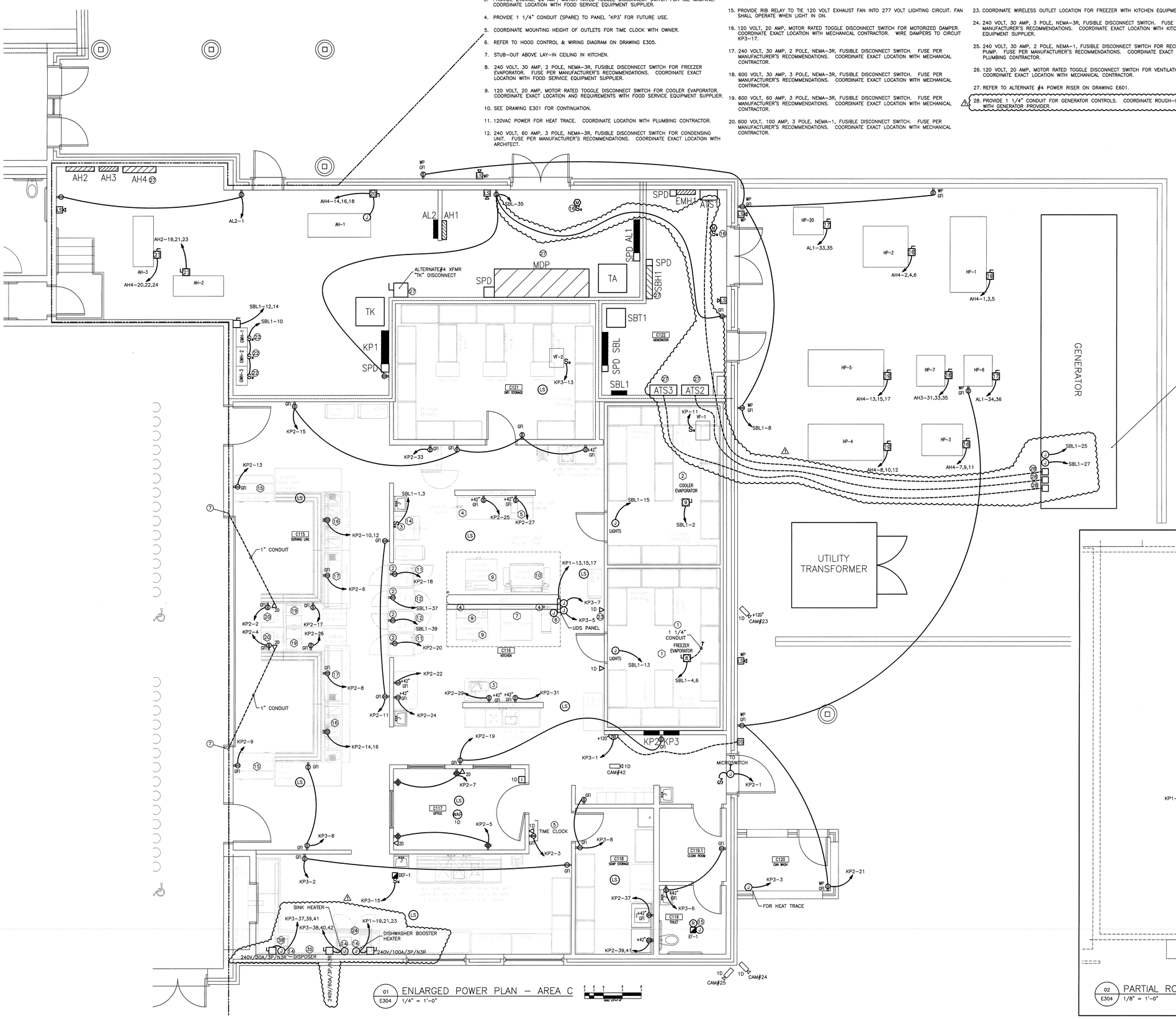
G. ALL 125V RECEPTACLES IN KITCHEN WHETHER SHOWN ON PLANS OR NOT SHALL BE GFCI PROTECTED.

H. REFER TO DRAWING E305 FOR FOOD SERVICE EQUIPMENT SCHEDULE AND ADDITIONAL NOTES.

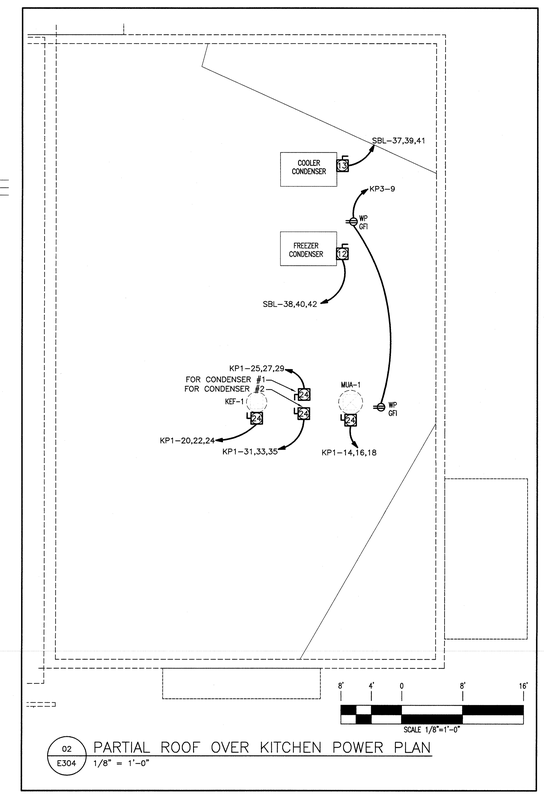
I. THE ELECTRICAL CONTRACTOR SHALL VERIFY FOOD SERVICE DRAWINGS AND CUT SHEETS FOR THE ACTUAL EQUIPMENT PROVIDED PRIOR TO ORDERING BREAKERS AND PERFORMING ROUGH-IN.

BASE BID GENERATOR: 200KW/250KVA (GAS/LP) 277/480V

ALTERNATE #4 GENERATOR: 810KW/1013KVA DIESEL WITH SUB-BASE 277/480V



01 E304 ENLARGED POWER PLAN – AREA C
1/4" = 1'-0"



02 E304 PARTIAL ROOF OVER KITCHEN POWER PLAN
1/8" = 1'-0"

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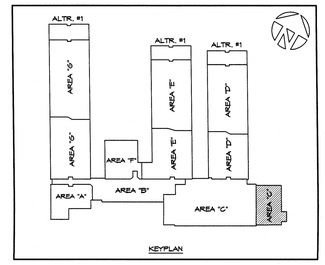
STUMP SOUND ELEMENTARY SCHOOL
ONSLOW COUNTY SCHOOLS
STUMP SOUND, NORTH CAROLINA
ENLARGED POWER PLAN
AREA C

E304

Project #: 180002
Sheet: E304
Plotted By: chris
Plotted: June 25, 2019 @ 5:30 PM



KEYPLAN

CONTRACTOR TO VERIFY ALL DIMENSIONS

FOOD SERVICE EQUIPMENT SCHEDULE

ITEM #	NAME	MANUFACTURER/MODEL NO.	Q'TY	WATER		WASTE		ELECTRICAL					GAS	REMARKS
				COLD	HOT	INDIR.	DIR.	H.P.	K.W.	AMP	VOLT	PH.		
1	WALK-IN COOLER	BROWN	1	–	–	–	–	–	–	–	208/115	3/1	–	PRE-ASSEMBLED SYSTEM SEMI HERMETIC, REFER TO NOTE #10 BELOW.
2	WALK-IN FREEZER	BROWN	1	–	–	–	–	–	–	–	208/115	3/1	–	PRE-ASSEMBLED SYSTEM SEMI HERMETIC, REFER TO NOTE #10 BELOW.
3	FOOD PROCESSOR	HOBART, HS7N-1	1	–	–	–	–	1.5	–	12	120	1	–	AUTODRIVE
4	CAN OPENER	EDLUND, #1	1	–	–	–	–	–	–	–	–	–	–	MANUAL, "OLD RELIABLE"
5	ELECTRIC CAN OPENER	EDLUND, 203	1	–	–	–	–	–	–	–	120	1	–	
6	MICROWAVE	AMANA, HDC12A	1	–	–	–	–	–	–	20	120	1	–	
7	COMBI-OVEN	BLODGETT, BCX-14E	1	3/4"	–	2"	–	–	19	53	208	3	–	TWO DECK OVEN WITH STAND AND 28 HOTEL PANS AND 14 FULL SHEET PANS – FEED FROM UDS
8	DIGITAL FOOD SCALE	EDLUND, RGS-600	1	–	–	–	–	–	–	–	120	1	–	
9	CONVECTION OVEN	VULCAN, VC44ED	2	–	–	–	–	1/2	25	–	208	3	–	FEED FROM UDS
10	TILTING BRAISING PAN	SOUTHBEND, BECT-40	1	1/2"	–	–	–	–	27	75	208	3	–	DUAL TEMP, FILL FAUCET, SPRAY HOSE GMS-40 – FEED FROM UDS
11	PASS THRU HOT CABINET	CRES COR, H-137-PWSUA-12D	2	–	–	–	–	–	2.0	16	120	1	–	REMOVABLE, UNIVERSAL PAN SLIDES, 5" CASTERS, TEMPERED GLASS DOOR WINDOW (ONE SIDE)
12	PASS THRU REFRIGERATOR	VICTORY, RS-1D-S7-PT	2	–	–	–	–	1/3	–	8.3	115	1	–	REMOVABLE, UNIVERSAL PAN SLIDES, 5" CASTERS, TEMPERED GLASS DOOR WINDOW (ONE SIDE)
13	HOT HOLDING CABINET	CRES COR, H-135-WUA-11	1	–	–	–	–	–	–	10	120	1	–	HUMIDITY PAN
14	ICE MACHINE	ICE-O-MATIC, ICE0400A	1	3/8"	–	3/4"	–	–	6.1	17.1	115	1	–	WATER AND DE-SCALING FILTER
14a	ICE STORAGE BIN	ICE-O-MATIC, B55PS	1	–	–	–	–	–	–	–	–	–	–	6" S.S. LEGS
15	MILK COOLER	TRUE, TMC-49-DS-SS	2	–	–	–	–	1/5	–	4.2	115	1	–	S.S. EXTERIOR, VERTICAL CORNER BUMPERS, 4" CASTERS, EXTERNAL DIAL THERMOMETER
16	HOT FOOD COUNTER	COLOR POINT, EF5-CPA (5 WELLS)	2	–	–	–	–	–	–	21.6	208	1	–	S.S. CARVING BOARD, REFER TO NOTE #1 BELOW, RE: SHEET A604
17	COLD FOOD COUNTER	COLOR POINT, 66-CFMA (4 WELLS)	2	–	–	–	–	1/3	–	4.8	120	1	–	S.S. CARVING BOARD, REFER TO NOTE #1 BELOW, RE: SHEET A604
18	PLAIN TOP COUNTER	COLOR POINT, 28-ST	2	–	–	–	–	–	–	–	–	–	–	S.S. SHELF, RE: SHEET A604
19	ICE CREAM DISPENSER	COLOR POINT, CTAL-5	2	–	–	–	–	1/2	–	16	120	1	–	6" S.S. ADJUSTABLE LEGS, RE: SHEET A604
20	CASHIER COUNTER	COLOR POINT, 28-CSE	2	–	–	–	–	–	–	–	–	–	–	6" S.S. ADJUSTABLE LEGS, RE: SHEET A604
21	PREPARATION SINK	48" 1 COMP. SINK & 1 SIDE BD. (1) T&S, B-0230-LN, (1) T&S, 065X	1	1/2"	1/2"	2"	–	–	–	–	–	–	–	CUSTOM; S.S. W/20"x20"x14" MIN. SINK COMPART. REFER TO NOTE #2 BELOW
22	POT WASH SINK W/ SPRAY ASSEMBLIES	3 COMPARTMENT SINK (1) T&S, B-0175-03, (1) T&S, B-0290	1	1/2" / 3/4"	1/2" / 3/4"	2"	–	–	–	–	–	–	–	CUSTOM; S.S W/20"x30"x14" SINK COMPART., W/ BOOSTER HEATER, B-0175-03 TO HAVE VACUUM BREAK
23	PREPARATION SINK	96" 2 COMP. SINK & SIDE BDS.	1	1/2"	1/2"	2"	–	–	–	–	–	–	–	CUSTOM; S.S. W/T&S B-0230 AND T&S 065X, REFER TO NOTE #2 BELOW
24	DISHWASHER	HOBART, CL44E	1	–	–	–	–	–	–	9	25	208	3	– W/ BOOSTER HEATER, PRE-RINSE UNIT, SILVER SOAK, CUSTOM S.S. DISH TABLES
25	DRYING SHELF	S.S. CUSTOM, 9'-0" LONG	1	–	–	–	–	–	–	–	–	–	–	CUSTOM, S.S.
26	PLAIN TOP COUNTER	COLOR POINT, 84-ST	2	–	–	–	–	–	–	–	–	–	–	S.S. SHELF, RE: SHEET A604
27	WORK TABLE	30"W x LENGTH VARIES x 36" HIGH	3											CUSTOM; S.S. W/ (2) LOCKABLE DRAWERS, BACKSPLASH & UNDER COUNTER SHELF
28	UTILITY CART	LAKESIDE, 544	4											STAINLESS STEEL
29	CAN RACK	KELMAX, CSR-156FIFO	3											
30	DUNNAGE RACK	METRO, METROMAX; 1'-0" TALL 24" WIDE, LENGTH VARIES	6											
31	STORAGE SHELVING	METRO, METROMAX; 6'-0" TALL 24" WIDE, LENGTH VARIES	44											
32	DRYING RACK	METRO, METROMAX i, PR48VX3	2											26"x50"x68" W/CASTERS & INCL. (2) DROP-INS & CUTTING BOARD/ TRAY DRYING RACK
33	WIRE SHELVING UNIT	METRO, A2448NS	1											24"x48"x60" W/CASTERS
34	DISPOSER	HOBART, FD3-200-D2	2	1/2"	–	–	2"	2	–	6.6	208	3	–	–
35	PRE-RINSE UNIT	T&S, B-0113-B	1	1/2"	1/2"	–	–	–	–	–	–	–	–	W/ VACUUM BREAK
36	SOILED DISH TABLE	S.S. CUSTOM	1	–	–	–	–	–	–	–	–	–	–	CUSTOM; S.S. W/ SILVER SOAK
37	CLEAN DISH TABLE	S.S. CUSTOM	1	–	–	–	–	–	–	–	–	–	–	CUSTOM; S.S.
38	SINK HEATER	HATCO, 3CS-9	2	–	–	–	–	–	9	25	208	3	–	

EQUIPMENT SCHEDULE NOTES:

1) ONE TIER DISPLAY STAND. 1/4" PLATE GLASS SHELVES. GLASS ENDS & FULL HEIGHT FOODSHIELD.
2) DRAINBOARDS MUST BE AT LEAST 24"x24", NSF APPROVED CONSTRUCTION.
3) FOOD SERVICE EQUIPMENT CONTRACTOR SHALL COORDINATE WITH PLUMBING, MECHANICAL, AND ELECTRICAL DRAWINGS AND VERIFY WITH MANUFACTURER'S SHOP DRAWINGS FOR EQUIPMENT UTILITY REQUIREMENTS.
4) UTILITY WALL SHALL BE CONSTRUCTED WITH 3 5/8" 16 GA. METAL STUDS, 16" O.C. WITH 1/2" GYPSUM GREEN BOARD AND WRAPPED WITH 4x4 CERAMIC TILE.
5) ALL EXPOSED CORNERS IN KITCHEN AND SERVING LINE AREA SHALL HAVE STAINLESS STEEL CORNER GUARDS.
6) ALL EQUIPMENT, WITH THE EXCEPTION OF TOASTERS, MICROWAVES, HAND MIXERS, HOODS AND WATER HEATERS MUST BE NSF/ANSI APPROVED FOR THE INTENDED USE OF THE EQUIPMENT.
7) ENTIRE KITCHEN, OFFICE, SERVING LINE, DRY STORAGE AREA, TOILET & SOAP STORAGE MUST HAVE NON-ABSORBENT, WASHABLE ACOUSTICAL CEILING TILE. REFER TO ROOM FINISH SCHEDULE, SHEET A602.
8) ALL WALLS MUST BE SMOOTH WATER RESISTANT, CLEANABLE SURFACE. REFER TO ROOM FINISH SCHEDULE.
9) BATHROOM TO HAVE HOT & COLD RUNNING WATER THROUGH A MIXING FAUCET, WASHABLE WALLS, & WASHABLE , NON-ABSORBENT CEILING, HOT WATER TO BE A MINIMUM OF 100°F. REFER TO ROOM FINISH SCHEDULE.
10) LIGHTING IN WALK-IN COOLER & FREEZER MUST BE A MINIMUM OF 10ft CANDLES 30 INCHES OFF THE FLOOR IN ALL AREAS OF THE WALK-IN UNITS.
11) FOOD PREP AREAS MUST BE A MINIMUM OF 50ft CANDLES.

GENERAL NOTES:

A. FOOD SERVICE EQUIPMENT CONTRACTOR SHALL COORDINATE WITH PLUMBING, MECHANICAL AND ELECTRICAL DRAWINGS AND VERIFY WITH MANUFACTURER'S SHOP DRAWINGS FOR EQUIPMENT UTILITY REQUIREMENTS.

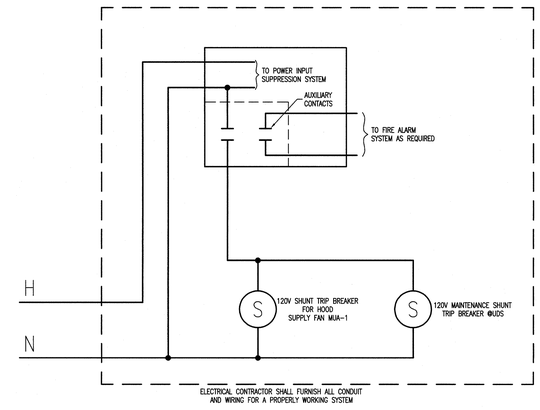
B. LIGHTING IN WALK-IN COOLER & FREEZER MUST BE A MINIMUM OF 10ft CANDLES 30 INCHES OFF THE FLOOR IN ALL AREAS OF THE WALK-IN UNITS.

C. FOOD PREP AREAS MUST BE A MINIMUM OF 50ft CANDLES.

D. ELECTRICAL CONTRACTOR SHALL PROVIDE ALL REQUIRED CORDS AND PLUGS TO MATCH EQUIPMENT AS REQUIRED.

E. ELECTRICAL CONTRACTOR SHALL PROVIDE AND INSTALL REQUIRED DISCONNECTS, STARTERS, CONDUIT/WIRING, FIRE ALARM, SHUNT TRIP, ETC. CONNECTIONS FOR FUNCTIONAL UDS AND KITCHEN HOOD. REFER TO HOOD/UDS SHOP DRAWINGS.

F. ALL RECEPTACLES SHALL BE TAMPER RESISTANT.



01 / E305 HOOD CONTROL AND WIRING DIAGRAM
NOT TO SCALE

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ISSUE DATE: 04.30.2019
DRAWN BY: JPT
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PROJECT: 1821

STUMP SOUND ELEMENTARY SCHOOL
ONSLOW COUNTY SCHOOLS
STUMP SOUND, NORTH CAROLINA

FOOD SERVICE EQUIPMENT SCHEDULE

REVISION SCHEDULE

⚠	DATE	REFERENCE

E305

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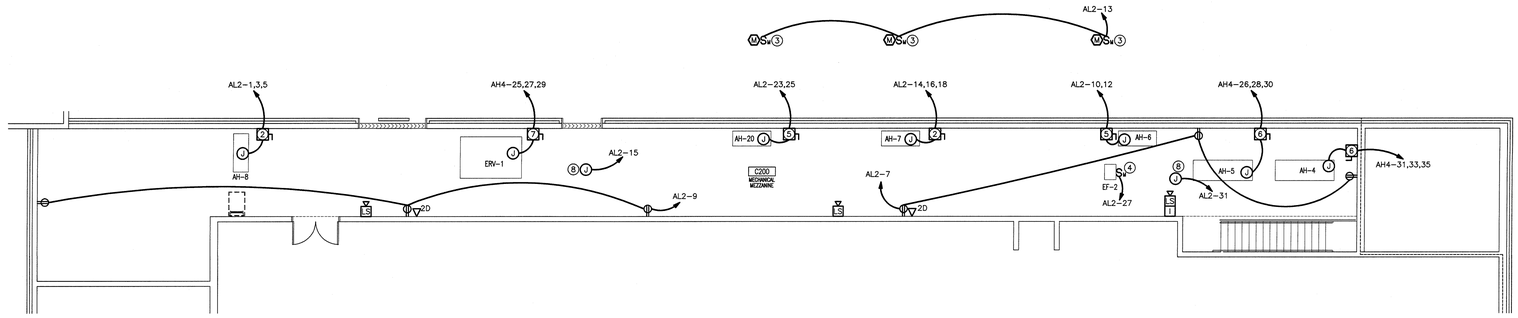
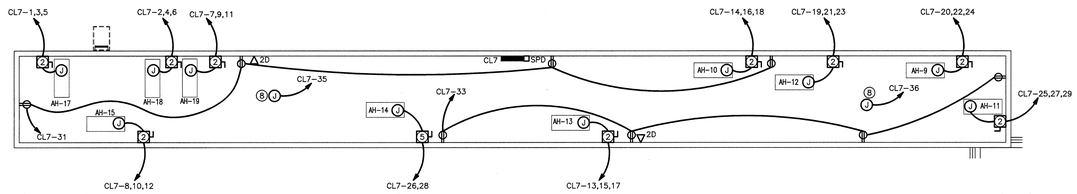
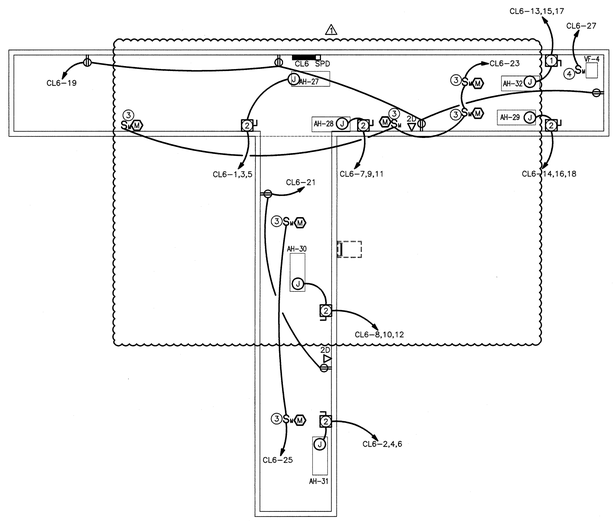
Project #: 190000
Sheet: E305
Plotted By: chris
Plotted: April 28, 2019 @ 4:08 PM



03 E306 MEZZANINE C POWER PLAN
1/8" = 1'-0"



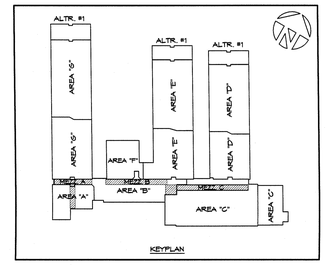
02 E306 MEZZANINE B POWER PLAN
1/8" = 1'-0"



01 E306 MEZZANINE A POWER PLAN
1/8" = 1'-0"

NOTES: (AS INDICATED ON THESE PLANS BY A NUMBER IN A ◯)

1. PROVIDE 240 VOLT, 30 AMP, 3 POLE, NEMA-1, FUSIBLE DISCONNECT SWITCH. FUSE PER MANUFACTURER'S RECOMMENDATIONS. COORDINATE FINAL LOCATION WITH MECHANICAL CONTRACTOR.
2. PROVIDE 240 VOLT, 60 AMP, 3 POLE, NEMA-1, FUSIBLE DISCONNECT SWITCH. FUSE PER MANUFACTURER'S RECOMMENDATIONS. COORDINATE EXACT LOCATION WITH MECHANICAL CONTRACTOR.
3. PROVIDE 120VAC MOTOR RATED TOGGLE DISCONNECT SWITCH FOR MOTORIZED DAMPER. COORDINATE EXACT LOCATION WITH MECHANICAL CONTRACTOR.
4. PROVIDE 120VAC MOTOR RATED TOGGLE DISCONNECT SWITCH FOR EXHAUST FAN. COORDINATE EXACT LOCATION WITH MECHANICAL CONTRACTOR.
5. PROVIDE 240 VOLT, 60 AMP, 2 POLE, NEMA-1, FUSIBLE DISCONNECT SWITCH. FUSE PER MANUFACTURER'S RECOMMENDATIONS. COORDINATE EXACT LOCATION WITH MECHANICAL CONTRACTOR.
6. PROVIDE 600 VOLT, 30 AMP, 3 POLE, NEMA-1, FUSIBLE DISCONNECT SWITCH. FUSE PER MANUFACTURER'S RECOMMENDATIONS. COORDINATE EXACT LOCATION WITH MECHANICAL CONTRACTOR.
7. PROVIDE 600 VOLT, 60 AMP, 3 POLE, NEMA-1, FUSIBLE DISCONNECT SWITCH. FUSE PER MANUFACTURER'S RECOMMENDATIONS. COORDINATE EXACT LOCATION WITH MECHANICAL CONTRACTOR.
8. WIRE MOTORIZED DAMPERS TO CIRCUIT SHOWN IN THIS AREA. COORDINATE ALL DAMPER LOCATIONS WITH MECHANICAL CONTRACTOR. DAMPERS SHALL BE PROVIDED WITH LOCAL 20 AMP/1 POLE MOTOR RATED TOGGLE FOR LOCAL DISCONNECTING MEANS. PROVIDE QUANTITY AS NEEDED FOR DAMPERS PROVIDED.



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ISSUE DATE: 04.30.2019
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PROJECT: 1821

STUMP SOUND ELEMENTARY SCHOOL
ONSLOW COUNTY SCHOOLS
STUMP SOUND, NORTH CAROLINA
POWER PLANS
MEZZANINES A, B & C

REVISION SCHEDULE

	DATE	REFERENCE
2		
1	06/25/19	DPI COMMENTS

E306

8' 4' 0 8' 16'
SCALE 1/8"=1'-0"

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Project #: 190202
Sheet: E306
Plotted By: chris
Plotted: June 25, 2019 @ 5:31 PM



01 E400 PARTIAL FIRE ALARM PLAN – AREAS A, B, AND PARTIAL F & G
1/8" = 1'-0"

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STUMP SOUND ELEMENTARY SCHOOL
ONSLOW COUNTY SCHOOLS
STUMP SOUND, NORTH CAROLINA

AREAS A, B, F & G
FIRE ALARM PLAN

REVISION SCHEDULE

△	DATE	REFERENCE

E400

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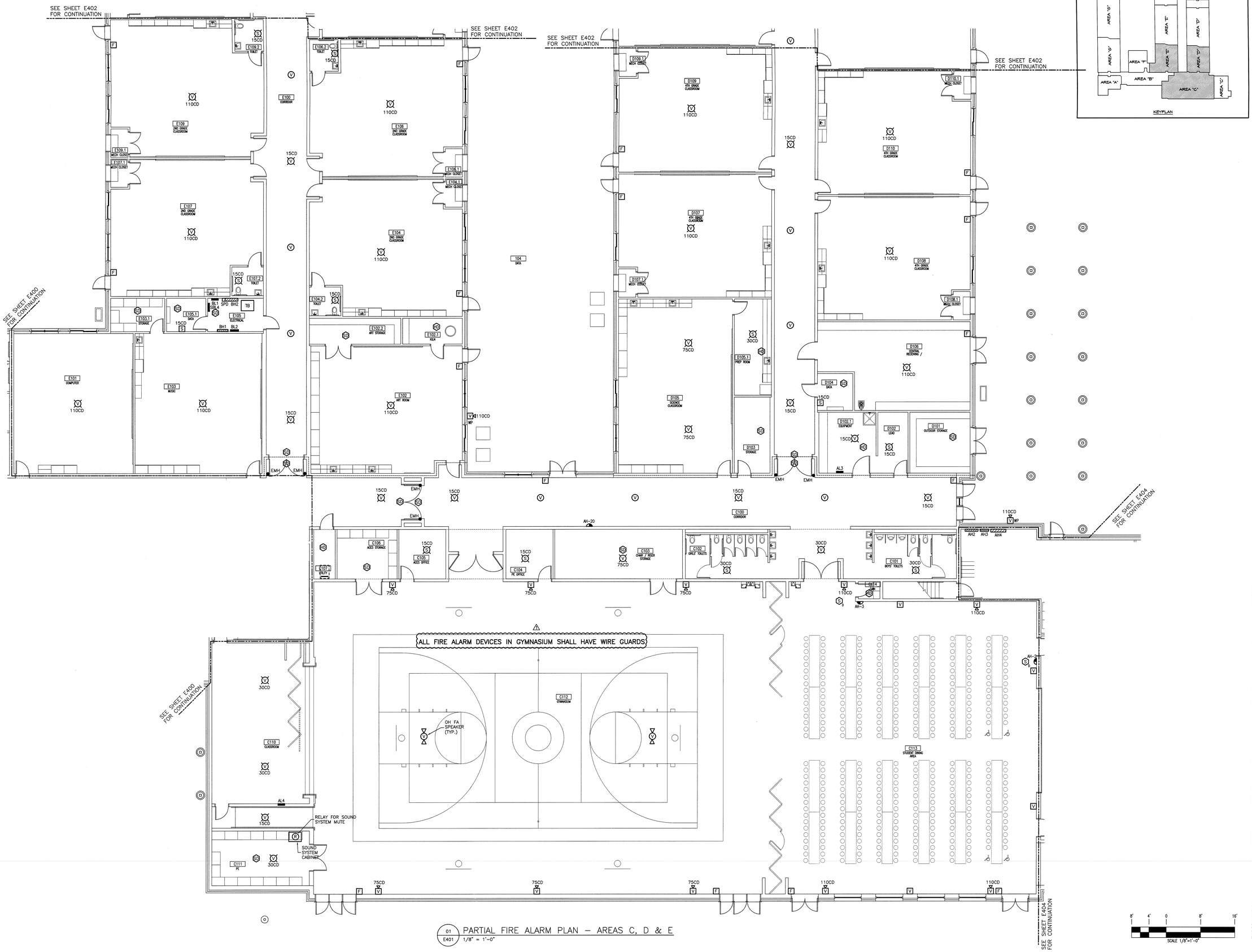
Project #: 190002 Plotted By: chris
Sheet: E400 Plotted: April 28, 2019 @ 3:08 PM



01 E401 PARTIAL FIRE ALARM PLAN – AREAS C, D & E
1/8" = 1'-0"

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STUMP SOUND ELEMENTARY SCHOOL
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STUMP SOUND, NORTH CAROLINA

PARTIAL FIRE ALARM PLAN
AREAS C, D & E

REVISION SCHEDULE

	DATE	REFERENCE
1	06/25/19	DPI COMMENTS

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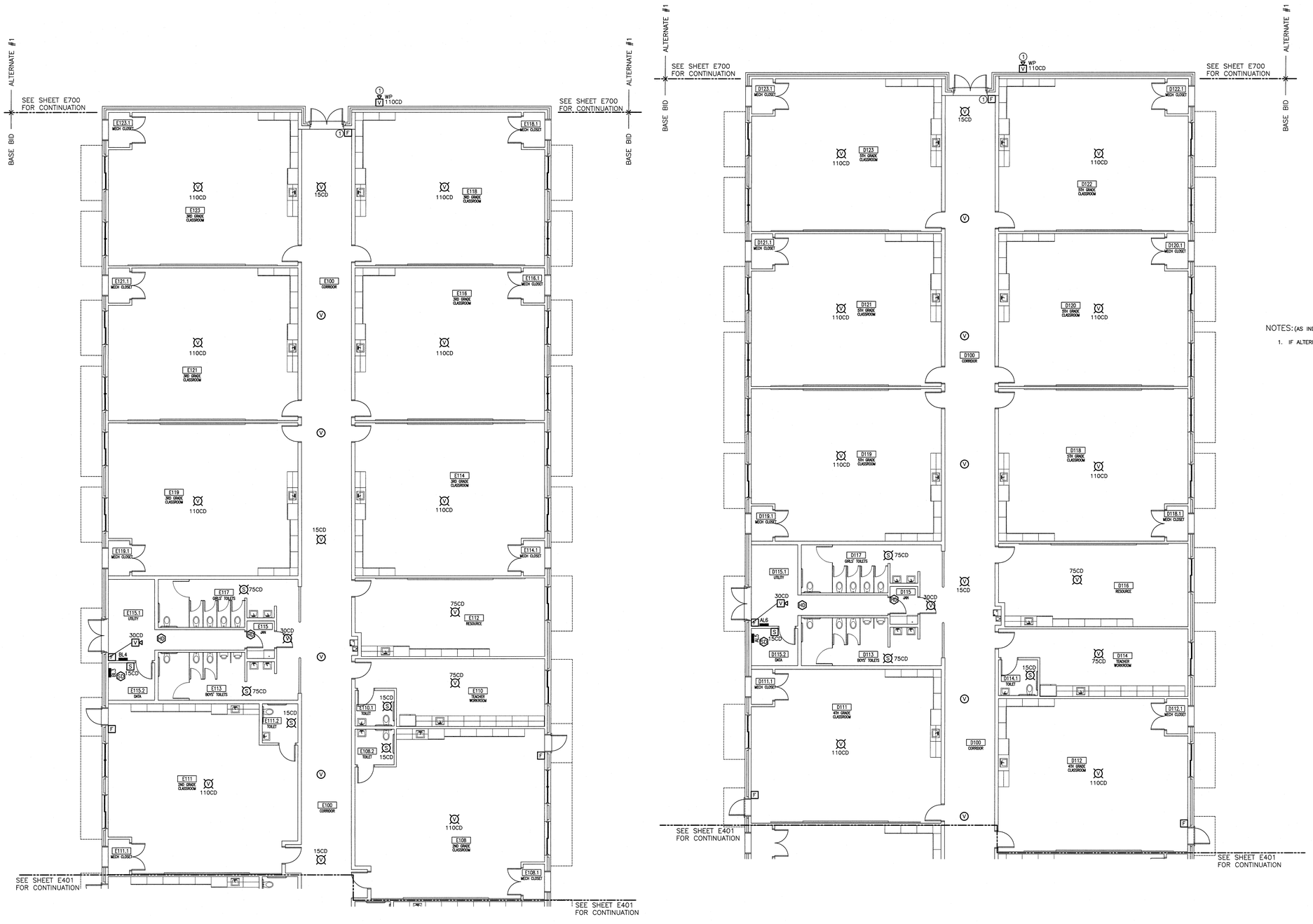
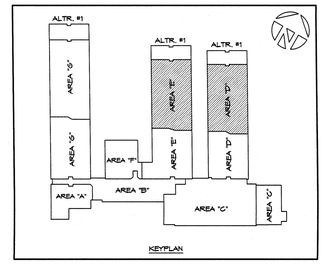
E401

Project #: 190002 Plotted By: chris
Sheet: E401 Plotted: June 25, 2019 @ 5:31 PM



01 E402 PARTIAL AREAS D & E FIRE ALARM PLANS
1/8" = 1'-0"



NOTES: (AS INDICATED ON THIS PLAN BY A NUMBER IN A ◯)

1. IF ALTERNATE #1 IS ACCEPTED, DO NOT INSTALL THIS DEVICE. REFER TO E700.

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ISSUE DATE: 04.30.2019
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PROJECT: 1821

STUMP SOUND ELEMENTARY SCHOOL
ONSLOW COUNTY SCHOOLS
STUMP SOUND, NORTH CAROLINA

PARTIAL FIRE ALARM PLAN
AREAS D & E

REVISION SCHEDULE

△	DATE	REFERENCE

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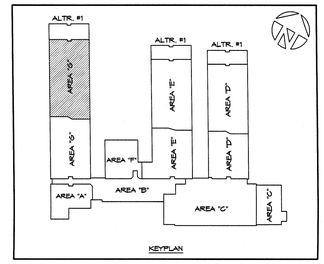
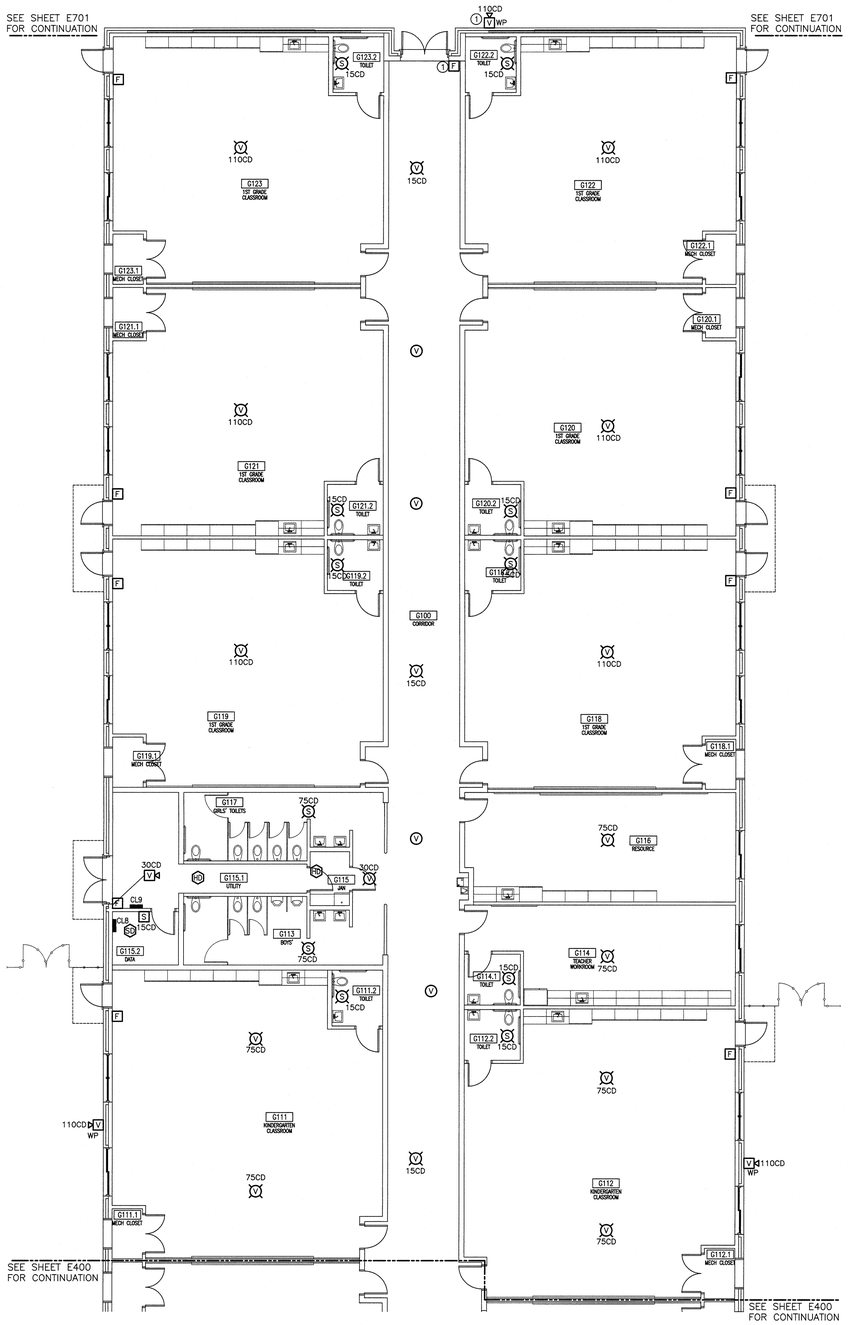
8' 4' 0 8' 16'
SCALE 1/8"=1'-0"

E402

Project #: 190002 Plotted By: chris
Sheet: E402 Plotted: April 28, 2019 @ 3:08 PM



KEYPLAN



NOTES: (AS INDICATED ON THESE PLANS BY A NUMBER IN A ◯)

1. IF ALTERNATE #1 IS ACCEPTED, DO NOT INSTALL THIS DEVICE. REFER TO DRAWING E701.

01 / E403 PARTIAL FIRE ALARM PLAN – AREA G
1/8" = 1'-0"

8' 4' 0 8' 16'
SCALE 1/8"=1'-0"

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STUMP SOUND ELEMENTARY SCHOOL
ONSLOW COUNTY SCHOOLS
STUMP SOUND, NORTH CAROLINA
PARTIAL FIRE ALARM PLAN
AREA G

REVISION SCHEDULE

	DATE	REFERENCE

E403

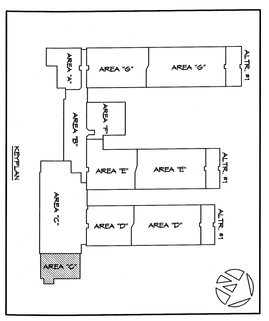
Project # 190002
Plotted By: chris
Plotted: Apr 28, 2019 @ 3:08 PM
Sheet: E403

Project #: 190002
Sheet: E404
Plotted By: chris
Plotted: April 28, 2019 @ 3:08 PM



01 E404 PARTIAL FIRE ALARM PLAN — AREA C
1/8" = 1'-0"

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



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E404

REVISION SCHEDULE

NO.	DATE	REFERENCE

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ONSLOW COUNTY SCHOOLS
STUMP SOUND, NORTH CAROLINA

PARTIAL FIRE ALARM PLAN
AREA C

ISSUE DATE: 04.30.2019
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4/29/19

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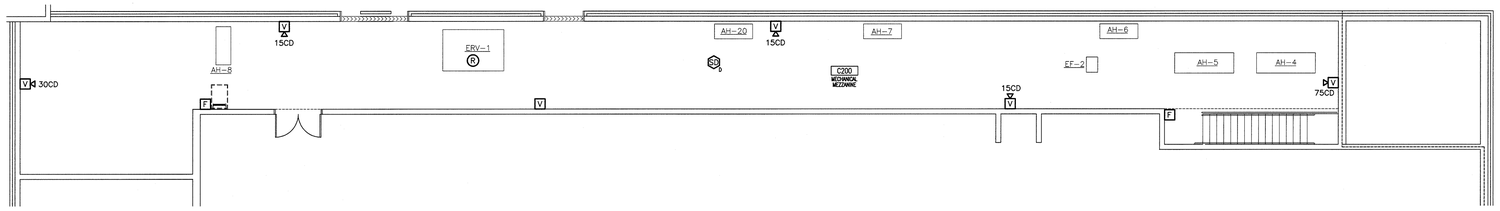
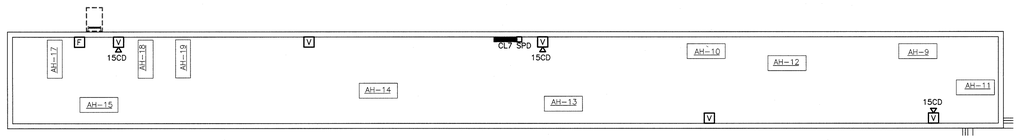
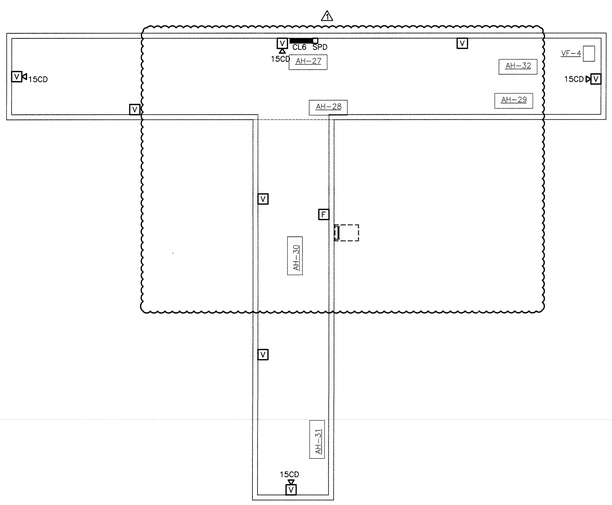


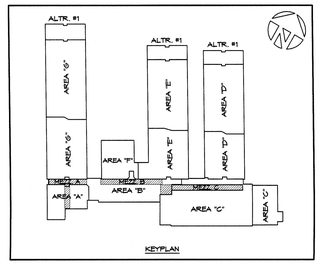
03 E405 MEZZANINE C FIRE ALARM PLAN
1/8" = 1'-0"



02 E405 MEZZANINE B FIRE ALARM PLAN
1/8" = 1'-0"



01 E405 MEZZANINE A FIRE ALARM PLAN
1/8" = 1'-0"



KEYPLAN

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STUMP SOUND ELEMENTARY SCHOOL
ONSLOW COUNTY SCHOOLS
STUMP SOUND, NORTH CAROLINA
FIRE ALARM PLANS
MEZZANINES A, B & C

REVISION SCHEDULE

	DATE	REFERENCE
1	06/25/19	DPI COMMENTS

8' 4' 0 8' 16'
SCALE 1/8"=1'-0"

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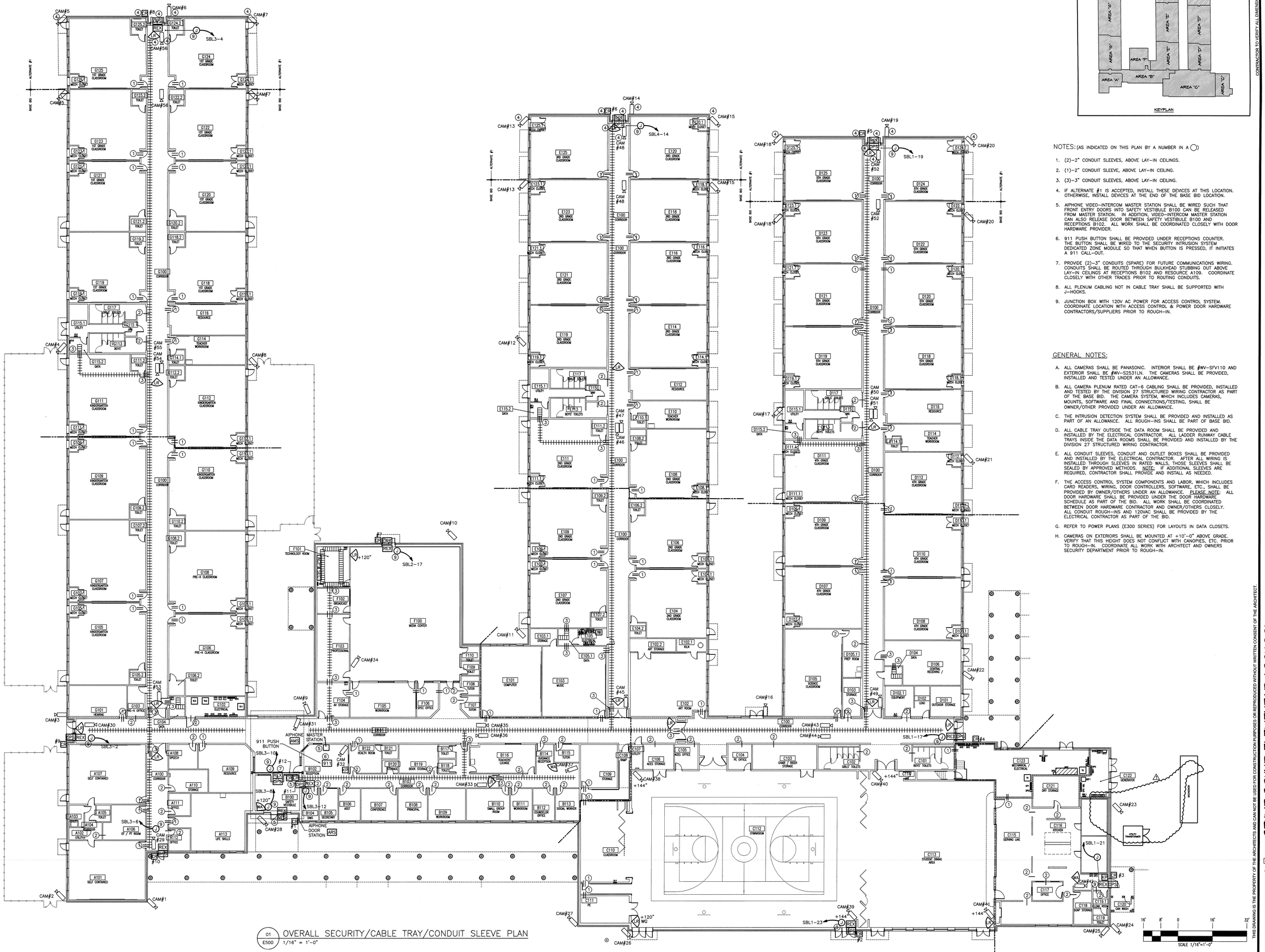
E405

Project # 190002
Sheet: E405
Plotted By: chris
Plotted: June 25, 2019 @ 5:31 PM



01 OVERALL SECURITY/CABLE TRAY/CONDUIT SLEEVE PLAN
E500 1/16" = 1'-0"

NOTES: (AS INDICATED ON THIS PLAN BY A NUMBER IN A ◯)

1. (2)–2" CONDUIT SLEEVES, ABOVE LAY–IN CEILINGS.
2. (1)–2" CONDUIT SLEEVE, ABOVE LAY–IN CEILING.
3. (3)–3" CONDUIT SLEEVES, ABOVE LAY–IN CEILING.
4. IF ALTERNATE #1 IS ACCEPTED, INSTALL THESE DEVICES AT THIS LOCATION. OTHERWISE, INSTALL DEVICES AT THE END OF THE BASE BID LOCATION.
5. AIPHONE VIDEO–INTERCOM MASTER STATION SHALL BE WIRED SUCH THAT FRONT ENTRY DOORS INTO SAFETY VESTIBULE B100 CAN BE RELEASED FROM MASTER STATION. IN ADDITION, VIDEO–INTERCOM MASTER STATION CAN ALSO RELEASE DOOR BETWEEN SAFETY VESTIBULE B100 AND RECEPTIONS B102. ALL WORK SHALL BE COORDINATED CLOSELY WITH DOOR HARDWARE PROVIDER.
6. 911 PUSH BUTTON SHALL BE PROVIDED UNDER RECEPTIONS COUNTER. THE BUTTON SHALL BE WIRED TO THE SECURITY INTRUSION SYSTEM DEDICATED ZONE MODULE SO THAT WHEN BUTTON IS PRESSED, IT INITIATES A 911 CALL–OUT.
7. PROVIDE (2)–3" CONDUITS (SPARE) FOR FUTURE COMMUNICATIONS WIRING. CONDUITS SHALL BE ROUTED THROUGH BULKHEAD STUBBING OUT ABOVE LAY–IN CEILINGS AT RECEPTIONS B102 AND RESOURCE A109. COORDINATE CLOSELY WITH OTHER TRADES PRIOR TO ROUTING CONDUITS.
8. ALL PLENUM CABLING NOT IN CABLE TRAY SHALL BE SUPPORTED WITH J–HOOKS.
9. JUNCTION BOX WITH 120V AC POWER FOR ACCESS CONTROL SYSTEM. COORDINATE LOCATION WITH ACCESS CONTROL & POWER DOOR HARDWARE CONTRACTORS/SUPPLIERS PRIOR TO ROUGH–IN.

GENERAL NOTES:

A. ALL CAMERAS SHALL BE PANASONIC. INTERIOR SHALL BE #WV–SFV110 AND EXTERIOR SHALL BE #WV–S2531LN. THE CAMERAS SHALL BE PROVIDED, INSTALLED AND TESTED UNDER AN ALLOWANCE.

B. ALL CAMERA PLENUM RATED CAT–6 CABLING SHALL BE PROVIDED, INSTALLED AND TESTED BY THE DIVISION 27 STRUCTURED WIRING CONTRACTOR AS PART OF THE BASE BID. THE CAMERA SYSTEM, WHICH INCLUDES CAMERAS, MOUNTS, SOFTWARE AND FINAL CONNECTIONS/TESTING, SHALL BE OWNER/OTHER PROVIDED UNDER AN ALLOWANCE.

C. THE INTRUSION DETECTION SYSTEM SHALL BE PROVIDED AND INSTALLED AS PART OF AN ALLOWANCE. ALL ROUGH–INS SHALL BE PART OF BASE BID.

D. ALL CABLE TRAY OUTSIDE THE DATA ROOM SHALL BE PROVIDED AND INSTALLED BY THE ELECTRICAL CONTRACTOR. ALL LADDER RUNWAY CABLE TRAYS INSIDE THE DATA ROOMS SHALL BE PROVIDED AND INSTALLED BY THE DIVISION 27 STRUCTURED WIRING CONTRACTOR.

E. ALL CONDUIT SLEEVES, CONDUIT AND OUTLET BOXES SHALL BE PROVIDED AND INSTALLED BY THE ELECTRICAL CONTRACTOR. AFTER ALL WIRING IS INSTALLED THROUGH SLEEVES IN RATED WALLS, THOSE SLEEVES SHALL BE SEALED BY APPROVED METHODS. NOTE: IF ADDITIONAL SLEEVES ARE REQUIRED, CONTRACTOR SHALL PROVIDE AND INSTALL AS NEEDED.

F. THE ACCESS CONTROL SYSTEM COMPONENTS AND LABOR, WHICH INCLUDES CARD READERS, WIRING, DOOR CONTROLLERS, SOFTWARE, ETC., SHALL BE PROVIDED BY OWNER/OTHERS UNDER AN ALLOWANCE. PLEASE NOTE: ALL DOOR HARDWARE SHALL BE PROVIDED UNDER THE DOOR HARDWARE SCHEDULE AS PART OF THE BID. ALL WORK SHALL BE COORDINATED BETWEEN DOOR HARDWARE CONTRACTOR AND OWNER/OTHERS CLOSELY. ALL CONDUIT ROUGH–INS AND 120VAC SHALL BE PROVIDED BY THE ELECTRICAL CONTRACTOR AS PART OF THE BID.

G. REFER TO POWER PLANS (E300 SERIES) FOR LAYOUTS IN DATA CLOSETS.

H. CAMERAS ON EXTERIORS SHALL BE MOUNTED AT +10'–0" ABOVE GRADE. VERIFY THAT THIS HEIGHT DOES NOT CONFLICT WITH CANOPIES, ETC. PRIOR TO ROUGH–IN. COORDINATE ALL WORK WITH ARCHITECT AND OWNERS SECURITY DEPARTMENT PRIOR TO ROUGH–IN.

CONTRACTOR TO VERIFY ALL DIMENSIONS

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ISSUE DATE: 04.30.2019
DRAWN BY: JPT
CHECKED BY: RAC
PROJECT: 1821

STUMP SOUND ELEMENTARY SCHOOL
ONSLOW COUNTY SCHOOLS
STUMP SOUND, NORTH CAROLINA
OVERALL SECURITY CABLE TRAY PLAN

REVISION SCHEDULE

	DATE	REFERENCE
1	06/25/19	DPI COMMENTS

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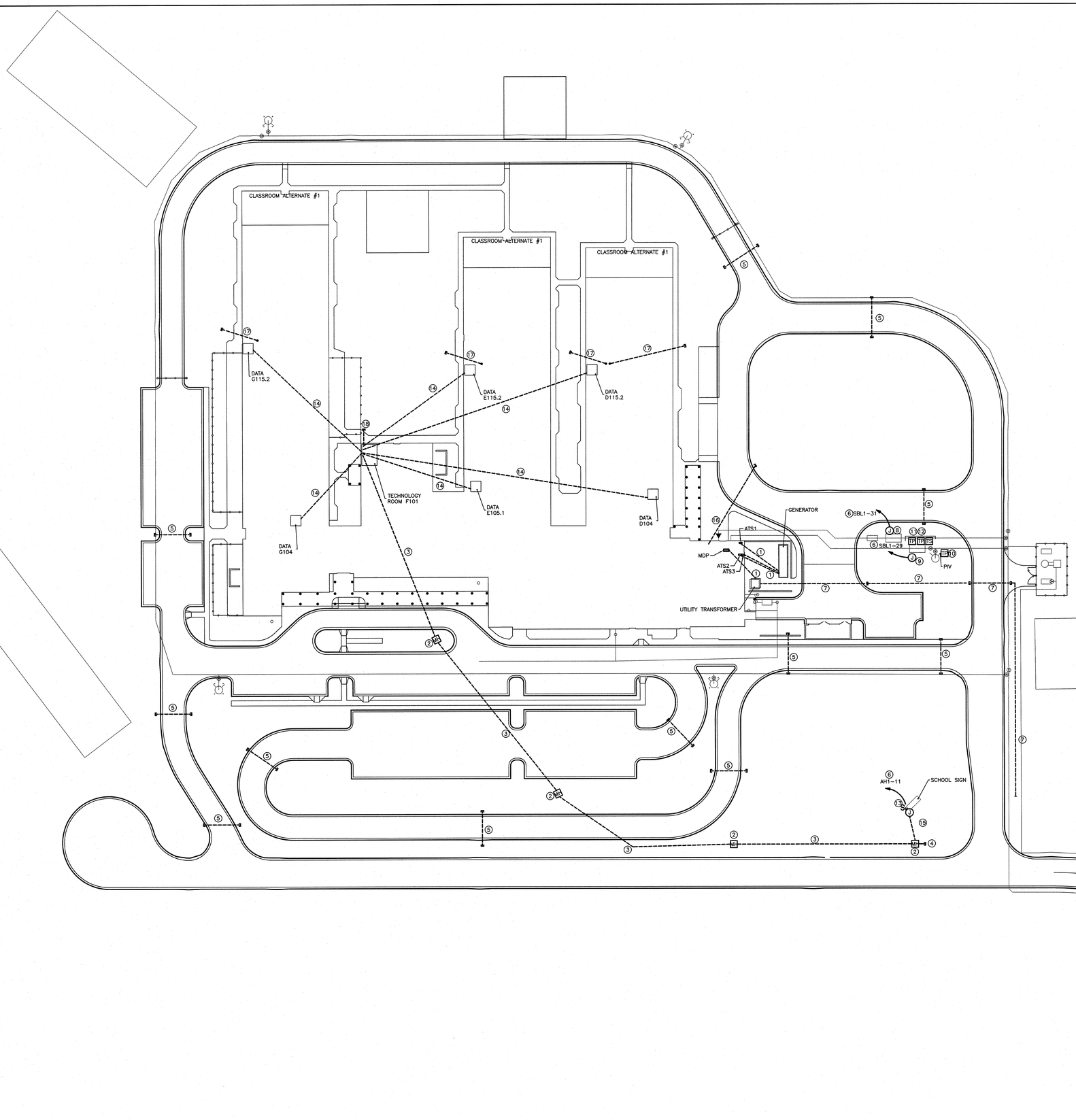
E500

Project #: 190002
Sheet: E500
Plotted By: chris
Plotted: June 25, 2019 @ 5:31 PM



NOTES: (AS INDICATED ON THIS PLAN BY A NUMBER IN A ◯)

1. SEE POWER RISER FOR CONDUIT AND WIRE SIZES.
2. REFER TO MANHOLE DETAIL E106/01.
3. (3) 4"C AND (1) 2"C FOR COMMUNICATIONS ROUTED FROM TECHNOLOGY F101 TO PROPERTY LINE VIA MANHOLES. BURY CONDUITS A MINIMUM OF 36" BELOW GRADE. COORDINATE WITH OWNER AND SERVICE PROVIDER'S PRIOR TO ROUGH-IN.
4. (3) 4"C FOR COMMUNICATIONS STUBBED OUT OF MANHOLE. LOCATE ON AS-BUILT PLANS. COORDINATE WITH SERVICE PROVIDER'S AND OWNER.
5. (2) 2"C SLEEVES FOR DUKE ENERGY PROGRESS SITE LIGHTING. COORDINATE WITH DUKE ENERGY PROGRESS LOCAL REPRESENTATIVE JACKIE LEE (910) 346-1412. ALL WORK SHALL BE COORDINATED WITH DUKE ENERGY PRIOR TO ANY INSTALLATION.
6. REFER TO PANEL SCHEDULE FOR CONDUIT AND WIRE SIZES.
7. PROPOSED UNDERGROUND DUKE ENERGY PROGRESS PRIMARY POWER LINE, ELECTRICAL CONTRACTOR SHALL PROVIDE 6"C TO ACCOMMODATE DUKE ENERGY, INSTALLATION SHALL BE PERFORMED IN ACCORDANCE WITH DUKE STANDARDS. COORDINATE WITH JACJIE LEE PRIOR TO COMMENCING ANY WORK FOR THE POWER COMPANY.
8. WEATHERPROOF JUNCTION BOX AND RECEPTACLE FOR DOMESTIC WATER HOTBOX HEATER, WIRE TO CIRCUIT AS SHOWN.
9. WEATHERPROOF JUNCTION BOX AND RECEPTACLE FOR FIRELINE HOTBOX HEATER, WIRE TO CIRCUIT AS SHOWN.
10. TAMPER SWITCH FOR PIV POST INDICATOR VALVE. PROVIDE AND INSTALL 1"C AND FIRE ALARM WIRING, MONITOR MODULE AND TIE TO FIRE ALARM SYSTEM FOR MONITORING THE TAMPER SWITCH.
11. TAMPER SWITCHES FOR FIRE LINE BFP. PROVIDE AND INSTALL 1"C AND FIRE ALARM WIRING, MONITOR MODULE AND TIE TO FIRE ALARM SYSTEM FOR MONITORING THE TAMPER SWITCHES.
12. TEMPERATURE SENSOR (POTTER OR EQUAL) FOR FIRELINE HOTBOX. PROVIDE AND INSTALL 1"C, FIRE ALARM WIRING, MONITOR MODULE AND TIE TO THE FIRE ALARM SYSTEM TO MONITOR THE SENSOR.
13. SCHOOL SIGN, PROVIDE 277v DIGITAL SIGN LIGHTING CIRCUIT AS SHOWN. INSTALL WEATHERPROOF LOCAL DISCONNECT AT SIGN LOCATION.
14. (2) 3"C FOR COMMUNICATIONS BETWEEN THE TECHNOLOGY ROOM F101 AND (IDF) DATA CLOSET AS SHOWN. COORDINATE LAYOUT OF CONDUITS IN THE F101 ROOM PRIOR TO ROUGH-IN. ALL CONDUITS SHALL HAVE PULLCORDS.
15. (1) 2"C FROM MANHOLE TO DIGITAL SIGN FOR COMMUNICATIONS CONNECTION. PROVIDE PULLCORD IN CONDUIT.
16. (2) 2"C SPARES FROM ELEC C123, CAP BOTH ENDS AND LOCATE ON AS-BUILT PLANS.
17. (2) 2"C SPARES FROM UTILITY ROOM TO 5FT OUTSIDE BUILDING, CAP BOTH ENDS AND LOCATE ON AS-BUILT PLANS.
18. (2) 2"C SPARES FROM TECHNOLOGY ROOM F101 TO 10FT OUTSIDE BUILDING, CAP BOTH ENDS AND LOCATE ON AS-BUILT PLANS.

GENERAL NOTES:

1. ALL COPPER COMMUNICATIONS, FIRE ALARM, ETC. CONDUCTORS EXITING THE BUILDING ENVELOPE SHALL BE PROVIDED WITH LIGHTNING SURGE SUPPRESSION AS REQUIRED PER NEC ARTICLE 800. REFER TO SPECIFICATIONS.

01 / E501 ELECTRICAL SITE PLAN
1" = 40'

40' 20' 0 40' 80'
SCALE 1"=40'-0"

CONTRACTOR TO VERIFY ALL DIMENSIONS

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ISSUE DATE: 04.30.2019
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CHECKED BY: RAC
PROJECT: 1821

STUMP SOUND ELEMENTARY SCHOOL
ONSLOW COUNTY SCHOOLS
STUMP SOUND, NORTH CAROLINA
ELECTRICAL SITE PLAN

REVISION SCHEDULE

⚠	DATE	REFERENCE

E501

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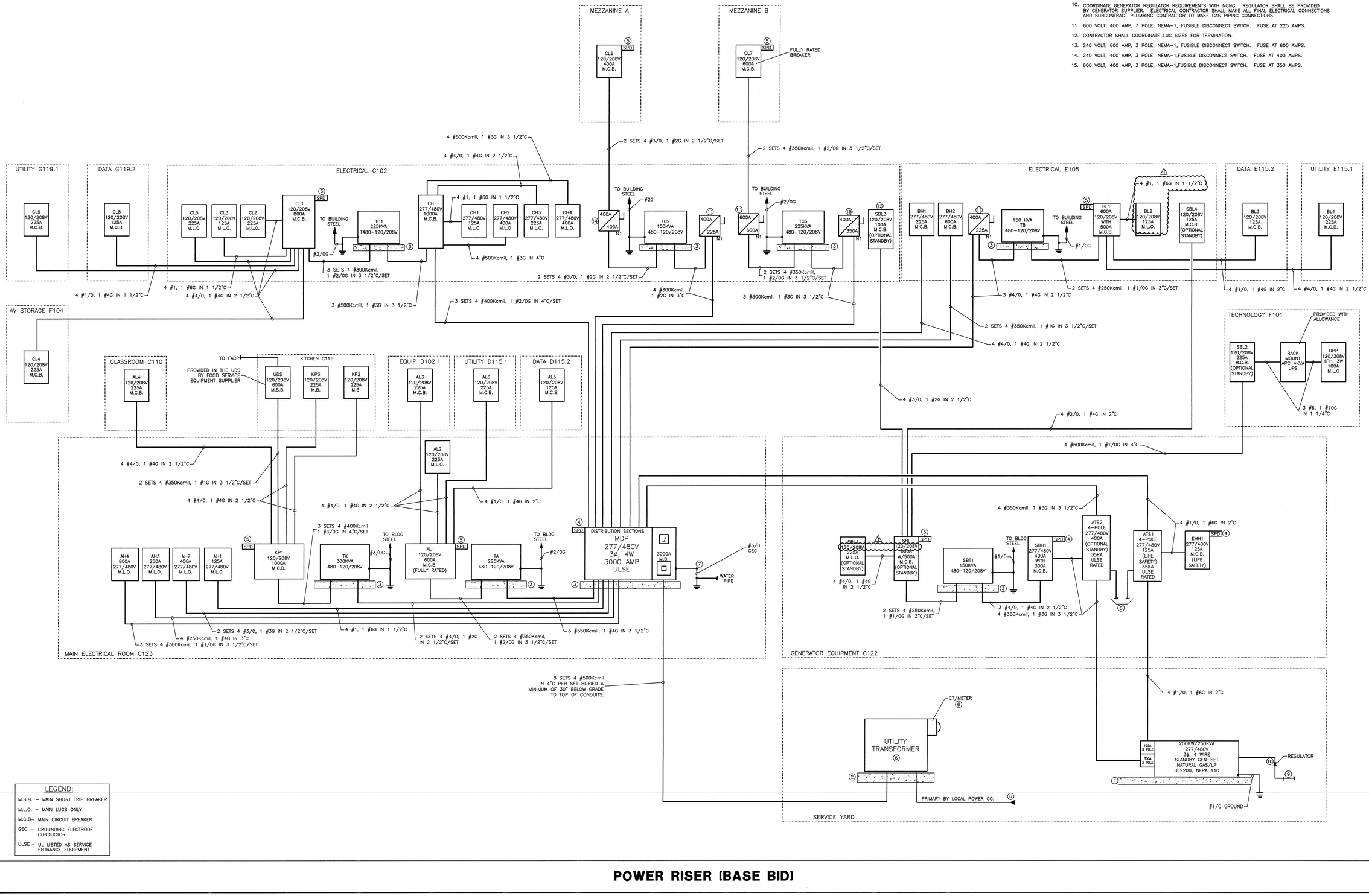
Project #: 190003
Sheet: E501
Plotted By: chris
Plotted: April 28, 2019 @ 3:39 PM

NOTES: (AS INDICATED ON THIS PLAN BY A NUMBER IN A ◯)

1. SEE GENERATOR PAD DETAIL E107–02.
2. 6", 3000psi, REINFORCED CONCRETE PAD BY ELECTRICAL CONTRACTOR FOR UTILITY COMPANY TRANSFORMER. COORDINATE REQUIREMENTS AND OPENINGS WITH LOCAL UTILITY COMPANY.
3. 4", 3000psi, REINFORCED CONCRETE HOUSEKEEPING PAD FOR ELECTRICAL EQUIPMENT.
4. ELECTRICAL CONTRACTOR SHALL PROVIDE A 200Ka TRANSIENT VOLTAGE SURGE SUPPRESSOR (TVSS) WITH FILTERING AND DRY CONTACTS, REFER TO SPECIFICATIONS. INSTALL PER MANUFACTURER'S RECOMMENDATIONS. TVSS SHALL BE LOCATED NEXT TO PANEL USING A CHASE NIPPLE FOR WIRING.
5. 100Ka TRANSIENT VOLTAGE SURGE SUPPRESSOR, REFER TO SPECIFICATIONS. LOCATE NEXT TO PANEL USING A CHASE NIPPLE FOR WIRING. PROVIDE TVSS WITH FILTERING AND DRY CONTACTS.
6. BY LOCAL UTILITY COMPANY.
7. SEE SERVICE GROUNDING DETAIL E102–08.
8. PROVIDE 1 1/4" CONDUIT FROM ATS TO GENERATOR FOR GENERATOR CONTROL WIRING. COORDINATE WITH GENERATOR SUPPLIER.
9. BY GAS COMPANY.
10. COORDINATE GENERATOR REGULATOR REQUIREMENTS WITH NCNG. REGULATOR SHALL BE PROVIDED BY GENERATOR SUPPLIER. ELECTRICAL CONTRACTOR SHALL MAKE ALL FINAL ELECTRICAL CONNECTIONS AND SUBCONTRACT PLUMBING CONTRACTOR TO MAKE GAS PIPING CONNECTIONS.
11. 600 VOLT, 400 AMP, 3 POLE, NEMA–1, FUSIBLE DISCONNECT SWITCH. FUSE AT 225 AMPS.
12. CONTRACTOR SHALL COORDINATE LUG SIZES FOR TERMINATION.
13. 240 VOLT, 600 AMP, 3 POLE, NEMA–1, FUSIBLE DISCONNECT SWITCH. FUSE AT 600 AMPS.
14. 240 VOLT, 400 AMP, 3 POLE, NEMA–1,FUSIBLE DISCONNECT SWITCH. FUSE AT 400 AMPS.
15. 600 VOLT, 400 AMP, 3 POLE, NEMA–1,FUSIBLE DISCONNECT SWITCH. FUSE AT 350 AMPS.



LEGEND:

- M.S.B. – MAIN SHUNT TRIP BREAKER
- M.L.O. – MAIN LUGS ONLY
- M.C.B– MAIN CIRCUIT BREAKER
- GEC – GROUNDING ELECTRODE CONDUCTOR
- ULSE – UL LISTED AS SERVICE ENTRANCE EQUIPMENT

POWER RISER (BASE BID)

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STUMP SOUND ELEMENTARY SCHOOL
ONSLOW COUNTY SCHOOLS
STUMP SOUND, NORTH CAROLINA

POWER RISER
BASE BID

REVISION SCHEDULE

	DATE	REFERENCE
1	06/25/19	DPI COMMENTS

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E600

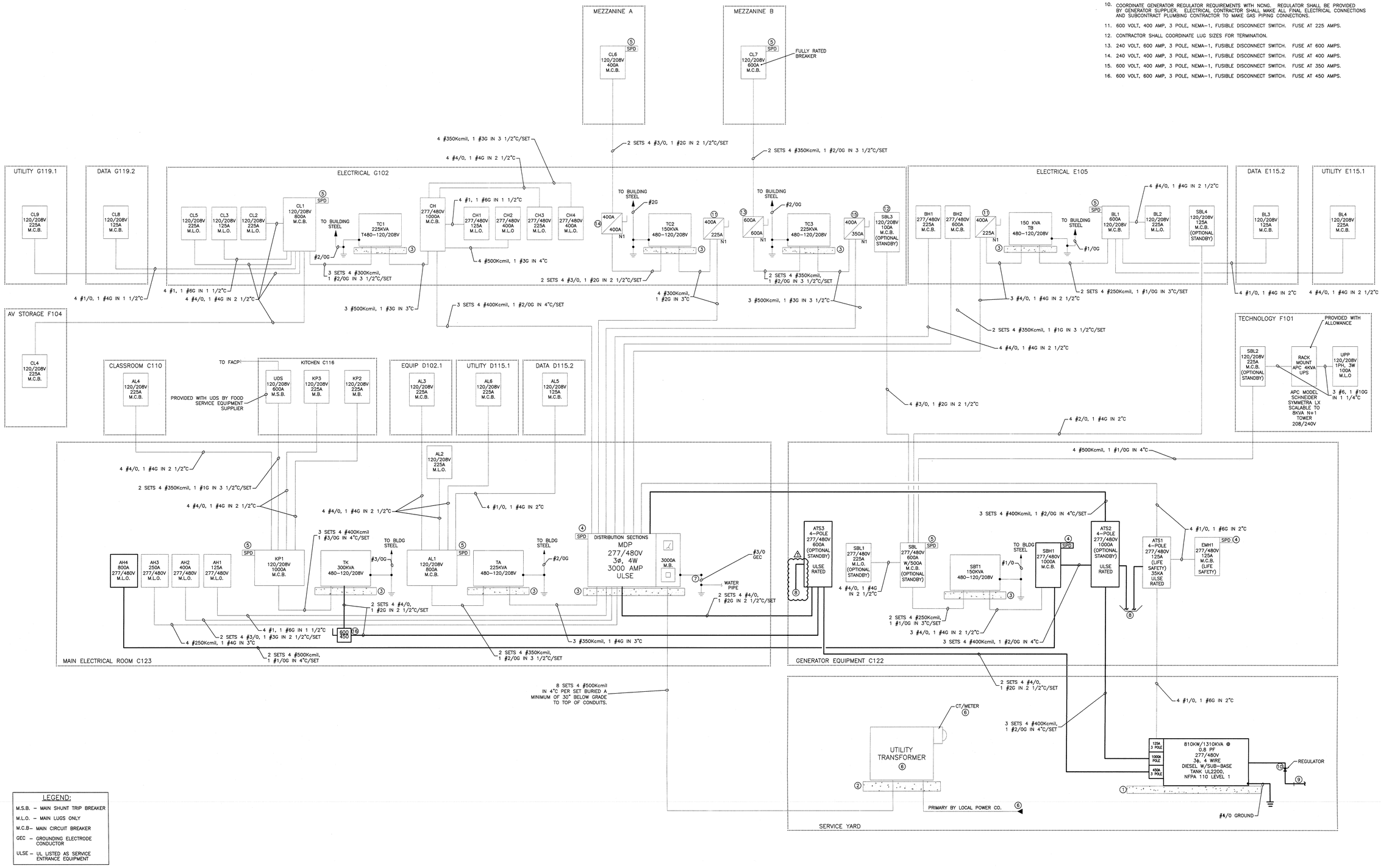
Project #: 190202
Sheet: E600
Plotted By: chris
Plotted: June 25, 2019 @ 5:31 PM

IMPORTANT NOTE:

ELECTRICAL WORK SHOWN ON THIS PLAN AS BOLD LINES IS PART OF ALTERNATE #4. ALL ELECTRICAL WORK SHOWN AS LIGHT LINES IS PART OF BASE BID. FOR BASE BID WORK, REFER TO DRAWING E600.

NOTES: (AS INDICATED ON THIS PLAN BY A NUMBER IN A ◯)

1. SEE GENERATOR PAD DETAIL E107-02.
2. 6", 3000psi, REINFORCED CONCRETE PAD BY ELECTRICAL CONTRACTOR FOR UTILITY COMPANY TRANSFORMER. COORDINATE REQUIREMENTS AND OPENINGS WITH LOCAL UTILITY COMPANY.
3. 4", 3000psi, REINFORCED CONCRETE HOUSKEEPING PAD FOR ELECTRICAL EQUIPMENT.
4. ELECTRICAL CONTRACTOR SHALL PROVIDE A 200Ka TRANSIENT VOLTAGE SURGE SUPPRESSOR (TVSS) WITH FILTERING AND DRY CONTACTS, REFER TO SPECIFICATIONS. INSTALL PER MANUFACTURER'S RECOMMENDATIONS. TVSS SHALL BE LOCATED NEXT TO PANEL USING A CHASE NIPPLE FOR WIRING.
5. 100Ka TRANSIENT VOLTAGE SURGE SUPPRESSOR, REFER TO SPECIFICATIONS. LOCATE NEXT TO PANEL USING A CHASE NIPPLE FOR WIRING. PROVIDE TVSS WITH FILTERING AND DRY CONTACTS.
6. BY LOCAL UTILITY COMPANY.
7. SEE SERVICE GROUNDING DETAIL E102-08.
8. PROVIDE 1 1/4" CONDUIT FROM ATS TO GENERATOR FOR GENERATOR CONTROL WIRING. COORDINATE WITH GENERATOR SUPPLIER.
9. BY GAS COMPANY.
10. COORDINATE GENERATOR REGULATOR REQUIREMENTS WITH NCNG. REGULATOR SHALL BE PROVIDED BY GENERATOR SUPPLIER. ELECTRICAL CONTRACTOR SHALL MAKE ALL FINAL ELECTRICAL CONNECTIONS AND SUBCONTRACT PLUMBING CONTRACTOR TO MAKE GAS PIPING CONNECTIONS.
11. 600 VOLT, 400 AMP, 3 POLE, NEMA-1, FUSIBLE DISCONNECT SWITCH. FUSE AT 225 AMPS.
12. CONTRACTOR SHALL COORDINATE LUG SIZES FOR TERMINATION.
13. 240 VOLT, 600 AMP, 3 POLE, NEMA-1, FUSIBLE DISCONNECT SWITCH. FUSE AT 600 AMPS.
14. 240 VOLT, 400 AMP, 3 POLE, NEMA-1, FUSIBLE DISCONNECT SWITCH. FUSE AT 400 AMPS.
15. 600 VOLT, 400 AMP, 3 POLE, NEMA-1, FUSIBLE DISCONNECT SWITCH. FUSE AT 350 AMPS.
16. 600 VOLT, 600 AMP, 3 POLE, NEMA-1, FUSIBLE DISCONNECT SWITCH. FUSE AT 450 AMPS.



LEGEND:

- M.S.B. – MAIN SHUNT TRIP BREAKER
- M.L.O. – MAIN LUGS ONLY
- M.C.B– MAIN CIRCUIT BREAKER
- GEC – GROUNDING ELECTRODE CONDUCTOR
- ULSE – UL LISTED AS SERVICE ENTRANCE EQUIPMENT

POWER RISER (ALTERNATE #4)

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STUMP SOUND ELEMENTARY SCHOOL
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STUMP SOUND, NORTH CAROLINA

POWER RISER
ALTERNATE #4

REVISION SCHEDULE

Δ	DATE	REFERENCE
1	06/25/19	DPI COMMENTS

E601

Project #: 19003
Sheet: E601
Plotted By: billy
Plotted: June 25, 2019 @ 5:23 PM

PANEL AL4

CKT	LOAD TYPE	LOAD KVA	DESCRIPTION	C	PH	N	G	CB	PHASE A	PHASE B	PHASE C	CB	PH	N	G	C	DESCRIPTION	LOAD KVA	LOAD TYPE	CKT
1	O	1.200	SOUND RACK	3/4"	12	12	12	20	1.740			20	12	12	12	3/4"	RECEPT - EXTERIOR	0.540	R	2
3	R	0.900	RECEPT - C110, C111	3/4"	12	12	12	20		2.820		20	12	12	12	3/4"	TRACK LIGHTS - C110	1.920	L	4
5	R	0.720	RECEPT - C110	3/4"	12	12	12	20			2.640	20	12	12	12	3/4"	TRACK LIGHTS - C110	1.920	L	6
7	R	0.720	RECEPT - C112	3/4"	12	12	12	20	1.440			20	12	12	12	3/4"	RECEPT - C109	0.720	R	8
9	R	0.720	RECEPT - C112	3/4"	12	12	12	20		1.620		20	12	12	12	3/4"	RECEPT - C108, C109	0.900	R	10
11	R	0.360	RECEPT - C112	3/4"	12	12	12	20			0.960	20	12	12	12	3/4"	HAM RADIO - C111	0.600	O	12
13	O	1.176	MOTORIZED BACKBOARD	3/4"	12	12	12	20	1.896			20	12	12	12	3/4"	RECEPT - C112	0.720	R	14
15	O	1.176	MOTORIZED BACKBOARD	3/4"	12	12	12	20		1.176		20					SPARE		O	16
17	O	1.176	MOTORIZED BACKBOARD	3/4"	12	12	12	20			1.176	20					SPARE		O	18
19	R	0.540	RECEPT - C106, C107	3/4"	12	12	12	20	0.540			20					SPARE		O	20
21	O	1.176	MOTORIZED BACKBOARD	3/4"	12	12	12	20		1.176		20					SPARE		O	22
23	R	0.720	RECEPT - C104, C105	3/4"	12	12	12	20			0.720	20					SPARE		O	24
25	R	0.540	RECEPT - C103	3/4"	12	12	12	20	0.540			20					SPARE		O	26
27	O	0.900	EWC - C113 (NOTE 1)	3/4"	12	12	12	20		0.900		20					SPARE		O	28
29	R	0.540	RECEPT - C100	3/4"	12	12	12	20			0.540	20					SPARE		O	30
31	O	1.176	MOTORIZED BACKBOARD	3/4"	12	12	12	20	1.176			20					SPARE		O	32
33	O	1.176	MOTORIZED BACKBOARD	3/4"	12	12	12	20		1.176		20					SPARE		O	34
35	R	0.900	RECEPT - C103	3/4"	12	12	12	20			0.900	20					SPARE		O	36
37	R	0.720	RECEPT - C105	3/4"	12	12	12	20	0.720			20					SPACE		O	38
39	O	0.900	PROJECTOR	3/4"	12	12	12	20		0.900		20					SPACE		O	40
41	O	0.800	PROJECTION SCREEN	3/4"	12	12	12	20			0.800	20					SPACE		O	42
			LOAD TOTAL:						8.05	9.77	7.74									

208Y/120 V 3 PHASE 4 WIRE
MAINS: MCB 225 A MCB
22000 A/C SE LABEL

CLASSROOM C110

LOAD TYPE	CONNECTED	DEMAND
(R) RECEPTACLES	10.26 99%	10.13
(M) MOTOR	0.00 100%	0.00
(H) HVAC	0.00 100%	0.00
(L) LIGHTING	3.84 125%	4.80
(O) OTHER	11.46 100%	11.46
(K) KITCHEN EQUIP	0.00 100%	0.00
TOTAL	25.56 103%	26.39

FED FROM: PANEL KP1
MOUNT: FLUSH
NEMA: 1

PROVIDE DOOR WITH LOCK AND HINGED TRIM. PROVIDE COPPER BUSS BARS AND BOLT ON BREAKERS.

NOTES:
1. PROVIDE GFCI BREAKER.
2.
3.
4.

PANEL TOTALS

PHASE A	8.314	KVA	69.3 AMP
PHASE B	10.085	KVA	84.0 AMP
PHASE C	7.987	KVA	66.6 AMP

PANEL AL5

CKT	LOAD TYPE	LOAD KVA	DESCRIPTION	C	PH	N	G	CB	PHASE A	PHASE B	PHASE C	CB	PH	N	G	C	DESCRIPTION	LOAD KVA	LOAD TYPE	CKT
1	H	0.864	FAN EF-3	3/4"	12	12	12	20	1.584			20	12	12	12	3/4"	RECEPT - D112	0.720	R	2
3	R	0.720	RECEPT - D111	3/4"	12	12	12	20		1.440		20	12	12	12	3/4"	RECEPT - D112	0.720	R	4
5	R	0.720	RECEPT - D111	3/4"	12	12	12	20			1.440	20	12	12	12	3/4"	RECEPT - D112	0.720	R	6
7	R	0.720	RECEPT - D111	3/4"	12	12	12	20	1.920			20	12	12	12	3/4"	REFRIGERATOR - D114	1.200	O	8
9	R	0.540	RECEPT - D113, D115, D117	3/4"	12	12	12	20		0.900		20	12	12	12	3/4"	RECEPT - D114	0.360	R	10
11	R	0.360	RECEPT - D111S.1, EXTERIOR	3/4"	12	12	12	20			0.720	20	12	12	12	3/4"	RECEPT - D114	0.360	R	12
13	R	0.360	RECEPT - D100	3/4"	12	12	12	20	1.260			20	12	12	12	3/4"	RECEPT - D114	0.900	R	14
15	O	0.900	EWC - D100 (NOTE 1)	3/4"	12	12	12	20		1.260		20	12	12	12	3/4"	RECEPT - D114.1, D116	0.360	R	16
17	R	0.720	RECEPT - D119	3/4"	12	12	12	20			1.440	20	12	12	12	3/4"	RECEPT - D116	0.720	R	18
19	R	0.720	RECEPT - D119	3/4"	12	12	12	20	1.440			20	12	12	12	3/4"	RECEPT - D116	0.720	R	20
21	R	0.720	RECEPT - D119	3/4"	12	12	12	20		1.440		20	12	12	12	3/4"	RECEPT - D118	0.720	R	22
23	R	0.720	RECEPT - D121	3/4"	12	12	12	20			1.440	20	12	12	12	3/4"	RECEPT - D118	0.720	R	24
25	R	0.720	RECEPT - D121	3/4"	12	12	12	20	1.440			20	12	12	12	3/4"	RECEPT - D118	0.720	R	26
27	R	0.720	RECEPT - D121	3/4"	12	12	12	20		0.720							SPARE		O	28
29	R	0.720	RECEPT - D123	3/4"	12	12	12	20			0.720						SPARE		O	30
31	R	0.720	RECEPT - D123	3/4"	12	12	12	20	0.720								SPARE		O	32
33	R	0.720	RECEPT - D123	3/4"	12	12	12	20		0.720							SPARE		O	34
35	O		SPARE					20			0.000						SPARE		O	36
37	O		SPARE					20	0.000								SPARE		O	38
39	O		SPARE					20		0.000		30					SPARE		O	40
41	O		SPARE					20			0.000						SPARE		O	42
			LOAD TOTAL:						8.36	6.48	5.76									

208Y/120 V 3 PHASE 4 WIRE
MAINS: MCB 125 A MCB
22000 A/C SE LABEL

UTILITY D115.1

LOAD TYPE	CONNECTED	DEMAND
(R) RECEPTACLES	17.64 78%	13.82
(M) MOTOR	0.00 100%	0.00
(H) HVAC	0.86 100%	0.86
(L) LIGHTING	0.00 125%	0.00
(O) OTHER	2.10 100%	2.10
(K) KITCHEN EQUIP	0.00 100%	0.00
TOTAL	20.60 81%	16.78

FED FROM: PANEL AL1
MOUNT: SURFACE
NEMA: 1

PROVIDE DOOR WITH LOCK AND HINGED TRIM. PROVIDE COPPER BUSS BARS AND BOLT ON BREAKERS.

NOTES:
1. PROVIDE GFCI BREAKER.
2.
3.
4.

PANEL TOTALS

PHASE A	6.813	KVA	56.8 AMP
PHASE B	5.279	KVA	44.0 AMP
PHASE C	4.692	KVA	39.1 AMP

PANEL AL6

CKT	LOAD TYPE	LOAD KVA	DESCRIPTION	C	PH	N	G	CB	PHASE A	PHASE B	PHASE C	CB	PH	N	G	C	DESCRIPTION	LOAD KVA	LOAD TYPE	CKT
1	O	2.496	EWH-4A	3/4"	10	10	10	30	4.992			30	10	10	10	3/4"	EWH-4B	2.496	O	2
3	O	2.496								4.992								2.496	O	4
5	R	0.720	RECEPT - D120	3/4"	12	12	12	20			0.720	20					SPARE		O	6
7	R	0.720	RECEPT - D120	3/4"	12	12	12	20	0.720			20					SPARE		O	8
9	R	0.720	RECEPT - D120	3/4"	12	12	12	20		0.720		20					SPARE		O	10
11	R	0.720	RECEPT - D122	3/4"	12	12	12	20			0.720	20					SPARE		O	12
13	R	0.720	RECEPT - D122	3/4"	12	12	12	20	0.720			20					SPARE		O	14
15	R	0.720	RECEPT - D122	3/4"	12	12	12	20		0.720		20					SPARE		O	16
17	H	0.800	MOTORIZED DAMPERS	3/4"	12	12	12	20			0.800	20					SPARE		O	18
19	R	0.720	RECEPT - D124	3/4"	12	12	12	20	0.720			20					SPARE		O	20
21	R	0.720	RECEPT - D124	3/4"	12	12	12	20		0.720		20					SPARE		O	22
23	R	0.720	RECEPT - D124	3/4"	12	12	12	20			0.720	20					SPARE		O	24
25	R	0.720	RECEPT - D125	3/4"	12	12	12	20	0.720			20					SPARE		O	26
27	R	0.720	RECEPT - D125	3/4"	12	12	12	20		0.720		20					SPARE		O	28
29	R	0.720	RECEPT - D125	3/4"	12	12	12	20			0.720	20					SPARE		O	30
31	O	0.180	RECIRCULATION PUMPS	3/4"	12	12	12	20	0.180			20					SPARE		O	32
33	O		SPARE					20		0.000		20					SPARE		O	34
35	O		SPARE					20			0.000	20					SPARE		O	36
37	O		SPARE					20	0.000			20					SPACE		O	38
39	O		SPARE					20		0.000		20					SPACE		O	40
41	O		SPARE					20			0.000	20					SPACE		O	42
			LOAD TOTAL:						8.05	7.57	5.68									

208Y/120 V 3 PHASE 4 WIRE
MAINS: MCB 225 A MCB
22000 A/C SE LABEL

UTILITY D115.1

LOAD TYPE	CONNECTED	DEMAND
(R) RECEPTACLES	8.64 100%	8.64
(M) MOTOR	0.00 100%	0.00
(H) HVAC	0.80 100%	0.80
(L) LIGHTING	0.00 125%	0.00
(O) OTHER	10.16 100%	10.16
(K) KITCHEN EQUIP	0.00 100%	0.00
TOTAL	19.60 100%	19.60

FED FROM: PANEL AL1
MOUNT: SURFACE
NEMA: 1

PROVIDE DOOR WITH LOCK AND HINGED TRIM. PROVIDE COPPER BUSS BARS AND BOLT ON BREAKERS.

NOTES:
1.
2.
3.
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PANEL TOTALS

PHASE A	8.052	KVA	67.1 AMP
PHASE B	7.972	KVA	66.4 AMP
PHASE C	3.680	KVA	30.7 AMP

PANEL BH1

CKT	LOAD TYPE	LOAD KVA	DESCRIPTION	C	PH	N	G	CB	PHASE A	PHASE B	PHASE C	CB	PH	N	G	C	DESCRIPTION	LOAD KVA	LOAD TYPE	CKT
1	L	1.791	LTS - E103, E105, E107, E109, E111	3/4"	12	12	12	20	2.969			20	12	12	12	3/4"	LTS - E100, E113, E117	1.178	L	2
3	L	2.319	LTS - E102, E104, E106	3/4"	12	12	12	20		2.919		20					SPARE		O	4
5	L	2.116	LTS - E114, E116, E118, E120	3/4"	12	12	12	20			2.116	20					SPARE		O	6
7	L	2.355	LTS - E119, E121, E123, E125	3/4"	12	12	12	20	2.355			20					SPARE		O	8
9	O		SPARE					20		0.000		20					SPARE		O	10
11	O		SPARE					20			0.000	20					SPARE		O	12
13	O		SPARE					20	0.000								SPACE		O	14
15	O		SPARE					20		0.000							SPACE		O	16
17	O		SPARE					20			0.000						SPACE		O	18
19	O		SPARE					20	0.000								SPACE		O	20
21	O		SPARE					20		0.000							SPACE		O	22
23	O		SPARE					20			0.000						SPACE		O	24
25	O		SPARE					20	0.000								SPACE		O	26
27	O		SPARE					20		0.000							SPACE		O	28
29	O		SPARE					20			0.000						SPACE		O	30
31	O								0.000										O	32
33	O		SPARE					30		0.000		30					SPARE		O	34
35	O										0.000								O	36
37	H	2.216							4.432										O	38
39	H	2.216	HP-23	3/4"	10	10	10	15		4.432		15	10	10	10	3/4"	HP-24	2.216	H	40
41	H	2.216									4.432							2.216	H	42
			LOAD TOTAL:						9.78	7.35	6.55									

480Y/277 V 3 PHASE 4 WIRE
MAINS: MCB 225 A MCB
22000 A/C SE LABEL

ELECTRICAL E105

LOAD TYPE	CONNECTED	DEMAND
(R) RECEPTACLES	0.00 100%	0.00
(M) MOTOR	0.00 100%	0.00
(H) HVAC	13.30 100%	13.30
(L) LIGHTING	10.36 125%	12.95
(O) OTHER	0.00 100%	0.00
(K) KITCHEN EQUIP	0.00 100%	0.00
TOTAL	23.66 111%	26.24

FED FROM: MDP
MOUNT: SURFACE
NEMA: 1

PROVIDE DOOR WITH LOCK AND HINGED TRIM. PROVIDE COPPER BUSS BARS AND BOLT ON BREAKERS.

NOTES:
1.
2.
3.
4.

PANEL TOTALS

PHASE A	10.824	KVA	39.1 AMP
PHASE B	8.156	KVA	29.4 AMP
PHASE C	7.265	KVA	26.2 AMP

PANEL AH4 (BASE BID)

CKT	LOAD TYPE	LOAD KVA	DESCRIPTION	C	PH	N	G	CB	PHASE A	PHASE B	PHASE C	CB	PH	N	G	C	DESCRIPTION	LOAD KVA	LOAD TYPE	CKT
1	H	9.252	HP-1	1"	8	8	10	40	14.792			25	10	10	10	3/4"	HP-2	5.540	H	2
3	H	9.252								14.792								5.540	H	4
5	H	9.252									14.792							5.540	H	6
7	H	5.540	HP-3	3/4"	10	10	10	25	18.282			60	6	6	10	1"	HP-4	12.742	H	8
9	H	5.540								18.282								12.742	H	10
11	H	5.540									18.282							12.742	H	12
13	H	12.742	HP-5	1"	6	8	10	60	35.179			90	3	3	8	1 1/2"	AH-1	22.437	H	14
15	H	12.742								35.179								22.437	H	16
17	H	12.742									35.179							22.437	H	18
19	H	9.695	AH-2	1"	8	8	10	35	19.390			35	8	8	10	1"	AH-3	9.695	H	20
21	H	9.695								19.390								9.695	H	22
23	H	9.695									19.390							9.695	H	24
25	H	11.911	ERV-1	1"	6	6	10	60	34.902			90	3	3	8	1 1/2"	AH-5	22.991	H	26
27	H	11.911								34.902								22.991	H	28
29	H	11.911									34.902							22.991	H	30
31	H	22.991	AH-4	1 1/2"	3	3	8	90	22.991			30					SPARE		O	32
33	H	22.991								22.991									O	34
35	H	22.991									22.991								O	36
37	O		SPARE					60	0.000			60					SPARE		O	38
39	O									0.000									O	40
41	O										0.000								O	42
			LOAD TOTAL:						145.54	145.54	145.54									

480Y/277 V 3 PHASE 4 WIRE
MAINS: MLO 600 A BUS
65000 A/C SE LABEL

ELECTRICAL/MECHANICAL C123

LOAD TYPE	CONNECTED	DEMAND
(R) RECEPTACLES	0.00 100%	0.00
(M) MOTOR	0.00 100%	0.00
(H) HVAC	436.61 100%	436.61
(L) LIGHTING	0.00 125%	0.00
(O) OTHER	0.00 100%	0.00
(K) KITCHEN EQUIP	0.00 100%	0.00
TOTAL	436.61 100%	436.61

FED FROM: PANEL MDP
MOUNT: SURFACE
NEMA: 1

PROVIDE DOOR WITH LOCK AND HINGED TRIM. PROVIDE COPPER BUSS BARS AND BOLT ON BREAKERS.

NOTES:
1.
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PANEL TOTALS

PHASE A	145.538	KVA	525.4 AMP
PHASE B	145.536	KVA	525.4 AMP
PHASE C	145.536	KVA	525.4 AMP

PANEL AL1

CKT	LOAD TYPE	LOAD KVA	DESCRIPTION	C	PH	N	G	CB	PHASE A	PHASE B	PHASE C	CB	PH	N	G	C	DESCRIPTION	LOAD KVA	LOAD TYPE	CKT
1	S	17.660	PANEL AL2	SEE POWER RISER				225	17.660			30	10	10	10	3/4"	SPD		O	2
3	S	17.436								17.436									O	4
5	S	19.680									19.680								O	6
7	S	8.376	PANEL AL3	SEE POWER RISER				225	16.428			225	SEE POWER RISER				PANEL AL6	8.052	S	8
9	S	5.960								13.832								7.872	S	10
11	S	7.896									11.576							3.680	S	12
13	S	8.364	PANEL AL5	SEE POWER RISER				125	8.364			225					SPARE		O	14
15	S	6.480								8.480									O	16
17	S	5.760									5.760								O	18
19	O		SPACE						0.000			125					SPARE		O	20
21	O									0.000									O	22
23	O										0.000								O	24
25	O		SPACE					20	0.000			20					SPACE		O	26
27	O		SPACE					20		0.000		20					SPACE		O	28
29	O		SPACE					20			0.000	20					SPACE		O	30
31	O		SPACE					20	0.000			20					SPACE		O	32
33	H	1.680	HP-20	3/4"	8	8	8	25		3.360		25	8	8	8	3/4"	HP-6	1.680	H	34
35	H	1.680									3.360							1.680	H	36
37	H	5.040	AH-21	1"	6	6	8	45	10.080			45	6	6	8	1"	AH-22	5.040	H	38
39	H	5.040								10.080								5.040	H	40
41	H	5.040									10.080							5.040	H	42
			LOAD TOTAL:						52.53	51.19	50.46									

208Y/120 V 3 PHASE 4 WIRE
MAINS: MCB 600 A MCB (NOTE 1)
42000 A/C SE LABEL

ELECTRICAL/MECHANICAL C123

LOAD TYPE	CONNECTED	DEMAND
(R) RECEPTACLES	43.44 62%	26.72
(M) MOTOR	0.00 100%	0.00
(H) HVAC	91.72 100%	91.72
(L) LIGHTING	0.00 125%	0.00
(O) OTHER	19.02 100%	19.02
(K) KITCHEN EQUIP	0.00 100%	0.00
TOTAL	154.18 89%	137.46

FED FROM: TRANSFORMER TA
MOUNT: SURFACE
NEMA: 1

PROVIDE DOOR WITH LOCK AND HINGED TRIM. PROVIDE COPPER BUSS BARS AND BOLT ON BREAKERS.

NOTES:
1. 100% FULLY RATED CIRCUIT BREAKER
2.
3.
4.

PANEL TOTALS

PHASE A	46.835	KVA	390.3 AMP
PHASE B	45.637	KVA	380.3 AMP
PHASE C	44.984	KVA	374.9 AMP

PANEL AL2

CKT	LOAD TYPE	LOAD KVA	DESCRIPTION	C	PH	N	G	CB	PHASE A	PHASE B	PHASE C	CB	PH	N	G	C	DESCRIPTION	LOAD KVA	LOAD TYPE	CKT
1	H	5.280	AH-8	1-1/4"	4	NA	8	45	5.280			20					SPARE		O	2
3	H	5.280								5.280									O	4
5	H	5.280									5.280	30					SPARE		O	6
7	R	0.540	RECEPT - C200	3/4"	12	12	12	20	0.540										O	8
9	R	0.540	RECEPT - C200	3/4"	12	12	12	20		5.100		40	8	NA	10	1"	AH-6	4.560	H	10
11	H		SPARE					20			4.560							4.560	H	12
13	H	0.600	MOTORIZED DAMPERS	3/4"	12	12	12	20	6.080									5.280	H	14
15	H	0.600	MOTORIZED DAMPERS	3/4"	12	12	12	20		5.880		45	8	NA	10	1"	AH-7	5.280	H	16
17	H							20			5.280							5.280	H	18
19	O	0.600	RESERVED FOR HVAC CONTROLS	3/4"	10	10	10	20	0.600			20					SPARE		O	20
21	O	0.600	RESERVED FOR HVAC CONTROLS	3/4"	10	10	10-	20		0.600		20					SPARE		O	22
23	H	4.560	AH-20	1"	6	NA	10	40			4.560	20					SPARE		O	24
25	H	4.560							4.560								SPACE		O	26
27	O	0.576	FAN EF-2	3/4"	12	12	12	20		0.576							SPACE		O	28
29	O		SPARE					20			0.000						SPACE		O	30
31	O	0.600	MOTORIZED DAMPERS	3/4"	12	12	12	20	0.600								SPACE		O	32
33	O		SPARE					20		0.000							SPACE		O	34
35	O		SPARE					20			0.000						SPACE		O	36
37	O		SPARE					20	0.000								SPACE		O	38
39	O		SPARE					20		0.000							SPACE		O	40
41	O		SPARE					20			0.000						SPACE		O	42
			LOAD TOTAL:						17.66	17.44	19.68									

208Y/120 V 3 PHASE 4 WIRE
MAINS: MLO 225 A BUS
22000 A/C SE LABEL

ELECTRICAL/MECHANICAL C123

LOAD TYPE	CONNECTED	DEMAND
(R) RECEPTACLES	1.08 100%	1.08
(M) MOTOR	0.00 100%	0.00
(H) HVAC	51.32 100%	51.32
(L) LIGHTING	0.00 125%	0.00
(O) OTHER	2.38 100%	2.38
(K) KITCHEN EQUIP	0.00 100%	0.00
TOTAL	54.78 100%	54.78

FED FROM: PANEL AL1
MOUNT: SURFACE
NEMA: 1

PROVIDE DOOR WITH LOCK AND HINGED TRIM. PROVIDE COPPER BUSS BARS AND BOLT ON BREAKERS.

NOTES:
1.
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PANEL TOTALS

PHASE A	17.660	KVA	147.2 AMP
PHASE B	17.436	KVA	145.3 AMP
PHASE C	19.680	KVA	164.0 AMP

PANEL AL3

CKT	LOAD TYPE	LOAD KVA	DESCRIPTION	C	PH	N	G	CB	PHASE A	PHASE B	PHASE C	CB	PH	N	G	C	DESCRIPTION	LOAD KVA	LOAD TYPE	CKT
1	R	0.360	RECEPT - D102.1	3/4"	12	12	12	20	1.080			20	12	12	12	3/4"	RECEPT - D106	0.720	R	2
3	R	0.360	RECEPT - D102.1	3/4"	12	12	12	20		0.360		20					SPARE		O	4
5	R	0.720	RECEPT - D108	3/4"	12	12	12	20			1.440	20	12	12	12	3/4"	RECEPT - D109	0.720	R	6
7	R	0.720	RECEPT - D108	3/4"	12	12	12	20	1.440			20	12	12	12	3/4"	RECEPT - D109	0.720	R	8
9	R	0.720	RECEPT - D108	3/4"	12	12	12	20		1.440		20	12	12	12	3/4"	RECEPT - D110	0.720	R	10
11	O	1.176	FAN SEF-1	3/4"	12	12	12	20			1.896	20	12	12	12	3/4"	RECEPT - D110	0.720	R	12
13	R	0.540	RECEPT - D100	3/4"	12	12	12	20	1.260			20	12	12	12	3/4"	RECEPT - D110	0.720	R	14
15	R	0.720	RECEPT - D101, D102, D102.1	3/4"	12	12	12	20		0.920		20	12	12	12	3/4"	FAN PEF-1	0.200	H	16
17	R	0.540	RECEPT - D103	3/4"	12	12	12	20			1.260	20	12	12	12	3/4"	RECEPT - D109	0.720	R	18
19	R	0.540	RECEPT - D103	3/4"	12	12	12	20	1.716			20	12	12	12	3/4"	FAN VF-1	1.176	H	20
21	R	0.360	RECEPT - D105	3/4"	12	12	12	20		0.760		20	12	12	12	3/4"	MOTORIZED DAMPERS	0.400	H	22
23

PANEL CH3

CKT	LOAD TYPE	LOAD KVA	DESCRIPTION	C	PH	N	G	CB	PHASE A	PHASE B	PHASE C	CB	PH	N	G	C	DESCRIPTION	LOAD KVA	LOAD TYPE	CKT
1	H	2.216							4.980									2.770	H	2
3	H	2.216	HP-12	3/4"	10	NA	10	15		4.980		15	10	NA	10	3/4"	HP-18	2.770	H	4
5	H	2.216									4.980							2.770	H	6
7	H	2.770	HP-19	3/4"	10	NA	10	15	4.980									2.216	H	8
9	H	2.770								4.980		15	10	NA	10	3/4"	HP-13	2.216	H	10
11	H	2.770									4.980							2.216	H	12
13	H	2.216							4.980									2.770	H	14
15	H	2.216	HP-17	3/4"	10	NA	10	15		4.980		15	10	NA	10	3/4"	HP-15	2.770	H	16
17	H	2.216									4.980							2.770	H	18
19	O								0.000										O	20
21	O		SPARE					30		0.000		30					SPARE		O	22
23	O										0.000								O	24
25	O		SPACE						0.000										O	26
27	O									0.000							SPACE		O	28
29	O										0.000								O	30

LOAD TOTAL: 14.96 14.96 14.96

480Y/277 V 3 PHASE 4 WIRE
MAINS: MCB 225 A MCB
30000 AIC SE LABEL

ELECTRICAL G102

LOAD TYPE	CONNECTED	DEMAND
(R) RECEPTACLES	0.00 100%	0.00
(M) MOTOR	0.00 100%	0.00
(H) HVAC	44.87 100%	44.87
(L) LIGHTING	0.00 125%	0.00
(O) OTHER	0.00 100%	0.00
(K) KITCHEN EQUIP	0.00 100%	0.00
TOTAL	44.87 100%	44.87

FED FROM: PANEL CH
MOUNT: SURFACE
NEMA: 1

PROVIDE DOOR WITH LOCK AND HINGED TRIM. PROVIDE COPPER BUSS BARS AND BOLT ON BREAKERS.

NOTES:
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PANEL TOTALS

PHASE A	14.958	KVA	54.0 AMP
PHASE B	14.958	KVA	54.0 AMP
PHASE C	14.958	KVA	54.0 AMP

PANEL CH4

CKT	LOAD TYPE	LOAD KVA	DESCRIPTION	C	PH	N	G	CB	PHASE A	PHASE B	PHASE C	CB	PH	N	G	C	DESCRIPTION	LOAD KVA	LOAD TYPE	CKT
1	H	2.216							4.432									2.216	H	2
3	H	2.216	HP-26	3/4"	10	NA	10	15		4.432		15	10	NA	10	3/4"	HP-25	2.216	H	4
5	H	2.216									4.432							2.216	H	6
7	H	6.648							12.742									6.094	H	8
9	H	6.648	PHP-6-5	1"	8	NA	8	25		12.742		25	8	NA	8	1"	PHP-5-5	6.094	H	10
11	H	6.648									12.742							6.094	H	12
13	H	6.648							13.296									6.648	H	14
15	H	6.648	PHP-6-6	1"	8	NA	8	25		13.296		25	8	NA	8	1"	PHP-6-7	6.648	H	16
17	H	6.648									13.296							6.648	H	18
19	H	6.094							12.188									6.094	H	20
21	H	6.094	PHP-5-6	1"	8	NA	8	25		12.188		25	8	NA	8	1"	PHP-5-7	6.094	H	22
23	H	6.094									12.188							6.094	H	24
25	H	6.648							12.742									6.094	H	26
27	H	6.648	PHP-8-8	1"	8	NA	8	25		12.742		25	8	NA	8	1"	PHP-5-8	6.094	H	28
29	H	6.648									12.742							6.094	H	30
31	O								0.000										O	32
33	O		SPARE					20		0.000		20					SPARE		O	34
35	O										0.000								O	36
37	O		SPACE						0.000										O	38
39	O									0.000							SPACE		O	40
41	O										0.000								O	42

LOAD TOTAL: 55.40 55.40 55.40

480Y/277 V 3 PHASE 4 WIRE
MAINS: MLO 225 A BUS
30000 AIC SE LABEL

ELECTRICAL G102

LOAD TYPE	CONNECTED	DEMAND
(R) RECEPTACLES	0.00 100%	0.00
(M) MOTOR	0.00 100%	0.00
(H) HVAC	166.20 100%	166.20
(L) LIGHTING	0.00 125%	0.00
(O) OTHER	0.00 100%	0.00
(K) KITCHEN EQUIP	0.00 100%	0.00
TOTAL	166.20 100%	166.20

FED FROM: PANEL CH
MOUNT: SURFACE
NEMA: 1

PROVIDE DOOR WITH LOCK AND HINGED TRIM. PROVIDE COPPER BUSS BARS AND BOLT ON BREAKERS.

NOTES:
1.
2.
3.
4.

PANEL TOTALS

PHASE A	55.400	KVA	200.0 AMP
PHASE B	55.400	KVA	200.0 AMP
PHASE C	55.400	KVA	200.0 AMP

PANEL CL1

CKT	LOAD TYPE	LOAD KVA	DESCRIPTION	C	PH	N	G	CB	PHASE A	PHASE B	PHASE C	CB	PH	N	G	C	DESCRIPTION	LOAD KVA	LOAD TYPE	CKT
1	S	10.148							19.026									8.880	S	2
3	S	10.632	PANEL CL2	SEE POWER RISER				225		20.352		125	SEE POWER RISER				PANEL CL3	9.720	S	4
5	S	10.056									17.376							7.320	S	6
7	S	6.480							15.220									8.740	S	8
9	S	5.280	PANEL CL4	SEE POWER RISER				225		11.920		225	SEE POWER RISER				PANEL CL5	6.640	S	10
11	S	5.040									12.960							7.920	S	12
13	S	9.276							16.956									7.692	S	14
15	S	7.740	PANEL CL8	SEE POWER RISER				125		12.996		225	SEE POWER RISER				PANEL CL9	5.256	S	16
17	S	7.740									12.396							4.656	S	18
19	H	5.040							5.040										O	20
21	H	5.040	AH-25	1"	6	6	10	45		5.040		30	10	10	10	3/4"	SPD		O	22
23	H	5.040									5.040								O	24
25	H	5.040	AH-26	1"	6	6	10	45	5.040			125					SPARE		O	26
27	H	5.040								5.040									O	28
29	H	5.040									5.040								O	30
31	O		SPARE					20	0.000								SPARE		O	32
33	O		SPARE					20		0.000							SPACE		O	34
35	O		SPARE					20			0.000						SPACE		O	36
37	O		SPARE					20	0.000								SPACE		O	38
39	O		SPARE					20		0.000							SPACE		O	40
41	O		SPARE					20			0.000						SPACE		O	42

LOAD TOTAL: 61.29 55.39 52.81

208Y/120 V 3 PHASE 4 WIRE
MAINS: MCB 400 A MCB
22000 AIC SE LABEL

ELECTRICAL G102

LOAD TYPE	CONNECTED	DEMAND
(R) RECEPTACLES	96.66 55%	54.44
(M) MOTOR	0.00 100%	0.00
(H) HVAC	32.42 100%	32.42
(L) LIGHTING	0.00 125%	0.00
(O) OTHER	38.16 100%	38.16
(K) KITCHEN EQUIP	0.00 100%	0.00
TOTAL	168.45 74%	125.01

FED FROM: TRANSFORMER TC1
MOUNT: SURFACE
NEMA: 1

PROVIDE DOOR WITH LOCK AND HINGED TRIM. PROVIDE COPPER BUSS BARS AND BOLT ON BREAKERS.

NOTES:
1.
2.
3.
4.

PANEL TOTALS

PHASE A	45.219	KVA	376.8 AMP
PHASE B	40.833	KVA	340.3 AMP
PHASE C	38.962	KVA	324.7 AMP

PANEL CL2

CKT	LOAD TYPE	LOAD KVA	DESCRIPTION	C	PH	N	G	CB	PHASE A	PHASE B	PHASE C	CB	PH	N	G	C	DESCRIPTION	LOAD KVA	LOAD TYPE	CKT
1	R	0.720	RECEPT - A101	3/4"	12	12	12	20	3.216									2.496	O	2
3	R	0.720	RECEPT - A101	3/4"	12	12	12	20		3.216		30	10	10	10	3/4"	DRYER	2.496	O	4
5	R	0.540	RECEPT - A101	3/4"	12	12	12	20			2.040	20	12	12	12	3/4"	WASHER	1.500	O	6
7	R	0.720	RECEPT - A106	3/4"	12	12	12	20	1.440			20	12	12	12	3/4"	RECEPT - A113	0.720	R	8
9	R	0.360	RECEPT - A103, A105	3/4"	12	12	12	20		1.260		20	12	12	12	3/4"	RECEPT - A113	0.900	R	10
11	R	0.540	RECEPT - A106	3/4"	12	12	12	20			2.040	20	12	12	12	3/4"	REFRIGERATOR - A113	1.500	O	12
13	R	0.540	RECEPT - A107	3/4"	12	12	12	20	1.440			20					SPARE	0.900	O	14
15	R	0.720	RECEPT - A107	3/4"	12	12	12	20		0.720		20					SPARE		O	16
17	R	0.720	RECEPT - A107	3/4"	12	12	12	20			0.720	20					SPARE		O	18
19	O	0.900	EWC - A100 (NOTE 1)	3/4"	12	12	12	20	0.900			20					SPARE		O	20
21	R	0.720	RECEPT - A100, A104, EXTERIOR	3/4"	12	12	12	20		0.720		20					SPARE		O	22
23	R	0.720	RECEPT - A111, A112	3/4"	12	12	12	20			0.900	20	12	12	12	3/4"	RECEPT - A109	0.180	R	24
25	R	0.720	RECEPT - A112	3/4"	12	12	12	20	1.620			20	12	12	12	3/4"	RECEPT - A109	0.900	R	26
27	R	0.900	RECEPT - A110, A111	3/4"	12	12	12	20		1.620		20	12	12	12	3/4"	RECEPT - A108, A109	0.720	O	28
29	R	0.360	RECEPT - EXTERIOR	3/4"	12	12	12	20			1.260	20	12	12	12	3/4"	RECEPT - A106, A110	0.900	R	30
31	R	0.720	RECEPT - G102, EXTERIOR	3/4"	12	12	12	20	1.440			20	12	12	12	3/4"	RECEPT - E100, E101	0.720	R	32
33	O	2.496	EWH-1	3/4"	10	10	10	30		2.496		20					SPARE		R	34
35	O	2.496									2.496	20					SPARE		R	36
37	O	0.090	RECIRCULATION PUMP	3/4"	12	12	12	20	0.090			20					SPARE		R	38
39	O	0.600	RESERVED FOR HVAC CONTROLS	3/4"	10	10	10	20		0.600		20					SPARE		R	40
41	O	0.600	RESERVED FOR HVAC CONTROLS	3/4"	10	10	10	20			0.600	20					SPARE		R	42

LOAD TOTAL: 10.15 10.63 10.06

208Y/120 V 3 PHASE 4 WIRE
MAINS: MLO 225 A BUS
22000 AIC SE LABEL

ELECTRICAL G102

LOAD TYPE	CONNECTED	DEMAND
(R) RECEPTACLES	14.04 86%	12.02
(M) MOTOR	0.00 100%	0.00
(H) HVAC	0.00 100%	0.00
(L) LIGHTING	0.00 125%	0.00
(O) OTHER	19.79 100%	19.79
(K) KITCHEN EQUIP	0.00 100%	0.00
TOTAL	30.83 90%	28.81

FED FROM: PANEL CL1
MOUNT: SURFACE
NEMA: 1

PROVIDE DOOR WITH LOCK AND HINGED TRIM. PROVIDE COPPER BUSS BARS AND BOLT ON BREAKERS.

NOTES:
1. PROVIDE GFCI BREAKER.
2.
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PANEL TOTALS

PHASE A	9.481	KVA	79.0 AMP
PHASE B	9.935	KVA	82.8 AMP
PHASE C	9.397	KVA	78.3 AMP

PANEL BL4

CKT	LOAD TYPE	LOAD KVA	DESCRIPTION	C	PH	N	G	CB	PHASE A	PHASE B	PHASE C	CB	PH	N	G	C	DESCRIPTION	LOAD KVA	LOAD TYPE	CKT
1	R	0.720	RECEPT - E114	3/4"	12	12	12	20	1.440									0.720	R	2
3	R	0.720	RECEPT - E114	3/4"	12	12	12	20		1.440		20	12	12	12	3/4"	RECEPT - E125	0.720	R	4
5	R	0.720	RECEPT - E114	3/4"	12	12	12	20			1.440	20	12	12	12	3/4"	RECEPT - E125	0.720	R	6
7	R	0.720	RECEPT - E116	3/4"	12	12	12	20	1.440			20	12	12	12	3/4"	RECEPT - E120	0.720	R	8
9	R	0.720	RECEPT - E116	3/4"	12	12	12	20		1.440		20	12	12	12	3/4"	RECEPT - E120	0.720	R	10
11	R	0.720	RECEPT - E116	3/4"	12	12	12	20			1.440	20	12	12	12	3/4"	RECEPT - E120	0.720	R	12
13	R	0.720	RECEPT - E118	3/4"	12	12	12	20	2.970									2.250	O	14
15	R	0.720	RECEPT - E118	3/4"	12	12	12	20		2.970								2.250	O	16
17	R	0.720	RECEPT - E118	3/4"	12	12	12	20			2.970	30	10	10	10	3/4"	EWH-3A	2.250	O	18
19	R	0.360	RECEPT - E100, EXTERIOR	3/4"	12	12	12	20	2.610									2.250	O	20
21	O	0.180	RECIRCULATION PUMP3	3/4"	12	12	12	20		0.180		20					SPARE		O	22
23	O		SPARE					20			0.000	20					SPARE		O	24
25	O		SPARE					20	0.000			20					SPARE		O	26
27	O		SPARE					20		0.000		20					SPARE		O	28
29	O		SPARE					20			0.000	20					SPARE		O	30
31	O		SPARE					20	0.000								SPACE		O	32
33	O		SPARE					20		0.000							SPACE		O	34
35	O		SPARE					20			0.000						SPACE		O	36
37	O		SPARE					20	0.000								SPACE		O	38
39	O		SPARE					20		0.000							SPACE		O	40
41	O		SPARE					20			0.000						SPACE		O	42

LOAD TOTAL: 8.46 9.03 5.86

208Y/120 V 3 PHASE 4 WIRE
MAINS: MCB 225 A MCB
22000 AIC SE LABEL

UTILITY E115.1

LOAD TYPE	CONNECTED	DEMAND
(R) RECEPTACLES	11.16 95%	10.58
(M) MOTOR	0.00 100%	0.00
(H) HVAC	0.00 100%	0.00
(L) LIGHTING	0.00 125%	0.00
(O) OTHER	9.18 100%	9.18
(K) KITCHEN EQUIP	0.00 100%	0.00
TOTAL	20.34 97%	19.76

FED FROM: PANEL BL1
MOUNT: SURFACE
NEMA: 1

PROVIDE DOOR WITH LOCK AND HINGED TRIM. PROVIDE COPPER BUSS BARS AND BOLT ON BREAKERS.

NOTES:
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PANEL TOTALS

PHASE A	8.219	KVA	68.5 AMP
PHASE B	5.858	KVA	48.8 AMP
PHASE C	5.683	KVA	47.4 AMP

PANEL CH

CKT	LOAD TYPE	LOAD KVA	DESCRIPTION	C	PH	N	G	CB	PHASE A	PHASE B	PHASE C	CB	PH	N	G	C	DESCRIPTION	LOAD KVA	LOAD TYPE	CKT
1	S	10.114							69.846									59.832	S	2
3	S	7.514	PANEL CH1	SEE POWER RISER				125		67.346		400	SEE POWER RISER				PANEL CH2	59.832	S	4
5	S	7.193									67.025							59.832	S	6
7	S	14.958							70.358									55.400	S	8
9	S	14.958	PANEL CH3	SEE POWER RISER				225		70.358		300	SEE POWER RISER				PANEL CH4	55.400	S	10
11	S	14.958									70.358							55.400	S	12
13	S	65.454							65.454										O	14
15	S	55.748	TRANSFORMER TC1	SEE POWER RISER				350		55.748		125					SPARE		O	16
17	S	56.372									56.372								O	18
19	O								0.000										O	20
21	O		SPACE							0.000							SPACE		O	22
23	O										0.000								O	24
25	O		SPACE						0.000								SPACE		O	26
27	O		SPACE							0.000							SPACE		O	28
29	O		SPACE								0.000						SPACE		O	30
31	O		SPACE						0.000								SPACE		O	32
33	O		SPACE							0.000							SPACE		O	34
35	O		SPACE								0.000						SPACE		O	36
37	O		SPACE						0.000								SPACE		O	38
39	O		SPACE							0.000							SPACE		O	40
41	O		SPACE								0.000						SPACE		O	42

LOAD TOTAL: 205.76 193.45 193.76

480Y/277 V 3 PHASE 4 WIRE
MAINS: MCB 1000 A MCB
22000 AIC SE LABEL

ELECTRICAL G102

LOAD TYPE	CONNECTED	DEMAND
(R) RECEPTACLES	0.00 100%	0.00
(M) MOTOR	0.00 100%	0.00
(H) HVAC	429.51 100%	429.51
(L) LIGHTING	24.82 125%	31.03
(O) OTHER	165.11 100%	185.11
(K) KITCHEN EQUIP	0.00 100%	0.00
TOTAL	1035.0 82%	848.41

FED FROM: PANEL MDP
MOUNT: SURFACE
NEMA: 1

PROVIDE DOOR WITH LOCK AND HINGED TRIM. PROVIDE COPPER BUSS BARS AND BOLT ON BREAKERS.

NOTES:
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PANEL TOTALS

PHASE A	186.670	KVA	606.9 AMP
PHASE B	158.582	KVA	572.5 AMP
PHASE C	158.830	KVA	573.4 AMP

PANEL CH1

CKT	LOAD TYPE	LOAD KVA	DESCRIPTION	C	PH	N	G	CB	PHASE A	PHASE B	PHASE C	CB	PH	N	G	C	DESCRIPTION	LOAD KVA	LOAD TYPE	CKT
1	L	2.547	LTS - A101-A113	3/4"	12	12	12	20	2.547									SPARE	O	2
3	L	0.771	LTS - B102, B103, B114	3/4"	12	12	12	20		2.796		20	12	12	12	3/4"	LTS - G111, G112, G114, G116	2.027	L	4
5	L	2.466	LTS - G101, G103, G105, G107, G109	3/4"	12	12	12	20			4.271	20	12	12	12	3/4"	LTS - G113, G119, G121, G123	1.805	L	6
7	L	2.307	LTS - G102, G106, G108, G110	3/4"	12	12	12	20	4.917									2.610	L	8
9	L	2.027	LTS - B104-B113, B115-B122	3/4"	12	12	12	20		2.651		20	12	12	12	3/4"	LTS - MEZZANINE A	0.624	L	10
11	L	2.298	LTS - E101, E103, F101-F110	3/4"	12	12	12	20			2.922	20	12	12	12	3/4"	LTS - MEZZANINE B	0.624	L	12
13	L	2.650	LTS - A100, B100, B101, G100, G113, G117	3/4"	12	12	12	20	2.650									SPARE	O	14
15	L	2.065	LTS - F100	3/4"	12	12	12	20		2.065		20						SPARE	O	16
17	O		SPARE					20			0.000	20						SPARE	O	18
19	O		SPARE					20	0.000			20						SPARE	O	20
21	O		SPARE					20		0.000		20						SPARE	O	22
23	O		SPARE					20			0.000	20						SPARE	O	24
25	O		SPACE						0.000									SPACE	O	26
27	O		SPACE							0.000								SPACE	O	28
29	O		SPACE								0.000							SPACE	O	30

LOAD TOTAL: 10.11 7.51 7.19

480Y/277 V 3 PHASE 4 WIRE
MAINS: MCB 125 A BUS
30000 AIC SE LABEL

ELECTRICAL G102

LOAD TYPE	CONNECTED	DEMAND
(R) RECEPTACLES	0.00 100%	0.00
(M) MOTOR	0.00 100%	0.00
(H) HVAC	0.00 100%	0.00
(L) LIGHTING	24.82 125%	31.03
(O) OTHER	0.00 100%	0.00
(K) KITCHEN EQUIP	0.00 100%	0.00
TOTAL	24.82 125%	31.03

FED FROM: PANEL CH
MOUNT: SURFACE
NEMA: 1

PROVIDE DOOR WITH LOCK AND HINGED TRIM. PROVIDE COPPER BUSS BARS AND BOLT ON BREAKERS.

NOTES:
1.
2.
3.
4.

PANEL TOTALS

PHASE A	12.643	KVA	45.6 AMP
PHASE B	9.393	KVA	33.9 AMP
PHASE C	8.991	KVA	32.5 AMP

PANEL CH2

CKT	LOAD TYPE	LOAD KVA	DESCRIPTION	C	PH	N	G	CB	PHASE A	PHASE B	PHASE C	CB	PH	N	G	C	DESCRIPTION	LOAD KVA	LOAD TYPE	CKT
1	H	6.094							12.188									6.094	H	2
3	H	6.094	PHP-5-1	3/4"	10	NA	10	25		12.188		25	10	NA	10	3/4"	PHP-5-2	6.094	H	4
5	H	6.094									12.188							6.094	H	6
7	H	6.094							12.742									6.648	H	8
9	H	6.094	PHP-5-3	3/4"	10	NA	10	25		12.742		25	10	NA	10	3/4"	PHP-6-1	6.648	H	10
11	H	6.094									12.742							6.648	H	12
13	H	6.648							13.296									6.648	H	14
15	H	6.648	PHP-6-2	3/4"	10	NA	10	25		13.296		25	10	NA	10	3/4"	PHP-6-3	6.648	H	16
17	H	6.648									13.296							6.648	H	18
19	H	2.216							4.432									2.216	H	20
21	H	2.216	HP-31	3/4"	10	NA	10	15		4.432		15	10	NA	10	3/4"	HP-29	2.216	H	22
23	H	2.216									4.432							2.216	H	24
25	H	2.216							4.432									2.216	H	26
27	H	2.216	HP-30	3/4"	10	NA	10	15		4.432		15	10	NA	10	3/4"	HP-27	2.216	H	28
29	H	2.216									4.432							2.216	H	30
31	H	6.648							6.648										O	32
33	H	6.648	PHP-6-4	3/4"	10	NA	10	25		6.648		20					SPARE		O	34
35	H	6.648									6.648								O	36
37	H	6.094							6.094										O	38
39	H	6.094	PHP-5-4	3/4"	10	NA	10	25		6.094							SPACE		O	40
41	H	6.094									6.094								O	42

LOAD TOTAL: 59.83 59.83 59.83

480Y/277 V 3 PHASE 4 WIRE
MAINS: MCB 400 A BUS
30000 AIC SE LABEL

ELECTRICAL G102

LOAD TYPE	CONNECTED	DEMAND
(R) RECEPTACLES	0.00 100%	0.00
(M) MOTOR	0.00 100%	0.00
(H) HVAC	179.50 100%	179.50
(L) LIGHTING	0.00 125%	0.00
(O) OTHER	0.00 100%	0.00
(K) KITCHEN EQUIP	0.00 100%	0.00
TOTAL	179.50 100%	179.50

FED FROM: PANEL CH
MOUNT: SURFACE
NEMA: 1

PROVIDE DOOR WITH LOCK AND HINGED TRIM. PROVIDE COPPER BUSS BARS AND BOLT ON BREAKERS.

NOTES:
1.
2.
3.
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PANEL TOTALS

PHASE A	59.832	KVA	216.0 AMP
PHASE B	59.832	KVA	216.0 AMP
PHASE C	59.832	KVA	216.0 AMP

PANEL BH2

CKT	LOAD TYPE	LOAD KVA	DESCRIPTION	C	PH	N	G	CB	PHASE A	PHASE B	PHASE C	CB	PH	N	G	C	DESCRIPTION	LOAD KVA	LOAD TYPE	CKT
1	H	2.216							4.432									2.216	H	2
3	H	2.216	HP-9	3/4"	10	NA	10	15		4.432		15	10	NA	10	3/4"	HP-10	2.216	H	4
5	H	2.216									4.432							2.216	H	6
7	H	6.094							12.188									6.094	H	8
9	H	6.094	PHP-3-1	3/4"	10	NA	10	25		12.188		25	10	NA	10	3/4"	PHP-3-2	6.094	H	10
11	H	6.094									12.188							6.094	H	12
13	H	6.648							13.296									6.648	H	14
15	H	6.648	PHP-4-1	3/4"	10	NA	10	25		13.296		25	10	NA	10	3/4"	PHP-4-2	6.648	H	16
17	H	6.648									13.296							6.648	H	18
19	H	6.648							13.296									6.648	H	20
21	H	6.648	PHP-4-3	3/4"	10	NA	10	25		13.296		25	8	NA	8	1"	PHP-4-4	6.648	H	22
23	H	6.648									13.296							6.648	H	24
25	H	6.648							13

PANEL KP2

CKT	LOAD TYPE	LOAD KVA	DESCRIPTION	C	PH	N	G	CB	PHASE A	PHASE B	PHASE C	CB	PH	N	G	C	DESCRIPTION	LOAD KVA	LOAD TYPE	CKT
1	K	0.288	FLY FAN	3/4"	1 2	1 2	15	1.728			20	1 2	1 2	3/4"			CASHIER - C114	1.440	K	2
3	O	0.600	TIM'C CLOCK	3/4"	1 2	1 2	20		2.040		20	1 2	1 2	3/4"			CASHIER - C114	1.440	K	4
5	R	0.720	RECEPT - C117	3/4"	1 2	1 2	20			1.740	20	1 2	1 2	3/4"			COLD FOOD COUNTER	1.020	K	6
7	R	0.720	RECEPT - C117	3/4"	1 2	1 2	20	1.740			20	1 2	1 2	3/4"			COLD FOOD COUNTER	1.020	K	8
9	K	0.504	MILK COOLER	3/4"	1 2	1 2	15		1.752		20	10	10	10	3/4"		HOT FOOD COUNTER	1.248	K	10
11	R	0.360	RECEPT - C115	3/4"	1 2	1 2	20			1.608								1.248	K	12
13	K	0.504	MILK COOLER	3/4"	1 2	1 2	15	1.752			20	10	10	10	3/4"		HOT FOOD COUNTER	1.248	K	14
15	R	0.720	RECEPT - C115, C116, C121	3/4"	1 2	1 2	20		1.968									1.248	K	16
17	K	1.920	ICE CREAM DISPENSER	3/4"	1 2	1 2	20			3.840	20	1 2	1 2	3/4"			PASS-THRU HOT CABINET (NOTE 1)	1.920	K	18
19	R	0.360	RECEPT - C116	3/4"	1 2	1 2	20	2.280			20	1 2	1 2	3/4"			PASS-THRU HOT CABINET (NOTE 1)	1.920	K	20
21	R	0.360	RECEPT - C120, EXTERIOR	3/4"	1 2	1 2	20		0.540		20	1 2	1 2	3/4"			RECEPT - C116	0.180	R	22
23	O		SPARE				20			0.180	20	1 2	1 2	3/4"			RECEPT - C116	0.180	R	24
25	R	0.180	RECEPT - C116	3/4"	1 2	1 2	20	2.100			20	1 2	1 2	3/4"			ICE CREAM DISPENSER	1.920	K	26
27	K	1.200	ELECTRIC CAN OPENER	3/4"	1 2	1 2	20		1.200		20						SPARE		O	28
29	K	0.672	FOOD PROCESSOR	3/4"	1 2	1 2	20			0.672	20						SPARE		O	30
31	R	0.180	RECEPT - C116	3/4"	1 2	1 2	20	0.180			20						SPARE		O	32
33	K	1.200	HOT HOLDING CABINET (NOTE 1)	3/4"	1 2	1 2	20		1.200		20						SPARE		O	34
35	O		SPARE				20			0.000	20						SPARE		O	36
37	O	1.200	WASHER	3/4"	1 2	1 2	20	1.200			20						SPARE		O	38
39	O	2.496	DRYER	3/4"	1 0	1 0	30		2.496		20						SPARE		O	40
41	O	2.496								2.496	20						SPARE		O	42

LOAD TOTAL: 10.98 11.20 10.54

LOAD TYPE	CONNECTED	DEMAND
(R) RECEPTACLES	3.96	100% 3.96
(M) MOTOR	0.00	100% 0.00
(H) HVAC	0.00	100% 0.00
(L) LIGHTING	0.00	125% 0.00
(O) OTHER	6.79	100% 6.79
(K) KITCHEN EQUIP	21.96	70% 15.37
TOTAL	32.71	60% 26.12

208Y/120 V 3 PHASE 4 WIRE
MAINS: MCB 225 A MCB
22000 AIC SE LABEL

KITCHEN C116

FED FROM: PANEL KP1
MOUNT: FLUSH
NEMA: 1

PROVIDE DOOR WITH LOCK AND HINGED TRIM. PROVIDE COPPER BUSS BARS AND BOLT ON BREAKERS.

NOTES:
1. PROVIDE GFCI BREAKER.
2.
3.
4.

PANEL TOTALS			
PHASE A	8.769	KVA	73.1 AMP
PHASE B	8.941	KVA	74.5 AMP
PHASE C	8.414	KVA	70.1 AMP

PANEL KP3

CKT	LOAD TYPE	LOAD KVA	DESCRIPTION	C	PH	N	G	CB	PHASE A	PHASE B	PHASE C	CB	PH	N	G	C	DESCRIPTION	LOAD KVA	LOAD TYPE	CKT
1	O	0.200	DOOR BELL - C116	3/4"	1 2	1 2	20	0.560			20	1 2	1 2	3/4"			RECEPT - DISHWASH	0.360	R	2
3	O	0.500	HEAT TRACE - C120 (NOTE 1)	3/4"	1 2	1 2	20		0.660		20	1 2	1 2	3/4"			RECEPT - C116	0.360	R	4
5	O	0.900	HOOD CONTROLS/LTB	3/4"	1 2	1 2	20			1.260	20	1 2	1 2	3/4"			RECEPT - E119, C119.1	0.360	R	6
7	O	0.600	SHUNT TRIP POWER	3/4"	1 2	1 2	20	0.960			20	1 2	1 2	3/4"			RECEPT - C116, C118	0.360	R	8
9	R	0.360	RECEPT - ROOF	3/4"	1 2	1 2	20		0.360		20						SPARE		O	10
11	H	1.176	FAN VF-1	3/4"	1 2	1 2	20			1.176	20						SPARE		O	12
13	H	1.176	FAN VF-2	3/4"	1 2	1 2	20	1.176			20						SPARE		O	14
15	H	0.200	FAN DEF-1	3/4"	1 2	1 2	20		0.200		20						SPARE		O	16
17	H	0.400	MOTORIZED DAMPERS	3/4"	1 2	1 2	20			0.400	20						SPARE		O	18
19	R	0.540	RECEPT - C121, C102, C114	3/4"	1 2	1 2	20	0.540			20						SPARE		O	20
21	R	0.720	RECEPT - C113	3/4"	1 2	1 2	20		0.720		20						SPARE		O	22
23	R	0.540	RECEPT - C113	3/4"	1 2	1 2	20			0.540	20						SPARE		O	24
25	R	0.720	RECEPT - C113	3/4"	1 2	1 2	20	0.720			20						SPACE		O	26
27	H	1.176	MOTORIZED DOOR	3/4"	1 2	1 2	20		1.176		20						SPACE		O	28
29	O		SPARE				20			0.000	20						SPACE		O	30
31	O		SPARE				20	0.000			20						SPACE		O	32
33	O		SPARE				20		0.000		20						SPACE		O	34
35	O		SPARE				20			0.000	20						SPACE		O	36
37	O	0.792	DISPOSER	3/4"	1 0	1 0	20	3.792			40	8	NA	10	1"		SINK HEATER	3.000	O	38
39	O	0.792							3.792									3.000	O	40
41	O	0.792								3.792								3.000	O	42

LOAD TOTAL: 7.75 7.11 7.17

LOAD TYPE	CONNECTED	DEMAND
(R) RECEPTACLES	0.00	100% 0.00
(M) MOTOR	2.95	100% 2.95
(H) HVAC	0.00	125% 0.00
(L) LIGHTING	0.00	100% 0.00
(O) OTHER	14.75	100% 14.75
(K) KITCHEN EQUIP	0.00	80% 0.00
TOTAL	22.02	100% 22.02

208Y/120 V 3 PHASE 4 WIRE
MAINS: MCB 225 A MCB
22000 AIC SE LABEL

KITCHEN C116

FED FROM: PANEL KP1
MOUNT: FLUSH
NEMA: 1

PROVIDE DOOR WITH LOCK AND HINGED TRIM. PROVIDE COPPER BUSS BARS AND BOLT ON BREAKERS.

NOTES:
1. PROVIDE GFEP CIRCUIT BREAKER.
2.
3.
4.

PANEL TOTALS			
PHASE A	7.746	KVA	64.6 AMP
PHASE B	7.108	KVA	59.2 AMP
PHASE C	7.166	KVA	59.7 AMP

PANEL UPP

CKT	LOAD TYPE	LOAD KVA	DESCRIPTION	C	PH	N	G	CB	PHASE A	PHASE B	CB	PH	N	G	C	DESCRIPTION	LOAD KVA	LOAD TYPE	CKT
1	R	1.200	RECEPT - F101	3/4"	1 2	1 2	20	1.200									SPACE			2
3	R	1.200	RECEPT - F101	3/4"	1 2	1 2	20		1.200								SPACE			4
5	R	1.200	RECEPT - F101	3/4"	1 2	1 2	20	1.200									SPACE			6
7	R	1.200	RECEPT - F101	3/4"	1 2	1 2	20		1.200								SPACE			8
9	R	1.200	RECEPT - F101	3/4"	1 2	1 2	20	1.200									SPACE			10
11			SPARE				20		0.000								SPACE			12
13			SPARE				20	0.000									SPACE			14
15			SPARE				20		0.000								SPACE			16
17			SPARE				20	0.000									SPACE			18
19			SPARE				20		0.000								SPACE			20
21			SPARE				20			0.000							SPACE			22
23			SPARE				20			0.000							SPACE			24

LOAD TOTAL: 3.60 2.40

LOAD TYPE	CONNECTED	DEMAND
(R) RECEPTACLES	6.00	100% 6.00
(M) MOTOR	0.00	100% 0.00
(H) HVAC	0.00	100% 0.00
(L) LIGHTING	0.00	125% 0.00
(O) OTHER	0.00	100% 0.00
(K) KITCHEN EQUIP	0.00	100% 0.00
TOTAL	6.00	100% 6.00

240Y/120V 1 PHASE 3 WIRE
MAINS: MCB 100 A MCB
22,000 AIC

FED FROM: (A)(B)(C)(N)(G) ⚠1
MOUNT: SURFACE
NEMA: 1

PROVIDE DOOR WITH LOCK AND HINGED TRIM. PROVIDE COPPER BUSS BARS AND BOLT ON BREAKERS.

NOTES:
1.

PANEL TOTALS			
PHASE A	3.6	KVA	30.0 AMP
PHASE B	2.4	KVA	20.0 AMP

PANEL EMH1

CKT	LOAD TYPE	LOAD KVA	DESCRIPTION	C	PH	N	G	CB	PHASE A	PHASE B	PHASE C	CB	PH	N	G	C	DESCRIPTION	LOAD KVA	LOAD TYPE	CKT
1	L	1.800	LTS - EMERG/EGRESS	3/4"	1 2	1 2	20	1.800			30	1 0	1 0	3/4"			SPD		O	2
3	L	1.700	LTS - EMERG/EGRESS	3/4"	1 2	1 2	20		1.700										O	4
5	L	1.900	LTS - EMERG/EGRESS	3/4"	1 2	1 2	20			1.900									O	6
7	L	1.400	LTS - EMERG/EGRESS	3/4"	1 2	1 2	20	3.218			20	6	8	8	1"		LTS - EMERGENCY EXTERIOR	1.818	L	8
9	L	1.100	LTS - EMERG/EGRESS	3/4"	1 2	1 2	20		1.100		20						SPARE		O	10
11	L	1.100	LTS - EMERG/EGRESS	3/4"	1 2	1 2	20			1.100	20						SPARE		O	12
13	L	1.900	LTS - EMERG/EGRESS	3/4"	1 2	1 2	20	1.900			20						SPARE		O	14
15	L	2.592	LTS - EMERG/EGRESS C112	3/4"	1 2	1 2	20		2.592		20						SPARE		O	16
17	L	2.592	LTS - EMERG/EGRESS C112	3/4"	1 2	1 2	20			2.592	20						SPARE		O	18
19	O		SPARE				20	0.000			20						SPACE		O	20
21	O		SPARE				20		0.000		20						SPACE		O	22
23	O		SPARE				20			0.000	20						SPACE		O	24
25	O		SPARE				20	0.000			20						SPACE		O	26
27	O		SPARE				20		0.000		20						SPACE		O	28
29	O		SPARE				20			0.000	20						SPACE		O	30

LOAD TOTAL: 6.92 5.39 5.59

LOAD TYPE	CONNECTED	DEMAND
(R) RECEPTACLES	0.00	100% 0.00
(M) MOTOR	0.00	100% 0.00
(H) HVAC	0.00	100% 0.00
(L) LIGHTING	17.90	125% 22.38
(O) OTHER	0.00	100% 0.00
(K) KITCHEN EQUIP	0.00	125% 0.00
TOTAL	17.90	125% 22.38

480Y/277 V 3 PHASE 4 WIRE
MAINS: MCB 125 A MCB
42000 AIC SE LABEL

GENERATOR C122

FED FROM: ATS-1
MOUNT: SURFACE
NEMA: 1

PROVIDE DOOR WITH LOCK AND HINGED TRIM. PROVIDE COPPER BUSS BARS AND BOLT ON BREAKERS.

NOTES:
1.
2.
3.
4.

PANEL TOTALS			
PHASE A	6.645	KVA	31.2 AMP
PHASE B	6.740	KVA	24.3 AMP
PHASE C	6.990	KVA	25.2 AMP

PANEL CL7

CKT	LOAD TYPE	LOAD KVA	DESCRIPTION	C	PH	N	G	CB	PHASE A	PHASE B	PHASE C	CB	PH	N	G	C	DESCRIPTION	LOAD KVA	LOAD TYPE	CKT
1	H	5.040	AH-17	1"	8	8	10	45	10.560			50	8	8	10	1"	AH-18	5.520	H	2
3	H	5.040								10.560								5.520	H	4
5	H	5.040									10.560							5.520	H	6
7	H	5.520	AH-19	1"	8	8	10	50	11.040			50	8	8	10	1"	AH-15	5.520	H	8
9	H	5.520								11.040								5.520	H	10
11	H	5.520									11.040							5.520	H	12
13	H	5.040	AH-13	1"	8	8	10	45	10.320			45	8	8	10	1"	AH-10	5.280	H	14
15	H	5.040								10.320								5.280	H	16
17	H	5.040									10.320							5.280	H	18
19	H	5.040	AH-12	1"	8	8	10	45	10.080			45	8	8	10	1"	AH-9	5.040	H	20
21	H	5.040								10.080								5.040	H	22
23	H	5.040									10.080							5.040	H	24
25	H	5.040	AH-11	1"	8	8	10	45	9.600			40	8	8	10	1"	AH-14	4.560	H	26
27	H	5.040								9.600								4.560	H	28
29	H	5.040									5.040						SPACE		O	30
31	R	0.720	RECEPT - MEZZ B	3/4"	1 2	1 2	20	0.720			100						SPARE		O	32
33	R	0.720	RECEPT - MEZZ B	3/4"	1 2	1 2	20		0.720										O	34
35	H	0.800	MOTORIZED DAMPERS	3/4"	1 2	1 2	20			0.800									O	36
37	H	0.800	MOTORIZED DAMPERS	3/4"	1 2	1 2	20	0.800											O	38
39	O		SPARE				20		0.000		30	1 0	1 0	3/4"			SPD		O	40
41	O		SPARE				20			0.000									O	42

LOAD TOTAL: 53.12 52.32 47.84

LOAD TYPE	CONNECTED	DEMAND
(R) RECEPTACLES	1.44	100% 1.44
(M) MOTOR	0.00	100% 0.00
(H) HVAC	151.84	100% 151.84
(L) LIGHTING	0.00	125% 0.00
(O) OTHER	0.00	100% 0.00
(K) KITCHEN EQUIP	0.00	100% 0.00
TOTAL	153.28	100% 153.28

208Y/120 V 3 PHASE 4 WIRE
MAINS: MCB 600 A MCB FULLY RATED
22000 AIC SE LABEL

MEZZANINE B

FED FROM: TRANSFORMER TC3
MOUNT: SURFACE
NEMA: 1

PROVIDE DOOR WITH LOCK AND HINGED TRIM. PROVIDE COPPER BUSS BARS AND BOLT ON BREAKERS.

NOTES:
1.
2.
3.
4.

PANEL TOTALS			
PHASE A	53.120	KVA	442.7 AMP
PHASE B	52.320	KVA	436.0 AMP
PHASE C	47.840	KVA	398.7 AMP

PANEL CL8

CKT	LOAD TYPE	LOAD KVA	DESCRIPTION	C	PH	N	G	CB	PHASE A	PHASE B	PHASE C	CB	PH	N	G	C	DESCRIPTION	LOAD KVA	LOAD TYPE	CKT
1	R	0.720	RECEPT - G111	3/4"	1 2	1 2	20	1.886			20	1 2	1 2	3/4"			EXHAUST FAN EF-5 (1/2HP)	1.176	H	2
3	R	0.900	RECEPT - G111	3/4"	1 2	1 2	20		1.260		20	1 2	1 2	3/4"			RECEPT - G100	0.360	R	4
5	R	0.720	RECEPT - G111	3/4"	1 2	1 2	20			1.440	20	1 2	1 2	3/4"			RECEPT - G113, G114.1, G115, G117	0.720	R	6
7	R	0.900	RECEPT - G119	3/4"	1 2	1 2	20	1.260			20	1 2	1 2	3/4"			RECEPT - G115.1, EXTERIOR	0.360	R	8
9	R	0.720	RECEPT - G119	3/4"	1 2	1 2	20		1.440		20	1 2	1 2	3/4"			RECEPT - G100	0.720	R	10
11	R	0.720	RECEPT - G119	3/4"	1 2	1 2	20			1.620	20	1 2	1 2	3/4"			EWC - G100 (NOTE 1)	0.900	O	12
13	R	0.720	RECEPT - G121	3/4"	1 2	1 2	20	1.920			20	1 2	1 2	3/4"			REFRIGERATOR - G114	1.200	O	14
15	R	0.720	RECEPT - G121	3/4"	1 2	1 2	20		1.440		20	1 2	1 2	3/4"			RECEPT - G114	0.720	R	16
17	R	0.900	RECEPT - G121	3/4"	1 2	1 2	20			1.440	20	1 2	1 2	3/4"			RECEPT - G114	0.540	R	18
19	R	0.900	RECEPT - G123	3/4"	1 2	1 2	20	1.500			20	1 2	1 2	3/4"			RECEPT - G114	0.600	R	20
21	R	0.720	RECEPT - G123	3/4"	1 2	1 2	20		1.440		20	1 2	1 2	3/4"			RECEPT - G118.2, G119.2, G120.2, G121.2	0.720	R	22
23	R	0.720	RECEPT - G123	3/4"	1 2	1 2	20			1.080	20	1 2	1 2	3/4"			RECEPT - G122.2, 123.2	0.360	R	24
25	R	0.900	RECEPT - G118	3/4"	1 2	1 2	20	0.900			20						SPARE		O	26
27	R	0.720	RECEPT - G118	3/4"	1 2	1 2	20		0.720		20						SPARE		O	28
29	R	0.720	RECEPT - G118	3/4"	1 2	1 2	20			0.720	20						SPARE		O	30
31	R	0.900	RECEPT - G120	3/4"	1 2	1 2	20	0.900			20						SPARE		O	32
33	R	0.720	RECEPT - G120	3/4"	1 2	1 2	20		0.720		20						SPARE		O	34
35	R	0.720	RECEPT - G120	3/4"	1 2	1 2	20			0.720	20						SPARE		O	36
37	R	0.900	RECEPT - G122	3/4"	1 2	1 2	20	0.900			20						SPARE		O	38
39	R	0.720	RECEPT - G122	3/4"	1 2	1 2	20		0.720		20						SPARE		O	40
41	R	0.720	RECEPT - G122	3/4"	1 2	1 2	20			0.720	20						SPARE		O	42

LOAD TOTAL: 9.28 7.74 7.74

LOAD TYPE	CONNECTED	DEMAND
(R) RECEPTACLES	21.48	73% 15.74
(M) MOTOR	0.00	100% 0.00
(H) HVAC	1.18	100% 1.18
(L) LIGHTING	0.00	125% 0.00
(O) OTHER	2.10	100% 2.10
(K) KITCHEN EQUIP	0.00	100% 0.00
TOTAL	24.76	77% 19.02

208Y/120 V 3 PHASE 4 WIRE
MAINS: MCB 125 A MCB
22000 AIC SE LABEL

DATA G115.2

FED FROM: PANEL CL1
MOUNT: SURFACE
NEMA: 1

PROVIDE DOOR WITH LOCK AND HINGED TRIM. PROVIDE COPPER BUSS BARS AND BOLT ON BREAKERS.

NOTES:
1. PROVIDE GFCI BREAKER.
2.
3.
4.

PANEL TOTALS			
PHASE A	7.125	KVA	59.4 AMP
PHASE B	5.945	KVA	49.5 AMP
PHASE C	5.945	KVA	49.5 AMP

PANEL CL9

CKT	LOAD TYPE	LOAD KVA	DESCRIPTION	C	PH	N	G	CB	PHASE A	PHASE B	PHASE C	CB	PH	N	G	C	DESCRIPTION	LOAD KVA	LOAD TYPE	CKT
1	R	0.900	RECEPT - G125	3/4"	1 2	1 2	20	3.396			30	10	10	10	3/4"		EWH-2A	2.496	O	2
3	R	0.720	RECEPT - G125	3/4"	1 2	1 2	20		3.216									2.496	O	4
5	R	0.720	RECEPT - G125	3/4"	1 2	1 2	20			3.216	30	10	10	10	3/4"		EWH-2B	2.496	O	6
7	R	0.540	RECEPT - G125.2, G125.2, EXTERIOR	3/4"	1 2	1 2	20	3.036										2.496	O	8
9	R	0.720	RECEPT - G124	3/4"	1 2	1 2	20		1.329		20	1 2	1 2	3/4"			MOTORIZED DAMPERS	0.600	H	10
11	R	0.900	RECEPT - G124	3/4"	1 2	1 2	20			1.080	20	1 2	1 2	3/4"			RECIRCULATION PUMPS	0.180	O	12
13	R	0.720	RECEPT - G124	3/4"	1 2	1 2	20	0.720			20						SPARE		O	14
15	R	0.720	RECEPT - G116	3/4"	1 2	1 2	20		0.720		20						SPARE		O	16
17	R	0.360	RECEPT - G116	3/4"	1 2	1 2	20			0.360	20						SPARE		O	18
19	R	0.540	RECEPT - G116	3/4"	1 2	1 2	20	0.540			20						SPARE		O	20
21	O		SPARE				20		0.000		20						SPARE		O	22
23	O		SPARE				20			0.000	20						SPARE		O	24
25	O		SPARE				20	0.000			20						SPACE		O	26
27	O		SPARE				20		0.000		20						SPACE		O	28
29	O		SPARE				20			0.000	20						SPACE		O	30
31	O		SPARE				20	0.000			20						SPACE		O	32
33	O		SPARE				20		0.000		20						SPACE		O	34
35	O		SPARE				20			0.000	20						SPACE		O	36
37	O		SPARE				20	0.000			20						SPACE		O	38
39	O		SPARE				20		0.000		20						SPACE		O	40
41	O		SPARE				20			0.000	20						SPACE		O	42

LOAD TOTAL: 7.68 5.26 4.56

LOAD TYPE	CONNECTED	DEMAND
(R) RECEPTACLES	6.84	100% 6.84
(M) MOTOR	0.00	100% 0.00
(H) HVAC	0.60	100% 0.60
(L) LIGHTING	0.00	125% 0.00
(O) OTHER	10.16	100% 10.16
(K) KITCHEN EQUIP	0.00	100% 0.00
TOTAL	17.60	100% 17.60

208Y/120 V 3 PHASE 4 WIRE
MAINS: MCB 225 A MCB
22000 AIC SE LABEL

UTILITY G115.1

FED FROM: PANEL CL1
MOUNT: SURFACE
NEMA: 1

PROVIDE DOOR WITH LOCK AND HINGED TRIM. PROVIDE COPPER BUSS BARS AND BOLT ON BREAKERS.

NOTES:
1.
2.
3.
4.

PANEL TOTALS			
PHASE A	7.692	KVA	64.1 AMP
PHASE B	5.256	KVA	43.8 AMP
PHASE C	4.656	KVA	38.8 AMP

PANEL KP1

CKT	LOAD TYPE	LOAD KVA	DESCRIPTION	C	PH	N	G	CB	PHASE A	PHASE B	PHASE C	CB	PH	N	G	C	DESCRIPTION	LOAD KVA	LOAD TYPE	CKT
1	S	10.980	PANEL KP2	SEE POWER RISER				225	18.728			225	SEE POWER RISER				PANEL KP3	7.748	S	2
3	S	11.196								18.304								7.108	S	4
5	S	10.536									17.704							7.168	S	6
7	S	8.052	PANEL AL4	SEE POWER RISER				225	8.052										O	8
9	S	9.768								9.768		30	10	10	10	3/4"	SPD		O	10
11	S	7.736									7.736								O	12
13	K	55.320	UDS	SEE POWER RISER				600	57.420			30	10	10	10	3/4"	KITCHEN HOOD MUA-1 (NOTE 1)	2.100	K	14
15	K	55.320								57.420								2.100	K	16
17	K	55.320									57.420							2.100	K	18
19	K	9.624	DISHWASHER BOOSTER HEATER	1 1/4"	3	3	8	90	11.724			30	10	10	10	3/4"	EXHAUST FAN KEF-1	2.100	K	20
21	K	9.624								11.724								2.100	K	22
23	K	9.624									11.724							2.100	K	24
25	K	1.740	KITCHEN HOOD CONDENSER #1	3/4"	1 0	1 0	20		8.340			70	4	4	8	1 1/2"	DISHWASHER	6.600	K	26
27	K	1.740								8.340								6.600	K	28
29	K	1.740									8.340								O	30
31	K	2.568	KITCHEN HOOD CONDENSER #2	3/4"	1 0	1 0	20		2.568			225					SPARE		O	32
33	K	2.568								2.568									O	34
35	K	2.568									2.568								O	36
37	O		SPACE						0.000								SPARE		O	38
39	O									0.000									O	40
41	O										0.000								O	42

LOAD TOTAL: 106.83 108.12 105.49

LOAD TYPE	CONNECTED	DEMAND
(R) RECEPTACLES	18.54	77% 14

PANEL MDP (ALTERNATE #4)

CKT	LOAD TYPE	LOAD KVA	DESCRIPTION	C	PH	N	G	CB	PHASE A	PHASE B	PHASE C	CB	PH	N	G	C	DESCRIPTION	LOAD KVA	LOAD TYPE	CKT
1	S	4.691							4.691										O	2
3	S	3.748	PANEL AH1	SEE POWER RISER				125		3.748		60	6	6	10	1"	SPD		O	4
5	S	4.017									4.017								O	6
7	S	63.702							116.23									52.532	S	8
9	S	63.702	PANEL AH2	SEE POWER RISER				400		114.69		300	SEE POWER RISER				TRANSFORMER TA (AL1)	51.186	S	10
11	S	63.702									114.16							50.456	S	12
13	S	37.672							144.50									106.832	S	14
15	S	37.672	PANEL AH3	SEE POWER RISER				250		145.83		450	SEE POWER RISER				ATS-3 (KP1)	108.124	S	16
17	S	37.672									143.16							105.452	S	18
19	O								37.30									37.304	S	20
21	O		SPACE							38.87		225	SEE POWER RISER				TRANSFORMER TB (BL1)	38.870	S	22
23	O										38.59							38.554	S	24
25	S	9.756							43.596									33.840	S	26
27	S	7.351	PANEL BH1	SEE POWER RISER				225		39.655		175	SEE POWER RISER				TRANSFORMER TC2 (CL6)	32.304	S	28
29	S	6.548									38.588							32.040	S	30
31	S	93.626							146.75									53.120	S	32
33	S	93.626	PANEL BH2	SEE POWER RISER				500		145.95		300	SEE POWER RISER				TRANSFORMER TC3 (CL7)	52.320	S	34
35	S	93.626									141.47							47.840	S	36
37	S	205.756							212.66									6.918	S	38
39	S	193.452	PANEL CH	SEE POWER RISER				1000		198.84		125	SEE POWER RISER				ATS-1 (EMH1)	5.392	S	40
41	S	193.755									199.35							5.562	S	42
43	S	190.205							190.21										O	44
45	S	181.720	ATS-2 (SBH1)	SEE POWER RISER				1000		181.72		225					SPARE		O	46
47	S	185.554									185.55								O	48
49	O								0.000										O	50
51	O		SPARE					225		0.000		400					SPARE		O	52
53	O										0.000								O	54
55	O								0.000										O	56
57	O		SPACE							0.000							SPACE		O	58
59	O										0.000								O	60

LOAD TOTAL: 890.96 859.47 764.65

480Y/277 V 3 PHASE 4 WIRE
MAINS: MCB 3000 A MCB (NOTE 1)
65000 AIC X SE LABEL

ELECTRICAL/MECHANICAL C123

LOAD TYPE	CONNECTED		DEMAND
(R) RECEPTACLES	518.46	51%	264.23
(M) MOTOR	0.00	100%	0.00
(H) HVAC	1827.9	100%	1827.9
(L) LIGHTING	84.71	125%	105.89
(O) OTHER	322.47	100%	322.47
(K) KITCHEN EQUIP	280.32	80%	224.25
TOTAL	3033.8	90%	2744.7

FED FROM: UTILITY TRANSFORMER
MOUNT: FLOOR
NEMA: 1

PROVIDE DOOR WITH LOCK AND HINGED TRIM. PROVIDE COPPER BUSS BARS AND BOLT ON BREAKERS.

NOTES:
1. PROVIDE WITH ARC FAULT REDUCTION.
2.
3.
4.

PANEL TOTALS

PHASE A	810.575	KVA	2926.3 AMP
PHASE B	786.612	KVA	2838.8 AMP
PHASE C	782.250	KVA	2824.0 AMP

PANEL SBH1 (ALTERNATE #4)

CKT	LOAD TYPE	LOAD KVA	DESCRIPTION	C	PH	N	G	CB	PHASE A	PHASE B	PHASE C	CB	PH	N	G	C	DESCRIPTION	LOAD KVA	LOAD TYPE	CKT
1	S	40.140							41.991			20	12	12	12	3/4"	LTS - C103-109, C114, EXTERIOR, MEZZ C	1.751	L	2
3	S	30.574	TRANSFORMER SB1 (SBL)	SEE POWER RISER				225		31.234		20	12	12	12	3/4"	LTS - C100-C102	0.660	L	4
5	S	33.160									35.606	20	12	12	12	3/4"	LTS - C113	2.448	L	6
7	O								0.588			20	12	12	12	3/4"	LTS - C110, C111	0.588	L	8
9	O		SPD	3/4"	10	10	10	30		2.592		20	12	12	12	3/4"	LTS - C112	2.592	L	10
11	O										2.592	20	12	12	12	3/4"	LTS - C112	2.592	L	12
13	S	145.536							147.75			20	12	12	12	3/4"	LTS - EXTERIOR	2.190	L	14
15	S	145.536	PANEL AH4	SEE POWER RISER				700		147.89		20	12	12	12	3/4"	LTS - C115-C123	2.358	L	16
17	S	145.536									147.35	20	12	12	12	3/4"	LTS - EXTERIOR, CANOPY	1.818	L	18
19	O								0.000			20					SPARE		O	20
21	O		SPACE							0.000		20					SPARE		O	22
23	O										0.000	20					SPARE		O	24
25	O		SPACE						0.000			20					SPARE		O	26
27	O		SPACE							0.000		20					SPARE		O	28
29	O		SPACE								0.000	20					SPARE		O	30
31	O		SPACE						0.000			20					SPARE		O	32
33	O		SPACE							0.000		20					SPARE		O	34
35	O		SPACE								0.000	20					SPARE		O	36
37	O		SPACE						0.000			20					SPARE		O	38
39	O		SPACE							0.000		20					SPARE		O	40
41	O		SPACE								0.000	20					SPARE		O	42

LOAD TOTAL: 190.21 181.72 185.55

480Y/277 V 3 PHASE 4 WIRE
MAINS: MCB 1000 A MCB
42000 AIC SE LABEL

GENERATOR C122

LOAD TYPE	CONNECTED		DEMAND
(R) RECEPTACLES	9.00	100%	9.00
(M) MOTOR	0.00	100%	0.00
(H) HVAC	454.08	100%	454.08
(L) LIGHTING	17.00	125%	21.25
(O) OTHER	59.20	100%	59.20
(K) KITCHEN EQUIP	18.20	70%	12.74
TOTAL	557.48	100%	556.27

FED FROM: ATS-2
MOUNT: SURFACE
NEMA: 1

PROVIDE DOOR WITH LOCK AND HINGED TRIM. PROVIDE COPPER BUSS BARS AND BOLT ON BREAKERS.

NOTES:
1.
2.
3.
4.

PANEL TOTALS

PHASE A	189.792	KVA	685.2 AMP
PHASE B	181.325	KVA	654.9 AMP
PHASE C	185.151	KVA	668.4 AMP

PANEL AH4 (ALTERNATE #4)

CKT	LOAD TYPE	LOAD KVA	DESCRIPTION	C	PH	N	G	CB	PHASE A	PHASE B	PHASE C	CB	PH	N	G	C	DESCRIPTION	LOAD KVA	LOAD TYPE	CKT
1	H	9.252							14.792									5.540	H	2
3	H	9.252	HP-1	1"	8	8	10	40		14.792		25	10	10	10	3/4"	HP-2	5.540	H	4
5	H	9.252									14.792							5.540	H	6
7	H	5.540							18.282									12.742	H	8
9	H	5.540	HP-3	3/4"	10	10	10	25		18.282		60	6	6	10	1"	HP-4	12.742	H	10
11	H	5.540									18.282							12.742	H	12
13	H	12.742							35.179									22.437	H	14
15	H	12.742	HP-5	1"	6	6	10	60		35.179		90	3	3	8	1 1/2"	AH-1	22.437	H	16
17	H	12.742									35.179							22.437	H	18
19	H	9.695							19.390									9.695	H	20
21	H	9.695	AH-2	1"	8	8	10	35		19.390		35	8	8	10	1"	AH-3	9.695	H	22
23	H	9.695									19.390							9.695	H	24
25	H	11.911							34.902									22.991	H	26
27	H	11.911	ERV-1	1"	6	6	10	60		34.902		90	3	3	8	1 1/2"	AH-5	22.991	H	28
29	H	11.911									34.902							22.991	H	30
31	H	22.991							22.991										O	32
33	H	22.991	AH-4	1 1/2"	3	3	8	90		22.991		30					SPARE		O	34
35	H	22.991									22.991								O	36
37	O								0.000										O	38
39	O		SPARE					60		0.000		60					SPARE		O	40
41	O										0.000								O	42

LOAD TOTAL: 146.54 145.54 145.54

480Y/277 V 3 PHASE 4 WIRE
MAINS: MCB 800 A MCB
65000 AIC SE LABEL

ELECTRICAL/MECHANICAL C123

LOAD TYPE	CONNECTED		DEMAND
(R) RECEPTACLES	0.00	100%	0.00
(M) MOTOR	0.00	100%	0.00
(H) HVAC	436.61	100%	436.61
(L) LIGHTING	0.00	125%	0.00
(O) OTHER	0.00	100%	0.00
(K) KITCHEN EQUIP	0.00	100%	0.00
TOTAL	436.61	100%	436.61

FED FROM: PANEL SBH1
MOUNT: SURFACE
NEMA: 1

PROVIDE DOOR WITH LOCK AND HINGED TRIM. PROVIDE COPPER BUSS BARS AND BOLT ON BREAKERS.

NOTES:
1.
2.
3.
4.

PANEL TOTALS

PHASE A	145.536	KVA	525.4 AMP
PHASE B	145.536	KVA	525.4 AMP
PHASE C	145.536	KVA	525.4 AMP

PANEL SBL3

CKT	LOAD TYPE	LOAD KVA	DESCRIPTION	C	PH	N	G	CB	PHASE A	PHASE B	PHASE C	CB	PH	N	G	C	DESCRIPTION	LOAD KVA	LOAD TYPE	CKT
1	H	1.456	MSAH-1/MSHP-1	1"	8	8	10	20	2.656									1.200	O	2
3	H	1.456								2.656		20	8	8	8	1"	ACCESS CONTROL POWER	1.200	O	4
5	O	0.540	RECEPT - G115.2	3/4"	12	12	12	20			1.740	20	10	10	10	3/4"	ACCESS CONTROL POWER	1.200	O	6
7	O	0.900	DATA RACK - G115.2	3/4"	12	12	12	20	2.100			20	8	8	8	1"	ACCESS CONTROL POWER	1.200	O	8
9	O	0.900	DATA RACK - G115.2	3/4"	12	12	12	20		2.100		20	8	8	8	1"	ACCESS CONTROL POWER	1.200	O	10
11	R	0.600	RECEPT - G115.2	3/4"	12	12	12	20			1.800	20	8	8	8	1"	ACCESS CONTROL POWER	1.200	O	12
13	O		SPARE					20	0.000			20					SPARE		O	14
15	O		SPARE					20		0.000		20					SPARE		O	16
17	O		SPARE					20			0.000	20					SPACE		O	18
19	O		SPARE					20	0.000								SPACE		O	20
21	O		SPARE					20		0.000							SPACE		O	22
23	O		SPARE					20			0.000						SPACE		O	24

LOAD TOTAL: 4.76 4.76 3.54

208Y/120 V 3 PHASE 4 WIRE
MAINS: MCB 125 A MCB
22000 AIC SE LABEL

DATA G104

LOAD TYPE	CONNECTED		DEMAND
(R) RECEPTACLES	1.14	100%	1.14
(M) MOTOR	0.00	100%	0.00
(H) HVAC	2.91	100%	2.91
(L) LIGHTING	0.00	125%	0.00
(O) OTHER	9.00	100%	9.00
(K) KITCHEN EQUIP	0.00	100%	0.00
TOTAL	13.05	100%	13.05

FED FROM: PANEL SBL
MOUNT: SURFACE
NEMA: 1

PROVIDE DOOR WITH LOCK AND HINGED TRIM. PROVIDE COPPER BUSS BARS AND BOLT ON BREAKERS.

NOTES:
1.
2.
3.
4.

PANEL TOTALS

PHASE A	4.756	KVA	39.6 AMP
PHASE B	4.756	KVA	39.6 AMP
PHASE C	3.540	KVA	29.5 AMP

PANEL SBL4

CKT	LOAD TYPE	LOAD KVA	DESCRIPTION	C	PH	N	G	CB	PHASE A	PHASE B	PHASE C	CB	PH	N	G	C	DESCRIPTION	LOAD KVA	LOAD TYPE	CKT
1	H	1.456	MSAH-3/MSHP-3	3/4"	10	10	10	20	2.912									1.456	H	2
3	H	1.456								2.912								1.456	H	4
5	O	0.600	F/A AMPLIFIER CABINET (NOTE 1)	3/4"	12	12	12	20			1.200	20	12	12	12	3/4"	RECEPT - D115.2	0.600	R	6
7	O	0.600	FIRE ALARM NAC PANEL (NOTE 1)	3/4"	12	12	12	20	1.520			20	12	12	12	3/4"	RECEPT - D115.2	0.720	R	8
9	R	0.540	RECEPT - E105.1	3/4"	12	12	12	20		1.440		20	12	12	12	3/4"	DATA - 115.2	0.900	O	10
11	O	0.900	DATA - E105.1	3/4"	12	12	12	20			1.800	20	12	12	12	3/4"	DATA - 115.2	0.900	O	12
13	O	0.900	DATA - E105.1	3/4"	12	12	12	20	2.100			20	12	12	12	3/4"	ACCESS CONTROL PANEL	1.200	O	14
15	O		SPARE					20		0.000		20					SPARE		O	16
17	O		SPARE					20			0.000	20					SPARE		O	18
19	O		SPARE					20	0.000			20					SPARE		O	20
21	O		SPARE					20		0.000		20					SPARE		O	22
23	O		SPARE					20			0.000	20					SPARE		O	24

LOAD TOTAL: 8.53 4.35 3.00

208Y/120 V 3 PHASE 4 WIRE
MAINS: MCB 125 A MCB
22000 AIC SE LABEL

ELEC E105

LOAD TYPE	CONNECTED		DEMAND
(R) RECEPTACLES	1.86	100%	1.86
(M) MOTOR	0.00	100%	0.00
(H) HVAC	5.82	100%	5.82
(L) LIGHTING	0.00	125%	0.00
(O) OTHER	6.20	100%	6.20
(K) KITCHEN EQUIP	0.00	100%	0.00
TOTAL	13.88	100%	13.88

FED FROM: PANEL SBL
MOUNT: SURFACE
NEMA: 1

PROVIDE DOOR WITH LOCK AND HINGED TRIM. PROVIDE COPPER BUSS BARS AND BOLT ON BREAKERS.

NOTES:
1. PROVIDE RED BREAKER LOCK TO PREVENT ACCIDENTAL TURN-OFF.
2.
3.
4.

PANEL TOTALS

PHASE A	8.532	KVA	54.4 AMP
PHASE B	4.352	KVA	36.3 AMP
PHASE C	3.000	KVA	25.0 AMP

PANEL SBH1 (BASE BID)

CKT	LOAD TYPE	LOAD KVA	DESCRIPTION	C	PH	N	G	CB	PHASE A	PHASE B	PHASE C	CB	PH	N	G	C	DESCRIPTION	LOAD KVA	LOAD TYPE	CKT
1	S	40.140							41.991			20	12	12	12	3/4"	LTS - C103-109, C114, EXTERIOR, MEZZ C	1.751	L	2
3	S	30.574	TRANSFORMER SB1 (SBL)	SEE POWER RISER				225		31.234		20	12	12	12	3/4"	LTS - C100-C102	0.660	L	4
5	S	33.160									35.606	20	12	12	12	3/4"	LTS - C113	2.448	L	6
7	O								0.588			20	12	12	12	3/4"	LTS - C110, C111	0.588	L	8
9	O		SPD	3/4"	10	10	10	30		2.592		20	12	12	12	3/4"	LTS - C112	2.592	L	10
11	O										2.592	20	12	12	12	3/4"	LTS - C112	2.592	L	12
13	O								2.190			20	12	12	12	3/4"	LTS - EXTERIOR	2.190	L	14
15	O		SPACE							2.358		20	12	12	12	3/4"	LTS - C115-C123	2.358	L	16
17	O										1.818	20	12	12	12	3/4"	LTS - EXTERIOR, CANOPY	1.818	L	18
19	O		SPACE						0.000			20					SPARE		O	20
21	O		SPACE							0.000		20					SPARE		O	22
23	O		SPACE								0.000	20					SPARE		O	24
25	O		SPACE						0.000			20					SPARE		O	26
27	O		SPACE							0.000		20					SPARE		O	28
29	O		SPACE								0.000	20					SPARE		O	30
31	O		SPACE						0.000			20					SPACE		O	32
33	O		SPACE							0.000		20					SPACE		O	34
35	O		SPACE								0.000	20					SPACE		O	36
37	O		SPACE						0.000			20					SPACE		O	38
39	O		SPACE							0.000		20					SPACE		O	40
41	O		SPACE								0.000	20					SPACE		O	42

LOAD TOTAL: 44.67 38.18 40.02

480Y/277 V 3 PHASE 4 WIRE
MAINS: MCB 300 A MCB
42000 AIC SE LABEL

GENERATOR C122

LOAD TYPE	CONNECTED		DEMAND
(R) RECEPTACLES	9.00	100%	9.00
(M) MOTOR	0.00	100%	0.00
(H) HVAC	17.47	100%	17.47
(L) LIGHTING	17.00	125%	21.25
(O) OTHER	59.20	100%	59.20
(K) KITCHEN EQUIP	18.20	80%	14.56
TOTAL	120.87	101%	121.47

FED FROM: ATS-2
MOUNT: SURFACE
NEMA: 1

PROVIDE DOOR WITH LOCK AND HINGED TRIM. PROVIDE COPPER BUSS BARS AND BOLT ON BREAKERS.

NOTES:
1.
2.
3.
4.

PANEL TOTALS

PHASE A	44.994	KVA	162.1 AMP
PHASE B	36.356	KVA	131.3 AMP
PHASE C	40.220	KVA	145.2 AMP

PANEL SBL

CKT	LOAD TYPE	LOAD KVA	DESCRIPTION	C	PH	N	G	CB	PHASE A	PHASE B	PHASE C	CB	PH	N	G	C	DESCRIPTION	LOAD KVA	LOAD TYPE	CKT
1	S	13.796							24.292									10.496	S	2
3	S	10.530	PANEL SBL1	SEE POWER RISER				225		16.904		225	SEE POWER RISER				PANEL SBL2	6.378	S	4
5	S	12.700									22.300							9.600	S	6
7	S	4.756							4.756										O	8
9	S	4.756	PANEL SBL3	SEE POWER RISER				100		4.756		30	10	10	10	3/4"	TVSS		O	10
11	S	3.540									3.540								O	12
13	S	6.532							8.532										O	14
15	S	4.352	PANEL SBL4	SEE POWER RISER				125		4.352							SPACE		O	16
17	S	3.000								3.000									O	18
19	O								0.000										O	20
21	O		SPARE					100		0.000							SPACE		O	22
23	O										0.000								O	24
25	O		SPARE						0.000										O	26
27	O		SPARE							0.000							SPACE		O	28
29	O		SPARE								0.000								O	30
31	O	0.600	RESERVED FOR HVAC CONTROLS	3/4"	10	10	10	20	0.600			20					SPACE		O	32
33	O	0.600	RESERVED FOR HVAC CONTROLS	3/4"	10	10	10	20		0.600		20					SPACE		O	34
35	R	0.360	RECEPT - C123					20			0.360	20					SPARE		O	36
37	K	1.440							3.960									2.520	K	38
39	K	1.440	COOLER CONDENSER	1"	10	10	10	30		3.960		40	8	8	10	1"	FREEZER CONDENSER	2.520	K	40
41	K	1.440									3.960							2.520	K	42

LOAD TOTAL: 40.14 30.57 33.16

208Y/120 V 3 PHASE 4 WIRE
MAINS: MCB 500 A MCB
42000 AIC SE LABEL

GENERATOR C122

LOAD TYPE	CONNECTED		DEMAND
(R) RECEPTACLES	9.00	100%	9.00
(M) MOTOR	0.00	100%	0.00
(H) HVAC	17.47	100%	17.47
(L) LIGHTING	0.00	125%	0.00
(O) OTHER	59.20	100%	59.20
(K) KITCHEN EQUIP	18.20	80%	14.56
TOTAL	103.87	96%	100.23

FED FROM: SBT1
MOUNT: SURFACE
NEMA: 1
OPTIONAL STANDBY

PROVIDE DOOR WITH LOCK AND HINGED TRIM. PROVIDE COPPER BUSS BARS AND BOLT ON BREAKERS.

NOTES:
1.
2.
3.
4.

PANEL TOTALS

PHASE A	38.733	KVA	322.8 AMP
PHASE B	29.503	KVA	245.9 AMP
PHASE C	31.998	KVA	266.6 AMP

PANEL SBL1

CKT	LOAD TYPE	LOAD KVA	DESCRIPTION	C	PH	N	G	CB	PHASE A	PHASE B	PHASE C	CB	PH	N	G	C	DESCRIPTION	LOAD KVA	LOAD TYPE	CKT
1	K	0.832	ICE MACHINE	3/4"	10	10	10	20	1.792									0.960	O	2
3	K	0.832								1.664		15	10	10	10	3/4"	FREEZER EVAPORATOR	0.832	O	4
5	K	0.864	PASS-THRU REFRIGERATOR	3/4"	10	10	10	20			1.696							0.832	O	6
7	K	0.864							1.584			20	12	12	12	3/4"	RECEPT - EXTERIOR	0.720	R	8
9	K	0.864	PASS-THRU REFRIGERATOR	3/4"	10	10	10	20		1.914		20	12	12	12	3/4"	GWH-1, 2, 3	1.050	O	10
11	K	0.864									2.526	15	12	12	12	3/4"	RECIRCULATION PUMP	1.664	O	12
13	K	0.800	FREEZER LIGHTS	3/4"	12	12	12	20	2.464									1.664	O	14
15	K	0.400	COOLER LIGHTS	3/4"	12	12	12	20		0.400		20					SPARE		O	16
17	O	1.200	ACCESS CONTROL POWER	3/4"	10	10	10	20			1.920	20	12	12	12	3/4"	RECEPT - D115.2	0.720	R	18
19	O	1.200	ACCESS CONTROL POWER	1"	8	8	8	20	1.800			20	12	12	12	3/4"	RECEPT - D115.2	0.600	R	20
21	O	1.200	ACCESS CONTROL POWER	3/4"	10	10	10	20		2.100		20	12	12	12	3/4"	DATA RACK - D115.2	0.900	O	22
23	O	1.200	ACCESS CONTROL POWER	1"	8	8	8	20			2.100	20	12	12	12	3/4"	DATA RACK - D115.2	0.900	O	24
25	O	1.500	GEN-SET HEATER	3/4"	12	12	12	20	2.956			20	8	8	10	1"	MSAH-4/MSHP-4	1.456	H	26
27	O	1.000	GEN-SET BATTERY CHARGER	3/4"	12	12	12	20		2.456								1.456	H	28
29	O	1.500	FL BACKFLOW HTR (NOTE -2)	1"	8	8	8	20			2.400	20	12	12	12	3/4"	DATA - D104	0.900	O	30
31	O	1.500	DOMESTIC BFP HTR (NOTE 2)	1"	8	8	8	20	2.400			20	12	12	12	3/4"	DATA - D104	0.900	O	32
33	O		SPARE					20		0.540		20	12	12	12	3/4"	RECEPT - D104	0.540	R	34
35	O		SPARE					20			0.600	20	12	12	12	3/4"	FIRE ALARM NAC PANEL (NOTE 1)	0.600	O	36
37	O		SPARE					20	0.800			20	12	12	12	3/4"	F/A AMPLIFIER CABINET (NOTE 1)	0.800	O	38
39	O		SPARE					20		1.456		20	8	8	10	1"	MSAH-6/MSHP-6	1.456	H	40
41	O		SPARE					20			1.456							1.456	H	42

PANEL LOAD TOTAL: 13.80 10.53 12.70

208Y/120 V 3 PHASE 4 WIRE
MAINS: MLO 225 A BUS
42000 AIC SE LABEL

LOAD TYPE	CONNECTED		DEMAND
(R) RECEPTACLES	2.56	100%	2.56
(M) MOTOR	0.00	100%	0.00
(H) HVAC	5.82	100%	5.82
(L) LIGHTING	0.00	125%	0.00
(O) OTHER	22.30	100%	22.30
(K) KITCHEN EQUIP	6.22	80%	5.06
TOTAL	37.03	97%	35.76

FED FROM: PANEL SBL
MOUNT: SURFACE
NEMA: 1

PROVIDE DOOR WITH LOCK AND HINGED TRIM. PROVIDE COPPER BUSS BARS AND BOLT ON BREAKERS.

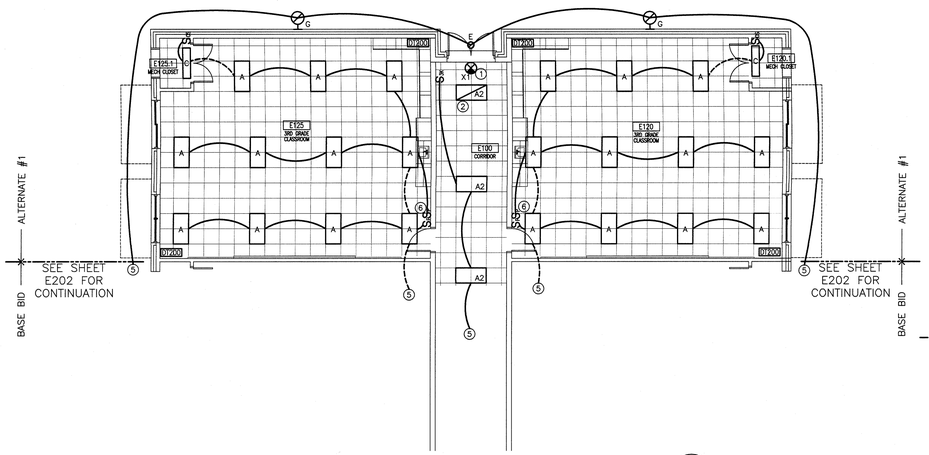
NOTES:
1. PROVIDE RED BREAKER LOCK TO PREVENT ACCIDENTAL TURNING OFF OF BREAKER.
2. PROVIDE GFEP BREAKER FOR HEAT TRACE CIRCUIT.
3.
4.

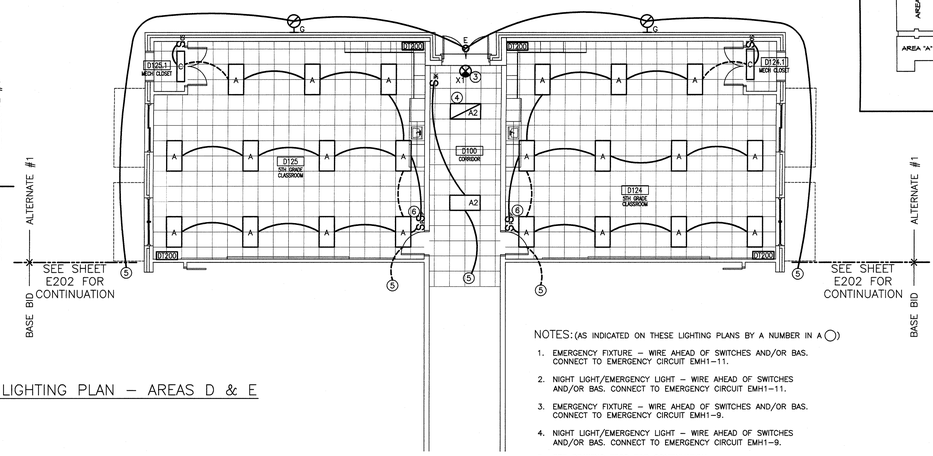
PANEL TOTALS

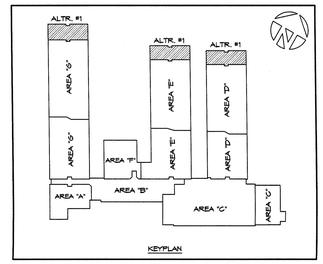
PHASE A	13.335	KVA	111.0 AMP
PHASE B	10.171	KVA	84.8 AMP
PHASE C	12.280	KVA	102.2 AMP

PANEL SBL2

| CKT | LOAD TYPE | LOAD KVA | DESCRIPTION | C | PH | N | G | CB | PHASE A | PHASE B | PHASE C | CB | PH | N | G | C | DESCRIPTION | LOAD KVA | LOAD TYPE | CKT |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---



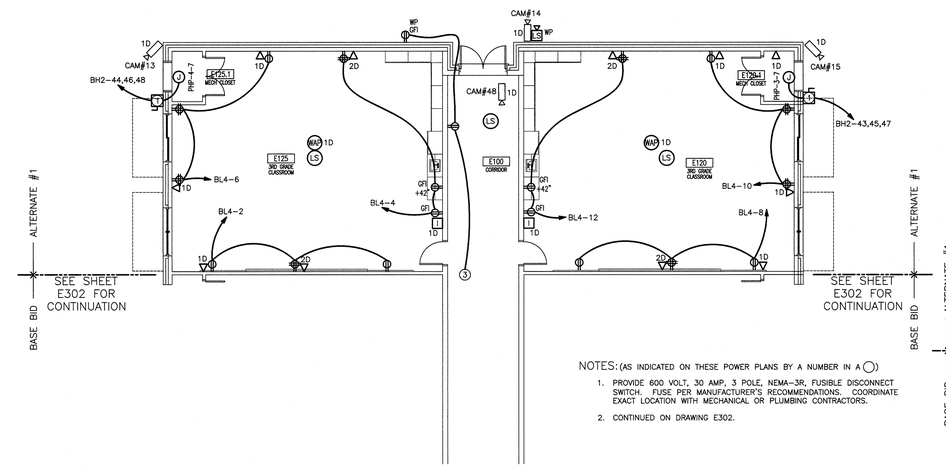


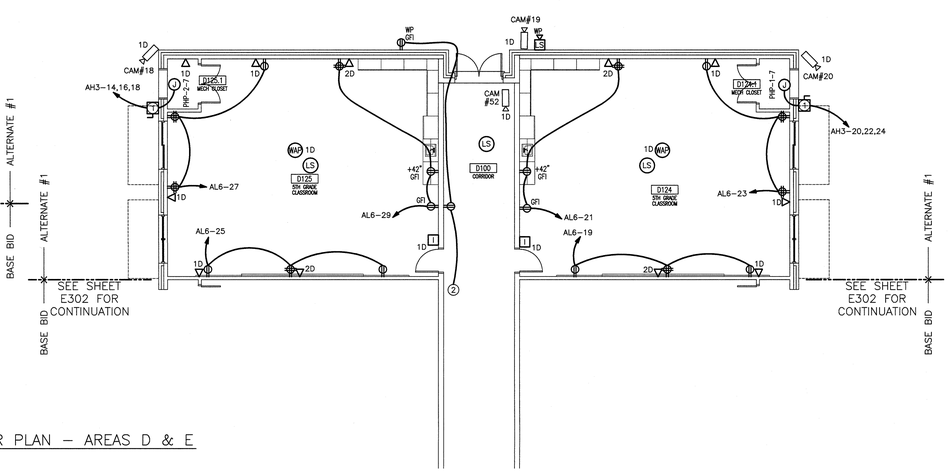


NOTES: (AS INDICATED ON THESE LIGHTING PLANS BY A NUMBER IN A ◯)

1. EMERGENCY FIXTURE – WIRE AHEAD OF SWITCHES AND/OR BAS. CONNECT TO EMERGENCY CIRCUIT EMH1-11.
2. NIGHT LIGHT/EMERGENCY LIGHT – WIRE AHEAD OF SWITCHES AND/OR BAS. CONNECT TO EMERGENCY CIRCUIT EMH1-11.
3. EMERGENCY FIXTURE – WIRE AHEAD OF SWITCHES AND/OR BAS. CONNECT TO EMERGENCY CIRCUIT EMH1-9.
4. NIGHT LIGHT/EMERGENCY LIGHT – WIRE AHEAD OF SWITCHES AND/OR BAS. CONNECT TO EMERGENCY CIRCUIT EMH1-9.
5. SEE DRAWING E202 FOR CONTINUATION.
6. REFER TO DETAIL E102-11.

01 E700 CLASSROOM ALTERNATE LIGHTING PLAN – AREAS D & E
1/8" = 1'-0"

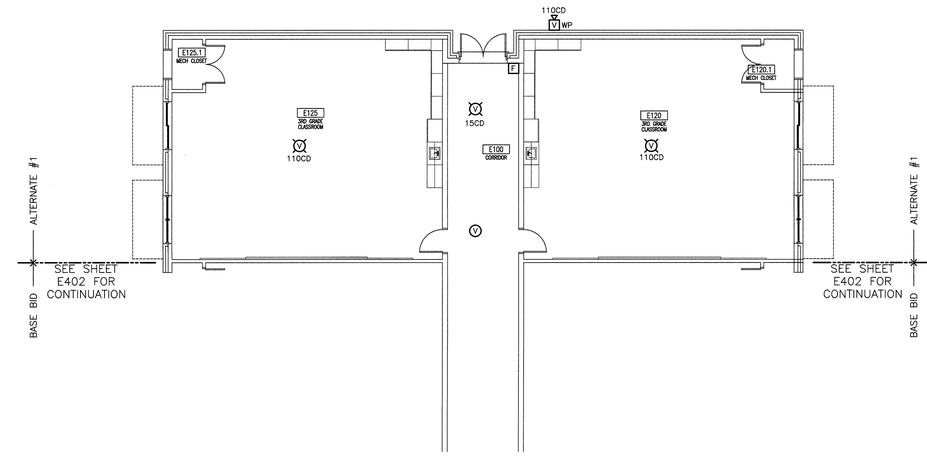


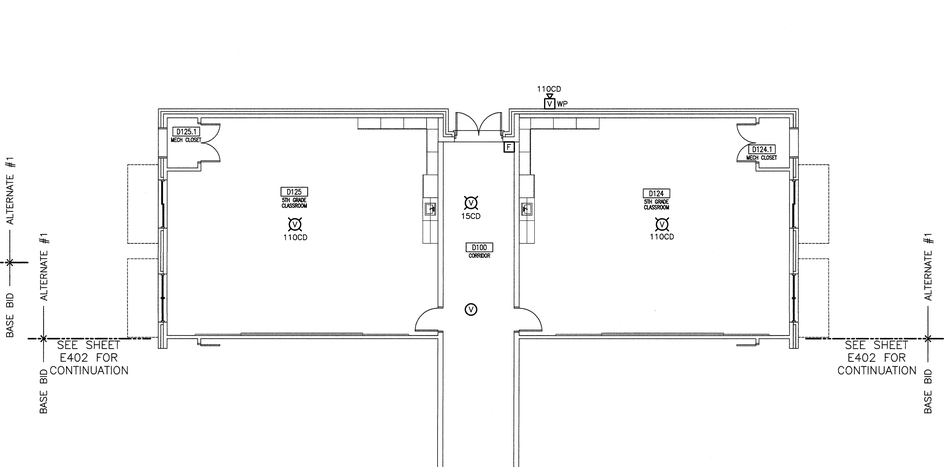


NOTES: (AS INDICATED ON THESE POWER PLANS BY A NUMBER IN A ◯)

1. PROVIDE 600 VOLT, 30 AMP, 3 POLE, NEMA-3R, FUSIBLE DISCONNECT SWITCH. FUSE PER MANUFACTURER'S RECOMMENDATIONS. COORDINATE EXACT LOCATION WITH MECHANICAL OR PLUMBING CONTRACTORS.
2. CONTINUED ON DRAWING E302.

02 E700 CLASSROOM ALTERNATE POWER PLAN – AREAS D & E
1/8" = 1'-0"





03 E700 CLASSROOM ALTERNATE FIRE ALARM PLAN – AREAS D & E
1/8" = 1'-0"

8' 4' 0 8' 16'
SCALE 1/8"=1'-0"

CONTRACTOR TO VERIFY ALL DIMENSIONS.

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ISSUE DATE: 04.30.2019
DRAWN BY: JPT
CHECKED BY: RAC
PROJECT: 1821

STUMP SOUND ELEMENTARY SCHOOL
ONSLOW COUNTY SCHOOLS
STUMP SOUND, NORTH CAROLINA
LIGHTING, POWER & FIRE ALARM PLANS
CLASSROOM ALTERNATE AREAS D & E

REVISION SCHEDULE

△	DATE	REFERENCE

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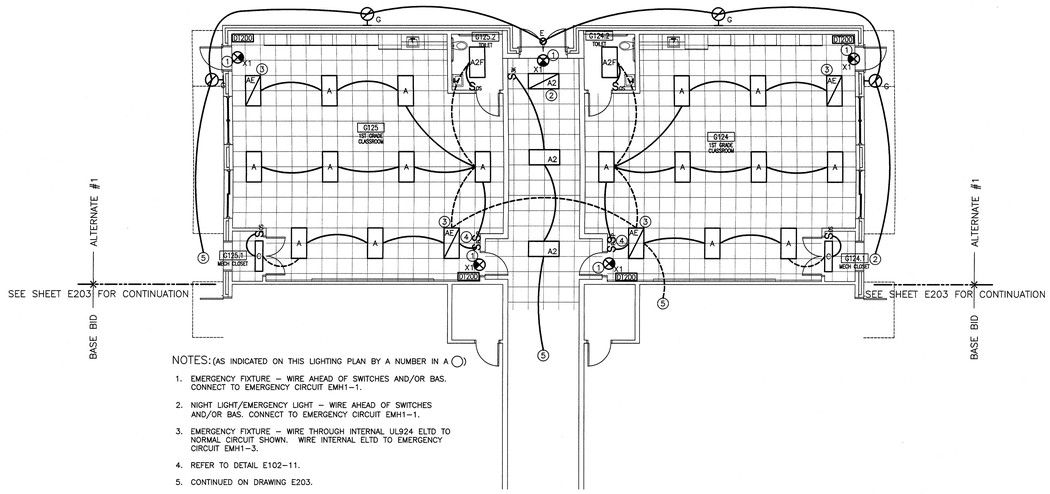
E700

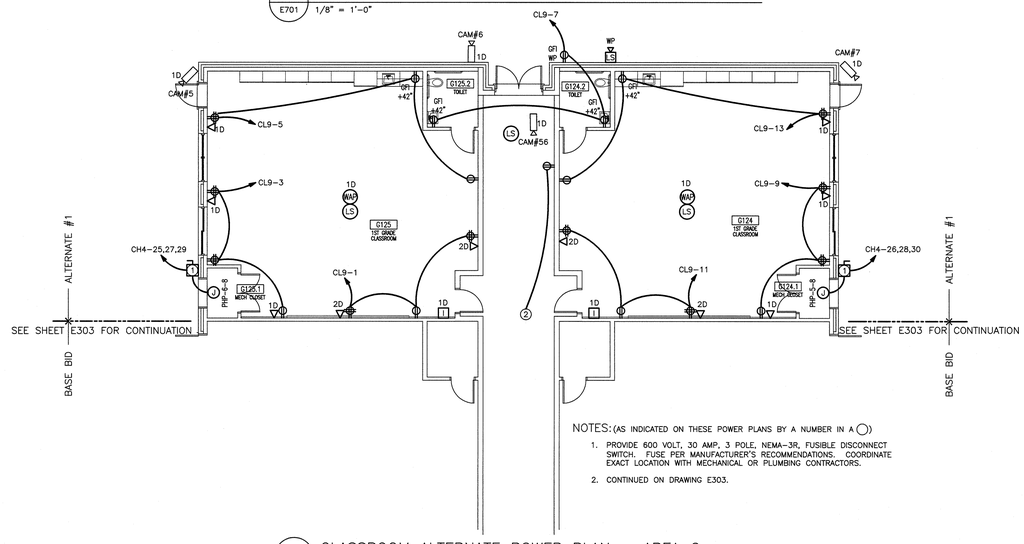
Project # 190002
Sheet: E700
Plotted By: chris
Plotted: April 26, 2019 @ 3:05 PM



NOTES: (AS INDICATED ON THIS LIGHTING PLAN BY A NUMBER IN A ◯)

1. EMERGENCY FIXTURE – WIRE AHEAD OF SWITCHES AND/OR BAS. CONNECT TO EMERGENCY CIRCUIT EMH1–1.
2. NIGHT LIGHT/EMERGENCY LIGHT – WIRE AHEAD OF SWITCHES AND/OR BAS. CONNECT TO EMERGENCY CIRCUIT EMH1–1.
3. EMERGENCY FIXTURE – WIRE THROUGH INTERNAL UL924 ELTD TO NORMAL CIRCUIT SHOWN. WIRE INTERNAL ELTD TO EMERGENCY CIRCUIT EMH1–3.
4. REFER TO DETAIL E102–11.
5. CONTINUED ON DRAWING E203.

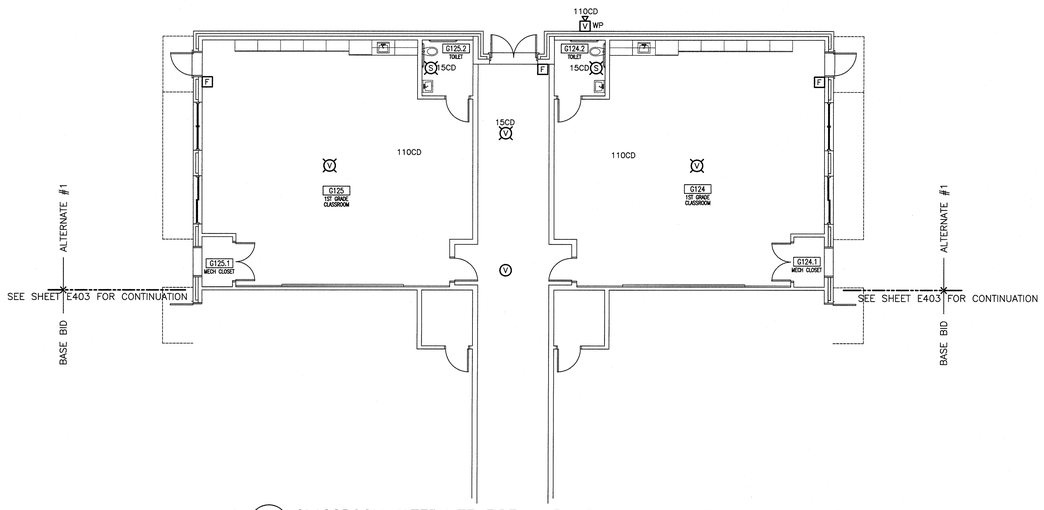
01 / E701 CLASSROOM ALTERNATE LIGHTING PLAN – AREA G
1/8" = 1'-0"



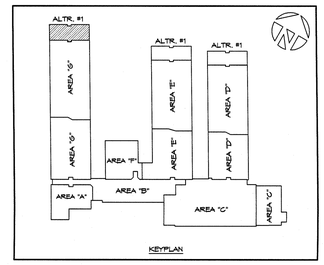
NOTES: (AS INDICATED ON THESE POWER PLANS BY A NUMBER IN A ◯)

1. PROVIDE 600 VOLT, 30 AMP, 3 POLE, NEMA–3R, FUSIBLE DISCONNECT SWITCH. FUSE PER MANUFACTURER'S RECOMMENDATIONS. COORDINATE EXACT LOCATION WITH MECHANICAL OR PLUMBING CONTRACTORS.
2. CONTINUED ON DRAWING E303.

02 / E701 CLASSROOM ALTERNATE POWER PLAN – AREA G
1/8" = 1'-0"



03 / E701 CLASSROOM ALTERNATE FIRE ALARM PLAN – AREA G
1/8" = 1'-0"



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STUMP SOUND ELEMENTARY SCHOOL
ONSLOW COUNTY SCHOOLS
STUMP SOUND, NORTH CAROLINA
LIGHTING, POWER & FIRE ALARM PLANS
CLASSROOM ALTERNATE AREA G

REVISION SCHEDULE

⚠	DATE	REFERENCE

8' 4' 0 8' 16'
SCALE 1/8"=1'-0"

E701

Project #: 130002
Sheet: E701
Plotted By: chris
Plotted: April 26, 2019 @ 3:08 PM