CONSTRUCTION DOCUMENTS
WESTERN PIEDMONT COMMUNITY COLLEGE
BUILDING K RENOVATION

200 E College Drive Morganton, NC 28655

SCO # 23-27049-01A NCCCS #2784

DESIGN TEAM

GENERAL	ARCHITECT	PLUMBING ENGINEER	MECHANICAL ENGINEER	ELECTRICAL ENGINEER
Morris Berg Architects 1018 Jay St., Suite 130 Charlotte, NC 28208 P (704) 552-5800	**Morris Berg Architects** 1018 Jay St., Suite 130 Charlotte, NC 28208 P (704) 552-5800	**Optima Engineering** 1927 S Tryon St Suite 300 Charlotte, NC 28203 P (704) 338-1292	**Optima Engineering** 1927 S Tryon St Suite 300 Charlotte, NC 28203 P (704) 338-1292	**Optima Engineering** 1927 S Tryon St Suite 300 Charlotte, NC 28203 P (704) 338-1292

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ED301	DEMO FIRST FLOOR EQUIPMENT PLAN - UPPER
ED401	DEMO FIRST FLOOR SPECIAL SYSTEMS PLAN - UPPER

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MATTHEW SCOTT BERG REGISTERED LICENSED ARCHITECT NORTH CAROLINA 6/8/26

CONSTRUCTION DOCUMENTS

ISSUE DATE: 06/08/2026

REVISIONS

NO.	DESCRIPTION	DATE

WESTERN PIEDMONT COMMUNITY COLLEGE

BUILDING K RENOVATION

200 E College Drive Morganton, NC 28655

WESTERN PIEDMONT COMMUNITY COLLEGE

PROJECT NUMBER 2317

SHEET TITLE
COVER SHEET

SHEET NUMBER
CS100

SCO # 23-27049-01A
NCCCS #2784

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

Name of Project: BUILDING K - COSMETOLOGY RENOVATION
Address: 200 E. College Drive, Morganton, NC Zip Code 28655
Owner/Authorized Agent: WPCC Phone # (828) 448 - 6025 E-Mail shoilman@wpcc.edu
Owned By: [X] City/County [ ] Private [ ] State
Code Enforcement Jurisdiction: [X] City [ ] County [X] State

CONTACT:

DESIGNER	FIRM	NAME	LICENSE #	TELEPHONE #	E-MAIL
Architectural	Morris - Berg	Matthew Hart	13884	(704) 552-5800	mhart@morrisberg.com
Civil	-	-	-	(___) -	-
Electrical	Optima	Brandon Miller	28297	(704) 336-1292	bmiller@optimaengineering.com
Fire Alarm	Optima	Brandon Miller	28297	(704) 336-1292	bmiller@optimaengineering.com
Plumbing	Optima	George Fowler	26023	(704) 336-1292	gfowler@optimaengineering.com
Mechanical	Optima	Ron Almond	17228	(704) 336-1292	ralmond@optimaengineering.com
Sprinkler-Standpipe	-	-	-	(___) -	-
Structural	-	-	-	(___) -	-
Retaining Walls >5' High	-	-	-	(___) -	-
Other	-	-	-	(___) -	-

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

2018 NC CODE FOR: [ ] New Construction [ ] Addition [X] Renovation
[ ] 1st Time Interior Completion
[ ] Shell/Core
[ ] Phased Construction – Shell/Core
[ ] Renovation

2018 NC EXISTING BUILDING CODE: [ ] Prescriptive [ ] Repair [ ] Chapter 14
Alteration: [ ] Level I [X] Level II [ ] Level III
[ ] Historic Property [ ] Change of Use
CONSTRUCTED:(date) 2002 **ORIGINAL OCCUPANCY(S)** (Ch. 3): Business
RENOVATED: (date) _____ **CURRENT OCCUPANCY(S)** (Ch. 3): Business
RISK CATEGORY (table 1604.5) **Current:** [ ] I [X] II [ ] III [ ] IV
Proposed: [ ] I [X] II [ ] III [ ] IV

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

Gross Building Area:

FLOOR	EXISTING (SQ FT)	NEW (SQ FT)	SUB-TOTAL
1st Floor	24,528	0	24,528
TOTAL	24,528	0	24,528

ALLOWABLE AREA
Primary Occupancy Classification: SELECT ONE
Assembly [ ] A-1 [ ] A-2 [ ] A-3 [ ] A-4 [ ] A-5
Business [X]
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 Condition [ ] 1 [ ] 2
[ ] I-2 Condition [ ] 1 [ ] 2
[ ] I-3 Condition [ ] 1 [ ] 2 [ ] 3 [ ] 4 [ ] 5
[ ] I-4
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): NONE
Incidental Uses (Table 509)**:** NONE
Special Uses (Chapter 4 – List Code Sections) NONE
Special Provisions: (Chapter 5 – List Code Sections): NONE
Mixed Occupancy: [X] No [ ] Yes Separation: ____ Hr. Exception: _____
[ ] Non-Separated Use (508.3)
The required type of construction for the building shall be determined by applying the height and area limitations for each of the applicable occupancies to the entire building. The most restrictive type of construction, so determined, shall apply to the entire building.
[ ] 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 ratios of the actual floor area of each use divided by the allowable floor area for each use shall not exceed 1.

$$\frac{\text{Actual Area of Occupancy A}}{\text{Allowable Area of Occupancy A}} + \frac{\text{Actual Area of Occupancy B}}{\text{Allowable Area of Occupancy B}} + \ldots \leq 1.00$$

STORY NO.	DESCRIPTION AND USE	(a) BLDG AREA PER STORY (ACTUAL)	(b) TABLE 506.2[1] AREA	(c) AREA FOR FRONTAGE INCREASE[1,2]	(D) ALLOWABLE AREA PER STORY OR UNLIMITED[2,3]
1	BUSINESS	24,528	23,000	15,502	38,502

[1] Frontage area increases from Section 506.3 are computed thus:
a. Perimeter which fronts a public way or open space having 20 feet minimum width = 608 (F)
b. Total Building Perimeter = 658 (P)
c. Ratio (F/P) = 0.924 (F/P)
d. W = Minimum width of public way = 30 (W)
e. Percent of frontage increase $I_f = 100 [F/P - 0.25] x W/30 = 67.4$ (%)
[2] Unlimited area applicable under conditions of Section 507.
[3] Maximum Building Area = total number of stories in the building x D (maximum 3 stories) (506.2).
[4] The maximum area of open parking garages must comply with Table 406.5.4
[5] Frontage increase is based on the unsprinklered area value in Table 506.2.

ALLOWABLE HEIGHT

	ALLOWABLE (TABLE 503)	SHOWN ON PLANS	CODE REFERENCE
Building Height in Feet (Table 504.3)	55'	24' to 28'	-
Building Height in Stories (Table 504.4)	3	1	-

[1] Provide code reference if the "Show on Plans" quantity is not based on Table 504.3 or 504.4.
[2] The maximum height of air traffic control towers must comply with Table 412.3.1
[3] The maximum height of open parking garages must comply with Table 406.5.4

FIRE PROTECTION REQUIREMENTS

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

* Indicate section number permitting reduction

PERCENTAGE OF WALL OPENING CALCULATIONS

FIRE SEPARATION DISTANCE (FEET FROM PROPERTY LINES)	DEGREES OF OPENINGS PROTECTION (TABLE 705.8)	ALLOWABLE AREA (%)	ACTUAL SHOWN ON PLANS (%)
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A

LIFE SAFETY SYSTEM REQUIREMENTS

Emergency Lighting: [ ] No [X] Yes
Exit Signs: [ ] No [X] Yes
Fire Alarm: [ ] No [X] Yes
Smoke Detection Systems: [ ] No [X] Yes [ ] Partial _____
Carbon Monoxide Detection: [X] No [ ] Yes

LIFE SAFETY PLAN REQUIREMENTS

Life Safety Plan Sheet #: LS100 & LS200

[ ] 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)
[X] Occupancy types for each area as it relates to occupant load calculation (Table 1004.1.2)
[X] Occupant loads for each area
[X] Exit access travel distances (1017)
[X] Clear exit widths for each exit door
[X] Common path of travel distances (1006.2.1 & 2006.3.2(1))
[X] Dead end lengths (1020.4)
[X] Clear exit widths for each exit door
[X] Maximum calculated occupant load capacity each exit door can accommodate based on egress width (1005.3)
[X] 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 and supporting construction for a fire barrier/fire partition/smoke barrier.
[X] 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

Section/Table/Note	Title
-	-
-	-

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 REQUIRED	TOTAL # OF PARKING SPACES PROVIDED	# OF ACCESSIBLE SPACES PROVIDED REGULAR WITH 5' ACCESS AISLE	# OF ACCESSIBLE SPACES PROVIDED VAN SPACES WITH 132" ACCESS AISLE	# OF ACCESSIBLE SPACES PROVIDED VAN SPACES WITH 8' ACCESS AISLE	TOTAL # ACCESSIBLE PROVIDED
NOT APPLICABLE FOR INTERIOR RENOVATION						
TOTAL						

PLUMBING FIXTURE REQUIREMENTS
(TABLE 2902.1)

USE		WATERCLOSETS MALE	WATERCLOSETS FEMALE	WATERCLOSETS UNISEX	URINALS	LAVATORIES MALE	LAVATORIES FEMALE	LAVATORIES UNISEX	SHOWERS / TUBS	DRINKING FOUNTAINS REGULAR	DRINKING FOUNTAINS ACCESSIBLE
SPACE	EXIST'G	2	5	1	4	2	3	1	-	3	3
	NEW	-	1	1	-	-	1	1	-	-	-
	REQ'D	2	6	-	4	4	4	-	-	3	3

NO CHANGES TO EXISTING FIXTURE. PROJECT ADDS 1 UNISEX RESTROOM WITH LAVATORY AND 1 FEMALE RESTROOM WITH LAVATORY.

SPECIAL APPROVALS

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

ENERGY SUMMARY

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

Existing building envelope complies with code: [ ] No [X] Yes (The remainder of this section is not applicable)
Exempt Building: [ ] No [ ] Yes (Provide Code or Statutory reference): _____
Climate Zone: [ ] 3A [ ] 4A [ ] 5A
Method of Compliance: Energy Code [ ] Performance [ ] Prescriptive
ASHRAE 90.1 [ ] Performance [ ] Prescriptive
(If "Other" specify source here) _____

THERMAL ENVELOPE (Prescriptive method only)

Roof/ceiling Assembly (each assembly)
Description of assembly: _____
U-Value of total assembly: _____
R-Value of insulation: _____
Skylights in each assembly: _____
U-Value of skylight: _____
Total square footage of skylights in each assembly: _____

Exterior Walls (each assembly)
Description of assembly: _____
U-Value of total assembly: _____
R-Value of insulation: _____
Openings (windows or doors with glazing)
U-Value of assembly: _____
Solar heat gain coefficient: _____
Projection factor: _____
Door R-Values: _____

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

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

Floors slab on grade
Description of assembly: _____
U-Value of total assembly: _____
R-Value of insulation: _____
Horizontal/Vertical requirement: _____
Slab Heated: _____

2018 APPENDIX B
BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS
STRUCTURAL DESIGN
(PROVIDE ON THE STRUCTURAL SHEETS IF APPLICABLE)

DESIGN LOADS:
Importance Factors: Snow (I_s) _____ Seismic (I_E) _____
NOT APPLICABLE
Live Loads: Roof _____ psf Mezzanine _____ psf Floor _____ psf
Ground Snow Load: _____ psf
Wind Load: Ultimate Wind Speed _____ mph (ASCE-7) Exposure Category _____

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_{DS} _____ %g S_1 _____ %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) _____ psf
Presumptive Bearing capacity _____ psf
Pile size, type, and capacity _____

2018 APPENDIX B
BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS
MECHANICAL DESIGN
(PROVIDE ON THE MECHANICL SHEETS IF APPLICABLE)

MECHANICAL SUMMARY

MECHANICAL SYSTEMS, SERVICE SYSTEMS AND EQUIPMENT

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

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

Building heating load: _____
SEE MECHANICAL DRAWINGS
Building cooling load: _____

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

List equipment efficiencies: _____

2018 APPENDIX B
BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS
ELECTRICAL DESIGN
(PROVIDE ON THE ELECTRICAL SHEETS IF APPLICABLE)

ELECTRICAL SUMMARY

ELECTRICAL SYSTEM AND EQUIPMENT

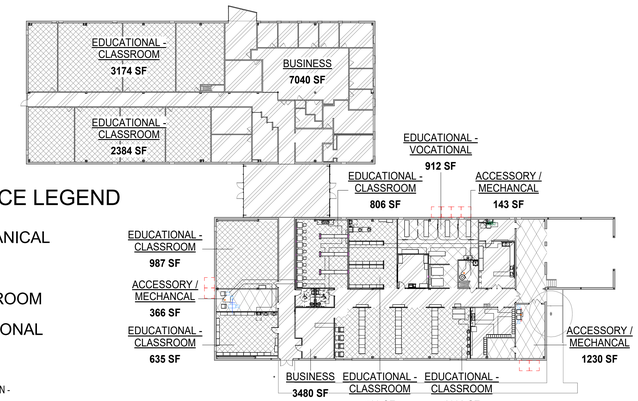
Method of Compliance: Energy Code: [ ] Prescriptive [ ] Performance
ASHRAE 90.1: [ ] Prescriptive [ ] Performance

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

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

BUILDING AREA LEGEND
Gross Building Area

3 FIRST FLOOR - GROSS BUILDING AREA
1" = 30'-0"
0' 15' 30' 60'

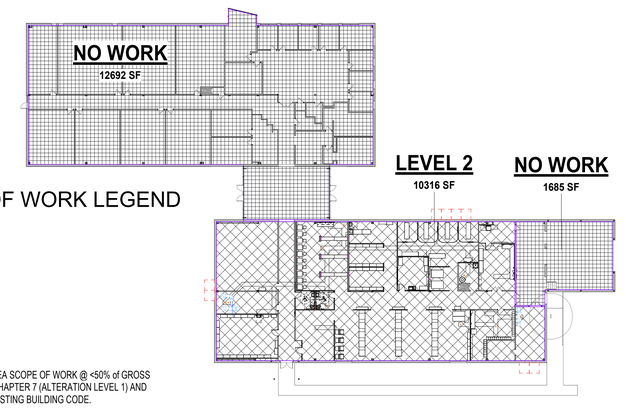


FUNCTION OF SPACE LEGEND
ACCESSORY / MECHANICAL
BUSINESS
EDUCATION - CLASSROOM
EDUCATION - VOCATIONAL

BUSINESS OCCUPANCY GROUP.

FUNCTION OF SPACE AREAS INCLUDE ACCESSORY/MECHANICAL, BUSINESS, EDUCATION - CLASSROOM, AND EDUCATION - VOCATIONAL.

2 FUNCTION OF SPACE PLAN
1" = 30'-0"
0' 15' 30' 60'



CLASSIFICATION OF WORK LEGEND
LEVEL 2
NO WORK

GROSS BUILDING AREA: 24,528 SF

CLASSIFICATION OF WORK TOTALS
LEVEL 1 AREA: NONE
LEVEL 2 AREA: 10,316 SF, OR 42.06%

BASED ON TOTAL LEVEL 1 AREA AND LEVEL 2 AREA SCOPE OF WORK @ <50% of GROSS BUILDING AREA, PROJECT MUST COMPLY WITH CHAPTER 7 (ALTERATION LEVEL 1) AND CHAPTER 8 (ALTERATION LEVEL 2) OF THE NC EXISTING BUILDING CODE.

1 CLASSIFICATION OF WORK PLAN
1" = 30'-0"
0' 15' 30' 60'

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PROJECT NUMBER 2317
SHEET TITLE APPENDIX B
SHEET NUMBER LS100

SCO # 23-27049-01A
NCCCS #2784

LEGEND

2225 — ROOM NUMBER
CLASSROOM — ROOM NAME
995 SF — ROOM SQUARE FOOTAGE

EXIT CAPACITY	
46" -	0.15
300	
100	
HO	PC

- LIFE SAFETY DOOR TAG
- DOOR WITH AND DIVISION FACTOR
- MAX. NUMBER OF PEOPLE
- ACTUAL NUMBER OF PEOPLE
- PANIC AND CLOSER
- HOLD OPEN
- EXIT SIGN
- FEC — FIRE EXTINGUISHER
- HC — ACCESSIBLE ENTRANCE/EXIT
- 1-A — TRAVEL DISTANCE LINE & PATH ID - SEE TABLE FOR DISTANCES

TRAVEL DISTANCE NEW

PATH ID	TRAVEL DISTANCE (FT)
1A	134
1B	180
1C	98

OCCUPANT LOAD

FUNCTION OF SPACE (CH.10)	OCCUPANT LOAD
ACCESSORY, MECHANICAL	6 OCC.
BUSINESS	106 OCC.
EDUCATIONAL - CLASSROOM	519 OCC.
EDUCATIONAL - VOCATIONAL	19 OCC.
TOTALS	**650 OCC.**

1 LIFE SAFETY PLAN

1/8" = 1'-0"

0' 4' 8' 16'

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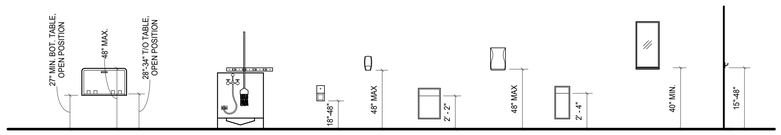
SHEET TITLE
LIFE SAFETY, FUNCTION OF SPACE & CLASSIFICATION OF WORK PLANS

LS200

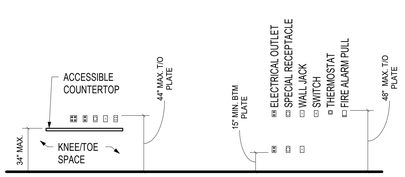
SCO # 23-27049-01A
NCCCS #2784



BABY CHANGING STATION | MOP & BROOM HOOK STRIP | TOILET TISSUE DISPENSER | SOAP/HAND SANITIZER DISPENSER | SANITARY NAPKIN RECEPTACLE | PAPER TOWEL DISPENSER | PAPER TOWEL RECEPTACLE | FRAMED MIRROR AT LAVATORY | ACCESSIBLE COAT HOOK

*DIMENSIONS INDICATED ARE FOR UNOBSTRUCTED SIDE AND FORWARD REACH. SEE OBSTRUCTED REACH RANGE DIMENSIONS FOR REQUIRED HEIGHTS AT ALTERNATE SITUATIONS. REFER TO MANUFACTURER'S WRITTEN INSTRUCTIONS FOR ADDITIONAL ANSI INSTALL REQUIREMENTS.

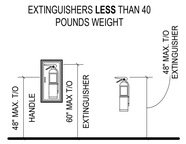
BATHROOM ACCESSORIES MOUNTING HEIGHTS



ACCESSIBLE **OBSTRUCTED** SIDE AND FORWARD REACH *(SEE REACH RANGES)*

ACCESSIBLE **UNOBSTRUCTED** SIDE AND FORWARD REACH *(SEE REACH RANGES)*

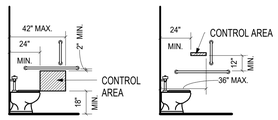
GENERAL WALL DEVICES MOUNTING HEIGHTS



FIRE EXTINGUISHER CABINET* | FIRE EXTINGUISHER BRACKET*

*THE CLEARANCE BETWEEN THE FLOOR AND THE BOTTOM OF INSTALLED HAND-HELD EXTINGUISHER SHALL NOT BE LESS THAN 4 INCHES **PER SECTION 906 OF THE NC BUILDING CODE.**

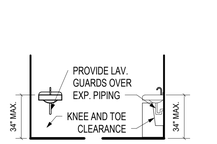
FIRE EXTINGUISHER MOUNTING HEIGHTS



ADA COMPLYING MOUNTING HEIGHTS **BELOW GRAB BAR** | ADA COMPLYING MOUNTING HEIGHTS **ABOVE GRAB BAR**

FOR ADULT'S USE

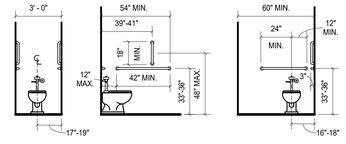
DISPENSER MOUNTING HEIGHTS



FRONT ELEVATION | SIDE ELEVATION

SEE SECTION 609 FOR CONTROL AREA CLEARANCES

LAVATORY MOUNTING HEIGHTS



AMBULATORY FRONT ELEVATION | ACCESSIBLE & AMBULATORY SIDE ELEVATION | ACCESSIBLE FRONT ELEVATION

GRAB BAR HEIGHTS FOR ADULT'S USE

WATER CLOSET & GRAB BAR MNT'G HGTS

CODE REFERENCE

DIMENSIONAL NOTES (THIS SHEET ONLY)

1. DIMENSIONS THAT ARE NOT STATED AS "MAXIMUM" OR "MINIMUM" ARE ABSOLUTE.
2. DIMENSIONS ARE NOT VARIABLE UNLESS INDICATED WITH DIMENSIONAL RANGES (i.e. 33"-36")
3. DIMENSIONS ARE VARIABLE WITHIN MINIMUM AND MAXIMUM LIMITATIONS INDICATED (i.e. 48" MAX)
4. DIMENSIONS ARE SUBJECT TO CONVENTIONAL INDUSTRY TOLERANCES.
5. INSIDE FINISH DIMENSIONS FOR SHOWER AND BATHTUBS SHALL BE MEASURED AT THE CENTERPOINT/CENTERLINE OF OPPOSING SIDES.
6. DIMENSIONS ARE MEASURED FROM FINISH SURFACES (NOT FACE OF STUD), UNLESS NOTED OTHERWISE.

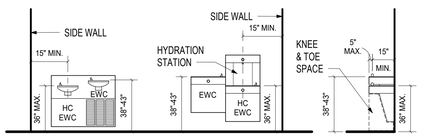
GENERAL NOTES (THIS SHEET ONLY)

1. WHERE CONTROL AREAS ARE INDICATED, OPERABLE PARTS OF ACCESSORIES SHALL BE LOCATED WITHIN THE RANGE INDICATED. OTHER PORTIONS OF THE ACCESSORIES MAY BE LOCATED OUTSIDE AREA. OPERABLE PART IS DEFINED AS THE COMPONENT USED TO WITHDRAW OBJECTS, OR TO ACTIVATE, DEACTIVATE, OR ADJUST THE ELEMENT. OPERABLE PARTS SHALL BE OPERABLE WITH ONE HAND AND SHALL NOT REQUIRE TIGHT GRASPING, PINCHING, OR TWISTING OF THE WRIST. THE FORCE REQUIRED TO ACTIVATE OPERABLE PARTS SHALL BE 5 LBS MAXIMUM.
2. TECHNICAL CRITERIA PROVIDED ON THIS SHEET MEETS THE NORTH CAROLINA BUILDING CODE - ANSI A117.1-2009 ACCESSIBILITY STANDARD FOR PLUMBING ELEMENTS AND FIXTURES INDICATED.
3. ACCESSORIES AND EQUIPMENT THAT DOES NOT COMPLY WITH LIMITS OF PROTRUDING OBJECTS SHALL BE MOUNTED, 1) AS INDICATED WITH CANE DETECTION OR 2) AT ADJUSTED HEIGHTS FOR CODE COMPLIANCE.
4. DRAWINGS SHALL NOT BE SCALED.
5. TECHNICAL CRITERIA INDICATED SHALL NOT BE USED FOR DWELLING UNITS AND SLEEPING UNITS.
6. CHILDREN'S USE IS DEFINED AS SPACES AND ELEMENTS SPECIFICALLY DESIGNED FOR THE USE PRIMARILY BY PEOPLE 12 YEARS OLD AND YOUNGER (I.E. K12 PROJECTS). COORDINATE USE OF CHILDREN'S FACILITIES PER PROJECT AND BY USE.

TOILET ACCESSORIES

TA-1	18" GRAB BAR
TA-2	36" GRAB BAR
TA-3	42" GRAB BAR
TA-5	WALL MOUNTED SOAP DISPENSER
TA-6	PAPER TOWEL DISPENSER
TA-7	TOILET TISSUE DISPENSER
TA-8	MIRROR AND INSTALLED
TA-10	SANITARY NAPKIN DISPOSAL
TA-14	ROBE HOOK
TA-15	MOP AND BROOM HOLDER
TA-19	DIAPER CHANGING STATION

TOILET - PROVIDE TOILET ROBE HOOK ON BACKS OF ALL TOILET DOORS.

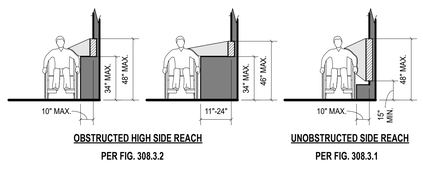


FRONT ELEVATION | FRONT ELEVATION | SIDE ELEVATION

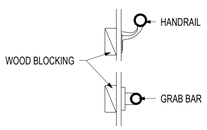
FOR ADULT'S USE

*DIMENSIONS ARE MEASURED TO SPOUT OUTLETS, NOT TOP OF BOWL.
*SINGLE EWC SHALL COMPLY WITH WHEELCHAIR ACCESSIBLE DIMENSIONS - 30" WIDE KNEE AND TOE SPACE REQUIRED **PER FIG. 602.2 & FIG. 602.5**.

ELECTRIC WATER COOLER MOUNTING HEIGHTS



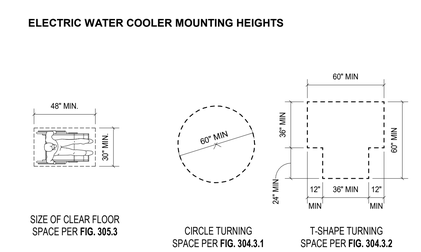
REACH RANGES



PROVIDE BLOCKING TO ACCOMMODATE THE FOLLOWING LOADS, PER **2018 NCBC, SECTION 1607.7**:

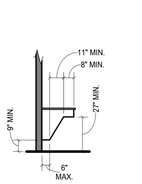
1. HANDRAILS AND GUARDS SHALL BE DESIGNED TO RESIST A LOAD OF 50 LBS. PER LINEAR FOOT APPLIED IN ANY DIRECTION AT THE TOP. HANDRAILS AND GUARDS SHALL ALSO BE ABLE TO RESIST A SINGLE CONCENTRATED LOAD OF 200 LBS., APPLIED IN ANY DIRECTION AT ANY POINT ALONG THE TOP. THE CONCENTRATED LOAD IS NOT INTENDED TO ACT CONCURRENTLY WITH THE OTHER LOAD REQUIREMENTS.
2. GRAB BARS, SHOWER SEATS, AND DRESSING ROOM BENCH SEATS SHALL BE DESIGNED TO RESIST A SINGLE CONCENTRATED LOAD OF 250 LBS APPLIED IN ANY DIRECTION AT ANY POINT.

BLOCKING REQUIREMENTS



SIZE OF CLEAR FLOOR SPACE PER **FIG. 305.3** | CIRCLE TURNING SPACE PER **FIG. 304.3.1** | T-SHAPE TURNING SPACE PER **FIG. 304.3.2**

CLEAR FLOOR SPACE | **TURNING SPACES**

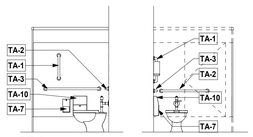


KNEE/TOE SPACE **PER 306.2 & 306.3**

*PROTRUDING OBJECTS SHALL NOT REDUCE THE THE CLEAR WIDTH REQUIRED FOR ACCESSIBLE ROUTES **PER FIG. 307.2**

KNEE AND TOE SPACE | **LIMITS OF PROTRUDING OBJECTS**

NOTE:
IN ALL ACCESSIBLE STALLS, FLUSH VALVE TO BE PLACED ON THE OPEN SIDE

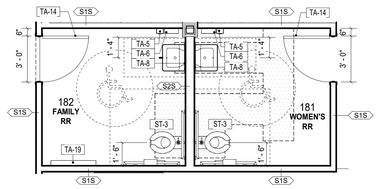


ST-3 ADA 5' CLEAR STALL
ST-3A SAME AS ST-3 EXCEPT TA-10 NOT REQUIRED

TOILET STALL TYPES

KEYNOTES - TOILET...

TA-5	WALL MOUNTED SOAP DISPENSER - PROVIDED AND INSTALLED BY OWNER
TA-6	PAPER TOWEL DISPENSER - PROVIDED AND INSTALLED BY OWNER
TA-8	24" X 36" MIRROR - PROVIDED AND INSTALLED BY OWNER
TA-14	ROBE HOOK
TA-19	DIAPER CHANGING STATION



1 **ENLARGED PLAN - FAMILY & WOMEN'S RESTROOMS**
1/4" = 1'-0"
0' 2' 4' 8'

Morris·Berg ARCHITECTS
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MORRIS-BERG ARCHITECTS, INC. REGISTERED CORPORATION CERT. NO. 3039 CHARLOTTE, N.C.

MATTHEW SCOTT HART REGISTERED ARCHITECT NORTH CAROLINA 6/8/26

CONSTRUCTION DOCUMENTS

ISSUE DATE: 06/08/2026

REVISIONS

NO.	DESCRIPTION	DATE

WESTERN PIEDMONT COMMUNITY COLLEGE

BUILDING K RENOVATION

200 E College Drive Morganton, NC 28655

WESTERN PIEDMONT COMMUNITY COLLEGE

PROJECT NUMBER 2317

SHEET TITLE
ENLARGED PLAN, 2D STANDARD AND ADA MOUNTING HEIGHTS AND DIMENSIONS

LS300

SCO # 23-27049-01A
NCCCS #2784

LEGEND

FEATURE	NEW	EXISTING
STRUCTURES		
UNPAVED/GRAVEL ROADS		
BITUMINOUS PAVEMENT		
CONCRETE WALK/PAVEMENT		
CONC. CURB & GUTTER (STANDARD)		
CONC. CURB & GUTTER (PITCHED)		
INDEX CONTOUR (5-FT)	600	605
INTERMEDIATE CONTOUR (1-FT)		602
ORNAMENTAL FENCING		
MANHOLE		
CLEANOUT	C.O.	C.O.
CURB INLET OR CATCH BASIN		
DITCH		
STORM DRAINAGE LINE	SD	SD
ROOF LEADER	RL	RL
FOUNDATION DRAIN	FD	FD
SANITARY SEWER LINE	SS	SS
WATER LINE	W	W
WATER VALVE	WV	WV
FIRE HYDRANT	FH	FH
WATER METER		WM
POWER LINE (OVERHEAD)		OHP
POWER LINE (UNDERGROUND)		UP
TELEPHONE LINE (UNDERGROUND)		UT
POWER POLE		PP

FEATURE	NEW	EXISTING
GUY WIRE		
LIGHT POLE		
TELEPHONE PEDESTAL		
FINISHED GRADE	259.9	259.6
FINISHED FLOOR ELEVATION	FIN. FLR. ELEV.	
TOP OF WALK GRADE	TW 258.50	
INVERT EL. OF PIPE OR DITCH	INV. EL.=256.50	INV.EL.=256.32
TEMPORARY BENCHMARK	<T.B.M.	
TREE LINES		
TEMP. GRAVEL CONSTR. ENTRANCE		
TEMPORARY SEDIMENT FENCE		
INLET PROTECTION		
RIPRAP		
TEMP. TREE PROTECTION		
TEMP. DIVERSION DITCH		

KEY	QTY	BOTANICAL NAME/ COMMON NAME	SIZE MIN.	ROOT	SPACING	REMARKS	ICON
TREES							
T1	15	Quercus phellos 'White Oak'	6' HIGH AND 1.5" CALIPER	B&B	AS SHOWN MINIMUM 40'	FULL CROWN, STRONG CENTRAL LEADER,	
SHRUBS							
S1	105	Nandina	N/A	CONT.	4.5' O.C. (AS SHOWN)	FULL BUSHY CONTAINER	

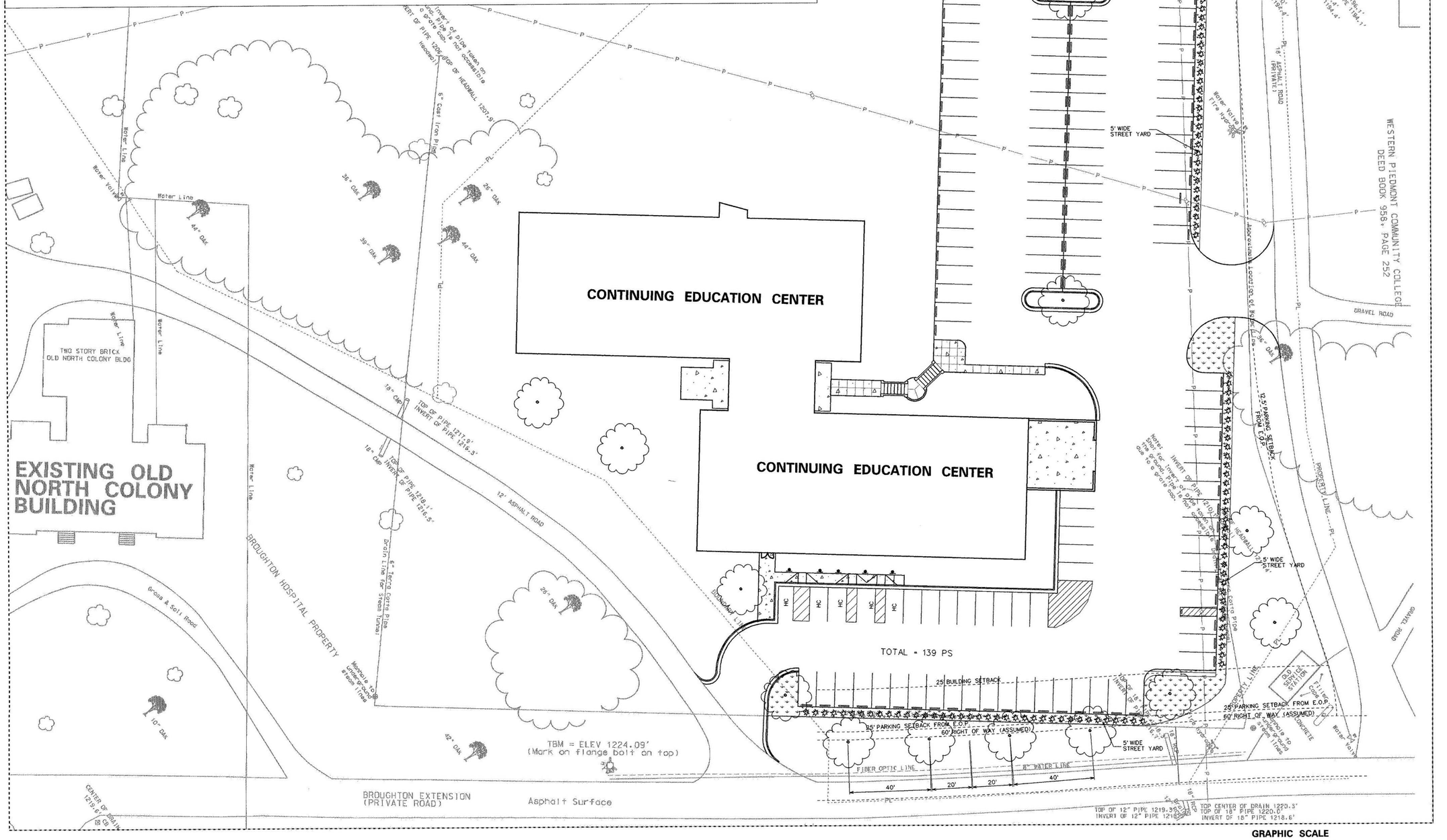
LANSCAPING CALCULATIONS:
DATA:
TOTAL SITE - 162,550 sq ft = 3.73 Acre
UNDEVELOPED - 84,050 sq ft = 1.93 Acre
BUILDING -26,000 sq ft = 0.60 Acre
PARKING LOT - 52,500 sq ft = 1.20 Acre
LINEAR FEET OF STREET YARD = 660 lf

LANDSCAPING AREA REQUIRED:
(200 / 3,000) x 52,500 +3,500 sq ft
PROVIDED = 56,300 sq ft

CANOPY TREES REQUIRED:
3,500 / 200 = 18
MUST BE PLANTED 15 TREES
(3 TREES ARE EXISTING)

SHRUBS ON THE STREET YARD
SHRUBS REQUIRED
(660 / 100) x 15 = 105 SHRUBS
PROVIDED = 105 SHRUBS

LANDSCAPING DETAILS SEE SHEET C8



NOTE:
EXISTING CIVIL SITE PLAN.
FOR REFERENCE ONLY.

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MORRIS-BERG ARCHITECTS, INC. REGISTERED ARCHITECTURAL CORPORATION CERT. NO. 3028 CHARLOTTE, N.C.

MATTHEW SCOTT HART REGISTERED ARCHITECT NORTH CAROLINA 6/8/26

CONSTRUCTION DOCUMENTS

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REVISIONS

NO.	DESCRIPTION	DATE

WESTERN PIEDMONT COMMUNITY COLLEGE

BUILDING K RENOVATION

200 E College Drive Morganton, NC 28655

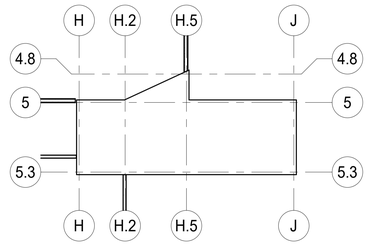
WESTERN PIEDMONT COMMUNITY COLLEGE

PROJECT NUMBER 2317

SHEET TITLE
ARCHITECTURAL SITE PLAN

SHEET NUMBER
AS100

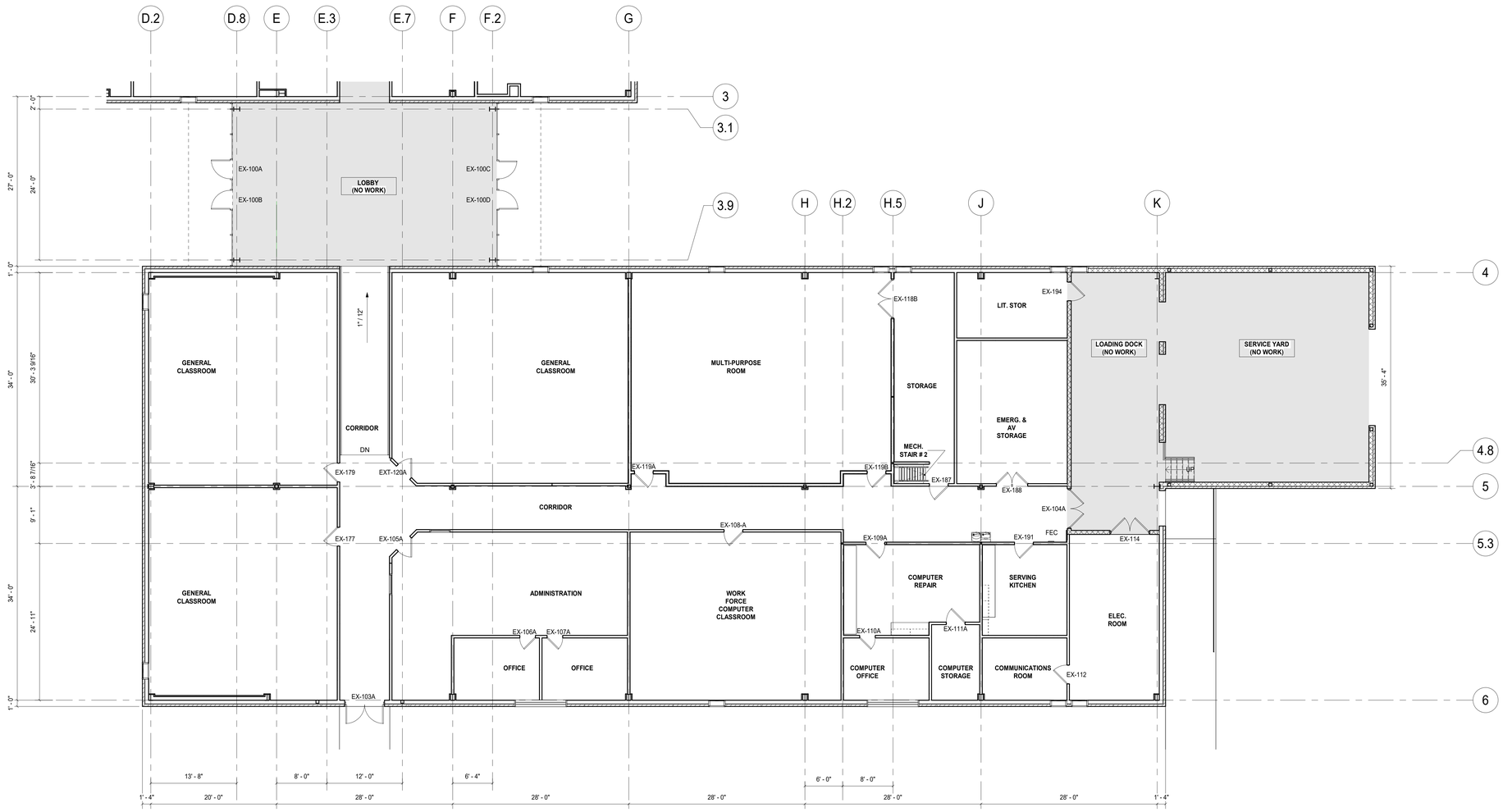
SCO # 23-27049-01A
NCCCS #2784



01 FIRST FLOOR - EXISTING MEZZANINE UPPER

1/8" = 1'-0"

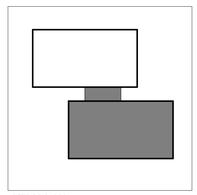
0' 4' 8' 16'



1 EXISTING PLAN - UPPER

1/8" = 1'-0"

0' 4' 8' 16'



KEY PLAN

Morris·Berg
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MORRIS-BERG ARCHITECTS, INC. REGISTERED ARCHITECTURAL CORPORATION CERT. NO. 3038 CHARLOTTE, N.C.

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CONSTRUCTION DOCUMENTS

ISSUE DATE: 06/08/2026

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WESTERN PIEDMONT COMMUNITY COLLEGE

BUILDING K RENOVATION

200 E College Drive Morganton, NC 28655

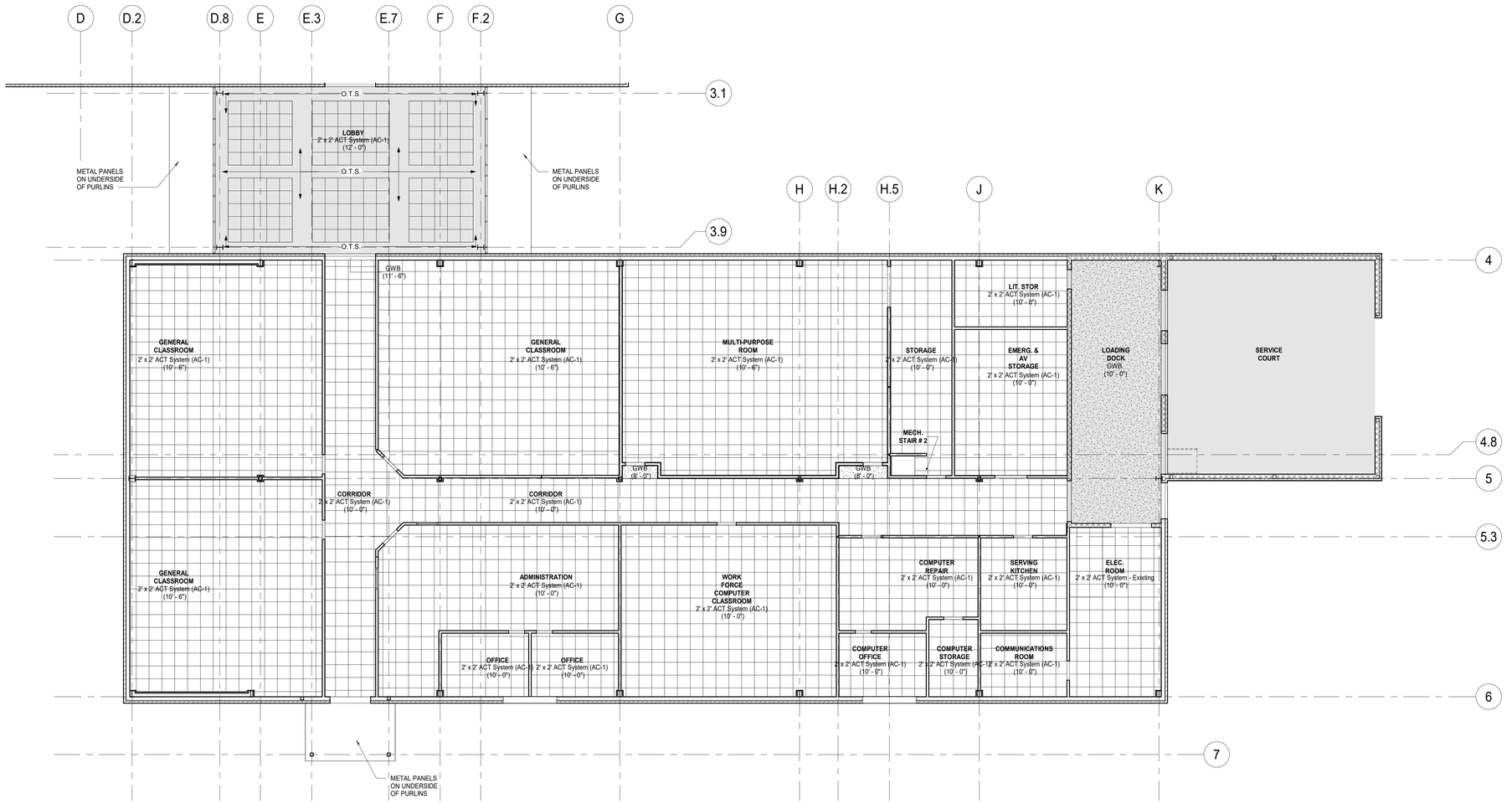
WESTERN PIEDMONT COMMUNITY COLLEGE

PROJECT NUMBER 2317

SHEET TITLE
EXISTING PLANS - UPPER

SHEET NUMBER
AE200

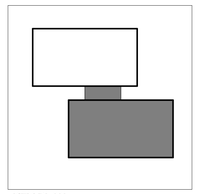
SCO # 23-27049-01A
NCCCS #2784



1 **EXISTING REFLECTED CEILING PLAN - UPPER**

1/8" = 1'-0"

0' 4' 8' 16'



KEY PLAN

Morris·Berg
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MORRIS-BERG ARCHITECTS, INC. REGISTERED ARCHITECTURAL CORPORATION CERT. NO. 3038 CHARLOTTE, N.C.

MATTHEW SCOTT HART REGISTERED ARCHITECT NORTH CAROLINA 6/8/26

CONSTRUCTION DOCUMENTS

ISSUE DATE: 06/08/2026

REVISIONS

NO.	DESCRIPTION	DATE

WESTERN PIEDMONT COMMUNITY COLLEGE

BUILDING K RENOVATION

200 E College Drive Morganton, NC 28655

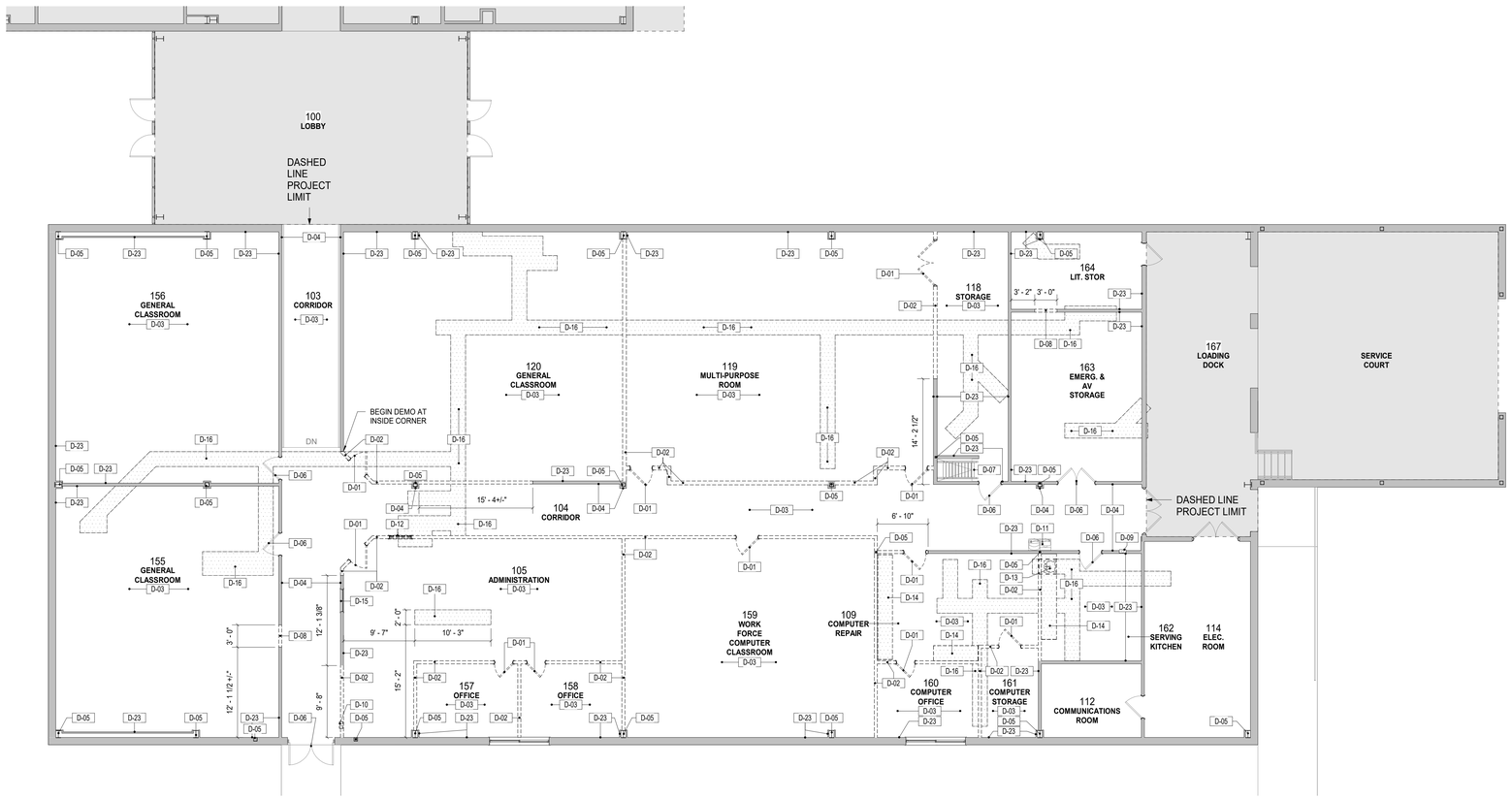
WESTERN PIEDMONT COMMUNITY COLLEGE

PROJECT NUMBER 2317

SHEET TITLE
EXISTING REFLECTED CEILING PLAN - UPPER

SHEET NUMBER
AE300

SCO # 23-27049-01A
NCCCS #2784



1 DEMOLITION PLAN - UPPER

1/8" = 1'-0"

0' 4' 8' 16'

KEYNOTES - DEMO

D-01	REMOVE EXISTING DOOR(S), FRAME(S) AND ASSOCIATED HARDWARE IN THEIR ENTIRETY - WHERE INDICATED. SAVED FOR RE-USE AS SCHEDULED - SEE DOOR SCHEDULE.
D-02	REMOVE EXISTING WALL IN ITS ENTIRETY. PATCH FLOOR AND ADJACENT WALLS TO REMAIN AS NECESSARY TO RECEIVE NEW FINISHES. COORDINATE WITH THE WORK OF OTHER TRADES.
D-03	REMOVE EXISTING FLOORING. FLOOR MUST BE CLEAN AND FREE OF DUST, DIRT, OIL, GREASE, PAINT, CURING AGENTS, CONCRETE SEALERS, LOOSELY BONDED TOPPINGS, LOOSE PARTICLES, AND ANY OTHER SUBSTANCE OR CONDITION THAT MAY PREVENT OR REDUCE ADHESION. SEE MANUFACTURER`S REQUIREMENTS BEFORE INSTALLATION OF ANY NEW FLOORING.
D-04	REMOVE EXISTING WALL COVERING AND BASE. PREPARE EXISTING WALL FOR NEW FINISHES.
D-05	EXISTING STRUCTURAL COLUMNS TO REMAIN.
D-06	EXISTING DOOR TO REMAIN.
D-07	EXISTING STAIRS TO REMAIN.
D-08	REMOVE PORTION OF EXISTING WALL FOR INSTALLATION OF NEW DOOR AND DOOR FRAME.
D-09	EXISTING FIRE EXTINGUISHER TO REMAIN.
D-10	REMOVE AND RELOCATE EXISTING FIRE EXTINGUISHER AND CABINET. SEE NEW WORK PLAN FOR RELOCATION.
D-11	EXISTING DRINKING FOUNTAIN TO REMAIN & TO BE PROTECTED DURING CONSTRUCTION.
D-12	REMOVE EXISTING INTERIOR WINDOW.
D-13	REMOVE EXISTING SINK AND CAP LINE. SEE PLUMBING DRAWINGS.
D-14	REMOVE EXISTING COUNTERTOP AND CASEWORK.
D-15	EXISTING INTERIOR WINDOW TO REMAIN & TO BE PROTECTED DURING CONSTRUCTION.
D-16	DEMO CONCRETE SLAB FOR PLUMBING/ELECTRICAL DEMOLITION AND/OR NEW WORK. ALL SLAB CUTS TO BE 2'-0" WIDE. OVERALL LAYOUT IS APPROXIMATE AND SHALL BE COORDINATED WITH MEP DRAWINGS.
D-23	REMOVE EXISTING WALL BASE. PREPARE EXISTING WALL FOR NEW FINISHES.

GENERAL NOTES

A. PLAN DIMENSIONS SHOWN ARE TO FACE OF EXISTING WALL, AND TO FACE OF NEW WALLS, U.O.N.

B. ANY DAMAGE TO EXISTING CONSTRUCTION TO REMAIN WILL BE REPAIRED TO MATCH EXISTING CONDITIONS AT CONTRACTOR'S EXPENSE.

C. WHERE NEW WORK IS BEING INCORPORATED INTO EXISTING CONDITIONS, CONTRACTOR IS REQUIRED TO VERIFY ROUGH OPENING DIMENSIONS PRIOR TO FABRICATION AND INSTALLATION.

D. CONTRACTOR WILL BE RESPONSIBLE FOR MAINTAINING ALL EGRESS EXITS, TEMPORARY SIGNAGE, BARRIERS,AND FIRE PROTECTION ACCORDING TO THE AHJ REQUIREMENTS DURING CONSTRUCTION.

E. CONTRACTOR IS RESPONSIBLE TO ADEQUATELY SUPPORT ANY EXISTING CONSTRUCTION.

GENERAL DEMO NOTES

1. DEMOLITION NOTES AND LEGEND ARE TO DEFINE INTENT AND MAY VARY FROM ACTUAL CONDITIONS. DEMOLITION SHALL INCLUDE ALL ITEMS REQUIRED TO BE DEMOLISHED TO ACCOMPLISH NEW CONSTRUCTION AND FINISHES. CONTRACTOR IS REQUIRED TO BE FAMILIAR WITH THE ENTIRE SET OF CONTRACT DOCUMENTS PRIOR TO BIDDING.
2. CONTRACTOR SHALL VISIT THE SITE IN CONJUCTION WITH REVIEWING THE CONTRACT DOCUMENTS PRIOR TO BID DATE.
3. ANY EXISTING CONDITIONS WHICH VERY FROM THOSE INDICATED ON THE CONTRACT DOCUMENTS SHALL BE CALLED TO THE ATTENTION OF THE ARCHITECT BEFORE CONTINUATION OF WORK.
4. CONTRACTOR TO BE RESPONSIBLE FOR TEMPORARY PARTITIONS AS NEEDED FOR TRAFFIC, DUST, AND SOUND CONTROL
5. WHERE ITEMS ARE BEING REMOVED, CONTRACTOR IS RESPONSIBLE FOR REMOVING ALL FASTENERS, HANGERS, BRACKETS, ETC. THAT ARE NOT BEING USED. REPAIR/ INFILL TO MATCH EXISTING CONDITIONS OR PREPARE FOR NEW FINISHES.
6. REFER TO DISCIPLINE DRAWINGS FOR ADDITIONAL DEMOLITION SCOPE.
7. ALL INTERIOR WALLS SHALL BE REPAIRED/PATCHED WHERE EXISTING EQUIPMENT AND UTILITIES ARE REMOVED.

SYMBOL LEGEND

SECTION TAG — 1 / A101 — SIM — DRAWING NUMBER / SHEET NUMBER

DETAIL TAG — 1 / A101 — SIM — DRAWING NUMBER / SHEET NUMBER

PARTITION TAG — ? — PARTITION TYPE (SEE SHEET LS300)

KEYED NOTE — ?

EXISTING WALLS

AREAS TO BE DEMOLISHED

NEW GWB WALL

KEY PLAN

Morris·Berg
ARCHITECTS
1018 JAY STREET, SUITE 130 CHARLOTTE, NC 28208
(704) 552-5800 FAX (704) 552-7420

MORRIS-BERG ARCHITECTS, INC. REGISTERED ARCHITECTURAL CORPORATION CERT. NO. 3078 CHARLOTTE, N.C.

MATTHEW SCOTT HART REGISTERED ARCHITECT NORTH CAROLINA 6/8/26

CONSTRUCTION DOCUMENTS

ISSUE DATE: 06/08/2026

REVISIONS

NO.	DESCRIPTION	DATE

WESTERN PIEDMONT COMMUNITY COLLEGE

BUILDING K RENOVATION

200 E College Drive Morganton, NC 28655

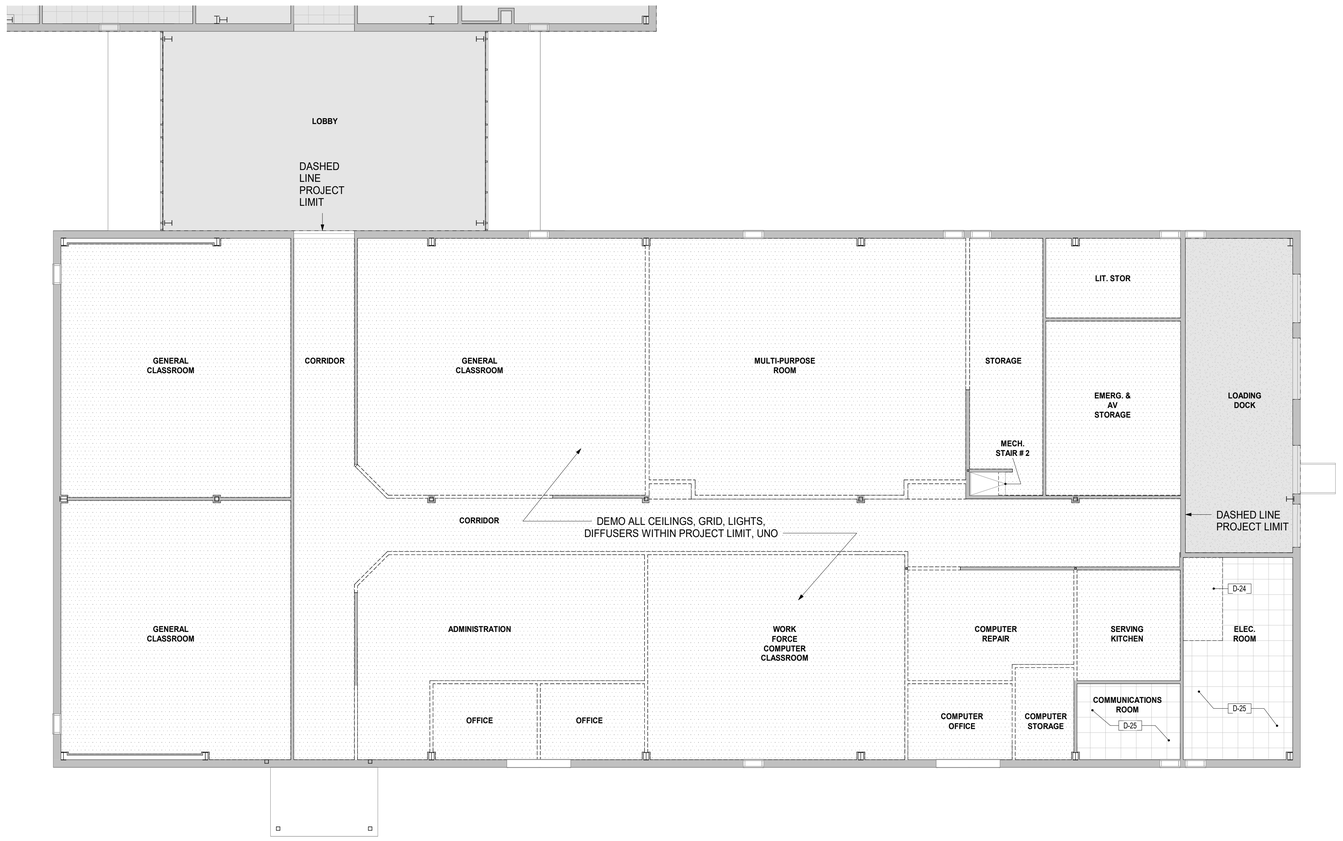
WESTERN PIEDMONT COMMUNITY COLLEGE

PROJECT NUMBER 2317

SHEET TITLE
DEMOLITION PLAN - UPPER

SHEET NUMBER
AD200

SCO # 23-27049-01A
NCCCS #2784



1 **DEMOLITION REFLECTED CEILING PLAN - UPPER**

1/8" = 1'-0"

0' 4' 8' 16'

KEYNOTES - DEMO

D-24	REMOVE PORTION OF CEILING TILE AND GRID FOR NEW EQUIPMENT - SEE MECHANICAL, ELECTRICAL, AND PLUMBING DRAWINGS
D-25	REMOVE CEILING TILE AND GRID ONLY AS REQUIRED FOR INSTALLATION OF NEW EQUIPMENT. SALVAGE CEILING TILE FOR REUSE. GRID LAYOUT SHOULD NOT SHIFT, BUT SHOULD MATCH EXISTING.

GENERAL NOTES

A. PLAN DIMENSIONS SHOWN ARE TO FACE OF EXISTING WALL, AND TO FACE OF NEW WALLS, U.O.N.
B. ANY DAMAGE TO EXISTING CONSTRUCTION TO REMAIN WILL BE REPAIRED TO MATCH EXISTING CONDITIONS AT CONTRACTOR'S EXPENSE.
C. WHERE NEW WORK IS BEING INCORPORATED INTO EXISTING CONDITIONS, CONTRACTOR IS REQUIRED TO VERIFY ROUGH OPENING DIMENSIONS PRIOR TO FABRICATION AND INSTALLATION.
D. CONTRACTOR WILL BE RESPONSIBLE FOR MAINTAINING ALL EGRESS EXITS, TEMPORARY SIGNAGE, BARRIERS,AND FIRE PROTECTION ACCORDING TO THE AHJ REQUIREMENTS DURING CONSTRUCTION.
E. CONTRACTOR IS RESPONSIBLE TO ADEQUATELY SUPPORT ANY EXISTING CONSTRUCTION.

GENERAL DEMO NOTES

1. DEMOLITION NOTES AND LEGEND ARE TO DEFINE INTENT AND MAY VARY FROM ACTUAL CONDITIONS. DEMOLITION SHALL INCLUDE ALL ITEMS REQUIRED TO BE DEMOLISHED TO ACCOMPLISH NEW CONSTRUCTION AND FINISHES. CONTRACTOR IS REQUIRED TO BE FAMILIAR WITH THE ENTIRE SET OF CONTRACT DOCUMENTS PRIOR TO BIDDING.
2. CONTRACTOR SHALL VISIT THE SITE IN CONJUCTION WITH REVIEWING THE CONTRACT DOCUMENTS PRIOR TO BID DATE.
3. ANY EXISTING CONDITIONS WHICH VERY FROM THOSE INDICATED ON THE CONTRACT DOCUMENTS SHALL BE CALLED TO THE ATTENTION OF THE ARCHITECT BEFORE CONTINUATION OF WORK.
4. CONTRACTOR TO BE RESPONSIBLE FOR TEMPORARY PARTITIONS AS NEEDED FOR TRAFFIC, DUST, AND SOUND CONTROL
5. WHERE ITEMS ARE BEING REMOVED, CONTRACTOR IS RESPONSIBLE FOR REMOVING ALL FASTENERS, HANGERS, BRACKETS, ETC. THAT ARE NOT BEING USED. REPAIR/ INFILL TO MATCH EXISTING CONDITIONS OR PREPARE FOR NEW FINISHES.
6. REFER TO DISCIPLINE DRAWINGS FOR ADDITIONAL DEMOLITION SCOPE.
7. ALL INTERIOR WALLS SHALL BE REPAIRED/PATCHED WHERE EXISTING EQUIPMENT AND UTILITIES ARE REMOVED.

SYMBOL LEGEND

SECTION TAG — 1 / A101 — SIM — DRAWING NUMBER / SHEET NUMBER

DETAIL TAG — 1 / A101 — SIM — DRAWING NUMBER / SHEET NUMBER

PARTITION TAG — ? — PARTITION TYPE (SEE SHEET LS300)

KEYED NOTE — ?

EXISTING WALLS

AREAS TO BE DEMOLISHED

NEW GWB WALL

KEY PLAN

Morris·Berg
ARCHITECTS
1018 JAY STREET, SUITE 130 CHARLOTTE, NC 28208
(704) 552-5800 FAX (704) 552-7420

MORRIS-BERG ARCHITECTS, INC. REGISTERED ARCHITECTURAL CERT. NO. 3038 CORPORATION CHARLOTTE, N.C.

MATTHEW SCOTT HART REGISTERED LICENSED ARCHITECT NORTH CAROLINA 6/8/26

CONSTRUCTION DOCUMENTS

ISSUE DATE: 06/08/2026

REVISIONS

NO.	DESCRIPTION	DATE

WESTERN PIEDMONT COMMUNITY COLLEGE

BUILDING K RENOVATION

200 E College Drive Morganton, NC 28655

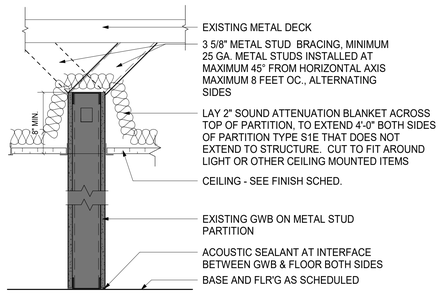
WESTERN PIEDMONT COMMUNITY COLLEGE

PROJECT NUMBER 2317

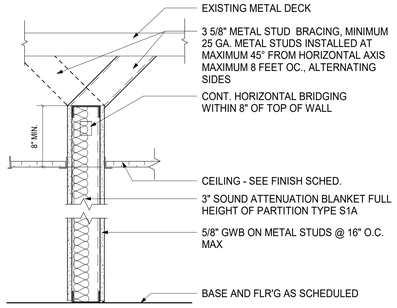
SHEET TITLE
DEMOLITION REFLECTED CEILING PLAN - UPPER

SHEET NUMBER
AD300

SCO # 23-27049-01A
NCCCS #2784



PARTITION TYPE S1E EXISTING METAL STUD PARTITION TO 8" ABOVE CEILING WITH SOUND ATTENUATION BLANKETS AS SHOWN

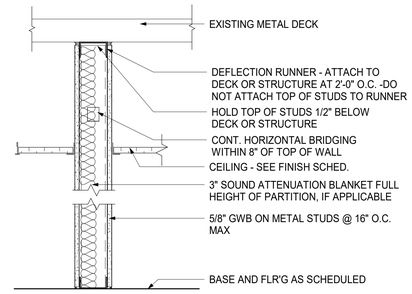


PARTITION TYPE S1 3 5/8" METAL STUD PARTITION TO 8" ABOVE CEILING

PARTITION TYPE S1A 3 5/8" METAL STUD PARTITION TO 8" ABOVE CEILING WITH SOUND ATTENUATION BLANKETS AS SHOWN

PARTITION TYPE S4.1 3 5/8" METAL STUD PARTITION TO 8" ABOVE CEILING WITH GYPSUM BOARD ON VISIBLE SIDE OF WALL ONLY

PARTITION TYPE S4.0 3 5/8" METAL STUD PARTITION TO 4'-0" AFF



PARTITION TYPE S1S 3 5/8" METAL STUD PARTITION TO DECK/STRUCTURE

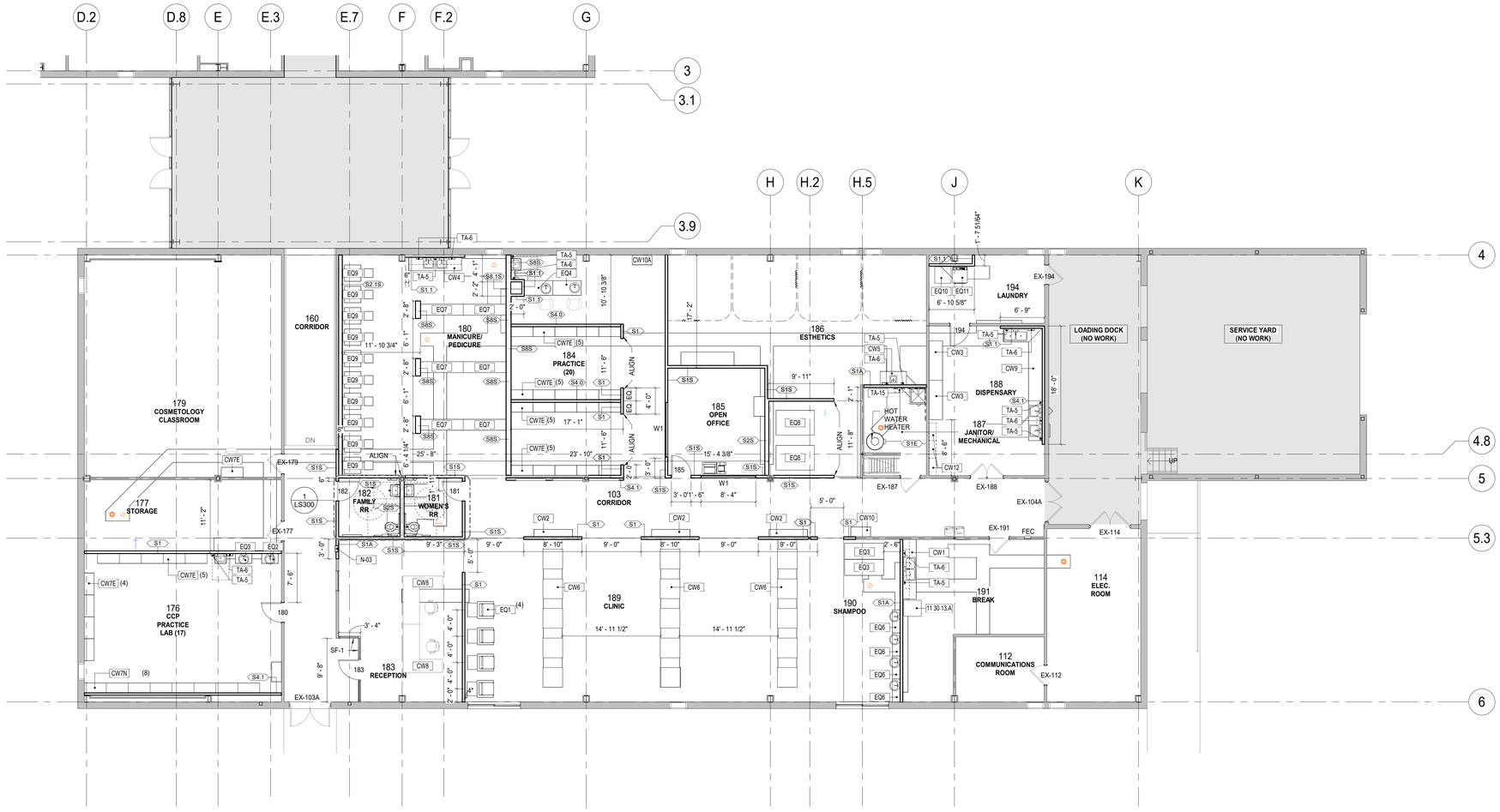
PARTITION TYPE S2S 6" METAL STUD PARTITION TO DECK/STRUCTURE

PARTITION TYPE S2.1S 6" METAL STUD PARTITION TO DECK/STRUCTURE WITH GYPSUM BOARD ON VISIBLE SIDE OF WALL ONLY

PARTITION TYPE S8S 8" METAL STUD PARTITION TO DECK/STRUCTURE

PARTITION TYPE S8.1S 8" METAL STUD PARTITION TO DECK/STRUCTURE WITH GYPSUM BOARD ON VISIBLE SIDE OF WALL ONLY

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



1 FLOOR PLAN - UPPER
1/8" = 1'-0"
0' 4' 8' 16'

KEYNOTES - TOILET...

TA-5	WALL MOUNTED SOAP DISPENSER - PROVIDED AND INSTALLED BY OWNER
TA-6	PAPER TOWEL DISPENSER - PROVIDED AND INSTALLED BY OWNER
TA-15	MOP AND BROOM HOLDER

GENERAL NOTES

A. DO NOT SCALE DRAWING. CONTRACTOR SHALL RELY ON WRITTEN DIMENSIONS AS SHOWN. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT FOR CLARIFICATION. ALL DIMENSIONS SHALL BE FIELD VERIFIED BY THE CONTRACTOR AND COORDINATED WITH ALL OF THE WORK OF ALL TRADES. IF DISCREPANCIES ARE FOUND, THE GENERAL CONTRACTOR SHALL NOTIFY THE ARCHITECT IN WRITING FOR CLARIFICATION BEFORE STARTING THE WORK.

B. PROVIDE TREATED WOOD BLOCKING BEHIND GWB AT THE FOLLOWING LOCATIONS (USE FIRE RETARDANT WOOD WHERE REQUIRED):
1. ALL WALL-MOUNTED DOOR STOPS, DOOR HOLD-OPEN DEVICES AND OTHER HARDWARE.
2. ALL WALL-MOUNTED TOILET ACCESSORIES. AT GRAB BARS, PROVIDE BLOCKING CAPABLE OF RESISTING A MINIMUM LOAD OF 250 POUNDS APPLIED VERTICALLY OR HORIZONTALLY ALONG ANY POINT ON THE GRAB BAR.
3. ALL WALL-MOUNTED PLUMBING FIXTURES, INCLUDING LAVATORIES, SINKS, URINALS, AND WATER COOLERS. PROVIDE BLOCKING CAPABLE OF RESISTING A MINIMUM LOAD OF 400 POUNDS APPLIED VERTICALLY AT ANY POINT ON THE PLUMBING FIXTURE.
4. ALL WALL MOUNTED CABINETRY, SHELVING, AND SIMILAR ITEMS; ALL MONITOR LOCATIONS, TACK BOARDS, AND MARKER BOARDS.

KEYNOTES

11 30 13.A	REFRIGERATOR
CW1	109" LONG X 25" DEEP CASEWORK WITH DOUBLE SINK - OWNER FURNISHED, CONTRACTOR INSTALLED
CW2	CASEWORK - OWNER FURNISHED AND INSTALL
CW3	EXISTING CASEWORK: 6'-0" LONG COUNTERTOP WITH TWO SETS OF BASE CABINETS
CW4	EXISTING CASEWORK: COUNTERTOP 8'-1/4" L X 25" D, THREE SETS OF DOUBLE DOOR BASE CABINETS, TWO SINKS, THREE SETS OF DOUBLE DOOR UPPER CABINETS
CW5	EXISTING CASEWORK: 48" W X 21" D COUNTERTOP AND BACKSPLASH WITH SINK. ONE SET OF DOUBLE DOOR BASE CABINETS AND ONE SET OF SINGLE DOOR BASE CABINET WITH DRAWER
CW6	HAIR STATION - COMBINED
CW7E	STUDENT PRACTICE STATION - NEW - OWNER FURNISHED, CONTRACTOR INSTALLED
CW7N	STUDENT PRACTICE STATION - EXISTING - OWNER FURNISHED, CONTRACTOR INSTALLED
CW8	RECEPTION DESK - OWNER FURNISHED AND INSTALLED
CW9	DISPENSERY CASEWORK - L SHAPED UNIT WITH 3 SINKS - OWNER PROVIDED, CONTRACTOR INSTALLED
CW10	TOWEL CABINET - TWO UNITS STACKED - OWNER FURNISHED AND CONTRACTOR INSTALLED. CONTRACTOR TO PROVIDE 4" WOOD FRAME BASE
CW10A	TOWEL CABINET - SINGLE UNIT - OWNER FURNISHED AND CONTRACTOR INSTALLED. CONTRACTOR TO PROVIDE 4" WOOD FRAME BASE
CW12	BASE STORAGE CABINETS IN DISPENSARY - 32" W X 13" D X 40" H - OWNER PROVIDED AND CONTRACTOR INSTALLED
EQ1	HAIR DRYER - OWNER FURNISHED, CONTRACTOR INSTALLED
EQ2	SHAMPOO UNIT - EXISTING - OWNER FURNISHED, CONTRACTOR INSTALLED. SEE PLUMBING FOR ADDITIONAL INFORMATION
EQ3	SHAMPOO UNIT - NEW - OWNER FURNISHED, CONTRACTOR INSTALLED. SEE PLUMBING FOR ADDITIONAL INFORMATION
EQ4	SHAMPOO UNIT - STAND BEHIND UNIT - EXISTING - OWNER FURNISHED, CONTRACTOR INSTALLED. SEE PLUMBING FOR ADDITIONAL INFORMATION
EQ6	SHAMPOO UNIT - EXISTING 42" UNIT WITH CABINETS ABOVE - OWNER FURNISHED, CONTRACTOR INSTALLED. SEE PLUMBING FOR ADDITIONAL INFORMATION
EQ7	DUCTED MANICURE TABLE FOR TWO - OWNER FURNISHED, CONTRACTOR INSTALLED
EQ8	PEDICURE SPA CHAIR - EXISTING - OWNER FURNISHED, CONTRACTOR INSTALLED
EQ9	PEDICURE CLUB CHAIR - OWNER FURNISHED, CONTRACTOR INSTALLED
EQ10	WASHER - EXISTING - OWNER FURNISHED, CONTRACTOR INSTALLED
EQ11	DRYER - EXISTING - OWNER FURNISHED, CONTRACTOR INSTALLED
N-03	RELOCATED FIRE EXTINGUISHER AND CABINET.

SYMBOL LEGEND

ELEVATION TAG — 3 / A0500 — DRAWING NUMBER / SHEET NUMBER

SECTION TAG — 1 / A101 — S/M — DRAWING NUMBER / SHEET NUMBER

DETAIL TAG — 1 / A101 — S/M — DRAWING NUMBER / SHEET NUMBER

PARTITION TAG — ? — PARTITION TYPE (SEE SHEET A0200)

KEYED NOTE — ?

WINDOW TAG — W# — WINDOW TYPE SEE SHEET A0200

EXISTING WALLS

AREAS TO BE DEMOLISHED

NEW GWB WALL

KEY PLAN

Morris·Berg ARCHITECTS
1018 JAY STREET, SUITE 130 CHARLOTTE, NC 28208
(704) 552-5800 FAX (704) 552-7420

MORRIS-BERG ARCHITECTS, INC. REGISTERED ARCHITECTURAL CORPORATION CERT. NO. 3078 CHARLOTTE, N.C.

MATTHEW SCOTT HART REGISTERED ARCHITECT NORTH CAROLINA 6/8/26

CONSTRUCTION DOCUMENTS

ISSUE DATE: 06/08/2026

REVISIONS

NO.	DESCRIPTION	DATE

WESTERN PIEDMONT COMMUNITY COLLEGE

BUILDING K RENOVATION

200 E College Drive Morganton, NC 28655

PROJECT NUMBER 2317

SHEET TITLE
FLOOR PLAN - UPPER & PARTITION TYPES

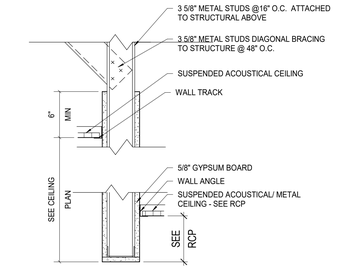
SHEET NUMBER
A0200

SCO # 23-27049-01A
NCCCS #2784

REFLECTED CEILING PLAN - UPPER

1 1/8" = 1'-0"

0' 4' 8' 16'



BULKHEAD DETAIL @ CEILING TRANSITION

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

GENERAL NOTES

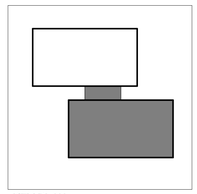
A. COORDINATE THE INSTALLATION OF CEILING SYSTEMS WITH THE FIRE PROTECTION, PLUMBING, MECHANICAL AND ELECTRICAL WORK.
B. COORDINATE RETURN AIR OPENINGS IN WALLS WITH MECHANICAL CONTRACTOR-SEE MECHANICAL FLOOR PLANS (M200 SHEETS) FOR OPENING SIZES.

KEYNOTES -...

AC-1	ACOUSTICAL PANEL CEILING (AC-1) - SEE SPEC SECTION 095113
AC-2	ACOUSTICAL PANEL CEILING (AC-2) MOISTURE RESISTANT - SEE SPEC SECTION 095113
AC-MT	ACOUSTICAL PANEL CEILING METAL TRIM - 2" HIGH. PROVIDE ALONG EDGE OF EXISTING LAY-IN CEILING

RCP LEGEND

- 2 x 2 LIGHT FIXTURE - SEE ELECT. DWGS
- 2 x 4 LIGHT FIXTURE - SEE ELECT. DWGS
- O.T.S. OPEN TO STRUCTURE.
- CEILING HUNG FIXTURE - SEE ELECTRICAL DRAWINGS.
- SURFACE MOUNTED LIGHT FIXTURE - SEE ELECTRICAL DRAWINGS.
- EXIT SIGN - SEE ELECTRICAL DRAWINGS.
- LOCATION OF WALL PENETRATION ABOVE CEILING FOR DATA WIRING. SEE 21/LS300 FOR DETAIL OPENING IN ALL NON-FIRE RATED WALLS/PARTITIONS. PENETRATIONS IN FIRE RATED WALLS/PARTITIONS SHALL BE FIRE STOPPED PER DETAILS ON SHEET E0001.
- WALL MOUNTED LIGHT FIXTURE - SEE ELECTRICAL DRAWINGS
- (S) SPEAKER - SEE ELECTRICAL DWG'S
- (SD) SMOKE DETECTOR - SEE ELECTRICAL DWG'S
- (HD) HEAT DETECTOR - SEE ELECTRICAL DWG'S
- (0'-0") INDICATES CEILING HEIGHT ABOVE FIN. FLOOR
- MECHANICAL SUPPLY DIFFUSER - SEE MECH DWG'S
- MECHANICAL RETURN - SEE MECH DWG'S
- (J)^N POWER REEL WITH WIRE LEADS MOUNTED ABOVE CEILING



KEY PLAN

Morris·Berg
ARCHITECTS
1018 JAY STREET, SUITE 130 CHARLOTTE, NC 28208
(704) 552-5800 FAX (704) 552-7420

MORRIS-BERG ARCHITECTS, INC. REGISTERED ARCHITECTURAL CORPORATION CERT. NO. 3018 CHARLOTTE, N.C.

MATTHEW SCOTT HART REGISTERED ARCHITECT NORTH CAROLINA 6/8/26

CONSTRUCTION DOCUMENTS

ISSUE DATE: 06/08/2026

REVISIONS

NO.	DESCRIPTION	DATE

WESTERN PIEDMONT COMMUNITY COLLEGE

BUILDING K RENOVATION

200 E College Drive Morganton, NC 28655

PROJECT NUMBER 2317

SHEET TITLE
REFLECTED CEILING PLAN - UPPER

SHEET NUMBER
A0300

SCO # 23-27049-01A
NCCCS #2784

1 ROOF PLAN
1/8" = 1'-0"
0' 4' 8' 16'

GENERAL NOTES

A. DO NOT SCALE DRAWING. CONTRACTOR SHALL RELY ON WRITTEN DIMENSIONS AS SHOWN. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT FOR CLARIFICATION. ALL DIMENSIONS SHALL BE FIELD VERIFIED BY THE CONTRACTOR AND COORDINATED WITH ALL OF THE WORK OF ALL TRADES. IF DISCREPANCIES ARE FOUND, THE GENERAL CONTRACTOR SHALL NOTIFY THE ARCHITECT IN WRITING FOR CLARIFICATION BEFORE STARTING THE WORK.

B. PROVIDE TREATED WOOD BLOCKING BEHIND GWB AT THE FOLLOWING LOCATIONS (USE FIRE RETARDANT WOOD WHERE REQUIRED):
   1. ALL WALL-MOUNTED DOOR STOPS, DOOR HOLD-OPEN DEVICES AND OTHER HARDWARE.
   2. ALL WALL-MOUNTED TOILET ACCESSORIES. AT GRAB BARS; PROVIDE BLOCKING CAPABLE OF RESISTING A MINIMUM LOAD OF 250 POUNDS APPLIED VERTICALLY OR HORIZONTALLY ALONG ANY POINT ON THE GRAB BAR.
   3. ALL WALL-MOUNTED PLUMBING FIXTURES, INCLUDING LAVATORIES, SINKS, URINALS, AND WATER COOLERS. PROVIDE BLOCKING CAPABLE OF RESISTING A MINIMUM LOAD OF 400 POUNDS APPLIED VERTICALLY AT ANY POINT ON THE PLUMBING FIXTURE.
   4. ALL WALL MOUNTED CABINETRY, SHELVING, AND SIMILAR ITEMS; ALL MONITOR LOCATIONS, TACK BOARDS, AND MARKER BOARDS.

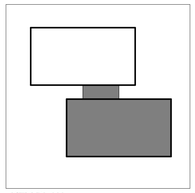
KEYNOTES

N-01	MECHANICAL ROOF PENETRATION. SEE MECHANICAL DRAWINGS.
N-02	PLUMBING VENT ROOF PENETRATION. SEE PLUMBING DRAWINGS.

SYMBOL LEGEND

KEYED NOTE

?



KEY PLAN

Morris·Berg
ARCHITECTS
1018 JAY STREET, SUITE 130 CHARLOTTE, NC 28208
(704) 552-5800 FAX (704) 552-7420

MORRIS-BERG ARCHITECTS, INC. REGISTERED ARCHITECTURAL CORPORATION CERT. NO. 3038 CHARLOTTE, N.C.

MATTHEW SCOTT BERG REGISTERED LICENSED ARCHITECT 6/8/26 NORTH CAROLINA

CONSTRUCTION DOCUMENTS

ISSUE DATE: 06/08/2026

REVISIONS

NO.	DESCRIPTION	DATE

WESTERN PIEDMONT COMMUNITY COLLEGE

BUILDING K RENOVATION

200 E College Drive Morganton, NC 28655

WESTERN PIEDMONT COMMUNITY COLLEGE

PROJECT NUMBER 2317

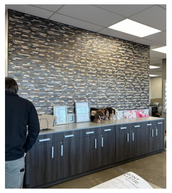
SHEET TITLE
ROOF PLAN - UPPER

SHEET NUMBER
A0400

SCO # 23-27049-01A
NCCCS #2784

CW1: EXISTING BREAK ROOM CASEWORK

CW2: EXISTING PRODUCT DISPLAY CASEWORK

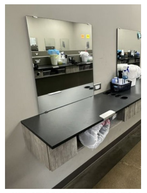


CW3: EXISTING CASEWORK (PICTURED TWO ABOVE) 6'-0" W X 25" D COUNTERTOP WITH TWO SETS OF DOUBLE DOOR CABINETS WITH DRAWERS

CW4: EXISTING CASEWORK - 8'-1/4" L X 25" D COUNTERTOP AND BACKSPLASH. THREE SETS OF DOUBLE DOOR BASE CABINETS, THREE SETS OF DOUBLE DOOR UPPER CABINETS

CW5: EXISTING CASEWORK 48" W X 21"D COUNTERTOP AND BACKSPLASH WITH ONE SET OF DOUBLE DOOR BASE CABINETS AND ONE SET OF SINGLE DOOR BASE CABINET WITH DRAWER

CW6: HAIR STATION - COMBINED

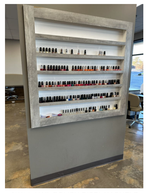


CW7: STUDENT PRACTICE STATION

CW8: RECEPTION DESK (2 PIECES)

CW9: DISPENSERY CASEWORK

CW10: TOWEL CABINET



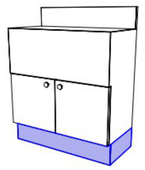
CW11: NAIL POLISH DISPLAY SHELF

CW12: STORAGE CASEWORK IN DISPENSARY

CW13: OPEN OFFICE CASEWORK

EQ1: HAIR DRYER

EQ2: SHAMPOO UNIT - EXISTING



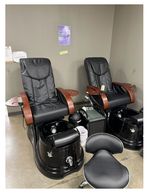
EQ3: SHAMPOO UNIT - NEW

EQ4: SHAMPOO UNIT - STAND BEHIND UNIT - EXISTING

EQ5: SHAMPOO UNIT - STAND BEHIND UNIT - NEW

EQ6: SHAMPOO UNIT - EXISTING - 42" WIDE UNITS WITH CABINET ABOVE (4 SHOWN)

EQ7: DUCTED MANICURE TABLE FOR TWO



EQ8: PEDICURE SPA CHAIR (2 SHOWN)

EQ9: PEDICURE CLUB CHAIR

EXISTING CASEWORK SCHEDULE

TYPE	EXISTING OR NEW	QUANTITY	DESCRIPTION	LOCATION	DIMENSIONS	PLUMBING	ELECTRICAL	EXHAUST	PROVIDED BY	INSTALLED BY	COMMENTS
CW1	EXISTING	1	109" L X 25"D CASEWORK WITH DOUBLE SINK, THREE BASE CABINET UNITS WITH A SET OF DRAWERS ON EACH SIDE, THREE SETS OF DOUBLE DOOR UPPER CABINETS, TWO SETS OF SINGLE DOOR UPPER CABINETS. TOP OF UPPER CABINETS MOUNTED AT 7'-3" AFF.	191 BREAK	109" L X 25" D X 89" H	YES	NO	NO	OWNER	CONTRACTOR	
CW2	EXISTING	3	PRODUCT DISPLAY CASEWORK: 70" W X 13-1/2" D - TWO SETS OF BASE CABINETS WITH COUNTERTOP ABOVE AND WALL MOUNTED SHELVING ABOVE COUNTERTOP	103 CORRIDOR	70" W X 13-1/2" D	NO	NO	NO	OWNER	CONTRACTOR	
CW3	EXISTING	2	6'-0" L X 24" D COUNTERTOP AND BACKSPLASH WITH TWO 36" WIDE BASE CABINET UNITS	188 DISPENSARY	6'-0"L X 24" DEEP	NO	POWER OUTLETS ON BACKSPLASH	NO	OWNER	CONTRACTOR	
CW4	EXISTING	1	8'-1/4" L X 25" D COUNTERTOP AND BACKSPLASH, 2 SINKS, 3 DOUBLE DOOR BASE CABINETS, 3 DOUBLE DOOR UPPER CABINETS	180 MANICURE/ PEDICURE	8'-1/4" L X 25" D	YES	POWER OUTLETS ON BACKSPLASH	NO	OWNER	CONTRACTOR	
CW5	EXISTING	1	48" W X 21" D COUNTERTOP AND BACKSPLASH WITH SINK. ONE SET OF DOUBLE DOOR BASE CABINETS AND ONE SET OF SINGLE DOOR BASE CABINET WITH DRAWER	186 ESTHETICS	48" L X 18" D	YES	YES - ABOVE COUNTER	NO	OWNER	CONTRACTOR	
CW6	EXISTING	3	HAIR STATION - COMBINED - 5 BACK TO BACK STATIONS PER ROW	189 CLINIC	OVERALL:270-1/2" X 34-1/2" D X 7' H. HAIR STATION INDIVIDUAL: 36" W	NO	YES	NO	OWNER	CONTRACTOR	
CW7	EXISTING	37	STUDENT PRACTICE STATION	174 CCP PRACTICE LAB & 184 PRACTICE	18" D X 40" W	NO	YES - ABOVE COUNTER	NO	OWNER	CONTRACTOR	
CW8	EXISTING	2	RECEPTION DESK	183 RECEPTION	88" L X 6'-0" D	NO	YES	NO	OWNER	CONTRACTOR	POWER AND DATA FROM FLOOR UP TO DESK IN ONE LOCATION
CW9	EXISTING	1	DISPENSARY CASEWORK - L SHAPED COUNTERTOP AND BACKSPLASH WITH UPPER AND LOWER CABINETS, AND 3 SINKS	188 DISPENSARY	205" X 25"	YES	YES - ABOVE COUNTER	NO	OWNER	CONTRACTOR	
CW10	EXISTING	1	TOWELS CABINET - STACKED UNIT	103 CORRIDOR	48" W X 24" D X 6'-0" H	NO	NO	NO	OWNER	CONTRACTOR	
CW10A	EXISTING	2	TOWELS CABINET - STACKED UNIT - SEPARATED INTO TWO CABINETS	174 CCP PRACTICE LAB & 184 PRACTICE	48" W X 24" D X 3'-0" H	NO	NO	NO	OWNER	CONTRACTOR	
CW11	EXISTING	3	NAIL POLISH SHELF	103 CORRIDOR	52-1/4" H X 55-1/2" W X 4" D	NO	NO	NO	OWNER	CONTRACTOR	
CW12	EXISTING	1	DISPENSARY STORAGE UNIT - THREE SETS OF CABINETS WITH COMMON TOP	188 DISPENSARY	13" D X 40" H X 8'L	NO	NO	NO	OWNER	CONTRACTOR	
CW13	EXISTING	1	OPEN OFFICE CASEWORK WITH COUNTERTOP - THREE SETS OF CABINETS WITH DRAWERS	186 ESTHETICS	25-1/2" D x 8'-2" L	NO	NO	NO	OWNER	CONTRACTOR	

EQUIPMENT SCHEDULE

TYPE	EXISTING OR NEW	QUANTITY	DESCRIPTION	LOCATION	DIMENSIONS	PLUMBING	ELECTRICAL	EXHAUST	PROVIDED BY	INSTALLED BY	COMMENTS
11 30 13.A	NEW	1	REFRIGERATOR	191 BREAK	36" W X 35" D X 72" H	NO	YES	NO	CONTRACTOR	CONTRACTOR	NOT PICTURED
EQ1	EXISTING	4	HAIR DRYER	189 CLINIC	25-1/2" W X 30" D	NO	YES	YES	OWNER	CONTRACTOR	
EQ2	EXISTING	1	SHAMPOO UNIT	176 CCP PRACTICE LAB	30" W X 16" D	YES	YES	NO	OWNER	CONTRACTOR	
EQ3	NEW	1	SHAMPOO UNIT	176 CCP PRACTICE LAB	30" W X 16" D	YES	YES	NO	OWNER	CONTRACTOR	
EQ4	EXISTING	2	SHAMPOO UNIT - STAND BEHIND UNIT	184 PRACTICE LAB		YES	YES	NO	OWNER	CONTRACTOR	
EQ5	NEW	2	SHAMPOO UNIT - STAND BEHIND UNIT	190 SHAMPOO	29-1/2" W X 59-1/2" L	YES	YES	NO	OWNER	CONTRACTOR	
EQ6	EXISTING	4	SHAMPOO UNIT - EXISTING 42" WIDE UNIT WITH CABINETS ABOVE	190 SHAMPOO	42" W X 24 "D X 6'-10" H	YES	NO	NO	OWNER	CONTRACTOR	
EQ7	NEW	6	DUCTED MANICURE TABLE FOR TWO	180 MANICURE/ PEDICURE	84" L X 32" W X 40" H	NO	YES	YES	OWNER	CONTRACTOR	
EQ8	EXISTING	2	PEDICURE SPA CHAIR	186 ESTHETICS		YES	YES	YES, NEARBY IN WALL TO EXHAUST FUMES	OWNER	CONTRACTOR	
EQ9	NEW	10	PEDICURE CLUB CHAIR	180 MANICURE/ PEDICURE	30" W X 30" D X 22" H X 37" H	NO	YES	YES, NEARBY IN WALL TO EXHAUST FUMES	OWNER	CONTRACTOR	
EQ10	EXISTING	1	WASHER - RESIDENTIAL	194 LAUNDRY		YES	YES	NO	OWNER	CONTRACTOR	NOT PICTURED
EQ11	EXISTING	1	DRYER - RESIDENTIAL	194 LAUNDRY		NO	YES	YES	OWNER	CONTRACTOR	NOT PICTURED
EQ12	EXISTING	1	COPIER	185 OPEN OFFICE		NO	YES	NO	OWNER	OWNER	NOT PICTURED, GC TO PROVIDE POWER AND DATA FOR MULTI-FUNCTION COPIER & PRINTER

FURNITURE SCHEDULE

TYPE	EXISTING OR NEW	QUANTITY	DESCRIPTION	LOCATION	PLUMBING	ELECTRICAL	EXHAUST	PROVIDED BY	INSTALLED BY	COMMENTS
F1	NEW	5	ESTHETICS TABLE	186 ESTHETICS	NO	YES	NO	OWNER	OWNER	
F2	NEW	10	36" X 16" LOCKER	191 BREAK	NO	NO	NO	OWNER	OWNER	
F3	NEW	2	15"X16" LOCKER	191 BREAK	NO	NO	NO	OWNER	OWNER	
F4	EXISTING	30	SALON CHAIR	189 CLINIC	NO	NO	NO	OWNER	OWNER	
F5	EXISTING	2	PRACTICE ROOM STORAGE CABINET	176 CCP PRACTICE LAB & 184 PRACTICE	NO	YES	NO	OWNER	CONTRACTOR	
F6	EXISTING	4	SALON HAIR WASH CHAIR	190 SHAMPOO	NO	NO	NO	OWNER	OWNER	
F7	EXISTING	24	MANICURE CHAIR	180 MANICURE/ PEDICURE	NO	NO	NO	OWNER	OWNER	
F8	EXISTING		OFFICE FURNITURE - DESKS & CHAIRS	183 RECEPTION & 185 OPEN OFFICE	NO	NO	NO	OWNER	OWNER	
F9	EXISTING		CLASSROOM FURNITURE	179 COSMETOLOGY CLASSROOM	NO	NO	NO	OWNER	OWNER	
F10	EXISTING	1	FOUR DRAWER LATERAL FILE	185 OPEN OFFICE	NO	NO	NO	OWNER	OWNER	

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MORRIS-BERG ARCHITECTS, INC. REGISTERED ARCHITECTURAL CORPORATION CERT. NO. 3038 CHARLOTTE, N.C.

MATTHEW SCOTT HART REGISTERED ARCHITECT NORTH CAROLINA 6/8/26

CONSTRUCTION DOCUMENTS

ISSUE DATE: 06/08/2026

REVISIONS

NO.	DESCRIPTION	DATE

WESTERN PIEDMONT COMMUNITY COLLEGE

BUILDING K RENOVATION

200 E College Drive Morganton, NC 28655

WESTERN PIEDMONT COMMUNITY COLLEGE

PROJECT NUMBER 2317

SHEET TITLE
CASEWORK, EQUIPMENT, AND FURNITURE SCHEDULE

SHEET NUMBER
A1001

SCO # 23-27049-01A
NCCCS #2784

KEYNOTES

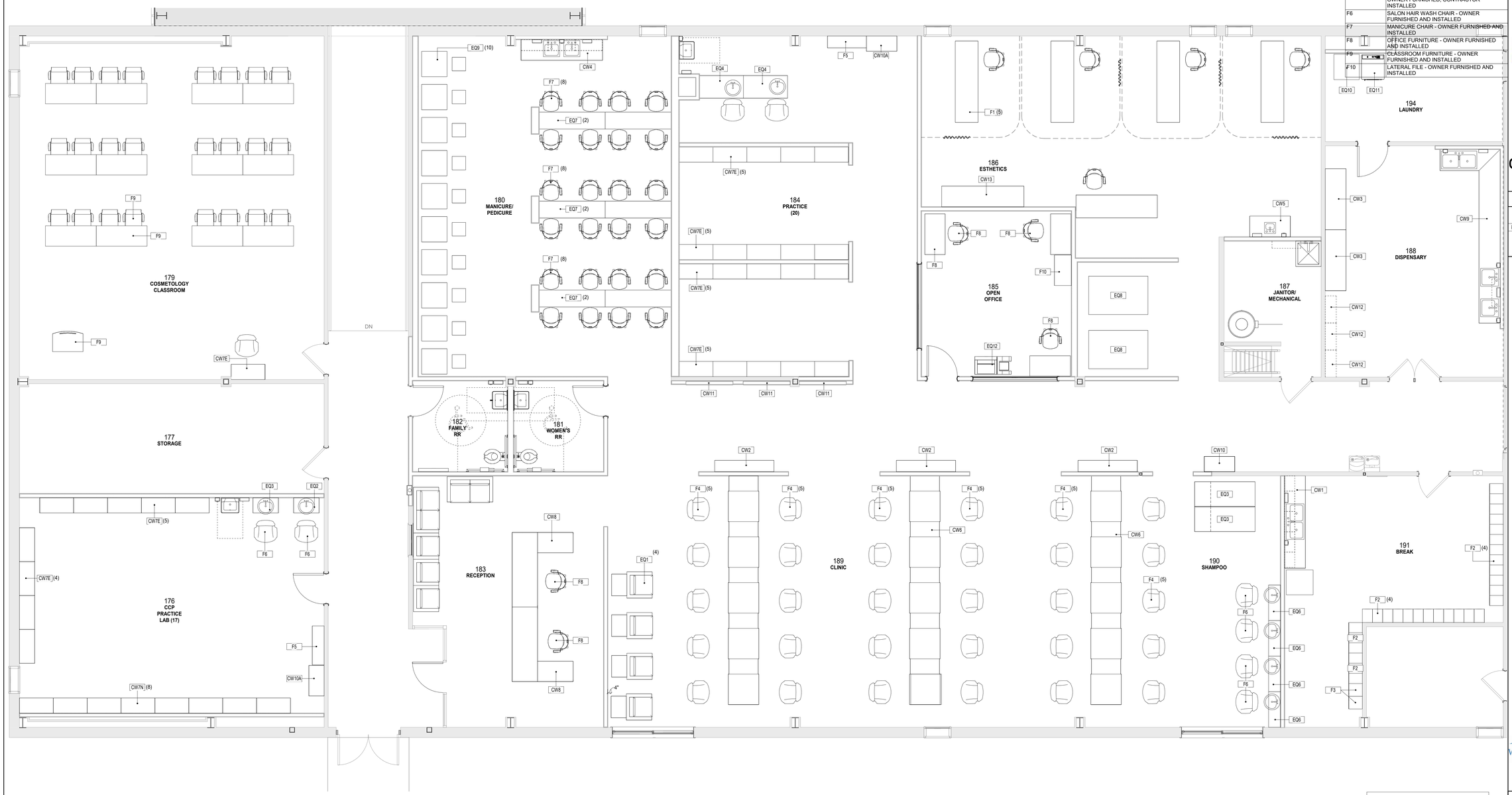
CW1	109" LONG X 25" DEEP CASEWORK WITH DOUBLE SINK - OWNER FURNISHED, CONTRACTOR INSTALLED
CW2	CASEWORK - OWNER FURNISHED AND INSTALL
CW3	EXISTING CASEWORK: 6'-0" LONG COUNTERTOP WITH TWO SETS OF BASE CABINETS
CW4	EXISTING CASEWORK: COUNTERTOP 8'-1/4" L X 25" D, THREE SETS OF DOUBLE DOOR BASE CABINETS, TWO SINKS, THREE SETS OF DOUBLE DOOR UPPER CABINETS
CW5	EXISTING CASEWORK: 48" W X 21" D COUNTERTOP AND BACKSPLASH WITH SINK, ONE SET OF DOUBLE DOOR BASE CABINETS AND ONE SET OF SINGLE DOOR BASE CABINET WITH DRAWER
CW6	HAIR STATION - COMBINED
CW7E	STUDENT PRACTICE STATION - NEW - OWNER FURNISHED, CONTRACTOR INSTALLED
CW7N	STUDENT PRACTICE STATION - EXISTING - OWNER FURNISHED, CONTRACTOR INSTALLED
CW8	RECEPTION DESK - OWNER FURNISHED AND INSTALLED
CW9	DISPENSERY CASEWORK - L SHAPED UNIT WITH 3 SINKS - OWNER PROVIDED, CONTRACTOR INSTALLED

KEYNOTES

CW10	TOWEL CABINET - TWO UNITS STACKED - OWNER FURNISHED AND CONTRACTOR INSTALLED. CONTRACTOR TO PROVIDE 4" WOOD FRAME BASE
CW10A	TOWEL CABINET - SINGLE UNIT - OWNER FURNISHED AND CONTRACTOR INSTALLED. CONTRACTOR TO PROVIDE 4" WOOD FRAME BASE
CW11	NAIL POLISH DISPLAY CABINET - IN WALL - OWNER PROVIDED AND CONTRACTOR INSTALLED
CW12	BASE STORAGE CABINETS IN DISPENSARY - 32" W X 13" D X 40" H - OWNER PROVIDED AND CONTRACTOR INSTALLED
CW13	COUNTERTOP AND BASE CABINETS - OWNER PROVIDED AND CONTRACTOR INSTALLED
EQ1	HAIR DRYER - OWNER FURNISHED, CONTRACTOR INSTALLED
EQ2	SHAMPOO UNIT - EXISTING - OWNER FURNISHED, CONTRACTOR INSTALLED. SEE PLUMBING FOR ADDITIONAL INFORMATION
EQ3	SHAMPOO UNIT - NEW - OWNER FURNISHED, CONTRACTOR INSTALLED. SEE PLUMBING FOR ADDITIONAL INFORMATION

KEYNOTES

EQ4	SHAMPOO UNIT - STAND BEHIND UNIT - EXISTING - OWNER FURNISHED, CONTRACTOR INSTALLED. SEE PLUMBING FOR ADDITIONAL INFORMATION
EQ6	SHAMPOO UNIT - EXISTING 42" UNIT WITH CABINETS ABOVE - OWNER FURNISHED, CONTRACTOR INSTALLED. SEE PLUMBING FOR ADDITIONAL INFORMATION
EQ7	DUCTED MANICURE TABLE FOR TWO - OWNER FURNISHED, CONTRACTOR INSTALLED
EQ8	PEDICURE SPA CHAIR - EXISTING - OWNER FURNISHED, CONTRACTOR INSTALLED
EQ9	PEDICURE CLUB CHAIR - OWNER FURNISHED, CONTRACTOR INSTALLED
EQ10	WASHER - EXISTING - OWNER FURNISHED, CONTRACTOR INSTALLED
EQ11	DRYER - EXISTING - OWNER FURNISHED, CONTRACTOR INSTALLED
EQ12	COPIER - OWNER FURNISHED AND INSTALLED. GC TO PROVIDE POWER AND DATA - SEE ELECT. DWGS
F1	ESTHETICS TABLE - OWNER FURNISHED AND INSTALLED
F2	36" X 16" LOCKER - OWNER FURNISHED AND INSTALLED
F3	15" X 16" LOCKER - OWNER FURNISHED AND INSTALLED
F4	SALON CHAIR - OWNER FURNISHED AND INSTALLED
F5	PRACTICE ROOM STORAGE CABINET - OWNER FURNISHED, CONTRACTOR INSTALLED
F6	SALON HAIR WASH CHAIR - OWNER FURNISHED AND INSTALLED
F7	MANICURE CHAIR - OWNER FURNISHED AND INSTALLED
F8	OFFICE FURNITURE - OWNER FURNISHED AND INSTALLED
F9	CLASSROOM FURNITURE - OWNER FURNISHED AND INSTALLED
F10	LATERAL FILE - OWNER FURNISHED AND INSTALLED



1 EQUIPMENT AND FURNITURE PLAN
1/4" = 1'-0"

KEY PLAN

Morris·Berg
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1016 JAY STREET, SUITE 130 CHARLOTTE, NC 28208
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MORRIS-BERG ARCHITECTS, INC. REGISTERED ARCHITECTURAL CORPORATION CERT. NO. 3018 CHARLOTTE, N.C.

MATTHEW SCOTT MAY REGISTERED ARCHITECT NORTH CAROLINA 6/8/26

CONSTRUCTION DOCUMENTS

ISSUE DATE: 06/08/2026

REVISIONS

NO.	DESCRIPTION	DATE

WESTERN PIEDMONT COMMUNITY COLLEGE

BUILDING K RENOVATION

WESTERN PIEDMONT COMMUNITY COLLEGE

200 E College Drive Morganton, NC 28655

WESTERN PIEDMONT COMMUNITY COLLEGE

PROJECT NUMBER 2317

SHEET TITLE
EQUIPMENT AND FURNITURE PLAN

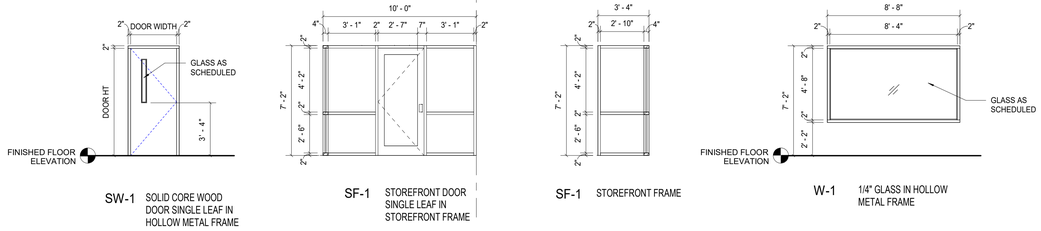
SHEET NUMBER
A1002

SCO # 23-27049-01A
NCCCS #2784

DOOR SCHEDULE

DOOR			DIMENSIONS		DOOR					GLASS				SIGNAGE			
MARK	TYPE	WALL TYPE	WIDTH	HEIGHT	HEAD	JAMB	SILL	HARDWARE	LABEL	TYPE	WIDTH	HEIGHT	COMMENTS	ROOM #	SIGN TO READ	SEEN	TYPE
FIRST FLOOR - UPPER																	
180	SW-1	GWB	3' - 0"	7' - 0"	1A/A1200	1B/A1200	1C/A1200				3"	33"					
181	SW-1	GWB	3' - 0"	7' - 0"	1A/A1200	1B/A1200	1C/A1200			-							
182	SW-1	GWB	3' - 0"	7' - 0"	1A/A1200	1B/A1200	1C/A1200			-							
183	SF-1	GWB	3' - 0"	7' - 0"	3A/A1200	3B/A1200	3C/A1200										
185	SW-1	GWB	3' - 0"	7' - 0"	1A/A1200	1B/A1200	1C/A1200				3"	33"					
194	SW-1	GWB	3' - 0"	7' - 0"	1A/A1200	1B/A1200	1C/A1200				3"	33"					
EX-103A	EXIST	EXIST EXT	6' - 0"	7' - 0"	-	-	-			-			EXISTING TO REMAIN				
EX-104A	EXIST	EXIST EXT	6' - 0"	7' - 0"	-	-	-			EXIST	3"	33"	EXISTING TO REMAIN				
EX-112	EXIST	EXIST GWB	3' - 0"	7' - 0"	-	-	-			EXIST	3"	33"	EXISTING TO REMAIN				
EX-114	EXIST	EXIST EXT	6' - 0"	7' - 0"	-	-	-			EXIST	3"	33"	EXISTING TO REMAIN				
EX-177	EXIST	EXIST GWB	3' - 0"	7' - 0"	-	-	-			EXIST	3"	33"	EXISTING TO REMAIN				
EX-179	EXIST	EXIST GWB	3' - 0"	7' - 0"	-	-	-			EXIST	3"	33"	EXISTING TO REMAIN				
EX-187	EXIST	EXIST GWB	3' - 0"	7' - 0"	-	-	-			EXIST	3"	33"	EXISTING TO REMAIN				
EX-188	EXIST	EXIST GWB	5' - 0"	7' - 0"	-	-	-			-			EXISTING TO REMAIN				
EX-191	EXIST	EXIST GWB	3' - 0"	7' - 0"	-	-	-			EXIST	3"	33"	EXISTING TO REMAIN				
EX-194	EXIST	EXIST EXT	3' - 0"	7' - 0"	-	-	-			EXIST	3"	33"	EXISTING TO REMAIN				

6



SW-1 SOLID CORE WOOD DOOR SINGLE LEAF IN HOLLOW METAL FRAME

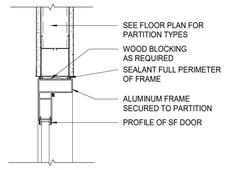
SF-1 STOREFRONT DOOR SINGLE LEAF IN STOREFRONT FRAME

DOOR TYPES

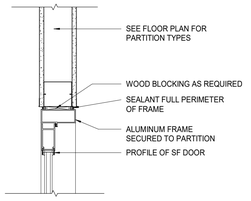
SF-1 STOREFRONT FRAME

W-1 1/4" GLASS IN HOLLOW METAL FRAME

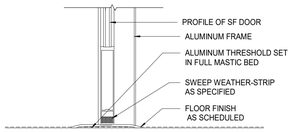
WINDOW TYPES



A - HEAD

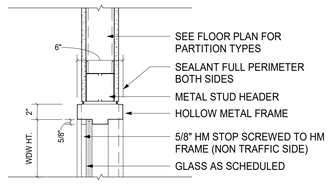


B - JAMB

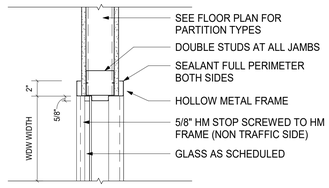


C - SILL

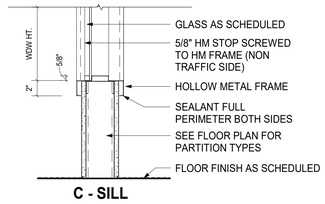
3 HEAD, JAMB, SILL INT. STOREFRONT
1 1/2" = 1'-0"



A - HEAD

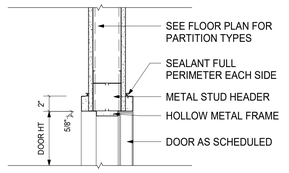


B - JAMB

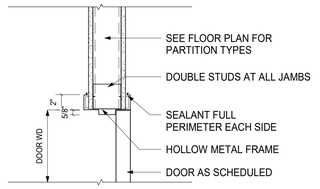


C - SILL

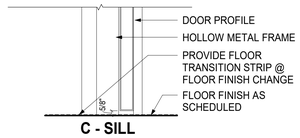
2 HEAD, JAMB, SILL @ INT. HM WINDOW
1 1/2" = 1'-0"



A - HEAD



B - JAMB



C - SILL

1 HEAD, JAMB, SILL INT. DOOR
1 1/2" = 1'-0"

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MATTHEW SCOTT HART REGISTERED ARCHITECT NORTH CAROLINA 6/8/26

CONSTRUCTION DOCUMENTS

ISSUE DATE: 06/08/2026

REVISIONS

NO.	DESCRIPTION	DATE

WESTERN PIEDMONT COMMUNITY COLLEGE

BUILDING K RENOVATION

200 E College Drive Morganton, NC 28655

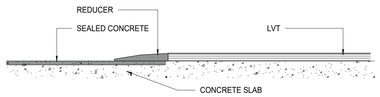
WESTERN PIEDMONT COMMUNITY COLLEGE

PROJECT NUMBER 2317

SHEET TITLE
DOOR SCHEDULE & DETAILS

SHEET NUMBER
A1200

SCO # 23-27049-01A
NCCCS #2784



1 **LVT TO SEALED CONCRETE TRANSITION**

FINISH SCHEDULE

ROOM NUMBER	ROOM NAME	FLOOR	BASE	WALL	CEILING	WINDOW TREATMENT	REMARKS
FIRST FLOOR - UPPER							
103	CORRIDOR	SC-1	RB-1	P-1	AC-1	-	
112	COMMUNICATIONS ROOM	EX	EX	EX	EX	-	
114	ELEC. ROOM	-	-	-	EX-AC, AC-MT	-	
160	CORRIDOR	LVT-2, SC-1	RB-1	P-1		-	
176	CCP PRACTICE LAB (17)	SC-1	RB-1	P-1	AC-1	BL-E	
177	STORAGE	SC-1	RB-1	P-1	AC-1	-	
179	COSMETOLOGY CLASSROOM	SC-1	RB-1	P-1	AC-1	BL-E	
180	MANICURE/ PEDICURE	SC-1	RB-1	P-1, P-3	AC-1	BL-E	
181	WOMEN'S RR	LVT-1	RB-1	EP-1	AC-2	-	
182	FAMILY RR	LVT-1	RB-1	EP-1	AC-2	-	
183	RECEPTION	SC-1	RB-1	P-1, P-3	AC-1	-	
184	PRACTICE (20)	SC-1	RB-1	P-1	AC-1	-	
185	OPEN OFFICE	LVT-1	RB-1	P-1	AC-1	BL-I	
186	ESTHETICS	SC-1	RB-1	P-1	AC-1	BL-E	
187	JANITOR/ MECHANICAL	SC-1	RB-1	EP-1, FRP-1	O.T.S	-	OPEN TO STRUCTURE
188	DISPENSARY	SC-1	RB-1	P-1	AC-1	-	
189	CLINIC	SC-1	RB-1	P-1, P-3	AC-1	BL-E	
190	SHAMPOO	SC-1	RB-1	P-1, P-3	AC-1	BL-E	
191	BREAK	SC-1	RB-1	P-1	AC-1	-	
194	LAUNDRY	SC-1	RB-1	P-1	AC-1	BL-E	
201	LOADING DOCK						

1 **FINISH PLAN - UPPER**
1/8" = 1'-0"
0' 4' 8' 16'

FLOOR FINISHES

LUXURY VINYL TILE (LVT) 12" X 24"- SPEC SECTION 096519

LVT-1: FIELD COLOR - OFFICE & RESTROOMS

LVT-2: FIELD COLOR - HALLWAY ACCENT

SEALED CONCRETE (SC) - SPEC SECTION 0991223

SC-1: OPAQUE PIGMENTED CONCRETE SEALER

FINISH DESCRIPTION

FLOOR

LVT-1	LUXURY VINYL TILE - FIELD COLOR - OFFICE & TOILET
LVT-2	LUXURY VINYL TILE - FIELD COLOR - HALLWAY ACCENT
SC-1	SEALED CONCRETE - PIGMENTED
EX	EXISTING FLOOR FINISH TO REMAIN
-	NO SCHEDULED FLOOR FINISH

BASE

RB-1	RUBBER - TYPE TS - 4" HIGH
EX	EXISTING BASE FINISH TO REMAIN
-	NO SCHEDULED BASE FINISH

WALL

EP-1	EPOXY WALL PAINT - TO MATCH P-1
P-1	WALL PAINT
P-3	ACCENT PAINT
P-7	CEILING PAINT (WHITE)
EX	EXISTING FINISH TO REMAIN
-	NO SCHEDULED WALL FINISH

CEILING

AC-1	2X2 LAY-IN ACOUSTICAL
AC-2	2X2 LAY-IN ACOUSTICAL - MOISTURE RESISTANT
AC-MT	METAL CEILING TRIM - 2" HIGH
O.T.S.	EXPOSED STRUCTURE (UNPAINTED)
GB-1	PAINTED GWB - PAINTED P-7 UNLESS OTHERWISE NOTED
P-7	CEILING PAINT (WHITE)
EX	EXISTING CEILING FINISH TO REMAIN
-	NO SCHEDULED CEILING FINISH

WINDOW TREATMENT

BL-E	HORIZONTAL BLINDS - EXTERIOR WINDOWS - SEE SPEC SECTION 122113
BL-I	HORIZONTAL BLINDS - INTERIOR WINDOWS - SEE SPEC SECTION 122113
-	NO SCHEDULED WINDOW TREATMENT

FINISH NOTES

1. **ALL FINISHES ARE TO COMPLY WITH THE 2018 NORTH CAROLINA STATE BUILDING CODE CHAPTER 8.**
2. **ALL FINISH MATERIALS TO MEET OR EXCEED THE FLAME SPREAD REQUIREMENTS OF TABLE 803.11 OF THE 2018 NORTH CAROLINA STATE BUILDING CODE.**
3. **PROVIDE APPROPRIATE TRANSITION STRIP AT ALL DOORS AND LOCATIONS WHERE FLOOR FINISH MATERIALS CHANGE.**
4. **FIELD VERIFY ALL ACCENT WALL LOCATIONS (START AND STOP POINTS) WITH ARCHITECT BEFORE PAINTING.**

KEYNOTES - TOILET...

TA-22 FRP PANEL - PROVIDE ON BOTH SIDES OF MOP SINK AND ABOVE MOP SINK. HEIGHT TO BE FROM FLOOR TO 5'-0" AFF IN AREA INDICATED ON PLANS.

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MATTHEW SCOTT BERG REGISTERED ARCHITECT NORTH CAROLINA 6/8/26

CONSTRUCTION DOCUMENTS

ISSUE DATE: 06/08/2026

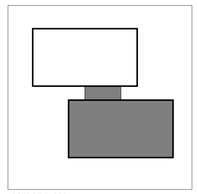
REVISIONS

NO.	DESCRIPTION	DATE

WESTERN PIEDMONT COMMUNITY COLLEGE

BUILDING K RENOVATION

200 E College Drive Morganton, NC 28655



KEY PLAN

PROJECT NUMBER 2317

SHEET TITLE
FINISH PLAN - UPPER, SCHEDULE & DETAILS

SHEET NUMBER
A1400

SCO # 23-27049-01A
NCCCS #2784

SANITARY WASTE & VENT PIPING

1. BELOW GRADE PIPING AND JOINTS: PROVIDE SERVICE WEIGHT CAST IRON HUB AND SPIGOT PIPE (ASTM A 74) WITH COMPRESSION JOINTS (CISPI HSN) AND NEOPRENE GASKETS (ASTM C 564) OR NO-HUB PIPE AND FITTINGS (CISPI 301) WITH NEOPRENE GASKET / STAINLESS STEEL CLAMP JOINTS (CISPI 310) WITH NEOPRENE GASKET / STAINLESS STEEL CLAMP JOINTS (HEAVY DUTY, ASTM C1540-15) OR PROVIDE SCHEDULE 40 PVC PIPE AND SOCKET FITTINGS (ASTM D 2665) WITH SOLVENT WELD JOINTS (ASTM D2855). INSTALL PLASTIC PIPE BELOW GRADE PER ASTM D2321. FOAM CORE PVC PIPING IS NOT APPROVED.
2. ABOVE GRADE PIPING AND JOINTS: PROVIDE SERVICE WEIGHT CAST IRON NO-HUB PIPE AND FITTINGS (CISPI 301) WITH NEOPRENE GASKET AND STAINLESS STEEL CLAMP JOINTS (CISPI 310) WITH NEOPRENE GASKET / STAINLESS STEEL CLAMP JOINTS (HEAVY DUTY, ASTM C1540-15) OR PROVIDE SCHEDULE 40 PVC PIPE AND SOCKET FITTINGS (ASTM D 2665) WITH SOLVENT WELD JOINTS (ASTM D2855). FOAM CORE PIPE IS NOT APPROVED. DO NOT INSTALL PVC PIPING IN RETURN AIR PLENUMS.
3. SLOPE WASTE AND STORM DRAIN PIPING AT 1/4" PER FOOT MINIMUM FOR PIPING 2-1/2" AND SMALLER AND 1/8" PER FOOT MINIMUM FOR PIPING 3" AND LARGER UNLESS NOTED OTHERWISE. SLOPE ALL KITCHEN GREASE WASTE PIPING AT 1/4" PER FOOT MINIMUM.
4. PROVIDE CLEAN-OUTS AT THE BASE OF WASTE STACKS, STORM RISERS, AND AT EVERY TURN IN PIPING IN EXCESS OF 45° AND SPACED WITH-IN 100'-0" APART IN A LOCATION THAT PERMITS ACCESS FOR SERVICE WITHOUT DAMAGE TO THE BUILDING OR FINISHED MATERIALS.
5. PROVIDE FLOOR CLEANOUTS (FCO) WITH TOPS DESIGNED TO MATCH SPECIFIC FLOOR FINISHES SUCH AS CARPET, TILE, ETC. PROVIDE YARD CLEANOUTS (YCO) ENCASED IN AN 18"x18"x6" CONCRETE PAD.
6. WHERE WASTE PIPING IS EXPOSED IN REST ROOM AREAS, PROVIDE CHROME PLATED BRASS PIPING, REMOVABLE P-TRAPS, MATCHING STOPS AND ESCUTCHEONS FOR ALL LAVATORIES.
7. WASTE AND VENT SYSTEMS SHALL BE TESTED AND PROVED WATER TIGHT UNDER A HEAD PRESSURE OF NO LESS THAN 10 FT. THIS PRESSURE SHALL BE HELD FOR A PERIOD OF NO LESS THAN 15 MINUTES.

PLUMBING DEMOLITION NOTES

1. THE PLUMBING CONTRACTOR SHALL VISIT THE SITE PRIOR TO BIDDING THE PROJECT TO VERIFY EXISTING CONDITIONS AND DETERMINE THE LEVEL OF DEMOLITION REQUIRED AND INCLUDE ALL NECESSARY PRICING IN THEIR BID. ANY DISCREPANCIES NOTED BETWEEN THE DOCUMENTS AND EXISTING CONDITIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO BIDDING.
2. PLUMBING CONTRACTOR SHALL REMOVE EXISTING PLUMBING FIXTURES AND EQUIPMENT AS INDICATED, INCLUDING ASSOCIATED LP GAS, HOT WATER, COLD WATER, STORM DRAIN, SANITARY WASTE AND VENT PIPING, UNLESS NOTED OTHERWISE. SEE ARCHITECTURAL DEMOLITION PLAN FOR LOCATIONS.
3. PLUMBING CONTRACTOR SHALL REMOVE UNUSED HW & CW BRANCH PIPING BACK TO WITHIN 12" OF THE MAIN IT CONNECTS, TERMINATE WITH SHUT-OFF VALVE AND CAP.
4. PLUMBING CONTRACTOR SHALL TERMINATE UNUSED BRANCH WASTE PIPING WITH A CLEAN-OUT AT THE MOST REMOTE END OR ABANDONED AND CAPPED WITHIN 12" OF THE MAIN IT CONNECTS. (NO DEAD- ENDS ALLOWED)
5. PLUMBING CONTRACTOR SHALL REMOVE UNUSED VENT BRANCH PIPING BACK TO WITHIN 12" OF THE MAIN IT CONNECTS THEN CAP.
6. PLUMBING CONTRACTOR SHALL VERIFY PROPER OPERATION OF ALL EXISTING EQUIPMENT PRIOR TO BEGINNING WORK. ANY PROBLEMS SHALL BE BROUGHT TO THE ATTENTION OF THE PROJECT ARCHITECT IMMEDIATELY.
7. WITH THE REMOVAL OF EXISTING WALLS, SOME EXISTING WASTE, VENT, STORM DRAIN, OR DOMESTIC WATER PIPING MAY BE DISCOVERED. ANY EXISTING PIPING DISCOVERED THAT IS ACTIVE SHALL BE OFFSET BY THE P.C. TO NEW WALLS. ANY EXISTING PIPING DISCOVERED THAT IS ABANDONED SHALL BE REMOVED.

COORDINATION DRAWINGS

PER DIVISION 01 SPECIFICATIONS, THE MECHANICAL CONTRACTOR SHALL ORGANIZE COORDINATION MEETINGS TO DEVELOP A SET OF COORDINATION DRAWINGS WITH ALL CONTRACTORS (ELECTRICAL, MECHANICAL, PLUMBING, FIRE PROTECTION, IT/DATA, AND GENERAL CONTRACTOR). THE MECHANICAL CONTRACTOR WILL HAVE THE LEAD RESPONSIBILITY FOR THE COORDINATION DRAWINGS. THE MECHANICAL CONTRACTOR SHALL PRODUCE THE ORIGINAL DRAWINGS AND FORWARD THE DRAWINGS TO EACH OF THE OTHER CONTRACTORS FOR THEM TO ADD THEIR SYSTEMS TO THIS SET OF COORDINATION DRAWINGS. THE CONTRACTORS WILL DEVELOP THE DRAWINGS IN THIS ORDER: MECHANICAL, FIRE PROTECTION, PLUMBING, ELECTRICAL, IT/DATA, AND GENERAL. THIS SHALL ALSO BE THE ORDER OF PRECEDENCE FOR INSTALLATION OF SYSTEMS. ANY RELOCATION OF SYSTEM ROUTINGS WILL BE FOUND IN THE COORDINATION PHASE AND NOTICED BY EACH OF THE CONTRACTORS. THESE DRAWINGS, WHEN COMPLETED, SHALL BE SIGNED OFF BY ALL OF THE ABOVE LISTED PARTIES. DRAWINGS SHALL BE COMPLETED PRIOR TO FABRICATION AND INSTALLATION OF DUCTWORK AND PIPING SYSTEMS, OR PURCHASE OF EQUIPMENT. THE FOLLOWING ITEMS REPRESENT THE MINIMUM REQUIREMENTS AND COORDINATION DRAWINGS:

1. ALL COORDINATION DRAWINGS WILL BE PRODUCED AT 1/4" = 1'-0 SCALE.
2. COORDINATION DRAWINGS WILL BE DISTRIBUTED ON REPRODUCIBLE MATERIAL 48"X36".
3. COORDINATION DRAWINGS ARE NOT SHOP DRAWINGS AND ARE REQUIRED IN ADDITION TO SHOP DRAWINGS.
4. ONCE THE COMPLETE COORDINATION DRAWINGS HAVE BEEN COMPILED, THE MECHANICAL CONTRACTOR WILL DISTRIBUTE ONE SIGNED SET TO EACH OF THE FOLLOWING CONTRACTORS: ELECTRICAL, PLUMBING, FIRE PROTECTION, AND GENERAL. ADDITIONAL SETS WILL BE SENT TO THE OWNER, ARCHITECT, AND ENGINEER.

DOMESTIC WATER PIPING

1. ABOVE GRADE PIPING AND JOINTS: PROVIDE TYPE 'L' HARD DRAWN SEAMLESS COPPER TUBING (ASTM B 88) AND CAST COPPER ALLOY FITTINGS (ASME B16.18). JOINTS 2" AND SMALLER SHALL BE LEAD FREE 95-5 TIN/SILVER SOLDER JOINTS (ASTM B 32), JOINTS 2-1/2" AND LARGER SHALL BE BCUP SILVER / PHOSPHORUS / COPPER BRAZED JOINTS (AWS A5.8). ALTERNATELY PRESS FITTINGS MAY BE USED FOR JOINTS. SEALING ELEMENTS FOR PRESS FITTINGS SHALL BE EPDM. SEALING ELEMENTS SHALL BE FACTORY INSTALLED. PRESS FITTINGS SHALL ALLOW IDENTIFICATION OF AN UNPRESSED FITTING DURING PRESSURE TESTING.
2. INSULATE PIPING ABOVE GRADE (EXCEPT EXPOSED CONNECTIONS TO PLUMBING FIXTURES) WITH GLASS FIBER INSULATION HAVING A VAPOR BARRIER AND JACKET. PIPE INSULATION SHALL HAVE A CONDUCTIVITY NOT EXCEEDING 0.27 BTUH x SQ. FT., SEE LIST BELOW FOR INSULATION THICKNESS:
   - PROVIDE 1" THICK INSULATION FOR HOT WATER & CIRCULATION PIPING SIZES 1/2" THRU 1-1/4".
   - PROVIDE 1-1/2" THICK INSULATION FOR HOT WATER & CIRCULATION PIPING SIZES 1-1/2" THRU 4".
   - PROVIDE 1/2" THICK INSULATION FOR COLD WATER PIPING SIZES 1/2" THRU 1-1/4".
   - PROVIDE 1" THICK INSULATION FOR COLD WATER PIPING SIZES 1-1/2" THRU 4".
3. PIPING INSULATION, JACKETS, COVERINGS, SEALERS, MASTICS AND ADHESIVES SHALL MEET A FLAME-SPREAD RATING OF 25 OR LESS AND A SMOKE-DEVELOPED RATING OF 50 OR LESS AS TESTED BY ASTM E84 (NFPA 255) METHOD AND SHALL BE PLENUM RATED. PROVIDE PVC INSULATION JACKET FOR EXPOSED PIPING IN MECHANICAL ROOMS. INSTALL INSULATION CONTINUOUSLY THRU FIRE RATED WALLS AND PIPE HANGERS. PROVIDE GALVANIZED STEEL SHIELD BETWEEN PIPE HANGER AND INSULATION.
4. PROVIDE TWO-PIECE, BRONZE OR BRASS BODY, FULL PORT, 600 PSI WOG, BALL TYPE SHUT-OFF VALVES WITH BLOW-OUT PROOF STEMS AND ADJUSTABLE PACKING GLANDS. VALVES SHALL BE LEAD FREE PER NSF 61, ANNEX G REQUIREMENTS. INSTALL VALVES IN A LOCATION THAT PERMITS ACCESS FOR SERVICE WITHOUT DAMAGE TO THE BUILDING OR FINISHED MATERIALS.
5. PROVIDE A CHROME FINISH ON EXPOSED PIPING IN REST ROOMS AND OTHER FINISHED AREAS.
6. PROTECT COPPER PIPING AGAINST CONTACT WITH DISSIMILAR METALS. ALL HANGERS, SUPPORTS, ANCHORS AND CLIPS SHALL BE COPPER OR COPPER PLATED. WHERE COPPER PIPING IS CARRIED ON TRAPEZE HANGERS WITH OTHER PIPING, PROVIDE A PERMANENT ELECTROLYTIC ISOLATION MATERIAL TO PREVENT CONTACT WITH DISSIMILAR OTHER METALS.
7. PROTECT COPPER PIPING AGAINST CONTACT WITH MASONRY. WHERE COPPER IS SLEEVED THROUGH MASONRY, PROVIDE COPPER OR RED BRASS SLEEVES. WHERE COPPER MUST BE CONCEALED IN OR AGAINST MASONRY PARTITIONS, PROVIDE A HEAVY COATING OF ASPHALTIC ENAMEL ON THE COPPER PIPING AND 15# ASPHALT SATURATED FELT BETWEEN THE PIPING AND THE MASONRY PARTITION.
8. PERFORM A PRESSURE TEST ON ALL WATER PIPING. FILL PIPING WITH POTABLE WATER, CAP AND SUBJECT PIPING TO A STATIC WATER PRESSURE OF 50 PSIG ABOVE OPERATING PRESSURE, WITHOUT EXCEEDING PRESSURE RATING OF PIPING SYSTEM MATERIALS OR PRESSURIZE PIPING WITH AIR TO AT LEAST ONE-HUNDRED (100) PSI. ISOLATE TEST SOURCE AND ALLOW TO STAND FOR FOUR HOURS. LEAKS AND LOSS IN TEST PRESSURE CONSTITUTE DEFECTS THAT MUST BE REPAIRED. REPAIR LEAKS AND DEFECTS WITH NEW MATERIALS AND RETEST PIPING OR PORTION THEREOF UNTIL SATISFACTORY RESULTS ARE OBTAINED
9. STERILIZE THE DOMESTIC WATER SYSTEM IN PER THE AMERICAN WATER WORKS ASSOCIATION'S INSTRUCTIONS SPECIFICATIONS AND LOCAL HEALTH DEPARTMENT REGULATIONS.
10. SLOPE WATER PIPING FOR DRAINAGE WITH DRAIN VALVES INSTALLED AT LOW POINTS.
11. BALANCE THE DOMESTIC HOT WATER CIRCULATION SYSTEM TO THE PERFORMANCE SPECIFICATIONS INDICATED ON THE PLANS AND PROVIDE THE ENGINEER WITH THREE COPIES OF A COMPLETE TEST AND BALANCE REPORT. THE REPORT IS TO BE ISSUED A MINIMUM OF TWO WEEKS PRIOR TO PROJECT COMPLETION. THE TEST AND BALANCE REPORT WILL BE SUBJECT TO REVIEW AND APPROVAL BY THE ENGINEER. ANY ADDITIONAL TESTING, ADJUSTING AND BALANCING REQUIRED (AT ENGINEER'S REQUEST) AFTER REVIEW OF THE INITIAL REPORT SHALL BE PROVIDED AT NO ADDITIONAL COST. TEST AND BALANCE REPORT TO BE COMPLETED BY AN INDEPENDENT, CERTIFIED TEST AND BALANCE CONTRACTOR.

NATURAL GAS PIPING

1. ABOVE GRADE PIPING AND FITTINGS : PROVIDE SCHEDULE 40 BLACK STEEL PIPING, TYPE S, SEAMLESS, GRADE B (ASTM A 53) AND 150 PSI MALLEABLE BLACK IRON FITTINGS, GRADE 32510, (ASTM B 16.3) OR FORGED STEEL WELDING TYPE FITTINGS (ASTM A234). PROVIDE THREADED JOINTS FOR PIPE 2" AND SMALLER. PROVIDE WELDED JOINTS (ASME B31.9) FOR PIPE 2-1/2" AND LARGER. ALTERNATELY PRESS FITTINGS MAY BE USED FOR JOINTS. COLD PRESS MECHANICAL JOINT FITTING SHALL CONFORM TO MATERIAL REQUIREMENTS OF ASTM A420 OR ASME B16.3 AND PERFORMANCE CRITERIA ANSI LC-4/CSA 6.32. SEALING ELEMENTS FOR PRESS FITTINGS SHALL BE HNBR. SEALING ELEMENTS SHALL BE FACTORY INSTALLED. PRESS FITTINGS SHALL ALLOW IDENTIFICATION OF AN UNPRESSED FITTING DURING PRESSURE TESTING. FITTINGS SHALL COMPLY TO THE REQUIREMENTS OF ASTM F3226.
2. SPACE GAS PIPING HANGER RODS 7'-0" ON CENTER MAXIMUM AND SPACE TRANSVERSE BRACING 20'-0" ON CENTER MAXIMUM. TRANSVERSE BRACING FOR ONE SECTION MAY ACT AS LONGITUDINAL BRACING FOR THE PIPE SECTION CONNECTED TO IT IF THE BRACING IS INSTALLED WITHIN 24" OF THE ELBOW OR TEE. COORDINATE HANGER LOCATIONS WITH STRUCTURAL DRAWING DETAILS.
3. PROVIDE A.G.A. CERTIFIED SHUT-OFF VALVES MINIMUM, 125 PSI RATED, NON- LUBRICATED PLUG TYPE WITH BRONZE BODY AND BRONZE PLUG, STRAINERS AND REGULATORS (AS RECOMMENDED BY THE EQUIPMENT MANUFACTURER) FOR ALL EQUIPMENT CONNECTED TO THE NATURAL GAS SYSTEM.
4. GAS PRESSURE REGULATORS SHALL COMPLY WITH ANSI Z21.80. REGULATORS SHALL BE CAST IRON OR DIE-CAST ALUMINUM CONSTRUCTION WITH INTERCHANGEABLE ZINC-PLATED STEEL SPRINGS, ZINC-PLATED STEEL DIAPHRAGM PLATE, NITRILE RUBBER SEAT DISC, INTERCHANGEABLE ALUMINUM ORIFICE, AND ULTRAVIOLET-STABILIZED MINERAL FILLED NYLON SEAL PLUG. REGULATOR SHALL BE SINGLE-PORT SELF-CONTAINED WITH ORIFICE NO LARGER THAN REQUIRED AT MAXIMUM PRESSURE INLET AND NO PRESSURE SENSING PIPING EXTERNAL TO THE REGULATOR. PRESSURE REGULATOR SHALL MAINTAIN DISCHARGE PRESSURE SETTING DOWNSTREAM AND NOT EXCEED 150 PERCENT OF DESIGN DISCHARGE PRESSURE AT SHUTOFF. OVERPRESSURE PROTECTION DEVICE SHALL BE FACTORY MOUNTED ON REGULATOR. WHEN USING VENTLESS REGULATORS, MOUNT REGULATOR IN A HORIZONTAL UPRIGHT POSITION. IF VENTED TYPE REGULATORS ARE USED, INSTALL VENT PIPING (FULL SIZE OPENING) FROM GAS PRESSURE REGULATORS TO OUTDOORS AND TERMINATE IN WEATHERPROOF HOOD.
5. PAINT ALL GAS PIPING WITH 2 COATS OF YELLOW ENAMEL PAINT APPLIED WITH A BRUSH (2 MIL THICKNESS MINIMUM). LABEL ALL GAS PIPING ON 5'-0" CENTERS INDICATING THE GAS PRESSURE.
   2 PSI GAS PIPING SHALL BE LABELED "2-PSI GAS"
   LOW PRESSURE GAS PIPING SHALL BE LABELED "GAS"
6. CONTACT LOCAL GAS UTILITY TO PROVIDE GAS SERVICE AND GAS METER WITH A PULSE OUTPUT COMPATIBLE WITH THE BUILDING AUTOMATION SYSTEM. COORDINATE REQUIREMENTS WITH MECHANICAL CONTRACTOR AND LOCAL GAS UTILITY.

PLUMBING GENERAL NOTES

1. PLUMBING WORK SHALL BE INSTALLED IN ACCORDANCE WITH THE 2018 NORTH CAROLINA STATE PLUMBING CODE AND WITH THE REQUIREMENTS OF THE LOCAL AUTHORITY HAVING JURISDICTION.
2. SCOPE: PROVIDE ALL LABOR, MATERIAL AND EQUIPMENT REQUIRED FOR THE COMPLETION AND OPERATION OF ALL PLUMBING SYSTEMS IN ACCORDANCE WITH ALL APPLICABLE CODES.
3. WARRANT THE SYSTEM LABOR, MATERIALS AND EQUIPMENT FOR THE TIME PERIOD SPECIFIED IN THE PROJECT MANUAL. IF NO WARRANTY SECTION IS PROVIDED, THEN WARRANT THE SYSTEM LABOR, MATERIAL AND EQUIPMENT FOR A MINIMUM OF ONE YEAR AFTER COMPLETION AND ACCEPTANCE. PRIOR TO TURNING THE COMPLETED SYSTEM OVER TO THE OWNER, REVIEW THE INSTALLATION WITH THE ARCHITECT / ENGINEER AND REPLACE OR REPAIR ANY DEFECTIVE WORKMANSHIP, EQUIPMENT AND MATERIALS AT NO ADDITIONAL COST TO THE OWNER.
4. COORDINATE ALL PLUMBING PIPING LOCATIONS, ROUGH-IN LOCATIONS AND EQUIPMENT LOCATIONS WITH OTHER TRADES TO AVOID CONFLICTS AND INTERFERENCES. FINAL PIPING AND EQUIPMENT LOCATIONS SHALL BE A CODE COMPLIANT INSTALLATION FOR ALL TRADES.
5. FIELD VERIFY PROPER OPERATION OF EXISTING SYSTEMS BEFORE STARTING CONSTRUCTION. NOTIFY THE ARCHITECT / ENGINEER OF RECORD OF ANY PROBLEMS OR DISCREPANCIES BETWEEN THE CONSTRUCTION DOCUMENTS AND EXISTING CONDITIONS AND/OR ANY POTENTIAL PROBLEMS OBSERVED BEFORE CONTINUING WORK IN THE EFFECTED AREAS.
6. PLUMBING PLANS SHALL NOT BE SCALED. REFERENCE THE ARCHITECTURAL PLANS FOR DIMENSIONS OF ALL LOCATIONS OF PLUMBING FIXTURES, FLOOR DRAINS, COLUMNS, WALLS, DOORS, ETC.
7. WHERE DISCREPANCIES ARE FOUND IN THE DRAWINGS AND SPECIFICATIONS THE MORE STRINGENT SHALL APPLY. CONTACT ENGINEER FOR CLARIFICATION.
8. ALL PIPING SHALL BE MANUFACTURED IN THE UNITED STATES OF AMERICA.
9. ALL VALVES, BACKFLOW PREVENTERS, BOOSTER PUMPS, ETC. SERVING THE DOMESTIC WATER SYSTEM SHALL MEET LEAD FREE STANDARDS PER ANSI/NSF 372 AND NSF 61, ANNEX G.
10. PROVIDE COMPLETE PLUMBING FIXTURES AND EQUIPMENT. INCLUDE SUPPLIES, STOPS, VALVES, FAUCETS, DRAINS, TRAPS, TAIL PIECES, ESCUTCHEONS, ETC. AND INSTALL PER THE MANUFACTURER'S INSTALLATION INSTRUCTIONS.
11. CUT WALLS, FLOORS AND CEILINGS AS REQUIRED FOR INSTALLATION OF PLUMBING WORK. ALL CUTTING SHALL BE HELD TO A MINIMUM. PATCH AND FINISH SURFACES TO MATCH ADJOINING SURFACES.
12. PIPE PENETRATIONS THRU WALLS, PARTITIONS AND FLOORS SHALL BE SLEEVED. CORE DRILLING THRU WALLS AND PARTITIONS IS PERMITTED IF PERFORMED IN A NEAT CRAFTSMAN LIKE MANNER. OPENINGS THRU WALLS, PARTITIONS, AND FLOORS SHALL BE LARGE ENOUGH FOR PIPE INSULATION TO REMAIN CONTINUOUS. PIPES PENETRATING THRU EXTERIOR WALLS SHALL BE SEALED WATER TIGHT. INSTALL ESCUTCHEONS IN ALL EXPOSED AREAS.
13. PIPING AND SPECIALTIES SHALL BE LOCATED CONCEALED IN WALLS, PARTITIONS OR ABOVE CEILINGS UNLESS NOTED OTHERWISE. PIPING IN EXPOSED AREAS SHALL BE RUN TIGHT TO UNDERSIDE OF STRUCTURE.
14. PROVIDE ACCESS DOORS FOR ALL SPECIALTIES, VALVES, WATER HAMMER ARRESTORS, TRAP PRIMERS, ETC., CONCEALED BEHIND WALLS OR CEILINGS THAT REQUIRE MAINTENANCE ACCESS.
15. DO NOT INSTALL PIPING IN AREAS SUBJECT TO FREEZING TEMPERATURES. INSTALL PIPING SHOWN IN EXTERIOR WALLS ON THE CONDITIONED SIDE OF THE WALL INSULATION.
16. PIPING, VENTS, ETC. EXTENDING THROUGH EXTERIOR WALLS AND/OR THE ROOF SHALL BE FLASHED AND COUNTER FLASHED IN A WATERPROOF MANNER. COORDINATE FLASHING WITH THE GENERAL CONTRACTOR.
17. PROVIDE A CHROME FINISH FOR ALL EXPOSED PIPING IN REST ROOMS AND OTHER FINISHED AREAS.
18. PROVIDE NON-CONDUCTING DIELECTRIC UNIONS WHENEVER CONNECTING DISSIMILAR METALS.
19. REFER TO THE STRUCTURAL PLANS AND DETAILS FOR ACCEPTABLE LOCATIONS TO ATTACH HANGERS AND SUPPORTS TO THE BUILDING STRUCTURE. HANGERS SHALL NOT ATTACH TO THE ROOF DECK.
20. PROVIDE MANUFACTURERS RECOMMENDED CLEARANCES AROUND ALL EQUIPMENT FOR MAINTENANCE.
21. VALVES AND OTHER PIPING ACCESSORIES REQUIRING ACCESS SHALL BE INSTALLED IN ACCESSIBLE LOCATION NO MORE THAN 18" ABOVE THE CEILING OR 2' BEHIND THE WALL. PROVIDE OFFSETS IN PIPING AS NEEDED.
22. PLUMBING SYSTEMS INCLUDE, BUT ARE NOT LIMITED TO: PLUMBING FIXTURES AND EQUIPMENT, FIRE STOPPING, SEISMIC BRACING, PIPE IDENTIFICATION, DOMESTIC WATER SYSTEM, SANITARY WASTE AND VENT SYSTEM, NATURAL GAS SYSTEM.

FIRE STOPPING:

1. FIRE STOP ALL PENETRATIONS, BY PIPING OR CONDUITS, OF FIRE RATED WALLS, FLOORS AND PARTITIONS. PROVIDE A DEVICE(S) OR SYSTEM(S) WHICH HAS BEEN TESTED AND LISTED AS COMPLYING WITH ASTM E-814 AND INSTALL IN ACCORDANCE WITH THE CONDITIONS OF THEIR LISTING. PROVIDE A DEVICE(S) OR SYSTEM(S) WITH AN 'F' RATING EQUAL TO THE RATING OF THE ASSEMBLY BEING PENETRATED. REFER TO ARCHITECTURAL PLANS FOR WALL AND FLOOR TYPES.

PIPE IDENTIFICATION:

1. PIPE IDENTIFICATION SHALL MATCH THE FACILITY'S EXISTING STANDARD. IF NO STANDARD EXISTS, THEN THE PIPE IDENTIFICATION SHALL BE IN ACCORDANCE WITH ANSI A13.1.
2. PROVIDE PIPING LABELS FOR ALL PLUMBING PIPING. PIPING LABELS SHALL BE ACRYLIC FACED, WRAP-AROUND TYPE. EACH LABEL SHALL INDICATE THE PIPING CONTENTS, DIRECTION OF FLOW AND SHALL BEAR THE MANUFACTURER'S STANDARD COLOR FOR THE SERVICE INDICATED.

SUBMITTALS:

1. PROVIDE SUBMITTALS BEARING THE CONTRACTORS REVIEW STAMP FOR ALL PLUMBING FIXTURES, PIPING, EQUIPMENT AND ACCESSORIES IN ELECTRONIC FORMAT (PDF).
2. NO PRIVATE LABELED MATERIALS WILL BE ACCEPTED AS EQUALS TO PRODUCTS SPECIFIED HEREIN.
3. THE PLUMBING CONTRACTOR IS RESPONSIBLE FOR ALL COSTS ASSOCIATED WITH SUBSTITUTIONS TO SPECIFIED PLUMBING FIXTURES AND EQUIPMENT INCLUDING BUT NOT LIMITED TO; PROVIDING MAINTENANCE ACCESS CLEARANCE, PIPING, ELECTRICAL, REPLACEMENT OF OTHER SYSTEM COMPONENTS, BUILDING ALTERATIONS, ETC. AND ANY MODIFICATIONS TO ASSOCIATED MECHANICAL, ELECTRICAL OR PLUMBING SYSTEMS REQUIRED BY THE EQUIPMENTS INSTALLATION INSTRUCTIONS. ALL COSTS ASSOCIATED WITH SUBSTITUTIONS SHALL BE INCLUDED IN THE ORIGINAL BASE BID.

PLUMBING LEGEND

SYMBOL	ABBREVIATION	DESCRIPTION
	CW	COLD WATER PIPING
	HW	HOT WATER PIPING
	HWR	HOT WATER RETURN PIPING
	W	SANITARY WASTE PIPING
	V	SANITARY VENT PIPING
G	G	NATURAL GAS PIPING
D	D	DRAIN PIPING (INDIRECT)
	-	PIPING ELBOW DOWN
	-	PIPING ELBOW UP
	-	PIPING CONTINUES
	-	BALL VALVE
	-	CHECK VALVE
	-	BALANCING VALVE
	-	GAS VALVE
	PRV	PRESSURE REDUCING VALVE
	-	IN-LINE PUMP
	-	PIPING REDUCER
	FCO	FLOOR CLEANOUT
	YCO	YARD CLEANOUT
	WCO	WALL CLEANOUT
	FD	FLOOR DRAIN
	HB	HOSE BIBB / WALL HYDRANT
	SA-#	SHOCK ARRESTOR - SUFFIX INDICATES PDI SIZE
	CTE	CONNECT TO EXISTING
	-	POINT OF DEMOLITION

ADDITIONAL ABBREVIATIONS

ABV	ABOVE	IW	INDIRECT WASTE
AFF	ABOVE FINISHED FLOOR	KW	KILLOWATT
AFG	ABOVE FINISHED GRADE	LAV	LAVATORY
BFF	BELOW FINISHED FLOOR	MBH	1,000 BRITISH THERMAL UNIT / HOUR
CFH	CUBIC FEET PER HOUR	MFG	MANUFACTURER
CLG	CEILING	PSI	POUNDS PER SQUARE INCH
CONT	CONTINUATION	SF	SQUARE FEET
DFU	DRAINAGE FIXTURE UNIT (WASTE)	T&P	TEMPERATURE AND PRESSURE
DN	DOWN	TW	TEMPERED WATER
EX / (E)	EXISTING	TYP	TYPICAL
FFE	FINISHED FLOOR ELEVATION	UG	UNDERGROUND
FIN	FINISH	VB	VACUUM BREAKER
FR	FROM	VTR	VENT THRU ROOF
FU	FIXTURE UNITS	WC	WATER COLUMN
GPC	GALLONS PER CYCLE (METERING)		
GPF	GALLONS PER FLUSH	EC	ELECTRICAL CONTRACTOR
GPM	GALLONS PER MINUTE	GC	GENERAL CONTRACTOR
HP	HORSE POWER	MC	MECHANICAL CONTRACTOR
INV	INVERT ELEVATION	PC	PLUMBING CONTRACTOR

GAS LOAD SUMMARY

LOAD	CONSUMPTION (CFH)
DOMESTIC WATER HEATER: WH1	100
GAS CLOTHES DRYER	20
EX. HVAC EQUIP - LOWER BUILDING (TOTAL)	450
NEW HVAC EQUIP. - UPPER BUILDING (IDU-1 THRU IDU-8)	800
TOTAL	1,370

NOTES:
FARTHEST POINT OF DELIVERY FROM GAS METER (TO 2 PSI GAS PRESSURE REGULATOR AT FARTHEST GAS-FIRED FIXTURE) = ±550 FT. EQUIVALENT DISTANCE

FUEL GAS CODE TABLE FOR ABOVE GRADE 2 PSI PIPING: 2018 NCFGC - TABLE 402.4(5)
SCHEDULE 40 METALLIC PIPE, 2 PSI INLET PRESSURE, 1 PSI PRESSURE DROP.

FUEL GAS CODE TABLE FOR ABOVE GRADE LOW PRESSURE PIPING: 2018 NCFGC - TABLE 402.4(4)
SCHEDULE 40 METALLIC PIPE, 0.5 PSI INLET PRESSURE, 0.5" W.C. PRESSURE DROP.

*-AVAILABLE AT PRESSURE REGULATOR

PLUMBING SHEET INDEX

P001	PLUMBING LEGEND, INDEX, AND NOTES
P002	PLUMBING SCHEDULES
P100	FIRST FLOOR PLUMBING DEMO PLAN - DRAINAGE - UPPER
P110	FIRST FLOOR PLUMBING DEMO PLAN - SUPPLY - UPPER
P200	FIRST FLOOR PLUMBING PLAN - DRAINAGE - UPPER
P210	FIRST FLOOR PLUMBING PLAN - SUPPLY - UPPER
P220	FIRST FLOOR PLUMBING PLAN - GAS - UPPER
P501	PLUMBING DETAILS

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NORTH CAROLINA REGISTERED PROFESSIONAL ENGINEER SEAL 26023 GEORGE C. POWELL III ENGINEERING 06/08/2026

CONSTRUCTION DOCUMENTS

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REVISIONS

NO.	DESCRIPTION	DATE

WESTERN PIEDMONT COMMUNITY COLLEGE

BUILDING K RENOVATION

200 E College Drive Morganton, NC 28655

PROJECT NUMBER 2317

SHEET TITLE
PLUMBING LEGEND, INDEX, AND NOTES

SHEET NUMBER
P001

SCO # 23-27049-01A
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OPTIMA# 24-0064

PLUMBING SPECIALTIES SCHEDULE

SYMBOL	DESCRIPTION	CONNECTION SIZE				SPECIFICATION	REMARKS
		W	V	CW	HW		
WB1	WASHING MACHINE CONNECTION BOX, 14"x 9"x 3.5", 20 GAUGE STEEL WITH WHITE POWDER COATING, RECESSED IN WALL	3"	2"	1/2"	1/2"	FIXTURE: GUY GRAY T200TPVCHA WITH WATER HAMMER ARRESTOR STOPS: INTEGRAL 1/4 TURN SUPPLIES: (2) 5/8" BRAIDED S.S. FLEXIBLE HOSES	2" DRAIN OUTLET, 2" STANDPIPE WITH 2" P-TRAP.
SA-x	SHOCK ARRESTOR, SUFFIX INDICATES PDI SIZE	-	-	x	-	EQUIPMENT: SIOUX CHIEF 650 SERIES, SIZES 1/2" THRU 2", NSF 61 CERTIFIED.	SEE SHOCK ARRESTOR TABLE THIS SHEET
HB1	HOSE BIBB, (MECHANICAL ROOMS) INTERIOR, EXPOSED, AUTOMATIC DRAINING, VACUUM BREAKER	-	-	3/4"	-	EQUIPMENT: WOODFORD 24, PROVIDE WITH LOOSE TEE KEY FOR EACH HOSE BIBB	MOUNT 24" AFF
FCO	FLOOR CLEANOUT, CAST IRON BODY, NICKEL BRONZE TOP, ADJUSTABLE	**	-	-	-	CLEANOUT: ZURN ZN-1400, BRONZE PLUG CLEANOUT SIZE SHALL MATCH PIPE SIZE	GAS / WATER TIGHT, INSTALL TOP FLUSH WITH FINISHED FLOOR
FD1	FLOOR DRAIN, CAST IRON BODY, ROUND NICKEL BRONZE GRATE, ADJUSTABLE	**	-	-	-	DRAIN: ZURN ZN-415-B, 6" DIAMETER GRATE P-TRAP: DEEP SEAL (MATCH DRAIN SIZE)	INSTALL TOP FLUSH WITH FINISHED FLOOR. SEE NOTE 1 BELOW.

NOTES:
1. PROVIDE WATERLESS INLINE TRAP GUARD FOR EACH FLOOR DRAIN CONFORMING TO ASSE 1072 AND EQUAL TO RECOTORSEAL"SURE-SEAL" MODEL SS3009V. INSTALL TRAP GUARDS IN THE OUTLET OF THE FLOOR DRAIN BODY (NOT IN THE STRAINER).

2. PROVIDE TRAP PRIMER PPP MODEL P-1 AND 1/2" COPPER LINE TO FLOOR DRAIN.

** MATCH PIPE SIZE SHOWN ON PLANS, SEE PLANS.

APPROVED EQUALS:	PRODUCT TYPE:	ACCEPTED MANUFACTURERS:
THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING THE MODEL WHICH MOST CLOSELY MATCHES THE SPECIFIED PRODUCT. PROVIDE PRODUCTS MADE BY THE MANUFACTURER'S LISTED.	INLINE FLOOR DRAIN TRAP SEALER DRAINS, CLEANOUTS SHOCK ARRESTOR, TRAP PRIMERS WALL HYDRANTS, HOSE BIBBS	SURESEAL, MIFAB, PROVENT ZURN, J.R. SMITH, WADE, JOSAM, WATTS SIOUX CHIEF, PPP INC., ZURN, WATTS ZURN, WOODFORD, ZURN, J.R. SMITH, MIFAB

PLUMBING FIXTURE SCHEDULE

SYMBOL	DESCRIPTION	CONNECTION SIZE				SPECIFICATION	REMARKS
		W	V	CW	HW		
P1	TOILET, A.D.A. COMPLIANT ELONGATED, WHITE VITREOUS CHINA, FLOOR MOUNTED (1.28 GPF) MANUALLY OPERATED FLUSH VALVE	4"	2"	1-1/4"	-	FIXTURE: KOHLER K-96057-0 "HIGHCLIFF ULTRA" FLUSH VALVE: SLOAN 111-1.28-DFB SEAT: CHURCH 9500SSCT (WHITE)	INSTALL FLUSH LEVER ON OPEN ACCESS SIDE OF TOILET. SEE NOTE 1 BELOW
P3	LAVATORY, A.D.A. COMPLIANT, 20"x18" RECTANGULAR BOWL, WHITE VITREOUS CHINA, CARRIER MOUNTED, 4" CENTER FAUCET HOLES, BATTERY POWERED SENSOR OPERATED (0.5 GPM) FAUCET	2"	1-1/2"	1/2"	1/2"	FIXTURE: KOHLER K-2032, EQUIPPED FOR CONCEALED ARM CARRIER FAUCET: SLOAN EBF-650-BDT, 0.5 GPM GRID DRAIN: MCGUIRE 155A; P-TRAP: MCGUIRE 8902 (1-1/4"x1-1/2", 17 GA.) SUPPLIES/STOPS: MCGUIRE LF175-LK	FIXTURE RIM HEIGHT 34"AFF. SEE NOTES 2 & 3 BELOW
P3A	LAVATORY, A.D.A. COMPLIANT, 20"x18" RECTANGULAR BOWL, VITREOUS CHINA, CARRIER MOUNTED, GOOSENECK FAUCET, WRISTBLADE HANDLES, 1.5 GPM LAMINAR FLOW OUTLET	2"	1-1/2"	1/2"	1/2"	FIXTURE: KOHLER K-2032, EQUIPPED FOR CONCEALED ARM CARRIER FAUCET: CHICAGO 895-317RGDIE3SABCP, 1.5 GPM GRID DRAIN: MCGUIRE 155A; P-TRAP: MCGUIRE 8902 (1-1/4"x1-1/2", 17 GA.) SUPPLIES/STOPS: MCGUIRE LF175-LK	FIXTURE RIM HEIGHT 34"AFF. SEE NOTES 2 & 3 BELOW
P5	STAINLESS STEEL SINK, OWNER FURNISHED CONTRACTOR INSTALLED. EXISTING SINK TO BE RELOCATED FROM EXISTING FACILITY. PROVIDE NEW P-TRAP, SUPPLIES & STOPS	2"	1-1/2"	1/2"	1/2"	FIXTURE, FAUCET, AND APPURTENANCES: EXISTING TO BE RELOCATED TO SITE BY OWNER. CONTRACTOR SHALL PROVIDE NEW ROUGH-IN. P-TRAP: MCGUIRE 8912 (1-1/2"x2", 17 GA.) SUPPLY/STOP: MCGUIRE LF175-LK	-
P5A	STAINLESS STEEL SINK, A.D.A. COMPLIANT, OWNER FURNISHED CONTRACTOR INSTALLED. EXISTING SINK TO BE RELOCATED FROM EXISTING FACILITY. PROVIDE NEW P-TRAP, SUPPLIES & STOPS	2"	1-1/2"	1/2"	1/2"	FIXTURE, FAUCET, AND APPURTENANCES: EXISTING TO BE RELOCATED TO SITE BY OWNER. CONTRACTOR SHALL PROVIDE NEW ROUGH-IN. P-TRAP: MCGUIRE 8912 (1-1/2"x2", 17 GA.) SUPPLY/STOP: MCGUIRE LF175-LK	SEE NOTE 2 BELOW
P6	MOP SINK, 32"x32"x12" TERRAZZO BASIN, STAINLESS STEEL THRESHOLD, STAINLESS STEEL WALL GUARDS, SERVICE FAUCET, HOSE, MOP HANGER BRACKET.	3"	1-1/2"	3/4"	3/4"	FIXTURE: FIAT TSBC-3011 FAUCET: FIAT 830AA DRAIN: FIAT 1453-BB ACCESSORIES: FIAT 832-AA HOSE & BRACKET P-TRAP: 3" DEEP SEAL	PROVIDE CHECK VALVES ON HW AND CW SUPPLIES.
P8	SHAMPOO SINK, COUNTER MOUNTED, OWNER FURNISHED CONTRACTOR INSTALLED. PROVIDE NEW P-TRAP, SUPPLIES & STOPS	2"	1-1/2"	1/2"	1/2"	FIXTURE, FAUCET, AND APPURTENANCES: OWNER FURNISHED CONTRACTOR INSTALLED. CONTRACTOR SHALL PROVIDE NEW ROUGH-IN. HAIR-TRAP: PIBBS MODEL PIB-HT10 SUPPLY/STOP: MCGUIRE LF175-LK	SEE NOTE 4 BELOW.
P8A	SHAMPOO SINK WITH FLOOR MOUNTED BASE, OWNER FURNISHED CONTRACTOR INSTALLED. PROVIDE NEW P-TRAP, SUPPLIES & STOPS	2"	1-1/2"	1/2"	1/2"	FIXTURE, FAUCET, AND APPURTENANCES: OWNER FURNISHED CONTRATOR INSTALLED. CONTRACTOR SHALL PROVIDE NEW ROUGH-IN. HAIR-TRAP: PIBBS MODEL PIB-HT10 SUPPLY/STOP: MCGUIRE LF175-LK	SEE NOTE 4 BELOW.
P8B	MANI / PEDI CHAIR WITH SINK, FLOOR MOUNTED BASE, OWNER FURNISHED CONTRACTOR INSTALLED. PROVIDE NEW P-TRAP, SUPPLIES & STOPS	2"	1-1/2"	1/2"	1/2"	FIXTURE, FAUCET, AND APPURTENANCES: OWNER FURNISHED CONTRACTOR INSTALLED. CONTRACTOR SHALL PROVIDE NEW ROUGH-IN. P-TRAP: MCGUIRE 8912 (1-1/2"x2", 17 GA.) SUPPLY/STOP: MCGUIRE LF175-LK	SEE NOTE 4 BELOW.

NOTES:
1. PROVIDE HEAVY DUTY CAST IRON CLOSET FLANGE WITH COMPRESSION SEAL AND TEST CAP EQUAL TO ZURN CF2980-CI4. OFFSET FLANGES ARE NOT ACCEPTABLE.

2. PROVIDE PRE-MANUFACTURED A.D.A. COMPLIANT INSULATION KIT FOR EXPOSED P'TRAP AND SUPPLY TRIM UNDER SINK. INSULATION KIT SHALL MEET OR EXCEED ASTM E84.

3. SEE ARCHITECTURAL PLANS FOR MOUNTING HEIGHT. PROVIDE A FLOOR MOUNTED, ADJUSTABLE CONCEALED ARM CARRIER EQUAL TO ZURN Z1231-EZ (-SL) SERIES. WHEN CARRIER IS LOCATED BEHIND BLOCK WALL, PROVIDE EXTENDED CONCEALED ARM SLEEVES TO COMPENSATE FOR THE BLOCK WALL THICKNESS.

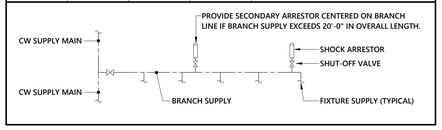
4. PROVIDE WASTE, VENT, HOT WATER, AND COLD WATER SERVICES PER FIXTURE MANUFACTURER'S INSTALLATION REQUIREMENTS.

** MATCH PIPE SIZE SHOWN ON PLANS, SEE PLANS.

APPROVED EQUALS:	PRODUCT TYPE:	ACCEPTED MANUFACTURERS:
THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING THE MODEL WHICH MOST CLOSELY MATCHES THE SPECIFIED PRODUCT. PROVIDE PRODUCTS MADE BY THE MANUFACTURER'S LISTED.	VITREOUS CHINA TOILET SEATS FLUSH VALVES MANUAL FAUCETS SENSOR OPERATED FAUCETS STAINLESS STEEL SINKS UTILITY SINKS SUPPLIES / STOPS, P-TRAPS ADA KIT FOR EXPOSED TRIM CARRIERS	KOHLER, AMERICAN STANDARD, ZURN, SLOAN, TOTO CHURCH, OLSONITE, BEMIS, CENTOCO SLOAN, ZURN, DELANEY T&S BRASS, CHICAGO, ZURN, DELTA COMMERCIAL, MOEN COMMERCIAL SLOAN, T&S BRASS, ZURN ELKAY, JUST, ADVANCE TABCO FIAT, FLORESTONE, STERN WILLIAMS MCGUIRE, BRASSCRAFT, KEENEY, ZURN TRUEBRO, PLUMBEREX, KEENEY ZURN, J.R. SMITH, WADE, JOSAM, WATTS

SHOCK ARRESTOR TABLE

DRAWING SYMBOL	FIXTURE UNITS	P.D.I. WH201 DESIGNATION	ARRESTOR SIZE	REMARKS
SA-A	1 - 11	A	1/2"	INSTALL SHOCK ARRESTORS PER THE PLUMBING DRAINAGE INSTITUTE (P.D.I.) GUIDELINES.
SA-B	12 - 32	B	3/4"	
SA-C	33 - 60	C	1"	ACCEPTED MANUFACTURERS: SIOUX CHIEF, WATTS, PPP INC., ZURN
SA-D	61 - 113	D	1-1/4"	
SA-E	114 - 154	E	1-1/2"	



PLUMBING EQUIPMENT SCHEDULE

SYM.	DESCRIPTION	CONN. SIZE		SPECIFICATION	REMARKS
		INLET	OUT		
WH1	COMMERCIAL WATER HEATER, GAS FIRED, TANK TYPE, 60 GALLON CAPACITY 28" DIAMETER	1-1/2"	1-1/2"	EQUIPMENT: A.O. SMITH BTH-100(A) GAS INPUT: 100,000 BTUH ELEC: 120V, 1 PHASE RECOVERY: 144 GPH AT 80° RISE.	SET OUTLET TEMP TO 120°F. SEE SCHEMATIC 1/P501. SEE NOTES 1 & 2 BELOW.
ET1	THERMAL EXPANSION TANK 6 GALLON CAPACITY	3/4"	-	EQUIPMENT: AMTROL ST-12-C	SUPPORT TANK FROM STRUCTURE IF NOT MOUNTED ON FLOOR
RCP1	CIRCULATION PUMP, 3-SPEED, ALL BRONZE CONSTRUCTION	3/4"	3/4"	PUMP: B&G NBF-25, 125 WATTS, 120V, RATED FOR 6 GPM AT 8 FEET HEAD	SEE NOTE 3

NOTES:
1. COMMERCIAL GAS FIRED WATER HEATER SHALL HAVE AT LEAST A 96% THERMAL EFFICIENCY RATING, A 5 YEAR WARRANTY, STAINLESS STEEL HEAT EXCHANGERS, REDUNDANT GAS VALVES, SEALED COMBUSTION CHAMBER, FAN ASSISTED COMBUSTION, ASME 150 PSI WORKING PRESSURE, INLET AND OUTLET TEMPERATURE GAUGE, TEMP GAUGE, 150 PSI T&P RELIEF VALVE, OPERATING LIMIT AND HIGH LIMIT CONTROLS, U.L. AND FM APPROVED GAS TRAIN, FLOW SWITCH, 100% SAFETY SHUTDOWN AND LOW NOX EMISSIONS. PROVIDE WITH FACTORY CONDENSATE NEUTRALIZATION KIT. WATER HEATER SHALL EXCEED ASHRAE 90.1 REQUIREMENTS. WATER HEATER SHALL BE MONITORED BY BUILDING BAS SYSTEM. COORDINATE WITH CONTROLS CONTRACTOR.

2. INSTALL DIRECT VENT PIPING WITH CONCENTRIC ROOF OUTLET PER MANUFACTURER'S DIRECTIONS. POLYPROPYLENE (TYPE BH VENT SYSTEM), CPVC PIPING, OR STAINLESS STEEL SHALL BE USED FOR VENT PIPING MATERIAL. PVC PIPING IS NOT ACCEPTABLE. DO NOT INSTALL CPVC PIPING IN RETURN AIR PLENUMS. PROVIDE CARBON MONOXIDE DETECTOR IN MECHANICAL ROOM ADJACENT TO GAS FIRED EQUIPMENT.

3. INTERLOCK WITH FULLY ADJUSTABLE AQUASTAT AND 7-DAY, 24 HOUR TIMER.

** MATCH PIPE SIZE SHOWN ON PLANS, SEE PLANS.

APPROVED EQUALS:	PRODUCT TYPE:	ACCEPTED MANUFACTURERS:
THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING THE MODEL WHICH MOST CLOSELY MATCHES THE SPECIFIED PRODUCT. PROVIDE PRODUCTS MADE BY THE MANUFACTURER'S LISTED.	WATER HEATERS EXPANSION TANKS HW RECIRC PUMPS MIXING VALVES	LOCHINVAR, A.O. SMITH, BRADFORD WHITE AMTROL, B&G, A.O. SMITH, WATTS, WESSELS B&G, TACO, GRUNDFOS LEONARD, LAWLER, SYMMONS

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06/08/2026

CONSTRUCTION DOCUMENTS

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WESTERN PIEDMONT COMMUNITY COLLEGE
BUILDING K RENOVATION
200 E College Drive Morganton, NC 28655

WESTERN PIEDMONT COMMUNITY COLLEGE

PROJECT NUMBER 2317

SHEET TITLE
PLUMBING SCHEDULES

SHEET NUMBER
P002

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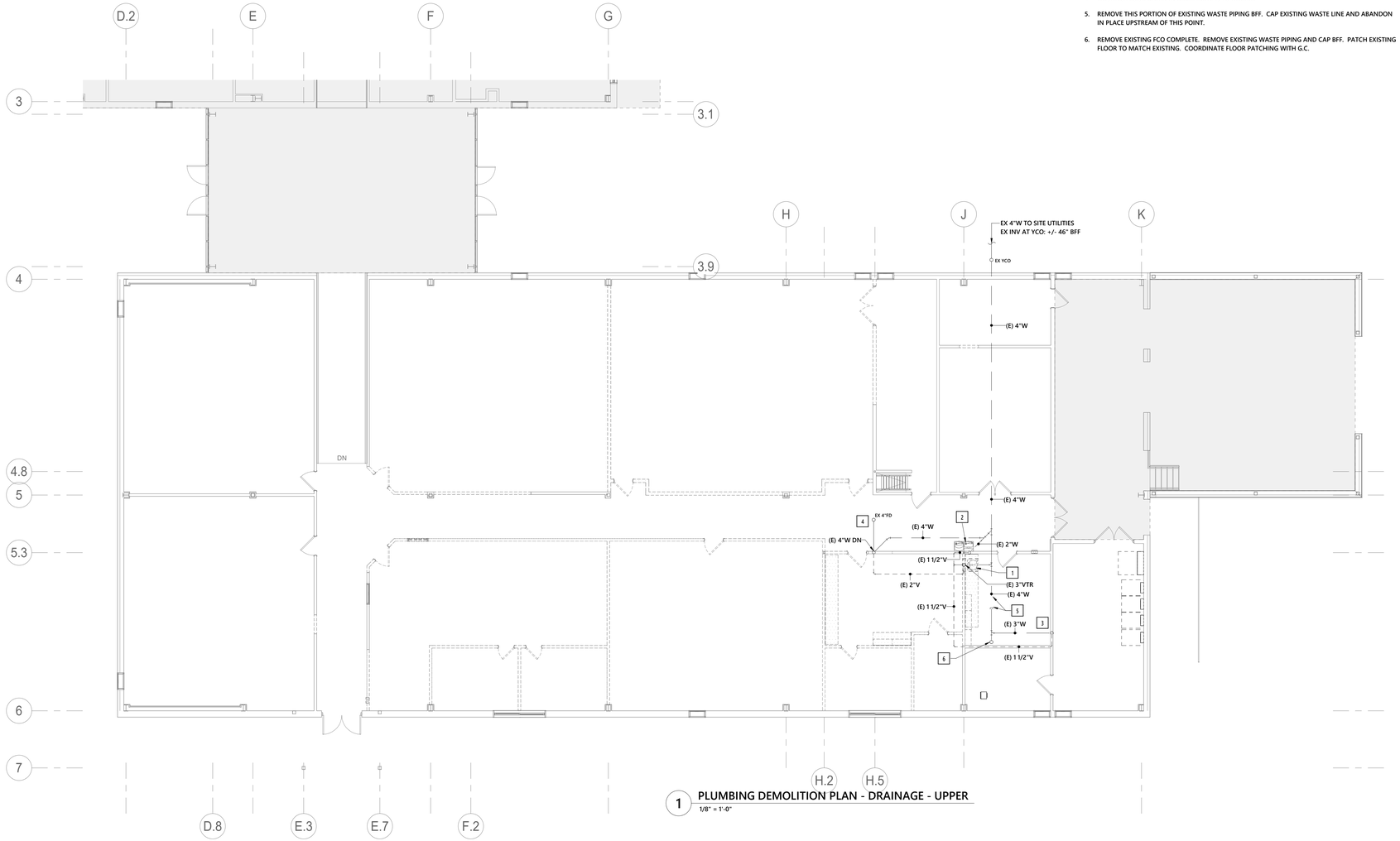

1 **PLUMBING DEMOLITION PLAN - DRAINAGE - UPPER**
1/8" = 1'-0"

KEYED NOTES: #

1. REMOVE EXISTING FIXTURE COMPLETE. REMOVE EXISTING WASTE PIPING DOWN TO BFF AND CAP CONCEALED. REMOVE EXISTING VENT PIPING UP TO ABOVE CEILING AND CAP. PATCH FLOOR AS REQUIRED TO MATCH EXISTING. COORDINATE FLOOR PATCHING WITH G.C.
2. FIXTURE IS EXISTING TO REMAIN.
3. REMOVE EXISTING WASHER BOX COMPLETE. CAP EXISTING WASTE AND VENT SERVICES IN WALL CONCEALED. PATCH WALL TO MATCH EXISTING. COORDINATE PATCH WITH G.C.
4. EXISTING FLOOR DRAIN IN MEZZANINE IS TO REMAIN.
5. REMOVE THIS PORTION OF EXISTING WASTE PIPING BFF. CAP EXISTING WASTE LINE AND ABANDON IN PLACE UPSTREAM OF THIS POINT.
6. REMOVE EXISTING FCO COMPLETE. REMOVE EXISTING WASTE PIPING AND CAP BFF. PATCH EXISTING FLOOR TO MATCH EXISTING. COORDINATE FLOOR PATCHING WITH G.C.

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WESTERN PIEDMONT COMMUNITY COLLEGE

PROJECT NUMBER 2317

SHEET TITLE
FIRST FLOOR
PLUMBING DEMO PLAN - DRAINAGE - UPPER

SHEET NUMBER
P100

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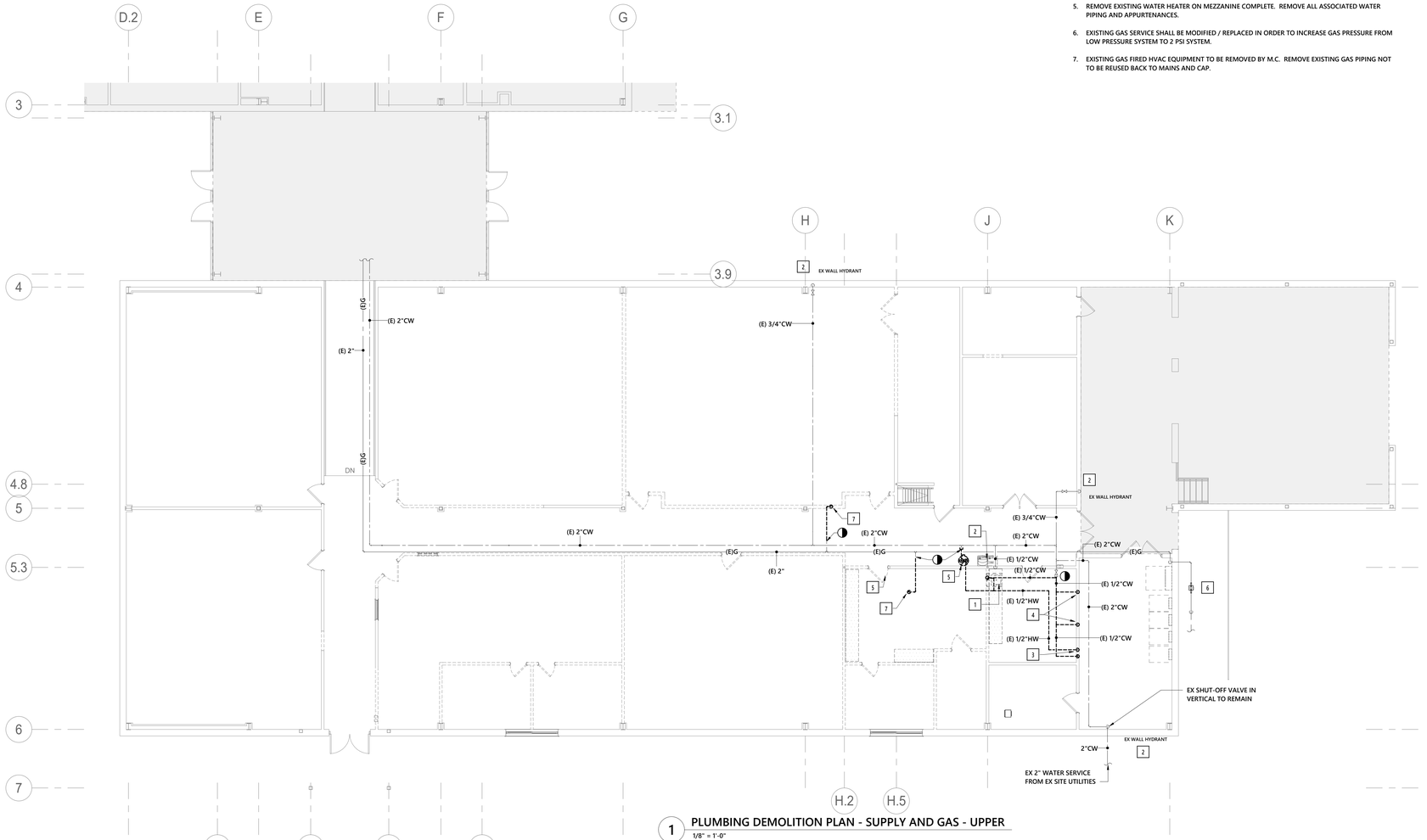

1 PLUMBING DEMOLITION PLAN - SUPPLY AND GAS - UPPER
1/8" = 1'-0"

KEYED NOTES: #

1. REMOVE EXISTING FIXTURE COMPLETE. REMOVE EXISTING DOMESTIC WATER SERVICES NOT TO BE REUSED BACK TO MAINS AND CAP.
2. FIXTURE IS EXISTING TO REMAIN.
3. REMOVE EXISTING WASHER BOX COMPLETE. REMOVE EXISTING DOMESTIC WATER SERVICES NOT TO BE REUSED BACK TO MAINS AND CAP. PATCH WALL TO MATCH EXISTING. COORDINATE PATCH WITH G.C.
4. REMOVE EXISTING WATER CONNECTION BOX COMPLETE. REMOVE EXISTING DOMESTIC WATER SERVICES NOT TO BE REUSED BACK TO MAINS AND CAP. PATCH WALL TO MATCH EXISTING. COORDINATE PATCH WITH G.C.
5. REMOVE EXISTING WATER HEATER ON MEZZANINE COMPLETE. REMOVE ALL ASSOCIATED WATER PIPING AND APPURTENANCES.
6. EXISTING GAS SERVICE SHALL BE MODIFIED / REPLACED IN ORDER TO INCREASE GAS PRESSURE FROM LOW PRESSURE SYSTEM TO 2 PSI SYSTEM.
7. EXISTING GAS FIRED HVAC EQUIPMENT TO BE REMOVED BY M.C. REMOVE EXISTING GAS PIPING NOT TO BE REUSED BACK TO MAINS AND CAP.

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PROJECT NUMBER 2317

SHEET TITLE
FIRST FLOOR
PLUMBING DEMO PLAN - SUPPLY - UPPER

SHEET NUMBER
P110

SCO # 23-27049-01A
NCCCS #2784

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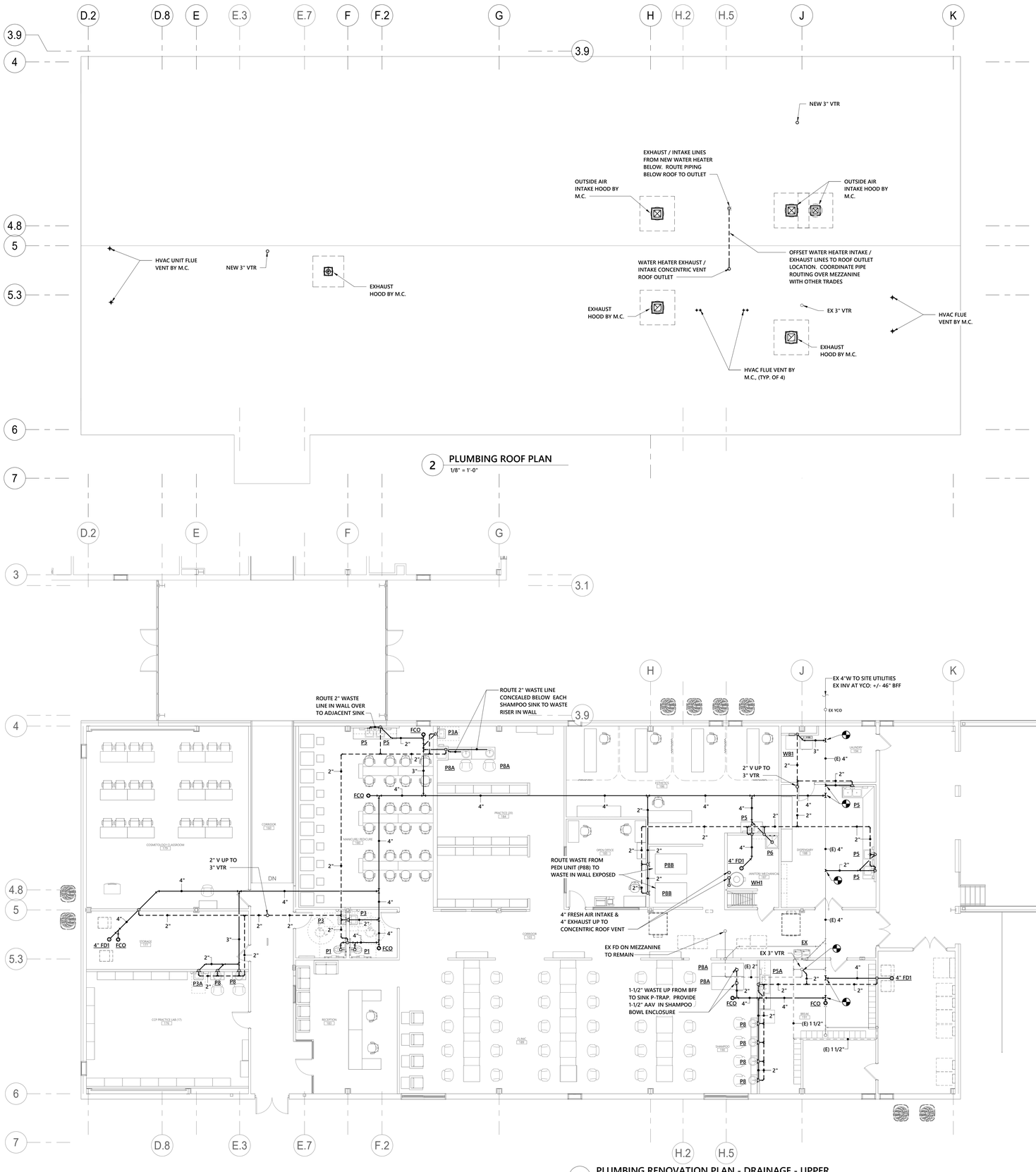

2 PLUMBING ROOF PLAN
1/8" = 1'-0"

1 PLUMBING RENOVATION PLAN - DRAINAGE - UPPER
1/8" = 1'-0"

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06/08/2026

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SHEET TITLE
FIRST FLOOR PLUMBING PLAN - DRAINAGE - UPPER

SHEET NUMBER
P200

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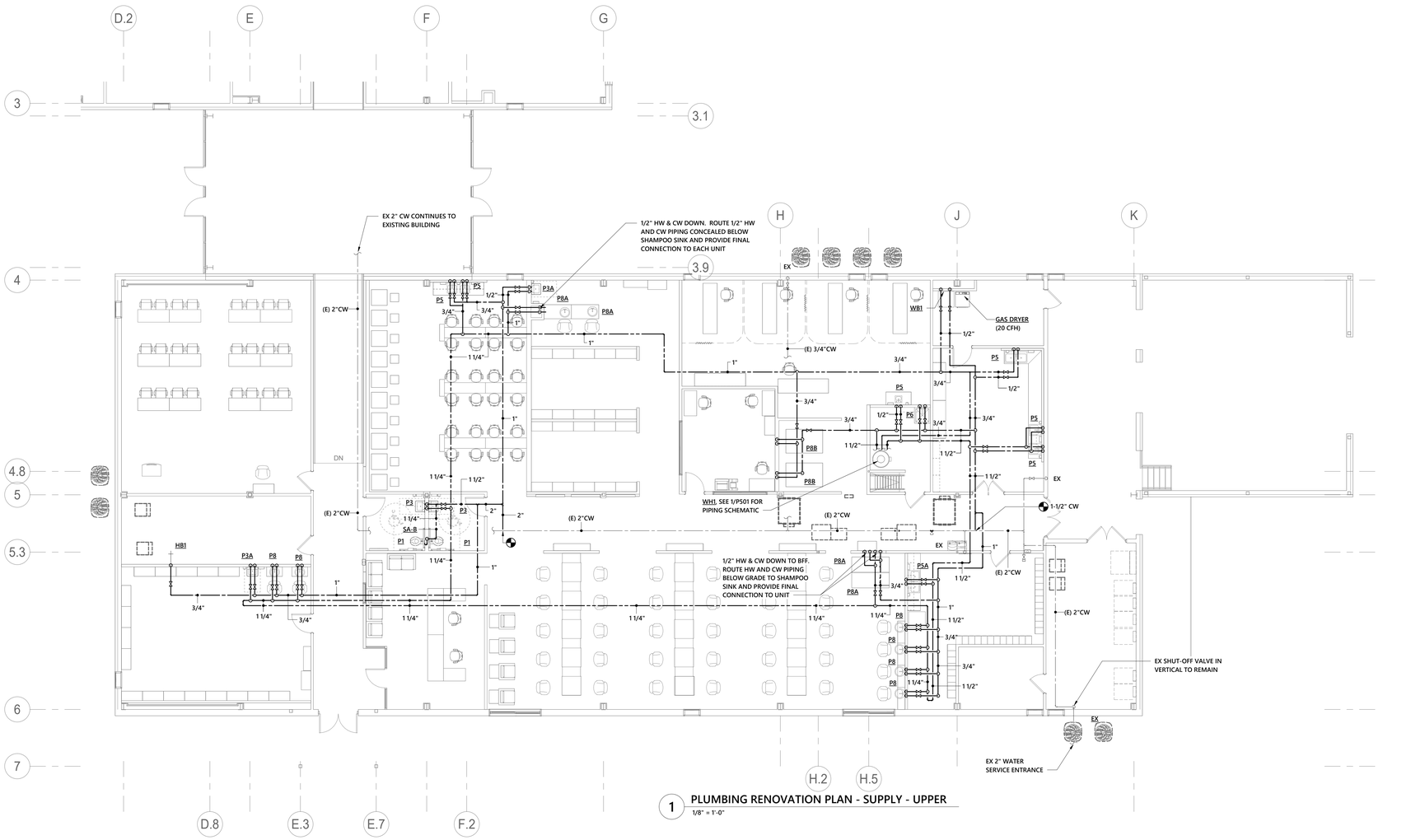

1 PLUMBING RENOVATION PLAN - SUPPLY - UPPER
1/8" = 1'-0"

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BUILDING K RENOVATION

200 E College Drive Morganton, NC 28655

WESTERN PIEDMONT COMMUNITY COLLEGE

PROJECT NUMBER 2317

SHEET TITLE
FIRST FLOOR PLUMBING PLAN - SUPPLY - UPPER

SHEET NUMBER
P210

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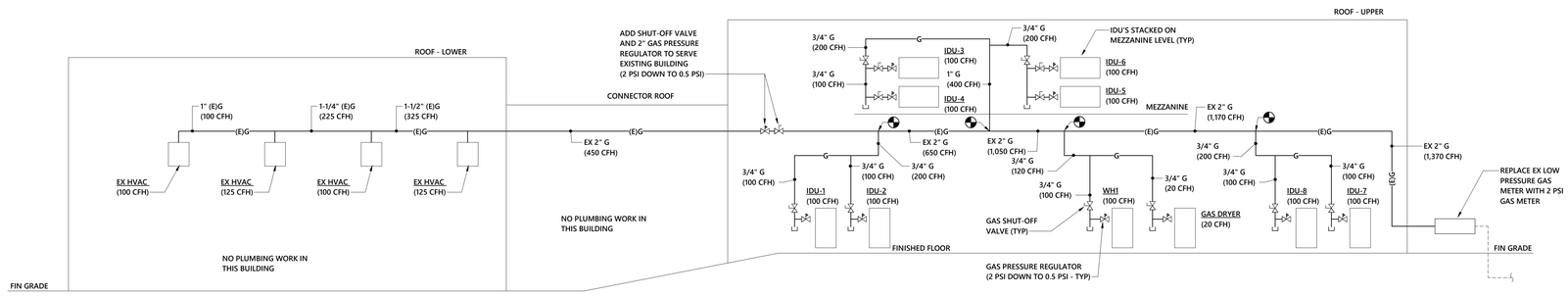
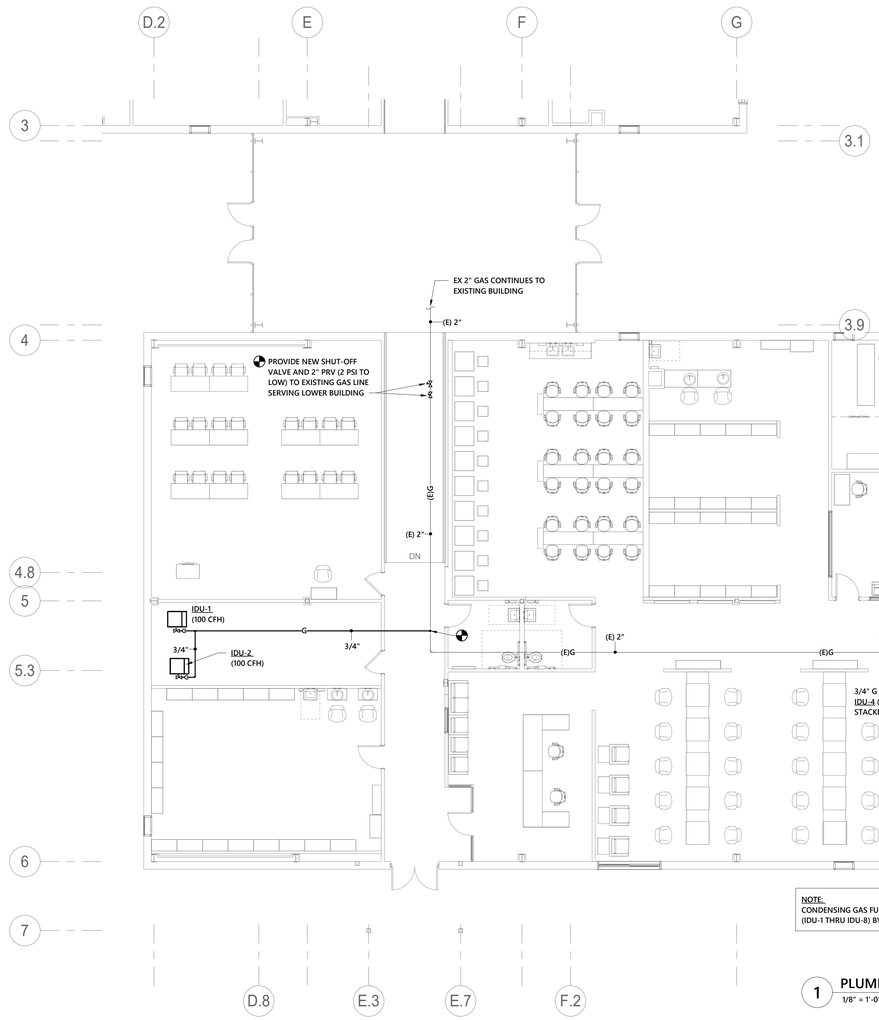


2 NATURAL GAS RISER DIAGRAM
NOT TO SCALE



1 PLUMBING RENOVATION PLAN - GAS - UPPER
1/8" = 1'-0"

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NORTH CAROLINA REGISTERED PROFESSIONAL ENGINEER SEAL 26023 — Kenneth C. Fowler III — 06/08/2026

CONSTRUCTION DOCUMENTS

ISSUE DATE:	06/08/2026

REVISIONS

NO.	DESCRIPTION	DATE

WESTERN PIEDMONT COMMUNITY COLLEGE

BUILDING K RENOVATION

200 E College Drive Morganton, NC 28655

WESTERN PIEDMONT COMMUNITY COLLEGE

PROJECT NUMBER 2317

SHEET TITLE
FIRST FLOOR PLUMBING PLAN - GAS - UPPER

SHEET NUMBER
P220

SCO # 23-27049-01A
NCCCS #2784

OPTIMA# 24-0064

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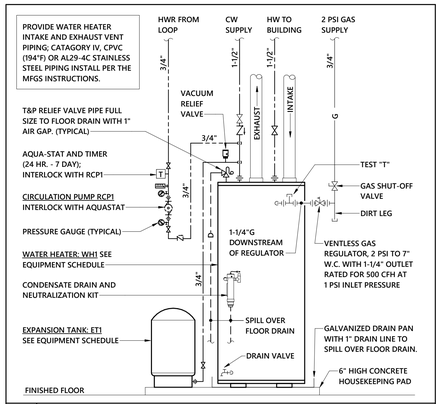
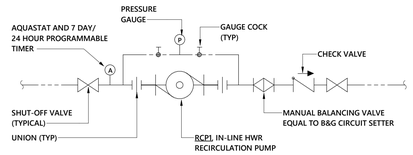
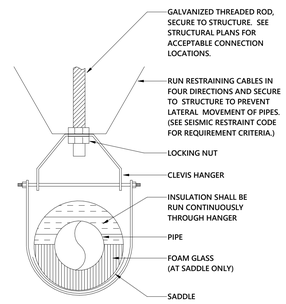


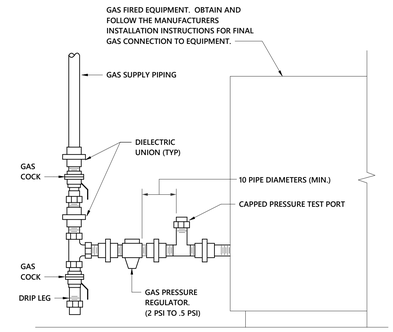
1 GAS FIRED WATER HEATER SCHEMATIC
NOT TO SCALE



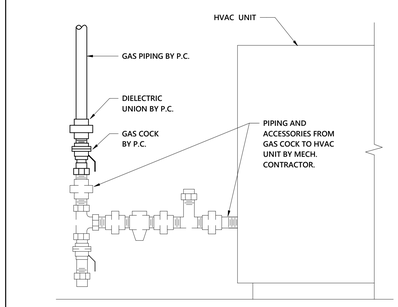
2 HOTWATER RECIRC PUMP DETAIL
NOT TO SCALE



3 PIPE HANGER SCHEMATIC
NOT TO SCALE



4 TYPICAL GAS PIPING CONNECTION TO EQUIPMENT DETAIL
NOT TO SCALE



5 GAS SERVICE PIPING SCHEMATIC - HVAC EQUIPMENT
NOT TO SCALE

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NORTH CAROLINA
Kenneth C. Powell III
E 26023
ENGINEER
06/08/2026

CONSTRUCTION DOCUMENTS

ISSUE DATE:	06/08/2026

REVISIONS

NO.	DESCRIPTION	DATE

WESTERN PIEDMONT COMMUNITY COLLEGE

BUILDING K RENOVATION

200 E College Drive Morganton, NC 28655

WESTERN PIEDMONT COMMUNITY COLLEGE

PROJECT NUMBER 2317

SHEET TITLE
PLUMBING DETAILS

SHEET NUMBER
P501

SCO # 23-27049-01A
NCCCS #2784

OPTIMA# 24-0064

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ABBREVIATIONS

Ø	ROUND	LVR	LOUVER
ABV	ABOVE	LWT	LEAVING WATER TEMPERATURE
AC	AIR CONDITIONING	M/A	MIXED AIR
ADD	ADDENDUM	MAX	MAXIMUM
AFF	ABOVE FINISHED FLOOR	MBH	ONE THOUSAND BTU PER HOUR
AFUE	ANNUAL FUEL UTILIZATION EFFICIENCY	MD	MOTORIZED DAMPER
ALT	ALTERNATE	MECH	MECHANICAL
AP	ACCESS PANEL	MFR	MANUFACTURER
ARCH	ARCHITECT/ARCHITECTURAL	MIN	MINIMUM
BFF	BELOW FINISHED FLOOR	MISC	MISCELLANEOUS
BLW	BELOW	MTR	MOTOR
BTU	BRITISH THERMAL UNITS	MU/A	MAKE-UP/AIR
BTUH	BRITISH THERMAL UNITS PER HOUR	NC	NOISE CRITERIA
CAP	CAPACITY	NC	NORMALLY CLOSED
CFM	CUBIC FEET PER MINUTE	NIC	NOT IN CONTRACT
CLG	CEILING	NO	NORMALLY OPEN
D	DEGREE	NTS	NOT TO SCALE
DB	DRY BULB	O/A	OUTSIDE AIR
DIA	DIAMETER	PD	PRESSURE DROP
DN	DOWN	PLBG	PLUMBING
EA	EACH	PRESS	PRESSURE
EAT	ENTERING AIR TEMPERATURE	PSI	POUNDS PER SQUARE INCH
ELEC	ELECTRICAL	PSIG	POUNDS PER SQUARE INCH GAUGE
EQUIP	EQUIPMENT	PWR	POWER
EWT	ENTERING WATER TEMPERATURE	R/A	RETURN AIR
E/A	EXHAUST AIR	RH	RELATIVE HUMIDITY
EXIST	EXISTING	RL/A	RELIEF AIR
F	DEGREES FAHRENHEIT	RM	REMAIN
FD	FIRE DAMPER	RPM	REVOLUTIONS PER MINUTE
FL	FLOOR	SF	SQUARE FOOT
FPM	FEET PER MINUTE	S/A	SUPPLY AIR
FT	FOOT/FEET	SF	SQUARE FOOT
GC	GENERAL CONTRACTOR	SD	SMOKE DAMPER
GPM	GALLONS PER MINUTE	SP	STATIC PRESSURE
HP	HORSE POWER	T	THERMOSTAT
HTG	HEATING	TD	TEMPERATURE DROP
HTR	HEATER	TEMP	TEMPERATURE
HW	HOT WATER	TYP	TYPICAL
IN	INCH	VAV	VARIABLE AIR VOLUME
LB	POUND	VENT	VENTILATION
LAT	LEAVING AIR TEMPERATURE	WB	WET BULB
LP	LOW PRESSURE		

RENOVATION LEGEND ABBREVIATIONS

ER	EXISTING ITEM RELOCATED TO THIS LOCATION.
RL	EXISTING ITEM TO BE RELOCATED.
EX	EXISTING ITEM TO REMAIN.
RP	EXISTING ITEM TO BE REPLACED.
RV	EXISTING ITEM TO BE REMOVED.
RC	RE-CONNECT

EQUIPMENT ABBREVIATIONS

AC	AIR CONDITIONING UNIT	EWH	ELECTRIC WATER HEATER
AHU	AIR HANDLING UNIT	FCU	FAN COIL UNIT
AS	AIR SEPARATOR	FP	FIRE PUMP
B	BOILER	GI	GREASE INTERCEPTOR
CH	CHILLER	GRV	GRAVITY ROOF VENTILATOR
CT	COOLING TOWER	HWP	HEATING WATER PUMP
CU	CONDENSING UNIT	HX	HEAT EXCHANGER
CUH	CABINET UNIT HEATER	HRU	HEAT RECOVERY UNIT
CWP	CONDENSER WATER PUMP	IDU	INDOOR UNIT
CHWP	CHILLED WATER PUMP	PRV	POWER ROOF VENTILATOR
DBP	DOMESTIC WATER BOOSTER PUMP	RE	RETURN/EXHAUST FAN
DC	DUCT MOUNTED COIL	RTU	ROOFTOP UNIT
DCP	DOMESTIC WATER CIRCULATING PUMP	SEP	SEWAGE EJECTOR PUMP
EF	EXHAUST FAN	SF	SUPPLY FAN
EDC	ELECTRIC DUCT COIL	SP	SUMP PUMP
ERV	ENERGY RECOVERY VENTILATOR	UH	UNIT HEATER
ET	EXPANSION TANK	WH	WATER HEATER

EQUIVALENT MANUFACTURERS LISTING

LISTING OF MANUFACTURER'S NAME DOES NOT GUARANTEE APPROVAL. ALL EQUIPMENT MUST MEET OR EXCEED QUALITY AND CAPACITIES OF SPECIFIED EQUIPMENT. FINAL APPROVAL WILL BE BASED ON EQUIPMENT SUBMITTALS. ANY MANUFACTURER NOT LISTED BUT WISHING TO BID THIS PROJECT SHALL SUBMIT A WRITTEN REQUEST A MINIMUM OF 7 DAYS PRIOR TO BID DATE OR AS INDICATED IN THE SPECIFICATIONS, ALL EQUIPMENT LISTED IN THE PROJECT SCHEDULE IS TO BE CONSIDERED DESIGN BASIS EQUIPMENT. PRIOR APPROVAL IS REQUIRED FOR ALL MANUFACTURERS NOT LISTED.

(ALPHABETICAL ORDER)
AIR DISTRIBUTION: CARNES, KRUEGER, METAL*AIRE, NAILOR, PRICE, TITUS
DDC CONTROLS: TRIDIUM NIAGARA (N4), JCI FACILITY EXPLORER
DUCTED SPLIT SYSTEMS: CARRIER, TRANE, DAIKIN
ENERGY RECOVERY VENTILATORS: RENEW AIRE, COOK, ENGINEERED AIR, GREENHECK, AAON
FANS: COOK, GREENHECK, PENN, TWIN CITY

NOTE:
ALL COST ASSOCIATED WITH SUBSTITUTED/NON-DESIGN BASIS EQUIPMENT TO COMPLY WITH BASIS OF DESIGN, INCLUDING PROVIDING MAINTENANCE ACCESS, CLEARANCE, PIPING, SHEET METAL, ELECTRICAL, REPLACEMENT OF SYSTEM COMPONENTS, BUILDING ALTERATIONS, ETC., SHALL BE INCLUDED IN THE ORIGINAL BASE BID. NO ADDITIONAL COST ASSOCIATED WITH SUBSTITUTED/NON-DESIGN BASIS EQUIPMENT WILL BE APPROVED DURING CONSTRUCTION AND ALL COST WILL BE THE RESPONSIBILITY OF THE MECHANICAL CONTRACTOR.

COMMISSIONING NOTE

THE MECHANICAL CONTRACTOR SHALL COORDINATE WITH COMMISSIONING AGENT AND PROVIDE ALL NECESSARY TIME, MATERIALS, AND PROCEDURES REQUIRED FOR A FULLY COMMISSIONED PROJECT PER NCMC.

OWNER TRAINING

ALL EQUIPMENT SHALL BE PROVIDED WITH OWNER TRAINING FROM FACTORY AUTHORIZED AND CERTIFIED TRAINING PERSONNEL. TRAINING SHALL BE PROVIDED WITHIN 5 DAYS OF OWNER ACCEPTANCE OF OPERATIONAL EQUIPMENT. DURATION AND FORMAT OF TRAINING SHALL BE COORDINATED WITH OWNER, BUT SHALL BE A MINIMUM OF 8 HRS (2) 4 HR SESSIONS OF ONSITE TRAINING WITH THE REQUIRED OWNER PERSONNEL. MECHANICAL CONTRACTOR SHALL DOCUMENT TRAINING WITH DATE/TIME, DURATION, AND OWNER SIGNATURE.

2018 NORTH CAROLINA ENERGY CONSERVATION CODE

COMMERCIAL ENERGY EFFICIENCY - MECHANICAL SUMMARY

C401 METHOD OF COMPLIANCE

- [x] 2018 NCECC CHAPTER 4
- [ ] ASHRAE 90.1-2013 PRESCRIPTIVE
- [ ] ASHRAE 90.1-2013 PERFORMANCE
- [ ] COMCHECK PROVIDED (2018 NCECC)
- [ ] COMCHECK PROVIDED (90.1-2013)
- [ ] ENERGY MODELING DATA PROVIDED
- [ ] N/A (EXISTING LIGHTING, HVAC, AND DOM. WATER HEATING SYSTEMS TO REMAIN)

C406 ADDITIONAL EFFICIENCY PACKAGE OPTIONS

- [ ] C406.2 EFFICIENT MECH EQUIPMENT
- [x] C406.3 REDUCED LTG DENSITY
- [ ] C406.4 ENHANCED LTG CONTROLS
- [ ] C406.5 ON-SITE RENEWABLE ENERGY
- [ ] C406.6 DEDICATED OA SYSTEM
- [ ] C406.7 SERVICE WATER HEATING

C301 CLIMATE ZONE
4A - BURKE COUNTY, NORTH CAROLINA
DESIGN CONDITIONS
EXTERIOR (ASHRAE 90.1-2013 TABLE D-1)
winter dry bulb 11° F.
summer dry bulb 85° F.
summer wet bulb 71° F.
INTERIOR (2018 NCECC SECTION C302.1)
winter dry bulb 72° F.
summer dry bulb 75° F.

C403.2 HEATING & COOLING LOADS AND EQUIPMENT & SYSTEM SIZING

BUILDING HEATING LOAD 217,000 BTUH (PEAK)
BUILDING COOLING LOAD 250,000 BTUH (PEAK)
INSTALLED HEATING CAPACITY REFER TO SCHEDULES
INSTALLED COOLING CAPACITY REFER TO SCHEDULES

C403.2.3 & C406.2 - REQUIRED & INCREASED HVAC EQUIPMENT PERFORMANCE
SYSTEM DESCRIPTION - DX DUCTED SPLIT AIR HANDLER UNITS WITH GAS HEAT; ENERGY RECOVERY VENTILATOR

- [x] MINIMUM HVAC EQUIP EFFICIENCY COMPLIANCE - TABLE C403.2.3
- [ ] INCREASED HVAC EQUIP EFFICIENCY COMPLIANCE - 10% OVER TABLE C403.2.3

EQUIP TYPE	SIZE CATEGORY (BTUH)	SUBCATEGORY	C403.2.3 MINIMUM EFFICIENCY (a)	10% INCREASED EFF. (a)	DESIGN EFFIC.
TABLE C403.2.3(1) - UNITARY AIR CONDITIONERS AND CONDENSING UNITS					
AIR COND, AIR COOLED	< 65,000 (<= 5 TONS)	SPLIT SYSTEM & SINGLE PACKAGE	13.0 SEER	14.3 SEER	SEE SCHEDULE
TABLE C403.2.3(4) - WARM AIR FURNACES					
DUCT FURN GAS FIRED	ALL CAPACITIES	MAXIMUM CAPACITY	80% Ec	88% Ec	SEE SCHEDULE

C403.2.4 THRU C403.2.11

- [x] HVAC SYSTEMS ARE FULLY COMPLIANT WITH THE REQUIREMENTS FOR HVAC SYSTEM CONTROL, VENTILATION, ENERGY RECOVERY, DUCT AND PLENUM INSULATION AND SEALING, PIPING INSULATION, AND SYSTEM COMPLETION.

C403.2.12 - AIR SYSTEM DESIGN AND CONTROL

- [x] ALL FANS INSTALLED ON THE PROJECT ARE 5 HP OR LESS AND ARE EXEMPT FROM THESE REQUIREMENTS.
- [ ] FANS ABOVE 5 HP MEET THE CFM LIMITATIONS SHOWN BELOW:

OPTION 1 - FAN SYSTEM MOTOR NAMEPLATE HP - TABLE C403.2.12.1(1)

ALLOWABLE NAMEPLATE MOTOR HP	CONSTANT VOLUME MINIMUM CFM	VARIABLE VOLUME MINIMUM CFM	DESIGN CFM
7.5	6,818 CFM	5,000 CFM	SEE SCHEDULE
10	9,091 CFM	6,667 CFM	SEE SCHEDULE
15	13,636 CFM	10,000 CFM	SEE SCHEDULE
20	18,182 CFM	13,333 CFM	SEE SCHEDULE
25	22,727 CFM	16,667 CFM	SEE SCHEDULE
30	27,272 CFM	20,000 CFM	SEE SCHEDULE
40	36,364 CFM	26,667 CFM	SEE SCHEDULE
50	45,455 CFM	33,333 CFM	SEE SCHEDULE

C405.8 - ELECTRICAL MOTORS (MANDATORY REQUIREMENTS).

- [x] ELECTRICAL MOTORS HAVE BEEN SPECIFIED TO MEET MINIMUM EFFICIENCY REQUIREMENTS PER C405.8, EXCEPT WHERE EXEMPT.
- [ ] NOT APPLICABLE.

C408 - SYSTEM COMMISSIONING

- [ ] PROJECT AREA IS LESS THAN 10,000 SQUARE FEET AND IS EXEMPT FROM THE SYSTEM COMMISSIONING REQUIREMENTS OF SECTION C408.
- [x] PROJECT AREA IS GREATER THAN 10,000 SQUARE FEET AND REQUIRES SYSTEM COMMISSIONING PER SECTION C408.

TESTING, ADJUSTING, AND BALANCING

1. THE MECHANICAL CONTRACTOR SHALL BALANCE ALL MECHANICAL SYSTEMS TO THE PERFORMANCE SPECIFICATIONS INDICATED ON PLANS AND PROVIDE THE ENGINEER WITH THREE COPIES OF A COMPLETE TEST AND BALANCE REPORT. THE REPORT IS TO BE ISSUED A MINIMUM OF TWO WEEKS PRIOR TO PROJECT COMPLETION. THE TEST AND BALANCE REPORT WILL BE SUBJECT TO REVIEW AND APPROVAL BY THE ENGINEER. ANY ADDITIONAL TESTING, ADJUSTING AND BALANCING REQUIRED (AT ENGINEER'S REQUEST) AFTER REVIEW OF THE INITIAL REPORT SHALL BE PROVIDED AT NO ADDITIONAL COST. TEST AND BALANCE REPORT TO BE COMPLETED BY AN INDEPENDENT, CERTIFIED TEST AND BALANCE CONTRACTOR.
2. CONDUCT TESTING AND BALANCING IN ACCORDANCE WITH TECHNICAL PORTIONS OF THE AABC "NATIONAL STANDARDS FOR TESTING AND BALANCING HVAC SYSTEMS", LATEST EDITION.
3. INSTRUMENTS USED FOR BALANCING MUST HAVE BEEN CALIBRATED WITHIN A PERIOD OF SIX (6) MONTHS PRIOR TO BALANCING. SUBMIT SERIAL NUMBERS, AND DATES OF CALIBRATION OF ALL INSTRUMENTS TO BE USED PRIOR TO THE START OF WORK.
4. SET HVAC SYSTEM AIRFLOW FLOW RATES WITHIN THE FOLLOWING TOLERANCES:
   A. SUPPLY, RETURN, AND EXHAUST FANS AND EQUIPMENT WITH FANS: MINUS 5 TO PLUS 10 PERCENT.
   B. AIR OUTLETS AND INLETS: 0 TO MINUS 10 PERCENT.
5. REFER TO SPECIFICATION SECTION 230593 AND CONTRACT DRAWINGS IN THEIR ENTIRETY FOR ADDITIONAL REQUIREMENTS.

ELECTRICAL/MECHANICAL DEMARCATION

REFER TO DETAIL 9/M-501 FOR MECHANICAL CONTRACTOR'S RESPONSIBILITIES RELATED TO ELECTRICAL DISCONNECTS, STARTERS AND WIRING OF MECHANICAL EQUIPMENT. ALL DISCONNECTS, STARTERS AND WIRING (LOAD SIDE OF DISCONNECTS) SHALL BE FURNISHED AND INSTALLED BY M.C. UNLESS OTHERWISE NOTED IN DETAIL 9/M-501. COORDINATE ALL ELECTRICAL REQUIREMENTS WITH E.C. PRIOR TO ASSEMBLING SHOP DRAWING SUBMITTALS OR ORDERING EQUIPMENT.

MECHANICAL GENERAL NOTES

SEE SPECIFICATIONS FOR ADDITIONAL PROJECT REQUIREMENTS. THESE GENERAL NOTES ARE INTENDED TO SUPPLEMENT THE SPECIFICATIONS. IN THE EVENT THAT THE VERBIAGE IS IN CONFLICT OR CONTRADICTS THE REQUIREMENTS LISTED HERE, THE QUESTION SHALL BE ASKED PRIOR TO BIDDING OR THE MORE STRINGENT SHALL APPLY AT THE ENGINEER'S DISCRETION.

1. DO NOT SCALE DRAWINGS. SEE ARCHITECTURAL DRAWINGS AND REFLECTED CEILING PLANS FOR EXACT LOCATION OF DOORS, WINDOWS, CEILING DIFFUSERS, ETC.
2. ALL EQUIPMENT LISTED IN PROJECT SCHEDULES IS TO BE CONSIDERED DESIGN BASIS EQUIPMENT. ALL COST ASSOCIATED WITH SUBSTITUTED/NON-DESIGN BASIS EQUIPMENT TO COMPLY WITH BASIS OF DESIGN, INCLUDING PROVIDING MAINTENANCE ACCESS, CLEARANCE, PIPING, SHEET METAL, ELECTRICAL, REPLACEMENT OF OTHER SYSTEM COMPONENTS, BUILDING ALTERATIONS, ETC., SHALL BE INCLUDED IN THE ORIGINAL BASE BID. NO ADDITIONAL COST ASSOCIATED WITH SUBSTITUTED/NON-DESIGN BASIS EQUIPMENT WILL BE APPROVED DURING CONSTRUCTION AND ALL COST WILL BE THE RESPONSIBILITY OF THE MECHANICAL CONTRACTOR. THIS INCLUDES ANY MODIFICATIONS TO ANY ASSOCIATED MECHANICAL, PLUMBING, OR ELECTRICAL SYSTEMS REQUIRED BY THIS SPECIFIC MANUFACTURER'S INSTALLATION INSTRUCTIONS.
3. ALL DUCTWORK SHALL BE GALVANIZED SHEET METAL CONSTRUCTED IN ACCORDANCE WITH THE LATEST SMACNA STANDARDS. ALL SUPPLY, RETURN AND OUTSIDE AIR DUCTWORK SHALL BE WRAPPED WITH 2" THICK DUCT WRAP WITH VAPOR BARRIER. INSULATION (INCLUDING FLEXIBLE DUCT INSULATION) SHALL HAVE A MINIMUM INSTALLED R-VALUE OF 6.0. ROOFTOP UNIT RETURN DUCTWORK AND TRANSFER DUCTS SHALL BE LINED WITH 1" THICK FIBERGLASS DUCT LINER FOR ACOUSTICAL PURPOSES. DUCT DIMENSIONS ON PLANS ARE FREE AREA SIZE.
4. SUPPLY AND RETURN DUCTWORK LOCATED OUTSIDE THE BUILDING SHALL BE WRAPPED WITH 3" THICK DUCT WRAP WITH VAPOR BARRIER HAVING A MINIMUM INSTALLED R VALUE OF 8.0. COVER EXTERNAL INSULATION WITH AN ALUMINUM OUTER ENCLOSURE AND SEAL WATER TIGHT.
5. ALL DUCTWORK SHALL BE SEALED PER THE REQUIREMENTS OF THE NORTH CAROLINA INTERNATIONAL MECHANICAL CODE. SEAL MEDIUM PRESSURE SUPPLY DUCTWORK FOR POSITIVE 3" PRESSURE CLASS, SMACNA SEAL CLASS A, SMACNA LEAKAGE CLASS 4. SEAL LOW PRESSURE SUPPLY, RETURN, OUTSIDE AIR, AND EXHAUST DUCTWORK FOR POSITIVE/NEGATIVE 2" PRESSURE CLASS, SMACNA SEAL CLASS A, SMACNA LEAKAGE CLASS 4.
6. ALL PIPING, DUCTS, VENTS, ETC., EXTENDING THROUGH WALLS AND ROOF SHALL BE FLASHED AND COUNTERFLASHED IN A WATERPROOF MANNER.
7. ALL PIPING AND DUCTWORK LOCATIONS SHALL BE COORDINATED WITH THE WORK UNDER OTHER DIVISIONS OF THE SPECIFICATIONS, TO AVOID INTERFERENCE.
8. THE MECHANICAL CONTRACTOR SHALL BALANCE ALL MECHANICAL SYSTEMS TO THE PERFORMANCE SPECIFICATIONS INDICATED ON PLANS AND PROVIDE THE ENGINEER WITH THREE COPIES OF A COMPLETE TEST AND BALANCE REPORT. THE REPORT IS TO BE ISSUED A MINIMUM OF TWO WEEKS PRIOR TO PROJECT COMPLETION. THE TEST AND BALANCE REPORT WILL BE SUBJECT TO REVIEW AND APPROVAL BY THE ENGINEER. ANY ADDITIONAL TESTING, ADJUSTING AND BALANCING REQUIRED (AT ENGINEER'S REQUEST) AFTER REVIEW OF THE INITIAL REPORT SHALL BE PROVIDED AT NO ADDITIONAL COST. TESTING AND BALANCING CONTRACTOR TO CONFIRM FILTERS ARE CLEAN, AND FREE OF DEBRIS PRIOR TO BEGINNING WORK. THE MECHANICAL CONTRACTOR SHALL REPLACE ANY DIRTY FILTERS, AS NEEDED. TEST AND BALANCE REPORT TO BE COMPLETED BY AN INDEPENDENT, CERTIFIED TEST AND BALANCE CONTRACTOR.
9. UPON PROJECT COMPLETION, THE MECHANICAL CONTRACTOR IS RESPONSIBLE FOR PROVIDING THE OWNER INSTALLATION INFORMATION INCLUDING RECORD SUBMITTALS (WITH ANY SUBMITTAL REVIEW COMMENTS ADDRESSED) AND O&M MANUALS FOR EACH PIECE OF EQUIPMENT INCLUDING ALL SELECTED OPTIONS, THE NAME AND ADDRESS OF AT LEAST ONE SERVICE AGENCY, FULL CONTROL SYSTEM O&M AND CALIBRATION INFORMATION INCLUDING WIRING DIAGRAMS, SCHEMATICS, FULL SEQUENCE OF OPERATION, AND PROGRAMMED SETPOINTS. IN ADDITION, THE MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE TO HIRE A REGISTERED DESIGN PROFESSIONAL TO COMMISSION THE INSTALLED SYSTEM AND PROVIDE THE OWNER AND CODE REVIEWER A SEALED STATEMENT OF SYSTEM COMMISSIONING (PER 2018 NCECC APPENDIX C1).
10. PROVIDE A ONE YEAR WARRANTY FOR ALL WORK PERFORMED BEGINNING ON THE DAY THE SYSTEM IS COMPLETELY OPERATIONAL AND ACCEPTABLE BY THE OWNER.
11. PROVIDE MANUFACTURER'S RECOMMENDED CLEARANCES AROUND ALL EQUIPMENT FOR MAINTENANCE AND FILTER REMOVAL.
12. CONDENSATE DRAIN PIPING SHALL BE TYPE 'L' HARD DRAWN COPPER AND SHALL BE INSULATED WITH 1 1/2" THICK FIBERGLASS INSULATION WITH A DENSITY OF 1.5 LB. PER CUBIC FOOT. INSULATION SHALL HAVE A FACTORY APPLIED PRESSURIZED VAPOR BARRIER JACKET WITH PRESSURE SENSITIVE ADHESIVE SELF-SEALING LAP. INSULATION AND JACKET SHALL BE RATED FOR INSULATION IN A RETURN AIR PLENUM.
13. ALL REFRIGERANT PIPE SHALL BE NITROGENIZED ACR COPPER TUBE. SIZE, INSULATE, AND INSTALL REFRIGERANT PIPING PER MANUFACTURER'S RECOMMENDATIONS. REFRIGERANT PIPING INSULATION EXPOSED OUTDOORS SHALL BE COVERED WITH AN OUTER ALUMINUM JACKET.
14. ANY DEVICE REQUIRING A THERMOSTAT FOR CONTROL SHALL BE FURNISHED WITH A THERMOSTAT WHETHER INDICATED ON THE DRAWINGS OR NOT.
15. INSTALL THE TOP OF ALL THERMOSTATS, SENSORS, AND SWITCHES AT 4'-0" (MAXIMUM) ABOVE FINISH FLOOR. COORDINATE EXACT THERMOSTAT LOCATION WITH OWNER PRIOR TO INSTALLATION. ANY DEVICE ON A PERIMETER WALL SHALL BE MOUNTED ON A FOAM-FILLED ELECTRICAL BOX, WITH ALL GAPS BETWEEN BOX AND WALL SEALED TO PREVENT INFILTRATION.
16. CONTRACTOR SHALL VERIFY LOCATION OF ALL ROOF PENETRATIONS WITH ARCHITECT & OWNER PRIOR TO INSTALLATION. NEW ROOF PENETRATIONS MADE THROUGH EXISTING ROOF SYSTEMS SHALL BE VERIFIED WITH THE OWNER'S EXISTING ROOF WARRANTY PRIOR TO INSTALLATION.
17. ROOF CURBS SHALL ALLOW A MINIMUM OF 8" ABOVE ROOF INSULATION FOR FLASHING, OR AS INDICATED ON THE DRAWINGS, WHICHEVER IS GREATER. IN ADDITION, ALL ROOF CURBS OR EQUIPMENT SUPPORT RAILS THAT SUPPORT EQUIPMENT, PIPING, CONDUIT, ETC. EXPOSED ON THE ROOF SHALL HAVE SUFFICIENT HEIGHT TO MAINTAIN A MINIMUM OF 18" CLEARANCE BELOW SUPPORTED EQUIPMENT FOR ROOF MAINTENANCE.
18. CONTRACTOR SHALL LOCATE EXHAUST FANS, OUTLETS, AND GAS FLUES A MINIMUM OF 15'-0" FROM ANY OUTSIDE AIR INTAKE.
19. DRYER VENT WALL CAPS SHALL BE PROVIDED WITH A BACKDRAFT DAMPER. DRYER VENT SHALL NOT EXCEED A TOTAL EQUIVALENT LENGTH OF 64'-0" WITH A 5' DEDUCTION FOR EACH 45° BEND AND A 10' DEDUCTION FOR EACH 90° BEND. (MANUFACTURER: WHIRLPOOL, MODEL: WGD8500DW3)
20. MINIMUM GAS PIPING SIZE SHALL BE 3/4".
21. GAS PIPING AND FITTINGS SHALL BE BLACK STEEL, SCHEDULE 40, IN ACCORDANCE WITH ASTM SPECIFICATION A 106, WITH 150 PSI BLACK MALLEABLE IRON FITTINGS IN ACCORDANCE WITH ASTM SPECIFICATION A 47, GRADE 32510, AND ASA SPECIFICATION B16.3, 125 LB.
22. GAS PIPING SHALL BE INSTALLED TO THE REQUIREMENTS OF THE STATE BUILDING CODE AND NFPA STANDARD NO. 54. ALL PIPING TO BE SUPPORTED BY CLEVIS HANGERS WITH GALVANIZED ROD A MAXIMUM OF 8' ON CENTER. PIPING SHALL BE SUPPORTED BY ROD HANGERS IN THE PIPE RUN 12" OR LESS IN LENGTH FROM THE TOP OF THE PIPE TO THE SUPPORTING STRUCTURE PER THE STATE BUILDING CODE AND ASCE 7.
23. GAS PIPING SHALL BE TESTED IN ACCORDANCE WITH THE PROCEDURES DESCRIBED IN NFPA NO 54. ANY OTHER TEST AS REQUIRED BY THE LOCAL GAS INSPECTION DEPARTMENT OR GAS COMPANY SHALL ALSO BE PERFORMED.
24. NATURAL GAS PIPING AND FITTINGS ABOVE GRADE: SCHEDULE 40 BLACK STEEL PIPING, TYPE S, SEAMLESS, GRADE B (ASTM A 53) AND 150 PSI MALLEABLE BLACK IRON FITTINGS, GRADE 32510, (ASTM B 16.3) OR FORGED STEEL WELDING TYPE FITTINGS (ASTM A234). PROVIDE THREADED JOINTS FOR PIPE 2" AND SMALLER. PROVIDE WELDED JOINTS (ASME B31.9) FOR PIPE 2 1/2" AND LARGER.
25. NATURAL GAS PIPING AND FITTINGS OUTSIDE BELOW GRADE: SCHEDULE 40 BLACK STEEL, TYPE S, SEAMLESS, GRADE B (ASTM A 53) AND FORGED STEEL WELDING TYPE FITTINGS (ASTM A234) WITH (AWWA C105) POLYETHYLENE JACKET OR DOUBLE LAYER, HALF LAPPED 10 MIL POLYETHYLENE TAPE. PROVIDE WELDED JOINTS (ASME B31.9) FOR ALL UNDERGROUND PIPE.
26. SPACE GAS PIPING HANGER RODS 8'-0" ON CENTER MAXIMUM AND SPACE TRANSVERSE BRACING 20'-0" ON CENTER MAXIMUM. TRANSVERSE BRACING FOR ONE SECTION MAY ACT AS LONGITUDINAL BRACING FOR THE PIPE SECTION CONNECTED TO IT IF THE BRACING IS INSTALLED WITHIN 24" OF THE ELBOW OR TEE. COORDINATE HANGER LOCATIONS WITH STRUCTURAL DRAWING DETAILS.
27. PROVIDE A.G.A. CERTIFIED SHUT-OFF VALVES MINIMUM, 125 PSI RATED, NON- LUBRICATED PLUG TYPE WITH BRONZE BODY AND BRONZE PLUG, STRAINERS AND REGULATORS (AS RECOMMENDED BY THE EQUIPMENT MANUFACTURER) FOR ALL EQUIPMENT CONNECTED TO THE NATURAL GAS SYSTEM.
28. PAINT ALL GAS PIPING WITH 2 COATS OF YELLOW ENAMEL PAINT APPLIED WITH A BRUSH (2 MIL THICKNESS MINIMUM). PROVIDE PRE-PRINTED LABELS WITH BLACK LETTERING INDICATING THE GAS PRESSURE AND THE WORD "GAS" ON THE PIPE AT 5'-0" CENTERS FOR ALL GAS PIPING.
29. ALL ISOLATION VALVES, TERMINAL UNITS, CONTROLS, ETC. REQUIRING ACCESS AND SERVICE SHALL BE INSTALLED WITHIN 18" OF THE CEILING FOR SERVICE ACCESSIBILITY. LOCATIONS SHALL BE INDICATED ON THE CEILING GRID PER THE SPECIFICATIONS.
30. ALL EQUIPMENT CONCRETE PAD SIZES FOR MECHANICAL EQUIPMENT SHALL BE CONFIRMED WITH APPROVED SHOP DRAWING SUBMITTALS AND ASSOCIATED UNIT MANUFACTURER ANCHOR LOCATIONS PRIOR TO FABRICATION/INSTALLATION. THE MECHANICAL AND PLUMBING CONTRACTORS SHALL COORDINATE THE EXACT LOCATION OF MECHANICAL EQUIPMENT HOUSEKEEPING PADS WITH THE FLOOR DRAIN LOCATIONS PRIOR TO INSTALLATION OF DRAINS AT EQUIPMENT/PAD LOCATIONS.
31. DUCTWORK AND PIPING PASSING THROUGH/ABOVE ELECTRICAL ROOMS SHALL BE CLOSELY COORDINATED WITH THE ELECTRICAL CONTRACTOR. DUCTWORK OR PIPING SHALL NOT BE LOCATED ABOVE ELECTRICAL PANELS.
32. EQUIPMENT OPERATED DURING CONSTRUCTION SHALL USE FILTERED MEDIA TO PREVENT CONSTRUCTION DEBRIS FROM ENTERING COILS, DUCTWORK SYSTEMS, AIR TERMINALS ETC. AT COMPLETION OF CONSTRUCTION, MECHANICAL CONTRACTOR SHALL CLEAN ALL SYSTEMS WITH ALL CONTROL DEVICES WIDE OPEN AND REMOVE ANY REMAINING DEBRIS PRIOR TO TEST AND BALANCING. MECHANICAL CONTRACTOR SHALL REPLACE ALL FILTRATION WITH NEW FILTERS AT COMPLETION OF CONSTRUCTION. ANY DUCTWORK, AIR TERMINALS, AND/OR OTHER EQUIPMENT UPSTREAM OF FILTRATION SHALL BE CLEANED THOROUGHLY OF CONSTRUCTION DEBRIS BEFORE HANDING OVER TO OWNER.
33. COMMERCIAL DRYER EXHAUST DUCTWORK SHALL BE CONSTRUCTED OF GALVANIZED SHEET METAL NOT LESS THAN 0.0195 INCHES THICK. EXHAUST DUCT SHALL BE ASSEMBLED WITH SMOOTH INTERIOR SURFACE SO THAT THE JOINTS DO NOT PERMIT THE ACCUMULATION OF LINT, DO NOT USE SHEET METAL SCREWS AT JOINTS. ALL 90° TURN SHALL HAVE LONG RADIUS ELBOWS. ALL DUCTWORK SHALL BE INSTALLED PER THE DRYER MANUFACTURER'S RECOMMENDATIONS. COMMERCIAL DRYER EXHAUST DUCTWORK SHALL BE WRAPPED WITH TWO LAYERS OF 1 1/2" THICK THERMAL INSULATION BLANKET AS MANUFACTURED BY FIREMASTER (OR EQUAL). INSULATION SHALL BE INSTALLED PER NFPA-96 AND IN ACCORDANCE WITH MANUFACTURERS' RECOMMENDATIONS TO OBTAIN A 2-HOUR RATED ASSEMBLY. ASSEMBLY SHALL BE U.L. APPROVED.
34. THE MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING RESTRAINTS TO RESIST THE EARTHQUAKE EFFECTS ON THE MECHANICAL SYSTEMS. THE REQUIREMENTS FOR THOSE RESTRAINTS ARE FOUND IN THE LOCAL BUILDING CODE AND ASCE 7. THE ANCHORAGE OF THE MECHANICAL SYSTEMS SHALL COMPLY WITH THE REQUIREMENTS OF THE LOCAL BUILDING CODE AND ASCE 7.
35. MECHANICAL CONTRACTOR SHALL PROVIDE PRE-PRINTED COLOR-CODED PIPE LABELS WITH 1-1/2" HIGH LETTERING INDICATING SERVICE AND FLOW DIRECTION. PLASTIC PIPE LABELS UTILIZED IN A RETURN AIR PLENUM SHALL BE LISTED/APPROVED FOR USE IN A RETURN AIR PLENUM. ALL PIPING TO MATCH EXISTING FACILITIES STANDARD (IF APPLICABLE). OTHERWISE, PIPE LABELS SHALL MATCH THE FOLLOWING:
    REFRIGERANT PIPING: YELLOW BACKGROUD, BLACK LETTERING
36. ALL MECHANICAL EQUIPMENT SHALL BE U.L. LISTED AND LABELED AS A COMPLETE PACKAGE, NOT THROUGH INDIVIDUAL COMPONENTS OR PARTS. PROVIDE REQUIRED 3RD PARTY FIELD UL LISTING SERVICES AS REQUIRED TO COMPLY.

COORDINATION DRAWINGS

THE MECHANICAL CONTRACTOR SHALL ORGANIZE COORDINATION MEETINGS TO DEVELOP A SET OF DRAWINGS WITH ALL CONTRACTORS (ELECTRICAL, MECHANICAL, PLUMBING, FIRE PROTECTION, IT/DATA, AND GENERAL CONTRACTOR). THE MECHANICAL CONTRACTOR WILL HAVE THE LEAD RESPONSIBILITY FOR THE COORDINATION DRAWINGS. THE MECHANICAL CONTRACTOR SHALL PRODUCE THE ORIGINAL DRAWINGS AND FORWARD THE DRAWINGS TO EACH OF THE OTHER CONTRACTORS FOR THEM TO ADD THEIR SYSTEMS TO THIS SET OF COORDINATION DRAWINGS. THE CONTRACTORS WILL DEVELOP THE DRAWINGS IN THIS ORDER: MECHANICAL, FIRE PROTECTION, PLUMBING, ELECTRICAL, IT/DATA (INCLUDING CABLE TRAY) AND GENERAL. THIS SHALL ALSO BE THE ORDER OF PRECEDENCE FOR INSTALLATION OF SYSTEMS. ANY RELOCATION OF SYSTEM ROUTINGS WILL BE FOUND IN THE COORDINATION PHASE AND NOTICED BY EACH OF THE CONTRACTORS. THESE DRAWINGS, WHEN COMPLETED, SHALL BE SIGNED OFF BY ALL OF THE ABOVE LISTED PARTIES. DRAWINGS SHALL BE COMPLETED PRIOR TO FABRICATION AND INSTALLATION OF DUCTWORK AND PIPING SYSTEMS, OR PURCHASE OF EQUIPMENT. THE FOLLOWING ITEMS REPRESENT THE MINIMUM REQUIREMENTS FOR SHOP DRAWINGS AND COORDINATION DRAWINGS:

1, ALL SHOP AND COORDINAGION DRAWINGS WILL BE 1/4" = 1'-O" SCALE
2. DRAWINGS WILL BE ORIGINAL DRAWINGS AND NOT OVERLAYS OF THE CONTRACT/DESIGN
3. COORDINATION DRAWINGS WILL BE DRAWN ON REPRODUCIBLE MATERIAL 48'x36".
4. COORDINATION DRAWINGS ARE NOT SHOP DRAWINGS AND ARE REQUIRED IN ADDITION TO SHOP DRAWINGS.
5. ONCE THE COMPLETE COORDINATION DRAWINGS HAVE BEEN COMPILED, THE MECHANICAL CONTRACTOR WILL DISTRIBUTE ONE SIGNED SET TO EACH OF THE FOLLOWING CONTRACTORS: ELECTRICAL, PLUMBING, FIRE PROTECTION, AND GENERAL. ADDITIONAL SETS WILL BE SENT TO THE OWNER, ARCHITECT, AND ENGINEER.

MECHANICAL SHEET INDEX

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M004	MECHANICAL CONTROLS AND POINTS LIST
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M201	FIRST FLOOR MECHANICAL PLAN
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MECHANICAL LEGEND

	DESCRIPTION
16x8	SQUARE DUCT SIZE TAG (WIDTH x HEIGHT)
16"Ø	ROUND DUCT SIZE TAG (DIAMETER)
(EX)	EXISTING DUCT TAG
	DUCT BEING DEMOLISHED
S/A	SUPPLY AIR
O/A	OUTDOOR AIR
R/A	RETURN AIR
E/A	EXHAUST AIR
	SUPPLY AIR DIFFUSER (4-WAY)
	RETURN AIR GRILLE
	RETURN AIR GRILLE WITH SOUND BOOT
	EXHAUST AIR GRILLE
—R—	REFRIGERANT LINE
—D—	CONDENSATE DRAIN
	POINT OF EXISTING TO NEW CONNECTION
	POINT OF DISCONNECT TO EXISTING CONNECTION
Ⓣ	THERMOSTAT (4'-0" AFF TO TOP)
©	CARBON MONOXIDE SENSOR
N.I.C.	NOT IN CONTRACT
(EX)	EXISTING
AFF	ABOVE FINISHED FLOOR
X / X	SECTION CUT REFERRING DETAIL NUMBER REFERRING SHEET NUMBER

MECHANICAL DEMOLITION NOTES

1. THE MECHANICAL CONTRACTOR SHALL VISIT SITE PRIOR TO BEGINNING WORK TO DETERMINE THE LEVEL OF DEMOLITION REQUIRED AND INCLUDE ALL NECESSARY PRICING IN THEIR BID.
2. IT IS THE MECHANICAL CONTRACTORS RESPONSIBILITY TO FIELD VERIFY ALL EXISTING DUCTWORK AND PIPING. ANY DISCREPANCIES BETWEEN EXISTING CONDITIONS AND MECHANICAL PLANS SHOULD BE BROUGHT TO THE ATTENTION OF THE MECHANICAL ENGINEER.
3. THE MECHANICAL CONTRACTOR SHALL FIELD VERIFY ALL EXISTING FIRE DAMPERS ARE LOCATED WHERE INDICATED ON DRAWINGS. ALL NEW AND EXISTING DUCTWORK PENETRATING NEW RATED WALLS SHALL BE PROVIDED WITH A 1 1/2-HOUR (TYPE-B) FIRE DAMPER WHETHER INDICATED ON PLANS OR NOT.
4. EXISTING GRILLES/DIFFUSERS AND RUN OUTS MAY BE REUSED IF SIZED ADEQUATELY TO PROVIDE THE AIR QUANTITIES INDICATED. ANY GRILLES/DIFFUSERS BEING REUSED SHALL BE CLEANED AND VERIFIED TO BE IN GOOD WORKING CONDITION.
5. M.C. SHALL VERIFY ALL EXISTING SUPPLY AND RETURN AIR DUCT TO REMAIN IS INSULATED WITH VAPOR BARRIER INTACT. IF EXISTING DUCT IS NOT INSULATED WITH EITHER DUCT LINER OR WRAP, M.C. SHALL PROVIDE 2" THICK DUCT WRAP WITH VAPOR BARRIER (MIN. R-VALUE OF 5.0).
6. M.C. SHALL VERIFY ALL EXISTING PIPING SYSTEMS TO REMAIN ARE INSULATED WITH VAPOR BARRIER INTACT. IF ANY PORTION OF THE PIPING SYSTEM IS MISSING INSULATION OR DETERMINED DURING ANY PHASE OF THE PROJECT AS DEFECTIVE, THAT PORTION SHALL BE PROVIDED WITH NEW INSULATION. MINOR TEARS ON EXISTING PIPING MAY BE REPAIRED WITH TAPES, ADHESIVE, OR SEALANT. EXISTING PIPING SYSTEMS SHALL INCLUDE CHILLED WATER, CONDENSER WATER, HOT WATER, STEAM & STEAM CONDENSATE, REFRIGERANT, AND A/C CONDENSATE DRAIN PIPING. THE MECHANICAL CONTRACTOR SHALL MAKE PROVISIONS IN THEIR BASE BID TO COVER ALL COSTS NECESSARY ACHIEVE A CONTINUOUS VAPOR BARRIER THROUGHOUT THESE EXISTING SYSTEMS. REFER TO SPECIFICATIONS SECTION 230700/ MECHANICAL GENERAL NOTES FOR INSULATION MATERIAL REQUIREMENTS.
7. FOR ALL EXISTING HVAC EQUIPMENT AND DUCTWORK NOTED TO REMAIN AND SERVING AREA OF RENOVATION, MECHANICAL CONTRACTOR SHALL INSPECT EQUIPMENT (AND ANY ASSOCIATED CONTROLS, VALVES, DAMPERS, ETC.) TO VERIFY PROPER WORKING ORDER. MECHANICAL CONTRACTOR TO SERVICE AND CLEAN EXISTING HVAC UNITS TO ENSURE DESIGN AIRFLOW AND COOLING/HEATING CAPACITIES ARE OBTAINED. ANY EQUIPMENT FOUND TO BE INOPERABLE OR SHORT OF DESIGN CAPACITIES SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER PRIOR TO PROJECT COMPLETION. PROVIDE CLEAN FILTERS IN ALL UNITS AT COMPLETION OF PROJECT. DAMAGED DUCTWORK SHALL BE REPAIRED.

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NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 17228 RONALD V. ALMOND
06/08/2026

CONSTRUCTION DOCUMENTS

ISSUE DATE: 06/08/2026

REVISIONS

NO.	DESCRIPTION	DATE

WESTERN PIEDMONT COMMUNITY COLLEGE
BUILDING K RENOVATION
200 E College Drive Morganton, NC 28655

WESTERN PIEDMONT COMMUNITY COLLEGE

PROJECT NUMBER 2317
SHEET TITLE
MECHANICAL LEGEND AND NOTES
SHEET NUMBER
M001

SCO # 23-27049-01A
NCCCS #2784
OPTIMA# 24-0064

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GRILLE AND DIFFUSER SCHEDULE

SYMBOL	SERVICE	CFM RANGE	FACE SIZE (*)	NECK SIZE	TYPE	OBD	PRICE
A	SUPPLY	0-125	24x24	6x6	LOUVERED	NO	SMD
B	SUPPLY	130-280	24x24	9x9	LOUVERED	NO	SMD
C	SUPPLY	285-500	24x24	12x12	LOUVERED	NO	SMD
D	SUPPLY	505-780	24x24	15x15	LOUVERED	NO	SMD
E	RET/EXH	(SEE PLANS FOR SIZE AND CFM)			FIXED BLADE	YES	530
F	RET/EXH	200-300	24x24	10x10	CUBE CORE	NO	80
G	RET/EXH	305-450	24x24	12x12	CUBE CORE	NO	80
H	RET/EXH	455-800	24x24	16x16	CUBE CORE	NO	80

NOTES:

1. ALL CEILING AND WALL MOUNTED DEVICE FINISHES TO BE REVIEWED AND CONFIRMED BY ARCHITECT.
2. ALL DEVICES SHALL BE FURNISHED WITH FRAMES SUITABLE FOR TYPE OF INSTALLATION REQUIRED.
3. ALL AIR DISTRIBUTION DEVICES LOCATED IN KITCHEN, LOCKER ROOMS, AND TOILETS SHALL BE ALL ALUMINUM CONSTRUCTION.
4. ALL DOUBLE DEFLECTION SUPPLY GRILLES SHALL HAVE DAMPER BLADES ADJUSTED TO PROVIDE AIRFLOW PATTERN INDICATED BY FLOW ARROWS ON PLANS. DAMPERS SHALL BE ADJUSTED TO A 30 DEGREE POSITION UNLESS NOTED OTHERWISE ON PLANS.

EXHAUST FAN SCHEDULE

SYMBOL	LOCATION	MANUFACTURER	MODEL NO.	TYPE	CFM	APPROX. ESP	DRIVE TYPE	FAN RPM	WATTS / H.P.	ELECTRICAL DATA VOLTAGE-PHASE/Ø	ACCESSORIES	CONTROL TYPE
EF-1	FAMILY / RESTROOM 182	GREENHECK	SP-A110	INLINE	75	0.300	DIRECT	950	17 WATTS	120 V-1Ø	A,B,F,G,O	5
EF-2	FAMILY / RESTROOM 181	GREENHECK	SP-A110	INLINE	75	0.300	DIRECT	950	17 WATTS	120 V-1Ø	A,B,F,G,O	5
EF-3	JANITOR 187	GREENHECK	SQ-70-VG	INLINE	75	0.300	DIRECT	1427	1/15 H.P.	120 V-1Ø	A,B,F,G	5
EF-4	DISPENSARY 188	GREENHECK	SQ-90-VG	INLINE	200	0.300	DIRECT	1158	1/6 H.P.	120 V-1Ø	A,B,F,G	5

EXHAUST FAN SCHEDULE ACCESSORIES:

A. DISCONNECT SWITCH
B. GRAVITY BACKDRAFT DAMPER
C. MOTORIZED BACKDRAFT DAMPER
D. PREFAB. ROOF CURB
E. BIRDSCREEN
F. ACOUSTICAL LINING
G. HANGING BRACKETS WITH VIBRATION ISOLATION
H. WL, WALL LOUVER DISCHARGE
I. RCC OR GRS ROOF CAP (FLAT ROOF) OR RJ ROOF CAP (PITCHED ROOF)
J. WALL MOUNTING COLLAR
K. INLET GAURD
M. 2" WASHABLE ALUMINUM FILTERS
N. MOTORSIDE FAN GUARD
O. EXHAUST GRILLE
P. U.L. 762
Q. VENTED ROOF CURB EXTENSION
R. COMBINATION KITCHEN HOOD FAN CURB
S. INTERLOCK WITH FUME HOOD
T. PROVIDE DRAIN PLUG ACCESSORY
U. ROOF SUPPORT RAILS
V. VFD

EXHAUST FAN SCHEDULE CONTROLS:

1. WALL MOUNTED THERMOSTAT (REVERSE ACTING, SET FOR 80°)
2. INTERLOCK WITH ROOM LIGHT SWITCH (FAN SHALL OPERATE WHEN LIGHT IS ON IF ANY ROOM IS SERVED BY FAN)
3. WALL MOUNTED ON/OFF SWITCH WITH IDENTIFICATION LABEL
4. WALL MOUNTED MUSHROOM PUSH BUTTON SWITCH/STARTER WITH IDENTIFICATION LABEL
5. CONTROLLED BY BUILDING AUTOMATION SYSTEM
6. CONTINUOUS OPERATION
7. CONTROLLED BY THE FACP AND FIREMAN'S MANUAL OVER-RIDE CONTROL PANEL IN FIRE COMMAND ROOM. NO MECHANICAL CONTROL POINTS REQUIRED BY M.C. FOR SMOKE CONTROL FANS

EXHAUST FAN SCHEDULE NOTES:

1. ALL FANS SHALL BE U.L. LISTED AND LABELED AND SHALL BE AMCA CERTIFIED FOR SOUND AND AIR FLOW. ALL FANS INSTALLED INSIDE, ABOVE, OR ADJACENT TO OCCUPIED SPACES SHALL HAVE A MAXIMUM 9.0 INLET SONE LEVEL.
2. ALL FANS SHALL BE SUPPLIED BY ONE MANUFACTURER UNLESS NOTED OTHERWISE.
3. MECHANICAL CONTRACTOR SHALL PROVIDE MAGNETIC STARTER WITH AUXILIARY CONTACTS AS REQUIRED.
4. PROVIDE ALL DIRECT DRIVE FANS WITH SPEED CONTROLLERS.

FIXED PLATE CROSS FLOW - ENERGY RECOVERY VENTILATOR SCHEDULE

SYMBOL	SUPPLY (CFM)	SUPPLY E.SP. (IN H20)	FAN HP	EXHAUST AIR EXH. (CFM)	EXH. E.S.P. (IN H20)	FAN HP	SUMMER SUPPLY AIR CONDITIONS (°F.) DRY BULB (F°)	WET BULB (F°)	SPECIFIC HUMIDITY	ENTHALPY	WINTER SUPPLY AIR CONDITIONS (°F.) DRY BULB (F°)	WET BULB (F°)	SPECIFIC HUMIDITY	ENTHALPY	MCA	MOCP	VOLTAGE	Phase	MANUFACTURER RENEWAIRE MODEL
ERV-1	1575	0.50	2.88 hp	1575	0.50	2.9 hp	80.5	67.7	85.5	28.6	54.4	40.7	17.4	21.2	12.8	15.0	208 V	3	HE20
ERV-2	1400	0.50	2.00 hp	1400	0.50	2.9 hp	81.0	68.1	86.9	28.6	52.9	39.5	16.3	21.2	12.8	15.0	208 V	3	HE15

NOTES:

1. ALL TEMPERATURES ARE MEASURED IN DEGREES FAHRENHEIT, SPECIFIC HUMIDITY IS MEASURED IN GRAINS PER POUND, AND ENTHALPY MEASURED IN BTU'S PER POUND.
2. OUTDOOR DESIGN CONDITIONS: SUMMER 95° F. D.B., 78° F W.B., WINTER 20° F D.B., 16.4° F. W.B.
3. INDOOR DESIGN CONDITIONS: SUMMER 76° F. D.B., 50% RELATIVE HUMIDITY, WINTER 72° F. D.B., 35% RELATIVE HUMIDITY.
4. PROVIDE ALL UNITS WITH BACNET CONTROLS.
5. PROVIDE UNITS WITH MANUFACTURER SUPPLY / EXHAUST UNIT ISOLATION DAMPERS.

CONDENSING FURNACE SCHEDULE (R-32)

SYMBOL	CFM	NOMINAL TONNAGE	O.A. CFM	E.S.P.	COOLING COIL EFFICIENCY(SEER2)	TC (BTUH)	MFG	COOLING COIL MODEL	HEATING CAPACITY INPUT (BTUH)	OUTPUT (BTUH)	EFF. (AFUE) %	MCA	ELECTRICAL DATA MOCP	VOLTAGE	PH	WEIGHT	FURNACE MODEL
IDU-1	1400	3.5	275	0.50	14.5	39000	DAIKIN	CHPTA4230C3	100,000	92,100	92	13.4	20.0	120 V	1	204 lb	DR92SN1005CN
IDU-2	1900	5	370	0.50	13.8	55500	DAIKIN	CHPTA6030D3	100,000	92,100	92	16.4	25.0	120 V	1	219 lb	DR92SN1005CN
IDU-3	1100	3	790	0.50	15.2	34200	DAIKIN	CHPTA3630B3	100,000	92,100	92	9.8	15.0	120 V	1	189 lb	DR92SN1005CN
IDU-4	1100	3	785	0.50	15.2	34200	DAIKIN	CHPTA3630B3	100,000	92,100	92	9.8	15.0	120 V	1	189 lb	DR92SN1005CN
IDU-5	1200	3	700	0.50	15.2	34200	DAIKIN	CHPTA3630B3	100,000	92,100	92	9.8	15.0	120 V	1	189 lb	DR92SN1005CN
IDU-6	1200	3	700	0.50	15.2	34200	DAIKIN	CHPTA3630B3	100,000	92,100	92	9.8	15.0	120 V	1	189 lb	DR92SN1005CN
IDU-7	1200	3	235	0.50	15.2	34200	DAIKIN	CHPTA3630B3	100,000	92,100	92	9.8	15.0	120 V	1	189 lb	DR92SN1005CN
IDU-8	1900	5	370	0.50	13.8	55500	DAIKIN	CHPTA6030D3	100,000	92,100	92	16.4	25.0	120 V	1	219 lb	DR92SN1005CN

NOTES:

1. COOLING CAPACITY BASED ON 80°/67° ENTERING AIR.
2. PROVIDE ALL UNITS WITH: BACNET THERMOSTAT AND 1" THICK DISPOSABLE FILTER (MERV 8 MINIMUM). MANUFACTURER CONDENSATE DRAIN KIT.
3. ALL UNITS SHALL BE AGA CERTIFIED AND U.L. LABELED.
4. EACH FURNACE SHALL BE SUPPLIED WITH CONCENTRIC VENT/COMBUSTION-AIR KIT AS RECOMMENDED BY THE UNIT MANUFACTURER. PROVIDE FACTORY CONCENTRIC ROOF OR WALL CAP FOR TERMINATION OF COMBUSTION-AIR/VENT PIPING AS INDICATED ON THE DRAWINGS.
5. ALL UNITS SHALL HAVE MANUFACTURER REFRIGERANT LEAK DETECTION INTEGRAL TO THE UNIT CONTROLS. UPON REFRIGERANT LEAK BEING DETECTED, INDOOR UNIT SHALL BE ENERGIZED TO CIRCULATE AIR THROUGH THE ENTIRE DUCT SYSTEM.

CONDENSING UNIT SCHEDULE (R-32)

SYMBOL	NOMINAL TONNAGE	COOLING COIL TC (BTUH)	EFFICIENCY SEER2	EFFICIENCY EER2	ELECTRICAL DATA MCA	MOCP	VOLTAGE	PH	WEIGHT	MANUFACTURER (DAIKIN) MODEL	MATCHING INDOOR UNIT
CU-1	3.5	39000	14.5	12	19.0	30.0	208 V	1	239 lb	DC4SEA421	IDU-1
CU-2	5.0	55500	13.8	11.2	32.4	50.0	208 V	1	244 lb	DC4SEA601	IDU-2
CU-3	3.0	34200	15.2	12	17.8	30.0	208 V	1	178 lb	DC4SEA361	IDU-3
CU-4	3.0	34200	15.2	12	17.8	30.0	208 V	1	178 lb	DC4SEA361	IDU-4
CU-5	3.0	34200	15.2	12	17.8	30.0	208 V	1	178 lb	DC4SEA361	IDU-5
CU-6	3.0	34200	15.2	12	17.8	30.0	208 V	1	178 lb	DC4SEA361	IDU-6
CU-7	3.0	34200	15.2	12	17.8	30.0	208 V	1	178 lb	DC4SEA361	IDU-7
CU-8	5.0	55500	13.8	11.2	32.4	50.0	208 V	1	244 lb	DC4SEA601	IDU-8

NOTES:

1. COOLING CAPACITY @ 95 AMBIENT.
2. ALL UNITS SHALL BE U.L. LISTED AND HAVE A MINIMUM SEER2 OF 13.
4. MOUNT UNITS ON A 4" THICK CONCRETE PAD AND PROVIDE MANUFACTURER'S RECOMMENDED CLEARANCES AROUND UNITS.
5. PROVIDE UNITS WITH CONDENSER COIL HAIL GUARDS AND LOW AMBIENT CONTROLS.
6. ALL UNITS SHALL HAVE MANUFACTURER REFRIGERANT LEAK DETECTION INTEGRAL TO THE UNIT CONTROLS.
7. FOR REFRIGERANT LINE APPLICATIONS WITH A TOTAL EQUIVALENT LENGTH BETWEEN 50'-0" AND 175'-0". THE FOLLOWING ACCESSORIES SHALL BE PROVIDED;
   -COMPRESSOR CRANKCASE HEATER
   -FOR HORIZONTAL CONFIGURATION: PROVIDE LIQUID LINE SOLENOID WITHIN 2'-0" OUTDOOR UNIT WITH FLOW ARROW POINTING TOWARD OUTDOOR UNIT. VAPOR LINE SHOULD SLOPE TOWARD INDOOR UNIT.
   -MECHANICAL CONTRACTOR & UNIT MANUFACTURER ARE TO REVIEW INSTALLATION, AND FOLLOW MANUFACTURER'S RECOMMENDATIONS FOR LONG REFRIGERANT LINE APPLICATIONS (AS DEFINED BY UNIT MFGR).

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KEITH CARROLL HESSEMER 017228 ENGINEER RONALD V. ALLEN
06/08/2026

CONSTRUCTION DOCUMENTS

ISSUE DATE: 06/08/2026

REVISIONS

NO.	DESCRIPTION	DATE

WESTERN PIEDMONT COMMUNITY COLLEGE
BUILDING K RENOVATION
200 E College Drive Morganton, NC 28655

WESTERN PIEDMONT COMMUNITY COLLEGE

PROJECT NUMBER 2317

SHEET TITLE
MECHANICAL SCHEDULES

SHEET NUMBER
M002

SCO # 23-27049-01A
NCCCS #2784

OPTIMA# 24-0064

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SPACE VENTILATION CALCULATIONS (NCMC 2018, SECT 403):

								ZONE AIR DISTRIBUTION EFFECTIVENESS AT CONDITIONED ANALYZED (Ez):				0.8
SYSTEM	ROOM NAME	OCCUPANCY CLASSIFICATION	Rp (CFM/PERSON)	Ra (CFM/SQ.FT.)	OCCUPANT DENSITY PEOPLE/1000 SQ.FT.	EXHAUST AIRFLOW (CFM/SQ.FT.)	Az AREA (SQ. FT.)	Pz CALCULATED OCCUPANCY (PEOPLE)	RpPz CALCULATED PEOPLE O/A (CFM)	RaAz CALCUATED AREA O/A (CFM)	Vbz PEOPLE + AREA O/A (CFM)	CALCULATED AREA E/A (CFM)
IDU-1	COSMO CLASSROOM	CLASSROOM (AGE 9+)	7.5		35		975	24	180	0	180	0
	CORRIDOR	CORRIDOR		0.06			522	0	0	31	31	0
	*based on seats					**Total Area:**	**1,497**			**Required:**	264	0
										Provided:	**275**	0
IDU-2	CORRIDOR	CORRIDOR		0.06			522	0	0	31	31	0
	CCP PRACTICE LAB*	CLASSROOM (AGE 9+)	7.5		35		635	20	150	0	150	0
	FAMILY/UNISEX RESTROOM	TOILET ROOMS PUBLIC				70	1	(FIXTURES)	0	0	0	70
	WOMEN'S RESTROOM	TOILET ROOMS PUBLIC				70	1	(FIXTURES)	0	0	0	70
	RECEPTION*	RECEPTION	5	0.06	30		449	**5**	25	27	52	0
	STORAGE*	STORAGE		0.12			323	0	0	39	39	0
	* based on seats					**Total Area:**	**2,083**			**Required:**	340	175
										Provided:	**370**	**175**
IDU-3 & IDU-4	MANICURE/PEDICURE	NAIL SALONS	20	0.12	25	0.6	822	21	420	99	519	493
	PRACTICE	BEAUTY SALONS	20	0.12	25	0.6	760	19	380	91	471	456
						Total Area:	**1,582**			**Required:**	1237	1187
										Provided:	**1575**	**1575**
IDU-5 & IDU-6	CLINIC / SHAMPOO	BEAUTY SALONS	20	0.12	25	0.6	1,642	42	840	197	**1037**	**985**
						Total Area:	**1,642**			**Required:**	1296	1232
										Provided:	**1400**	**1400**
IDU-7	BREAK	OFFICE	5	0.06	5		388	2	10	23	33	0
	EXISTING ELEC	MECH/ELECT		0.12			364	0	0	44	44	0
	EXISTING COMM	MECH/ELECT		0.12			130	0	0	16	16	0
	CORRIDOR 2	CORRIDOR		0.06			350	0	0	21	21	0
						Total Area:	**1,232**			**Required:**	142	0
										Provided:	**235**	**0**
IDU-8	ESTHETICS	CLASSROOM (AGE 9+)	7.5		35		922	10	75	0	75	0
	OPEN OFFICE	OFFICE	5	0.06	5		240	2	10	14	24	0
	JANITOR/MECHANICAL	STORAGE				70	1	0	0	0	0	70
	DISPENSARY	STORAGE		0.12			390	0	0	47	47	0
	LAUNDRY	STORAGE		0.12			170	0	0	20	20	0
	* based on seats					**Total Area:**	**1,723**			**Required:**	167	88
										Provided:	**370**	**250**

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NORTH CAROLINA PROFESSIONAL 17228 ENGINEER RONALD V. ALLEN
06/08/2026

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ISSUE DATE: 06/08/2026

REVISIONS

NO.	DESCRIPTION	DATE

WESTERN PIEDMONT COMMUNITY COLLEGE

BUILDING K RENOVATION

200 E College Drive Morganton, NC 28655

WESTERN PIEDMONT COMMUNITY COLLEGE

PROJECT NUMBER 2317

SHEET TITLE
MECHANICAL
VENTILATION CALCS

SHEET NUMBER

M003

SCO # 23-27049-01A
NCCCS #2784

OPTIMA# 24-0064

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BUILDING AUTOMATION SYSTEM

JCI FACILITY EXPLORER (NIAGARA):

THIS CONTRACTOR SHALL PROVIDE A COMPLETE BUILDING DDC CONTROL SYSTEM TO COMPLY WITH SEQUENCES OF OPERATIONS OUTLINE HEREIN. PROVIDE A GLOBAL CONTROL SYSTEM THAT CAN COMMINCATE WITH ALL EQUIPMENT. THE SYSTEM SHALL BE VIEWABLE AND EDITABLE FROM A COMPUTER USING INTERNET WEB BROWSER COMMUNICATING EITHER DIRECTLY OR REMOTELY WITH THE BAS MAIN CONTROL PANEL.

A. DIRECT DIGITAL CONTROL (DDC) TECHNOLOGY SHALL BE USED TO PROVIDE THE FUNCTIONS NECESSARY FOR CONTROL OF MECHANICAL SYSTEMS.
B. THE CONTROL SYSTEM SHALL BE DESIGNED SUCH THAT IN THE EVENT OF A NETWORK COMMUNICATION FAILURE, OR THE LOSS OF ANY OTHER CONTROLLER, THE CONTROL SYSTEM SHALL CONTINUE TO INDEPENDENTLY OPERATE UNDER CONTROL.
C. OWNER SHALL PROVIDE WAN/LAN CONNECTION TO THE BUILDING AUTOMATION SYSTEM.
D. UNIT LEVEL CONTROLLERS SHALL USE BACNET MSTP PROTOCOL. CONTROLLERS SHALL BE BACNET BTL CERTIFIED.
E. THE SYSTEM MUST BE PROVIDED, INSTALLED, WIRED AND PROGRAM BY THE MANUFACTURER'S LOCAL FACTORY OFFICE. BIDS BY WHOLESALERS, CONTRACTORS OR FRANCHISED DEALERS OR ANY OTHER FIRM WHOSE PRINCIPLE BUSINESS IS NOT THAT OF MANUFACTURING AND INSTALLING BUILDING AUTOMATION SYSTEM IS NOT ACCEPTABLE.
F. PROVIDE ONE YEAR PARTS AND LABOR WARRANTY OF THE BAS.
G. PROVIDE 8 HOURS OF OWNER'S TRAINING AT JOBSITE ON THE BUILDING AUTOMATION SYSTEM OPERATION.

THE SYSTEM SHALL HAVE THE FOLLOWING FUNCTIONS:

A. TIME OF DAY SCHEDULING INCLUDING OPTIMAL START/STOP, HOLIDAY AND EXCEPTION SCHEDULES.
B. TIMED OVERRIDE BASED ON DURATION LIMIT OR FIXED UNTIL RELEASED.
C. DATA LOGGING AND TRENDING.
D. USER SECURITY LEVEL ASSIGMENT.
E. SYSTEM AND ALARMS REPORTS.
F. FLOOR PLANS, SYSTEM, EQUIPMENT GRAPHICS WITH DYNAMIC DATA DISPLAY.
G. ALARM E-MAIL ROUTING.
H. GLOBAL NAVIGATION ICONS TO MANAGE ALARMS, USER CREDENTIALS, HELP FUNCTIONS.
I. SUPPORT A MINIMUM OF 5 CONCURRENT USERS.

THE SYSTEM SHALL HAVE THE FOLLOWING PROGRAMMING STANDARD APPLICATIONS:

A. STATIC PRESSURE SETPOINT OPTIMIZATION AS DEFINED BY ASHRAE 90.1-2010,
B. DEMAND CONTROL VENTILATION OPTIMIZATION AS DEFINED BY ASHRAE 62.1-2004.
C. WIRELESS COMPATIBILITY WITH ZIGBEE BUILDING AUTOMATION CERTIFIED WIRELESS COMMUNIATIONS INTERFACE.
D. FREE DOWNLOADABLE MOBILE DEVICE APPS.

MINIMUM INPUT/OUTPUT SUMMARY

SYSTEM, APPARATUS, OR AREA POINT DESCRIPTION	INPUTS: ANALOG: MEASURED: TEMPERATURE	PRESSURE	PH	KW	AIR FLOW	WATER FLOW	CO2	NO2	NG FLOW (CFH)	AMPS	KWH	ENTHALPY	RUN TIME	EFFICIENCY	INPUTS: ANALOG: CALC.	INPUTS: BINARY: STATUS	FILTER	SMOKE	FREEZE	IRR FLOW	METER	OVER-RIDE	OUTPUTS: DIGITAL: OFF-ON	OFF-HI-LO	OPEN-CLOSE	OUTPUTS: ANALOG: DMPR. POS.	VALVE POS.	VFD (ADJ.)	STEP CONTROL	SYSTEM FEATURES: ALARMS: HI ANALOG	LO ANALOG	HI BINARY	LO BINARY	PROOF	SYSTEM FEATURES: PROGRAMS: TIME SCHEDULING	DEMAND LIMITING	OPTIMAL START/STOP OPT.	ENTHALPY OPT.	LOGIC CTRL	TREND	ALARM INSTRUCT	MAIN WORK ORDER	GENERAL: COLOR GRAPHIC	SUPPLEMENTAL NOTES
FANS																																																
Restroom Exhaust Fans																X							X																								
General Exhaust Fans																X							X																								
CONDENSING FURNACE																																			X								X				
Indoor AC Unit																X							X								X																
Outdoor Unit																X							X								X																
Space Temp	X																																						X								
Supply Temp	X																																						X								
Setpoint Adjust																												X																				
Space CO						X																																	X								
OA Temp	X											X																		X										X								
Supply Fan																X							X								X																
ERV																																			X		X						X				
Supply Fan																X							X								X																
Exhaust Fan																X							X								X																
Outdoor Air Temp Sensor	X																																						X								
Discharge Air Temp Sensor	X																																						X								Supply and exhaust
Fan Switch																					X																									
MISC POINTS																																															
OA Temp	X												X																		X										X								
Dew Point	X												X																												X								
Fire Alarm Status													X																																			FACP by Division 26
Space CO							X																																	X								
OA RH		X																																						X								
Motor Operated Dampers																X												X																			End Switch Verification, Modulating

GENERAL NOTE:

INPUT/OUTPUT SUMMARY IS A GENERAL LIST OF CONTROL POINTS REQUIRED FOR THE OPERATION OF THE MECHANICAL SYSTEM. IN ADDITION TO CONTROL POINTS INDICATED, THE CONTROLS CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ADDITIONAL POINTS AS REQUIRED FOR OPERATION OF THE MECHANICAL SYSTEM AS SPECIFIED AND OUTLINED IN THE SEQUENCE OF OPERATION AND TO COMPLY WITH THE SPECIFICATIONS.

CONTROLS AND SEQUENCE OF OPERATION

CONTROL SYSTEM SHALL BE COMPRISED OF A WEB BASED APPLICATION/SOFTWARE TO PROVIDE END-USER WITH AN OVERALL INTEGRATED CONTROL SYSTEM THAT ALLOWS FOR VISIBILITY OF THE HVAC SYSTEM (MAIN DUCTED SPLIT SYSTEMS, ERVS, EXHAUST FANS) INCLUDING VISIBILITY TO VIEW EQUIPMENT STATUS, MANAGE ACTIVE AND HISTORIC ALARMS, BUILT-IN GRAPHICS FOR EQUIPMENT STATUS/OPERATION/ALARMS, ADJUSTABLE SETPOINTS, OVERRIDE CAPABILITIES OF EQUIPMENT AND OCCUPANCY.

GENERAL:

1. LOCATE BAS PANEL IN MECHANICAL MEZZANINE.
2. ALL CONTROL SETPOINTS SHALL BE ADJUSTABLE & TRENDABLE. INDICATED TEMPERATURE SETPOINTS SHOULD BE USED FOR ORIGINAL SYSTEM SET-UP. ANY CHANGES IN SETPOINT SETTINGS REQUIRED FOR INTENDED SYSTEM OPERATION SHALL BE NOTED ON AS-BUILT DRAWINGS.
3. SCHEDULES SEPARATE FOR ALL ZONES AND ERVS.

GENERAL EXHAUST FANS
FANS SHALL OPERATE DURING OCCUPIED HOURS ON A PROGRAMMED SCHEDULE BY BAS.

RESTROOM EXHAUST FANS
FANS SHALL OPERATE DURING OCCUPIED HOURS ON A PROGRAMMED SCHEDULE BY BAS.

DUCTED CONDENSING FURNACE SPLIT SYSTEMS WITH ERV: (IDU-3, IDU-4, IDU-5, IDU-6)
UNIT SHALL BE CONTROLLED BY ITS UNIT CONTROLLER AND DDC THERMOSTAT. UNIT SUPPLY FAN SHALL RUN CONTINUOUSLY IN THE OCCUPIED MODE, CYCLE WITH HEATING AND COOLING WHILE UNOCCUPIED. UPON A RISE IN SPACE TEMPERATURE, UNIT COMPRESSOR AND CONDENSER FAN SHALL ACTIVATE TO SATISFY SPACE. UPON A DROP IN SPACE TEMPERATURE, GAS HEAT SHALL BE ACTIVATED TO SATISFY SPACE TEMPERATURE. THERMOSTATS SHALL PROVIDE A DEADBAND OF 5° (ADJ.), WITHIN WHICH THE SUPPLY OF HEATING OR COOLING ENERGY TO THE ZONE CAN BE REDUCED TO THE MINIMUM. OCCUPANCY SCHEDULES SHALL BE SET TO OCCUPIED MONDAY THRU FRIDAY (ADJ.), 7 AM TO 7 PM (ADJ.), UNOCCUPIED NIGHTS AND WEEKENDS (ADJ.). THERMOSTATS SHALL BE SET FOR OCCUPIED COOLING 75° (ADJ.), OCCUPIED HEATING 70° (ADJ.), UNOCCUPIED COOLING 85° (ADJ.), UNOCCUPIED HEATING 55° (ADJ.). ALL TIME AND TEMPERATURE SETPOINTS SHALL BE VERIFIED BY THE OWNER PRIOR TO PROGRAMMING. THERMOSTATS SHALL BE PROGRAMMED BY MECHANICAL CONTRACTOR IN THE PRESENCE OF OWNER'S REPRESENTATIVE PRIOR TO PROJECT COMPLETION.

OUTSIDE AIR FOR IDU-3 & IDU-4 SHALL BE PROVIDED BY ASSOCIATED ERV-1. OUTSIDE AIR FOR IDU-5 & IDU-6 SHALL BE PROVIDED BY ASSOCIATED ERV-2.

ENERGY RECOVERY VENTILATORS: (ERV-1, ERV-2)
WHEN THE ASSOCIATED AIR HANDLING UNITS ARE IN THE OCCUPIED MODE: ENERGY RECOVER VENTILATOR SUPPLY AND EXHAUST FANS SHALL ENERGIZE, EXHAUST AND OUTSIDE AIR DAMPERS SHALL OPEN TO MAINTAIN FULL SCHEDULED ENERGY RECOVER VENTILATOR AIRFLOW. BYPASS DAMPERS ON SYSTEM RETURN AIR DUCT SHALL MODULATE TO ALLOW FOR REMAINDER OF SYSTEM SCHEDULED AIRFLOW TO BYPASS TO AIR HANDLING UNIT.

WHEN THE ASSOCIATED AIR HANDLING UNITS ARE IN THE UNOCCUPIED MODE: ENERGY RECOVER VENTILATOR SUPPLY AND EXHAUST AIR FANS SHALL REMAIN OFF, BOTH OUTSIDE AIR AND EXHAUST AIR DAMPERS SHALL REMAIN CLOSED. BYPASS DAMPER ON RETURN DUCTWORK SHALL OPEN TO ALLOW FOR FULL FLOW TO BYPASS TO THE AIR HANDLING UNIT.

BAS SHALL BE CAPABLE OF OPENING AND CLOSING OUTSIDE AIR, EXHAUST AIR, AND BYPASS DAMPERS.

CONTROLS VENDOR SHALL COORDINATE EXACT SEQUENCE OF OPERATION FOR ENERGY RECOVERY UNITS WITH MANUFACTURER. MANUFACTURER, CONTROLS VENDOR, ENGINEER, AND OWNER TO APPROVE FINAL SEQUENCE DURING SUBMITTAL PHASE AND PRIOR TO FACTORY PROGRAMMING OF UNIT OR INSTALLATION OF FIELD INSTALLED CONTROL SYSTEM.

DUCTED CONDENSING FURNACE SPLIT SYSTEMS: (IDU-1, IDU-2, IDU-7, IDU-8)
UNIT SHALL BE CONTROLLED BY ITS UNIT CONTROLLER AND DDC THERMOSTAT. UNIT SUPPLY FAN SHALL RUN CONTINUOUSLY IN THE OCCUPIED MODE, CYCLE WITH HEATING AND COOLING WHILE UNOCCUPIED. UPON A RISE IN SPACE TEMPERATURE, UNIT COMPRESSOR AND CONDENSER FAN SHALL ACTIVATE TO SATISFY SPACE. UPON A DROP IN SPACE TEMPERATURE, GAS HEAT SHALL BE ACTIVATED TO SATISFY SPACE TEMPERATURE. THERMOSTATS SHALL PROVIDE A DEADBAND OF 5° (ADJ.), WITHIN WHICH THE SUPPLY OF HEATING OR COOLING ENERGY TO THE ZONE CAN BE REDUCED TO THE MINIMUM. OCCUPANCY SCHEDULES SHALL BE SET TO OCCUPIED MONDAY THRU FRIDAY (ADJ.), 7 AM TO 7 PM (ADJ.), UNOCCUPIED NIGHTS AND WEEKENDS (ADJ.). THERMOSTATS SHALL BE SET FOR OCCUPIED COOLING 75° (ADJ.), OCCUPIED HEATING 70° (ADJ.), UNOCCUPIED COOLING 85° (ADJ.), UNOCCUPIED HEATING 55° (ADJ.). ALL TIME AND TEMPERATURE SETPOINTS SHALL BE VERIFIED BY THE OWNER PRIOR TO PROGRAMMING. THERMOSTATS SHALL BE PROGRAMMED BY MECHANICAL CONTRACTOR IN THE PRESENCE OF OWNER'S REPRESENTATIVE PRIOR TO PROJECT COMPLETION.

OUTSIDE AIR INTAKE SHALL BE PROVIDED WITH MOTORIZED DAMPERS. ON UNIT START UP, THE O.A. DAMPER SHALL REMAIN CLOSED UNTIL THE RETURN AIR TEMPERATURE RISES ABOVE 65° (ADJ.) OR FALLS BELOW 78° (ADJ.). ONCE RETURN AIR TEMPERATURE IS SATISFIED THE O.A. INTAKE DAMPER SHALL BE OPEN TO THE DESIGN OA AIRFLOW POSITION, WHILE THE AIR HANDLING UNIT IS IN THE OCCUPIED MODE, DAMPER SHALL OPEN TO MAINTAIN THE THE DESIGN MINIMUM OUTSIDE AIRFLOW. DAMPER SHALL REMAIN CLOSED WHILE THE UNIT IS IN THE UNOCCUPIED MODE.

OUTSIDE AIR INTAKE DAMPER SHALL REMAIN CLOSED WHILE THE UNIT IS IN THE UNOCCUPIED MODE.

BAS SHALL BE CAPABLE OF OPENING AND CLOSING OUTSIDE AIR DAMPER.

CARBON MONOXIDE SENSORS:
CARBON MONOXIDE SENSOR LOCATED IN SPACE TO SEND ALARM TO FIRE ALARM PANEL IF CO LEVEL DETECTED EXCEEDS DEVICE MANUFACTURER ALARM SETPOINTS.

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06/08/2026

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ISSUE DATE: 06/08/2026

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WESTERN PIEDMONT COMMUNITY COLLEGE
BUILDING K RENOVATION
200 E College Drive Morganton, NC 28655

WESTERN PIEDMONT COMMUNITY COLLEGE

PROJECT NUMBER 2317

SHEET TITLE
MECHANICAL CONTROLS AND POINTS LIST

SHEET NUMBER
M004

SCO # 23-27049-01A
NCCCS #2784

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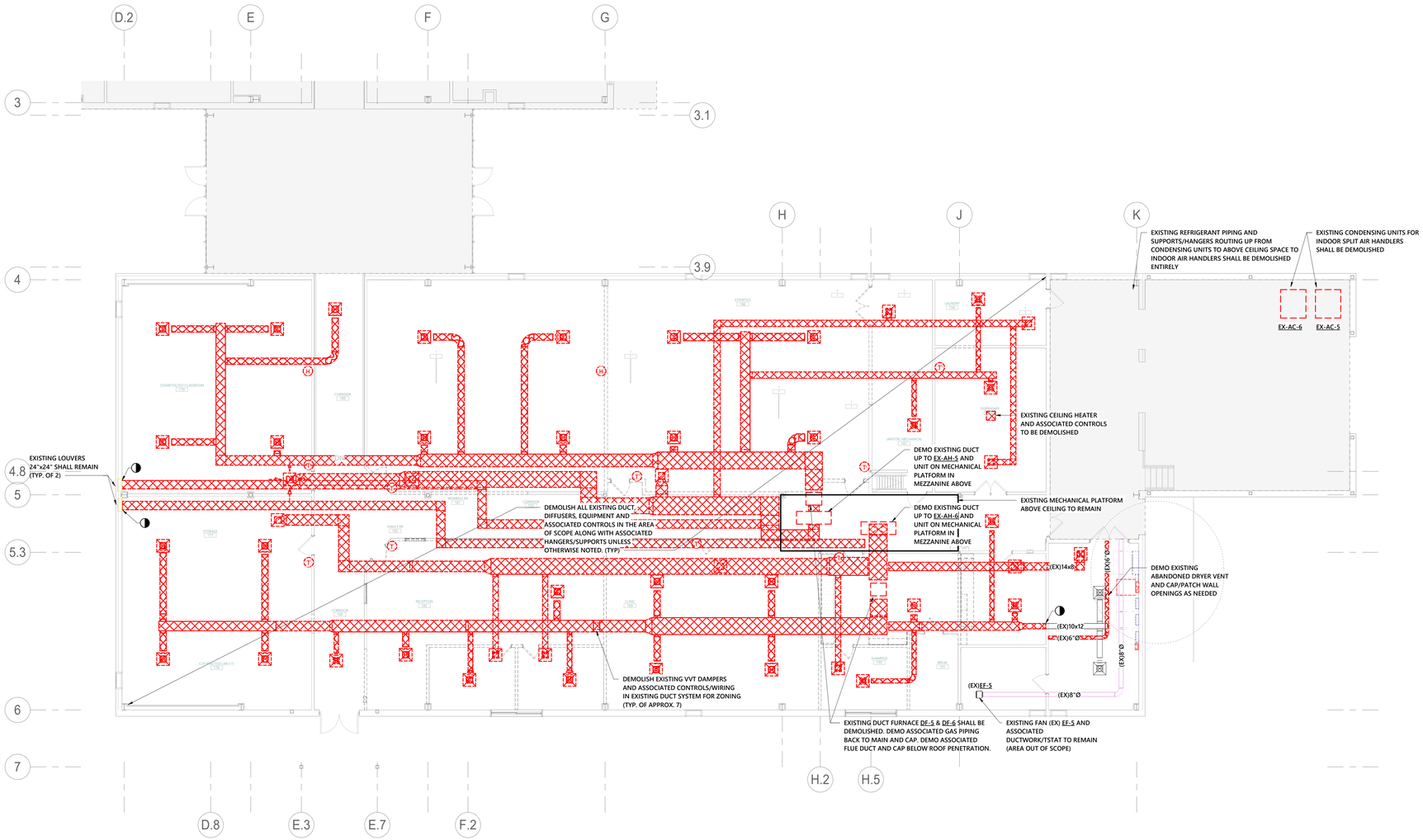

1 **DEMO FIRST FLOOR MECHANICAL PLAN - UPPER**
1/8" = 1'-0"

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WESTERN PIEDMONT COMMUNITY COLLEGE

PROJECT NUMBER 2317

SHEET TITLE
DEMO FIRST FLOOR MECHANICAL PLAN

SHEET NUMBER
M101

TRUE NORTH

SCO # 23-27049-01A
NCCCS #2784

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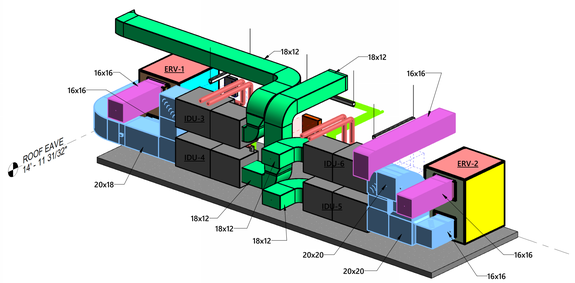
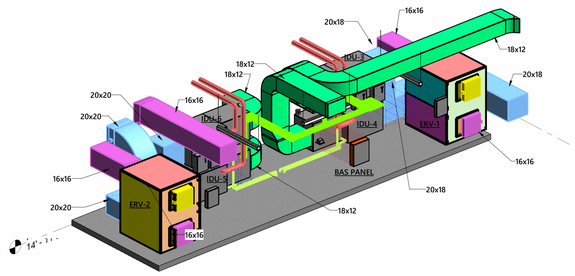
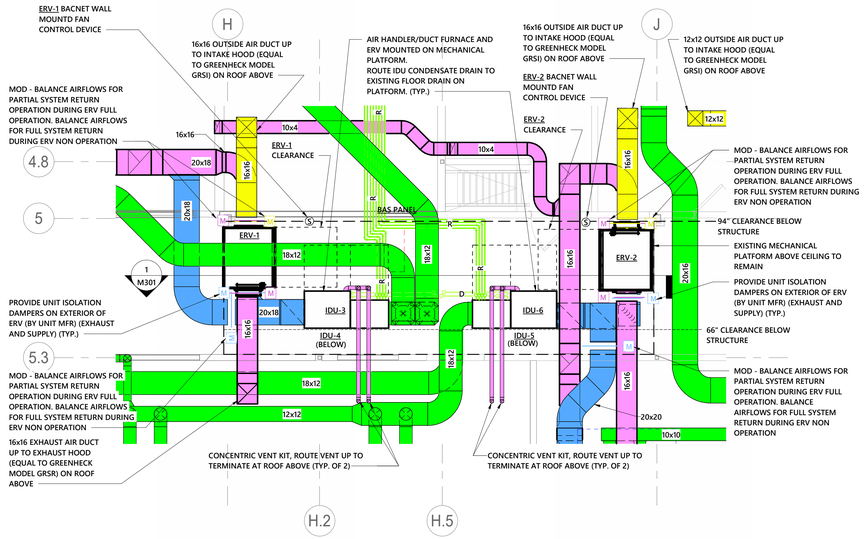


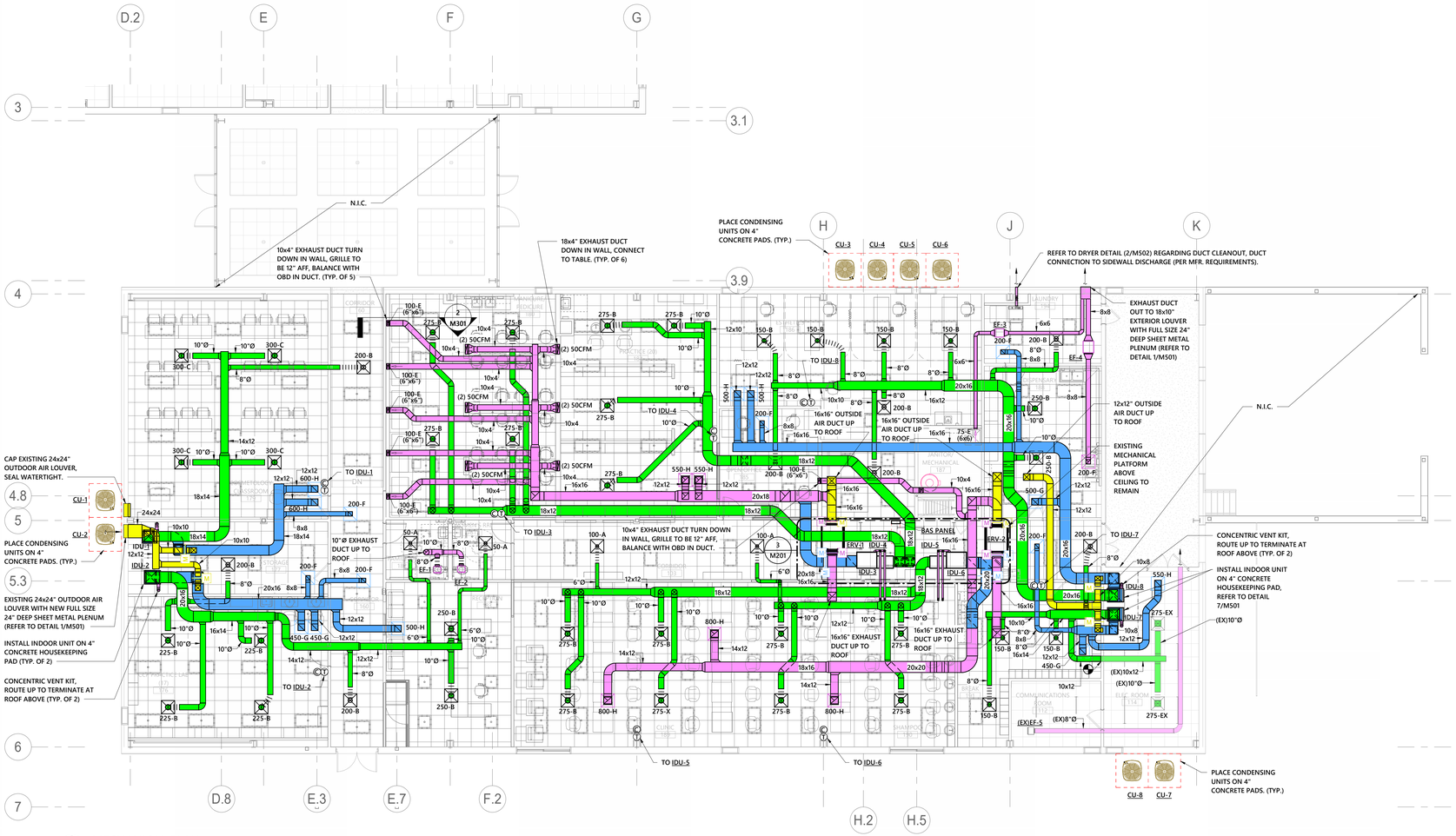
1 MEZZ MER - 3D ISOMETRIC-2
REFERENCE ONLY



2 MEZZ MER - 3D ISOMETRIC-1
REFERENCE ONLY



3 ENLARGED MECHANICAL PLAN - MEZZANINE
1/4" = 1'-0"



4 MECHANICAL PLAN
1/8" = 1'-0"

TRUE NORTH

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BUILDING K RENOVATION

WESTERN PIEDMONT COMMUNITY COLLEGE
200 E College Drive Morganton, NC 28655

PROJECT NUMBER 2317

SHEET TITLE
FIRST FLOOR MECHANICAL PLAN

SHEET NUMBER
M201

SCO # 23-27049-01A
NCCCS #2784

OPTIMA# 24-0064

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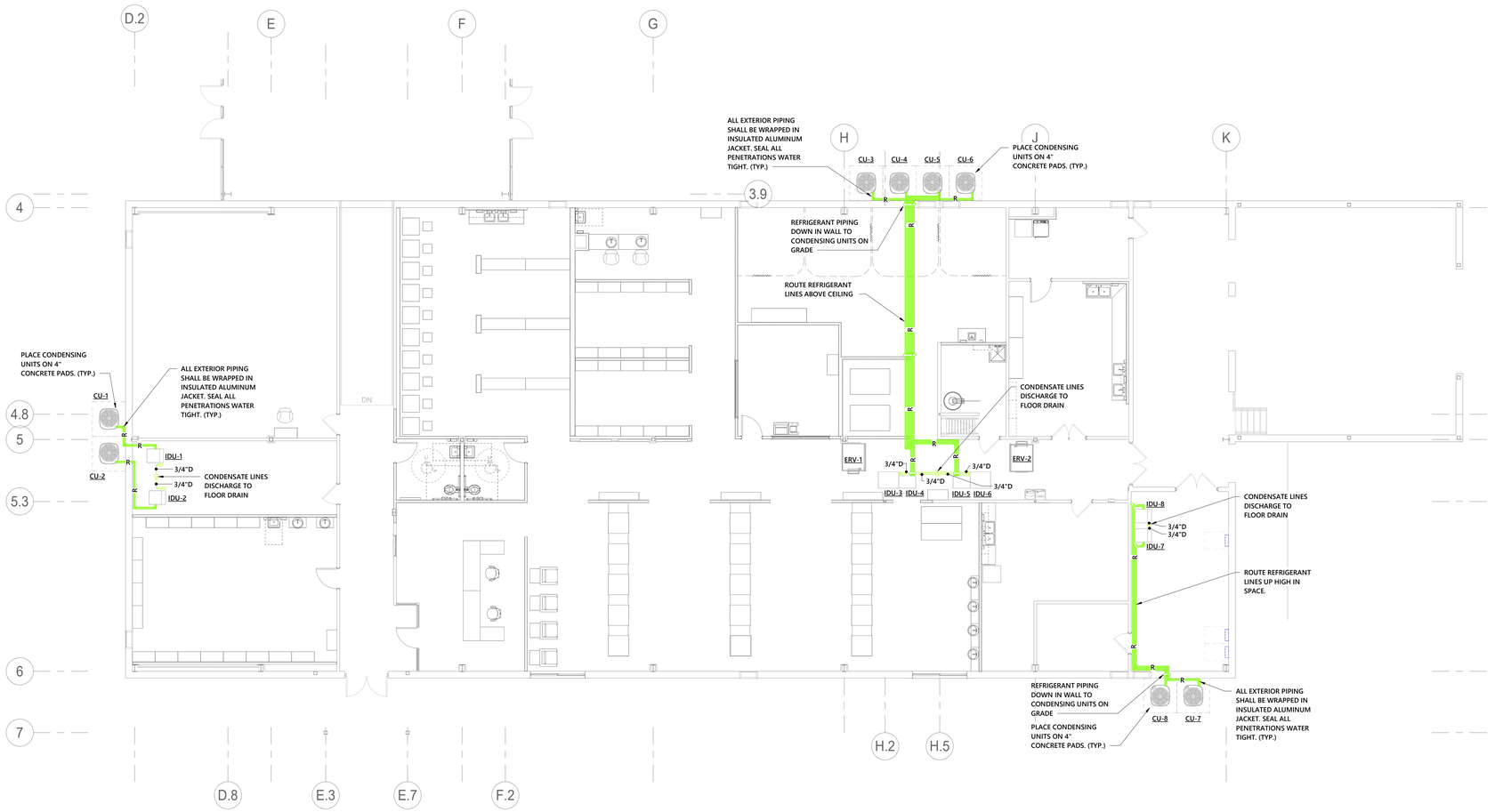
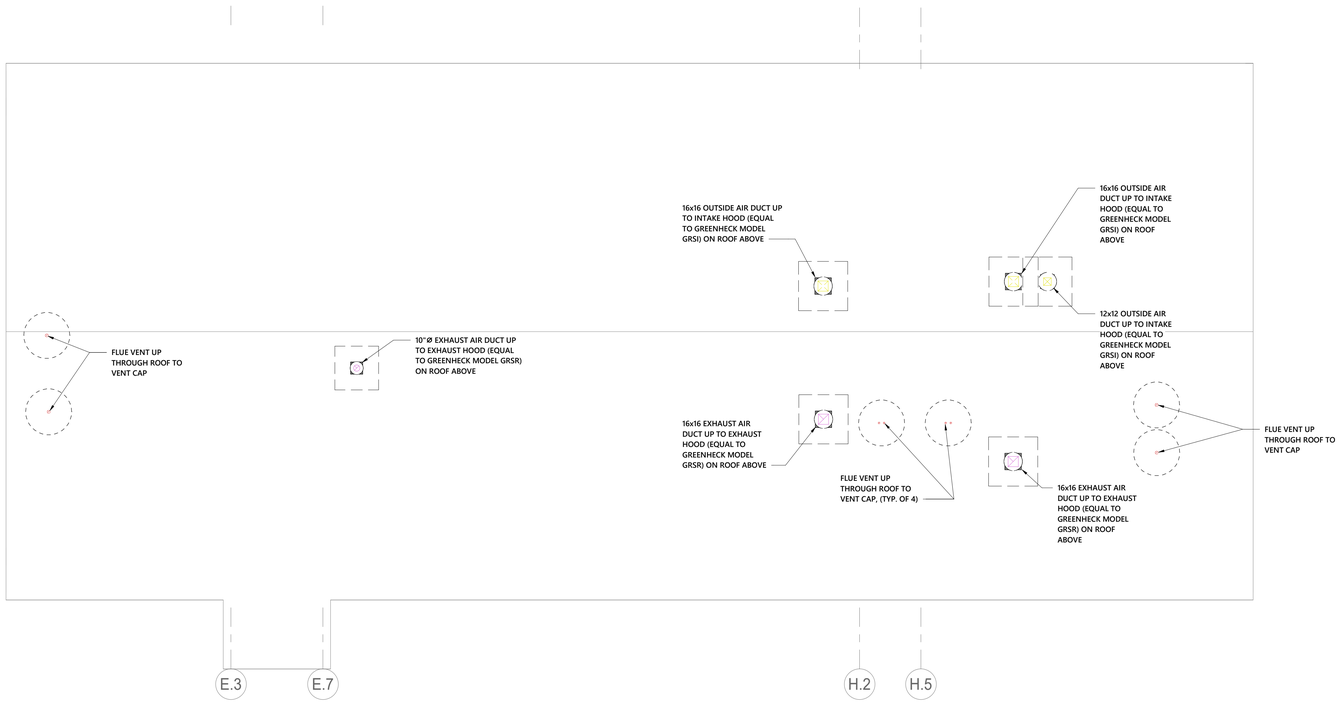


1 MECHANICAL PIPING PLAN - FIRST FLOOR - UPPER
1/8" = 1'-0"



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

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North Carolina License Number C-0914

NORTH CAROLINA PROFESSIONAL 17228 ENGINEER RONALD V. ALLEN
06/08/2026

CONSTRUCTION DOCUMENTS

ISSUE DATE:	06/08/2026

REVISIONS

NO.	DESCRIPTION	DATE

WESTERN PIEDMONT COMMUNITY COLLEGE
BUILDING K RENOVATION
200 E College Drive Morganton, NC 28655

WESTERN PIEDMONT COMMUNITY COLLEGE

PROJECT NUMBER 2317

SHEET TITLE
FIRST FLOOR MECHANICAL PIPING & ROOF PLAN

SHEET NUMBER
M202

TRUE NORTH

SCO # 23-27049-01A
NCCCS #2784

OPTIMA# 24-0064

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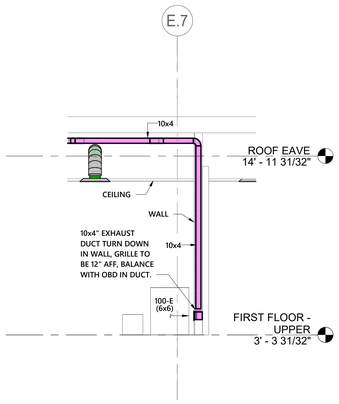
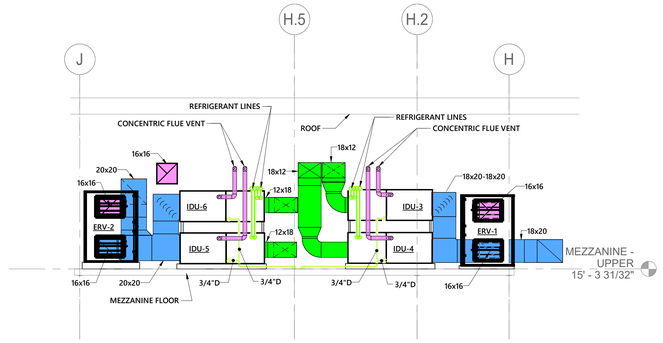


2 MANICURE / PEDICURE SECTION
1/4" = 1'-0"



1 MEZZANINE SECTION
1/4" = 1'-0"

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BUILDING K RENOVATION

200 E College Drive Morganton, NC 28655

WESTERN PIEDMONT COMMUNITY COLLEGE

PROJECT NUMBER 2317

SHEET TITLE
MECHANICAL SECTIONS

SHEET NUMBER

M301

SCO # 23-27049-01A
NCCCS #2784

OPTIMA# 24-0064

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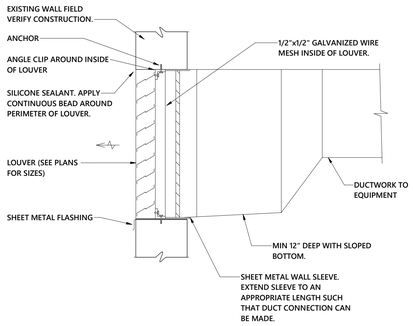
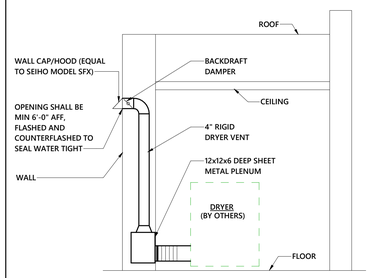
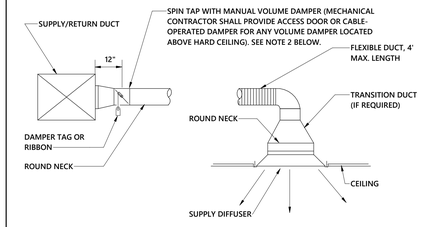


1 DUCTWORK LOUVER ASSEMBLY
NO SCALE



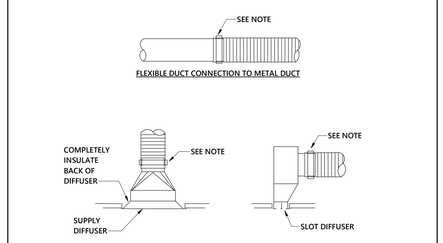
NOTES:
1. DRYER VENT PIPING SHALL BE GALVANIZED SHEET METAL AND SHALL HAVE A SMOOTH INTERIOR FINISH WITH JOINTS RUNNING IN THE DIRECTION OF THE AIR FLOW.
2. MAXIMUM LENGTH OF DRYER VENT SHALL NOT EXCEED 64' IN TOTAL LENGTH. DEDUCT 10' FOR EACH 90° ELBOW AND 5' FOR EACH 45° ELBOW. (MANUFACTURER: WHIRLPOOL, MODEL: WGD8500DW3)
3. DRYER VENT SHALL BE NONSCREENED WITH A BACKDRAFT DAMPER AND MINIMUM SIZE OF 4".

2 DRYER VENT THRU WALL
NOT TO SCALE



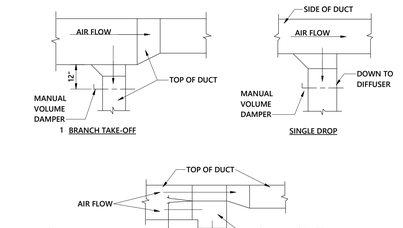
NOTE:
1. MANUAL VOLUME DAMPERS SHALL BE PROVIDED FOR ALL SUPPLY, RETURN AND GENERAL EXHAUST RUNOUTS.
2. ALL MANUAL VOLUME DAMPERS (FOR INSULATED DUCTWORKS) SHALL BE PROVIDED WITH AN ELEVATED REGULATOR (STAND-OFF) EQUAL TO DURO DYNE SEST SERIES AND FULL-LENGTH SHAFT. STAND SHALL EXTEND A MINIMUM OF 2" BEYOND DUCTWORK WITH EXTENDED TAB/SHAFT.
3. CONTRACTOR TO COORDINATE WITH ARCHITECT FOR DESIRED DAMPER ACCESS STYLE CABLE-OPERATED DAMPER ADJUSTMENT SHALL BE THROUGH AIR TERMINAL. FACE OPERATION (CONCEALED MOUNTING) OR THROUGH CEILING-MOUNTED RECESSED PORTS EQUAL TO MAT RT-CCM.

3 SPIN TAP TO ROUND NECK DIFFUSER
NOT TO SCALE



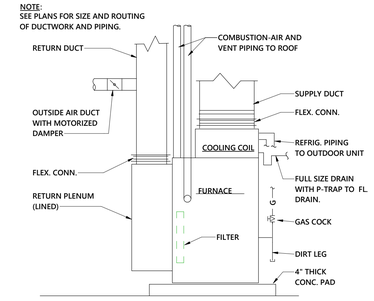
NOTE:
ALL FLEXIBLE DUCT CONNECTIONS TO SHEET METAL SHALL BE SECURED WITH APPROVED STRAP AND SEALANT.

4 FLEX CONNECTION DETAIL
NOT TO SCALE



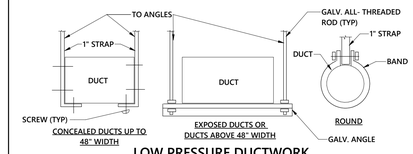
NOTE:
1. USE BRANCH TAKE-OFF ① WHEN MAIN AND BRANCH DUCTS ARE DIFFERENT DEPTHS
2. USE BRANCH TAKE-OFF ② WHEN MAIN AND BRANCH DUCTS ARE SAME DEPTHS
3. MANUAL VOLUME DAMPERS SHALL BE PROVIDED FOR ALL SUPPLY, RETURN AND GENERAL EXHAUST SINGLE DROP DUCT RUNS.

5 DUCTWORK DETAILS
NOT TO SCALE



NOTE:
1. SEE PLANS FOR SIZE AND ROUTING OF DUCTWORK.
2. DOUBLE UNITS WITH TWINNING KIT IS SIMILAR.

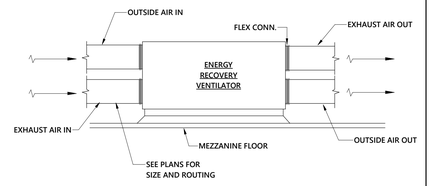
6 IDU - VERTICAL GAS UNIT W/SMOKE DETECTOR - UPFLOW
NOT TO SCALE



LOW PRESSURE DUCTWORK

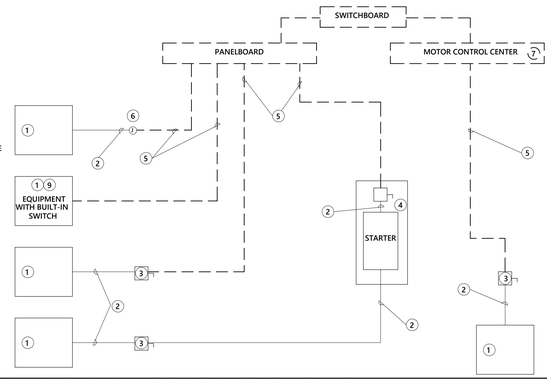
NOTES:
1. SUPPORTS OR FASTENERS SHALL NOT PENETRATE GREASE EXHAUST DUCT.
2. EXPOSED DUCTS SHALL BE SUPPORTED WITH THREADED RODS OR TRAPEZE SUPPORTS.

7 DUCT HANGER
NOT TO SCALE



8 ENERGY RECOVERY VENTILATOR
NOT TO SCALE

NOTES:
1. EQUIPMENT OF TRADES OTHER THAN ELECTRICAL
2. CONDUIT AND WIRING BY HVAC PLUMBING CONTRACTOR OR OTHER TRADES.
3. IF AN ADDITIONAL DISCONNECT IS REQUIRED BY NEC, IT SHALL BE PROVIDED AND INSTALLED BY THE EQUIPMENT CONTRACTOR.
4. A COMBINATION STARTER OR VFD MAY BE USED IN LIEU OF A SEPARATE DISCONNECT SWITCH AND STARTER LOCATE ADJACENT TO EQUIPMENT.
5. FEEDER CIRCUIT WIRING AND CONDUIT IN ELECTRICAL WORK SEE PANELBOARD SCHEDULES FOR WIRE AND BREAKER SIZES.
6. JUNCTION BOX MAY BE SHOWN ON ELECTRICAL PLANS FOR SOME EQUIPMENT. A JUNCTION BOX SHALL BE INSTALLED ADJACENT TO EQUIPMENT. THE ELECTRICAL CONTRACTOR SHALL PROVIDE LINE SIDE WIRING TO THE JUNCTION BOX. LOAD SIDE WIRING WILL BE PROVIDED BY MECHANICAL CONTRACTOR OR OTHER TRADES.
7. PROJECTS UTILIZING AN MCC. THE STARTER, CB, OR VFD IN THE MCC ARE PROVIDED BY THE ELECTRICAL CONTRACTOR.
8. IN ALL CASES THE EQUIPMENT CONTRACTOR SHALL MAKE FINAL CONNECTIONS STARTUP, AND TEST EQUIPMENT.
9. IF THE EQUIPMENT IS NOT PROVIDED WITH BUILT IN SWITCH, THE ELECTRICAL CONTRACTOR SHALL PROVIDE AND INSTALL DISCONNECT SWITCH



9 ELECTRICAL REQUIREMENTS FOR MECHANICAL CONTRACTOR (DIVISION 23/26 DEMARCATION)
NO SCALE

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NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 17228 DONALD V. ALLEN
06/08/2026

CONSTRUCTION DOCUMENTS

ISSUE DATE: 06/08/2026

REVISIONS

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WESTERN PIEDMONT COMMUNITY COLLEGE
BUILDING K RENOVATION
200 E College Drive Morganton, NC 28655

WESTERN PIEDMONT COMMUNITY COLLEGE

PROJECT NUMBER 2317

SHEET TITLE
MECHANICAL DETAILS

SHEET NUMBER
M501

SCO # 23-27049-01A
NCCCS #2784

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OPTIMA# 24-0064

2018 NORTH CAROLINA ENERGY CONSERVATION CODE

COMMERCIAL ENERGY EFFICIENCY - ELECTRICAL SUMMARY

C401 METHOD OF COMPLIANCE

- [x] 2018 NCECC CHAPTER 4
- [ ] NC SPECIFIC COMCHECK PROVIDED
- [ ] N/A BASED ON PROJECT SCOPE
- [ ] ASHRAE 90.1-2013

C406 ADDITIONAL EFFICIENCY PACKAGE OPTIONS

- [ ] C406.2 EFFICIENT MECH EQUIPMENT
- [ ] C406.5 ON-SITE RENEWABLE ENERGY
- [x] C406.3 REDUCED LTG DENSITY
- [ ] C406.6 DEDICATED OA SYSTEM
- [ ] C406.4 ENHANCED DIGITAL LTG CNTLS
- [ ] C406.7 HI-EFF SERVICE WTR HTG
- [ ] NOT APPLICABLE BASED ON PROJECT SCOPE
- [ ] C406.7.1 WTR HTG LOAD FRACTION

C405.2 - LIGHTING CONTROLS (MANDATORY REQUIREMENTS):

- [x] LIGHTING SYSTEMS ARE PROVIDED WITH CONTROLS AS REQUIRED PER SECTION C405.2, EXCEPT WHERE EXEMPT.
- [ ] NOT APPLICABLE

C405.3 - EXIT SIGNS (MANDATORY REQUIREMENTS):

- [x] INTERNALLY ILLUMINATED EXIT SIGNS DO NOT EXCEED 5 WATTS PER SIDE.
- [ ] NOT APPLICABLE

C405.4 - INTERIOR LIGHTING POWER REQUIREMENTS (PRESCRIPTIVE) (NON-EXEMPT):

- [ ] NOT APPLICABLE PER 2018 NCECC C503.1, EXCEPTION 2.G.

C405.4.1 - TOTAL CONNECTED INTERIOR LIGHTING POWER:

5782 WATTS SPECIFIED

35.41 % REDUCTION OF SPECIFIED VS. ALLOWED (APPLICABLE IF C406.1.2 IS SELECTED)

C405.4.2 - TOTAL ALLOWABLE INTERIOR LIGHTING POWER:

METHOD OF COMPLIANCE:

- [x] BUILDING AREA METHOD
- [ ] SPACE-BY-SPACE METHOD

8952.30 WATTS ALLOWED

C405.5.1 - EXTERIOR BUILDING LIGHTING POWER (NON-EXEMPT):

- [ ] NOT APPLICABLE

TOTAL CONNECTED EXTERIOR LIGHTING POWER:

274 WATTS SPECIFIED

TOTAL ALLOWABLE EXTERIOR LIGHTING POWER:

930 WATTS ALLOWED

C405.6 - ELECTRICAL ENERGY CONSUMPTION (DWELLING UNITS):

- [ ] SEPARATE ELECTRICAL METERING HAS BEEN PROVIDED FOR EACH DWELLING UNIT IN GROUP R-2 BUILDINGS.
- [x] NOT APPLICABLE

C405.7 - ELECTRICAL TRANSFORMERS (MANDATORY REQUIREMENTS):

- [x] ELECTRICAL TRANSFORMERS HAVE BEEN SPECIFIED TO MEET MINIMUM EFFICIENCY REQUIREMENTS PER C405.7, EXCEPT WHERE EXEMPT.
- [ ] NOT APPLICABLE

C405.8 - ELECTRICAL MOTORS (MANDATORY REQUIREMENTS):

- [x] ELECTRICAL MOTORS HAVE BEEN SPECIFIED TO MEET MINIMUM EFFICIENCY REQUIREMENTS PER C405.8, EXCEPT WHERE EXEMPT.
- [ ] NOT APPLICABLE

C408 - SYSTEM COMMISSIONING:

- [ ] PROJECT AREA IS LESS THAN 10,000 SQUARE FEET AND IS EXEMPT FROM THE SYSTEM COMMISSIONING REQUIREMENTS OF SECTION C408.
- [x] PROJECT AREA IS GREATER THAN 10,000 SQUARE FEET AND REQUIRES SYSTEM COMMISSIONING PER SECTION C408.

SYMBOL SCHEDULE POWER

SYMBOL	DESCRIPTION
	WIRING SYSTEM CONCEALED IN WALL OR CEILING. WHEN SHOWN, CROSS LINES INDICATE NUMBER OF WIRES. (GROUND WIRES ARE NOT SHOWN)
	WIRING SYSTEM CONCEALED IN OR UNDER SLAB OR UNDERGROUND.
	WIRING SYSTEM EXPOSED.
	CONDUIT TURNED DOWN TO FLOOR BELOW.
	CONDUIT TURNED UP TO FLOOR ABOVE.
	BRANCH CIRCUIT HOMERUN TO PANEL.

SYMBOL SCHEDULE POWER LEGEND

SYMBOL	DESCRIPTION
	DUPLEX RECEPTACLE CEILING MOUNTED
	JUNCTION BOX WITH CONNECTION TO EQUIPMENT SERVED. 4" SQUARE BOX WITH A SINGLE-GANG OPENING AND PLASTER RING.
	CEILING MOUNT JUNCTION BOX WITH CONNECTION TO EQUIPMENT SERVED
	208/120V THREE PHASE PANELBOARD. SEE SCHEDULE FOR MOUNTING. TOP OF PANEL AT 6'-6" AFF.
SPD	SURGE PROTECTION DEVICE (SPD); SEE DETAIL.
	SPECIAL OUTLET. SEE PLANS.
	FUSED HEAVY DUTY DISCONNECT SWITCH. NUMERALS INDICATE SWITCH RATING. NEMA 1 ENCLOSURE, UNLESS OTHERWISE NOTED. UNSHADED INDICATES NON-FUSED.
0.3 hp XX-1	CONNECTION TO MOTOR. STARTER PROVIDED BY OTHERS UNLESS OTHERWISE NOTED. NUMBER INDICATES HORSEPOWER.
	FRACTIONAL HORSEPOWER MANUAL MOTOR STARTER, WITH OVERLOAD PROTECTION

ELECTRICAL FIXTURES LEGEND - COMMERCIAL

SYMBOL	DESCRIPTION
	COMBINATION GROUND FAULT RECEPTACLE AND USB. NEMA 5-20R DUPLEX. ALL OUTLETS INSTALLED WITHIN 6' OF A SINK OR IN A KITCHEN SHALL BE GFCI.
	DUPLEX RECEPTACLE, 20 AMP, 120 VOLT COOPER 5362 OR EQUAL.
GFCI	GROUND FAULT RECEPTACLE. NEMA 5-20R DUPLEX. ALL RECEPTACLES INSTALLED OUTSIDE, WITHIN 6' OF A SINK OR IN A KITCHEN SHALL BE GFCI.
GFCI	GROUND FAULT RECEPTACLE - BREAKER AT PANEL. NEMA 5-20R DUPLEX. ALL RECEPTACLES INSTALLED OUTSIDE, WITHIN 6' OF A SINK OR IN A KITCHEN SHALL BE GFCI.
BS	GROUND FAULT DUPLEX RECEPTACLE, NEMA 5-20R MOUNTED ABOVE COUNTER BACKSPLASH OR AT HEIGHT NOTED.
GFCI BS	GROUND FAULT DUPLEX RECEPTACLE - BREAKER AT PANEL, NEMA 5-20R MOUNTED ABOVE COUNTER BACKSPLASH OR AT HEIGHT NOTED.
GFCI WR	WEATHERPROOF GROUND FAULT RECEPTACLE. NEMA 5-20R DUPLEX, CORROSION RESISTANT, WITH IN-USE COVER.
	QUAD RECEPTACLE. TWO NEMA 5-20R DUPLEX RECEPTACLES, OTHERWISE SAME AS DUPLEX RECEPTACLE ABOVE.
EWC	QUAD RECEPTACLE, TWO NEMA 5-20R FOR ELECTRIC WATER COOLER TO BE SUPPLIED BY GROUND FAULT BREAKER. COORDINATE LOCATION WITH PLUMBING CONTRACTOR.
GFCI BS	GROUND FAULT QUAD RECEPTACLE. TWO NEMA 5-20R DUPLEX RECEPTACLES ABOVE COUNTER.
IG	QUAD RECEPTACLE. TWO NEMA 5-20R DUPLEX RECEPTACLES WITH ISOLATED GROUND.

NFPA FIRE ALARM LEGEND

SYMBOL	DESCRIPTION
FACP	FIRE ALARM CONTROL PANEL
FAA	FIRE ALARM ANNUNCIATOR
G	GAS DETECTOR (TYPE DENOTED)
H	HEAT DETECTOR/SENSOR. X=TYPE
P	PULLSTATION/FIRE ALARM
S	SMOKE DETECTOR/SENSOR (DEFAULT PHOTOELECTRIC TYPE)
D	DUCT SMOKE DETECTOR (NFPA 72, SECTION 17.7.5.5)
15cd	FIRE ALARM STROBE (CANDELAS), WHITE FINISH
15cd	ADA COMPLIANT WALL MOUNTED FIRE ALARM HORN WITH STROBE LIGHT, 15CD UNLESS OTHERWISE NOTED. WHITE FINISH.**
15cd	FIRE ALARM STROBE (CANDELAS), WHITE FINISH
15cd	FIRE ALARM HORN W/STROBE (CANDELAS), WHITE FINISH
S	SMOKE DETECTOR/SENSOR - IN DUCT

**Note: AUDIBLE DEVICES WITHIN SLEEPING ROOMS SHALL BE SUBJECT TO LOW FREQUENCY REQUIREMENTS. A SQUARE WAVE 520HZ TONE COMPATIBLE WITH NFPA 72 18.4.5.3. COORDINATE WITH LOCAL CODES AND REQUIREMENTS.

TELECOM LEGEND - ELECTRICAL

SYMBOL	DESCRIPTION
	PLYWOOD TELEPHONE BACKBOARD. SIZE AS INDICATED ON RISER.
#	DATA OUTLET. MINIMUM 1 1/4" CONDUIT TO ABOVE NEAREST ACCESSIBLE CEILING FOR J-HOOK SYSTEM OR TO LOCAL CABLE TRAY (WITHIN 6') AS APPLICABLE WITH PULL STRING. 4" SQUARE BOX WITH A SINGLE-GANG OPENING AND PLASTER RING. SUBSCRIPT NEXT TO OUTLET INDICATES DATA DROPS. IF CABLE QUANTITY AND SERVICE ARE NOT IDENTIFIED, THEN PATHWAY ONLY OR REFER TO TO TECHNOLOGY DRAWINGS FOR CABLE AND ACTIVATION TYPE.
WAP	STRUCTURE MOUNTED JUNCTION BOX FOR WIRELESS ACCESS POINT IN OPEN CEILING APPLICATIONS. 4" SQUARE BOX WITH A TWO-GANG OPENING. STUB 1" EC FROM BOX TO J-HOOKS OR CABLE TRAY ABOVE ACCESSIBLE CEILING. PROVIDE CABLING, TERMINATIONS AND FACEPLATE PER SPECIFICATIONS.

FLR. BOX OUTLETS-FLUSH MOUNT SINGLE DUPLE...

SYMBOL	DESCRIPTION
FBS	SIX GANG FLUSH MOUNTED FLOOR BOX WITH ACCESSIBLE COVER FOR POWER AND COMMUNICATIONS. PROVIDE FOUR NEMA 5-20R DUPLEX RECEPTACLES AND TWO COMMUNICATIONS PLATE WITH PROVISION FOR SIX RJ45 CAT6 JACKS. EQUAL TO WIREMOLD RFB6E-OG-8CT. ARCHITECT TO SELECT FINISH. STUB FROM BOX ONE CONCEALED 1 1/4"C ROUTED TO WHICHEVER IS NEAREST, BB, J-HOOKS, OR CABLE TRAY.

Note: CONTRACTOR SHALL VERIFY WITH ARCHITECT THE FLOOR FINISH PRIOR TO ORDERING MATERIAL. PROVIDE ALL NECESSARY SHIMS, TRIM PLATES, ACCESSORIES AS REQUIRED FOR A COMPLETE INSTALLATION.

EM./LS LIGHTING FIXTURE SYMBOLS AND DEVICES

SYMBOL	DESCRIPTION
	LED FIXTURE WITH EMERGENCY BATTERY BALLAST OR DRIVER ON LIFE SAFETY BRANCH. PROVIDE 1100 LUMEN INVERTER RATED FOR 90 MINUTE OPERATION. SEE FIXTURE SCHEDULE FOR FIXTURE TYPE, EMERGENCY DEVICE SHALL SUPPLEMENT FIXTURE.
	LED FIXTURE WITH EMERGENCY BATTERY BALLAST OR DRIVER ON CRITICAL BRANCH. PROVIDE 1100 LUMEN INVERTER RATED FOR 90 MINUTE OPERATION. SEE FIXTURE SCHEDULE FOR FIXTURE TYPE, EMERGENCY DEVICE SHALL SUPPLEMENT FIXTURE.
1	SWITCHING DEVICE INDICATOR;INDICATES SWITCH AND ASSOCIATED FIXTURES CONTROLLED BY DEVICE.

LIGHTING FIXTURES SYMBOLS AND DEVICES...

SYMBOL	DESCRIPTION
	WALL MOUNTED LED LIGHTING FIXTURE.
	LED LIGHTING FIXTURE. SEE FIXTURE SCHEDULE. SUSPEND FOUR CORNERS WITH WIRE TO STRUCTURE. DO NOT ALLOW GRID ALONE TO SUPPORT FIXTURE.
	LED STRIP LIGHT FIXTURE
	EXIT LIGHT WITH ARROWS AND NUMBERS OF FACES AS INDICATED ON PLANS. 90 MIN BATTERY BACKUP. SEE LIGHTING FIXTURE SCHEDULE.
	EXIT LIGHT WITH ARROWS AND NUMBERS OF FACES AS INDICATED ON PLANS. 90 MIN BATTERY BACKUP. SEE LIGHTING FIXTURE SCHEDULE.
	EMERGENCY BATTERY PACK FIXTURE. 90 MINUTE EMERGENCY INTEGRAL BATTERY. SEE LIGHTING FIXTURE SCHEDULE
	EMERGENCY BATTERY PACK/EXIT COMBO FIXTURE WITH 90 MINUTE BATTERY BACKUP, SEE FIXTURE SCHEDULE.
	LIGHT BOLLARD OR POLE TOP FIXTURE. SEE FIXTURE SCHEDULE.
S	SINGLE POLE SWITCH, 20 AMP, 120/277 VOLT, COOPER AH 1221, OR EQUAL BY HUBBELL, LEVITON AND PASS & SEYMOUR.
S3	THREE WAY SWITCH, 20 AMP, 120/277 VOLT, COOPER 1223, THREE WAY SWITCH, 20 AMP, 120/277 VOLT, COOPER 1223, OR EQUAL BY HUBBELL, LEVITON AND PASS & SEYMOUR.
SP	PILOT LIGHT SWITCH
SD	DIMMER SWITCH. LUTRON SERIES, OR EQUAL. VERIFY LOAD ON CIRCUIT AND MATCH DIMMER SIZE TO LOAD AND DEVICE QUANTITY. PROVIDE DOUBLE GANG J-BOX WITH SINGLE GANG TRIM PLATE. PROVIDE DIMMING SWITCH AS RECOMMENDED BY LIGHTING MANUFACTURER. MATCH SWITCH TYPE TO SOURCE (LED, FLUORESCENT, OR INCANDESCENT,) WATTAGE, AND QUANTITY.
S0-10	0-10V DIMMER SWITCH. SEE DETAIL "CLASSROOM SWITCH CONTROL - DIMMING" FOR TYPE AND TYPICAL APPLICATION. 3WAY "3D" APPLICATION IS BASED ON ON/ON LOW VOLTAGE SWITCH SWX-801 OR EQUAL.
	INDICATES TWO LEVEL SWITCHING. SWITCH OUTER TWO LAMPS OF FIXTURES TOGETHER AND THE INNER LAMP(S) TOGETHER.
OCC	CEILING MOUNTED OCCUPANCY SENSOR, DUAL TECHNOLOGY. 360 DEGREE COVERAGE, 2,000 SQ FT COVERAGE LARGE MOTION, 400 SQ FT SMALL MOTION. NON CATEGORY CABLE CONNECTORS. LOW VOLTAGE DETECTOR, PROVIDE WITH POWER PACK FOR EACH SWITCH LEG. SENSOR SWITCH, WATT STOPPER, LEVITION, EATON, SENSORWORX OR EQUAL.
SOC	WALL MOUNTED OCCUPANCY SENSOR AND SWITCH. INFRARED TECHNOLOGY WITH NEUTRAL, 120/277V RATED. WATT STOPPER #WS-250, OR EQUAL BY SENSOR SWITCH, AND LEVITON.
	CEILING MOUNTED OCCUPANCY SENSOR POWER PACK. SENSOR SWITCH PP-20, WATT STOPPER #BZ-100, COOPER SP-20, OR EQUAL.
P	CEILING MOUNTED OCCUPANCY SENSOR POWER PACK WITH DIMMER. SENSOR SWITCH PP-20, WATT STOPPER #BZ-100, COOPER SP-20, OR EQUAL.

ELECTRICAL SHEET INDEX

E0001	ELECTRICAL LEGEND AND NOTES
E0002	ELECTRICAL SPECIFICATIONS
ED101	DEMO FIRST FLOOR LIGHTING PLAN - UPPER
ED201	DEMO FIRST FLOOR POWER PLAN - UPPER
ED301	DEMO FIRST FLOOR EQUIPMENT PLAN - UPPER
ED401	DEMO FIRST FLOOR SPECIAL SYSTEMS PLAN - UPPER
E0101	FIRST FLOOR LIGHTING PLAN - UPPER
E0201	FIRST FLOOR POWER PLAN - UPPER
E0301	FIRST FLOOR EQUIPMENT PLAN - UPPER
E0401	FIRST FLOOR SPECIAL SYSTEMS PLAN - UPPER
E0601	ELECTRICAL DETAILS - LIGHTING
E0602	ELECTRICAL DETAILS - POWER
E0603	ELECTRICAL DETAILS - SYSTEMS
E0701	ELECTRICAL DIAGRAMS
E0801	LIGHTING FIXTURES + MECHANICAL EQUIPMENT SCHEDULE
E0802	PANEL SCHEDULES
E0803	PANEL SCHEDULES

RENOVATION LEGEND ABBREVIATIONS

ER	EXISTING ITEM RELOCATED TO THIS LOCATION.
RL	EXISTING ITEM TO BE RELOCATED.
EX	EXISTING ITEM TO REMAIN.
RP	EXISTING ITEM TO BE REPLACED.
RV	EXISTING ITEM TO BE REMOVED.
RC	RE-CONNECT

EXISTING/DEMOLITION LEGEND

SYMBOL	DESCRIPTION
	HALFTONE SYMBOL INDICATES EXISTING
	DASHED SYMBOL INDICATES REMOVED
	HATCHED SYMBOL INDICATES REMOVED

GENERAL PROJECT NOTES:

1. ELECTRICAL CODE COMPLIANCE SHALL BE IN ACCORDANCE WITH NEC 2020.
2. ALL ELECTRICAL MATERIALS, DEVICES, APPLIANCES, AND EQUIPMENT SHALL BE LABEL LISTED BY AN NC APPROVED THIRD PARTY TESTING AGENCY.

FIRE ALARM SCOPE OF WORK / ALTERNATES

BASE BID:
(KEEP SIMPLEX THROUGHOUT)

- REMOVE THE EXISTING SIMPLEX 4100 SERIES FACP AND REPLACE WITH A NEW SIMPLEX FACP.
- PROVIDE NEW SIMPLEX DEVICES AND WIRING FOR THE COSMETOLOGY SUITE PER PLANS.
- DEVICES IN THE EXISTING WING OF THE BUILDING WOULD TIE BACK INTO THE NEW SIMPLEX SYSTEM.

ALTERNATE 1A:
(REPLACE WITH NEW MANUFACTURER AND INTEGRATE WITH EXISTING SIMPLEX DEVICES)

- REMOVE THE EXISTING SIMPLEX 4100 SERIES FACP AND REPLACE WITH A NEW FACP BY ANOTHER VENDOR (EDWARDS, HONEYWELL, SIEMENS, ETC..)
- PROVIDE NEW DEVICES AND WIRING FOR THE COSMETOLOGY SUITE PER PLANS.
- THE NEW FACP WOULD NEED TO BE ABLE TO ACCEPT THE EXISTING WING'S SIMPLEX WIRING AND DEVICES TO INTEGRATE INTO THEIR CONTROL PANEL WITH FULL CODE COMPLIANT FUNCTIONALITY.

ALTERNATE 1B:
(NEW SYSTEM THROUGHOUT)

- REMOVE THE EXISTING SIMPLEX 4100 SERIES FACP AND REPLACE WITH A NEW FACP BY ANOTHER VENDOR (EDWARDS, HONEYWELL, SIEMENS, ETC..)
- PROVIDE NEW DEVICES AND WIRING FOR THE COSMETOLOGY SUITE PER PLANS.
- PROVIDE NEW DEVICES AND WIRING FOR THE EXISTING WING.
  1. REFER TO APPENDIX DRAWING #1 FOR EXISTING BUILDING AS-BUILTS FOR EXISTING WING'S FIRE ALARM DEVICE LAYOUT. E.C. SHALL VISIT THE SITE AND PERFORM A SURVEY OF ALL EXISTING DEVICES IN THAT AREA TO ENSURE A FULL, CODE COMPLIANT, REPLACEMENT OF ALL EXISTING DEVICES IS PERFORMED AND PROVIDED.

ELECTRICAL ABBREVIATIONS LIST

1P	1 POLE (2P, 3P, 4P, ETC.)	DCP	DOMESTIC WATER CIRCULATING PUMP	HT	HEIGHT	NEMA	NATIONAL ELECTRICAL MANUFACTURER'S ASSOCIATION
A	AMPERE	DEPT	DEPARTMENT	HTG	HEATING	SWBD	SWITCHBOARD
AC	ABOVE COUNTER OR AIR CONDITIONER	DET	DETAIL	HTR	HEATER	SYM	SYMMETRICAL
ACLG	ABOVE CEILING	DIA	DIAMETER	HV	HIGH VOLTAGE	SYS	SYSTEM
ADO	AUTOMATIC DOOR OPENER	DISC	DISCONNECT	HVAC	HEATING, VENTILATING AND AIR CONDITIONING	NFDS	NON-FUSED SAFETY DISCONNECT SWITCH
AF	AMP FRAME	DIST	DISTRIBUTION	HWP	HYDRONIC WATER PUMP	NIC	NOT IN CONTRACT
AFF	ABOVE FINISHED FLOOR	DN	DOWN			NL	NIGHT LIGHT
AFG	ABOVE FINISHED GRADE	DPR	DAMPER	IC	INTERRUPTING CAPACITY	N.O.	NORMALLY OPEN
AFI	ARC FAULT CIRCUIT INTERRUPTER	DS	SAFETY DISCONNECT SWITCH	IG	ISOLATED GROUND	NPF	NORMAL POWER FACTOR
AHU	AIR HANDLING UNIT	DT	DOUBLE THROW	IMC	INTERMEDIATE METAL CONDUIT	NTS	NOT TO SCALE
AL	ALUMINUM	DWG	DRAWING	INCAND	INCANDESCENT	OH	OVERHEAD
ALT	ALTERNATE	EC	ELECTRICAL CONTRACTOR	IR	INFRARED	OL	OVERLOADS
AMP	AMPERE	ELEC	ELECTRIC, ELECTRICAL	I/W	INTERLOCK WITH	PA	PUBLIC ADDRESS
AMPL	AMPLIFIER	ELEV	ELEVATOR	J-BOX	JUNCTION BOX	PB	PULL BOX OR PUSHBUTTON
ANNUN	ANNUNCIATOR	EM	EMERGENCY			PE	PNEUMATIC ELECTRIC
APPROX	APPROXIMATELY	EMS	ENERGY MANAGEMENT SYSTEM	KV	KILOVOLT	PED	PEDESTAL
AQ-STAT	AQUASTAT	EMT	ELECTRICAL METALLIC TUBING	KVA	KILOVOLT-AMPERE	PF	POWER FACTOR
ARCH	ARCHITECT, ARCHITECTURAL	EP	ELECTRIC PNEUMATIC	KVAR	KILOVOLT-AMPERE REACTIVE	PH	PHASE
AS	AMP SWITCH	EQUIP	EQUIPMENT	KW	KILOWATT	PIV	POST INDICATING VALVE
AT	AMP TRIP	EWC	ELECTRIC WATER COOLER	KWH	KILOWATT HOUR	PNL	PANEL
ATS	AUTOMATIC TRANSFER SWITCH	EX	EXISTING			PP	POWER POLE
AUTO	AUTOMATIC	EXH	EXHAUST	LOC	LOCATE OR LOCATION	PR	PAIR
AUX	AUXILARY	EXP	EXPLOSION PROOF	LT	LIGHT	PRI	PRIMARY
AV	AUDIO VISUAL			LTG	LIGHTING	PROJ	PROJECTION
AWG	AMERICAN WIRE GAUGE	FA	FIRE ALARM	LTNG	LIGHTNING	PRV	POWER ROOF VENTILATOR
		FABP	FIRE ALARM BOOSTER POWER SUPPLY PANEL	LV	LOW VOLTAGE	PT	POTENTIAL TRANSFORMER
BATT	BATTERY	FACP	FIRE ALARM CONTROL PANEL	MAX	MAXIMUM	PVC	POLYVINYL CHLORIDE (CONDUIT)
BD	BOARD	FCU	FAN COIL UNIT	MAG.S	MAGNETIC STARTER	PWR	POWER
BLDG	BUILDING	FIXT	FIXTURE	M/C	MOMENTARY CONTACT		
BMS	BUILDING MANAGEMENT SYSTEM	FLR	FLOOR	MC	MECHANICAL CONTRACTOR	QUAN	QUANTITY
		FLUOR	FLUORESCENT	MCB	MAIN CIRCUIT BREAKER		
C	CONDUIT	FU	FUSE	MCC	MOTOR CONTROL CENTER	RCPT	RECEPTACLE
CAB	CABINET	FUDS	FUSED SAFETY DISCONNECT SWITCH	MDC	MAIN DISTRIBUTION CENTER	REQD	REQUIRED
CAT	CATALOG			MDP	MAIN DISTRIBUTION PANEL	RM	ROOM
CATV	CABLE TELEVISION	GA	GAUGE	MFR	MANUFACTURER	RSC	RIGID STEEL CONDUIT
CB	CIRCUIT BREAKER	GAL	GALLON	MFS	MAIN FUSED DISCONNECT SWITCH	RTU	ROOF TOP UNIT
CCTV	CLOSED CIRCUIT TELEVISION	GALV	GALVANIZED	MH	MANHOLE	SC	SURFACE CONDUIT
CKT	CIRCUIT	GC	GENERAL CONTRACTOR	MIC	MICROPHONE	SEC	SECONDARY
CLG	CEILING	GEN	GENERATOR	MIN	MINIMUM	SHT	SHEET
COMB	COMBINATION	GFI	GROUND FAULT CIRCUIT INTERRUPTER	MISC	MISCELLANEOUS	SIM	SIMILAR
CMPR	COMPRESSOR	GFP	GROUND FAULT PROTECTOR	MLO	MAIN LUGS ONLY	S/N	SOLID NEUTRAL
CONN	CONNECTION	GND	GROUND	MMS	MANUAL MOTOR STARTER	SPEC	SPECIFICATION
CONST	CONSTRUCTION	GRS	GALVANIZED RIGID STEEL (CONDUIT)	MOA	MULTIOUTLET ASSEMBLY	SPKR	SPEAKER
CONT	CONTINUATION OR CONTINUOUS	GYP BD	GYPSUM BOARD	MSP	MOTOR STARTER PANELBOARD	SP	SPARE
CONTR	CONTRACTOR			MSBD	MAIN SWITCHBOARD	SR	SURFACE RACEWAY
CONV	CONVECTOR			MT	MOUNT	SS	STAINLESS STEEL
CP	CIRCULATING PUMP	HOA	HANDS-OFF-AUTOMATIC SWITCH	MT.C	EMPTY CONDUIT	SSW	SELECTOR SWITCH
CRT	CATHODE-RAY TUBE	HORIZ	HORIZONTAL	MTS	MANUAL TRANSFER SWITCH	S/S	STOP/START PUSHBUTTONS
CT	CURRENT TRANSFORMER	HP	HORSEPOWER	MTR	MOTOR, MOTORIZED	STA	STATION
CTR	CENTER	HPF	HIGH POWER FACTOR	N.C.	NORMALLY CLOSED	STD	STANDARD
CU	COPPER			NEC	NATIONAL ELECTRICAL CODE	SURF	SURFACE MOUNTED
						SW	SWITCH
						XFMR	TRANSFORMER
						XFR	TRANSFER
						∠	ANGLE
						@	AT
						△	DELTA
						'	FEET
						"	INCHES
						#	NUMBER
						Ø	PHASE
						C	CENTER LINE
						P	PLATE

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06/08/2026

CONSTRUCTION DOCUMENTS

ISSUE DATE: 06/08/2026

REVISIONS

NO.	DESCRIPTION	DATE

WESTERN PIEDMONT COMMUNITY COLLEGE

BUILDING K RENOVATION

200 E College Drive Morganton, NC 28655

WESTERN PIEDMONT COMMUNITY COLLEGE

PROJECT NUMBER 2317

SHEET TITLE
ELECTRICAL LEGEND AND NOTES

SHEET NUMBER
E0001

SCO # 23-27049-01A
NCCCS #2784

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OPTIMA# 24-0064

1. GENERAL:
   A. THE WORK COVERED BY THESE SPECIFICATIONS CONSISTS OF FURNISHING ALL LABOR, EQUIPMENT, MATERIALS, AND SUPPLIES AS NECESSARY FOR THE COMPLETE AND SATISFACTORY OPERATING ELECTRICAL SYSTEMS AS SHOWN ON THE PLANS.
   B. ALL WORK SHALL BE IN ACCORDANCE WITH THE LATEST EDITIONS OF THE NATIONAL ELECTRICAL CODE, NFPA, STATE BUILDING CODE, AND ANY OTHER LOCAL REQUIREMENTS THAT MAY APPLY.
   C. CONTRACTOR SHALL OBTAIN AND PAY FOR ALL ELECTRICAL PERMITS AND INSPECTION FEES.
   D. ALL MATERIALS AND EQUIPMENT SHALL BE NEW AND SHALL BE LISTED BY THE UNDERWRITER'S LABORATORIES, INC. OR BY A STATE APPROVED THIRD PARTY TESTING AGENCY FOR THE USE INTENDED WHERE A STANDARD FOR SUCH MATERIALS AND USE EXISTS. ALL ITEMS OF THE SAME TYPE AND RATING SHALL BE IDENTICAL AND OF THE SAME MANUFACTURER.
   E. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS AND CATALOG DATA IN ELECTRONIC FORMAT (PDF) FOR ALL ELECTRICAL ITEMS IN THE SCOPE OF WORK, INCLUDING, BUT NOT LIMITED TO, RACEWAYS, BOXES, FITTINGS, CONDUCTORS, LUMINAIRES, LAMPS, BALLASTS, WIRING DEVICES, SAFETY SWITCHES, DISCONNECTS, TRANSFORMERS, PANELBOARDS, SWITCHBOARDS, SWITCHGEARS, MOTOR CONTROL CENTERS (MCC), BUSWAYS, GENERATORS, AUTOMATIC TRANSFER SWITCHES (ATS), UNINTERRUPTIBLE POWER SUPPLY (UPS), POWER DISTRIBUTION UNITS (PDU), FLOOR/REMOTE DISTRIBUTION CABINETS (FDC/RDC), STATIC TRANSFER SWITCHES (STS), FIRE ALARM, TELECOMMUNICATIONS, ETC. FOR APPROVAL AS APPLICABLE FOR THE PROJECT. ONE COMPLETE SET OF APPROVED SUBMITTALS SHALL BE MAINTAINED AT THE JOB SITE.
   F. ALL COST ASSOCIATED WITH SUBSTITUTED EQUIPMENT TO COMPLY WITH THE BASIS OF DESIGN, INCLUDING PROVIDING MAINTENANCE ACCESS, CLEARANCE, CONDUIT, WIRING, REPLACEMENT OF OTHER SYSTEM COMPONENTS, BUILDING ALTERATIONS, METHODS, ETC., SHALL BE INCLUDED IN THE ORIGINAL BASE BID. NO ADDITIONAL COSTS ASSOCIATED WITH SUBSTITUTED EQUIPMENT WILL BE APPROVED AFTER BIDS HAVE BEEN ACCEPTED AND ALL COSTS WILL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR. CREDITS SHALL BE GIVEN TO THE OWNER WHERE SUCH EQUIPMENT AND METHODS RESULT IN LESS EXPENSE TO THE CONTRACTOR.
   G. ONE COMPLETE SET OF THE LATEST CONSTRUCTION PLANS OF ALL TRADES SHALL BE MAINTAINED AT THE JOB SITE. IN ADDITION, ALL ADDENDUMS, BULLETINS, AND/OR SKETCHES SHALL BE INCORPORATED INTO THE ON-SITE CONSTRUCTION PLANS AS THE JOB PROGRESSES.
   H. COMPLETELY ADEQUATE HOUSING SHALL BE PROVIDED FOR ALL MATERIALS STORED ON JOB SITE. ONLY CONDUIT MAY BE STORED OUTSIDE, BUT NOT IN CONTACT WITH THE GROUND.
   I. THE CONDUIT AND NEUTRAL SYSTEM SHALL BE GROUNDED AT THE MAIN SERVICE EQUIPMENT. GROUNDING ELECTRODE SYSTEM SHALL BE INSTALLED PER NEC 250.
   J. PROVIDE AN INTERSYSTEM BONDING TERMINATION DEVICE AT THE MAIN ELECTRICAL SERVICE PER NEC 250.94.
   K. WIRING SHALL BE TESTED FOR CONTINUITY AND GROUNDS BEFORE BEING ENERGIZED. FAULTY WIRING SHALL BE REPLACED AT NO ADDITIONAL EXPENSE TO THE OWNER.
   L. PROVIDE ALL CUTTING AND PATCHING FOR INSTALLATION OF WORK AND REPAIR ANY DAMAGE DONE.
   M. THE ELECTRICAL CONTRACTOR SHALL CONNECT ALL EQUIPMENT REQUIRING ELECTRICAL CONNECTIONS (UNLESS OTHERWISE NOTED), EXCEPT FOR CONTROL WIRING FOR EQUIPMENT NOT PROVIDED BY THE ELECTRICAL CONTRACTOR. CONTROL WIRING FOR SUCH EQUIPMENT SHALL BE PROVIDED BY THE RESPECTIVE DISCIPLINE.
   N. ALL ELECTRICAL JUNCTION BOXES, SWITCHGEAR, CABLING, VOICE/DATA OUTLETS, LOW VOLTAGE CABINETS, EMERGENCY RECEPTACLES, ETC. SHALL BE LABELED ACCORDING TO PANEL/RACK AND CIRCUIT NUMBER.
   O. UPON COMPLETION OF WORK, CONTRACTOR SHALL PRESENT ENGINEER WITH CERTIFICATE OF APPROVAL FROM LOCAL INSPECTOR AND/OR AUTHORITY HAVING JURISDICTION BEFORE WORK WILL BE APPROVED FOR FINAL PAYMENT.
   P. CONTRACTOR SHALL GUARANTEE ALL WORK AND MATERIALS FOR A PERIOD OF ONE YEAR EFFECTIVE THE DATE THE PROJECT IS ACCEPTED BY THE OWNER. ANY IMPERFECT MATERIALS OR WORKMANSHIP SHALL BE REPLACED WITHOUT ADDED COST TO THE PROJECT.
   Q. IT SHALL NOT BE THE INTENT OF ISSUED PLANS AND/OR SPECIFICATIONS TO SHOW EVERY MINOR DETAIL OF CONSTRUCTION. THE ELECTRICAL CONTRACTOR IS EXPECTED TO FURNISH AND INSTALL ALL NECESSARY ITEMS FOR A COMPLETE AND OPERATING SYSTEM.
   R. THE WORD "PROVIDE" MEANS THAT THIS CONTRACTOR SHALL FURNISH, FABRICATE, ERECT, CONNECT, AND COMPLETELY INSTALL SYSTEMS IN PROPER OPERATING CONDITION. ALL LABOR, PRODUCT OPTIONS, ACCESSORIES AND INCIDENTAL MATERIALS REQUIRED SHALL BE INCLUDED AS PART OF THIS WORK TO COMPLETE THE INSTALLATION.
   S. THE WORD "CONNECT" MEANS THAT THIS CONTRACTOR SHALL PROVIDE (SEE DEFINITION ABOVE) ALL DISCONNECTING MEANS, OVERCURRENT PROTECTION AND WIRING REQUIRED TO PLACE THE EQUIPMENT AND SYSTEMS IN PROPER OPERATING CONDITION AND TO COMPLY WITH CODE REQUIREMENTS.
   T. CONTRACTOR SHALL COORDINATE THE ROUGH-IN OF ALL OUTLET LOCATIONS WITH ARCHITECTURAL FLOOR PLANS, ELEVATIONS, AND MILLWORK SHOP DRAWINGS PRIOR TO ROUGH-IN.
   U. ELECTRICAL CONTRACTOR SHALL NOT SCALE PLANS. CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS AND ELEVATIONS FOR EXACT LOCATIONS OF ALL EQUIPMENT, UNLESS OTHERWISE NOTED.
   V. CONTRACTOR SHALL TEST ALL "LIFE SAFETY" EQUIPMENT AND SYSTEMS FOR PROPER FUNCTION AND OPERATION. UPON SUCCESSFUL COMPLETION OF TESTS, CONFIRMATION SHALL BE SENT TO THE ENGINEER OF RECORD IN THE FORM OF A LETTER STATING THE TESTS PERFORMED, THE RESULTS, AND THE DATE TESTS WERE SUCCESSFULLY COMPLETE. "LIFE SAFETY" EQUIPMENT AND SYSTEMS CONSIST OF THOSE AS SPECIFIED IN THE STATE BUILDING CODE, THE NATIONAL ELECTRICAL CODE, NFPA 101, AND ANY OTHER LOCAL REQUIREMENTS THAT MAY APPLY.
   W. IF DURING THE COURSE OF WORK, THE CONTRACTOR DISCOVERS A PROBLEM WITH THE PERFORMANCE OF THE INSTALLATION RELATIVE TO THE PLANS AND SPECIFICATIONS, THE NEC, OR OTHER CODES OR REQUIREMENTS, THE CONTRACTOR SHALL IMMEDIATELY BRING THE PROBLEM TO THE ATTENTION OF THE ARCHITECT AND/OR ENGINEER FOR RESOLUTION PRIOR TO THE EXECUTION OF THE WORK.
   X. WHERE THERE ARE CONFLICTS BETWEEN THE PLANS AND SPECIFICATIONS, THE CONTRACTOR SHALL BRING THE ISSUE TO THE ATTENTION OF THE ENGINEER FOR RESOLUTION PRIOR TO THE EXECUTION OF THE WORK OR ORDERING ANY MATERIALS. NO ADDITIONAL COSTS SHALL BE WARRANTED WITHOUT A CHANGE TO THE PROJECT SCOPE.
   Y. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING AND PROVIDING TEMPORARY POWER AND LIGHTING FOR ALL TRADES. AT NO TIME SHALL EXISTING BUILDING POWER SYSTEMS BE UTILIZED WITHOUT WRITTEN PERMISSION FROM THE OWNER.
   Z. COORDINATE LOCATION AND REQUIREMENTS FOR ELECTRICAL SERVICE WITH THE POWER COMPANY. WHERE MORE THAN ONE SERVICE IS SUPPLIED TO A BUILDING, PROVIDE IDENTIFICATION AT EACH SERVICE PER NEC 230-2(E).
   AA. COORDINATE LOCATION AND REQUIREMENTS FOR TELEPHONE SERVICE WITH THE TELEPHONE COMPANY.
   BB. THE CONTRACTOR SHALL PROVIDE A MINIMUM TWO WEEK NOTICE FOR ANY PLANNED UTILITY OUTAGES. WRITTEN AUTHORIZATION FROM THE OWNER SHALL BE PROVIDED PRIOR TO ANY OUTAGE. ALL PLANNED UTILITY OUTAGES SHALL BE COORDINATED WITH THE OWNER TO OCCUR DURING NON-OPERATING TIMES, INCLUDING NIGHTS, WEEKENDS AND HOLIDAYS. ALL PLANNED UTILITY OUTAGES SHALL INCLUDE PROVISIONS FOR PROPER BACK-UP OF ALL LIFE-SAFETY SYSTEMS AND INCLUDE AN APPROVED FIRE-WATCH PROGRAM AS REQUIRED BY THE LOCAL FIRE MARSHALL.
   CC. EACH BIDDER SHALL VISIT THE JOB SITE PRIOR TO BIDDING TO FAMILIARIZE THEMSELVES WITH EXISTING CONDITIONS AND TO ASCERTAIN THE EXTENT OF WORK REQUIRED. FAILURE TO VISIT SITE SHALL NOT EXCUSE CONTRACTOR FROM PERFORMING REQUIRED WORK NOR SHALL IT BE AN ACCEPTABLE REASON FOR REQUESTING ADDITIONS TO THE CONTRACT.

2. RACEWAY:
   A. CONDUIT SHALL BE MANUFACTURED BY ALLIED, WHEATLAND, REPUBLIC CONDUIT, WESTERN TUBE, OR APPROVED EQUIVALENT.
   B. FOR INTERIOR WORK, CONDUIT SHALL BE ZINC COATED EMT EXCEPT WHERE NOT PERMITTED BY CODE. USE SCHEDULE 40 PVC BELOW CONCRETE SLAB, IN DUCTBANKS, AND FOR EXTERIOR WORK WHERE NOT SUBJECT TO DAMAGE. USE IMC WHERE SUBJECT TO PHYSICAL DAMAGE.
   C. EMT FITTINGS SHALL BE COMPRESSION GLAND TYPE, OF MALLEABLE STEEL. CONNECTORS SHALL HAVE INSULATED THROATS. CAST, SET SCREW, OR INDENTER TYPE FITTINGS ARE NOT ACCEPTABLE. ALL FITTINGS FOR EMT SHALL BE MADE OF STEEL.
   D. ALL RACEWAY SHALL BE RUN CONCEALED, UNLESS OTHERWISE NOTED. FISH ALL NEW OUTLETS IN EXISTING WALLS, WHERE POSSIBLE. ALL RUNS SHALL BE NEAT AND SQUARE.
   E. LOW VOLTAGE CABLING NOT SPECIFIED TO BE INSTALLED IN CONDUIT, SHALL BE INSTALLED IN A CABLE TRAY SYSTEM OR J-HOOK SYSTEM CONSISTING OF MINIMUM 2" DIAMETER HOOKS LOCATED ON 3'-0" CENTERS IN ALL ACCESSIBLE CEILINGS. WHERE THERE ARE INACCESSIBLE CEILINGS, PROVIDE CONDUIT FOR ENTIRE LENGTH OF INACCESSIBILITY.
   F. RACEWAYS USED FOR LOW VOLTAGE SYSTEMS SUCH AS TELECOMMUNICATIONS, FIRE ALARM, SECURITY, CCTV, CONTROLS, AND SIMILAR CONDUITS ABOVE THE CEILING AND BACKBOARD(S) SHALL BE PROVIDED WITH INSULATED THROAT BUSHINGS AT EACH CONDUIT TERMINATION. THESE BUSHINGS SHALL BE INSTALLED PRIOR TO PULLING LOW-VOLTAGE CABLES.
   G. RACEWAY PENETRATIONS THROUGH FLOOR SLABS AND FIRE-RATED WALLS SHALL BE FILLED WITH IMPERVIOUS, NON-SHRINK GROUT SUFFICIENTLY TIGHT TO PREVENT THE TRANSFER OF SMOKE, WATER, AND DUST. ROOF PENETRATIONS SHALL BE WITHIN THE EQUIPMENT ROOF CURB.
   H. SUPPORT ALL CONDUIT WITH STRAPS AND CLAMPS.
   I. ALL CONDUIT SHALL BE RUN PARALLEL OR PERPENDICULAR TO BUILDING LINES, WHETHER EXPOSED OR NOT AND SUPPORTED FROM STRUCTURE AND PROPERLY SECURED.
   J. WHERE CONDUITS PASS THROUGH A BUILDING EXPANSION JOINT, PROVIDE GALVANIZED EXPANSION FITTINGS WITH BONDING JUMPERS.
   K. MINIMUM CONDUIT SIZE SHALL BE 3/4" FOR INTERIOR WORK, 1" FOR EXTERIOR WORK.
   L. PROVIDE MINIMUM 210# TEST NYLON PULL CORD AND NYLON BUSHINGS IN ALL EMPTY RACEWAYS.
   M. LIQUID-TIGHT METAL CONDUIT SHALL ONLY BE USED FOR FINAL CONNECTIONS TO EQUIPMENT AND ALL OTHER ROTATING AND VIBRATING EQUIPMENT, MAXIMUM LENGTH OF 3'-0".
   N. FLEXIBLE METAL CONDUIT, MINIMUM SIZE 3/8", SHALL ONLY BE USED FOR FINAL CONNECTION TO LIGHTING FIXTURES, MAXIMUM LENGTH OF 6'-0".
   O. PROVIDE PULL BOXES, SUCH THAT NO SINGLE CONDUIT RUN HAS BENDS IN EXCESS OF 360°. PULL BOXES SHALL BE SUITABLE AND APPROVED FOR THE INTENDED USE. WHERE CONDUITS PASS UNDER PAVED AREAS, THEY SHALL BE RGS.
   P. ALL CONDUIT BENDS/ELBOWS EMERGING FROM UNDERGROUND SHALL BE IMC AND SHALL EXTEND A MINIMUM OF 18" BELOW GRADE.
   Q. ALL UNDERGROUND RACEWAYS SHALL BE THOROUGHLY COATED WITH TWO COATS OF ASPHALTUM BITUMASTIC.
   R. ALL CONDUITS INSTALLED UNDERGROUND OR IN CONCRETE SHALL HAVE JOINTS MADE WATERTIGHT BY USE OF POLYETRA-FLUOROETHYLENE TAPE.
   S. THE USE OF AC OR NM CABLE IS NOT PERMITTED.
   T. MC CABLE MAY ONLY BE UTILIZED WHERE PERMITTED BY CODE AND IT SHALL ONLY BE ALLOWED WHERE CONCEALED BEHIND HARD WALLS AND HARD CEILINGS. MC CABLE SHALL NOT BE EXPOSED.
   U. APPROVED SEALS SHALL BE PROVIDED IN HAZARDOUS LOCATIONS AS REQUIRED BY THE NEC.

3. OUTLET BOXES:
   A. JUNCTION AND PULL BOXES SHALL BE CODE GAUGE GALVANIZED STEEL. ACCEPTED MANUFACTURERS SHALL BE STEEL CITY (THOMAS & BETTS), RACO, CROUSE-HINDS, APPLETON (EMERSON), OR APPROVED EQUIVALENT.
   B. OUTLET BOXES SHALL NOT BE MOUNTED BACK TO BACK IN COMMON WALLS.
   C. ATTACH EMT WITH CONNECTORS HAVING INSULATED THROAT.
   D. ATTACH BOXES TO STUD WORK USING CADDY BAR STRAPS THAT CONNECT TO TWO ADJACENT METAL STUDS TO PREVENT TWISTING OF BOX IN WALL.
   E. ALL OUTLET BOXES (INCLUDING TELEPHONE, CABLE TV, AND COMPUTER) SHALL HAVE COVER PLATES, BLANK IF NOT USED.
   F. ALL EXTERIOR BOXES SHALL BE WATER-TIGHT.

4. CONDUCTORS:
   A. CONDUCTORS SHALL BE MANUFACTURED BY SOUTHWIRE (SIMPULL), ENCORE (SUPERSLICK), UNITED COPPER (SLK), CERRO (SLP), OR APPROVED EQUAL, "PRE-LUBRICATED" BY THE MANUFACTURER.
   B. ALL CONDUCTORS SHALL BE COPPER, RATED 75° C WET/DRY EXCEPT WHERE OTHERWISE NOTED OR REQUIRED BY U.L. OR OTHER CODES.
   C. ALL CONDUCTORS SHALL BE SINGLE INSULATED CONDUCTOR, THHN/THWN-2. SIZES #10 AWG AND SMALLER SHALL BE SOLID, SIZES #8 AWG AND LARGER SHALL BE STRANDED.
   D. BRANCH CIRCUITS SHALL NOT BE SMALLER THAN #12 AWG. CONTROL WIRING MAY BE #14 AWG.
   E. CONDUCTORS SHALL BE COLOR CODED BLACK/RED/BLUE FOR 120/208 VOLT SYSTEMS AND BROWN/ORANGE/YELLOW FOR 277/480 VOLT SYSTEMS FOR A, B, AND C PHASES, RESPECTIVELY. NEUTRAL SHALL BE WHITE FOR 120/208 VOLT SYSTEMS AND NATURAL GRAY FOR 277/480 VOLT SYSTEMS. GROUND CONDUCTOR SHALL BE GREEN ON ALL SYSTEMS. ALL CONDUCTOR SIZES SHALL HAVE COLOR-CODED INSULATION. THE USE OF COLORED TAPE ON LARGER WIRE SIZES SHALL NOT BE ALLOWED.
   F. INSULATION SHALL BE DUAL RATED TYPE THHN/THWN-2 FOR FEEDERS AND BRANCH CIRCUITS. FIXTURE TAPS SHALL BE #12 THHN/THWN-2 IN FLEX WITH GREEN #12 AWG GROUNDING CONDUCTOR.
   G. ALL CONDUCTORS SHALL BE IN CONDUIT.
   H. WIRING TO LIGHTING FIXTURES SHALL BE AS REQUIRED BY UL LABEL.
   I. MULTI-WIRE BRANCH CIRCUITS SHALL NOT BE ALLOWED, UNLESS EXPLICITLY INDICATED ON THE DRAWINGS. WHERE EXPLICITLY INDICATED ON THE DRAWINGS:
      a. ALL 20A MULTI-WIRE RECEPTACLE CIRCUITS SHALL UTILIZE A #10 AWG NEUTRAL CONDUCTOR.
      OR
      b. ONLY WHERE PERMITTED UNDER "RACEWAYS", MC CABLE ASSEMBLIES CAN BE AFC "SUPER NEUTRAL" OR EQUAL, UNLESS OTHERWISE INDICATED ON THE DRAWINGS. WHERE MULTI-WIRE BRANCH CIRCUITS ARE EXPLICITLY INDICATED ON THE DRAWINGS, THEY SHALL BE INSTALLED PER NEC 210.4. MEANS SHALL BE PROVIDED TO SIMULTANEOUSLY DISCONNECT ALL UNGROUNDED CONDUCTORS AT THE POINT WHERE THE BRANCH CIRCUIT ORIGINATES IN ADDITION TO OTHER REQUIREMENTS PER NEC 210.4.
   J. JOINTS IN #10 AWG AND SMALLER SHALL BE MADE UP WITH CRIMPED CONNECTORS WITH INSULATING CAPS (NO TAPE) OR WIRENUTS (MAXIMUM OF 3 CONDUCTORS UNDER ANY CONNECTOR OR WIRENUT). LARGER WIRE SHALL USE SPLIT BOLTS OR BOLTED CLAMPS.
   K. ALL WIRING LUGS THROUGHOUT THE PROJECT, INCLUDING, BUT NOT LIMITED TO, BREAKERS, PANELBOARD/SWITCHBOARD LUGS, SAFETY SWITCH LUGS, MOTOR STARTER LUGS, TRANSFORMERS LUGS, WIRING DEVICE TERMINALS, AND ALL EQUIPMENT LUGS/TERMINALS SHALL BE RATED FOR USE WITH 75 DEGREE INSULATED CONDUCTORS AT THEIR 75 DEGREE AMPACITY AND SHALL BE SIZED AND SELECTED TO MATCH THE CONDUCTOR SIZE AND MATERIAL.
   L. CIRCUIT JOINTS SHALL NOT BE MADE ON DEVICE TERMINALS.
   M. WIRE WITHIN PANELBOARDS SHALL BE NEATLY TRAINED, SQUARED, BUNCHED, AND TAGGED.
   N. ALL SYSTEM FURNITURE CONNECTIONS SHALL COMPLY WITH NEC 605.
   O. GROUND ALL EQUIPMENT PER NEC ARTICLE 250. BOND WHERE CONDUITS ENTER ENCLOSURES THROUGH CONCENTRIC KNOCKOUTS. ALL FLEX, INCLUDING FIXTURE TAPS, SHALL INCLUDE GREEN GROUNDING CONDUCTOR, #12 AWG MINIMUM. PROVIDE GREEN INSULATED EQUIPMENT GROUNDING CONDUCTOR IN EACH CONDUIT AND FOR EACH CIRCUIT, SIZED PER NEC 250-122.
   P. ALL CONDUCTORS INSTALLED IN VERTICAL RACEWAYS SHALL BE SUPPORTED AT INTERVALS AS REQUIRED PER NEC 300-19.
   Q. THE ELECTRICAL CONTRACTOR SHALL FOLLOW AND APPLY THE TABLE BELOW, REGARDLESS WHAT THE PANEL SCHEDULE INDICATES, FOR SIZING ALL 120V & 277V, 20 AMP BRANCH CIRCUITS (COPPER CONDUCTORS) TO ALLOW A MAXIMUM OF 3% VOLTAGE DROP FROM THE CIRCUIT BREAKER TO THE FIRST DEVICE ON THE BRANCH CIRCUIT AND ACHIEVE A MAXIMUM OF 5% VOLTAGE DROP ACROSS THE ENTIRE BRANCH CIRCUIT:

VOLTAGE	CONDUCTOR LENGTH *	BRANCH CIRCUIT
120	0' - 50'	#12
120	51' - 90'	#10
120	91' - 140'	#8
120	141' - 255'	#6

   * - THE LENGTH IS MEASURED FROM THE CIRCUIT BREAKER TO THE FIRST DEVICE WHICH THE BRANCH CIRCUIT SERVES. WHERE THE DISTANCE EXCEEDS ABOVE, CONSULT WITH THE ENGINEER.

   R. ALL BRANCH CIRCUIT CONDUCTORS FROM ISOLATED POWER SOURCES SHALL BE INSTALLED IN IMC CONDUIT AND SHALL BE TYPE XHHW-2, COLOR CODED ORANGE FOR CONDUCTOR #1, BROWN FOR CONDUCTOR #2, AND YELLOW FOR CONDUCTOR #3.

5. WIRING DEVICES:
   A. WIRING DEVICES SHALL BE SPECIFICATION GRADE, MINIMUM, EQUAL TO COOPER QUALITY INDICATED BELOW OR AS MANUFACTURED BY HUBBELL, LEGRAND-PASS & SEYMOUR, LEVITON, OR APPROVED EQUAL, UNLESS OTHERWISE NOTED:

   SWITCHES (120/277V) SHALL BE AS FOLLOWS:

SINGLE-POLE 20 AMP	COOPER AH1221
DOUBLE-POLE 20 AMP	COOPER AH1222
THREE-WAY 20 AMP	COOPER AH1223
FOUR-WAY 20 AMP	COOPER AH1224
SINGLE-POLE-KEY 20 AMP	COOPER AH1221L

   DUPLEX RECEPTACLES SHALL HAVE A NYLON FACE AND SHALL BE AS FOLLOWS:

15 AMP DUPLEX	COOPER 5252
20 AMP DUPLEX	COOPER 5352
15 AMP DUPLEX GFCI	COOPER SGF15F
20 AMP DUPLEX GFCI	COOPER SGF20F
15 AMP DUPLEX TAMPER	COOPER TR5262
20 AMP DUPLEX TAMPER	COOPER TR5362
15 AMP DUPLEX GFCI-TAMPER	COOPER TRSGF15F
20 AMP DUPLEX GFCI-TAMPER	COOPER TRSGF20F

   THE PART NUMBERS ABOVE ARE FOR WIRING DEVICE TYPE ONLY. SEE BELOW FOR WIRING DEVICE COLOR AND PLATE MATERIAL/COLOR.

   B. SEE MOUNTING HEIGHT ELEVATION DETAIL FOR STANDARD MOUNTING HEIGHTS OF ALL DEVICES, UNLESS OTHERWISE NOTED.
   C. THE COLOR OF ALL WIRING DEVICES (SWITCHES AND RECEPTACLES) SHALL BE AS DIRECTED BY THE ARCHITECT, UNLESS OTHERWISE NOTED. ALL COVER PLATES SHALL BE 302 STAINLESS STEEL. COVER PLATES IN MASONRY WALLS SHALL BE JUMBO SIZE.
   D. ALL WIRING DEVICES FED FROM THE EMERGENCY POWER SYSTEM SHALL BE RED.
   E. ALL WIRING DEVICES FED FROM A UPS SOURCE SHALL BE BLUE.
   F. EACH DUPLEX RECEPTACLE INDICATED TO BE ON A DEDICATED CIRCUIT SHALL BE 20 AMP TYPE.
   G. ADJACENT DEVICES SHALL HAVE A COMMON WALL PLATE.
   H. WEATHERPROOF COVERS SHALL BE "WHILE-IN-USE" AND EXTRA-DUTY RATED SO PLUGS MAY BE INSTALLED WITHOUT COMPROMISING THE WP FUNCTION. COOPER #WIU-2 DOUBLE-GANG WITH CLEAR COVER OR APPROVED EQUAL.
   I. A MAXIMUM OF 10 GENERAL PURPOSE RECEPTACLES SHALL BE ON EACH BRANCH CIRCUIT.
   J. DIMMERS SHALL BE LINEAR SLIDE, PRESENT ON/OFF, SQUARE LAW DIMMING, W/RFI FILTERING AND VOLTAGE COMPENSATION CIRCUITING.
   K. ALL WALL MOUNTED OCCUPANCY/VACANCY SENSORS/SWITCHES SHALL BE INSTALLED WITH AN EQUIPMENT GROUNDING CONDUCTOR.
   L. GROUND-FAULT CIRCUIT-INTERRUPTER (GFCI) PROTECTION FOR PERSONNEL SHALL BE PROVIDED FOR ALL LOCATIONS PER NEC 210.8, INSTALLED IN A READILY ACCESSIBLE LOCATION. WHERE A DEVICE LOCATION IS NOT ACCESSIBLE, THE GFCI PROTECTION SHALL BE PROVIDED WITH THE BREAKER SERVING THE DEVICE.
   M. ALL GFCI RECEPTACLES SHALL HAVE AUTO-MONITORING / SELF-TEST FUNCTION AND REVERSE LINE-LOAD MISFIRE FUNCTION AND MEET ALL REQUIREMENTS OF UL 943 (LATEST EDITION).
   N. TAMPER-RESISTANT RECEPTACLES SHALL BE PROVIDED FOR ALL AREAS PER NEC 406.12, INCLUDING DWELLING UNITS, ATTACHED AND DETACHED GARAGES AND ACCESSORY BUILDINGS TO DWELLING UNITS, COMMON AREAS OF MULTIFAMILY DWELLINGS, GUEST ROOMS/GUEST SUITES/COMMON AREAS OF HOTELS AND MOTELS, CHILD-CARE FACILITIES, PRESCHOOL AND EDUCATION FACILITIES, BUSINESS OFFICES/CORRIDORS/WAITING ROOMS AND THE LIKE IN CLINICS/MEDICAL/DENTAL OFFICES AND OUTPATIENT FACILITIES, ASSEMBLY OCCUPANCIES INCLUDING PLACES OF AWAITING TRANSPORTATION/GYMNASIUMS/SKATING RINKS/AUDITORIUMS, DORMITORIES/STUDENT HOUSING, AND ASSISTED LIVING FACILITIES.

6. SUPPORTS:
   A. ALL EQUIPMENT SHALL BE ADEQUATELY SUPPORTED FROM STRUCTURE.
   B. INSERTS IN MASONRY SHALL BE LEAD OR FIBER IN DRILLED HOLES, OR CAST IN PLACE.
   C. NAILS OR POWDER ACTUATED FASTENERS SHALL NOT BE USED.
   D. EMT/IMC/RGS SUPPORTS SHALL BE A MAXIMUM OF 8'-0" APART AND A MAXIMUM OF 3'-0" FROM BOXES.
   E. LIGHTING FIXTURES MOUNTED IN OR ON CEILING SHALL BE SUPPORTED FROM STRUCTURE VIA 12 GAUGE STEEL WIRE. PROVIDE A MINIMUM OF FOUR WIRES, ONE ATTACHED TO EACH CORNER OF LAY-IN FIXTURES. RECESSED DOWNLIGHT FIXTURES SHALL BE SUPPORTED THE SAME. DO NOT SUPPORT RACEWAY OR FIXTURES FROM CEILING GRID OR DUCT WORK. USE U.L. LISTED GRID CLIPS ON ALL LAY-IN FIXTURES.

7. PAINTING:
   A. SUITABLE FINISH COAT SHALL BE PROVIDED FOR ALL EQUIPMENT. PANEL TUBS, COVERS, ETC. SHALL BE PRIMED AND ENAMELED TO BLEND WITH ADJACENT SURFACES, OR SHALL BE MANUFACTURER'S STANDARD COLOR BAKED ENAMEL FINISH, OR AS DIRECTED BY THE ARCHITECT.
   B. CONTRACTOR TO PAINT WHERE EXISTING EXPOSED PANELBOARDS, SURFACE RACEWAY, SURFACE BOXES, ETC. HAVE BEEN REMOVED DURING THE DEMOLITION PHASE, EITHER FOR TEMPORARY WORK OR PERMANENTLY.

8. TELECOMMUNICATIONS:
   A. FURNISH A COMPLETE TELEPHONE CONDUIT SYSTEM AS INDICATED ON THE DRAWINGS.
   B. TELECOMMUNICATION OUTLETS SHALL CONSIST OF A 4" SQUARE DEEP BOX WITH SINGLE GANG PLASTER RING. PROVIDE BLANK PLATE WITH KNOCKOUTS FOR OUTLETS, AS PERMANENT COVERS WILL BE PROVIDED BY A SEPARATE INSTALLER.
   C. PROVIDE MINIMUM 1.25" RACEWAY, UNLESS OTHERWISE NOTED, FROM EACH BOX TO ABOVE NEAREST ACCESSIBLE CEILING SPACE FOR J-HOOK SYSTEM OR TO CABLE TRAY AS APPLICABLE. PROVIDE MINIMUM 210# TEST NYLON PULL CORD AND NYLON BUSHINGS IN ALL EMPTY RACEWAYS. CONDUITS SHALL NOT BE DAISY-CHAINED.
   D. PROVIDE RACEWAYS FOR ALL EXTERIOR AND/OR EXPOSED LOCATIONS.
   E. PROVIDE GROUNDING FOR ALL TELEPHONE/DATA SYSTEMS AND EQUIPMENT PER REQUIREMENTS AND SPECIFICATIONS PROVIDED BY THE OWNERS DESIGNATED VENDOR.
   F. ALL LOW-VOLTAGE CABLING SHALL BE PLENUM-RATED.
   G. CONTRACTOR SHALL FURNISH AND INSTALL A #6 AWG GREEN INSULATED COPPER WIRE IN CONDUIT FROM THE MAIN ELECTRICAL GROUNDING BAR TO TELECOMMUNICATIONS GROUNDING BUS BAR.
   H. PROVIDE MOUNTING BACKBOARDS FOR COMMUNICATIONS EQUIPMENT. BACKBOARDS SHALL BE OF 3/4" TYPE AC, EXTERIOR PLYWOOD, PAINTED BOTH SIDES AND ALL EDGES WITH 2 COATS OF GRAY FLAME RETARDANT PAINT.
   I. VERIFY SITE LOCATION OF TELEPHONE SERVICES WITH APPROPRIATE VENDOR, PRIOR TO SUBMITTING BID. TELEPHONE SERVICE CONDUITS SHALL BE PROVIDED TO THE PROPERTY LINE OR POINT AS DIRECTED BY THE LOCAL UTILITY.

9. LIGHTING FIXTURES:
   A. TYPES AND MANUFACTURERS ARE SCHEDULED ON THE PLANS. EQUIVALENT FIXTURES BY OTHERS MAY BE SUBMITTED ONLY AS INDICATED ON THE PLANS AND ARE SUBJECT TO THE APPROVAL OF THE OWNER AND ENGINEER.
   B. ALL FIXTURES SHALL BE U.L. LISTED AND LABELED.
   C. LED DRIVERS AND/OR BALLASTS SHALL BE AS INDICATED IN THE LIGHTING FIXTURE SCHEDULE OR AS OTHERWISE NOTED.
   D. ALL FIXTURES SHALL BE PROVIDED FOR PROPER VOLTAGE BASED ON THE CIRCUIT ASSIGNMENT INDICATED ON THE PLANS.
   E. CATALOG NUMBERS ARE FOR GENERAL IDENTIFICATION OF FIXTURES ONLY. ALL RELATED PARTS, SUCH AS PLASTER RINGS, JUNCTION BOXES, LOUVERS, SHIELDS, MOUNTING STEMS, CANOPIES, CONNECTORS, STRAPS, NIPPLES, HARDWARE, ACCESSORIES, ETC., TO FIT THEM PROPERLY TO THE CONSTRUCTION, SHALL BE FURNISHED AND INSTALLED BY THIS CONTRACTOR. CONTRACTOR SHALL PROVIDE SUITABLE TRIM AND APPURTENANCES TO MOUNT FIXTURES IN TYPE OF CEILING OR WALL AS SPECIFIED IN ARCHITECTURAL FINISH SCHEDULES REGARDLESS OF CATALOG NUMBER GIVEN.
   F. ALL FIXTURES SHALL BE GROUNDED PER THE NEC.
   G. FIXTURES CONNECTED WITH FLEX TO THE RIGID RACEWAY PORTION OF THE WIRING SYSTEM SHALL CARRY A GREEN BONDING JUMPER WITHIN THE FLEX. THE JUMPER SHALL BE FASTENED TO BOTH THE FIXTURE AND THE RACEWAY SYSTEM WITH A STEEL CITY "G" CLIP OR APPROVED EQUIVALENT. PHASE AND GROUND CONDUCTORS RUN IN FLEX SHALL BE #12 AWG MINIMUM. MAXIMUM FLEX LENGTH SHALL BE 6'-0".
   H. MOUNT ALL FIXTURES PLUMB AND SQUARE WITH ROWS ALIGNED.
   I. SEE ARCHITECTURAL REFLECTED CEILING PLANS FOR EXACT LOCATION OF FIXTURES.
   J. CONTRACTOR SHALL COORDINATE FIXTURE TYPE AND TRIM WITH CEILING CONSTRUCTION AND ADJUST ACCORDINGLY WITHOUT ADDITIONAL EXPENSE.
   K. ALL LIGHTING FIXTURES SHALL BE THERMALLY PROTECTED PER THE NEC.
   L. SURFACE-MOUNTED FIXTURES INSTALLED ON COMBUSTIBLE MATERIAL SHALL BE MOUNTED AT LEAST 1/4" FROM THE SURFACE OF THE MATERIAL, EXCEPT FOR FIXTURES WHICH ARE PLAINLY MARKED AS U.L. APPROVED FOR MOUNTING DIRECTLY TO SUCH SURFACES.
   M. FIXTURES IN CONTACT WITH INSULATION SHALL BE IC RATED.
   N. FOR RECESSED LIGHTING FIXTURES IN FIRE RATED CEILINGS, PROVIDE A MANUFACTURER APPROVED AND LISTED FIRE RATED COVER/ASSEMBLY OVER THE FIXTURE TO MAINTAIN THE INTEGRITY OF THE CEILING FIRE RATING. ANY LIGHTING FIXTURES INSTALLED UNDER THE FIRE RATED CAP SHALL BE SUITABLE FOR THE INSTALLATION.

10. LIGHTING CONTROLS:
   A. FURNISH AND INSTALL WHERE SHOWN AN ELECTRONIC TIME CONTROLLER AS MANUFACTURED BY TORK (NSI), PARAGON, INTERMATIC, OR APPROVED EQUAL. CONTACTS SHALL BE SPST OR AS INDICATED, RATED 120/277V AT 20A BALLAST LOAD, AND MINIMUM 30,000 SWITCHING CYCLES. PROVIDE WITH THE NUMBER OF CHANNELS INDICATED (MINIMUM 2 CHANNELS) OR AS REQUIRED TO MEET THE INTENT OF THE DRAWINGS. EACH CHANNEL SHALL BE INDIVIDUALLY PROGRAMMABLE WITH 128 ON-OFF OPERATIONS PER WEEK PLUS FOUR SEASONAL SCHEDULES TO MODIFY THE BASIC PROGRAM AND A HOLIDAY SCHEDULE THAT OVERRIDES THE WEEKLY OPERATION. THE CONTROLLER SHALL BE PROVIDED WITH A PHOTOELECTRIC SENSOR, ASTRONOMIC DIAL, AND A BATTERY BACKED-UP, NON-VOLATILE MEMORY FOR SCHEDULES AND TIME CLOCK.
   B. LIGHTING CONTACTORS SHALL SWITCH LOADS AT THE VOLTAGE AND AMPERE RATING INDICATED AND SHALL HAVE THE NUMBER OF POLES INDICATED ON THE DRAWINGS OR AS REQUIRED. THE CONTACTOR AND CONTACTS SHALL BE CONTINUOUSLY RATED FOR THE LOAD SERVED, INCLUDING TUNGSTEN FILAMENT, INDUCTIVE, AND HIGH-INRUSH BALLAST LOADS.
   C. ALL LIGHTING CONTACTORS SHALL BE ELECTRICALLY HELD AND BE INSTALLED IN A NEMA 1 ENCLOSURE, UNLESS OTHERWISE NOTED.

11. EQUIPMENT IDENTIFICATION:
   A. PROVIDE ENGRAVED PHENOLIC NAMEPLATES FOR ALL ELECTRICAL EQUIPMENT SUPPLIED FOR THE PROJECT, INCLUDING BUT NOT LIMITED TO, WIRING TROUGHS, SAFETY SWITCHES, DISCONNECTS, TRANSFORMERS, PANELBOARDS, SWITCHBOARDS, SWITCHGEARS, MOTOR CONTROL CENTERS (MCC), BUSWAYS, GENERATORS, AUTOMATIC TRANSFER SWITCHES (ATS), UNINTERRUPTIBLE POWER SUPPLY (UPS), POWER DISTRIBUTION UNITS (PDU), FLOOR/REMOTE DISTRIBUTION CABINETS (FDC/RDC), STATIC TRANSFER SWITCHES (STS), ETC. NAMEPLATE SHALL INDICATE THE DEVICE NAME, SYSTEM VOLTAGE (VOLTAGE/PHASE/WIRE), AND UPSTREAM DEVICE AND CIRCUIT. PROVIDE NAMEPLATES FOR CIRCUIT BREAKERS IN SWITCHGEARS, SWITCHBOARDS AND DISTRIBUTION PANELS.
   B. NAMEPLATE COLORS SHALL BE AS FOLLOWS:

120/208V EQUIPMENT	BLUE SURFACE WITH WHITE CORE
277/480V EQUIPMENT	BLACK SURFACE WITH WHITE CORE
EMERGENCY SYSTEMS	GREEN SURFACE WITH WHITE CORE
FIRE ALARM SYSTEMS	BRIGHT RED SURFACE WITH WHITE CORE
SECURITY SYSTEMS	BURGUNDY SURFACE WITH WHITE CORE
TELEPHONE SYSTEMS	ORANGE SURFACE WITH WHITE CORE
DATA SYSTEMS	BROWN SURFACE WITH WHITE CORE
TV SYSTEMS	PURPLE SURFACE WITH WHITE CORE
PAGING SYSTEMS	WHITE SURFACE WITH BLACK CORE
UPS SYSTEM A	WHITE SURFACE WITH BLUE CORE
UPS SYSTEM B	WHITE SURFACE WITH GREEN CORE
UPS SYSTEM C	WHITE SURFACE WITH DARK YELLOW CORE
UPS SYSTEM D	WHITE SURFACE WITH MAGENTA CORE
EPO SYSTEMS	WHITE SURFACE WITH RED CORE

   C. NAMEPLATES UP TO 8 SQUARE INCHES SHALL NOT BE LESS THAN 1/16" THICK. NAMEPLATES LARGER THAN 8 SQUARE INCHES SHALL NOT LESS THAN 1/8" THICK.
   D. LETTERING HEIGHT SHALL BE 1/2" MINIMUM.
   E. NAMEPLATES SHALL BE ATTACHED WITH SELF-DRILLING/SELF-TAPPING SCREWS, EXCEPT RIVETS SHALL BE USED WHERE END OF SCREW IS NOT PROTECTED. QUANTITY AS FOLLOWS:

UP TO 5 SQUARE INCHES:	2 SCREWS
5 TO 12 SQUARE INCHES:	4 SCREWS
ABOVE 12 SQUARE INCHES:	6 SCREWS

12. DISCONNECTS:
   A. DISCONNECT SWITCHES SHALL BE HEAVY-DUTY TYPE IN NEMA 1 ENCLOSURES, UNLESS OTHERWISE NOTED, FUSED OR NON-FUSED AS INDICATED. SWITCHES SHALL HAVE REJECTION-TYPE FUSE CLIPS. SWITCHES SHALL BE BY EATON, SQUARE-D, ABB, OR APPROVED EQUAL. WHERE FED FROM A LOAD CENTER, GENERAL-DUTY SWITCHES SHALL BE PERMITTED.
   B. FUSES LESS THAN 60A SHALL BE CLASS RK5, DUAL-ELEMENT, TIME-DELAY WITH INDICATION
   C. FUSES GREATER THAN 60A SHALL BE CLASS J, DUAL-ELEMENT, TIME-DELAY WITH INDICATION.
   D. A SET OF 3 SPARE FUSES OF EACH SIZE AND TYPE SHALL BE FURNISHED TO THE OWNER.

13. PANELBOARDS:
   A. PANELBOARDS SHALL BE PROVIDED AS MANUFACTURED BY EATON, SQUARE-D, ABB, OR APPROVED EQUAL. ALL NEW EQUIPMENT FOR THE PROJECT SHALL BE BY THE SAME MANUFACTURER. LOAD CENTER TYPE PANELBOARDS SHALL BE USED WHERE THE PANELBOARD SERVES A DWELLING UNIT.
   B. ALL BUSSING, INCLUDING NEUTRAL AND GROUND, SHALL BE COPPER.
   C. ALL BREAKERS SHALL BE AUTOMATIC THERMAL-MAGNETIC TYPE MOLDED CASE BOLT-ON TYPE, CALIBRATED FOR 40 DEGREE C, OR AMBIENT COMPENSATION, UNLESS OTHERWISE NOTED.
   D. PANELS SHALL BE FULLY RATED (AIC). NO SERIES AIC RATINGS ARE ALLOWED.
   E. PANELS SHALL HAVE FULL SIZE EQUIPMENT GROUNDING BARS AND NEUTRAL BARS, EXCEPT WHERE INDICATED TO BE 200%.
   F. ALL PANELBOARD AND BREAKER LUGS SHALL BE SIZED AND RATED PER THE CONDUCTOR SIZE AND MATERIAL.
   G. LIGHTING AND APPLIANCE PANELS (100A-600A) SHALL HAVE FRONT ACCESSIBLE HINGED DOOR-IN-DOOR COVERS WITH DEAD FRONT, SHALL BE 20" WIDE MINIMUM WITH MINIMUM 4" WIDE WIRING GUTTERS.
   H. DISTRIBUTION PANELS (600A-1200A) SHALL HAVE FRONT ACCESSIBLE DEAD FRONT COVERS.
   I. PROVIDE HANDLE LOCK-ON DEVICES FOR ALL CIRCUIT BREAKERS CONNECTED TO EMERGENCY, EXIT, NIGHT LIGHTING, FIRE ALARM, TELEPHONE BOARDS, AND SECURITY SYSTEMS.
   J. BREAKERS USED FOR SWITCHING SHALL BE SWITCHING DUTY (SWD) RATED.
   K. BREAKERS USED FOR HEATING, AIR-CONDITIONING AND/OR REFRIGERATION SHALL BE HACR RATED.
   L. GROUND-FAULT CIRCUIT-INTERRUPTER (GFCI) PROTECTION FOR PERSONNEL SHALL BE PROVIDED FOR ALL LOCATIONS PER NEC 210.8, INSTALLED IN A READILY ACCESSIBLE LOCATION. WHERE A DEVICE LOCATION IS NOT ACCESSIBLE, THE GFCI PROTECTION SHALL BE PROVIDED WITH THE BREAKER SERVING THE DEVICE.
   M. ARC-FAULT CIRCUIT-INTERRUPTER (AFCI) PROTECTION SHALL BE PROVIDED FOR ALL LOCATIONS PER NEC 210.12, INSTALLED IN A READILY ACCESSIBLE LOCATION. THIS INCLUDES ALL 120V, 15A AND 20A BRANCH CIRCUITS IN DWELLING UNITS, DORMITORY/STUDENT HOUSING UNITS AND HOTEL/MOTEL GUEST ROOMS/SUITES AS DEFINED BY THE NEC.
   N. ALL OVERCURRENT DEVICES WHICH COMPRISE THE EMERGENCY SYSTEM OR LEGALLY REQUIRED STANDBY SYSTEM SHALL BE SELECTIVELY COORDINATED. THE ELECTRICAL CONTRACTOR SHALL PROVIDE MANUFACTURER DOCUMENTATION INDICATING COMPLIANCE WITH THE SELECTIVE COORDINATION REQUIREMENTS PER THE NEC.
   O. ALL PANELBOARDS SHALL HAVE METAL DIRECTORY FRAME. FOR EACH PANELBOARD, PROVIDE TYPED CIRCUIT DIRECTORY PER NEC 408.4. SPARE CIRCUIT BREAKERS SHALL BE LABELED SPARE AND IN THE OFF POSITION.

14. FIRE ALARM SYSTEM:
   A. SYSTEM SHALL BE A CENTRALIZED, ANALOG, ADDRESSABLE, FULLY ELECTRONICALLY SUPERVISED (INCLUDING AUXILIARY SYSTEMS INTERCONNECT WIRING) SYSTEM LISTED BY UL IN COMPLIANCE WITH ALL APPLICABLE NFPA 72 AND OTHER STANDARDS AS WELL AS THE AMERICAN'S WITH DISABILITIES ACT (ADA). ALL FINAL CONNECTIONS, TESTING AND ADJUSTMENTS SHALL BE PERFORMED BY OR UNDER DIRECT SUPERVISION OF AN AUTHORIZED FACTORY REPRESENTATIVE. SYSTEM SHALL BE EDWARDS, NOTIFIER, SIEMENS, OR APPROVED EQUAL AS ACCEPTED BY THE ENGINEER. SYSTEM SHALL HAVE A 60HR MINIMUM BATTERY BACKUP.
   B. INITIATING DEVICE ACTIVATION SHALL CAUSE OPERATION OF THE PROPER ALARM CIRCUIT IN THE CONTROL PANEL, AND OPERATE ALL AUDIBLE AND VISUAL INDICATING ALARMS. ALL AIR HANDLING UNITS SHALL BE STOPPED UPON ANY ALARM INPUT. EACH AIR HANDLER UNIT SHALL BE PROVIDED WITH A SYSTEM CONTROLLED RELAY TO EFFECT SHUTDOWN. ALL ALARM DEVICES AND LAMPS SHALL CONTINUE TO OPERATE UNTIL THE INITIATING DEVICE IS RESET. SUBSEQUENT ALARMS SHALL RESOUND THE SYSTEM. AN AUDIBLE AND VISUAL SIGNAL SHALL INDICATE SYSTEM TROUBLE. THE CONTROL PANEL SHALL PROVIDE FOR ACTIVATING A UL LISTED CENTRAL STATION SIGNAL FOR NOTIFYING THE FIRE DEPARTMENT.
   C. MANUAL STATIONS SHALL BE NON-CODED, WITH PULL LEVER AND GLASS ROD, SEMI-FLUSH MOUNTED. COMBINATION LIGHT AND HORN SIGNALS SHALL BE FLUSH MOUNTED. WIRING SHALL BE IN CONDUIT AS PREVIOUSLY SPECIFIED, #14 AWG MINIMUM, THHN. ALL J-BOXES USED FOR THE FIRE ALARM SYSTEM SHALL BE PAINTED RED.
   D. SPRINKLER SYSTEM TAMPER SWITCHES SHALL BE CONNECTED INTO A COMMON ZONE WHICH SHALL DISTINGUISH BETWEEN A CONDUIT FAULT AND A CLOSED VALVE. A CLOSED VALVE SHALL BE INDICATED AS AN ALARM CONDITION, BUT WILL NOT ACTIVATE THE AUDIO-VISUAL DEVICES AND SHALL CAUSE A SUPERVISORY SIGNAL TO BE TRANSMITTED TO THE CENTRAL STATION.
   E. CONDUCTORS SHALL BE PLENUM-RATED AND INSTALLED IN CONDUIT AND INSTALLED IN COMPLIANCE WITH NFPA 70, ARTICLE 760; IN ADDITION TO WIRING METHODS 300.4.
   F. ALL FIRE ALARM WIRING SHALL BE CLASS A/B.
   G. PROVIDE ALL REQUIRED MODULES, POWER EXTENDERS, PROGRAMMING, ETC. FOR A COMPLETE AND OPERATIONAL SYSTEM.
   H. SUBMIT FIRE ALARM SHOP DRAWINGS CONSISTING OF PRODUCT DATA, TO THE ENGINEER AND FOR APPROVAL.
   I. FILL OUT NFPA 72 CERTIFICATION REPORT AND SUBMIT TO ENGINEER AND AUTHORITY HAVING JURISDICTION.
   J. WARRANTY - ALL WORK PERFORMED AND ALL MATERIALS AND EQUIPMENT FURNISHED UNDER THIS CONTRACT SHALL BE FREE FROM DEFECTS AND SHALL REMAIN SO FOR A PERIOD OF ONE YEAR FROM THE DATE OF ACCEPTANCE BY THE PROFESSIONAL ENGINEER AND/OR OWNER. THE FULL COST OF MAINTENANCE, LABOR, AND MATERIALS REQUIRED TO CORRECT ANY DEFECT DURING THIS ONE YEAR PERIOD SHALL BE IMMEDIATELY CORRECTED AT NO ADDITIONAL COST TO THE OWNER. ANY DEFECTS THAT RENDER THE SYSTEM INOPERATIVE SHALL BE REPAIRED WITHIN 24 HOURS OF THE OWNER NOTIFYING THE CONTRACTOR. OTHER DEFECTS SHALL BE REPAIRED WITHIN 48 HOURS OF THE OWNER NOTIFYING THE CONTRACTOR.
   K. AUDIBLE DEVICES WITHIN SLEEPING ROOMS SHALL PROVIDE A SQUARE WAVE 520HZ TONE COMPATIBLE WITH NFPA 72 18.4.5.3.
   L. PROVIDE ALL REPROGRAMMING AND/OR REWORK AND/OR REPLACEMENT OF EXISTING FIRE ALARM PANEL AS REQUIRED.
   M. PROVIDE CARBON MONOXIDE SENSOR FOR ALL BUILDINGS WITH GAS FIRED APPLIANCES. INCLUDE AT SOURCE LOCATIONS OF CO PRODUCING APPLIANCES AND WITHIN ALL SLEEPING ROOMS. REPORT TO FACP AS SUPERVISORY SIGNAL.

15. FIRE STOPPING:
   A. ALL PENETRATIONS OF RATED ASSEMBLIES SHALL BE SEALED WITH RATED MATERIALS MEETING ASTM E-814.
   B. PROVIDE FIRESTOPPING DEVICE(S) OR SYSTEM(S) WHICH HAVE BEEN TESTED AND LISTED AS COMPLYING WITH ASTM E-814. INSTALL THE DEVICE(S) OR SYSTEM(S) IN ACCORDANCE WITH THE CONDITIONS OF THEIR LISTING. PROVIDE THE APPROPRIATE DEVICE(S) OR SYSTEM(S) WITH AN 'F' RATING EQUAL TO THE RATING OF THE ASSEMBLY BEING PENETRATED.
   C. DEVICE(S) AND/OR SYSTEM(S) SHALL BE BY HILTI, 3M OR EQUIVALENT.

16. SEISMIC:
   A. THE ELECTRICAL CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR PROVIDING SEISMIC SUPPORT AND BRACING OF ELECTRICAL COMPONENTS TO RESIST THE EFFECTS OF EARTHQUAKES ON THE ELECTRICAL SYSTEM AS WELL AS ANY REQUIRED SPECIAL INSPECTIONS BASED ON THE SPECIFIC GEOGRAPHIC LOCATION AS REQUIRED. THE SEISMIC RESTRAINTS AND SPECIAL INSPECTIONS SHALL MEET ALL APPLICABLE STATE AND LOCAL BUILDING CODE REQUIREMENTS AS WELL AS ASCE-7 REQUIREMENTS.
   OR
   THE ELECTRICAL CONTRACTOR SHALL RETAIN THE SERVICES OF A STRUCTURAL ENGINEER TO DETERMINE SITE CLASSIFICATION AND SEISMIC RESTRAINT REQUIREMENTS FOR ELECTRICAL EQUIPMENT AND SYSTEMS REQUIRED FOR THIS PROJECT. WHERE REQUIRED, THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING RESTRAINTS TO RESIST THE EARTHQUAKE EFFECTS ON THE ELECTRICAL SYSTEM. THE REQUIREMENTS FOR THESE RESTRAINTS ARE FOUND IN CHAPTERS 16 AND 17 OF THE NORTH CAROLINA STATE BUILDING CODE (NCSBC). ***OR*** INTERNATIONAL BUILDING CODE (IBC).
   B. THE ELECTRICAL CONTRACTOR SHALL RETAIN THE SERVICES OF A PROFESSIONAL STRUCTURAL ENGINEER REGISTERED IN THE STATE OF NORTH CAROLINA TO DESIGN SEISMIC RESTRAINT ELEMENTS REQUIRED FOR THIS PROJECT. THE ENGINEER'S COMPUTATIONS, BEARING HIS PROFESSIONAL SEAL, SHALL ACCOMPANY SHOP DRAWINGS WHICH SHOW COMPLIANCE WITH THE NORTH CAROLINA STATE BUILDING CODE. ***OR*** INTERNATIONAL BUILDING CODE. COMPUTATIONS AND SHOP DRAWINGS SHALL BE SUBMITTED FOR REVIEW PRIOR TO THE PURCHASING OF MATERIALS, EQUIPMENT, SYSTEMS AND ASSEMBLIES.
   C. THE ELECTRICAL CONTRACTOR SHALL INCLUDE SHOP DRAWINGS OF THE SPECIFIC METHODS OF SEISMIC RESTRAINT TO BE USED FOR THIS PROJECT PRIOR TO INSTALLATION OF ELECTRICAL EQUIPMENT AND SYSTEMS.
   D. INTERNAL SEISMIC RESTRAINT ELEMENTS OF MANUFACTURED EQUIPMENT SHALL BE CERTIFIED BY A PROFESSIONAL ENGINEER RETAINED BY THE MANUFACTURER. SUCH CERTIFICATE APPLIES ONLY TO INTERNAL ELEMENTS OF THE EQUIPMENT. ALL EQUIPMENT ANCHORAGE REQUIREMENTS SHALL BE COORDINATED WITH THE BUILDING STRUCTURE AND SHALL BE COMPATIBLE THERETO. ALL SUCH ANCHORAGE SHALL BE REVIEWED BY THE PROJECT'S ELECTRICAL ENGINEER PRIOR TO INSTALLATION.
   E. THE PROFESSIONAL ENGINEER RETAINED BY THE ELECTRICAL CONTRACTOR FOR SEISMIC RESTRAINT CALCULATIONS AND DESIGN SHALL VISIT THE JOB SITE UPON COMPLETION OF THE SEISMIC RESTRAINT INSTALLATION. THIS ENGINEER SHALL PROVIDE IN WRITING, VERIFICATION OF COMPLIANCE WITH THE APPROVED SEISMIC SUBMITTAL. THIS ENGINEER SHALL ALSO PERFORM ANY SPECIAL INSPECTIONS REQUIRED. THIS VERIFICATION SHALL BEAR THE ENGINEER'S PROFESSIONAL SEAL. JOB SITE INSPECTION BY OTHER THAN THIS ENGINEER IS NOT ACCEPTABLE. SEE CHAPTERS 16 AND 17 OF THE NORTH CAROLINA STATE BUILDING CODE. ***OR*** INTERNATIONAL BUILDING CODE.
   F. REVIEW OF THE SEISMIC DESIGN AND SHOP DRAWINGS BY THE PROJECT'S ELECTRICAL ENGINEER, STRUCTURAL ENGINEER OR ARCHITECT SHALL NOT RELIEVE THE CONTRACTOR OF THEIR RESPONSIBILITY TO COMPLY WITH SEISMIC AND OTHER REQUIREMENTS OF THE NORTH CAROLINA STATE BUILDING CODE. ***OR*** INTERNATIONAL BUILDING CODE.

17. ELECTRICAL COORDINATION WITH OTHER TRADES:
   A. THE ELECTRICAL CONTRACTOR SHALL CONNECT AND/OR PROVIDE FINAL CONNECTIONS TO ALL EQUIPMENT SUPPLIED BY OTHERS APPLICABLE TO THE PROJECT, INCLUDING BUT NOT LIMITED TO, MECHANICAL, PLUMBING, FIRE PROTECTION AND SUPPRESSION, OWNER FURNISHED, KITCHEN, LABORATORY, ETC. UNLESS OTHERWISE NOTED.
   B. THE ELECTRICAL CONTRACTOR SHALL COORDINATE ALL CONNECTIONS PRIOR TO ROUGH-IN USING APPROVED CATALOG SHEETS AND SHOP DRAWINGS.
   C. THE ELECTRICAL CONTRACTOR SHALL PROVIDE AND INSTALL ALL MANUAL MOTOR STARTER SWITCHES, DISCONNECT SWITCHES, RECEPTACLES, ETC. TO MECHANICAL AND PLUMBING EQUIPMENT. ALL STARTERS, OTHER THAN MANUAL STARTER SWITCHES, SHALL BE PROVIDED BY OTHERS, BUT INSTALLED BY THE ELECTRICAL CONTRACTOR.
   D. ALL DISCONNECT SWITCHES AND FUSE SIZES SHALL BE COORDINATED WITH SHOP DRAWINGS PRIOR TO ORDERING OR INSTALLING. ANY EQUIPMENT INSTALLED INCORRECTLY BECAUSE OF LACK OF COORDINATION WILL BE REMOVED AND INSTALLED CORRECTLY AT THE EXPENSE OF THE ELECTRICAL CONTRACTOR.
   E. THE ELECTRICAL CONTRACTOR SHALL COORDINATE ALL CONDUIT RUNS AND LIGHT FIXTURE LOCATIONS ABOVE THE CEILING WITH OTHER TRADES PRIOR TO INSTALLATION.
   F. ALL DUCT SMOKE DETECTORS SHALL BE PROVIDED AND CONNECTED BY THE ELECTRICAL CONTRACTOR, BUT INSTALLED BY THE MECHANICAL CONTRACTOR.
   G. THE ELECTRICAL CONTRACTOR SHALL PROVIDE ALL NECESSARY OUTLETS FOR HEAT TAPE CONNECTIONS FOR MECHANICAL SYSTEMS. PROVIDE CLASS B (30mA) GFCI PROTECTION ON THE BREAKER SUPPLYING THE HEAT TAPE.
   H. THE ELECTRICAL CONTRACTOR SHALL PROVIDE 120V POWER AT EACH HVAC UNIT HAVING A CONTROLS POWER SUPPLY. CIRCUIT(S) SHALL BE DEDICATED 20A SERVING A MAXIMUM OF 10 HVAC UNITS PER CIRCUIT. COORDINATE ALL LOCATIONS WITH THE MECHANICAL CONTRACTOR.

18. DEMOLITION NOTES:
   A. PARTIAL AND TOTAL DEMOLITION OF PORTIONS SHALL BE PERFORMED ALONG WITH ALL NECESSARY MODIFICATIONS TO THAT PORTION OF THE EXISTING BUILDING WHICH SHALL REMAIN SO THAT IT CONTINUES TO FUNCTION UNAFFECTED BY THE DEMOLITION AND ASSOCIATED NEW CONSTRUCTION.
   B. WHERE INCLUDED AS PART OF THE CONTRACT DOCUMENTS, THE DRAWINGS INDICATE THE GENERAL AREAS OF WORK INVOLVED. HOWEVER, THE ELECTRICAL CONTRACTOR SHALL PERFORM WORK OUTSIDE THOSE AREAS SHOWN AS IS NECESSARY TO COMPLY WITH THE INTENT OF THIS SECTION.
   C. THE ELECTRICAL CONTRACTOR SHALL FAMILIARIZE THEMSELVES WITH THE EXISTING BUILDING AND WITH THE WORK OF ALL OTHER TRADES AND INCLUDE ALL WORK NECESSARY TO COMPLY WITH THE INTENT OF THE DEMOLITION.
   D. IT SHALL BE UNDERSTOOD THAT FIELD CONDITIONS MAY BE ENCOUNTERED DURING THE EXECUTION OF THIS CONTRACT WHICH WILL REQUIRE EXTENSION OR RELOCATION OF EXISTING SYSTEMS OR EQUIPMENT WHICH ARE NOT SPECIFICALLY SHOWN ON THE DRAWINGS, BUT WHICH ARE REQUIRED TO MEET THE STATED INTENT THAT THE BUILDING CONTINUE TO FUNCTION UNAFFECTED BY THE DEMOLITION AND ASSOCIATED NEW CONSTRUCTION. THE ELECTRICAL CONTRACTOR SHALL INCLUDE SUCH WORK AS WOULD NORMALLY BE EXPECTED IN AN EXISTING BUILDING OF THIS AGE AND TYPE.
   E. THE ELECTRICAL CONTRACTOR SHALL PROVIDE ALL TOOLS, EQUIPMENT, LABOR, ETC. IN ORDER TO ACCOMPLISH THE DEMOLITION PORTION OF THE PROJECT.
   F. THE DEMOLITION OF CERTAIN AREAS OF THE EXISTING BUILDING SHALL BE PERFORMED BY THE GENERAL CONTRACTOR. IT SHALL BE THE ELECTRICAL CONTRACTOR'S RESPONSIBILITY TO COORDINATE WITH THE GENERAL CONTRACTOR TO DIFFERENTIATE THE SCOPE OF WORK BETWEEN SEPARATE TRADES.
   G. THE ELECTRICAL CONTRACTOR SHALL INCLUDE COORDINATION WITH THE GENERAL CONTRACTOR AND SUCH DEMOLITION OF THE EXISTING ELECTRICAL SYSTEMS AS IS NECESSARY SO THAT THE DEMOLITION WORK OF THE GENERAL CONTRACTOR SHALL NOT DAMAGE THOSE PORTIONS OF THE ELECTRICAL SYSTEMS WHICH ARE TO REMAIN IN SERVICE, ARE TO BE REUSED, OR ARE TO BECOME THE PROPERTY OF THE OWNER.
   H. TURN OVER TO OWNER, UPON REQUEST OR AS NOTED, ITEMS SHOWN AS BEING REMOVED AND NOT REINSTALLED. ITEMS NOT DIRECTED OR REQUESTED TO BE TURNED OVER TO THE OWNER SHALL BE DISPOSED OF BY THE ELECTRICAL CONTRACTOR.
   I. EQUIPMENT OR MATERIALS WHICH ARE TO BE REUSED OR TURNED OVER TO THE OWNER SHALL BE CAREFULLY REMOVED, CLEANED, AND STORED IN A CLEAN AND DRY AREA. SHOULD THE ELECTRICAL CONTRACTOR ENCOUNTER SUCH EQUIPMENT WHICH IS NOT IN SATISFACTORY CONDITION FOR REUSE AND NOT IN WORKING ORDER, THE ELECTRICAL CONTRACTOR SHALL NOTIFY THE ARCHITECT/ENGINEER IMMEDIATELY.
   J. DISCONNECT ELECTRICAL SERVICES TO ALL EQUIPMENT REQUIRING REMOVAL. CONDUIT SHALL BE REMOVED BACK TO THE POINT WHERE IT WILL BE CONCEALED AT THE COMPLETION OF THIS CONTRACT. WIRE AND CABLE SHALL BE REMOVED BACK TO THE FIRST OUTLET BOX, CABINET, OR TERMINATION POINT WHICH IS TO REMAIN. CIRCUITS WHICH ARE NOT REUSED SHALL BE REMOVED BACK TO THE SOURCE IN THEIR ENTIRETY.
   K. REMOVE AND REINSTALL CEILINGS IN THE EXISTING BUILDING AS REQUIRED FOR THE WORK. COORDINATE WITH THE GENERAL CONTRACTOR. IN SUCH AREAS, REMOVE AND REINSTALL ALL ELECTRICAL DEVICES WHICH ARE TO REMAIN IN OR ON THE CEILING.
   L. WHERE NEW CEILINGS CONFLICT WITH EXISTING ELECTRICAL WORK WHICH IS TO REMAIN, RELOCATE THE ELECTRICAL WORK INVOLVED TO CLEAR THE NEW CONSTRUCTION.
   M. WHERE NEW WALL OR FLOOR FINISHES CONFLICT WITH EXISTING ELECTRICAL WORK WHICH IS TO REMAIN, RELOCATE THE ELECTRICAL WORK INVOLVED OR PROVIDE BOX EXTENSIONS OR SIMILAR DEVICES AND REINSTALL ON THE NEW FINISH.
   N. WHERE EXISTING BRANCH CIRCUITS AND SYSTEMS ARE INTERRUPTED BY NEW WORK OR SYSTEMS (ELECTRICAL, MECHANICAL, PLUMBING, FIRE PROTECTION, ETC.), EXTEND AND RECONNECT THOSE EXECUTION OF THIS CONTRACT, PROVIDE TEMPORARY CONNECTIONS UNTIL FINAL CONNECTIONS ARE COMPLETE.

19. COORDINATION DRAWINGS:
   A. THE MECHANICAL CONTRACTOR SHALL ORGANIZE COORDINATION MEETINGS TO DEVELOP A SET OF DRAWINGS WITH ALL CONTRACTORS (ELECTRICAL, MECHANICAL, PLUMBING, FIRE PROTECTION, IT/DATA, SECURITY AND GENERAL). THE MECHANICAL CONTRACTOR WILL HAVE THE LEAD RESPONSIBILITY FOR THE COORDINATION DRAWINGS. THE MECHANICAL CONTRACTOR SHALL PRODUCE THE ORIGINAL DRAWINGS AND FORWARD THE DRAWINGS TO EACH OF THE OTHER CONTRACTORS FOR THEM TO ADD THEIR SYSTEMS TO THIS SET OF COORDINATION DRAWINGS. THE CONTRACTORS WILL DEVELOP THE DRAWINGS IN THIS ORDER: MECHANICAL, FIRE PROTECTION, PLUMBING, ELECTRICAL, IT/DATA (INCLUDING CABLE TRAY), SECURITY, AND GENERAL. THIS SHALL ALSO BE THE ORDER OF PRECEDENCE FOR INSTALLATION OF SYSTEMS. ANY RELOCATION OF SYSTEM ROUTINGS WILL BE FOUND IN THE COORDINATION PHASE AND NOTICED BY EACH OF THE CONTRACTORS. THESE DRAWINGS, WHEN COMPLETED, SHALL BE SIGNED OFF BY ALL OF THE ABOVE LISTED PARTIES. DRAWINGS SHALL BE COMPLETED PRIOR TO PURCHASE, FABRICATION OR INSTALLATION OF EQUIPMENT AND/OR SYSTEMS. THE FOLLOWING ITEMS REPRESENT THE MINIMUM REQUIREMENTS FOR SHOP DRAWINGS AND COORDINATION DRAWINGS:
      1. ALL SHOP AND COORDINATION DRAWINGS WILL BE 1/4"=1'-0" SCALE.
      2. DRAWINGS WILL BE ORIGINAL DRAWINGS AND NOT OVERLAYS OF THE CONTRACT/DESIGN DRAWINGS.
      3. COORDINATION DRAWINGS WILL BE DRAWN ON REPRODUCIBLE MATERIAL 48"x36".
      4. COORDINATION DRAWINGS ARE NOT SHOP DRAWINGS AND ARE REQUIRED IN ADDITION TO SHOP DRAWINGS.
      5. ONCE THE COMPLETE COORDINATION DRAWINGS HAVE BEEN COMPILED, THE MECHANICAL CONTRACTOR WILL DISTRIBUTE ONE SIGNED SET TO EACH OF THE FOLLOWING CONTRACTORS: ELECTRICAL, PLUMBING, FIRE PROTECTION, IT/DATA, AND GENERAL. ADDITIONAL SETS WILL BE SENT TO THE OWNER, ARCHITECT, AND ENGINEER.

20. TESTING AND DOCUMENTATION:
   A. THE ELECTRICAL CONTRACTOR SHALL ENGAGE THE GEAR MANUFACTURER OR ANOTHER INDEPENDENT 3RD PARTY TO PROVIDE A COMPLETE FAULT CURRENT, COORDINATION, AND ARC-FLASH HAZARD ANALYSIS STUDY AND REPORT, COMPLETE WITH ARC-FLASH HAZARD LABELS FOR ALL EQUIPMENT.
   B. TESTING AND DOCUMENTATION SHALL BE PROVIDED AS FOLLOWS:
      1. ALL CONDUCTORS SHALL BE MEGGERED BEFORE FINAL CONNECTIONS.
      2. THE GROUND SYSTEM SHALL BE TESTED AND VERIFIED TO BE 25 OHMS OR LESS RESISTANCE-TO-GROUND.
      3. A PRIMARY INJECTION TEST SHALL BE PERFORMED ON ALL CIRCUIT BREAKERS RATED 225A OR HIGHER.
      4. GFCI EQUIPPED BREAKERS SHALL BE PERFORMANCE TESTED.
      5. LIGHTING CONTROL SYSTEMS SHALL BE TESTED FOR PROPER OPERATION OF SETPOINTS.
      6. GENERATOR TESTING SHALL INCLUDE AN 8-HOUR, 100% LOAD BANK AND TRANSIENT TESTING. POWER QUALITY ANALYZERS SHALL BE USED FOR WAVEFORM CAPTURE AND TRANSIENT RESPONSE DOCUMENTATION.
      7. UPS TESTING SHALL INCLUDE AN 8-HOUR, 100% LOAD BANK, TRANSIENT TESTING, AND BATTERY DISCHARGE TESTING. POWER QUALITY ANALYZERS SHALL BE USED FOR WAVEFORM CAPTURE AND TRANSIENT RESPONSE DOCUMENTATION.
      8. ATS TESTING SHALL INCLUDE TRANSFER FUNCTIONS, VERIFICATION OF TIMER/PICKUP/DROP-OUT SETPOINTS AND LOAD/NO-LOAD TEST OPERATION.

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NORTH CAROLINA PROFESSIONAL SEAL 028297 ENGINEER BRANDON L. MILLER
06/08/2026

CONSTRUCTION DOCUMENTS

ISSUE DATE: 06/08/2026

REVISIONS

NO.	DESCRIPTION	DATE

WESTERN PIEDMONT COMMUNITY COLLEGE
BUILDING K RENOVATION
200 E College Drive Morganton, NC 28655

WESTERN PIEDMONT COMMUNITY COLLEGE

PROJECT NUMBER 2317

SHEET TITLE
ELECTRICAL SPECIFICATIONS

SHEET NUMBER
E0002

SCO # 23-27049-01A
NCCCS #2784

OPTIMA# 24-0064

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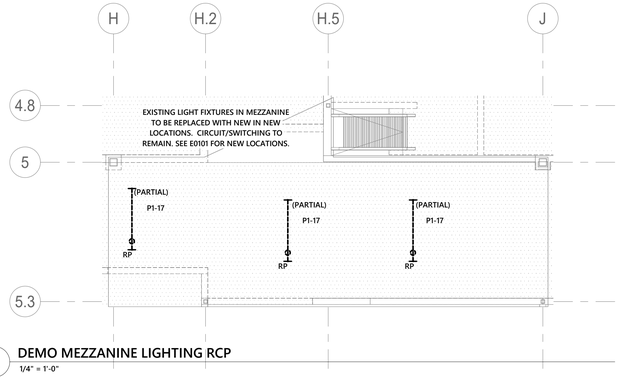
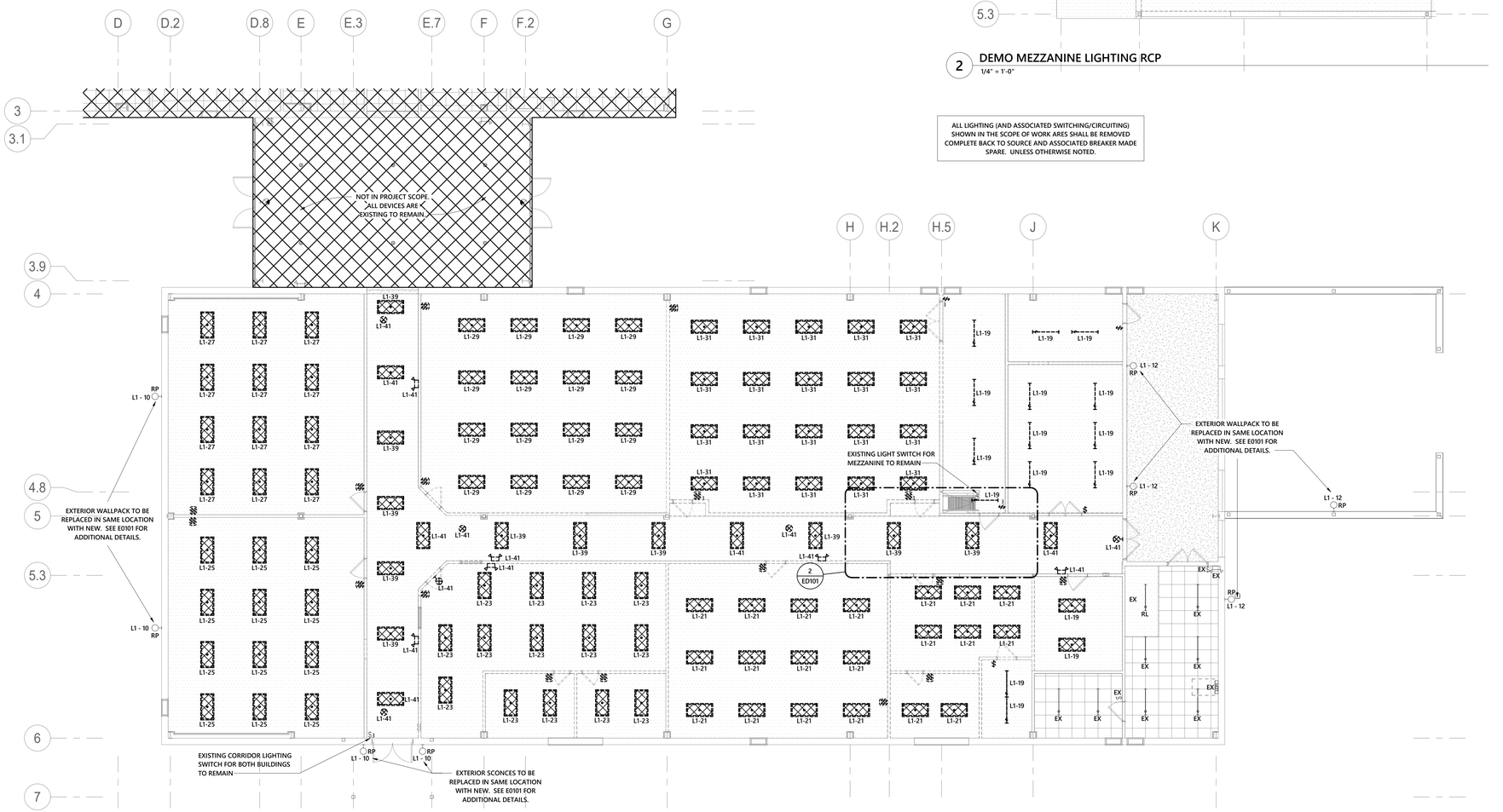
RV	EXISTING ITEM TO BE REMOVED.
RC	RE-CONNECT



2 DEMO MEZZANINE LIGHTING RCP
1/4" = 1'-0"

ALL LIGHTING (AND ASSOCIATED SWITCHING/CIRCUITING) SHOWN IN THE SCOPE OF WORK ARES SHALL BE REMOVED COMPLETE BACK TO SOURCE AND ASSOCIATED BREAKER MADE SPARE. UNLESS OTHERWISE NOTED.



1 DEMO FIRST FLOOR LIGHTING RCP - UPPER
1/8" = 1'-0"

GENERAL NOTES

DEMOLITION

A.	SEE ARCHITECTURAL DRAWINGS AND SPECIFICATIONS FOR PHASES OF DEMOLITION AND CONSTRUCTION. COORDINATE WITH GENERAL CONSTRUCTION.
B.	DISCONNECT AND REMOVE ALL ELECTRICAL DEVICES AND LIGHTING FIXTURES IN DEMOLITION AREAS UNLESS NOTED OTHERWISE.
C.	DISCONNECT AND REMOVE ALL ELECTRICAL DEVICES IN WALLS TO BE DEMOLISHED. WALLS TO BE DEMOLISHED ARE SHOWN DASHED. DISCONNECT AND REMOVE ASSOCIATED CONDUIT AND WIRE BACK TO LAST REMAINING DEVICE. FURNISH AND INSTALL CONDUIT AND WIRE AS NECESSARY FOR CONTINUITY OF CIRCUIT(S) TO ANY EXISTING DEVICES TO REMAIN. COORDINATE AND VERIFY REQUIREMENTS WITH NEW WORK IN AREA.
D.	FURNISH AND INSTALL CONDUIT AND WIRE AS NECESSARY FOR CONTINUITY OF ANY FEEDERS OR BRANCH CIRCUITS ORIGINATING OUTSIDE THE DEMOLITION AREA THAT SERVES ANY ELECTRICAL EQUIPMENT OR DEVICES TO REMAIN AFTER DEMOLITION. MODIFY OR REPLACE AS REQUIRED.
E.	FURNISH AND INSTALL CONDUIT AND/OR COMMUNICATIONS/DATA WIRING AS NECESSARY FOR CONTINUITY OF ANY WIRING ORIGINATING OUTSIDE THE DEMOLITION AREA THAT SERVES ANY COMMUNICATIONS/DATA EQUIPMENT OR DEVICES TO REMAIN AFTER DEMOLITION. MODIFY OR REPLACE AS REQUIRED.
F.	DISCONNECT AND REMOVE LIGHT SWITCHES IN DEMOLITION AREAS AS NECESSARY TO ACCOMMODATE NEW DOOR CONFIGURATIONS.
G.	DISCONNECT AND REMOVE ANY EXISTING ELECTRICAL DEVICES AND BACK BOXES AS NECESSARY WHERE NEW WALL CONSTRUCTION WILL INTERSECT AN EXISTING WALL. FURNISH AND INSTALL CONDUIT AND WIRE AS REQUIRED FOR CONTINUITY OF CIRCUIT(S).
H.	FURNISH AND INSTALL BLANK COVER PLATES OVER ALL EXISTING UNUSED OPENINGS.

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NORTH CAROLINA PROFESSIONAL SEAL 028297 ENGINEER JOHNSON, TYLER
06/08/2026

CONSTRUCTION DOCUMENTS

ISSUE DATE: 06/08/2026

REVISIONS

NO.	DESCRIPTION	DATE

WESTERN PIEDMONT COMMUNITY COLLEGE

BUILDING K RENOVATION

200 E College Drive Morganton, NC 28655

WESTERN PIEDMONT COMMUNITY COLLEGE

PROJECT NUMBER 2317

SHEET TITLE
DEMO FIRST FLOOR LIGHTING PLAN - UPPER

SHEET NUMBER
ED101

SCO # 23-27049-01A
NCCCS #2784

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OPTIMA# 24-0064

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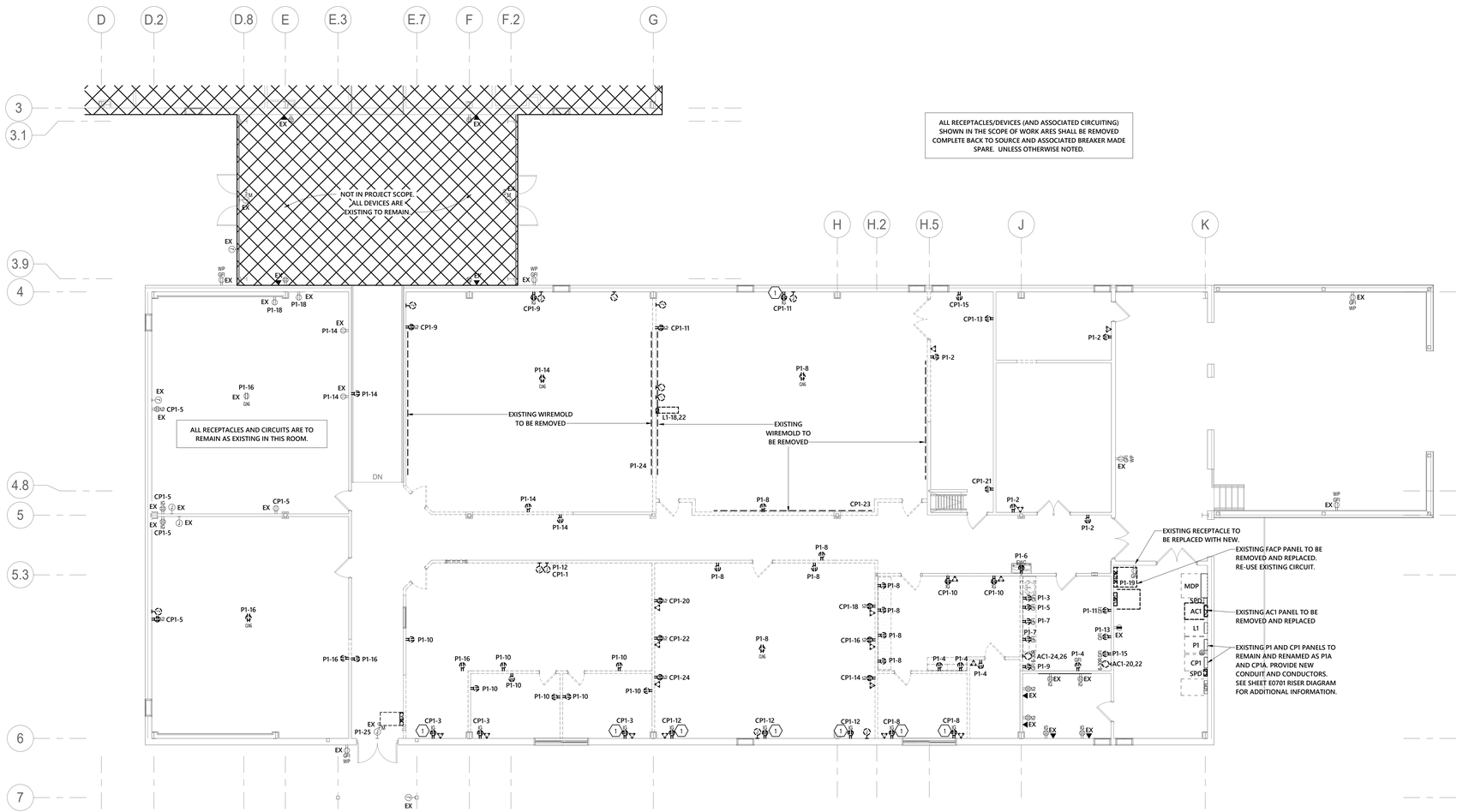
RC	RE-CONNECT

GENERAL NOTES

DEMOLITION

A.	SEE ARCHITECTURAL DRAWINGS AND SPECIFICATIONS FOR PHASES OF DEMOLITION AND CONSTRUCTION. COORDINATE WITH GENERAL CONSTRUCTION.
B.	DISCONNECT AND REMOVE ALL ELECTRICAL DEVICES AND LIGHTING FIXTURES IN DEMOLITION AREAS UNLESS NOTED OTHERWISE.
C.	DISCONNECT AND REMOVE ALL ELECTRICAL DEVICES IN WALLS TO BE DEMOLISHED. WALLS TO BE DEMOLISHED ARE SHOWN DASHED. DISCONNECT AND REMOVE ASSOCIATED CONDUIT AND WIRE BACK TO LAST REMAINING DEVICE. FURNISH AND INSTALL CONDUIT AND WIRE AS NECESSARY FOR CONTINUITY OF CIRCUIT(S) TO ANY EXISTING DEVICES TO REMAIN. COORDINATE AND VERIFY REQUIREMENTS WITH NEW WORK IN AREA.
D.	FURNISH AND INSTALL CONDUIT AND WIRE AS NECESSARY FOR CONTINUITY OF ANY FEEDERS OR BRANCH CIRCUITS ORIGINATING OUTSIDE THE DEMOLITION AREA THAT SERVES ANY ELECTRICAL EQUIPMENT OR DEVICES TO REMAIN AFTER DEMOLITION. MODIFY OR REPLACE AS REQUIRED.
E.	FURNISH AND INSTALL CONDUIT AND/OR COMMUNICATIONS/DATA WIRING AS NECESSARY FOR CONTINUITY OF ANY WIRING ORIGINATING OUTSIDE THE DEMOLITION AREA THAT SERVES ANY COMMUNICATIONS/DATA EQUIPMENT OR DEVICES TO REMAIN AFTER DEMOLITION. MODIFY OR REPLACE AS REQUIRED.
F.	DISCONNECT AND REMOVE LIGHT SWITCHES IN DEMOLITION AREAS AS NECESSARY TO ACCOMMODATE NEW DOOR CONFIGURATIONS.
G.	DISCONNECT AND REMOVE ANY EXISTING ELECTRICAL DEVICES AND BACK BOXES AS NECESSARY WHERE NEW WALL CONSTRUCTION WILL INTERSECT AN EXISTING WALL. FURNISH AND INSTALL CONDUIT AND WIRE AS REQUIRED FOR CONTINUITY OF CIRCUIT(S).
H.	FURNISH AND INSTALL BLANK COVER PLATES OVER ALL EXISTING UNUSED OPENINGS.



1 **DEMO FIRST FLOOR POWER PLAN - UPPER**
1/8" = 1'-0"

KEYNOTES

#	Keynote Description
1	RECEPTACLE SHALL BE REMOVED ALONG WITH ALL ASSOCIATED WIRING/CIRCUITING BACK TO SOURCE. EXISTING DEVICE BOX AND CONDUIT PATHWAY SHALL BE KEPT FOR NEW DEVICE AND NEW CONDUCTORS. REFER TO SHEET E200 FOR ADDITIONAL NOTES. CONFIRM ALL LOCATIONS OF DEVICES WITH EXISTING CONDITIONS AND NEW PLANNED WORK AND FURNITURE/EQUIPMENT LOCATIONS PRIOR TO WORK. E.C. TO CONFIRM LOCATIONS WITH ARCHITECT AND OWNER.

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NORTH CAROLINA PROFESSIONAL SEAL 028297 ENGINEER JOHNSON, LEE
06/08/2026

CONSTRUCTION DOCUMENTS

ISSUE DATE: 06/08/2026

REVISIONS

NO.	DESCRIPTION	DATE

WESTERN PIEDMONT COMMUNITY COLLEGE
BUILDING K RENOVATION
200 E College Drive Morganton, NC 28655

WESTERN PIEDMONT COMMUNITY COLLEGE

PROJECT NUMBER 2317

SHEET TITLE
DEMO FIRST FLOOR POWER PLAN - UPPER

SHEET NUMBER
ED201

SCO # 23-27049-01A
NCCCS #2784

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GENERAL NOTES

DEMOLITION

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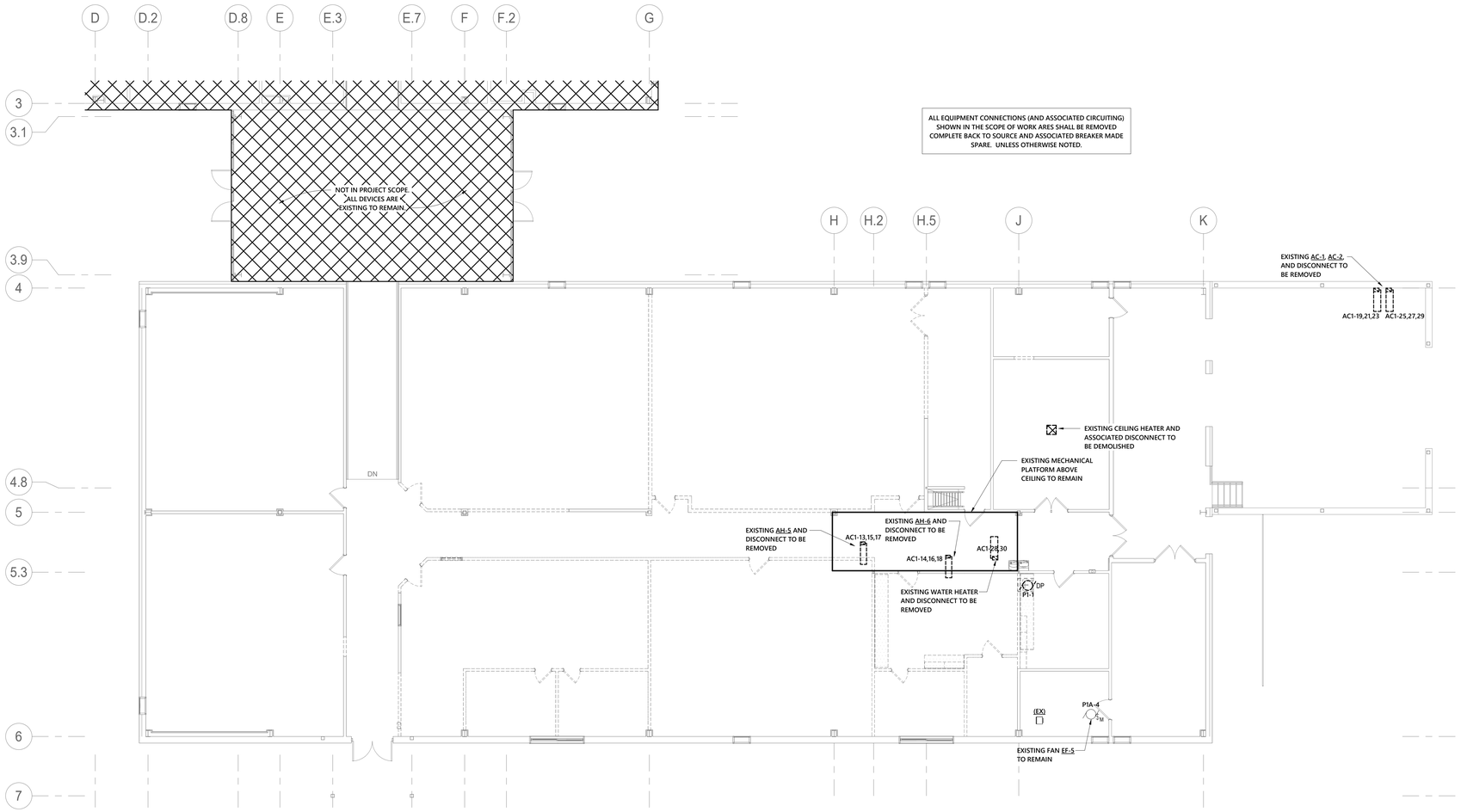

1 **DEMO FIRST FLOOR EQUIPMENT CONNECTIONS PLAN - UPPER**
1/8" = 1'-0"

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NORTH CAROLINA PROFESSIONAL SEAL 028297 ENGINEER JOHNSON, LUKE
06/08/2026

CONSTRUCTION DOCUMENTS

ISSUE DATE: 06/08/2026

REVISIONS

NO.	DESCRIPTION	DATE

WESTERN PIEDMONT COMMUNITY COLLEGE
BUILDING K RENOVATION
200 E College Drive Morganton, NC 28655

WESTERN PIEDMONT COMMUNITY COLLEGE

PROJECT NUMBER 2317

SHEET TITLE
DEMO FIRST FLOOR EQUIPMENT PLAN - UPPER

SHEET NUMBER
ED301

SCO # 23-27049-01A
NCCCS #2784

OPTIMA# 24-0064

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FIRE ALARM SCOPE OF WORK / ALTERNATES

BASE BID:
(KEEP SIMPLEX THROUGHOUT)

- REMOVE THE EXISTING SIMPLEX 4100 SERIES FACP AND REPLACE WITH A NEW SIMPLEX FACP.
- PROVIDE NEW SIMPLEX DEVICES AND WIRING FOR THE COSMETOLOGY SUITE PER PLANS.
- DEVICES IN THE EXISTING WING OF THE BUILDING WOULD TIE BACK INTO THE NEW SIMPLEX SYSTEM.

ALTERNATE 1A:
(REPLACE WITH NEW MANUFACTURER AND INTEGRATE WITH EXISTING SIMPLEX DEVICES)

- REMOVE THE EXISTING SIMPLEX 4100 SERIES FACP AND REPLACE WITH A NEW FACP BY ANOTHER VENDOR (EDWARDS, HONEYWELL, SIEMENS, ETC..)
- PROVIDE NEW DEVICES AND WIRING FOR THE COSMETOLOGY SUITE PER PLANS.
- THE NEW FACP WOULD NEED TO BE ABLE TO ACCEPT THE EXISTING WING'S SIMPLEX WIRING AND DEVICES TO INTEGRATE INTO THEIR CONTROL PANEL WITH FULL CODE COMPLIANT FUNCTIONALITY.

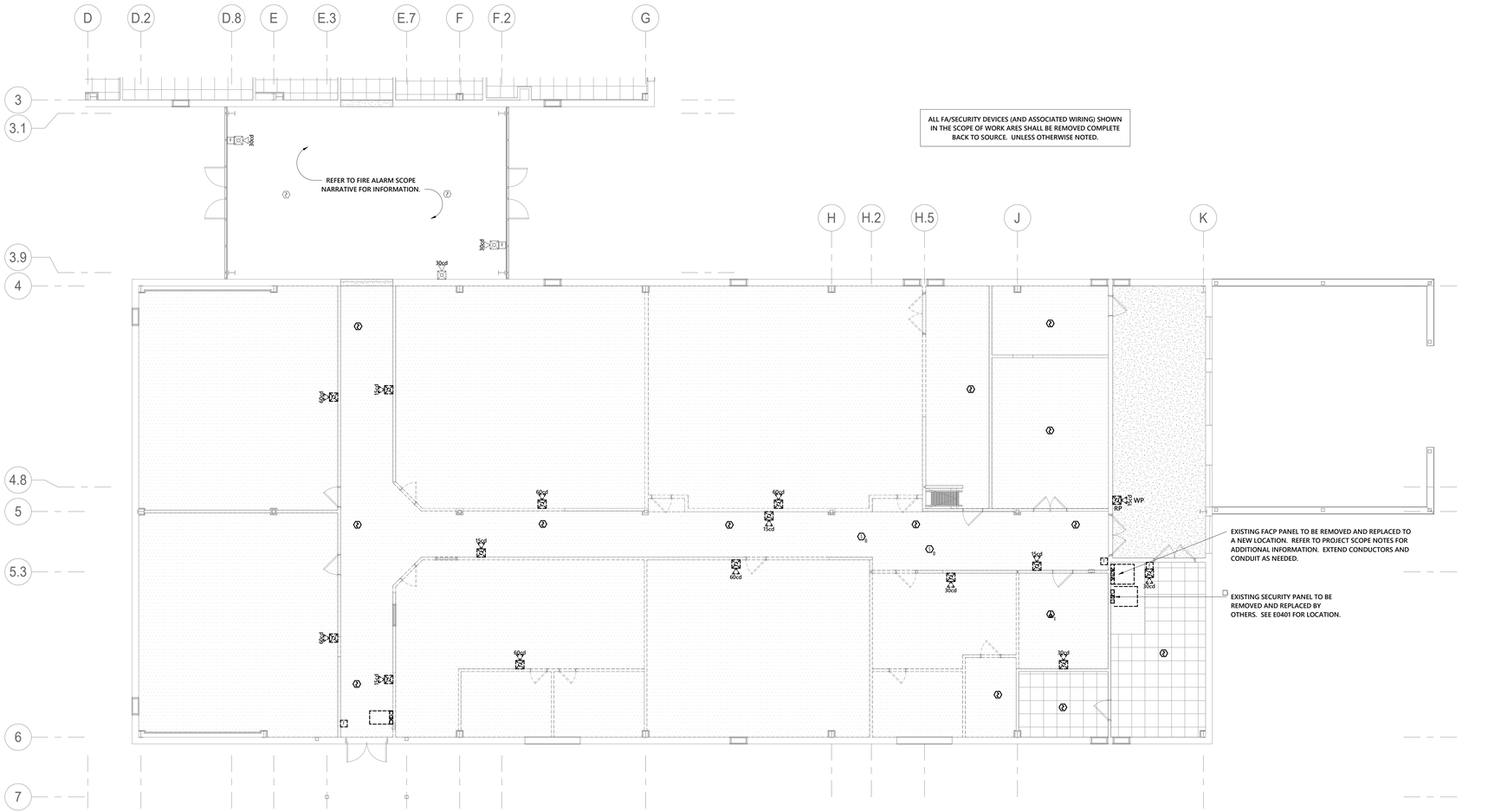
ALTERNATE 1B:
(NEW SYSTEM THROUGHOUT)

- REMOVE THE EXISTING SIMPLEX 4100 SERIES FACP AND REPLACE WITH A NEW FACP BY ANOTHER VENDOR (EDWARDS, HONEYWELL, SIEMENS, ETC..)
- PROVIDE NEW DEVICES AND WIRING FOR THE COSMETOLOGY SUITE PER PLANS.
- PROVIDE NEW DEVICES AND WIRING FOR THE EXISTING WING.
  1. REFER TO APPENDIX DRAWING #1 FOR EXISTING BUILDING AS-BUILTS FOR EXISTING WING'S FIRE ALARM DEVICE LAYOUT. E.C. SHALL VISIT THE SITE AND PERFORM A SURVEY OF ALL EXISTING DEVICES IN THAT AREA TO ENSURE A FULL, CODE COMPLIANT, REPLACEMENT OF ALL EXISTING DEVICES IS PERFORMED AND PROVIDED.

GENERAL NOTES

DEMOLITION

A.	SEE ARCHITECTURAL DRAWINGS AND SPECIFICATIONS FOR PHASES OF DEMOLITION AND CONSTRUCTION. COORDINATE WITH GENERAL CONSTRUCTION.
B.	DISCONNECT AND REMOVE ALL ELECTRICAL DEVICES AND LIGHTING FIXTURES IN DEMOLITION AREAS UNLESS NOTED OTHERWISE.
C.	DISCONNECT AND REMOVE ALL ELECTRICAL DEVICES IN WALLS TO BE DEMOLISHED. WALLS TO BE DEMOLISHED ARE SHOWN DASHED. DISCONNECT AND REMOVE ASSOCIATED CONDUIT AND WIRE BACK TO LAST REMAINING DEVICE. FURNISH AND INSTALL CONDUIT AND WIRE AS NECESSARY FOR CONTINUITY OF CIRCUIT(S) TO ANY EXISTING DEVICES TO REMAIN. COORDINATE AND VERIFY REQUIREMENTS WITH NEW WORK IN AREA.
D.	FURNISH AND INSTALL CONDUIT AND WIRE AS NECESSARY FOR CONTINUITY OF ANY FEEDERS OR BRANCH CIRCUITS ORIGINATING OUTSIDE THE DEMOLITION AREA THAT SERVES ANY ELECTRICAL EQUIPMENT OR DEVICES TO REMAIN AFTER DEMOLITION. MODIFY OR REPLACE AS REQUIRED.
E.	FURNISH AND INSTALL CONDUIT AND/OR COMMUNICATIONS/DATA WIRING AS NECESSARY FOR CONTINUITY OF ANY WIRING ORIGINATING OUTSIDE THE DEMOLITION AREA THAT SERVES ANY COMMUNICATIONS/DATA EQUIPMENT OR DEVICES TO REMAIN AFTER DEMOLITION. MODIFY OR REPLACE AS REQUIRED.
F.	DISCONNECT AND REMOVE LIGHT SWITCHES IN DEMOLITION AREAS AS NECESSARY TO ACCOMMODATE NEW DOOR CONFIGURATIONS.
G.	DISCONNECT AND REMOVE ANY EXISTING ELECTRICAL DEVICES AND BACK BOXES AS NECESSARY WHERE NEW WALL CONSTRUCTION WILL INTERSECT AN EXISTING WALL. FURNISH AND INSTALL CONDUIT AND WIRE AS REQUIRED FOR CONTINUITY OF CIRCUIT(S).
H.	FURNISH AND INSTALL BLANK COVER PLATES OVER ALL EXISTING UNUSED OPENINGS.



1 **DEMO FIRST FLOOR SYSTEMS RCP - UPPER**
1/8" = 1'-0"

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NORTH CAROLINA PROFESSIONAL SEAL 028297 ENGINEER JOHNSON, TIMOTHY
06/08/2026

CONSTRUCTION DOCUMENTS

ISSUE DATE: 06/08/2026

REVISIONS

NO.	DESCRIPTION	DATE

WESTERN PIEDMONT COMMUNITY COLLEGE

BUILDING K RENOVATION

200 E College Drive Morganton, NC 28655

WESTERN PIEDMONT COMMUNITY COLLEGE

PROJECT NUMBER 2317

SHEET TITLE
DEMO FIRST FLOOR SPECIAL SYSTEMS PLAN - UPPER

SHEET NUMBER
ED401

SCO # 23-27049-01A
NCCCS #2784

OPTIMA# 24-0064

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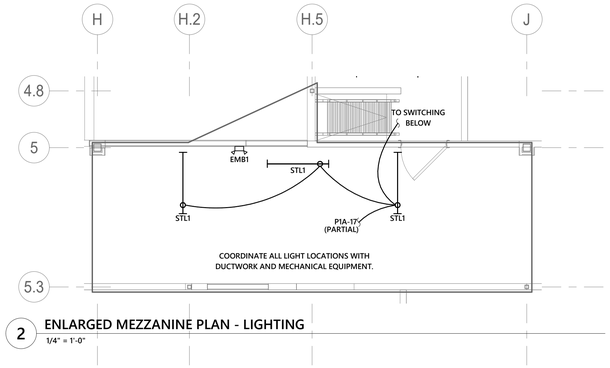
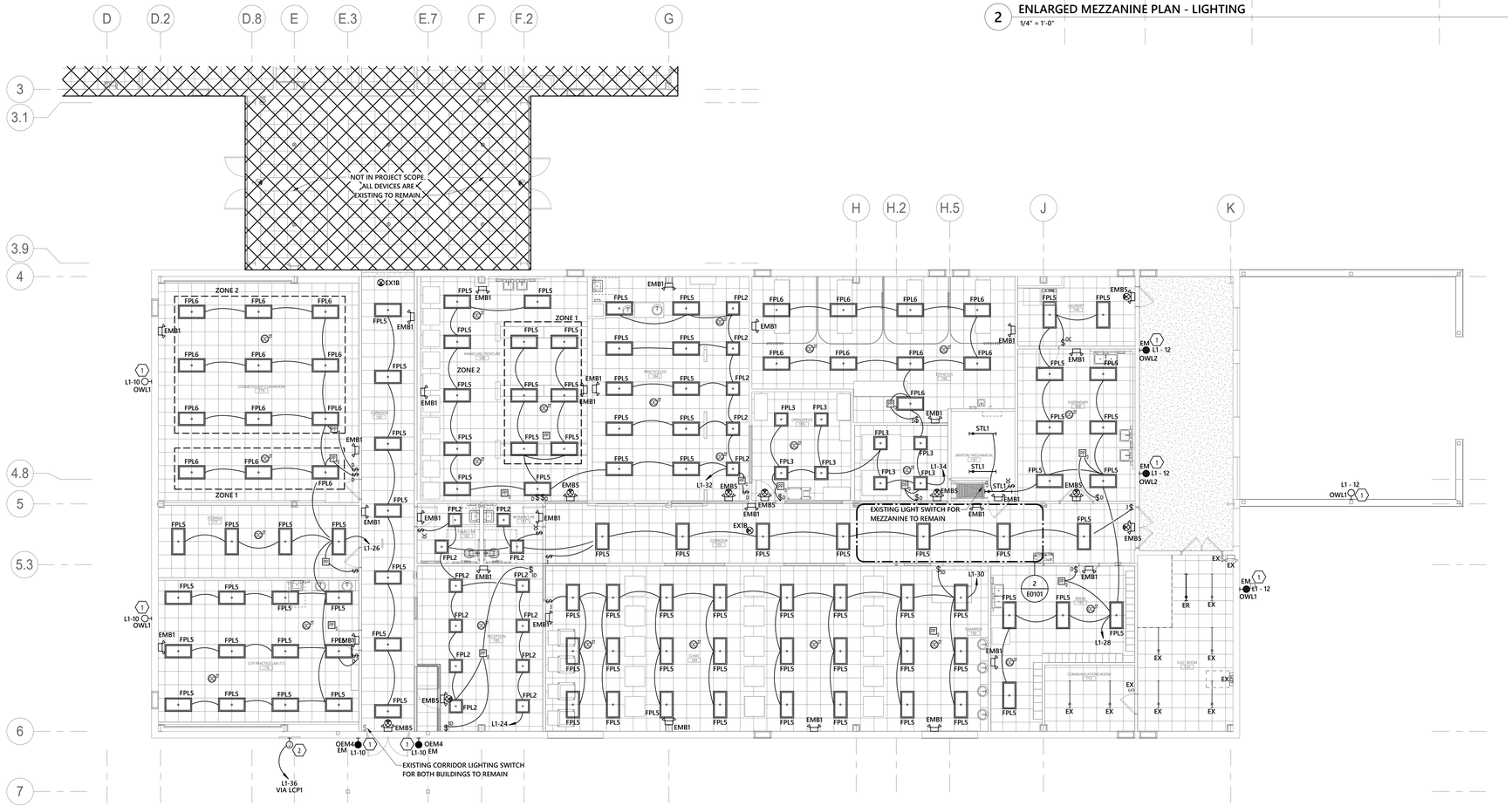
GENERAL NOTES

LIGHTING

A.	ALL RECESSED LIGHTING FIXTURES IN LAY-IN CEILINGS SHALL BE INSTALLED WITH 6' LONG FLEXIBLE METAL CONDUIT.
B.	ALL MOUNTING HEIGHTS FOR LIGHTING FIXTURES ARE TO THE BOTTOM OF THE FIXTURES UNLESS INDICATED OTHERWISE.
C.	SEE ARCHITECTURAL EXTERIOR ELEVATIONS FOR MOUNTINGSHEIGHTS OF EXTERIOR LIGHTING FIXTURES.
D.	REFER TO SECTION 26 0519 FOR MINIMUM CONDUCTOR SIZE ADJUSTMENTS FOR VOLTAGE DROP.
E.	WIRE COUNTS FOR CIRCUIT CONDUCTORS ARE NOT SHOWN. PROVIDE PROPER NUMBER OF CONDUCTORS TO ACHIEVE CIRCUIT AND SWITCHING CONNECTIONS SHOWN.
F.	CIRCUIT NUMBERS AT DEVICES CORRESPOND TO PANELBOARD BREAKERS (SEE PANELBOARD SCHEDULE). BRANCH CIRCUITS SHALL BE SIZED ACCORDING TO THE CIRCUIT BREAKER RATING, UNLESS INDICATED OTHERWISE ON THE ELECTRICAL EQUIPMENT SCHEDULE.
G.	CONNECT ALL EMERGENCY LIGHTS & EXIT SIGNS TO CIRCUIT L1-41 AHEAD OF ANY SWITCHING.



2 ENLARGED MEZZANINE PLAN - LIGHTING
1/4" = 1'-0"



1 FIRST FLOOR LIGHTING RCP - UPPER
1/8" = 1'-0"

KEYNOTES

#	Keynote Description
1	EXISTING LIGHT FIXTURE TO BE REPLACED WITH NEW AS SHOWN. CONNECT TO EXISTING CIRCUIT/CONTROLS.
2	JUNCTION BOX FOR SIGNAGE. COORDINATE EXACT MOUNTING HEIGHT, LOCATIONS, AND QUANTITIES WITH ARCHITECT AND OWNER PRIOR TO ROUGH-IN. CONNECT TO EXISTING LIGHTING CONTROL PANEL.

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BUILDING K RENOVATION
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WESTERN PIEDMONT COMMUNITY COLLEGE

PROJECT NUMBER 2317

SHEET TITLE
FIRST FLOOR LIGHTING PLAN - UPPER

SHEET NUMBER
E0101

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NCCCS #2784

OPTIMA# 24-0064

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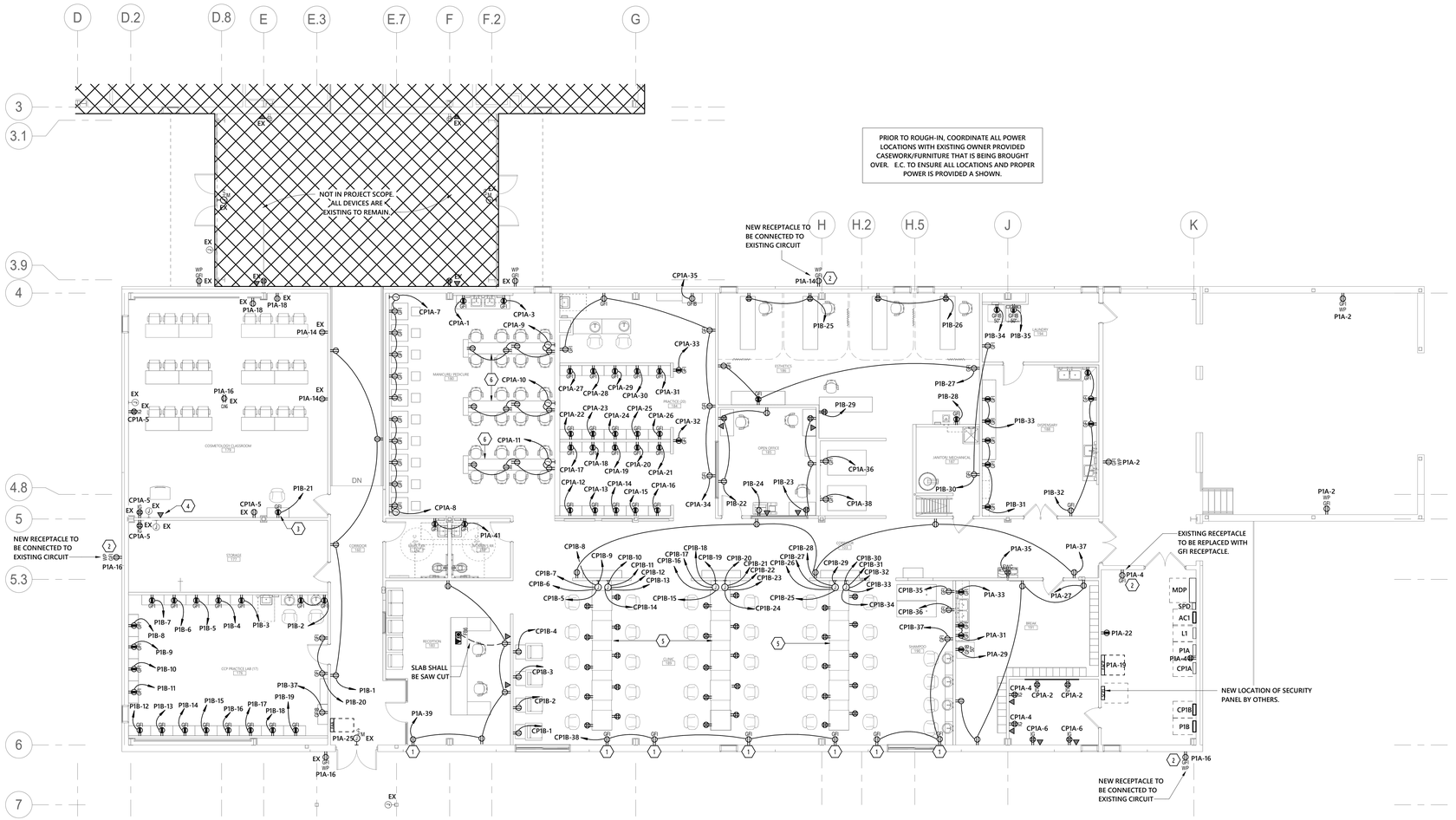

1 EXISTING FIRST FLOOR POWER PLAN - UPPER

1/8" = 1'-0"

GENERAL NOTES

POWER

A.	WHERE CONNECTED TO A 20A. BRANCH CIRCUIT SUPPLYING AN INDIVIDUAL RECEPTACLE (SIMPLEX OR DUPLEX), THE RECEPTACLE SHALL BE RATED AT 20A.
B.	REFER TO SECTION 26 0519 FOR MINIMUM CONDUCTOR SIZE ADJUSTMENTS FOR VOLTAGE DROP.
C.	WIRE COUNTS FOR CIRCUIT CONDUCTORS ARE NOT SHOWN. PROVIDE PROPER NUMBER OF CONDUCTORS TO ACHIEVE CIRCUIT AND SWITCHING CONNECTIONS SHOWN.
D.	CIRCUIT NUMBERS AT DEVICES CORRESPOND TO PANELBOARD BREAKERS (SEE PANELBOARD SCHEDULE). BRANCH CIRCUITS SHALL BE SIZED ACCORDING TO THE CIRCUIT BREAKER RATING, UNLESS INDICATED OTHERWISE ON THE ELECTRICAL EQUIPMENT SCHEDULE.
E.	COORDINATE RECEPTACLE ORIENTATION WITH ARCHITECT AND CASEWORK PRIOR TO ROUGH-IN.

KEYNOTES

#	Keynote Description
1	PROVIDE NEW DUPLEX RECEPTACLE (TYPE AS SHOWN) IN EXISTING 4X4 DEVICE BOX. RE-USE EXISTING CONDUIT PATHWAY AS ABLE AND CIRCUIT AS SHOWN ON PLANS.
2	GFI SERVICE RECEPTACLE FOR LOCAL HEATING, AIR CONDITIONING, AND REFRIGERATION EQUIPMENT PER NEC 210.63.
3	NEW RECEPTACLE FOR PRACTICE STATION. COORDINATE EXACT LOCATION WITH ARCHITECT AND CASEWORK.
4	NEW DATA FOR LECTURN. COORDINATE EXACT LOCATION WITH ARCHITECT.
5	RECEPTACLES TO BE MOUNTED TO CASEWORK. CONDUIT SHALL BE RAN INSIDE THE BOTTOM RISER OF THE CASEWORK BACK TO THE WALL , THEN TO A JUNCTION BOX LOCATED ABOVE THE CEILING. COORDINATE EXACT RECEPTACLE LOCATIONS AND ROUTING WITHIN CASEWORK WITH EXISTING CASEWORK/FURNITURE BRING BROUGHT OVER.
6	COORDINATE EXACT POWER DROP LOCATIONS/REQUIREMENTS WITH NEW MANICURE TABLES.

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WESTERN PIEDMONT COMMUNITY COLLEGE

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SHEET TITLE
FIRST FLOOR POWER PLAN - UPPER

SHEET NUMBER
E0201

SCO # 23-27049-01A
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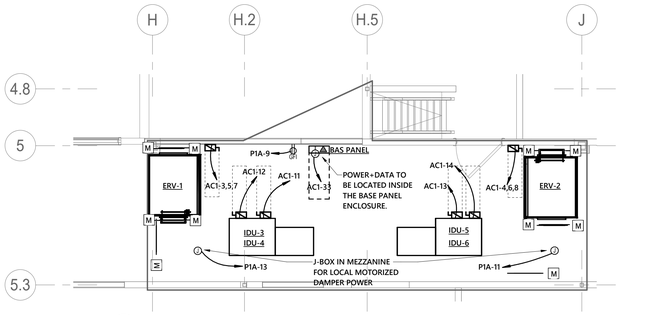
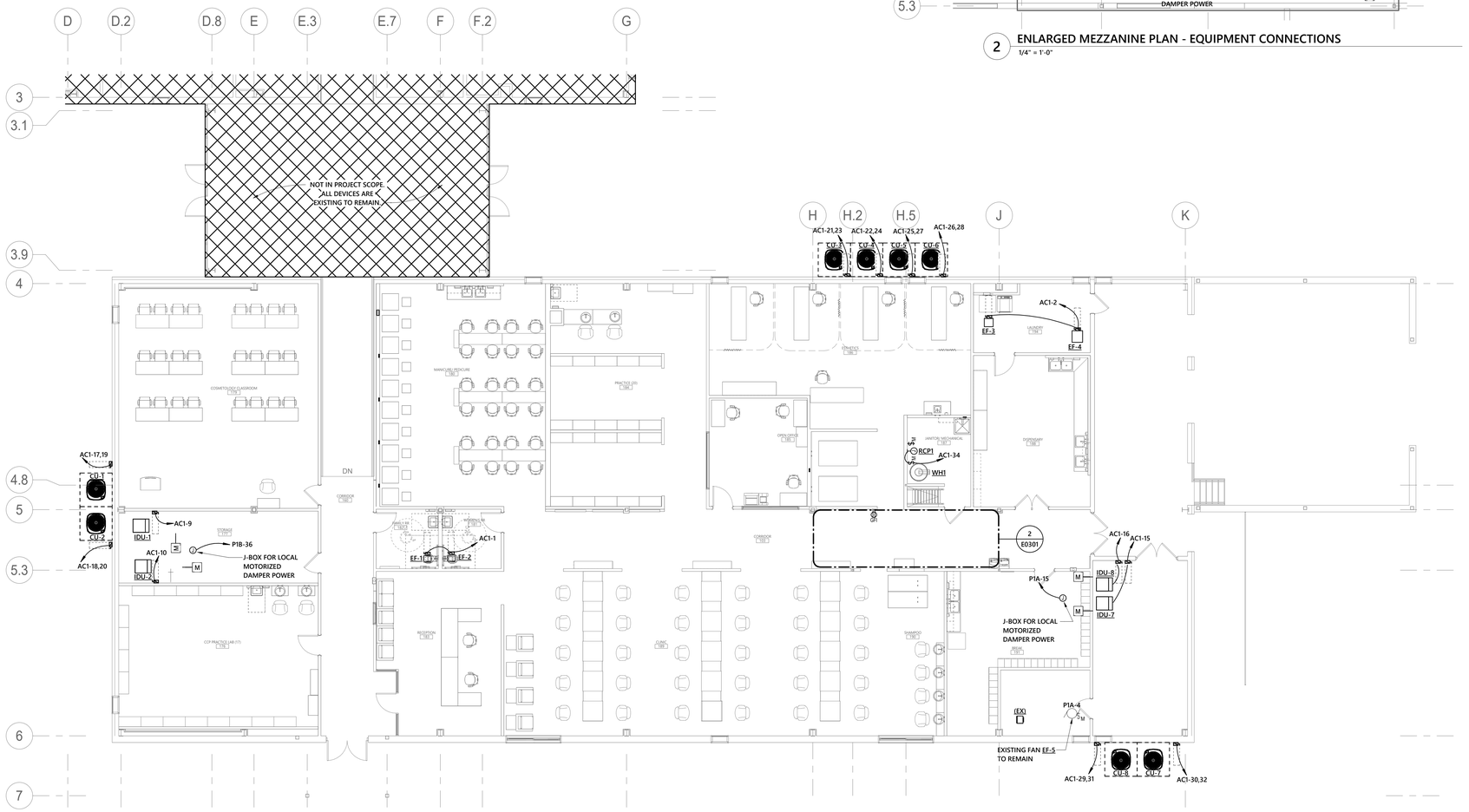


2 ENLARGED MEZZANINE PLAN - EQUIPMENT CONNECTIONS
1/4" = 1'-0"



1 EQUIPMENT CONNECTIONS PLAN - UPPER
1/8" = 1'-0"

GENERAL NOTES

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BUILDING K RENOVATION

200 E College Drive Morganton, NC 28655

WESTERN PIEDMONT COMMUNITY COLLEGE

PROJECT NUMBER 2317

SHEET TITLE
FIRST FLOOR EQUIPMENT PLAN - UPPER

SHEET NUMBER
E0301

SCO # 23-27049-01A
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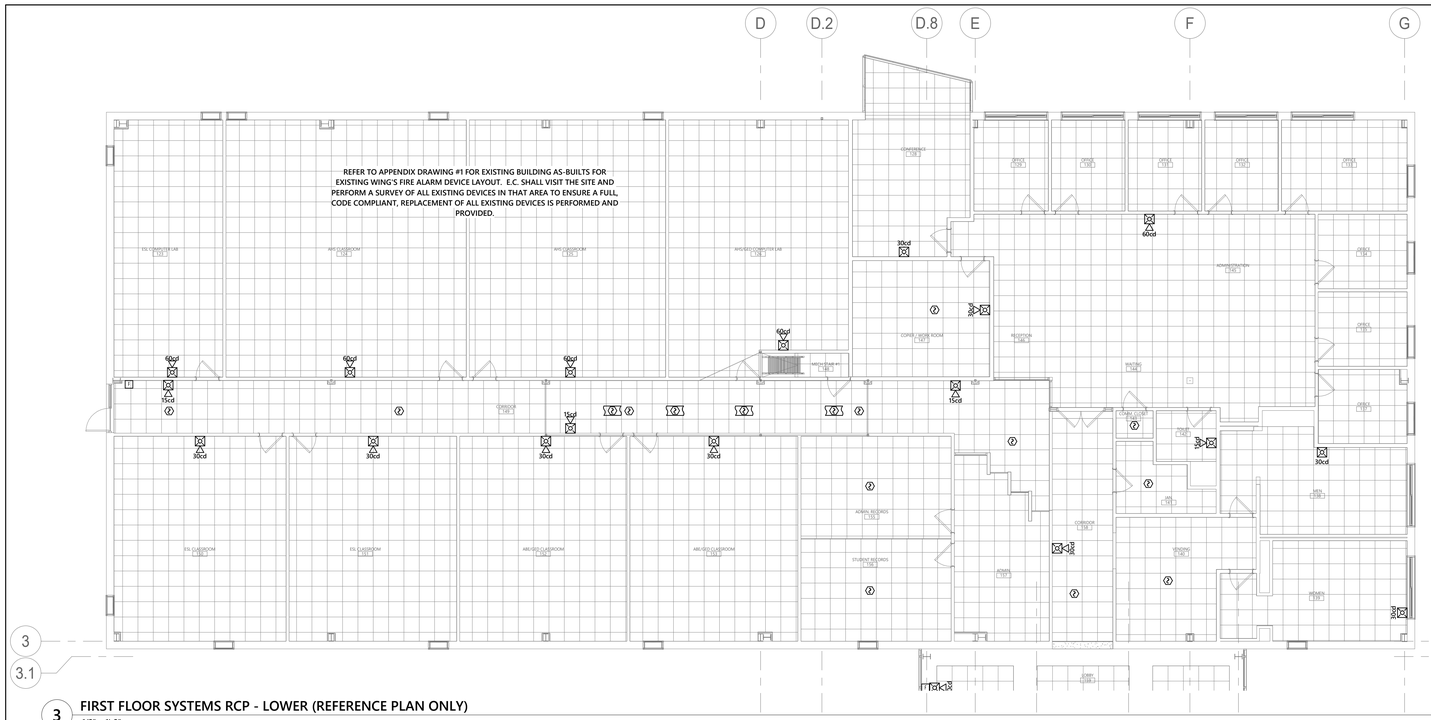
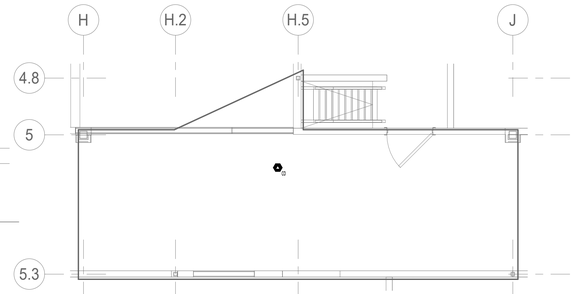
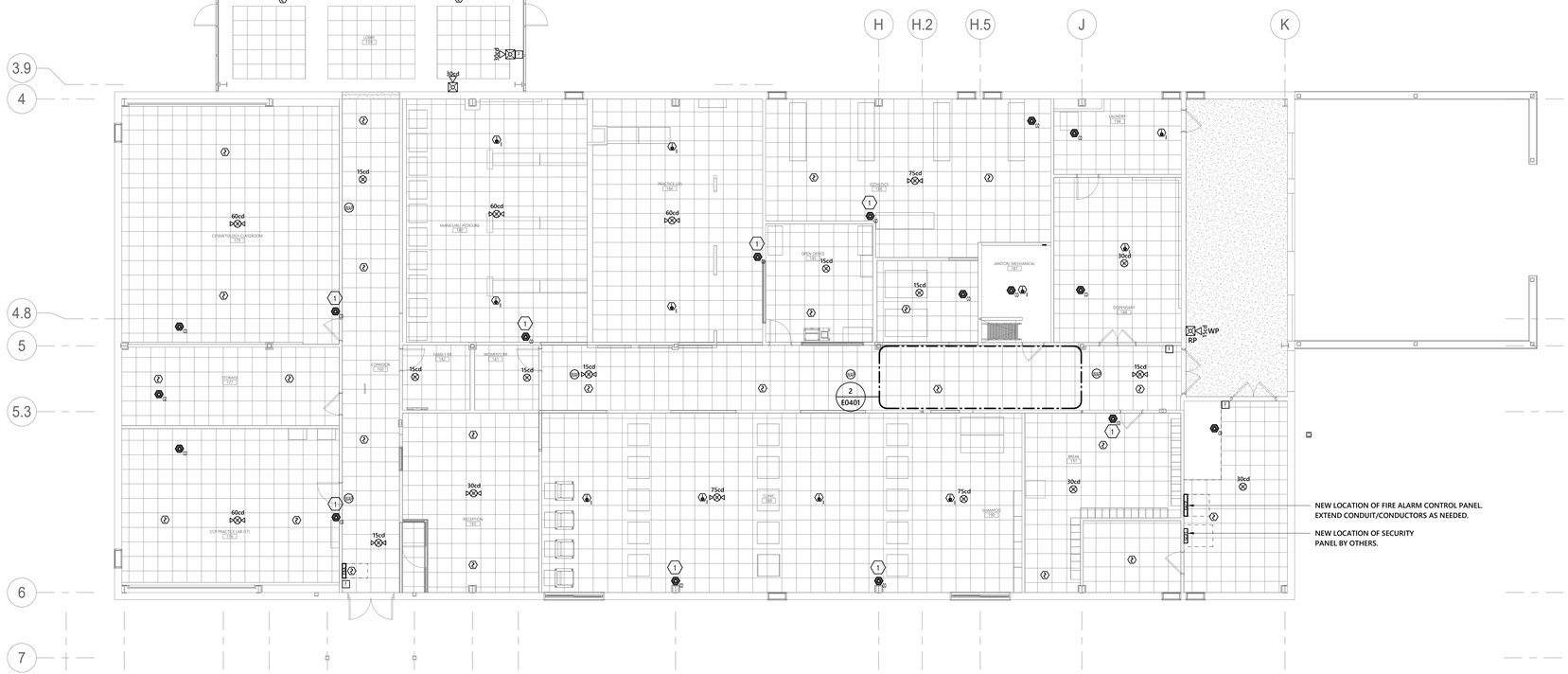


3 FIRST FLOOR SYSTEMS RCP - LOWER (REFERENCE PLAN ONLY)
1/8" = 1'-0"



2 ENLARGED MEZZANINE PLAN - SPECIAL SYSTEMS
1/4" = 1'-0"



1 FIRST FLOOR SYSTEMS RCP - UPPER
1/8" = 1'-0"

FIRE ALARM SCOPE OF WORK / ALTERNATES

BASE BID:
(KEEP SIMPLEX THROUGHOUT)

- REMOVE THE EXISTING SIMPLEX 4100 SERIES FACP AND REPLACE WITH A NEW SIMPLEX FACP.
- PROVIDE NEW SIMPLEX DEVICES AND WIRING FOR THE COSMETOLOGY SUITE PER PLANS.
- DEVICES IN THE EXISTING WING OF THE BUILDING WOULD TIE BACK INTO THE NEW SIMPLEX SYSTEM.

ALTERNATE 1A:
(REPLACE WITH NEW MANUFACTURER AND INTEGRATE WITH EXISTING SIMPLEX DEVICES)

- REMOVE THE EXISTING SIMPLEX 4100 SERIES FACP AND REPLACE WITH A NEW FACP BY ANOTHER VENDOR (EDWARDS, HONEYWELL, SIEMENS, ETC..)
- PROVIDE NEW DEVICES AND WIRING FOR THE COSMETOLOGY SUITE PER PLANS.
- THE NEW FACP WOULD NEED TO BE ABLE TO ACCEPT THE EXISTING WING'S SIMPLEX WIRING AND DEVICES TO INTEGRATE INTO THEIR CONTROL PANEL WITH FULL CODE COMPLIANT FUNCTIONALITY.

ALTERNATE 1B:
(NEW SYSTEM THROUGHOUT)

- REMOVE THE EXISTING SIMPLEX 4100 SERIES FACP AND REPLACE WITH A NEW FACP BY ANOTHER VENDOR (EDWARDS, HONEYWELL, SIEMENS, ETC..)
- PROVIDE NEW DEVICES AND WIRING FOR THE COSMETOLOGY SUITE PER PLANS.
- PROVIDE NEW DEVICES AND WIRING FOR THE EXISTING WING.
  1. REFER TO APPENDIX DRAWING #1 FOR EXISTING BUILDING AS-BUILTS FOR EXISTING WING'S FIRE ALARM DEVICE LAYOUT. E.C. SHALL VISIT THE SITE AND PERFORM A SURVEY OF ALL EXISTING DEVICES IN THAT AREA TO ENSURE A FULL, CODE COMPLIANT, REPLACEMENT OF ALL EXISTING DEVICES IS PERFORMED AND PROVIDED.

GENERAL NOTES

SPECIAL SYSTEMS

A.	ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR WIRING ALL ELECTRICAL ITEMS SHOWN ON THE DRAWINGS, EXCEPT ITEMS LISTED ON SHEET E0.01 GENERAL ELECTRICAL NOTES.
B.	SEE FIRE ALARM ZONE SCHEDULE FOR INITIATING ZONES AND SIGNAL CIRCUITS.
C.	MAXIMUM NUMBER OF 4 INFORMATION OUTLET LOCATIONS PER CONDUIT HOME RUN TO MDF OR IDF IS PERMITTED. CONDUIT SHALL BE SIZED AS FOLLOWS
D.	1 INFORMATION OUTLET LOCATION: 1"
E.	2 INFORMATION OUTLET LOCATIONS:1 1/4"
F.	3 INFORMATION OUTLET LOCATIONS:1 1/2"
G.	**SELECT NEXT NOTE FOR PROJECT REQUIREMENT**
H.	ALL COMMUNICATIONS CABLES SHALL BE INSTALLED IN CONDUIT, CABLE TRAY, OR SUPPORTED BY CABLE HOOKS. PROVIDE BUSHINGS AT THE ENDS OF ALL CONDUIT WHERE STUBBED ABOVE ACCESSIBLE CEILINGS OR WHERE DROPPED INTO CABLE TRAY. PROVIDE CABLE HOOKS ABOVE ACCESSIBLE CEILINGS FOR CABLE INSTALLATION WHERE NOT INSTALLED IN CONDUIT OR CABLE TRAY.
I.	ALL COMMUNICATIONS CABLES SHALL BE INSTALLED IN CONDUIT OR CABLE TRAY.

KEYNOTES

#	Keynote Description
1	CO DETECTOR LOCATED ADJACENT TO THERMOSTAT. COORDINATE EXACT LOCATION WITH MECHANICAL PLANS.

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BUILDING K RENOVATION

200 E College Drive Morganton, NC 28655

WESTERN PIEDMONT COMMUNITY COLLEGE

PROJECT NUMBER 2317

SHEET TITLE
FIRST FLOOR SPECIAL SYSTEMS PLAN - UPPER

SHEET NUMBER
E0401

SCO # 23-27049-01A
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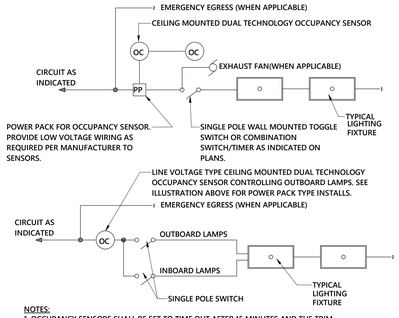
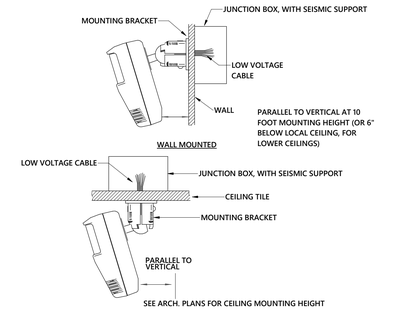


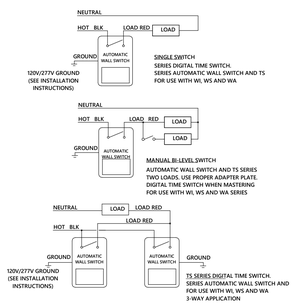
NOTES:
1. OCCUPANCY SENSORS SHALL BE SET TO TIME OUT AFTER 15 MINUTES AND THE TRIM POTENTIOMETER IS SET TO 90% FOR SENSITIVITY.
2. OCCUPANCY SENSORS SHALL BE PLACED AS TO NOT FUNCTION UPON SOMEONE JUST PASSING BY THE ROOM DOOR BUT BY ACTUALLY ENTERING THE ROOM IN AS MUCH AS POSSIBLE.

1 TYPICAL CEILING MOUNTED OCCUPANCY SENSOR WIRING DIAGRAMS
NOT TO SCALE



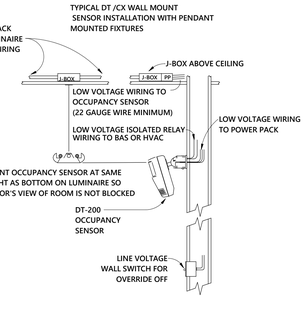
NOTES:
1. TILT SENSOR TOWARD CENTER OF ROOM FOR MAXIMUM EFFECTIVENESS.
2. CALIBRATE SENSITIVITY AND DIRECTION AFTER INSTALLATION.
3. PROVIDE WALL MOUNT BRACKET AND INSTALL AT CORNER MOST SECTION OF ROOM. PATTERN IS BASED ON CONICAL SHAPE.

6 CORNER MOUNT SENSOR
NOT TO SCALE



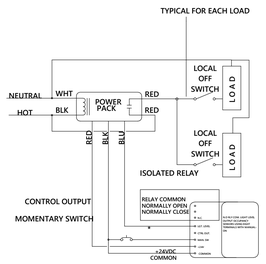
*WHEN THESE SWITCHES ARE WIRED IN A THREE-WAY WIRING CONFIGURATION THEY WILL ONLY OPERATE AS THREE-WAY SWITCHES IF THEY ARE LEFT IN AUTOMATIC MODE. IF ONE SWITCH IS TURNED OFF, THE LIGHTS WILL NOT COME AUTOMATICALLY ON UNTIL THAT SWITCH IS TURN BACK TO THE AUTOMATIC POSITION.

2 SINGLE POLE OCC. SENSOR SWITCH
NOT TO SCALE

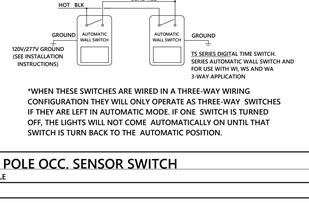


DT-200/CX SERIES MOUNTING DETAIL WITH PENDANT MOUNTED FIXTURES

7 DT-200 PENDENT FIXTURE
NOT TO SCALE



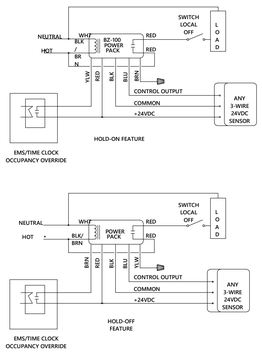
8 DT-200-300
NOT TO SCALE



NOTE:
DO NOT MOUNT POWER PACKS CLOSER THAN 6-12 INCHES FROM SENSOR. PROVIDE DOUBLE STACKED JUNCTION BOX FOR MAXIMUM VENTILATION OF POWER PACK. PROVIDE BLANK COVER. WHERE PERMITTED BY CODE AND AHJ, LEAVE (2) OPENINGS IN CONDUIT KNOCKOUT FOR VENTING OF POWER PACK. VERIFY WITH AHJ PRIOR TO KNOCKOUT REMOVAL.

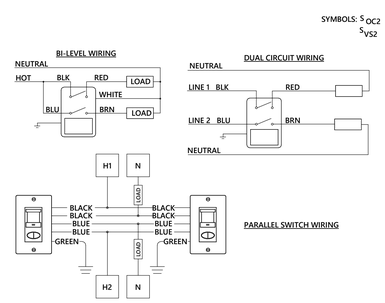
POWER PACK INSTALLED IN J-BOX

3 POWER PACK INSTALLATION
NOT TO SCALE



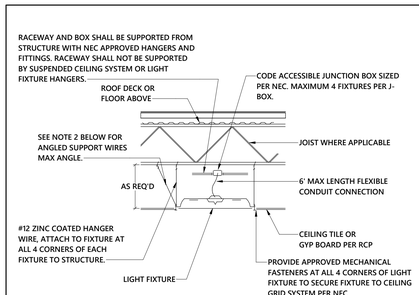
NOTE: CONNECT ONLY THE SUPPLY FOR THE VOLTAGE BEING USED. CAP UNUSED POWER SUPPLY WIRE.

4 POWER PACK WIRING DIAGRAM
NOT TO SCALE

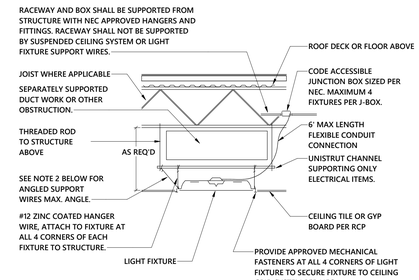


NOTES:
1. COLOR CODING AND WIRING MAY VARY PER MANUFACTURER.
2. IF SEQUENCE OF OPERATION PROVIDED, SEE SEQUENCE FOR SETTING REQUIREMENTS. OTHERWISE SET TIME AFTER NO OCCUPANCY DETECTED FOR 15 MINUTES.
3. OCCUPANCY AND/OR VACANCY SENSORS APPLY.
4. BOTH SENSORS MUST TIME OUT FOR LIGHTS TO TURN OFF.
5. SWITCHING IS LINE VOLTAGE.
6. WHEN REQUIRED CONNECT NEUTRAL TO WHITE LEAD (NEUTRAL OF SWITCH).

5 DUAL RELAY WALL SWITCH SENSORS
NOT TO SCALE



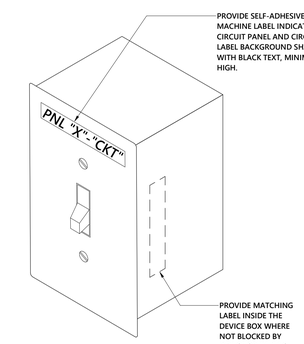
TYPICAL INSTALLATION



INSTALLATION WITH OBSTRUCTION ABOVE

NOTES:
1. WHERE ROOF DECKING IS THE IS THE ALLOWABLE SUPPORT STRUCTURE, AND PATHWAY SYSTEM IS NOT IMC OR RMC, THE MINIMUM DISTANCE FROM ROOF DECKING SHALL BE 1.5" FOR ALL BOXES AND CONUIT.
2. WHERE WIRE IS USED FOR SUPPORT THE SYSTEM SHALL MEET ASTM C636 FOR CONNECTIONS AND ANGLE OF WIRES. USE #12 GAUGE HANGER WIRE, THREE TIGHT FULL TURNS WITHIN 3" AT EACH END, AND NO MORE THAN A 1:6 ANGLE OUT OF PLUMB. SUPPORTS SHALL BE TO STRUCTURE ABOVE NOT ADJACENT WALLS.

9 TYPICAL LAY-IN FIXTURE AND SUPPORT BELOW STRUCTURE DIAGRAM
NOT TO SCALE



10 SWITCH PLATE AND BOX LABELING
NO SCALE

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North Carolina License Number C-0914

CONSTRUCTION DOCUMENTS

ISSUE DATE:	06/08/2026

REVISIONS

NO.	DESCRIPTION	DATE

WESTERN PIEDMONT COMMUNITY COLLEGE

BUILDING K RENOVATION

200 E College Drive Morganton, NC 28655

WESTERN PIEDMONT COMMUNITY COLLEGE

PROJECT NUMBER 2317

SHEET TITLE
ELECTRICAL DETAILS - LIGHTING

SHEET NUMBER
E0601

SCO # 23-27049-01A
NCCCS #2784

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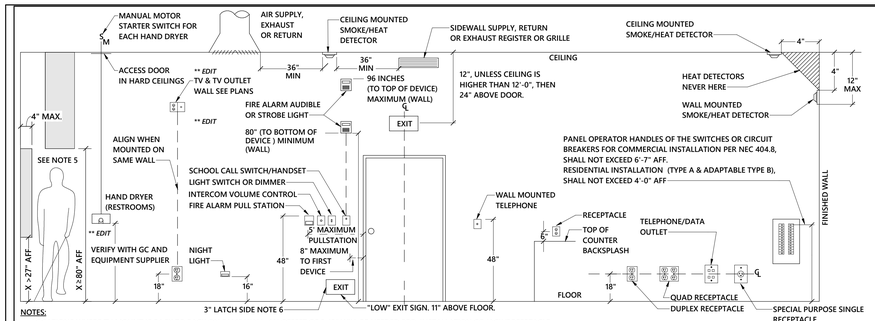
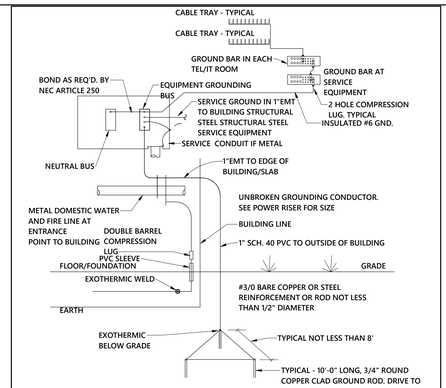
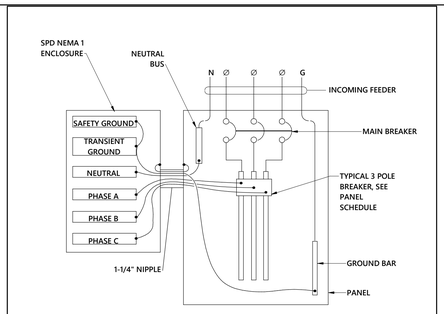


NOTES:
1. LOCATIONS WHERE TV MOUNT IS BACK TO BACK ON SAME WALL, AN OFFSET OF 8-12" WILL BE NEEDED FOR INSTALLATION OF JACK/RECEPTACLE.
2. DEVICES ABOVE COUNTER TOPS SHALL BE A MAXIMUM OF 48" TO TOP OF DEVICE. DEVICES REQUIRED TO BE ADA ACCESSIBLE SHALL BE INSTALLED PER ANSI A117.1.
3. DEVICES NEXT TO DOOR EXIT SHALL BE WITHIN 8" (MAXIMUM) TYPICAL OF DOOR UNLESS OBSTACLES SUCH AS SIDELITES, ETC.
4. ALL METALLIC & NON-METALLIC, SWITCH AND RECEPTACLE BOXES INSTALLED IN FIRE RATED FRAME WALLS SHALL INCLUDE APPROVED FIRESTOP PUTTY PADS APPLIED ON THE BACK AND ALL SIDES OF BOX NOT TOUCHING THE WOOD STUD.
5. IN THE CIRCULATION PATH, IF THERE ARE PENDANT LIGHT FIXTURES, ENSURE THEY ARE LOCATED 80" A.F.F. OR HIGHER UNLESS LOCATED ABOVE A FIXED ELEMENT. WALL MOUNTED FIXTURES LOCATED BETWEEN 27" AND 80" A.F.F. SHALL NOT EXTEND GREATER THAN 4" FROM WALL OR BASE OR HAVE FIXED PROTECTION AT 27" A.F.F. OR LOWER WHEN THESE ELEMENTS ARE LOCATED IN THE CIRCULATION PATH.
6. LOW EXIT SIGN AS INDICATED ON PLANS. PER IBC 1011.2.
7. WALL/PENDANT HEIGHTS SHOWN ON PLANS ARE FROM BOTTOM OF FIXTURE.

1 MOUNTING HEIGHTS OF DEVICES - ELEVATION
NOT TO SCALE

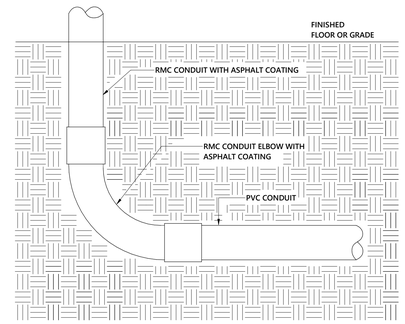


2 SERVICE GROUND DIAGRAM
NOT TO SCALE

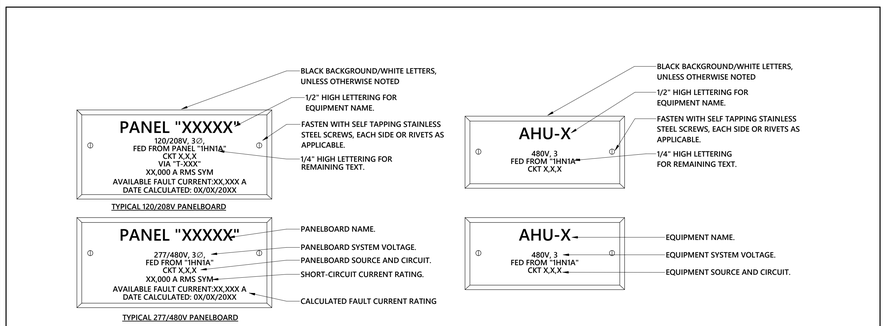


NOTES:
1. ALL WIRING SHALL BE #6 AWG.
2. AVOID SHARP BENDS IN WIRES. ALL WIRE LENGTHS SHALL NOT EXCEED 18" (WHERE POSSIBLE).
3. SEE SPD SPECIFICATION FOR EXACT TYPE FOR LOCATION AS INDICATED ON THE POWER RISER DIAGRAM.

3 SPD CONNECTION DETAIL
NOT TO SCALE



4 CONDUIT TRANSITION DETAIL
NO SCALE



PANELBOARD NAMEPLATES

EQUIPMENT NAMEPLATES

NOTES:
1. SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS, COLORS, ETC.
2. PROVIDE SHORT-CIRCUIT CURRENT RATING AND AVAILABLE FAULT CURRENT ON EACH NON-DWELLING SERVICE EQUIPMENT NAMEPLATE.

5 TYPICAL NAMEPLATE DIAGRAM
NOT TO SCALE

WITH PERMANENT MEANS (MINIMUM 1" LETTERING), INDICATE PANEL SOURCE, CIRCUIT NUMBER(S), FIRE ALARM LOOP ID, ETC. TO IDENTIFY WHAT IS CONTAINED WITHIN THE JUNCTION BOX. LABELING SHALL BE CLEARLY VISIBLE AGAINST THE PAINTED BACKGROUND.

PAINT ENTIRE JUNCTION BOX COVER TO IDENTIFY VOLTAGE (480/277V, 208/120V, ETC.) AND/OR SYSTEM (FIRE ALARM, NORMAL/EMERGENCY, SECURITY, VOICE/DATA, BAS/BMS, ETC.). COLOR SHALL BE AS INDICATED IN THE SPECIFICATIONS OR PER OWNER/BUILDING STANDARDS OR REQUIREMENTS.

NOTES:
1. ALL JUNCTION BOXES SHALL BE ACCESSIBLE.
2. THE LABELING/IDENTIFICATION INDICATED ABOVE IS INTENDED FOR ALL JUNCTION BOXES EXCEPT AS INDICATED IN NOTE 3.
3. LABELING/IDENTIFICATION FOR JUNCTION BOXES WHICH ARE VISIBLE IN FINISHED SPACES SHALL BE SIMILAR TO ABOVE EXCEPT THE LABELING/IDENTIFICATION SHALL BE LOCATED ON THE INSIDE COVER OF THE JUNCTION BOX.

6 JUNCTION BOX LABELING/IDENTIFICATION
NO SCALE

PROVIDE SELF-ADHESIVE BACKED MACHINE LABEL INDICATING BRANCH CIRCUIT PANEL AND CIRCUIT ID. LABEL BACKGROUND SHALL BE CLEAR WITH BLACK TEXT, MINIMUM 1/4" HIGH.

PROVIDE MATCHING LABEL INSIDE THE DEVICE BOX WHERE NOT BLOCKED BY DEVICE OR WIRING.

7 RECEPTACLE PLATE AND BOX LABELING
NO SCALE

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NORTH CAROLINA PROFESSIONAL SEAL 028297 ENGINEER JOHN D. HINSON
06/08/2026

CONSTRUCTION DOCUMENTS

ISSUE DATE:	06/08/2026

REVISIONS

NO.	DESCRIPTION	DATE

WESTERN PIEDMONT COMMUNITY COLLEGE

BUILDING K RENOVATION

200 E College Drive Morganton, NC 28655

WESTERN PIEDMONT COMMUNITY COLLEGE

PROJECT NUMBER 2317

SHEET TITLE
ELECTRICAL DETAILS - POWER

SHEET NUMBER
E0602

SCO # 23-27049-01A
NCCCS #2784

OPTIMA# 24-0064

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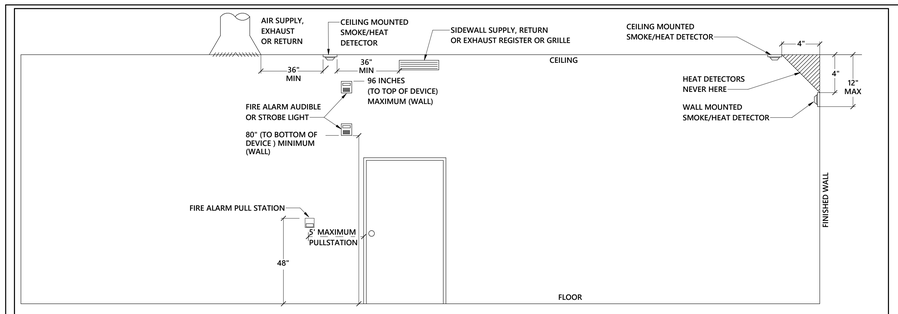
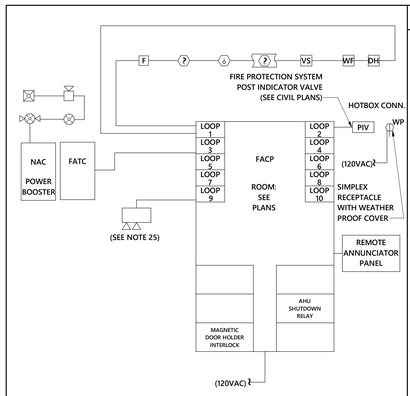


NOTES:
1. LOCATIONS WHERE TV MOUNT IS BACK TO BACK ON SAME WALL, AN OFFSET OF 8-12" WILL BE NEEDED FOR INSTALLATION OF JACK/RECEPTACLE.
2. DEVICES ABOVE COUNTER TOPS SHALL BE A MAXIMUM OF 48" TO TOP OF DEVICE.
3. DEVICES NEXT TO DOOR EXIT SHALL BE WITHIN 8" (MAXIMUM) TYPICAL OF DOOR UNLESS OBSTACLES SUCH AS SIDELITES, ETC.
4. ALL DEVICES ARE TO CENTER LINE OF DEVICE, UNLESS OTHERWISE NOTED.

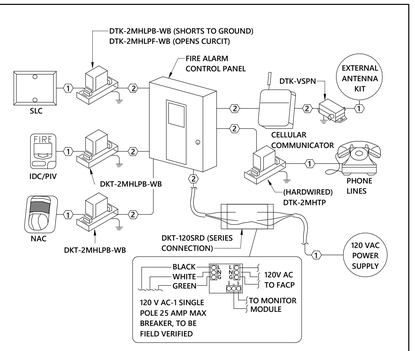
1 MOUNTING HEIGHTS OF DEVICES - ELEVATION
NOT TO SCALE



FIRE ALARM NOTES

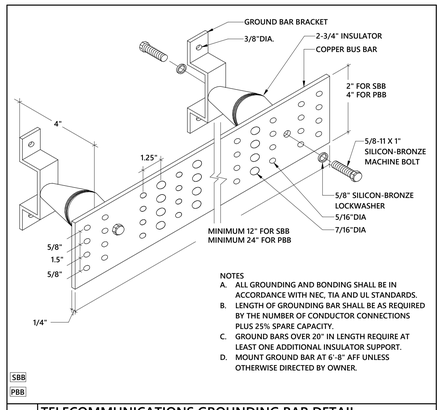
1. FACP SHALL HAVE A MINIMUM 60HR. BATTERY BACKUP.
2. FACP SHALL BE FULLY ANALOG ADDRESSABLE.
3. FACP SHALL BE CONNECTED TO A UL APPROVED CENTRAL STATION.
4. ZONE PER NFPA 72, 2013 AND MANUFACTURER'S RECOMMENDATIONS WITH NO ONE ZONE EXCEEDING 15,000 S.F. PER FLOOR.
5. COORDINATE QUANTITY AND LOCATIONS OF DEVICES WITH CONTRACT DRAWINGS.
6. LOCATE SMOKE DETECTOR WITHIN 5' OF THE MAGNETIC HOLD OPEN DOORS. (TYPICAL)
7. LOCATE FIRE ALARM PULL STATION WITHIN 5' OF THE EXIT DOOR.
8. LOCATE SMOKE/HEAT DETECTOR WITHIN 5' OF THE FA EQUIPMENT (FACP, FATC, NAC).
9. LOCATION OF CEILING MOUNTED SMOKE/HEAT DETECTOR SHALL BE FIELD COORDINATED PRIOR TO ROUGH IN. THE DETECTOR SHALL BE A MINIMUM OF 2' AWAY FROM LIGHT FIXTURE AND A MINIMUM OF 3' AWAY FROM AIR DISTRIBUTION DEVICES.
10. AUTOMATIC DOOR CLOSING SHALL BE ACCOMPLISHED BY THE ACTIVATION OF THE BUILDING FIRE ALARM SYSTEM. SMOKE DETECTOR ACTIVATION SHALL ALERT THE BUILDING FIRE ALARM SYSTEM. THE FIRE ALARM SYSTEM SHALL CAUSE ALL HOLD OPEN DOORS TO CLOSE UPON ALARM ACTIVATION IN THE BUILDING.
11. ACTIVATION OF AN ALARM ZONE SHALL CAUSE ALL AIR HANDLING EQUIPMENT TO SHUT DOWN (ALL DAMPERS, AIR HANDLERS AND EXHAUST FANS MUST STOP).
12. ACTIVATION OF KITCHEN HOOD SUPPRESSION SYSTEM PROVIDES SIGNAL TO FACP WHICH IN TURN ACTIVATES ALL ANNUNCIATING ZONES & SHUTS DOWN HOOD SUPPLY AIR. HOOD EXHAUST SHALL CONTINUE TO OPERATE.
13. ELECTRICAL CONTRACTOR SHALL COORDINATE EXACT LOCATIONS OF ALL FLOW, PRESSURE, & TAMPER SWITCHES WITH FIRE PROTECTION CONTRACTOR PRIOR TO INSTALLATION.
14. ALL VISUAL DEVICES WITHIN THE SAME AREA SHALL BE SYNCHRONIZED.
15. ALL FIRE ALARM WIRING SHALL BE IN RED COLORED CONDUIT,/FIRE ALARM CABLING SHALL BE PLENUM RATED.
16. PROVIDE MULTI-TEMPORAL SOUNDING CAPABILITY AT ALL AUDIO DEVICES FOR EMERGENCY NOTIFICATION FOR NON VOICE SYSTEMS COMPONENTS.
17. THE FIRE ALARM SYSTEM MANUFACTURER SHALL PROVIDE NOTIFICATION APPLIANCE CIRCUIT (NAC) POWER EXTENDERS AS REQUIRED.
18. THE DUCT SMOKE DETECTORS SHALL COMPLY WITH IFC 907.2.12.1.2 AND 907.3.1.
19. PROVIDE DITEK #DTK-DF1205I SERIES OR EQUAL TVSS FOR 120V SUPPLY TO FIRE ALARM CONTROL PANELS, WITH TVSS DRY CONTACT TO BE MONITORED BY FACP. PROVIDE DITEK DTK-2MHLP24F-WB OR EQUAL FOR ALL FIRE ALARM CABLES THAT EXIT THE PHYSICAL BUILDING. TAMPER SWITCHES DTK-2MHLP24B-WB, AND EACH UB/EXTENDER FIRE ALARM PANEL. NAC, PIV, IDC SURGE: DTK-2MHLP24B-WB OR EQUAL. DIALER SURGE: DTK -2MHTPWB FIBER MEDIA CONVERTER PROTECTOR DTK-PVPIP OR EQUAL.
20. THE CIRCUIT FEEDING THE FIRE ALARM PANEL IS DEDICATED FOR THE FIRE ALARM ONLY. BREAKER SHALL BE PROVIDED WITH A LABEL "FIRE ALARM CIRCUIT" AND SHALL BE RED. PROVIDE BREAKER LOCK ON DEVICE.
21. PROVIDE REMOTE LIGHT WITH TEST SWITCH FOR DUCT SMOKE DETECTOR ON CEILING WHERE UNIT IS ABOVE CEILING.
22. CONTRACTOR SHALL INCLUDE IN BID LABOR AND MATERIAL FOR UP TO (2) DUCT DETECTORS. (5) ANNUNCIATION DEVICES, (2) SMOKE DETECTORS AND (2) PULL STATIONS 100' FROM LOCAL PANEL (IN WALL) AS REQUIRED BY LOCAL AHJ/ENGINEER. INCLUDE ALL PROGRAMMING COSTS.
23. CONTRACTOR RESPONSIBLE FOR SHOP DRAWINGS AS REQUIRED BY LOCAL AHJ.
24. DUCT DETECTORS SHALL BE VERIFIED WITH THE MECHANICAL DRAWINGS FOR QUANTITY AND LOCATION. TOTAL QUANTITY MINIMUM SHALL BE BASED ON BOTH MECHANICAL SCHEDULES AND MECHANICAL PLAN LOCATIONS AND ELECTRICAL PLANS. WHEN DEVICE QUANTITIES (ELECTRICAL VS. MECHANICAL) ARE IN CONFLICT, PROVIDE THE GREATER QUANTITY OF DETECTORS.
25. DIGITAL ALARM COMMUNICATOR TRANSMITTER SHALL BE ACCEPTABLE TO THE REMOTE CENTRAL STATION AND SHALL COMPLY WITH UL 632. CELLULAR LINE – DUAL SOURCE. PROVIDE NAPCO STARLINK (SLD-CMDA-FIRE) FIRE ALARM COMMUNICATOR AND SLE-ANTEXT5D EXTERNAL ANTENNA TO OR EQUAL AND COORDINATED WITH THE CELLULAR DIAL OUT SERVICE. CELLULAR DIAL OUT SHALL BE BACKED UP AS PART OF BATTERY BACKUP AS WELL AS GENERATOR BACKED UP WHERE AVAILABLE. FUNCTIONAL PERFORMANCE: UNIT SHALL RECEIVE AN ALARM, SUPERVISORY, OR TROUBLE SIGNAL FROM FIRE-ALARM CONTROL UNIT AND AUTOMATICALLY CAPTURE A PRESET NUMBER FOR A REMOTE CENTRAL STATION. WHEN CONTACT IS MADE WITH CENTRAL STATION(S), SIGNALS SHALL BE TRANSMITTED. IF SERVICE ON THE CELLULAR LINE IS INTERRUPTED FOR LONGER THAN 45 SECONDS, TRANSMITTER SHALL INITIATE A LOCAL TROUBLE SIGNAL. TRANSMITTER SHALL AUTOMATICALLY REPORT CELLULAR SERVICE RESTORATION TO THE CENTRAL STATION. IF SERVICE IS LOST, TRANSMITTER SHALL INITIATE THE LOCAL TROUBLE SIGNAL.
26. PROVIDE ISOLATION MODULES (OR ISOLATOR BASES) ALONG EACH SLC (ADDRESSABLE LOOP). 20 DEVICES MAX BETWEEN ISO'S.

2 FIRE ALARM RISER DIAGRAM
NOT TO SCALE



KEY NOTES:

3 SURGE PROTECTION FIRE ALARM
NOT TO SCALE



NOTES
A. ALL GROUNDING AND BONDING SHALL BE IN ACCORDANCE WITH NEC, TIA AND UL STANDARDS.
B. LENGTH OF GROUNDING BAR SHALL BE AS REQUIRED BY THE NUMBER OF CONDUCTOR CONNECTIONS PLUS 25% SPARE CAPACITY.
C. GROUND BARS OVER 20" IN LENGTH REQUIRE AT LEAST ONE ADDITIONAL INSULATOR SUPPORT.
D. MOUNT GROUND BAR AT 6'-8" AFF UNLESS OTHERWISE DIRECTED BY OWNER.

4 TELECOMMUNICATIONS GROUNDING BAR DETAIL
NO SCALE

FIRE ALARM SYSTEM MATRIX | BUILDING SYSTEM OUTPUTS

	ACTIVATE COMMON ALARM SIGNAL INDICATOR	ACTIVATE AUDIBLE ALARM SIGNAL	ACTIVATE COMMON SUPERVISORY SIGNAL INDICATOR	ACTIVATE AUDIBLE SUPERVISORY SIGNAL	ACTIVATE COMMON TROUBLE SIGNAL INDICATOR	ACTIVATE AUDIBLE TROUBLE SIGNAL	ACTIVATE ZONE OR DEVICE ALARM ADDRESS INDICATOR	ACTIVATE GENERAL EVACUATION	DISPLAY CHANGE OF STATUS	ACTIVATE ADA DOOR STROBE	ACTUATE ALL SOUNDER BASES IN BUILDING	TRANSMIT FIRE ALARM SIGNAL TO CENTRAL STATION	TRANSMIT SUPERVISORY SIGNAL TO CENTRAL STATION	TRANSMIT TROUBLE SIGNAL TO CENTRAL STATION	SHUT DOWN RESPECTIVE HVAC	CLOSE ALL FIRE/SMOKE DAMPERS	UNLOCK EXIT ALARM CONTROL DOORS	RELEASE MAGNETICALLY HELD DOORS	SHOW CHANGE OF STATUS ON ANNUNCIATOR	SHOW CHANGE OF STATUS ON CENTRAL PANEL	ACTIVATE EXTERNAL HORN/STROBES
MANUAL FIRE ALARM PULL BOXES	X	X				X	X	X		X	X								X	X	X	X	
BUILDING SMOKE DETECTOR	X	X					X	X			X	X										X	X	X
BUILDING CO DETECTOR	X	X					X	X			X	X										X	X	X
DUCT SMOKE DETECTOR			X	X		X		X	X		X								X		X	X		
AREA HEAT DETECTOR	X	X				X	X	X	X		X	X							X	X	X	X		
NOTIFICATION DEVICE SHORT CIRCUIT					X	X			X					X										
OPEN CIRCUIT					X	X			X					X					X					
GROUND FAULT					X	X			X					X										
FIRE ALARM A.C. POWER FAILURE					X	X			X					X										
FIRE ALARM SYSTEM LOW BATTERY					X									X										

5 FIRE ALARM MATRIX
NOT TO SCALE

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NORTH CAROLINA PROFESSIONAL SEAL 028297 ENGINEER JOHNSON
06/08/2026

CONSTRUCTION DOCUMENTS

ISSUE DATE: 06/08/2026

REVISIONS

NO.	DESCRIPTION	DATE

WESTERN PIEDMONT COMMUNITY COLLEGE
BUILDING K RENOVATION
200 E College Drive Morganton, NC 28655

WESTERN PIEDMONT COMMUNITY COLLEGE

PROJECT NUMBER 2317

SHEET TITLE
ELECTRICAL DETAILS - SYSTEMS

SHEET NUMBER
E0603

SCO # 23-27049-01A
NCCCS #2784

OPTIMA# 24-0064

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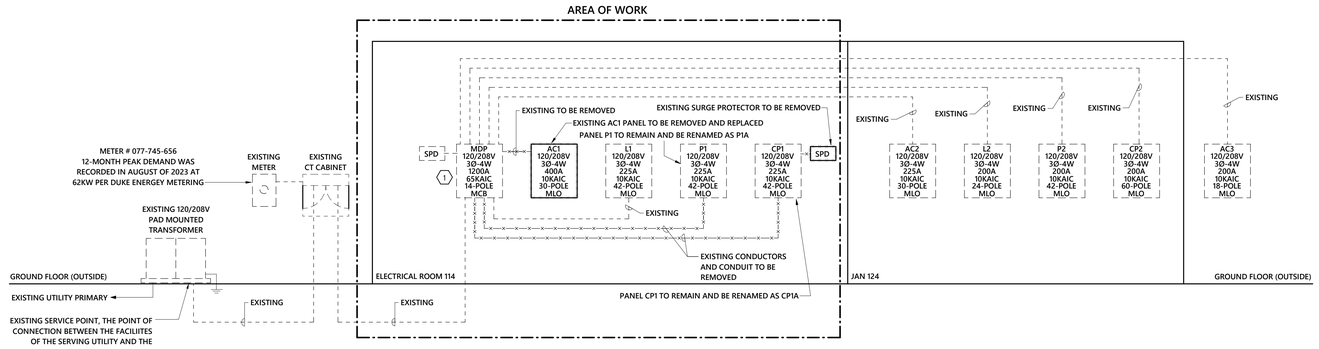


1 EXISTING POWER RISER DIAGRAM
1/8" = 1'-0"

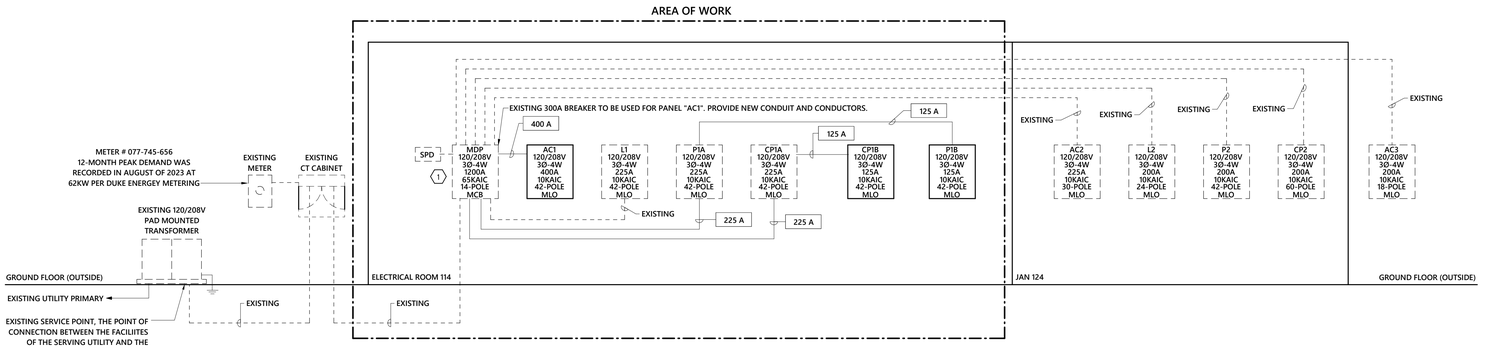
LEGEND
EXISTING CONSTRUCTION
DEMOLITION CONSTRUCTION

GENERAL NOTES

1. CONSULT WITH THE UTILITY PROVIDER FOR THEIR SPECIFIC REQUIREMENTS IN REGARDS TO DELIVERY OF POWER. ANY ALTERATION OF THE APPROVED DESIGN MAY REQUIRE RE-SUBMITTAL TO DETERMINE COMPLIANCE TO NEC W/NC AMENDMENTS.
2. FAULT CURRENT MUST BE CALCULATED AFTER INSTALLATION AND BE LEGIBLY MARKED ON SERVICE EQUIPMENT WITH THE DATE CALCULATED TO COMPLY WITH NEC 110.24 BEFORE POWER CAN BE TURNED ON TO THE SERVICE.

KEYNOTES

#	Keynote Description
1	EXISTING 150A BREAKERS FOR PANELS P1 AND CP1 TO BE REMOVED AND REPLACED WITH 225A BREAKERS. PANELS TO BE RENAMED AS P1A AND CP1A.



2 NEW WORK POWER RISER DIAGRAM
1/8" = 1'-0"

LEGEND
NEW CONSTRUCTION
EXISTING CONSTRUCTION

FEEDER SCHEDULE FOR COPPER...

FEEDER AMPS	WIRE SIZE TEMP 60°C (CU)	WIRE SIZE TEMP 75°C (CU)
15 A	4#12, 1#12G, 3/4"C	4#12, 1#12G, 3/4"C
20 A	4#12, 1#12G, 3/4"C	4#12, 1#12G, 3/4"C
25 A	4#10, 1#10G, 3/4"C	4#10, 1#10G, 3/4"C
30 A	4#10, 1#10G, 3/4"C	4#10, 1#10G, 3/4"C
35 A	4#8, 1#10G, 3/4"C	4#8, 1#10G, 3/4"C
40 A	4#8, 1#10G, 3/4"C	4#8, 1#10G, 3/4"C
45 A	4#6, 1#10G, 1"C	4#8, 1#10G, 3/4"C
50 A	4#6, 1#10G, 1"C	4#8, 1#10G, 3/4"C
60 A	4#4, 1#10G, 1-1/4"C	4#6, 1#10G, 1"C
60 AS	4#4, 1-1/4"C	4#6, 1"C
70 A	4#4, 1#8G, 1-1/4"C	4#4, 1#8G, 1-1/4"C
70 AS	4#4, 1-1/4"C	4#4, 1-1/4"C
80 A	4#3, 1#8G, 1-1/4"C	4#4, 1#8G, 1-1/4"C
80 AS	4#3, 1-1/4"C	4#4, 1-1/4"C
90 A	4#2, 1#8G, 1-1/4"C	4#3, 1#8G, 1-1/4"C
90 AS	4#2, 1-1/4"C	4#3, 1-1/4"C
100 A	4#1, 1#8G, 1 -1/2"C	4#3, 1#8G, 1-1/4"C
100 AS	4#1, 1-1/2"C	4#3, 1-1/4"C
110 A		4#2, 1#6G, 1-1/2"C
110 AS		4#2, 1-1/2"C
125 A		4#1, 1#6G, 2"C
125 AS		4#1, 2"C
150 A		4#1/0, 1#6G, 2"C
150 AS		4#1/0, 2"C
175 A		4#2/0, 1#6G, 2"C
175 AS		4#2/0, 2"C
200 A		4#3/0, 1#6G, 2-1/2"C
200 AS		4#3/0, 2-1/2"C
225 A		4#4/0, 1#4G, 2-1/2"C
225 AS		4#4/0, 2-1/2"C
250 A		4-250 KCMIL, 1#4G, 3"C
250 AS		4-250 KCMIL, 3"C
300 A		4-350 KCMIL, 1#4G, 3"C
300 AS		4-350 KCMIL, 3"C
350 A		4-500 KCMIL, 1#3G, 3-1/2"C
350 AS		4-500 KCMIL, 3-1/2"C
400 A		(2)-4#3/0, 1#3G, 2-1/2"C
400 AS		(2)-4#3/0, 2-1/2"C
450 A		(2) 4#4/0, 1#2G, 2-1/2"C
450 AS		(2) 4#4/0, 2-1/2"C
500 A		(2) 4-250 KCMIL, 1#2G, 3"C
500 AS		(2) 4-250 KCMIL, 3"C
600 A		(2) 4-350 KCMIL, 1#1G, 3"C
600 AS		(2) 4-350 KCMIL, 3"C
700 A		(2) 4-500 KCMIL, 1#1/0G, 3-1/2"C
700 AS		(2) 4-500 KCMIL, 3-1/2"C
800 A		(3) 4-300 KCMIL, 1#1/0G, 3"C
800 AS		(3) 4-300 KCMIL, 3"C
1000 A		(3) 4-400 KCMIL, 1#2/0G, 3-1/2"C
1000 AS		(3) 4-400 KCMIL, 3-1/2"C
1200 A		(4) 4-350 KCMIL, 1#3/0G, 3"C
1200 AS		(4) 4-350 KCMIL, 3"C

NOTES: 1.) FOR TERMINATIONS RATED 100A OR LESS, THE ELECTRICAL CONTRACTOR SHALL VERIFY THE TERMINATIONS ARE LISTED FOR 75°C. WHERE 100A OR LESS RATED TERMINATIONS ARE LISTED 60°C, THE ELECTRICAL CONTRACTOR SHALL USE THE 60°C FEEDER LISTED IN THE TABLE.

15 A	
20 A	
25 A	
30 A	
35 A	
40 A	
45 A	
50 A	
60 A	60 AS
70 A	70 AS
80 A	80 AS
90 A	90 AS
100 A	100 AS
110 A	110 AS
125 A	125 AS
150 A	150 AS
175 A	175 AS
200 A	200 AS
225 A	225 AS
250 A	250 AS
300 A	300 AS
350 A	350 AS
400 A	400 AS
450 A	450 AS
500 A	500 AS
600 A	600 AS
700 A	700 AS
800 A	800 AS
1000 A	1000 AS
1200 A	1200 AS

ELECTRICAL EQUIPMENT RISER SCHEDULE

PANEL NAME	SHORT CIRCUIT RATING	VOLTAGE	Isc	MAINS	CALCULATED MAXIMUM 80%	TOTAL ESTIMATED DEMAND CIRCUIT	NUMBER OF POLES	NUMBER OF WIRES	FEEDER WIRE & CONDUIT	PANEL LOCATION	PANEL FED FROM
MDP	65 KAIC	208 V		1200 A	960 A	752 A	3	4		ELEC. ROOM 114	
AC1	10 KAIC	208 V		400 A	320 A	0 A	3	4		ELEC. ROOM 114	
AC1	10 KAIC	208 V		400 A	320 A	131 A	3	4		ELEC. ROOM 114	MDP
L1	10 KAIC	208 V		225 A	180 A	76 A	3	4		ELEC. ROOM 114	MDP
P1A	10 KAIC	208 V		225 A	180 A	79 A	3	4		ELEC. ROOM 114	MDP
CP1A	10 KAIC	208 V		225 A	180 A	115 A	3	4		ELEC. ROOM 114	MDP
AC2	10 KAIC	208 V		225 A	180 A	51 A	3	4		JAN. 141	MDP
L2	10 KAIC	208 V		200 A	160 A	55 A	3	4		JAN. 141	MDP
P2	10 KAIC	208 V		200 A	160 A	66 A	3	4		JAN. 141	MDP
CP2	10 KAIC	208 V		200 A	160 A	73 A	3	4		JAN. 141	MDP
AC3	10 KAIC	208 V		200 A	160 A	148 A	3	4			MDP
CP1B	10 KAIC	208 V		125 A	100 A	70 A	3	4		ELEC. ROOM 114	CP1A
P1B	10 KAIC	208 V		125 A	100 A	44 A	3	4		ELEC. ROOM 114	P1A

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06/08/2026

CONSTRUCTION DOCUMENTS

ISSUE DATE: 06/08/2026

REVISIONS

NO.	DESCRIPTION	DATE

WESTERN PIEDMONT COMMUNITY COLLEGE
BUILDING K RENOVATION
200 E College Drive Morganton, NC 28655

WESTERN PIEDMONT COMMUNITY COLLEGE

PROJECT NUMBER 2317

SHEET TITLE
ELECTRICAL DIAGRAMS

SHEET NUMBER
E0701

SCO # 23-27049-01A
NCCCS #2784

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OPTIMA# 24-0064

MECHANICAL / PLUMBING EQUIPMENT SCHEDULE

ID	POWER	VOLTAGE	PHASE	FLA	MCA	MOCP/FUSE	LOAD CLASSIFICATION	PANEL/CIRCUIT	DISCONNECT
EF-1	17 W	120V	1	-	-	-	VENTILATION	AC1-1	30/FPN-2P
EF-2	17 W	120V	1	-	-	-	VENTILATION	AC1-1	30/FPN-2P
EF-3	1/15 HP	120V	1	-	-	-	VENTILATION	AC1-2	30/FPN-2P
EF-4	1/6 HP	120V	1	-	-	-	VENTILATION	AC1-2	30/FPN-2P
ERV-1	-	208V	3	-	12.8 A	15.0 A	VENTILATION	AC1-3,5,7	30/FPN-3P
ERV-2	-	208V	3	-	12.8 A	15.0 A	VENTILATION	AC1-4,6,8	30/FPN-3P
IDU-1	-	120V	1	-	13.4 A	20.0 A	COOLING	AC1-9	30/FPN-2P
IDU-2	-	120V	1	-	16.4 A	25.0 A	COOLING	AC1-10	30/FPN-2P
IDU-3	-	120V	1	-	9.8 A	15.0 A	COOLING	AC1-11	30/FPN-2P
IDU-4	-	120V	1	-	9.8 A	15.0 A	COOLING	AC1-12	30/FPN-2P
IDU-5	-	120V	1	-	9.8 A	15.0 A	COOLING	AC1-13	30/FPN-2P
IDU-6	-	120V	1	-	9.8 A	15.0 A	COOLING	AC1-14	30/FPN-2P
IDU-7	-	120V	1	-	9.8 A	15.0 A	COOLING	AC1-15	30/FPN-2P
IDU-8	-	120V	1	-	16.4 A	25.0 A	COOLING	AC1-16	30/FPN-2P
CU-1	-	208V	1	-	19.0 A	30.0 A	COOLING	AC1-17,19	30/FPN-2P-3R
CU-2	-	208V	1	-	32.4 A	50.0 A	COOLING	AC1-18,20	60/FPN-2P-3R
CU-3	-	208V	1	-	17.8 A	30.0 A	COOLING	AC1-21,23	30/FPN-2P-3R
CU-4	-	208V	1	-	17.8 A	30.0 A	COOLING	AC1-22,24	30/FPN-2P-3R
CU-5	-	208V	1	-	17.8 A	30.0 A	COOLING	AC1-25,27	30/FPN-2P-3R
CU-6	-	208V	1	-	17.8 A	30.0 A	COOLING	AC1-26,28	30/FPN-2P-3R
CU-7	-	208V	1	-	17.8 A	30.0 A	COOLING	AC1-29,31	30/FPN-2P-3R
CU-8	-	208V	1	-	32.4 A	50.0 A	COOLING	AC1-30,32	60/FPN-2P-3R
BAS1	-	120V	1	-	-	-	MISC.	AC1-33	BY MC
WH1	-	120V	1	-	-	-	WATER HEATER	AC1-34	
RCP1	125 W	120V	1	-	-	-	MISC.	AC1-34	

LIGHTING (SPECIFIED)

TYPE	FIXTURE WATTS	MULT	FIXTURE COUNT	EQUALS	TOTAL FIXTURE TYPE WATT (W)
EMB1	6.00	X	28	=	168.0 W
EMB5	3.00	X	9	=	27.0 W
FPL2	21.00	X	17	=	357.0 W
FPL3	31.00	X	8	=	248.0 W
FPL5	40.00	X	89	=	3560.0 W
FPL6	56.00	X	21	=	1176.0 W
OEM4	12.00	X	2	=	24.0 W
OWL1	50.00	X	4	=	200.0 W
OWL2	25.00	X	2	=	50.0 W
STL1	42.00	X	6	=	252.0 W
TOTAL BUILDING ACCUMULATED FIXTURE WATTAGE (SPECIFIED) =					6062.0 W

LIGHTING FIXTURE SCHEDULE

TYPE	DESCRIPTION	MINIMUM LUMENS	CCT	TOTAL FIXURE WATTAGE	DRIVER	VOLTAGE	MANUFACTURER	MODEL	REMARKS	EXAMPLE
EMB1	INTERIOR EMERGENCY BATTERY EGRESS LIGHT (HIGH OUTPUT)	1,100		6.0 W	INTEGRAL LED DRIVER	UNIV	LITHONIA HUBBELL JUNO COOPER	ELM6L APPROVED EQUAL APPROVED EQUAL APPROVED EQUAL	TEST SWITCH PROVIDED SEALED 90 MINUTE BATTERY 20' (ON CENTER) X 6 W DESIGN PATH SELF TEST SDRT WITH RTKIT	
EMB5	INTERIOR EMERGENCY BATTERY EGRESS LIGHT AND EXIT COMBO		3500K	3.0 W	INTEGRAL LED DRIVER	UNIV	LITHONIA CHLORIDE DUAL-LITE MULE SURE-LITES	LHQM LED VLLCR2R HCXUR CEU COMBO LPXC	TEST SWITCH PROVIDED SEALED 90 MINUTE BATTERY	
EXIB	BATTERY THERMOPLASTIC EXIT SIGN		3500K	1.0 W	INTEGRAL LED DRIVER	UNIV	LITHONIA CHLORIDE DUAL-LITE MULE SURE-LITES	LQM VERWEM WPREM MX LPX	NICKEL CADMIUM BATTERY EXIT SIGN 90 MINUTE OPERATION TEST SWITCH PROVIDED UL LISTED FOR DAMP LOCATIONS SELF DIAGNOSTIC	
FPL2	2X2 LED LAY-IN FLAT PANEL	2,400	3500K	21.0 W	INTEGRAL LED DRIVER (STANDARD 0-10V DIMMING) 100-10% DIMMING	UNIV	METALUX LITHONIA DAY-BRITE	FPS LED APPROVED EQUAL APPROVED EQUAL	UL LISTED DAMP LOCATIONS DLC LISTED SELECTABLE LUMENS SELECTABLE CCT (VERIFY WITH ARCH/OWNER)	
FPL3	2X2 LED LAY-IN FLAT PANEL	3,000	3500K	31.0 W	INTEGRAL LED DRIVER (STANDARD 0-10V DIMMING) 100-10% DIMMING	UNIV	METALUX LITHONIA DAY-BRITE	FPS LED APPROVED EQUAL APPROVED EQUAL	UL LISTED DAMP LOCATIONS DLC LISTED SELECTABLE LUMENS SELECTABLE CCT (VERIFY WITH ARCH/OWNER)	
FPL5	2X4 LED LAY-IN FLAT PANEL	4,800	3500K	40.0 W	INTEGRAL LED DRIVER (STANDARD 0-10V DIMMING) 100-10% DIMMING	UNIV	METALUX LITHONIA DAY-BRITE	FPS LED APPROVED EQUAL APPROVED EQUAL	UL LISTED DAMP LOCATIONS DLC LISTED SELECTABLE LUMENS SELECTABLE CCT (VERIFY WITH ARCH/OWNER)	
FPL6	2X4 LED LAY-IN FLAT PANEL	6,000	3500K	56.0 W	INTEGRAL LED DRIVER (STANDARD 0-10V DIMMING) 100-10% DIMMING	UNIV	METALUX LITHONIA DAY-BRITE	FPS LED APPROVED EQUAL APPROVED EQUAL	UL LISTED DAMP LOCATIONS DLC LISTED SELECTABLE LUMENS SELECTABLE CCT (VERIFY WITH ARCH/OWNER)	
OEM4	DECORATIVE WALL SCONCE	1,300	4000K	12.0 W	INTEGRAL LED DRIVER (STANDARD 0-10 DIMMING)	UNIV	ALW APPROVED EQUAL	CORE/WL 4 CRS4/WL APPROVED EQUAL	UL LISTED WET LOCATION LS CODE 101 COMPLIANT PROVIDE 90 MIN. REMOTE BATT. VERIFY FINISH, MOUNTING, AND TRIM OPTIONS WITH ARCHITECT	
OWL1	LED WALL PACK - HIGH LUMEN	6,000	4000K	50.0 W	INTEGRAL LED DRIVER (STANDARD 0-10V DIMMING)	UNIV	LITHONIA HUBBELL METALUX	WST LED APPROVED EQUAL APPROVED EQUAL	WIDE THROW DISTRIBUTUION WET LOCATION LISTED VERIFY FINISH WITH ARCHITECT PROVIDE 90-MIN. INTEGRAL EMERGENCY BATTERY, WITH TEST SWITCH ON UNIT, WHERE NOTED AS "EM" ON PLANS.	
OWL2	LED WALL PACK - LOW LUMEN	3,000	4000K	25.0 W	INTEGRAL LED DRIVER (STANDARD 0-10V DIMMING)	UNIV	LITHONIA HUBBELL METALUX	WST LED APPROVED EQUAL APPROVED EQUAL	WIDE THROW DISTRIBUTUION WET LOCATION LISTED VERIFY FINISH WITH ARCHITECT PROVIDE 90-MIN. INTEGRAL EMERGENCY BATTERY, WITH TEST SWITCH ON UNIT, WHERE NOTED AS "EM" ON PLANS.	
STL1	4 FT. LED STRIP	5,000	3500K	42.0 W	INTEGRAL LED DRIVER (STANDARD 0-10V DIMMING)	UNIV	LITHONIA COLUMBIA CREE COOPER DAY-BRITE	CLX LED FSS LCL 4-OC1 SNLED	PROVIDE CHAIN FOR PENDANT MOUNTING PROVIDE WIRE GUARD LENSED DLC LISTED	

NOTE: IF MINIMUM LUMENS IS EQUAL TO "0", THE CELL WILL BE FILLED IN SOLID BLACK SHADING.

1. ALL FIXTURES SHALL BE LED UNLESS OTHERWISE SPECIFIED. COLOR TEMPERATURE SHALL BE 3500K UNLESS OTHERWISE NOTED.
2. LED DRIVERS SHALL BE PROVIDED FROM PER MANUFACTURER RECOMMENDATION. AS PART OF THIS RECOMMENDATION COORDINATE THE REQUIRED WAVE OUTPUT SO THEY ARE COMPATIBLE. THIS INCLUDES EMERGENCY DRIVERS.
3. SEE ARCHITECTURAL REFLECTED CEILING PLAN FOR EXACT FIXTURE LOCATIONS.
4. FIXTURES IN FIRE RATED CEILING SHALL BE PROVIDED WITH FIRE RATED TENTS AS REQUIRED.
5. SUSPEND ALL FOUR CORNERS WITH WIRE TO STRUCTURE. DO NOT ALLOW GRID ALONE TO SUPPORT FIXTURE.
6. FIXTURES WITH EMERGENCY BATTERY PACKS SHALL BE SUPPLIED WITH 1100 LUMEN INVERTERS.
7. PROVIDE INTEGRAL SURGE PROTECTION ON ALL EXTERIOR LED DRIVER FIXTURE TYPES.
8. DIMMING OF FIXTURES SHALL BE WITH A SWITCH AS RECOMMENDED BY THE DRIVER MANUFACTURER.
9. THE CONTRACTOR SHALL VERIFY THE LEAD TIME OF ALL PRODUCTS SPECIFIED IN THIS SCHEDULE AT THE TIME OF PACKAGE QUOTE.
10. DURING THE BID PROCESS, THE CONTRACTOR SHALL NOTIFY THE ARCHITECT/ENGINEER OF ANY DELIVERY/SCHEDULING ISSUES.
11. NO SUBSTITUTIONS WILL BE ALLOWED DUE TO LACK OF COORDINATION OF DELIVERY DATES AND CONSTRUCTION SCHEDULE AFTER BID.
12. ALL EXPEDITED EXPENSES SHALL BE THE RESPONSIBILTY OF THE CONTRACTOR.
13. FIXTURES TO BE INSTALLED IN CEILINGS, INDICATED ON ARCHITECTURAL PLANS AS HAVING INSULATION IN CONTACT WITH CEILING SURFACE, SHALL BE IC RATED BY MANUFACTURER.
14. LED DRIVERS LOCATED IN UNCONDITIONED SPACES SHALL BE RATED FOR 90 DEGREES F.
15. PROVIDE 90 MINUTE EMERGENCY BATTERY BACK UP. EMERGENCY BACK UP SHALL BE BASED ON TYPE OF FIXTURE, LED DRIVER, BALLAST, ETC. EMERGENCY BACKUP SHALL BE DUAL INPUT FOR BOTH SWITCHING AND CHARGING. PROVIDE UNSWITCHED "HOT" FROM LOCAL CIRCUIT UNLESS OTHERWISE INDICATED ON PLANS. PROVIDE WITH INDICATOR LIGHT. INSTALL LED INDICATOR ON LIGHT FIXTURE UNLESS DECORATIVE. DECORATIVE FIXTURES SHALL HAVE INDICATOR PLACED AT LOCAL CEILING. BODINE, PHILLIPS, POWER SENTRY OR EQUAL.
16. PROVIDE EMERGENCY RELAY BASED ON MINIMUM BODINE GLCD-208 OR EQUAL. SEE PLANS FOR INTENT. PROVIDE EMERGENCY GENERATOR/INVERTER CIRCUIT AND SWITCH LEG NORMAL CIRCUIT. SEE DETAIL.
17. POLES PROVIDED FOR LED FIXTURES SHALL BE METAL, REGARDLESS OF SPECIFICATION FOR GROUNDING PURPOSES.

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06/08/2026

CONSTRUCTION DOCUMENTS

ISSUE DATE: 06/08/2026

REVISIONS

NO.	DESCRIPTION	DATE

WESTERN PIEDMONT COMMUNITY COLLEGE

BUILDING K RENOVATION

200 E College Drive Morganton, NC 28655

WESTERN PIEDMONT COMMUNITY COLLEGE

PROJECT NUMBER 2317

SHEET TITLE
LIGHTING FIXTURES + MECHANICAL EQUIPMENT SCHEDULE

SHEET NUMBER
E0801

SCO # 23-27049-01A
NCCCS #2784

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OPTIMA# 24-0064

EXISTING PANEL: MDP

VOLTAGE: 208Y/120 3Ø | **FED FROM:** | **MOUNTING:** SURFACE | **MAIN TYPE:** MCB | **MFR:** EXISTING | **ENCLOSURE:** NEMA1 | **PHASE:** 3 | **TYPE:** EXISTING | **MAIN:** 1200 A | **WIRE:** 4 | **AIC:** 65 KAIC

LC Abbr	Load Served	Wire	Trip	Ckt No	Pole	A	B	C	Pole	Ckt No	Trip	Wire	Load Served	LC Abbr
				1		16.58 --				2				
F	**PANEL "AC1" (NOTE 4)**	**(2)-3/0**	300 A	3	3		14.88 --		3	4	--	-	NO SPACE	
				5				15.75 --		6				
F	PANEL "AC3" (EXISTING CKT)	4/0	200 A	7		15.80 7.70				8				
				9	3		18.70 4.70		3	10	200 A	3/0	PANEL "AC2" (EXISTING CKT)	F
				11				18.70 5.80		12				
F	**PANEL "P1A" (NOTE 3)**	**4/0**	**225 A**	13		11.47 6.70				14				
				15	3		11.12 4.20		3	16	200 A	3/0	PANEL "L2" (EXISTING CKT)	F
				17				9.93 5.00		18				
F	**PANEL "CP1A" (NOTE 3)**	**4/0**	**225 A**	19		19.91 8.40				20				
				21	3		16.13 7.50		3	22	150 A	1/0	PANEL "P2" (EXISTING CKT)	F
				23				17.46 8.80		24				
F	PANEL "L1" (EXISTING CKT)	3/0	200 A	25		7.87 14.50				26				
				27	3		8.81 14.20		3	28	200 A	4/0	PANEL "CP2" (EXISTING CKT)	F
				29				5.85 13.10		30				
MS	TVSS (EXISTING CKT)	-	30 A	31		0.00 --				32				
				33	3		0.00 --		3	34	--	-	SPACE ONLY	
				35				0.00 --		36				
				37		-- --				38				
	SPACE ONLY	-	--	39	3		-- --		3	40	--	-	SPACE ONLY	
				41				-- --		42				
				43		-- --				44				
	SPACE ONLY	-	--	45	3		-- --		3	46	--	-	SPACE ONLY	
				47				-- --		48				

	LOAD	Connected Load	Demand Factor	Estimated Demand
L	LIGHTS	22.95 kVA	125.00%	28.68 kVA
LE	LIGHTING - EXTERIOR	12.98 kVA	125.00%	16.22 kVA
H	HEATING	12.20 kVA	100.00%	12.20 kVA
C	COOLING	90.87 kVA	100.00%	90.87 kVA
V	VENTILATION	8.81 kVA	100.00%	8.81 kVA
M	MOTORS	0.25 kVA	100.00%	0.25 kVA
K	KITCHEN	0.00 kVA	0.00%	0.00 kVA
R	RECEPTACLES	105.18 kVA	54.75%	57.59 kVA
WH	WATER HEATER	6.50 kVA	100.00%	6.50 kVA
MS	MISC.	49.82 kVA	100.00%	49.82 kVA
S	Spare	0.00 kVA	0.00%	0.00 kVA
E	ELEVATOR	0.00 kVA	0.00%	0.00 kVA
LD	LAUNDRY	0.00 kVA	0.00%	0.00 kVA
EV	EV CHARGING	0.00 kVA	0.00%	0.00 kVA

NOTES:
1. BOLD INDICATES NEW WORK.
2. CIRCUITS SHOWN ARE BASED OFF OF EXISTING AS-BUILT AND SHOULD BE VERIFIED PRIOR TO ANY WORK BEING DONE.
3. PROVIDE NEW BREAKER IN SPACE MADE SPARE DURING DEMO.
4. USE EXISTING BREAKER FOR NEW "AC1" PANEL. PROVIDE WITH NEW CONDUCTORS AND CONDUIT FROM EXISTING BREAKER TO PANEL "AC1" AS SHOWN ON POWER RISER DIAGRAM.

TOTAL KVA...	309.55 kVA	TOTAL PER PHASE: (CONNECTED)		
TOTAL KVA (DEMAND):	270.94 kVA	907.9 A	835.3 A	836.7 A
TOTAL AMP....	859 A			
TOTAL AMP. (DEMAND):	752 A	**TOTAL AMP. (DEMAND) x 125%**		940.1 A

LOAD CLASSIFICATION ABBREVIATIONS (CONT.)
F - FEEDER FOR DOWN STREAM PANEL. LOADS ARE INCLUDED IN THE PANEL LOAD SUMMARY.

EXISTING PANEL: L1

VOLTAGE: 208Y/120 3Ø | **FED FROM:** MDP | **MOUNTING:** SURFACE | **MAIN TYPE:** MLO | **MFR:** EXISTING | **ENCLOSURE:** NEMA1 | **PHASE:** 3 | **TYPE:** EXISTING | **MAIN:** 225 A | **WIRE:** 4 | **AIC:** 10 KAIC

LC Abbr	Load Served	Wire	Trip	Ckt No	Pole	A	B	C	Pole	Ckt No	Trip	Wire	Load Served	LC Abbr
LE	SITE LIGHTS	8	20 A	1	2	0.90 1.20			1	2	20 A	10	PEDASTAL LIGHT	LE
				3			0.90 1.20		1	4	20 A	10	PEDASTAL LIGHT	LE
LE	SITE LIGHTS	8	20 A	5	2			0.90 0.08	1	6	20 A	10	WALL PACK REAR	LE
				7		0.90 0.08			1	8	20 A	10	WALL PACK REAR	LE
LE	SITE LIGHTS	8	20 A	9	2		0.90 1.73		1	10	20 A	10	WALL PACK FRT	LE
				11				0.90 0.11	1	12	20 A	10	WALL PACK FRT	LE
LE	SITE LIGHTS	8	20 A	13	2	0.90 0.50			1	14	20 A	12	WALL PACK FRT	LE
				15			0.90 0.50		1	16	20 A	12	TIMER LIGHTS	MS
MS	EXISTING LOAD	12	20 A	17	1			0.50 0.00	2	18	20 A	-	**MADE SPARE DURING DEMO**	**Spare**
LI...	LIGHTING - ELEC/COMM ROOMS	12	20 A	19	1	0.52 0.00				20				
S...	**MADE SPARE DURING DEMO**	-	20 A	21	1		0.00 0.00		1	22	30 A	-	**MADE SPARE DURING DEMO**	**S...**
S...	**MADE SPARE DURING DEMO**	-	20 A	23	1			0.00 0.82	1	24	20 A	**12**	**LIGHTS - 103,160,181,182,183**	**L**
S...	**MADE SPARE DURING DEMO**	-	20 A	25	1	0.00 1.33			1	26	20 A	**12**	**LIGHTS - 176,177,179**	**L**
S...	**MADE SPARE DURING DEMO**	-	20 A	27	1		0.00 0.61		1	28	20 A	**12**	**LIGHTS - 187,188,191,194**	**L**
S...	**MADE SPARE DURING DEMO**	-	20 A	29	1			0.00 0.97	1	30	20 A	**12**	**LIGHTS - 189,190**	**L**
S...	**MADE SPARE DURING DEMO**	-	20 A	31	1	0.00 1.04			1	32	20 A	**12**	**LIGHTS - 180,184**	**L**
MS	EXISTING LOAD	12	20 A	33	1		0.50 0.76		1	34	20 A	**12**	**LIGHTS - 185.186**	**L**
MS	EXISTING LOAD	12	20 A	35	1			0.50 1.00	1	36	20 A	**12**	**SIGN J-BOX (VIA LCP1)**	**LE**
MS	EXISTING LOAD	12	20 A	37	1	0.50 0.00			1	38	20 A	-	**SPARE**	**S...**
L	CORRIDOR LIGHTING	10	20 A	39	1		0.80 --		1	40	--	-	SPACE ONLY	
L	EXIT/EMERG/NITE LTG	10	20 A	41	1			0.06 --	1	42	--	-	SPACE ONLY	

	LOAD	Connected Load	Demand Factor	Estimated Demand
L	LIGHTS	7.05 kVA	125.00%	8.81 kVA
LE	LIGHTING - EXTERIOR	12.98 kVA	125.00%	16.22 kVA
H	HEATING	0.00 kVA	0.00%	0.00 kVA
C	COOLING	0.00 kVA	0.00%	0.00 kVA
V	VENTILATION	0.00 kVA	0.00%	0.00 kVA
M	MOTORS	0.00 kVA	0.00%	0.00 kVA
K	KITCHEN	0.00 kVA	0.00%	0.00 kVA
R	RECEPTACLES	0.00 kVA	0.00%	0.00 kVA
WH	WATER HEATER	0.00 kVA	0.00%	0.00 kVA
MS	MISC.	2.50 kVA	100.00%	2.50 kVA
S	Spare	0.00 kVA	0.00%	0.00 kVA
E	ELEVATOR	0.00 kVA	0.00%	0.00 kVA
LD	LAUNDRY	0.00 kVA	0.00%	0.00 kVA
EV	EV CHARGING	0.00 kVA	0.00%	0.00 kVA

NOTES:
1. BOLD INDICATES NEW WORK.
2. CIRCUITS SHOWN ARE BASED OFF OF EXISTING AS-BUILT AND SHOULD BE VERIFIED PRIOR TO ANY WORK BEING DONE.

TOTAL KVA...	22.52 kVA	TOTAL PER PHASE: (CONNECTED)		
TOTAL KVA (DEMAND):	27.53 kVA	68.2 A	76.0 A	48.7 A
TOTAL AMP....	63 A			
TOTAL AMP. (DEMAND):	76 A	**TOTAL AMP. (DEMAND) x 125%**		95.5 A

LOAD CLASSIFICATION ABBREVIATIONS (CONT.)
F - FEEDER FOR DOWN STREAM PANEL. LOADS ARE INCLUDED IN THE PANEL LOAD SUMMARY.

EXISTING PANEL: CP1A

VOLTAGE: 208Y/120 3Ø | **FED FROM:** MDP | **MOUNTING:** SURFACE | **MAIN TYPE:** MLO | **MFR:** EXISTING | **ENCLOSURE:** NEMA1 | **PHASE:** 3 | **TYPE:** EXISTING | **MAIN:** 225 A | **WIRE:** 4 | **AIC:** 10 KAIC

LC Abbr	Load Served	Wire	Trip	Ckt No	Pole	A	B	C	Pole	Ckt No	Trip	Wire	Load Served	LC Abbr
MS	**REC - MANICURE 180**	**12**	20 A	1	1	0.19 0.72			1	2	20 A	12	RECEP; TELE BRD (EXISTING CKT)	R
MS	**REC - MANICURE 180**	**12**	20 A	3	1		0.19 0.72		1	4	20 A	12	RECEP; TELE RM (EXISTING CKT)	R
R	RECEP; QUAD (EXISTING CKT)	12	20 A	5	1			1.26 0.72	1	6	20 A	12	RECEP; TELE RM (EXISTING CKT)	R
MS	**REC - PEDICURE 180 CHAIRS**	**12**	20 A	7	1	0.90 0.90			1	8	20 A	**12**	**REC - PEDICURE 180 CHAIRS**	**MS**
R	**REC - MANICURE 180**	**12**	20 A	9	1		0.72 0.72		1	10	20 A	**12**	**REC - MANICURE 180**	**R**
R	**REC - MANICURE 180**	**12**	20 A	11	1			0.72 0.18	1	12	20 A	**12**	**REC - PRACTICE 184**	**R**
R	**REC - PRACTICE 184**	**12**	20 A	13	1	0.18 0.18			1	14	20 A	**12**	**REC - PRACTICE 184**	**R**
R	**REC - PRACTICE 184**	**12**	20 A	15	1		0.18 0.18		1	16	20 A	**12**	**REC - PRACTICE 184**	**R**
R	**REC - PRACTICE 184**	**12**	20 A	17	1			0.18 0.18	1	18	20 A	**12**	**REC - PRACTICE 184**	**R**
R	**REC - PRACTICE 184**	**12**	20 A	19	1	0.18 0.18			1	20	20 A	**12**	**REC - PRACTICE 184**	**R**
R	**REC - PRACTICE 184**	**12**	20 A	21	1		0.18 0.18		1	22	20 A	**12**	**REC - PRACTICE 184**	**R**
R	**REC - PRACTICE 184**	**12**	20 A	23	1			0.18 0.18	1	24	20 A	**12**	**REC - PRACTICE 184**	**R**
R	**REC - PRACTICE 184**	**12**	20 A	25	1	0.18 0.18			1	26	20 A	**12**	**REC - PRACTICE 184**	**R**
R	**REC - PRACTICE 184**	**12**	20 A	27	1		0.18 0.18		1	28	20 A	**12**	**REC - PRACTICE 184**	**R**
R	**REC - PRACTICE 184**	**12**	20 A	29	1			0.18 0.18	1	30	20 A	**12**	**REC - PRACTICE 184**	**R**
R	**REC - PRACTICE 184**	**12**	20 A	31	1	0.18 1.80			1	32	20 A	**12**	**REC - PRACTICE 184**	**MS**
MS	**REC - PRACTICE 184**	**12**	20 A	33	1		1.80 0.90		1	34	20 A	**12**	**REC - PRACTICE 184**	**R**
MS	**HEATED CABINET - 184 (NOTE 3)**	**12**	20 A	35	1			1.80 1.80	1	36	20 A	**12**	**REC - PEDICURE CHAIR ESTHETIC...**	**MS**
				37		12.34 1.80			1	38	20 A	**12**	**REC - PEDICURE CHAIR ESTHETIC...**	**MS**
F	**PANEL "CP1B"**	**1**	**125 A**	39	3		10.00 0.00		1	40	20 A	-	**SPARE**	**S...**
				41				9.90 0.00	1	42	20 A	-	**SPARE**	**S...**

	LOAD	Connected Load	Demand Factor	Estimated Demand
L	LIGHTS	0.00 kVA	0.00%	0.00 kVA
LE	LIGHTING - EXTERIOR	0.00 kVA	0.00%	0.00 kVA
H	HEATING	0.00 kVA	0.00%	0.00 kVA
C	COOLING	0.00 kVA	0.00%	0.00 kVA
V	VENTILATION	0.00 kVA	0.00%	0.00 kVA
M	MOTORS	0.00 kVA	0.00%	0.00 kVA
K	KITCHEN	0.00 kVA	0.00%	0.00 kVA
R	RECEPTACLES	34.02 kVA	64.70%	22.01 kVA
WH	WATER HEATER	0.00 kVA	0.00%	0.00 kVA
MS	MISC.	19.48 kVA	100.00%	19.48 kVA
S	Spare	0.00 kVA	0.00%	0.00 kVA
E	ELEVATOR	0.00 kVA	0.00%	0.00 kVA
LD	LAUNDRY	0.00 kVA	0.00%	0.00 kVA
EV	EV CHARGING	0.00 kVA	0.00%	0.00 kVA

NOTES:
1. BOLD INDICATES NEW WORK.
2. CIRCUITS SHOWN ARE BASED OFF OF EXISTING AS-BUILT AND SHOULD BE VERIFIED PRIOR TO ANY WORK BEING DONE.
3. PROVIDE CLASS A GFI (6mA-PERSONNEL) BRKR (250' MAX).

TOTAL KVA...	53.50 kVA	TOTAL PER PHASE: (CONNECTED)		
TOTAL KVA (DEMAND):	41.49 kVA	167.6 A	134.4 A	147.2 A
TOTAL AMP....	149 A			
TOTAL AMP. (DEMAND):	115 A	**TOTAL AMP. (DEMAND) x 125%**		144.0 A

LOAD CLASSIFICATION ABBREVIATIONS (CONT.)
F - FEEDER FOR DOWN STREAM PANEL. LOADS ARE INCLUDED IN THE PANEL LOAD SUMMARY.

EXISTING PANEL: P1A

VOLTAGE: 208Y/120 3Ø | **FED FROM:** MDP | **MOUNTING:** SURFACE | **MAIN TYPE:** MLO | **MFR:** EXISTING | **ENCLOSURE:** NEMA1 | **PHASE:** 3 | **TYPE:** EXISTING | **MAIN:** 225 A | **WIRE:** 4 | **AIC:** 10 KAIC

LC Abbr	Load Served	Wire	Trip	Ckt No	Pole	A	B	C	Pole	Ckt No	Trip	Wire	Load Served	LC Abbr
S...	**MADE SPARE DURING DEMO**	-	20 A	1	1	0.00 0.54			1	2	20 A	12	RECEP; EXTERIOR (EXISTING CKT)	R
S...	**MADE SPARE DURING DEMO**	-	20 A	3	1		0.00 0.61		1	4	20 A	12	RECEPTACLES (EXISTING CKT)	R
S...	**MADE SPARE DURING DEMO**	-	20 A	5	1			0.00 0.00	1	6	20 A	-	**MADE SPARE DURING DEMO**	**S...**
S...	**MADE SPARE DURING DEMO**	-	20 A	7	1	0.00 0.00			1	8	20 A	-	**MADE SPARE DURING DEMO**	**S...**
R	**REC - MEZZANINE**	**12**	20 A	9	1		0.18 0.00		1	10	20 A	-	**MADE SPARE DURING DEMO**	**S...**
MS	**MOTORIZED DAMPERS**	**12**	20 A	11	1			0.25 0.00	1	12	20 A	-	**MADE SPARE DURING DEMO**	**S...**
MS	**MOTORIZED DAMPERS**	**12**	20 A	13	1	0.25 0.72			1	14	20 A	12	RECEPTACLES (EXISTING CKT)	R
MS	**MOTORIZED DAMPERS**	**12**	20 A	15	1		0.50 0.90		1	16	20 A	12	RECEPTACLES (EXISTING CKT)	R
MS	ATTIC LTS/REC (EXISTING CKT)	12	20 A	17	1			0.18 0.72	1	18	20 A	12	RECEP; QUAD (EXISTING CKT)	R
MS	FACP (EXISTING CKT)	12	20 A	19	1	0.50 0.36			1	20	20 A	12	RECEP; QUAD (EXISTING CKT)	R
MS	LOBBY DOOR OPENER (EXISTING...	12	20 A	21	1		1.00 0.50		1	22	20 A	12	RECEP; ALARM (EXISTING CKT)	MS
MS	LOBBY DOOR OPENER (EXISTING...	12	20 A	23	1			1.00 0.00	1	24	20 A	-	**MADE SPARE DURING DEMO**	**S...**
MS	DOOR OPENER (EXISTING CKT)	12	20 A	25	1	1.00 0.00			2	26	20 A	-	**MADE SPARE DURING DEMO**	**Spare**
R	**REC - BREAK 191**	**12**	20 A	27	1		0.72 0.00			28				
MS	**FRIDGE - BREAK 191 (NOTE 3)**	**12**	20 A	29	1			1.00 0.50	1	30	20 A	12	POLE CAMERA (EXISTING CKT)	MS
R	**REC - BREAK 191**	**12**	20 A	31	1	0.36 0.00			1	32	20 A	-	SPARE	Sp...
MS	**MICROWAVE - BREAK 191**	**12**	20 A	33	1		1.00 0.00		1	34	20 A	-	SPARE	Sp...
MS	**EWC - CORRIDOR 103 (NOTE 3)**	**12**	20 A	35	1			1.00 0.00	1	36	20 A	-	SPARE	Sp...
R	**REC - CORRIDOR 103**	**12**	20 A	37	1	0.90 6.84				38				
R	**REC - RECEPTION 183**	**12**	20 A	39	1		1.44 4.27		3	40	**125 A**	**1**	**PANEL "P1B"**	**F**
R	**REC - RR 181, 182**	**12**	20 A	41	1			0.36 4.92		42				

	LOAD	Connected Load	Demand Factor	Estimated Demand
L	LIGHTS	0.00 kVA	0.00%	0.00 kVA
LE	LIGHTING - EXTERIOR	0.00 kVA	0.00%	0.00 kVA
H	HEATING	0.00 kVA	0.00%	0.00 kVA
C	COOLING	0.00 kVA	0.00%	0.00 kVA
V	VENTILATION	0.00 kVA	0.00%	0.00 kVA
M	MOTORS	0.25 kVA	100.00%	0.25 kVA
K	KITCHEN	0.00 kVA	0.00%	0.00 kVA
R	RECEPTACLES	18.36 kVA	77.23%	14.18 kVA
WH	WATER HEATER	0.00 kVA	0.00%	0.00 kVA
MS	MISC.	13.91 kVA	100.00%	13.91 kVA
S	Spare	0.00 kVA	0.00%	0.00 kVA
E	ELEVATOR	0.00 kVA	0.00%	0.00 kVA
LD	LAUNDRY	0.00 kVA	0.00%	0.00 kVA
EV	EV CHARGING	0.00 kVA	0.00%	0.00 kVA

NOTES:
1. BOLD INDICATES NEW WORK.
2. CIRCUITS SHOWN ARE BASED OFF OF EXISTING AS-BUILT AND SHOULD BE VERIFIED PRIOR TO ANY WORK BEING DONE.
3. PROVIDE CLASS A GFI (6mA-PERSONNEL) BRKR (250' MAX).

TOTAL KVA...	32.52 kVA	TOTAL PER PHASE: (CONNECTED)		
TOTAL KVA (DEMAND):	28.34 kVA	97.1 A	94.2 A	82.8 A
TOTAL AMP....	90 A			
TOTAL AMP. (DEMAND):	79 A	**TOTAL AMP. (DEMAND) x 125%**		98.3 A

LOAD CLASSIFICATION ABBREVIATIONS (CONT.)
F - FEEDER FOR DOWN STREAM PANEL. LOADS ARE INCLUDED IN THE PANEL LOAD SUMMARY.

NEW PANEL: AC1

VOLTAGE: 208Y/120 3Ø | **FED FROM:** MDP | **MOUNTING:** SURFACE | **MAIN TYPE:** MLO | **MFR:** | **ENCLOSURE:** NEMA1 | **PHASE:** 3 | **TYPE:** | **MAIN:** 400 A | **WIRE:** 4 | **AIC:** 10 KAIC

LC Abbr	Load Served	Wire	Trip	Ckt No	Pole	A	B	C	Pole	Ckt No	Trip	Wire	Load Served	LC Abbr
V	EF-1, EF-2	12	20 A	1	1	0.04 0.79			1	2	20 A	12	EF-3, EF-4	V
				3			1.23 1.23			4				
V	ERV-1	12	20 A	5	3			1.23 1.23	3	6	20 A	12	ERV-2	V
				7		1.23 1.23				8				
C	IDU-1	12	20 A	9	1		1.29 1.57		1	10	30 A	10	IDU-2	C
C	IDU-3	12	20 A	11	1			0.94 0.94	1	12	20 A	12	IDU-4	C
C	IDU-5	12	20 A	13	1	0.94 0.94			1	14	20 A	12	IDU-6	C
C	IDU-7	12	20 A	15	1		0.94 1.57		1	16	30 A	10	IDU-8	C
C	CU-1	10	30 A	17	2			1.58 2.70	2	18	50 A	6	CU-2	C
				19		1.58 2.70				20				
C	CU-3	10	30 A	21	2		1.48 1.48		2	22	30 A	10	CU-4	C
				23				1.48 1.48		24				
C	CU-5	10	30 A	25	2	1.48 1.48			2	26	30 A	10	CU-6	C
				27			1.48 1.48			28				
C	CU-7	10	30 A	29	2			1.48 2.70	2	30	50 A	6	CU-8	C
				31		1.48 2.70				32				
MS	BAS PANEL	12	20 A	33	1		0.50 0.63		1	34	20 A	12	WH1 + RCP1	WH
Sp...	SPARE	-	20 A	35	1			0.00 0.00	1	36	20 A	-	SPARE	Sp...
Sp...	SPARE	-	20 A	37	1	0.00 0.00			1	38	20 A	-	SPARE	Sp...
Sp...	SPARE	-	20 A	39	1		0.00 0.00		1	40	20 A	-	SPARE	Sp...
Sp...	SPARE	-	20 A	41	1			0.00 0.00	1	42	20 A	-	SPARE	Sp...

	LOAD	Connected Load	Demand Factor	Estimated Demand
L	LIGHTS	0.00 kVA	0.00%	0.00 kVA
LE	LIGHTING - EXTERIOR	0.00 kVA	0.00%	0.00 kVA
H	HEATING	0.00 kVA	0.00%	0.00 kVA
C	COOLING	37.87 kVA	100.00%	37.87 kVA
V	VENTILATION	8.21 kVA	100.00%	8.21 kVA
M	MOTORS	0.00 kVA	0.00%	0.00 kVA
K	KITCHEN	0.00 kVA	0.00%	0.00 kVA
R	RECEPTACLES	0.00 kVA	0.00%	0.00 kVA
WH	WATER HEATER	0.50 kVA	100.00%	0.50 kVA
MS	MISC.	0.63 kVA	100.00%	0.63 kVA
S	Spare	0.00 kVA	0.00%	0.00 kVA
E	ELEVATOR	0.00 kVA	0.00%	0.00 kVA
LD	LAUNDRY	0.00 kVA	0.00%	0.00 kVA
EV	EV CHARGING	0.00 kVA	0.00%	0.00 kVA

NOTES:
1. BREAKER FRAME SHALL BE AS REQ'D PER PANEL AIC RATING.
2. SHALL BE FULLY RATED - SERIES RATINGS NOT ALLOWED.
3. ALL BUSSING, INCL GND AND NEUTRAL, SHALL BE COPPER.
4. ALL INCOMING PANEL & BRKR LUGS SHALL MATCH FEEDERS.
5. PROVIDE HINGED DOOR-IN-DOOR WITH OUTER DOOR LOCK.
6. PROVIDE METAL DIRECTORY FRAME.
7. PROVIDE BREAKER WITH HANDLE LOCK-ON DEVICE.
8. PROVIDE BREAKER WITH SHUNT TRIP.
9. PROVIDE FEED-THRU LUGS.
10. PROVIDE "ALL MODES" SPD (40kA / MODE, 80kA / PHASE).

TOTAL KVA...	47.21 kVA	TOTAL PER PHASE: (CONNECTED)		
TOTAL KVA (DEMAND):	47.21 kVA	139.3 A	124.0 A	132.4 A
TOTAL AMP....	131 A			
TOTAL AMP. (DEMAND):	131 A	**TOTAL AMP. (DEMAND) x 125%**		163.8 A

LOAD CLASSIFICATION ABBREVIATIONS (CONT.)
F - FEEDER FOR DOWN STREAM PANEL. LOADS ARE INCLUDED IN THE PANEL LOAD SUMMARY.

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NORTH CAROLINA PROFESSIONAL SEAL 028297 ENGINEER JOHN W. HOLT
06/08/2026

CONSTRUCTION DOCUMENTS

ISSUE DATE: 06/08/2026

REVISIONS

NO.	DESCRIPTION	DATE

WESTERN PIEDMONT COMMUNITY COLLEGE

BUILDING K RENOVATION

200 E College Drive Morganton, NC 28655

WESTERN PIEDMONT COMMUNITY COLLEGE

PROJECT NUMBER 2317

SHEET TITLE
PANEL SCHEDULES

SHEET NUMBER
E0802

SCO # 23-27049-01A
NCCCS #2784

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OPTIMA# 24-0064

NEW PANEL: CP1B

VOLTAGE: 208Y/120 3Ø | **FED FROM:** CP1A

MOUNTING: SURFACE | **MAIN TYPE:** MLO | **MFR:**
ENCLOSURE: NEMA1 | **PHASE:** 3 | **TYPE:**
MAIN: 125 A | **WIRE:** 4 | **AIC:** 10 KAIC

LC Abbr	Load Served	Wire	Trip	Ckt No	Pole	A	B	C	Pole	Ckt No	Trip	Wire	Load Served	LC Abbr
MS	REC - HAIR DRYER CLINC 189	12	20 A	1	1	1.40	1.40		1	2	20 A	12	REC - HAIR DRYER CLINC 189	MS
MS	REC - HAIR DRYER CLINC 189	12	20 A	3	1			1.40	1.40		1	4	20 A	12	REC - HAIR DRYER CLINC 189	MS
R	REC - CLINIC 189	12	20 A	5	1					0.72	0.72	1	6	20 A	12	REC - CLINIC 189	R
R	REC - CLINIC 189	12	20 A	7	1	0.72	0.72					1	8	20 A	12	REC - CLINIC 189	R
R	REC - CLINIC 189	12	20 A	9	1			0.72	0.72			1	10	20 A	12	REC - CLINIC 189	R
R	REC - CLINIC 189	12	20 A	11	1					0.72	0.72	1	12	20 A	12	REC - CLINIC 189	R
R	REC - CLINIC 189	12	20 A	13	1	0.72	0.72					1	14	20 A	12	REC - CLINIC 189	R
R	REC - CLINIC 189	12	20 A	15	1			0.72	0.72			1	16	20 A	12	REC - CLINIC 189	R
R	REC - CLINIC 189	12	20 A	17	1					0.72	0.72	1	18	20 A	12	REC - CLINIC 189	R
R	REC - CLINIC 189	12	20 A	19	1	0.72	0.72					1	20	20 A	12	REC - CLINIC 189	R
R	REC - CLINIC 189	12	20 A	21	1			0.72	0.72			1	22	20 A	12	REC - CLINIC 189	R
R	REC - CLINIC 189	12	20 A	23	1					0.72	0.72	1	24	20 A	12	REC - CLINIC 189	R
R	REC - CLINIC 189	12	20 A	25	1	0.72	0.72					1	26	20 A	12	REC - CLINIC 189	R
R	REC - CLINIC 189	12	20 A	27	1			0.72	0.72			1	28	20 A	12	REC - CLINIC 189	R
R	REC - CLINIC 189	12	20 A	29	1					0.72	0.72	1	30	20 A	12	REC - CLINIC 189	R
R	REC - CLINIC 189	12	20 A	31	1	0.72	0.72					1	32	20 A	12	REC - CLINIC 189	R
R	REC - CLINIC 189	12	20 A	33	1			0.72	0.72			1	34	20 A	12	REC - CLINIC 189	R
MS	REC - SHAMPOO 190	12	20 A	35	1					1.35	1.35	1	36	20 A	12	REC - SHAMPOO 190	MS
R	REC - SHAMPOO 190	12	20 A	37	1	0.90	1.44					1	38	20 A	12	REC - CLINIC 189	R
Sp...	SPARE	-	20 A	39	1			0.00	0.00			1	40	20 A	-	SPARE	Sp...
Sp...	SPARE	-	20 A	41	1					0.00	0.00	1	42	20 A	-	SPARE	Sp...

	LOAD	Connected Load	Demand Factor	Estimated Demand
L	LIGHTS	0.00 kVA	0.00%	0.00 kVA
LE	LIGHTING - EXTERIOR	0.00 kVA	0.00%	0.00 kVA
H	HEATING	0.00 kVA	0.00%	0.00 kVA
C	COOLING	0.00 kVA	0.00%	0.00 kVA
V	VENTILATION	0.00 kVA	0.00%	0.00 kVA
M	MOTORS	0.00 kVA	0.00%	0.00 kVA
K	KITCHEN	0.00 kVA	0.00%	0.00 kVA
R	RECEPTACLES	23.94 kVA	70.89%	16.97 kVA
WH	WATER HEATER	0.00 kVA	0.00%	0.00 kVA
MS	MISC.	8.30 kVA	100.00%	8.30 kVA
S	Spare	0.00 kVA	0.00%	0.00 kVA
E	ELEVATOR	0.00 kVA	0.00%	0.00 kVA
LD	LAUNDRY	0.00 kVA	0.00%	0.00 kVA
EV	EV CHARGING	0.00 kVA	0.00%	0.00 kVA

NOTES:
1. BREAKER FRAME SHALL BE AS REQ'D PER PANEL AIC RATING.
2. SHALL BE FULLY RATED - SERIES RATINGS NOT ALLOWED.
3. ALL BUSSING, INCL GND AND NEUTRAL, SHALL BE COPPER.
4. ALL INCOMING PANEL & BRKR LUGS SHALL MATCH FEEDERS.
5. PROVIDE HINGED DOOR-IN-DOOR WITH OUTER DOOR LOCK.
6. PROVIDE METAL DIRECTORY FRAME.
7. PROVIDE BREAKER WITH HANDLE LOCK-ON DEVICE.
8. PROVIDE BREAKER WITH SHUNT TRIP.
9. PROVIDE FEED-THRU LUGS.
10. PROVIDE "ALL MODES" SPD (40kA / MODE, 80kA / PHASE).
11. PROVIDE CLASS A GFI (6mA-PERSONNEL) BRKR (250' MAX).

TOTAL KVA...	32.24 kVA	TOTAL PER PHASE: (CONNECTED)		
TOTAL KVA (DEMAND):	25.27 kVA	103.0 A	83.5 A	82.5 A
TOTAL AMP....	89 A			
TOTAL AMP. (DEMAND):	70 A	**TOTAL AMP. (DEMAND) x 125%**		87.7 A

LOAD CLASSIFICATION ABBREVIATIONS (CONT.)

F - FEEDER FOR DOWN STREAM PANEL. LOADS ARE INCLUDED IN THE PANEL LOAD SUMMARY.

NEW PANEL: P1B

VOLTAGE: 208Y/120 3Ø | **FED FROM:** P1A

MOUNTING: SURFACE | **MAIN TYPE:** MLO | **MFR:**
ENCLOSURE: NEMA1 | **PHASE:** 3 | **TYPE:**
MAIN: 125 A | **WIRE:** 4 | **AIC:** 10 KAIC

LC Abbr	Load Served	Wire	Trip	Ckt No	Pole	A	B	C	Pole	Ckt No	Trip	Wire	Load Served	LC Abbr
R	REC - CORRIDOR 160	12	20 A	1	1	0.72	0.36		1	2	20 A	12	REC - PRACTICE LAB 176	R
R	REC - PRACTICE LAB 176	12	20 A	3	1			0.18	0.18		1	4	20 A	12	REC - PRACTICE LAB 176	R
R	REC - PRACTICE LAB 176	12	20 A	5	1					0.18	0.18	1	6	20 A	12	REC - PRACTICE LAB 176	R
R	REC - PRACTICE LAB 176	12	20 A	7	1	0.18	0.18					1	8	20 A	12	REC - PRACTICE LAB 176	R
R	REC - PRACTICE LAB 176	12	20 A	9	1			0.18	0.18			1	10	20 A	12	REC - PRACTICE LAB 176	R
R	REC - PRACTICE LAB 176	12	20 A	11	1					0.18	0.18	1	12	20 A	12	REC - PRACTICE LAB 176	R
R	REC - PRACTICE LAB 176	12	20 A	13	1	0.18	0.18					1	14	20 A	12	REC - PRACTICE LAB 176	R
R	REC - PRACTICE LAB 176	12	20 A	15	1			0.18	0.18			1	16	20 A	12	REC - PRACTICE LAB 176	R
R	REC - PRACTICE LAB 176	12	20 A	17	1					0.18	0.18	1	18	20 A	12	REC - PRACTICE LAB 176	R
R	REC - PRACTICE LAB 176	12	20 A	19	1	0.18	0.36					1	20	20 A	12	REC - PRACTICE LAB 176	R
R	REC - CLASSROOM 179	12	20 A	21	1			0.18	0.72			1	22	20 A	12	REC - OFFICE 185	R
R	REC - OFFICE 185	12	20 A	23	1					0.90	1.00	1	24	20 A	12	COPIER - OFFICE 185	MS
R	REC - ESTHETICS 186	12	20 A	25	1	0.72	0.72					1	26	20 A	12	REC - ESTHETICS 186	R
R	REC - ESTHETICS 186	12	20 A	27	1			0.54	0.19			1	28	20 A	12	REC - ESTHETICS 186	MS
R	REC - ESTHETICS 186	12	20 A	29	1					0.36	0.36	1	30	20 A	12	REC - JAN 187, LAUNDRY 194	R
R	REC - DISPENSARY 188	12	20 A	31	1	0.54	0.72					1	32	20 A	12	REC - DISPENSARY 188	R
R	REC - DISPENSARY 188	12	20 A	33	1			0.36	1.20			1	34	20 A	12	WASHER - LAUNDRY 194 (NOTE 11)	MS
MS	DRYER - LAUNDRY 194 (NOTE 11)	12	20 A	35	1					0.72	0.50	1	36	20 A	12	MOTORIZED DAMPERS	MS
MS	HEATED CABINET - 176 (NOTE 11)	12	20 A	37	1	1.80	0.00					1	38	20 A	-	SPARE	Sp...
Sp...	SPARE	-	20 A	39	1			0.00	0.00			1	40	20 A	-	SPARE	Sp...
Sp...	SPARE	-	20 A	41	1					0.00	0.00	1	42	20 A	-	SPARE	Sp...

	LOAD	Connected Load	Demand Factor	Estimated Demand
L	LIGHTS	0.00 kVA	0.00%	0.00 kVA
LE	LIGHTING - EXTERIOR	0.00 kVA	0.00%	0.00 kVA
H	HEATING	0.00 kVA	0.00%	0.00 kVA
C	COOLING	0.00 kVA	0.00%	0.00 kVA
V	VENTILATION	0.00 kVA	0.00%	0.00 kVA
M	MOTORS	0.00 kVA	0.00%	0.00 kVA
K	KITCHEN	0.00 kVA	0.00%	0.00 kVA
R	RECEPTACLES	10.62 kVA	97.08%	10.31 kVA
WH	WATER HEATER	0.00 kVA	0.00%	0.00 kVA
MS	MISC.	5.41 kVA	100.00%	5.41 kVA
S	Spare	0.00 kVA	0.00%	0.00 kVA
E	ELEVATOR	0.00 kVA	0.00%	0.00 kVA
LD	LAUNDRY	0.00 kVA	0.00%	0.00 kVA
EV	EV CHARGING	0.00 kVA	0.00%	0.00 kVA

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11. PROVIDE CLASS A GFI (6mA-PERSONNEL) BRKR (250' MAX).

TOTAL KVA...	16.03 kVA	TOTAL PER PHASE: (CONNECTED)		
TOTAL KVA (DEMAND):	15.72 kVA	57.8 A	35.6 A	41.8 A
TOTAL AMP....	44 A			
TOTAL AMP. (DEMAND):	44 A	**TOTAL AMP. (DEMAND) x 125%**		54.5 A

LOAD CLASSIFICATION ABBREVIATIONS (CONT.)

F - FEEDER FOR DOWN STREAM PANEL. LOADS ARE INCLUDED IN THE PANEL LOAD SUMMARY.

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PROFESSIONAL SEAL 028297 ENGINEER JOHN T. CARR
06/08/2026

CONSTRUCTION DOCUMENTS

ISSUE DATE:	06/08/2026

REVISIONS

NO.	DESCRIPTION	DATE

WESTERN PIEDMONT COMMUNITY COLLEGE

BUILDING K RENOVATION

200 E College Drive Morganton, NC 28655

WESTERN PIEDMONT COMMUNITY COLLEGE

PROJECT NUMBER 2317

SHEET TITLE
PANEL SCHEDULES

SHEET NUMBER
E0803

SCO # 23-27049-01A
NCCCS #2784

OPTIMA# 24-0064

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