BASIC LAW ENFORCEMENT TRAINING

CARTERET COMMUNITY COLLEGE

3705 ARENDELL STREET MOREHEAD CITY, NC 28557

PERMIT DRAWINGS 03/09/2022



SHEET INDEX

SHEET NUMBER	SHEET NAME
GENERAL	
G-001	COVER SHEET
GI002	BUILDING CODE SUMMARY
GI101	FIRST FLOOR AND ATTIC LIFE SAFETY PLAN
GI201	SPECIFICATIONS
GI202	SPECIFICATIONS
ARCHITECTU	RAL
A-001	ARCHITECTURAL LEGEND, NOTES AND ABBREVIATIONS
AD101	FIRST FLOOR DEMO PLAN
AE101	FIRST FLOOR AND REFLECTED CEILING PLAN
AE401	MOUNTING HEIGHTS AND CLEARANCES, ENLARGED PLANS, ELEVATIONS AND DETAILS
AE501	PARTITION TYPES, DETAILS, DOOR SCHEDULE, DOOR DETAILS, FINISH SCHEDULE AND LEGEND
PLUMBING	
PE000	PLUMBING LEGEND, SCHEDULES AND DETAILS
PE100	PLUMBING FLOOR - DEMO
PE101	PLUMBING FLOOR PLAN - NEW WORK
PE201	PLUMBING DETAILS
MECHANICAL	
MH101	FIRST FLOOR PLAN
ELECTRICAL	
E-001	ELECTRICAL LEGEND, NOTES, ABBREVIATIONS, AND LIGHTING FIXTURE SCHEDULE
ED101	ELECTRICAL DEMOLITION PLAN
EL101	ELECTRICAL LIGHTING PLAN
EP101	ELECTRICAL POWER PLAN
EP601	PANELBOARD SCHEDULES, POWER RISER DIAGRAM, AND LOAD SUMMARY

VICINITY MAP



SITE MAP



OWNER

CARTERET COMMUNITY COLLEGE 3505 ARENDELL STREET MOREHEAD CITY, NC 28557 T: 252.222.6000 ARCHITECT

CLARK NEXSEN 333 FAYETTEVILLE STREET, SUITE 1000 RALEIGH, NC 27601 T: 919.876.1876

PROJECT TEAM

MECHANICAL, PLUMBING, AND ELECTRICAL ENGINEER

CLARK NEXSEN
333 FAYETTEVILLE STREET, SUITE 1000
RALEIGH, NC 27601
T: 919.876.1876

CARTERET COMMUNITY COLLEGE **BASIC I AW**

BASIC LAW
ENFORCEMENT
TRAINING

3705 ARENDELL STREET MOREHEAD CITY, NC 28557

CLARKNEXSEN

333 FAYETTEVILLE STREET, SUITE 1000 RALEIGH, NORTH CAROLINA 27601 919-828-1876

CLARK NEXSEN LICENSE NUMBER: C-1028

SUBMITTAL

PROFESSIONAL SEAL

03/09/2022
PERMIT DRAWINGS

DEVICIONO

REVISIONS

KET PLAN

COVER SHEET

G-001

DESIGN: Designer
DRAWN: Author
REVIEW: Checker

Location of doors equipped with hold-open devices

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

Location of emergency escape windows (1030)

The square footage of each fire area (202)

2018 APPENDIX B

BUILDING CODE SUMMARY FOR ALL COMMERCIAL PROJECTS

BUSINESS AND

STORAGE

8,525 SF

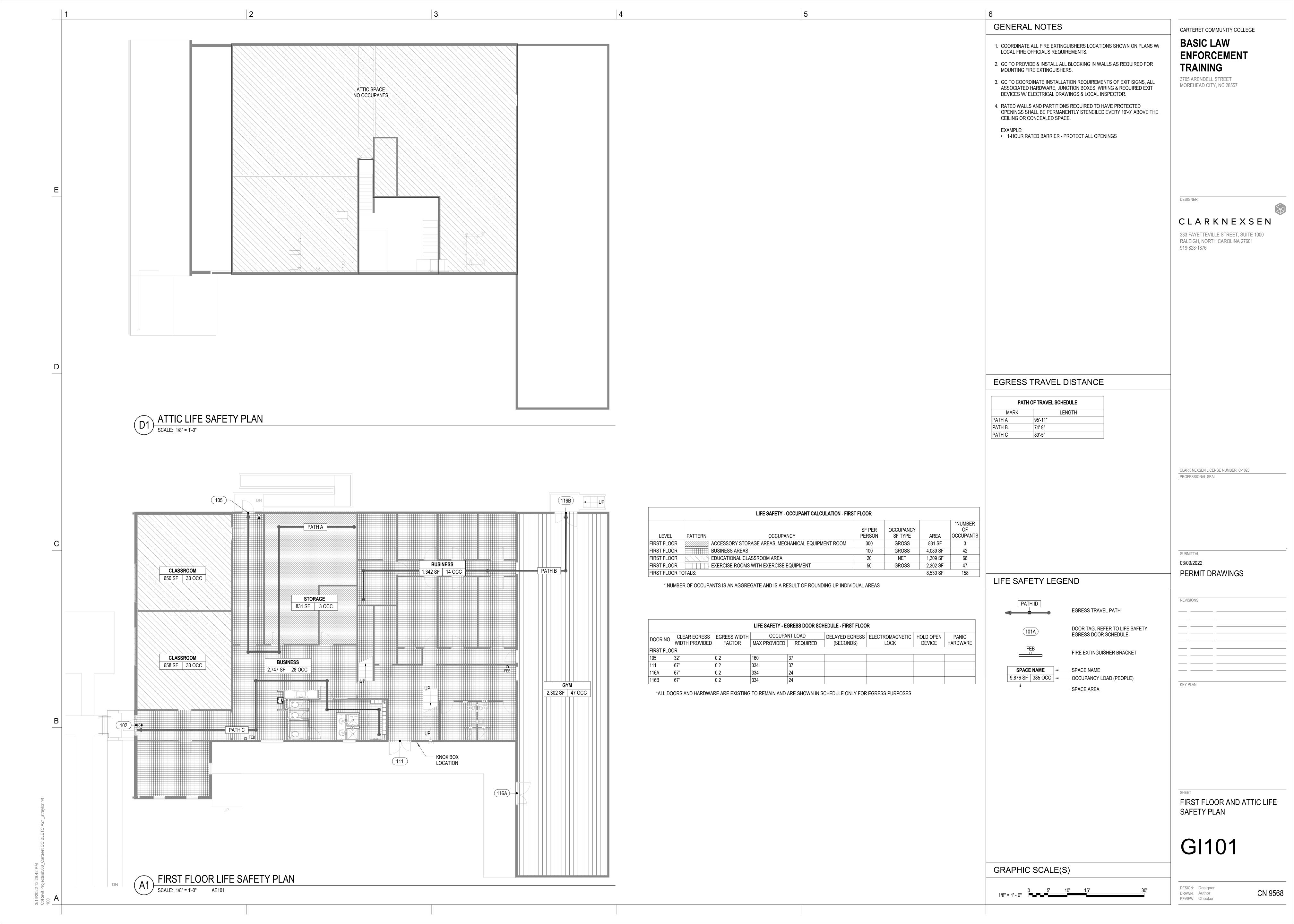
4,451 SF 12,976 SF 9,000 SF

CARTERET COMMUNITY COLLEGE

BASIC LAW

G1002

DESIGN: Designer DRAWN: Author REVIEW: Checker



A. Plastic Laminate Manufacturers:

1. Hinges: Frameless, concealed.

5. Exposed Hardware Finishes: Satin stainless steel.

2. Pulls: Back mounted Wire.

3. Adjustable shelf supports.

4. Locks: Door and drawer.

ABET LAMINATI

Formica

Wilsonart

B. Cabinet Hardware:

14. CONDUITS AND PIPES EMBEDDED WITHIN A CAST-IN-PLACE CONCRETE

SLAB MUST NOT BE LARGER IN OUTSIDE DIMENSION THAN 1/3 THE

OVERALL THICKNESS OF THE SLAB OR WALL IN WHICH THEY ARE

THREE (3) DIAMETERS ON CENTER AND RUN MID-DEPTH, UNLESS

OTHERWISE NOTED.

EMBEDDED. CONDUITS AND PIPES MUST BE SPACED NO LESS THAN

15. PLACEMENT OF CONCRETE IS NOT PERMITTED UNTIL THE OWNER OR

THE OWNER'S DESIGNATED REPRESENTATIVE HAS INSPECTED

EMBEDDED WORK, INCLUDING REINFORCING STEEL.

1.3INTERIOR TILE INSTALLATION SCHEDULE

B. Interior Walls, Wood or Metal Studs or Furring:

C. Bathtub/Shower Walls, Wood or Metal Studs or Furring:

backer units or fiber-cement underlayment. Standard grout.

gypsum backer board. Standard grout.

1. TCNA F125A: Thinset mortar on crack isolation membrane. Standard grout.

1. TCNA W245 or TCNA W248: Thinset mortar on glass-mat, water-resistant

1. TCNA B412: Thinset mortar over waterproof membrane on cementitious

A. Interior Floors on Concrete:

1.2CONSTRUCTION PHOTOGRAPHS

before starting the Work.

waterproofing and weather-resistant barriers.

B. Preconstruction Photographs:

A. Include key plan indicating location photographs were taken.

1. Take 20 photographs showing existing conditions adjacent to property

C. Concealed Work Photographs: Record nature and location of concealed Work,

including underground and underslab services, piping, electrical conduit,

E. Final Completion Construction Photographs: Take 20 color photographs.

D. Periodic Construction Photographs: Take 20 photographs weekly.

DESIGN: Designer DRAWN: Author REVIEW: Checker

SPECIFICATIONS

GI201

2. Manufacturers: Subject to compliance with requirements, provide products by

one of the following:

B. Mounting brackets.

a. Amerex Corporation.

b. Guardian Fire Equipment, Inc.

c. <u>Larsens Manufacturing Company</u>

CARTERET COMMUNITY COLLEGE

ENFORCEMENT

BASIC LAW

TRAINING

DESIGNER

919-828-1876

CLARKNEXSEN

333 FAYETTEVILLE STREET, SUITE 1000

RALEIGH, NORTH CAROLINA 27601

CLARK NEXSEN LICENSE NUMBER: C-1028

PROFESSIONAL SEAL

SUBMITTAL

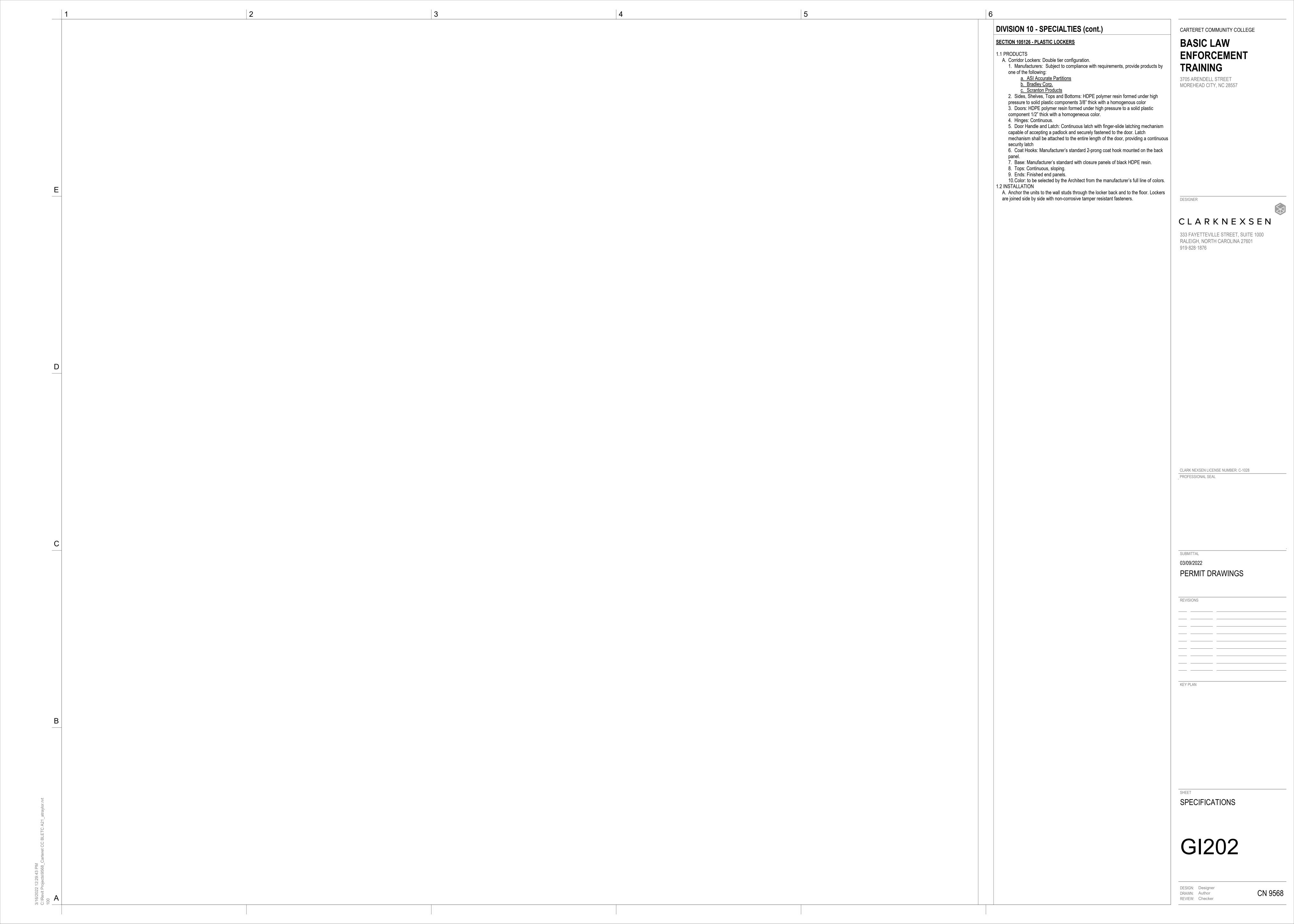
03/09/2022

KEY PLAN

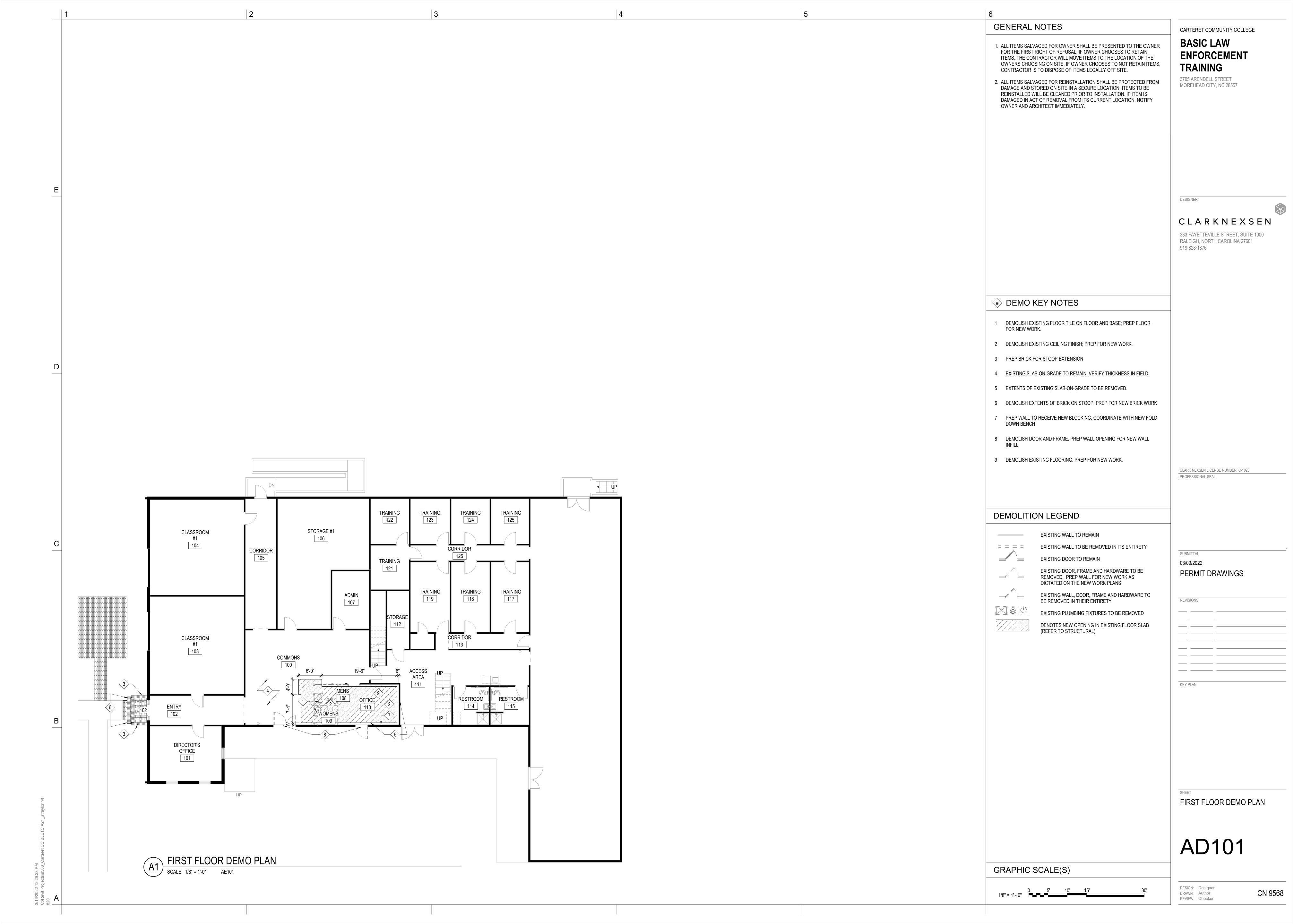
PERMIT DRAWINGS

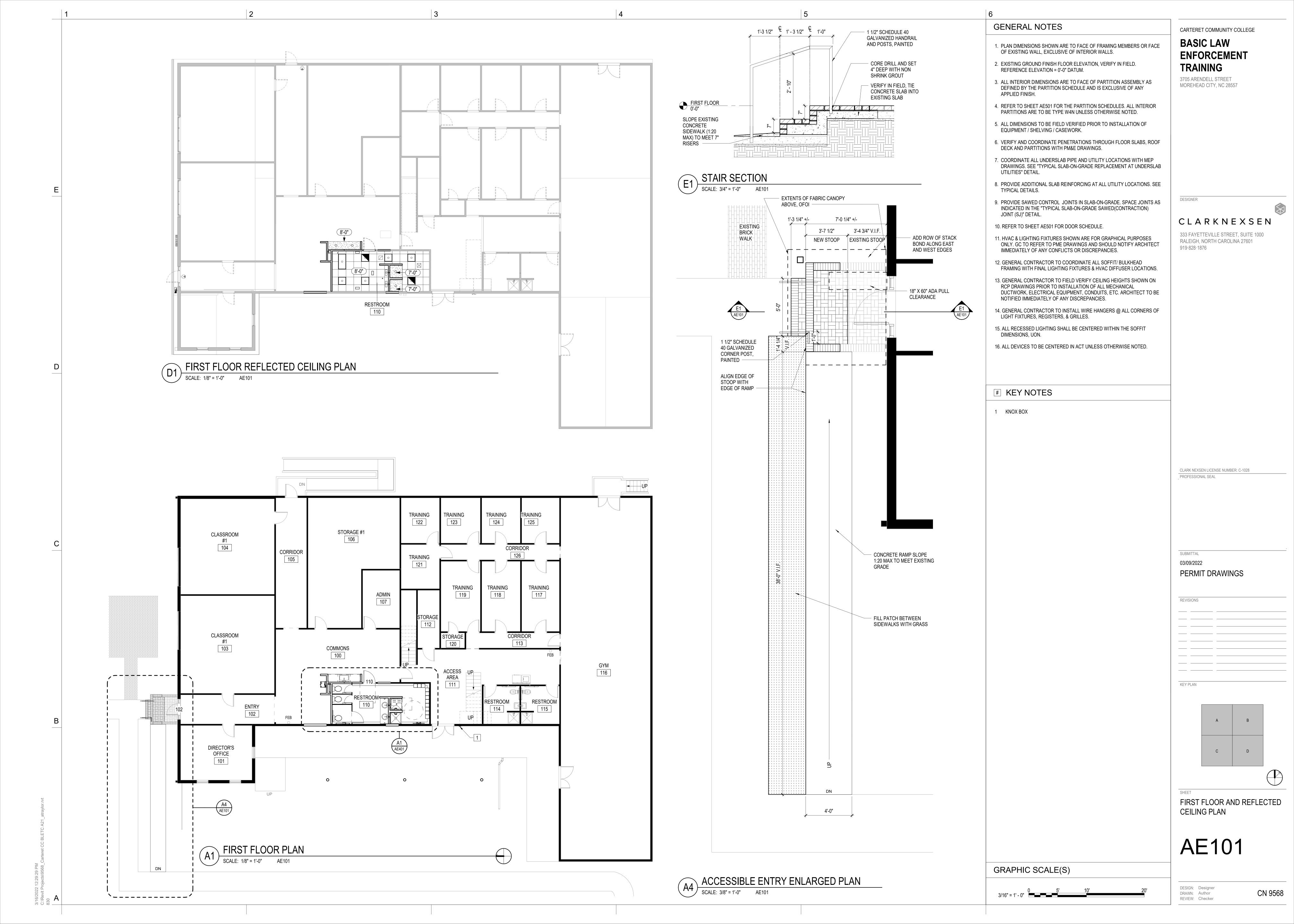
3705 ARENDELL STREET

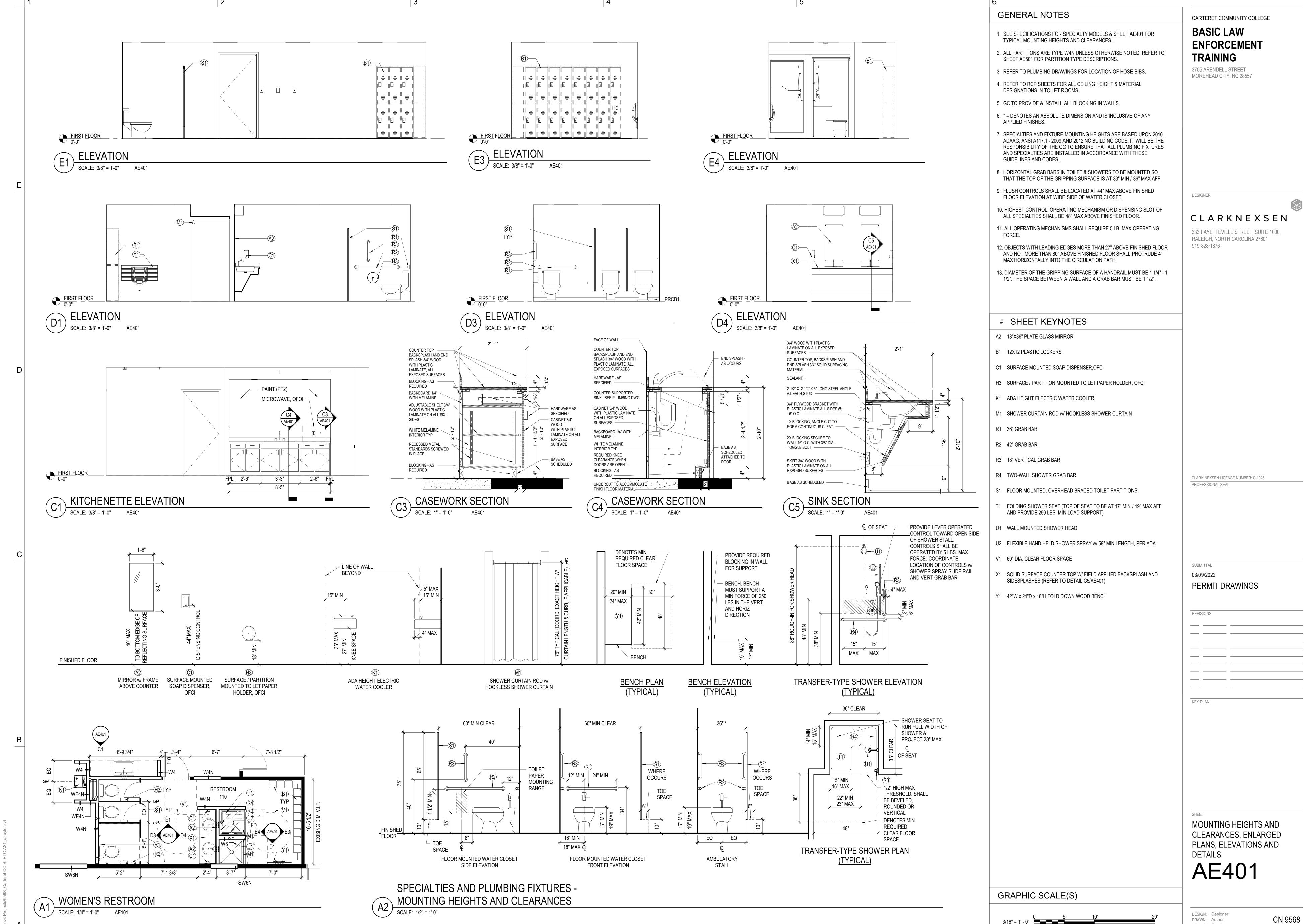
MOREHEAD CITY, NC 28557



1	2	3	4	5		6		
	RCP LEGEND	ARCHITECTURAL	SYMBOLOGY		ARCHITECTURAL	GENERAL NOTES		CARTERET COMMUNITY COLLEGE
	SUPPLY GRILLE / RETURN GRILLE	# NEW WORK KEYNOTE	# DEMOLITION KEYNOTE	 PLAN DIMENSIONS SHOWN ARE TO FACE OF FRAMING OF EXISTING WALL AND TO CENTERLINE OF COLUMNS. ALL NOTES, DETAILS, AND FEATURES DRAWN AS APPLIAPPLICABLE TO SIMILAR CONDITIONS, WHETHER OR NO. 	ICABLE FOR ONE CONDITION ARE	DRAWINGS, SPECIFICATIONS, A	ON BETWEEN THE ARCHITECTURAL DRAWINGS AND ANY OTHER AND/OR EXISTING CONDITIONS SHALL BE NOTED IN WRITING TO THE MUST BE CLARIFIED PRIOR TO COMMENCING THE CONSTRUCTION IN	BASIC LAW ENFORCEMENT TRAINING
	EXHAUST FAN	W1 S1 WINDOW / STOREFRONT DESIGNATION	A SPECIALTY ITEM DESIGNATION	3. IN STUD WALLS, LOCATE ALL INTERIOR DOOR FRAMES FROM THE THROAT RETURN TO THE CLOSEST ADJACE IN CMU WALLS, LOCATE MASONRY OPENING AT DOORS PERPENDICULAR WALL.	A DISTANCE OF 4" (FOUR) INCHES NT PERPENDICULAR PARTITION, UON.	A. ALL WALL-MOUNTED OR CE OTHER HARDWARE.	OCKING BEHIND GWB AT THE FOLLOWING LOCATIONS: ILING-MOUNTED DOOR STOPS, DOOR HOLD-OPEN DEVICES, AND	3705 ARENDELL STREET MOREHEAD CITY, NC 28557
		□ FD	1	4. ALL ELEVATIONS ARE MEASURED FROM THE REFEREN TOP OF THE FIRST FLOOR SLAB, UON.	CE ELEVATION +0'-0", WHICH IS THE		ACCESSORIES. AT GRAB BARS, PROVIDE BLOCKING CAPABLE OF OF 250 POUNDS APPLIED VERTICALLY OR HORIZONTALLY AT ANY	
	INDICATES BRACKET, WALL MOUNTED ELECTRICAL LIGHT / FIXTURE / EQUIPMENT, ETC	FLOOR DRAIN	REVISION TAG	DO NOT SCALE DRAWINGS TO DETERMINE DIMENSIONS ALL WOOD BLOCKING AND MISCELLANEOUS STEEL SHOW SHALL BE CONTINUOUS, UON.		C. ALL WALL-MOUNTED PLUME URINALS, WATER CLOSETS, A MINIMUM LOAD OF 400 PO FIXTURE.	SING FIXTURES, INCLUDING BUT NOT LIMITED TO LAVATORIES, SINKS, AND WATER COOLERS. PROVIDE BLOCKING CAPABLE OF RESISTING UNDS APPLIED VERTICALLY AT ANY POINT ON THE PLUMBING	
	□ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □	ROOM NAME 101 ROOM DESIGNATION	EXISTING COLUMN GRID LINE	7. USE FIRE-RETARDANT TREATED WOOD PRODUCTS FO	R ALL CONCEALED WOOD BLOCKING,		ETRY, SHELVING, AND SIMILAR ITEMS. MONITORS, AND SIMILAR ITEMS.	
<u>E</u>	LIGHT FIXTURE			8. USE PRESERVATIVE-TREATED WOOD PRODUCTS FOR A WITH EXTERIOR MASONRY OR CONCRETE WALLS, AND CONTACT WITH CONCRETE SLABS ON GRADE.			PROJECT SHALL BE NEW AND PROVIDED BY THE CONTRACTOR, UON.	DESIGNER
	CEILING CEILING MOUNTED EXIT	FEC FIRE EXTINGUISHER CABINET	FIRST FLOOR	9. VERIFY ALL DIMENSIONS. BRING ANY DISCREPANCIES THE ARCHITECT.	TO THE IMMEDIATE ATTENTION OF	13. USE BITUMINOUS MEMBRANE CONTACT WITH ANY METAL SU	TO SEPARATE PRESERVATIVE-TREATED WOOD PRODUCTS FROM IRFACE.	CLADINEVEEN
	LIGHT LIGHT W/ ARROW		LLEVATION DATON			A DDDEV//A TIONO		CLARKNEXSEN 333 FAYETTEVILLE STREET, SUITE 1000
	CEILING MOUNTED	ACCESSIBLE BEDROOMS - MOBILITY FEATURES	FEB FIRE EXTINGUISHER BRACKET	0 AND		ABBREVIATIONS		RALEIGH, NORTH CAROLINA 27601 919·828·1876
	OCCUPANCY SENSOR		FIRE EXTINGUISHER BRACKET	@ AT E	EA EACH EJ EXPANSION JOINT ELEC ELECTRICAL	L LENGTH/LON MATL MATERIAL	IG SAB SOUND ATTENUATING BLANKET SAFB SOUND ATTENUATING FIRE BLANKET SF SQUARE FEET	
	CEILING MOUNTED RECEPTACLE		ETAIL, SECTION, LEVATION TITLE	AFF ABOVE FINISH FLOOR AFS ABOVE FINISH SLAB ALT ALTERNATE ALUM ALUMINUM	ELEV ELEVATION EOS EDGE OF SLAB EPS EXPANDED POLYSTYRENE EQUIP EQUIPMENT	MAX MAXIMUM MECH MECHANICAL MFR MANUFACTUR MIN MINIMUM MISC MISCELLANEO	SS STAINLESS STEEL STRUCT STRUCTURAL OUS STD STANDARD	
	INDICATES BRACKET, WALL MOUNTED	PLAN NORTH INDICATOR TRUE NORTH INDICATOR		APC ARCHITECTURAL PRECAST CONCRETE E	EXIST EXISTING EXP EXPANSION / EXPOSED EXT EXTERIOR	MO MASONRY OP MTG MOUNTING MTL METAL	ENING STL STEEL SUSP SUSPENDED	
	FIRE PROTECTION FIXTURE / EQUIPMENT, ETC		LAN TITLE ND NORTH ARROW	BD BOARD BLDG BUILDING F	FD FLOOR DRAIN	NIC NOT IN CONTE		
D			BER	BRG BEARING F BSJ BUILDING SEPARATION JOINT F	FEB FIRE EXTINGUISHER BRACKET FEC FIRE EXTINGUISHER CABINET FF FINISH FLOOR	NO NUMBER NOM NOMINAL NTS NOT TO SCALI	THR THRESHOLD TOC TOP OF CONCRETE TOW TOP OF WALL	
	SPRINKLER HEAD	AE402	ETAIL / ENLARGED PLAN	BUR BUILT-UP ROOFING F	FIN FINISH FLR FLOOR FO FACE OF	OC ON CENTER	TP TOILET PARTITION TTL TOTAL TYP TYPICAL	
	V	SHEET WHERE SHO)WN	CG CORNER GUARD F CJ CONTROL JOINT	FP FIRE PROTECTION FPL FILLER PANEL	OD OUTSIDE DIAM OFCI OWNER FURN CONTRACTOR	IISHED	
	FIRE ALARM STROBE / FIRE ALARM HORN STROBE	A1 ELEVATION NUMBER	R	CLR CLEAR CLG CEILING	FRT FIRE RETARDANT TREATED	OFOI OWNER FURN OWNER INSTA	ALLED VB VINYL BASE	
		$A4 \underbrace{\begin{array}{c} A1 \\ AE410 \end{array}} A2 $	NTERIOR ELEVATION		GA GAUGE GALV GALVANIZED GC GENERAL CONTRACTOR	OH OPPOSITE HA OPNG OPENING OPP OPPOSITE	ND VCT VINYL COMPOSITION TILE VERT VERTICAL VIF VERIFY IN FIELD	
	SMOKE DETECTOR	A3 SHEET WHERE SHO — ELEVATION NUMBER		CONST CONSTRUCTION CONT CONTINUOUS	GFRG GLASS FIBER REINFORCED GYPS GL GLASS	JM ORD OVERFLOW R	OOF DRAIN VTR VENT THRU ROOF	
	S S <		XTERIOR ELEVATION		GWB GYPSUM WALLBOARD GYP GYPSUM	PH PANIC HARDW PL PLATE PLAM PLASTIC LAMI	W/ WITH	CLARK NEXSEN LICENSE NUMBER: C-1028 PROFESSIONAL SEAL
	SPEAKER / SPEAKER W/ STROBE	SHEET WHERE SHO		DBL DOUBLE H	HDW HARDWARE HDWD HARDWOOD	PLYWD PLYWOOD POLYISO POLYISOCYAN	WC WALLCOVERING NURATE WD WOOD	
	©O CO	SECTION NUMBER			HM HOLLOW METAL HORIZ HORIZONTAL HT HEIGHT	INSULATION PR PAIR PTD PAINTED	WDW WINDOW WO WINDOW OPENING WP WORK POINT	
	CARBON MONOXIDE SENSOR	A1 BUILDING	ETAIL / WALL SECTION	DISP DISPENSER H DN DOWN	HVAC HEATING, VENTILATION, & AIR CONDITIONING	R RADIUS	WT WEIGHT	
C		SHEET WHERE SHO	OWN		D INSIDE DIAMETER GU INSULATING GLASS UNIT NSUL INSULATION	RD ROOF DRAIN REF REFRIGERATO REINF REINFORCING	DR Control of the con	SUBMITTAL
	HEAT SENSOR / PHOTO SENSOR	DETAIL NUMBER	ETAIL SECTION		NT INTERIOR	REQ'D REQUIRED RM ROOM		03/09/2022
		SHEET NUMBER NOTED IN GENERAL		J K	IT JOINT KO KNOCK OUT	RO ROUGH OPEN RWL RAIN WATER I		PERMIT DRAWINGS
	EXPOSED CEILING					L LEGEND		REVISIONS
		 −xx.x P/	ARTITION / WALL TYPE	ALUMINUM	FOCOCOCI		INSULATION - SPRAY FOAM	
	EILING HEIGHT					.005		
	LO L	50		BRICK	GRAVEL		PLYWOOD / MDF	
	ACCESS PANEL		OOR NUMBER	CONCRETE	GWB / GR	OUT / SPRAY FIREPROOFING	SPANDREL GLAZING	KEV DI ANI
	2' x 2' ACOUSTICAL GWB			CONCRETE MASONRY UNIT (CMU)	INSULATIO	DN - BATT / LOOSE / BLANKET	STEEL	KEY PLAN
В	TILE LAY-IN CEILING CEILING / SOFFIT			EARTH	INSULATIO	ON - MINERAL WOOL	WOOD BLOCKING / FRAMING - CONTINUOUS	
				FILL - GRANULAR	INSULATION	ON - RIGID	WOOD BLOCKING - INTERRUPTED	
								ARCHITECTURAL LEGEND, NOTES AND ABBREVIATIONS
								A-001
Projector							SYMBOLS, AND LEGEND GRAPHICS LISTED ARE NECESSARILY USED	DESIGN: Designer
₀₀ A						ON THIS PROJEC	CT. REFER TO DOCUMENTS FOR SPECIFIC INFORMATION.	DESIGN: Designer DRAWN: Author REVIEW: Checker







DRAWN: Author
REVIEW: Checker

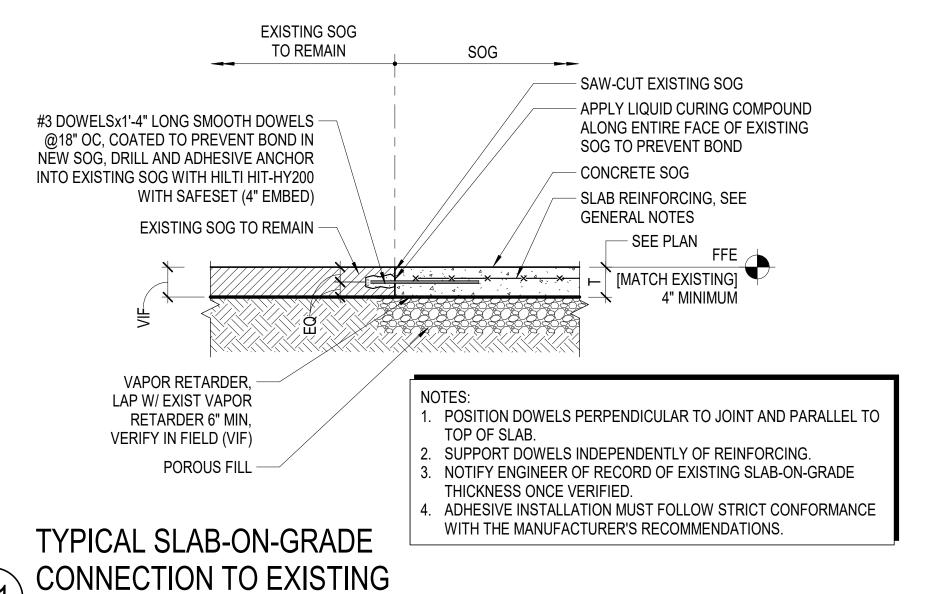
GENERAL PARTITION NOTES:

- 1. ALL INTERIOR WALLS SHALL BE W4N, UON.
- 2. PARTITION DIMENSIONING AND PARTITION TYPE DESIGNATIONS ARE INDEPENDENT OF APPLIED FINISHES. REFER TO FINISH SCHEDULE FOR INFORMATION REGARDING APPLIED FINISHES.
- 3. ALL PARTITIONS TO RUN FROM FINISH FLOOR TO UNDERSIDE OF DECK, UON.
- 4. PROVIDE FIRE RETARDANT TREATED WOOD BLOCKING FOR MOUNTING FIXTURES, MILLWORK, SHELVING, HARDWARE, DOOR STOPS AND OTHER EQUIPMENT.
- 5. PROVIDE WATER RESISTANT GWB FULL LENGTH OF TOILET / URINAL WALLS AND WITHIN 2 FEET HORIZONTALLY AND 4 FEET VERTICALLY OF SINKS, LAVATORIES AND JANITORS CLOSETS AND ARE NOT SCHEDULED TO RECEIVE TILE OR SHOWER / TUB SURROUNDS.
- 6. ON NON-RATED WALLS SCHEDULED TO RECEIVE TILE OR SHOWER / TUB SURROUNDS, PROVIDE CEMENTITIOUS BACKER BOARD IN LIEU OF GWB.
- 7. DESIGN LOAD CRITERIA: A. PARTITION ALLOWANCE 15 PSF 100 PSF B. COMMONS

SELF ADHERED FLEXIBLE FLASHING OVER BUILDING WRAP (ALL AROUND OPENING) **NEW VENT** WALL PENETRATION **BLOCKING AS** REQUIRED -**EXISTING EXTERIOR WALL**

WALL PENETRATION DETAIL SCALE: 1 1/2" = 1'-0"

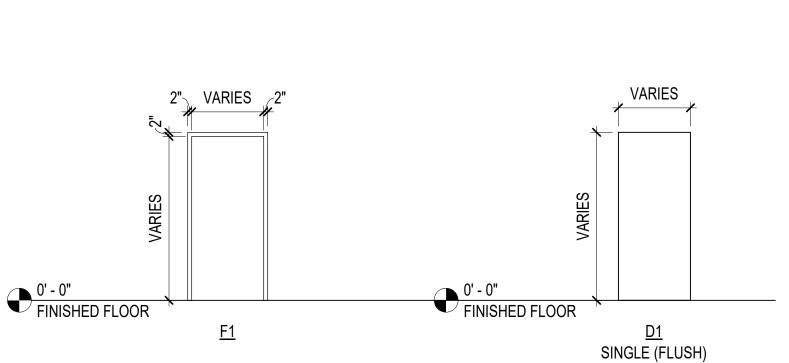
SCALE: 3/4" = 1'-0"



SLAB REINFORCEMENT: PROVIDE 6x6 W2.9xW2.9 FOR SLAB CONCRETE SLAB-ON-GRADE (SOG) WIDTHS EXCEEDING 2'-0"; MATCH EXISTING SOG THICKNESS PROVIDE #3@12" OC EACH WAY SLAB WIDTH AS REQD FOR SLAB WIDTHS LESS THAN 2'-0" - #3 DOWELS x 1'-4" LONG @ SAW CUT EXISTING SLAB 1'-6" MINIMUM 18" OC, DRILL AND ADHESIVE ANCHOR DOWELS INTO EXISTING SOG EXISTING SOG, 4" EMBED FFE [MATCH EXISTING] VAPOR RETARDER, LAP 6" WITH EXISTING VAPOR RETARDER - (2) #3 CONT, TYP EACH SIDE UTILITIES, TYP, SEE MEP DWGS POROUS FILL

TYPICAL SLAB-ON-GRADE REPLACEMENT AT UNDERSLAB UTILITIES SCALE: 3/4" = 1'-0"

DOOR SCHEDULE DOOR NO. **ROOM NAME** TOTAL WIDTH HEIGHT THICKNESS | TYPE | MATERIAL | TYPE | MATERIAL | HEAD JAMB COMMENTS SILL FIRE RATING | HARDWARE FIRST FLOOR 110 RESTROOM D1 WD F1 HM



SEALANT BOTH SIDES -ANCHOR (3 PER JAMB) SEALANT BOTH SIDES HM FRAME DOOR JAMB DOOR HEAD SCALE: 1 1/2" = 1'-0" SCALE: 1 1/2" = 1'-0" TILE AS SCHEDULED DOOR AS SCHEDULED MARBLE THRESHOLD EXISTING VCT FLOORING

> TRANSITION VCT TO TILE SCALE: 3" = 1'-0"

SEE PARTITION

DOUBLE

WOOD STUD

DOUBLE WOOD STUD

	FINISH SCHEDULE											
	ROOM		FLOOR		BASE		WALLS		CEILING			
NO.	NAME	MATERIAL	CODE	MATERIAL	CODE	MATERIAL	CODE	MATERIAL	CODE	REMARKS		
110	RESTROOM	PORCELAIN	PRC1	PORCELAIN TILE BASE	PRCB1	PAINT	PT1	ACOUSTICAL CEILING PANEL	APC1	REFER TO ELEVATIONS FOR TILE LOCATION AND HEIGHT		
100	COMMONS	EXISTING	EXISTING	RUBBER BASE	RB1	PAINT	PT1, PT2	EXISTING, GWB	GYPSUM WALLBOARD	REFER TO ELEVATION FOR ACCENT PAINT LOCATION		

FINISH MATERIAL LIST DESCRIPTION MANUFACTURER

DOOR AND FRAME TYPES

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

WALL BASE RB1 TARKETT: 4" RUBBER COVE BASE, COLOR: MATCH EXISTING *ACCEPTABLE MANUFACTURERS:

1. ROPPE 2. MANNINGTON COMMERCIAL

PRCB1 DALTILE: TBS

*ACCEPTABLE MANUFACTUERS: 1. AMERICAN OLEAN 2. MOSAIC TILE

PT1 SHERWIN WILLIAMS: COLOR: TBS PT2 (ACCENT) SHERWIN WILLIAMS: COLOR: TBS PT3 (CEILING) SHERWIN WILLIAMS, COLOR: TBS

PLASTIC LAMINATE
PL1 PIONITE, COLOR: TBS *ACCEPTABLE MANUFACTURERS: 1. FORMICA 2. WILSONART

2. FORMICA

SSM1 WILSONART CORIAN: COLOR: TBS *ACCEPTABLE MANUFACTURERS: 1. DUPONT

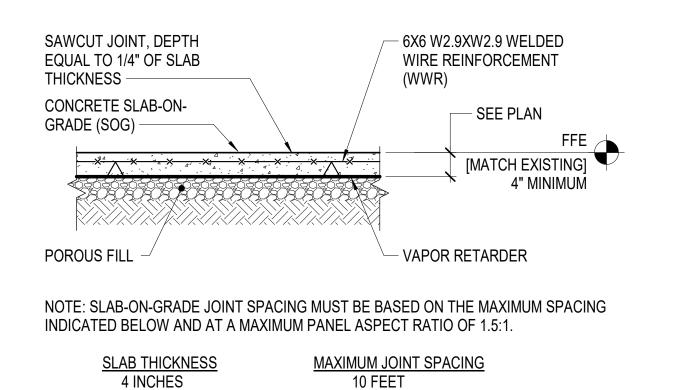
<u>CEILING TILES</u> ACT1 ARMSTRONG: TBS *ACCEPTABLE MANUFACTURERS: 1. USG 2. ROCKFON

FLOOR TILE PRC1 DALTILE: TBS *ACCEPTABLE MANUFACTURERS: 1. AMERICAN OLEAN 2. MOSAIC TILE

PLASTIC TOILET PARTITIONS:
GENERAL PARTITIONS, COLOR: TBS

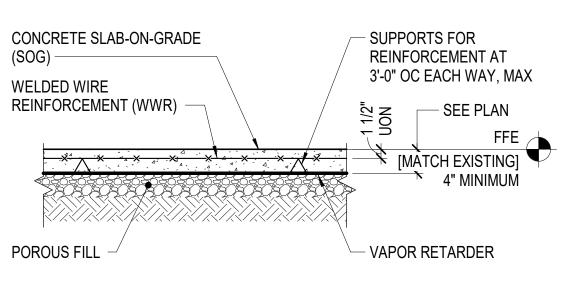
- (2) #3 BARS x 2'-6" LONG MID-DEPTH OF SLAB - OPENING FOR UTILITIES; COORDINATE OPENING SIZE AND LOCATION WITH MECHANICAL AND PLUMBING DRAWINGS 1. REINFORCING FOR ROUND **OPENINGS SIMILAR** 2. SLAB REINFORCEMENT NOT SHOWN FOR CLARITY

TYPICAL REINFORCING AROUND UTILITY OPENING SCALE: 3/4" = 1'-0"



12 FEET 5 INCHES TYPICAL SLAB-ON-GRADE SAWED

(CONTRACTION) JOINT (SOG) SCALE: 3/4" = 1'-0"



TYPICAL SLAB-ON-GRADE (SOG) A5 | IYPICAL S | SCALE: 3/4" = 1'-0"

CARTERET COMMUNITY COLLEGE **BASIC LAW**

ENFORCEMENT TRAINING

3705 ARENDELL STREET

MOREHEAD CITY, NC 28557

DESIGNER

CLARKNEXSEN

333 FAYETTEVILLE STREET, SUITE 1000 RALEIGH, NORTH CAROLINA 27601 919.828.1876

CLARK NEXSEN LICENSE NUMBER: C-1028 PROFESSIONAL SEAL

SUBMITTAL 03/09/2022

PERMIT DRAWINGS

REVISIONS

KEY PLAN

PARTITION TYPES, DETAILS, DOOR SCHEDULE, DOOR DETAILS, FINISH SCHEDULE AND LEGEND

AE501

DESIGN: Designer DRAWN: Author

CN 9568

REVIEW: Checker

- 1. GENERAL NOTES WITHIN THESE DOCUMENTS ARE APPLICABLE TO EACH PLUMBING DRAWING OF THIS SET. NOTES SPECIFIC TO INDIVIDUAL PLUMBING DRAWINGS WILL BE SHOWN ON THAT RESPECTIVE DRAWING.
- 2. CONTRACTOR SHALL NOT ALLOW ON-SITE ACCUMULATION OF DEBRIS OR DEMOLISHED MATERIALS. PROMPTLY AND LEGALLY TRANSPORT AND DISPOSE OF MATERIALS OFF-SITE. DO NOT BURN DEBRIS OR DEMOLISHED MATERIALS. ALL DISPOSAL COSTS TO BE BORNE BY
- 3. OPENINGS THRU WALLS, FLOORS AND ROOFS SHALL BE FLASHED AND SEALED WATER TIGHT. PENETRATIONS THROUGH SMOKE OR FIRE-RATED WALLS AND/OR PARTITIONS SHALL BE SEALED TO MAINTAIN RATING PER ASTM E-814 AND BUILDING CODE REQUIREMENTS. DO NOT CUT STRUCTURAL ELEMENTS WITHOUT PRIOR APPROVAL OF THE ENGINEER AND THE OWNER.
- 4. UNLESS OTHERWISE INDICATED, ALL PIPING SHALL BE RUN IN CONCEALED SPACES IN WALLS, IN CHASES OR BETWEEN CEILINGS AND INSULATION ABOVE. PIPES SHALL BE RUN AT RIGHT ANGLES OR PARALLEL LINES WITH BUILDING WALLS AND ROUTED WITH STRUCTURAL MEMBERS IN EXPOSED AREAS. PLUMBING SHALL COORDINATE WITH MECHANICAL DUCTWORK IN ALL CHASES. SUPPORT ALL INTERIOR PIPING FROM BUILDING STRUCTURE BY MEANS OF PIPE STANDS, HANGERS OR INSERTS TO MAINTAIN REQUIRED GRADING AND PITCHING OF LINES, TO PREVENT VIBRATION AND TO SECURE PIPING IN PLACE. SOIL WASTE AND VENT STACKS SHALL BE SUPPORTED AT THE BASE BY MEANS OF PIERS OR HEAVY-DUTY HANGERS CLOSE TO THE BOTTOM OF RISERS AND SECURED AT EACH FLOOR BY MEANS OF HEAVY-DUTY IRON RISER CLAMPS. PROTECT COPPER PIPING AGAINST CONTACT WITH MASONRY OR DISSIMILAR METALS. HANGERS, SUPPORTS, ANCHORS AND CLIPS SHALL BE COPPER OR COPPER PLATED.
- 5. FLAT WALL CLEANOUT COVERS SHALL BE FLUSH WITH FINISHED WALL SURFACE. DEEP COVERS ARE NOT ACCEPTABLE. EXPOSED PIPING CONNECTIONS IN OCCUPIED SPACES SHALL BE CHROME PLATED. PAINTING OF PIPING AND PIPING SUPPORTS SHALL BE INCLUDED PER ARCHITECT'S SPECIFICATIONS AND COLORS. HANGER SPACING SHALL BE IN ACCORDANCE WITH MSS STANDARDS AND PIPE MANUFACTURERS' WRITTEN INSTRUCTIONS.
- 6. CONTRACTOR SHALL PROVIDE INSULATION ON ALL ABOVEGROUND WATER PIPING; INSULATION SHALL BE 1" FOR COLD WATER, HOT WATER, HOT WATER RETURN AND GRAVITY DRAINAGE. INSULATION SHALL BE HIGH-DENSITY FIBERGLASS WITH ALL-SERVICE JACKET, OR EQUIVALENT SELF-ADHERING CELLULAR (FOAM) GLASS TUBE INSULATION. EXPOSED PIPING SHALL HAVE A PVC JACKET. PIPE SHIELDS/SADDLES SHALL BE PROVIDED AT ALL HANGERS & PIPE STANDS.
- 7. CONTRACTOR SHALL COORDINATE THEIR WORK WITH THAT OF OTHER TRADES. COORDINATE WITH MECHANICAL DUCTWORK IN CHASES. INTERRUPTIONS OF SERVICES SHALL BE COORDINATED WITH THE OWNER AT LEAST 48 HOURS IN ADVANCE OF THE WORK BEING PERFORMED. DISRUPTION TIME SHALL BE KEPT TO A MINIMUM.
- 8. WORK SHALL BE PERFORMED BY SKILLED WORKERS IN ACCORDANCE WITH REQUIREMENTS AND PROVISIONS OF OSHA, THE STATE LABOR BOARD, BUILDING CODES AND GENERALLY ACCEPTED GOOD PRACTICE. KEEP SITE ORDERLY AND CLEAN AT ALL TIMES. WHEN COMPLETE, CLEAN AND REPAIR THE ENTIRE WORK AREA TO RESTORE TO ORIGINAL CONDITIONS, OR BETTER.

PLUMBING FIXTURE SCHEDULE

- 9. THE DRAWINGS ARE INTENDED TO COVER THE COMPLETE PLUMBING SYSTEMS. HOWEVER, THE DRAWINGS MAY NOT SHOW COMPLETE OR ACCURATE DETAILS OF THE BUILDING OR SYSTEMS IN EVERY RESPECT. MAKE PROPER PIPING CONNECTIONS TO FIXTURES AND EQUIPMENT EVEN THOUGH BRANCH MAINS, ELBOWS AND CONNECTIONS ARE NOT SHOWN.
- 10. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY THE ITEMS TO BE FURNISHED FIT THE SPACE AVAILABLE. CONTRACTOR TO VERIFY LOCATIONS OF ALL EXISTING SERVICES AND CONNECTION POINTS. CONTRACTOR SHALL FIELD CONFIRM ALL PIPE SIZES AND LOCATIONS, AND ALL DIMENSIONS AND ELEVATIONS, AND OBTAIN ANY ADDITIONAL INFORMATION AS REQUIRED. CONTRACTOR SHALL BE RESPONSIBLE FOR CONTACTING AND PAYING ALL FEES FOR UTILITY LOCATOR SERVICE TO LOCATE PUBLIC AND PRIVATE UTILITIES AND UNDERGROUND STRUCTURES BEFORE DIGGING. CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGES INCURRED AS A RESULT OF THIS WORK. ALL DISCOVERIES SHALL BE ACCURATELY SHOWN ON THE RECORD DRAWINGS.
- 11. THE ENGINEER SHALL NOT BE RESPONSIBLE FOR THE MEANS, METHODS, TECHNIQUES, SEQUENCES OR PROCEDURES OF CONSTRUCTION SELECTED BY THE CONTRACTOR OR OF THE SAFETY PRECAUTIONS AND PROGRAMS INCIDENTAL TO THE WORK OF THE CONTRACTOR TO PERFORM THE CONSTRUCTION WORK IN ACCORDANCE WITH OSHA, APPLICABLE CODES, THE DRAWINGS AND SPECIFICATIONS.
- 12. SANITARY TIE-INS SHALL BE MADE WITH SANITARY TEES IN THE VERTICAL AND WYES IN THE HORIZONTAL, TIE BRANCH CONNECTIONS TO SEWER MAINS IN UPPER HALF OF MAIN. UNLESS NOTED OTHERWISE ON THE DRAWINGS. SANITARY PIPE CONNECTIONS SHALL NOT BE REDUCED IN SIZE WITHOUT PRIOR APPROVAL OF THE ENGINEER. WATER PIPING CONNECTIONS SHALL BE MADE WITH ALL COPPER FITTINGS OF THE SIZES INDICATED. IF EXISTING IS FOUND TO BE OF DISSIMILAR METALS, PROVIDE DIELECTRIC UNIONS OR OTHER NON-CONDUCTIVE MEANS TO PREVENT ELECTROLYSIS.
- 13. CONTRACTOR SHALL INSTALL FIXTURES, EQUIPMENT AND MATERIALS IN ACCORDANCE WITH THE MANUFACTURER'S WRITTEN INSTRUCTIONS, AND APPLICABLE CODES. INSTALL ADA FIXTURES AT THE HEIGHTS PRESCRIBED BY THE CODE HAVING JURISDICTION. MAKE PROPER PIPING CONNECTIONS TO FIXTURES AND EQUIPMENT EVEN THOUGH BRANCH MAINS, ELBOWS AND CONNECTIONS ARE NOT SHOWN. COORDINATE WITH ARCHITECTURAL DRAWINGS BEFORE ROUGHING-IN PLUMBING FIXTURES. PROVIDE STOPS ON ALL PLUMBING FIXTURE WATER SUPPLIES.
- 14. INSTALL PIPING SO ALL VALVES, STRAINERS, UNIONS, TRAPS, FLANGES AND OTHER COMPONENTS REQUIRING ACCESS ARE ACCESSIBLE. LOCATE ALL VALVES ABOVE ACCESSIBLE CEILINGS WHERE POSSIBLE. PROVIDE ACCESS DOORS FOR ALL CONCEALED VALVES IN INACCESSIBLE LOCATIONS.
- 15. PIPE SUPPORTS/HANGERS SHALL BE FURNISHED AND INSTALLED BY THE PLUMBING CONTRACTOR FOR ALL PIPING ON PLUMBING PLANS.
- 16. REQUIRED PIPE TESTING, INCLUDING SANITARY/VENT, STORM AND PRESSURE PIPING TESTS, SHALL BE WITNESSED BY REPRESENTATIVES OF THE OWNER AND APPLICABLE JURISDICTIONAL AUTHORITIES (PROVIDE 48-HOUR ADVANCE NOTICE TO ALL PARTIES.)
- A. DWV PIPING SHALL BE PRESSURE TESTED. FOR PRESSURE TEST. FILL EACH OPENING WITH WATER AND TEST SYSTEM WITH MIN. 10-FT.

HEAD OF WATER FOR 15 MINUTES BEFORE CHECKING FOR LEAKS. INSTALL ALL FIXTURES AND SEAL.

- B. FOR WATER SYSTEMS, BLANK-OFF ALL FIXTURES AND PLACE SYSTEMS UNDER 150 PSI PRESSURE TEST FOR TWO HOURS WITHOUT LOSS
- C. TEST ALL VALVES, SERVICE FITTINGS, EQUIPMENT, BACKFLOW PREVENTERS, AND SAFETY EQUIPMENT TO ENSURE PROPER OPERATION PER MANUFACTURER'S REQUIREMENTS. REPORT ANY DEFECTS IMMEDIATELY TO THE A/E.
- 17. PROVIDE TRAP SEAL PRIMERS FOR FLOOR DRAINS AS REQUIRED OR SHOWN.

OF PRESSURE.

- 18. SPACE FOR ALL MECHANICAL AND ELECTRICAL SERVICES IS VERY RESTRICTED. IT WILL BE THE CONTRACTORS RESPONSIBILITY TO COORDINATE ALL WORK WITH OTHER TRADES BEFORE PROCEEDING WITH THE PLUMBING CONTRACT. SHOULD FIELD CONDITIONS DICTATE THAT CHANGES BE MADE, THE CONTRACTOR SHALL CONSULT THE GC. MAINTAIN A MINIMUM OF 8'-0" CLEARANCE TO UNDERSIDE OF PIPING THROUGHOUT ACCESS ROUTES IN MECHANICAL ROOMS. FULL COORDINATION DRAWINGS SHOWING MEP SERVICES SHALL BE PREPARED.
- 19. CONTRACTOR SHALL PROVIDE ALL LABOR, MATERIALS, TOOLS AND EQUIPMENT NECESSARY TO PROVIDE COMPLETE AND OPERABLE PLUMBING SYSTEMS, INCLUDING ALL NECESSARY APPURTENANCES AND ACCESSORIES IF NOT SPECIFICALLY CALLED OUT.
- 20. CONTRACTOR SHALL HAVE PROPER STATE AND LOCAL CONTRACTOR AND BUSINESS LICENSES AND SHALL COMPLY WITH THE FOLLOWING CODES AND STANDARDS INSOFAR AS THEY APPLY FOR INSTALLATION AND TESTING: NORTH CAROLINA PLUMBING CODE, NORTH CAROLINA BUILDING CODE, AND ALL LOCAL ORDINANCES AND CODES, INCLUDING LOCAL AMENDMENTS.
- 21. SANITARY PIPE SHALL BE LAID IN CLASS "B" BEDDING WITH CLASS I OR CLASS II MATERIALS. BEDDING MATERIALS SHALL BE GRANULAR BEDDING MATERIALS AND SHALL BE LAID TO THE SPRING LINE OF THE PIPE WITH THE BOTTOM OF THE PIPE 2" (MIN.) ABOVE THE BOTTOM OF THE TRENCH. LAYING OF PIPE SHALL BE DONE PER ANSI/ASTM D-2321. TAMPING SHALL BE DONE IN 8" LAYERS WITH UP TO 95% COMPACTION PER ASTM 698, TOP 18" SHALL BE 100% COMPACTION.
- 22. REMOVE ROCK, ROOTS AND OTHER QUESTIONABLE MATERIALS WITHIN THE LIMITS OF WORK. ROOTS AND MATTED ROOTS SHALL BE GRUBBED OUT AT LEAST 18" BELOW EXISTING SURFACE. CONTRACTOR SHALL BE RESPONSIBLE FOR DISPOSAL OF UNSUITABLE SOILS OR

EXCESS EXCAVATION AND/OR BACKFILL MATERIALS. CONTRACTOR SHALL BE RESPONSIBLE FOR EROSION CONTROL.

- 23. CONTRACTOR SHALL PREPARE AND MAINTAIN AT THE PROJECT SITE ACCURATE RECORD (AS BUILT) DRAWINGS DURING CONSTRUCTION PROGRESS. THESE DRAWINGS SHALL BE CONSOLIDATED INTO ONE (1) COMPLETE SET OF DRAWINGS, WHICH SHALL BE KEPT NEAT, IN ORDER AND LEGIBLE. DRAWINGS SHALL BE TURNED OVER TO THE ENGINEER AT THE PROJECT CONCLUSION, AFTER OWNER ACCEPTANCE.
- 24. ALL WALL HUNG FIXTURES SHALL BE SECURELY MOUNTED AND SEALED BETWEEN WALL AND FIXTURES WITH WHITE OR CLEAR SILICONE CAULKING. COUNTER MOUNTED FIXTURES SHALL BE SEALED WITH CLEAR SILICONE CAULKING.
- 25. ALL POTABLE WATER SYSTEMS SHALL BE DISINFECTED PRIOR TO USE IN ACCORDANCE WITH THE AMERICAN WATER WORKS ASSOCIATION STANDARD, AWWA C-651. FLUSH ENTIRE SYSTEM WITH WATER UNTIL ALL ENTRAINED DIRT AND MUD HAVE BEEN REMOVED. THE ENTIRE WATER PIPING SYSTEM SHALL BE STERILIZED TO CONFORM TO THE REQUIREMENTS OF THE LOCAL AUTHORITY OR WATER PURVEYOR AND SHALL BE TESTED BY AN INDEPENDENT CERTIFIED LAB.
- 26. THE CONTRACTOR SHALL GUARANTEE ALL WORK PERFORMED UNDER THIS CONTRACT TO BE FREE FROM DEFECTS IN MATERIAL AND WORKMANSHIP FOR A PERIOD OF ONE (1) YEAR FROM THE DATE OF FINAL ACCEPTANCE OF SUCH WORK BY THE OWNER.
- 27. THE CONTRACTOR SHALL THOROUGHLY CLEAN ALL EQUIPMENT, FIXTURES AND SYSTEMS BEFORE PLACING IN OPERATION. RESTORE FINISHED SURFACES IF DAMAGED AND DELIVER THE ENTIRE INSTALLATION IN AN APPROVED CONDITION.
- 28. CONTRACTOR SHALL MAKE A PERSONAL INSPECTION OF THE SITE AND INCLUDE PERFORMING ALL WORK REQUIRED BY THE DRAWINGS AND SPECIFICATIONS. FIELD VERIFY INFORMATION PROVIDED ON THE DRAWINGS AND EXISTING CONDITIONS, INCLUDING: LOCATIONS, ELEVATIONS, DIMENSIONS AND QUANTITIES REQUIRED FOR THE WORK. NOTIFY THE ENGINEER IN WRITING OF ANY ADDITIONAL WORK THAT MAY BE REQUIRED TO ACCOMPLISH THE SCOPE OF WORK AND/OR ACCOMMODATE FIELD INCONSISTENCIES WITH OR IN THE DRAWINGS AND/OR SPECIFICATIONS PRIOR TO COMMENCING THE SCOPE OF WORK.
- 29. CONTRACTOR CONSTRUCTION PLANS WILL NOT BE APPROVED WITHOUT PRIOR REVIEW AND APPROVAL OF THE PLUMBING PLANS BY DURHAM COUNTY.
- 30. ALL PENETRATIONS THROUGH FLOOR WATER PROOFING MEMBRANES SHALL BE COORDINATED TO LIMIT PENETRATIONS, COMBINED WITH OTHER TRADES WHEN POSSIBLE, AND SEALED WATERTIGHT PER MANUFACTURER'S WRITTEN INSTRUCTIONS.
- 31. INSTALL EQUIPMENT TO FACILITATE SERVICING, MAINTENANCE, AND REPAIR OR REPLACEMENT OF EQUIPMENT COMPONENTS. AS MUCH AS PRACTICAL, CONNECT EQUIPMENT FOR EASE OF DISCONNECTING, WITH A MINIMUM OF INTERFERENCE WITH OTHER INSTALLATIONS. PIPING SHALL NOT INTERFERE WITH COMPONENT CLEARANCES. UNIONS AND/OR FLANGES SHALL BE INSTALLED AT EACH PIECE OF EQUIPMENT TO PERMIT DISASSEMBLY FOR ALTERATION AND REPAIRS.
- 32. DO NOT INSTALL EQUIPMENT OR PIPING OVER ANY ELECTRICAL EQUIPMENT, PANELS OR SERVICE SPACE.
- 33. ALL EQUIPMENT SHALL BE PROVIDED WITH PERMANENT METAL NAMEPLATES WITH MANUFACTURER, MODEL NO., SERIAL NO., CAPACITY, OPERATING CHARACTERISTICS, COMPLIANCE AND OTHER ESSENTIAL DATA. PIPING SHALL BE LABELED WITH SERVICE AND DIRECTION OF FLOW EVERY 20 FEET, AND IN EACH ROOM, WITH SNAP-ON SEMIRIGID, PREPRINTED PLASTIC MARKERS INCLUDING PROPER COLOR-CODING. ALL VALVES SHALL BE TAGGED WITH ALUMINUM TAGS STAMPED OR ENGRAVED WITH SERVICE AND SEQUENCED NUMBER, HUNG FROM VALVE. PROVIDE A FRAMED, TYPED VALVE TAG SCHEDULE IN THE BASEMENT MECHANCIAL ROOM.

ID COLOR CODI
GREEN
LIGHT GREEN
GRAY

PLUMBING FIXTURE SCHEDULE													
Symbol	bol Description CW HW SAN VENT CW FU HW FU COUNT Comments												
P-1	WATER CLOSET	1"		4"	2"	13.2	0	24	6				
P-1a	WATER CLOSET	1"		4"	2"	2.2	0	4	1				
P-2	COUNTERTOP LAVATORY	1/2"	1/2"	2"	2"	1.4	1	2	2				
P-3	COUNTERTOP SINK	1/2"	1/2"	2"	2"	1.4	1	2	1				
P-4	EZ ADA	1/2"		2"	2"	0.25	0	0.5	1				
P-5	HOSE BIB	1/2"				2	0	0	2				
P-6	SHOWER	1/2"	1/2"	3"	2"	1.4	1	2	1				
P-6a	SHOWER - ADA	1/2"	1/2"	3"	2"	1.4	1	2	1				
and total						23.25	4	36.5					

	XTURE SCHEDULE		1		
SYMBOL	DESCRIPTION	TYPE	COMPONENT	DESCRIPTION	COMMENTS
5.4	WATER CLOSET	FLOOR MOUNTED	CLOSET	AMERICAN STANDARD MODEL 215CA.104, 1.28 GPF, ELONGATED, "WHITE" , FLOOR MOUNTED TANK, VITREOUS CHINA WATER CLOSET, SIPHON JET FLUSHING ACTION, 2-1/8" DIAMETER, FULLY GLAZED TRAPWAY, ASME 112.19.2/CSA B45.1.	
P-1			SEAT	BEMIS "COMMERCIAL" MODEL 3155SSCT ELONGATED WHITE OPEN FRONT SEAT LESS COVER WITH SELF SUSTAINING S.S. CHECK HINGE	
	WATER CLOSET	FLOOR MOUNTED	CLOSET	AMERICAN STANDARD MODEL 215AA.104, 1.28 GPF, ELONGATED, "WHITE" , FLOOR MOUNTED TANK, VITREOUS CHINA WATER CLOSET, SIPHON JET FLUSHING ACTION, 2-1/8" DIAMETER, FULLY GLAZED TRAPWAY, ASME 112.19.2/CSA B45.1.	
P-1a	ADA COMPLIANT		SEAT	BEMIS "COMMERCIAL" MODEL 3155SSCT ELONGATED WHITE OPEN FRONT SEAT LESS COVER WITH SELF SUSTAINING S.S. CHECK HINGE	
	LAVATORY	COUNTERTOP	LAVATORY	AMERICAN STANDARD MODEL 0496.300 (19.25"x16.25"), UNDER MOUNTED, WHITE VITREOUS CHINA LAVATORY WITH FRONT OVERLOW, ADA COMPLIANT	
P-2	ADA COMPLIANT		FAUCET	T&S BRASS MODEL B-2711-VF05, 4" FIXED CENTERS, INTEGRAL CAST BRASS SPOUT, 0.5 GPM, VANDAL PROOF PRESSURE COMPENSATING NON-AERATING SPRAY, CERAMIC CARTRIDGE WITH ADJUSTABLE TEMPERATURE LIMIT STOP, SINGLE LEVEL HANDLE, 1/2" NPSM MALE INLETS WITH COUPLING NUTS	SUPPORT SUPPLY PIPE THRU WALL WITH CHLORITE #107-26 COPPER BONDED STEEL BRACKET PIPE SUPPORT.
			SUPPLY	MCGUIRE MLF175LK (1/2" x 3/8") SWEAT LAVATORY SUPPLY KIT WITH LOOSE KEY STOP, CHROME PLATED RISERS, BRASS FLANGE WITH SET SCREW.	PROVIDE PRECISION
			DRAIN	MCGUIRE GRID DRAIN MODEL 155AECO 1-1/4" TAILPIECE - OPEN GRID P.O. PLUG & MCGUIRE M8872CBECO (1-1/4") - CHROME PLATED P-TRAP SHALL BE CAST BRASS BODY WITH CLEANOUT WITH 17 GAUGE SEAMLESS TUBULAR WALL BEND AND FLANGE.	PROVIDE PRECISION PLUMBING PRODUCTS BAC-2-BAC MANIFOLD WHERE APPLICABLE.
			INSULATION	PLUMBEREX TRAP-GEAR MODEL 396 WHITE, ASTM-E 84-07 CLASS A INSULATION MATERIAL.	
P-3	SINGLE BOWL SINK	COUNTERTOP	SINK	ELKAY MFG. ELUHAD191655PD, ADA COMPLAINT SINGLE BOWL, UNDERMOUNT SINK, TYPE 304 18-8 STAINLESS STEEL SINK 21.5 x 18.5" x 5-3/8" DEEP; DRAIN: CENTER-REAR, LKPD1 CUP STRAINER AND 1-1/2" TAILPIECE	
	ADA COMPLIANT		FAUCET	ELKAY MODEL LK1001 WITH DEDICATED SPRAY NOZZLE, 1.5 GPM, SINGLE HANDLE, REMOVABLE CERAMIC DISC CARTRIDGE, 1/2" IPS SUPPLY INLETS, QUICK CONNECT SIDE SPRAY FITTING, CHROME PLATE FINISH	
			SUPPLY	MCGUIRE MLF175LK (1/2" x 3/8") SWEAT LAVATORY SUPPLY KIT WITH LOOSE KEY STOP, CHROME PLATED RISERS, BRASS FLANGE WITH SET SCREW.	
			DRAIN	MCGUIRE GRID DRAIN MODEL 151AECO 1-1/4" TAILPIECE - STAINLESS STEEL BASKET P.O. PLUG & MCGUIRE M8912CBECO (1-1/4") - CHROME PLATED P-TRAP SHALL BE CAST BRASS BODY WITH CLEANOUT WITH 17 GAUGE SEAMLESS TUBULAR WALL BEND AND FLANGE.	
			INSULATION	PLUMBEREX TRAP-GEAR MODEL 396 WHITE, ASTM-E 84-07 CLASS A INSULATION MATERIAL.	
P-4	ELECTRIC WATER COOLER ADA COMPLIANT	WALL MOUNTED		ELKAY MODEL EZS8WSVRLK "NO-LEAD" SINGLE LEVEL "EZH2O", BARRIER-FREE, NON-FILTERED, REFRIGERATED DRINKING FOUNTAIN WITH ELECTRONIC SENSOR BOTTLE FILLING STATION, WALL MOUNTED, STAINLESS STEEL CONSTRUCTION WITH ABS ALCOVE. CERTIFIED TO NSF/ANSI 42 AND 53., FLEXIBLE BUBBLER GUARD. LEAD-FREE IN MATERIALS AND CONSTRUCTION. SHALL COMPLY WITH ANSI 117.1 AND ADA, SHALL COMPLY WITH NSF/ANSI 61 & 372, BUILT-IN 100 MICRON STRAINER	
				115 VOLT, 6 AMP, 370 WATTS	
P-5	HOSE BIB			WOODFORD 24 INTERIOR HOSE BIBB W/ VACUUM BREAKER AND LOOSE TEE HANDLE, CHROME PLATED, MOUNT 12" A.F.F.	
P-6	SHOWER	-		THE SHOWER IS SPECIFIED ON THE ARCHITECTURAL DRAWINGS AND IS FURNISHED COMPLETE WITH ALL SHOWER SUPPLY HARDWARE AND DRAIN.	
P-6a	SHOWER ADA COMPLIANT	-		THE SHOWER SUPPLY ROUGH-IN AND FINAL UTILITY INSTALLATION IS BY THE PLUMBING CONTRACTOR.	

	PLUMBING GENERAL NOTES										
NO.	DESCRIPTION										
1	ALL OPENINGS FOR PIPING PENETRATIONS ARE GENERALLY PROVIDED BY THE PLUMBING CONTRACTOR. EXCEPTIONS ARE COVERED BY NOTES AND DETAILS. THE LOCATION AND SIZE OF EACH OPENING SHALL BE FURNISHED TO THE GENERAL CONTRACTOR BY THE PLUMBING CONTRACTOR. COORDINATE ALL SLAB PENETRATIONS FOR NEW WORK WITH STRUCTURAL DRAWINGS TO CONFIRM LOCATION IS ACCEPTABLE AND IF SLAB REINFORCEMENT IS REQURED.										
2	PIPE HANGERS AND CONCRETE INSERTS UTILIZED FOR THIS PROJECT SHALL BE PROVIDED BY THE PLUMBING CONTRACTOR. THIS INCLUDES ALL SUPPLEMENTAL STEEL, ETC										
3	ALL LINTELS REQUIRED IN MASONRY AND STUD WALLS FOR PIPING PENETRATIONS SHALL BE PROVIDED BY THE GENERAL CONTRACTOR.										
4	COORDINATE VERTICAL PIPING WITH ARCHITECTURAL PLANS FOR EXACT LOCATION OF RISER.										
5	CUTTING OF OPENINGS ASSOCIATED WITH THE PIPING SYSTEMS NOT SPECIFICALLY INDICATED ON ARCHITECTURAL SHEETS TO BE PROVIDED BY THE GENERAL CONTRACTOR, SHALL BE PROVIDED BY THE PLUMBING CONTRACTOR.										
6	UNLESS APPROVED BY THE ENGINEER, NO HORIZONTAL PIPING IN THE MECHANICAL ROOM SHALL BE INSTALLED WITH A BOTTOM OF PIPE ELEVATION BELOW 8'-0"AFF.										
7	INSTALL ALL HANDICAP TOILET FLUSH HANDLES ON THE WIDE SIDE OF THE TOILET.										
8	ALL MATERIALS INSTALLED WITHIN THE AIR PLENUM SHALL MEET THE NORTH CAROLINA MECHANICAL CODE SECTION 602.										
9	ALL INDIRECT WASTE MUST DISCHARGE THROUGH AN AIR GAP WHICH IS AT LEAST TWICE THE DIAMETER OF THE INDIRECT WASTE PIPE PER THE NORTH CAROLINA PLUMBING CODE.										
10	VENTS SHALL RISE VERTICALLY 6" ABOVE THE FLOOD RIM BEFORE TURNING HORIZONTALLY AND PROVIDED WITH A CLEANOUT ON THE VERTICAL.										
11	PROVIDE A WALL CLEANOUT OR FLOOR CLEANOUT AT THE BASE OF ALL SANITARY AND STORM DRAINAGE VERTICAL RISERS. SANITARY WALL CLEANOUTS SHALL BE INSTALLED AT A LEVEL 18" ABOVE THE FINISHED FLOOR.										
12	THE PLUMBING SUB-CONTRACTOR SHALL COORDINATE THE LOCATION OF THE MECHANICAL EQUIPMENT FLOOR DRAINS WITH THE MECHANICAL SUB-CONTRACTOR AND THE PROPOSED MECHANICAL EQUIPMENT.										
13	THE ISOMETRIC AND PIPING SECTIONS ARE SCHEMATIC IN NATURE AND PROVIDED FOR GENERAL ROUTING CLARIFICATION OF PIPE SIZES. THE ISOMETRIC AND PIPING SECTIONS SHALL NOT BE USED FOR A SPECIFIC ESTIMATE TAKE-OFF OF VALVES, PIPE LENGTHS AND FITTINGS.										

GENERAL ROUTING CLARIFICATION OF PIPE SIZES. THE ISOMETRIC AND PIPING SECTIONS SHALL NOT BE USED FOR A SPECIFIC ESTIMATE TAKE-OFF OF VALVES, PIPE LENGTHS AND FITTINGS.

14 COORDINATE THE INVERT ELEVATIONS WITH THE SITE UTILITY DRAWINGS. THE INVERT INDICATED ON THE PLUMBING DRAWINGS IS THE MINIMUM INVERT TO EXIT THE BUILDING. THE PLUMBING CONTRACTOR SHALL COORDINATE. VERIFY AND PROVIDE THE INVERT ELEVATIONS

ON THE COORDINATION DRAWINGS.

NEVER BLOCK SERVICE PATHWAYS TO AND FROM THIS BUILDING.

16 THE PLUMBING CONTRACTOR IS REQUIRED TO ROD-OUT, CLEAN AND CAMERA ALL OF THE UNDERGROUND SANITARY AND STORM PIPING AFFECTED BY THE NEW SCOPE OF WORK TO THE FIRST MANHOLE. ANY PIPE CRACKS, OR OBSTRUCTIONS UNABLE TO BE REMOVED SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER AND OWNER.

17 THE SCHEDULED PLUMBING FIXTURE COUNTS SHALL NOT BE USED FOR ESTIMATE TAKE-OFFS.

15 THE PLUMBING CONTRACTOR'S WORK SHALL BE COORDINATED IN SUCH A MANNER AS TO

ALL CLEANOUT ACCESS LOCATIONS SHALL BE COORDINATED WITH CASEWORK, WALLS AND EQUIPMENT. ALL FLOOR DRAINS AND CLEANOUTS NEED TO BE ACCESSIBLE. NO FLOOR DRAINS OR CLEANOUTS SHALL BE INSTALLED UNDER EQUIPMENT.

PLUMBING ABBREVIATIONS								
SYMBOL	DESCRIPTION							
AD	AREA DRAIN							
FS	FLOOR SINK							
FD	FLOOR DRAIN							
FCO	FLOOR CLEANOUT							
WC	WATER CLOSET							
LAV	LAVATORY							

	PLUMBING LEGEND
SYMBOL	DESCRIPTION
SAN	SANITARY SEWER
v	SANITARY VENT
CW	COLD WATER
HW=	HOT WATER
HWR	HOT WATER RETURN
D	DRAIN PIPING
	FLOW ARROW
	NEW PIPING
=======	EXISTING PIPING TO REMAIN
<i>ZZZZZZZ</i> _	DEMOLITION - PIPING TO BE REMOVED
0	VALVE IN RISER
	BALL VALVE
	BALANCING VALVE
Image: section of the content of the	CHECK VALVE
	STRAINER
	SHOCK ABSORBER
WCO	WALL CLEANOUT
FCO	FLOOR CLEANOUT
C.O.T.G.	CLEANOUT TO GRADE
VTR	VENT THROUGH THE ROOF
(X)	NEW PIPING TO EXISTING CONNECTION POINT
	EXISTING PIPING DEMOLITION POINT
•	INVERT ELEVATION
8" RD #7	 PIPE SIZE PIPE SYSTEM ABBREVIATION UTILITY RISER IDENTIFICATION RISER DESIGNATION

		APPLIC	APPLICATION		ST		PIPE				FITTINGS			VA	ALVES AND) ACCESSORIES	
PIPING SERVICE	SYMBOL	MAX. PRESS. PSIG	MAX. TEMP °F	TEST PRESS. PSIG	TYPE	INSUL.	DIA.	SCH.	DESCRIPTION	DIA.	RATING OR SCH.	DESCRIPTION	EQUIP.	DIA.	PRESS. RATING CLASS	DESCRIPTION	NOTES
HOT WATER COLD WATER	HW	75 75	140 80	100	н	SEE SPEC.	ALL SIZES	NA	COPPER TYPE L HARD, COLD DRAWN (SJ) ASTM B-88	ALL SIZES	125#	WROUGHT COPPER, SJ 95-5 SOLDER NON-LEAD FLUX ANSI B16.22	BALL	ALL SIZES	125 125	TE BRONZE BODY, FULL PORT, QUARTER-TURN, DOUBLE SEAL SJ BRONZE BODY, SWING	BARE COPPER PIPES MAY NOT BE PLACED ON BARE STEEL SUPPORTS. USE COPPER HANGERS.
SANITARY VENT	SAN V	10 FT	100	10 FT	HP	NONE	2" & LGR.	NA	CAST IRON	2" & LGR.	NA	HUB & SPIGOT BELOW SLAB NO HUB ABOVE SLAB	N/A				HUB & SPIGOT CONNECTIONS: SHALL BE RUBBER GASKETS NO HUB COUPLINGS: SHALL BE "MG" OR "CLAMP-ALL"

CARTERET COMMUNITY COLLEGE

BASIC LAW
ENFORCEME
TRAINING

3705 ARENDELL STREET MOREHEAD CITY, NC 28557

DEGICNED

CLARKNEXSEN

333 FAYETTEVILLE STREET, SUITE 1000 RALEIGH, NORTH CAROLINA 27601 919·828·1876

CLARK NEXSEN LICENSE NUMBER: C-1028
PROFESSIONAL SEAL

SUBMITTAL 03/09/2022

PERMIT DRAWINGS

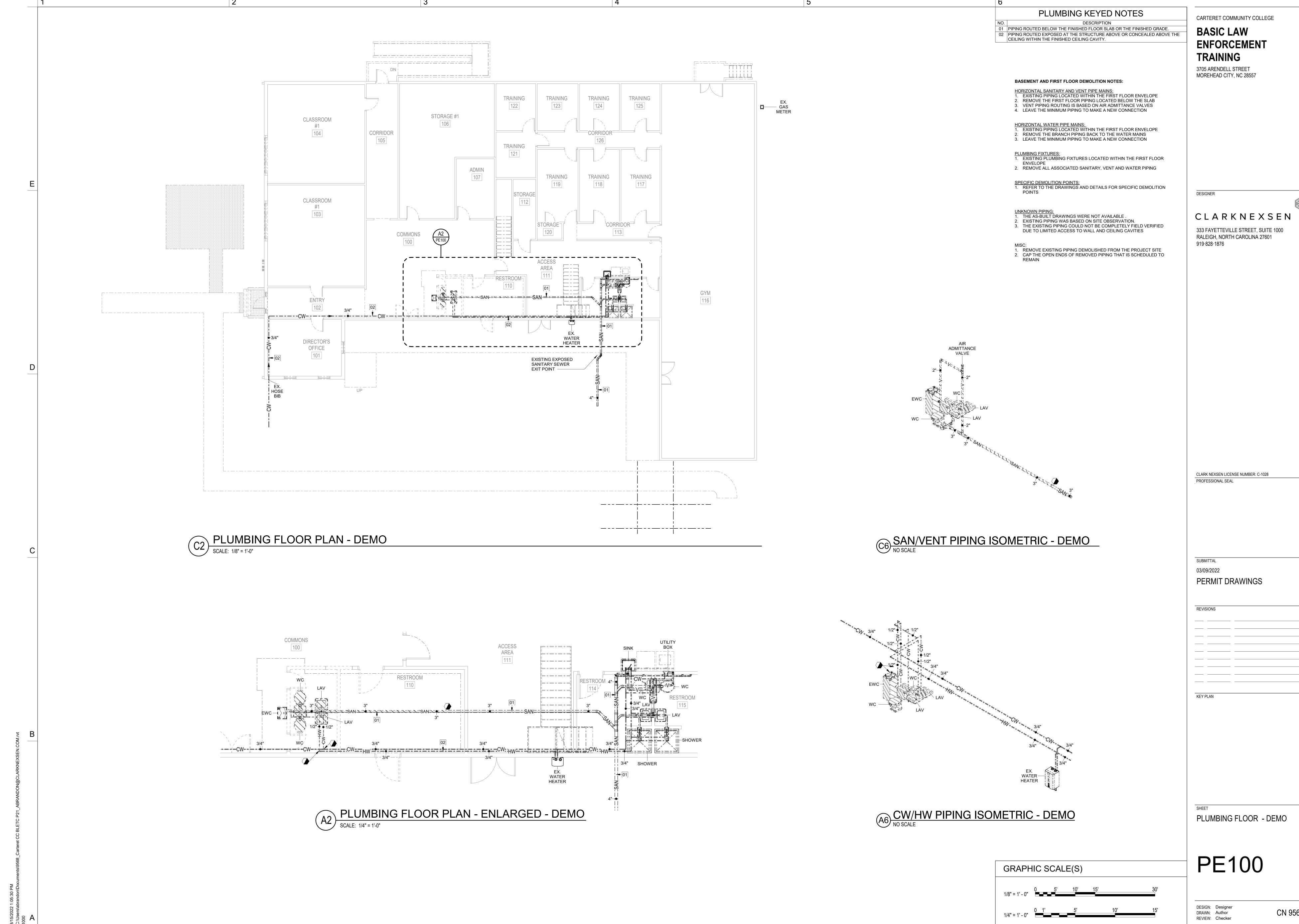
REVISIONS

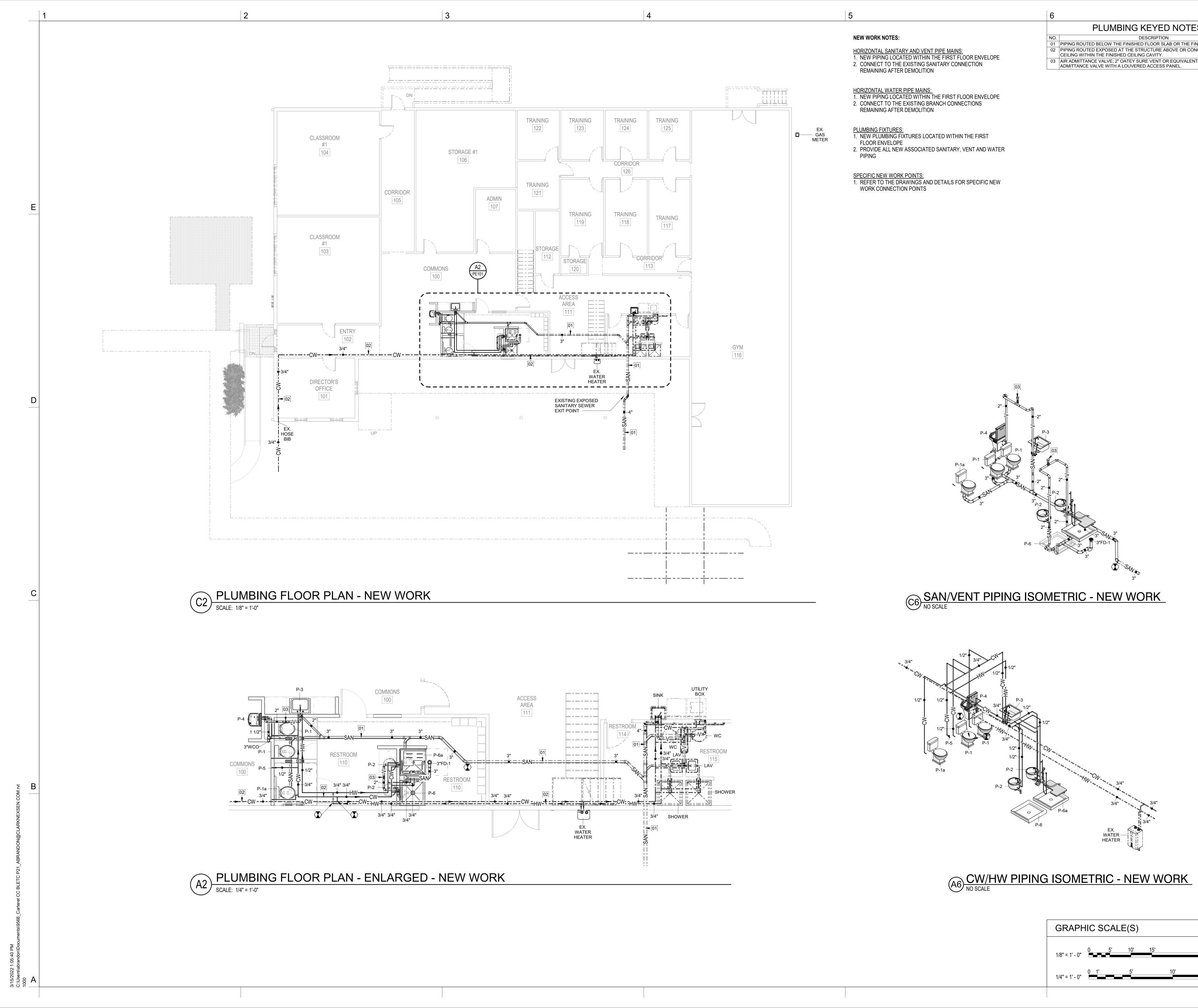
KEY PLAN

PLUMBING LEGEND, SCHEDULES AND DETAILS

PE000

DESIGN: AWB
DRAWN: AWB
REVIEW: CN





PLUMBING KEYED NOTES

DESCRIPTION 01 PIPING ROUTED BELOW THE FINISHED FLOOR SLAB OR THE FINISHED GRADE.

02 PIPING ROUTED EXPOSED AT THE STRUCTURE ABOVE OR CONCEALED ABOVE THE CEILING WITHIN THE FINISHED CEILING CAVITY. 03 AIR ADMITTANCE VALVE; 2" OATEY SURE VENT OR EQUIVALENT. PROVIDE THE AIR ADMITTANCE VALVE WITH A LOUVERED ACCESS PANEL.

BASIC LAW ENFORCEMENT

MOREHEAD CITY, NC 28557

CARTERET COMMUNITY COLLEGE

TRAINING 3705 ARENDELL STREET

CLARKNEXSEN

333 FAYETTEVILLE STREET, SUITE 1000 RALEIGH, NORTH CAROLINA 27601 919.828.1876

CLARK NEXSEN LICENSE NUMBER: C-1028 PROFESSIONAL SEAL

03/09/2022

PERMIT DRAWINGS

PLUMBING FLOOR PLAN - NEW

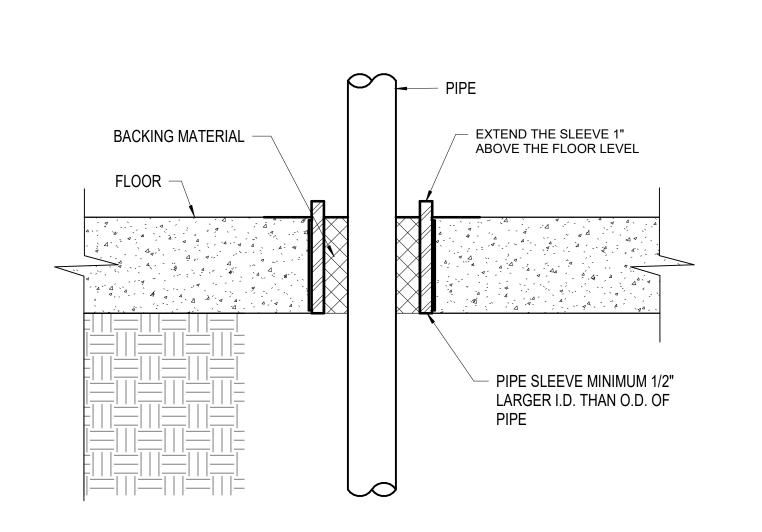
PE101

DESIGN: Designer
DRAWN: Author
REVIEW: Checker

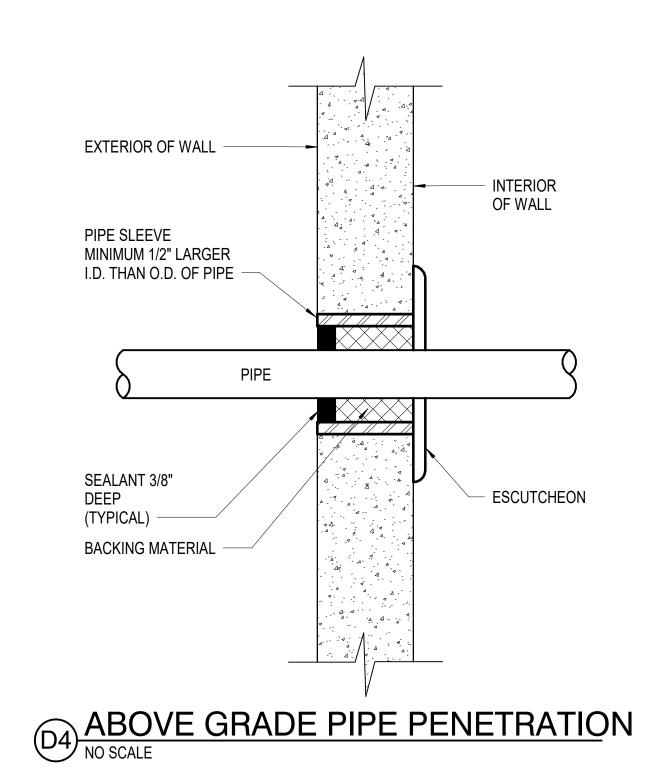
WORK

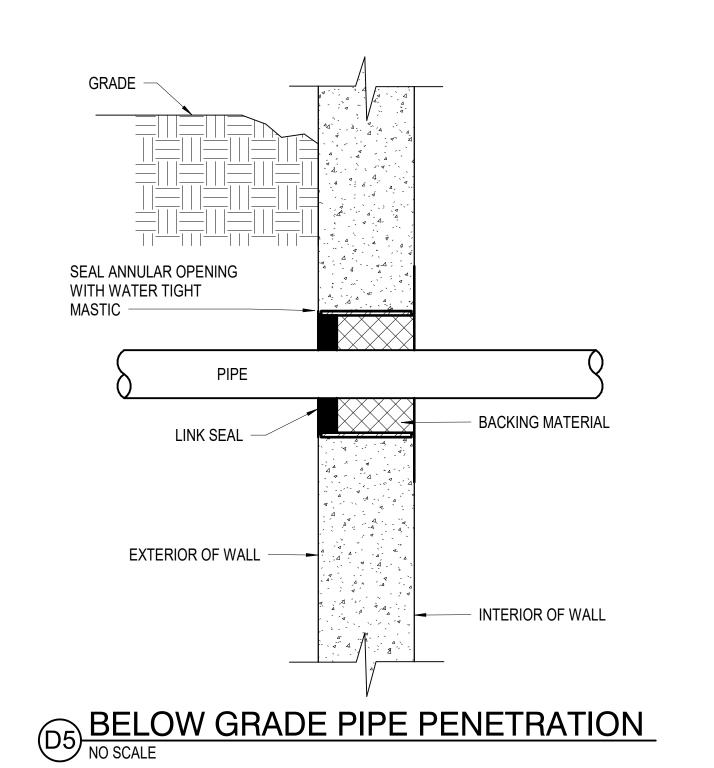
CN 9568

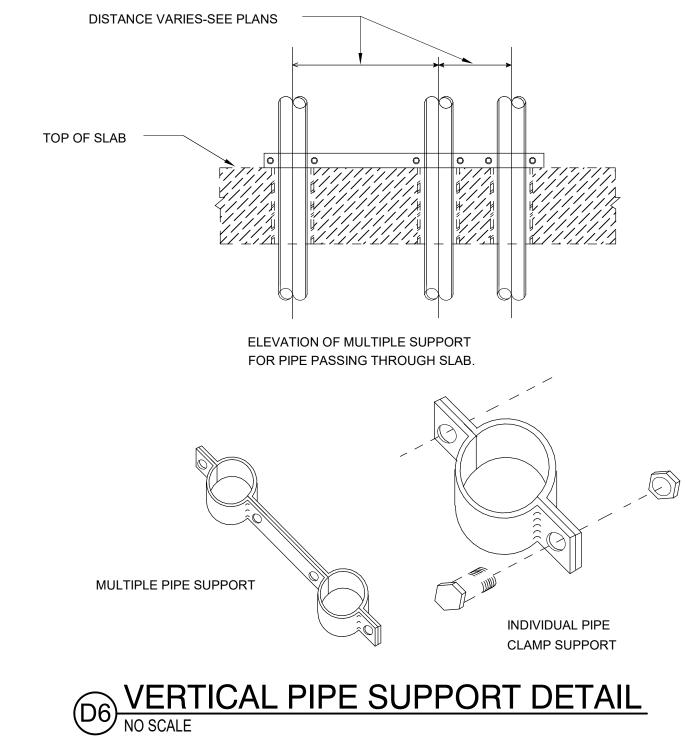
GRAPHIC SCALE(S)



FLOOR PIPE PENETRATION
NO SCALE

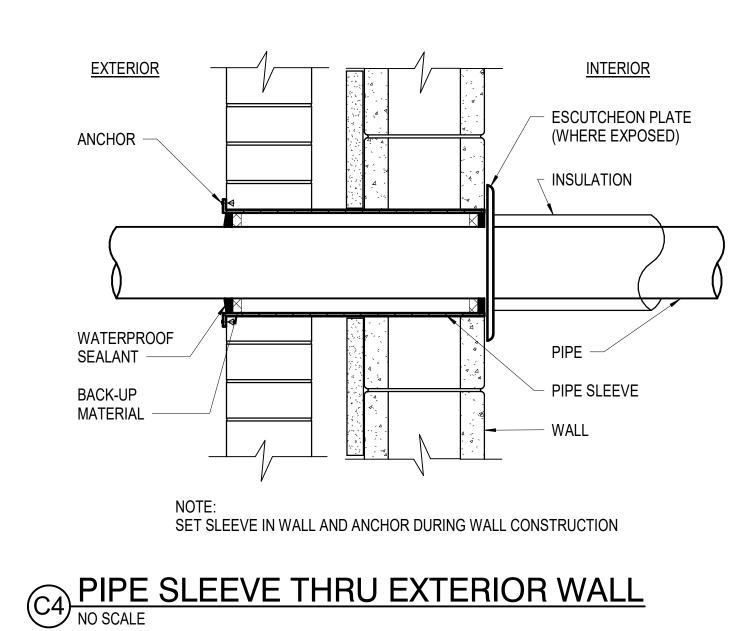






1. REFER TO THE DRAWINGS FOR THE LOCATION OF THE VERTICAL PIPE SUPPORT MOUNTED TO THE BOTTOM OF THE SLAB. 2. PIPE SUPPORTS SHALL BE GALVANIZED STEEL OR COPPER PLATED WHEN IN CONTACT WITH COPPER PIPING.

RATED ASSEMBLIES SCHEDULE CONCRETE BLOCK CONCRETE FLOOR PENETRATING ITEM GYPSUM WALL SINGLE METAL PIPE C-AJ 1226 (3 HR F RATING) W-L 1054 (2 HR F RATING) F-A 1016 (2 HR F RATING) C-AJ 1278 (3 HR F RATING) W-L 1164 (2 HR F RATING) F-A 1105 (2 HR F & T RATING) C-AJ 1597 (3 HR F & 2.75 HR T RATING) W-L 1410 (2 HR F RATING) C-AJ 1610 (2 HR F & T RATING) MULTIPLE METAL PIPES C-AJ 5044 (3 HR F RATING) W-L 1389 (2 HR F RATING) F-A 1127 (2 HR F & T RATING) W-L 1408 (2 HR F RATING) F-A 1066 (3 HR F RATING) INSULATED METAL PIPE C-AJ 5091 (2 HR F RATING, 1 HR T RATING) W-L 5096 (2 HR F RATING) F-A 5015 (2 HR F RATING) W-L 5027 (2 HR F RATING) C-AJ 5096 (2 HR F RATING) F-A 5016 (3 HR F & T RATING) PVC, CPVC PIPE C-AJ 2109 (3 HR F & T RATING) W-L 2078 (2 HR F & T RATING) F-A 2053* (2 HR F RATING) C-AJ 5096 (2 HR F RATING) W-L 2084 (2 HR F RATING) F-A 2054* (3 HR F & T RATING) PP PIPING C-AJ 2285 (2 HR F & T RATING) W-L 2473 (2 HR F, 1 HR T RATING) | F-A 2141 (2 HR F & T RATING) INSULATED PP PIPING W-L 2043 (2 HR F & T RATING)



WHERE INSULATION IS IN CONTACT WITH UNISTRUT OR PIPE CLAMPS,

COMPLIANCE WITH CODES.

OVERHEAD TRAPEZE PIPING SUPPORT
NO SCALE

1. SPACING OF ALL HANGERS SHALL BE IN

2. NUMBER OF PIPES, SIZES AND SERVICES

USE INSULATION PROTECTION

3/8" GRINNELL THREADED ROD, SECURE FROM BLDG. STRUCT. (ONLY FOR OVERHEAD SERVICES)

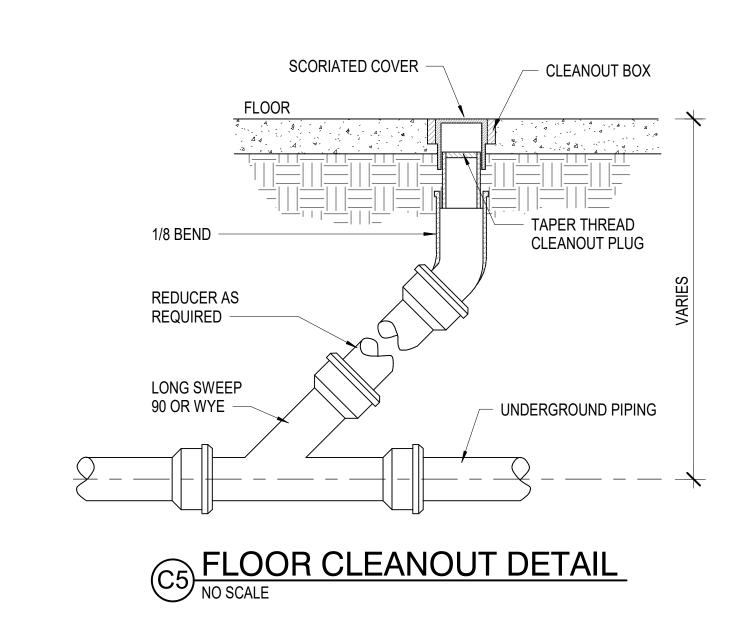
LATERAL BRACE AS

REQUIRED BY LOCAL

CODE OR SEISMIC

P-4000 UNISTRUT

DESIGN -



PIPE SLEEVE

PIPE WITH INSULATION -

- 1" PIPE

INSULATION

FIRE RATED SEALANT

3/8" DEEP (TYPICAL) -

ALUMINUM JACKET

PARTITIONS, SEE

ARCHITECTURAL DRAWINGS

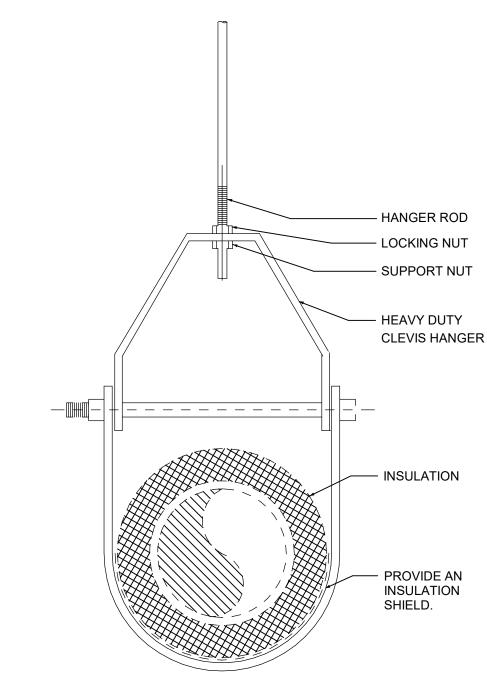
FIRE RATED WALLS AND

6" MINIMUM

NOTES:

1. INSULATION IS 1" FIBERGLASS WITH ASJ COVERING.

2. SLEEVES ARE NOT PROVIDED THROUGH GYPSUM WALLS. 3. GYPSUM WALLS ARE 2 LAYERS OF 5/8" - EACH SIDE OF WALL.



MAXIMU	M PI	IPE SU	PPORT SPACING						
	HORIZONTAL VERTICA								
PIPE SIZE	1"	1 1/4"	1 1/2" AND LARGER	ALL PIPE SIZES					
COPPER PIPING		6 FT	10 FT	10 FT					
PIPE SIZE		Δ	LL PIPE SIZES	ALL PIPE SIZES					
CAST IRON PIPING		FT. (10 FT NGTH O	15 FT						
NOTE:									
FOR TRAPEZE HANGER TAKE SPACING OF SMALLEST PIPE ON TRAPEZE.									
DIDE CUIDDODES CUIVA		\	OTEL OR CORRED DI AT						

PIPE SUPPORTS SHALL BE GALVANIZED STEEL OR COPPER PLATED WHEN IN CONTACT WITH COPPER PIPING.

PIPE SLEEVE THRU FIRE RATED WALL OR FLOOR
NO SCALE

FIRE SEAL PACKING OF MINERAL WOOL OR

APPROVED NON-COMBUSTIBLE MATERIAL

BREAK STANDARD INSULATION 6" FROM

PACKING. JACKET FIRE SEAL INSULATION

WITH ALUMINUM OR OTHER APPROVED NON-

PENETRATION. INSULATE PIPE WITH THE

ESCUTCHEON (TYPICAL) WHERE

PIPE WITHOUT INSULATION

6" MINIMUM SAME INSULATION USED AS FIRE SEAL

COMBUSTIBLE JACKET.

REQUIRED

CLEVIS HANGER DETAIL

NO SCALE

DESIGNER CLARKNEXSEN 333 FAYETTEVILLE STREET, SUITE 1000 RALEIGH, NORTH CAROLINA 27601 919-828-1876 CLARK NEXSEN LICENSE NUMBER: C-1028 PROFESSIONAL SEAL SUBMITTAL 03/09/2022 PERMIT DRAWINGS REVISIONS

CARTERET COMMUNITY COLLEGE

ENFORCEMENT

BASIC LAW

TRAINING

3705 ARENDELL STREET MOREHEAD CITY, NC 28557

PLUMBING DETAILS

KEY PLAN

PE201

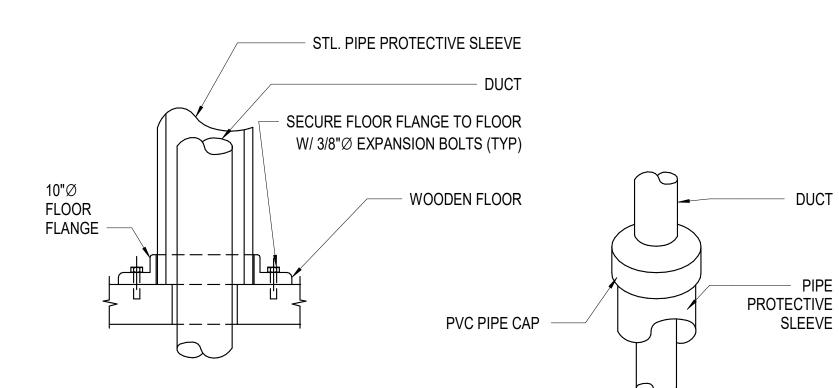
DESIGN: AWB DRAWN: AWB REVIEW: CN

	ENERGY RECOVERY VENTILATOR SCHEDULE											
MARK	EXHAUST SUPPLY AIRFLOW AIRFLOW EXHAUST FAN ESP SUPPLY FAN ESP POWER MARK (CFM) (CFM) (IN WG) (IN WG) (WATTS) MCA MOP VOLTS/PHASE BASIS OF DESIGN NOTES											
ERV-1	222	222	0.8	0.8	85	10	10	120/60	RENEWAIRE EV PREMIUM L	1		
NOTEO						•	•					

1. PROVIDE WITH CEILING MOUNTED MOTION OCCUPANCY SENSOR/CONTROL

ELECTRIC DUCT HEATER SCHEDULE								
//ARK	MINIMUM AIRFLOW (CFM)	CAPACITY (KW)	VOLTS/PHASE	FLA	BASIS OF DESIGN	NOTES		
DH-1	60	2	240/1	8.3	RENEWAIRE RH-D			

	DIFFUSERS, REGISTERS AND GRILLES SCHEDULE										
MARK	MODULE SIZE (IN)	SERVICE	MOUNTING	TYPE	MATERIAL	MAX PRESSURE	MAX NC	DAMPER	BASIS OF DE	ESIGN	NOTES
IVIAIN	WODOLL SIZE (IIV)	SERVICE	MOONTING	IIFE	IVIATENIAL	DROP (IN. WG)	WAX NO	TYPE	MANUFACTURER	MODEL	NOTES
А	12 x 12	SUPPLY	LAY-IN	3 CONE	ALUMINUM	0.10	25	OPPOSED BLADE	TITUS	TDC-AA	
Н	12 x 12	RETURN/ EXHAUST	LAY-IN	PERFORATED FACE	ALUMINUM	0.10	25	OPPOSED BLADE	TITUS	PAR-AA	



FLOOR PENETRATION DUCT DETAIL

DIVISION 23 - 0000

2.3 SINGLE-WALL ROUND DUCTS AND FITTINGS A. GENERAL FABRICATION REQUIREMENTS: COMPLY WITH SMACNA'S "HVAC DUCT CONSTRUCTION STANDARDS - METAL AND FLEXIBLE," CH. 3, "ROUND, OVAL, AND FLEXIBLE DUCT," BASED ON INDICATED STATIC-PRESSURE CLASS UNLESS OTHERWISE

INDICATED. 1. CONSTRUCT DUCTS OF GALVANIZED SHEET STEEL UNLESS OTHERWISE INDICATED B. TRANSVERSE JOINTS: SELECT JOINT TYPES AND FABRICATE IN ACCORDANCE WITH SMACNA'S "HVAC DUCT CONSTRUCTION STANDARDS - METAL AND FLEXIBLE," FIGURE 3-1, "ROUND DUCT TRANSVERSE JOINTS," FOR STATIC-PRESSURE CLASS, APPLICABLE SEALING REQUIREMENTS. MATERIALS INVOLVED. DUCT-SUPPORT INTERVALS. AND OTHER PROVISIONS IN SMACNA'S "HVAC DUCT CONSTRUCTION STANDARDS - METAL AND

D. TEES AND LATERALS: SELECT TYPES AND FABRICATE IN ACCORDANCE WITH

SUPPORT INTERVALS, AND OTHER PROVISIONS IN SMACNA'S "HVAC DUCT

ROLLER MARKS, STAINS, DISCOLORATIONS, AND OTHER IMPERFECTIONS.

2. FINISHES FOR SURFACES EXPOSED TO VIEW: MILL PHOSPHATIZED.

A. GENERAL SEALANT AND GASKET REQUIREMENTS: SURFACE-BURNING

OR LESS; 3/8-INCH- MINIMUM DIAMETER FOR LENGTHS LONGER THAN 36 INCHES.

GASKETS ARE TO BE A MAXIMUM FLAME-SPREAD INDEX OF 25 AND A MAXIMUM SMOKE-

7. MAXIMUM STATIC-PRESSURE CLASS: 10-INCH WG, POSITIVE AND NEGATIVE.

MAXIMUM STATIC-PRESSURE CLASS: 10-INCH WG, POSITIVE OR NEGATIVE.

1. GENERAL: SINGLE-COMPONENT, ACID-CURING, SILICONE, ELASTOMERIC.

D. FLANGE GASKETS: BUTYL RUBBER, NEOPRENE, OR EPDM POLYMER WITH

AND IS TO BE RATED FOR 10-INCH WG STATIC-PRESSURE CLASS. POSITIVE OR

B. STRAP AND ROD SIZES: COMPLY WITH SMACNA'S "HVAC DUCT CONSTRUCTION

STANDARDS - METAL AND FLEXIBLE," TABLE 5-1, "RECTANGULAR DUCT HANGERS

MINIMUM SIZE." AND TABLE 5-2. "MINIMUM HANGER SIZES FOR ROUND DUCT."

A. HANGER RODS FOR NONCORROSIVE ENVIRONMENTS: GALVANIZED-STEEL RODS AND

C. STEEL CABLES FOR GALVANIZED-STEEL DUCTS: GALVANIZED STEEL COMPLYING WITH

D. STEEL CABLES FOR STAINLESS STEEL DUCTS: STAINLESS STEEL COMPLYING WITH

E. STEEL CABLE END CONNECTIONS: GALVANIZED-STEEL ASSEMBLIES WITH BRACKETS,

F. DUCT ATTACHMENTS: SHEET METAL SCREWS, BLIND RIVETS, OR SELF-TAPPING METAL

2. SUPPORTS FOR STAINLESS STEEL DUCTS: STAINLESS STEEL SHAPES AND PLATES.

SWIVEL, AND BOLTS DESIGNED FOR DUCT HANGER SERVICE; WITH AN AUTOMATIC-

1. SUPPORTS FOR GALVANIZED-STEEL DUCTS: GALVANIZED-STEEL SHAPES AND

3. SUPPORTS FOR ALUMINUM DUCTS: ALUMINUM OR GALVANIZED STEEL COATED

A. HVAC CONTRACTOR SHALL NEGOTIATE A CONTRACT WITH A QUALIFIED AND

CERTIFIED MEMBER OF NEBB OR AABC TO COMPLETELY BALANCE AIR SYSTEMS AND

1. ADJUST SUPPLY AIR OUTLET QUANTITIES TO PLUS OR MINUS 5 PERCENT OF

2. ADJUST EXHAUST AIR INLETS TO PLUS OR MINUS 10 PERCENT OF INDICATED

ARCHITECT/ENGINEER AND MECHANICAL CONTRACTOR. BALANCING CONTRACTOR SHALL ALSO RECOMMEND POSSIBLE ACTIONS TO REMEDY THE DEFICIENCIES. A BALANCING REPORT SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW AND

B. THE BALANCING CONTRACTOR SHALL REPORT ANY DEFICIENCIES TO

9. SUBSTRATE: COMPATIBLE WITH GALVANIZED SHEET STEEL (BOTH PVC COATED

12. SUBSTRATE: COMPATIBLE WITH GALVANIZED SHEET STEEL (BOTH PVC COATED

DEVELOPED INDEX OF 50 WHEN TESTED IN ACCORDANCE WITH UL 723; CERTIFIED BY AN

B. GALVANIZED SHEET STEEL: COMPLY WITH ASTM A653/A653M.

A. GENERAL MATERIAL REQUIREMENTS: COMPLY WITH SMACNA'S "HVAC DUCT

CONSTRUCTION STANDARDS - METAL AND FLEXIBLE" FOR ACCEPTABLE MATERIALS,

MATERIAL THICKNESSES, AND DUCT CONSTRUCTION METHODS UNLESS OTHERWISE

INDICATED. SHEET METAL MATERIALS ARE TO BE FREE OF PITTING, SEAM MARKS,

CONSTRUCTION STANDARDS - METAL AND FLEXIBLE."

1. GALVANIZED COATING DESIGNATION: G60.

CHARACTERISTICS FOR SEALANTS AND

B. WATER-BASED JOINT AND SEAM SEALANT:

2. SOLIDS CONTENT: MINIMUM 65 PERCENT.

1. APPLICATION METHOD: BRUSH ON.

3. SHORE A HARDNESS: MINIMUM 20.

6. VOC: MAXIMUM 75 G/L (LESS WATER).

AND BARE), STAINLESS STEEL, OR ALUMINUM SHEETS.

AND BARE), STAINLESS STEEL, OR ALUMINUM SHEETS.

C. FLANGED JOINT SEALANT: COMPLY WITH ASTM C920.

5. MOLD AND MILDEW RESISTANT

8. SERVICE: INDOOR OR OUTDOOR.

11. SERVICE: INDOOR OR OUTDOOR.

4. WATER RESISTANT

2. TYPE: S.

3. GRADE: NS.

4. CLASS: 25.

POLYISOBUTYLENE PLASTICIZER

LOCKING AND CLAMPING DEVICE.

G. TRAPEZE AND RISER SUPPORTS:

SECTION 230593 - TESTING AND BALANCING

INDICATED SUPPLY AIR QUANTITIES

RETURN AIR AND EXHAUST AIR QUANTITIES.

HYDRONIC PIPING AS REQUIRED.

WITH ZINC CHROMATE.

SCREWS; COMPATIBLE WITH DUCT MATERIALS.

E. ROUND DUCT JOINT O-RING SEALS:

5. USE: O.

NEGATIVE.

ASTM A603.

ASTM A492.

PLATES.

PART 1 - GENERAL

1.1 SUMMARY

APPROVAL.

2.6 HANGERS AND SUPPORTS

2.4 SHEET METAL MATERIALS

NRTL.

"90 DEGREE TEES AND LATERALS," AND FIGURE 3-6, "CONICAL TEES," FOR STATIC-

SMACNA'S "HVAC DUCT CONSTRUCTION STANDARDS - METAL AND FLEXIBLE," FIGURE 3-5,

PRESSURE CLASS, APPLICABLE SEALING REQUIREMENTS, MATERIALS INVOLVED, DUCT-

DEVICES AND INSTALLATION. FLEXIBLE." C. LONGITUDINAL SEAMS: SELECT SEAM TYPES AND FABRICATE IN ACCORDANCE WITH 2. SECTION 230593 "TESTING, ADJUSTING, AND BALANCING FOR HVAC" FOR TESTING, ADJUSTING, AND BALANCING REQUIREMENTS FOR METAL DUCTS. SMACNA'S "HVAC DUCT CONSTRUCTION STANDARDS - METAL AND FLEXIBLE," FIGURE 3-2, 3. SECTION 233300 "AIR DUCT ACCESSORIES" FOR DAMPERS, SOUND-CONTROL DEVICES, DUCT-"ROUND DUCT LONGITUDINAL SEAMS," FOR STATIC-PRESSURE CLASS, APPLICABLE MOUNTING ACCESS DOORS AND PANELS, TURNING VANES, AND FLEXIBLE DUCTS. SEALING REQUIREMENTS, MATERIALS INVOLVED, DUCT-SUPPORT INTERVALS, AND OTHER PROVISIONS IN SMACNA'S "HVAC DUCT CONSTRUCTION STANDARDS - METAL AND

2 ACTION SUBMITTALS A. PRODUCT DATA: FOR EACH TYPE OF THE FOLLOWING PRODUCTS: 1. LINERS AND ADHESIVES.

1. SINGLE-WALL RECTANGULAR DUCTS AND FITTINGS.

2. SINGLE-WALL ROUND DUCTS AND FITTINGS

SEALANTS AND GASKETS. 1.3 INFORMATIONAL SUBMITTALS

DIVISION 23 - 0000

A. SECTION INCLUDES:

PART 1 - GENERAL

1.1 SUMMARY

SECTION 233113 - METAL DUCTS

3. SHEET METAL MATERIALS

4. SEALANTS AND GASKETS.

5. HANGERS AND SUPPORTS

B. RELATED REQUIREMENTS:

A. COORDINATION DRAWINGS: A SINGLE SET OF PLANS OR BIM MODEL, DRAWN TO SCALE, SHOWING THE ITEMS DESCRIBED IN THIS SECTION, AND COORDINATED WITH ALL BUILDING TRADES.

1. SECTION 230548 "VIBRATION AND SEISMIC CONTROLS FOR HVAC" FOR SEISMIC RESTRAINT

B. WELDING CERTIFICATES

C. FIELD QUALITY-CONTROL REPORTS. 1.4 QUALITY ASSURANCE

A. WELDING QUALIFICATIONS: QUALIFY PROCEDURES AND PERSONNEL IN ACCORDANCE WITH THE FOLLOWING:

1. AWS D9.1/D9.1M, "SHEET METAL WELDING CODE," FOR DUCT JOINT AND SEAM WELDING.

PART 2 - PRODUCTS

2.1 PERFORMANCE REQUIREMENTS A. AIRSTREAM SURFACES: SURFACES IN CONTACT WITH AIRSTREAM COMPLY WITH

REQUIREMENTS IN ASHRAE 62.1. B. ASHRAE COMPLIANCE: APPLICABLE REQUIREMENTS IN ASHRAE 62.1, SECTION 5 - "SYSTEMS AND | 2.5 SEALANT AND GASKETS EQUIPMENT," AND SECTION 7 - "CONSTRUCTION AND SYSTEM STARTUP." C. ASHRAE/IES COMPLIANCE: APPLICABLE REQUIREMENTS IN ASHRAE/IES 90.1, SECTION 6.4.4 -

"HVAC SYSTEM CONSTRUCTION AND INSULATION." D. DUCT DIMENSIONS: UNLESS OTHERWISE INDICATED, ALL DUCT DIMENSIONS INDICATED ON

DRAWINGS ARE INSIDE CLEAR DIMENSIONS AND DO NOT INCLUDE INSULATION OR DUCT WALL THICKNESS.

2.2 SINGLE-WALL RECTANGULAR DUCTS AND FITTINGS

A. GENERAL FABRICATION REQUIREMENTS: COMPLY WITH SMACNA'S "HVAC DUCT CONSTRUCTION STANDARDS - METAL AND FLEXIBLE" BASED ON INDICATED STATIC-PRESSURE CLASS UNLESS OTHERWISE INDICATED. 1. CONSTRUCT DUCTS OF GALVANIZED SHEET STEEL UNLESS OTHERWISE INDICATED.

B. TRANSVERSE JOINTS: FABRICATE JOINTS IN ACCORDANCE WITH SMACNA'S "HVAC DUCT CONSTRUCTION STANDARDS - METAL AND FLEXIBLE," FIGURE 2-1, "RECTANGULAR DUCT/TRANSVERSE JOINTS," FOR STATIC-PRESSURE CLASS, APPLICABLE SEALING REQUIREMENTS, MATERIALS INVOLVED, DUCT-SUPPORT INTERVALS, AND OTHER PROVISIONS IN

SMACNA'S "HVAC DUCT CONSTRUCTION STANDARDS - METAL AND FLEXIBLE." 1. FOR DUCTS WITH LONGEST SIDE LESS THAN 36 INCHES, SELECT JOINT TYPES IN ACCORDANCE WITH FIGURE 2-1.

2. FOR DUCTS WITH LONGEST SIDE 36 INCHES OR GREATER, USE FLANGE JOINT CONNECTOR TYPE T-22, T-24, T-24A, T-25A, OR T-25B. FACTORY-FABRICATED FLANGED DUCT CONNECTION SYSTEM MAY BE USED IF SUBMITTED AND APPROVED BY ENGINEER OF RECORD. C. LONGITUDINAL SEAMS: SELECT SEAM TYPES AND FABRICATE IN ACCORDANCE WITH SMACNA'S

"HVAC DUCT CONSTRUCTION STANDARDS - METAL AND FLEXIBLE," FIGURE 2-2, "RECTANGULAR DUCT/LONGITUDINAL SEAMS." FOR STATIC-PRESSURE CLASS, APPLICABLE SEALING REQUIREMENTS, MATERIALS INVOLVED, DUCT-SUPPORT INTERVALS, AND OTHER PROVISIONS IN SMACNA'S "HVAC DUCT CONSTRUCTION STANDARDS - METAL AND FLEXIBLE." ALL LONGITUDINAL SEAMS ARE TO BE PITTSBURGH LOCK SEAMS UNLESS OTHERWISE SPECIFIED FOR SPECIFIC APPLICATION.

D. ELBOWS, TRANSITIONS, OFFSETS, BRANCH CONNECTIONS, AND OTHER DUCT CONSTRUCTION: SELECT TYPES AND FABRICATE IN ACCORDANCE WITH SMACNA'S "HVAC DUCT CONSTRUCTION STANDARDS - METAL AND FLEXIBLE," CH. 4, "FITTINGS AND OTHER CONSTRUCTION," FOR STATIC-PRESSURE CLASS, APPLICABLE SEALING REQUIREMENTS, MATERIALS INVOLVED, DUCT-SUPPORT INTERVALS, AND OTHER PROVISIONS IN SMACNA'S "HVAC DUCT CONSTRUCTION STANDARDS -METAL AND FLEXIBLE."

GENERAL NOTES

PROVIDE A COMPLETE HVAC SYSTEM TO INCLUDE ALL LABOR, MATERIALS, TOOLS, AND EQUIPMENT FOR A COMPLETE AND FUNCTIONAL SYSTEM INCLUDING ALL NECESSARY APPURTENANCES CUSTOMARILY INCLUDED IF NOT SPECIFICALLY CALLED OUT.

CONFORM WITH ALL APPLICABLE LAWS, CODES, AND REGULATIONS OF MUNICIPAL, STATE AND FEDERAL AUTHORITIES.

CONFORM TO APPLICABLE ASHRAE, NFPA, AND SMACNA STANDARDS AND OTHER REGULATORY BODIES HAVING JURISDICTION OVER THE CLASS OF

MATERIALS AND EQUIPMENT SHALL HAVE STAMPS OR SEALS OF ARI, ASME, UL, AND ASTM.

MAKE TESTS FOR ACCEPTANCE AND APPROVAL AS REQUIRED BY CODE AND THE REQUIREMENTS OF APPLICABLE REGULATORY AGENCIES. REQUIRED

TESTS SHALL BE PERFORMED IN THE PRESENCE OF THE CONTRACTING OFFICER UNLESS OTHERWISE WAIVED IN WRITING. OBTAIN AND PAY FOR ALL PERMITS, LICENSES, DOCUMENTS, AND SERVICES

COORDINATE WORK WITH THE OTHER TRADES IN ORDER TO RESOLVE ANY CONFLICT THAT MIGHT ARISE DUE TO THE LOCATION OF EQUIPMENT OR THE USE OF SPACE

EQUIPMENT OF HIGHER ELECTRICAL CHARACTERISTICS MAY BE SUBSTITUTED PROVIDED SUCH PROPOSED EQUIPMENT IS APPROVED IN WRITING AND CONNECTING ELECTRICAL SERVICE, CIRCUIT BREAKERS AND CONDUIT SIZES ARE APPROPRIATELY MODIFIED AT NO COST TO THE OWNER.

RUN ALL HORIZONTAL PIPING AND DUCTWORK ABOVE CEILING UNLESS OTHERWISE NOTED.

INSTALLATION OF PIPING, DUCTWORK, AND EQUIPMENT, PATCH AND REPAIR TO MATCH THE EXISTING ADJACENT CONSTRUCTION.

CUT OPENINGS, AS REQUIRED, IN THE EXISTING CONSTRUCTION FOR THE

12. MAKE DUCT PENETRATIONS OF ALL WALLS WITH SHEET METAL DUCTS. FLEXIBLE DUCT PENETRATIONS OF WALLS ARE NOT ACCEPTABLE.

C. TIE RODS: GALVANIZED STEEL, 1/4-INCH- MINIMUM DIAMETER FOR LENGTHS 36 INCHES REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR EXACT LOCATION OF DIFFUSERS, REGISTERS, AND GRILLES. FINISH AND COLOR TO BE SELECTED BY GOVERNMENT [FROM MANUFACTURER'S STANDARD PALETTE] [CUSTOM].

DUCTWORK SIZES ARE INSIDE CLEAR DIMENSIONS.

RELATED TO INSTALLATION OF THE WORK.

15. ALL ELBOWS IN DUCTWORK SHALL BE RADIUS ELBOWS UNLESS OTHERWISE NOTED. WHERE SQUARE ELBOWS ARE SHOWN, INSTALL DOUBLE WALL TURNING VANES. RADIUS ELBOWS SHALL HAVE A MINIMUM CENTERLINE RADIUS OF CURVATURE OF 1.5 TIMES DUCT WIDTH OR DIAMETER

INSTALL MECHANICAL EQUIPMENT TO FACILITATE SERVICING, MAINTENANCE, AND REPAIR OR REPLACEMENT OF EQUIPMENT COMPONENTS. CONNECT EQUIPMENT FOR EASE OF DISCONNECTING, WITH A MINIMUM OF INTERFERENCE WITH OTHER INSTALLATIONS. PIPING SHALL NOT INTERFERE WITH FILTER PULL. MAINTAIN EQUIPMENT MANUFACTURER'S RECOMMENDED MINIMUM SERVICE CLEARANCE.

LOCATE AND SIZE 5 1/2" THICK CONCRETE HOUSEKEEPING PADS AND CURBS IN ACCORDANCE WITH ACTUAL EQUIPMENT PURCHASED. EXTEND PAD BEYOND EQUIPMENT FOR 6" IN ALL DIRECTIONS.

ALL EQUIPMENT REMOVED FROM THE BUILDING, DURING DEMOLITION, SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE REMOVED FROM THE SITE UNLESS OTHERWISE NOTED.

32. EXISTING DUCT, PIPE AND EQUIPMENT SIZES NOTED ARE FOR THE CONVENIENCE OF THE CONTRACTOR ONLY AND ARE NOT WARRANTED TO BE CORRECT. FIELD VERIFY ALL EXISTING DUCT, PIPE AND EQUIPMENT SIZES AND THEIR RESPECTIVE LOCATIONS BEFORE PROCEEDING WITH ANY ASSOCIATED

PRIOR TO SUBMITTING A PROPOSAL THE CONTRACTOR IS STRONGLY ENCOURAGED TO VISIT THE SITE AND THOROUGHLY INSPECT ALL EXISTING CONDITIONS TO INSURE THAT THE WORK REPRESENTED ON THE DRAWINGS 1. SEAL IS TO PROVIDE MAXIMUM LEAKAGE CLASS OF 3 CFM/100 SQ. FT. AT 1-INCH WG CAN BE INSTALLED AS INDICATED.

REFER TO ELECTRICAL DRAWINGS FOR VOLTAGE AND PHASE REQUIREMENTS FOR ALL EQUIPMENT REQUIRING AN ELECTRICAL CONNECTION.

KEY NOTES

EXISTING FLUSH-MOUNT SUPPLY REGISTER TO BE DEMOLISHED.

EXISTING EXHAUST GRILLE AND FAN TO BE DEMOLISHED. NEW FLUSH-MOUNT SUPPLY REGISTER. RECONNECT TO EXISTING

DUCTWORK. ERV-1, EDH-1, AND ASSOCIATED DUCTWORK IN ATTIC ABOVE

REVERSIBLE DAMPER, ALUMINUM WALL VENT. PROVIDE WITH #8 SCREEN. TEST AND BALANCE SPACE TO MAINTAIN -50 CFM TOTAL AIR IN TLT/SHOWER RM BY ADJUSTING OA FAN ECM MOTOR AS REQUIRED. DO NOT REDUCE FAN SPEED TO DELIVERR AIR LESS THAN 70 CMF (MAINTAIN GREATER THAN EDH-1 MINIMUM REQUIRED AIR VOLUME).

919-828-1876

CLARKNEXSEN

333 FAYETTEVILLE STREET, SUITE 1000

RALEIGH, NORTH CAROLINA 27601

CARTERET COMMUNITY COLLEGE

ENFORCEMENT

BASIC LAW

TRAINING

DESIGNER

3705 ARENDELL STREET

MOREHEAD CITY, NC 28557

SBC# - 369/000-01-2021A-Arc_21-003

CLARK NEXSEN LICENSE NUMBER: C-1028 PROFESSIONAL SEAL

03/09/2022

PERMIT DRAWINGS

REVISIONS

KEY PLAN

FIRST FLOOR PLAN

MH101

OVERALL FLOORPLAN

ENLARGED DEMOLITION PLAN

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

ENLARGED FLOORPLAN

GRAPHIC SCALE(S)

DESIGN: Designer DRAWN: Author REVIEW: Checker

RECEPTACLE AS NOTED ABOVE BUT, MOUNT 48" AFF OR 6"

INDICATED.

CONNECTION.

JUNCTION BOX

EQUIPMENT TAG.

ABOVE BACKSPLASH OR COUNTER TOP WHERE COUNTER IS

EQUIPMENT CONNECTIONS

EQUIPMENT: DISCONNECT SWITCHES, STARTERS, VFD'S, AND

OTHER REQUIRED COMPONENTS FOR THE OPERATION OF THE

EQUIPMENT CONNECTION. FOR MECHANICAL / PLUMBING

EQUIPMENT SHALL BE FURNISHED BY THE MECHANICAL /

PLUMBING CONTRACTOR. PROVIDE CONDUIT AND WIRING

FROM THE POWER SOURCE TO THE DISCONNECT SWITCH,

FROM THE STARTER / VFD TO THE FINAL EQUIPMENT

DISCONNECT SWITCH PROVIDED INTEGRAL WITH EQUIPMENT.

FROM THE DISCONNECT SWITCH TO THE STARTER / VFD, AND

DISCONNECT SWITCH. PROVIDE 600 V IN NEMA 1 ENCLOSURE UON. 3P = NO. OF POLES, 60 = SWITCH RATING, 40 = FUSE RATING (NF INDICATES NON-FUSIBLE) (SEE LEGEND NOTE 3)

	DESCRIPTION
	DISTRIBUTION
P/	ANELBOARD - 240/120V
	WIRE, CONDUIT AND RACEWAY
LA C(Q(RANCH CIRCUIT OR FEEDER WIRING IN CONDUIT. NO ABEL INDICATES 2 #12 CONDUCTORS & 1 #12 GND IN 1/2" ONDUIT. CONDUIT LARGER THAN 1/2", CONDUCTOR JANTITY MORE THAN 3, OR WIRE LARGER THAN #12 SHALL E AS INDICATED. (SEE LEGEND NOTE 1)
	OMERUNS TO PANEL. PANEL AND CIRCUIT ESIGNATIONS AS INDICATED.
FI	NDICATES A CONDUIT RUN CONCEALED IN CEILING, WALL, LOOR, OR ABOVE SUSPENDED CEILING UON. (SEE LEGEND OTES 1 & 4)
	GENERAL
	OTE REFERENCE - TYPICALLY LOCATED ON SAME SHEET HERE SYMBOL IS USED, UON.
RO	OOM NUMBER.

ELECTRICAL ABBREVIATIONS	

Α	AMPERE	MLO	MAIN LUG ONLY
AF	AMPERE FRAME	MOCP	MAXIMUM OVERCURRENT PROTECTION
AFF	ABOVE FINISHED FLOOR	MT	MOUNT
AFG	ABOVE FINISHED GRADE	MTD	MOUNTED
AT	AMPERE TRIP	MTG HT	MOUNTING HEIGHT
ATC	AUTOMATIC TEMPERATURE CONTROL	NEC	NATIONAL ELECTRICAL CODE
AWG	AMERICAN WIRE GAUGE	NESC	NATIONAL ELECTRICAL SAFETY CODE
BLDG	BUILDING	NEU	NEUTRAL
BRKR	BREAKER	NF	NON FUSIBLE
C	CONDUIT	NIC	NOT IN CONTRACT
СВ	CIRCUIT BREAKER	NL	NIGHT LIGHT
CCT	CORRELATED COLOR TEMPERATURE	NTS	NOT TO SCALE
CKT	CIRCUIT	OS	OCCUPANCY SENSOR
CRI	COLOR RENDERING INDEX	PH	PHASE
DISC SW	DISCONNECT SWITCH	PNL	PANEL
DWG	DRAWING	PVC	RIGID POLYVINYL CHLORIDE CONDUIT
EA	EACH	QTY	QUANTITY
EF	EXHAUST FAN	RCPT,	RECEPTACLE
ELEC	ELECTRICAL	RECEPT	
EMT	ELECTRICAL METALLIC TUBING	REQ'D	REQUIRED
EQUIP	EQUIPMENT	RM	ROOM
EWC	ELECTRIC WATER COOLER	RMC	RIGID METAL CONDUIT
EXST	EXISTING	S.E.	SERVICE ENTRANCE
FLA	FULL LOAD AMPS	S/N	SOLID NEUTRAL
FMC	FLEXIBLE METAL CONDUIT	SBB	SECONDARY BONDING BUSBAR
FT	FEET		(FORMERLY TELECOMMUNICATIONS
GFI	GROUND FAULT INTERRUPTER	00	GROUND BUSBAR - TGB)
GND	GROUND	SC	SPLIT CIRCUIT (SEE LEGEND NOTE 2)
GRS	GALVANIZED RIGID METAL CONDUIT	SF	SUPPLY FAN
IMC	INTERMEDIATE METAL CONDUIT	SPD	SURGE PROTECTIVE DEVICE
KAIC	THOUSAND AMP CAPACITY, RMS	SW	SWITCH
	SYMMETRICAL	TYP	TYPICAL
KVA	KILOVOLT AMPERE	UON	UNLESS OTHERWISE NOTED
LED	LIGHT EMITTING DIODE	V	VOLTAGE OR VOLTS
LTG	LIGHTING	VAC	VOLTS ALTERNATING CURRENT
LTS	LUMINAIRE	WD	WIRE
MC	METAL-CLAD CABLE	WP	WEATHERPROOF
MCA	MINIMUM CIRCUIT AMPACITY	XFMR	TRANSFORMER

GENERAL	. NOTE
---------	--------

- A. WIRING IN CONDUIT, MINIMUM SIZE ONE-HALF (1/2) INCH WITH LARGER SIZES AS INDICATED OR REQUIRED BY NEC.
- B. WIRE AND CABLE MUST BE #12 AWG MINIMUM. C. OPENINGS CREATED IN A FIRE OR SMOKE RATED WALL OR FLOOR BY PROVISION OF ANY ELECTRICAL DEVICE OR CONDUIT, MUST BE SEALED AFTER THE WORK IS COMPLETED WITH A UL APPROVED FIRE/SMOKE
- SEALANT TO RE-ESTABLISH THE PREVIOUS RATING OF THE WALL OR FLOOR. D. COORDINATE EXACT LOCATION OF CEILING MOUNTED LIGHTING FIXTURES WITH ARCHITECTURAL REFLECTED CEILING PLANS.
- E. DRAWINGS WERE CREATED FROM NON-INVASIVE VISUAL INSPECTIONS AND CONTRACTOR TO VISIT THE SITE AND BECOME FAMILIAR WITH THE SCOPE OF THESE DRAWINGS. CONTRACTOR TO VERIFY FIELD CONDITIONS MATCH THOSE OF THE DRAWINGS PRIOR TO ACCOMPLISHING WORK. IF FIELD CONDITIONS DO NOT MATCH WHAT IS SHOWN ON DRAWINGS, NOTIFY ENGINEER AS SOON AS POSSIBLE.

LEGEND NOTES

- SIZE AND COUNT AS INDICATED ON THE CIRCUIT HOMERUN UNLESS
- ACCORDANCE WITH MANUFACTURERS RECOMMENDATION. 4. WHERE EQUIPMENT OR DEVICES ARE NOTED AS "REMOVE", REMOVE CONDUCTORS ASSOCIATED WITH THESE ITEMS TO THE LAST ACTIVE ITEM ON THE CIRCUIT, OR TO THE BRANCH CIRCUIT BREAKER IF ALL ITEMS ON THE CIRCUIT ARE REMOVED. REMOVE CONDUITS FOR THESE CIRCUITS WHERE THEY RUN EXPOSED OR IN CEILING OR FLOOR PLENUMS. CONDUITS RUN CONCEALED IN WALLS OR FLOOR SLABS SHALL BE CUT OFF FLUSH WITH SURFACE AND ABANDONED. VOIDS IN WALLS OR FLOOR SLABS LEFT BY THE REMOVAL OF ELECTRICAL EQUIPMENT OR CONDUITS MUST BE FILLED WITH NON-SHRINK GROUT

INDICATES TO PROVIDE FUSE OR BREAKER TRIP RATING IN

	LIGHTING FIXTURE SCHEDULE										
				SO	URCE			LUMEN			
PE	DESCRIPTION	MANUFACTURER	MODEL NO.	NO.	TYPE	CCT	CRI	OUTPUT	MOUNTING		
1	2X2 LED FLAT PANEL, 3500K CCT, UNIVERSAL DRIVER, 3300 LUMEN (SWITCHABLE) OUTPUT, RECESSED, WHITE FINISH.	COLUMBIA	CBT22-LS35	1	LED	3500 K	80	3300 lm	RECESSED		
Е	SAME AS A1 EXCEPT SUPPLIED WITHEMERGENCY EGRESS BATTERY PACK.				LED						
2	2X4 LED FLAT PANEL, 3500K CCT, UNIVERSAL DRIVER, 3300 LUMEN (SWITCHABLE) OUTPUT, RECESSED, WHITE FINISH.	COLUMBIA	CBT24-LS35	1	LED	3500 K	80	3300 lm	RECESSED		
1	4" LED DOWNLIGHT, 80CRI, 1000 LUMENS (MINIMUM), 4000K CCT, 120V DRIVER.	WILLIAMS	4DR-TL-L10-8-40-DIM-UNV-L-W-CS-N	1	LED	4000 K	80	1000 lm	RECESSED		
2	SAME AS D1 EXCEPT WET LOCATION RATED.	WILLIAMS	4DR-TL-L10-8-40-DIM-UNV-L-W-CS-WET	1	LED	4000 K	80	1000 lm	RECESSED		
1	20" LED VANITY, 90CRI, 1190 LUMENS (MINIMUM), 3000K CCT, TO BE MOUNTED HORIZONTALLY ABOVE MIRROR, CENTER BETWEEN TOP OF MIRROR AND BOTTOM OF CEILING, LUMEN OUTPUT PER FOOT, 120V DRIVER.	WAC	WS-40720-3000-AL	1	LED	3000 K	90	1190 lm	SURFACE (WALL)		
1	MINI ARCHITECTURAL LED WALL PACK, 1,700 LUMENS (MINIMUM), GRAY COLOR FINISH, 80CRI, 4000K CCT, 120V DRIVER.	WILLIAMS	VMMV-L17-840-T3-**-SDGL-UNV	1	LED	4000 K	80	1700 lm	SURFACE (WALL) 8'-0" ABOVE FINISHED GRADE		

MAIN CIRCUIT BREAKER

MIN MINIMUM

LIGHTING FIXTURE SCHEDULE NOTES:

101

- 1. 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.
- CONTRACTOR SHALL VERIFY TYPE OF CEILING OR WALL PER ARCHITECTURAL FINISH SCHEDULES PRIOR TO PROCUREMENT OF LIGHT FIXTURES.
- 2. LIGHTING FIXTURES SHALL HAVE A RATED LIFE OF NOT LESS THAN 24,000 HOURS. 3. EGRESS FIXTURES PROVIDED WITH INDIVIDUAL MEANS OF DISCONNECT PER NEC ARTICLE 410.130(G), AS REQUIRED.

- 1. WIRE AND CONDUIT FOR MOTOR AND EQUIPMENT LOADS MUST BE CONTINUOUS IN SIZE AND COUNT FROM SOURCE TO FINAL CONNECTION. OTHERWISE NOTED.
- 2. BRANCH CIRCUIT WIRING TO EXIT LIGHT FIXTURES AND TO THE BATTERY INVERTERS WITHIN FIXTURES WITH INTEGRAL BATTERY UNITS MUST BE UNSWITCHED, CONNECTED AHEAD OF ANY CONTROL SWITCHES. 3. A (*) IN THE FUSE RATING OR TRIP RATING POSITION FOR THIS SYMBOL
- AND FINISHED TO MATCH ADJACENT SURFACES.

CLARK NEXSEN LICENSE NUMBER: C-1028 PROFESSIONAL SEAL

CARTERET COMMUNITY COLLEGE

ENFORCEMENT

BASIC LAW

TRAINING

DESIGNER

919.828.1876

CLARKNEXSEN

333 FAYETTEVILLE STREET, SUITE 1000

RALEIGH, NORTH CAROLINA 27601

3705 ARENDELL STREET

MOREHEAD CITY, NC 28557

SUBMITTAL

03/09/2022

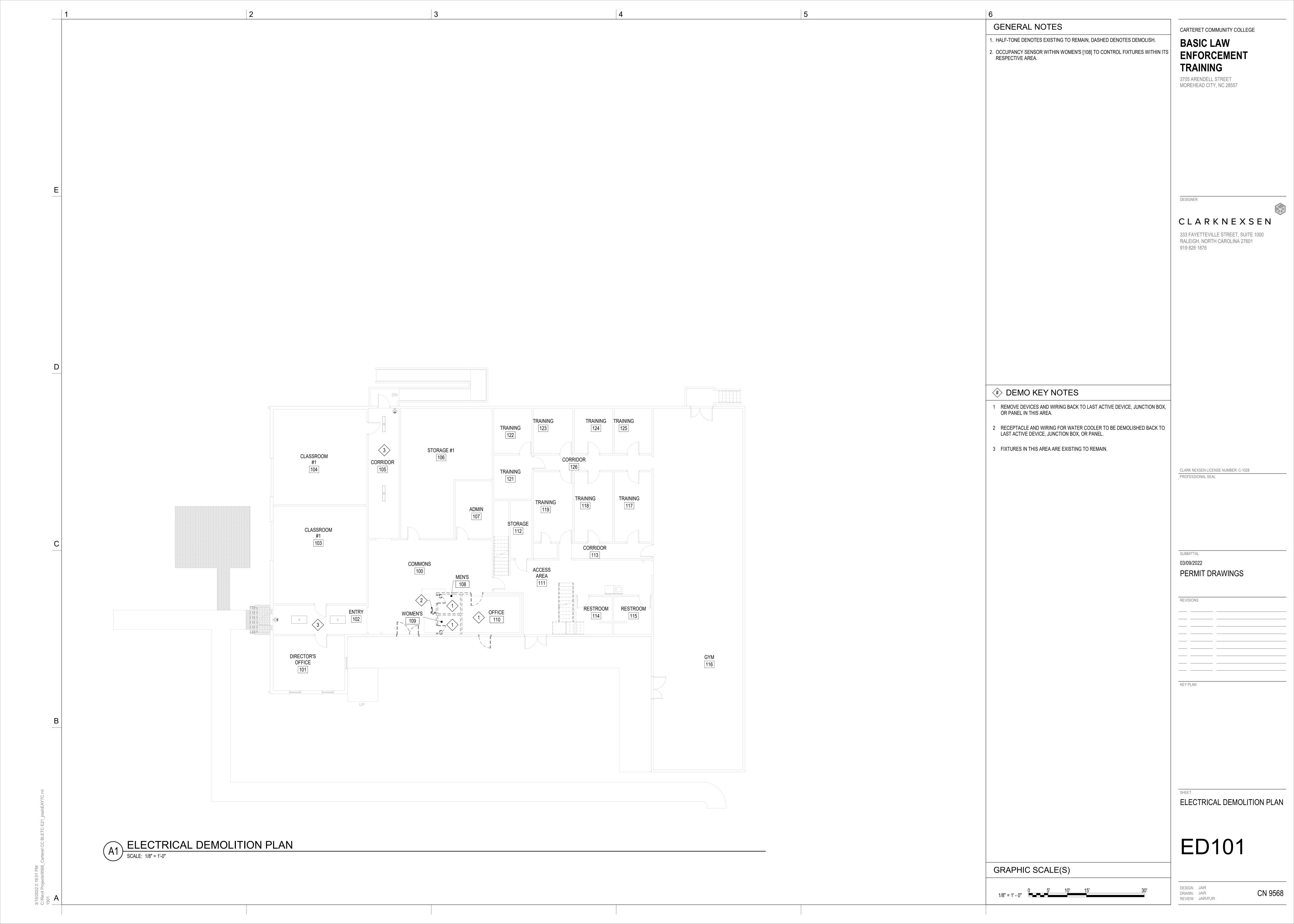
PERMIT DRAWINGS

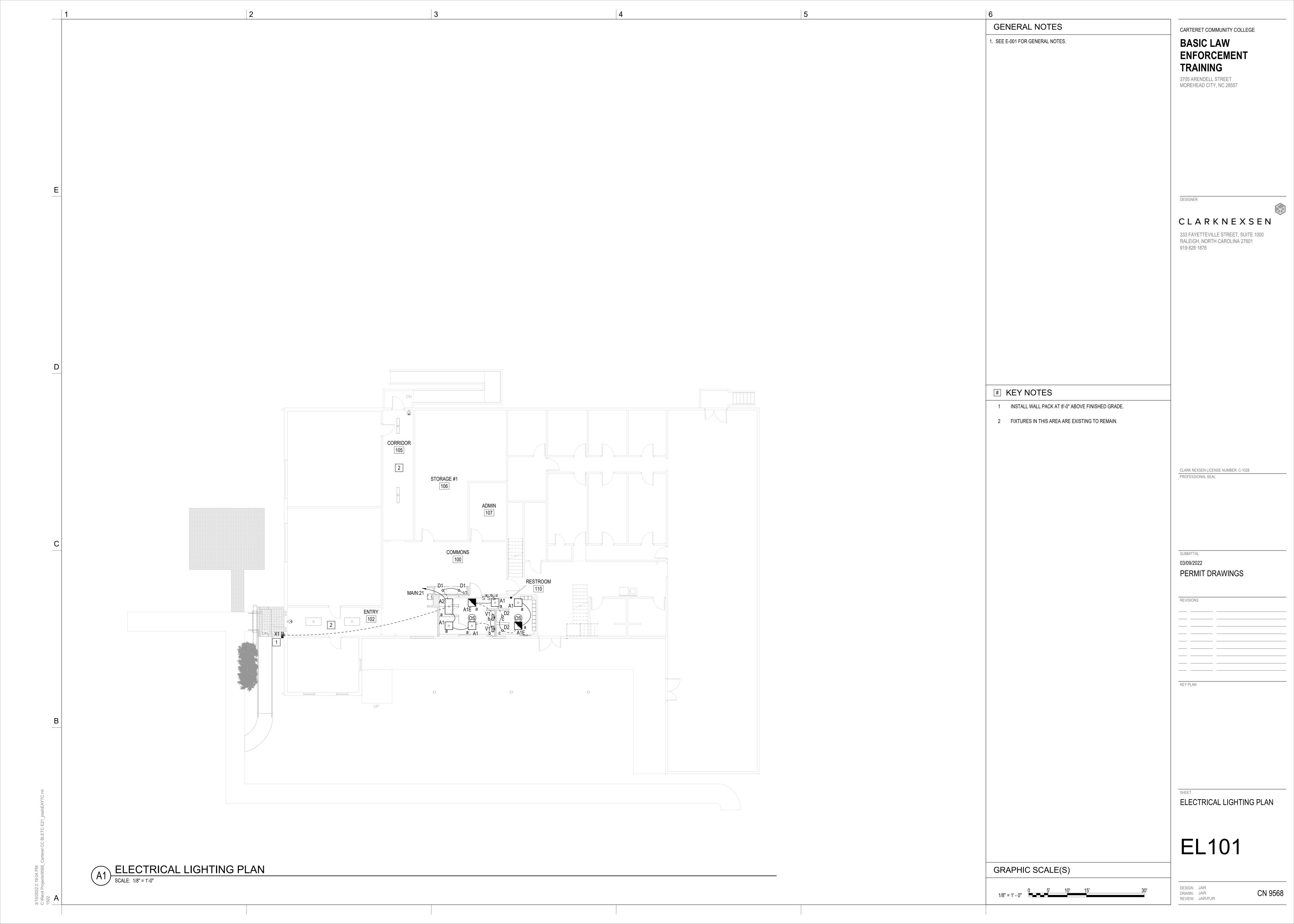
KEY PLAN

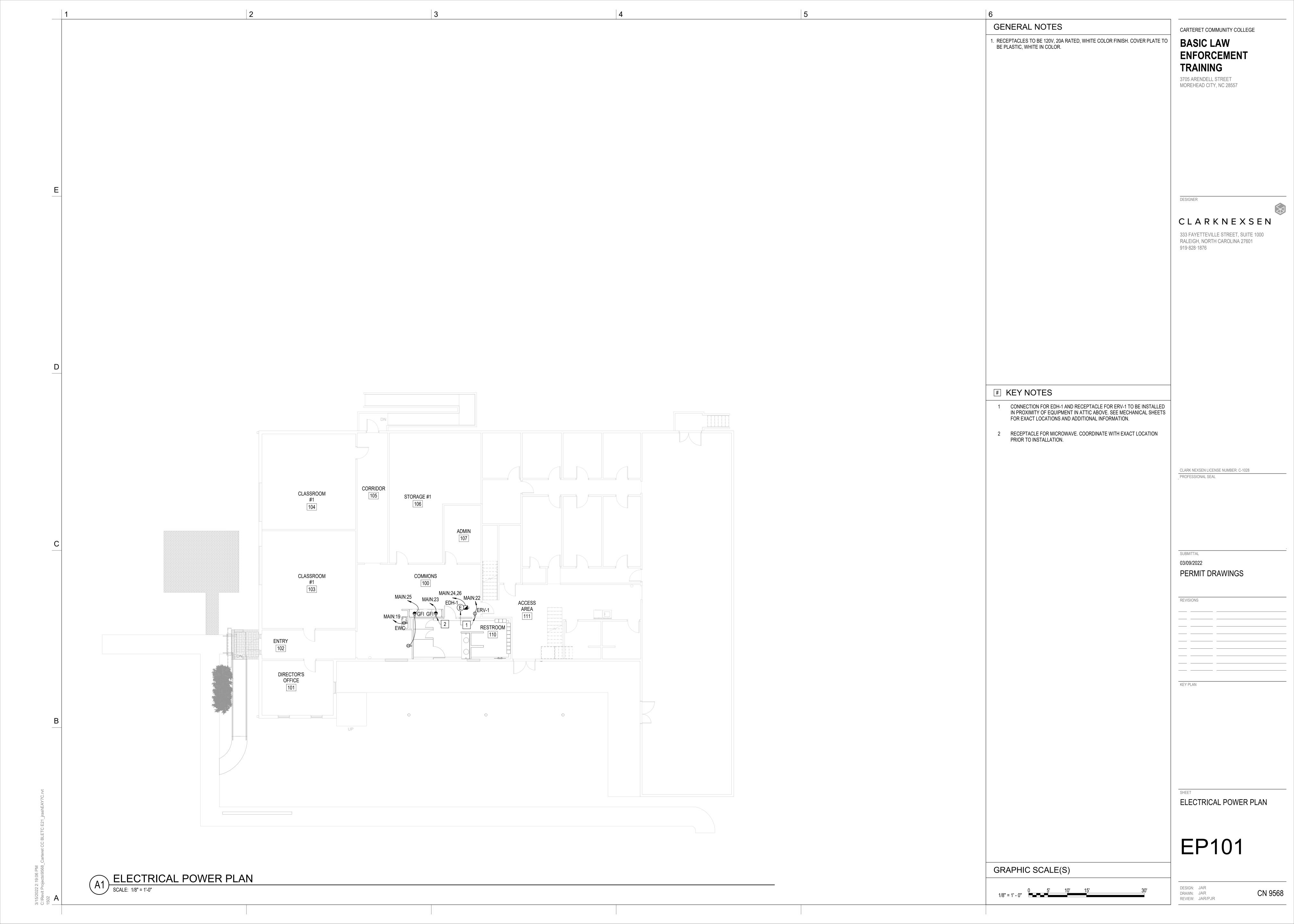
ELECTRICAL LEGEND, NOTES, ABBREVIATIONS, AND LIGHTING FIXTURE SCHEDULE

E-001

DESIGN: JAR DRAWN: JAR REVIEW: JAR/PJR

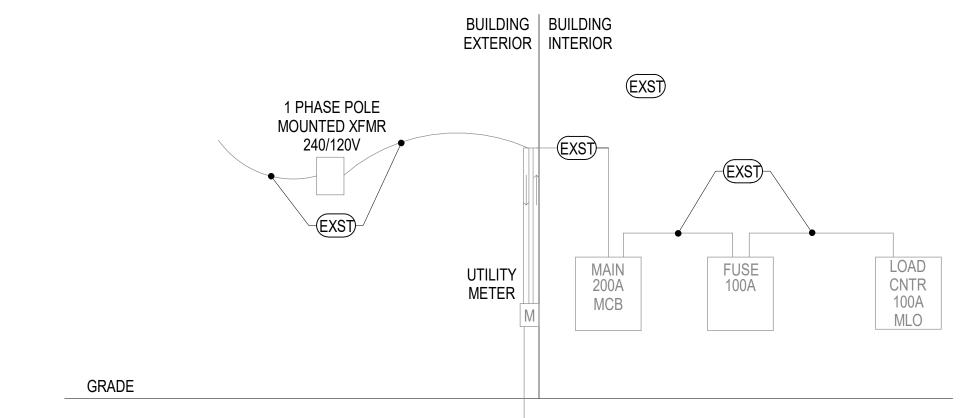






2	00 AMP MCB	120/24	0 VOLTS	1PI	H, 3W, 60	HZ	MIN. 10 K	AIC	SURFA	CE MOUNTED	
CKT.	WIRE	BKR						BKR	WIRE		С
NO. LOAD DESCRIPTION	SIZE	TRIP	AMPS	KVA	PH	KVA	AMPS	TRIP	SIZE	LOAD DESCRIPTION	1
1 EXST DRINK MACHINES					Α					EXST LTG WEST CLASSROOM	
3 EXST LIGHTS UPPER AREA THIS SIDE					В					EXST LOAD	
5 EXST GYM LIGHTS & RCPT SOUTH WALL					Α					EXST LTG UPPER AREA	
7 EXST LIGHTS EAST CLASSROOM					В					EXST RCPT W CLASS, HALL, AND OFF E WALL	
9 EXST RCPT EAST CLASSROOM					Α					EXST LOAD	
11 EXST LTG FRONT HALL, LOUNGE					В					EXST LTG STORAGE ROOM	
13 EXST LTG AND RCPT FRONT OFFICE					Α					EXST LTG STORAGE, BACK HALL, BATHROOMS	Т
15 EXST RCPT REFRIGERATOR & WATER COOL	ER .				В					EXST RCPT DATA CAB E CLASS<G W DOOR LOUNGE	
17 EXST LOAD					Α					EXST GYM FANS	
19 EXST LOAD					В					EXST LOAD	T
OTAL AMPS (CONN. LOAD)	•	A:			B:	•	•	•			
OTAL AMPS (FEEDTHRU)		A:			B:						
OTAL AMPS (CONN. LOAD + FEED-THRU)		A:			B:						
ANELBOARD OPTIONS:					PANELB	OARD N	OTES:				
								-			

PANEL MAIN LOAD SUMMARY							
240/120V 1-Phase	KVA	AMPS					
PEAK DEMAND PREV 12 MONTHS (PROVIDED BY OWNER)	31.2	130.0					
X 125%	39.0	162.5					
LOAD REMOVED:	(0.6)	(2.6)					
LOAD ADDED:	5.5	23.0					
TOTAL:	43.9	183.0					
MAIN RATING: 200A							



SECTION 260000 - ELECTRICAL SPECIFICATIONS

PART 1 - GENERAL REQUIREMENTS

A. THE SCOPE OF WORK DESCRIBED IN THIS SPECIFICATION SHALL INCLUDE THE FURNISHING OF ALL MATERIALS, EQUIPMENT, APPURTENANCES, ACCESSORIES, CONNECTIONS, LABOR, TRANSPORTATION, TOOLS, SUPERVISION, ETC. REQUIRED AND/OR NECESSARY TO COMPLETELY INSTALL AND LEAVE IN SAFE AND PROPER OPERATING CONDITION ALL ELECTRICAL SYSTEMS. ALL ITEMS NOT SPECIFICALLY MENTIONED HEREIN, WHICH ARE OBVIOUSLY NECESSARY TO MAKE A COMPLETE WORKING INSTALLATION, SHALL BE PROVIDED.

B. ELECTRICAL COMPONENTS INCLUDING BUT NOT LIMITED TO CONDUCTOR SIZE, OVERCURRENT PROTECTIVE DEVICE, AND DISCONNECT SWITCHES ARE BASED ON POWER REQUIREMENTS AS SHOWN ON THE CONTRACT DOCUMENTS. ALL COSTS (INCLUDING ADDITIONAL DESIGN FEES IF REQUIRED) ASSOCIATED WITH CHANGES TO THESE POWER REQUIREMENTS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR MAKING THE CHANGE.

C. CODES AND STANDARDS:

1. THE ELECTRICAL SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH ALL FEDERAL, STATE, AND LOCAL CODES AND GUIDELINES, INCLUDING BUT NOT LIMITED TO THE:

2. INTERNATIONAL BUILDING CODE 3. AMERICAN WITH DISABILITIES ACT (ADA) ACCESSIBILITY GUIDELINES 4. NFPA 70 - 2017 EDITION, NATIONAL ELECTRICAL CODE WITH NORTH CAROLINA AMENDMENTS.

5. ASHRAE 90.1 - ENERGY EFFICIENT DESIGN 6. NFPA 70E - NATIONAL ELECTRICAL SAFETY CODE 7. ANSI/TIA/EIA STANDARDS

8. IESNA LIGHTING HANDBOOK

DEFECTS IN WORKMANSHIP OR MATERIAL.

9. 2018 NORTH CAROLINA ENERGY CONSERVATION CODE). Warranty ELECTRICAL SYSTEMS INSTALLATION SHALL BE GUARANTEED FOR A PERIOD OF FIVE YEAR FROM DATE OF FINAL ACCEPTANCE AGAINST ANY

1.1 SUBMITTALS

A. LIGHTING CONTROL DEVICES, WIRING DEVICES, CIRCUIT BREAKERS, INTERIOR LIGHTING, TEST REPORTS, PERFORMANCE DATA, AND CERTIFICATIONS, AND OTHER INFORMATION AS REQUIRED TO PERMIT DETERMINATION BY THE ENGINEER/ARCHITECT AND OWNER WHETHER PROPOSED EQUIPMENT IS EQUAL TO SPECIFIED STANDARD.

SECTION 260500 - COMMON WORK RESULTS FOR ELECTRICAL

1.1 SUMMARY

A. ELECTRICAL EQUIPMENT COORDINATION, SLEEVES AND SLEEVE SEALS FOR RACEWAYS AND CABLES, AND COMMON ELECTRICAL INSTALLATION REQUIREMENTS.

1.2 MATERIALS

A. SLEEVES FOR RACEWAYS AND CABLES:

 STEEL PIPE SLEEVES. 2. CAST-IRON PIPE SLEEVES

3. SLEEVES FOR RECTANGULAR OPENINGS. B. SLEEVE SEALS: MODULAR SEALING DEVICES WITH EPDM SEALING ELEMENTS, STAINLESS-STEEL PRESSURE PLATES, AND STAINLESS-STEEL CONNECTING BOLTS AND NUTS.

C. APPLY FIRESTOPPING TO PENETRATIONS OF FIRE-RATED FLOOR AND WALL ASSEMBLIES FOR ELECTRICAL INSTALLATIONS TO RESTORE ORIGINAL FIRE- RESISTANCE RATING OF ASSEMBLY

D. INTERIOR PENETRATIONS OF NON-FIRE-RATED WALLS AND FLOORS: SEAL ANNULAR SPACE BETWEEN SLEEVE AND RACEWAY OR CABLE. USING JOINT SEALANT APPROPRIATE FOR SIZE, DEPTH, AND LOCATION OF

E. ROOF-PENETRATION SLEEVES: SEAL PENETRATION OF INDIVIDUAL RACEWAYS AND CABLES WITH FLEXIBLE BOOT-TYPE FLASHING UNITS APPLIED IN COORDINATION WITH ROOFING WORK.

SECTION 260519 - LOW-VOLTAGE ELECTRICAL POWER CONDUCTORS AND CABLES

1.1 SUMMARY

A. BUILDING WIRES, CABLES, CONNECTORS, SPLICES, AND TERMINATIONS FOR WIRING SYSTEMS RATED 600 V AND LESS; AND SLEEVES AND SLEEVE SEALS FOR CABLES.

1.2 QUALITY ASSURANCE

A. QUALITY STANDARD: NFPA 70.

1.3 MATERIALS

A. CONDUCTORS AND CABLES: CONDUCTORS: COPPER. 2. CONDUCTOR INSULATION: TYPES THHN-THWN.

1.4 CONDUCTOR MATERIAL APPLICATIONS

B. CONNECTORS AND SPLICES: FACTORY FABRICATED.

A. FEEDERS: COPPER SOLID FOR NO. 10 AWG AND SMALLER; STRANDED FOR NO. 8 AWG AND LARGER.

B. BRANCH CIRCUITS: COPPER. SOLID FOR NO. 10 AWG AND SMALLER: STRANDED FOR NO. 8 AWG AND LARGER.

1.5 CONDUCTOR AND INSULATION APPLICATIONS

A. EXPOSED BRANCH CIRCUITS, TYPE THHN-THWN, SINGLE CONDUCTORS IN

E. BRANCH CIRCUITS CONCEALED IN CEILINGS, WALLS, AND PARTITIONS: TYPE THHN-THWN, SINGLE CONDUCTORS IN RACEWAY. F. CLASS 1 CONTROL CIRCUITS: TYPE THHN-THWN, IN RACEWAY.

G. CLASS 2 CONTROL CIRCUITS: TYPE THHN-THWN, IN RACEWAY. H. CORD DROPS AND PORTABLE APPLIANCE CONNECTIONS: TYPE SO, HARD SERVICE CORD WITH STAINLESS STEEL. WIRE-MESH, STRAIN RELIEF DEVICE AT TERMINATIONS TO SUIT APPLICATION.

SECTION 260526 - GROUNDING AND BONDING FOR ELECTRICAL

1.1 SUMMARY

A. METHODS AND MATERIALS FOR GROUNDING ELECTRICAL SYSTEMS AND EQUIPMENT.

1.2 QUALITY ASSURANCE

A. QUALITY STANDARD FOR GROUNDING MATERIALS AND EQUIPMENT: UL

1.3 PRODUCTS

A. INSULATED CONDUCTORS: COPPER WIRE AND CABLE. B. BARE COPPER CONDUCTORS:

1. SOLID CONDUCTORS. 2. STRANDED CONDUCTORS.

3. TINNED CONDUCTORS.

4. STRANDED BONDING CONDUCTORS. COPPER TAPE BRAIDED BONDING JUMPERS. C. CONNECTORS: BOLTED AND EXOTHERMIC-WELDED TYPE.

D. GROUNDING ELECTRODES: 1. GROUND RODS: COPPER-CLAD STEEL, 3/4 INCH BY 10 FEET IN DIAMETER.

1.4 GROUNDING APPLICATIONS

A. CONDUCTORS: SOLID FOR NO. 8 AWG AND SMALLER; STRANDED FOR

NO. 6 AWG AND LARGER. B. UNDERGROUND GROUNDING CONDUCTORS: BARE TINNED-COPPER CONDUCTOR, NO. 3/0 AWG MINIMUM. BURY AT LEAST 36 INCHES BELOW GRADE.

C. GROUNDING BUS. D. CONDUCTOR TERMINATIONS AND CONNECTIONS: BOLTED AND WELDED.

E. INSULATED EQUIPMENT GROUNDING CONDUCTORS WITH CIRCUIT CONDUCTORS FOR THE FOLLOWING:

 FEEDERS AND BRANCH CIRCUITS. 2. LIGHTING CIRCUITS. 3. RECEPTACLE CIRCUITS.

4. SINGLE-PHASE MOTOR AND APPLIANCE BRANCH CIRCUITS FLEXIBLE RACEWAY RUNS.

F. SIGNAL AND COMMUNICATION EQUIPMENT. G. SERVICE AND CENTRAL EQUIPMENT LOCATIONS AND WIRING CLOSETS. H TERMINAL CABINETS.

I. GROUND RESISTANCE TESTING: BY CONTRACTOR. USE CLAMP ON TESTING.

SECTION 260529 - HANGERS AND SUPPORTS FOR ELECTRICAL

1.1 PERFORMANCE REQUIREMENTS

A. RATED STRENGTH: MINIMUM STRUCTURAL SAFETY FACTOR OF FIVE TIMES THE APPLIED FORCE.

1.2 PRODUCTS

A. SUPPORT, ANCHORAGE, AND ATTACHMENT COMPONENTS

1. STEEL SLOTTED SUPPORT SYSTEMS WITH METALLIC COATINGS. 2. RACEWAY AND CABLE SUPPORTS.

3. STEEL AND MALLEABLE-IRON CONDUIT AND CABLE HANGERS, CLAMPS, AND ASSOCIATED ACCESSORIES.

4. SUPPORT FOR NON-ARMORED CONDUCTORS AND CABLES IN VERTICAL CONDUIT RISERS. 5. STRUCTURAL STEEL FOR FABRICATED SUPPORTS AND

RESTRAINTS. 6. MOUNTING, ANCHORING, AND ATTACHMENT COMPONENTS: a. POWDER-ACTUATED FASTENERS.

 b. MECHANICAL-EXPANSION ANCHORS. c. FABRICATED METAL EQUIPMENT SUPPORT ASSEMBLIES: WELDED OR

BOLTED STEEL SHAPES. d. CONCRETE BASES: 3000-PSI, 28-DAY COMPRESSIVE-STRENGTH CONCRETE.

SECTION 260533 - RACEWAY AND BOXES FOR ELECTRICAL SYSTEMS

1.1 SUMMARY

A. RACEWAYS, FITTINGS, BOXES, ENCLOSURES, AND CABINETS FOR ELECTRICAL WIRING.

1.2 MATERIALS

A. METAL CONDUIT AND TUBING:

1. CONDUIT: RIGID STEEL 2. IMC. 3. EMT.

4. FMC: ZINC-COATED STEEL

5. LFMC. B. NONMETALLIC CONDUIT AND TUBING: RNC. C. METAL WIREWAYS: SHEET METAL, NEMA TYPE 1 FOR INSIDE AND TYPE 3R FOR DAMP OR WET LOCATIONS, UNLESS OTHERWISE INDICATED.

 WIREWAY COVERS: SCREW-COVER TYPE. D. BOXES, ENCLOSURES, AND CABINETS:

 OUTLET AND DEVICE BOXES: CAST METAL AND NONMETALLIC. 2. PULL AND JUNCTION BOXES: CAST METAL.

3. HINGED-COVER ENCLOSURES: METAL. 4. CABINETS: GALVANIZED STEEL

SURFACE RACEWAY: ALUMINUM.

PART 3 - INSTALLATION

A. RACEWAY APPLICATIONS: 1. OUTDOORS:

a. EXPOSED: RIGID STEEL OR IMC. b. CONCEALED, ABOVEGROUND: RIGID STEEL OR IMC.

c. UNDERGROUND: RNC, TYPE EPC-40-PVC, DIRECT BURIED, TYPE EPC-80- PVC FOR DUCTS CROSSING DRIVEWAYS AND ROADWAYS. d. CONNECTION TO VIBRATING EQUIPMENT: LFMC.

e. BOXES AND ENCLOSURES, ABOVEGROUND: NEMA TYPE 3R. 2. INDOORS:

a. EXPOSED: NOT SUBJECT TO PHYSICAL DAMAGE AND WHERE INSTALLED EIGHT FEET AFF: EMT. b. EXPOSED AND SUBJECT TO SEVERE DAMAGE: RIGID STEEL OR IMC. c. CONCEALED: EMT.

d. CONNECTION TO VIBRATING EQUIPMENT: FMC, EXCEPT LFMC IN DAMP OR WET LOCATIONS. e. DAMP OR WET LOCATIONS: RIGID STEEL OR IMC.

f. BOXES AND ENCLOSURES: NEMA TYPE 1. EXCEPT NEMA TYPE 4 IN DAMP OR WET LOCATIONS.

SECTION 260553 - IDENTIFICATION FOR ELECTRICAL SYSTEMS

1.1 SUMMARY

A. ELECTRICAL IDENTIFICATION MATERIALS AND DEVICES:

1. IDENTIFICATION FOR RACEWAY 2. IDENTIFICATION FOR CONDUCTORS AND COMMUNICATION AND CONTROL CABLE. 3. WARNING LABELS AND SIGNS.

4. INSTRUCTION SIGNS 5. EQUIPMENT IDENTIFICATION LABELS. 6. MISCELLANEOUS IDENTIFICATION PRODUCTS.

1.2QUALITY ASSURANCE A. COMPLY WITH ANSI A13.1 AND ANSI C2. 1.3PRODUCTS A. CONDUCTOR AND CABLE IDENTIFICATION: MARKER TAPE.

B. EQUIPMENT LABELS: ENGRAVED PLASTIC. C. WARNING SIGNS: BAKED ENAMEL D. INSTRUCTION SIGNS: ENGRAVED, LAMINATED ACRYLIC OR

SECTION 262726 - WIRING DEVICES

MELAMINE PLASTIC.

1.1 PRODUCTS

A. RECEPTACLES: DUPLEX, 125 V, 20 A. 1. STRAIGHT BLADE: CONVENIENCE RECEPTACLES, COMPLY WITH

NEMA WD1, NEMA WD6, AND UL 498. 2. GFCI: FEED THROUGH-TYPE. INCLUDE INDICATOR LIGHT THAT IS LIGHTED WHEN DEVICE IS TRIPPED.

B. CORD AND PLUG SETS. C. SNAP SWITCHES: 120/277 V, 20 A. D. WALL PLATES:

1. WALL PLATE COLOR TO BE WHITE E. FINISHES: 1. AS SELECTED BY ARCHITECT, UNLESS OTHERWISE INDICATED OR

REQUIRED BY NFPA 70 OR DEVICE LISTING.

SECTION 265119 - LED INTERIOR LIGHTING

1.1 WARRANTY A. Materials and Workmanship for Luminaires: 10 years.

1.2 Listing to be per minimum of one of the following: A. LED Lighting Facts Website

B. Energy Star Website C. Design Light Consortium Website

1.3 LUMINAIRE REQUIREMENTS A. Electrical Components, Devices, and Accessories: Listed and labeled as defined

B. Factory-Applied Labels: Comply with UL 1598.

C. Recessed luminaires shall comply with NEMA LE 4. D. Luminaires shall be provided with integral disconnects, except where remote switch control is provided for a single luminaire. Switches must be reusable after

driver replacement. E. LED drivers shall have Total Harmonic Distortion (THD) not exceeding 20%. F. Luminaires shall have a power factor greater than 90%.

G. Indoor luminaires shall be provided with 2KV (minimum) surge suppression integral with driver. J. Neutrals are not to be shared on LED lighting circuits.

1.4 MATERIALS A. Lighting Diffusers: Frosted, UV-stabilized acrylic.

B. Luminaire Support: 1. Single-Stem Hangers: Steel tubing with swivel ball fittings and ceiling canopy. 2. Wires: Soft temper, zinc-coated steel, 12 gage.

3. Rod Hangers: Cadmium-plated, threaded steel rod. 4. Hook Hangers: Integrated assembly matched to luminaire, line voltage, and equipment with threaded attachment, cord, and locking-type plug.

END OF SECTION 265119

SECTION 260923 - LIGHTING CONTROL DEVICES PART 1 - GENERAL

1.2 ACTION SUBMITTALS

1.1 SUMMARY A. Section Includes:

Indoor occupancy and vacancy sensors.

A. Product Data: For each type of product. 1.3WARRANTY

A. Manufacturer's Warranty: Manufacturer and Installer agree to repair or replace lighting control devices that fail(s) in materials or workmanship within specified warranty period. 1. Failures include, but are not limited to, the following:

 a. Faulty operation of lighting control devices. 2. Warranty Period: five year(s) from date of Substantial Completion. PART 2 - PRODUCTS

2.1 SWITCHBOX-MOUNTED AND CEILING MOUNTED OCCUPANCY SENSORS A. General Requirements for Sensors: Automatic-wall-switch occupancy sensor with manual on-off switch, suitable for mounting in a single gang switchbox using hardwired connection.

and marked for intended location and application. 2. Occupancy Sensor Operation: Unless otherwise indicated, turn lights on when coverage area is occupied, and turn lights off when unoccupied; with a time delay for turning lights off, adjustable over a minimum range of 1 to 30 minutes.

1. Listed and labeled as defined in NFPA 70, by a qualified testing agency,

3.1 EXAMINATION

PART 3 - EXECUTION

A. Examine lighting control devices before installation. Reject lighting control devices that are wet, moisture damaged, or mold damaged B. Proceed with installation only after unsatisfactory conditions have been corrected. 3.2 WIRING INSTALLATION

3. Switch Rating: Not less than 800-VA LED load at 120 V.

A. Comply with NECA 1. B. Wiring within Enclosures: Comply with NECA 1. Separate power-limited and nonpower-limited conductors according to conductor manufacturer's written

C. Size conductors according to lighting control device manufacturer's written instructions unless otherwise indicated. D. Splices, Taps, and Terminations: Make connections only on numbered terminal

strips in junction, pull, and outlet boxes; terminal cabinets; and equipment

enclosures. 3.3 IDENTIFICATION

A. Identify components and power and control wiring according to Section 260553 "Identification for Electrical Systems." 1. Identify controlled circuits in lighting contactors. 2. Identify circuits or luminaires controlled by photoelectric and occupancy

sensors at each sensor. B. Label time switches and contactors with a unique designation. 3.4 FIELD QUALITY CONTROL

A. Testing Agency: Engage a qualified testing agency to evaluate lighting control devices and perform tests and inspections. B. Manufacturer's Field Service: Engage a factory-authorized service representative to test and inspect components, assemblies, and equipment installations,

including connections. C. Perform the following tests and inspections with the assistance of a factoryauthorized service representative: 1. Operational Test: After installing time switches and sensors, and after

2. Test and adjust controls and safeties. Replace damaged and malfunctioning controls and equipment.

electrical circuitry has been energized, start units to confirm proper unit

D. Lighting control devices will be considered defective if they do not pass tests and

END OF SECTION 260923

inspections.

ENFORCEMENT

TRAINING 3705 ARENDELL STREET

MOREHEAD CITY, NC 28557

BASIC LAW

CARTERET COMMUNITY COLLEGE

DESIGNER

919.828.1876

CLARKNEXSEN

333 FAYETTEVILLE STREET, SUITE 1000 RALEIGH, NORTH CAROLINA 27601

CLARK NEXSEN LICENSE NUMBER: C-1028 PROFESSIONAL SEAL

SUBMITTAL

03/09/2022 PERMIT DRAWINGS

KEY PLAN

PANELBOARD SCHEDULES. POWER RISER DIAGRAM, AND

EP601

LOAD SUMMARY

DESIGN: JAR DRAWN: JAR

REVIEW: JAR/PJR

POWER RISER DIAGRAM

ELECTRICAL SPECIFICATIONS NOT TO SCALE