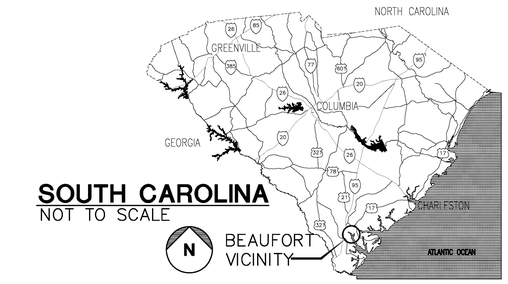
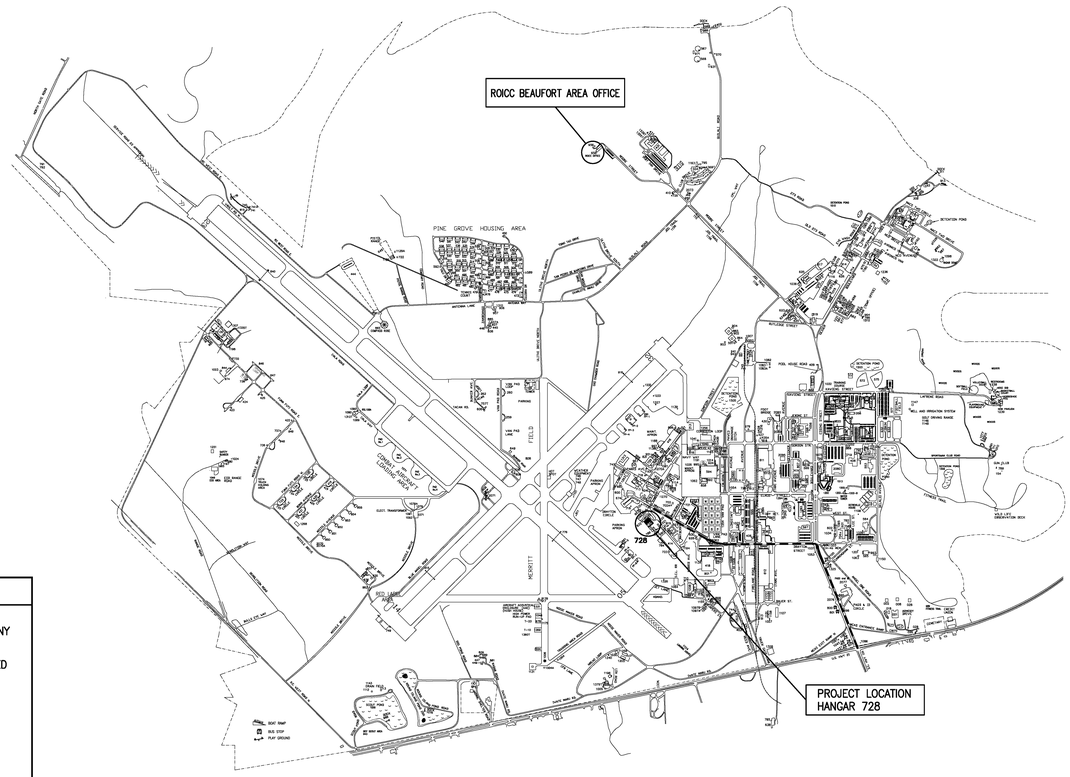


SOUTH CAROLINA
NOT TO SCALE

RENOVATE HANGAR 728
ADMINISTRATIVE SPACES
PROJECT No. BE1204M
MCAS BEAUFORT
BEAUFORT, SOUTH CAROLINA



US MARINE CORPS AIR STATION BEAUFORT
NOT TO SCALE
---------- HAUL ROUTE
NORTH

NOTES

1. VERIFY EXISTING CONDITIONS AND NOTIFY THE CONTRACTING OFFICER OF ANY DISCREPANCIES. DO NOT PROCEED IN UNCERTAINTY.
2. THE GENERAL SCOPE OF WORK INCLUDES BUT IS NOT NECESSARILY LIMITED TO THE FOLLOWING:
   - A. PROVIDE NEW FINISHES FOR ADMINISTRATIVE SPACES.
   - B. COMPLETELY RENOVATE EXISTING BATHROOMS INCLUDING THE REPLACEMENT OF ALL FINISHES AND FIXTURES.
   - C. REPLACE MECHANICAL SYSTEM AS REQUIRED.
   - D. REPLACE LIGHTING FIXTURES COMPLETE.
   - E. REPLACE ALL CABINETS AND COUNTER TOPS, AND REPAIR OR REPLACE DOORS AND HARDWARE AS REQUIRED.
   - F. PROVIDE PARTIAL NEW ROOF AND ADJACENT PARAPET DESIGN TO CORRECT CURRENT ROOF SYSTEM DEFICIENCIES.

LEAD BASED PAINT GENERAL NOTES

1. REFER TO "HAZARDOUS MATERIALS SURVEY REPORT OF ADMINISTRATIVE AREAS OF BUILDING 728", PREPARED BY KCI ASSOCIATES OF NORTH CAROLINA, P.A., KCI#10110414F, DATED AUGUST 18, 2011.

2. ALL LEAD BASED PAINT AFFECTED BY THE NEW WORK IS TO BE PROPERLY ENCAPSULATED OR REMOVED FROM THE BUILDING. ABATEMENT, DISPOSAL, AND REGULATORY PROCEDURES ARE THE RESPONSIBILITY OF THE CONTRACTOR.

ASBESTOS GENERAL NOTES

1. REFER TO "HAZARDOUS MATERIALS SURVEY REPORT OF ADMINISTRATIVE AREAS OF BUILDING 728", PREPARED BY KCI ASSOCIATES OF NORTH CAROLINA, P.A., KCI#10110414F, DATED AUGUST 18, 2011.
   - A. ADDITIONAL INFORMATION INCLUDED ON KCI LETTER DATED OCTOBER 28, 2011. RE: ASBESTOS INSPECTION OF ROOFING MATERIALS.

2. ALL ASBESTOS CONTAINING MATERIALS AFFECTED BY THE NEW WORK IS TO BE PROPERLY REMOVED FROM THE BUILDING. ABATEMENT, DISPOSAL, AND REGULATORY PROCEDURES ARE THE RESPONSIBILITY OF THE CONTRACTOR.

REVISIONS

SYM.	DESCRIPTION	DATE	APP.

INDEX OF DRAWINGS - HANGAR 728

PW DWG. NO.	DWG. NO.	SHEET NO.	DRAWING TITLE
21059	T1.0	1	TITLE SHEET
21060	C1.0	2	SERVICE YARD PLAN - DEMOLITION & NEW WORK
21061	S1.0	3	STRUCTURAL NOTES AND DETAILS
21062	S2.0	4	ROOF STRUCTURAL PLANS - DEMOLITION & NEW WORK
21063	A1.1	5	FLOOR PLANS - FIRST & SECOND FLOOR - EXISTING & DEMOLITION
21064	A2.1	6	FIRST FLOOR PLAN - NEW WORK
21065	A2.2	7	SECOND FLOOR PLAN - NEW WORK
21066	A2.3	8	FLOOR FINISH PLANS - FIRST & SECOND FLOORS - NEW WORK
21067	A3.0	9	REFLECTED CEILING PLANS - FIRST & SECOND FLOOR - NEW WORK
21068	A4.0	10	ROOF PLANS DEMOLITION & NEW WORK
21069	A4.1	11	ROOF DETAILS - NEW WORK
21070	A5.1	12	EXTERIOR ELEVATIONS - SOUTH & EAST - NEW WORK
21071	A5.2	13	EXTERIOR ELEVATIONS - NORTH & WEST - NEW WORK
21072	A6.1	14	ENLARGED PLANS & ELEVATIONS - FIRST FLOOR - NEW WORK
21073	A6.2	15	ENLARGED PLANS & ELEVATIONS - SECOND FLOOR - NEW WORK
21074	A7.0	16	SCHEDULES & LEGEND
21075	A8.0	17	ARCHITECTURAL DETAILS
21076	M1.0	18	MECHANICAL PLANS - EXISTING & PARTIAL DEMOLITION
21077	M2.0	19	MECHANICAL PLANS - EXISTING & PARTIAL DEMOLITION
21078	M3.0	20	MECHANICAL PLANS - SUPPLY/RETURN DUCTWORK
21079	M4.0	21	MECHANICAL PLANS - EXHAUST/VENTILATION DUCTWORK
21080	M5.0	22	MECHANICAL PLANS - HYDRONIC PIPING
21081	M6.0	23	MECHANICAL SCHEDULES
21082	M7.0	24	DDC CONTROLS
21083	P1.1	25	PLUMBING PLAN - FIRST FLOOR - EXISTING & DEMOLITION
21084	P1.2	26	PLUMBING PLAN - SECOND FLOOR - EXISTING & DEMOLITION
21085	P1.3	27	ENLARGED PLUMBING PLANS - FIRST FLOOR - DEMOLITION
21086	P1.4	28	ENLARGED PLUMBING PLANS - SECOND FLOOR - DEMOLITION
21087	P2.1	29	PLUMBING PLAN - FIRST FLOOR - NEW WORK
21088	P2.2	30	PLUMBING PLAN - SECOND FLOOR - NEW WORK
21089	P2.3	31	ENLARGED PLUMBING PLANS - FIRST FLOOR - NEW WORK
21090	P2.4	32	ENLARGED PLUMBING PLANS - SECOND FLOOR - NEW WORK
21091	P3.1	33	PLUMBING DETAILS
21092	E1.0	34	LIGHTING PLANS - FIRST & SECOND FLOORS - DEMOLITION
21093	E2.0	35	ELECTRICAL PLANS - FIRST & SECOND FLOORS - DEMOLITION
21094	E3.0	36	LIGHTING PLANS - FIRST & SECOND FLOORS - NEW WORK
21095	E4.0	37	ELECTRICAL PLANS - FIRST & SECOND FLOORS - NEW WORK
21096	E5.0	38	HVAC POWER PLANS - FIRST & SECOND FLOORS - NEW WORK
21097	E6.0	39	ELECTRICAL LEGEND, DETAILS & SCHEDULES
21098	FP1.0	40	FIRE PROTECTION PLANS - FIRST & SECOND FLOORS - NEW WORK

REFERENCE DRAWINGS

PW DRAWING NO.	DRAWING TITLE
PW12436	STAIR SECTION
PW12438	WALL SECTIONS
PW12439	WALL SECTIONS
PW12441	TYPICAL DETAILS
PW12656	STAIR SECTION
PW12663	ROOF FRAMING PLAN
PW12664	WALL ELEVATIONS
PW12665	WALL ELEVATIONS
PW12689	ELECTRICAL SITE PLAN
PW12694	ROOF PLAN LIGHTNING PROT. SYS.
PW12697	ELECTRICAL SCHEDULES
PW12701	FIRST FLOOR - FP
PW12702	SECOND FLOOR - FP

YOUR ELECTRONIC SIGNATURE ON THIS COVER SHEET APPORVES ALL SHEETS ASSOCIATED WITH THIS SET OF DRAWINGS.

NOVEMBER 2011

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SOUTH CAROLINA — BEAUFORT ENGINEERING SERVICES, INC. — No. C00670 — CERTIFICATE OF AUTHORIZATION

NATURAL RESOURCES & ENVIRONMENTAL AFFAIRS
SATISFACTORY TO DATE — BATTEN.EUGENE.REECE.1060254717 — Digitally signed by BATTEN.EUGENE.REECE.1060254717 Date: 2011.12.08 08:03:47 -05'00'
SAFETY DEPARTMENT
SATISFACTORY TO DATE — LANOIE.RONALD.L.1011923352 — Digitally signed by LANOIE.RONALD.L.1011923352 Date: 2011.12.08 14:46:39 -05'00'
FIRE DEPARTMENT
SATISFACTORY TO DATE — OTTERBINE.JOSEPH.A.1170003388 — Digitally signed by OTTERBINE.JOSEPH.A.1170003388 Date: 2011.12.02 10:26:43 -05'00'
PUBLIC WORKS SUPERVISOR
SATISFACTORY TO DATE — WEBB.OWEN.H.1229842990 — Digitally signed by WEBB.OWEN.H.1229842990 Date: 2011.12.08 13:24:56 -05'00'

P.W. DWG. NO. 21059
DRAWN BY J.AMRINE
CHECKED BY R.DeLOACH
SUPERVISOR B.COFFMAN
APPROVED DATE — MANGASARIAN.SETH.T.1012959229 — Digitally signed by MANGASARIAN.SETH.T.1012959229 Date: 2011.12.02 14:48:51 -05'00'
PUBLIC WORKS OFFICER

DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND
MARINE CORPS AIR STATION
BEAUFORT, S. C.

RENOVATE HANGAR 728
ADMINISTRATIVE SPACES
TITLE SHEET

SIZE F | CODE IDENT. NO. | N A V F A C DRAWING NO. N/A
HQMC PROJ. NO. BE1204M | CONSTR. CONTR. NO. N69450-11-D-2529
SCALE AS NOTED | MACC. | T.O.# ____ | SHEET 1 OF 40

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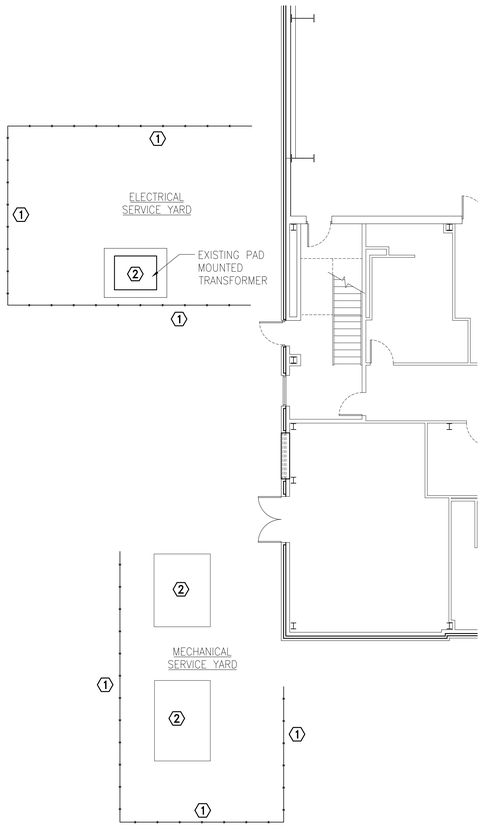
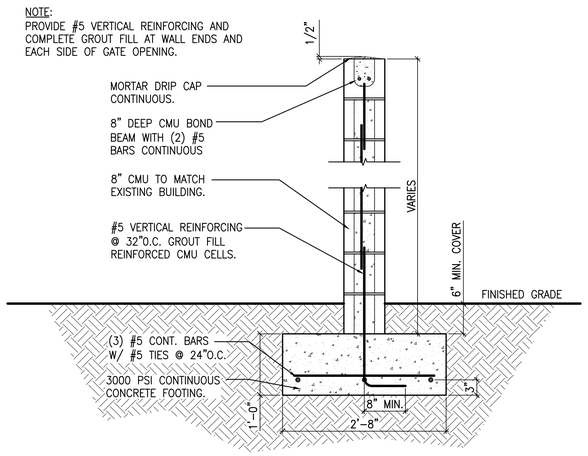


2 C1.0 C1.0 SERVICE YARD PLAN - DEMOLITION

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

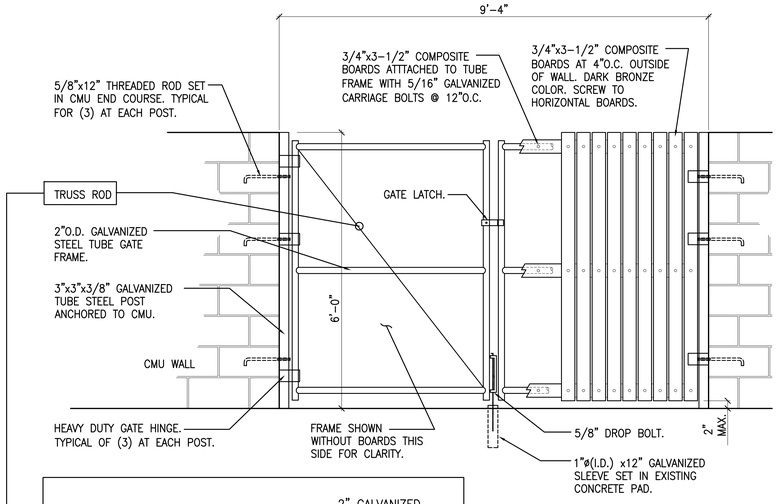
DEMOLITION NOTE SCHEDULE

1. DEMOLISH EXISTING WOODEN FENCING COMPLETE, INCLUDING SLATS, POSTS, HARDWARE AND FOOTINGS.
2. VERIFY EXISTING EQUIPMENT DIMENSIONS AND LOCATIONS IN FIELD. PROTECT DURING CONSTRUCTION.



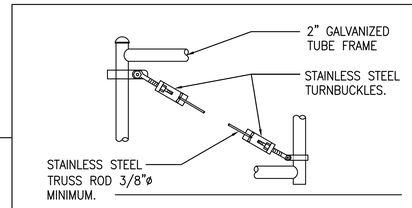
3 C1.0 C1.0 SECTION

SCALE: 1" = 1'-0"



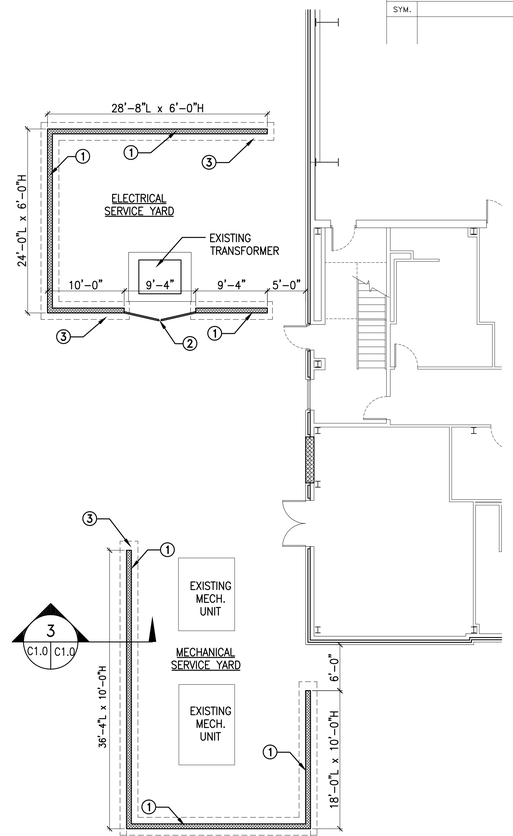
4 C1.0 C1.0 GATE DETAILS

SCALE: NOT TO SCALE



TRUSS ROD DETAIL

NOT TO SCALE



1 C1.0 C1.0 SERVICE YARD PLAN - NEW WORK

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

NEW WORK NOTE SCHEDULE

1. PROVIDE NEW REINCFORCED CMU WALL AS INDICATED. MATCH CMU STYLE AND COLOR TO EXISTING BUILDING. WALL HEIGHT SHALL BE 10'-0" CONTINUOUS FOR MECHANICAL YARD. WALL SHALL BE 6'-0" CONTINUOUS FOR ELECTRICAL YARD. SEE DETAIL THIS SHEET FOR ADDITIONAL INFORMATION.
2. PROVIDE NEW 6'-0" HIGH GATES ADJACENT TO TRANSFORMER IN ELECTRICAL SERVICE YARD. SEE DETAIL #4 THIS SHEET.
3. PROVIDE NEW CONTINUOUS CONCRETE FOOTING AS INDICATED. SEE DETAIL THIS SHEET FOR ADDITIONAL INFORMATION.

GRAPHIC SCALES:

5' 0' 5' 15' 20'
1/8"=1'-0"

1' 6" 0' 1' 2'
1"=1'-0"

REVISIONS

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NATURAL RESOURCES & ENVIRONMENTAL AFFAIRS — SATISFACTORY TO DATE
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FIRE DEPARTMENT — SATISFACTORY TO DATE
PUBLIC WORKS SUPERVISOR — SATISFACTORY TO DATE
PUBLIC WORKS OFFICER

P.W. DWG. NO. 21060
DRAWN BY JMA
CHECKED BY R. DeLOACH
SUPERVISOR B.COFFMAN
APPROVED DATE

DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND
MARINE CORPS AIR STATION
BEAUFORT, S. C.

RENOVATE HANGAR 728
ADMINISTRATIVE SPACES
SERVICE YARD PLAN
DEMOLITION & NEW WORK

SIZE F | CODE IDENT. NO. | N A V F A C DRAWING NO. N/A
HQMC PROJ. NO. BE1204M | CONSTR. CONTR. NO. N69450-11-D-2529
SCALE AS NOTED | MACC. | T.O.# ____ | SHEET 2 OF 40

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REVISIONS			
SYM.	DESCRIPTION	DATE	APP.

STRUCTURAL LEGEND

CMU – CONCRETE MASONRY UNIT

CIP – CAST IN PLACE

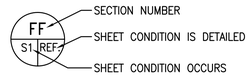
O.C. – ON CENTER

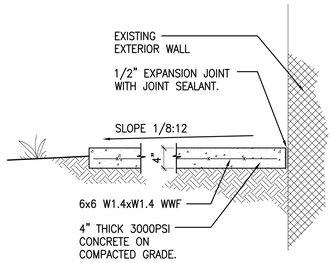
CFRP – CARBON FIBER REINFORCED POLYMER

NTS – NOT TO SCALE

ø – DIAMETER

@ – AT





NOTE:
PROVIDE SAW CUT CONTROL JOINTS AT 6'–0"O.C.
JOINT TO BE 25% OF CONCRETE DEPTH.

1 / S1.0 S1.0 **EXTERIOR SIDEWALK**
SCALE: 1" = 1'–0"

EPOXY GROUTED DOWELS/FASTENERS

1. ALL ANCHOR RODS CONNECTING STEEL TO CONCRETE SHALL BE GRADE 36 STEEL IN ACCORANCE WITH ASTM F1554. PROPOSED ANCHOR RODS IN EXISTING REINFORCED CONCRETE COLUMNS AND BEAMS SHALL BE INSTALLED IN PRE–DRILLED HOLES USING SIMPSON "SET" EPOXY OR EQUAL IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.

GENERAL CONCRETE NOTES

1. DESIGN, MATERIAL, AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH THE FOLLOWING STANDARDS UNLESS OTHERWISE MODIFIED ON THE DRAWINGS OR IN THE SPECIFICATIONS:

ACI–347R RECOMMENDED PRACTICE FOR CONCRETE FORM WORK.
ACI–318 BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE.
ACI–315 (REVISED 1986) DETAILS AND DETAILING OF CONCRETE FOR BUILDINGS.
ACI–301 SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS.
CRSI RECOMMENDED PRACTICE FOR PLACING REINFORCING STEEL

2. CONCRETE AND REINFORCING STEEL MATERIAL AND WORKMANSHIP SHALL BE IN ACCORDANCE WITH PROJECT SPECIFICATIONS. MINIMUM CONCRETE COVER FOR REINFORCEMENT SHALL BE 3" FOR CONCRETE EXPOSED TO EARTH.

3. FABRICATION, DELIVERY AND INSTALLATION OF MISCELLANEOUS MATERIALS SHALL BE IN ACCORDANCE WITH PROJECT SPECIFICATIONS. REFER TO ARCHITECTURAL, PIPING, PLUMBING, AND ELECTRICAL DRAWINGS FOR EMBEDDED ITEMS.

4. CONCRETE : 4,000 PSI @ 28 DAY UNLESS SPECIFIED OTHERWISE.

5. REINFORCEMENT DEFORMED BARS: ASTM A 615, GRADE 60 MINIMUM SPLICE LENGTH SHALL BE 50 BAR DIAMETERS. WELDED WIRE FABRIC: ASTM A185

GENERAL MASONRY NOTES

1. MASONRY WORK SHALL COMPLY WITH THE LATEST EDITION OF ACI–530 AND GOVERNING BUILDING CODE.

2. CONCRETE BLOCKS SHALL BE HOLLOW TWO CORE LOAD BEARING TYPE, CONFORMING TO ASTM C90 GRADE N–1, WITH COMPRESSIVE STRENGTH OF 1500 PSI (MIN). MORTAR SHALL BE TYPE "S", 1800 PSI, CONFORMING TO ASTM C270, BLOCKS SHALL BE PLACED AS RUNNING BOND WHERE POSSIBLE.

3. GROUT FOR MASONRY WALLS TO BE FINE MIX UNLESS SPECIFIED OTHERWISE.

STRUCTURAL STEEL NOTES

1. DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL SHALL BE IN ACCORDANCE WITH THE MANUAL OF STEEL CONSTRUCTION OF THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC), NINTH EDITION, UNLESS OTHERWISE MODIFIED ON THE DRAWINGS OR IN THE SPECIFICATIONS.

2. MATERIAL SHALL MEET THE REQUIREMENTS OF THE FOLLOWING SPECIFICATIONS, UNLESS NOTED ON THE DESIGN DRAWING:
STRUCTURAL STEEL (SEE FOLLOWING NOTES)
HIGH STRENGTH BOLTS: ASTM A325 3/4"ø. MECH. GALV. (UNLESS NOTED).
ANCHOR BOLTS: ASTM F1554
WELD FILLER MATERIAL: AWS D1.1 CLASS E70

3. STRUCTURAL STEEL ANGLES, CHANNELS, AND PLATES SHALL CONFORM TO ASTM A36 UNLESS NOTED OTHERWISE. WIDE FLANGES SHALL CONFORM TO ASTM A992 (50KSI) UNLESS NOTED OTHERWISE. STRUCTURAL STEEL TUBING SHALL CONFORM TO ASTM A500 GRADE B (42KSI OR 46KSI).

4. STEEL PIPE SHALL CONFORM TO ASTM A53, TYPE S, GRADE B, XS.

STRUCTURAL DESIGN CRITERIA

ALL DESIGN LOADS ARE BASED ON THE INTERNATIONAL BUILDING CODE, 2006 EDITION.

1.0 DESIGN LOADS

1.1 DEAD LOADS

1.1.1 ROOF DEAD LOADS

ROOF DEAD LOADS INCLUDE EXISTING AS BUILT CONSTRUCTION COMPONENTS AS SHOWN ON REFERENCE DRAWINGS, AS WELL AS ADDITIONAL LOADS FROM RETROFIT ROOF SYSTEM.

1.2 LIVE LOADS (PER IBC 2006 EDITION)

1.2.1 ROOF LIVE LOADS: 20 PSF MINIMUM WITH A CONCENTRATED LOAD OF 300 POUNDS

1.2.2 SEE REFERENCE DRAWINGS FOR ORIGINAL DESIGN LIVE LOADS

1.3 SNOW LOAD (PER IBC 2006 EDITION)

1.3.1 DESIGN PARAMETERS

ROOF SNOW LOAD = 5 PSF
SNOW LOAD IMPORTANCE FACTOR, I = 1.0
SNOW EXPOSURE FACTOR = 1.0
THERMAL FACTOR 1.0

1.4 WIND LOAD
(PER INTERNATIONAL BUILDING CODE 2006 EDITION)

1.4.1 WIND VELOCITY (3 SEC) 130 MPH
OCCUPANCY CATEGORY II
EXPOSURE C

1.5 SEISMIC LOAD (PER INTERNATIONAL BUILDING CODE 2006 EDITION)

1.5.1 SEISMIC USE GROUP: I (OCCUPANCY CATEGORY II) 1.0

1.5.2 SPECTRAL RESPONSE COEFFICIENTS S_{DS} AND S_{D1}:

S_{DS} = 0.578
S_{D1} = 0.282

1.5.3 SITE CLASS – D

ELEC/MECH SEISMIC BRACING NOTES

1. BRACING IS NOT REQUIRED WHEN THE TOP OF DUCT OR PIPE IS SUSPENDED 12" OR LESS FROM THE SUPPORTING STRUCTURAL MEMBER.

2. ATTACHMENT TO STRUCTURAL MEMBERS SHALL USE DEVICES PROVIDED BY FEDERAL SPECIFICATIONS WW–H–171 OR BE BOLTED/WELDED AS APPROVED BY THE CONTRACTING OFFICER.

3. WALLS, INCLUDING DRYWALL PARTITIONS, MAY REPLACE REQUIRED TRANSVERSE OR VERTICAL BRACING FOR DUCTWORK OR PIPING.

4. SEE SPECIFICATIONS FOR ANY ADDITIONAL MANUFACTURER'S RESPONSIBILITIES IN SUBMITTING THE PROPER DESIGN OF SEISMICALLY BRACED MECHANICAL SYSTEMS.

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DRAWN BY JMA
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SUPERVISOR B.COFFMAN
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PUBLIC WORKS OFFICER

DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND
MARINE CORPS AIR STATION
BEAUFORT, S. C.

RENOVATE HANGAR 728
ADMINISTRATIVE SPACES
STRUCTURAL NOTES AND DETAILS

SIZE F | CODE IDENT. NO. | NAVFAC DRAWING NO. N/A
HOMC PROJ. NO. BE1204M | CONSTR. CONTR. NO. N69450–11–D–2529
SCALE AS NOTED | MACC. | T.O.# _____ | SHEET 3 OF 40

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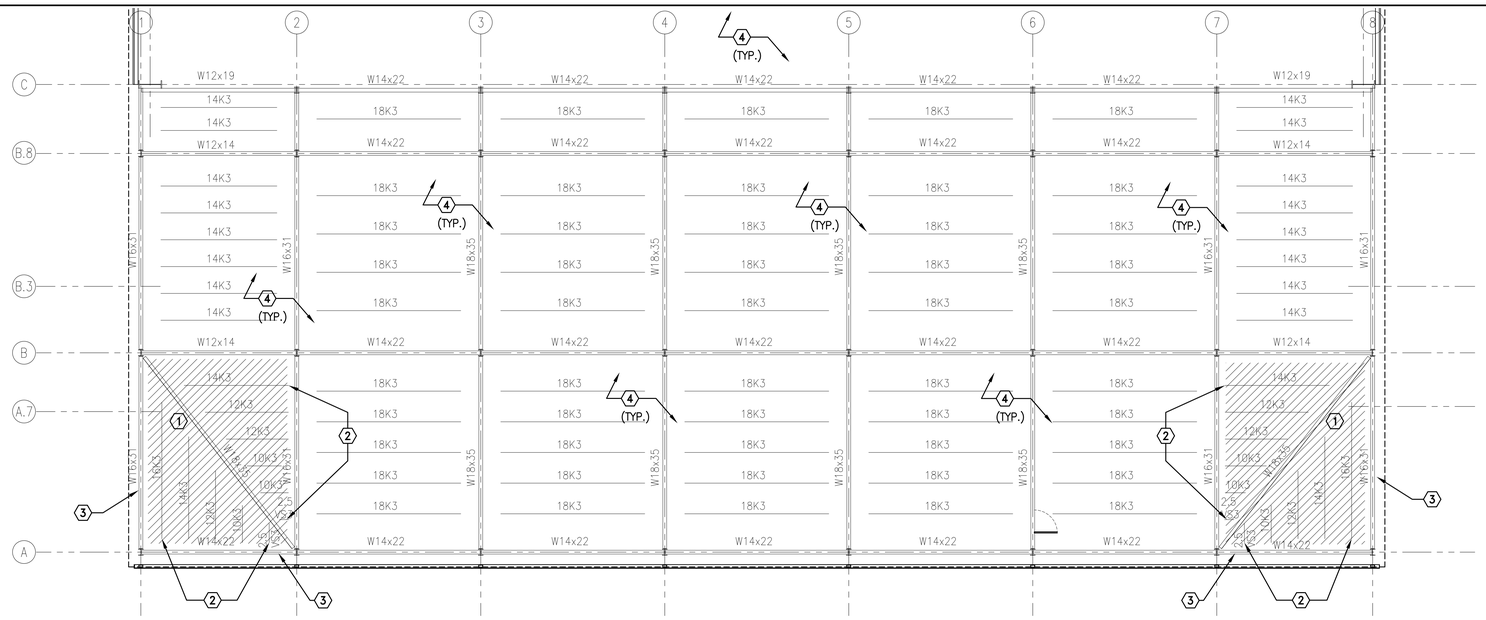
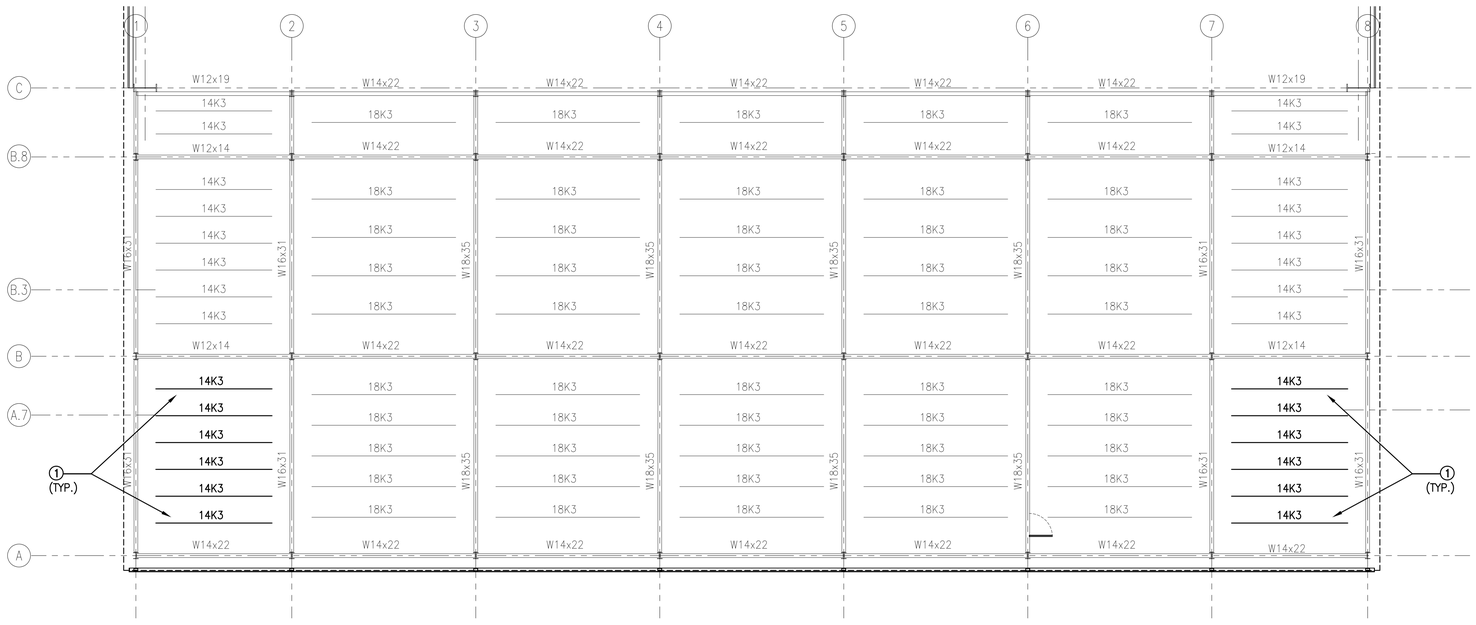


1 A4.0|A4.0 **ROOF STRUCTURAL PLAN - EXISTING & DEMOLITION**

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

DEMOLITION NOTE SCHEDULE

1. DEMOLISH EXISTING STEEL VALLEY BEAM.
2. DEMOLISH EXISTING STEEL JOIST ROOF FRAMING AS INDICATED. EXISTING BEAMS TO REMAIN.
3. PARTIALLY DEMOLISH EXISTING LIGHT GAUGE WALL FRAMING TO ACCOMMODATE NEW EAVE AND PARAPET CONDITIONS.
4. EXISTING STEEL FRAMING TO REMAIN.



2 A4.0|A4.0 **ROOF STRUCTURAL PLAN - NEW WORK**

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

NEW WORK NOTE SCHEDULE

1. INSTALL NEW STEEL ROOF JOISTS EQUALLY SPACED. SIZES AS INDICATED. ROOF JOISTS ARE TO BEAR ON EXISTING STEEL BEAMS EACH SIDE. JOISTS ARE DESIGNED BASED ON ACTUAL ROOF LOAD OF 160 POUNDS PER LINEAR FOOT

GRAPHIC SCALES:

5' 0' 5' 15' 20'

1/8"=1'-0"

REVISIONS

SYM.	DESCRIPTION	DATE	APP.

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ARCH. & ENGR. SEAL
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P.W. DWG. NO. 21062
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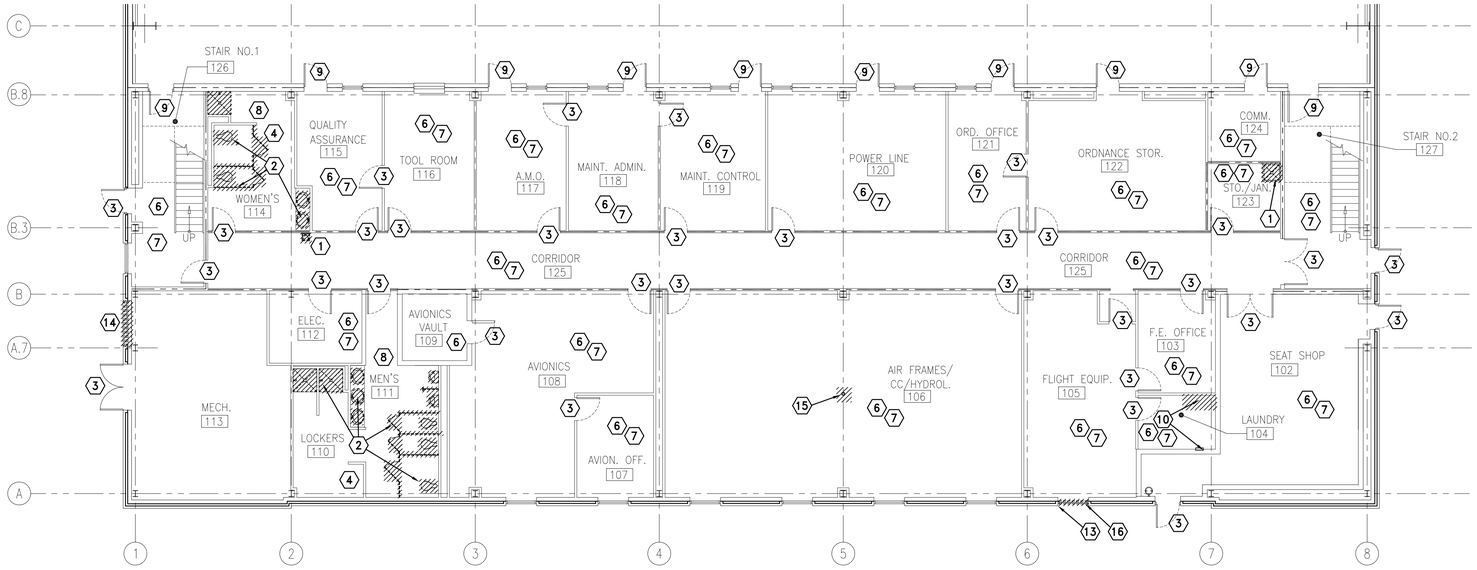
SUPERVISOR B.COFFMAN
APPROVED DATE
PUBLIC WORKS OFFICER

DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND
MARINE CORPS AIR STATION
BEAUFORT, S. C.

RENOVATE HANGAR 728
ADMINISTRATIVE SPACES
ROOF STRUCTURAL PLANS
DEMOLITION & NEW WORK

SIZE F | CODE IDENT. NO. | NAVFAC DRAWING NO. N/A
HQMC PROJ. NO. BE1204M | CONSTR. CONTR. NO. N69450-11-D-2529
SCALE AS NOTED | MACC. | T.O.# ____ | SHEET 4 OF 40

Dec 02, 2011 - 09:50 K:\2011005_06_H 728\Renovate Hangar 728 Admin Spaces\DWG\2011005.06_S2.0.dwg



1 A1.1 | A1.1 **FIRST FLOOR PLAN - EXISTING & DEMOLITION**

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

2 A1.1 | A1.1 **SECOND FLOOR PLAN - EXISTING & DEMOLITION**

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

GRAPHIC SCALES:

5' 0' 5' 15' 20'

1/8"=1'-0"

DEMOLITION NOTE SCHEDULE

1. DEMOLISH PLUMBING FIXTURE COMPLETE. STUB OUT PLUMBING SUPPLY AND WASTE LINES FOR USE IN NEW WORK.
2. DEMOLISH ALL EXISTING PLUMBING FIXTURES AND TOILET PARTITIONS COMPLETE. SEE PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION.
3. PREP FRAME TO RECEIVE NEW DOOR LEAF, FINISH, AND HARDWARE.
4. DEMOLISH FLOOR AND WALL TILE, AND ASSOCIATED SETTING BED COMPLETE. PREPARE FOR NEW FINISHES IN NEW WORK.
5. DEMOLISH EXISTING RAISED FLOOR, COUNTER, AND ALL ATTACHED STRUCTURE COMPLETE.
6. DEMOLISH EXISTING FLOOR COVERING COMPLETE INCLUDING VCT, BASE AND MASTIC.
7. DEMOLISH EXISTING ACT CEILING SYSTEM COMPLETE INCLUDING GRID, TILES, AND SUPPORTS.
8. DEMOLISH EXISTING GYPSUM BOARD CEILING COMPLETE. SUPPORT FRAMING TO REMAIN FOR REUSE IN NEW WORK.
9. PREP DOOR AND FRAME TO RECEIVE NEW FINISH (ADMIN OFFICE SIDE ONLY).
10. REMOVE ALL PLUMBING FIXTURES AND WASHER BOX COMPLETE. STUB OUT PLUMBING SUPPLY AND WASTE LINES FOR REUSE IN NEW WORK. SEE PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION.
11. DEMOLISH EXISTING DOOR LEAVES, FRAME, AND WALL COMPLETE AS INDICATED.
12. DEMOLISH EXISTING ACCORDION WALL COMPLETE INCLUDING BUT NOT LIMITED TO ACCORDION WALL, CEILING/FLOOR TRACKS, AND WALL HARDWARE.
13. CAREFULLY SAWCUT OPENING IN EXISTING CMU WALL TO ALLOW FOR INSTALLATION OF DOOR AND FRAME IN NEW WORK PHASE.
14. DEMOLISH EXISTING MECHANICAL LOUVER COMPLETE. DO NOT DAMAGE ADJACENT BLOCK. PREPARE OPENING FOR INFILL IN NEW WORK PHASE.
15. DEMOLISH EXISTING DATA DROP COMPLETE. SEE ELECTRICAL DRAWINGS FOR ADDITIONAL INFORMATION.
16. DEMOLISH EXISTING WINDOW AND FRAME COMPLETE.
17. DEMOLISH EXISTING DOOR LEAVE AND FRAME COMPLETE AS INDICATED.

LEGEND - DEMOLITION

- (#) DEMOLITION NOTE NUMBER
- ITEM OR AREA TO BE DEMOLISHED
- ITEM OR AREA TO REMAIN

REVISIONS

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PUBLIC WORKS OFFICER

P.W. DWG. NO. 21063
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CHECKED BY R. DeLOACH
SUPERVISOR B.COFFMAN
APPROVED DATE

DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND
MARINE CORPS AIR STATION
BEAUFORT, S. C.

RENOVATE HANGAR 728
ADMINISTRATIVE SPACES
FLOOR PLANS - FIRST & SECOND FLOOR
EXISTING & DEMOLITION

SIZE F | CODE IDENT. NO. | N A V F A C DRAWING NO. N/A
HQMC PROJ. NO. BE1204M | CONSTR. CONTR. NO. N69450-11-D-2529
SCALE AS NOTED | MACC. | T.O.# _____ | SHEET 5 OF 40

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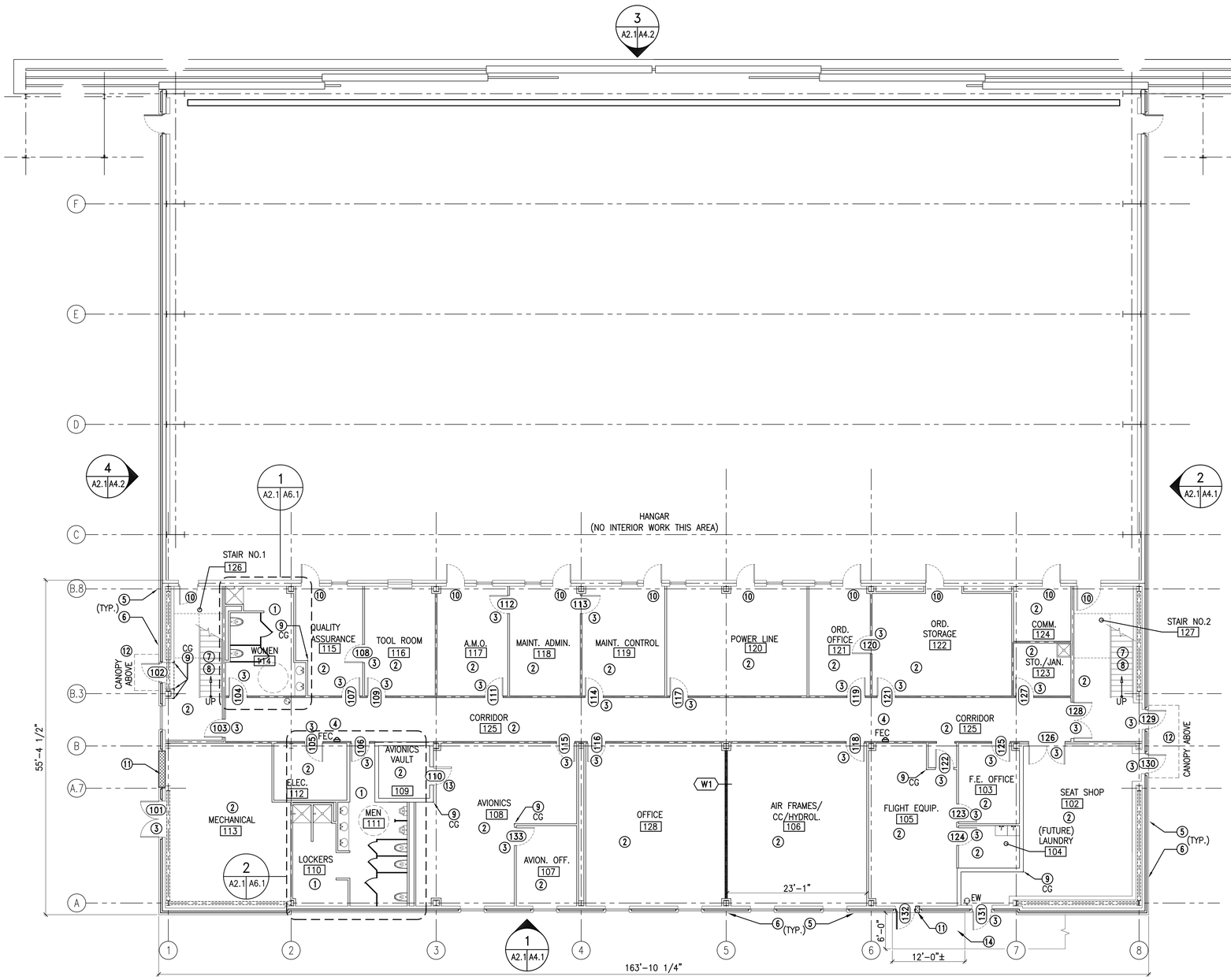

NEW WORK NOTE SCHEDULE

1. PROVIDE NEW WALL TILE FINISH. SEE SHEETS A6.1 & A6.2 FOR ADDITIONAL INFORMATION.
2. PAINT ALL WALLS COMPLETE. SEE FINISH SCHEDULE FOR ADDITIONAL INFORMATION.
3. CLEAN AND REPAIR EXISTING FRAME. PROVIDE NEW DOOR LEAVE(S), AND PAINT FRAME AND DOOR LEAVE(S) COMPLETE. SEE FINISH SCHEDULE FOR ADDITIONAL INFORMATION.
4. REMOVE ALL EXISTING SURFACE MOUNTED FIRE EXTINGUISHERS IN ADMIN AREA. PROVIDE NEW 10LB A–B–C FIRE EXTINGUISHER IN SURFACE MOUNTED STAINLESS STEEL CABINET AS INDICATED.
5. REMOVE ALL DIRT AND DEBRIS ON ALL EXTERIOR CMU WALLS COMPLETE.
6. ADJUST OR REPLACE SPLASH BLOCKS AROUND BUILDING AS NEEDED TO ENSURE POSITIVE DRAINAGE AWAY FROM BUILDING. (TYPICAL)
7. CLEAN AND STRIP STAIRWELL HANDRAILS AND OTHER METAL SURFACES OF LOOSE PAINT & DEBRIS AND APPLY NEW HIGH IMPACT RESISTANT FINISH. PAINT PT5.
8. INSTALL NEW TREAD & RISER SYSTEM TO MATCH EXISTING. REFER TO MANUFACTURER'S REQUIREMENTS FOR CORRECT INSTALLATION PROCEDURE. SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION.
9. PROVIDE HIGH IMPACT VINYL CORNER GUARDS IN LOCATIONS INDICATED. 3"x3"x60"Hx .1" MIN. THICKNESS. COLOR MATCH TO WALL FINISH. (TYPICAL)
10. CLEAN AND PAINT ALL EXISTING DOOR LEAVES AND FRAMES COMPLETE ON THE INTERIOR/ADMIN SIDE ONLY. PAINT PT2.
11. PROVIDE NEW CMU INFILL TO MATCH ADJACENT WALL TYPE, BOTH EXTERIOR AND INTERIOR. SEE DETAIL ON SHEET A8.0 FOR ADDITIONAL INFORMATION.
12. INSTALL NEW CANOPY AS INDICATED. SEE DETAIL ON SHEET A8.0 FOR ADDITIONAL INFORMATION.
13. NO WORK REQUIRED FOR EXISTING VAULT DOOR.
14. NEW CAST IN PLACE CONCRETE SIDEWALK. SLOPE TO DRAIN AWAY FROM BUILDING. FINISH ELEVATION TO MATCH ADJACENT SIDEWALK. SEE DETAIL ON DRAWING S1.0 FOR ADDITIONAL INFORMATION.

LEGEND

W1	WALL TYPE (SEE WALL TYPE LEGEND)
1	NEW WORK NOTE
100	ROOM NUMBER
	AREA OF REINFORCED CMU INFILL
	HATCHING INDICATES NEW WALL
100	DOOR NUMBER
FEC	FIRE EXTINGUISHER CABINET
B	WINDOW TYPE
NIC	NOT IN CONTRACT.
	EYE WASH STATION

B — A2.0 A7.0 — SECTION/DETAIL NUMBER; DETAILED ON PAGE SHOWN ON PAGE

1 — A1.0 A2.0 — ELEVATION NUMBER (EXTERIOR ELEVATIONS); DETAILED ON PAGE SHOWN ON PAGE

4 / 6 A7.0 3 / 2 — SHOWN ON PAGE; ELEVATION NUMBER (INTERIOR ELEVATIONS)

1 A2.1 A2.1 FIRST FLOOR PLAN - NEW WORK

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

GRAPHIC SCALES:

5' 0' 5' 15' 20'

1/8"=1'-0"

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FIRE DEPARTMENT — SATISFACTORY TO DATE
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PUBLIC WORKS OFFICER

P.W. DWG. NO. 21064
DRAWN BY JMA
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SUPERVISOR B.COFFMAN
APPROVED DATE

DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND
MARINE CORPS AIR STATION
BEAUFORT, S. C.

RENOVATE HANGAR 728
ADMINISTRATIVE SPACES
FIRST FLOOR PLAN
NEW WORK

SIZE F | CODE IDENT. NO. | NAVFAC DRAWING NO. N/A
HQMC PROJ. NO. BE1204M | CONSTR. CONTR. NO. N69450-11-D-2529
SCALE AS NOTED | MACC. | T.O.# | SHEET 6 OF 40

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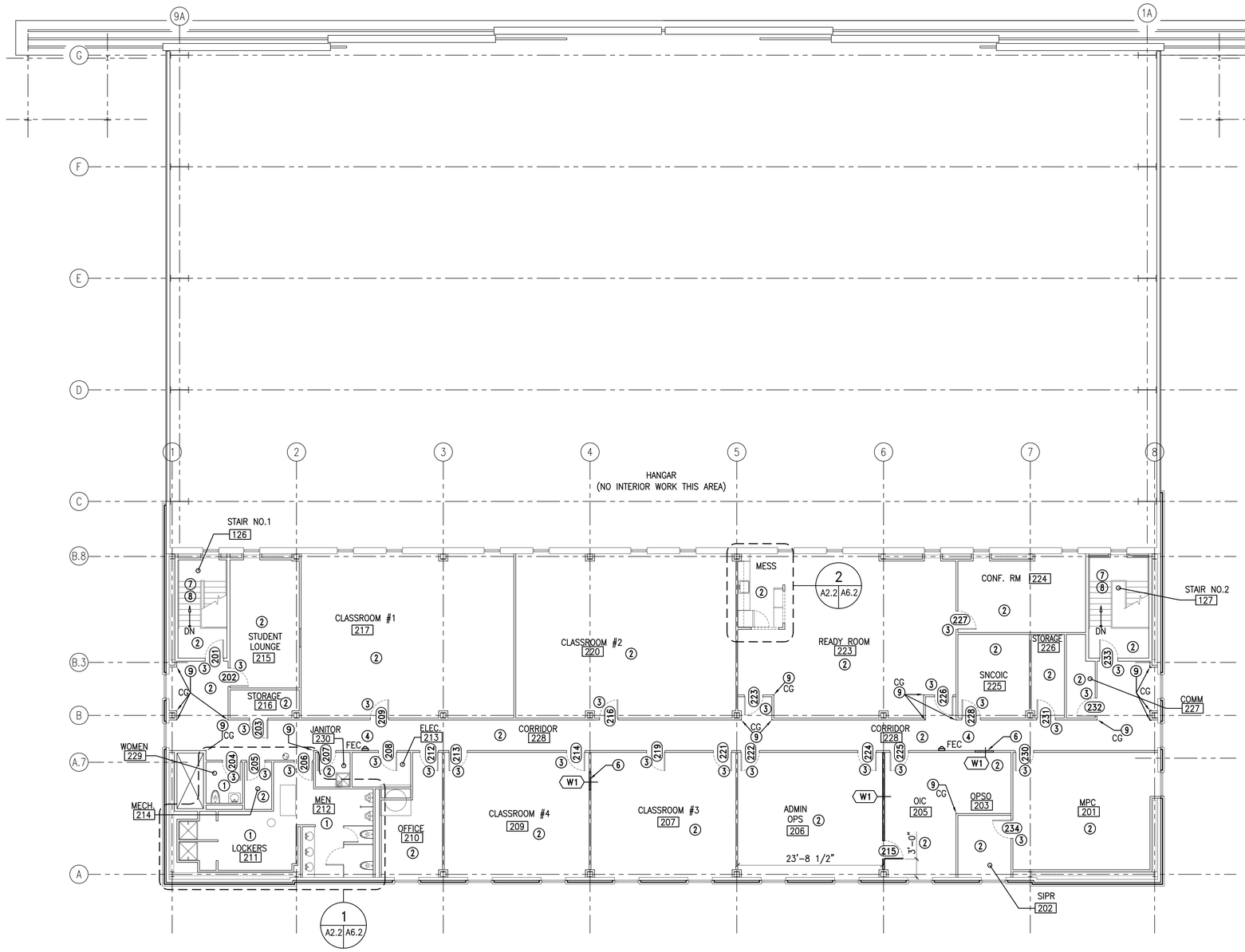

NEW WORK NOTE SCHEDULE

1. PROVIDE NEW WALL TILE FINISH. SEE SHEETS A6.2 FOR ADDITIONAL INFORMATION.
2. PAINT ALL WALLS COMPLETE. SEE FINISH SCHEDULE FOR ADDITIONAL INFORMATION.
3. CLEAN AND REPAIR EXISTING FRAME. PROVIDE NEW DOOR LEAVE(S), AND PAINT FRAME AND DOOR LEAVE(S) COMPLETE. SEE FINISH SCHEDULE FOR ADDITIONAL INFORMATION.
4. REMOVE ALL EXISTING SURFACE MOUNTED FIRE EXTINGUISHERS IN ADMIN AREA. PROVIDE NEW 10LB A-B-C FIRE EXTINGUISHER IN SURFACE MOUNTED STAINLESS STEEL CABINET AS INDICATED.
5. (NOT USED)
6. PROVIDE WALL INFILL AS INDICATED. MATCH TO ADJACENT WALL TYPE. SEE WALL TYPES ON SHEET A8.0 FOR ADDITIONAL INFORMATION.
7. CLEAN AND STRIP STAIRWELL HANDRAILS AND OTHER METAL SURFACES OF LOOSE PAINT & DEBRIS AND APPLY NEW HIGH IMPACT RESISTANT FINISH. PAINT PT5.
8. INSTALL NEW TREAD & RISER SYSTEM TO MATCH EXISTING. REFER TO MANUFACTURER'S REQUIREMENTS FOR CORRECT INSTALLATION PROCEDURE. SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION.
9. PROVIDE HIGH IMPACT VINYL CORNER GUARDS IN LOCATIONS INDICATED. 3"x3"x60"Hx .1" MIN. THICKNESS. COLOR MATCH TO WALL FINISH. (TYPICAL)

1 A2.2 A2.2 SECOND FLOOR PLAN - NEW WORK

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

GRAPHIC SCALES:

5' 0' 5' 15' 20'

1/8"=1'-0"

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DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND
MARINE CORPS AIR STATION
BEAUFORT, S. C.

RENOVATE HANGAR 728
ADMINISTRATIVE SPACES
SECOND FLOOR PLAN
NEW WORK

SIZE F | CODE IDENT. NO. | NAVFAC DRAWING NO. N/A
HQMC PROJ. NO. BE1204M | CONSTR. CONTR. NO. N69450-11-D-2529
SCALE AS NOTED | MACC. | T.O.# _____ | SHEET 7 OF 40

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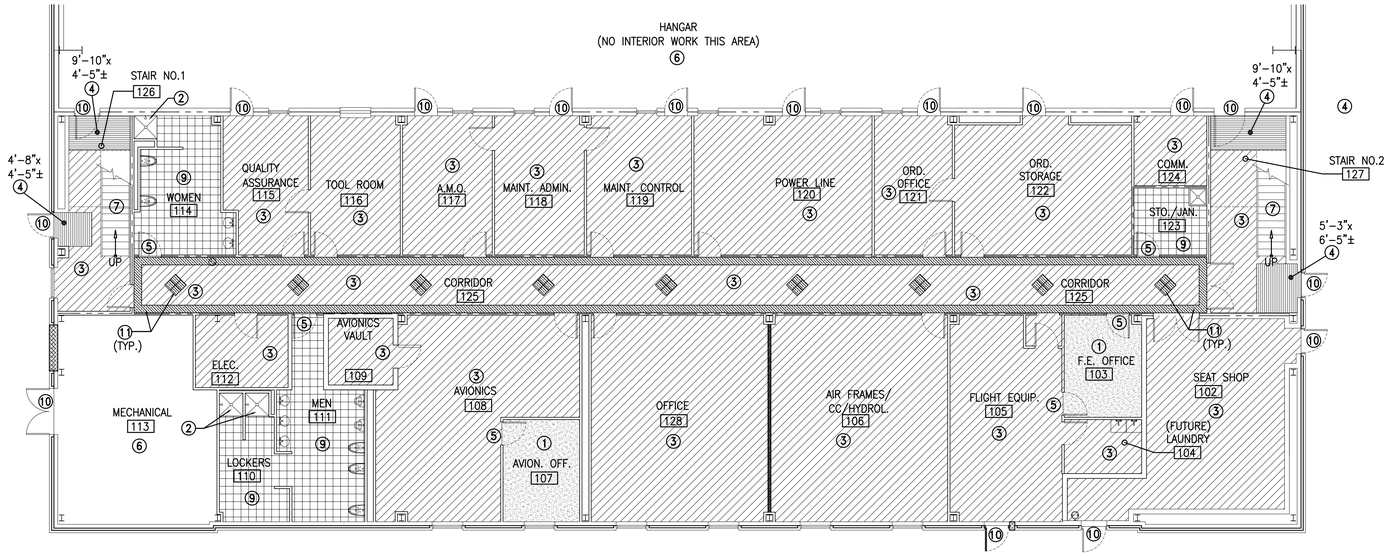
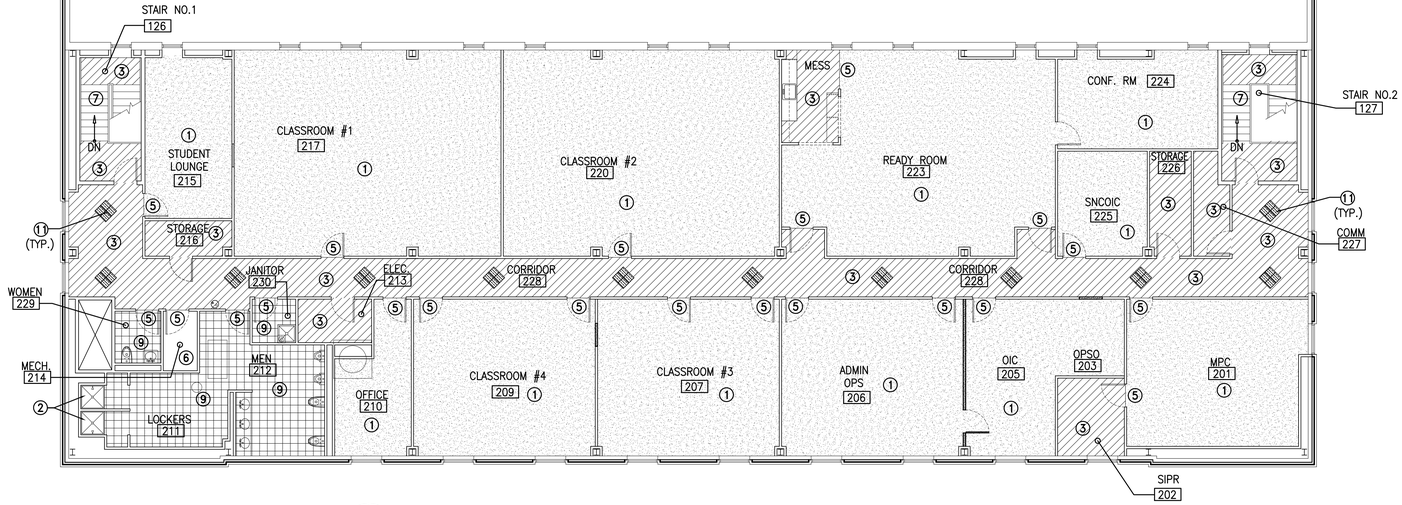


1 A2.3 A2.3 **FLOOR FINISH PLAN - FIRST FLOOR - NEW WORK**

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



2 A2.3 A2.3 **FLOOR FINISH PLAN - SECOND FLOOR - NEW WORK**

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

FLOOR FINISH NOTE SCHEDULE

1. PROVIDE NEW CARPET (CPT) AS INDICATED. SEE FINISH SCHEDULE FOR ADDITIONAL INFORMATION.
2. SHOWER STALL TILE PATTERN. SEE SHOWER STALL DIAGONAL TILE PATTERN ON SHEET A6.2.
3. PROVIDE NEW LINOLEUM TILE (LT). SEE FINISH SCHEDULE FOR ADDITIONAL INFORMATION.
4. PROVIDE NEW ENTRANCE MAT (EM) AS INDICATED. SEE FINISH SCHEDULE FOR ADDITIONAL INFORMATION.
5. PROVIDE STAINLESS STEEL OR BRONZE TRANSITION SADDLE.
6. NO FLOOR WORK THIS AREA.
7. PROVIDE NEW STAIR TREADS AND BASE
8. (NOT USED)
9. PROVIDE NEW CERAMIC TILE (CT). SEE FINISH SCHEDULE FOR ADDITIONAL INFORMATION.
10. DOOR THRESHOLD. SEE HARDWARE SCHEDULE.
11. PROVIDE LINOLEUM (LT) ACCENT TILE PATTERN AND 12" WIDE PERIMETER BORDER AS INDICATED. DIAMOND PATTERN TO BE 24"x24" (TYPICAL).

NOTE:
IN ALL AREAS OF THE EXISTING FLOOR SLAB THAT HAVE BEEN DAMAGED OR OTHERWISE DISTURBED DURING DEMOLITION WORK PROVIDE CONCRETE PATCH ACCORDING TO THE DETAIL ON DRAWING A8.0, AND APPLY LEVELING COMPOUND TO YIELD A SMOOTH AND LEVEL SURFACE FOR THE INSTALLATION OF NEW FINISHES.

LEGEND - NEW WORK

SYMBOL	DESCRIPTION
	NEW LINOLEUM TILE
	NEW LINOLEUM ACCENT TILE
	NEW CERAMIC TILE
	NEW CARPET
	ENTRANCE FLOOR MAT
	CONCRETE

GRAPHIC SCALES:

5' 0' 5' 15' 20'
1/8"=1'-0"

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

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PUBLIC WORKS OFFICER

P.W. DWG. NO. 21066
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CHECKED BY R. DeLOACH
SUPERVISOR B.COFFMAN
APPROVED DATE

DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND
MARINE CORPS AIR STATION
BEAUFORT, S. C.

RENOVATE HANGAR 728
ADMINISTRATIVE SPACES
FLOOR FINISH PLANS
FIRST & SECOND FLOORS - NEW WORK

SIZE F | CODE IDENT. NO. | NAVFAC DRAWING NO. N/A
HQMC PROJ. NO. BE1204M | CONSTR. CONTR. NO. N69450-11-D-2529
SCALE AS NOTED | MACC. | T.O.# ____ | SHEET 8 OF 40

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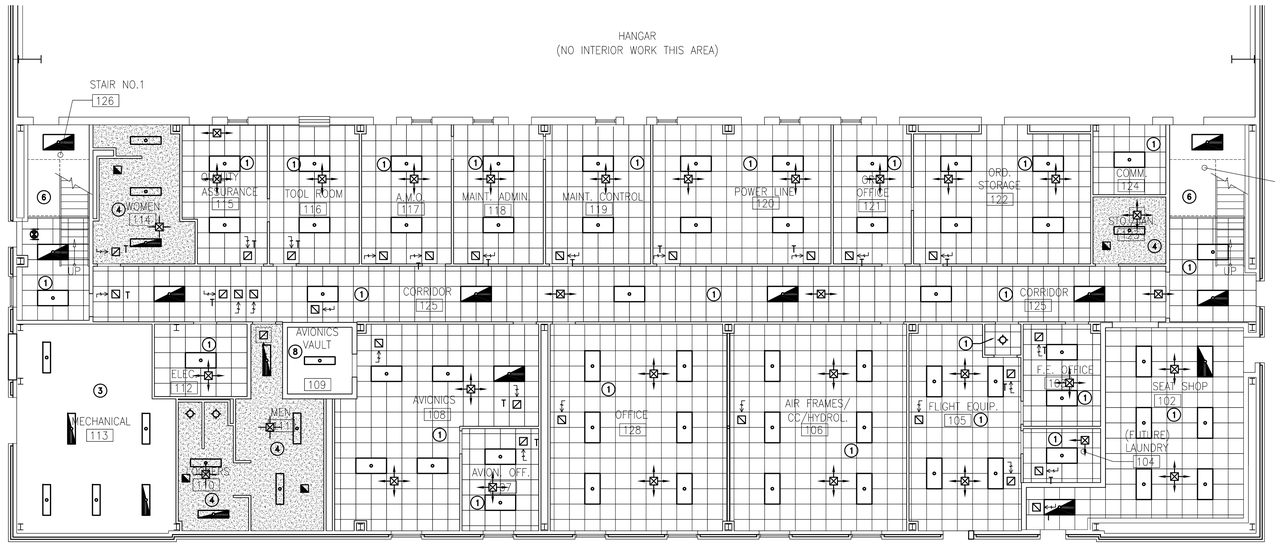


1 A3.1 A3.1 **REFLECTED CEILING PLAN - FIRST FLOOR - NEW WORK**

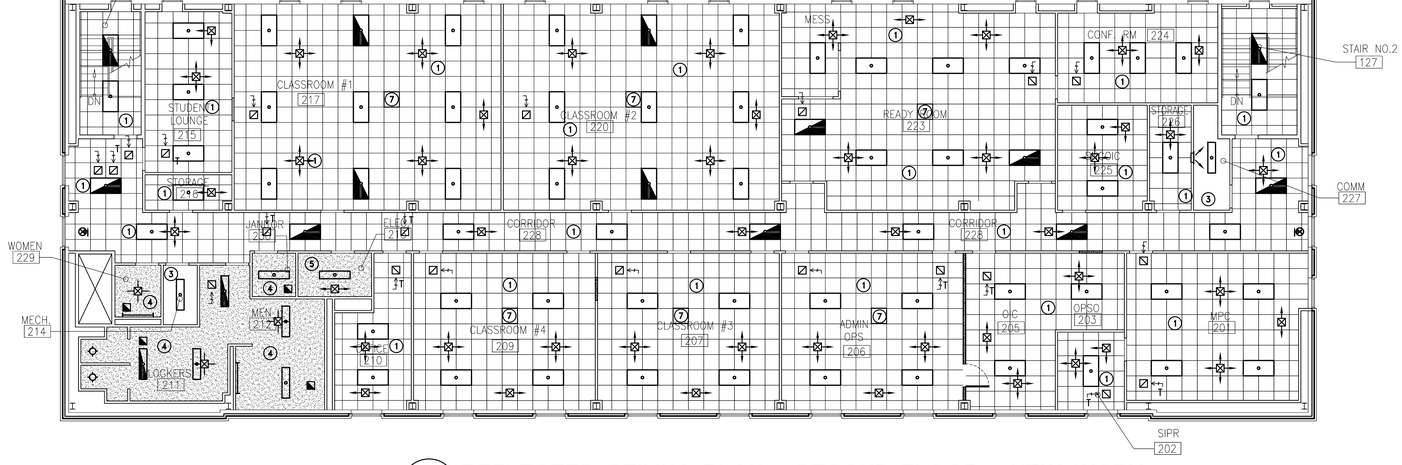
SCALE: 1/8" = 1'-0"

NEW WORK NOTE SCHEDULE

1. PROVIDE NEW ACOUSTICAL CEILING TILES, GRID AND SUPPORTS.
2. (NOT USED)
3. NO WORK THIS AREA.
4. PROVIDE NEW MOISTURE RESISTANT GYPSUM BOARD CEILING.
5. PROVIDE NEW GYPSUM BOARD CEILING.
6. PROVIDE NEW MOISTURE RESISTANT GYPSUM BOARD CEILING AT UNDERSIDE OF STAIRS AND LANDING.
7. PROVIDE 16"x16" CEILING HUNG PROJECTOR PLATFORM. CENTER IN ROOM.
8. PAINT EXISTING CEILING.

LEGEND

- 2x2 CEILING GRID
- GYPSUM BOARD CEILING
- NO WORK THIS AREA
- 2x4 LAY-IN FLUORESCENT FIXTURE
- 2x4 LAY-IN FLUORESCENT FIXTURE, EMERGENCY
- 1x4 WALL MOUNTED FLUORESCENT FIXTURE
- RECESSED DOWN LIGHT
- EXIT LIGHT
- RECESSED EMERGENCY
- HVAC AIR DISTRIBUTION DEVICE
- HVAC AIR RETURN
- EXHAUST GRILLE



2 A3.1 A3.1 **REFLECTED CEILING PLAN - SECOND FLOOR - NEW WORK**

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

GRAPHIC SCALES:

5' 0' 5' 15' 20'

1/8"=1'-0"

NOVEMBER 2011

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PUBLIC WORKS SUPERVISOR
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P.W. DWG. NO. 21067
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CHECKED BY R. DeLOACH
SUPERVISOR B.COFFMAN
APPROVED DATE
PUBLIC WORKS OFFICER

DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND
MARINE CORPS AIR STATION
BEAUFORT, S. C.

RENOVATE HANGAR 728
ADMINISTRATIVE SPACES
REFLECTED CEILING PLANS
FIRST & SECOND FLOORS - NEW WORK

SIZE F | CODE IDENT. NO. | NAVFAC DRAWING NO. N/A
HQMC PROJ. NO. BE1204M | CONSTR. CONTR. NO. N69450-11-D-2529
SCALE AS NOTED | MACC. | T.O.# _____ | SHEET 9 OF 40

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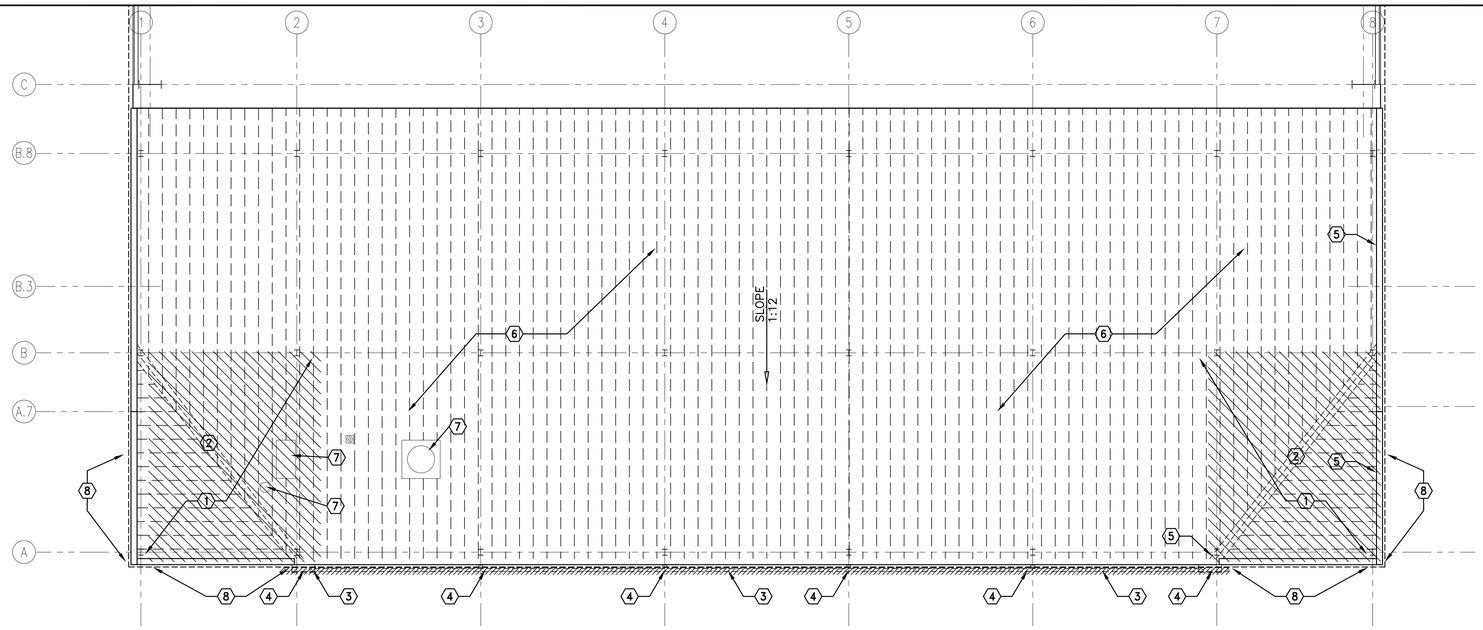
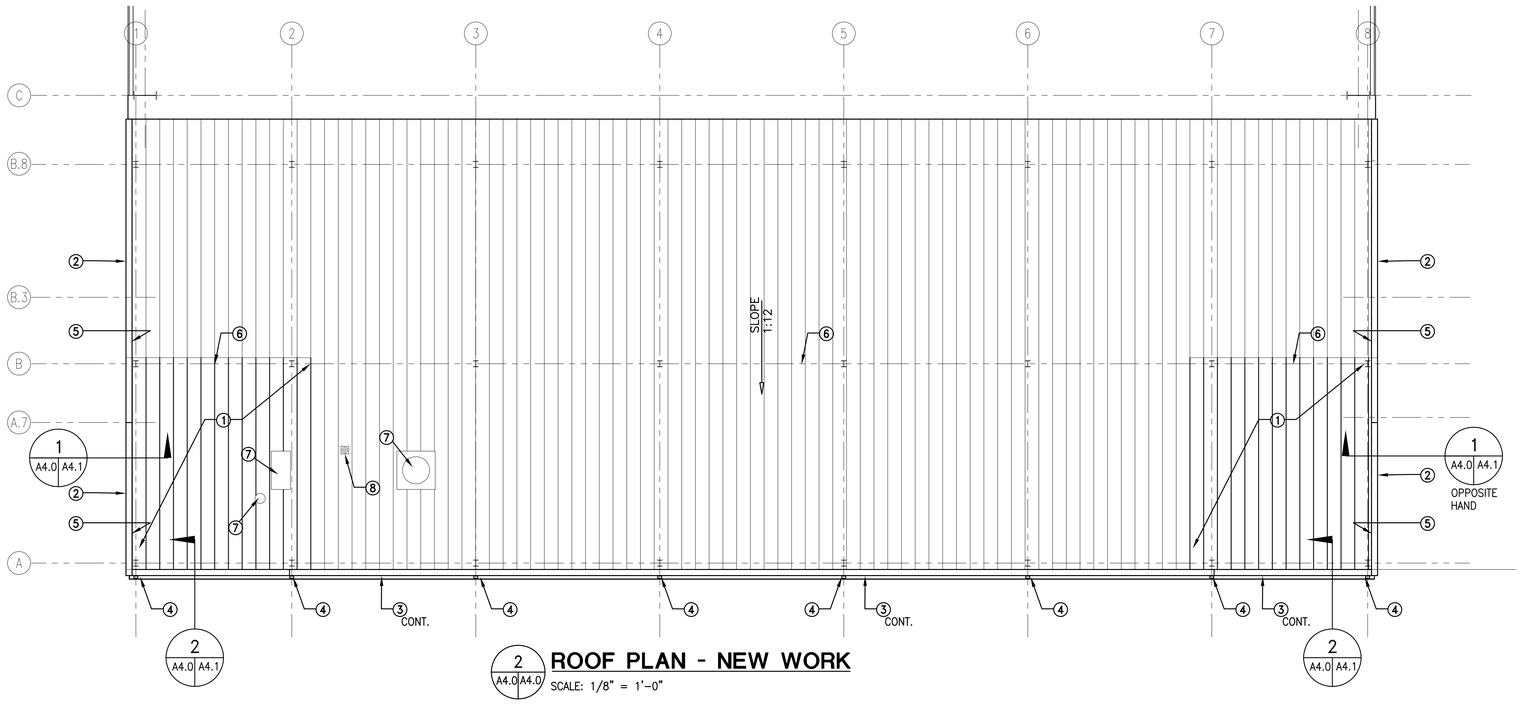


1 A4.0 A4.0 **ROOF PLAN - EXISTING & DEMOLITION**

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



2 A4.0 A4.0 **ROOF PLAN - NEW WORK**

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

GRAPHIC SCALES:

5' 0' 5' 15' 20'

1/8"=1'-0"

REVISIONS

SYM.	DESCRIPTION	DATE	APP.

DEMOLITION NOTE SCHEDULE

1. EXISTING INSULATED METAL ROOF PANELS TO BE REMOVED AS BACK TO EXISTING SEAM.
2. DEMOLISH EXISTING VALLEY FLASHING COMPLETE.
3. DEMOLISH EXISTING METAL GUTTER
4. DEMOLISH EXISTING METAL DOWNSPOUTS AND LEADER HEADS.
5. REMOVE OR TEMPORARILY RELOCATE EXISTING WALL MOUNTED ANTENNAE (TYP. FOR 7) AND CABLING. PROTECT OR STORE DURING CONSTRUCTION PERIOD. REINSTALL ANTENNAE IN ACCORDANCE WITH GOVERNMENT REQUIREMENTS.
6. EXISTING FACTORY INSULATED METAL ROOF PANELS TO REMAIN
7. EXISTING ROOF TOP VENTS TO REMAIN.
8. PARTIALLY DEMOLISH EXISTING PARAPET WALL TO HEIGHTS INDICATED. PARTIAL DEMOLITION TO INCLUDE METAL COPING, CMU VENEER, METAL STUD FRAMING, INSULATED METAL WALL PANELS, AND FLASHING.

NEW WORK NOTE SCHEDULE

1. FACTORY INSULATED METAL ROOF PANELS (R-30) WITH RIB CAPS COLOR AND PROFILE TO MATCH EXISTING ROOFING. INSTALL PANELS TO ENSURE CONTINUOUS SLOPE AND POSITIVE DRAINAGE. INSTALL IN ACCORDANCE WITH MANUFACTURER'S REQUIREMENTS FOR PROPER LAP, FASTENING, AND FLASHING.
2. NEW CONTINUOUS METAL COPING VERTICAL & HORIZONTAL. PROFILE TO MATCH EXISTING. COLOR TO BE DARK BRONZE.
3. NEW CONTINUOUS METAL GUTTER 6"x8" PROFILE TO MATCH EXISTING. COLOR TO BE DARK BRONZE. INSTALL NEW SPLASH BLOCK UNDER EACH DOWNSPOUT.
4. NEW 4"x6" RECTANGULAR DOWNSPOUT (TYPICAL FOR 8) COLOR TO BE DARK BRONZE.
5. RE-ROUTE EXISTING CABLING RUNNING FROM THE BUILDING TO THE PARAPET MOUNTED ANTENNAE. BUNDLE AND HANG CABLING ON THE INSIDE FACE OF THE PARAPET WALL. CONCEAL FROM VIEW TO THE EXTENT POSSIBLE.
6. EXISTING SEAM BETWEEN METAL ROOF PANEL SECTIONS. ENSURE NEW PANEL INSTALLATION PROVIDES PROPER LAP AND SEALANT.
7. INSTALL FLASHING AT EXISTING ROOFTOP PENETRATIONS IN ACCORDANCE WITH ROOFING MANUFACTURER'S WRITTEN INSTRUCTIONS.
8. INSTALL NEW VTR. SEE PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION.

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PUBLIC WORKS SUPERVISOR	SATISFACTORY TO DATE
PUBLIC WORKS OFFICER	

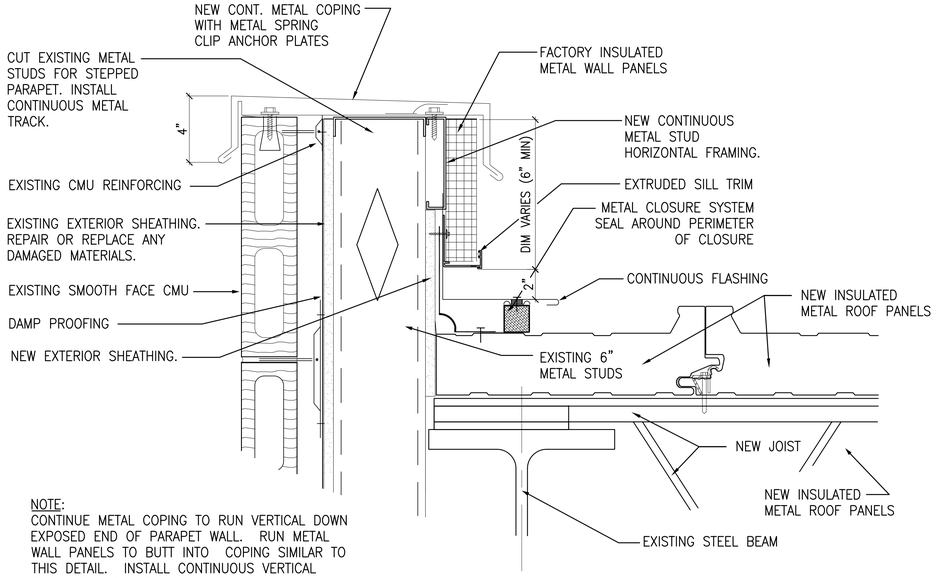
P.W. DWG. NO.	21068
DRAWN BY	JMA
CHECKED BY	R. DeLOACH
SUPERVISOR	B.COFFMAN
APPROVED	DATE

DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND
MARINE CORPS AIR STATION
BEAUFORT, S. C.

RENOVATE HANGAR 728
ADMINISTRATIVE SPACES
ROOF PLANS
DEMOLITION & NEW WORK

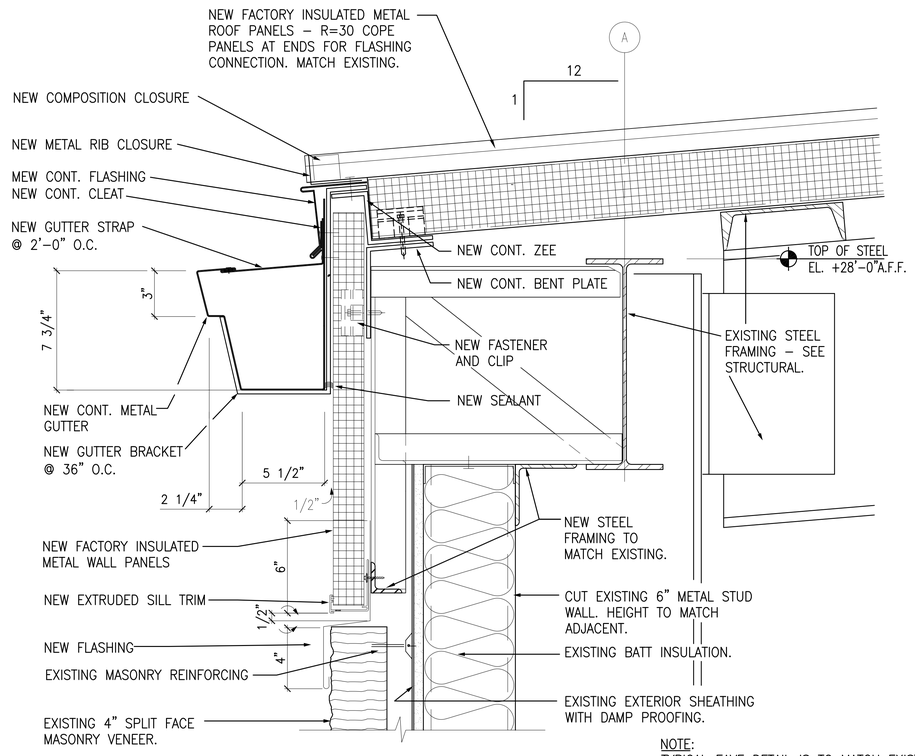
SIZE	CODE IDENT. NO.	NAVFAC DRAWING NO.
F		N/A
HQMC PROJ. NO.	BE1204M	CONSTR. CONTR. NO. N69450-11-D-2529
SCALE AS NOTED	MACC.	T.O.# ____ SHEET 10 OF 40

Dec 02, 2011 - 09:57 K:\2011005_06_H 728\Renovate Hangar 728 Admin Spaces\DWG\2011005_06_A4.0.dwg



NOTE:
CONTINUE METAL COPING TO RUN VERTICAL DOWN EXPOSED END OF PARAPET WALL. RUN METAL WALL PANELS TO BUTT INTO COPING SIMILAR TO THIS DETAIL. INSTALL CONTINUOUS VERTICAL FLASHING AND APPLY SEALANT.

1 DETAIL AT PARAPET (TYPICAL)
A4.0 | A4.1
SCALE: 3" = 1'-0"



NOTE:
TYPICAL EAVE DETAIL IS TO MATCH EXISTING. ALIGN HORIZONTAL ELEMENTS.

2 EAVES & GUTTER DETAIL
A4.0 | A4.1
SCALE: 3" = 1'-0"

GRAPHIC SCALES:
1' 9" 6" 3" 0'
3"=1'-0"

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MARINE CORPS AIR STATION
BEAUFORT, S. C.

RENOVATE HANGAR 728 ADMINISTRATIVE SPACES
ROOF DETAILS NEW WORK

SIZE F | CODE IDENT. NO. | N A V F A C DRAWING NO. N/A
HQMC PROJ. NO. BE1204M | CONSTR. CONTR. NO. N69450-11-D-2529
SCALE AS NOTED | MACC. | T.O.# _____ | SHEET 11 OF 40

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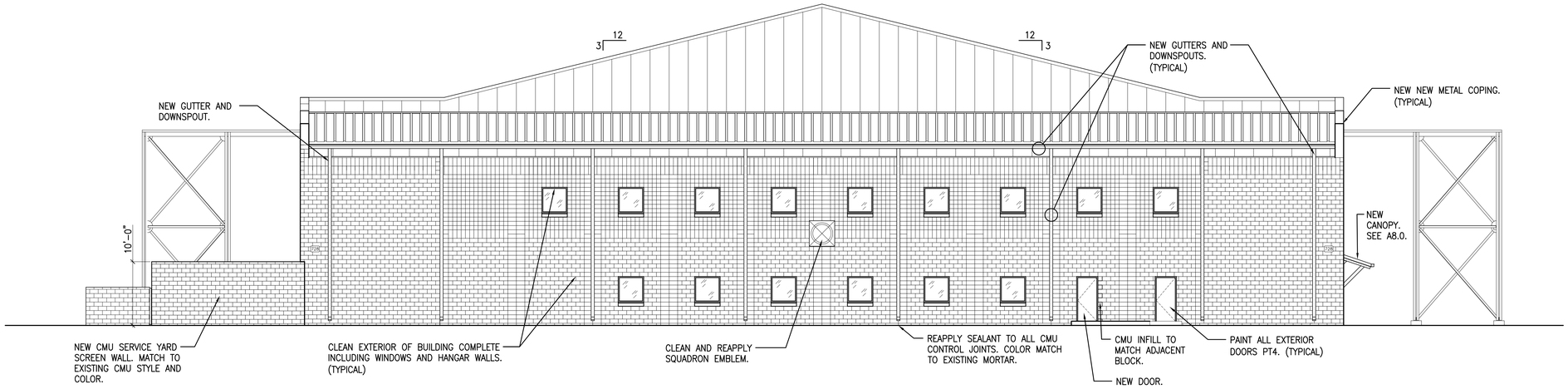
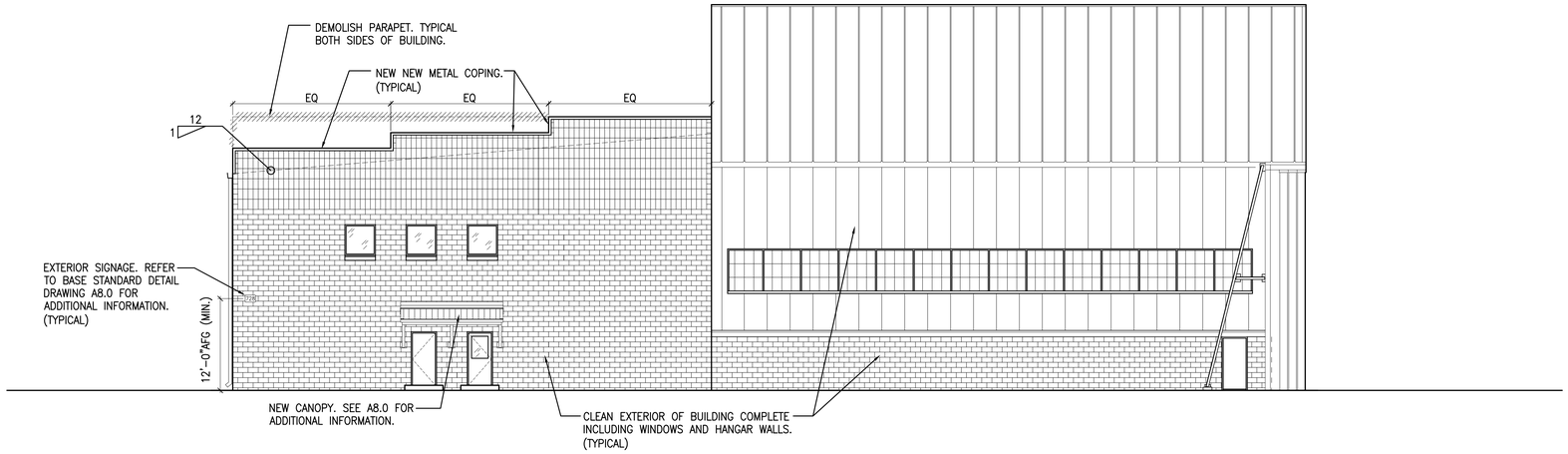
SYM.	DESCRIPTION	DATE	APP.



1 A2.1 A5.1 SOUTH ELEVATION - NEW WORK

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



2 A2.1 A5.1 EAST ELEVATION - NEW WORK

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

GRAPHIC SCALES:

5' 0' 5' 15' 20'

1/8"=1'-0"

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A5.1

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PUBLIC WORKS OFFICER

DEPARTMENT OF THE NAVY NAVAL FACILITIES ENGINEERING COMMAND

MARINE CORPS AIR STATION

BEAUFORT, S. C.

RENOVATE HANGAR 728 ADMINISTRATIVE SPACES

EXTERIOR ELEVATIONS SOUTH & EAST - NEW WORK

SIZE	CODE IDENT. NO.	NAVFAC DRAWING NO.
F		N/A

HQMC PROJ. NO. BE1204M — CONSTR. CONTR. NO. N69450-11-D-2529

SCALE AS NOTED — MACC. — T.O.# ____ — SHEET 12 OF 40

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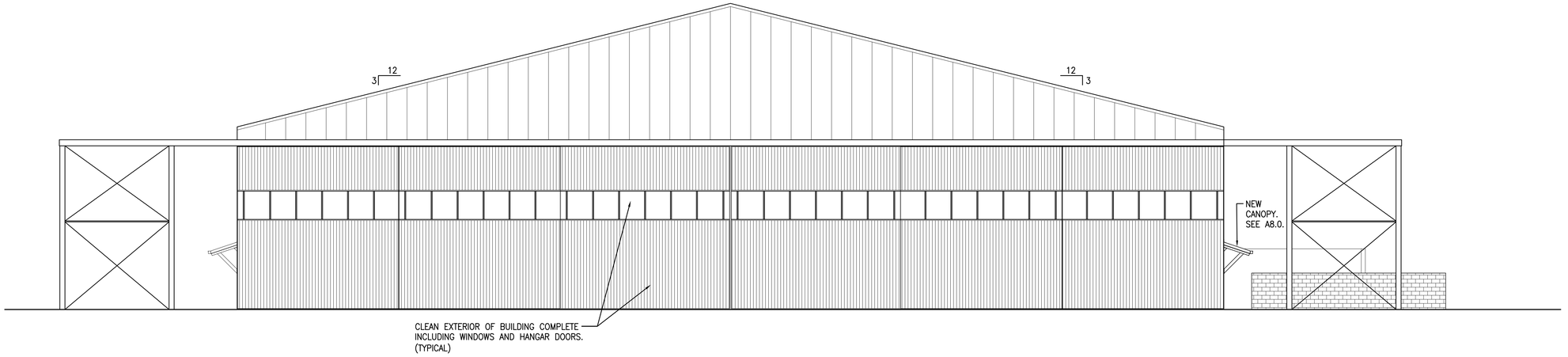
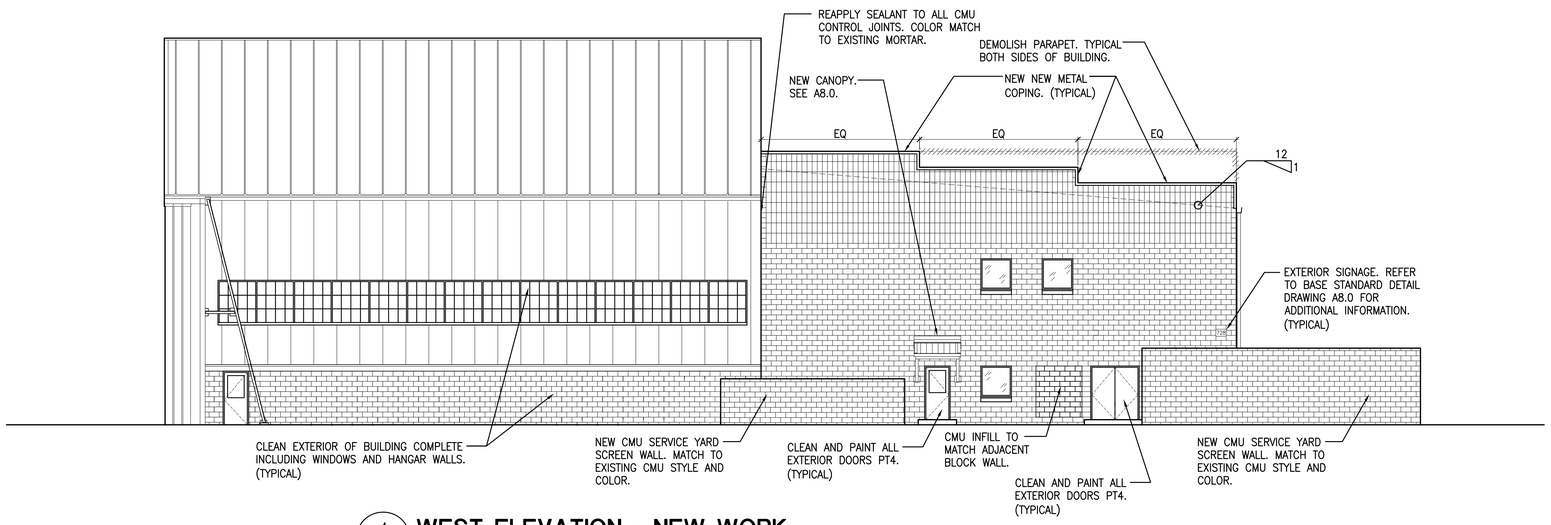
SYM.	DESCRIPTION	DATE	APP.



3 A2.1 A5.2 NORTH ELEVATION - NEW WORK

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



4 A2.1 A5.2 WEST ELEVATION - NEW WORK

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

GRAPHIC SCALES:

5' 0' 5' 15' 20'

1/8"=1'-0"

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A5.2

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P.W. DWG. NO. 21071

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MARINE CORPS AIR STATION

BEAUFORT, S. C.

RENOVATE HANGAR 728 ADMINISTRATIVE SPACES

EXTERIOR ELEVATIONS NORTH & WEST - NEW WORK

SIZE	CODE IDENT. NO.	NAVFAC DRAWING NO.
F		N/A

HQMC PROJ. NO. BE1204M — CONSTR. CONTR. NO. N69450-11-D-2529

SCALE AS NOTED — MACC. — T.O.# _____ — SHEET 13 OF 40

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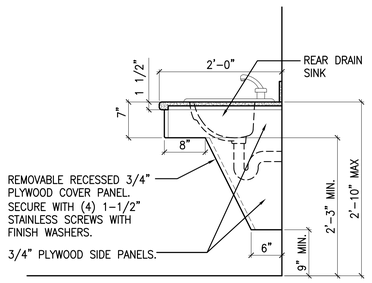
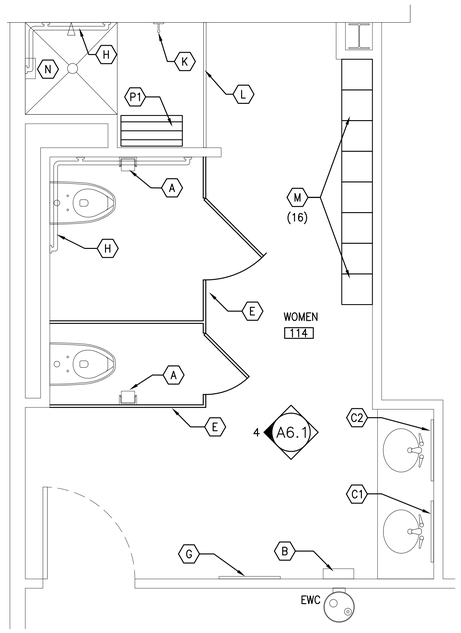
REVISIONS			
SYM.	DESCRIPTION	DATE	APP.

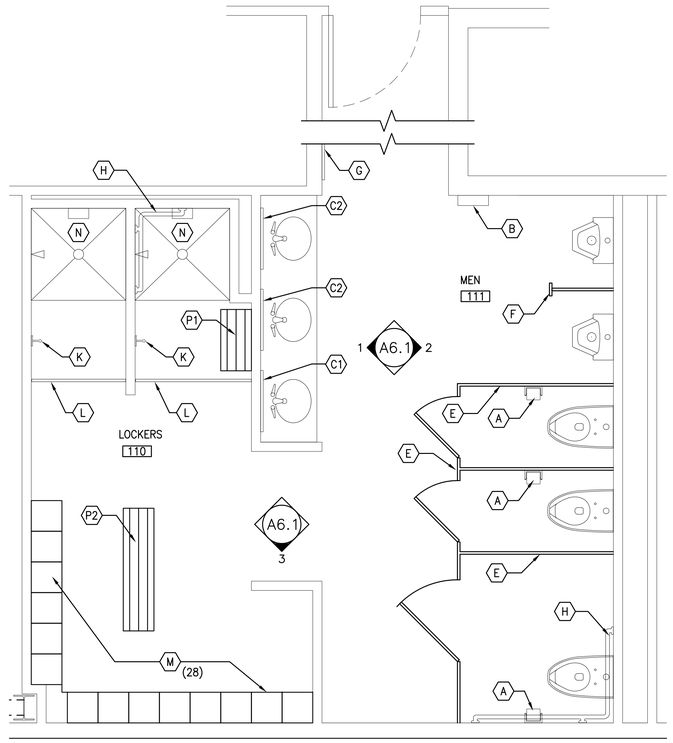


NOTES:
1. COUNTERTOP AND SKIRT FACE SHALL BE SOLID SURFACE SS1. BULLNOSE EXPOSED COUNTER EDGE; 1/4" FILLET EXPOSED SKIRT EDGES.
2. VANITY SIDES, REMOVABLE COVER PANEL, AND BOTTOM SHALL BE 3/4" BIRCH PLYWOOD WITH HARDWOOD TRIM FOR ALL EXPOSED EDGES. PROVIDE MINIMUM OF THREE COATS POLYEURETHANE FINISH.
3. LAVATORY IS ADA COMPLIANT.

VANITY SECTION
SCALE: 1" = 1'-0"



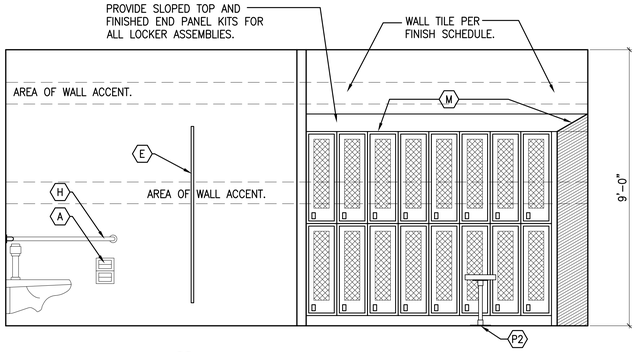
1 A2.1 A6.1 ENLARGED FLOOR PLAN ROOM 114
SCALE: 1/2" = 1'-0"



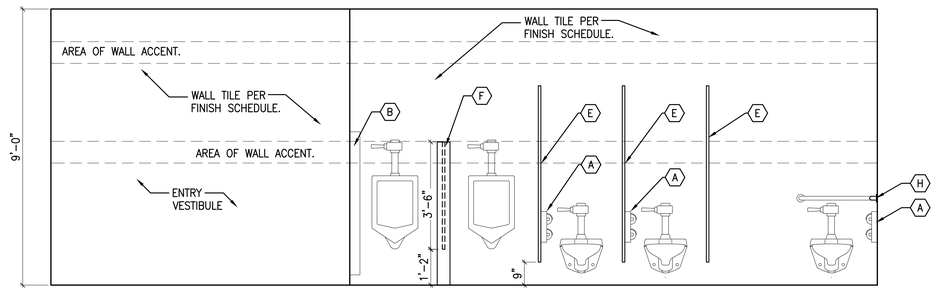
ENLARGED FLOOR PLAN ROOMS 110 AND 111
2 A2.1 A6.1 SCALE: 1/2" = 1'-0" (MEN'S SHOWER HEADS AT 7'-0"AFF)

ACCESSORY SCHEDULE

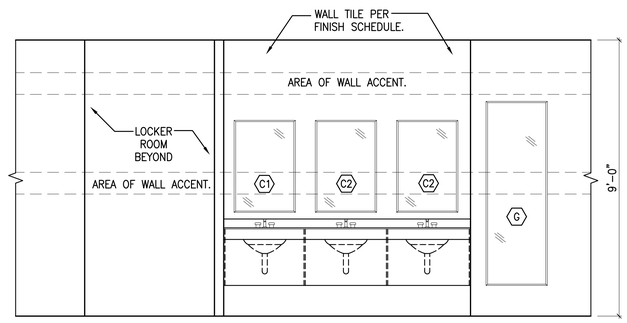
SYMBOL	ITEM	COMMENTS
A	VERTICAL DOUBLE TOILET TISSUE DISPENSER W/ OPEN FRONT	SURFACE @ 20" TO CENTERLINE A.F.F.
B	TOWEL DISPENSER/TRASH COMBO (ADA)	WALL MOUNTED @ 60" TO TOP A.F.F. – 13"x55"±
C1	MIRROR 24" x 36" (ADA)	WALL MOUNTED @ 40" A.F.F. MAX. BOTTOM OF MIRROR
C2	MIRROR 24" x 36"	WALL MOUNTED @ 40" A.F.F.
D	(NOT USED)	
E	TOILET PARTITION	BOTTOM @ 9" AFF
F	URINAL PARTITION	BOTTOM @ 14" AFF (WALL AND FLOOR BRACED)
G	MIRROR 24" x 72"	WALL MOUNTED @ 12" A.F.F. MAX. BOTTOM OF MIRROR
H	GRAB BAR	ANGLED ONE PIECE BAR W/ CONCEALED MOUNTING
K	TOWEL HOOK	WALL MOUNTED @ 60" A.F.F.
L	SHOWER CURTAIN ROD WITH CURTAIN	ROD MOUNTED 76" TO CENTERLINE A.F.F.
M	METAL LOCKERS	DOUBLE TIER, VENTED FRONT, 12"Wx12"Dx75H, ENCLOSED 6" BASE, ANGLED TOP CAP.
N	SOAP HOLDER	RECESSED @ 54" A.F.F. MAX. BOTTOM OF DISPENSER
P1	BENCH	24"x12"
P2	BENCH	60"x12"
R	ADA PIPE COVER	



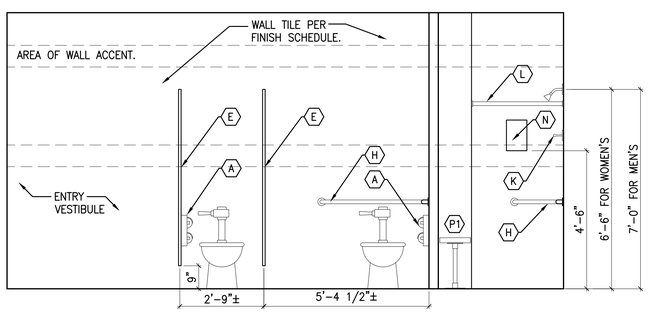
3 A6.1 A6.1 ELEVATION - ROOMS 110-111
SCALE: 1/2" = 1'-0"



2 A6.1 A6.1 ELEVATION - ROOM 111
SCALE: 1/2" = 1'-0"



1 A6.1 A6.1 ELEVATION - ROOM 111
SCALE: 1/2" = 1'-0"



4 A6.1 A6.1 ELEVATION - ROOMS 114
SCALE: 1/2" = 1'-0" (MEN'S SHOWER SIMILAR)

GRAPHIC SCALES:
1' 0' 1' 2' 3' 4' 5'
1/2"=1'-0"

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SUPERVISOR B.COFFMAN
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PUBLIC WORKS OFFICER

DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND
MARINE CORPS AIR STATION
BEAUFORT, S. C.

RENOVATE HANGAR 728
ADMINISTRATIVE SPACES
ENLARGED PLANS & ELEVATIONS
FIRST FLOOR - NEW WORK

SIZE F | CODE IDENT. NO. | N A V F A C DRAWING NO. N/A
HQMC PROJ. NO. BE1204M | CONSTR. CONTR. NO. N69450-11-D-2529
SCALE AS NOTED | MACC. | T.O.# ____ | SHEET 14 OF 40

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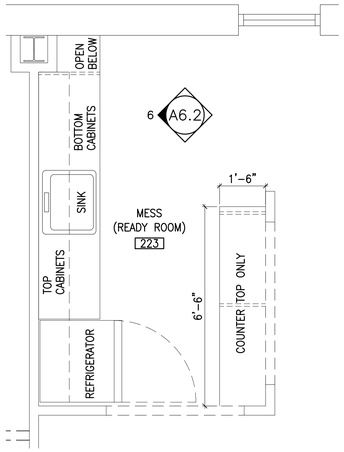
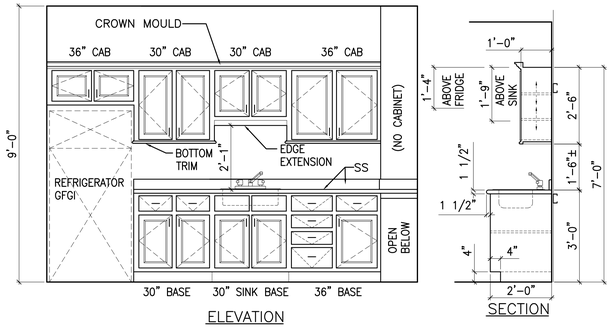




NOTES:
1. ALL POST-FORMED COUNTERTOP EDGES SHALL BE ROUND.
2. ALL CABINET DOORS SHALL BE SQUARE RAISED PANEL.
3. PROVIDE CABINETRY WITH CHERRY FRAMES AND DOORS.
4. CABINET SHELVING SHALL BE 3/4" ADJUSTABLE SHELVING.
5. BOTTOM TRIM SHALL EXTEND ACROSS BOTTOM OF CABINETS AND RETURN TO WALL AS INDICATED.
6. CABINET CROWN MOULD AND BOTTOM TRIM SHALL BE MANUFACTURER'S STANDARD PROFILES.

ENLARGED FLOOR PLAN
READY ROOM MESS (RM 223)
2 / A2.2 A6.2 SCALE: 1/2" = 1'-0"

ELEVATION
READY ROOM MESS (RM 223)
6 / A7.2 A7.2 SCALE: 1/2" = 1'-0"

CABINETRY NOTES:

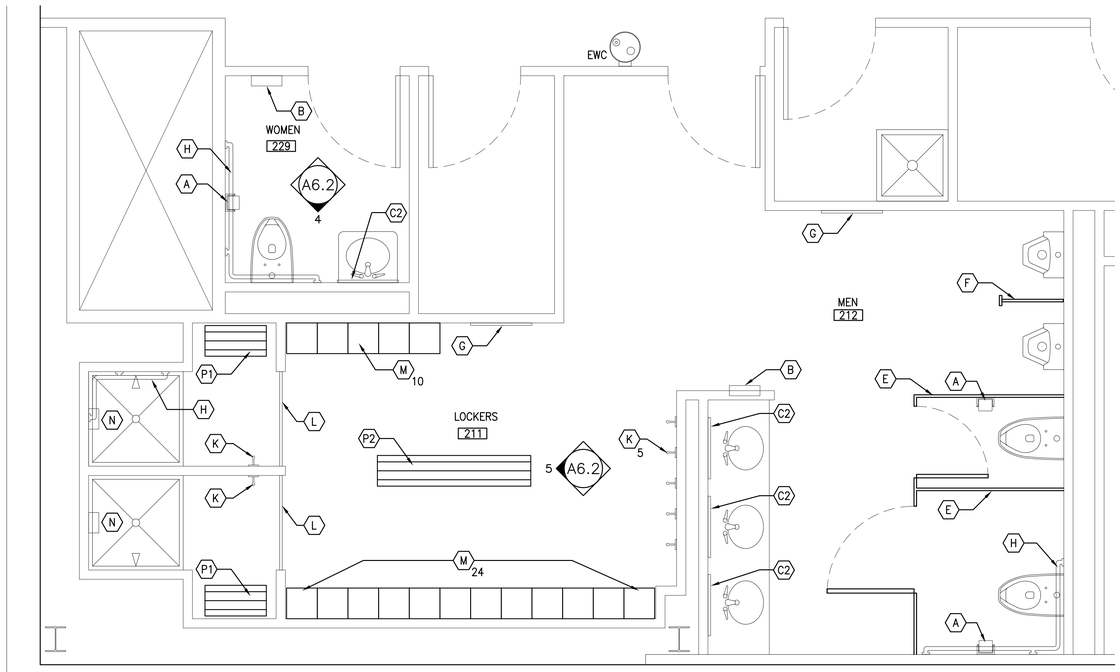
THE TERMS "PREMIUM," "CUSTOM," AND "ECONOMY" REFER TO THE QUALITY GRADES DEFINED IN ARCHITECTURAL WOODWORK INSTITUTE (AWI) QS. ITEMS NOT SPECIFIED TO BE OF A SPECIFIC GRADE SHALL BE CUSTOM GRADE.

COUNTERTOPS: COUNTERTOP SHALL BE SOLID SURFACE (SS) AS INDICATED.

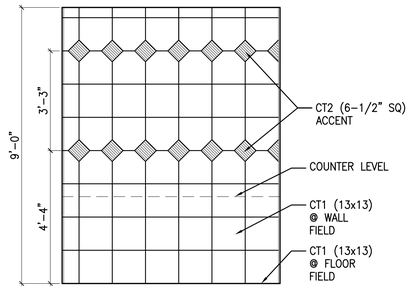
CABINETS: WALL AND BASE CABINETS SHALL BE OF THE SAME CONSTRUCTION AND APPEARANCES. FABRICATE WITH SOLID ENDS AND FRAME FRONTS, OR WITH FRAMES ALL AROUND. FRAMES SHALL BE NOT LESS THAN 3/4 BY 1 1/2 INCHES. ENDS, BOTTOM, BACK, AND PARTITIONS SHALL BE PLYWOOD. MORTISE AND TENON, DOVETAIL, OR DOWEL AND GLUE JOINTS TO PRODUCE A RIGID UNIT. COVER EXPOSED EDGES OF PLYWOOD WITH FINISH STRIPS. DOORS, FRAMES, AND SOLID EXPOSED ENDS SHALL BE 3/4 INCH THICK; BOTTOM, PARTITIONS, AND FRAMED ENDS 1/2 INCH MINIMUM; SHELVES 3/4 INCH MINIMUM; BACK 1/4 INCH MINIMUM. FABRICATOR SHALL SPECIFY SIZE AND LOCATION OF IN-WALL BLOCKING FOR THE SAFE AND SECURE MOUNTING OF ALL CABINETRY, AND COORDINATE THIS INFORMATION WITH FRAMING CONTRACTOR.

HARDWARE: PROVIDE HARDWARE FOR EACH DOOR, INCLUDING TWO HINGES. ALL PULLS TO BE 4" WIRE PULLS IN BRUSHED STAINLESS STEEL.

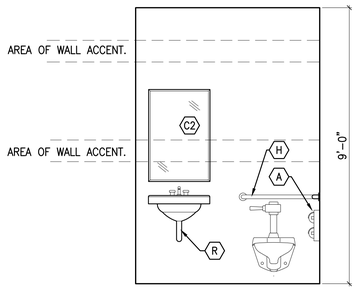
FINISH: PROVIDE 2 COATS OF POLYURETHANE OR FABRICATOR'S STANDARD CLEAR FINISH.



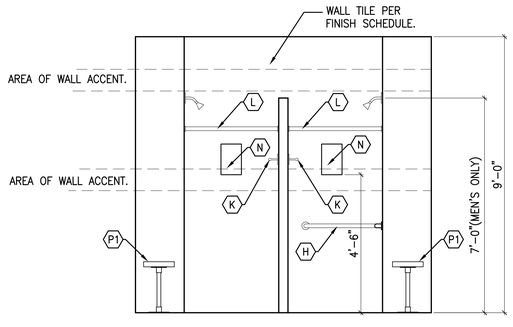
ENLARGED FLOOR PLAN
ROOMS 211, 212, AND 229
1 / A2.2 A6.2 SCALE: 1/2" = 1'-0"



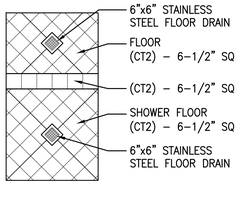
WALL TILE PATTERN
SCALE: 1/2" = 1'-0"



ELEVATION - ROOM 229
4 / A6.2 A6.2 SCALE: 1/2" = 1'-0"



ELEVATION - ROOM 211
5 / A6.2 A6.2 SCALE: 1/2" = 1'-0"



SHOWER STALL TILE PATTERN
SCALE: 1/2" = 1'-0"

GRAPHIC SCALES:
1' 0' 1' 2' 3' 4' 5'
1/2"=1'-0"

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ARCH. & ENGR. SEAL
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PUBLIC WORKS SUPERVISOR — SATISFACTORY TO DATE

P.W. DWG. NO. 21073
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CHECKED BY R.L.DeLOACH
SUPERVISOR B.COFFMAN
APPROVED DATE
PUBLIC WORKS OFFICER

DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND
MARINE CORPS AIR STATION
BEAUFORT, S. C.

RENOVATE HANGAR 728
ADMINISTRATIVE SPACES
ENLARGED PLANS & ELEVATIONS
SECOND FLOOR - NEW WORK

SIZE F | CODE IDENT. NO. | NAVFAC DRAWING NO. N/A
FROM PROJ. NO. BE1204M | CONSTR. CONTR. NO. N69450-11-D-2529
SCALE AS NOTED | MACC. | T.O.# ____ | SHEET 15 OF 40

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Dec 02, 2011 - 10:03 K:\2011005_06_H 728\Renovate Hangar 728 Admin Spaces\DWG\2011005.06_A6.2.dwg

DOOR/FRAME AND TRIM SCHEDULE

DOOR No.	WIDTH	HEIGHT	THICKNESS	MATERIAL	DOOR TYPE	FINISH	GLAZING	FRAME TYPE	FINISH	HEAD	JAMB	SILL	HARDWARE	NOTES
101	3/0 PAIR	6/10	1 3/4	HM/INSUL	3	PT2	NO	EX	PT2				HW4	NOTE 1
102	3/0	6/10	1 3/4	HM/INSUL	2	PT2	YES	EX	PT2				HW1	NOTE 1
103	3/0	6/10	1 3/4	HM/INSUL	2	PT2	YES	EX	PT2				HW5	NOTE 1, 3
104	3/0	6/10	1 3/4	HM/INSUL	3	PT2	NO	EX	PT2				HW3	NOTE 1, 2
105	3/0	6/10	1 3/4	HM/INSUL	3	PT2	NO	EX	PT2				HW2	NOTE 1, 2
106	3/0	6/10	1 3/4	HM/INSUL	3	PT2	NO	EX	PT2				HW3	NOTE 1, 2
107	3/0	6/10	1 3/4	HM/INSUL	1	PT2	YES	EX	PT2				HW2	NOTE 1, 2
108	3/0	6/10	1 3/4	HM/INSUL	1	PT2	YES	EX	PT2				HW2	NOTE 1
109	3/0	6/10	1 3/4	HM/INSUL	1	PT2	YES	EX	PT2				HW2	NOTE 1, 2
110														EXISTING TO REMAIN
111	3/0	6/10	1 3/4	HM/INSUL	1	PT2	YES	EX	PT2				HW2	NOTE 1, 2
112	3/0	6/10	1 3/4	HM/INSUL	1	PT2	YES	EX	PT2				HW2	NOTE 1
113	3/0	6/10	1 3/4	HM/INSUL	1	PT2	YES	EX	PT2				HW2	NOTE 1
114	3/0	6/10	1 3/4	HM/INSUL	1	PT2	YES	EX	PT2				HW2	NOTE 1, 2
115	3/0	6/10	1 3/4	HM/INSUL	1	PT2	YES	EX	PT2				HW2	NOTE 1, 2
116	3/0	6/10	1 3/4	HM/INSUL	1	PT2	YES	EX	PT2				HW2	NOTE 1, 2
117	3/0	6/10	1 3/4	HM/INSUL	1	PT2	YES	EX	PT2				HW2	NOTE 1, 2
118	3/0	6/10	1 3/4	HM/INSUL	1	PT2	YES	EX	PT2				HW2	NOTE 1, 2
119	3/0	6/10	1 3/4	HM/INSUL	1	PT2	YES	EX	PT2				HW2	NOTE 1, 2
120	3/0	6/10	1 3/4	HM/INSUL	1	PT2	YES	EX	PT2				HW2	NOTE 1
121	3/0	6/10	1 3/4	HM/INSUL	1	PT2	YES	EX	PT2				HW2	NOTE 1, 2
122	3/0	6/10	1 3/4	HM/INSUL	1	PT2	YES	EX	PT2				HW2	NOTE 1, 2, 7
123	3/0	6/10	1 3/4	HM/INSUL	1	PT2	YES	EX	PT2				HW2	NOTE 1, 5
124	3/0	6/10	1 3/4	HM/INSUL	1	PT2	YES	EX	PT2				HW2	NOTE 1
125	3/0	6/10	1 3/4	HM/INSUL	1	PT2	YES	EX	PT2				HW2	NOTE 1, 2
126	3/0 PAIR	6/10	1 3/4	HM/INSUL	1	PT2	YES	EX	PT2				HW4	NOTE 1, 2, 7
127	3/0	6/10	1 3/4	HM/INSUL	3	PT2	NO	EX	PT2				HW2	NOTE 1, 2
128	3/0 PAIR	6/10	1 3/4	HM/INSUL	2	PT2	YES	EX	PT2				HW6	NOTE 1, 3
129	3/0	6/10	1 3/4	HM/INSUL	2	PT2	YES	EX	PT2				HW1	NOTE 1
130	3/0	6/10	1 3/4	HM/INSUL	3	PT2	NO	EX	PT2				HW1	NOTE 1, 6
131	3/0	6/10	1 3/4	HM/INSUL	3	PT2	NO	EX	PT2				HW1	NOTE 1, 6
132	3/0	6/10	1 3/4	HM/INSUL	3	PT2	NO	B	PT2				HW1	NOTE 6
133	3/0	6/10	1 3/4	HM/INSUL	1	PT2	YES	EX	PT2				HW2	NOTE 1
201	3/0	6/10	1 3/4	HM/INSUL	1	PT2	YES	EX	PT2				HW5	NOTE 1, 3
202	3/0	6/10	1 3/4	HM/INSUL	2	PT2	YES	EX	PT2				HW2	NOTE 1, 2
203	3/0	6/10	1 3/4	HM/INSUL	3	PT2	NO	EX	PT2				HW2	NOTE 1, 2
204	3/0	6/10	1 3/4	HM/INSUL	3	PT2	NO	EX	PT2				HW3	NOTE 1, 2
205	3/0	6/10	1 3/4	HM/INSUL	3	PT2	NO	EX	PT2				HW2	NOTE 1, 2
206	3/0	6/10	1 3/4	HM/INSUL	3	PT2	NO	EX	PT2				HW3	NOTE 1, 2
207	3/0	6/10	1 3/4	HM/INSUL	3	PT2	NO	EX	PT2				HW2	NOTE 1, 2
208	3/0	6/10	1 3/4	HM/INSUL	3	PT2	NO	EX	PT2				HW2	NOTE 1, 2
209	3/0	6/10	1 3/4	HM/INSUL	2	PT2	YES	EX	PT2				HW2	NOTE 1, 2
210														(NOT USED)
211														(NOT USED)
212	3/0	6/10	1 3/4	HM/INSUL	2	PT2	YES	EX	PT2				HW2	NOTE 1, 2
213	3/0	6/10	1 3/4	HM/INSUL	2	PT2	YES	EX	PT2				HW2	NOTE 1, 2
214	3/0	6/10	1 3/4	HM/INSUL	2	PT2	YES	EX	PT2				HW2	NOTE 1, 2
215	3/0	6/10	1 3/4	HM/INSUL	2	PT2	YES	A	PT2				HW2	
216	3/0	6/10	1 3/4	HM/INSUL	2	PT2	YES	EX	PT2				HW2	NOTE 1, 2
217														(NOT USED)
218														(NOT USED)
219	3/0	6/10	1 3/4	HM/INSUL	2	PT2	YES	EX	PT2				HW2	NOTE 1, 2
220														(NOT USED)
221	3/0	6/10	1 3/4	HM/INSUL	2	PT2	YES	EX	PT2				HW2	NOTE 1, 2
222	3/0	6/10	1 3/4	HM/INSUL	2	PT2	YES	EX	PT2				HW2	NOTE 1, 2
223	3/0	6/10	1 3/4	HM/INSUL	2	PT2	YES	EX	PT2				HW2	NOTE 1, 2
224	3/0	6/10	1 3/4	HM/INSUL	2	PT2	YES	EX	PT2				HW2	NOTE 1, 2
225	3/0	6/10	1 3/4	HM/INSUL	1	PT2	YES	EX	PT2				HW2	NOTE 1, 2
226	3/0	6/10	1 3/4	HM/INSUL	2	PT2	YES	EX	PT2				HW2	NOTE 1, 2
227	3/0	6/10	1 3/4	HM/INSUL	2	PT2	YES	EX	PT2				HW2	NOTE 1
228	3/0	6/10	1 3/4	HM/INSUL	1	PT2	YES	EX	PT2				HW2	NOTE 1, 2
229														(NOT USED)
230	3/0	6/10	1 3/4	HM/INSUL	1	PT2	YES	EX	PT2				HW2	NOTE 1, 4, 2
231	3/0	6/10	1 3/4	HM/INSUL	3	PT2	NO	EX	PT2				HW2	NOTE 1, 2
232	3/0	6/10	1 3/4	HM/INSUL	3	PT2	NO	EX	PT2				HW2	NOTE 1, 2
233	3/0	6/10	1 3/4	HM/INSUL	1	PT2	YES	EX	PT2				HW5	NOTE 1, 3
234	3/0	6/10	1 3/4	HM/INSUL	1	PT2	YES	EX	PT2				HW2	NOTE 1

DOOR/FRAME AND TRIM SCHEDULE NOTES:

1. REUSE EXISTING FRAME. FILL DENTS, SAND, CLEAN, AND PRIME & PAINT.
2. 20 MINUTE DOOR.
3. ¾ HOUR DOOR.
4. WITH MAGNETIC LOCK COMBINATION TO REMAIN.
5. INSTALL HEAVY DUTY BOLT LATCH ON ROOM #105 SIDE OF DOOR.
6. DOOR TO BE EXIT ONLY. DO NOT INSTALL EXTERIOR PULL.
7. INSTALL CYPHER LOCK.

HARDWARE SCHEDULE

HW1 – SINGLE DOOR WITH PANIC.

(1-1/2) PAIR	HINGES
(1)	EXIT DEVICE
(1)	DOOR CLOSER
(3)	SILENCERS
(1)	EXTERIOR PULL AND LOCKSET
(1)	KICKPLATE

HW2 – INTERIOR SINGLE DOOR WITHOUT PANIC.

(1-1/2) PAIR	HINGES
(1)	DOOR CLOSER
(3)	SILENCERS
(1)	LOCKSET
(1)	KICKPLATE
(1)	DROP-DOWN DOOR STOP
(1)	WALL DOOR STOP

HW3 – TOILET, SINGLE DOOR WITHOUT PANIC.

(1-1/2) PAIR	HINGES
(1)	DOOR CLOSER
(3)	SILENCERS
(1)	PULL SET
(1)	KICKPLATE
(1)	WALL DOOR STOP

HW4 – DOUBLE DOOR WITHOUT PANIC.

(3) PAIR	HINGES
(2)	DOOR CLOSER
(6)	SILENCERS
(2)	EXTERIOR PULL AND LOCKSET
(2)	KICKPLATE

HW5 – INTERIOR SINGLE DOOR WITH PANIC.

(1-1/2) PAIR	HINGES
(1)	DOOR CLOSER
(3)	SILENCERS
(1)	KICKPLATE
(1)	WALL DOOR STOP
(1)	EXIT DEVICE
(1)	EXTERIOR PULL AND LOCKSET

HW6 – DOUBLE DOOR WITH PANIC.

(3) PAIR	HINGES
(2)	DOOR CLOSER
(6)	SILENCERS
(2)	KICKPLATE
(2)	EXIT DEVICE
(2)	EXTERIOR PULL AND LOCKSET

NOTE:
1. PROVIDE WEATHER SEAL ON ALL EXTERIOR DOORS.
2. PROVIDE BLOCKING AT ALL STUD WALL DOOR STOP LOACTIONS.

FINISH LEGEND - COLOR BOARD #6

FLOOR/WALL TILE (CT)

CT1 MFG'R.: DAL TILE
STYLE: CONCRETE CONNECTION
COLOR: #CN91 STEEL STRUCTURE
SIZE: 13x13
FLOOR/WALL – FIELD

CT2 MFG'R.: DAL TILE
STYLE: CONCRETE CONNECTION
COLOR: #CN90 BOULEVARD BEIGE
SIZE: 6-1/2"x6-1/2"
FLOOR/WALL – ACCENT

GROUT/FLOOR

MFG'R.: CUSTOM BLDG. PRODUCTS
COLOR: #122 LINEN
SIZE: 1/4"

LINOLEUM TILE (LT)

LT1 MFG'R.: MARLOMEUM
STYLE: STANDARD EXCELON
COLOR: FIELD – #T2629 EIGER

LT2 MFG'R.: MARLOMEUM
STYLE: STANDARD EXCELON
COLOR: ACCENT – MCT607 WHITE MARBLE

CARPET (CPT)

CPT1 MFG'R.: J&J INVISIONS
STYLE: PROBLEM SOLVED MOD (7442)
COLOR: #1210 DUCT TAPE

VINYL WALL BASE (VB)

VB1 MFG'R.: ROPPE
COLOR: #129 DOLPHIN

SOLID SURFACE MATERIAL (SS)

SS1 MFG'R.: CORIAN
COLOR: SANDSTONE

STAIN (ST)

ST1 MFG'R.: GEPPETTO
STYLE: WOOD-CHERRY
COLOR: AUTUMN WITH BROWN GLAZE

FINISH NOTES:
1. ALL HARDWARE, INCULDING BUT NOT LIMITED TO DOOR, CABINET, BATH, SHALL BE STAINLESS STEEL FINISH.
2. VERIFY ALL FLOOR TILE PATTERNS WITH BASE ARCHITECT.

ACOUSTICAL CEILING TILE (ACT)

ACT1 MFG'R.: ARMSTRONG
STYLE: #1835 FINE FISSURED BEVELED TEGULAR
COLOR: WHITE
SIZE: 24"x24"
GRID: WHITE, 9/16"

PAINT-WALL (PT)

PT1 MFG'R.: SHERWIN WILLIAMS
STYLE: SATIN FINISH
COLOR: #SW0054 TWILIGHT GRAY

PAINT-DOOR/FRAME/TRIM (PT)

PT2 MFG'R.: SHERWIN WILLIAMS
STYLE: SEMI-GLOSS FINISH
COLOR: #SW0023 PEWTER TANKARD

PAINT-CEILING (PT)

PT3 MFG'R.: SHERWIN WILLIAMS
STYLE: SEMI-GLOSS
COLOR: WHITE (INTERIOR)

PAINT-EXTERIOR TRIM (PT)

PT4 MFG'R.: SHERWIN WILLIAMS
STYLE: SEMI-GLOSS / EXTERIOR
COLOR: (COLOR BY OWNER)

PAINT-SPECIAL (PT)

PT5 MFG'R.: SHERWIN WILLIAMS
STYLE: HD GLOSS ENAMEL
COLOR: #SW0023 PEWTER TANKARD

TOILET PARTITIONS (TP)

TP1 MFG'R.: SCRANTON PRODUCTS
COLOR: STAINLESS, HAMMERED FINISH

LOCKERS

MFG'R.: SCRANTON PRODUCTS
COLOR: STAINLESS, HAMMERED FINISH

WINDOW BLINDS

MFG'R.: LEVOLOR
STYLE: METAL – RIVIERA
COLOR: #885 DARK BRONZE

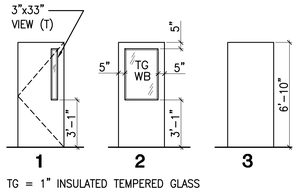
NOTE:
PROVIDE WINDOW BLINDS AT ALL EXTERIOR AND INTERIOR WINDOWS.

GENERAL NOTES:

1. ALL DOOR FRAMES TO BE PAINTED PT2, EXCEPT WHERE NOTED OTHERWISE.
2. ALL TOILET PARTITIONS TO BE TP1.
3. ALL MANUFACTURERS LISTED ARE FOR REFERENCE TO COLOR AND STYLE. AN APPROVED EQUAL WILL BE ACCEPTED.
4. CONTRACTOR SHALL SUBMIT PROPOSED PAINT, TILE, AND OTHER MATERIAL MANUFACTURERS & COLOR CHIPS FOR APPROVAL BY THE CONTRACTING OFFICER PRIOR TO CONSTRUCTION.
5. NOT USED.
6. EXTERIOR DOOR & FRAME PAINT COLOR SHALL BE PT4.
7. ALL WOOD DOORS SHALL BE STAINED WITH 2 COATS POLYURETHANE.

LEGEND

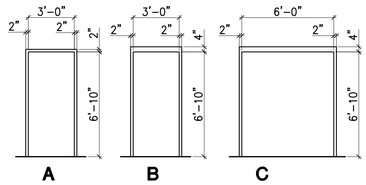
ACT	ACOUSTICAL CEILING TILE SYSTEM	LT	LINOLEUM TILE
ALM	ALUMINUM	MGYP	MOISTURE RESISTANT GYPSUM BOARD
CH	CHERRY	M	MARBLE
CMU	CONCRETE MASONRY UNIT	PAN	PANELING
CM	CROWN MOLD	PL	PLASTIC LAMINATE
CONC	CONCRETE	PT	PAINT
CPT	CARPET	RO	RED OAK
CT	CERAMIC TILE	SEALED	SEALED CONCRETE
EIFS	EXTERIOR INSULATION & FINISH SYSTEM	SC	SOLID CORE
EPS	EXTRUDED POLYSTYRENE	SS	SOLID SURFACING
EXP	EXPOSED STRUCTURE	ST	STAIN
EPX	EPOXY FINISH	STL	STEEL
EX	EXISTING	VB	VINYL BASE
GFGI	GOV. FURNISHED, GOV. INSTALLED	VCT	VINYL COMPOSITION TILE
GYP	GYPSUM BOARD	WD	WOOD
IRGYP	IMPACT RESISTANT GYPSUM BOARD	XGYP	EXTERIOR GYPSUM BOARD



TG = 1" INSULATED TEMPERED GLASS
WB = PROVIDE TOP/BOTTOM ANCHORED WINDOW BLINDS

DOOR TYPES

NOT TO SCALE



TG = 1" INSULATED TEMPERED GLASS

FRAME TYPES

NOT TO SCALE

REVISIONS

SYM.	DESCRIPTION	DATE	APP.

ROOM FINISH SCHEDULE

LOCATION		FLOORS		WALLS								CEILING			NOTES
				NORTH		SOUTH		EAST		WEST					
ROOM No	ROOM NAME	FINISH	BASE	MAT	FIN.	MAT	FIN.	MAT	FIN.	MAT	FIN.	MAT.	FINISH	HEIGHT	
* 102	SEAT SHOP	LT1	VB1		PT1		PT1		PT1		PT1	ACT	ACT1	9'-0"	
* 103	FE OFFICE	CPT1	VB1		PT1		PT1		PT1		PT1	ACT	ACT1	9'-0"	
* 104	LAUNDRY	LT1	VB1		PT1		PT1		PT1		PT1	ACT	ACT1	9'-0"	
* 105	FLIGHT EQUIP.	LT1	VB1		PT1		PT1		PT1		PT1	ACT	ACT1	9'-0"	
* 106	AIR FRAMES/CC/HYD	LT1	VB1		PT1		PT1		PT1		PT1	ACT	ACT1	9'-0"	
* 107	AV. OFFICE	CPT1	VB1		PT1		PT1		PT1		PT1	ACT	ACT1	9'-0"	
* 108	AVIONICS	LT1	VB1		PT1		PT1		PT1		PT1	ACT	ACT1	9'-0"	
* 109	AVIONICS VAULT	LT1	VB1		PT1		PT1		PT1		PT1	EX	PT3	9'-0"	
* 110	LOCKERS	CT1	CT1		CT1/2		CT1/2		CT1/2		CT1/2	MGYP	PT3	9'-0"	
* 111	MEN	CT1	CT1		CT1/2		CT1/2		CT1/2		CT1/2	MGYP	PT3	9'-0"	
* 112	ELEC.	LT1	VB1		PT1		PT1		PT1		PT1	ACT	ACT1	9'-0"	
* 113	MECHANICAL	CONC	VB1		PT1		PT1		PT1		PT1	ACT	ACT1	9'-0"	
* 114	WOMEN	CT1	CT1		CT1/2		CT1/2		CT1/2		CT1/2	MGYP	PT3	9'-0"	
* 115	QUALITY ASSURANCE	LT1	VB1		PT1		PT1		PT1		PT1	ACT	ACT1	9'-0"	
* 116	TOOL ROOM	LT1	VB1		PT1		PT1		PT1		PT1	ACT	ACT1	9'-0"	
* 117	AMO	LT1	VB1		PT1		PT1		PT1		PT1	ACT	ACT1	9'-0"	
* 118	MAINT. ADMIN	LT1	VB1		PT1		PT1		PT1		PT1	ACT	ACT1	9'-0"	
* 119	MAINT. CONTROL	LT1	VB1		PT1		PT1		PT1		PT1	ACT	ACT1	9'-0"	
* 120	POWER LINE	LT1	VB1		PT1		PT1		PT1		PT1	ACT	ACT1	9'-0"	
* 121	ORD. OFFICE	CPT1	VB1		PT1		PT1		PT1		PT1	ACT	ACT1	9'-0"	
* 122	ORD. STORAGE	LT1	VB1		PT1		PT1		PT1		PT1	ACT	ACT1	9'-0"	
* 123	STO/JAN	CT1	VB1		PT1		PT1		PT1		PT1	MGYP	PT3	9'-0"	
* 124	COMM	LT1	VB1		PT1		PT1		PT1		PT1	ACT	ACT1	9'-0"	
* 125	CORRIDOR	LT1/2	VB1		PT1		PT1		PT1		PT1	ACT	ACT1	9'-0"	
* 126	STAIR No.1 – LEVEL 1	LT1	VB1		PT1		PT1		PT1		PT1	MGYP	PT3	--	
* 127	STAIR No.2 – LEVEL 1	LT1	VB1		PT1		PT1		PT1		PT1	MGYP	PT3	--	
* 128	OFFICE	LT1	VB1		PT1		PT1		PT1		PT1	ACT	ACT1	9'-0"	
* 201	MPC	CPT1	VB1		PT1		PT1		PT1		PT1	ACT	ACT1	9'-0"	
* 202	SIPR	LT1	VB1		PT1		PT1		PT1		PT1	ACT	ACT1	9'-0"	
* 203	OPSO	CPT1	VB1		PT1		PT1		PT1		PT1	ACT	ACT1	9'-0"	
* 205	OIC	CPT1	VB1		PT1		PT1		PT1		PT1	ACT	ACT1	9'-0"	
* 206	ADMIN OPS	CPT1	VB1		PT1		PT1		PT1		PT1	ACT	ACT1	9'-0"	
* 207	CLASSROOM #3	CPT1	VB1		PT1		PT1		PT1		PT1	ACT	ACT1	9'-0"	
* 209	CLASSROOM #4	CPT1	VB1		PT1		PT1		PT1		PT1	ACT	ACT1	9'-0"	
* 210	OFFICE	CPT1	VB1		PT1		PT1		PT1		PT1	ACT	ACT1	9'-0"	
* 211	LOCKERS	CT1	CT1		CT1/2		CT1/2		CT1/2		CT1/2	MGYP	PT3	9'-0"	
* 212	MEN	CT1	CT1		CT1/2		CT1/2		CT1/2		CT1/2	MGYP	PT3	9'-0"	
* 213	ELEC.	LT1	VB1		PT1		PT1		PT1		PT1	ACT	ACT1	9'-0"	
* 214	MECH.	EX CONC.	VB1		PT1		PT1		PT1		PT1	ACT	ACT1	9'-0"	
* 215	STUDENT LOUNGE	CPT1	VB1		PT1		PT1		PT1		PT1	ACT	ACT1	9'-0"	
* 216	STORAGE	LT1	VB1		PT1		PT1		PT1		PT1	ACT	ACT1	9'-0"	
* 217	CLASSROOM #1	CPT1	VB1		PT1		PT1		PT1		PT1	ACT	ACT1	9'-0"	
* 220	CLASSROOM #2	CPT1	VB1		PT1		PT1		PT1		PT1	ACT	ACT1	9'-0"	
* 223	READY ROOM	CPT1	VB1		PT1		PT1		PT1		PT1	ACT	ACT1	9'-0"	
* 224	CONF ROOM	CPT1	VB1		PT1		PT1		PT1		PT1	ACT	ACT1	9'-0"	
* 225	SNCOIC	CPT1	VB1		PT1		PT1		PT1		PT1	ACT	ACT1	9'-0"	
* 226	STO/JAN	LT1	VB1		PT1		PT1		PT1		PT1	ACT	ACT1	9'-0"	
* 227	COMM	LT1	VB1		PT1		PT1		PT1		PT1	ACT	ACT1	9'-0"	
* 228	CORRIDOR	LT1/2	VB1		PT1		PT1		PT1		PT1	ACT	ACT1	9'-0"	
* 229	WOMEN	CT1	CT1		CT1/2		CT1/2		CT1/2		CT1/2	MGYP	PT3	9'-0"	
* 230	JANITOR	CT1	VB1		PT1		PT1		PT1		PT1	ACT	ACT1	9'-0"	
* 126	STAIR No.1 – LEVEL 2	LT1	VB1		PT1		PT1		PT1		PT1	ACT	ACT1		
* 127	STAIR No.2 – LEVEL 2	LT1	VB1		PT1		PT1		PT1		PT1	ACT	ACT1		

* PROVIDE ROOM DESIGNATION SIGNAGE. SEE DETAILS ON DRAWING A8.0.

NOVEMBER 2011

IF SHEET IS LESS THAN (30"x42") IT IS A REDUCED PRINT; SCALE ACCORDINGLY

A7.0

ARCHITECTURAL & ENGINEERING FIRM
BES INCORPORATED ARCHITECTS ENGINEERS
P.O. BOX 2060, BEAUFORT, S.C. 29901-2060 843-522-2094
ARCH. & ENGR. SEAL
SOUTH CAROLINA BEAUFORT ENGINEERING SERVICES, INC. No. C00670 CERTIFICATE OF AUTHORIZATION

NATURAL RESOURCES & ENVIRONMENTAL AFFAIRS — SATISFACTORY TO DATE
SAFETY DEPARTMENT — SATISFACTORY TO DATE
FIRE DEPARTMENT — SATISFACTORY TO DATE
PUBLIC WORKS SUPERVISOR — SATISFACTORY TO DATE
PUBLIC WORKS OFFICER

P.W. DWG. NO. 21074
DRAWN BY JMA
CHECKED BY R. DeLOACH
SUPERVISOR B.COFFMAN
APPROVED DATE

DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND
MARINE CORPS AIR STATION
BEAUFORT, S. C.

RENOVATE HANGAR 728 ADMINISTRATIVE SPACES SCHEDULES & LEGEND

SIZE F | CODE IDENT. NO. | NAVFAC DRAWING NO. N/A
HQMC PROJ. NO. BE1204M | CONSTR. CONTR. NO. N69450-11-D-2529
SCALE AS NOTED | MACC. | T.O.# ____ | SHEET 16 OF 40

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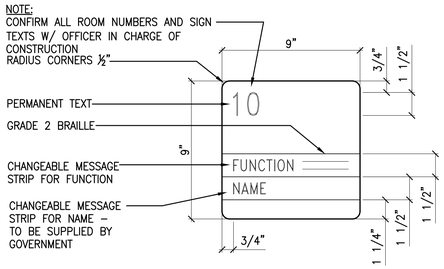
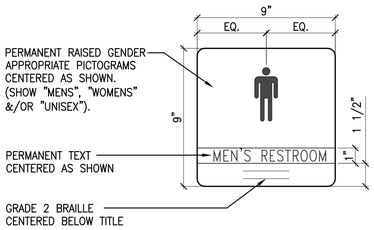
REVISIONS			
SYM.	DESCRIPTION	DATE	APP.



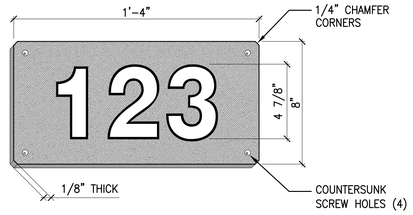
NUMBERS & LETTERS:
"HELVETICA MEDIUM", SIZES AS SHOWN, GRAY BACKGROUND COLOR W/ BLACK TEXT AND ICON



NOTE:
BOTTOM EDGE OF SIGNAGE SHALL BE 52"AFF.

INTERIOR SIGNAGE DETAILS

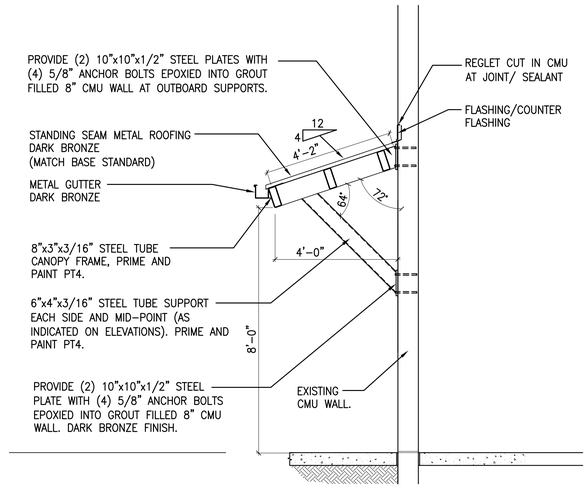
SCALE: 3" = 1'-0"

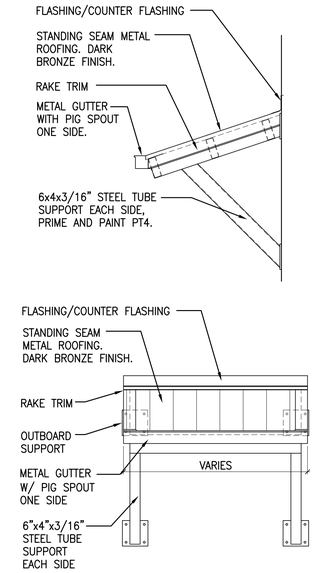


1. SOLID ALUMINUM PANEL SIZED AS INDICATED.
2. FIELD COLOR: MAP# 10217 "RICH BROWN".
3. TEXT COLOR: CALON #06 YELLOW REFLECTIVE VINYL APPLIED WITH WEATHER RESISTANT ADHESIVE.
4. ATTACH WITH STAINLESS STEEL COUNTER-SUNK SCREWS WITH VINYL WASHERS.
5. TEXT STYLE: "HELVETICA MEDIUM", HEIGHT AS INDICATED.

EXTERIOR SIGNAGE DETAILS

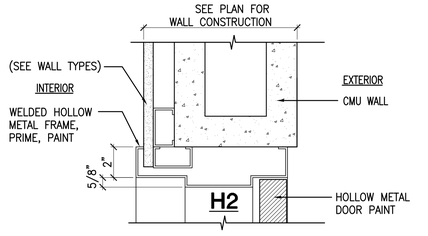
SCALE: 3" = 1'-0" BASE STANDARD

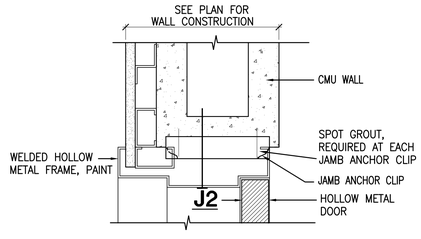


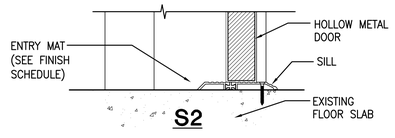


1 / A8.0 A8.0 **CANOPY DETAILS**

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

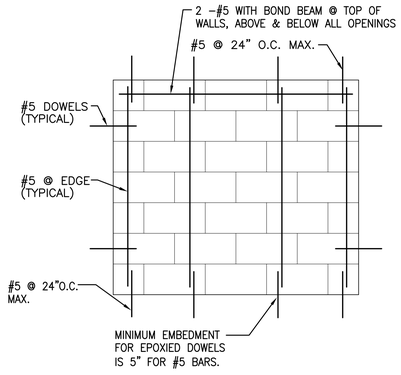






HEAD, JAMB & SILL DETAILS

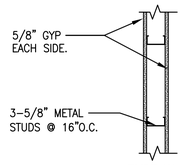
SCALE: NOT TO SCALE



NOTES: SEE ARCHITECTURAL DRAWINGS FOR LOCATION OF OPENINGS, EXTENT OF FILL-IN, AND OPENING SIZES. ALL CELLS CONTAINING VERTICAL OR HORIZONTAL BARS TO BE FILLED WITH GROUT.

3 / A8.0 A8.0 **TYP. REINFORCING @ FILLED IN OPENINGS**

SCALE: NOT TO SCALE

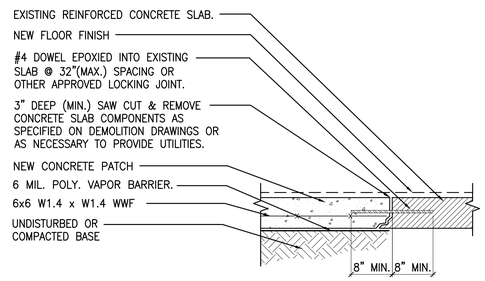


TYPE W1

NOTE:
CONTINUE GYPSUM WALL BOARD ON ALL NEW AND REFINISHED WALLS 12 INCHES ABOVE NEW ACT CEILINGS.

WALL TYPES

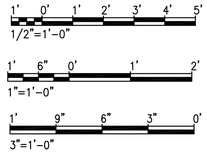
SCALE: NOT TO SCALE



2 / A8.0 A8.0 **SLAB PATCH DETAIL**

SCALE: 1" = 1'-0"

GRAPHIC SCALES:



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ARCH. & ENGR. SEAL
SOUTH CAROLINA BEAUFORT ENGINEERING SERVICES, INC. No. C00670 CERTIFICATE OF AUTHORIZATION

NATURAL RESOURCES & ENVIRONMENTAL AFFAIRS — SATISFACTORY TO DATE
SAFETY DEPARTMENT — SATISFACTORY TO DATE
FIRE DEPARTMENT — SATISFACTORY TO DATE
PUBLIC WORKS SUPERVISOR — SATISFACTORY TO DATE
PUBLIC WORKS OFFICER

P.W. DWG. NO. 21075
DRAWN BY JMA
CHECKED BY R. DeLOACH
SUPERVISOR B.COFFMAN
APPROVED DATE

DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND
MARINE CORPS AIR STATION
BEAUFORT, S. C.

RENOVATE HANGAR 728
ADMINISTRATIVE SPACES
ARCHITECTURAL DETAILS

SIZE F | CODE IDENT. NO. | N A V F A C DRAWING NO. N/A
HQMC PROJ. NO. BE1204M | CONSTR. CONTR. NO. N69450-11-D-2529
SCALE AS NOTED | MACC. | T.O.# ____ | SHEET 17 OF 40

Dec 02, 2011 - 10:08 K:\2011005_06_H 728\Renovate Hangar 728 Admin Spaces\DWG\2011005.06_A8.0.dwg

LEGEND

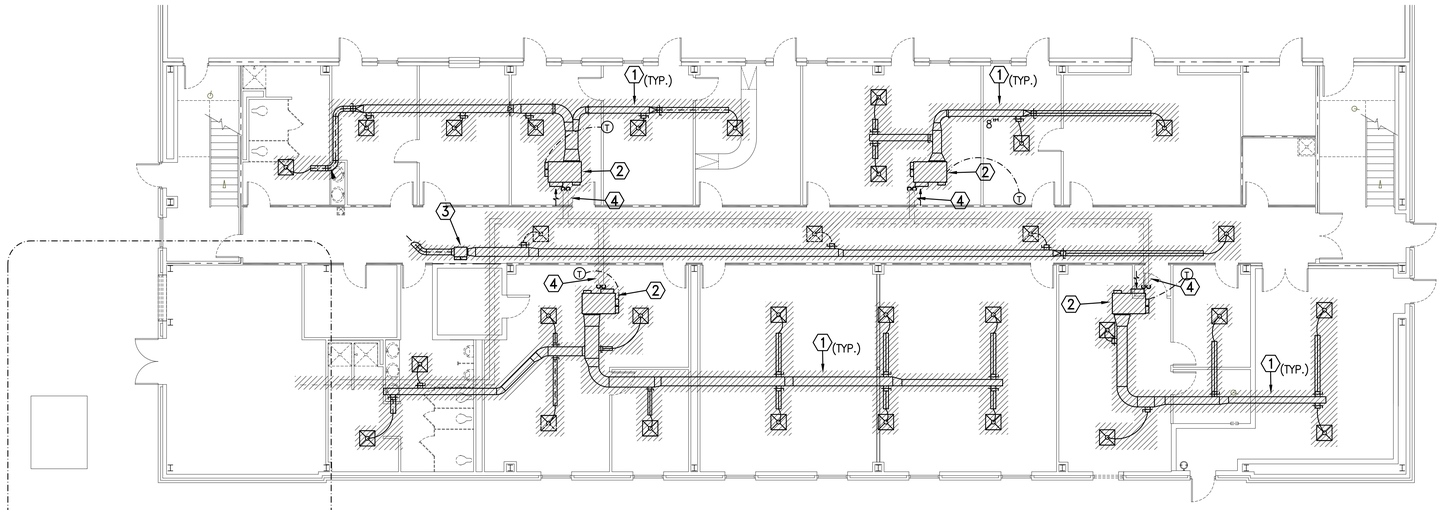
ITEM	DESCRIPTION
	ITEM/DEVICE TO BE DEMOLISHED
	SQUARE ELBOW WITH TURNING VANES
"A" x "B"	DUCTWORK, SIZE SHOWN IN INCHES
	MANUAL BALANCING DAMPER
M	MOTORIZED CONTROL VOLUME DAMPER (MVD)
PB	PUSH BUTTON CONTROL SWITCH, EXPLOSION PROOF
S	SWITCH
W	WALL MOUNTED DUCT WINCH
CO_2	CARBON MONOXIDE SENSOR. "2" INDICATES UNIT MONITORED
H	HUMIDISTAT
T	THERMOSTAT
CFM	CUBIC FEET PER MINUTE
FD	FIRE DAMPER
BD	MANUAL VOLUME DAMPER
	POINT OF CONNECTION NEW WORK TO EXISTING
	POINT OF DISCONNECTION DEMOLITION
℄	CENTER LINE
D1 215 9x9	DIFFUSER DESIGNATION (SIZE, CFM, NECK SIZE)
	DIFFUSER, DIRECTION OF FLOW AS INDICATED
	SIDEWALL DIFFUSER
	RETURN AIR OUTLET
	EXHAUST AIR OUTLET
OA	OUTSIDE AIR
RA	RETURN AIR
AFF	ABOVE FINISHED FLOOR
UNO	UNLESS NOTED OTHERWISE
OBD	OPPOSED BLADE DAMPER
DDC	DIRECT DIGITAL CONTROL PANEL
EF3	EXHAUST FAN DESIGNATION
AHUA	AIR HANDLING UNIT DESIGNATION
A/V	AUDIO/VISUAL DEVICE
	POINT OF DISCONNECTION (P.O.D.)
HWS	HOT WATER SUPPLY
HWR	HOT WATER RETURN

DEMOLITION NOTE SCHEDULE

1. DEMOLISH ALL DUCTWORK AND AIR DEVICES COMPLETE, INCLUDING DUCTWORK, INSULATION, SUPPORTS, DAMPERS, FLEX CONNECTIONS, AIR SUPPLY AND AIR RETURN OUTLETS.
2. DEMOLISH FAN POWERED VAV UNIT COMPLETE, INCLUDING UNIT, HOT WATER COIL, HOT WATER PIPING, SUSPENSION SYSTEM, ELECTRICAL POWER AND CONTROLS, ENTIRE SUPPLY AIR TRUNK. EXISTING UNIT IS MOUNTED ABOVE CEILING.
3. DEMOLISH VAV UNIT COMPLETE, INCLUDING UNIT, HOT WATER COIL, HOT WATER PIPING, SUSPENSION SYSTEM, ELECTRICAL POWER AND CONTROLS, ENTIRE SUPPLY AIR TRUNK. EXISTING UNIT IS MOUNTED ABOVE CEILING.
4. DEMOLISH EXISTING HOT WATER PIPING, VALVES, FITTINGS, AND SUPPORTS, FROM FAN POWERED VAV UNIT TO POINT OF DISCONNECTION.

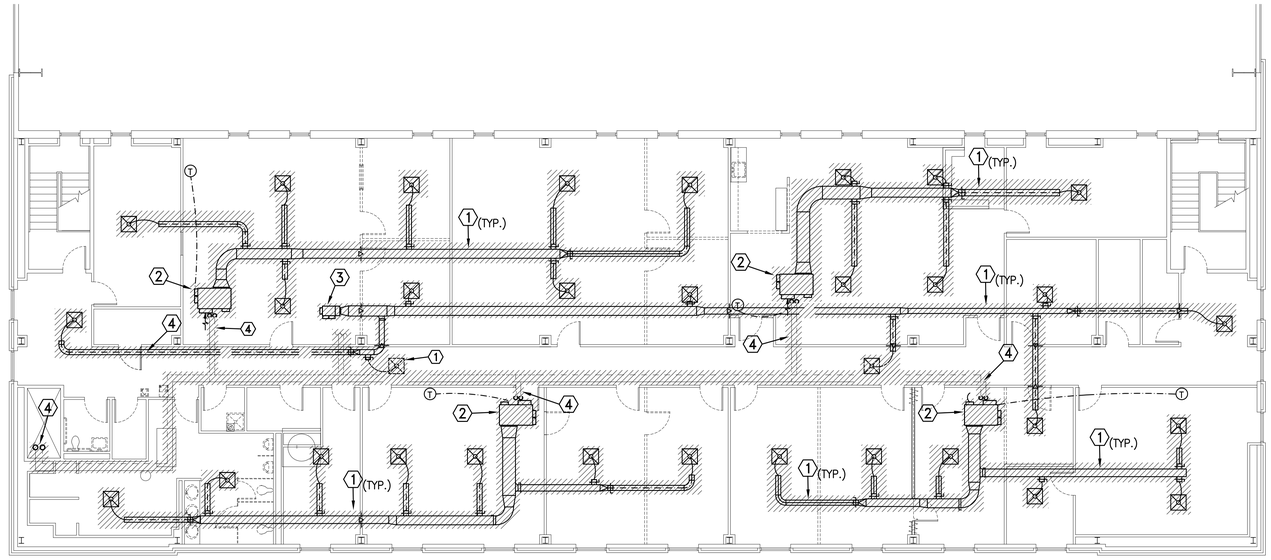
REVISIONS

SYM.	DESCRIPTION	DATE	APP.



1 / M1.0M1.0 **MECHANICAL PLAN - FIRST FLOOR - EXISTING & PARTIAL DEMOLITION PLAN**
SCALE: 1/8" = 1'-0"

3 / M1.0M2.0



2 / M1.0M1.0 **MECHANICAL PLAN - SECOND FLOOR - EXISTING & PARTIAL DEMOLITION PLAN**
SCALE: 1/8" = 1'-0"

GENERAL DEMOLITION NOTES

1. ALL ITEMS SHOWN WITH HATCHED LINES INDICATE ITEMS TO BE DEMOLISHED. SEE ARCHITECTURAL DRAWINGS AND CODED DEMOLITION NOTES FOR SPECIFIC INFORMATION.

2. LOCATION OF EXISTING EQUIPMENT, DUCTWORK, AIR OUTLETS, CONTROLS AND ALL CONCEALED WORKS, ETC. ARE APPROXIMATE.

3. ALL OPENINGS AND SURFACES MADE BARE BY DEMOLITION AND/OR REMOVAL OF AIR OUTLETS, EQUIPMENT, PIPING, DUCTWORK, CONTROLS, ETC. SHALL BE REPAIRED AND/OR PATCHED TO MATCH ADJACENT FINISH. PREPARE SURFACES TO RECEIVE NEW FINISH, SEE ARCHITECTURAL DRAWINGS FOR NEW FINISH SCHEDULE. ALL REPAIRS AND NEW FINISH SHALL BE BY TRADES SKILLED IN FINISH WORK UNDER EMPLOY OF THE GENERAL CONTRACTOR.

4. DURING THE LIFE OF THE CONTRACT, THE CONTRACTOR SHALL PROTECT ALL SYSTEMS OR PORTIONS OF SYSTEMS TO REMAIN FOR REUSE FROM DAMAGE. ALL SYSTEMS SHALL BE TESTED IN SERVICE AFTER COMPLETION OF THE CONTRACT AND MADE COMPLETE AND OPERABLE AT NO ADDITIONAL COST TO THE GOVERNMENT.

5. NOT ALL CIRCUITS AND DEVICES ARE INDICATED. FOR EACH DEVICE THERE IS A CIRCUIT OR FEEDER BACK TO THE POINT OF ORIGIN. WHERE WALLS, FLOORS OR CEILINGS ARE TO BE DEMOLISHED ALL MATERIAL, SURFACE OR FLUSH MOUNTED THEREON SHALL BE REMOVED UNLESS INDICATED OR REQUIRED TO REMAIN TO SERVE A DEVICE.

6. SEE ARCHITECTURAL DRAWINGS AND SPECIFICATION FOR ADDITIONAL INFORMATION. COORDINATE ALL DEMOLITION WITH ALL TRADES INVOLVED.

7. ALL OPENINGS IN RATED CONSTRUCTION NOT REUSED IN NEW WORK SHALL BE CLOSED WITH FIRE RATED MATERIAL TO MATCH ADJACENT FINISH AND NEW CONSTRUCTION. MODIFY EXISTING OPENINGS TO BE REUSED IN NEW WORK BY SAW CUTTING.

8. NOT ALL FITTINGS, VALVES, SUPPORTS, DEVICES, AND FIXTURES ARE SHOWN.

GRAPHIC SCALES:
5' 0' 5' 15' 20'
1/8"=1'-0"

NOVEMBER 2011

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SOUTH CAROLINA — BEAUFORT ENGINEERING SERVICES, INC. — No. C00670 — CERTIFICATE OF AUTHORIZATION

NATURAL RESOURCES & ENVIRONMENTAL AFFAIRS — SATISFACTORY TO DATE
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PUBLIC WORKS SUPERVISOR — SATISFACTORY TO DATE

P.W. DWG. NO. 21076
DRAWN BY RL
CHECKED BY R. DeLOACH
SUPERVISOR B.COFFMAN
APPROVED DATE
PUBLIC WORKS OFFICER

DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND
MARINE CORPS AIR STATION
BEAUFORT, S. C.

RENOVATE HANGAR 728
ADMINISTRATIVE SPACES
MECHANICAL PLANS
EXISTING & PARTIAL DEMOLITION

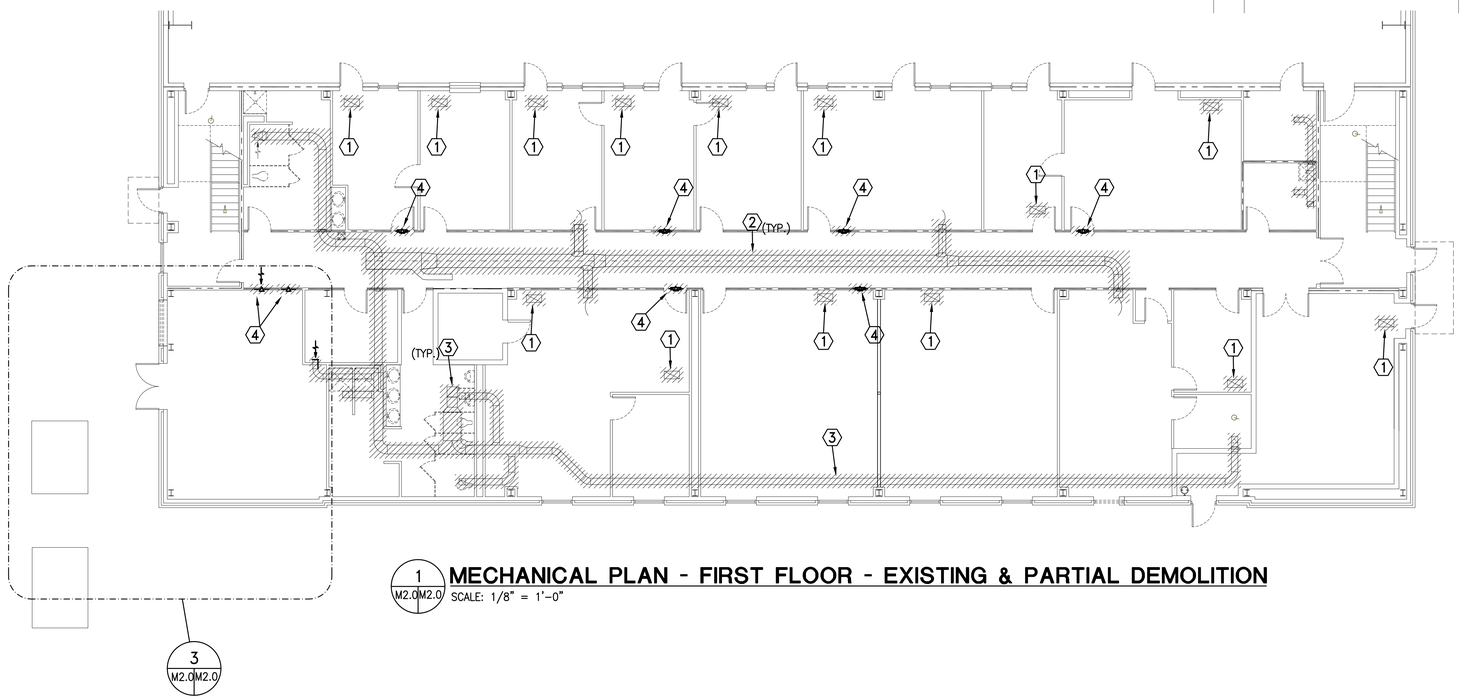
SIZE	CODE IDENT. NO.	NAVFAC DRAWING NO.
F		N/A
HQMC PROJ. NO. BE1204M	CONSTR. CONTR. NO. N69450-11-D-2529	
SCALE AS NOTED	MACC.	T.O.# ____ SHEET 18 OF 40

Dec 02, 2011 - 10:36 K:\2011005_06_H 728\Renovate Hangar 728 Admin Spaces\DWG\2011005.06_M1.0.dwg

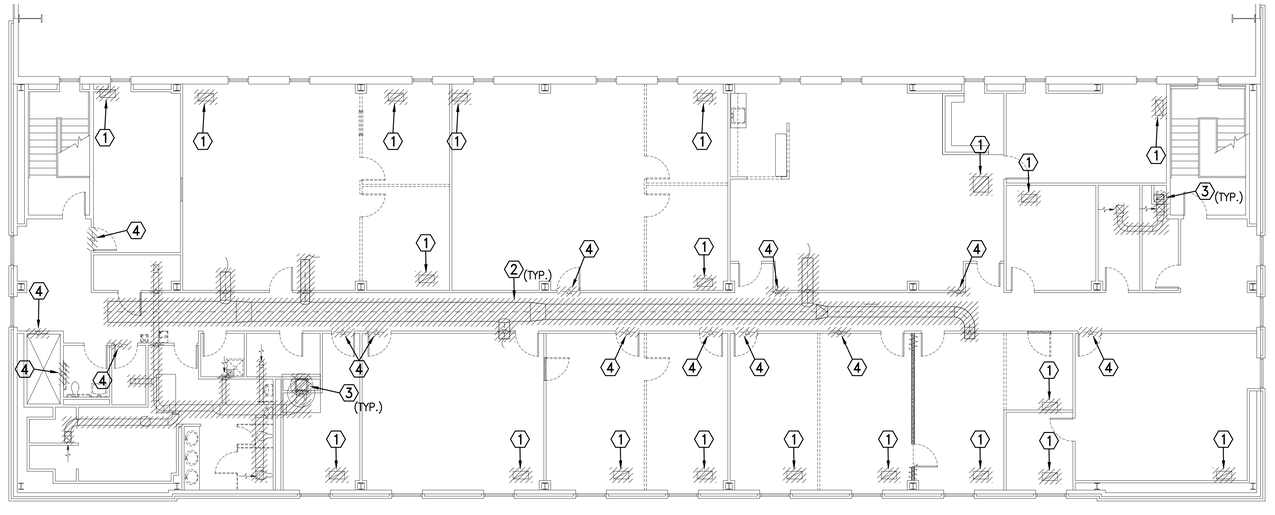
REVISIONS			
SYM.	DESCRIPTION	DATE	APP.

DEMOLITION NOTE SCHEDULE

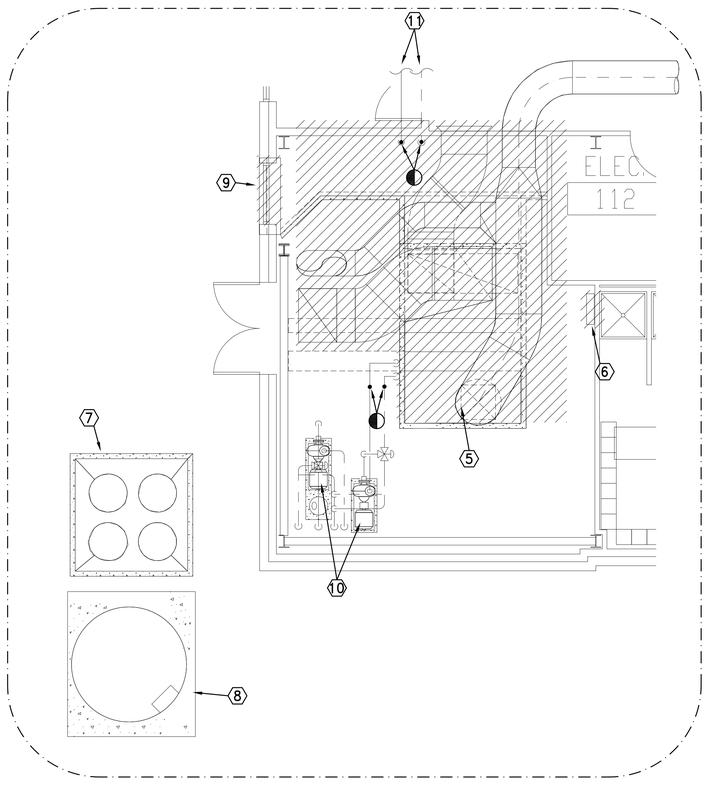
1. DEMOLISH EXISTING RETURN AIR GRILLE INTO CEILING PLENUM.
2. DEMOLISH ALL DUCTWORK COMPLETE, INCLUDING DUCTWORK, INSULATION, SUPPORTS, DAMPERS AND FLEX CONNECTIONS BACK TO AIR HANDLER IN MECHANICAL ROOM.
3. DEMOLISH EXISTING EXHAUST AIR GRILLE INCLUDING EXHAUST AIR DUCT, EXHAUST AIR FAN, SUSPENSION SYSTEM, ELECTRICAL POWER AND CONTROLS,EXISTING UNIT IS MOUNTED ON THE ROOF.
4. DEMOLISH EXISTING FIRE DAMPER.
5. DEMOLISH EXISTING AIR HANDLING UNIT COMPLETE, INCLUDING UNIT, CHILLED AND HOT WATER COILS BACK TO POINT OF DISCONNECTION, PIPING, SUPPORTS, ASSOCIATED DUCTWORK, ELECTRICAL POWER AND CONTROLS, BASE, AND 4" CONCRETE PAD. EXISTING UNIT IS LOCATED IN MECHANICAL ROOM.
6. DEMOLISH EXISTING DDC SYSTEM COMPLETE INCLUDING PANELS, DEVICES, ASSOCIATED CONTROL WIRE, CONDUIT AND POWER.
7. EXISTING CHILLER TO REMAIN.
8. EXISTING THERMAL STORAGE UNIT TO REMAIN.
9. DEMOLISH EXISTING FRESH AIR LOUVER.
10. EXISTING CHILLED WATER PUMP TO REMAIN.
11. EXISTING HOT WATER LINES. EXISTING BOILER AND HOT WATER PUMP IN HANGAR TO REMAIN.



1 M2.0M2.0 **MECHANICAL PLAN - FIRST FLOOR - EXISTING & PARTIAL DEMOLITION**
SCALE: 1/8" = 1'-0"



2 M2.0M2.0 **MECHANICAL PLAN - SECOND FLOOR - EXISTING & PARTIAL DEMOLITION**
SCALE: 1/8" = 1'-0"



3 M1.0M2.0 M2.0 **ENLARGED MECHANICAL PLAN - DEMOLITION**
SCALE: 1/4" = 1'-0"

GRAPHIC SCALES:
5' 0' 5' 15' 20'
1/8"=1'-0"

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ARCH. & ENGR. SEAL
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NATURAL RESOURCES & ENVIRONMENTAL AFFAIRS SATISFACTORY TO DATE	
SAFETY DEPARTMENT SATISFACTORY TO DATE	
FIRE DEPARTMENT SATISFACTORY TO DATE	
PUBLIC WORKS SUPERVISOR SATISFACTORY TO DATE	
PUBLIC WORKS OFFICER	
P.W. DWG. NO.	21077
DRAWN BY	RL
CHECKED BY	R. DeLOACH
SUPERVISOR	B.COFFMAN
APPROVED DATE	

DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND
MARINE CORPS AIR STATION
BEAUFORT, S. C.

RENOVATE HANGAR 728
ADMINISTRATIVE SPACES
MECHANICAL PLANS
EXISTING & PARTIAL DEMOLITION

SIZE F	CODE IDENT. NO.	NAVFAC DRAWING NO.	N/A
HQMC PROJ. NO.	BE1204M	CONSTR. CONTR. NO.	N69450-11-D-2529
SCALE AS NOTED	MACC.	T.O.# ____	SHEET 19 OF 40

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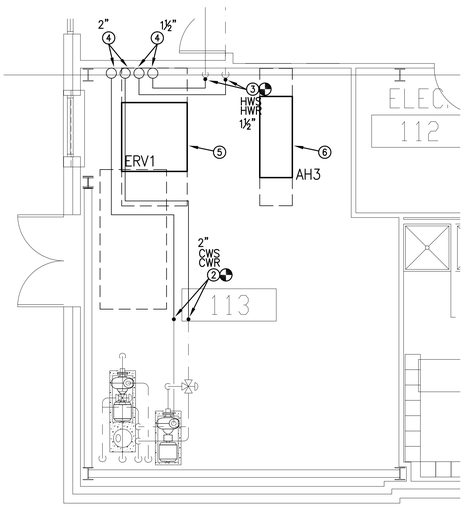
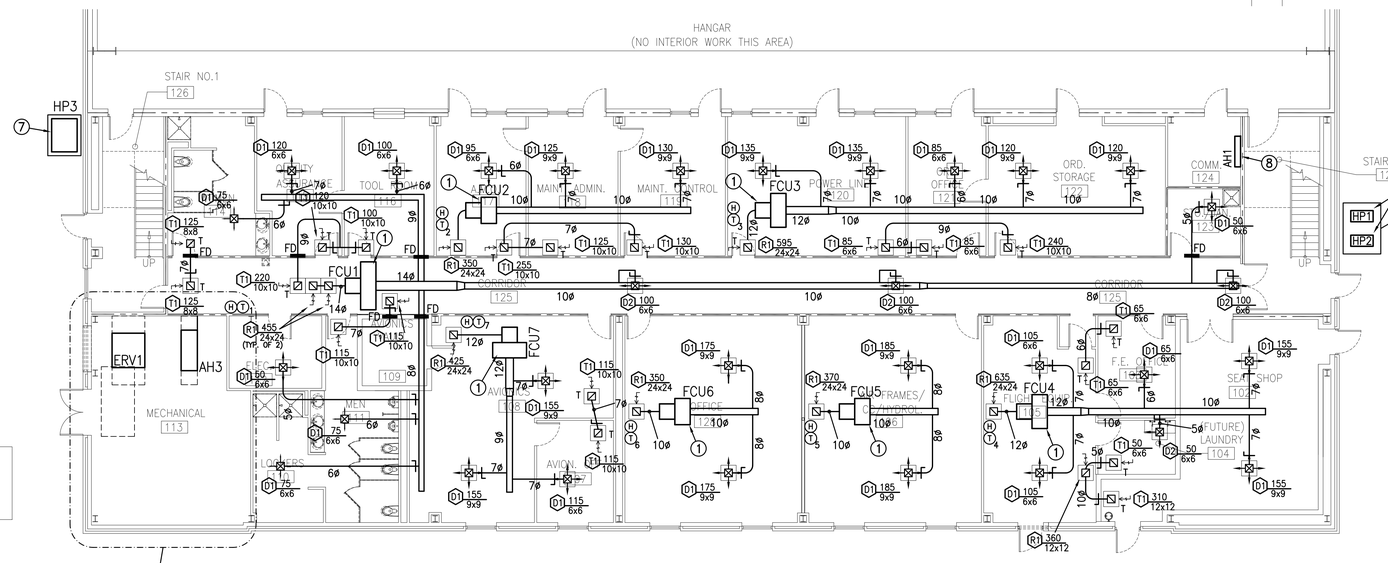
REVISIONS			
SYM.	DESCRIPTION	DATE	APP.

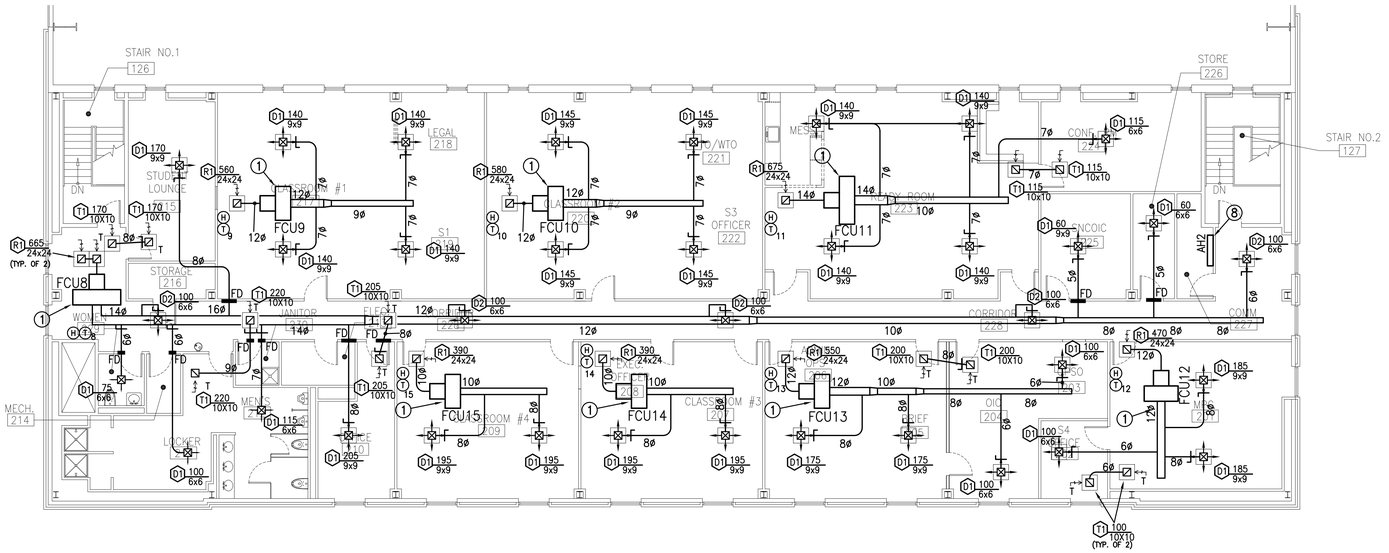


3 M3.0M3.0 M4.0 M5.0 **ENLARGED MECHANICAL ROOM PLAN - NEW WORK**
SCALE: 1/4" = 1'-0"



3 M3.0M3.0

1 M3.0M3.0 **MECHANICAL PLAN - FIRST FLOOR - SUPPLY/RETURN DUCTWORK**
SCALE: 1/8" = 1'-0"



2 M3.0M3.0 **MECHANICAL PLAN - SECOND FLOOR - SUPPLY/RETURN DUCTWORK**
SCALE: 1/8" = 1'-0"

NEW WORK NOTE SCHEDULE

1. NEW "FOUR PIPE" FAN COIL UNIT LOCATED ABOVE SUSPENDED CEILING. SEE SCHEDULE SHEET FOR ADDITIONAL INFORMATION.
2. CONNECT TO EXISTING CHILLED WATER PIPING.
3. CONNECT TO EXISTING HOT WATER PIPING.
4. NEW CHILLED AND HOT WATER PIPING, SEE SHEET M5.0 FOR CONTINUATION.
5. NEW PRECONDITIONED OUTSIDE AIR UNIT ON 4" THICK REINFORCED CONCRETE MAINTENANCE PAD. PAD TO EXTEND A MINIMUM OF 6" BEYOND UNIT FOOTPRINT.
6. NEW VERTICAL AIR HANDLER UNIT ON 4" THICK REINFORCED CONCRETE MAINTENANCE PAD. PAD TO EXTEND A MINIMUM OF 6" BEYOND UNIT FOOTPRINT.
7. PROVIDE OUTDOOR HEAT PUMP UNIT ON 6" THICK REINFORCED CONCRETE PAD. PAD TO EXTEND A MINIMUM OF 6" BEYOND UNIT FOOTPRINT.
8. PROVIDE WALL MOUNTED MINI SPLIT SYSTEM AIR HANDLER. PROVIDE ASSOCIATED CONTROLS & SUPPORTS. UNIT TO BE MOUNTED 18" ABOVE ALL DATA EQUIPMENT. CONTRACTOR TO COORDINATE UNIT PLACEMENT WITH CONTRACTING OFFICER PRIOR TO INSTALLATION.
9. PROVIDE OUTDOOR CONDENSING UNIT ON 6" THICK REINFORCED CONCRETE PAD. PAD TO EXTEND A MINIMUM OF 6" BEYOND UNIT FOOTPRINT.

GRAPHIC SCALES:
5' 0' 5' 15' 20'
1/8"=1'-0"

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FIRE DEPARTMENT — SATISFACTORY TO DATE
PUBLIC WORKS SUPERVISOR — SATISFACTORY TO DATE

P.W. DWG. NO. 21078
DRAWN BY RL
CHECKED BY R. DeLOACH
SUPERVISOR B.COFFMAN
APPROVED DATE
PUBLIC WORKS OFFICER

DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND
MARINE CORPS AIR STATION
BEAUFORT, S. C.

RENOVATE HANGAR 728 ADMINISTRATIVE SPACES MECHANICAL PLANS SUPPLY/RETURN DUCTWORK

SIZE	CODE IDENT. NO.	NAVFAC DRAWING NO.
F		N/A

HQMC PROJ. NO. BE1204M — CONSTR. CONTR. NO. N69450-11-D-2529
SCALE AS NOTED — MACC. — T.O.# _____ — SHEET 20 OF 40

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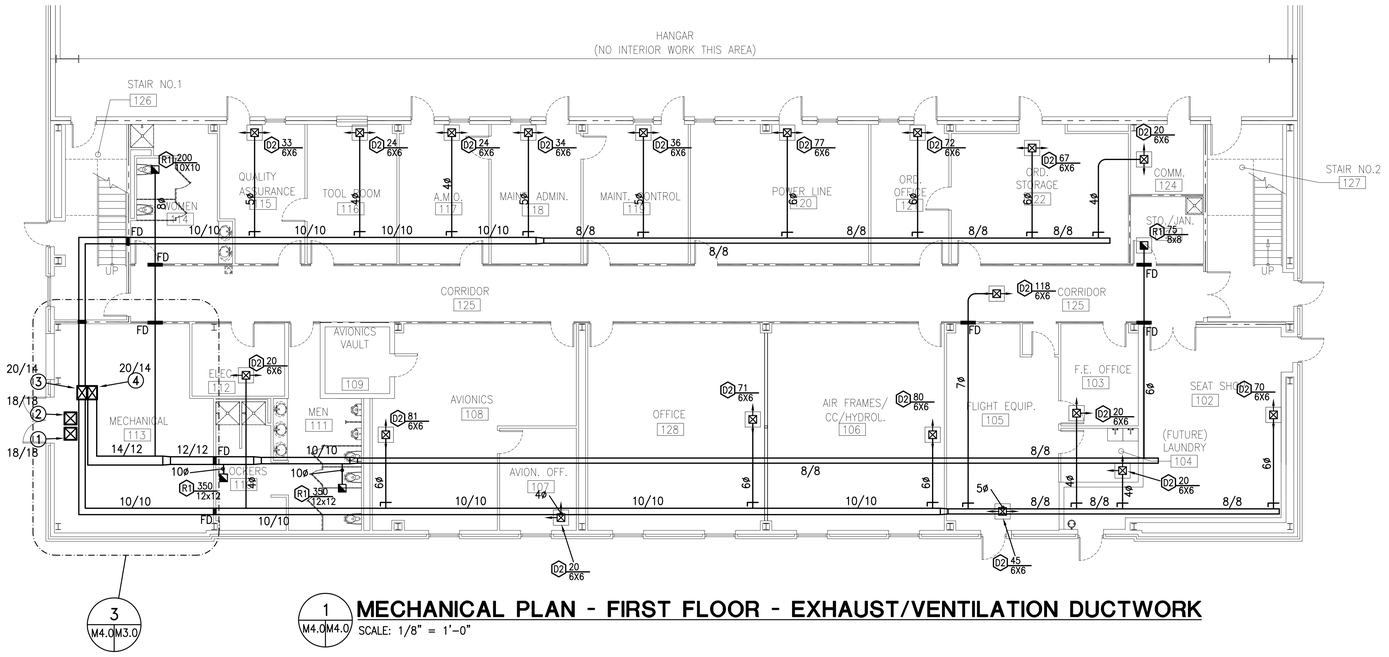
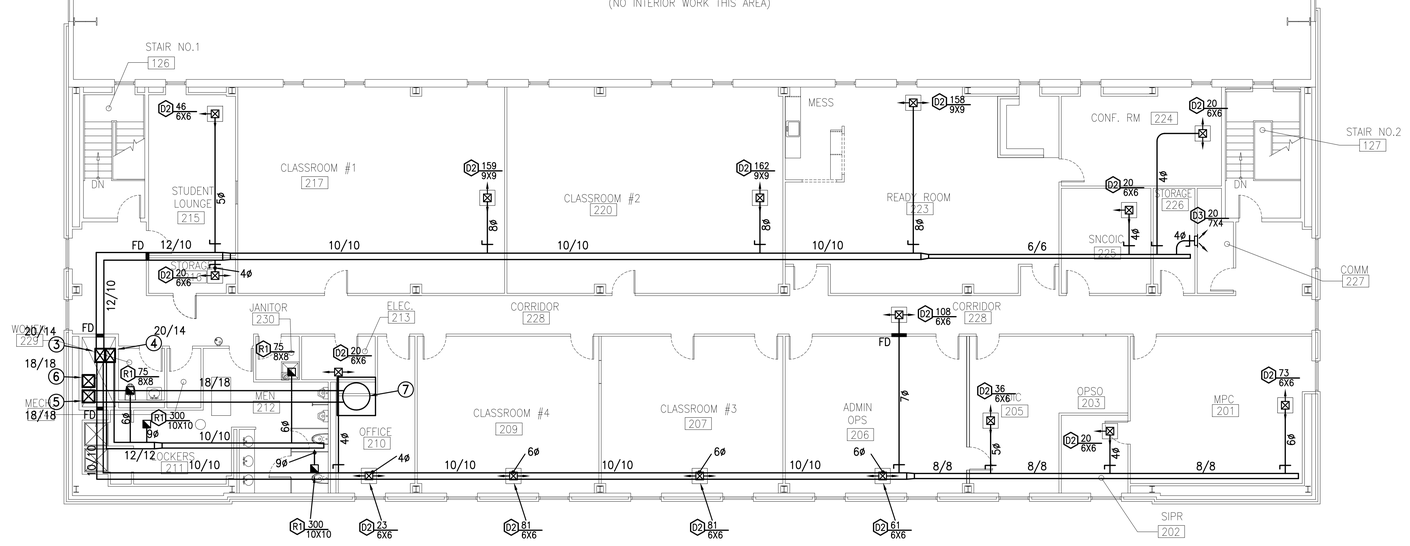
REVISIONS			
SYM.	DESCRIPTION	DATE	APP.





NEW WORK NOTE SCHEDULE

1. FRESH AIR DUCT. CONNECT TO NEW PRECONDITIONED OUTSIDE AIR UNIT. CONTINUE TO NEW ROOF CAP ABOVE.
2. EXHAUST AIR DUCT. CONNECT TO NEW PRECONDITIONED OUTSIDE AIR UNIT. CONTINUE TO NEW ROOF CAP ABOVE.
3. PRECONDITIONED AIR DUCT UP FROM NEW PRECONDITIONED OUTSIDE AIR UNIT BELOW.
4. EXHAUST AIR DUCT DOWN TO NEW PRECONDITIONED OUTSIDE AIR UNIT BELOW.
5. FRESH AIR DUCT DOWN TO NEW PRECONDITIONED OUTSIDE AIR UNIT BELOW. CONNECT TO NEW ROOF CAP ON EXISTING ROOF PENETRATION ABOVE.
6. EXHAUST AIR DUCT UP FROM NEW PRECONDITIONED OUTSIDE AIR UNIT BELOW. CONTINUE TO NEW ROOF CAP ABOVE.
7. CONNECT NEW ROOF INTAKE CAP TO EXISTING ROOF PENETRATION ABOVE.

GRAPHIC SCALES:
5' 0' 5' 15' 20'
1/8"=1'-0"

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ARCH. & ENGR. SEAL
SOUTH CAROLINA — BEAUFORT ENGINEERING SERVICES, INC. No. C00670 — CERTIFICATE OF AUTHORIZATION

NATURAL RESOURCES & ENVIRONMENTAL AFFAIRS — SATISFACTORY TO DATE
SAFETY DEPARTMENT — SATISFACTORY TO DATE
FIRE DEPARTMENT — SATISFACTORY TO DATE
PUBLIC WORKS SUPERVISOR — SATISFACTORY TO DATE
PUBLIC WORKS OFFICER

P.W. DWG. NO. 21079
DRAWN BY RL
CHECKED BY R. DeLOACH
SUPERVISOR B.COFFMAN
APPROVED DATE

DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND
MARINE CORPS AIR STATION
BEAUFORT, S. C.

RENOVATE HANGAR 728
ADMINISTRATIVE SPACES
MECHANICAL PLANS
EXHAUST/VENTILATION DUCTWORK

SIZE F | CODE IDENT. NO. | N A V F A C DRAWING NO. N/A
HQMC PROJ. NO. BE1204M | CONSTR. CONTR. NO. N69450-11-D-2529
SCALE AS NOTED | MACC. | T.O.# _____ | SHEET 21 OF 40

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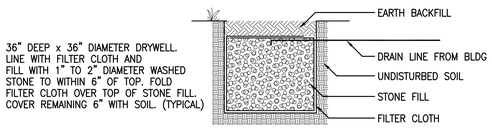
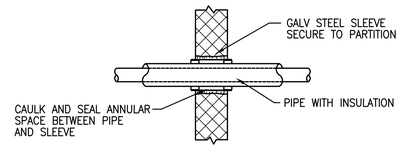
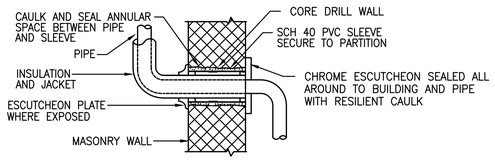


36" DEEP x 36" DIAMETER DRYWELL. LINE WITH FILTER CLOTH AND FILL WITH 1" TO 2" DIAMETER WASHED STONE TO WITHIN 6" OF TOP. FOLD FILTER CLOTH OVER TOP OF STONE FILL. COVER REMAINING 6" WITH SOIL. (TYPICAL)

4 / M5.0M5.0 DRYWELL DETAIL
NTS



INTERIOR WALL



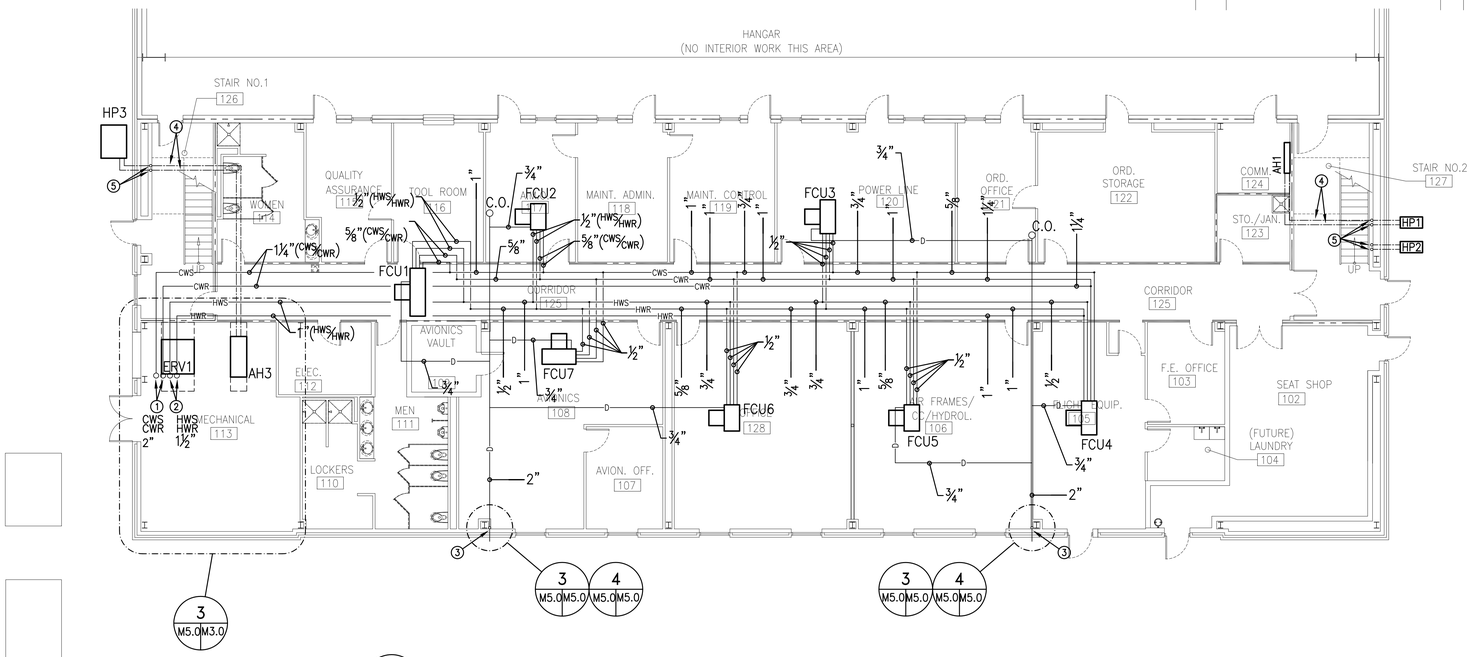
EXTERIOR WALL

NOTE: WHERE PIPING IS EXPOSED AT FINISH WALLS, FLUSH MOUNT SLEEVE AND PROVIDE ESCUTCHEON PLATE.

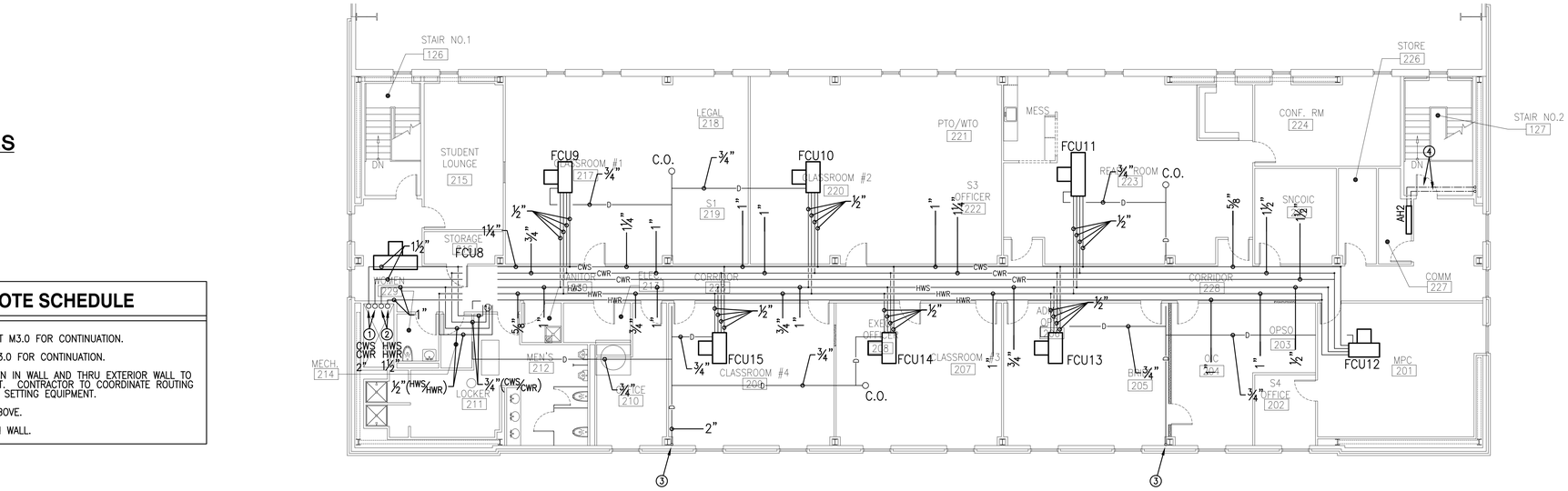
3 / M5.0M5.0 PIPE PENETRATION THRU WALLS
NTS

NEW WORK NOTE SCHEDULE

1. CHILLED WATER PIPING, SEE SHEET M3.0 FOR CONTINUATION.
2. HOT WATER PIPING, SEE SHEET M3.0 FOR CONTINUATION.
3. INSULATED CONDENSATE PIPE DOWN IN WALL AND THRU EXTERIOR WALL TO DRYWELL. SEE DETAIL THIS SHEET. CONTRACTOR TO COORDINATE ROUTING OF CONDENSATE PIPING PRIOR TO SETTING EQUIPMENT.
4. LIQUID/GAS REFRIGERANT LINES ABOVE.
5. LIQUID/GAS REFRIGERANT DOWN IN WALL.



1 / M5.0M5.0 MECHANICAL PLAN - FIRST FLOOR - HYDRONIC PIPING
SCALE: 1/8" = 1'-0"



2 / M5.0M5.0 MECHANICAL PLAN - SECOND FLOOR - HYDRONIC PIPING
SCALE: 1/8" = 1'-0"

GRAPHIC SCALES:
5' 0' 5' 15' 20'
1/8"=1'-0"

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DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND
MARINE CORPS AIR STATION
BEAUFORT, S. C.

RENOVATE HANGAR 728
ADMINISTRATIVE SPACES
MECHANICAL PLANS
HYDRONIC PIPING

SIZE	CODE IDENT. NO.	NAVFAC DRAWING NO.
F		N/A

HQMC PROJ. NO. BE1204M — CONSTR. CONTR. NO. N69450-11-D-2529
SCALE AS NOTED — MACC. — T.O.# ____ — SHEET 22 OF 40

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REVISIONS			
SYM.	DESCRIPTION	DATE	APP.

PRECONDITIONED OUTDOOR AIR UNIT SCHEDULE

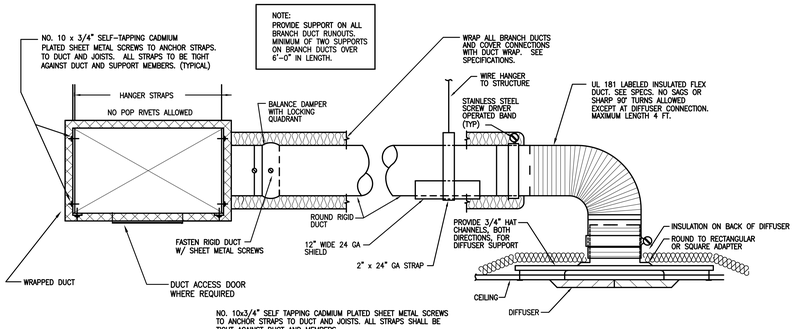
UNIT NUMBER	WEIGHT (lbs.)	ELECTRICAL			NOMINAL CONDITION	INPUT CONDITIONS										RETURN CONDITIONS										DESIGN BASIS MFR & MODEL #	NOTES
			FAN MOTOR HP			OUTSIDE AIR						VENTILATION AIR				ENTERING AIR						LEAVING AIR					
		POWER	SUPPLY	EXHAUST		CFM	EXT. STATIC PR. (WC)	DEG.F (db)	DEG.F (wb)	HUM. gr/lb	ENTHALPY (Btu/lb)	DEG.F (db)	DEG.F (wb)	RH gr/lb	ENTHALPY (Btu/lb)	CFM	EXT. STATIC PR. (WC)	DEG.F (db)	REL. HUMIDITY %	HUM. gr/lb	ENTHALPY (Btu/lb)	DEG.F (db)	DEG.F (wb)	RH gr/lb	ENTHALPY (Btu/lb)		
ERV1	250	477V/3ø	1/3	1/3	SUMMER	2380	0.50	95	79	124.1	42.4	81.7	68.8	84.9	32.9	1780	0.50	75	50	64.7	28.1	92.7	77.5	117.8	40.8	CONSERV D4I-FSE-XTHHHH	1, 2
					WINTER	2380	0.50	26	21.9	10	7.8	55.2	45.2	28.8	17.7	1780	0.50	70	35	38	22.7	31	26.5	13.4	9.5		

NOTES:
1. PROVIDE EXHAUST AIR CAP ON ROOF.
2. PROVIDE FRESH AIR INTAKE CAP ON EXISTING BATHROOM EXHAUST FAN CURB.
3. CONSERV IS BASIS OF DESIGN. PROVIDE INDICATED UNIT OR UNIT OF EQUAL PERFORMANCE AND QUALITY.

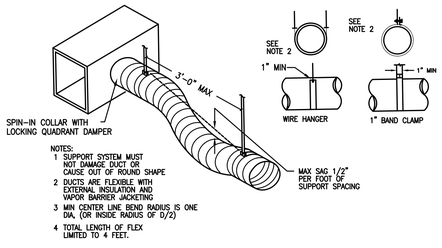
FAN COIL UNIT SCHEDULE

MARK	UNIT SIZE	FAN				PRECOND. O.A. CFM	COIL																		REMARKS
							COOLING										HEATING								
		CFM	E.S.P.	FAN HP	VOLTS PHASE		TOTAL MBH	SENS. MBH	COIL ROWS	ENT. AIR DB	ENT. AIR WB	LVG. AIR DB	LVG. AIR WB	EWT °F	LWT °F	GPM (MIN)	WATER PD (FT)	MBH	COIL ROWS	ENT. AIR DB	LVG. AIR DB	EWT °F	LWT °F	GPM (MIN)	WATER PD (FT)	
FCU1	10	845	.20	–	277V/1ø	217	14.6	13.1	3	75.4	63.9	59.7	56.7	45	55	2.9	.64	28.1	1	70.5	104.2	180	150	1.9	3.86	1,2
FCU2	04	345	.20	–	277V/1ø	129	8.6	6.9	3	75.4	63.9	58.6	56.3	45	55	1.7	7.51	12.8	1	70.5	101.9	180	150	.9	.46	1,2
FCU3	08	595	.20	–	277V/1ø	202	13.7	11.3	3	75.4	63.9	58.6	56.5	45	55	2.7	3.5	21.9	1	70.5	103.2	180	150	1.5	1.8	1,2
FCU4	08	635	.20	–	277V/1ø	169	13.7	11.3	3	75.4	63.9	58.6	56.5	45	55	2.7	3.5	21.9	1	70.5	103.2	180	150	1.5	1.8	1,2
FCU5	04	370	.20	–	277V/1ø	115	8.6	6.9	3	75.4	63.9	58.3	56.3	45	55	1.7	7.51	12.8	1	70.5	101.9	180	150	.9	.46	1,2
FCU6	04	350	.20	–	277V/1ø	106	8.6	6.9	3	75.4	63.9	58.3	56.3	45	55	1.7	7.51	12.8	1	70.5	101.9	180	150	.9	.46	1,2
FCU7	06	425	.20	–	277V/1ø	130	9.9	8.3	3	75.4	63.9	58.9	56.9	45	55	2.0	1.56	16.4	1	70.5	102.9	180	150	1.1	.86	1,2
FCU8	12	1285	.20	–	277V/1ø	238	29.9	23.9	3	75.4	63.9	56.4	55.2	45	55	6.0	4.26	40.7	1	70.5	102.8	180	150	2.7	9.17	1,2
FCU9	08	560	.20	–	277V/1ø	194	13.7	11.3	3	75.4	63.9	58.6	56.5	45	55	2.7	3.5	21.9	1	70.5	103.2	180	150	1.5	1.8	1,2
FCU10	08	580	.20	–	277V/1ø	197	13.7	11.3	3	75.4	63.9	58.6	56.5	45	55	2.7	3.5	21.9	1	70.5	103.2	180	150	1.5	1.8	1,2
FCU11	10	675	.20	–	277V/1ø	211	13.9	12.4	3	75.4	63.9	59.8	57.6	45	55	2.8	.58	26.8	1	70.5	104.2	180	150	1.8	3.52	1,2
FCU12	06	470	.20	–	277V/1ø	119	9.9	8.3	3	75.4	63.9	58.9	56.9	45	55	2.0	1.56	16.4	1	70.5	102.9	180	150	1.1	.86	1,2
FCU13	06	550	.20	–	277V/1ø	133	12.5	9.7	3	75.4	63.9	55.6	54.5	45	55	2.5	3.51	15.9	1	70.5	103.0	180	150	1.1	.81	1,2
FCU14	06	390	.20	–	277V/1ø	116	9.0	7.5	3	75.4	63.9	58.9	56.8	45	55	1.8	1.31	14.8	1	70.5	103.0	180	150	1.0	.71	1,2
FCU15	06	390	.20	–	277V/1ø	116	9.0	7.5	3	75.4	63.9	58.9	56.8	45	55	1.8	1.31	14.8	1	70.5	103.0	180	150	1.0	.71	1,2

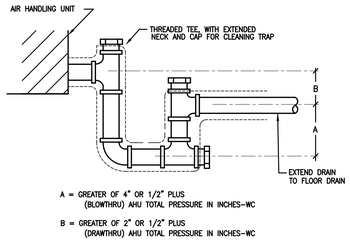
1. BASIS OF DESIGN IS CARRIER BLOWER COIL. PROVIDE INDICATED EQUIPMENT OR EQUIPMENT OF EQUAL PERFORMANCE AND QUALITY.
2. PROVIDE WITH SECONDARY DRAIN PAN WITH UNIT SHUTDOWN FLOAT SWITCH.



DIFFUSER CONNECTION
SCALE: NTS (TYPICAL FOR LAY-IN CEILINGS)



STRAIGHT SECTION FLEXIBLE DUCT
SCALE: NTS



CONDENSATE DRAIN TRAP
SCALE: NTS

AIR CONDITIONING UNIT SCHEDULE

SYMBOL		HP1/AH1	HP2/AH2	HP3/AH3
MANUFACTURER (BASIS OF DESIGN) *		MITSUBISHI	MITSUBISHI	TRANE
SPLIT SYSTEM	INDOOR	MSZ-FD09A	MSZ-FD09A	–
	OUTDOOR	MSUZ-FD09A	MSUZ-FD09A	–
REFRIGERANT		R410A	R410A	R410A
CFM		162	162	1995
CAPACITY ARI STD.	HEATING	10,900 BTUH	10,900 BTUH	120,000 BTUH
	COOLING	9,000 BTUH	9,000 BTUH	120,000 BTUH
ELECTRICAL DATA	EFFICIENCY	25 SEER	25 SEER	13 SEER
	VOLTAGE INDOOR	120 V, 1ø	120 V, 1ø	480 V, 3ø
	VOLTAGE OUTDOOR	208 V, 1ø	208 V, 1ø	480 V, 3ø
	AUXILIARY HEAT	N/A	N/A	N/A
	MIN. CIRC. AMPS INDOOR	1.0 (AH2)	1.0 (AH2)	20.1 (AH3)
	MIN. CIRC. AMPS OUTDOOR	12 (HP2)	12 (HP2)	3.6 (HP3)
	MAX. FUSE AMPS INDOOR	15 (AH2)	15 (AH2)	25 (AH3)
	MAX. FUSE AMPS OUTDOOR	15 (HP2)	15 (HP2)	15 (HP32
OUTSIDE AIR (CFM)		–	–	–
WEIGHT (LBS)	INDOOR	27 (AH2)	27 (AH2)	–
	OUTDOOR	80 (HP2)	80 (HP2)	–
NOTE		–	–	–
ACCESSORIES		–	–	–

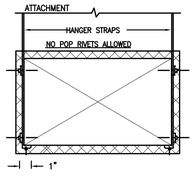
* PROVIDE INDICATED UNIT OR UNIT OF EQUAL PERFORMANCE AND QUALITY.

REGISTER, LOUVER & GRILLE SCHEDULE

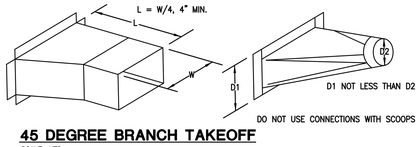
MARK	TYPE	SERVICE	PATTERN	BLOW	REMARKS
D1	SQUARE DIRECTIONAL LOUVER FACE CEILING DIFFUSER	SUPPLY		4-WAY	LAY-IN CEILINGS PROVIDE T-BAR LAY-IN FRAME; ALUMINUM 24x24 WITH OBD. GYP BD. CEILINGS. PROVIDE FLUSH MNTD. FRAME
D2	SQUARE DIRECTIONAL LOUVER FACE CEILING DIFFUSER	SUPPLY		2-WAY	LAY-IN CEILINGS PROVIDE T-BAR LAY-IN FRAME; ALUMINUM 24x24 WITH OBD. GYP BD. CEILINGS. PROVIDE FLUSH MNTD. FRAME
R1	REGISTER; PERFORATED; LAY-IN TYPE	RETURN		--	FILTERED RETURN REGISTER; PERFORATED FACE; ALUMINUM 24x24 LAY-IN FRAME; GYP BD CEILINGS PROVIDE FLUSH MOUNTED FRAME
R2	REGISTER; FIXED ANGLE VANES; LAY-IN TYPE	RETURN/ EXHAUST		--	RETURN OR EXHAUST REGISTER AS INDICATED; 45° ANGLED VANES; ALUMINUM 24x24 LAY-IN FRAME; GYP BD CEILINGS PROVIDE FLUSH MNTD FRAME
T1	SQUARE; FIXED ANGLE VANES; LAY-IN TYPE	TRANSFER	T	--	TRANSFER GRILLE; 45° ANGLED VANES; ALUMINUM 24x24 LAY-IN FRAME; GYP BD CEILINGS PROVIDE FLUSH MNTD FRAME

NOTES: 1. BASIS OF DESIGN IS PRICE.

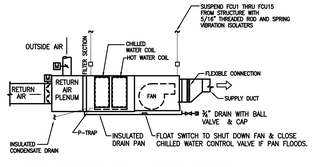
HANGER SIZES FOR RECTANGULAR DUCT			
MAX. SIDE	HANGER	HORIZONTAL SUPPORT ANGLE	MAXIMUM SPACING
UP TO 34"	1" x 18 GAUGE STRAP	NONE REQUIRED	8'-0"
34" TO 40"	1" x 18 GAUGE STRAP	NONE REQUIRED	6'-0"



DUCT STRAP HANGER
SCALE: NTS



45 DEGREE BRANCH TAKEOFF
SCALE: NTS



SINGLE ZONE AHU - ABOVE CEILING
SCALE: NTS

GRAPHIC SCALES:
5' 0' 5' 15' 20'
1/8"=1'-0"

PUMP SCHEDULE

MARK	DESCRIPTION	HEAD FT.	GPM	TYPE	MIN. EFF. %	MOTOR				NOTES
						VOLTS	PHASE	HP	RPM	
HW-1	BOILER PUMP	–	58	EXISTING	EXISTING	–	–	15.0	1800	–
CHWP-4-1	CHILLED WATER PUMP	–	40	VARIABLE SPEED	EXISTING	–	–	5.0	1760	–
CHWP-4-2	CHILLED WATER PUMP	–	40	SINGLE SPEED	EXISTING	–	–	5.0	1760	–

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ARCH. & ENGR. SEAL
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PUBLIC WORKS SUPERVISOR — SATISFACTORY TO DATE
PUBLIC WORKS OFFICER

P.W. DWG. NO. 21081
DRAWN BY RL
CHECKED BY R. DeLOACH
SUPERVISOR B.COFFMAN
APPROVED DATE

DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND
MARINE CORPS AIR STATION
BEAUFORT, S. C.

RENOVATE HANGAR 728
ADMINISTRATIVE SPACES
MECHANICAL SCHEDULES

SIZE F | CODE IDENT. NO. | N A V F A C DRAWING NO. N/A
HQMC PROJ. NO. BE1204M | CONSTR. CONTR. NO. N69450-11-D-2529
SCALE AS NOTED | MACC. | T.O.# ____ | SHEET 23 OF 40

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SEQUENCE OF OPERATION

FAN COIL UNITS

OCCUPIED PERIOD

HEATING/COOLING OPERATION SHALL BE CONTROLLED BY THE DDC SYSTEM SPACE TEMPERATURE SENSOR. DDC SYSTEM WILL MAINTAIN A SPACE TEMPERATURE (ADJUSTABLE) FOR HEATING OR COOLING. DURING THE OCCUPIED PERIOD THE INDOOR FAN SHALL RUN CONTINUOUSLY. DURING THE OCCUPIED PERIOD, THE BUILDING PRECONDITIONED OUTSIDE AIR UNIT (PCOA) SHALL BE ON TO ALLOW FOR SCHEDULED OUTSIDE AIR INTO THE UNIT.

OPTIMUM START-UP OF THE UNITS SHALL ENABLE HEATING OR COOLING OPERATION PRIOR TO OCCUPANCY AS DETERMINED BY THE DDC SYSTEM IN ORDER TO HAVE SPACE TEMPERATURE AT SETPOINT (ADJUSTABLE) BY OCCUPANCY TIME.

COOLING:

AS THE SPACE TEMPERATURE BEGINS TO RISE ABOVE THE COOLING SETPOINT OF 77 F (ADJUSTABLE), AS SENSED BY THE SPACE SENSOR, THE DDC SYSTEM WILL MODULATE THE CHILLED WATER VALVE OPEN FOR COOLING. AS THE SPACE TEMPERATURE BEGINS TO DROP BELOW THE COOLING SETPOINT OF 77 F (ADJUSTABLE), AS SENSED BY THE SPACE SENSOR, THE DDC SYSTEM WILL MODULATE THE CHILLED WATER VALVE CLOSED.

HEATING:

AS THE SPACE TEMPERATURE BEGINS TO DROP BELOW THE HEATING SETPOINT OF 68 F (ADJUSTABLE), AS SENSED BY THE SPACE SENSOR, THE DDC SYSTEM WILL MODULATE THE HOT WATER VALVE OPEN FOR HEATING. AS THE SPACE TEMPERATURE BEGINS TO RISE ABOVE THE HEATING SETPOINT OF 68 F (ADJUSTABLE), AS SENSED BY THE SPACE SENSOR, THE DDC SYSTEM WILL MODULATE THE HOT WATER VALVE CLOSED.

UNOCCUPIED PERIOD

HEATING/COOLING OPERATION SHALL BE CONTROLLED BY THE DDC SYSTEM SPACE TEMPERATURE SENSOR. DDC SYSTEM WILL MAINTAIN A SPACE SET-BACK/SET-UP TEMPERATURE (ADJUSTABLE) FOR HEATING OR COOLING. DURING THE UNOCCUPIED PERIOD, THE INDOOR FAN SHALL CYCLE. DURING THE UNOCCUPIED PERIOD, THE BUILDING PRECONDITIONED OUTSIDE AIR UNIT (PCOA) SHALL BE OFF. THE SPACE TEMPERATURE SENSOR SHALL CONTAIN A SCHEDULE OVERRIDE BUTTON WHICH WILL SWITCH THE UNIT INTO THE "OCCUPIED" MODE FOR AN OVERRIDE PERIOD OF 2 HOURS (ADJUSTABLE). WHEN ANY FAN COIL UNIT OVERRIDE BUTTON IS ENGAGED, THE PRECONDITIONED OUTSIDE AIR UNIT SHALL BE STARTED.

SMOKE DETECTOR ACTUATION

UPON ACTIVATION OF THE SUPPLY AIR SMOKE DETECTOR, THE UNIT WILL BE TURNED OFF.

CHILLED WATER PUMP

ON/OFF CONTROL OF THE CHILLED WATER PUMP SHALL BE CONTROLLED BY THE DDC SYSTEM. THE CHILLED WATER PUMP SHALL RUN CONTINUOUSLY WHEN THE SYSTEM (ANY SPACE) IS IN THE COOLING MODE.

HOT WATER PUMP

ON/OFF CONTROL OF THE HOT WATER PUMP SHALL BE CONTROLLED BY THE DDC SYSTEM. THE HOT WATER PUMP SHALL RUN CONTINUOUSLY WHEN THE SYSTEM (ANY SPACE) IS IN THE HEATING MODE.

CHILLER

ON/OFF CONTROL OF THE CHILLER SHALL BE CONTROLLED BY THE DDC SYSTEM. ONCE THE CHILLER IS ENABLED BY THE DDC SYSTEM, THE CHILLER SHALL OPERATE UNDER ITS OWN PACKAGED CONTROLS. CHILLER CIRCULATING PUMP CWP1 SHALL OPERATE WHENEVER THE CHILLER IS ENABLED.

BOILER

THE BOILER SHALL BE ENABLED BY THE DDC SYSTEM. ONCE THE BOILER IS ENABLED BY THE DDC SYSTEM, THE BOILER SHALL OPERATE TO MAINTAIN HEATING HOT WATER TEMPERATURE SETPOINT. HOT WATER SETPOINT SHALL BE ADJUSTABLE AND BE RESET BASED ON OUTSIDE AIR TEMPERATURE. BOILER CIRCULATING PUMP AND BOILER HOT WATER PUMP SHALL OPERATE WHENEVER THE BOILER IS ENABLED.

ENABLED.

PRECONDITIONED OUTSIDE AIR UNIT

PRECONDITIONED OUTSIDE AIR UNIT (PCOA)

THE PCOA UNIT WILL OPERATE CONTINUOUSLY IN THE OCCUPIED PERIOD. THE SUPPLY FAN AND EXHAUST FAN WILL OPERATE CONTINUOUSLY IN THE OCCUPIED PERIOD. PCOA UNIT SHALL BE STARTED AND STOPPED BY THE DDC SYSTEM.

HEATING/COOLING OPERATION SHALL BE CONTROLLED BY THE DDC SYSTEM THROUGH DISCHARGED AIR TEMPERATURE (DAT) SENSORS. WHEN OUTSIDE AIR TEMPERATURE IS EQUAL TO OR GREATER THAN 60 DEGREES F, THE DDC SYSTEM WILL MODULATE THE COOLING VALVE TO MAINTAIN 55 DEGREES F SUPPLY AIR TEMPERATURE (ADJUSTABLE). WHEN THE OUTSIDE AIR TEMPERATURE IS LESS THAN 60 DEGREES F THE ENERGY RECOVERY UNIT'S COOLING COIL SHALL BE DISABLED. AT ALL OUTSIDE AIR TEMPERATURES, THE DDC SYSTEM SHALL MODULATE THE HEATING VALVE FOR HEATING TO MAINTAIN 73 DEGREES F. (ADJUSTABLE)

ENERGY RECOVERY WHEEL

THE ENERGY RECOVERY WHEEL WILL BE CONTROLLED ON WHEN THE UNIT IS ON. IN THE EVENT OF A WHEEL FAILURE, AN ALARM WILL BE SENT TO THE BUILDING DDC SYSTEM AND THE PCOA UNIT WILL BE TURNED OFF.

SUPPLY FAN CONTROL

THE SUPPLY FAN WILL OPERATE CONTINUOUSLY WHENEVER THE PCOA UNIT IS ON. THE SUPPLY FAN WILL BE OFF WHENEVER THE PCOA UNIT IS OFF, THE EXHAUST FAN HAS FAILED, THE FREEZESTAT HAS TRIPPED, THE DISCHARGE AIR TEMPERATURE SENSOR FAILS, OR THE SUPPLY FAN STATUS INDICATES FAILURE.

EXHAUST FAN CONTROL

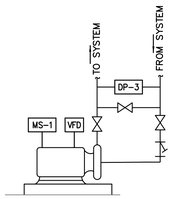
THE EXHAUST FAN WILL OPERATE CONTINUOUSLY WHENEVER THE PCOA UNIT IS ON. THE EXHAUST FAN WILL BE OFF WHENEVER THE PCOA UNIT IS OFF, THE SUPPLY FAN HAS FAILED, THE FREEZESTAT HAS TRIPPED, THE DISCHARGE AIR TEMPERATURE SENSOR HAS FAILED, OR THE EXHAUST FAN STATUS INDICATES A FAILURE.

OUTSIDE AIR TEMPERATURE SENSOR

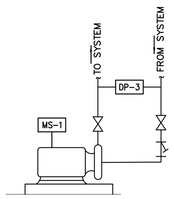
IF THE OUTSIDE AIR TEMPERATURE SENSOR FAILS, AN ALARM WILL BE SENT, COOLING COIL VALVE WILL CLOSE AND HEATING COIL VALVE WILL OPEN, AND THE ENERGY RECOVERY WHEEL WILL RUN.

SMOKE DETECTOR ACTUATION

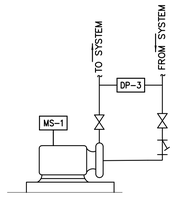
UPON ACTIVATION OF THE SUPPLY AIR SMOKE DETECTOR, THE UNIT WILL BE TURNED OFF.



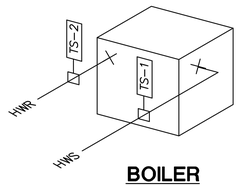
PUMP CWP-4-1
NTS (EXISTING)



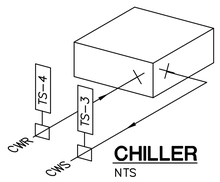
PUMP CWP-4-2
NTS (EXISTING)



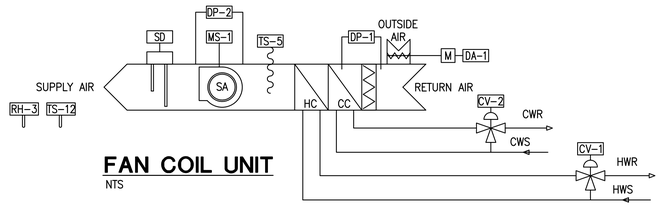
PUMP HW-1
NTS (EXISTING)



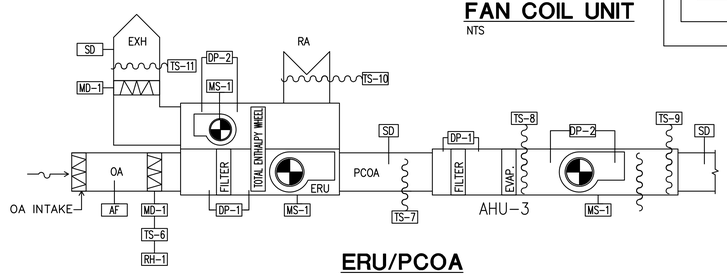
BOILER
NTS



CHILLER
NTS

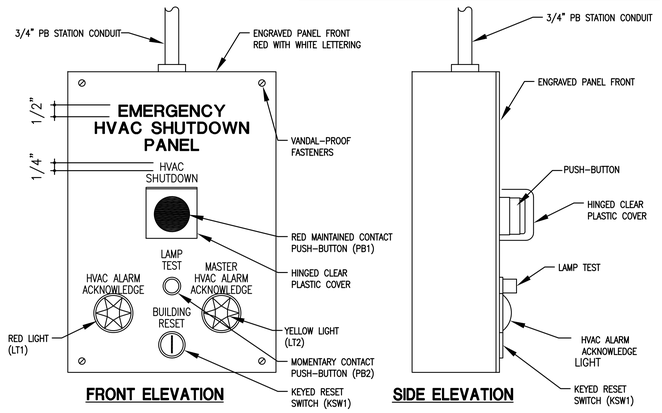


FAN COIL UNIT
NTS



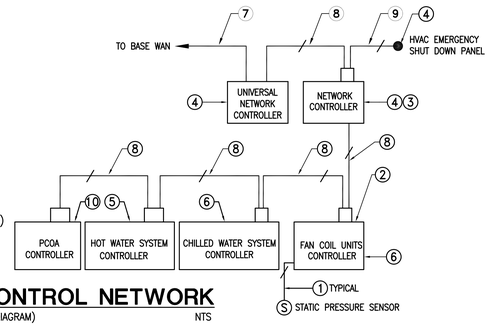
ERU/PCOA
NOT TO SCALE

CONTROL WIRING SIGNALS	
ANALOG INPUTS:	4-20 mA OR 1-5 VDC WITH 12-BIT A/D CONVERSION RESOLUTION MINIMUM.
ANALOG OUTPUTS:	4-20 mA OR 1-10 VDC WITH 8-BIT D/A CONVERSION RESOLUTION MINIMUM.
I/P RANGES:	4-20 mA



HVAC SHUTDOWN PANEL
NTS (LOCATE IN MECH ROOM 113)

NOTES:
1. REFER TO MECHANICAL DRAWINGS FOR LOCATION OF HVAC EQUIPMENT.
2. TYPICAL NETWORK CONTROLLER
3. EMERGENCY SHUT-DOWN CONTROLLER
4. LOCATE IN MECH ROOM 113.
5. LOCATE IN MECH ROOM 113.
6. LOCATE IN MECH ROOM 113.
7. CAT 6e CABLE, PLENUM RATED
8. 18/2 SHIELDED CABLE, PLENUM RATED (ASD BUS)
9. 18/8 CABLE IN 3/4" CONDUIT
10. LOCATE IN MECH ROOM 113.



HVAC CONTROL NETWORK
(DDC CONTROL DIAGRAM) NTS

CONTROL DIAGRAM LEGEND

CV-1	HEATING COIL MOTORIZED CONTROL VALVE, N.O.
CV-2	COOLING COIL MOTORIZED CONTROL VALVE, N.C.
DDCP	DIRECT DIGITAL CONTROL PANEL
DP-1	DIFFERENTIAL PRESSURE SENSOR/SWITCH ACROSS FILTER
DP-2	DIFFERENTIAL PRESSURE SENSOR/SWITCH ACROSS FAN
DP-3	DIFFERENTIAL PRESSURE SENSOR ACROSS PUMP
DP-4	DIFFERENTIAL PRESSURE SENSOR ACROSS PUMP
AF	AIR FLOW MONITORING STATION
MS-1	MOTOR STATUS (ON/OFF) - STARTER AUXILIARY CONTACT
MD-1	MOTORIZED DAMPER - 2 POSITION
SD	SMOKE DETECTOR (UNITS OVER 2000 CFM)
TS-1	HOT WATER SUPPLY TEMPERATURE SENSOR
TS-2	HOT WATER RETURN TEMPERATURE SENSOR
TS-3	HOT WATER SUPPLY TEMPERATURE SENSOR
TS-4	HOT WATER RETURN TEMPERATURE SENSOR
TS-5	COOLING SUPPLY AIR TEMPERATURE SENSOR
TS-6	OUTSIDE AIR TEMPERATURE SENSOR
TS-7	STAGE 1 AIR TEMPERATURE SENSOR
TS-8	STAGE 2 AIR TEMPERATURE SENSOR (PRE REHEAT)
TS-9	SUPPLY AIR TEMPERATURE SENSOR (POST REHEAT)
TS-10	ENTERING EXHAUST AIR TEMPERATURE SENSOR
TS-11	LEAVING EXHAUST AIR TEMPERATURE SENSOR
TS-12	SPACE AIR TEMPERATURE SENSOR
RH-1	OUTSIDE AIR HUMIDITY SENSOR
RH-2	SUPPLY AIR HUMIDITY SENSOR (POST REHEAT)
RH-3	SPACE AIR HUMIDITY SENSOR

NOTES

1. REFER TO SHEET M1.0 FOR MECHANICAL LEGEND.
2. REFER TO SHEETS M6.0 FOR MECHANICAL SCHEDULES.
3. PROVIDE ALL SENSORS, ACTUATORS, DETECTORS SHOWN IN DIAGRAMS AND/OR REQUIRED TO PERFORM WRITTEN SEQUENCE OF OPERATIONS.
4. WIRE CONTROLS TO DIRECT DIGITAL CONTROL (DDC) PANELS. PANELS ARE TO BE FURNISHED BY THE CONTRACTOR.
5. CONTRACTOR SHALL PROGRAM THE SEQUENCE OF OPERATIONS FOR CONTROLS.
6. FIRE ALARM SYSTEMS SHALL BE WIRED BY FIRE ALARM CONTRACTOR. DUCT DETECTORS AND FIRE AND/OR SMOKE DAMPERS SHALL BE TIED INTO THE FIRE ALARM SYSTEM BY THE FIRE ALARM CONTRACTOR PER FIRE DEPARTMENT INSTRUCTIONS AND NFPA REQUIREMENTS.
7. DUCT SMOKE DETECTORS SHALL BE COMPATIBLE WITH FIRE ALARM SYSTEM.
8. FANS TO OPERATE WITH FAN COIL UNITS.
9. ALL POWER FOR ACTUATORS ASSOCIATED WITH THE CONTROL SYSTEM IS THE RESPONSIBILITY OF THE CONTROLS CONTRACTOR.

	ANALOG INPUTS													ANALOG OUTPUTS				BINARY INPUTS				BINARY OUTPUTS		SYSTEM FEATURES: ALARMS			SYSTEM FEATURES: PROGRAMS					NOTE
	CWS TEMPERATURE	CWR TEMPERATURE	HWS TEMPERATURE	HWR TEMPERATURE	ROOM TEMPERATURE	PUMP DIFF. PRESSURE	RETURN AIR TEMPERATURE	OUTSIDE AIR TEMPERATURE	OUTSIDE AIR HUMIDITY SENSOR	OUTSIDE AIR FLOW	SUPPLY AIR TEMPERATURE	PRE REHEAT AIR TEMPERATURE	POST PREHEAT AIR TEMPERATURE	ENTERING EXHAUST AIR TEMP.	LEAVING EXHAUST AIR TEMPERATURE	HW VALVE POSITION	CW VALVE POSITION	OA DAMPER	STATUS	FILTER DIFFERENTIAL PRESSURE	SMOKE	FREEZE	ENABLE/DISABLE	SMOKE DETECTOR (UNITS GREATER THAN 2000 CFM)	PROOF	FLOW FAIL	DIAGNOSTICS	FILTER	TIME SCHEDULING	OPT. START/STOP	SET BACK/SET UP	TOTALIZING	GRAPHIC DISPLAY	
CHILLER	■	■																	■				■		■	■			■	■	■	■	1
CW PUMP (CHWP-4-1)						■													■				■						■	■	■	■	1
CW PUMP (CHWP-4-2)						■													■				■						■	■	■	■	1
BOILER			■	■															■				■		■				■	■	■	■	1
HW PUMP (HW-1)																			■				■						■	■	■	■	1
FAN COIL UNITS (FCU)					■											■	■	■	■	■	■	■	■					■	■	■	■	■	1
ENERGY RECOVERY UNIT (ERV1)							■	■	■	■			■						■	■	■	■	■					■	■	■	■	■	1
AHU3							■	■	■	■		■	■						■	■	■	■	■					■	■	■	■	■	1

1. PROVIDE NEW DDC SYSTEM WITH WEB BASED CONTROL.

DDC POINTS LIST

NOVEMBER 2011

IF SHEET IS LESS THAN (30"x42") IT IS A REDUCED PRINT; SCALE ACCORDINGLY

M7.0

ARCHITECTURAL & ENGINEERING FIRM: BES INCORPORATED, ARCHITECTS ENGINEERS, P.O. BOX 2060, BEAUFORT, S.C. 29901-2060 843-522-2094	NATURAL RESOURCES & ENVIRONMENTAL AFFAIRS: SATISFACTORY TO DATE	P.W. DWG. NO. 21082	DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND — MARINE CORPS AIR STATION, BEAUFORT, S. C.
ARCH. & ENGR. SEAL: SOUTH CAROLINA, BEAUFORT ENGINEERING SERVICES, INC., No. C00670, CERTIFICATE OF AUTHORIZATION	SAFETY DEPARTMENT: SATISFACTORY TO DATE	DRAWN BY RL	RENOVATE HANGAR 728 ADMINISTRATIVE SPACES DDC CONTROLS
	FIRE DEPARTMENT: SATISFACTORY TO DATE	CHECKED BY R. DeLOACH	
	PUBLIC WORKS SUPERVISOR: SATISFACTORY TO DATE	SUPERVISOR B.COFFMAN	
		APPROVED DATE — PUBLIC WORKS OFFICER	SIZE F; CODE IDENT. NO.; NAVFAC DRAWING NO. N/A; HQMC PROJ. NO. BE1204M; CONSTR. CONTR. NO. N69450-11-D-2529; SCALE AS NOTED; MACC.; T.O.# ____; SHEET 24 OF 40

REVISIONS

SYM.	DESCRIPTION	DATE	APP.

Dec 02, 2011 - 10:37 K:\2011005_06_H 728\Renovate Hangar 728 Admin Spaces\DWG\2011005_06_M7.0.dwg

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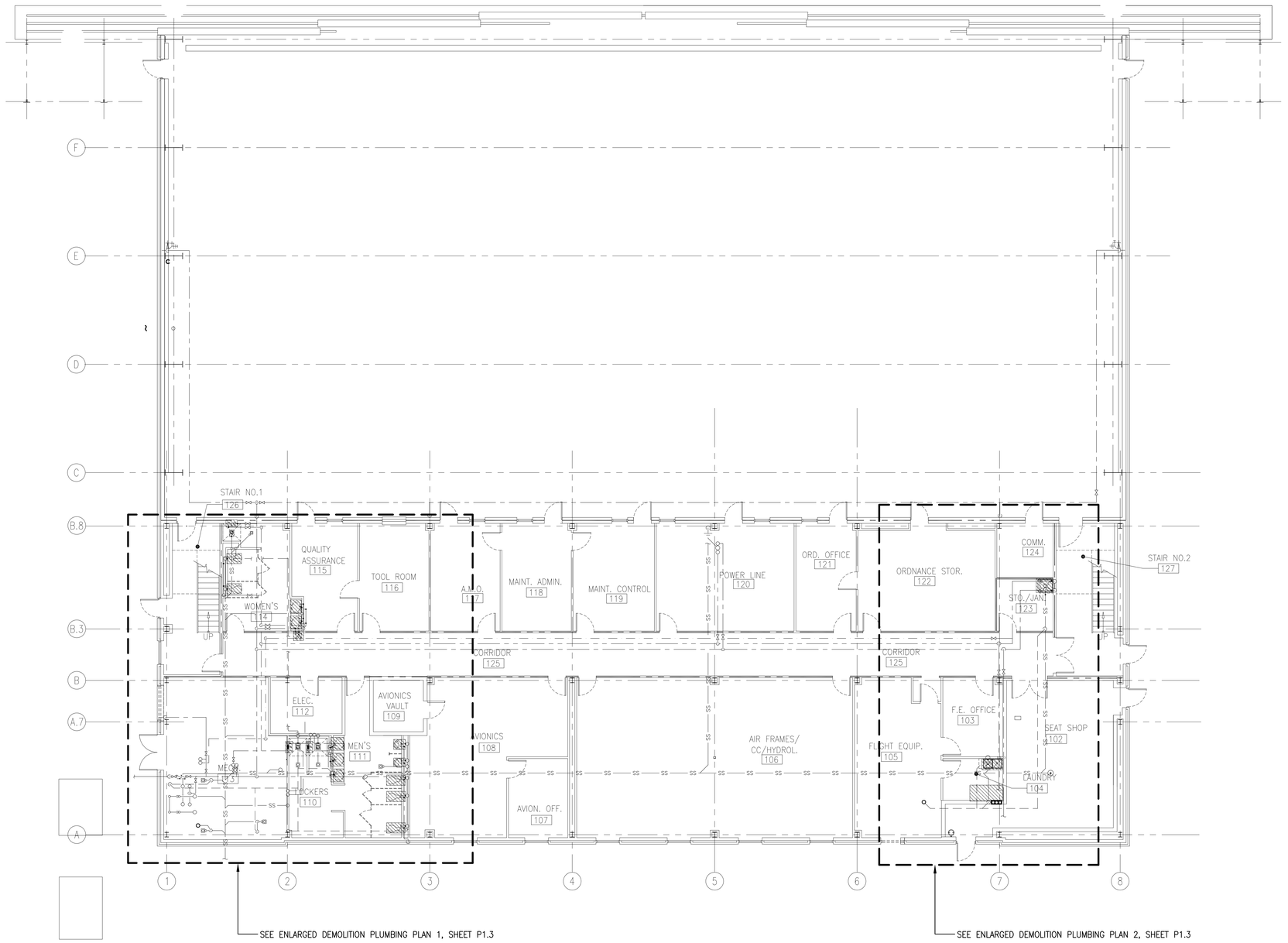

LEGEND - DEMOLITION & NEW

←(1)	DEMOLITION NOTE NUMBER (SEE SCHEDULE)
←(1)	NEW WORK NOTE (SEE SCHEDULE)
←	POINT OF DISCONNECTION (P.O.D.)
←	POINT OF CONNECTION (P.O.C.)
G SS	SANITARY SEWER CLEANOUT (GRADE)
	EXISTING COLD WATER
	EXISTING HOT WATER
	EXISTING HOT WATER RECIRC.
SS SS SS	EXISTING SANITARY SEWER
	EXISTING SS VENT PIPING
	ISOLATION VALVE
F	HOSE BIB (FROSTPROOF)
	WATER HAMMER ARRESTOR
W	SANITARY SEWER CLEANOUT (WALL)
F	SANITARY SEWER CLEANOUT (FLOOR)
	NEW COLD WATER
	NEW HOT WATER
	NEW HOT WATER RECIRC.
	NEW SANITARY SEWER
	NEW SS VENT PIPING
	ITEM OR AREA TO BE DEMOLISHED (HATCHED)

CW	COLD WATER
HW	HOT WATER
HWR	HOT WATER RECIRCULATION
EX.	EXISTING
P.O.D.	POINT OF DISCONNECTION
SS	SANITARY SEWER
SW	STORM WATER
V	VENT
WP	WASTE PIPE

PLUMBING DEMO NOTES

1. THE CONTRACTOR SHALL VERIFY THE LOCATIONS OF EXISTING PLUMBING, FIXTURES AND PENETRATIONS BEFORE COMMENCING WORK.
2. ANY FLOOR PENETRATIONS TO BE FILLED TO THE ELEVATION OF TOP OF STRUCTURAL FLOOR SLAB, AND PIPE DEMOLISHED IF REQUIRED, BEFORE APPLYING NEW SURFACE.
3. PROTECT ALL EXPOSED PIPES & FITTINGS LEFT BARE BY DEMOLITION THAT ARE TO BE REUSED WITH NEW FIXTURES.
4. PROTECT TOILET & URINAL CARRIERS DURING CONSTRUCTION.

GENERAL DEMOLITION NOTES

1. ALL ITEMS SHOWN WITH HATCHED LINES INDICATE ITEMS TO BE DEMOLISHED. SEE ARCHITECTURAL DRAWINGS AND CODED DEMOLITION NOTES FOR SPECIFIC INFORMATION.
2. LOCATION OF EXISTING EQUIPMENT, DUCTWORK, AIR OUTLETS, CONTROLS AND ALL CONCEALED WORKS, ETC. ARE APPROXIMATE. THE CONTRACTOR SHALL EXAMINE THE SITE PRIOR TO BUILDING AND AFTER DEMOLITION HAS EXPOSED "AS-BUILT" CONDITIONS TO VERIFY EACH AIR OUTLET, AND EQUIPMENT LOCATION. THE CONTRACTOR SHALL MAKE ADJUSTMENTS AND/OR ALTERATIONS AS NECESSARY TO INSTALL COMPLETE AND OPERABLE SYSTEMS IN ACCORDANCE WITH THE CODES HAVING JURISDICTION AT NO ADDITIONAL COST TO THE GOVERNMENT.
3. ALL OPENINGS AND SURFACES MADE BARE BY DEMOLITION AND/OR REMOVAL OF AIR OUTLETS, EQUIPMENT, CONTROLS, ETC. SHALL BE REPAIRED AND/OR PATCHED TO MATCH ADJACENT FINISH. PREPARE SURFACES TO RECEIVE NEW FINISH, SEE ARCHITECTURAL DRAWINGS FOR NEW FINISH SCHEDULE. ALL REPAIRS AND NEW FINISH SHALL BE BY TRADES SKILLED IN FINISH WORKS UNDER EMPLOY OF THE GENERAL CONTRACTOR.
4. DURING THE LIFE OF THE CONTRACT (CONSTRUCTION AND DEMOLITION TO POINT OF BENEFICIAL OCCUPANCY BY OWNER). THE CONTRACTOR SHALL PROTECT ALL SYSTEMS OR PORTIONS OF SYSTEMS TO REMAIN FOR REUSE FROM DAMAGE. ALL SYSTEMS SHALL BE TESTED IN SERVICE AFTER COMPLETION OF THE CONTRACT AND MADE COMPLETE AND OPERABLE AT NO ADDITIONAL COST TO THE GOVERNMENT.
5. NOT ALL CONTROL CIRCUITS AND DEVICES ARE INDICATED. FOR EACH CONTROL AND, DEVICE THERE IS A CIRCUIT OR FEEDER BACK TO THE POINT OF ORIGIN. WHERE WALLS, FLOORS OR CEILING ARE TO BE DEMOLISHED ALL MATERIAL, SURFACE OR FLUSH MOUNTED THEREON SHALL BE REMOVED UNLESS INDICATED OR REQUIRED TO REMAIN TO SERVE A DEVICE.
6. SEE ARCHITECTURAL DRAWINGS AND SPECIFICATION FOR ADDITIONAL INFORMATION. COORDINATE ALL DEMOLITION WITH ALL TRADES INVOLVED.
7. EXISTING PIPING AND/OR CONDUIT RUN CONCEALED IN FLOOR SLAB OR UNDERGROUND AND NOT INDICATED OR SPECIFIED FOR REUSE IN NEW WORK SHALL BE ABANDONED UNLESS NOTED OTHERWISE. CUT PIPING AND/OR CONDUIT AT FLOOR AND MINIMUM 12" BELOW GRADE. PATCH AS NOTED IN PARAGRAPH 3 ABOVE.

1 P1.1 FIRST FLOOR PLUMBING PLAN - EXISTING & DEMOLITION

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

GRAPHIC SCALES:

5' 0' 5' 15' 20'

1/8"=1'-0"

NOVEMBER 2011

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P1.1

ARCHITECTURAL & ENGINEERING FIRM
BES INCORPORATED ARCHITECTS ENGINEERS
P.O. BOX 2060, BEAUFORT, S.C. 29901-2060 843-522-2094
ARCH. & ENGR. SEAL
SOUTH CAROLINA BEAUFORT ENGINEERING SERVICES, INC. No. C00670 CERTIFICATE OF AUTHORIZATION

NATURAL RESOURCES & ENVIRONMENTAL AFFAIRS — SATISFACTORY TO DATE
SAFETY DEPARTMENT — SATISFACTORY TO DATE
FIRE DEPARTMENT — SATISFACTORY TO DATE
PUBLIC WORKS SUPERVISOR — SATISFACTORY TO DATE
PUBLIC WORKS OFFICER

P.W. DWG. NO. 21083
DRAWN BY JLL
CHECKED BY R. DeLOACH
SUPERVISOR B.COFFMAN
APPROVED DATE

DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND
MARINE CORPS AIR STATION
BEAUFORT, S. C.

RENOVATE HANGAR 728
ADMINISTRATIVE SPACES
PLUMBING PLAN - FIRST FLOOR EXISTING & DEMOLITION

SIZE F | CODE IDENT. NO. | NAVFAC DRAWING NO. N/A
HQMC PROJ. NO. BE1204M | CONSTR. CONTR. NO. N69450-11-D-2529
SCALE AS NOTED | MACC. | T.O.# _____ | SHEET 25 OF 40

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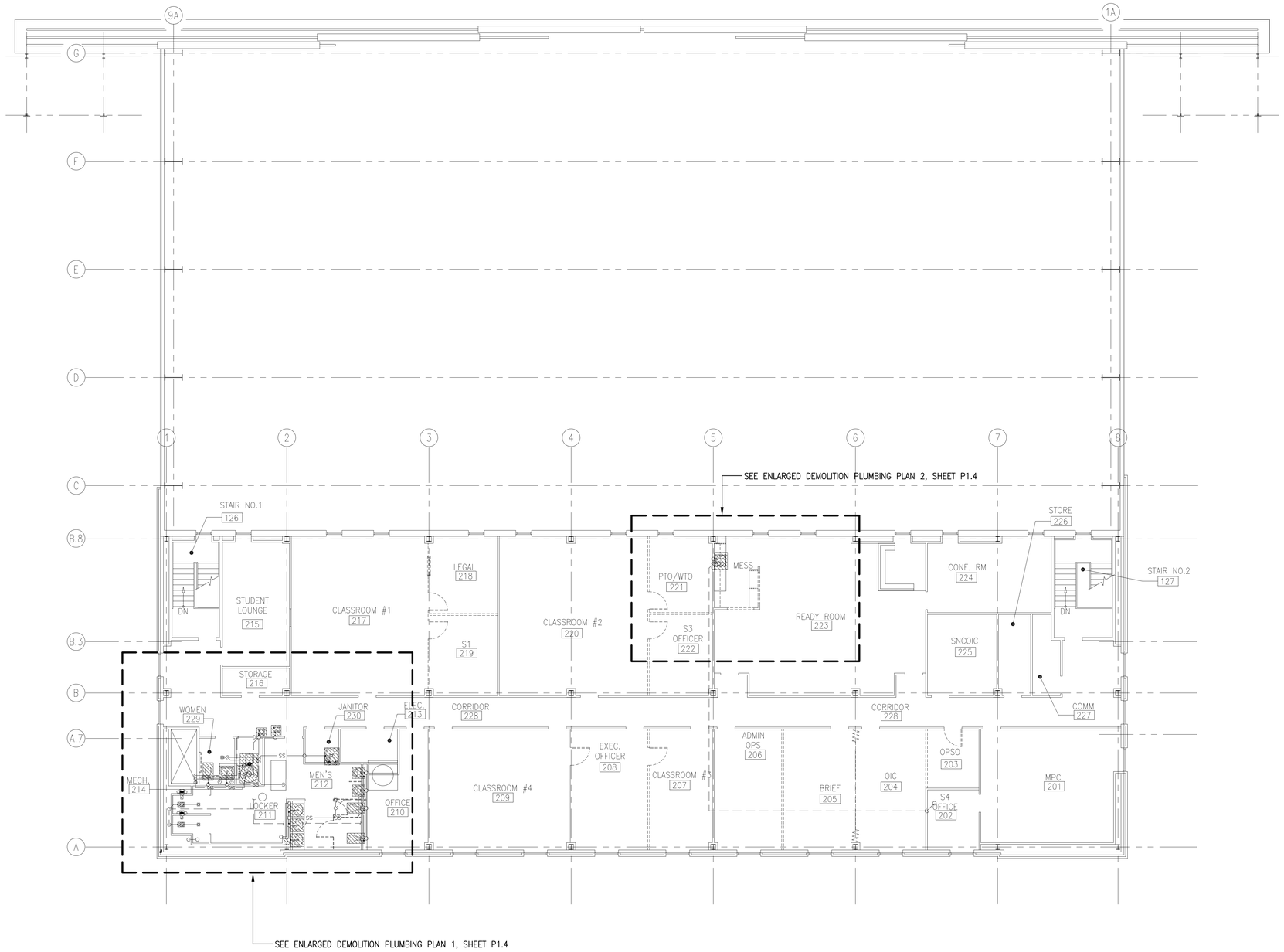

1 P1.2 P1.2 SECOND FLOOR PLUMBING PLAN - EXISTING & DEMOLITION

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

GRAPHIC SCALES:

5' 0' 5' 15' 20'

1/8"=1'-0"

NOVEMBER 2011

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P1.2

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ARCH. & ENGR. SEAL
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NATURAL RESOURCES & ENVIRONMENTAL AFFAIRS — SATISFACTORY TO DATE
SAFETY DEPARTMENT — SATISFACTORY TO DATE
FIRE DEPARTMENT — SATISFACTORY TO DATE
PUBLIC WORKS SUPERVISOR — SATISFACTORY TO DATE
PUBLIC WORKS OFFICER

P.W. DWG. NO. 21084
DRAWN BY JLL
CHECKED BY R. DeLOACH
SUPERVISOR B.COFFMAN
APPROVED DATE

DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND
MARINE CORPS AIR STATION
BEAUFORT, S. C.

RENOVATE HANGAR 728
ADMINISTRATIVE SPACES
PLUMBING PLAN - SECOND FLOOR EXISTING & DEMOLITION

SIZE F | CODE IDENT. NO. | NAVFAC DRAWING NO. N/A
HQMC PROJ. NO. BE1204M | CONSTR. CONTR. NO. N69450-11-D-2529
SCALE AS NOTED | MACC. | T.O.# ____ | SHEET 26 OF 40

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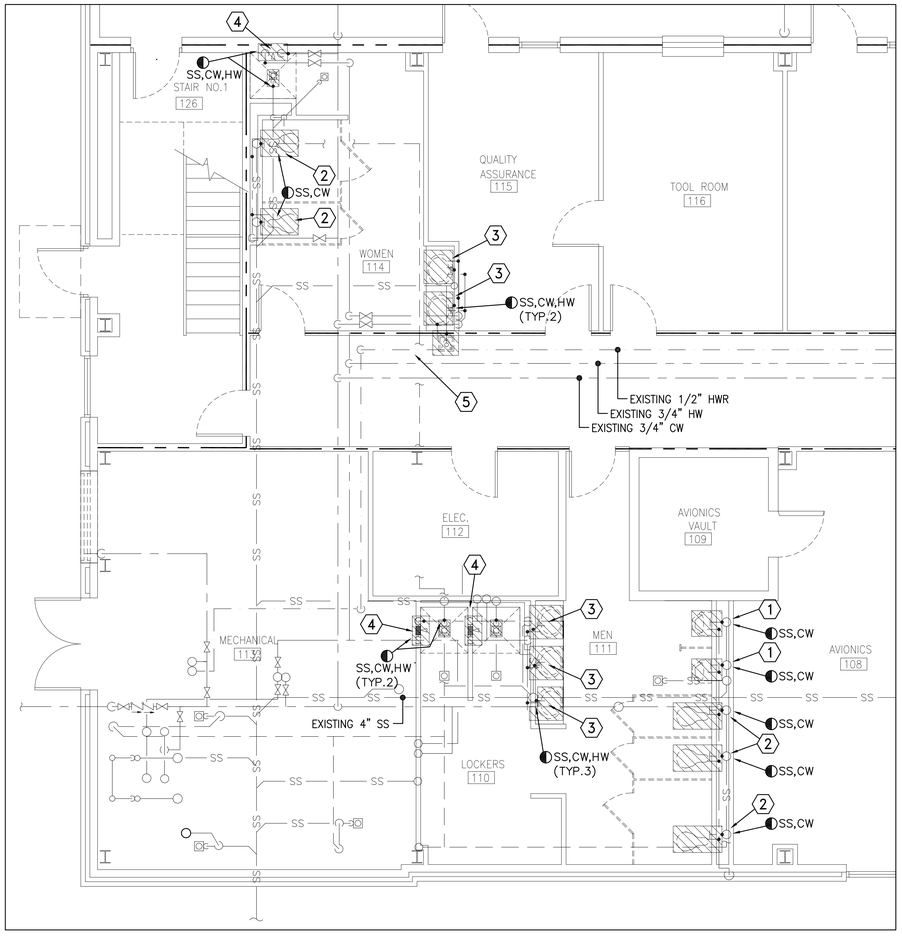
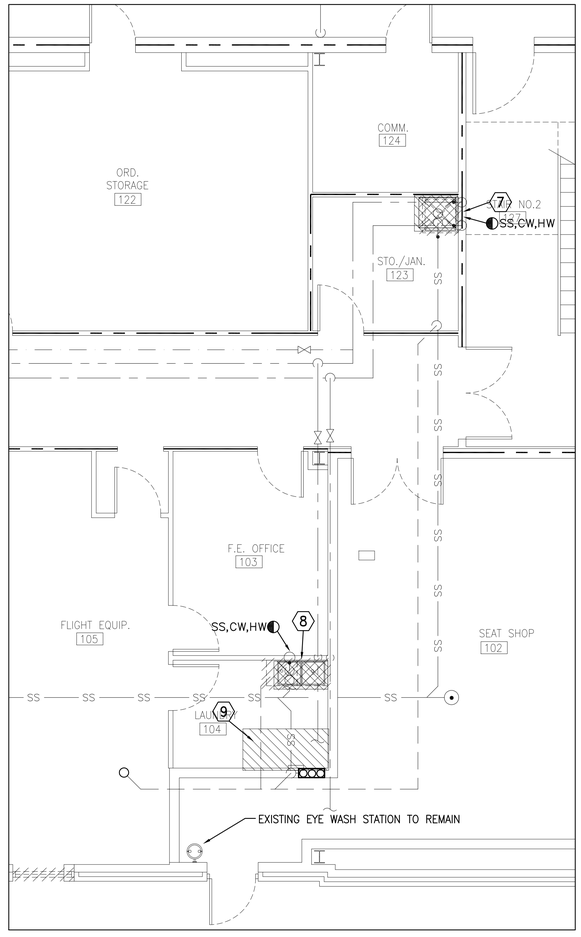


1 P1.1|P1.3 **ENLARGED FIRST FLOOR PLUMBING PLAN - DEMOLITION**

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



2 P1.1|P1.3 **ENLARGED FIRST FLOOR PLUMBING PLAN - DEMOLITION**

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

GENERAL DEMOLITION WORK NOTES

NOTE: APPLIES TO ALL PLUMBING DEMO SHEETS

1. DEMOLISH EXISTING URINAL, COMPLETE INCLUDE FIXTURE AND TRIM. DEMOLISH COLD WATER AND WASTE PIPING BACK TO THE POINT OF DISCONNECTION. PREPARE PIPING LEFT BARE BY DEMOLITION TO ACCEPT PIPING IN NEW WORK.
2. DEMOLISH EXISTING WATER CLOSET, COMPLETE INCLUDE FIXTURE AND TRIM. DEMOLISH COLD WATER AND WASTE PIPING BACK TO THE POINT OF DISCONNECTION. PREPARE PIPING LEFT BARE BY DEMOLITION TO ACCEPT PIPING IN NEW WORK.
3. DEMOLISH EXISTING LAVATORY, COMPLETE INCLUDE FIXTURE AND TRIM. DEMOLISH HOT & COLD WATER AND WASTE PIPING BACK TO THE POINT OF DISCONNECTION. PREPARE PIPING LEFT BARE BY DEMOLITION TO ACCEPT PIPING IN NEW WORK.
4. DEMOLISH EXISTING SHOWER, COMPLETE INCLUDE FIXTURE AND TRIM. DEMOLISH HOT & COLD WATER AND WASTE PIPING BACK TO THE POINT OF DISCONNECTION. PREPARE PIPING LEFT BARE BY DEMOLITION TO ACCEPT PIPING IN NEW WORK.
5. DEMOLISH EXISTING WATER COOLER, COMPLETE INCLUDE FIXTURE AND TRIM. DEMOLISH COLD WATER AND WASTE PIPING BACK TO THE POINT OF DISCONNECTION. PREPARE PIPING LEFT BARE BY DEMOLITION TO ACCEPT PIPING IN NEW WORK.
6. DEMOLISH EXISTING SINK, COMPLETE INCLUDE FIXTURE AND TRIM. DEMOLISH HOT & COLD WATER AND WASTE PIPING BACK TO THE POINT OF DISCONNECTION. PREPARE PIPING LEFT BARE BY DEMOLITION TO ACCEPT PIPING IN NEW WORK.
7. DEMOLISH EXISTING JANITOR'S SINK, COMPLETE INCLUDE FIXTURE, TRIM AND ROUGH-IN. DEMOLISH HOT & COLD WATER AND WASTE PIPING BACK TO THE POINT OF DISCONNECTION. PREPARE PIPING LEFT BARE BY DEMOLITION TO ACCEPT PIPING IN NEW WORK.
8. DEMOLISH EXISTING LAUNDRY SINK, COMPLETE INCLUDE FIXTURE, TRIM AND ROUGH-IN. DEMOLISH HOT & COLD WATER AND WASTE PIPING BACK TO THE POINT OF DISCONNECTION. PREPARE PIPING LEFT BARE BY DEMOLITION TO ACCEPT PIPING IN NEW WORK.
9. REMOVE EXISTING WASHER AND DRYER AND DELIVER TO PROPERTY CONTROL WITHIN 5 MILES OF JOB SITE.

LEGEND

FOR PLUMBING LEGEND, SEE DWG. P1.1.

GRAPHIC SCALES:

4' 0' 4' 8'

1/4"=1'-0"

NOVEMBER 2011

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P1.3

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P.W. DWG. NO. 21085
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DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND
MARINE CORPS AIR STATION
BEAUFORT, S. C.

RENOVATE HANGAR 728
ADMINISTRATIVE SPACES
ENLARGED PLUMBING PLANS
FIRST FLOOR - DEMOLITION

SIZE F | CODE IDENT. NO. | N A V F A C DRAWING NO. N/A
HQMC PROJ. NO. BE1204M | CONSTR. CONTR. NO. N69450-11-D-2529
SCALE AS NOTED | MACC. | T.O.# _____ | SHEET 27 OF 40

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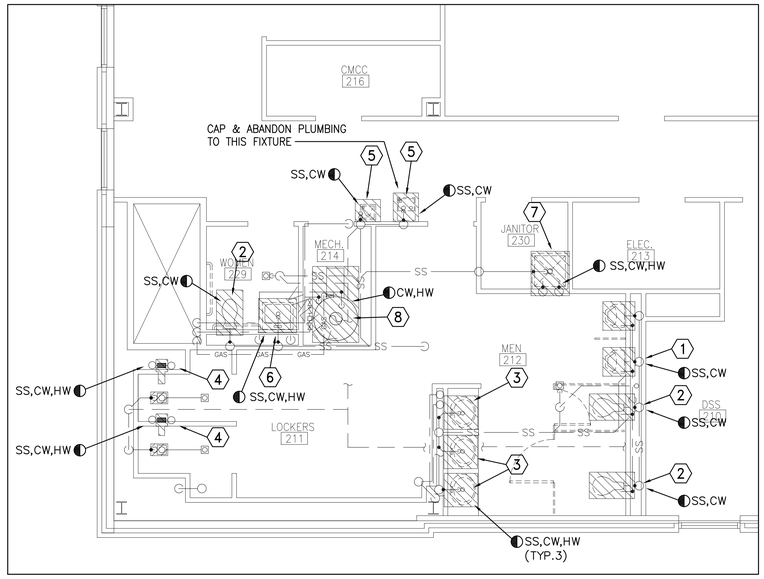
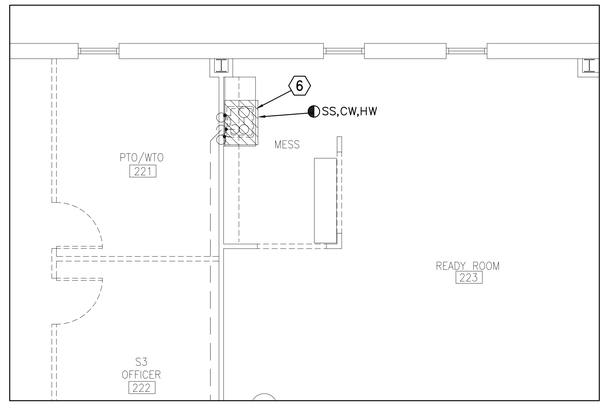
REVISIONS			
SYM.	DESCRIPTION	DATE	APP.



1 P1.2 P1.4 **ENLARGED SECOND FLOOR PLUMBING PLAN - DEMOLITION**
SCALE: 1/4" = 1'-0"



2 P1.2 P1.4 **ENLARGED SECOND FLOOR PLUMBING PLAN - DEMOLITION**
SCALE: 1/4" = 1'-0"

GENERAL DEMOLITION WORK NOTES

FOR GENERAL DEMOLITION WORK NOTES, SEE DWG. P1.3.

LEGEND

FOR PLUMBING LEGEND, SEE DWG. P1.1.

GRAPHIC SCALES:
4' 0' 4' 8'
1/4"=1'-0"

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BEAUFORT, S. C.

RENOVATE HANGAR 728
ADMINISTRATIVE SPACES
ENLARGED PLUMBING PLANS
SECOND FLOOR - DEMOLITION

SIZE F | CODE IDENT. NO. | N A V F A C DRAWING NO. N/A
HQMC PROJ. NO. BE1204M | CONSTR. CONTR. NO. N69450-11-D-2529
SCALE AS NOTED | MACC. | T.O.# _____ | SHEET 28 OF 40

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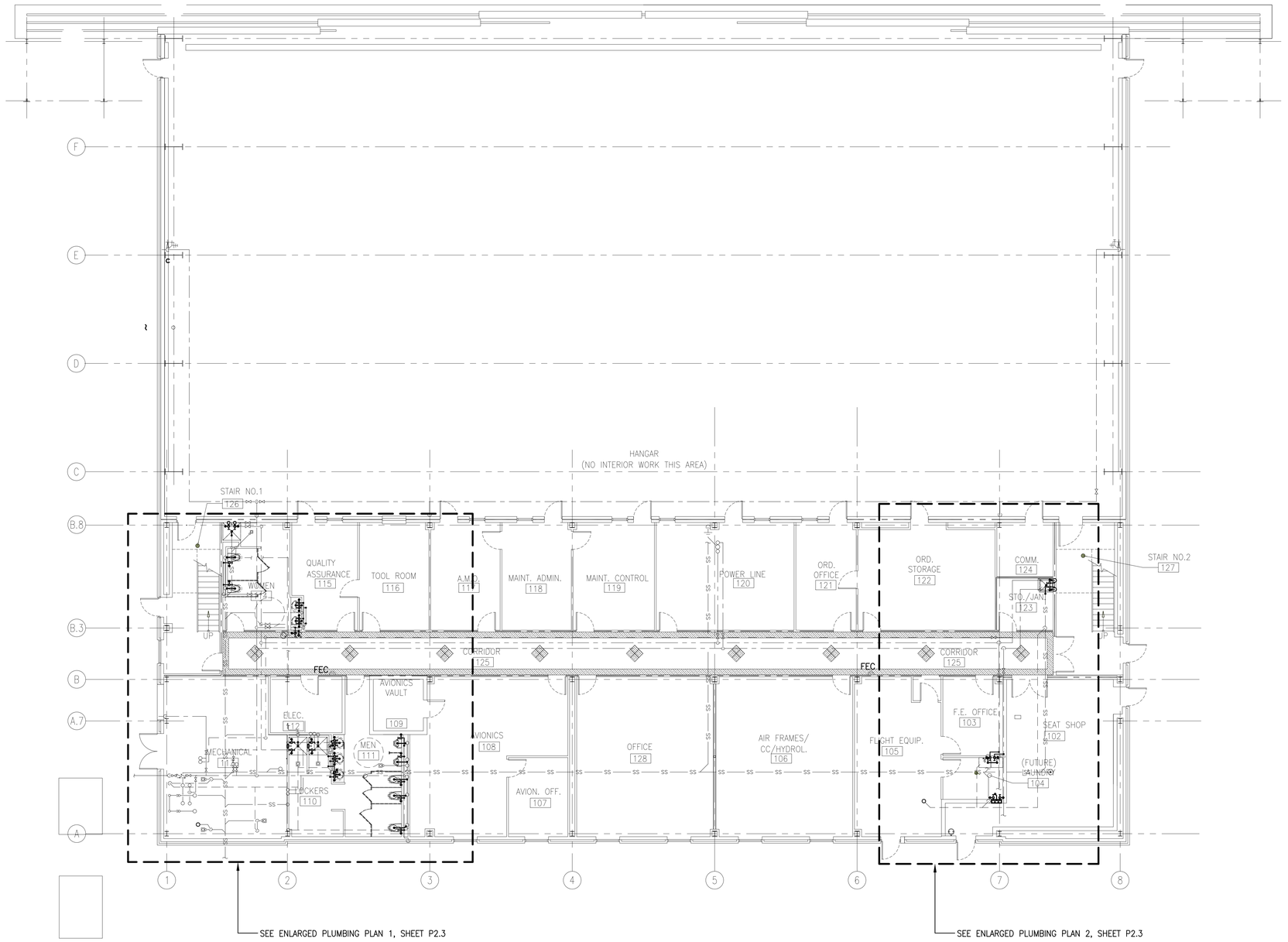
SYM.	DESCRIPTION	DATE	APP.

LEGEND

SEE SHEET PL1.1 FOR LEGEND.

PLUMBING NOTES

1. DO NOT SCALE PLANS. ROUGHING TO BE PERFORMED FROM ARCHITECTURAL AND EQUIPMENT MANUFACTURER'S DRAWINGS. REFER TO ARCHITECTURAL DRAWINGS FOR LOCATIONS.
2. PROVIDE COPPER PIPING (TYPE K OR L) FOR ALL NEW HOT & COLD POTABLE WATER. SIZE AS INDICATED ON DRAWINGS. SEE SPECIFICATIONS FOR ADDITIONAL INFORMATION.
3. THE PLUMBING SYSTEM SHALL CONFORM TO INTERNATIONAL PLUMBING CODE 2006.
4. FOR HOT WATER HEATING AND SUPPLY, PROVIDE A MINIMUM TEMP OF 120 DEG. F AND A MAXIMUM OF 130 DEG. F AT THE FIXTURE, UNLESS SPECIFIC APPLIANCES OR EQUIPMENT SPECIFICALLY REQUIRE HIGHER TEMPERATURE WATER SUPPLY.
5. UNLESS OTHERWISE SPECIFIED OF DIRECTED, DESIGN IN ACCORDANCE WITH ASHRAE HANDBOOK SERIES (APPROPRIATE CHAPTERS), ASHRAE STANDARD 90.1, AND THE ENERGY CONSERVATION REQUIREMENTS OF THE CONTRACT. SIZE AND PLACE EQUIPMENT SO THAT IT IS EASILY ACCESSIBLE AND REMOVABLE FOR REPAIR OR REPLACEMENT.
6. COORDINATE PLUMBING PIPING WITH AIR CONDITIONING DUCTS AND ELECTRICAL CONDUIT.
7. CONTRACTOR SHALL VERIFY DISTANCE TO CONNECTION TO EXISTING UTILITIES PRIOR TO BID.



1 / P2.1 | P2.1 FIRST FLOOR PLUMBING PLAN - NEW WORK

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

NOTE: ALL FIXTURES SHOWN ARE NEW UNLESS NOTED OTHERWISE.

GRAPHIC SCALES:

5' 0' 5' 15' 20'

1/8"=1'-0"

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PUBLIC WORKS OFFICER

P.W. DWG. NO. 21087

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SUPERVISOR B.COFFMAN

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MARINE CORPS AIR STATION

BEAUFORT, S. C.

RENOVATE HANGAR 728 ADMINISTRATIVE SPACES

PLUMBING PLAN - FIRST FLOOR NEW WORK

SIZE F | CODE IDENT. NO. | N A V F A C DRAWING NO. N/A

HQMC PROJ. NO. BE1204M | CONSTR. CONTR. NO. N69450-11-D-2529

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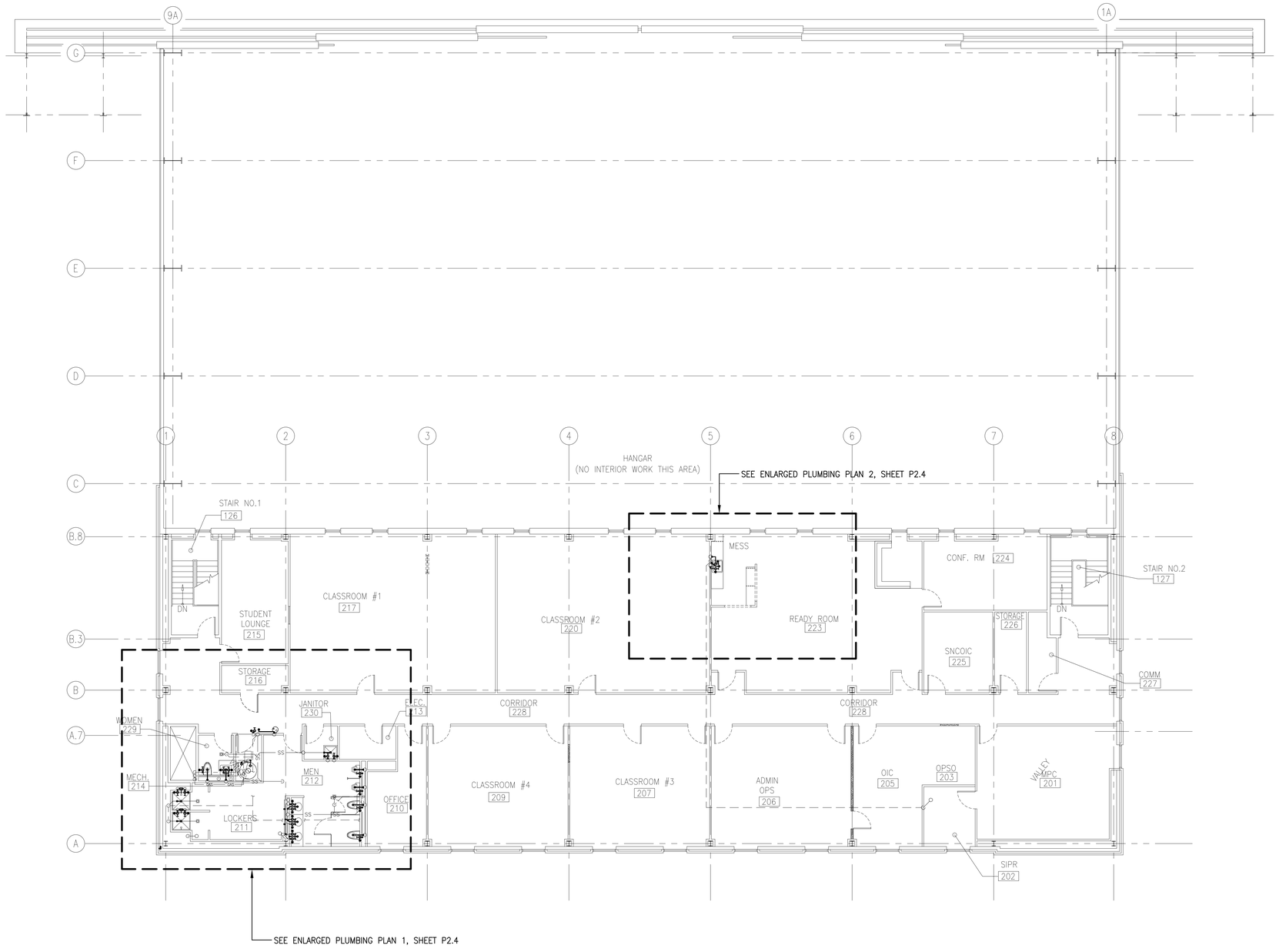

1 / P2.2 P2.2 SECOND FLOOR PLUMBING PLAN - NEW WORK

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

NOTE: ALL FIXTURES SHOWN ARE NEW UNLESS NOTED OTHERWISE.

GRAPHIC SCALES:

5' 0' 5' 15' 20'

1/8"=1'-0"

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P2.2

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PUBLIC WORKS OFFICER

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MARINE CORPS AIR STATION
BEAUFORT, S. C.

RENOVATE HANGAR 728
ADMINISTRATIVE SPACES
PLUMBING PLAN - SECOND FLOOR NEW WORK

SIZE F | CODE IDENT. NO. | NAVFAC DRAWING NO. N/A
HQMC PROJ. NO. BE1204M | CONSTR. CONTR. NO. N69450-11-D-2529
SCALE AS NOTED | MACC. | T.O.# _____ | SHEET 30 OF 40

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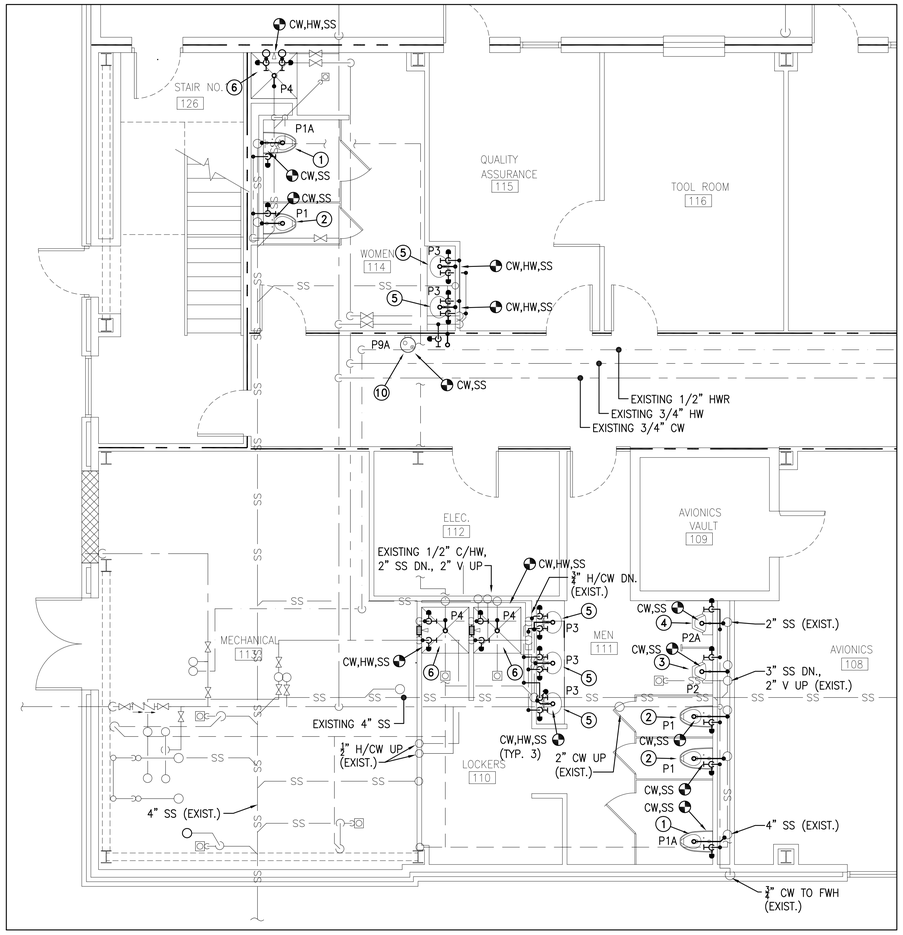
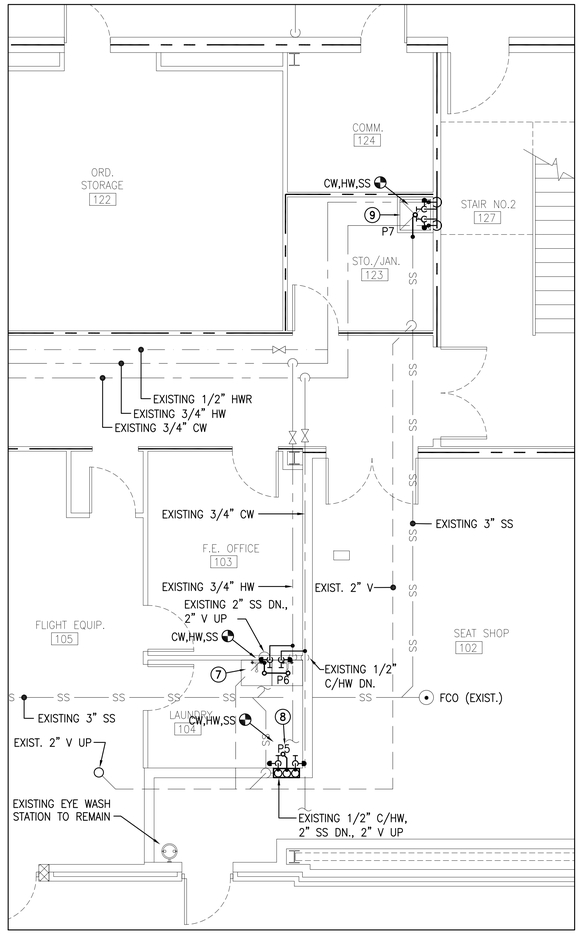
SYM.	DESCRIPTION	DATE	APP.



1 P2.1 P2.3 **ENLARGED FIRST FLOOR PLUMBING PLAN - NEW WORK**

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



2 P2.1 P2.3 **ENLARGED FIRST FLOOR PLUMBING PLAN - NEW WORK**

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

GENERAL NEW WORK NOTES

1. PROVIDE ADA COMPLAINT FIXTURE. REPIPE TO EXISTING CW, WASTE, AND VENT PIPING. SEE "NEW FIXTURE SCHEDULE" FOR ADDITIONAL INFORMATION AND ARCHITECTURAL DRAWINGS FOR NEW FINISHES. PROVIDE NEW FLUSH VALVE. NEW FIXTURE SHALL BE WALL HUNG.
2. PROVIDE NEW FIXTURE. REPIPE TO EXISTING CW, WASTE, AND VENT PIPING. SEE "NEW FIXTURE SCHEDULE" FOR ADDITIONAL INFORMATION AND ARCHITECTURAL DRAWINGS FOR NEW FINISHES. PROVIDE NEW FLUSH VALVE. NEW FIXTURE SHALL BE WALL HUNG.
3. PROVIDE NEW FIXTURE. REUSE EXISTING CW, WASTE, AND VENT BRANCH LINES. REUSE EXIST FIXTURE WALL SUPPORTS, ADAPT AS REQUIRED. PROVIDE NEW FLUSH VALVE, AND ESCUTCHEONS
4. PROVIDE NEW ADA COMPLIANT FIXTURE– REPIPE TO EXISTING CW, WASTE, AND VENT PIPING. PROVIDE NEW FLUSH VALVE, AND ESCUTCHEONS. SEE "NEW FIXTURE SCHEDULE" FOR ADDITIONAL INFORMATION AND ARCHITECTURAL DRAWINGS FOR NEW WALL FINISHES.
5. PROVIDE NEW HW, CW, AND WASTE PIPING FROM EXISTING BRANCH PIPING TO NEW LAVATORIES (ADA COMPLIANT). SEE ARCHITECTURAL DRAWINGS FOR NEW VANITY WITH LAVATORIES. PROVIDE NEW STOPS, AND ESCUTCHEONS CAP AND/OR PLUG EXISTING LINES NOT REUSED IN CONCEALED LOCATION.
6. PROVIDE NEW SHOWER FIXTURE (ADA COMPLIANT) & FLOOR DRAIN. REUSE EXISTING CW, HW, WASTE, AND VENT BRANCH LINES. REUSE EXIST FIXTURE WALL SUPPORTS, ADAPT AS REQUIRED.
7. PROVIDE NEW LAUNDRY SINK AND FAUCET FIXTURE. REUSE EXISTING CW, HW, WASTE, AND VENT BRANCH LINES.
8. PROVIDE NEW WASHING MACHINE BOX. REUSE EXISTING CW, HW, WASTE, AND VENT BRANCH LINES. REUSE EXIST FIXTURE WALL SUPPORTS, ADAPT AS REQUIRED.
9. PROVIDE NEW JANITOR'S SINK AND FAUCET FIXTURE. REUSE EXISTING CW, HW, WASTE, AND VENT BRANCH LINES.
10. PROVIDE ADA COMPLAINT WATER FOUNTAIN. REPIPE TO EXISTING CW AND WASTE PIPING. SEE "NEW FIXTURE SCHEDULE" FOR ADDITIONAL INFORMATION AND ARCHITECTURAL DRAWINGS FOR NEW FINISHES. NEW FIXTURE SHALL BE WALL HUNG.
11. PROVIDE NEW WATER FOUNTAIN. REPIPE TO EXISTING CW AND WASTE PIPING. SEE "NEW FIXTURE SCHEDULE" FOR ADDITIONAL INFORMATION AND ARCHITECTURAL DRAWINGS FOR NEW FINISHES. NEW FIXTURE SHALL BE WALL HUNG.
12. PROVIDE NEW HW, CW, AND WASTE PIPING FROM EXISTING BRANCH PIPING TO NEW SINK. PROVIDE NEW STOPS, AND ESCUTCHEONS CAP AND/OR PLUG EXISTING LINES NOT REUSED IN CONCEALED LOCATION.
13. PROVIDE NEW GAS WATER HEATER. SEE SCHEDULE.
14. PROVIDE NEW HW, CW, AND WASTE PIPING FROM EXISTING BRANCH PIPING TO NEW KITCHEN SINK. PROVIDE NEW STOPS, AND ESCUTCHEONS CAP AND/OR PLUG EXISTING LINES NOT REUSED IN CONCEALED LOCATION.

LEGEND

FOR PLUMBING LEGEND, SEE DWG. P1.1.

GRAPHIC SCALES:

4' 0' 4' 8'

1/4"=1'-0"

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DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND
MARINE CORPS AIR STATION
BEAUFORT, S. C.

RENOVATE HANGAR 728
ADMINISTRATIVE SPACES
ENLARGED PLUMBING PLANS
FIRST FLOOR - NEW WORK

SIZE F | CODE IDENT. NO. | N A V F A C DRAWING NO. N/A
HQMC PROJ. NO. BE1204M | CONSTR. CONTR. NO. N69450-11-D-2529
SCALE AS NOTED | MACC. | T.O.# _____ | SHEET 31 OF 40

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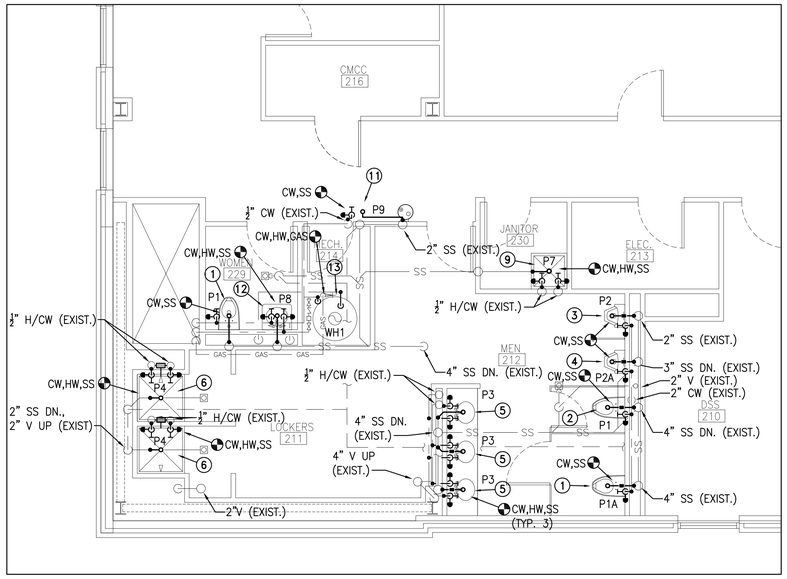
SYM.	DESCRIPTION	DATE	APP.

GENERAL NEW WORK NOTES

FOR GENERAL NEW WORK NOTES, SEE DWG. P2.3.

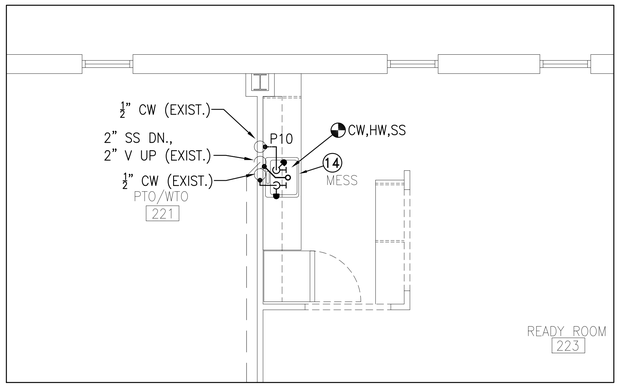
LEGEND

FOR PLUMBING LEGEND, SEE DWG. P1.1.



1 P2.2 P2.4 **ENLARGED SECOND FLOOR PLUMBING PLAN - NEW WORK**

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



2 P2.2 P2.4 **ENLARGED SECOND FLOOR PLUMBING PLAN - NEW WORK**

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

GRAPHIC SCALES:

4' 0' 4' 8'

1/4"=1'-0"

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PUBLIC WORKS OFFICER

P.W. DWG. NO. 21090

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MARINE CORPS AIR STATION

BEAUFORT, S. C.

RENOVATE HANGAR 728 ADMINISTRATIVE SPACES

ENLARGED PLUMBING PLANS SECOND FLOOR - NEW WORK

SIZE	CODE IDENT. NO.	NAVFAC DRAWING NO.
F		N/A

HQMC PROJ. NO. BE1204M — CONSTR. CONTR. NO. N69450-11-D-2529

SCALE AS NOTED — MACC. — T.O.# _____ — SHEET 32 OF 40

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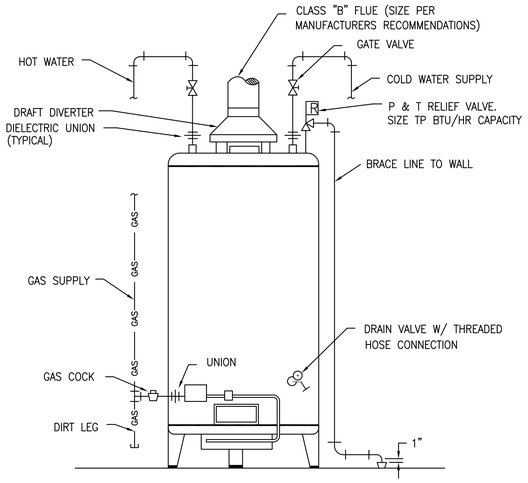
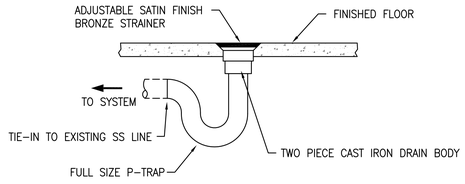
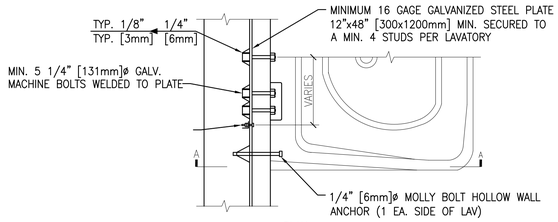


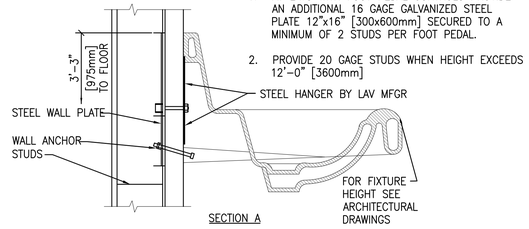
A P3.1 **GAS WATER HEATER DETAIL**
SCALE: NONE



B P3.1 **FLOOR DRAIN**
SCALE: NONE



PLAN



SECTION A

NOTE:

1. AT LAVS WITH FOOT PEDAL CONTROLS PROVIDE AN ADDITIONAL 16 GAGE GALVANIZED STEEL PLATE 12"x16" [300x600mm] SECURED TO A MINIMUM OF 2 STUDS PER FOOT PEDAL.
2. PROVIDE 20 GAGE STUDS WHEN HEIGHT EXCEEDS 12'-0" [3600mm]

C P3.1 **LAVATORY MOUNTING DETAIL**
SCALE: NONE

WATER HEATER SCHEDULE

ITEM	TYPE	CAPACITY		CONNECTIONS			ELECTRICAL	REMARKS
		TANK	RECOVERY	CW	HW	GAS		
WH1	ASME GLASSLINED STORAGE	81	171GPH	1-1/2	1-1/2	1/2	120V CONTROL	AMERICAN BCG38OT1506N (OR APPROVED EQUAL)

MISCELLANEOUS EQUIPMENT:

WATER HAMMER ARRESTORS: PERMANENTLY SEALED MECHANICAL DEVICE, PRE-CHARGED, THREADED CONNECTION. ASSE 1010 – 2004 CERTIFIED. INSTALL AS CLOSE AS POSSIBLE TO QUICK-CLOSING VALVE. NO ACCESS PANEL REQUIRED. PISTON TYPE: HARD DRAWN SEALED COPPER BODY WITH PLASTIC RINGS AND PISTON, THREADED ADAPTER: SIOUX CHIEF 650 SERIES OR EQUAL.

FIXTURE SCHEDULE

ITEM	DESCRIPTION	CW	HW	WASTE	VENT	REMARKS
P1	WATER CLOSET	1"	–	4"	2"	WALL HUNG FIXTURE ON EXISTING CARRIER, SELECTED BY OWNER
P1A	WATER CLOSET ADA COMPLIANT	1"	–	4"	2"	WALL HUNG FIXTURE ON EXISTING CARRIER, SELECTED BY OWNER
P2	URINAL	3/4"	–	2"	2"	WALL HUNG FIXTURE ON EXISTING CARRIER, SELECTED BY OWNER
P2A	URINAL ADA COMPLIANT	3/4"	–	2"	2"	WALL HUNG FIXTURE ON EXISTING CARRIER, SELECTED BY OWNER
P3	LAVATORY ADA COMPLIANT	1/2"	1/2"	1 1/4"	2"	SELECTED BY OWNER
P4	SHOWER ADA COMPLIANT	1/2"	1/2"	2"	2"	SELECTED BY OWNER
P5	WASHER BOX, RECESSED	1/2"	1/2"	2"	2"	SELECTED BY OWNER
P6	LAUNDRY SINK	1/2"	1/2"	3"	–	SELECTED BY OWNER
P7	JANITOR'S SINK	1/2"	1/2"	3"	–	SELECTED BY OWNER
P8	SINK	1/2"	1/2"	1 1/4"	2"	SELECTED BY OWNER
P9	WATER FOUNTAIN	1/2"	–	1 1/4"	2"	SELECTED BY OWNER
P9A	WATER FOUNTAIN ADA COMPLIANT	1/2"	–	1 1/4"	2"	SELECTED BY OWNER
P10	SINK	1/2"	1/2"	1 1/4"	2"	SELECTED BY OWNER
FD	FLOOR DRAIN	–	–	3"	–	ZURN FD-2213 OR APPROVED EQUAL

NOTES:

1. ALL COLORS TO BE COORDINATED WITH ARCHITECT.

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ARCH. & ENGR. SEAL
SOUTH CAROLINA BEAUFORT ENGINEERING SERVICES, INC. No. C00670 CERTIFICATE OF AUTHORIZATION

NATURAL RESOURCES & ENVIRONMENTAL AFFAIRS — SATISFACTORY TO DATE
SAFETY DEPARTMENT — SATISFACTORY TO DATE
FIRE DEPARTMENT — SATISFACTORY TO DATE
PUBLIC WORKS SUPERVISOR — SATISFACTORY TO DATE

P.W. DWG. NO. 21091
DRAWN BY JLL
CHECKED BY R. DeLOACH
SUPERVISOR B.COFFMAN
APPROVED DATE
PUBLIC WORKS OFFICER

DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND
MARINE CORPS AIR STATION
BEAUFORT, S. C.

RENOVATE HANGAR 728 ADMINISTRATIVE SPACES
PLUMBING DETAILS

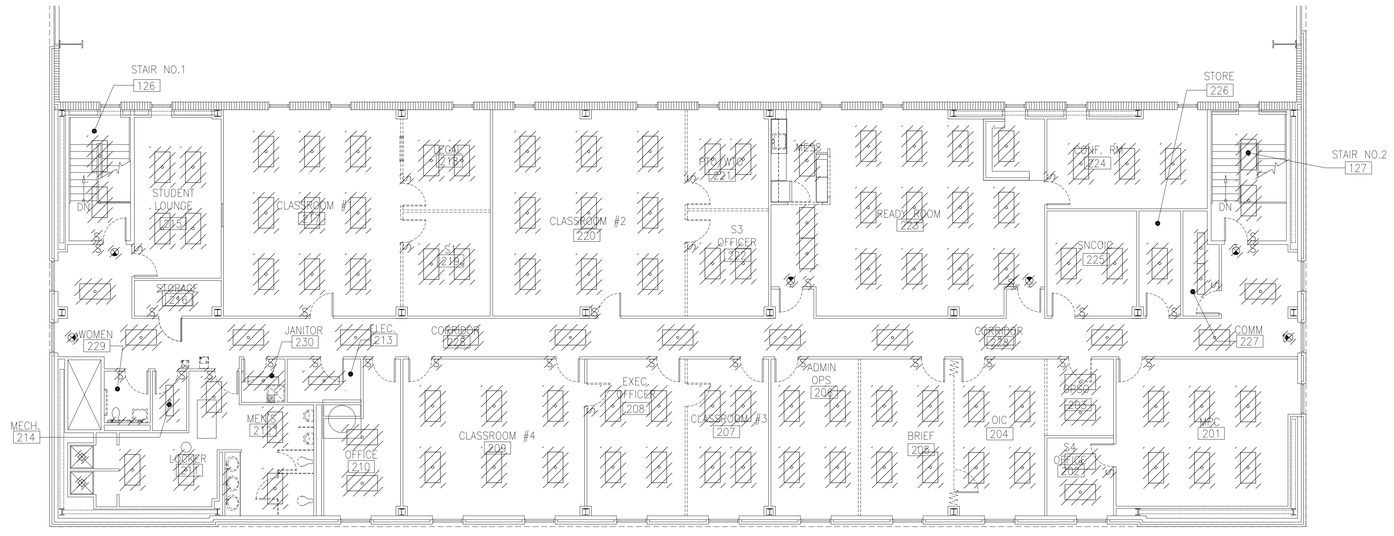
SIZE F | CODE IDENT. NO. | N A V F A C DRAWING NO. N/A
HQMC PROJ. NO. BE1204M | CONSTR. CONTR. NO. N69450-11-D-2529
SCALE AS NOTED | MACC. | T.O.# _____ | SHEET 33 OF 40

Dec 02, 2011 - 10:45 K:\2011005_06_H 728\Renovate Hangar 728 Admin Spaces\DWG\2011005.06_P3.1.dwg

REVISIONS			
SYM.	DESCRIPTION	DATE	APP.

LIGHTING PLAN - FIRST FLOOR - DEMOLITION

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



LIGHTING PLAN - SECOND FLOOR - DEMOLITION

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

GENERAL DEMOLITION NOTES

1. ALL ITEMS SHOWN WITH HATCHED LINES INDICATE ITEMS TO BE DEMOLISHED. SEE ARCHITECTURAL DRAWINGS AND CODED DEMOLITION NOTES FOR SPECIFIC INFORMATION.

2. LOCATION OF EXISTING EQUIPMENT, CONDUITS, OUTLETS, DEVICES, CONTROLS AND ALL CONCEALED WORKS, ARE APPROXIMATE. NOT ALL CIRCUITS, SUPPORTS, DEVICES, AND FIXTURES ARE SHOWN.

3. DURING THE LIFE OF THE CONTRACT (CONSTRUCTION AND DEMOLITION TO THE POINT OF BENEFICIAL OCCUPANCY BY OWNER) THE CONTRACTOR SHALL PROTECT ALL SYSTEMS OR PORTIONS OF SYSTEMS TO REMAIN FOR REUSE FROM DAMAGE. ALL SYSTEMS SHALL BE TESTED IN SERVICE AFTER COMPLETION OF THE CONTRACT AND MADE COMPLETE AND OPERABLE AT NO ADDITIONAL COST TO THE GOVERNMENT.

4. NOT ALL CIRCUITS AND DEVICES ARE INDICATED. FOR EACH DEVICE THERE IS A CIRCUIT OR FEEDER BACK TO THE POINT OF ORIGIN. WHERE WALLS, FLOORS OR CEILINGS ARE TO BE DEMOLISHED ALL DEVICES, WIRING, AND CONDUIT SHALL BE REMOVED UNLESS INDICATED OTHERWISE.

5. SEE ARCHITECTURAL DRAWINGS AND SPECIFICATION FOR ADDITIONAL INFORMATION. COORDINATE ALL DEMOLITION WITH ALL TRADES INVOLVED.

6. EXISTING PIPING AND/OR CONDUIT RUN CONCEALED IN FLOOR SLAB OR UNDERGROUND AND NOT INDICATED OR SPECIFIED FOR REUSE IN NEW WORK SHALL BE ABANDONED UNLESS NOTED OTHERWISE. CUT PIPING AND/OR CONDUIT AT FLOOR AND SEAL BY AN APPROVED METHOD.

7. ALL REPAIRS TO EXISTING FACILITES SHALL BE BY TRADES SKILLED IN FINISH WORK.

8. ALL ELECTRIC WORK SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE NATIONAL ELECTRIC SAFETY CODE (IEEE C-2) AND THE 2005 EDITION OF THE NATIONAL ELECTRIC CODE (NFPA 70).

9. IT IS THE DECLARED AND ACKNOWLEDGED INTENTION AND MEANING TO DEMOLISH ALL INDICATED LIGHTING SYSTEMS COMPLETE, INCLUDING ALL ASSOCIATED DEVICES, CONDUIT AND WIRING UNLESS NOTED OTHERWISE.

DEMOLITION NOTES

① DEMOLISH EXISTING LIGHT FIXTURE. EXISTING CIRCUIT SHALL BE PROTECTED FROM DAMAGE FOR REUSE IN NEW WORK.

GRAPHIC SCALE
1/8"=1'- 0"
8 4 0 8 16 24
SCALE IN FEET

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SAFETY DEPARTMENT — SATISFACTORY TO DATE
FIRE DEPARTMENT — SATISFACTORY TO DATE
PUBLIC WORKS SUPERVISOR — SATISFACTORY TO DATE
PUBLIC WORKS OFFICER

P.W. DWG. NO. 21092
DRAWN BY J.POPE
CHECKED BY R.DeLOACH
SUPERVISOR B.COFFMAN
APPROVED DATE

DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND
MARINE CORPS AIR STATION
BEAUFORT, S. C.

RENOVATE HANGAR 728
ADMINISTRATIVE SPACES
LIGHTING PLANS - FIRST & SECOND FLOORS - DEMOLITION

SIZE	CODE IDENT. NO.	N A V F A C DRAWING NO.
F		N/A
HQMC PROJ. NO. BE1204M	CONSTR. CONTR. NO. N69450-11-D-2529	
SCALE AS NOTED	MACC.	T.O.# ____ SHEET 34 OF 40

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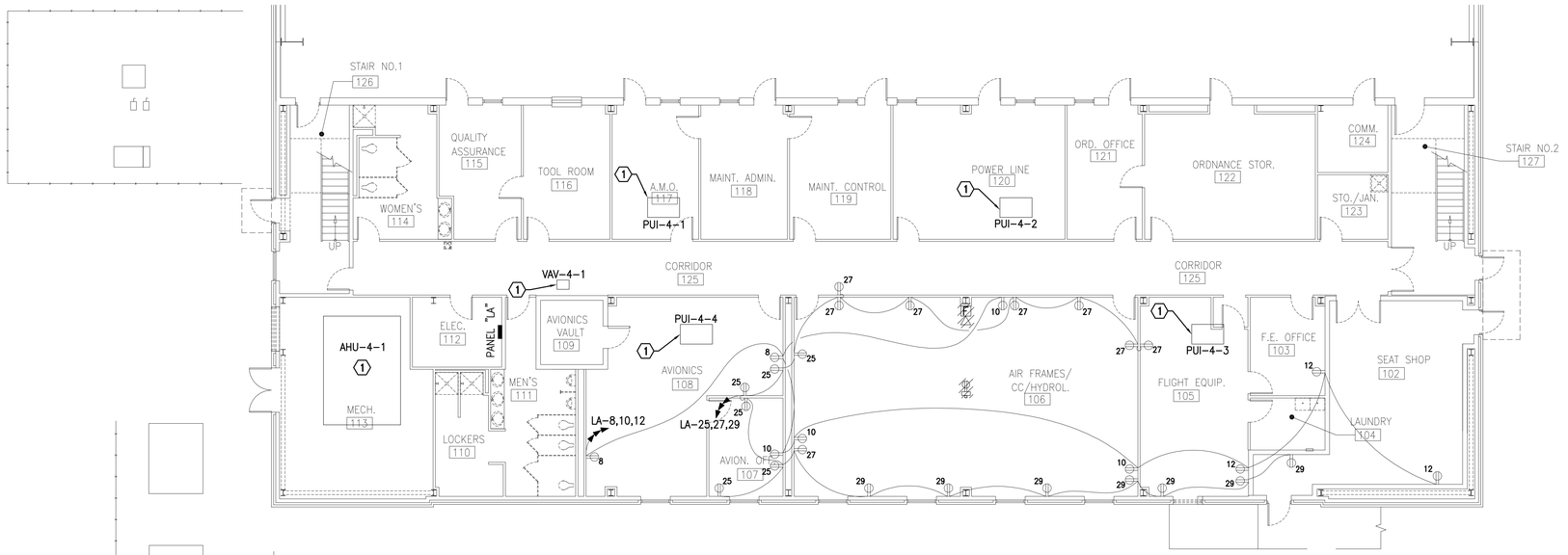
REVISIONS			
SYM.	DESCRIPTION	DATE	APP.



ELECTRICAL PLAN - FIRST FLOOR - DEMOLITION

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

GENERAL DEMOLITION NOTES

1. ALL ITEMS SHOWN WITH HATCHED LINES INDICATE ITEMS TO BE DEMOLISHED. SEE ARCHITECTURAL DRAWINGS AND CODED DEMOLITION NOTES FOR SPECIFIC INFORMATION.

2. LOCATION OF EXISTING EQUIPMENT, CONDUITS, OUTLETS, DEVICES, CONTROLS AND ALL CONCEALED WORKS, ARE APPROXIMATE. NOT ALL CIRCUITS, SUPPORTS, DEVICES, AND FIXTURES ARE SHOWN.

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4. NOT ALL CIRCUITS AND DEVICES ARE INDICATED. FOR EACH DEVICE THERE IS A CIRCUIT OR FEEDER BACK TO THE POINT OF ORIGIN. WHERE WALLS, FLOORS OR CEILINGS ARE TO BE DEMOLISHED ALL DEVICES, WIRING, AND CONDUIT SHALL BE REMOVED UNLESS INDICATED OTHERWISE.

5. SEE ARCHITECTURAL DRAWINGS AND SPECIFICATION FOR ADDITIONAL INFORMATION. COORDINATE ALL DEMOLITION WITH ALL TRADES INVOLVED.

6. EXISTING PIPING AND/OR CONDUIT RUN CONCEALED IN FLOOR SLAB OR UNDERGROUND AND NOT INDICATED OR SPECIFIED FOR REUSE IN NEW WORK SHALL BE ABANDONED UNLESS NOTED OTHERWISE. CUT PIPING AND/OR CONDUIT AT FLOOR AND SEAL BY AN APPROVED METHOD.

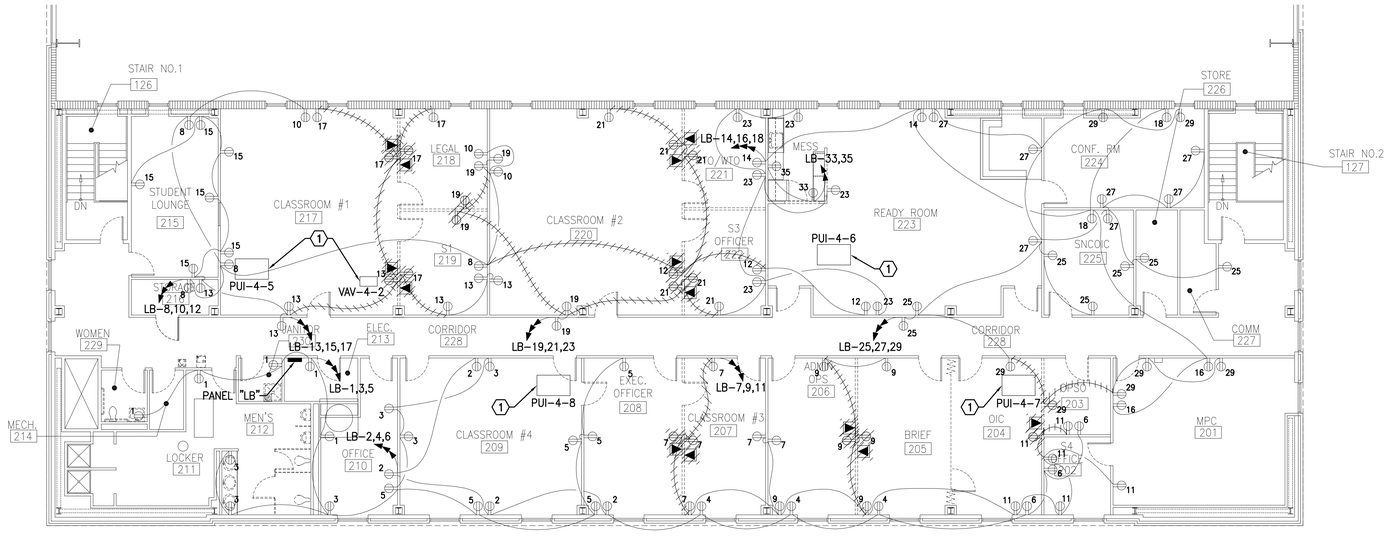
7. ALL REPAIRS TO EXISTING FACILITES SHALL BE BY TRADES SKILLED IN FINISH WORK.

8. ALL ELECTRIC WORK SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE NATIONAL ELECTRIC SAFETY CODE (IEEE C-2) AND THE 2005 EDITION OF THE NATIONAL ELECTRIC CODE (NFPA 70).

9. IT IS THE DECLARED AND ACKNOWLEDGED INTENTION AND MEANING TO DEMOLISH ALL INDICATED LIGHTING SYSTEMS COMPLETE, INCLUDING ALL ASSOCIATED DEVICES, CONDUIT AND WIRING UNLESS NOTED OTHERWISE.

DEMOLITION NOTES

(1) DEMOLISH EXISTING HVAC DEVICE CURCUIT COMPLETE BACK TO POINT OF ORIGIN, INCLUDING BUT NOT LIMITED TO DISCONNECT, CONDUIT, WIRING AND CIRCUIT BREAKER.



ELECTRICAL PLAN - SECOND FLOOR - DEMOLITION

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

GRAPHIC SCALE
1/8"=1'- 0"
8 4 0 8 16 24
SCALE IN FEET

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PUBLIC WORKS OFFICER

P.W. DWG. NO. 21093
DRAWN BY J.POPE
CHECKED BY R.DeLOACH
SUPERVISOR B.COFFMAN
APPROVED DATE

DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND
MARINE CORPS AIR STATION
BEAUFORT, S. C.

RENOVATE HANGAR 728
ADMINISTRATIVE SPACES
ELECTRICAL PLANS - FIRST & SECOND FLOORS - DEMOLITION

SIZE F | CODE IDENT. NO. | N A V F A C DRAWING NO. N/A
HQMC PROJ. NO. BE1204M | CONSTR. CONTR. NO. N69450-11-D-2529
SCALE AS NOTED | MACC. | T.O.# ____ | SHEET 35 OF 40

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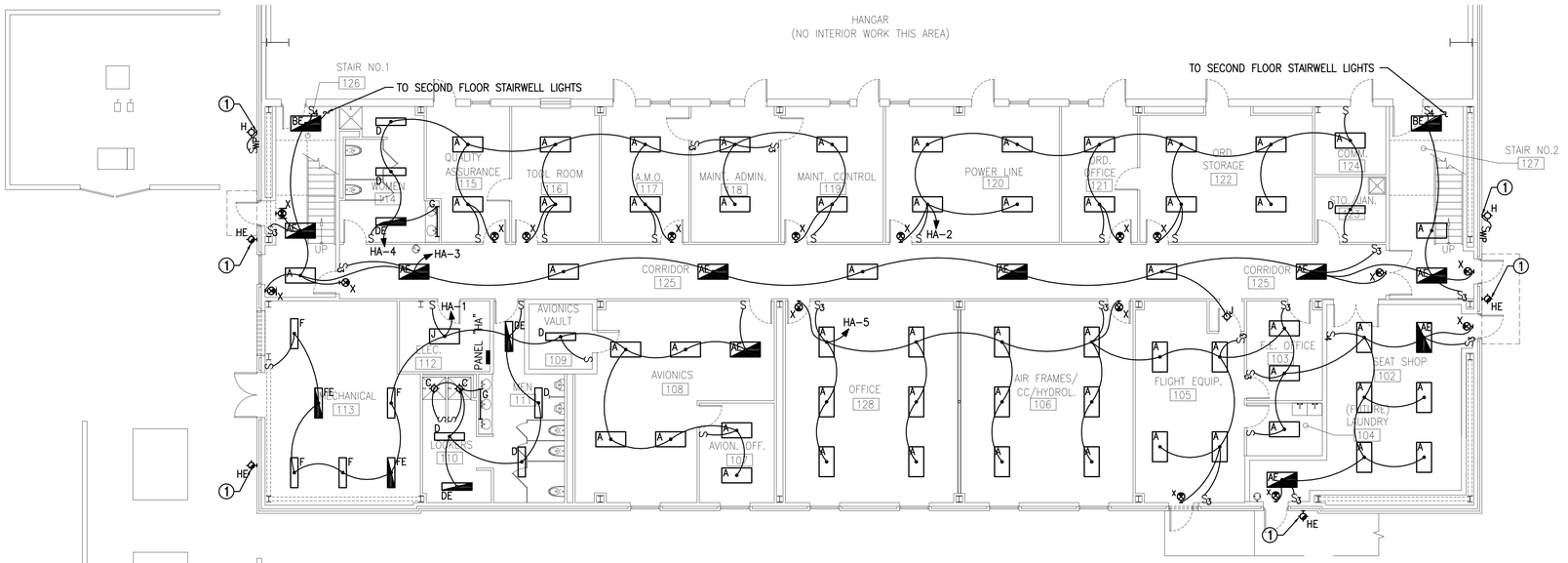
REVISIONS			
SYM.	DESCRIPTION	DATE	APP.



LIGHTING PLAN - FIRST FLOOR - NEW WORK

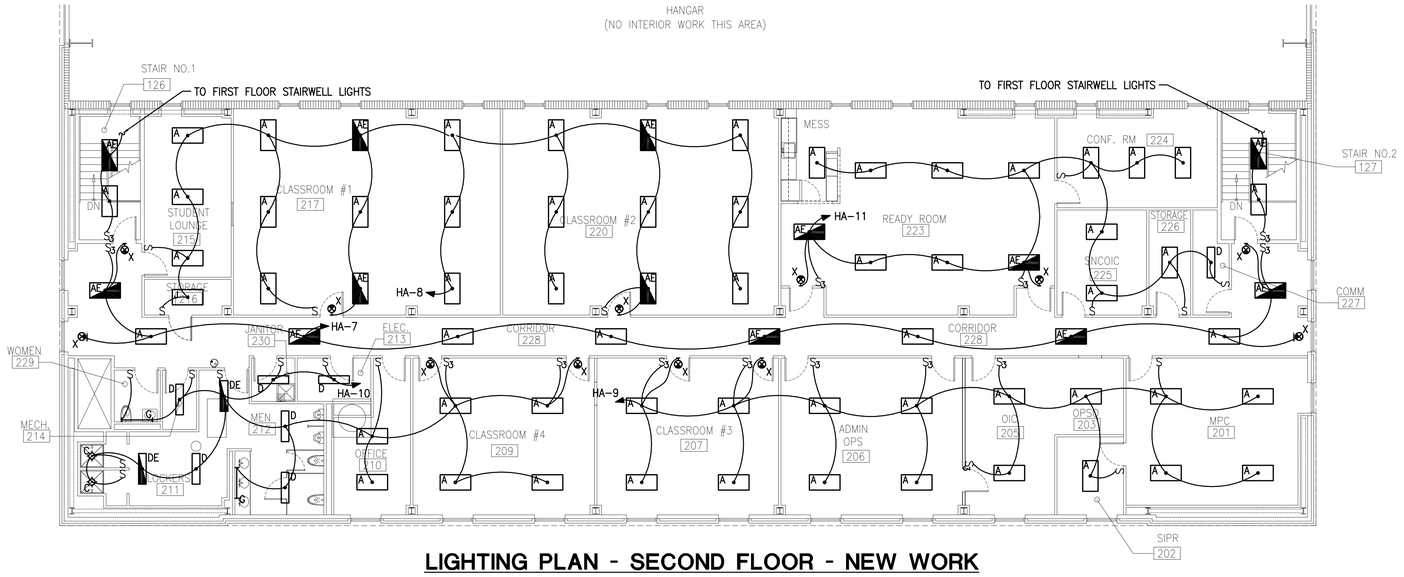
SCALE: 1/8" = 1'-0"

GENERAL NEW WORK NOTES

1. ALL ELECTRICAL WIRING, CONDUIT, DEVICES, EQUIPMENT AND MATERIALS SHALL BE NEW UNLESS NOTED OTHERWISE.
2. ALL ELECTRICAL WORK SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE NATIONAL ELECTRIC SAFETY CODE (IEEE C-2) AND THE NATIONAL ELECTRIC CODE (NFPA 70).
3. ALL CONDUCTORS SHALL BE COPPER UNLESS NOTED OTHERWISE.
4. ALL INTERIOR ELECTRICAL WIRING SHALL BE IN METALLIC CONDUIT UNLESS NOTED OTHERWISE.
5. PROVIDE FLEXIBLE METALLIC CONDUIT TO ALL MOTOR OPERATED EQUIPMENT.
6. MINIMUM CONDUCTOR SIZE SHALL BE #12 AWG UNLESS NOTED OTHERWISE.

NEW WORK NOTES

(1) NEW LIGHT FIXTURE SHALL BE CONNECTED TO EXISTING PHOTOCELL TIMECLOCK CIRCUIT PROTECTED DURING DEMOLITION. CONTRACTOR SHALL ALSO VERIFY EXISTING PHOTOCELL IS WORKING PROPERLY AND REPLACE IF NECESSARY.



LIGHTING PLAN - SECOND FLOOR - NEW WORK

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

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GRAPHIC SCALE
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8 4 0 8 16 24
SCALE IN FEET

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BEAUFORT, S. C.

RENOVATE HANGAR 728
ADMINISTRATIVE SPACES
LIGHTING PLANS - FIRST & SECOND FLOORS - NEW WORK

SIZE F | CODE IDENT. NO. | N A V F A C DRAWING NO. N/A
HQMC PROJ. NO. BE1204M | CONSTR. CONTR. NO. N69450-11-D-2529
SCALE AS NOTED | MACC. | T.O.# ____ | SHEET 36 OF 40

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REVISIONS			
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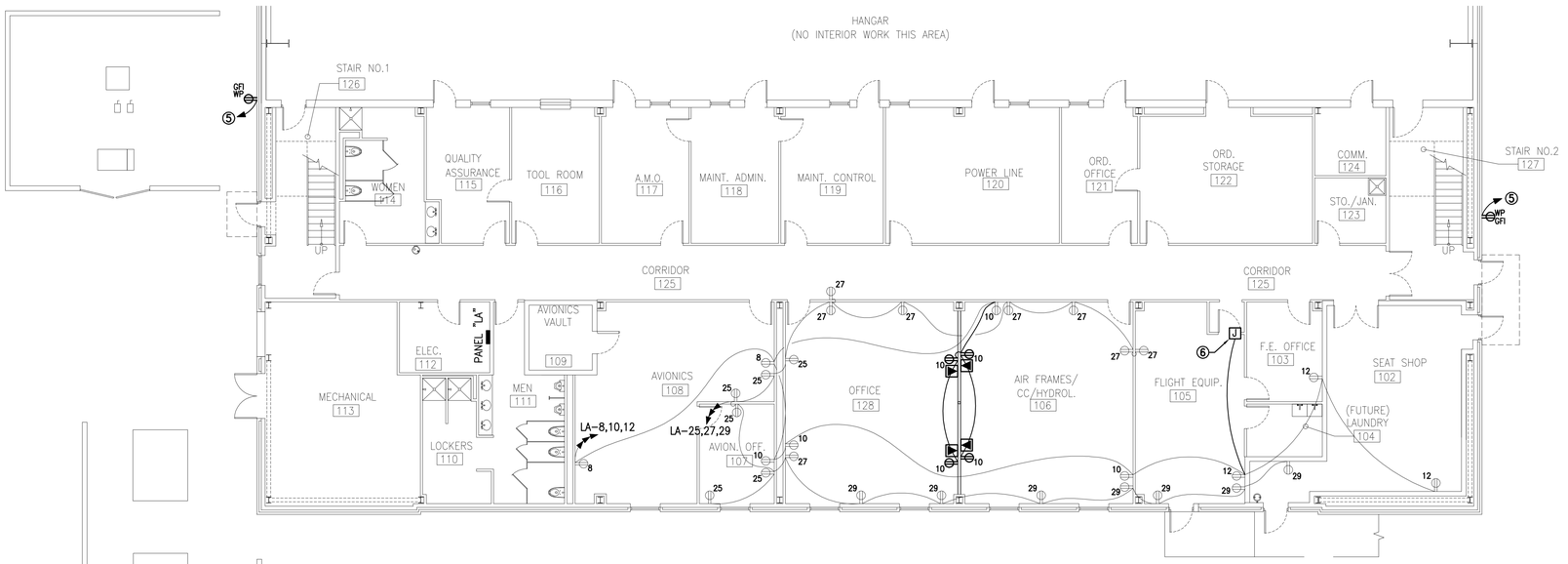
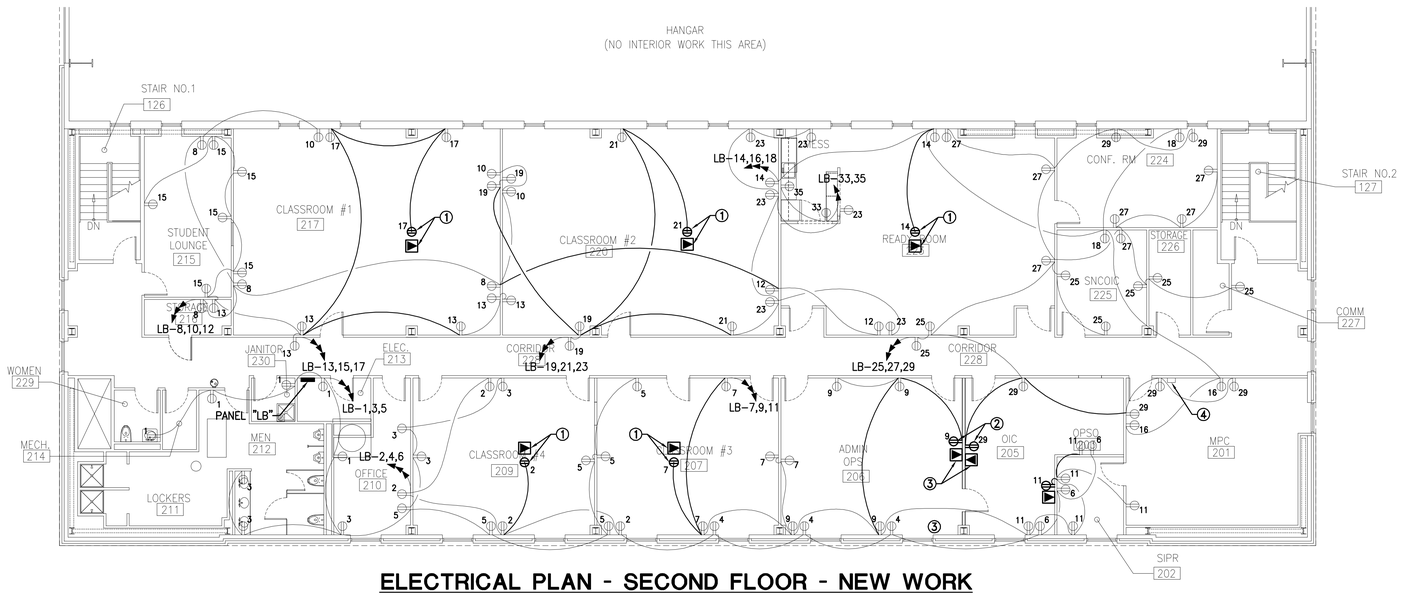


ELECTRICAL PLAN - FIRST FLOOR - NEW WORK

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



ELECTRICAL PLAN - SECOND FLOOR - NEW WORK

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

GENERAL NEW WORK NOTES

1. ALL ELECTRICAL WIRING, CONDUIT, DEVICES, EQUIPMENT AND MATERIALS SHALL BE NEW UNLESS NOTED OTHERWISE.
2. ALL ELECTRICAL WORK SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE NATIONAL ELECTRIC SAFETY CODE (IEEE C-2) AND THE NATIONAL ELECTRIC CODE (NFPA 70).
3. ALL CONDUCTORS SHALL BE COPPER UNLESS NOTED OTHERWISE.
4. ALL INTERIOR ELECTRICAL WIRING SHALL BE IN METALLIC CONDUIT UNLESS NOTED OTHERWISE.
5. PROVIDE FLEXIBLE METALLIC CONDUIT TO ALL MOTOR OPERATED EQUIPMENT.
6. MINIMUM CONDUCTOR SIZE SHALL BE #12 AWG UNLESS NOTED OTHERWISE.

NEW WORK NOTES

(1) PROVIDE NEW CEILING MOUNTED RECEPTACLE AND DATA/COMM FOR FUTURE PROJECTOR. COORDINATE FINAL PLACEMENT WITH CONTRACTING OFFICER.

(2) PROVIDE NEW REPECTACLES ON EXISTING CIRCUITS AS SHOWN.

(3) PROVIDE NEW DATA DROP AS SHOWN. DATA DROPS SHALL BE CONNECTED TO EXISTING DATA SERVICE.

(4) EXISTING MAGNETING DOOR LOCK CONTROL WIRES SHALL BE RE-ROUTED TO BE CONCEALED IN WALL.

(5) PROVIDE NEW 20A CIRCUIT IN SPARE SPACE OF PANEL "LA". FEEDERS SHALL BE #12 AWG W/GND, 3/4" CONDUIT.

(6) PROVIDE JUNCTION BOX FOR NEW CYPHER LOCK.

GRAPHIC SCALE
1/8"=1'- 0"
8 4 0 8 16 24
SCALE IN FEET

NOVEMBER 2011

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PUBLIC WORKS SUPERVISOR	SATISFACTORY TO DATE
PUBLIC WORKS OFFICER	

P.W. DWG. NO.	21095
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SUPERVISOR	B.COFFMAN
APPROVED	DATE

DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND
MARINE CORPS AIR STATION
BEAUFORT, S. C.

RENOVATE HANGAR 728
ADMINISTRATIVE SPACES
ELECTRICAL PLANS - FIRST & SECOND FLOORS - NEW WORK

SIZE F	CODE IDENT. NO.	N A V F A C DRAWING NO. N/A
HQMC PROJ. NO.	BE1204M	CONSTR. CONTR. NO. N69450-11-D-2529
SCALE AS NOTED	MACC.	T.O.# ____ SHEET 37 OF 40

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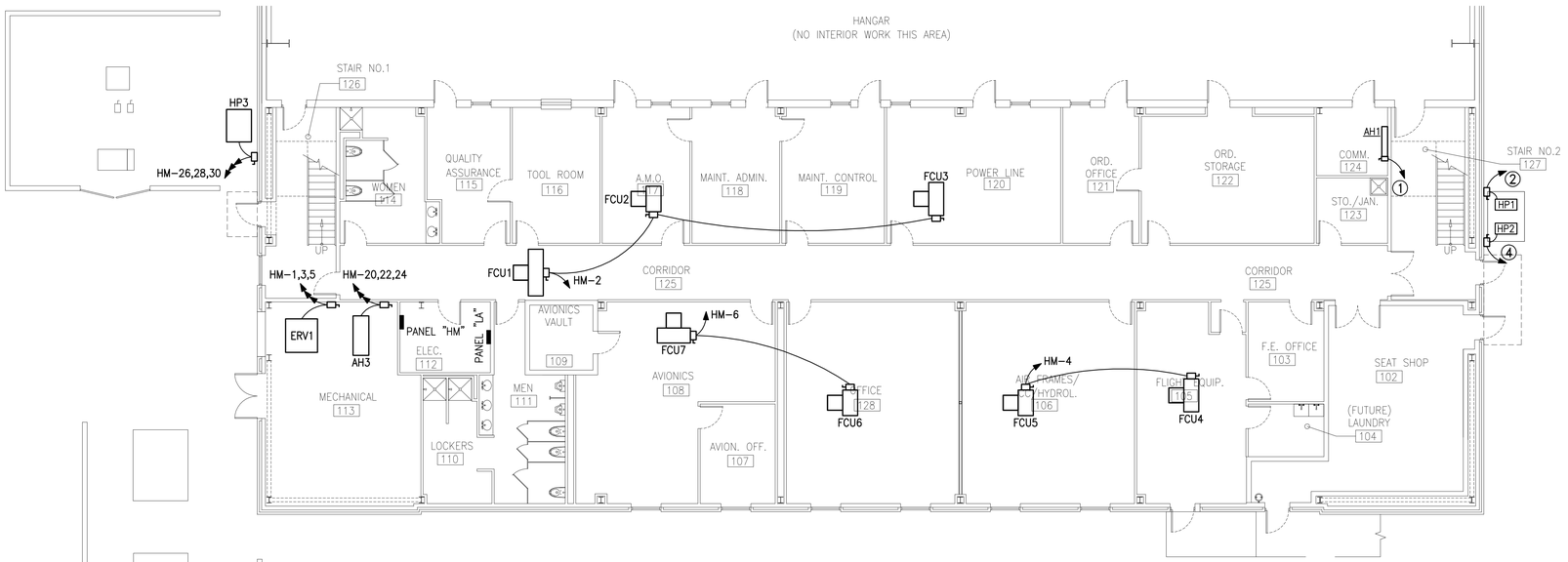
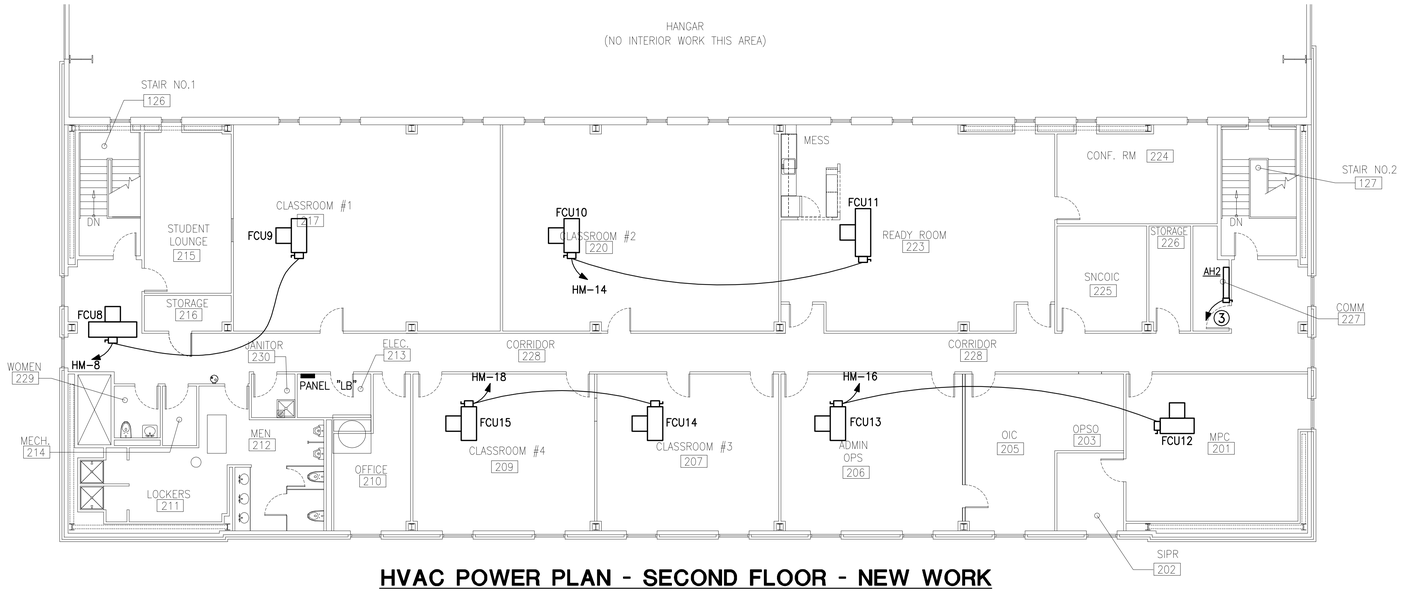
SYM.	DESCRIPTION	DATE	APP.



HVAC POWER PLAN - FIRST FLOOR - NEW WORK

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



HVAC POWER PLAN - SECOND FLOOR - NEW WORK

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

GENERAL NEW WORK NOTES

1. ALL ELECTRICAL WIRING, CONDUIT, DEVICES, EQUIPMENT AND MATERIALS SHALL BE NEW UNLESS NOTED OTHERWISE.
2. ALL ELECTRICAL WORK SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE NATIONAL ELECTRIC SAFETY CODE (IEEE C-2) AND THE NATIONAL ELECTRIC CODE (NFPA 70).
3. ALL CONDUCTORS SHALL BE COPPER UNLESS NOTED OTHERWISE.
4. ALL INTERIOR ELECTRICAL WIRING SHALL BE IN METALLIC CONDUIT UNLESS NOTED OTHERWISE.
5. PROVIDE FLEXIBLE METALLIC CONDUIT TO ALL MOTOR OPERATED EQUIPMENT.
6. MINIMUM CONDUCTOR SIZE SHALL BE #12 AWG UNLESS NOTED OTHERWISE.

NEW WORK NOTES

(1) PROVIDE NEW CIRCUIT TO SPARE BREAKER ON CIRCUIT #44 OF PANEL "LA". FEEDERS SHALL BE #12 AWG W/GND, 3/4" CONDUIT.

(2) PROVIDE NEW CIRCUIT TO SPARE BREAKER ON CIRCUIT #46 OF PANEL "LA". FEEDERS SHALL BE #12 AWG W/GND, 3/4" CONDUIT.

(3) PROVIDE NEW CIRCUIT TO SPARE BREAKER ON CIRCUIT #22 OF PANEL "LB". FEEDERS SHALL BE #12 AWG W/GND, 3/4" CONDUIT.

(4) PROVIDE NEW CIRCUIT TO SPARE BREAKER ON CIRCUIT #24 OF PANEL "LB". FEEDERS SHALL BE #12 AWG W/GND, 3/4" CONDUIT.

GRAPHIC SCALE
1/8"=1'- 0"
8 4 0 8 16 24
SCALE IN FEET

NOVEMBER 2011

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ARCH. & ENGR. SEAL
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PUBLIC WORKS SUPERVISOR — SATISFACTORY TO DATE
PUBLIC WORKS OFFICER

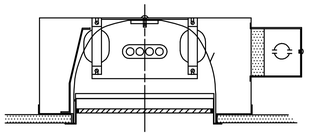
P.W. DWG. NO. 21096
DRAWN BY J.POPE
CHECKED BY R.DeLOACH
SUPERVISOR B.COFFMAN
APPROVED DATE

DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND
MARINE CORPS AIR STATION
BEAUFORT, S. C.

RENOVATE HANGAR 728
ADMINISTRATIVE SPACES
HVAC POWER PLANS - FIRST & SECOND FLOORS - NEW WORK

SIZE F | CODE IDENT. NO. | N A V F A C DRAWING NO. N/A
HQMC PROJ. NO. BE1204M | CONSTR. CONTR. NO. N69450-11-D-2529
SCALE AS NOTED | MACC. | T.O.# ____ | SHEET 38 OF 40

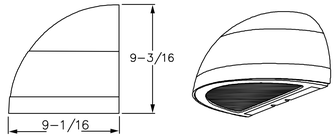
Nov 30, 2011 - 10:24 K:\2011005_06_H 728\Renovate Hangar 728 Admin Spaces\DWG\2011005_06_E5.0.dwg



LUMINAIRE REQUIREMENTS

1. HOUSING – POLYCARBONATE WITH BRONZE FINISH. PROVIDE INTERNAL GREEN GROUNDING SCREW.
2. HIGH POWER FACTOR (≥ .9) ELECTROMAGNETIC BALLAST.
3. TRIM FLANGE–POLYCARBONATE,
4. LAMPS – COMPACT FLUORESCENT. 1–26W 4100K
5. LENS – FLAT PRISMATIC.
6. MINIMUM FIXTURE EFFICIENCY–44%.
7. FIXTURE SHALL BE UL LISTED FOR WET LOCATION.

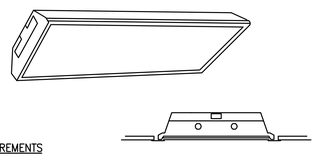
FIXTURE "C"
NTS



LUMINAIRE REQUIREMENTS

1. 1–42W TRIPLE CFL, FULL CUTOFF, WALL MOUNT LUMINAIRE.
2. HEAVY DUTY DIE–CAST ALUMINUM HOUSING.
3. PROGRAM START, HIGH EFFICIENCY MULTI–VOLTAGE 50/60Hz BALLAST WITH –18°C (0°F) MINIMUM STARTING.
4. HEAT–AND IMPACT–RESISTANT TEMPERED GLASS LENS.
5. DURABLE DARK BRONZE POWDER COAT FINISH.
6. U.L. LISTED FOR WET LOCATIONS. CSA CERTIFIED.
7. FIXTURE "HE" SAME AS FIXTUR "H" WITH EMERGENCY CFL BATTERY PACK. COLD WEATHER BATTERY PACK SHALL OPERATE 42W CFL LAMP FOR 90 MINUTES.

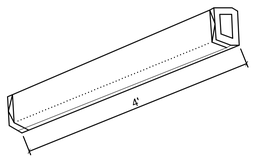
FIXTURES "H" & "HE"
NTS



LUMINAIRE REQUIREMENTS

1. HOUSING SHALL BE 1/32" MIN. THICKNESS FORMED STEEL. HEIGHT SHALL BE 4–1/8" MIN. AND SHALL NOT PERMANENTLY DEFORM WHEN LIFTED BY ONE CORNER WITH LENS DOOR IN PLACE NOR WITH LENS DOOR REMOVED. LENS DOOR SHALL NOT OPEN WHEN LUMINAIRE IS LIFTED BY ONE CORNER. LUMINAIRE SHALL HAVE LESS THAN THE FOLLOWING DEFLECTION WHEN LIFTED BY ONE CORNER WITH LENS DOOR REMOVED.
2. HOUSING SHALL BE CHEMICALLY TREATED FOR RUST PREVENTION AND HAVE BAKED WHITE ENAMEL FINISH 85% MIN. REFLECTANCE (INTERIOR). HOUSING SHALL HAVE INTERNAL GREEN GROUNDING SCREW.
3. LATCHES SHALL BE A 1/32" MINIMUM THICKNESS STEEL OR 1/64" MINIMUM THICKNESS SPRING STEEL.
4. LENS DOOR SHALL BE 1/32" MINIMUM THICKNESS STEEL, SHALL BE ASSEMBLED WITH SCREWS (FOR LENS REPLACEMENT). PROVIDE LIGHT TIGHT FIT WITHOUT MOVABLE BAFFLES. GASKETING SHALL NOT BE A MEANS OF ACHIEVING LIGHT TIGHT DOOR.
5. LENS SHALL BE 1/8", PATTERN 12, PLUS OR MINUS 10% OVERALL (1/16" MAX, PRISM PENETRATION) CLEAR PRISMATIC 100% ACRYLIC.
6. DOOR SHALL BE CAPABLE OF HINGING AND LATCHING FROM EITHER SIDE OF LUMINAIRE. PROVIDE SAFETY TYPE HINGES.
7. BALLAST SHALL BE HIGH POWER FACTOR (≥ .95) INSTANT START CLASS P ELECTRONIC UNIVERSAL BALLAST WITH SOUND RATING OF "A". SECURE BALLAST TO HOUSING WITH AT LEAST ONE SCREW AND SLIP–ON BRACKET OR 2 SCREWS ONE AT EACH END. LAMPS SHALL BE 2 – 25WT8.

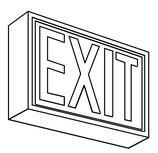
FIXTURE "J"
NTS



LUMINAIRE REQUIREMENTS

- SMOOTH WHITE OPAL ACRYLIC DIFFUSER
- HIGH GLOSS BACKED WHITE ENAMEL FINISH
- HEAVY GRADE STEEL DIE FORMED HOUSING
- ELECTRONIC ENERGY EFFICIENT BALLAST
- LAMP 1–25W/T8
- FIXTURE SHALL BE UL LISTED

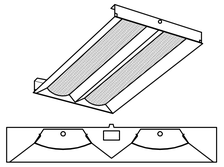
FIXTURE "G"
NTS



LUMINAIRE REQUIREMENTS

1. LETTERS SHALL BE 150mm TALL WITH 20mm STROKES FORMED BY A STENCIL FACE.
2. PROVIDE RED FIBERGLASS PANEL BEHIND STENCIL FACE.
3. PROVIDE LED LAMPS.
4. PROVIDE ILLUMINATED ARROWS AS INDICATED ON PLANS.
5. PROVIDE UNIVERSAL FACE.
6. PROVIDE BACK WALL OR MOUNTING.
7. PROVIDE INTERNAL GREEN GROUNDING SCREW, OR ATTACHED GROUND LEAD.
8. PROVIDE HIGH POWER FACTOR (≥ .9) ELECTROMAGNETIC BALLAST.
9. POLYCARBONATE HOUSING, MATTE BLACK WITH STENCIL FACE.

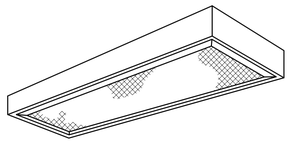
FIXTURE "X"
NTS



LUMINAIRE REQUIREMENTS

1. HOUSING – 22 GA. DIE FORMED C.R.S
2. SHIELDING – RIBBED ACRYLIC DIFFUSER.
3. FINISH – HIGHLY REFLECTIVE MATTE WHITE POWDER COAT.
4. ELECTRICAL – ELECTRONIC BALLAST STANDARD, INSTANT START T8, RATED CLASS P.
5. LABELS – UL/CUL LISTED AS RECESSED FLUORESCENT LUMINAIRE SUITABLE FOR DRY OR DAMP LOCATIONS.
6. FIXTURE 'AE' SAME AS FIXTURE 'A', WITH PARALLEL EMERGENCY BATTERY. 1400 LUMENS IN EMERGENCY MODE.
7. LAMPS – (2) 4', 25W T8, 2400 LUMENS MINIMUM, 4100K
8. BALLAST ACCESSS FROM BELOW PLENUM.
9. TOTAL LUMINAIRE OPTICAL EFFICIENCY SHALL BE 89.1% MINIMUM.
10. ALL PARTS SHALL BE PAINTED AFTER FABRICATION TO FACILITATE INSTALLATION, INCREASE EFFICIENCY, AND INHIBIT CORROSION.

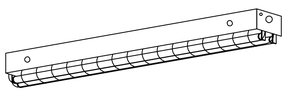
FIXTURES "A", "AE", "BE"
NTS



LUMINAIRE REQUIREMENTS

1. HEAVY GUAGE FORMED STEEL HOUSING. CHEMICAL TREATMENT FOR RUST PREVENTION. BAKED WHITE ENAMEL FINISH. 85% MIN. REFLECTANCE (INTERIOR). HOUSING SHALL NOT PERMANENTLY DEFORM NOR SHALL IT DEFLECT MORE THAN 1" WHEN LIFTED BY ONE CORNER.
2. SECURE HOUSING ENDS BY RIVETS OR SCREWS. PROVIDE A KNOCKOUT IN EACH END AND TWO IN TOP OF HOUSING. HOUSING SHALL HAVE INTERNAL GREEN GROUNDING SCREW.
3. OVERALL LUMINAIRE LENGTH SHALL BE 48" NOMINAL. OVERALL WIDTH SHALL BE 10" MINIMUM FOR 2 LAMP. OVERALL HEIGHT SHALL BE 3.5" MAXIMUM.
4. LENS SHALL BE CLEAR 100% ACRYLIC HAVING A MINIMUM OVERALL (BOTTOM OF LENS) THICKNESS OF 0.14 WITH A MAXIMUM PRISM PENETRATION DEPTH OF 1.8mm (0.05" MIN. OVERALL SIDE THICKNESS).
5. LENS SHALL BE PRISMATIC TYPE, INJECTION MOLDED INTO A SINGLE 5–SIDED UNIT WITH 0.6" MINIMUM RE–ENTRANT FLANGE ON EACH LONG SIDE FOR ADDITIONAL STRENGTH.
6. LENS SHALL BE CAPABLE OF HINGING AND LATCHING FROM EITHER SIDE OF FIXTURE.
7. BALLAST: HIGH POWER FACTOR (≥ .95) INSTANT START CLASS P ELECTRONIC BALLAST WITH SOUND RATING OF "A". SECURE BALLASTS TO HOUSING WITH AT LEAST ONE SCREW AND SLIP ON BRACKET OR TWO SCREWS – ONE AT EACH END. LAMPS SHALL BE 2–25W T8 2400 LUMENS MINIMUM, 4100K.
8. PHOTOMETRICS: MINIMUM COEFFICIENT OF UTILIZATION (CU) FOR THE FOLLOWING CAVITY REFLECTANCES: CEILING = 80% WALL = 50% FLOOR = 20%
9. MINIMUM SPACING CRITERIA: 1.3
10. FIXTURE "BE" SAME AS FIXTURE "B" WITH PARALLEL EMERGENCY BATTERY. 1400 LUMENS IN EMERGENCY MODE.

FIXTURES "D" & "DE"
NTS



LUMINAIRE REQUIREMENTS

- 22–GUAGE DIE–FORMED C.R.S HOUSING
- 92% MINIMUM AVERAGE REFLECTIVE WHITE POWDER COAT WITH MULTI–STAGE IRON/PHOSPHATE PREPARED METAL
- HEAVY GRADE STEEL DIE FORMED HOUSING
- ELECTRONIC ENERGY EFFICIENT BALLAST
- LAMP 2–25W/T8
- FIXTURE SHALL BE UL LISTED FOR DAMP LOCATIONS 14–GUAGE WHITE POWDER COAT WIREGUARD

FIXTURES "F" & "FE"
NTS

ELECTRICAL LEGEND

S	SWITCH, 125V, 20A, WALL MOUNTED 3 = 3WAY, F = FAN, 4 = 4WAY, WP = WEATHER PROOF M = MOTION SENSOR(DUAL TECHNOLOGY)
	RACEWAY IN WALLS OR CEILING
	PANEL BOARD, RECESSED
	PANEL BOARD, SURFACE MOUNTED
MDP–1	HOME RUN TO PANEL BOARD, NUMBER IS CKT. #
	DISCONNECT SWITCH, RATING, POLES, FUSING, AND ENCLOSURE RATING NOTED
	CEILING MOUNTED FIXTURE
	WALL MOUNTED FIXTURE
	2x4 FLUORESCENT LIGHT FIXTURE
	2x4 FLUORESCENT LIGHT FIXTURE WITH EMERGENCY BALLAST "E" SUFFIX IN FIXTURE SCHEDULE
	FLUORESCENT LIGHT FIXTURE
	FLUORESCENT LIGHT FIXTURE WITH EMERGENCY BALLAST "E" SUFFIX IN FIXTURE SCHEDULE
	WALL MOUNTED VANITY LIGHT
	EXIT FIXTURE
PE	PHOTOELECTRIC CELL
AFF	ABOVE FINISHED FLOOR
AC	ABOVE COUNTER
UNO	UNLESS NOTED OTHERWISE
EXST	EXISTING
NTS	NOT TO SCALE
TYP	TYPICAL

PANEL: PANEL "HA" (EXISTING) TYPE: SURFACE MOUNT
VOLTAGE: 480/277V 3P 4W MAINS: 100A MLO

CIRCUIT NO.	POWER CABLE SIZE	CONDUIT	NO.RUNS	NEUT	PHASE	GRD.	DEVICE AMP.TRIP	POLE	KAIC	BRANCH CIRCUIT DESIGNATION	AMPS	PHASE LOAD (KVA) øA	øB	øC	BRANCH CIRCUIT AMPS	DESIGNATION	DEVICE KAIC	POLE	AMP.TRIP	GRD.	POWER CABLE PHASE	NEUT	NO.RUNS	SIZE	CONDUIT	CIRCUIT NO.
1	¾	1	12	12	12	20	1	30		LTS–RM 107–113	4.2	1.8			2.4	LTS–RM 120–124	30	1	20	12	12	12	1	¾	2
3	¾	1	12	12	12	20	1	30		LTS–CORRIDOR,STAIRS	3.4		1.7		2.7	LTS–RM 114–119	30	1	20	12	12	12	1	¾	4
5	¾	1	12	12	12	20	1	30		LTS–RM 102–106	4.8			1.5	0.7	LTS–EXTERIOR (EXST)	30	1	20						6
7	¾	1	12	12	12	20	1	30		LTS–CORRIDOR	2.0	1.7			4.4	LTS–RM 215–220	30	1	20	12	12	12	1	¾	8
9	¾	1	12	12	12	20	1	30		LTS–RM 201–208	3.2		1.7		3.2	LTS–RM 209–214,229,230	30	1	20	12	12	12	1	¾	10
11	¾	1	12	12	12	20	1	30		LTS–RM 223–226	3.0			1.1		SPACE (EXST)									12
13										SPACE						SPACE (EXST)									14
15										SPACE						SPACE (EXST)									16
17										SPACE						SPACE (EXST)									18
19										SPACE (EXST)						SPACE (EXST)									20
21										SPACE (EXST)						SPACE (EXST)									22
23										SPACE (EXST)						SPACE (EXST)									24
25										SPACE (EXST)						SPACE (EXST)									26
27										SPACE (EXST)						SPACE (EXST)									28
29										SPACE (EXST)						SPACE (EXST)									30

NOTE: CONTRACTOR SHALL PROVIDE A NEW PRINTED, DETAILED PANEL SCHEDULE.

PANEL: PANEL "HM" (EXISTING) TYPE: SURFACE MOUNT
VOLTAGE: 480/277V 3P 4W MAINS: 100A MCB

CIRCUIT NO.	POWER CABLE SIZE	CONDUIT	NO.RUNS	NEUT	PHASE	GRD.	DEVICE AMP.TRIP	POLE	KAIC	BRANCH CIRCUIT DESIGNATION	AMPS	PHASE LOAD (KVA) øA	øB	øC	BRANCH CIRCUIT AMPS	DESIGNATION	DEVICE KAIC	POLE	AMP.TRIP	GRD.	POWER CABLE PHASE	NEUT	NO.RUNS	SIZE	CONDUIT	CIRCUIT NO.
1	¾	1	12	12	12	15	3	20			3.4				6.3	FCU–1,FCU–2,FCU–3	20	1	20	12	12	12	1	¾	2
3										ERV1	3.4				4.6	FCU–4,FCU–5	20	1	20	12	12	12	1	¾	4
5											3.4				4.0	FCU–6,FCU–7	20	1	20	12	12	12	1	¾	6
7															5.5	FCU–8,FCU–9	20	1	20	12	12	12	1	¾	8
9										SPARE (EXST)						EWH–4–1									10
11																EWH–4–2									12
13															4.6	FCU–10,FCU–11	20	1	20	12	12	12	1	¾	14
15										CHWP–4–1 (EXST)					3.5	FCU–12,FCU–13	20	1	20	12	12	12	1	¾	16
17															4.6	FCU–14,FCU–15	20	1	20	12	12	12	1	¾	18
19															25.0		20	3	25	10	10	10	1	¾	20
21										CHWP–4–2 (EXST)					25.0	AH3									22
23															25.0										24
25															3.6		20	3	15	12	12	12	1	¾	26
27										HWP–4–1 (EXST)					3.6	HP3									28
29															3.6										30
31																SPACE (EXST)									32
33										AC–4–1						SPACE (EXST)									34
35																SPACE (EXST)									36
37																SPACE (EXST)									38
39										SPARE (EXST)						SPACE (EXST)									40
41																SPACE (EXST)									42

NOTE: CONTRACTOR SHALL PROVIDE A NEW PRINTED, DETAILED PANEL SCHEDULE.

REVISIONS

SYM.	DESCRIPTION	DATE	APP.

NOVEMBER 2011

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BES INCORPORATED ARCHITECTS ENGINEERS
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ARCH. & ENGR. SEAL
SOUTH CAROLINA BEAUFORT ENGINEERING SERVICES, INC. No. C00670 CERTIFICATE OF AUTHORIZATION

NATURAL RESOURCES & ENVIRONMENTAL AFFAIRS — SATISFACTORY TO DATE
SAFETY DEPARTMENT — SATISFACTORY TO DATE
FIRE DEPARTMENT — SATISFACTORY TO DATE
PUBLIC WORKS SUPERVISOR — SATISFACTORY TO DATE

P.W. DWG. NO. 21097
DRAWN BY J.POPE
CHECKED BY R.DeLOACH
SUPERVISOR B.COFFMAN
APPROVED DATE
PUBLIC WORKS OFFICER

DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND
MARINE CORPS AIR STATION
BEAUFORT, S. C.

RENOVATE HANGAR 728 ADMINISTRATIVE SPACES
ELECTRICAL LEGEND, DETAILS, & SCHEDULES

SIZE F | CODE IDENT. NO. | N A V F A C DRAWING NO. N/A
HQMC PROJ. NO. BE1204M | CONSTR. CONTR. NO. N69450–11–D–2529
SCALE AS NOTED | MACC. | T.O.# ____ | SHEET 39 OF 40

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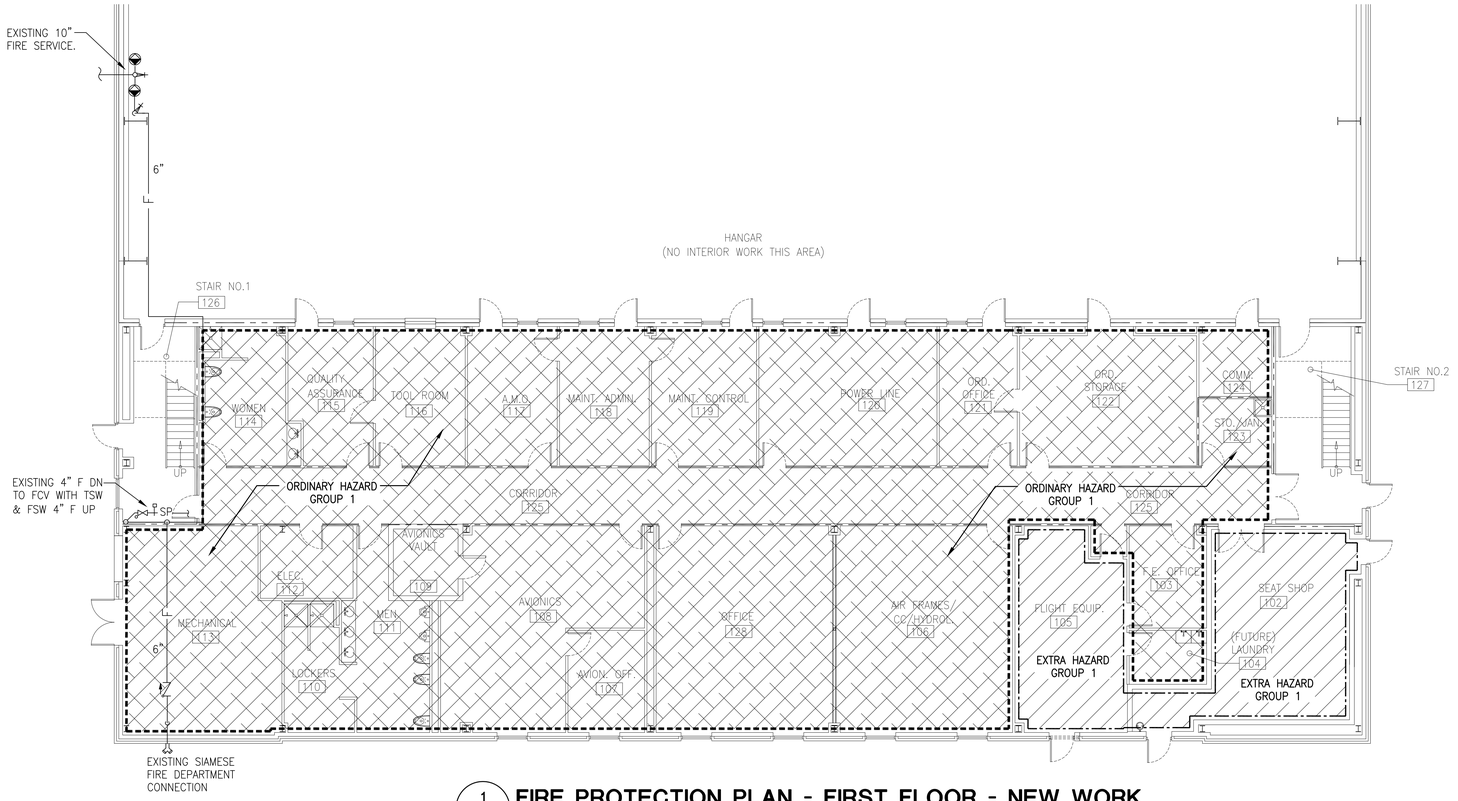
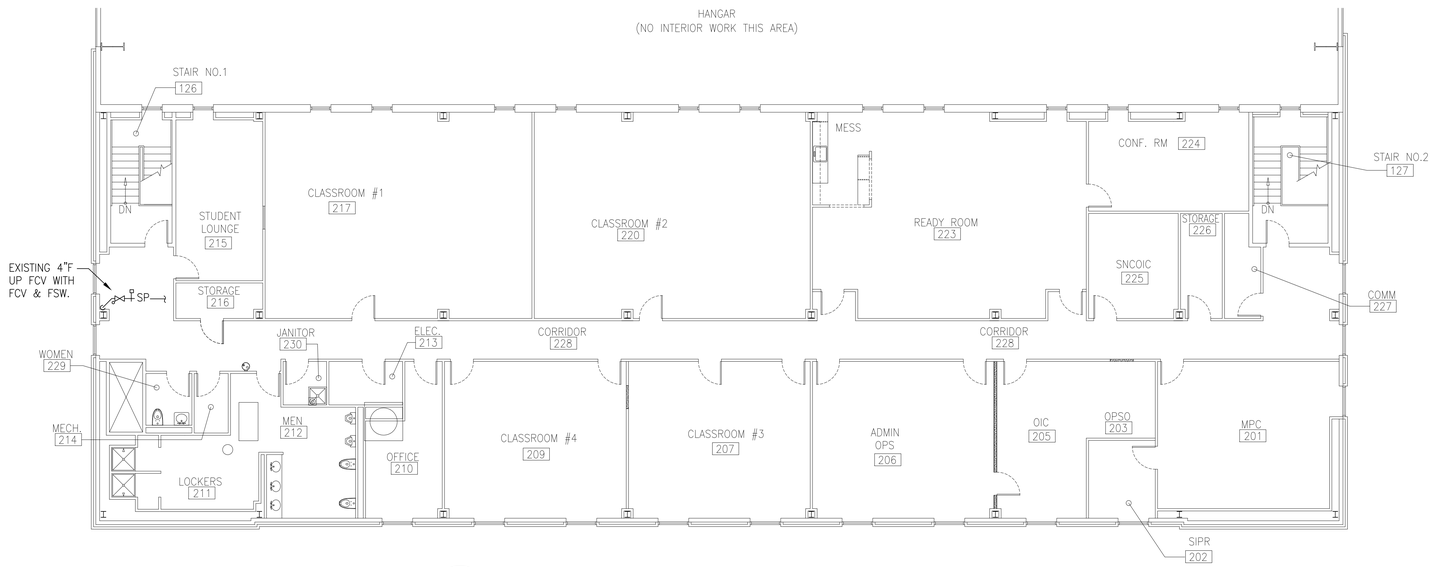


1 FP1.0 | FP1.0 **FIRE PROTECTION PLAN - FIRST FLOOR - NEW WORK**

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



2 FP1.0 | FP1.0 **FIRE PROTECTION PLAN - SECOND FLOOR - NEW WORK**

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

GRAPHIC SCALES:

5' 0' 5' 15' 20'

1/8"=1'-0"

REVISIONS

SYM.	DESCRIPTION	DATE	APP.

GENERAL NOTES

1. PRIOR TO PERFORMING WORK ON ANY PORTION OF ANY FIRE SPRINKLER SYSTEM OF THIS FACILITY THE CONTRACTOR SHALL ISOLATE AND DRAIN ALL SYSTEMS SERVING THE FACILITY.

2. NEW ACOUSTICAL TILE CEILINGS ARE BEING PROVIDED IN THIS FACILITY. ALL FIRE SPRINKLER PENDANT HEADS LOCATED IN THE NEW ACOUSTICAL CEILING SHALL BE PROVIDED WITH ESCUTCHEONS WHICH ALLOW FOR COVERAGE OF OVERSIZED OPENINGS REQUIRED FOR SEISMIC PURPOSES. SEE ARCHITECTURAL DRAWINGS FOR EXTENT OF ACOUSTICAL CEILINGS.

3. THE CONTRACTOR IS TO SUBMIT SHOP DRAWINGS TO THE NAVFAC FIRE PROTECTION ENGINEER FOR APPROVAL. SHOP DRAWINGS ARE TO SHOW ALL NEW AND EXISTING PIPING. HYDRAULIC CALCULATIONS OF THE SYSTEM SHALL BE PERFORMED AND SUBMITTED BY THE FIRE SPRINKLER CONTRACTOR. SHOP DRAWINGS SHALL BE REVIEWED AND SEALED BY A REGISTERED FIRE PROTECTION ENGINEER.

4. PROTECT EXISTING SPRINKLER HEADS THROUGHOUT BUILDING DURING CONSTRUCTION. THE CONTRACTOR SHALL REPIPE AND RELOCATE THE POSITION OF SPRINKLER HEADS OR PROVIDE ADDITIONAL SPRINKLER HEADS AND/OR PIPING AS NECESSARY TO PROVIDE FOR PROPER SPRINKLER HEAD SPACING FOR THE TYPE OCCUPANCY INDICATED BASED ON NEW LAYOUT. OCCUPANCY SHALL BE "LIGHT HAZARD OCCUPANCY" UNLESS NOTED OTHERWISE. ALL SPRINKLER HEADS SHALL BE POSITIONED IN THE CENTER OF 2'x2' ACOUSTICAL CEILING TILES. BRANCH RUNOUTS AND DROPS SHALL BE PROVIDED AS NECESSARY TO ACCOMMODATE THE REQUIRED COVERAGE, PER THE REQUIREMENTS OF NFPA 13 AND TO AVOID OBSTRUCTIONS. COORDINATE NEW LOCATIONS AND METHODS OF CONSTRUCTION WITH ALL TRADES AND THE OICC. PIPE SHALL BE BLACK SCHEDULE 40 STEEL. INSTALLATION SHALL BE PER NFPA 13.

5. ALL NEW SPRINKLER HEADS SHALL BE QUICK RESPONSE TYPE. PENDANT SPRINKLERS SHALL BE CHROME RECESSED TYPE. UPRIGHT SPRINKLERS SHALL BE BRASS.

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P.W. DWG. NO. 21098
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SUPERVISOR B.COFFMAN
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DEPARTMENT OF THE NAVY — NAVAL FACILITIES ENGINEERING COMMAND
MARINE CORPS AIR STATION
BEAUFORT, S. C.

RENOVATE HANGAR 728
ADMINISTRATIVE SPACES
FIRE PROTECTION PLANS
FIRST & SECOND FLOORS - NEW WORK

SIZE F | CODE IDENT. NO. | N A V F A C DRAWING NO. N/A
HOMC PROJ. NO. BE1204M | CONSTR. CONTR. NO. N69450-11-D-2529
SCALE AS NOTED | MACC. | T.O.# ____ | SHEET 40 OF 40

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