Brunswick County Courthouse Addition & Renovations

Addendum 3

January 13, 2020

To: All Plan Holders

From: John R. Sawyer, AIA

SAWYER SHERWOOD & ASSOCIATE ARCHITECTURE

General Items

1. Alternate bid M-1 is added. The Bid Proposal form has been revised accordingly and is enclosed.

2. General Conditions, Art 59 B. property insurance. The existing building is of type IIB construction and is fully protected by an automatic fire sprinkler system. The building value is provided by the enclosed tax record document.

Specification Items

1. Section 03 0516 Underslab Vapor Barrier: Delete this section, the vapor barrier is specified in spec section 03 3000 Cast-In-Place Concrete.

2. Section 03 3000 Cast-In-Place Concrete: 2.06 VAPOR RETARDERS ITEM 1d. Change Viper VaporCheck 16 to Viper VaporCheck II (Viper II).

3. Section 03 4900 Glass-Fiber Reinforced Concrete is to be added to the specifications and is enclosed. This specification applies to the fabricated fascia and soffit panels to be used in the new addition.

4. Section 08 7100 Door Hardware: Hardware Sets are revised per the attached revision report.

5. Section 10 1400 Signage: Replace with the enclosed revised specification.

6. Section 10 5626 Mobile Storage Shelving: two storage systems are included in the project. The system located in room 2202 is in the base bid. The system in room 3018 is by alternate bid. The system in room 3018 shall include a clutch brake system that will accommodate floor deflection of L/480.

7. Section 12 6760 Pews and Courtroom Furniture:
    a. Pew end panels shall be similar and equal to Rugel end M-1.
    b. 2.01 MANUFACTURERS ITEM A.1. Change "Rueger Chuch Furnishing" to "Rugel Church Furnishing".

8. Section 23 0900 Direct Digital Control Systems:
    a. Change Article 2.1.C to read "BAS shall connect to the existing Trane Tracer SC+ system with 100% compatibility and functionality to view,

command, trend and schedule the newly installed and existing equipment from the existing system interface(s). Provide all necessary gateways, controls, updated software, etc. for a fully functional system that fully communicates and integrates with the existing Trane Tracer SC+ system."

9. Section 32 3100 Vertical Pivot Vehicle Gate:
    a. Part 1.03: Delete part A, Gate Dimensions. Refer to drawing sheet AC 1.1 for this information.
    b. Part 1.12: Delete Item A. 1. and all other references to chain link fabric. Refer to drawing AC 1.1 for gate appearance.
    c. Part 1.16: Delete item A and D
    d. Part 1.16: Add an SOS system (Siren Operated Sensor). The SOS when sensing an audible emergency "yelp" shall open the gate.

Drawing Items

10. Sheet AC1.0, detail 3 Portico Slab Edge. The stem wall is to be reinforced with #4 vertical bar spaced 18"o.c. These bars shall be epoxy set in the existing grade beam. The grade beam must be scanned to locate the existing reinforcing with new vertical bars positioned to avoid the existing. Horizontal bars will be #4 spaced 12"o.c. Top 12" of existing fill under this slab shall be removed and the grade below that compacted to 98% of proctor. The top 12" is to be placed and also compacted to 98% of proctor. Slab reinforcing shall be as shown for other new slabs on grade.

11. Sheet L1.0 is reissued and enclosed with the following clarifications and revisions:
    a. Grass species is clarified for extent of seeded lawn.
    b. Mulch is specified.
    c. An irrigation system is not included in the project.

12. Sheets AD1.0 & AD1.1 are reissued and enclosed with the following clarifications and revisions:
    a. Courtroom floor construction demolition has been clarified.
    b. Existing floor plans (First Floor Plan & Second Floor Plan IN1.0, enclosed) showing existing seating and furniture are enclosed. Courtroom seating outside of the rail is stadium seating bolted to the floor. The contract scope includes removal and disposal of this seating, seating anchoring hardware and repair of floor slab in preparation for new floor finishes in the contract.
    c. Seating and furniture inside the rail shall be saved and reused. Construction contract scope includes safe storage or other protection of the existing furniture and reinstallation following renovations.

13. Sheet A1.0 is reissued and enclosed with the following clarifications and revisions:
    a. Lobby exit turnstile. Railings indicated between the turnstile bodies and the exterior walls are to be modular post and panel barriers of glass and

vertical tube as furnished by the turnstile mfg. Power circuit to the turnstiles will require cutting and repair of existing terrazzo flooring. Circuit route to be concealed behind existing drywall exterior wall and room ceiling finishes.

b. Lockers specified in spec section 105126 will be located in Court Security 1101.
c. Fire extinguisher cabinets, existing to remain and new cabinets are added to the plans.

14. Sheet A1.1 is reissued and enclosed with the following clarifications and revisions:
    a. Courtroom entrance large format porcelain tile and cut metal letter signage has been added for courtroom 5 and courtroom 6. Courtroom entrances for courtrooms 1,2,3,4 & 7 are to be finished with large format porcelain tile and cut metal letter signage as shown in typical details on Sheet A 7.5. Minor ceiling grid revisions in the corridor outside of each courtroom may be required to accommodate.
    b. Fire extinguisher cabinets, existing to remain and new cabinets are added to the plans.

15. Sheet A1.2 is reissued and enclosed with the following clarifications and revisions:
    a. Fire extinguisher cabinets, existing to remain and new cabinets are added to the plans.

16. Sheet A1.3: Detail Section at the expansion joint is changed from 10-A5.0 to 2-A5.0.

17. Sheet A3.3: Typical Exterior Shear Wall @ Pilaster 1-A3.3; Exterior wythe of CMU forming the pilaster from the second floor to roof is revised to be metal stud frame construction as shown on the architectural floor plan sheets and structural drawings.

18. Sheet A4.4: Detail Section at judge's bench in Courtroom #4 Casework Elevation 1-A4.4 is changed from 2-A7.4 to 5-A7.4.

19. Sheet A4.5 is reissued and enclosed with the following clarifications and revisions:
    a. Detail Section at judge's bench in Courtroom #5 Judge Casework Elevation 1-A4.5 is changed from 2-A7.4 to 5-A7.4.
    b. Details 6 & 7 have been added.

20. Sheet A4.6 is reissued and enclosed with the following clarifications and revisions:
    a. Detail Section at clerk's bench in Courtroom #6 Judge Casework Elevation 1-A4.6 is changed from 11-A7.4 to 10-A7.4.
    b. Section cuts added to Courtroom #6 2100 Enlarged Plan 3-A4.6.

21. Sheet A4.7: Detail Section at judge's bench in Courtroom #7 Judge Casework Elevation 4-A4.7 is changed from 5-A7.4 to 1-A7.4.

22. Sheet A4.9: Detail reference in Exit Stair 1080 Enlarged Plan 5-A4.9 is changed from 14-A5.2 is changed to 14-A5.3.

23. Sheet A5.2 is reissued and enclosed with the following clarifications and revisions:
    a. Added information on the existing cornice. The existing GFRC cornice must be removed along grid line 20 where the addition connects (also indicated on the roof plan). The existing cornice is in 16-foot lengths. The existing cornice detail including notes on how the cornice connections and original lifting point may be accessed is shown.

24. Sheet A6.0 is reissued and enclosed with the following clarifications and revisions:
    a. Finish Schedule: Floor finishes have been corrected to coordinate with the floor finish plan sheets A7.7 thru A7.9.
    b. Door Schedule: Signage required at each door has been added to the door number using suffixes in the signage legend.

25. Sheet A6.1 is reissued and enclosed with the following clarifications and revisions:
    a. Finish Schedule: Floor finishes have been corrected to coordinate with the floor finish plan sheets A7.7 thru A7.9.
    b. Door Schedule: Signage required at each door has been added to the door number using suffixes in the signage legend.

26. Sheet A6.2 is reissued and enclosed with the following clarifications and revisions:
    a. Elevations have been added to define butt glazed partitions in Lobby 1000.
    b. Aluminum Door Frame AL-4: transom member changed to coordinate with door hardware.

27. Sheet A7.4 is reissued and enclosed with the following clarifications and revisions: courtroom bench details and sections have been revised.
    a. Courtroom 2, 3, & 7: The existing bench will be modified to lower the judge's area. The existing floor platform construction is metal framing.
    b. Courtroom 5 & 6: The entire bench and jury box will be new. Construction is in FRT wood. Contractor is permitted to change this to metal framing. The metal framing option will require a framing plan and detail to be submitted for review and approval.
    c. Courtroom 4 is new construction. Bench and jury box platform will be metal frame and concrete construction as shown in the structural plan set.

28. Sheet A7.5 is reissued and enclosed with the following clarifications and revisions:
    a. Elevation 10 has been added.
    b. Detail 11 has been added to address abandoning in place the first floor and second floor elevator lobby overhead coiling fire doors.

29. Sheet A7.8 is reissued and enclosed with the following clarification/revision: Four TV mounts are to be installed in room 2200.

30. Sheet S1.0: New single 14" auger cast piles located within new (2) PC-1 pile caps attached to existing pile cap F/20 has tight clearance for pile installation. Should the pile installation contractor deem the clearance inadequate, micro piles or similar may be substituted in these two locations. The required service level load capacity for each of the single piles in the new PC-1 caps is 28 kips (compression). Alternative pile design for this specific location shall be submitted by the successful bidder and reviewed by the design team prior to pile installation.

31. Sheet S5.0: Detail 8 references "Schedule Sht. S5.0". To clarify, the wall thickness dimension should read, "WALL THICKNESS, SEE ELEVATIONS SHT. S4.1".

32. Sheets M6.0 & M8.1 are reissued and enclosed with the following clarifications and revisions: Alternate No. M-1 shall be to replace the DDC controls on the existing Series Fan Power Terminal Units, existing Parallel Fan Power Terminal Units, and existing VAV Room Terminal Boxes as indicated on revised drawings. New DDC BAS controls for these existing units shall be turnkey complete for each unit including:
    a. All materials and labor.
    b. Connection to the existing Trane Tracer SC+ system with 100% compatibility and functionality to view, command, trend and schedule the existing equipment.
    c. All programming and graphics.
    d. Sequences of operation for existing terminal units and boxes shall match existing.
    e. Terminal unit and box controllers shall be wireless wi-fi type as specified to connect to existing DDC wireless mesh system.
    f. Space temperature sensors shall be wireless wi-fi type as specified to connect to existing DDC wireless mesh system. Install sensors in same location as existing space sensors. Patch and/or paint walls as necessary to cover existing sensor installation or provide stainless steel cover plates.
    g. Replace or provide new discharge air temp sensor from each terminal unit or box.
    h. Remove existing unused control wiring, conduits may remain.
    i. After controllers are replaced on each terminal unit and box, test and balance airflow for the terminal unit and box.

33. Sheet M8.0 is reissued and enclosed with the following revision: Note revised regarding existing BAS controls.

34. Sheet ED1.9 is reissued and enclosed with the following clarification/revision: Note added for relocation of existing devices.

35. Sheet E0.1 is reissued and enclosed with the following revisions:
    a. Fire Alarm Legend: Add strobe and horn / strobe appliances added to plans.
    b. Receptacle Legend: Add power for turnstiles.

36. Sheet E1.1 is reissued and enclosed with the following revisions:
    a. Add power for exit turnstiles
    b. Remove power for entrance metal detectors

37. Sheet E1.3 is reissued and enclosed with the following clarifications and revisions:
    a. Security 1000 Entrance: Add pull station and horn / strobe.
    b. Security 1000 Entrance: Remove data outlet for entrance metal detectors.
    c. Security 1000 Exit: Add pull station and horn / strobe.
    d. Security 1000 Exit: Add fire alarm control module for exit turnstile interface.
    e. Security 1000 Exit: Add data outlet for spare future exit turnstile interface.
    f. Elevator Lobby 1001: Add horn / strobe.
    g. Courtroom Lobby 1024: Add horn / strobe.
    h. Toilet 1064: Add strobe.
    i. Waiting Area 1077: Change strobe to horn / strobe.
    j. Hearing Room Lobby 1081: Add horn / strobes.
    k. Probation Waiting Area 1083: Change strobe to horn / strobe.
    l. Corridor 1084: Add horn / strobe.
    m. Court Security 1101: Add horn / strobe.
    n. Courtroom #2 1120: Add horn / strobe.
    o. Attorney Lounge 1209: Change strobe to horn / strobe.

38. Sheet E1.5 is reissued and enclosed with the following revisions:
    a. Courtroom 2030: Add light fixtures type EG.
    b. Juvenile Court Waiting 2064: Add light fixture type EG.

39. Sheet E1.6 is reissued and enclosed with the following revisions:
    a. Break Room 2007: Replace existing strobe with horn / strobe.
    b. Deliberation 2037: Replace existing strobe with horn / strobe.
    c. Conference 2074: Replace existing strobe with horn / strobe.
    d. Conference Room 2114: Add horn / strobe.
    e. Break Room 2203: Change strobe to horn / strobe.
    f. Jury Lounge 2204: Change strobe to horn / strobe.

40. Sheet E1.9 is reissued and enclosed with the following revisions:
    a. Exit Stair 3080: Existing notification device relocation.
    b. Exit Stair 3080: Existing pull station relocation.

41. Sheet F1.1 is reissued and enclosed with the following revision: Added sprinkler coverage to Corridor 1202, per Fire Marshal's comments.

Clarifications

42. First Floor of the existing building has 2 areas where access flooring is to be removed and depressed floor areas infilled with concrete. Referencing the existing building construction drawings, the depressed slab area slab surface is 4" below the finish floor slab. The infill thickness will be 4".

43. Construction logistics: Conditions the contractor may anticipate at the job site include:
    a. Power actuated nailers will be allowed. When working inside the existing building, contractor shall inform the lead court security officer and PM regarding timing of work that requires this type of tool and other power tools including concrete saws, impact chisels, steel stud chop saws and similar tools.
    b. Corridor 1032, 2032 & 3022 may be closed to public and staff access.
    c. Stair 1020, 2020 & 3020 may be closed to public and staff access.
    d. After returning the stair and corridors listed above to service by the public and staff, stair 1080, 2080 & 3080 may be closed to public and staff access.
    e. Elevator 4 may be used by the contractor during phase one renovations
    f. Elevator 5 may be used by the contractor during phase two & three renovations
    g. Elevators used by the contractor must be protected from damage and if damaged restored to their condition prior to contractor use.
    h. Working hours for site civil and exterior activities are not limited.
    i. Working hours for interior renovations:
        i. Where the work area is isolated from owner occupied areas by contractor provided dust partitions walling off the work area from other parts of the building and allowing access to the space from other contractor-controlled work areas, work hours are not restricted.
        ii. Where this is not possible work hours are Monday - Friday; 8am -5:30 pm.
    j. When disruptions are unavoidable and work must be performed after hours, the contractor will be responsible for providing building security.

44. Where the phasing plans are showing work in a courtroom the entire courtroom will be out of service and under renovation. Renovations to build or modify Courtroom 3 & 7 are in phase one. Courtrooms 1, 2, & 5 are in phase two. Courtroom 6 is in phase three.

Approved Substitutions

a. Metal Products Inc.: Hollow Metal Doors & Frames
b. Schlage: Door Hardware
c. Avalis: single panel series, Signage
d. Babymedi: stainless steel changing station by Saniflow Corp.
e. TERRAZZCO® Epoxy Resin Matrix terrazzo.
f. Davis Furniture Company: Pews and Courtroom Furniture

End of Addendum 3

F O R M O F P R O P O S A L
Brunswick County Courthouse Addition & Renovations

To: **BRUNSWICK COUNTY**

From: *Bidder* _____

Address _____

_____

_____

Tele./Fax _____

Date of Bid _____

The undersigned, as bidder, hereby declares that the only person or persons interested in this proposal as principal or principals is or are named herein and that no other person than herein mentioned has any interest in this proposal or in the Contract to be entered into; that this proposal is made without connection with any other person, company, or parties making a bid or proposal; and that it is in all respects fair and in good faith without collusion or fraud. By signing this proposal, the bidder affirms they are not listed and will not utilize a subcontractor or vendor listed on the Final Divestment List created by the State Treasurer pursuant to NCGS 143-6A-4, Iran Divestment Act Certification. The Bidder further declares that he has examined the site of the work and the Contract Documents relative thereto, and has read all special provisions furnished prior to the opening of bids; that he has satisfied himself relative to the work to be performed.

The Bidder proposes and agrees if this proposal is accepted to Contract with **Brunswick County** in the form of Contract specified below, to furnish all necessary materials, equipment, machinery, tools, apparatus, means of transportation, supplies, labor, etc. necessary to complete the construction of:

Brunswick County Courthouse Addition and Renovations

in full in complete accordance with the plans, specifications, and Contract Documents, to the full and entire satisfaction of **Brunswick County** and their representatives with a definite understanding that no money will be allowed for extra work except as set forth in the General Conditions and the Contract Documents, for the sum of:

SINGLE PRIME CONTRACT: _____

Base Bid:

All work covered in the Contract Documents **including** unit price items, contingency allowance, and the use of Preferred Brands.

_____ Dollars($) _____

General Subcontractor: Plumbing Subcontractor:

_____Lic_____ _____Lic_____

Mechanical Subcontractor: Electrical Subcontractor:

_____Lic_____ _____Lic_____

When the project is a Building, NCGS 143-128(d) requires all Single Prime Bidders to identify their Subcontractors for the above subdivisions of work. A Contractor whose bid is accepted shall not substitute any person as Subcontractor in the place of the Subcontractor listed in the original bid, except in accordance with NCGS 143-128(d).

ALTERNATES:

Should any of the alternates as described in the Contract Documents be accepted, the amount written below shall be the amount to be "added to" the base bid.

GENERAL CONTRACT:

Alternate No. G-1 Existing Building South Elevation Renovations :

State the amount to add to the base bid for removal of precast wall panels, and providing new cast inplace wall panel with openings, aluminum curtain wall and glazing as shown. Refer to drawings 2-A2.1, 1-A3.2 and all details on sheet A5.3.

_____Dollars($)_____

Alternate No. G-2 Records Room 3018

State the amount to add to the base bid for reinforcing the existing floor structure under the mobile storage shelving as shown and noted on sheet S1.3. Also include in this alternate bid the cost to furnish and install the mobile storage shelving system shown on sheet A1.2 and specified in specification section 10 5626.

_____Dollars($)_____

Alternate No. G-3 Exit Turnstile, Main Entrance 1000

State the amoun to add to the base bid for furnishing and installing the exit turnstiles and adjacent railings. Refer to specification section 11 1420. This alternate bid includes the electrical power circuit, chasing and repairing the flooring.

_____Dollars($)_____

Alternate No. M-1 HVAC controls

State the amount to add to the base bid for replacing the DDC controls on the existing Series Fan Power Terminal Units, existing Parallel Fan Power Terminal Units, and existing VAV Room Terminal Boxes as indicated in addenda #3.

_____Dollars($)_____

UNIT PRICES

Unit prices quoted shall apply throughout the life of the Contract. Unit prices shall be applied, as appropriate, to compute the total value of **changes** in the scope of the work all in accordance with the Contract Documents.

Unit price No. 1

Remedial Floor Coating, specification Section 09 0561 - Common Work Results for Flooring Preparation. State the cost per square yard for this floor preparation.

Dollars per Square Yard ($)

Unit price No. 2

Communications, voice / data outlet box and conduit rough in. specification Section 26 0533. State the amount per wall outlet box and conduit raceway to above ceiling. This unit cost will be used if outlets are added to or deleted from the project

Dollars per voice / data outlet ($)

ATTACHED DOCUMENTS

The following documents are attached to and made a condition of this Bid:

- Bid Security
- Identification of Minority Business Participation form
- MBE Affidavit A (Listing of Good Faith Efforts) or Affidavit B (Intent to Perform Contract with Own Workforce)

The bidder further proposes and agrees hereby to commence work under this Contract on a date to be specified in a written order of the Designer and shall fully complete all work thereunder within the time specified in the Notice to Bidders. Applicable liquidated damages amount is also stated in the Notice to Bidders (see General Conditions “Time of Completion, Delays, Extension of Time”.)

BRUNSWICK COUNTY
310 GOVERNMENT CENTER DR NE
20074440

Parcel ID: 13900059
PLAT: H/96 UNIQ ID 28049
ID NO: 215114239253
SPLIT FROM ID

BOLIVIA FIRE (14,950), BRUNSWICK COUNTY (100)
Reval Year: 2019 Tax Year: 2020 137.47 AC US 17 PL H/96
Appraised By 05 on 09/07/2018 2006 BOLIVIA CITY LIMITS

CARD NO. 12 of 17
137.4700 AC
TW-02 CI-00 FR-03

SRC= Inspection
EX-B AT- LAST ACTION 20190320

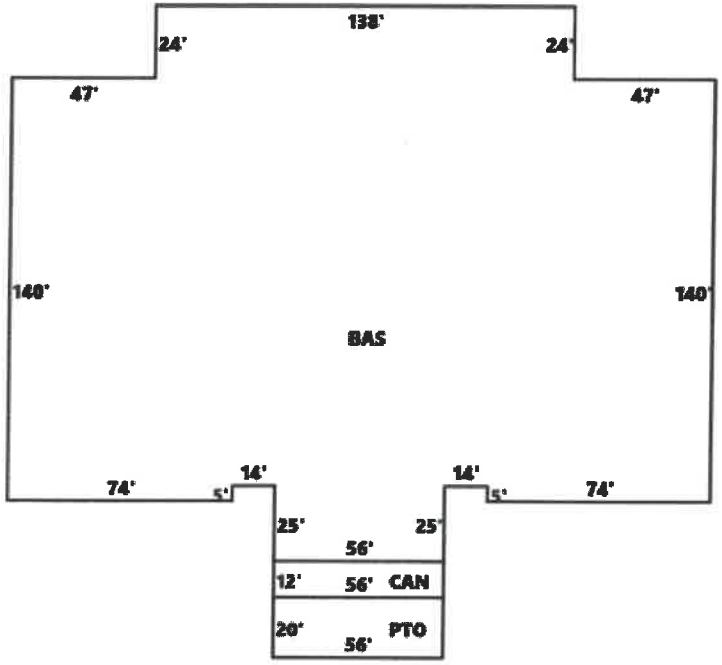
CONSTRUCTION DETAIL	
Foundation	5
Spread Footing	6.00
Sub Floor System	2
Slab On Grade	5.00
Exterior Walls	26
Precast Panel	22.00
Roofing Structure	10
Steel Frame or Truss	10.00
Roofing Cover	05
Rubber	4.00
Interior Wall Construction	5
Drywall/Sheetrock	30.00
Interior Floor Cover	14
Carpet	10.00
Heating Fuel	04
Electric	1.00
Heating Type	09
Heat Pump Only	5.00
Air Conditioning Type	03
Central	6.00
Commercial Heat & Air	1
None	0.00
Structural Frame	06
Fireproof Steel	16.00
Ceiling & Insulation	05
Suspended - Ceiling & Walls Insulated	5.00
Average Rooms Per Floor	99
Average Rooms Per Floor	0.00
Half-Bathrooms BAS - 0 FUS - 0 LL - 0	
Office BAS - 0 FUS - 0 LL - 0	0
TOTAL POINT VALUE	120.000

BUILDING ADJUSTMENTS			
Market/Design	05	1.00	1.00
Quality	3		1.00
Size	Size	Size	0.90
Construction Factor	05	1.00	1.00
TOTAL ADJUSTMENT FACTOR			0.900
TOTAL QUALITY INDEX			108

MARKET VALUE							
USE	MOD	Eff. Area	QUAL	BASE RATE	RCN	EYB	AYB
86	04	90,021	108	135.00	12152835	2002	2001

DEPRECIATION	
NORM	0.04000
% GOOD	96.0
OFFICE CONST.	

TYPE: COUNTY OFFICE
STYLE: 2 - 1.5 Stories



CORRELATION OF VALUE	
CREDENCE TO	MARKET
DEPR. BUILDING VALUE - CARD	11,666,720
DEPR. OB/XF VALUE - CARD	236,020
MARKET LAND VALUE - CARD	0
TOTAL MARKET VALUE - CARD	11,902,740
TOTAL APPRAISED VALUE - CARD	11,902,740
TOTAL APPRAISED VALUE - PARCEL	49,385,230
TOTAL PRESENT USE VALUE - LAND	0
TOTAL VALUE DEFERRED - PARCEL	0
TOTAL TAXABLE VALUE - PARCEL $	49,385,230

PRIOR APPRAISAL	
BUILDING VALUE	51,264,270
OBXF VALUE	1,571,590
LAND VALUE	680,480
PRESENT USE VALUE	0
DEFERRED VALUE	0
TOTAL VALUE	53,516,340

PERMIT			
CODE	DATE	NO.	AMT.
01	07/20/2015	20140323 B	

ROUT: WTRSHD:

SALES DATA

OFF. RECORD BOOK	PAGE	DATE MO	YR	DEED TYPE	Q/U	V/I	INDICATE SALES PRICE
00343	0477	1	1976	GW	U	V	0
00343	0474	1	1976	GW	U	V	0

BUILDING AREA 103,137

NOTES

COURT HOUSE
310 GOVERNMENT CENTER DR

SUBAREA TYPE	GS AREA	PCT	RPL CS
BAS	36,772	100	4964220
CAN	672	015	13635
FUS	66,365	080	7167420
PTO	1,120	005	7560
SUBAREA TOTALS	104,929		12,152,835

CODE	QUALITY	DESCRIPTION	COUNT	LTH	WTH	UNITS	UNIT PRICE	ORIG % COND	BLDG #	SIZE FACT	AYB	EYB	DEP SCH	OVR	% COND	OB/XF DEPR. VALUE
01	M	ASPHALT PAVING		0	0	100,000	1.25	0.00	12	0.00	2001	2001	S5		20	25000
90	A	SPRINKLER SYSTEM		0	0	102,450	1.75	0.00	12	0.00	2001	2001	S1		82	147016
29	E	ELEVATOR(COMMERCIAL)		0	0	1	50,000.00	0.00	12	0.00	2001	2001	S2		64	32000
29	E	ELEVATOR(COMMERCIAL)		0	0	1	50,000.00	0.00	12	0.00	2001	2001	S2		64	32000
TOTAL OB/XF VALUE																236016

BLDG DIMENSIONS BAS=W47N24W138S24W47S140E74N5E14S25E56CAN=W56S12E56PTO=W56S20E56N20$N12$N25E14S5E74N140$FUS=66365$.

LAND INFORMATION

HIGHEST AND BEST USE	USE CODE	LOCAL ZONING	FRONTAGE	DEPTH	DEPTH / SIZE	LND MOD	COND FACT	OTHER ADJ/NOTES RF AC LC TO OT	ROAD TYPE	LAND UNIT PRICE	TOTAL LAND UNITS	UNIT TYPE	TOTAL ADJST	ADJUSTED UNIT PRICE	LAND VALUE	OVERRIDE VALUE	LAND NOTES
TOTAL MARKET LAND DATA																	
TOTAL PRESENT USE DATA																	

SECTION 03 4900
GLASS-FIBER REINFORCED CONCRETE

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Architectural precast glass-fiber-reinforced concrete Facia & Soffits .

B. Supports, anchors, and attachments.

1.02 RELATED REQUIREMENTS

A. Section 05 4000 - Cold-Formed Metal Framing: Structural stud members.

B. Section 06 1000 - Rough Carpentry: Placement of anchors specified in this section.

C. Section 07 9200 - Joint Sealants: Sealing perimeter and intermediate joints.

1.03 REFERENCE STANDARDS

A. ASTM A36/A36M - Standard Specification for Carbon Structural Steel; 2014.

B. ASTM A153/A153M - Standard Specification for Zinc Coating (Hot-Dip) on Iron and Steel Hardware; 2016a.

C. ASTM A563 - Standard Specification for Carbon and Alloy Steel Nuts; 2015.

D. ASTM A563M - Standard Specification for Carbon and Alloy Steel Nuts (Metric); 2007 (Reapproved 2013).

E. ASTM A653/A653M - Standard Specification for Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process; 2017.

F. ASTM C33/C33M - Standard Specification for Concrete Aggregates; 2016, with Editorial Revision (2016).

G. ASTM C150/C150M - Standard Specification for Portland Cement; 2018.

H. ASTM F436/F436M - Standard Specification for Hardened Steel Washers Inch and Metric Dimensions; 2016.

I. ASTM F959/F959M - Standard Specification for Compressible-Washer-Type Direct Tension Indicators for Use with Structural Fasteners, Inch and Metric Series; 2017a.

J. ASTM F3125/F3125M - Standard Specification for High Strength Structural Bolts, Steel and Alloy Steel, Heat Treated, 120 ksi (830 MPa) and 150 ksi (1040 MPa) Minimum Tensile Strength, Inch and Metric Dimensions; 2015a.

K. AWS D1.1/D1.1M - Structural Welding Code - Steel; 2015, with Errata (2016).

L. IAS AC157 - Accreditation Criteria for Fabricator Inspection Programs for Reinforced and Precast/Prestressed Concrete; 2017.

M. PCI MNL-117 - Manual for Quality Control for Plants and Production of Architectural Precast Concrete Products; 2013.

N. PCI MNL-128 - Recommended Practice for Glass Fiber Reinforced Concrete Panels; 2001.

1.04 ADMINISTRATIVE REQUIREMENTS

A. Preinstallation Meeting: Convene two weeks before starting work of this section.

1.05 SUBMITTALS

A. See Section 01 3000 - Administrative Requirements, for submittal procedures.

B. Product Data: Manufacturer's information on accessory products, including pigments, admixtures, inserts, plates, etc.

C. Shop Drawings: Indicate locations, layout, fabrication details, reinforcement, metal framing details, connection details, dimensions, and relationship to adjacent materials. Provide erection drawings.

D. Samples: Submit two samples 6 inch by 6 inch in size illustrating surface color, finish and texture.

E. Manufacturer's Installation Instructions: Indicate surface cleaning instructions.

F. Designer's Qualification Statement.

G. Fabricator's Qualification Statement: Provide documentation showing precast concrete fabricator is accredited under IAS AC157.

H. Erector's Qualifications Statement.

1.06 QUALITY ASSURANCE

A. Designer Qualifications: Design units under direct supervision of a Professional Structural Engineer experienced in design of this work and licensed in the State in which the Project is located.

B. Fabricator Qualifications: Company specializing in performing the work of this section with minimum 5 years of documented experience.

C. Installer Qualifications: Company specializing in performing the work of this section with minimum 5 years of documented experience.

D. Maintain plant records and quality control program during production of units. Make records and access to plant available to Architect upon request.

1.07 PROJECT CONDITIONS

A. Coordinate the Work with installation of backup supporting structure, windows.

1.08 DELIVERY, STORAGE, AND HANDLING

A. Handle units to position, consistent with their shape and design. Lift and support only from support points.

B. Lifting Device: Capable of maintaining unit shape during manufacture, storage, transportation, erection, and in position for fastening.

C. Blocking and Lateral Support During Transport and Storage: Clean, non-staining, without causing harm to exposed surfaces. Provide temporary lateral support to prevent bowing and warping. Place spacers in same location during transport and site storage.

D. Protect edges of units to prevent staining, chipping, or spalling of concrete.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Glass-Fiber-Reinforced Concrete:
   1. Advanced Architectural Stone; ____: www.advancedarchitecturalstone.com/#sle.
   2. Royal Corinthian; RoyalCrete™ GFRC: www.royalcorinthian.com/#sle.
   3. Stromberg Architectural Products, Inc; ____: www.strombergarchitectural.com/#sle.
   4. Substitutions: See Section 01 6000 - Product Requirements & SUBSTITUTIONS.

2.02 GLASS-FIBER-REINFORCED CONCRETE UNITS

A. Glass-Fiber-Reinforced Concrete Units: Factory-fabricated, using rigid molds, constructed to maintain unit panel uniform in shape, size and finish.
   1. Design and fabricate to comply with applicable codes.
   2. Design to withstand dead loads, positive and negative wind loads, and erection forces.
   3. Control deflection of units to maintain fit with adjacent construction and openings within their tolerances.
   4. Design connections to accommodate building movement without damage to components, wracking of joint connections, breakage of seals, or moisture penetration.
   5. Allow for adjustment of connections to accommodate misalignment of structure without permanent distortion.

6. Concrete Mix: Of strength to accommodate panel configuration, panel size and weight, and manufacturing criteria, air entrained.
7. Welding: Comply with AWS D1.1/D1.1M.
8. Appearance: Ensure exposed-to-view finish surfaces of units are uniform in color and appearance.
9. Finish of Exposed-to-View Precast Unit Surfaces: Match existing glass fiber reinforced concrete cornice finish.

2.03 CONCRETE MATERIALS

A. Cement: ASTM C150/C150M Portland Type I - Normal; white color.

B. Concrete Aggregates: ASTM C33/C33M.

C. Reinforcement: Alkali resistant chopped glass fiber rovings specifically formulated for use in concrete, with lengths varying from 1-1/2 to 2 inches.

2.04 FRAMING MATERIALS

A. Metal Framing Members: Formed from hot-dipped galvanized steel sheet, ASTM A653/A653M, SS Grade 50 (340) Class 1, with G90/Z275 coating.

2.05 SUPPORT DEVICES

A. Connecting and Support Devices: ASTM A36/A36M steel; hot-dip galvanized in accordance with ASTM A153/A153M.

B. Bolts, Nuts, and Washers: ASTM F3125/F3125M heavy hex structural bolts, Type 1, with matching ASTM A563 (ASTM A563M) nuts, and washers as follows:
   1. Standard Washers: ASTM F436/F436M washers, in finish matching bolts.
   2. Compressible Direct Tension Indicators: ASTM F959/F959M, Type 325-1.

C. Primer: Zinc rich oil alkyd.

2.06 FABRICATION

A. Spray-up concrete mix in multiple passes; maintain consistent quality during manufacture.

B. Place metal framing members in position in mold.

C. Embed anchors, inserts, plates, angles, and other cast-in items as indicated on shop drawings.

D. Fabricate connecting devices, items fit to framing members, fasteners and accessories necessary for proper installation.

E. Locate hoisting devices to permit device removal after erection.

F. Cure units to minimize appearance blemishes such as non-uniformity, staining or surface cracking.

G. Identify each unit with corresponding code on erection drawings, in location not visible in finish work.

H. Exposed Non-Galvanized Steel Components: Clean surfaces of rust, scale, grease, and foreign matter; prime paint in two coats, except surfaces in direct contact with concrete or requiring field welding.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify that building structure, anchors, devices, and openings are ready to receive work of this section.

3.02 PREPARATION

A. Provide for erection procedures and induced loads during erection. Maintain temporary bracing in place until final support is provided.

3.03 INSTALLATION

A. Coordinate installation with structural supports, backup, and opening framing, if any.

B. Install units without damage to shape or finish. Replace or repair damaged panels.

C. Install units level and plumb within allowable tolerances.

D. Align and maintain uniform horizontal and vertical joints as erection progresses.

E. When units require adjustment beyond design or tolerance criteria, discontinue affected work and advise Architect.

F. Site cutting of panels not permitted.

G. Fasten units in place with mechanical connections.

3.04 TOLERANCES

A. Maximum Variation from Plane of Location: 1/4 inch in 10 feet and 3/8 inch in 100 feet, non-cumulative.

B. Maximum Offset from True Alignment Between Two Connecting Units: 1/4 inch.

C. Maximum Out of Square: 1/8 inch in 10 feet, non-cumulative.

D. Variation From Dimensions Indicated on Shop Drawings: Plus or minus 1/8 inch.

E. Bowing of Units: Length of Unit/360.

F. Exposed Joint Dimension: 1/2 inch plus or minus 1/4 inch.

3.05 FIELD QUALITY CONTROL

A. An independent testing agency will perform field quality control tests, as specified in Section 01 4000 - Quality Requirements.

B. Perform water absorption test in accordance with PCI MNL-117.

3.06 CLEANING

A. Clean units according to manufacturer's written instructions.
   1. Remove dirt, stains, and residue.
   2. Protect adjacent materials during cleaning.

3.07 PROTECTION

A. Protect installed units from damage.

END OF SECTION

A. Manufacturer's Abbreviations:

1. MK - McKinney
2. RO - Rockwood
3. RU - Corbin Russwin
4. AA - ASSA High Security Locks
5. FO - Folger Adam
6. HS - HES
7. RF - Rixson
8. NO - Norton
9. NG - National Guard
10. PE - Pemko
11. SA - SARGENT
12. HD - HID
13. SU - Securitron
14. OT - OTHER

HARDWARE SET REVISION SUMMARY

Set: 4.0

Doors: 1000A
Description: Exterior Aluminum Card Access Entrance Pair + Motion Sensor Operator

5	Hinge (heavy weight)	T4A3386 NRP 4-1/2" x 4-1/2"	US32D	MK
2	Hinge (heavy weight)	T4A3386 QC12 4-1/2" x 4-1/2"	US32D	MK ⚡
2	Exit Device (exit only,elect latch retract)	ED5860 EO M92 MELR	630	RU
2	Door Pull	BF157 Mtg-Type 1	US32D	RO
2	Door Operator	6070 SN-134	689	RU
1	Threshold	896HDP SIA x Door Width	689	NO ⚡
2	Sweep	315CN TKSP x Door Width		NG
2	Door Position Switch	By Div 28 Subcontractor QC-C012 Hinge to Device Rail		PE
1	ElectroLynx Harness	QC-C3000P Hinge to Panel		SA
1	ElectroLynx Harness	SE-RP40 By Div 28 Sub		MK ⚡
1	Wall Card Reader	663		MK ⚡
1	Motion Sensor	BPS-24 By Div 28 Sub	BLK	HD ⚡
1	Power Supply			NO ⚡
				SU ⚡

Notes: Perimeter gasket by frame manufacturer.
Door position is monitored by magnetic switch for authorized egress.
NOTE: Access control panel and security management software by security integrator.
Prep door and hinge jamb for electromechanical device.
OPERATION: OPEN HOURS: Both devices are switched to push pull with latches retracted by door control panel timer & outside actuator is activated.
AFTER HOURS: Card Reader outside retracts latchbolt at active leaf. Inside ADA pushpad retract latchbolt and cycle operator at active leaf.
Electronic device function is fail-secure with inside RX switch in rail. Inside rail always allows egress.

Set: 5.0 –NOT USED

Set: 6.0

Doors: 2202A
Description: Rated Card Access Function

2	Hinge (heavy weight)	T4A3786 NRP 4-1/2" x 4-1/2"	US26D	MK	
1	Hinge (heavy weight)	T4A3786 QC12 4-1/2" x 4-1/2"	US26D	MK	⚡
1	Fail Safe Lock	CL33903 NZD 24AD M92	626	RU	⚡
1	Cylinder As Required	Mortise Rim or K I L	626	AA	
1	Surface Closer (HDPA)	DC6210 A3 M54	689	RU	
1	Kick Plate	K1050 12" High CSK	US32D	RO	
1	Wall Stop	409	US32D	RO	
1	Perimeter Gasketing	S88BL x Head & Jambs		PE	
1	ElectroLynx Harness	QC-C3000P Hinge to Panel		MK	⚡
1	ElectroLynx Harness	QC-C300 Hinge to Lock Body		MK	⚡
1	Wall Card Reader	SE-RP40 By Div 28 Sub	BLK	HD	⚡
1	Power Supply	BPS-24 By Div 28 Sub		SU	⚡

Notes: Door position is monitored by magnetic switch for authorized egress.
Access control panel and security management software by security integrator.
Prep door and hinge jamb for electronic device. Furnish wiring harness in door per specifications.
OPERATION: Outside wall reader temporarily unlocks outside lever: auto-relock. Electronic function is fail-secure with outside key override. Inside lever always allows egress and includes REX. Lock includes door position switch and latchbolt monitor switch.

Set: 10.0 – NOT USED

Set: 11.0 – NOT USED

Set: 12.0

Doors: 1020B, 1080A, 1120B, 2020A, 2080A
Description: Rated Passage Function Exit

3	Hinge	TA2714 NRP 4-1/2" x 4-1/2"	US26D	MK	
1	Exit Device (passage)	ED5200A N910ET	630	RU	
1	Surface Closer (reg)	DC6200 M54	689	RU	
1	Kick Plate	K1050 12" High CSK	US32D	RO	
1	Wall Stop	409	US32D	RO	
1	Perimeter Gasketing	S88BL x Head & Jambs		PE	

Set: 16.0

Doors: 2088A
Description: Storeroom Function Exit

3	Hinge	TA2714 NRP 4-1/2" x 4-1/2"	US26D	MK	
1	Exit Device (storeroom)	ED5200 N957ET M93 M51	630C	RU	⚡
1	Cylinder As Required	Mortise Rim or K I L	626	AA	
1	Surface Closer (HDPA)	DC6210 A3 M54	689	RU	
1	Kick Plate	K1050 12" High CSK	US32D	RO	
1	Wall Stop	409	US32D	RO	
3	Silencer	608-RKW		RO	
1	Door Position Switch	By Div 28 Subcontractor		SA	

Set: 22.0

Doors: 2092A, 2117C, 3202A, 3208A
Description: Classroom Function + Closer + O H Stop

3	Hinge (heavy weight)	T4A3786 NRP 4-1/2" x 4-1/2"	US26D	MK
1	Classroom Lock	CL3355 NZD	626	RU
1	Cylinder As Required	Mortise Rim or K I L	626	AA
1	Surf Overhead Stop	9-X36	652	RF
1	Surface Closer (reg)	DC6200	689	RU
1	Kick Plate	K1050 12" High CSK	US32D	RO
1	Wall Stop	409	US32D	RO
3	Silencer	608-RKW		RO

Set: 25.0

Doors: 1074A, 1092A, 1093A, 1094A, 1207A, 3018AA Data, 3208B
Description: Card Access + Closer

2	Hinge	TA2714 NRP 4-1/2" x 4-1/2"	US26D	MK	
1	Hinge	TA2714 QC12 4-1/2" x 4-1/2"	US26D	MK	⚡
1	Fail Secure Lock	CL33905 NZD M92	626	RU	⚡
1	Cylinder As Required	Mortise Rim or K I L	626	AA	
1	Surface Closer (reg)	DC6200 M54	689	RU	
1	Kick Plate	K1050 12" High CSK	US32D	RO	
1	Wall Stop	409	US32D	RO	
3	Silencer	608-RKW		RO	
1	Door Position Switch	By Div 28 Subcontractor		SA	
1	ElectroLynx Harness	QC-C3000P Hinge to Panel		MK	⚡
1	ElectroLynx Harness	QC-C300 Hinge to Lock Body		MK	⚡
1	Wall Card Reader	SE-RP40 By Div 28 Sub	BLK	HD	⚡
1	Power Supply	BPS-24 By Div 28 Sub		SU	⚡

Notes: Door contact switch indicates propped door condition.
Security management software and access control panel by others.
Prep door and hinge jamb for electronic lock.
OPERATION: Card Reader outside temporarily unlocks outside lever: auto-relock. Electronic lock function is fail-secure with inside RX switch. Outside trim has key override. Inside trim always allows egress.

Set: 26.0

Doors: 2020B, 2080C, 3080A, 3080B
Description: Rated Card Access - Fail Safe

2	Hinge	TA2714 NRP 4-1/2" x 4-1/2"	US26D	MK	
1	Hinge	TA2714 QC12 4-1/2" x 4-1/2"	US26D	MK	⚡
1	Fail Safe Lock	CL33903 NZD 24AD M92	626	RU	⚡
1	Cylinder As Required	Mortise Rim or K I L	626	AA	
1	Surface Closer (reg)	DC6200 M54	689	RU	
1	Kick Plate	K1050 12" High CSK	US32D	RO	
1	Wall Stop	409	US32D	RO	
1	Perimeter Gasketing	S88BL x Head & Jambs		PE	
1	Door Position Switch	By Div 28 Subcontractor		SA	
1	ElectroLynx Harness	QC-C3000P Hinge to Panel		MK	⚡
1	ElectroLynx Harness	QC-C300 Hinge to Lock Body		MK	⚡

1	Wall Card Reader	SE-RP40 By Div 28 Sub	BLK	HD	⚡
1	Power Supply	BPS-24 By Div 28 Sub		SU	⚡

Notes: Door contact switch indicates propped door condition.
Security management software and access control panel by others.
Prep door and hinge jamb for electronic lock.
OPERATION: Card Reader outside temporarily unlocks outside lever: auto-relock. Electronic lock function is fail-safe with inside RX switch. Outside trim has key override. Inside trim always allows egress.

Set: 27.0

Doors: 1205A, 2014A, 2065A, 2201A
Description: Card Access + Closer

2	Hinge	TA2714 NRP 4-1/2" x 4-1/2"	US26D	MK	
1	Hinge	TA2714 QC12 4-1/2" x 4-1/2"	US26D	MK	⚡
1	Fail Secure Lock	CL33905 NZD M92	626	RU	⚡
1	Cylinder As Required	Mortise Rim or K I L	626	AA	
1	Surface Closer	DC6210 M54	689	RU	
1	Kick Plate	K1050 12" High CSK	US32D	RO	
1	Wall Stop	409	US32D	RO	
3	Silencer	608-RKW		RO	
1	Door Position Switch	By Div 28 Subcontractor		SA	
1	ElectroLynx Harness	QC-C3000P Hinge to Panel		MK	⚡
1	ElectroLynx Harness	QC-C300 Hinge to Lock Body		MK	⚡
1	Wall Card Reader	SE-RP40 By Div 28 Sub	BLK	HD	⚡
1	Power Supply	BPS-24 By Div 28 Sub		SU	⚡

Notes: Door contact switch indicates propped door condition.
Security management software and access control panel by others.
Prep door and hinge jamb for electronic lock.
OPERATION: Card Reader outside temporarily unlocks outside lever: auto-relock. Electronic lock function is fail-secure with inside RX switch. Outside trim has key override. Inside trim always allows egress.

Set: 28.0

Doors: 3014B, 3207A
Description: Card Access + Closer

3	Hinge	TA2714 NRP 4-1/2" x 4-1/2"	US26D	MK	
3	Hinge	TA2714 QC12 4-1/2" x 4-1/2"	US26D	MK	⚡
1	Fail Secure Lock	CL33905 NZD M92	626	RU	⚡
1	Cylinder As Required	Mortise Rim or K I L	626	AA	
1	Surface Closer (uni)	DC6210 A11 M54 M78	689	RU	
1	Kick Plate	K1050 12" High CSK	US32D	RO	
3	Silencer	608-RKW		RO	
1	Door Position Switch	By Div 28 Subcontractor		SA	
1	ElectroLynx Harness	QC-C3000P Hinge to Panel		MK	⚡
1	ElectroLynx Harness	QC-C300 Hinge to Lock Body		MK	⚡
1	Wall Card Reader	SE-RP40 By Div 28 Sub	BLK	HD	⚡
1	Power Supply	BPS-24 By Div 28 Sub		SU	⚡

Notes: Door contact switch indicates propped door condition.
Security management software and access control panel by others.
Prep door and hinge jamb for electronic lock.
OPERATION: Card Reader outside temporarily unlocks outside lever: auto-relock. Electronic lock function is fail-secure with inside RX switch. Outside trim has key override. Inside trim always allows egress.

Set: 29.0

Doors: 1083A, 1083B, 1096A, 1209A, 2004B, 2058A, 3027B
Description: Card Access + Closer

2	Hinge (heavy weight)	T4A3786 NRP 4-1/2" x 4-1/2"	US26D	MK	
1	Hinge (heavy weight)	T4A3786 QC12 4-1/2" x 4-1/2"	US26D	MK	⚡
1	Fail Secure Lock	CL33905 NZD M92	626	RU	⚡
1	Cylinder As Required	Mortise Rim or K I L	626	AA	
1	Surface Closer (reg)	DC6200 M54	689	RU	
1	Kick Plate	K1050 12" High CSK	US32D	RO	
1	Wall Stop	409	US32D	RO	
3	Silencer	608-RKW		RO	
1	Door Position Switch	By Div 28 Subcontractor		SA	
1	ElectroLynx Harness	QC-C3000P Hinge to Panel		MK	⚡
1	ElectroLynx Harness	QC-C300 Hinge to Lock Body		MK	⚡
1	Wall Card Reader	SE-RP40 By Div 28 Sub	BLK	HD	⚡
1	Power Supply	BPS-24 By Div 28 Sub		SU	⚡

Notes: Door contact switch indicates propped door condition.
Security management software and access control panel by others.
Prep door and hinge jamb for electronic lock.
OPERATION: Card Reader outside temporarily unlocks outside lever: auto-relock. Electronic lock

function is fail-secure with inside RX switch. Outside trim has key override. Inside trim always allows egress.

Set: 31.0

Doors: 1101A, 1102B, 1122A, 3002B, 3019A, 3023B, 3079B, 3201A
Description: Card Access + Closer

2	Hinge (heavy weight)	T4A3786 NRP 4-1/2" x 4-1/2"	US26D	MK	
1	Hinge (heavy weight)	T4A3786 QC12 4-1/2" x 4-1/2"	US26D	MK	⚡
1	Fail Secure Lock	CL33905 NZD M92	626	RU	⚡
1	Cylinder As Required	Mortise Rim or K I L	626	AA	
1	Surface Closer (HDPA)	DC6210 A3 M54	689	RU	
1	Kick Plate	K1050 12" High CSK	US32D	RO	
1	Wall Stop	409	US32D	RO	
3	Silencer	608-RKW		RO	
1	Door Position Switch	By Div 28 Subcontractor		SA	
1	ElectroLynx Harness	QC-C3000P Hinge to Panel		MK	⚡
1	ElectroLynx Harness	QC-C300 Hinge to Lock Body		MK	⚡
1	Wall Card Reader	SE-RP40 By Div 28 Sub	BLK	HD	⚡
1	Power Supply	BPS-24 By Div 28 Sub		SU	⚡

Notes: Door contact switch indicates propped door condition.
Security management software and access control panel by others.
Prep door and hinge jamb for electronic lock.
OPERATION: Card Reader outside temporarily unlocks outside lever: auto-relock. Electronic lock function is fail-secure with inside RX switch. Outside trim has key override. Inside trim always allows egress.

Set: 34.0

Doors: 1200A
Description: Passage Function + Closer

3	Hinge (heavy weight)	T4A3786 NRP 4-1/2" x 4-1/2"	US26D	MK
1	Passage Latch	CL3310 NZD	626	RU
1	Surface Closer (reg)	DC6200 M54	689	RU
1	Kick Plate	K1050 12" High CSK	US32D	RO

1	Wall Stop	409	US32D	RO
1	Perimeter Gasketing	S88BL x Head & Jambs		PE

– NOT USED

Set: 36.0

Doors: 2062A, 2114A, 2128A, 2131A, 3061D, 3214A

Description: Passage Function

3	Hinge	TA2714 NRP 4-1/2" x 4-1/2"	US26D	MK
1	Passage Latch	CL3310 NZD	626	RU
1	Wall Stop	409	US32D	RO
3	Silencer	608-RKW		RO

Set: 38.0

Doors: 1075A, 1076A, 1098A, 1099A, 2021A, 2021B, 2063A, 2084A, 2084B, 2084C, 2084D, 2084G, 2093A, 3032D, 3044A, 3046B, 3047A, 3061A, 3061B, 3061C, 3061F, 3068A, 3210A, 3213A, 3214B, 3215A, 3217A, 3218A, 3219A, 3220A, 3222A, 3223A

Description: Office - Entry Function

3	Hinge	TA2714 NRP 4-1/2" x 4-1/2"	US26D	MK
1	Entrance Lock	CL3351 NZD	626	RU
1	Cylinder As Required	Mortise Rim or K I L	626	AA
1	Wall Stop	409	US32D	RO
3	Silencer	608-RKW		RO

Set: 52.0

Doors: 1100A, 1118A, 2100D, 3018A
Description: Storeroom Function + Closer

3	Hinge	TA2714 NRP 4-1/2" x 4-1/2"	US26D	MK
1	Storeroom Lock	CL3357 NZD	626C	RU
1	Cylinder As Required	Mortise Rim or K I L	626	AA
1	Surface Closer (uni)	DC6210 A11 M54 M78	689	RU
3	Silencer	608-RKW		RO

Set: 59.0

Doors: 1003A, 1020C, 1025A, 1032A, 1033B, 2003B, 2048B, 3056A
Description: Electric Strike Replacement

1	Electric Strike	712-F-24D	630	FO ⚡
1	SMART Pac Bridge Rectifier	2005M3		HS ⚡
1	Door Position Switch	By Div 28 Subcontractor		SA
1	Wall Card Reader	SE-RP40 By Div 28 Sub	BLK	HD ⚡
1	Power Supply	BPS-24 By Div 28 Sub		SU ⚡

Notes: Balance of existing hardware to remain.
Verify new hardware compatibility with existing conditions.
Door contact switch indicates propped door condition.
Access control panel and security management software by others.
Prep strike jamb for electrical component.
OPERATION: Outside card reader temporarily unlocks electric strike: automatic relock. Electric strike is fail-secure. Mechanical lock outside lever is always fixed. Outside key retracts latchbolt. Inside lever is always free.

Set: 60.0

Doors: 1007/2A, 1036A, 1036B, 1054A, 1065A, 1065B, 1069A, 1101B, 1119A, 1120C, 2013A, 2043B, 2056B, 2066A, 2067A, 2088B, 2134B, 3029A
Description: Card Access - Existing Door & Frame

1	Hinge	TA2714 QC12 4-1/2" x 4-1/2"	US26D	MK ⚡
1	Fail Secure Lock	CL33905 NZD M92	626	RU ⚡
1	Cylinder As Required	Mortise Rim or K I L	626	AA
1	Door Position Switch	By Div 28 Subcontractor		SA

1 ElectroLynx Harness	QC-C3000P Hinge to Panel		MK ⚡
1 ElectroLynx Harness	QC-C300 Hinge to Lock Body		MK ⚡
1 Wall Card Reader	SE-RP40 By Div 28 Sub	BLK	HD ⚡
1 Power Supply	BPS-24 By Div 28 Sub		SU ⚡

Notes: Balance of existing hardware to remain.
Verify new hardware compatibility with existing conditions.
Door contact switch indicates propped door condition. Security management software and access control panel by others.
Prep door and hinge jamb for electronic lock. Provide wiring harness in door.
OPERATION: Card Reader outside temporarily unlocks outside lever: auto-relock. Electronic lock function is fail-secure with inside RX switch. Outside trim has key override. Inside trim always allows egress.

Set: 61.0

Doors: 1068A, 3051A, 3052A, 3072A, 3083A
Description: Card Access - Existing Door & Frame

3 Hinge	TA2314 x NRP 5" x 4-1/2"	US32D	MK
1 Exit Device (nightlatch,ELR) 1	ED5200 K157ET M92 M51 MELR	630	RU ⚡
Cylinder As Required	Mortise Rim or K I L	626	AA
1 Door Position Switch	By Div 28 Subcontractor		SA
1 Wall Card Reader	SE-RP40 By Div 28 Sub	BLK	HD ⚡
1 Power Supply	BPS-24 By Div 28 Sub		SU ⚡

Notes: Balance of existing hardware to remain.
Verify new hardware compatibility with existing conditions.
Door contact switch indicates propped door condition. Security management software and access control panel by others.
Prep door and hinge jamb for electronic lock. Provide wiring harness in door.
OPERATION: Card Reader outside temporarily unlocks outside lever: auto-relock. Electronic lock function is fail-secure with inside RX switch. Outside trim has key override. Inside trim always allows egress.

Set: 67.0

Doors: 1040A, 1060B
Description: Existing Rated Card Access Exit

3 Hinge	TA2314 x NRP 5" x 4-1/2"	US32D	MK

1	Electric Exit Device (rim, fail secure)	ED5200A N9905ET M92	630	RU ⚡
1	Surface Closer (reg)	DC6200 M54	689	RU
1	Wall Stop	409	US32D	RO
1	ElectroLynx Harness	QC-C3000P Hinge to Panel		MK ⚡
1	ElectroLynx Harness	QC-C300 Hinge to Lock Body		MK ⚡
1	Wall Card Reader	SE-RP40 By Div 28 Sub	BLK	HD ⚡
1	Power Supply	BPS-24 By Div 28 Sub		SU ⚡

Notes: Balance of existing hardware to remain.
Verify new hardware compatibility with existing conditions.
Door contact switch indicates propped door condition. Security management software and access control panel by others.
Prep door and hinge jamb for electronic device.
OPERATION: Card Reader outside temporarily unlocks outside lever: auto-relock. Electronic lock function is fail-secure with inside RX switch. Outside trim has key override. Inside push bar always allows egress.

SECTION 10 1400
SIGNAGE REVISED

PART 1 GENERAL

1.01 SECTION INCLUDES

A. Room and door signs.

B. Building Safety signs.

C. Emergency evacuation maps.

D. Plaque.

1.02 REFERENCE STANDARDS

A. 36 CFR 1191 - Americans with Disabilities Act (ADA) Accessibility Guidelines for Buildings and Facilities; Architectural Barriers Act (ABA) Accessibility Guidelines; current edition.

B. ADA Standards - Americans with Disabilities Act (ADA) Standards for Accessible Design; 2010.

C. ICC A117.1 - Accessible and Usable Buildings and Facilities; 2017.

1.03 SUBMITTALS

A. See Section 01 3000 - Administrative Requirements, for submittal procedures.

B. Product Data: Manufacturer's printed product literature for each type of sign, indicating sign styles, font, foreground and background colors, locations, overall dimensions of each sign.

C. Signage Schedule: Provide information sufficient to completely define each sign for fabrication, including room number, room name, other text to be applied, sign and letter sizes, fonts, and colors.

1. When room numbers to appear on signs differ from those on drawings, include the drawing room number on schedule.
2. Submit for approval by Owner through Architect prior to fabrication.

D. Samples: Submit two samples of each type of sign, of size similar to that required for project, illustrating sign style, font, and method of attachment.

E. Selection Samples: Where colors are not specified, submit two sets of color selection charts or chips.

F. Shop Drawings: Indicating fabricated letter constrcution and mounting method.

G. Plaque: Provide approval rubbing based on text and layout provided by architect.

1.04 QUALITY ASSURANCE

A. Manufacturer Qualifications: Company specializing in manufacturing the products specified in this section with minimum three years of documented experience.

1.05 DELIVERY, STORAGE, AND HANDLING

A. Package signs as required to prevent damage before installation.

B. Store tape adhesive at normal room temperature.

1.06 FIELD CONDITIONS

A. Do not install tape adhesive when ambient temperature is lower than recommended by manufacturer.

B. Maintain this minimum temperature during and after installation of signs.

PART 2 PRODUCTS

2.01 MANUFACTURERS

A. Interior Signage :

1. Best Sign Systems, Inc; Product Impressions: www.bestsigns.com. Basis of design product
2. Inpro; _____: www.inprocorp.com.

3. Mohawk Sign Systems, Inc; ____: www.mohawksign.com/#sle.
4. Seton Identification Products; ____: www.seton.com/aec/#sle.
5. Substitutions: See Section 01 6000 - Product Requirements & SUBSTITUTIONS.

B. Interior Cut Plate Letters:
1. Gemini Sign Letters
2. Woodland Manufacturing : .http://www.woodlandmanufacturing.com
3. J & G Diversified, Inc.. http://www.cut-metal-letters.com
4. Substitutions: See Section 01 6000 - Product Requirements & SUBSTITUTIONS.

C. Building Plaque:
1. Cosco Industries; Cast Aluminum: www.coscoarchitecturalsigns.com/#sle.
2. Matthews International Corporation.
3. Southwell Company.
4. Metallic Arts Inc.
5. Substitutions: See Section 01 6000 - Product Requirements & SUBSTITUTIONS.

2.02 INTERIOR SIGNAGE APPLICATIONS

A. Accessibility Compliance: Signs are required to comply with ADA Standards and ICC A117.1, unless otherwise indicated; in the event of conflicting requirements, comply with the most comprehensive and specific requirements.

B. Room Signs: Provide a sign identifying rooms as discribed in the attached signage schedule
1. Sign Type: Flat signs with injection molded panel media.
2. Sign Height: 4-6 inches, unless otherwise indicated.
3. Where signs are mounted on glass sidelights, provide blank panel mounted to opposite side of glass to conceal mounting adhesives.

C. Building Safety Signs:
1. Use clear plastic panel silk-screened on reverse, and bonded after printing to laminate backing. Map and text proof submitted by fabricator for approval.
a. Evacuation Maps
1) Provide two maps per floor , locate as directed by Architect and Fire Marshal.
2) Map and text to be provided by Architect
b. Occupancy load sign:
1) Provide at room 2200, maximum occupancy 200.
2) Provide at room 1200, maximum occupancy 99.

2.03 PLAQUES

A. Metal Plaques:
1. Metal: Aluminum casting.
2. Metal Sheet Thickness: 1/4 inch, minimum.
3. Double line edge profile, matte finish painted background , color selected by architect
4. Plaque size: 30" x 36"
5. Mounting: exposed with rosettes.
6. Text: provided by architect.

2.04 DIMENSIONAL LETTERS

A. Metal Letters: Provide at all courtroom entrances Refer to typical elevations on drawing sheet A 7.5
1. Metal: Aluminum sheet, flat.
2. Metal Thickness: Manufacturer's standard for letter size.
3. Letter Height: 8 inches.
4. Text and Typeface:
a. Character Font: Helvetica, Arial, or other sans serif font.
b. Character Case: Upper case only.
5. Finish: Brushed, satin.
6. Mounting: Concealed screws.

2.05 ACCESSORIES

A. Concealed Screws: Stainless steel, or other non-corroding metal.

B. Tape Adhesive: Double sided tape, permanent adhesive.

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify that substrate surfaces are ready to receive work.

3.02 INSTALLATION

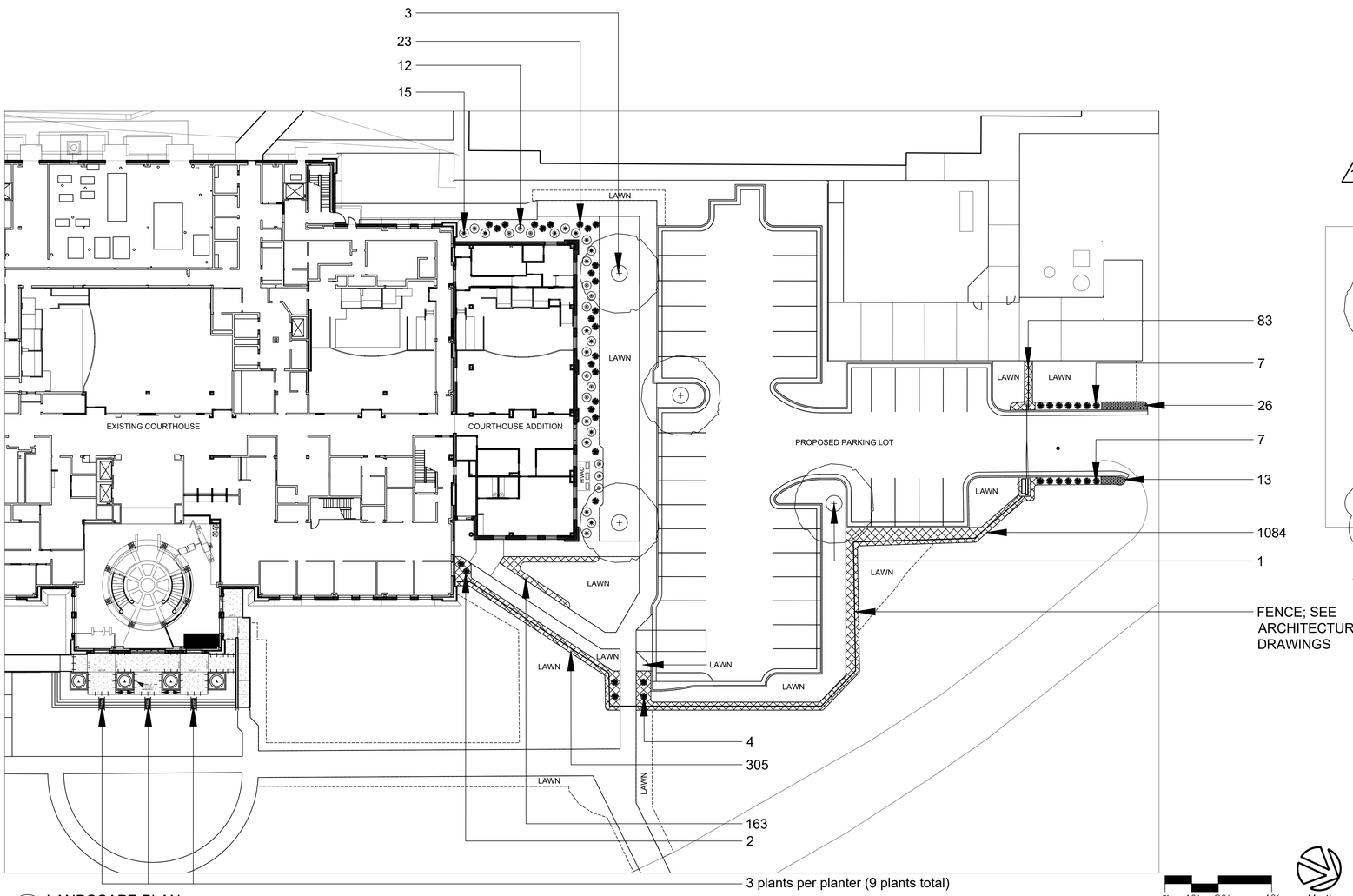
A. Install in accordance with manufacturer's instructions.

B. Install neatly, with horizontal edges level.

C. Locate signs where indicated:
   1. If no location is indicated obtain Owner's instructions.

D. Protect from damage until Substantial Completion; repair or replace damaged items.

END OF SECTION



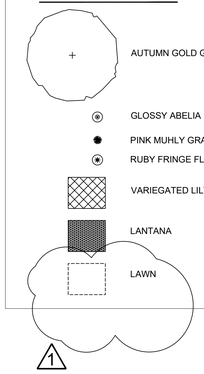
A LANDSCAPE PLAN

SCALE: 1" = 20'-0"

PLANT SCHEDULE						
QTY	KEY	BOTANICAL NAME	COMMON NAME	SIZE	ROOT	SPACING
		SMALL SHADE TREE				
4		GINKGO BILOBA 'AUTUMN GOLD'	AUTUMN GOLD GINKGO	2" CAL. MIN. & 10' HT. MIN.	B & B/CONT.	AS SHOWN
		SHRUBS				
12		ABELIA X GRANDIFLORA	GLOSSY ABELIA	7 GAL. MIN.	CONTAINER	AS SHOWN
15		LOROPETALUM CHINENSE VAR. RUBRUM 'RUBY'	RUBY FRINGE FLOWER	7 GAL. MIN.	CONTAINER	AS SHOWN
		GROUNDCOVERS/PERENNIALS				
48		LANTANA	LANTANA	1 GAL MIN.	CONTAINER	18" O.C.
1635		LIRIOPE MUSCARI 'VARIEGATA'	VARIEGATED LILYTURF	3" POT MIN.	CONTAINER	12" O.C.
		GRASSES				
43		MUHLENBERGIA CAPILLARIS	PINK MUHLY GRASS	1 GAL MIN.	CONTAINER	36" O.C.
		OTHER				
			SEED (NON-NCDOT RIGHT OF WAY)		PER ACRE	
			NOVEMBER-MARCH			
			BERMUDA (UNHULLED)		20 LBS.	
			WINTER RYE (GRAIN)		50 LBS.	
			FESCUE		80 LBS.	
			MARCH-NOVEMBER			
8,823	SQUARE FEET OF SEEDED LAWN	SEED TO MATCH EXISTING LAWN	BERMUDA (HULLED)		30 LBS.	
			FESCUE		80 LBS.	
29	CUBIC YARDS OF MULCH	BROWN TRIPLE SHREDDED HARDWOOD MULCH AT A MINIMUM INSTALLED DEPTH OF 3"	ALL TREES, SHRUBS, AND GROUNDCOVERS/ LANDSCAPE BEDS TO BE INCLUDED IN MULCH BEDS. OWNER TO APPROVE MULCH SIZE AND COLOR.			

1

PLANTING LEGEND



1

PLANT MATERIAL NOTES

1. ALL PLANT MATERIAL SHALL CONFORM TO THE MOST CURRENT STANDARDS ESTABLISHED BY 'THE AMERICAN ASSOCIATION OF NURSERYMAN".
2. CONTAINERIZED PLANTS SHALL HAVE A ROOT SYSTEM SUFFICIENT ENOUGH IN DEVELOPMENT TO HOLD THE SOIL INTACT WHEN REMOVED FROM THE CONTAINER. THE ROOT SYSTEM SHALL NOT BE ROOT BOUND, A CONDITION WHERE THE ROOT SYSTEM IS DENSE IN MASS, EXCESSIVELY INTERTWINED, AND HAS ESTABLISHED A CIRCULAR GROWTH PATTERN.
3. ALL PLANTS SHALL BE FRESHLY DUG, SOUND, HEALTHY, VIGOROUS, WELL-ROOTED PLANTS AND ESTABLISHED IN THE CONTAINER IN WHICH THEY ARE SOLD. THE PLANTS SHALL HAVE TOPS WHICH ARE GOOD QUALITY AND ARE IN A HEALTHY GROWING CONDITION.
4. PLANTS SHALL NOT BE PRUNED PRIOR TO DELIVERY UNLESS APPROVED BY THE LANDSCAPE ARCHITECT PRIOR TO SHIPMENT.
5. ALL TREE PITS, SHRUB BEDS AND PREPARED PLANTING BEDS ARE TO BE COMPLETELY EXCAVATED IN ACCORDANCE WITH THE PLANTING DETAILS AND SPECIFICATIONS.
6. TOPSOIL AMENDMENTS REQUIRED FOR SOIL MIXES SHALL BE PROVIDED BY CONTRACTOR AND APPROVED BY LANDSCAPE ARCHITECT PRIOR TO INSTALLATION. CONTRACTOR MUST LOAD, HAUL, MIX AND SPREAD ALL TOPSOIL AND OTHER SOIL ADDITIVES AS REQUIRED ON SITE.
7. CONTRACTOR SHALL VERIFY AND/ OR AMEND ALL PLANTING SOILS TO ENSURE PROPER SUITABILITY INCLUDING STATE RECOMMENDED QUANTITIES OF NITROGEN, PHOSPHORUS, AND POTASH NUTRIENTS AND SOIL AMENDMENTS TO BE ADDED TO PRODUCE QUALITY PLANTING SOIL FOR ALL PLANT MATERIAL TO SURVIVE.
8. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ENSURING THAT ALL PLANTING PITS PERCOLATE PROPERLY PRIOR TO PLANTING INSTALLATION.
9. SHRUBS, BULBS, AND GROUNDCOVERS SHALL BE TRIANGULARLY SPACED AT SPACING SHOWN ON PLANTING PLANS AND/OR IN THE PLANT SCHEDULE.
10. THE CONTRACTOR SHALL THE VERIFY EXTENT OF SEEDING OR SOD AREA WITH OWNER REPRESENTATIVE AND LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.
11. LANDSCAPER MUST BE A LICENSED NC LANDSCAPE CONTRACTOR.

TREE INSTALLATION NOTES

1. ALL TREES SHALL MEET AMERICAN STANDARD FOR NURSERY STOCK (ANSI, 1990, PART 1, "SHADE AND FLOWERING TREES").
2. TREES SUPPLIED MUST HAVE BEEN PROPERLY PLANTED AND GROWN IN THE NURSERY. THE ROOT CROWN (ALSO CALLED THE TRUNK FLARE) SHALL BE EVIDENT NEAR THE TOP OF THE GROUND. ANY EXCESS SOIL, UP TO 3 INCHES COVERING THE CROWN WILL HAVE TO BE REMOVED CAREFULLY BY HAND, IN ORDER TO PREVENT ROOT SCRAPES. THE TREE IS THEN TO BE PLANTED WITH THE ROOT CROWN IN PROPER RELATION TO THE SURROUNDING GRADE. ANY TREES WITH MORE THAN 3 INCHES OF SOIL ON TOP OF THE ROOT CROWN WILL BE REJECTED. THE NURSERY OWNERS MAY DIG OVERSIZE BALLS AND REMOVE THE SOIL IN ORDER FOR THE ROOT SYSTEM DIAMETER (WHICH IS THE REQUIRED ROOT BALL DIAMETER) TO MEET THE SPECIFICATION FOR THE TRUNK CALIPER REQUIRED.
3. BALL AND BURLAPPED (B&B) PLANTS MUST HAVE FIRM, NATURAL BALLS OF EARTH, OF DIAMETER NOT LESS THAN RECOMMENDED IN THE "TREE AND SHRUB TRANSPLANTING MANUAL", AND BE OF SUFFICIENT DEPTH TO INCLUDE THE FIBROUS AND FEEDING ROOTS. PLANTS MOVED WITH A BALL WILL NOT BE ACCEPTED IF THE BALL IS DRY, CRACKED OR BROKEN BEFORE OR DURING PLANTING OPERATIONS.
4. REMOVE ALL TREATED OR PLASTIC-COATED BURLAP, STRAPPING, WIRE OR NYLON TWINE FROM ROOT BALL. AFTER SETTING IN HOLE, CUT AWAY 2/3 OF WIRE BASKET, IF ANY, AND TOP 1/3 OF BURLAP.
5. SOAK ROOT BALL AND PIT IMMEDIATELY AFTER INSTALLATION.
6. CONSTRUCT 4" HIGH SAUCER (WATER BERM) OUTSIDE OF PLANT MIX BACK FILL.
7. WHERE TREES ARE PLANTED IN ROWS, THEY SHALL BE UNIFORM IN SIZE AND SHAPE.
8. NO EXISTING TREES SHALL BE REMOVED WITHOUT WRITTEN AUTHORIZATION FROM THE OWNER REPRESENTATIVE EXCEPT WHERE NOTED ON PLANS. NO GRUBBING SHALL OCCUR WITHIN EXISTING TREE AREAS.
9. THE CONTRACTOR SHALL STAKE THE LOCATIONS OF ALL PROPOSED TREES AND OBTAIN APPROVAL FROM THE LANDSCAPE ARCHITECT AND OWNER REPRESENTATIVE PRIOR TO INSTALLATION.
10. ALL TREES SHALL BE STAKED AT TIME OF INSTALLATION IN ACCORDANCE WITH PLANTING DETAILS.
11. THE CONTRACTOR SHALL ENSURE THAT TREES REMAIN VERTICAL AND UPRIGHT FOR THE DURATION OF THE GUARANTEE PERIOD.

SHRUB INSTALLATION NOTES

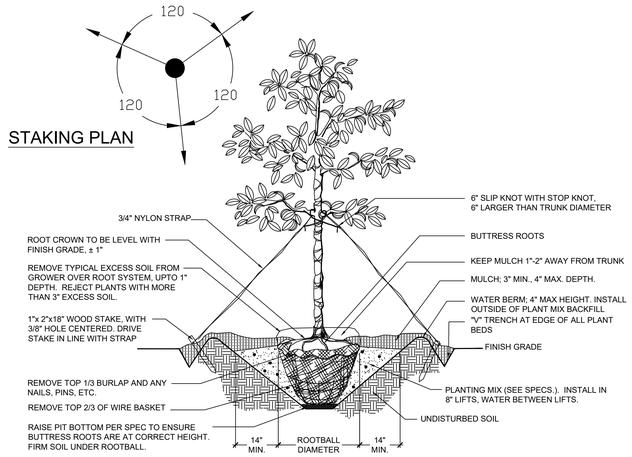
1. CUT ROOTS AS NECESSARY IN CONTAINERIZED PLANTS THAT ARE POT BOUND. REJECT PLANTS THAT HAVE GIRDLED ROOT OR ARE BOUND.
2. INSTALL TOP OF PLANT BALL 2" ABOVE ADJACENT GRADE.
3. TAMP PLANT SOIL MIX FIRMLY IN 8" LIFTS AROUND PLANT BALL.
4. SOAK PLANT BALL AND PIT IMMEDIATELY AFTER INSTALLATION.

WATERING NOTES

1. CONTRACTOR IS RESPONSIBLE FOR ENSURING ALL PLANT MATERIAL HAS ADEQUATE WATER TO ENSURE PLANT SUCCESS. CONTRACTOR SHALL WATER PLANT MATERIAL THROUGH THE DURATION OF THE PROJECT UNTIL OWNER HAS GIVEN APPROVAL AND/OR RELEASED THE CONTRACTOR FROM THE SITE.

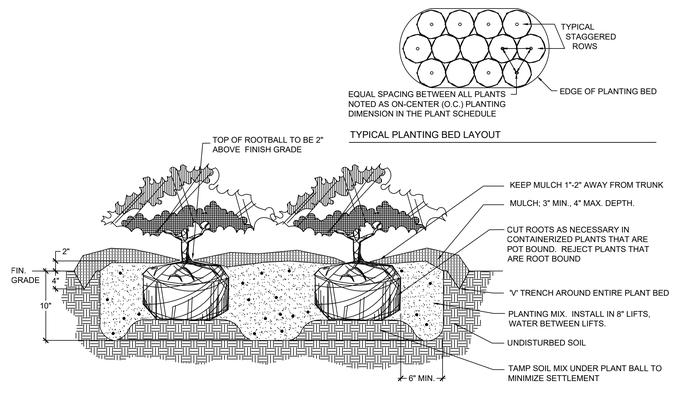
GENERAL NOTE

1. SEE CIVIL ENGINEERING PLANS FOR EXISTING CONDITIONS AND ITEMS INCLUDED IN DEMOLITION. SITE PLAN SHOWN TO BE USED FOR PLANTING LOCATION REFERENCE ONLY.



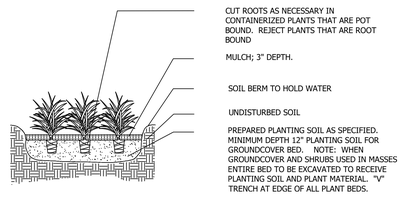
B SINGLE STEM TREE INSTALLATION DETAIL

SCALE: NTS



C SHRUB INSTALLATION DETAIL

SCALE: NTS



D GROUNDCOVER INSTALLATION DETAIL

SCALE: NTS

SAWYER SHERWOOD & ASSOCIATE ARCHITECTURE
124 Market St, Wilmington, NC 28401
910 762-0892 s2a3.com

CRISER TROUTMAN TANNER
CONSULTING ENGINEERS
CRISER TROUTMAN TANNER CONSULTING ENGINEERS NC
3809 Peachtree Ave., Suite 102
Wilmington, NC 28403
910.397.2929 Ph.
910.397.2971 Fax
www.cttengineering.com
Firm License Number: F-0113
#8240.00

SageDesign
landscape architecture • land planning
connecting people to community
228 North Front Street, Suite 301 Wilmington, NC 28401
910.232.3678

NORTH CAROLINA REGISTERED LANDSCAPE ARCHITECT 1785 SARA L. BURROUGHS
11-5-19

Brunswick County Courthouse Addition & Renovations

Bolivia, NC

Construction Drawings
September 23, 2019

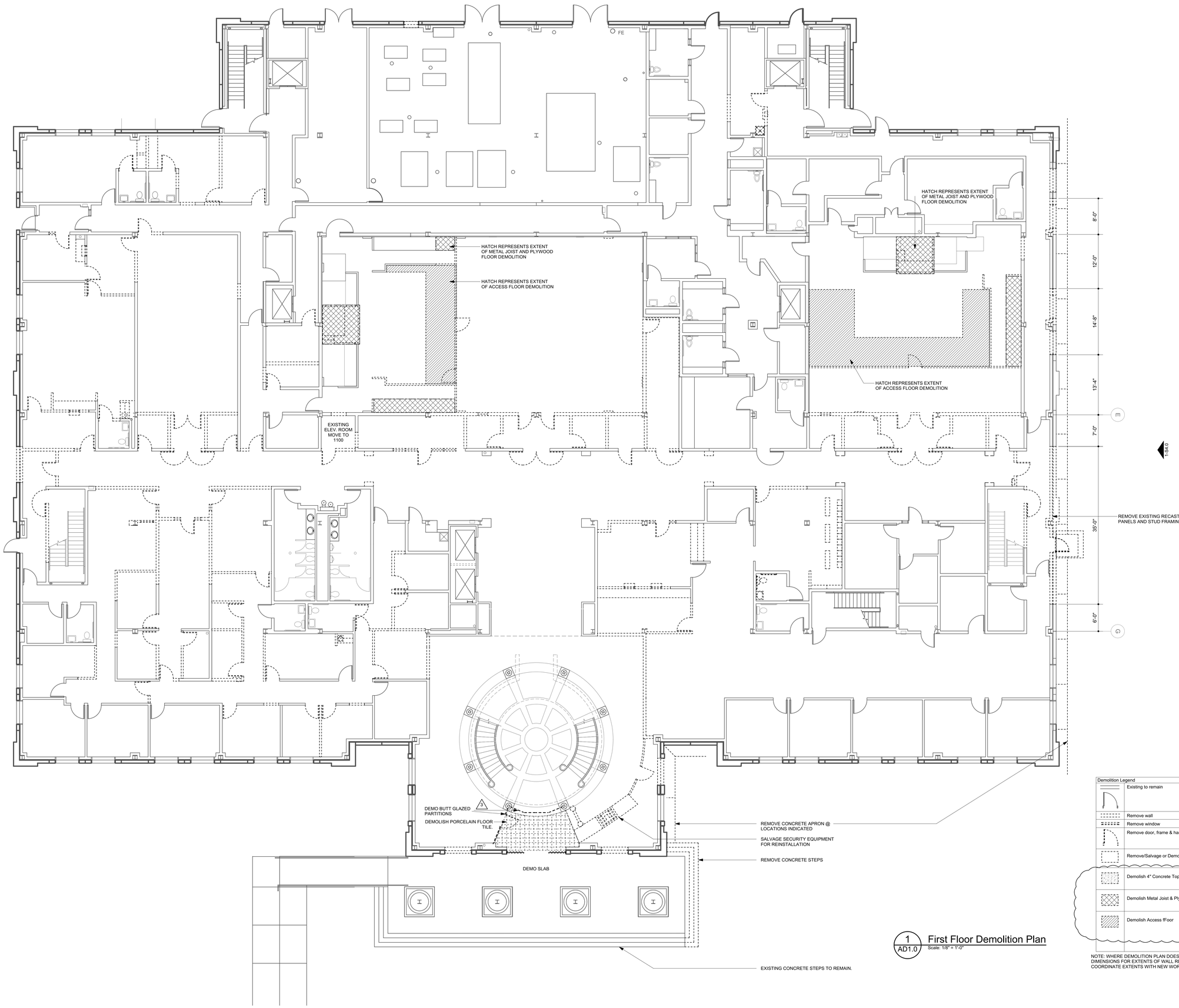
Revisions:

1 QUANTITY CLARIFICATION JANUARY 7, 2020

LANDSCAPE PLAN, PLANTING DETAILS & NOTES

L1.0

© 2018 Sawyer Sherwood & Associate- All Rights Reserved



1 AD1.0 First Floor Demolition Plan
Scale: 1/8" = 1'-0"

Demolition Legend
Existing to remain
Remove wall
Remove window
Remove door, frame & hardware
Remove/Salvage or Demolish
Demolish 4" Concrete Topping Slab
Demolish Metal Joist & Plywood floor
Demolish Access fFoor

NOTE: WHERE DEMOLITION PLAN DOES NOT SHOW DIMENSIONS FOR EXTENTS OF WALL REMOVAL, COORDINATE EXTENTS WITH NEW WORK PLANS.

SAWYER SHERWOOD & ASSOCIATE ARCHITECTURE
124 Market St, Wilmington, NC 28401
910 762-0892 s2a3.com

CRISER TROUTMAN TANNER
CRISER TROUMAN TANNER CONSULTING ENGINEERS
CRISER TROUTMAN TANNER CONSULTING ENGINEERS NC
3809 Peachtree Ave., Suite 102
Wilmington, NC 28403
910.397.2929 Ph.
910.397.2971 Fax
www.cttengineering.com
Firm License Number: F-0113
#8240.00

CHEATHAM AND ASSOCIATES, P.A.
CONSULTING ENGINEERS
3412 ENTERPRISE DRIVE
WILMINGTON, NORTH CAROLINA 28405
PHONE: (910) 452-4210
FAX: (910) 452-4211
OFFICE@CHEATHAMPA.COM
WWW.CHEATHAMPA.COM
18048 NC LICENSE# C-1073

SAWYER, SHERWOOD & ASSOCIATE, P.C. ARCHITECTURE CORPORATION 52349 NORTH CAROLINA WILMINGTON, NC

JOHN R. SAWYER REGISTERED ARCHITECT 3428 NORTH CAROLINA WILMINGTON, N. CA.

Brunswick County Courthouse Addition & Renovations

Bolivia, NC

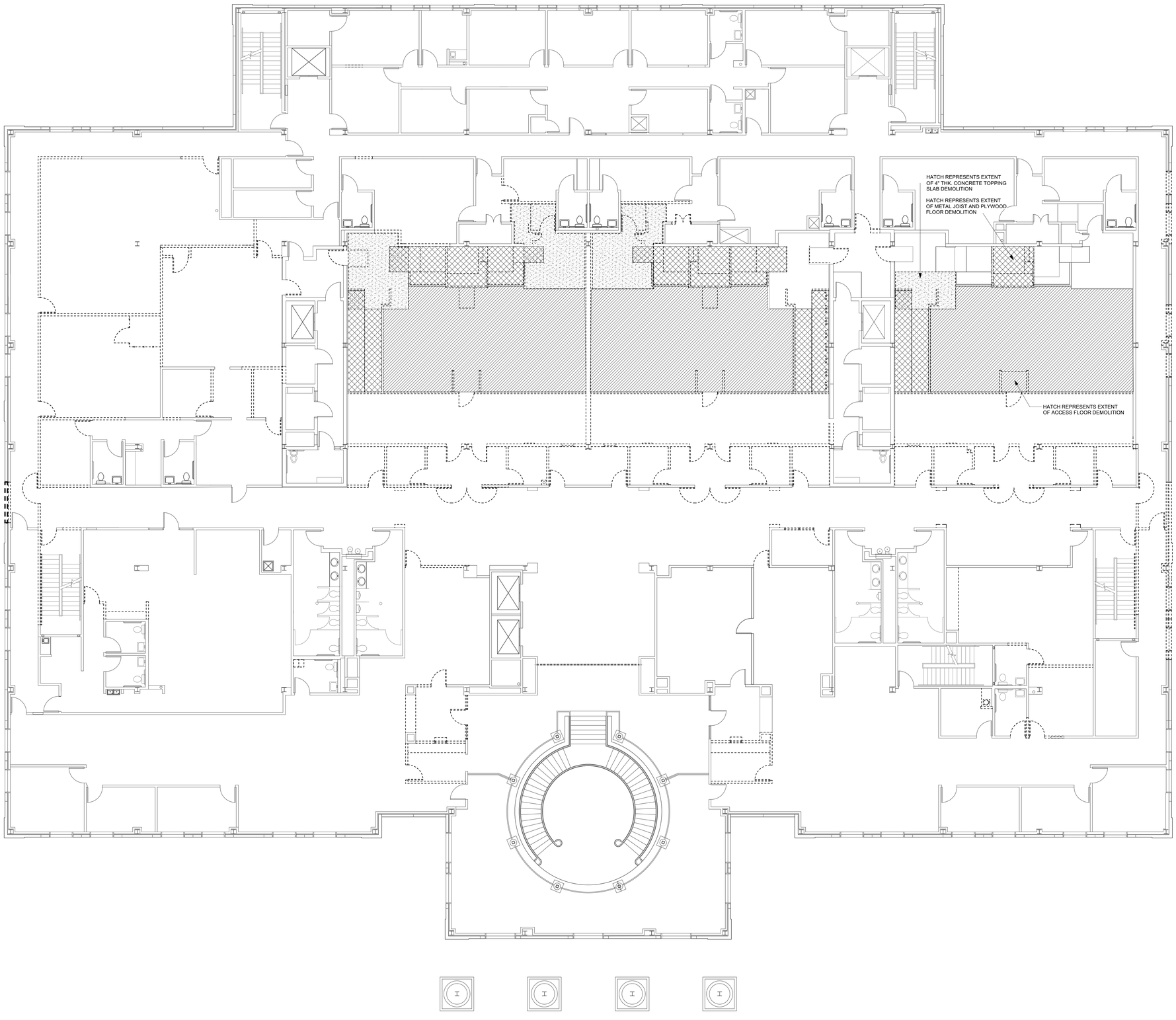
Construction Drawings
September 23, 2019

Revisions:
3 - ADDENDUM 3

First Floor Demolition Plan

AD1.0
01 of 03

© 2019 Sawyer Sherwood & Associate- All Rights Reserved



Demolition Legend	
	Existing to remain
	Remove wall
	Remove window
	Remove door, frame & hardware
	Remove/Salvage or Demolish
	Demolish 4" Concrete Topping Slab
	Demolish Metal Joist & Plywood floor
	Demolish Access fFoor

3

1 / AD1.1 Second Floor Demolition Plan
Scale: 1/8" = 1'-0"

Plan North

SAWYER SHERWOOD & ASSOCIATE ARCHITECTURE
124 Market St, Wilmington, NC 28401
910 762-0892 s2a3.com

CRISER TROUTMAN TANNER
CRISER TROUMAN TANNER
CONSULTING ENGINEERS
CRISER TROUTMAN TANNER
CONSULTING ENGINEERS NC
3809 Peachtree Ave., Suite 102
Wilmington, NC 28403
910.397.2929 Ph.
910.397.2973 Fax
www.cttengineering.com
Firm License Number: F-0113
#8240.00

CHEATHAM AND ASSOCIATES, P.A.
CONSULTING ENGINEERS
3412 ENTERPRISE DRIVE
WILMINGTON, NORTH CAROLINA 28405
PHONE: (910) 452-4210
FAX: (910) 452-4211
OFFICE@CHEATHAMPA.COM
WWW.CHEATHAMPA.COM
18048 NC LICENSE# C-1073

SAWYER SHERWOOD & ASSOCIATE, P.A. ARCHITECTURE, CORPORATION 52349 NORTH CAROLINA WILMINGTON, NC

JOHN R. SAWYER REGISTERED ARCHITECT 3428 11-1-2019 NORTH CAROLINA WILMINGTON, N.C.

Brunswick County Courthouse Addition & Renovations

Bolivia, NC

Construction Drawings
September 23, 2019

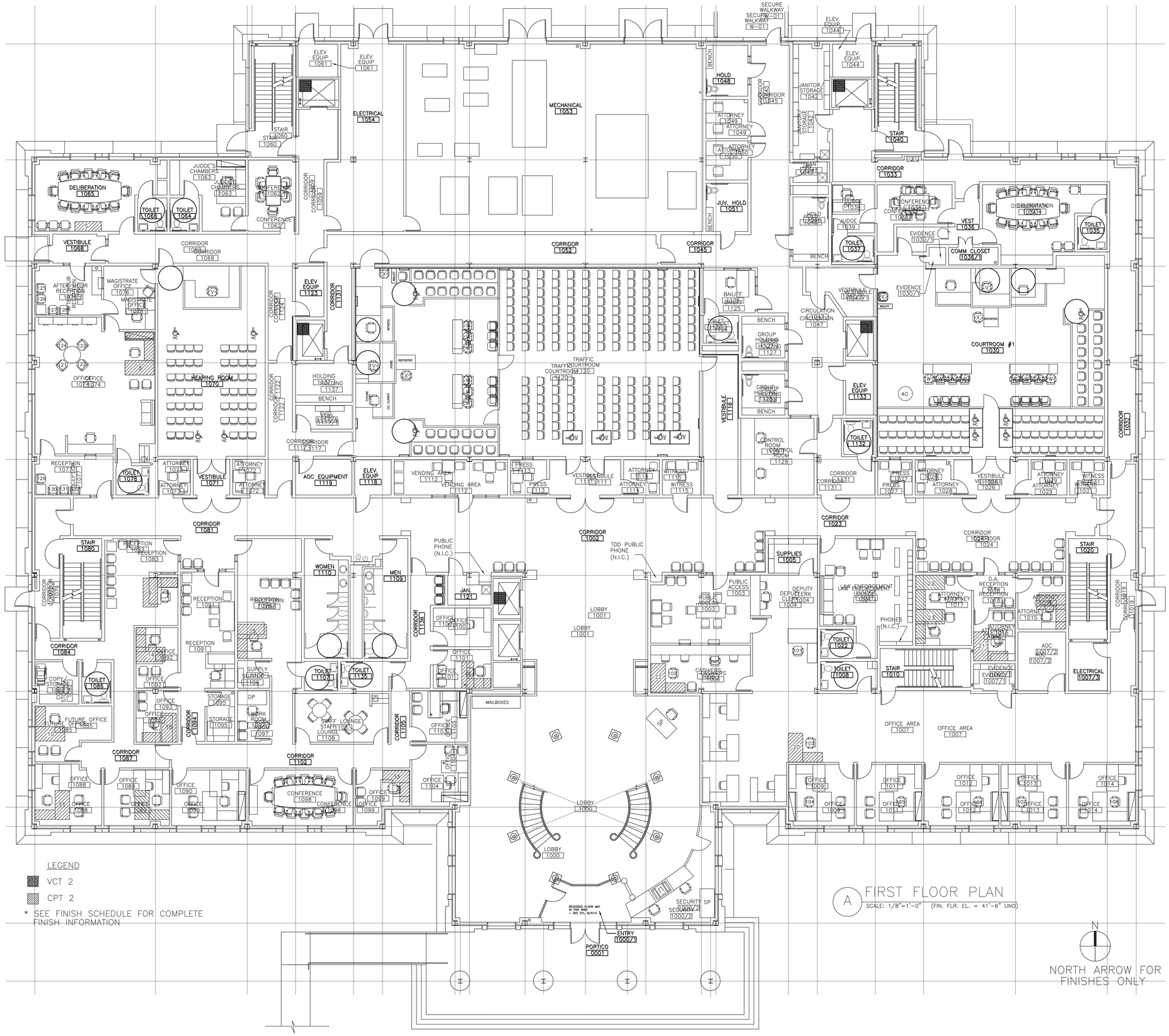
Revisions:
3 - ADDENDUM 3

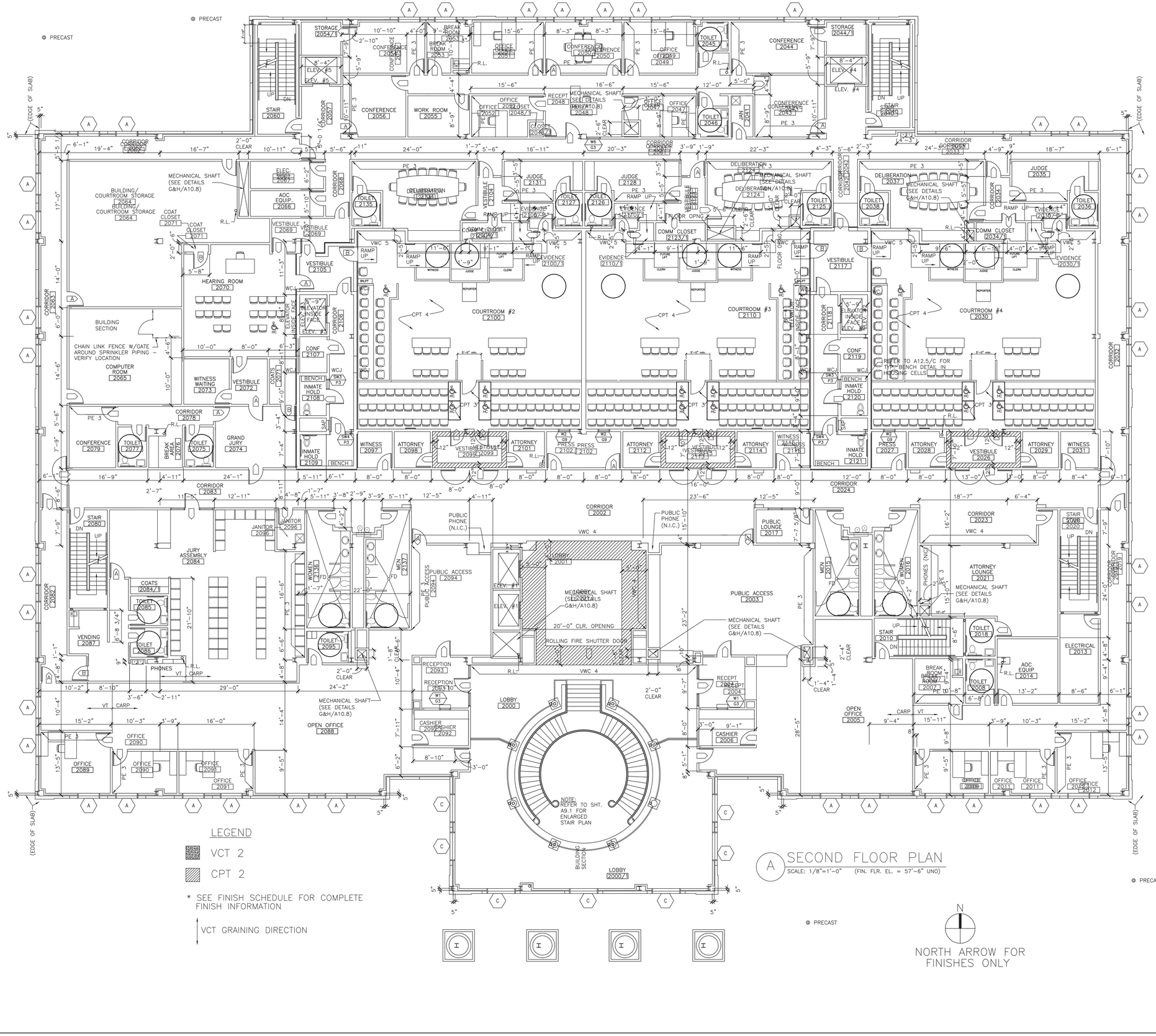
Second Floor Demolition Plan

AD1.1

02 of 03

© 2019 Sawyer Sherwood & Associate- All Rights Reserved


LEGEND
VCT 2
CPT 2
* SEE FINISH SCHEDULE FOR COMPLETE FINISH INFORMATION
A FIRST FLOOR PLAN
SCALE: 1/8"=1'-0" (FIN. FLR. EL. = 41'-6" UNO)
NORTH ARROW FOR FINISHES ONLY
MECHANICAL 1053
ELECTRICAL 1054
CORRIDOR 1052
CORRIDOR 1045
CORRIDOR 1033
HOLD 1048
JUV. HOLD 1051
JANITOR STORAGE 1042
COURTROOM #1 1030
TRAFFIC COURTROOM 1120
HEARING ROOM 1070
CORRIDOR 1081
CORRIDOR 1002
CORRIDOR 1023
CORRIDOR 1084
CORRIDOR 1087
CORRIDOR 1102
LOBBY 1001
LOBBY 1000
ENTRY 1000/1
PORTICO 0001
SECURITY SP 1000/2
MAILBOXES
STAIR 1080
STAIR 1060
STAIR 1040
STAIR 1010
STAIR 1020
ELEV. EQUIP 1061
ELEV. EQUIP 1044
ELEV. EQUIP 1123
ELEV. EQUIP 1133
ELEV. EQUIP 1118
AOC EQUIPMENT 1119
VESTIBULE 1068
VESTIBULE 1071
VESTIBULE 1116
VESTIBULE 1026
DELIBERATION 1065
DELIBERATION 1043
JUDGE'S CHAMBERS 1063
CONFERENCE 1064
CONFERENCE 1062
CONFERENCE 1098
CONFERENCE 1038
TOILET 1066
TOILET 1064
TOILET 1078
TOILET 1086
TOILET 1107
TOILET 1135
TOILET 1037
TOILET 1035
TOILET 1132
TOILET 1022
TOILET 1008
MAGISTRATE OFFICE 1076
AFTER HOUR RECEPTION 1075
RECEPTION 1083
RECEPTION 1091
RECEPTION 1086
RECEPTION 1072
RECEPTION 1029
WOMEN 1110
MEN 1109
JAN. 1121
SUPPLY STORAGE 1105
STAFF LOUNGE 1106
COPY STORAGE 1082
FUTURE OFFICE 1085
STORAGE 1095
DP 1096
CLERK ROOM 1097
OFFICE 1092
OFFICE 1093
OFFICE 1094
OFFICE 1088
OFFICE 1089
OFFICE 1090
OFFICE 1099
OFFICE 1100
OFFICE 1101
OFFICE 1103
OFFICE 1104
OFFICE 1009
OFFICE 1011
OFFICE 1012
OFFICE 1013
OFFICE 1014
OFFICE 1017
OFFICE 1015
OFFICE 1029
OFFICE 1028
OFFICE 1027
OFFICE 1007
BENCH
BAILIFF 1125
CIRCULATION 1047
GROUP HOLDING 1127
GROUP HOLDING 1128
HOLDING 1137
CONTROL ROOM 1129
EVID. STOR. 1117/1
EVID. STOR. 1117/2
VENDING AREA 1112
PRESS 1113
ATTORNEY 1114
WITNESS 1115
ATTORNEY 1072
ATTORNEY 1073
ATTORNEY 1074
ATTORNEY 1049
ATTORNEY 1050
ATTORNEY 1028
ATTORNEY 1029
ATTORNEY 1031
PUBLIC ACCESS 1003
PUBLIC ACCESS 1003
SUPPLIES 1005
DEPUTY CLERKS 1004
CASHIERS 1006
LAW ENFORCEMENT LOUNGE 1021
D.A. RECEPTION 1016
EVIDENCE 1030/1
COMM. CLOSET 1036/1
VEST 1036
JUDGE 1039
JUDGE 1040
JUDGE 1041
HOLD 1046
JANITOR 1042
CORRIDOR 1045
CORRIDOR 1069
CORRIDOR 1122
CORRIDOR 1117
CORRIDOR 1131
CORRIDOR 1024
CORRIDOR 1032
CORRIDOR 1079
CORRIDOR 1109
CORRIDOR 1136
CORRIDOR 1105
CORRIDOR 1094
CORRIDOR 1097
CORRIDOR 1100
CORRIDOR 1103
CORRIDOR 1104
CORRIDOR 1007
CORRIDOR 1007
CORRIDOR 1007



FreemanWhite

BRUNSWICK COUNTY COURTHOUSE

BRUNSWICK COUNTY NORTH CAROLI

BOLIVIA, NC

SECOND FLOOR PLAN

project number
■ 3800200

date
■ DATE: 3/20/2000

seals

© 2000 By FreemanWhite, Inc.

drawn by
■ CK/DT/ESH

checked by
■ SFS

revisions
■
■
■
■
■
■
■

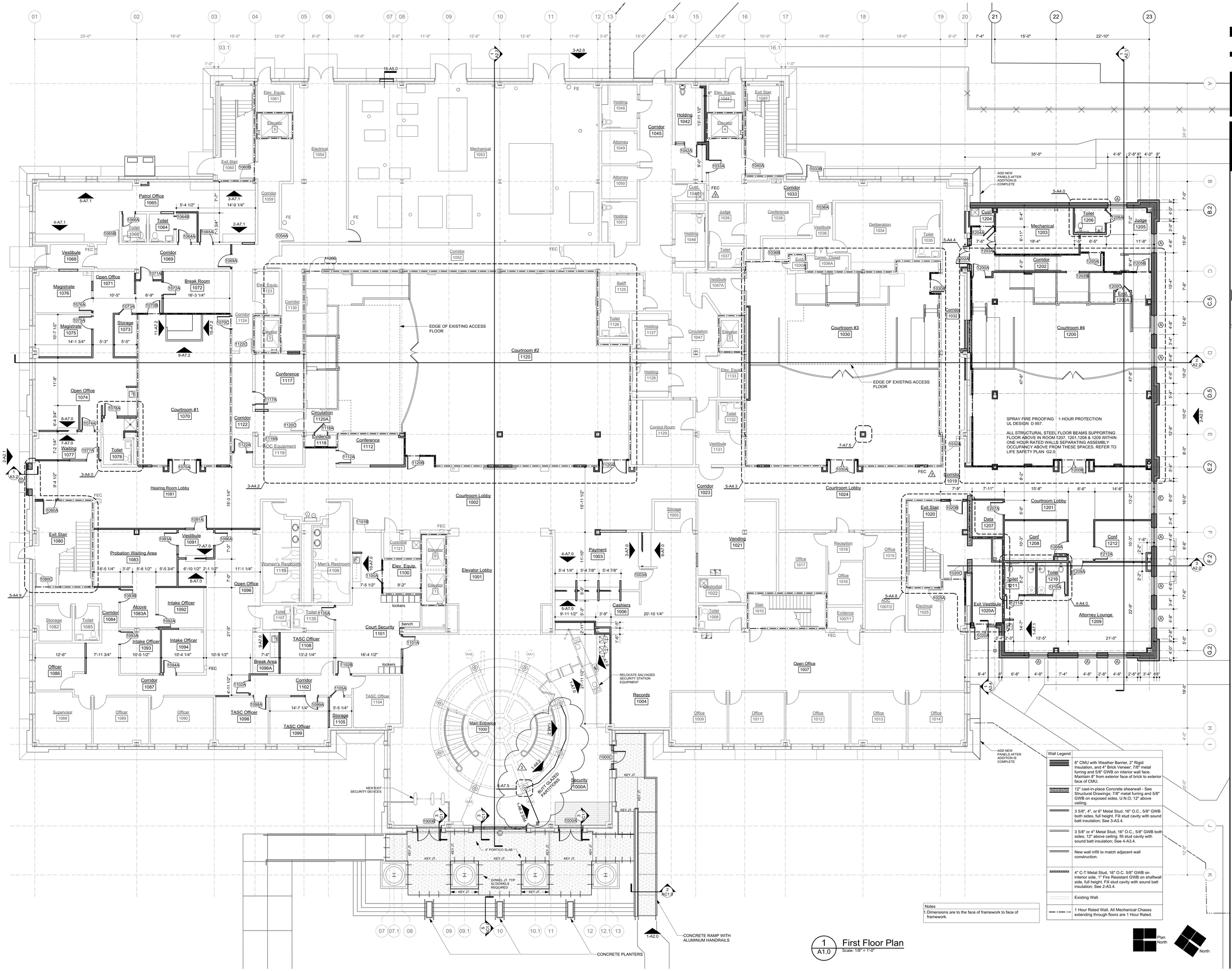
cpr number
■

date
■

includes sheets
■
■
■
■
■
■

THIS DRAWING REFLECTS ALL CHANGES PREVIOUSLY MADE ON THIS SHEET. VERIFY THAT PREVIOUS CHANGES HAVE BEEN INCORPORATED INTO THE CONTRACT BEFOR PROCEEDING WITH ANY WORK NOT SPECIFICALLY REFERENCED BY THIS CPR.

sheet number
■ IN1.0.


Courtroom #1 1070
Courtroom #2 1120
Courtroom #3 1030
Courtroom #4 1200
Patrol Office 1065
Vestibule 1068
Corridor 1069
Open Office 1071
Break Room 1072
Magistrate 1076
Magistrate 1075
Storage 1073
Open Office 1074
Waiting 1077
Toilet 1078
Hearing Room Lobby 1081
Exit Stair 1080
Probation Waiting Area 1083
Open Office 1096
Intake Officer 1092
Intake Officer 1093
Intake Officer 1094
Alcove 1083A
Corridor 1084
Storage 1082
Toilet 1085
Officer 1086
Corridor 1087
Supervisor 1088
Officer 1089
Officer 1090
Vestibule 1091
Women's Restroom 1110
Men's Restroom 1109
Custodial 1121
Elev. Equip. 1100
Court Security 1101
Break Area 1096A
TASC Officer 1108
TASC Officer 1098
TASC Officer 1099
TASC Officer 1104
Storage 1105
Corridor 1102
Corridor 1052
Corridor 1059
Corridor 1130
Corridor 1124
Corridor 1122
Corridor 1023
Corridor 1019
Corridor 1032
Courtroom Lobby 1002
Courtroom Lobby 1024
Courtroom Lobby 1201
Elevator Lobby 1001
Main Entrance 1000
Security 1000A
Conference 1117
Conference 1112
Circulation 1120A
Evidence 1118
AOC Equipment 1119
Judge 1039
Conference 1038
Deliberation 1034
Toilet 1035
Vestibule 1036
Comm. Closet 1036A
Evid. 1030A
Holding 1048
Holding 1042
Holding 1051
Attorney 1049
Attorney 1050
Corridor 1045
Cust. 1043
Holding 1048
Holding 1127
Holding 1128
Circulation 1047
Vestibule 1047A
Toilet 1037
Toilet 1126
Toilet 1132
Bailiff 1125
Elev. Equip. 1133
Control Room 1129
Vestibule 1131
Elevator 1
Elevator 2
Elevator 3
Elevator 4
Elevator 5
Elevator 6
Exit Stair 1040
Exit Stair 1060
Exit Stair 1020
Elev. Equip. 1044
Elev. Equip. 1061
Elev. Equip. 123
Electrical 1054
Mechanical 1053
Mechanical 1203
Storage 1005
Vending 1021
Payment 1003
Cashiers 1006
Custodial 1022
Toilet 1008
Stair 1010
Office 1017
Office 1016
Office 1015
Reception 1018
Evidence 1007/1
Electrical 1025
Open Office 1007
Records 1004
Office 1009
Office 1011
Office 1012
Office 1013
Office 1014
Cust. 1204
Toilet 1206
Judge 1205
Conf 1208
Conf 1212
Data 1207
Toilet 1210
Toilet 1211
Attorney Lounge 1209
Exit Vestibule 1020A
Evid. 1200A
Toilet 1035
Toilet 1107
Toilet 1135
Toilet 1135A
Toilet 1037
Toilet 1126
Toilet 1132
Toilet 1008
Toilet 1211
Custodial 1121
Custodial 1022
Elevator 1
Elevator 2
Elevator 3
Elevator 4
Elevator 5
Elevator 6
Holding 1048
Holding 1042
Holding 1051
Holding 1127
Holding 1128

SPRAY FIRE PROOFING 1 HOUR PROTECTION
UL DESIGN D 957.

ALL STRUCTURAL STEEL FLOOR BEAMS
SUPPORTING FLOOR ABOVE PROVIDE IN ALL
AREA WITHIN ONE HOUR RATED WALLS
SEPARATING THIS ASSEMBLY OCCUPANCY
FROM OTHER OCCUPANCIES. REFER TO LIFE
SAFETY PLAN G 2.1

ROOF FRAMING ABOVE THIS SPACE
DOES NOT REQUIRE FIREPROOFING

ROOF FRAMING ABOVE THIS SPACE
DOES NOT REQUIRE FIREPROOFING

SPRAY FIRE PROOFING 1 HOUR PROTECTION
UL DESIGN D 957.

ALL STRUCTURAL STEEL FLOOR BEAMS SUPPORTING
FLOOR ABOVE PROVIDE IN ALL AREA WITHIN ONE
HOUR RATED WALLS SEPARATING THIS ASSEMBLY
OCCUPANCY FROM OTHER OCCUPANCIES. REFER TO
LIFE SAFETY PLAN G 2.1

Wall Legend	
	8" CMU with Weather Barrier, 2" Rigid Insulation, and Stucco Finish; 7/8" metal furring and 5/8" GWB on interior wall face.
	6" Metal Stud, 16" O.C., 5/8" Exterior Sheathing with Weather Barrier, 2" Rigid Insulation, and Stucco Finish
	12" cast-in-place Concrete shearwall - See Structural Drawings; 7/8" metal furring and 5/8" GWB on exposed sides, 12" above ceiling.
	3 5/8", 4", or 6" Metal Stud, 16" O.C., 5/8" GWB both sides, full height. Fill stud cavity with sound batt insulation; See 3-A3.4.
	3 5/8" or 4" Metal Stud, 16" O.C., 5/8" GWB both sides, 12" above ceiling. Fill stud cavity with sound batt insulation; See 4-A3.4.
	New wall infill to match adjacent wall construction.
	4" CT Metal Stud, 16" O.C. 5/8" GWB on interior side, 1" GWB on shaftwall side, full height. Fill stud cavity with sound batt insulation; See 2-A3.4
	Existing Wall.
	1 Hour Rated Wall. All Mechanical Chases extending through floors are 1 Hour Rated.

1 A1.1 Second Floor Plan
Scale: 1/8" = 1'-0"

SAWYER SHERWOOD & ASSOCIATE ARCHITECTURE
124 Market St, Wilmington, NC 28401
910 762-0892 s2a3.com

CRISER TROUTMAN TANNER
CRISER TROUMAN TANNER CONSULTING ENGINEERS
CRISER TROUTMAN TANNER CONSULTING ENGINEERS NC
3809 Peachtree Ave., Suite 102
Wilmington, NC 28403
910.397.2929 Ph.
910.397.2971 Fax
www.cttengineering.com
Firm License Number: F-0113
#8240.00

CHEATHAM AND ASSOCIATES, P.A.
CONSULTING ENGINEERS
3412 ENTERPRISE DRIVE
WILMINGTON, NORTH CAROLINA 28405
PHONE: (910) 452-4210
FAX: (910) 452-4211
OFFICE@CHEATHAMPA.COM
WWW.CHEATHAMPA.COM
18048 NC LICENSE# C-1073

SAWYER SHERWOOD & ASSOCIATE, P.A. 52349 NORTH CAROLINA WILMINGTON, NC

JOHN R. SAWYER REGISTERED ARCHITECT 3428 NORTH CAROLINA WILMINGTON, N.C.

Brunswick County Courthouse Addition & Renovations

Bolivia, NC

Construction Drawings
September 23, 2019

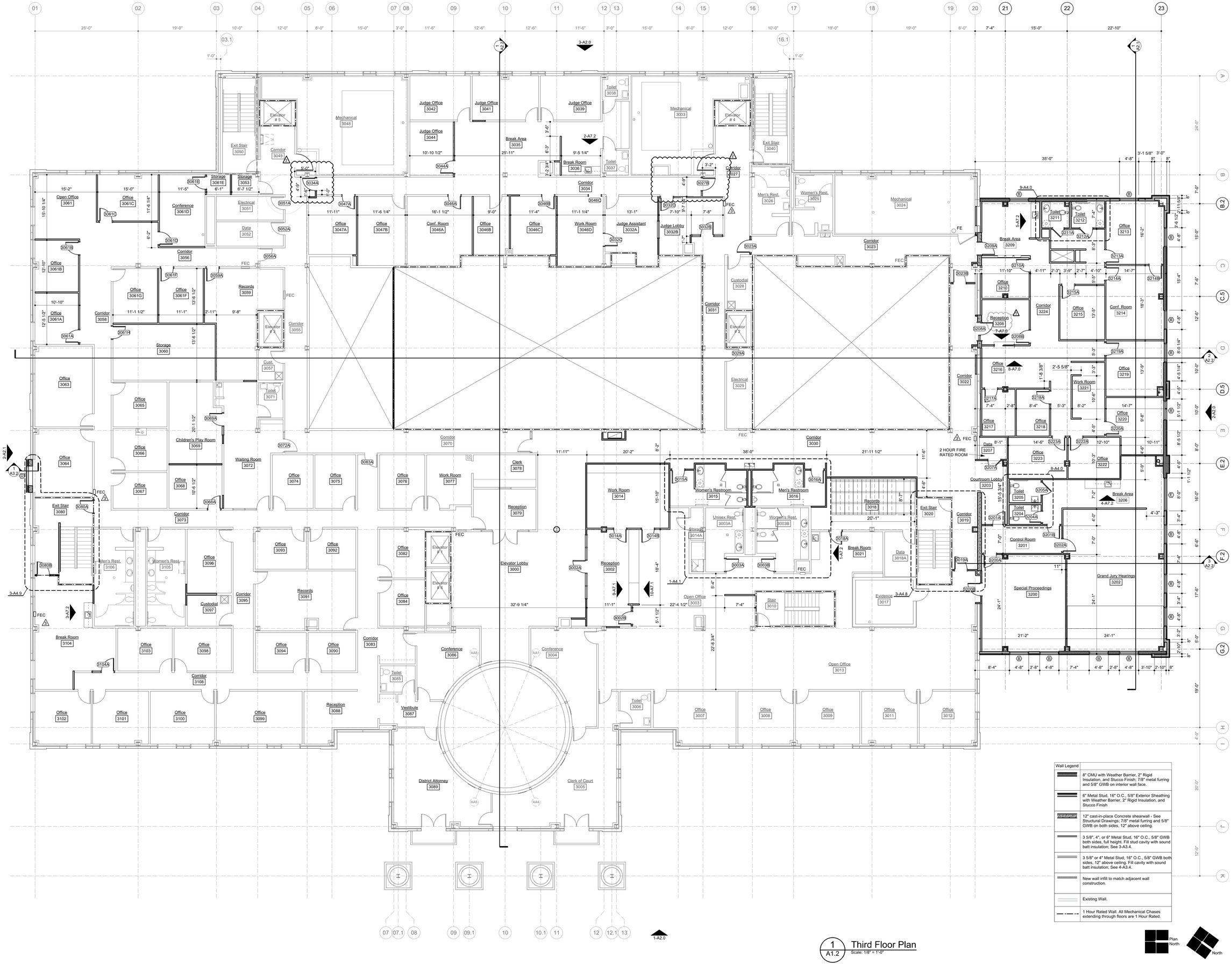
Revisions:

1 - ADDENDUM 1
2 - ADDENDUM 2
3 - ADDENDUM 3

Second Floor Plan

A1.1

© 2019 Sawyer Sherwood & Associate- All Rights Reserved



1 / A1.2 Third Floor Plan
Scale: 1/8" = 1'-0"

SAWYER SHERWOOD & ASSOCIATE ARCHITECTURE
124 Market St, Wilmington, NC 28401
910 762-0892 s2s3.com

CRISER TROUTMAN TANNER
CRISER TROUMAN TANNER CONSULTING ENGINEERS
CRISER TROUTMAN TANNER CONSULTING ENGINEERS NC
3809 Peachtree Ave., Suite 102
Wilmington, NC 28403
910.397.2929 Ph.
910.397.2971 Fax
www.cttengineering.com
Firm License Number: F-0113
#8240.00

CHEATHAM AND ASSOCIATES, P.A.
CONSULTING ENGINEERS
3412 ENTERPRISE DRIVE
WILMINGTON, NORTH CAROLINA 28405
PHONE: (910) 452-4210
FAX: (910) 452-4211
OFFICE@CHEATHAMPA.COM
WWW.CHEATHAMPA.COM
NC LICENSE# C-1073
18048

SAWYER SHERWOOD & ASSOCIATE, P.A. ARCHITECTURE 52349 WILMINGTON, NC
JOHN R. SAWYER REGISTERED ARCHITECT 3428 NORTH CAROLINA WILMINGTON, N.C.

Brunswick County Courthouse Addition & Renovations

Bolivia, NC

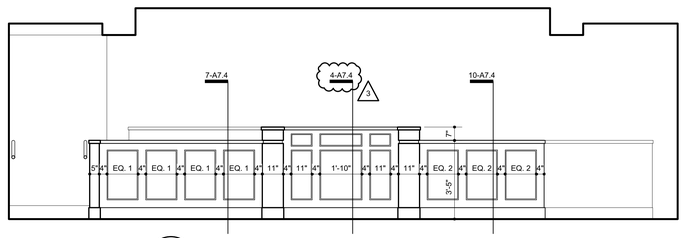
Construction Drawings
September 23, 2019

Revisions:
2 Addenda #2
3 Addenda #3

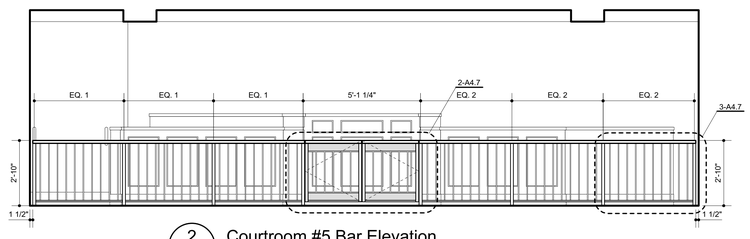
Third Floor Plan

A1.2
03 of 43

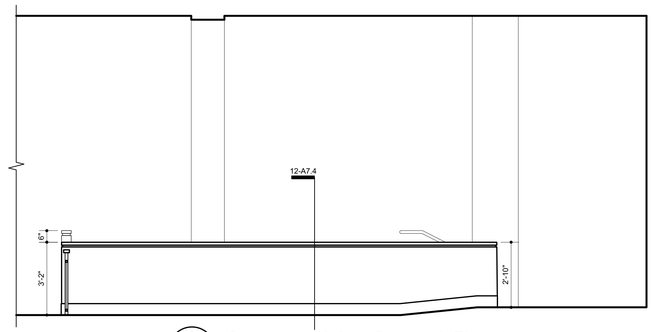
© 2019 Sawyer Sherwood & Associate- All Rights Reserved



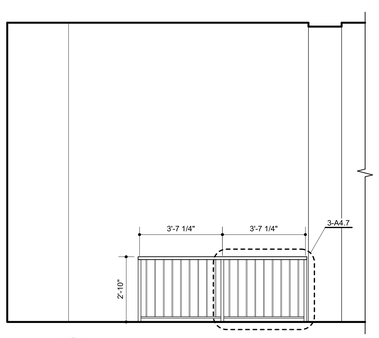
1 A4.5 Courtroom #5 Judge Casework Elevation
Scale: 3/8" = 1'-0"



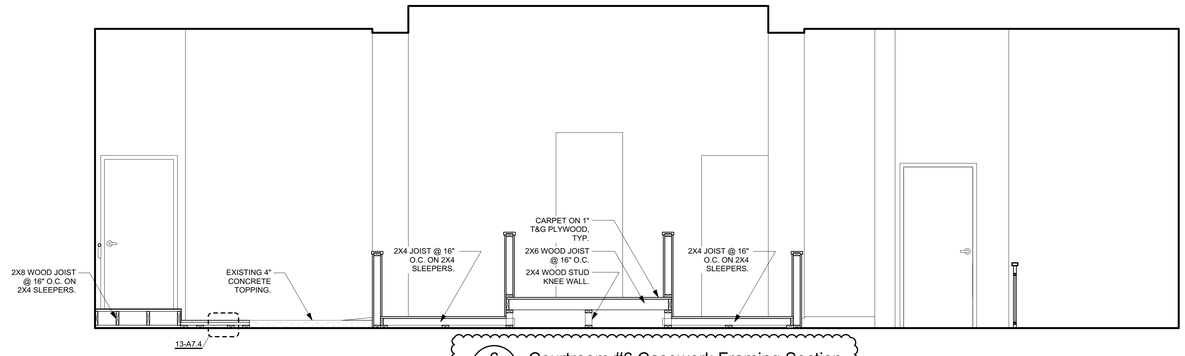
2 A4.5 Courtroom #5 Bar Elevation
Scale: 3/8" = 1'-0"



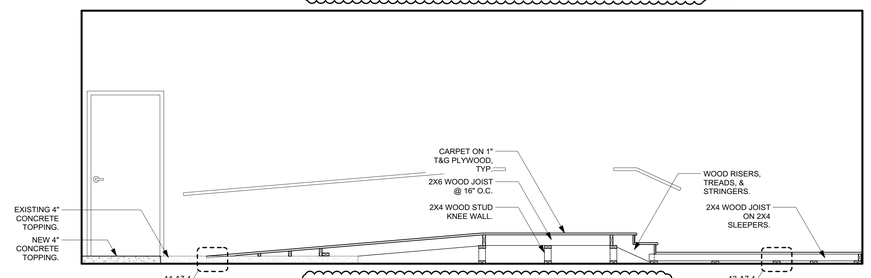
3 A4.5 Courtroom #6 Jury Casework Elevation
Scale: 3/8" = 1'-0"



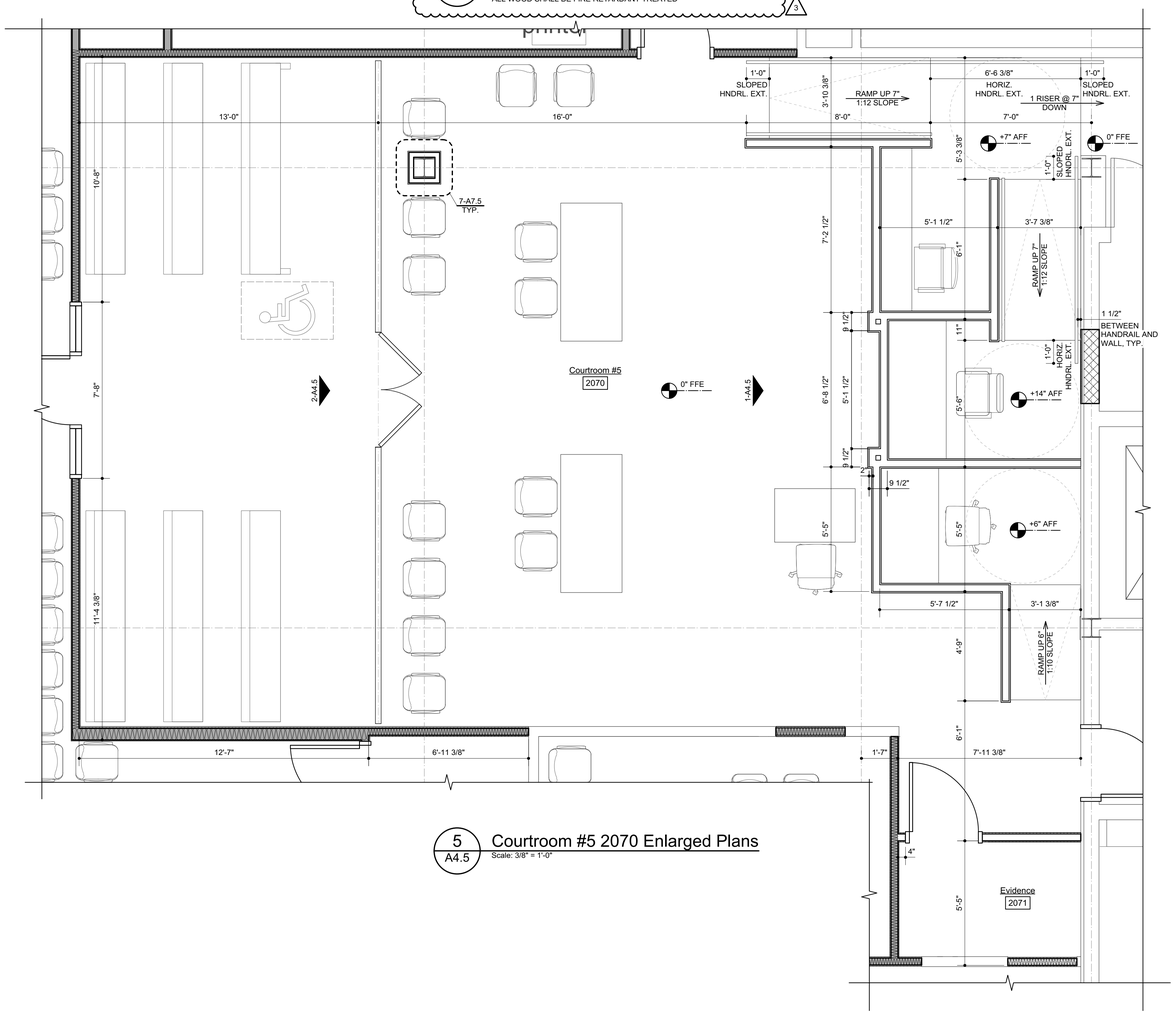
4 A4.5 Courtroom #6 Barrier Elevation
Scale: 3/8" = 1'-0"



6 A4.5 Courtroom #6 Casework Framing Section
Scale: 3/8" = 1'-0"
ALL WOOD SHALL BE FIRE RETARDANT TREATED



7 A4.5 Courtroom #6 Ramp Framing Section
Scale: 3/8" = 1'-0"
ALL WOOD SHALL BE FIRE RETARDANT TREATED



5 A4.5 Courtroom #5 2070 Enlarged Plans
Scale: 3/8" = 1'-0"

SAWYER SHERWOOD & ASSOCIATE ARCHITECTURE
124 Market St, Wilmington, NC 28401
910 762-0892 s2a3.com

CRISER TROUTMAN TANNER
CRISER TROUMAN TANNER CONSULTING ENGINEERS
CRISER TROUTMAN TANNER CONSULTING ENGINEERS NC
3809 Peachtree Ave., Suite 102
Wilmington, NC 28403
910.397.2929 Ph.
910.397.2971 Fax
www.cttengineering.com
Firm License Number: F-0113
#8240.00

CHEATHAM AND ASSOCIATES, P.A.
CONSULTING ENGINEERS
3412 ENTERPRISE DRIVE
WILMINGTON, NORTH CAROLINA 28405
PHONE: (910) 452-4210
FAX: (910) 452-4211
OFFICE@CHEATHAMPA.COM
WWW.CHEATHAMPA.COM
NC LICENSE# C-1073
18048

SAWYER SHERWOOD & ASSOCIATE P.A. ARCHITECTURAL CORPORATION 52349 NORTH CAROLINA WILMINGTON, NC

JOHN R. SAWYER REGISTERED ARCHITECT 3428 NORTH CAROLINA WILMINGTON, N.C.

Brunswick County Courthouse Addition & Renovations

Bolivia, NC

Construction Drawings
September 23, 2019

Revisions:

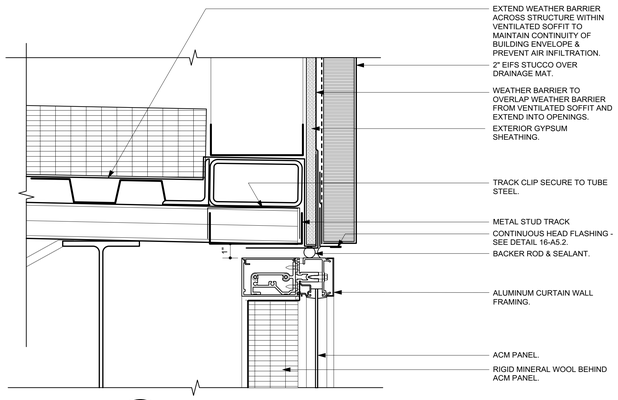
3 ADDENDUM 3

Courtroom #5 Enlarged Plan & Casework

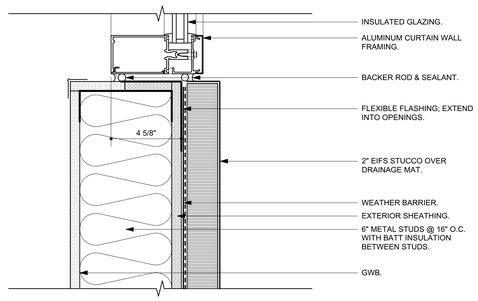
A4.5

21 of 43

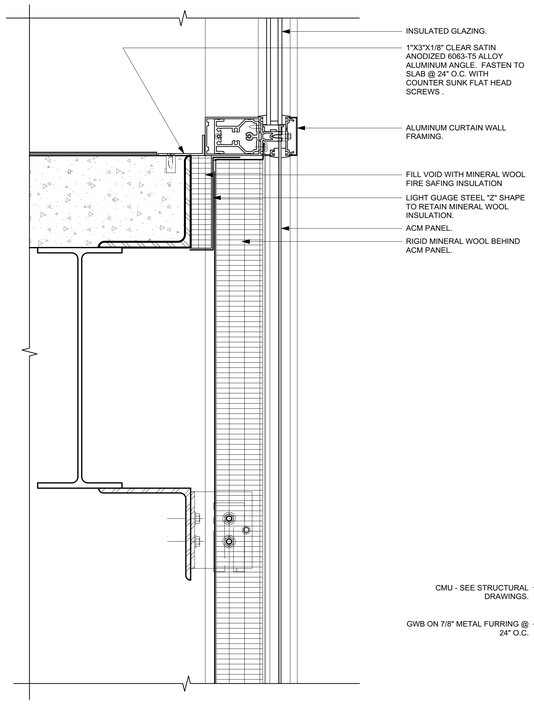
© 2019 Sawyer Sherwood & Associate- All Rights Reserved



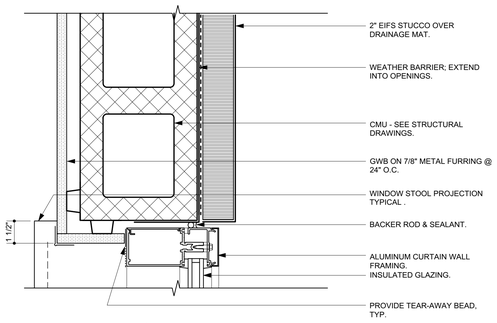
1 A5.2 **Head Detail @ North Curtain Wall**
Scale: 3" = 1'-0"



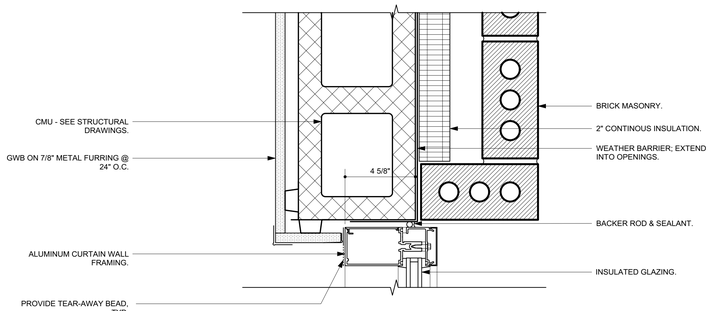
2 A5.2 **Metal Stud Detail @ North Curtain Wall Jamb**
Scale: 3" = 1'-0"



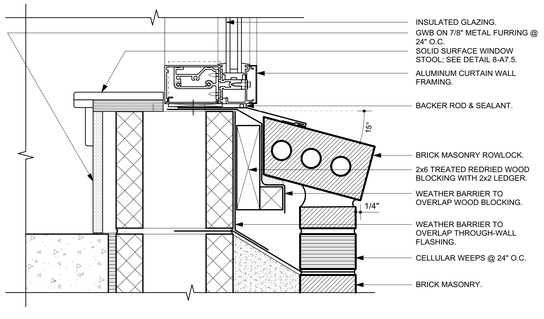
9 A5.2 **Floor Detail @ North Curtain Wall**
Scale: 3" = 1'-0"



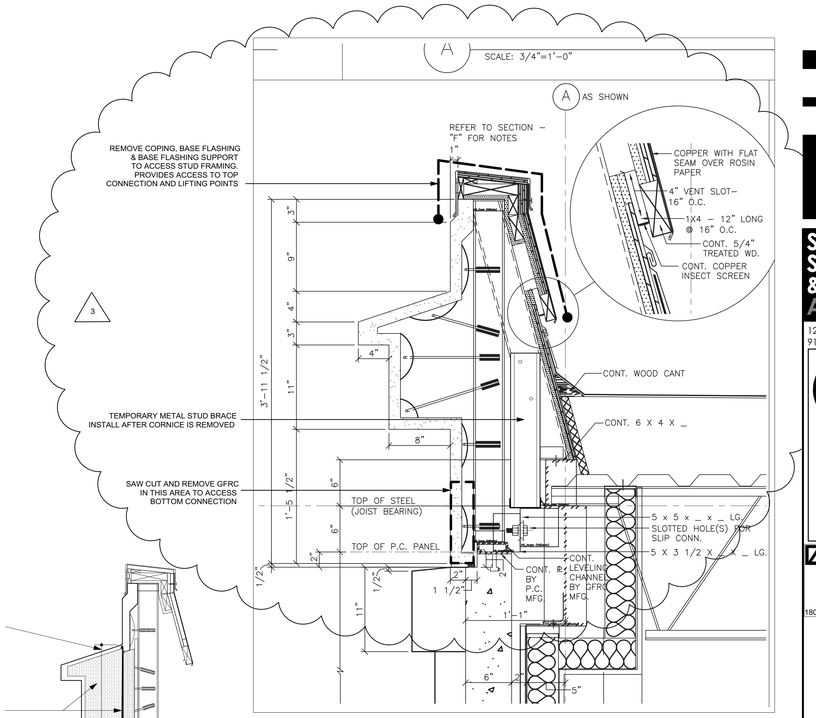
6 A5.2 **EIFS Jamb Detail @ North Curtain Wall**
Scale: 3" = 1'-0"

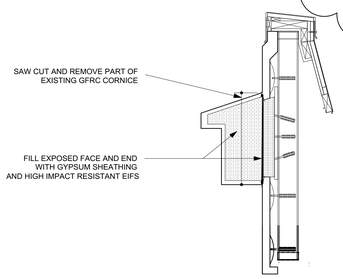


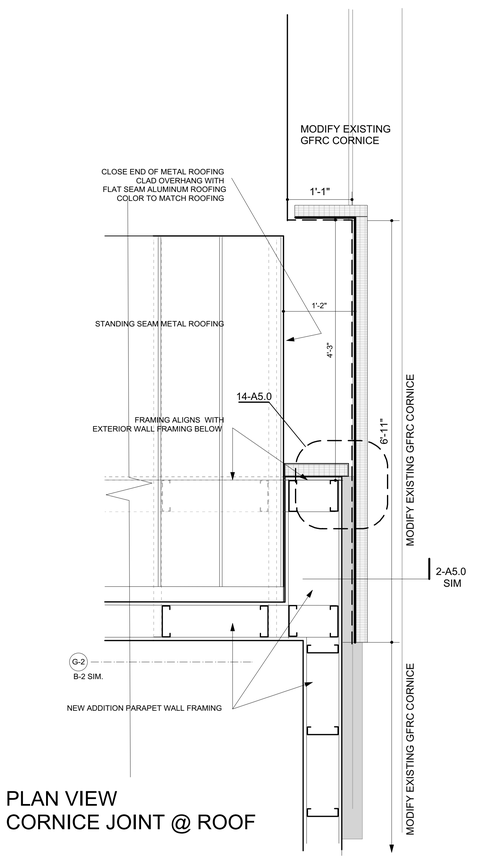
10 A5.2 **Brick Jamb Detail @ North Curtain Wall**
Scale: 3" = 1'-0"



13 A5.2 **Sill Detail @ North Curtain Wall**
Scale: 3" = 1'-0"

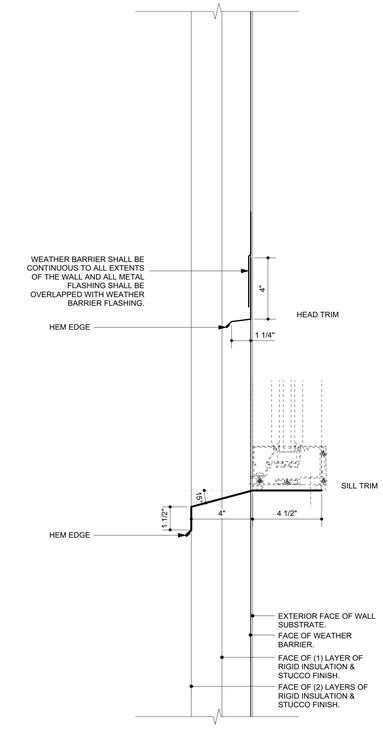






PLAN VIEW
CORNICE JOINT @ ROOF

15 A5.2 **GFRC Cornice @ Roof**
Scale: 1" = 1'-0"



16 A5.2 **Metal Trim Details**
Scale: 3" = 1'-0"

SAWYER SHERWOOD & ASSOCIATE ARCHITECTURE
124 Market St, Wilmington, NC 28401
910 762-0892 s2a3.com

CRISER TROUTMAN TANNER
CRISER TROUMAN TANNER CONSULTING ENGINEERS
CRISER TROUTMAN TANNER CONSULTING ENGINEERS NC
3809 Peachtree Ave., Suite 102
Wilmington, NC 28403
910.397.2929 Ph.
910.397.2973 Fax
www.cttengineering.com
Firm License Number: F-0113
#8240.00

CHEATHAM AND ASSOCIATES, P.A.
CONSULTING ENGINEERS
3412 ENTERPRISE DRIVE
WILMINGTON, NORTH CAROLINA 28405
PHONE: (910) 452-4210
FAX: (910) 452-4211
OFFICE@CHEATHAMPA.COM
WWW.CHEATHAMPA.COM
18048 NC LICENSE# C-1073

SAWYER SHERWOOD & ASSOCIATE, PA REGISTERED ARCHITECTURE CORPORATION 52349 NORTH CAROLINA WILMINGTON, NC

JOHN R. SAWYER REGISTERED ARCHITECT 3428 NORTH CAROLINA WILMINGTON, N.C.

Brunswick County Courthouse Addition & Renovations

Bolivia, NC

Construction Drawings
September 23, 2019

Revisions:

3 ADDENDUM #3

Details

A5.2

© 2019 Sawyer Sherwood & Associate- All Rights Reserved

Finish Schedule

ID	ROOM NAME	FLOOR FINISH	BASE MATERIAL	NORTH WALL FINISH	EAST WALL FINISH	SOUTH WALL FINISH	WEST WALL FINISH	CEILING	CEILING HT	REMARKS
1000	Main Entrance	New & Exist.Terrazo & Entrance Mat*	Wood	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ETR	See A1.4	*see plans for extents
1000A	Security	New & Existing Terrazo	Wood	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ETR	See A1.4	
1001	Elevator Lobby	LVT	Wood	Painted GWB	Painted GWB	Painted GWB	Painted GWB	EG-ACT	See A1.4	
1002	Courtroom Lobby	LVT	Wood	Painted GWB	Painted GWB	Painted GWB	Painted GWB	GWB & EG-ACT	See A1.4	*see plans for extents
1003	Payment	LVT	Wood	Painted GWB	Painted GWB	Painted GWB	Painted GWB	EG-ACT	See A1.4	
1004	Records	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	EG-ACT	See A1.4	
1006	Cashiers	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	EG-ACT	See A1.4	
1007	Open Office	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	EG-ACT	See A1.4	
1019	Corridor	LVT	Wood	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT	See A1.4	
1020	Exit Stair	RSF, Resilient Treads,Risers & Landing	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT & GWB	See A1.4	Acoustic Ceiling Panels; Paint Stair Structure & Rails
1020A	Exit Vestibule	RSF	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT	See A1.4	
1021	Vending	LVT	Wood	Painted GWB	Painted GWB	Painted GWB	Painted GWB	EG-ACT	See A1.4	
1023	Corridor	LVT	Wood	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT	See A1.4	
1024	Courtroom Lobby	LVT	Wood	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT	See A1.4	
1030	Courtroom #3	CPT	Wood	Painted GWB	Painted GWB	Painted GWB	Painted GWB	EG-ACT,ACT, EXIST. GWB	See A1.4	Add Crown Moulding at New Const.; Paint Existing
1032	Corridor	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT	See A1.4	
1033	Corridor	ETR	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	EG-ACT	See A1.4	
1042	Holding	Concrete	-	Painted CMU	Painted CMU	Painted CMU	Painted CMU	GWB	See A1.4	
1045	Corridor	Concrete	RB	Painted CMU	-	Painted CMU	Painted CMU	GWB	See A1.4	
1064	Toilet	ETR & new CT	ETR & new CT	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT & EG-ACT	See A1.4	
1065	Patrol Office	VCT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT & EG-ACT	See A1.4	
1068	Vestibule	ETR	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	EG-ACT	See A1.4	
1069	Corridor	ETR & VCT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT & EG-ACT	See A1.4	
1070	Courtroom #1	CPT	Wood	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT & EG-ACT	See A1.4	Add Crown Moulding at New Const.; Paint Existing
1071	Open Office	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT	See A1.4	
1072	Break Room	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	EG-ACT	See A1.4	
1073	Storage	VCT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT	See A1.4	
1074	Open Office	CPT & VCT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	EG-ACT	See A1.4	
1075	Magistrate	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	EG-ACT	See A1.4	
1076	Magistrate	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	EG-ACT	See A1.4	
1077	Waiting	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	EG-ACT	See A1.4	
1078	Toilet	ETR & CT	ETR & CT	Painted GWB	Painted GWB	Painted GWB	Painted GWB	GWB	See A1.4	PT Wainscot
1080	Exit Stair	RSF, Resilient Treads,Risers & Landing	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT & GWB	See A1.4	Acoustic Ceiling Panels, Paint Stair Structure & Rails
1081	Hearing Room Lobby	LVT	Wood	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT & EG-ACT	See A1.4	
1083	Probation Waiting Area	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT	See A1.4	
1083A	Alcove	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT	See A1.4	
1084	Corridor	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT & EG-ACT	See A1.4	
1086	Officer	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	EG-ACT	See A1.4	
1087	Corridor	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	EG-ACT	See A1.4	
1091	Vestibule	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT	See A1.4	
1092	Intake Officer	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT	See A1.4	
1093	Intake Officer	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT	See A1.4	
1094	Intake Officer	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT	See A1.4	
1096	Open Office	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT	See A1.4	
1096A	Break Area	VCT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT	See A1.4	
1098	TASC Officer	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	EG-ACT	See A1.4	
1099	TASC Officer	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT	See A1.4	
1100	Elevator Equipment	Concrete	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	Open to Structure	See A1.4	
1101	Court Security	CPT & VCT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT	See A1.4	
1102	Corridor	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	EG-ACT	See A1.4	
1105	Storage	VCT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT	See A1.4	
1108	TASC Officer	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	EG-ACT	See A1.4	
1112	Conference Room	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	EG-ACT	See A1.4	
1117	Conference Room	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT	See A1.4	
1118	Evidence	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	GWB	See A1.4	
1120	Courtroom #2	CPT	Wood	Painted GWB	Painted GWB	Painted GWB	Painted GWB	EG-ACT,ACT, EXIST. GWB	See A1.4	Add Crown Moulding at New Const.; Paint Existing
1120A	Circulation	CPT	Wood	Painted GWB	Painted GWB	Painted GWB	Painted GWB	EG-ACT	See A1.4	
1122	Corridor	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	EG-ACT	See A1.4	
1200	Courtroom #4	CPT	Wood	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT & GWB	See A1.4	
1200A	Evidence	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	Open		
1201	Courtroom Lobby	LVT & CPT	Wood	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT	See A1.4	
1202	Corridor	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT	See A1.4	
1203	Mechanical	Concrete	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	Open to Structure	See A1.4	
1204	Custodial	Concrete	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	Open to Structure	See A1.4	
1205	Judge	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT	See A1.4	
1206	Toilet	PT	PT	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT	See A1.4	PT Wainscot
1207	Data	Concrete	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	Open to Structure	See A1.4	
1208	Conference Room	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT	See A1.4	
1209	Attorney Lounge	CPT & VCT	Wood	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT	See A1.4	
1210	Toilet	PT	PT	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT	See A1.4	PT Wainscot
1211	Toilet	PT	PT	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT	See A1.4	PT Wainscot
1212	Conference Room	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT	See A1.4	
2001	Elevator Lobby	LVT	Wood	Painted GWB	Painted GWB	Painted GWB	Painted GWB	EG-ACT	See A1.5	
2002	Public Waiting	LVT	Wood	Painted GWB	Painted GWB	Painted GWB	Painted GWB	EG-ACT & GWB	See A1.5	
2004	Reception	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT	See A1.5	
2005	Open Office	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT & EG-ACT	See A1.5	
2006	Corridor	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	EG-ACT	See A1.5	
2008	Toilet	ETR	ETR	Painted GWB	Painted GWB	Painted GWB	Painted GWB	EG-ACT	See A1.5	
2014	AOC	VCT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	Open	See A1.5	
2017	Custodial	PT	PT	Painted GWB	Painted GWB	Painted GWB	Painted GWB	EG-ACT	See A1.5	
2018	Toilet	ETR	ETR	Painted GWB	Painted GWB	Painted GWB	Painted GWB	EG-ACT	See A1.5	
2019	Corridor	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT	See A1.5	
2020	Exit Stair	RSF, Resilient Treads,Risers & Landing	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT	See A1.5	Acoustic Ceiling Panels; Paint Stair Structure & Rails
2021	50B Intake	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	EG-ACT	See A1.5	
2021A	Office	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT	See A1.5	
2021B	Office	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	EG-ACT	See A1.5	
2023	Corridor	LVT	Wood	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT	See A1.5	
2024	Corridor	LVT	Wood	Painted GWB	Painted GWB	Painted GWB	Painted GWB	EG-ACT	See A1.5	
2030	Courtroom #7	CPT	Wood	Painted GWB	Painted GWB	Painted GWB	Painted GWB	*EG-ACT,ACT, EXIST. GWB	See A1.5	Add Crwn Mldg @ New Const.; Paint Existing; *see plan
2032	Corridor	VCT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT	See A1.5	
2042	Corridor	VCT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	EG-ACT	See A1.5	
2058	Corridor	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT & EG-ACT	See A1.5	
2061	Corridor	ETR	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	EG-ACT	See A1.5	
2062	Conference Room	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT	See A1.5	
2063	Chambers	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT	See A1.5	
2064	Juvenile Court Waiting	CPT	Wood	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT	See A1.5	
2065	Data	Concrete	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	Open	See A1.5	
2070	Courtroom #5	CPT	Wood	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT & GWB	See A1.5	Add Crown Moulding at New Const.; Paint Existing
2071	Evidence	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT	See A1.5	
2073	Conference Room	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT & EG-ACT	See A1.5	
2074	Conference Room	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	EG-ACT	See A1.5	
2076	Break	VCT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	EG-ACT	See A1.5	
2080	Exit Stair	RSF, Resilient Treads,Risers & Landing	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT	See A1.5	Acoustic Ceiling Panels, Paint Stair Structure & Rails
2082	Corridor	RSF	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	EG-ACT	See A1.5	
2083	Corridor	LVT	Wood	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT & EG-ACT	See A1.5	
2084	Guardian ad Litem	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	EG-ACT	See A1.5	
2084A	Office	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	EG-ACT	See A1.5	
2084B	Office	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	EG-ACT	See A1.5	
2084C	Office	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	EG-ACT	See A1.5	
2084D	Office	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	EG-ACT	See A1.5	
2084E	Conference Room	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	EG-ACT	See A1.5	
2087	Break Room	RSF	ETR	ETR	ETR	ETR	ETR	ETR	See A1.5	
2088	Open Office	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT & EG-ACT	See A1.5	
2092	US Congress Administration	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT	See A1.5	
2093	US Congress Office	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT	See A1.5	
2093A	Toilet	PT	PT	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT	See A1.5	PT Wainscot
2094	Vending	LVT	Wood	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT	See A1.5	
2100	Courtroom #6	CPT	Wood	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT & GWB	See A1.5	Add Crown Moulding at New Const.; Paint Existing
2100A	Conference	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT	See A1.5	
2100B	Conference	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT	See A1.5	
2100C	Vestibule	CPT	WOOD	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT	See A1.5	
2100D	Evidence	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	Open	See A1.5	
2102	Corridor	LVT	Wood	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT	See A1.5	
2105	Conference Room	ETR	RB	Painted CMU	Painted CMU	Painted CMU	Painted CMU	EG-ACT	See A1.5	
2114	Conference Room	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	GWB	See A1.5	
2115	Vestibule	VCT	RB	Painted GWB	Painted GWB	Painted GWB	Painted CMU	GWB	See A1.5	
2117	Vestibule	VCT	RB	Painted CMU	Painted CMU	Painted CMU	Painted CMU	EG-ACT	See A1.5	
2128	Chamber	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT & EG-ACT	See A1.5	
2128A	Closet	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT	See A1.5	
2128B	Data	Concrete	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	Open to Structure	See A1.5	
2131	Office	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT & EG-ACT	See A1.5	
2131A	Closet	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT	See A1.5	
2134	Waiting Area	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT & EG-ACT	See A1.5	
2200	Jury Assembly	CPT	Wood	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT	See A1.5	
2201	Data	Concrete	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	Open to Structure	See A1.5	
2202	Open Office	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT	See A1.5	
2203	Break Area	VCT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT	See A1.5	
2204	Jury Lounge	LVT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT	See A1.5	

Door Schedule

Door				Frame			
ID #	Size WxH	Type	Material	Type	Material	Jamb Depth	Remarks
1000A	2-10 x 7-0 PR		Alum	AL4	Alum	6"	Automatic Opener
1000B	2-10 x 7-0 PR		Alum	AL4	Alum	6"	Egress Only
1000C	3-0 x 7-0		Alum.	AL3	Alum.	6"	Egress Only
1003A^	-	C	-	-	-	-	Existing Door & Frame to receive new door hardware
1020A	3-0 x 7-0		Alum.	AL2	Alum.	6"	
1020B	3-0 x 7-0		Wood	HM1	HM	8 1/4"	45 Minute Rated Door & Frame
1020C	-	-	-	-	-	-	Existing Door & Frame to receive new door hardware
1025A	-	-	-	-	-	-	Existing Door & Frame to receive new door hardware
1030A	3-0 x 7-0 PR		Wood	HM1	HM	5 7/8"	45 Minute Rated Door & Frame
1030B ^	3-0 x 7-0	C	Wood	HM1	HM	5 7/8"	45 Minute Rated Door & Frame
1032A *	-	A	-	-	-	-	Existing Door & Frame to receive new door hardware
1033A	3-0 x 7-0		HM	HM2	HM	8 5/8"	
1033B	-	-	-	-	-	-	Existing Door & Frame to receive new door hardware
1036A	-	-	-	-	-	-	Existing Door & Frame to receive new door hardware
1036B	-	-	-	-	-	-	Existing Door & Frame to receive new door hardware
1040A	-	-	-	-	-	-	Existing Door & Frame to receive new door hardware
1042A	3-0 x 7-0		HM	HM5	HM	8 5/8"	Laminated Safety Glass
1054A	-	-	-	-	-	-	Existing Door & Frame to receive new door hardware
1060B	-	-	-	-	-	-	Existing Door & Frame to receive new door hardware
1064A	3-0 x 7-0		Wood	HM1	HM	8 1/4"	
1064B	-	-	-	HM1	HM	8 1/4"	Cased Opening
1065A ^	3-0 x 7-0	C	Wood	HM1	HM	8 1/4"	
1065B ^	-	C	-	-	-	-	Existing Door & Frame to receive new door hardware
1066A	3-0 x 7-0		Wood	HM1	HM	8 1/4"	
1069A *	3-0 x 7-0	A	Wood	HM1	HM	5 7/8"	
1070A	3-0 x 7-0 PR		Wood	HM1	HM	5 7/8"	45 Minute Rated Door & Frame
1070B ^	3-0 x 7-0	C	Wood	HM1	HM	5 7/8"	45 Minute Rated Door & Frame
1070C ^	3-0 x 7-0	C	Wood	HM1	HM	8 1/4"	45 Minute Rated Door & Frame
1071A *	3-0 x 7-0	A	Wood	HM1	HM	5 7/8"	
1072A	3-0 x 7-0		Wood	HM1	HM	5 7/8"	
1073A ^	3-0 x 7-0	C	Wood	HM1	HM	5 7/8"	
1074A *	3-0 x 7-0	A	Wood	HM1	HM	6 1/4"	
1075A ^	3-0 x 7-0	C	Wood	HM1	HM	6 1/4"	
1076A ^	3-0 x 7-0	C	Wood	HM1	HM	6 1/4"	
1077A ^	3-0 x 7-0	C	Wood	HM6	HM	5 7/8"	
1078A	3-0 x 7-0		Wood	HM1	HM	8 1/4"	
1080A	3-0 x 7-0		Wood	HM1	HM	8 1/4"	45 Minute Rated Door & Frame
1080C	-	-	-	-	-	-	Existing Door & Frame to receive new door hardware
1083A	3-0 x 7-0		Wood	HM4	HM	5 7/8"	
1083B *	3-0 x 7-0	A	Wood	HM1	HM	6 1/4"	
1091A *	3-0 x 7-0	C	Wood	HM4	HM	5 7/8"	
1092A *	3-0 x 7-0	B	Wood	HM1	HM	8 1/4"	
1093A +	3-0 x 7-0	B	Wood	HM1	HM	6 1/4"	
1094A +	3-0 x 7-0	B	Wood	HM1	HM	8 1/4"	
1096A *	3-0 x 7-0	A	Wood	HM1	HM	5 7/8"	
1098A +	3-0 x 7-0	B	Wood	HM1	HM	6 1/4"	
1099A +	3-0 x 7-0	B	Wood	HM1	HM	5 7/8"	
1100A ^	3-0 x 7-0	C	Wood	HM1	HM	5 7/8"	45 Minute Rated Door & Frame
1101A ^	3-0 x 7-0	C	Wood	HM6	HM	5 7/8"	
1101B	-	-	-	-	-	-	Existing Door & Frame to receive new door hardware
1102A ^	3-0 x 7-0	C	Wood	HM1	HM	5 7/8"	
1102B	3-0 x 7-0		Wood	HM1	HM	5 7/8"	
1105A ^	3-0 x 7-0	C	Wood	HM1	HM	6 1/4"	
1112A *	3-0 x 7-0		Wood	HM1	HM	8 1/4"	
1117A ^	3-0 x 7-0	C	Wood	HM1	HM	8 3/4"	
1118A	2-6 x 7-0		Wood	HM1	HM	9 1/2"	
1119A	3-0 x 7-0		Wood	HM1	HM	8 1/4"	
1120A	3-0 x 7-0 PR		Wood	HM1	HM	5 7/8"	45 Minute Rated Door & Frame
1120B	3-0 x 7-0		Wood	HM1	HM	5 7/8"	45 Minute Rated Door & Frame
1120C ^	-	C	-	-	-	-	Existing Door & Frame to receive new door hardware
1120D	-	-	-	-	-	-	Exising Door & Frame to receive new door hardware
1122A *	3-0 x 7-0	A	Wood	HM1	HM	5 7/8"	
1122C *	-	A	-	-	-	-	Existing Door & Frame to receive new door hardware
1135A	3-0 x 7-0		Wood	HM1	HM	6 1/4"	
1200A ^	3-0 x 7-0		Wood	HM1	HM	5 7/8"	
1200B	3-0 x 7-0 PR		Wood	HM1	HM	5 7/8"	45 Minute Rated Door & Frame
1200C	1-6 x 7-0 PR		Wood	HM1	HM	5 7/8"	
1202A *	3-0 x 7-0 & 1-4 x 7-0		Wood	HM1	HM	5 7/8"	45 Minute Rated Door & Frame
1202B	-	-	-	HM1	HM	5 7/8"	Cased Opening
1203A ^	2-6 x 7-0 PR	C	Wood	HM1	HM	5 7/8"	45 Minute Rated Door & Frame
1204A ^	3-0 x 7-0	C	Wood	HM1	HM	5 7/8"	45 Minute Rated Door & Frame
1205A	3-0 x 7-0		Wood	HM1	HM	5 7/8"	45 Minute Rated Door & Frame
1205B *	3-0 x 7-0	A	Wood	HM1	HM	5 7/8"	45 Minute Rated Door & Frame
1206A	3-0 x 7-0		Wood	HM1	HM	5 7/8"	
1207A ^	3-0 x 7-0	C	Wood	HM1	HM	5 7/8"	
1208A ^	3-0 x 7-0	C	Wood	HM1	HM	5 7/8"	
1209A ^	3-0 x 7-0	C	Wood	HM1	HM	5 7/8"	
1210A	3-0 x 7-0		Wood	HM1	HM	5 7/8"	
1211A	3-0 x 7-0		Wood	HM1	HM	5 7/8"	
1212A ^	3-0 x 7-0	C	Wood	HM1	HM	5 7/8"	
2003A	-	-	-	-	-	-	Existing Door & Frame to receive new door hardware
2004B	3-0 x 7-0		Wood	HM1	HM	5 7/8"	
2008A	3-0 x 7-0		Wood	HM1	HM	6 1/4"	
2013A ^	-	C	-	-	-	-	Existing Door & Frame to receive new door hardware
2014A ^	3-0 x 7-0	C	Wood	HM1	HM	5 7/8"	
2017A ^	3-0 x 7-0	C	Wood	HM1	HM	5 7/8"	
2018A	3-0 x 7-0		Wood	HM1	HM	6 1/4"	
2020A	3-0 x 7-0		Wood	HM1	HM	5 7/8"	45 Minute Rated Door & Frame
2020B	3-0 x 7-0		Wood	HM1	HM	5 7/8"	45 Minute Rated Door & Frame
2021A +	3-0 x 7-0	B	Wood	HM1	HM	5 7/8"	
2021B +	3-0 x 7-0	B	Wood	HM1	HM	5 7/8"	
2030A	3-0 x 7-0 PR		Wood	HM1	HM	5 7/8"	45 Minute Rated Door & Frame
2032A	3-0 x 7-0		Wood	HM1	HM	5 7/8"	
2040A	-	-	-	-	-	-	Existing Door & Frame to receive new door hardware
2042A ^	3-0 x 7-0	C	Wood	HM1	HM	5 7/8"	
2043B ^	-	C	-	-	-	-	Existing Door & Frame to receive new door hardware
2048B	-	-	-	-	-	-	Existing Door & Frame to receive new door hardware
2056B ^	-	C	-	-	-	-	Existing Door & Frame to receive new door hardware
2060A	-	-	-	-	-	-	Existing Door & Frame to receive new door hardware
2062A ^	3-0 x 7-0	C	Wood	HM1	HM	5 7/8"	
2062B *	-	A	-	-	-	-	Existing Door & Frame to receive new door hardware
2063A ^	3-0 x 7-0		Wood	HM1	HM	5 7/8"	
2064A	3-0 x 7-0		Wood	HM4	HM	5 7/8"	45 Minute Rated Door & Frame
2065A ^	3-0 x 7-0		Wood	HM1	HM	5 7/8"	45 Minute Rated Door & Frame
2066A ^	-	C	-	-	-	-	Exising Door & Frame to receive new door hardware
2067A ^	-	C	-	-	-	-	Existing Door & Frame to receive new door hardware
2070A ^	3-0 x 7-0	C	Wood	HM1	HM	5 7/8"	45 Minute Rated Door & Frame
2070B	3-0 x 7-0		Wood	HM1	HM	10 5/8"	45 Minute Rated Door & Frame
2070C	3-0 x 7-0		Wood	HM7	HM	5 7/8"	
2071A	3-0 x 7-0		Wood	HM1	HM	5 7/8"	
2073A ^	3-0 x 7-0		Wood	HM1	HM	6 1/4"	
2076A	3-0 x 7-0		Wood	HM1	HM	5 7/8"	45 Minute Rated Door & Frame
2080A	3-0 x 7-0		Wood	HM1	HM	6 1/4"	45 Minute Rated Door & Frame
2080C	3-0 x 7-0		Wood	HM1	HM	5 7/8"	45 Minute Rated Door & Frame
2082A *	-	-	-	-	-	-	Existing Door & Frame to receive new door hardware
2084A +	3-0 x 7-0		Wood	HM1	HM	5 7/8"	
2084B +	3-0 x 7-0		Wood	HM1	HM	5 7/8"	
2084C +	3-0 x 7-0		Wood	HM1	HM	5 7/8"	
2084D +	3-0 x 7-0		Wood	HM1	HM	5 7/8"	
2084E ^	3-0 x 7-0		Wood	HM1	HM	5 7/8"	
2084G *	3-0 x 7-0		Wood	HM1	HM	5 7/8"	
2084H	3-0 x 7-0		Wood	HM1	HM	5 7/8"	
2088A *	3-0 x 7-0		Wood	HM1	HM	6 1/4"	Existing Door & Frame to receive new door hardware
2088A *	-	-	-	-	-	-	
2092A ^	3-0 x 7-0		Wood	HM4	HM	5 7/8"	
2093A +	3-0 x 7-0		Wood	HM1	HM	5 7/8"	
2093B +	3-0 x 7-0		Wood	HM1	HM	5 7/8"	
2100A ^	3-0 x 7-0	C	Wood	HM1	HM	5 7/8"	
2100B ^	3-0 x 7-0	C	Wood	HM1	HM	5 7/8"	

3 Signage indicator added refer to signage legend this sheet

SIGNAGE LEGEND:	
*	Room #
+	Room # & Media Slot
^	Room # & Room Name

Notes:
-~~See A7.# for sign details~~
-Provide ADA signage at all doors to restroom & stairs.
-Final Room Names to be determined at a later date.

FINISH SCHEULE LEGEND:
GWB - Gypsum Wall Board ACT - New Acoustical Ceiling Grid & Tile EG-ACT - Exist. Acoustical Ceiling Grid, New Tile LVT - Luxury Vinyl Tile PT - Porcelain Tile - See Tile Spec CT - Ceramic Tile CPT - Carpet Tile RB - Rubber Base RSF - Resilient Sheet Flooring ETR - Existing to Remain
Note: -See Detail 4/A7.5 for Typical Wood Base and Crown Moulding Profiles

1 Provide 45 minute rated door & frame

SAWYER SHERWOOD & ASSOCIATE ARCHITECTURE
124 Market St, Wilmington, NC 28401
910 762-0892 s2a3.com

CRISER TROUTMAN TANNER
CRISER TROUMAN TANNER CONSULTING ENGINEERS
CRISER TROUTMAN TANNER CONSULTING ENGINEERS NC
3809 Peachtree Ave., Suite 102
Wilmington, NC 28403
910.397.2929 Ph.
910.397.2973 Fax
www.cttengineering.com
Firm License Number: F-0113
#8240.00

CHEATHAM AND ASSOCIATES, P.A.
CONSULTING ENGINEERS
3412 ENTERPRISE DRIVE
WILMINGTON, NORTH CAROLINA 28405
PHONE: (910) 452-4210
FAX: (910) 452-4211
OFFICE@CHEATHAMPA.COM
WWW.CHEATHAMPA.COM
18048 NC LICENSE# C-1073

REGISTERED ARCHITECTURE CORPORATION 52349 NORTH CAROLINA SAWYER SHERWOOD & ASSOCIATE, P.C. WILMINGTON, NC

JOHN R. SAWYER REGISTERED ARCHITECT 3428 NORTH CAROLINA WILMINGTON, N.C.

Brunswick County Courthouse Addition & Renovations

Bolivia, NC

Construction Drawings
September 23, 2019

Revisions:

2 - ADDENDUM 2

3 - AD

Finish Schedule

ID	ROOM NAME	FLOOR FINISH	BASE MATERIAL	NORTH WALL FINISH	EAST WALL FINISH	SOUTH WALL FINISH	WEST WALL FINISH	CEILING	CEILING HT	REMARKS
2205	Mechanical	Concrete	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	Open to Structure	See A1.5	
2206	Toilet	PT	PT	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT	See A1.5	PT Wainscot
2207	Toilet	PT	PT	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT	See A1.5	PT Wainscot
2208	Toilet	PT	PT	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT	See A1.5	PT Wainscot
3000	Elevator Lobby	LVT	Wood	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT & EG-ACT	See A1.6	
3002	Reception	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT & GWB	See A1.6	
3013	Open Office	CPT	RB	ETR	ETR	ETR	ETR	ACT	See A1.6	
3014	Work Room	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT	See A1.6	
3015	Women's Restroom	PT	PT	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT	See A1.6	PT Wainscot
3016	Men's Restroom	PT	PT	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT	See A1.6	PT Wainscot
3018	Records	VCT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT	See A1.6	
3019	Corridor	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT	See A1.6	
3020	Exit Stair	RSF, Resilient Treads,Risers & Landing	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT	See A1.6	Paint Stair Structure and Rails
3021	Break Room	VCT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	EG-ACT	See A1.6	
3022	Corridor	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT	See A1.6	
3023	Corridor	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	EG-ACT	See A1.6	
3027	Corridor	ETR	ETR	Painted GWB	Painted GWB	Painted GWB	Painted GWB	EG-ACT	See A1.6	
3030	Corridor	CPT	Wood	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT	See A1.6	
3031	Corridor	ETR	ETR	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT & EG-ACT	See A1.6	
3032A	Judge Assistant	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT	See A1.6	
3032B	Judge Lobby	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT	See A1.6	
3034	Corridor	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	EG-ACT	See A1.6	
3035	Break Area	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT	See A1.6	
3036	Break Room	VCT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT	See A1.6	
3039	Judge Office	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	EG-ACT	See A1.6	
3041	Judge Office	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	EG-ACT	See A1.6	
3042	Judge Office	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	EG-ACT	See A1.6	
3044	Judge Office	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT & EG-ACT	See A1.6	
3046A	Conference Room	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT & EG-ACT	See A1.6	
3046B	Office	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT & EG-ACT	See A1.6	
3046C	Office	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT & EG-ACT	See A1.6	
3046D	Work Room	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT & EG-ACT	See A1.6	
3047A	Office	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT	See A1.6	
3047B	Office	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT	See A1.6	
3053	Storage	ETR	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT	See A1.6	
3056	Corridor	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT & EG-ACT	See A1.6	
3058	Corridor	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT & EG-ACT	See A1.6	
3059	Records	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	EG-ACT	See A1.6	
3060	Storage	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	EG-ACT	See A1.6	
3061	Open Office	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT	See A1.6	
3061A	Office	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT	See A1.6	
3061B	Office	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT	See A1.6	
3061C	Office	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT	See A1.6	
3061D	Conference Room	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT	See A1.6	
3061E	Storage	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT	See A1.6	
3061F	Office	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	EG-ACT	See A1.6	
3061G	Office	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	EG-ACT	See A1.6	
3063	Office	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	EG-ACT	See A1.6	
3064	Office	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	EG-ACT	See A1.6	
3065	Office	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	EG-ACT	See A1.6	
3066	Office	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	EG-ACT	See A1.6	
3067	Office	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	EG-ACT	See A1.6	
3068	Office	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	EG-ACT	See A1.6	
3069	Children's Play Room	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT & EG-ACT	See A1.6	
3072	Waiting Room	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	EG-ACT	See A1.6	
3073	Corridor	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	EG-ACT	See A1.6	
3074	Office	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	EG-ACT	See A1.6	
3075	Office	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	EG-ACT	See A1.6	
3076	Office	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	EG-ACT	See A1.6	
3077	Work Room	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	EG-ACT	See A1.6	
3078	Clerk	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	EG-ACT	See A1.6	
3079	Reception	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	EG-ACT	See A1.6	
3080	Exit Stair	RSF, Resilient Treads,Risers & Landing	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT	See A1.6	Paint Stair Structure & Rails
3082	Office	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	EG-ACT	See A1.6	
3083	Corridor	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	EG-ACT	See A1.6	
3084	Office	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	EG-ACT	See A1.6	
3086	Conference Room	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	EG-ACT	See A1.6	
3087	Vestibule	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	EG-ACT	See A1.6	
3088	Reception	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	EG-ACT	See A1.6	
3089	District Attorney	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	EG-ACT	See A1.6	
3090	Office	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	EG-ACT	See A1.6	
3091	Records	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	EG-ACT	See A1.6	
3092	Office	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	EG-ACT	See A1.6	
3093	Office	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	EG-ACT	See A1.6	
3094	Office	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	EG-ACT	See A1.6	
3095	Corridor	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	EG-ACT	See A1.6	
3096	Office	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT & EG-ACT	See A1.6	
3097	Custodial	PT	PT	Painted GWB	Painted GWB	Painted GWB	Painted GWB	Open	See A1.6	
3098	Office	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	EG-ACT	See A1.6	
3099	Office	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	EG-ACT	See A1.6	
3100	Office	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	EG-ACT	See A1.6	
3101	Office	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	EG-ACT	See A1.6	
3102	Office	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	EG-ACT	See A1.6	
3103	Office	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	EG-ACT	See A1.6	
3104	Break Room	RSF	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT	See A1.6	
3108	Corridor	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	EG-ACT	See A1.6	
3200	Special Proceedings	CPT	Wood	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT & GWB	See A1.6	
3201	Control Room	CPT	Wood	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT	See A1.6	
3202	Grand Jury Hearings	CPT	Wood	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT & GWB	See A1.6	
3203	Courtroom Lobby	CPT	Wood	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT	See A1.6	
3204	Toilet	PT	PT	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT	See A1.6	PT Wainscot
3205	Toilet	PT	PT	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT	See A1.6	PT Wainscot
3206	Break Area	VCT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT	See A1.6	
3207	Data	Concrete	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	Open	See A1.6	
3208	Office	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT	See A1.6	
3209	Break Area	VCT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT	See A1.6	
3210	Office	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT	See A1.6	
3211	Toilet	PT	PT	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT	See A1.6	PT Wainscot
3212	Toilet	PT	PT	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT	See A1.6	PT Wainscot
3213	Office	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT	See A1.6	
3214	Conference Room	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT	See A1.6	
3215	Office	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT	See A1.6	
3216	Office	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT	See A1.6	
3217	Office	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT	See A1.6	
3218	Office	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT	See A1.6	
3219	Office	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT	See A1.6	
3220	Office	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT	See A1.6	
3221	Work Room	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT	See A1.6	
3222	Office	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT	See A1.6	
3223	Office	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT	See A1.6	
3224	Corridor	CPT	RB	Painted GWB	Painted GWB	Painted GWB	Painted GWB	ACT	See A1.6	

Door Schedule

Door ID #	Size WxH	Type	Material	Frame Type	Material	Jamb Depth	Remarks
2100C	3-0 x 7-0 PR		Wood	HM1	HM	5 7/8"	
2100D	2-8 x 7-0		Wood	HM1	HM	5 7/8"	
2100E	3-0 x 7-0 PR		Wood	HM1	HM	5 7/8"	45 Minute Rated Door & Frame
2114A	3-0 x 7-0		Wood	HM4	HM	5 7/8"	
2115A	3-0 x 7-0		Wood	HM1	HM	5 7/8"	45 Minute Rated Door & Frame
2117A ^	3-0 x 7-0	C	Wood	HM1	HM	10 5/8"	45 Minute Rated Door & Frame
2117C ^	3-0 x 7-0	C	Wood	HM1	HM	10 5/8"	45 Minute Rated Door & Frame
2128A	3-0 x 7-0		Wood	HM1	HM	5 7/8"	
2128B ^	3-0 x 7-0	C	Wood	HM1	HM	6 1/4"	
2131A	3-0 x 7-0		Wood	HM1	HM	5 7/8"	
2134A ^	3-0 x 7-0	C	Wood	HM7	HM	5 7/8"	
2134B ^	-	C	-	-	-	-	Existing Door & Frame to receive new door hardware
2200A ^	3-0 x 7-0	C	Wood	HM7	HM	5 7/8"	45 Minute Rated Door & Frame
2200B ^	3-0 x 7-0	C	Wood	HM3	HM	6"	45 Minute Rated Door & Frame
2201A ^	3-0 x 7-0	C	Wood	HM1	HM	8 1/4"	
2202A ^	3-0 x 7-0	C	Wood	HM1	HM	5 7/8"	45 Minute Rated Door & Frame
2203A	3-0 x 7-0		Wood	HM1	HM	5 7/8"	
2205A ^	2-2 x 7-0 PR	C	Wood	HM1	HM	6"	
2206A ^	3-0 x 7-0	C	Wood	HM1	HM	5 7/8"	
2207A ^	2-8 x 7-0	C	Wood	HM1	HM	5 7/8"	
2208A ^	2-8 x 7-0	C	Wood	HM1	HM	5 7/8"	
3002A ^	3-0 x 7-0		Wood	HM8	HM	5 7/8"	
3002B	3-0 x 7-0		Wood	HM1	HM	5 7/8"	
3003A	3-0 x 7-0		Wood	HM1	HM	6 1/4"	
3003B	3-0 x 7-0		Wood	HM1	HM	6 1/4"	
3014A	3-0 x 7-0		Wood	HM1	HM	5 7/8"	
3014B	3-0 x 7-0		Wood	HM1	HM	5 7/8"	
3015A ^	3-0 x 7-0		Wood	HM1	HM	5 7/8"	
3016A ^	3-0 x 7-0		Wood	HM1	HM	5 7/8"	
3018A ^	3-0 x 7-0		Wood	HM1	HM	6 1/4"	
3019A *	3-0 x 7-0		Wood	HM1	HM	5 7/8"	
3023A	3-0 x 7-0		Wood	HM1	HM	5 7/8"	
3023B	3-0 x 7-0		Wood	HM1	HM	5 7/8"	
3027B *	3-0 x 7-0		Wood	HM1	HM	5 7/8"	
3029A	-	-	-	-	-	-	Existing Door & Frame to receive new door hardware
3032B ^	3-0 x 7-0		Wood	HM7	HM	5 7/8"	
3032C	3-0 x 7-0		Wood	HM1	HM	6 1/4"	
3032D	3-0 x 7-0		Wood	HM1	HM	6 1/4"	
3034A *	3-0 x 7-0		Wood	HM1	HM	5 7/8"	
3044A +	3-0 x 7-0		Wood	HM1	HM	5 7/8"	
3046A +	3-0 x 7-0		Wood	HM1	HM	6 1/4"	
3046B +	3-0 x 7-0		Wood	HM1	HM	6 1/4"	
3046C	-	-	-	HM1	HM	6 1/4"	Cased Opening
3047A +	3-0 x 7-0		Wood	HM1	HM	6 1/4"	
3051A ^	-	-	-	-	-	-	Existing Door & Frame to receive new door hardware
3052A ^	-	-	-	-	-	-	Existing Door & Frame to receive new door hardware
3056A	-	-	-	-	-	-	Existing Door & Frame to receive new door hardware
3059A ^	3-0 x 7-0		Wood	HM1	HM	6 1/4"	
3061A	3-0 x 7-0		Wood	HM1	HM	5 7/8"	
3061B +	3-0 x 7-0		Wood	HM1	HM	5 7/8"	
3061C +	3-0 x 7-0		Wood	HM1	HM	5 7/8"	
3061D *	3-0 x 7-0		Wood	HM1	HM	5 7/8"	
3061E	3-0 x 7-0		Wood	HM1	HM	5 7/8"	
3061F +	3-0 x 7-0		Wood	HM1	HM	6 1/4"	
3061H ^	3-0 x 7-0		Wood	HM1	HM	6 1/4"	
3068A +	3-0 x 7-0		Wood	HM1	HM	6 1/4"	
3069A ^	3-0 x 7-0		Wood	HM4	HM	6 1/4"	
3072A	-	-	-	-	-	-	Existing Door & Frame to receive new door hardware
3080A	3-0 x 7-0		Wood	HM1	HM	6 1/4"	45 Minute Rated Door & Frame
3080B	3-0 x 7-0		Wood	HM1	HM	5 7/8"	45 Minute Rated Door & Frame
3083A *	-	-	-	-	-	-	Existing Door & Frame to receive new door hardware
3104A ^	3-0 x 7-0		Wood	HM4	HM	6 1/4"	
3200A ^	3-0 x 7-0		Wood	HM1	HM	5 7/8"	
3200B ^	3-0 x 7-0		Wood	HM1	HM	5 7/8"	
3201A ^	3-0 x 7-0		Wood	HM1	HM	5 7/8"	
3201B	3-0 x 7-0		Wood	HM1	HM	5 7/8"	
3202A ^	3-0 x 7-0		Wood	HM1	HM	5 7/8"	
3204A ^	2-8 x 7-0		Wood	HM1	HM	5 7/8"	
3205A ^	3-0 x 7-0		Wood	HM1	HM	5 7/8"	
3207A	3-0 x 7-0		Wood	HM1	HM	5 7/8"	
3208A ^	3-0 x 7-0		Wood	HM3	HM	6"	
3208B	3-0 x 7-0		Wood	HM1	HM	5 7/8"	
3209A	3-0 x 7-0		Wood	HM1	HM	6"	
3210A +	3-0 x 7-0		Wood	HM1	HM	5 7/8"	
3211A	2-8 x 7-0		Wood	HM1	HM	5 7/8"	
3212A	3-0 x 7-0		Wood	HM1	HM	5 7/8"	
3213A +	3-0 x 7-0		Wood	HM1	HM	5 7/8"	
3214A ^	3-0 x 7-0		Wood	HM1	HM	5 7/8"	
3214B	3-0 x 7-0		Wood	HM1	HM	5 7/8"	
3215A +	3-0 x 7-0		Wood	HM1	HM	5 7/8"	
3217A +	3-0 x 7-0		Wood	HM1	HM	5 7/8"	
3218A +	3-0 x 7-0		Wood	HM1	HM	5 7/8"	
3219A +	3-0 x 7-0		Wood	HM1	HM	5 7/8"	
3220A +	3-0 x 7-0		Wood	HM1	HM	5 7/8"	
3222A +	3-0 x 7-0		Wood	HM1	HM	5 7/8"	
3223A +	3-0 x 7-0		Wood	HM1	HM	5 7/8"	

3 Signage indicator added refer to signage legend this sheet

Signage for Existing Doors

Room #	Room Name
2004 ^	Clerk of Court Public Records
2021 ^	50B Intake
2084 ^	Guardian ad Litem
3039 +	
3041 +	
3042 +	
3046B +	
3047B +	

3

SIGNAGE LEGEND:

*	Room #
+	Room # & Media Slot
^	Room # & Room Name

Notes:
-See A7.# for sign details.
-Provide ADA signage at all doors to restroom & stairs.
-Final Room Names to be determined at a later date.

3

FINISH SCHEULE LEGEND:

GWB - Gypsum Wall Board
ACT - New Acoustical Ceiling Grid & Tile
EG-ACT - Exist. Acoustical Ceiling Grid, New Tile
LVT - Luxury Vinyl Tile
PT - Porcelain Tile - See Tile Spec
CT - Ceramic Tile
CPT - Carpet Tile
RB - Rubber Base
RSF - Resilient Sheet Flooring
ETR - Existing to Remain

Note:
-See Detail 4/A7.5 for Typical Wood Base and Crown Moulding Profiles

SAWYER SHERWOOD & ASSOCIATE ARCHITECTURE
124 Market St, Wilmington, NC 28401
910 762-0892 s2a3.com

CRISER TROUTMAN TANNER
CRISER TROUMAN TANNER CONSULTING ENGINEERS
CRISER TROUTMAN TANNER CONSULTING ENGINEERS NC
3809 Peachtree Ave., Suite 102
Wilmington, NC 28403
910.397.2929 Ph.
910.397.2973 Fax
www.cttengineering.com
Firm License Number: F-0113
#8240.00

CHEATHAM AND ASSOCIATES, P.A.
CONSULTING ENGINEERS
3412 ENTERPRISE DRIVE
WILMINGTON, NORTH CAROLINA 28405
PHONE: (910) 452-4210
FAX: (910) 452-4211
OFFICE@CHEATHAMPA.COM
WWW.CHEATHAMPA.COM
NC LICENSE# C-1073
18048

SAWYER SHERWOOD & ASSOCIATE, P.A. REGISTERED ARCHITECTURAL CORPORATION 52349 NORTH CAROLINA WILMINGTON, NC

JOHN R. SAWYER REGISTERED ARCHITECT 3428 NORTH CAROLINA WILMINGTON, N.C.

Brunswick County Courthouse Addition & Renovations

Bolivia, NC

Construction Drawings
September 23, 2019

Revisions:

3 - ADDENDUM 3

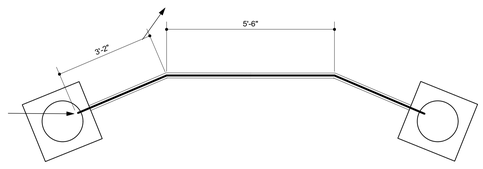
Finish & Door Schedules

A6.1

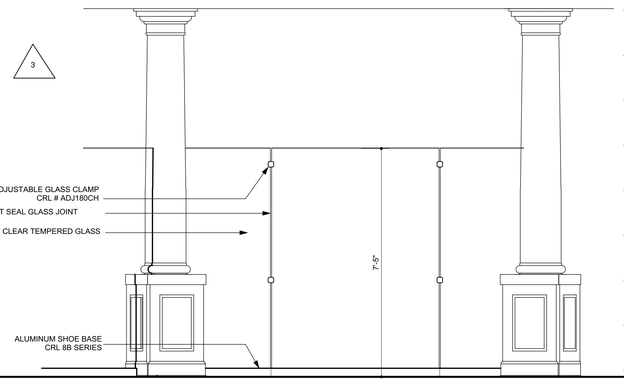
© 2019 Sawyer Sherwood & Associate- All Rights Reserved



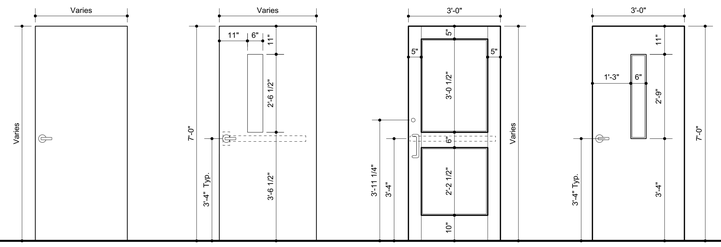
EXISTING COLUMN COVER TO BE REPAIRED FOLLOWING DEMO OF EXISTING GLASS

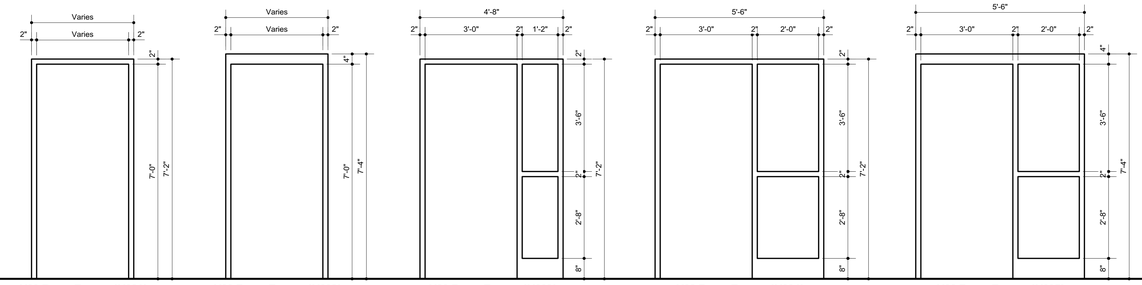


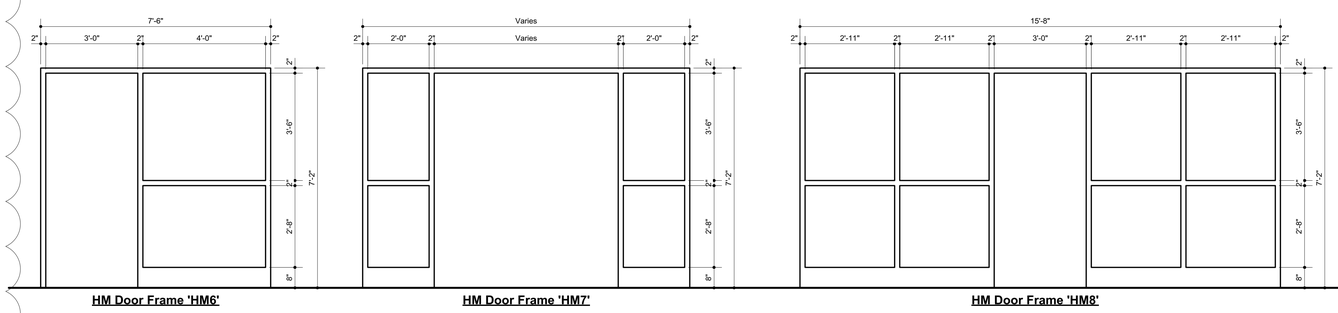
CUT EXISTING COLUMN COVER TO FORM POCKET FOR WET GLAZED JOINT COMPLETED GLASS TO COLUMN JOINT TO BE SIMILAR TO EXISTING

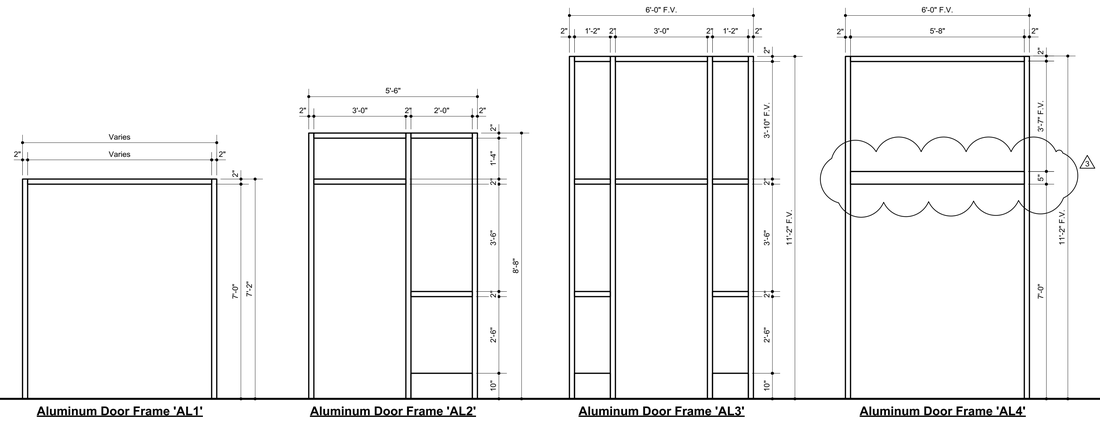


1 / A6.2 Lobby Glass Barrier
Scale: 1/2" = 1'-0"









SAWYER SHERWOOD & ASSOCIATE ARCHITECTURE
124 Market St, Wilmington, NC 28401
910 762-0892 s2a3.com

CRISER TROUTMAN TANNER
CRISER TROUMAN TANNER CONSULTING ENGINEERS
CRISER TROUTMAN TANNER CONSULTING ENGINEERS NC
3809 Peachtree Ave., Suite 102
Wilmington, NC 28403
910.397.2929 Ph.
910.397.2973 Fax
www.cttengineering.com
Firm License Number: F-0113

CHEATHAM AND ASSOCIATES, P.A.
CONSULTING ENGINEERS
3412 ENTERPRISE DRIVE
WILMINGTON, NORTH CAROLINA 28405
PHONE: (910) 452-4210
FAX: (910) 452-4211
OFFICE@CHEATHAMPA.COM
WWW.CHEATHAMPA.COM
NC LICENSE# C-1073
18048

SAWYER SHERWOOD & ASSOCIATE, P.A. ARCHITECTURE, ENGINEERING 52349 NORTH CAROLINA WILMINGTON, NC

JOHN R. SAWYER REGISTERED ARCHITECT 3428 NORTH CAROLINA WILMINGTON, N.C. 11-20-19

Brunswick County Courthouse Addition & Renovations

Bolivia, NC

Construction Drawings
September 23, 2019

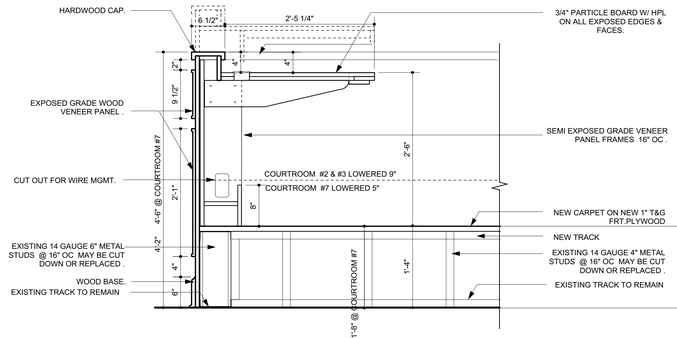
Revisions:

3 ADDENDUNM #3

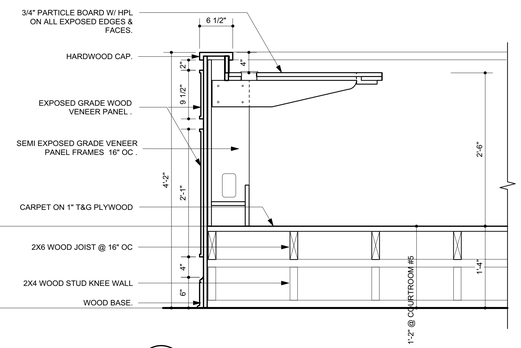
Door Elevations

A6.2

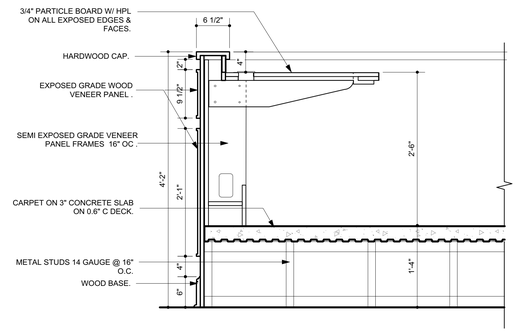
© 2019 Sawyer Sherwood & Associate- All Rights Reserved



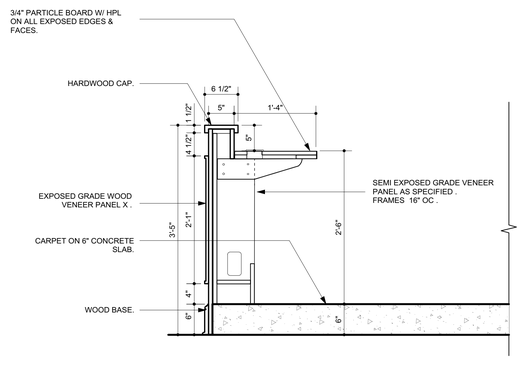
1 A7.4 Courtroom #2 , #3 & #7 Judge Casework Section
Scale: 1" = 1'-0"



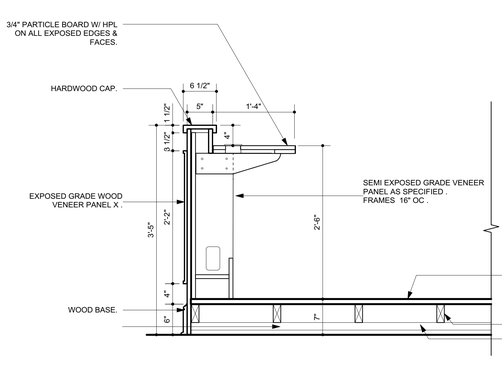
4 A7.4 Courtroom #5 & # 6 Judge Casework Section
Scale: 1" = 1'-0"



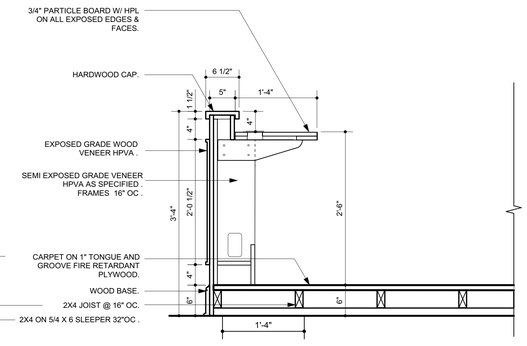
5 A7.4 Courtroom #4 Judge Casework Section
Scale: 1" = 1'-0"



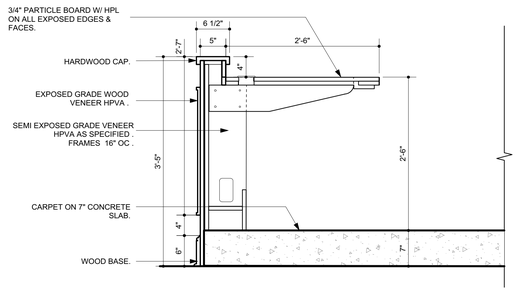
6 A7.4 Courtroom #4 Witness Casework Section
Scale: 1" = 1'-0"



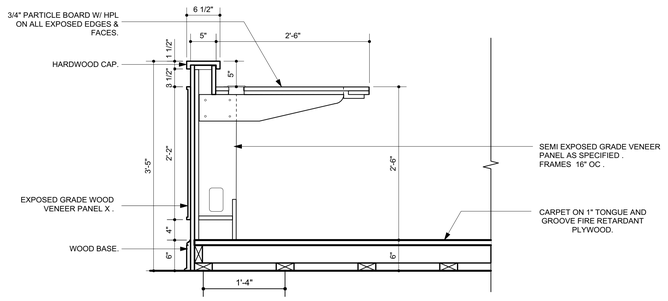
7 A7.4 Courtroom #5 Witness Casework Section
Scale: 1" = 1'-0"



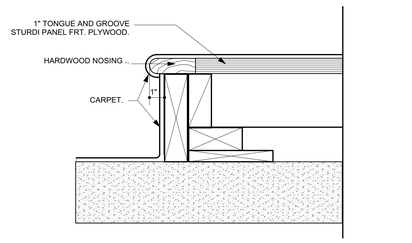
8 A7.4 Courtroom #6 Witness Casework Section
Scale: 1" = 1'-0"



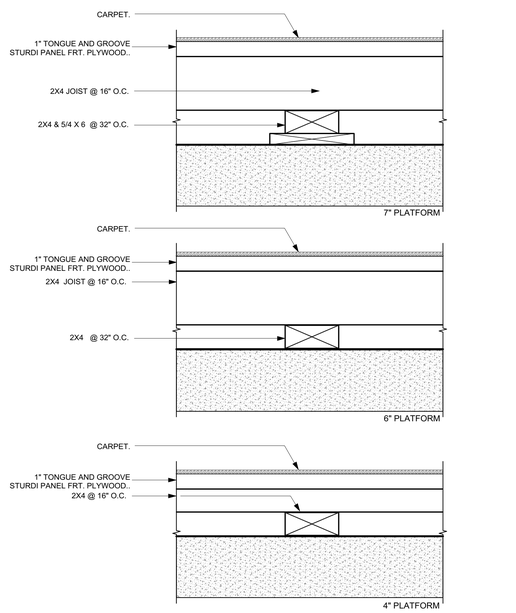
9 A7.4 Courtroom #4 Clerk Casework Section
Scale: 1" = 1'-0"



10 A7.4 Courtroom #5 & #6 Clerk Casework Section
Scale: 1" = 1'-0"

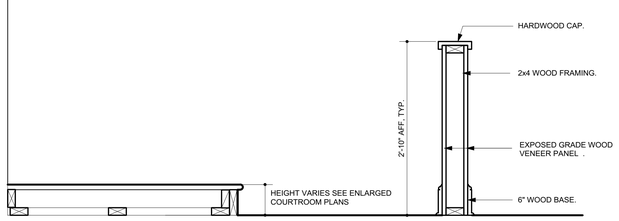


11 A7.4 Typical Platform Edge Detail
Scale: 3" = 1'-0"

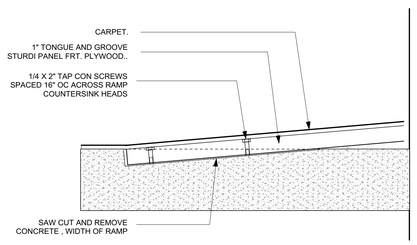


13 A7.4 Typical Platform Base Details
Scale: 3" = 1'-0"

10 A7.4 Courtroom #5 & #6 Clerk Casework Section
Scale: 1" = 1'-0"



12 A7.4 Typ. Jury Casework Section
Scale: 1" = 1'-0"



14 A7.4 Typical Ramp to Concrete Detail
Scale: 3" = 1'-0"

SAWYER SHERWOOD & ASSOCIATE ARCHITECTURE
124 Market St, Wilmington, NC 28401
910 762-0892 s2a3.com

CRISER TROUTMAN TANNER
CRISER TROUMAN TANNER CONSULTING ENGINEERS
CRISER TROUTMAN TANNER CONSULTING ENGINEERS NC
3809 Peachtree Ave., Suite 102
Wilmington, NC 28403
910.397.2929 Ph.
910.397.2973 Fax
www.cttengineering.com
Firm License Number: F-0113
#8240.00

CHEATHAM AND ASSOCIATES, P.A.
CONSULTING ENGINEERS
3412 ENTERPRISE DRIVE
WILMINGTON, NORTH CAROLINA 28405
PHONE: (910) 452-4210
FAX: (910) 452-4211
OFFICE@CHEATHAMPA.COM
WWW.CHEATHAMPA.COM
NC LICENSE# C-1073
18048

SAWYER SHERWOOD & ASSOCIATE P.A. ARCHITECTURAL CORPORATION 52349 NORTH CAROLINA WILMINGTON, NC

JOHN R. SAWYER REGISTERED ARCHITECT 3428 NORTH CAROLINA WILMINGTON, N.C.

Brunswick County Courthouse Addition & Renovations

Bolivia, NC

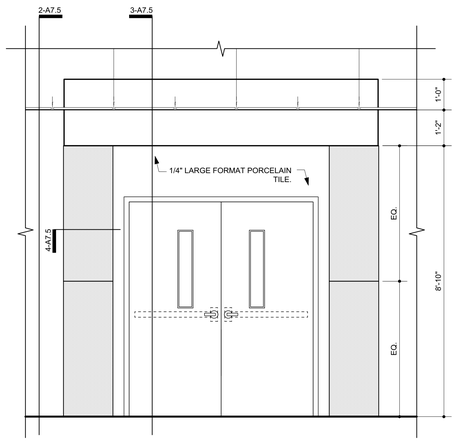
Construction Drawings
September 23, 2019

Revisions:
3 Addendum #3 Revisions to all details

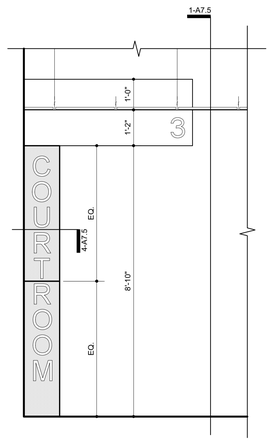
Courtroom Casework Sections

A7.4

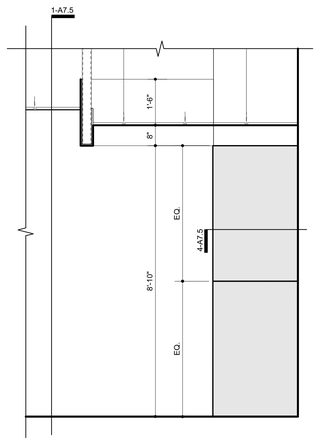
© 2019 Sawyer Sherwood & Associate- All Rights Reserved



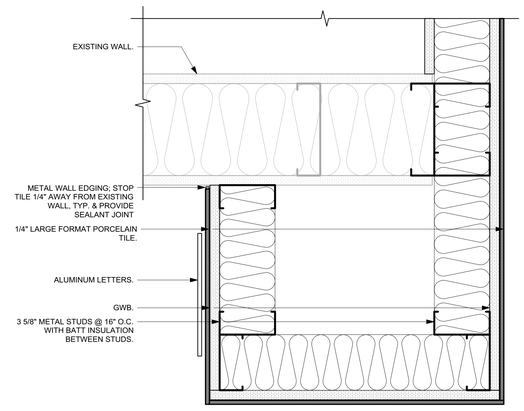
1 A7.5 Typ. Courtroom Entrance Elevation
Scale: 1/2" = 1'-0"



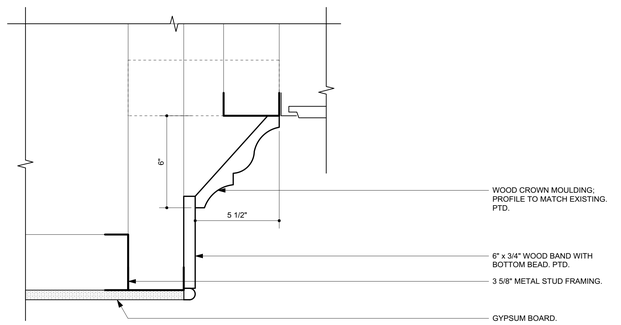
2 A7.5 Typ. Courtroom Entrance Elevation
Scale: 1/2" = 1'-0"



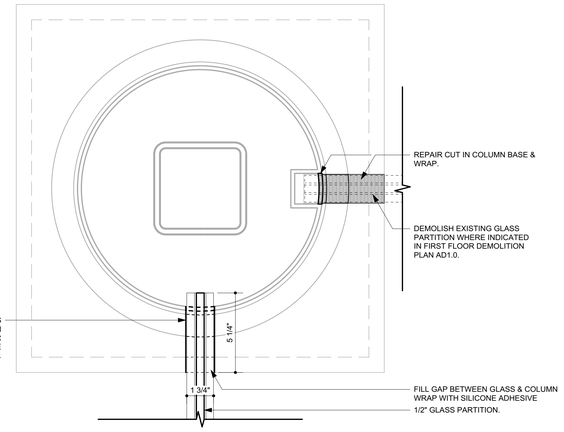
3 A7.5 Typ. Courtroom Entrance Elevation
Scale: 1/2" = 1'-0"



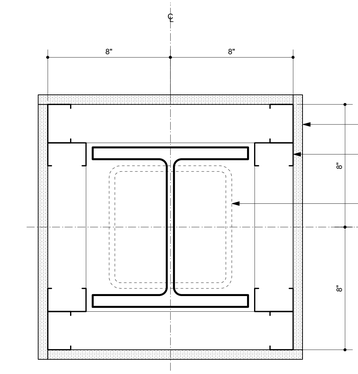
4 A7.5 Courtroom Entrance Detail
Scale: 3" = 1'-0"



5 A7.5 Crown Moulding & Wood Base Profile
Scale: 3" = 1'-0"



6 A7.5 Typ. Security 1000A Column Wrap Detail
Scale: 3" = 1'-0"

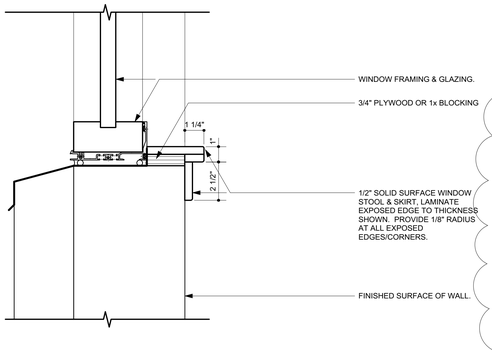


NOTE: PROVIDE SIMILAR DETAIL WHERE COLUMN WRAP ABUTS ADJACENT WALL.

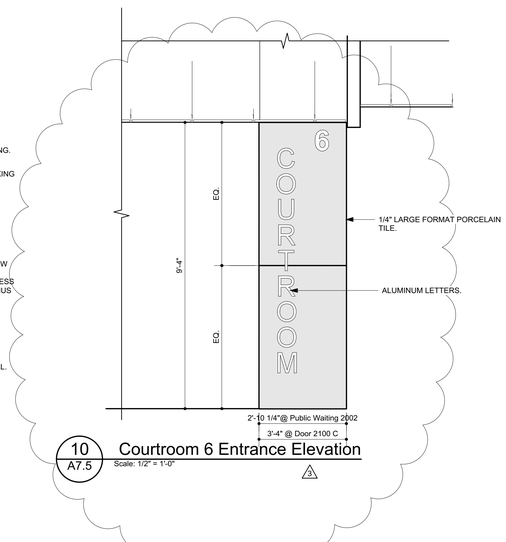
NOTE: WHRE COLUMN WRAP IS ENLARGED TO PROVIDE A CHASE FOR UTILITIES, MATCH ENLARGED DIMENSION ON ADJACENT COLUMN WRAPS AS INDICATED ON PLANS.

7 A7.5 Typ. Interior Column Wrap Detail
Scale: 3" = 1'-0"

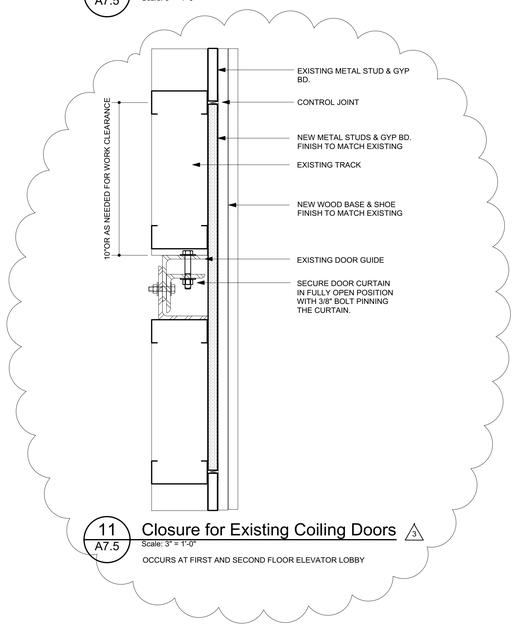
PARTS LIST			
ITEM	QTY.	PART NUMBER	DESCRIPTION
1	4	011-049	BRACKET PLATE, BOLT DOWN, SHORT, TONIK, PEDESTAL AC LAMP
2	4	021-077	Screw, Machine 1/4"-20 X 1", FH, Pin in Torx® T-27, Zinc



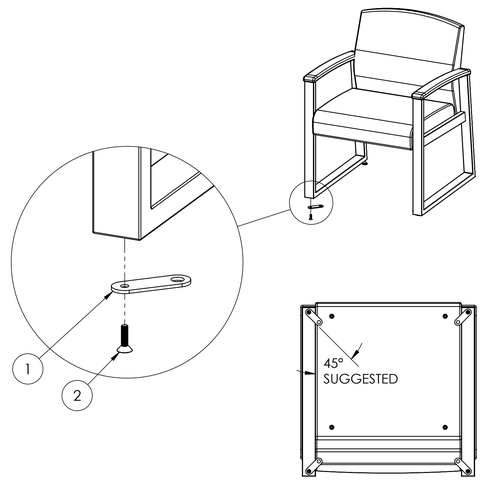
9 A7.5 Typ. Window Stool Detail
Scale: 3" = 1'-0"



10 A7.5 Courtroom 6 Entrance Elevation
Scale: 1/2" = 1'-0"
3



11 A7.5 Closure for Existing Coiling Doors 3
Scale: 3" = 1'-0"
OCCURS AT FIRST AND SECOND FLOOR ELEVATOR LOBBY



8 A7.5 Jury Assembly Fixed Seating Detail
NOT TO SCALE

SAWYER SHERWOOD & ASSOCIATE ARCHITECTURE
124 Market St, Wilmington, NC 28401
910 762-0892 s2a3.com

CRISER TROUTMAN TANNER
CRISER TROUMAN TANNER CONSULTING ENGINEERS
CRISER TROUTMAN TANNER CONSULTING ENGINEERS NC
3809 Peachtree Ave., Suite 102
Wilmington, NC 28403
910.397.2929 Ph.
910.397.2973 Fax
www.cttengineering.com
Firm License Number: F-0113
#8240.00

CHEATHAM AND ASSOCIATES, P.A.
CONSULTING ENGINEERS
3412 ENTERPRISE DRIVE
WILMINGTON, NORTH CAROLINA 28405
PHONE: (910) 452-4210
FAX: (910) 452-4211
OFFICE@CHEATHAMPA.COM
WWW.CHEATHAMPA.COM
NC LICENSE# C-1073
18048

SAWYER, SHERWOOD & ASSOCIATE, P.A. ARCHITECTURAL CORPORATION 52349 NORTH CAROLINA WILMINGTON, NC

JOHN R. SAWYER REGISTERED ARCHITECT 3428 NORTH CAROLINA WILMINGTON, N. C.

Brunswick County Courthouse Addition & Renovations

Bolivia, NC

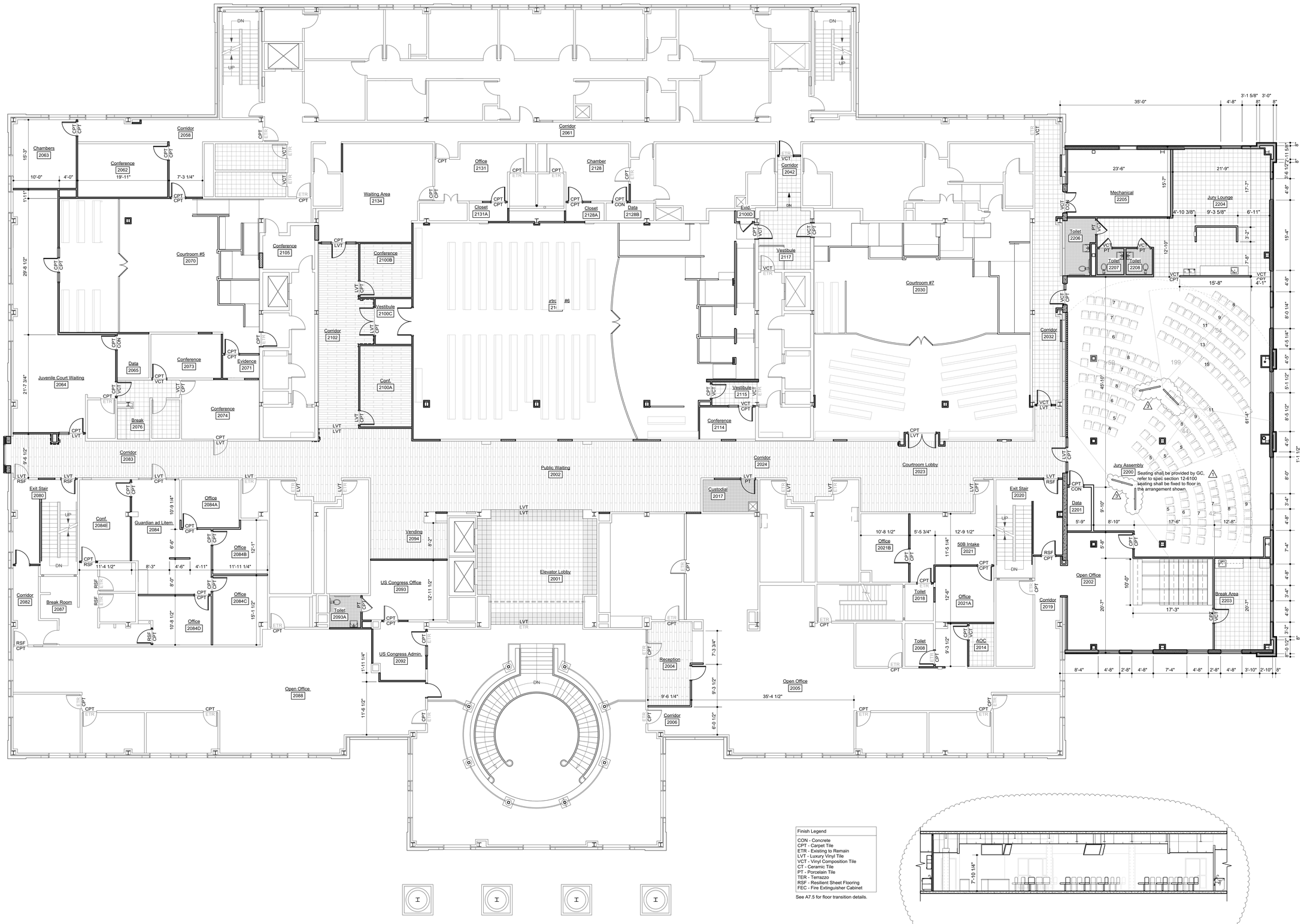
Construction Drawings
September 23, 2019

Revisions:
3 ADDENDUM # 3

Interior Details

A7.5

© 2019 Sawyer Sherwood & Associate- All Rights Reserved



1 A7.8 Second Floor Plan
Scale: 1/8" = 1'-0"

2 A7.8 Jury Assembly Section
Scale: 1/8" = 1'-0"

SAWYER SHERWOOD & ASSOCIATE ARCHITECTURE
124 Market St, Wilmington, NC 28401
910 762-0892 s2a3.com

CRISER TROUTMAN TANNER
CRISER TROUMAN TANNER CONSULTING ENGINEERS
CRISER TROUTMAN TANNER CONSULTING ENGINEERS NC
3809 Peachtree Ave., Suite 102
Wilmington, NC 28403
910.397.2929 Ph.
910.397.2973 Fax
www.cttengineering.com
Firm License Number: F-0113
#8240.00

CHEATHAM AND ASSOCIATES, P.A.
CONSULTING ENGINEERS
3412 ENTERPRISE DRIVE
WILMINGTON, NORTH CAROLINA 28405
PHONE: (910) 452-4210
FAX: (910) 452-4211
OFFICE@CHEATHAMPA.COM
WWW.CHEATHAMPA.COM
NC LICENSE# C-1073
18048

SAWYER SHERWOOD & ASSOCIATE, P.A. ARCHITECTURAL CORPORATION 52349 NORTH CAROLINA WILMINGTON, NC

JOHN R. SAWYER REGISTERED ARCHITECT 3428 NORTH CAROLINA WILMINGTON, N.C.

Brunswick County Courthouse Addition & Renovations

Bolivia, NC

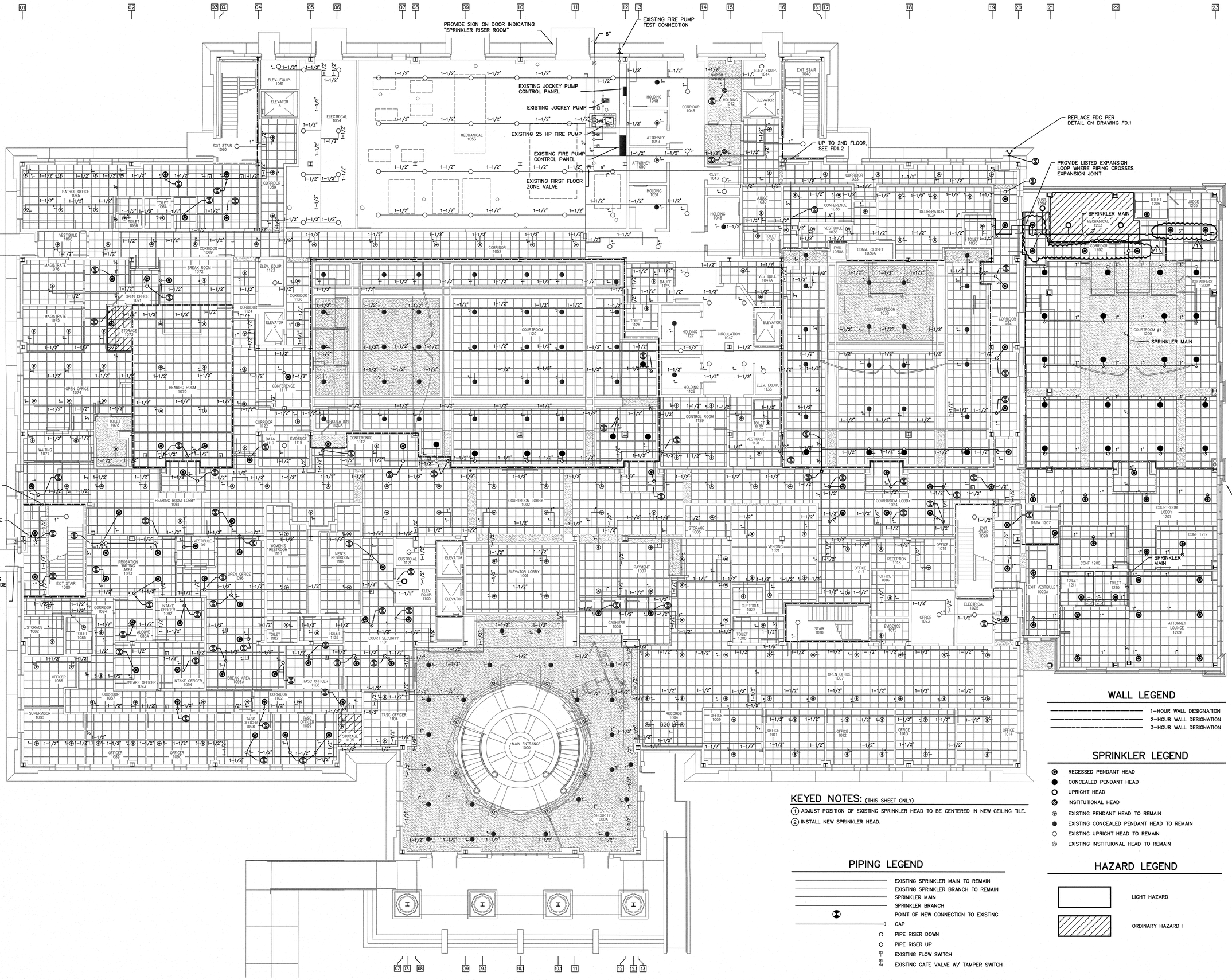
Construction Drawings
September 23, 2019

Revisions:
1 ADDENDUM #1
3 ADDENDUM #3

Finish Floor Plan
Second Floor

A7.8

© 2019 Sawyer Sherwood & Associate- All Rights Reserved



KEYED NOTES: (THIS SHEET ONLY)

1. ADJUST POSITION OF EXISTING SPRINKLER HEAD TO BE CENTERED IN NEW CEILING TILE.
2. INSTALL NEW SPRINKLER HEAD.

PIPING LEGEND

- EXISTING SPRINKLER MAIN TO REMAIN
- EXISTING SPRINKLER BRANCH TO REMAIN
- SPRINKLER MAIN
- SPRINKLER BRANCH
- POINT OF NEW CONNECTION TO EXISTING
- CAP
- PIPE RISER DOWN
- PIPE RISER UP
- EXISTING FLOW SWITCH
- EXISTING GATE VALVE W/ TAMPER SWITCH

WALL LEGEND

- 1-HOUR WALL DESIGNATION
- 2-HOUR WALL DESIGNATION
- 3-HOUR WALL DESIGNATION

SPRINKLER LEGEND

- RECESSED PENDANT HEAD
- CONCEALED PENDANT HEAD
- UPRIGHT HEAD
- INSTITUTIONAL HEAD
- EXISTING PENDANT HEAD TO REMAIN
- EXISTING CONCEALED PENDANT HEAD TO REMAIN
- EXISTING UPRIGHT HEAD TO REMAIN
- EXISTING INSTITUIONAL HEAD TO REMAIN

HAZARD LEGEND

- LIGHT HAZARD
- ORDINARY HAZARD I

1 / F1.1 FIRE PROTECTION RENOVATION PLAN – FIRST FLOOR
SCALE: 1/8" = 1'-0"

SAWYER SHERWOOD & ASSOCIATE ARCHITECTURE
124 Market St, Wilmington, NC 28401
910 762-0892 s2a3.com
CHEATHAM AND ASSOCIATES, P.A.
CONSULTING ENGINEERS
3412 ENTERPRISE DRIVE
WILMINGTON, NORTH CAROLINA 28405
PHONE: (910) 452-4210
FAX: (910) 452-4211
OFFICE@CHEATHAMPA.COM
WWW.CHEATHAMPA.COM
NC LICENSE# C-1075
18048

NORTH CAROLINA PROFESSIONAL SEAL 043164 ENGINEER CASEY D. GILMAN

Brunswick County Courthouse Addition & Renovations

Bolivia, NC

Plan North

CONSTRUCTION DRAWINGS
SEPTEMBER 23, 2019

Revisions:

1	ADDENDUM #2	01/03/20

FIRE PROTECTION RENOVATION PLAN FIRST FLOOR

F1.1

5 OF 7

© 2019 Sawyer Sherwood & Associate- All Rights Reserved

SERIES FAN POWER TERMINAL UNIT SCHEDULE – FOR REFERENCE ONLY

TERMINAL NUMBER	BOX INLET CFM COOLING MINIMUM	BOX INLET CFM COOLING MAXIMUM	BOX INLET CFM HEATING	BOX INLET SIZE (1)	BOX RUNOUT SIZE	FAN CFM	FAN ELECTRICAL HP	FAN ELECTRICAL VOLTAGE & PHASE	HEATING COIL HEATING CAPACITY MBH	HEATING COIL KW	HEATING COIL STAGES	HEATING COIL VOLTAGE & PHASE	REMARKS
SFP-4-1	180	360	–	8"ø	–	360	1/10	277/1	12830	4.0	UNK	277/1	EXISTING (3)(4)
SFP-4-2	75	150	–	6"ø	–	150	1/10	277/1	3321	1.0	UNK	277/1	EXISTING (3)(4)
SFP-4-3	295	590	–	8"ø	–	590	1/4	277/1	13062	4.0	UNK	277/1	EXISTING RELOCATED (2)(3)
SFP-4-4	225	450	–	8"ø	–	450	1/10	277/1	9963	3.0	UNK	277/1	EXISTING (2)(3)
SFP-4-5	235	470	–	8"ø	–	470	1/10	277/1	10406	3.0	UNK	277/1	EXISTING (3)(4)
SFP-4-6	340	680	–	10"ø	–	680	1/4	277/1	15055	4.5	UNK	277/1	EXISTING (2)(3)
SFP-4-7	310	620	–	10"ø	–	620	1/4	277/1	13727	4.0	UNK	277/1	EXISTING (3)(4)
SFP-4-8	780	1560	–	14"ø	–	1560	1/2	480/3	34538	10.0	UNK	480/3	EXISTING (3)(4)
SFP-4-9	800	1600	–	14"ø	–	1600	1/2	480/3	57024	17.0	UNK	480/3	EXISTING (3)(4)
SFP-4-10	300	600	–	8"ø	–	600	1/4	277/1	13284	4.0	UNK	277/1	EXISTING (2)(3)
SFP-4-11	255	510	–	8"ø	–	510	1/10	277/1	11291	3.5	UNK	277/1	EXISTING RELOCATED (2)(3)
SFP-4-12	700	1400	–	12"ø	–	1400	1/2	480/3	49896	15.0	UNK	480/3	EXISTING (2)(3)
SFP-4-13	590	1180	–	12"ø	–	1180	1/3	480/3	42055	12.5	UNK	480/3	EXISTING (3)(4)
SFP-4-14	220	440	–	8"ø	–	440	1/10	277/1	9742	3.0	UNK	277/1	EXISTING (2)(3)
SFP-4-15	180	360	–	8"ø	–	360	1/10	277/1	12830	4.0	UNK	277/1	EXISTING (2)(3)
SFP-4-16	260	520	–	8"ø	–	520	1/10	277/1	18533	5.5	UNK	277/1	EXISTING (2)(3)
SFP-4-17	465	930	–	10"ø	–	930	1/3	277/1	20590	6.0	UNK	277/1	EXISTING (2)(3)
SFP-4-18	420	840	–	10"ø	–	840	1/4	480/3	29938	9.0	UNK	480/3	EXISTING (3)(4)
SFP-4-19	379	740	–	10"ø	–	740	1/4	480/3	26374	8.0	UNK	480/3	EXISTING (2)(3)
SFP-10-1	150	300	–	8"ø	–	300	1/10	277/1	10692	3.5	UNK	277/1	EXISTING (3)(4)
SFP-10-2	210	420	–	8"ø	–	420	1/10	277/1	9299	3.0	UNK	277/1	EXISTING (3)(4)
SFP-10-3	150	300	–	8"ø	–	300	1/10	277/1	6642	2.0	UNK	277/1	EXISTING (3)(4)
SFP-10-4	175	350	–	8"ø	–	350	1/10	277/1	7749	2.5	UNK	277/1	EXISTING (3)(4)
SFP-10-5	195	390	–	8"ø	–	390	1/10	277/1	8634	2.5	UNK	277/1	EXISTING (3)(4)
SFP-10-6	165	330	–	8"ø	–	330	1/10	277/1	7306	2.5	UNK	277/1	EXISTING (3)(4)
SFP-10-7	285	570	–	8"ø	–	570	1/4	277/1	12619	4.0	UNK	277/1	EXISTING (2)(3)
SFP-10-8	555	1110	–	12"ø	–	1110	1/3	480/3	24575	7.5	UNK	480/3	EXISTING (2)(3)
SFP-10-9	355	710	–	10"ø	–	710	1/4	277/1	15719	5.0	UNK	277/1	EXISTING (2)(3)
SFP-10-10	700	1400	–	12"ø	–	1400	1/2	480/3	30996	9.0	UNK	480/3	EXISTING (3)(4)
SFP-10-11	810	1620	–	14"ø	–	1620	1/2	480/3	57736	17.0	UNK	480/3	EXISTING (3)(4)
SFP-10-12	470	940	–	10"ø	–	940	1/3	277/1	20811	6.0	UNK	277/1	EXISTING (3)(4)
SFP-10-13	230	460	–	8"ø	–	460	1/10	277/1	10184	3.0	UNK	277/1	EXISTING (3)(4)
SFP-10-14	345	690	–	10"ø	–	690	1/4	480/3	24591	7.5	UNK	480/3	EXISTING (3)(4)
SFP-10-15	210	420	–	8"ø	–	420	1/10	277/1	9298	3.0	UNK	277/1	EXISTING (3)(4)
SFP-10-16	175	350	–	8"ø	–	350	1/10	277/1	7749	2.5	UNK	277/1	EXISTING (3)(4)
SFP-10-17	150	300	–	8"ø	–	300	1/10	277/1	6642	2.0	UNK	277/1	EXISTING (3)(4)
SFP-10-18	320	640	–	10"ø	–	640	1/4	480/3	22809	7.0	UNK	480/3	EXISTING (3)(4)
SFP-10-19	275	550	–	8"ø	–	550	1/10	277/1	19602	6.0	UNK	277/1	EXISTING (3)(4)
SFP-10-20	215	430	–	8"ø	–	430	1/10	277/1	9520	3.0	UNK	277/1	EXISTING (3)(4)
SFP-10-21	310	620	–	10"ø	–	620	1/4	277/1	13726	4.0	UNK	277/1	EXISTING RELOCATED (2)(3)
SFP-10-22	475	950	–	10"ø	–	950	1/3	480/3	21033	6.5	UNK	480/3	EXISTING (2)(3)
SFP-10-23	195	390	–	8"ø	–	390	1/10	277/1	8634	2.5	UNK	277/1	EXISTING (2)(3)
SFP-10-24	905	1810	–	14"ø	–	1810	3/4	480/3	40073	12.0	UNK	480/3	EXISTING (2)(3)
SFP-10-25	585	1170	–	12"ø	–	1170	1/3	480/3	25903	7.5	UNK	480/3	EXISTING (3)(4)
SFP-10-26	820	1640	–	14"ø	–	1640	1/2	480/3	58449	17.0	UNK	480/3	EXISTING (2)(3)
SFP-11-1	320	640	–	10"ø	–	640	1/4	277/1	15897	5.0	UNK	277/1	EXISTING (2)(3)
SFP-11-2	200	400	–	6"ø	–	400	1/10	277/1	9936	3.0	UNK	277/1	EXISTING (3)(4)
SFP-11-3	280	560	–	8"ø	–	560	1/4	277/1	13910	4.0	UNK	277/1	EXISTING (2)(3)
SFP-11-4	665	1330	–	12"ø	–	1330	1/2	480/3	47401	14.0	UNK	480/3	EXISTING (3)(4)
SFP-11-5	180	360	–	8"ø	–	360	1/10	277/1	8942	3.0	UNK	277/1	EXISTING (2)(3)
SFP-11-6	780	1560	–	14"ø	–	1560	1/2	480/3	38570	11.5	UNK	480/3	EXISTING (2)(3)
SFP-11-7	300	600	–	8"ø	–	600	1/4	277/1	14904	4.5	UNK	277/1	EXISTING (2)(3)
SFP-11-8	460	920	–	10"ø	–	920	1/3	480/3	22852	7.0	UNK	480/3	EXISTING (3)(4)
SFP-11-9	160	320	–	8"ø	–	320	1/10	277/1	7948	2.5	UNK	277/1	EXISTING (3)(4)
SFP-11-10	390	780	–	10"ø	–	780	1/4	480/3	27799	8.5	UNK	480/3	EXISTING (3)(4)
SFP-11-11	900	1800	–	14"ø	–	1800	3/4	480/3	64152	19.0	UNK	480/3	EXISTING (3)(4)
SFP-11-12	275	550	–	8"ø	–	550	1/10	277/1	13662	4.0	UNK	277/1	EXISTING (3)(4)
SFP-11-13	580	1160	–	12"ø	–	1160	1/3	480/3	28814	8.5	UNK	480/3	EXISTING (2)(3)
SFP-11-14	360	720	–	10"ø	–	720	1/4	480/3	25660	7.5	UNK	480/3	EXISTING (3)(4)
SFP-11-15	775	1550	–	14"ø	–	1550	1/2	480/3	55242	16.5	UNK	480/3	EXISTING (2)(3)
SFP-11-16	270	540	–	8"ø	–	540	1/10	277/1	13413	4.0	UNK	277/1	EXISTING (3)(4)
SFP-11-17	170	340	–	8"ø	–	340	1/10	277/1	8445	2.5	UNK	277/1	EXISTING (3)(4)
SFP-11-18	155	310	–	8"ø	–	310	1/10	277/1	15649	2.5	UNK	277/1	EXISTING (3)(4)
SFP-11-19	465	930	–	10"ø	–	930	1/3	480/3	33145	10.0	UNK	480/3	EXISTING (3)(4)
SFP-11-20	90	180	–	8"ø	–	180	1/10	277/1	6415	2.0	UNK	277/1	EXISTING (3)(4)
SFP-11-21	315	630	–	10"ø	–	630	1/4	277/1	15649	4.5	UNK	277/1	EXISTING (2)(3)
SFP-11-22	765	1570	–	14"ø	–	1570	1/2	480/3	55954	16.5	UNK	480/3	EXISTING (3)(4)
SFP-11-23	885	1770	–	14"ø	–	1770	3/4	480/3	43966	13.0	UNK	480/3	EXISTING (3)(4)

(1) BASED ON EXISTING DRAWINGS.
(2) NEW LAYOUT AND/OR GRILLE LOCATIONS. TAB AIRFLOW ON BOX AND SUPPLY AIR CFMS FOR EACH RUNOUT.
(3) ALTERNATE NO. M-1 – REPLACE THE DDC CONTROLLER AND REPLACE/ADD THE DISCHARGE AIR SENSOR AND CONNECT TO NEW BAS DDC SYSTEM.
(4) ALTERNATE NO. M-1 – TAB AIRFLOW ON TERMINAL UNIT.

PARALLEL FAN POWER TERMINAL UNIT SCHEDULE – FOR REFERENCE ONLY

TERMINAL NUMBER	BOX INLET CFM COOLING MINIMUM	BOX INLET CFM COOLING MAXIMUM	BOX INLET CFM HEATING	BOX INLET SIZE (1)	BOX RUNOUT SIZE	FAN CFM	FAN ELECTRICAL HP	FAN ELECTRICAL VOLTAGE & PHASE	HEATING COIL HEATING CAPACITY MBH	HEATING COIL KW	HEATING COIL STAGES	HEATING COIL VOLTAGE & PHASE	REMARKS
PFP-4-1	95	380	–	8"ø	–	95	1/10	277/1	6771	2.0	UNK-	277/1	EXISTING (2)(3)
PFP-4-2	190	760	–	10"ø	–	190	1/10	277/1	13543	4.0	UNK	277/1	EXISTING (2)(3)
PFP-4-3	135	540	–	8"ø	–	135	1/10	277/1	9622	3.0	UNK	277/1	EXISTING (3)(4)
PFP-4-4	70	280	–	6"ø	–	70	1/10	277/1	3099	1.0	UNK	277/1	EXISTING (3)(4)
PFP-4-5	113	450	–	8"ø	–	113	1/10	277/1	4981	1.5	UNK	277/1	EXISTING (3)(4)
PFP-4-6	150	600	–	8"ø	–	150	1/10	277/1	6642	2.0	UNK	277/1	EXISTING (3)(4)
PFP-4-7	153	610	–	10"ø	–	153	1/10	277/1	6752	2.0	UNK	277/1	EXISTING (3)(4)
PFP-4-8	203	810	–	10"ø	–	203	1/4	277/1	8966	3.0	UNK	277/1	EXISTING RELOCATED (2)(3)
PFP-4-9	68	270	–	6"ø	–	68	1/10	277/1	2988	1.0	UNK	277/1	EXISTING (2)(3)
PFP-4-10	220	880	–	10"ø	–	220	1/4	277/1	9741	3.0	UNK	277/1	EXISTING RELOCATED (2)(3)
PFP-4-11	110	440	–	8"ø	–	110	1/10	277/1	4870	1.5	UNK	277/1	EXISTING RELOCATED (2)(3)
PFP-10-1	158	630	–	10"ø	–	158	1/10	277/1	11226	3.5	UNK	277/1	EXISTING (3)(4)
PFP-10-2	105	420	–	8"ø	–	105	1/10	277/1	7484	2.5	UNK	277/1	EXISTING (2)(3)
PFP-10-3	150	600	–	8"ø	–	150	1/10	277/1	6642	2.0	UNK	277/1	EXISTING (3)(4)
PFP-10-4	260	1040	–	12"ø	–	260	1/4	277/1	18532	5.5	UNK	277/1	EXISTING RELOCATED (2)(3)
PFP-10-5	180	720	–	10"ø	–	180	1/10	277/1	7970	2.5	UNK	277/1	EXISTING RELOCATED (2)(3)
PFP-10-6	160	640	–	10"ø	–	160	1/10	277/1	11404	3.5	UNK	277/1	EXISTING (2)(3)
PFP-10-7	193	770	–	10"ø	–	193	1/10	277/1	8523	2.5	UNK	277/1	EXISTING (2)(3)
PFP-10-8	200	800	–	10"ø	–	200	1/4	277/1	14256	4.5	UNK	277/1	EXISTING (3)(4)
PFP-10-9	105	420	–	8"ø	–	105	1/10	277/1	7970	2.5	UNK	277/1	EXISTING (2)(3)
PFP-11-1	175	700	–	10"ø	–	175	1/10	277/1	11404	4.0	UNK	277/1	EXISTING (3)(4)
PFP-11-2	115	460	–	8"ø	–	115	1/10	277/1	8523	2.5	UNK	277/1	EXISTING (2)(3)
PFP-11-3	85	340	–	6"ø	–	85	1/10	277/1	14256	2.0	UNK	277/1	EXISTING (3)(4)
PFP-11-4	148	590	–	8"ø	–	148	1/10	277/1	7484	3.5	UNK	277/1	EXISTING (2)(3)
PFP-11-5	123	490	–	8"ø	–	123	1/10	277/1	12474	2.5	UNK	277/1	EXISTING (3)(4)
PFP-11-6	123	490	–	8"ø	–	123	1/10	277/1	8197	2.5	UNK	277/1	EXISTING (3)(4)
PFP-11-7	165	660	–	10"ø	–	165	1/10	277/1	6058	3.5	UNK	277/1	EXISTING RELOCATED (2)(3)
PFP-11-8	115	460	–	8"ø	–	115	1/10	277/1	10832	2.5	UNK	277/1	EXISTING (3)(4)
PFP-11-9	123	490	–	8"ø	–	123	1/10	277/1	8731	2.5	UNK	277/1	EXISTING (3)(4)
PFP-11-10	140	560	–	8"ø	–	140	1/10	277/1	9979	3.0	UNK	277/1	EXISTING (2)(3)
PFP-11-11	135	540	–	8"ø	–	135	1/10	277/1	9822	3.0	UNK	277/1	EXISTING (3)(4)
PFP-11-12	88	350	–	8"ø	–	88	1/10	277/1	6237	2.0	UNK	277/1	EXISTING (2)(3)
PFP-11-13	143	570	–	8"ø	–	143	1/10	277/1	10157	3.0	UNK	277/1	EXISTING (3)(4)
PFP-11-14	195	780	–	10"ø	–	195	1/10	277/1	13899	4.0	UNK	277/1	EXISTING (3)(4)

(1) BASED ON EXISTING DRAWINGS.
(2) NEW LAYOUT AND/OR GRILLE LOCATIONS. TAB AIRFLOW ON BOX AND SUPPLY AIR CFMS FOR EACH RUNOUT.
(3) ALTERNATE NO. M-1 – REPLACE THE DDC CONTROLLER AND REPLACE/ADD THE DISCHARGE AIR SENSOR AND CONNECT TO NEW BAS DDC SYSTEM.
(4) ALTENRATE NO. M-1 – TAB AIRFLOW ON TERMINAL UNIT.

VAV ROOM TERMINAL BOX SCHEDULE

TERMINAL NUMBER	BOX CFM COOLING MAXIMUM	BOX CFM COOLING AND HEATING MINIMUM	BOX CFM HEATING MAXIMUM	BOX INLET SIZE (1)	BOX RUNOUT SIZE (1)	ELECTRIC HEATING HEATING CAPACITY BTU/HR	ELECTRIC HEATING KW	ELECTRIC HEATING VOLTAGE AND PHASE	ELECTRIC HEATING STAGES	REMARKS
VAV-4-1	250	125	–	5"	–	5118	1.5	277V-1ø	UNK	EXISTING RELOCATED (2) (3)
VAV-4-2	250	125	–	5"	–	5118	1.5	277V-1ø	UNK	EXISTING (3)(4)
VAV-4-3	360	180	–	6"	–	1706	0.5	277V-1ø	UNK	EXISTING (3)(4)
VAV-4-4	1300	675	–	10x13	–	8530	2.5	277V-1ø	UNK	EXISTING (3)(4)
VAV-4-5	400	200	–	7"	–	6824	2.0	277V-1ø	UNK	EXISTING (2) (3)
VAV-4-6	250	125	–	5"	–	5118	1.5	277V-1ø	UNK	EXISTING (3)(4)
VAV-10-1	360	180	–	6"	–	1706	0.5	277V-1ø	UNK	EXISTING (3)(4)
VAV-10-2	100	50	–	4"	–	1706	0.5	277V-1ø	UNK	EXISTING (3)(4)
VAV-10-3	250	125	–	5"	–	5118	1.5	277V-1ø	UNK	EXISTING (3)(4)
VAV-11-1	250	125	–	5"	–	5118	1.5	277V-1ø	UNK	EXISTING (3)(4)
VAV-11-2	360	180	–	6"	–	1706	0.5	277V-1ø	UNK	EXISTING (3)(4)
VAV 13-1	1100	225	550	10"	12"	23,800	8.0	277V-1ø	SCR	COURT ROOM – 4 (2)
VAV 13-2	1100	225	550	10"	12"	23,800	8.0	277V-1ø	SCR	COURT ROOM – 4 (2)
VAV 13-3	450	100	225	6"	8"	9720	3.0	277V-1ø	SCR	JUDGE 1205 (2)
VAV 13-4	1000	200	500	10"	12"	21,600	7.0	277V-1ø	SCR	CONFERENCE 1208/LOBBY 1201 (2)
VAV 13-5	800	200	400	8"	10"	17,280	5.0	277V-1ø	SCR	ATTORNEY LOUNGE 1209 (2)
VAV 14-1	800	200	400	8"	10"	17,280	5.0	277V-1ø	SCR	JURY LOUNGE 2204 (2)
VAV 14-2	1500	600	750	12"	14"	30,250	10.0	277V-1ø	SCR	JURY ASSEMBLY 2200 (2)
VAV 14-3	1500	600	750	12"	14"	30,250	10.0	277V-1ø	SCR	JURY ASSEMBLY 2200 (2)
VAV 14-4	1100	225	550	10"	12"	23,800	8.0	277V-1ø	SCR	OPEN OFFICE 2202 (2)
VAV 14-5	600	175	350	8"	10"	15,120	5.0	277V-1ø	SCR	BREAK 3209/OFFICE 2202 (2)
VAV 14-6	400	100	200	6"	8"	8,640	2.5	277V-1ø	SCR	OFFICES AREA (2)
VAV 14-7	800	200	400	8"	10"	17,280	5.0	277V-1ø	SCR	CONFERENCE ROOM/OFFICES (2)
VAV 14-8	850	200	425	8"	10"	17,280	5.0	277V-1ø	SCR	WORKROOM/INNER OFFICES (2)
VAV 14-9	1300	250	675	12"	14"	29,200	9.0	277V-1ø	SCR	GRAND JURY (2)
VAV 14-10	850	200	425	8"	10"	18,360	6.0	277V-1ø	SCR	SPECIAL PROCEEDINGS 3200 (2)

(1) FOR EXISTING BOXES SIZES ARE BASED ON EXISTING DRAWINGS. FOR NEW VAV BOXES INLET SIZE IS ROOM TERMINAL BOX INLET SIZE. RUNOUT SIZE IS AS SCHEDULED AND SHOWN ON DRAWINGS. DUCT TRANSITION SHALL OCCUR 36" BEFORE BOX INLET. TOTAL STATIC PRESSURE DROP FOR BOX TERMINAL INLET VALVE, BOX, PLUS COIL SHALL NOT EXCEED 0.50"W.G.
(2) NEW LAYOUT AND/OR GRILLE LOCATIONS. TAB AIRFLOW ON VAV BOX AND SUPPLY AIR CFMS FOR EACH RUNOUT.
(3) ALTERNATE NO. M-1 – REPLACE/ADD DDC CONTROLLER AND REPLACE THE DISCHARGE AIR SENSOR AND CONNECT TO NEW BAS DDC SYSTEM.
(4) ALTERNATE NO. M-1 – TAB AIRFLOW ON VAV BOX.

PIPE INSULATION THICKNESS SCHEDULE

PIPE SIZE	INSULATION THICKNESS CHILLED WATER	REMARKS
3/4"	1-1/2"	
1"	1-1/2"	
1-1/4"	1-1/2"	
1-1/2"	1-1/2"	
2"	1-1/2"	
2-1/2"	1-1/2"	
3"	1-1/2"	
4"	1-1/2"	
5"	1-1/2"	
6"	1-1/2"	
8"	1-1/2"	

SAWYER SHERWOOD & ASSOCIATE ARCHITECTURE
124 Market St, Wilmington, NC 28401
910 762-0892 s2a3.com

CHEATHAM AND ASSOCIATES, P.A.
CONSULTING ENGINEERS
3412 ENTERPRISE DRIVE
WILMINGTON, NORTH CAROLINA 28405
PHONE: (910) 452-4210
FAX: (910) 452-4211
OFFICE@CHEATHAMPA.COM
WWW.CHEATHAMPA.COM
NC LICENSE# C-1073

18048

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 17655 KENNETH LYNCH

Brunswick County Courthouse Addition & Renovations

Bolivia, NC

CONSTRUCTION DRAWINGS
SEPTEMBER 23, 2019

Revisions:

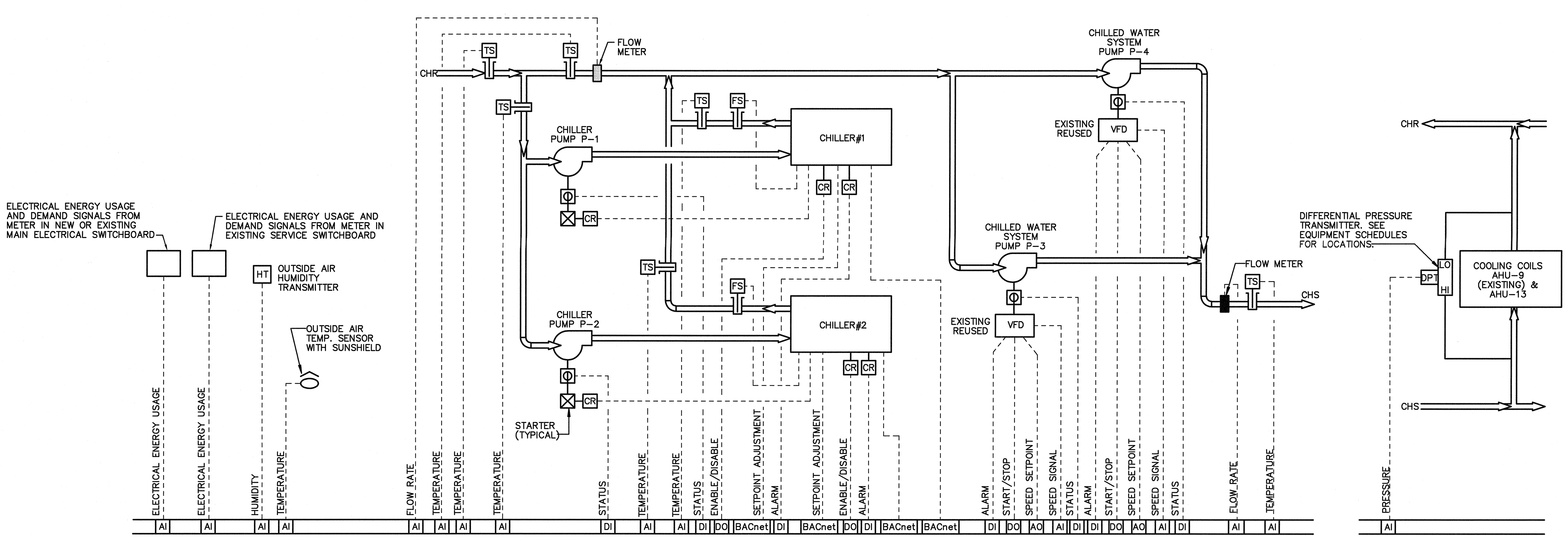
(1) ADDENDUM #3 01-10-2020

MECHANICAL SCHEDULES

M6.0

OF 20

© 2019 Sawyer Sherwood & Associate- All Rights Reserved



CHILLED WATER SYSTEM

SEQUENCE OF OPERATION

PRIMARY-SECONDARY, VARIABLE FLOW CHILLED WATER SYSTEM WITH MULTIPLE CHILLERS

DESCRIPTION : VARIABLE FLOW CHILLED WATER SYSTEM UTILIZING MULTIPLE CHILLERS PIPED IN PARALLEL. CHILLERS AND PUMPS ARE 100% BACKUP OF ONE ANOTHER. PRIMARY CHILLER CONTROL IS PROVIDED BY FACTORY CONTROLLER INTERFACED WITH DDC SYSTEM.

SYSTEM START/STOP CONTROL : START/STOP SYSTEM BASED ON (1) USER-DEFINED "ON/OFF" SCHEDULE, (2) DEMAND FOR COOLING BY SECONDARY SYSTEMS AS USER- DEFINED, OR (3) OPERATOR COMMAND. START SEQUENCE SHALL BE AS FOLLOWS:

COMMAND LEAD SECONDARY CHILLED WATER PUMP "ON".

SECONDARY CHILLED WATER TEMPERATURE/FLOW CONTROL:

MONITOR SECONDARY CHILLED WATER SUPPLY TEMPERATURE.

MONITOR SECONDARY CHILLED WATER RETURN TEMPERATURE.

MODULATE SECONDARY CHILLED WATER PUMPS SPEED VIA INTERFACE WITH VFD CONTROLLER TO MAINTAIN SECONDARY CHILLED WATER RETURN TEMPERATURE AT SETPOINT.

ROTATE LEAD SECONDARY CHILLED WATER PUMP TO EQUALIZE RUNTIME AS LEAD PUMP.

MONITOR DIFFERENTIAL PRESSURE AT POINT(S) INDICATED ON THE DRAWINGS.

IF DIFFERENTIAL PRESSURE INPUT(S) FALLS BELOW SETPOINT, INCREASE SECONDARY CHILLED WATER PUMPS SPEED TO MAINTAIN DIFFERENTIAL PRESSURE(S) AT SETPOINT. DURING TEST AND BALANCE OF SECONDARY HOT WATER DISTRIBUTION, DIFFERENTIAL PRESSURE SETPOINT(S) TO VALUE(S) RECOMMENDED BY ADJUST SUBCONTRACTOR, AS APPROVED BY A/E.

MONITOR SECONDARY PUMP STATUS VIA CURRENT SENSOR.

IF LEAD SECONDARY PUMP DOES NOT OPERATE OR SATISFY SETPOINT, COMMAND PUMP "OFF", INITIATE ALARM, AND COMMAND BACKUP PUMP "ON".

MONITOR PRIMARY CHILLED WATER RETURN TEMPERATURE.

START/STOP LEAD CHILLER IN SEQUENCE TO MAINTAIN PRIMARY CHILLED WATER RETURN TEMPERATURE AT OR BELOW SECONDARY CHILLED WATER RETURN TEMPERATURE SETPOINT, AS FOLLOWS:

IF PRIMARY CHILLED WATER RETURN TEMPERATURE IS ABOVE SECONDARY CHILLED WATER RETURN TEMPERATURE SETPOINT FOR 30 MINUTES, COMMAND LEAD CHILLER "ON".

IF PRIMARY CHILLED WATER RETURN TEMPERATURE IS BELOW SECONDARY CHILLED WATER RETURN TEMPERATURE SETPOINT MINUS COMPUTED TEMPERATURE RISE PER CHILLER FOR 30 MINUTES, COMMAND A CHILLER "OFF".

ROTATE CHILLER ON/OFF SEQUENCE TO EQUALIZE RUNTIME BETWEEN CHILLERS.

CHILLER START/STOP CONTROL:

CHILLER SHALL CONTROL ITS PRIMARY CHILLED WATER PUMP "ON".

CONFIRM PRIMARY CHILLED WATER FLOW VIA DIFFERENTIAL PRESSURE FLOW SWITCH.

COMMAND CHILLER "ON" THROUGH INTERFACE WITH CHILLER CONTROLLER.

MONITOR CHILLER ENTERING CHILLED WATER TEMPERATURE.

MONITOR CHILLER LEAVING CHILLED WATER TEMPERATURE.

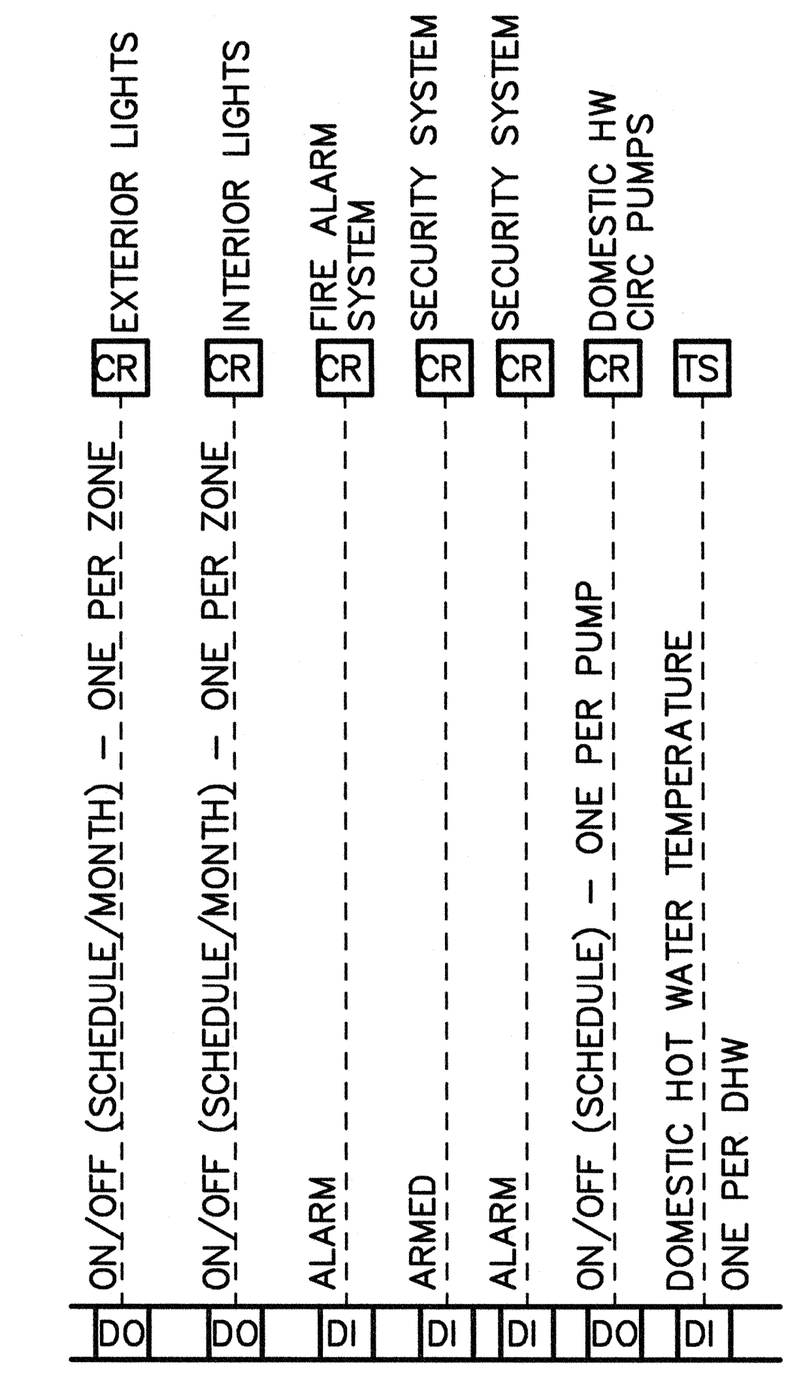
IF CHILLER FAILS TO START WITHIN 5 MINUTES, STOP LEAD CHILLER AND INITIATE ALARM. COMMAND BACKUP CHILLER "ON".

LEAVING CHILLED WATER TEMPERATURE SHALL BE MAINTAINED VIA CHILLER CONTROLLER AT SETPOINT INPUT FROM DDC SYSTEM.

MONITOR CHILLER ALARM STATUS. IF CHILLER SAFETY CONTROLS STOP CHILLER, STOP LEAD CHILLER AND INITIATE ALARM. COMMAND BACKUP CHILLER "ON".

PRIMARY CHILLED WATER PUMPS SHALL RUN AS COMMANDED BY THEIR CHILLERS.

UPON RESUMPTION OF POWER AFTER A POWER OUTAGE, LEAD CHILLER SHALL RESTART, IF COMMANDED "ON", AFTER 3 MINUTES.



MISCELLANEOUS POINTS

GENERAL SEQUENCES OF OPERATION

A. LIGHTING AND SECURITY SEQUENCE OF OPERATION
   1. SECURITY SYSTEM INTERFACE: THE SECURITY ALARM PANEL WILL PROVIDE CONTACTS FOR ALARM/NORMAL AND ARMED/DISARMED TO THE BAS SYSTEM.
   2. INTERIOR LIGHTING: ON/OFF BASED ON USER-DEFINED SCHEDULE OR OPERATOR COMMAND.
   3. EXTERIOR LIGHTING: THE EXTERIOR LIGHTS (ONLY THOSE LIGHTS THAT ARE ATTACHED TO THE BUILDING) WILL BE ENERGIZED AT SUNDOWN AND WILL BE DEENERGIZED AT SUNRISE.
B. HEATERS
   1. ELECTRIC UNIT HEATER: BUILT-IN THERMOSTAT SHALL MAINTAIN ITS SET POINT OF 55°F. BY STARTING THE UNIT HEATER. NO ENERGY MANAGEMENT SYSTEM MONITORING OR CONTROL IS REQUIRED FOR UNIT HEATERS.
C. BAS OVERRIDE
   1. ACTIVATION OF THE OVERRIDE PUSHBUTTON AT SPECIFIED WALL MOUNTED TEMPERATURE SENSOR WILL SWITCH AN AIR HANDLING UNIT AND ASSOCIATED ZONE CONTROL SEQUENCE OR FROM THE UNOCCUPIED TO THE OCCUPIED MODE FOR A PROGRAMMABLE TIME PERIOD THE INITIAL SET UP TIME PERIOD SHALL BE TWO HOURS.
D. TREND LOGS
   1. PROVIDE TREND LOGS FOR ALL MAJOR EQUIPMENT OPERATION AT OWNER'S DISCRETION.
   2. COORDINATE WITH OWNER FOR EXACT REQUIREMENTS OF TREND LOG REQUIREMENTS
E. DOMESTIC HOT WATER SYSTEM
   1. WATER HEATER BURNER SHALL BE CONTROLLED BY INTERNAL THERMOSTAT.
   2. DOMESTIC HOT WATER RECIRCULATING PUMP(S) SHALL BE CONTROLLED BY SEPARATE DIGITAL OUTPUTS FOR COMMAND AND OVERRIDE BASED ON SCHEDULE.
   3. TEMPERATURE SHALL BE SENSED FOR MONITORING AND ALARM POINTS.

CONTROL SYMBOL LEGEND

DPT	DIFFERENTIAL PRESSURE SWITCH
FS	FLOW SENSOR
TS	TEMPERATURE SENSOR
HT	HUMIDITY SENSOR
VFD	VARIABLE FREQUENCY DRIVE
CR	CONTROL RELAY
ES	EMERGENCY SWITCH
EVS	EVENT SWITCH
M2E	MOTOR OPERATED TWO POSITION ELECTRIC
MPE	MOTOR OPERATED PROPORTIONAL ELECTRIC
NO	NORMALLY OPEN
NC	NORMALLY CLOSED
FAR	FIRE ALARM RELAY
CLS	CONDENSATE LEVEL SENSOR
EN	ENTHALPY
SPS	STATIC PRESSURE SENSOR
O/V	OCCUPANCY/VACANCY SENSOR
SA	SUPPLY AIR
RA	RETURN AIR
OA	OUTSIDE AIR
(symbol)	CONTROL VALVE
(symbol)	CURRENT SENSOR
(symbol)	STARTER

1. EXISTING BAS CONTROLS ARE TRANE TRACER SC + BACnet DDC.
2. NEW CONTROLS SHALL FULLY INTEGRATED AND COMMUNICATING WITH THAT SYSTEM, INCLUDING GRAPHICS

AIR HANDLING UNITS - GENERAL

A. LOGIC STRATEGIES: THE BAS SHALL FULLY CONTROL THE AIR HANDLERS. GENERALLY THE BAS SHALL ENERGIZE THE AHU (START THE FANS AND ACTIVATE CONTROL LOOPS) AS DICTATED FOR EACH AIR HANDLER. THE FOLLOWING INDICATES WHEN AND HOW THE BAS SHALL ENERGIZE THE AHUS AND CONTROL VARIOUS COMMON ASPECTS OF THEM. THE FOLLOWING "LOGIC STRATEGIES" SHALL BE INCLUDED BY REFERENCE WITH EACH AIR HANDLER WITH ANY SPECIFIC CLARIFICATIONS REQUIRED:
   1. SCHEDULED OCCUPANCY: BAS SHALL DETERMINE THE OCCUPANCY PERIODS (OCCUPIED, UNOCCUPIED, PREOCCUPANCY, AND SETBACK). THE FOLLOWING DETAILS THE COMMON CONTROL ASPECTS RELATED TO THE SCHEDULED OCCUPANCY. THE BAS SHALL DISPLAY THE APPLICABLE MODE OR "CAUSE" FOR THE UNIT OPERATING. REFERENCE THE BAS CONTROL SPECIFICATIONS (GRAPHICS) FOR MORE INFORMATION ON HOW THIS SHOULD BE DISPLAYED.
      a. OCCUPIED PERIOD: BAS SHALL ENERGIZE THE AHU DURING ALL OCCUPIED PERIODS. NOTE THAT THE BEGINNING OF THE OCCUPANCY PERIOD SHALL BE SET SUFFICIENTLY BEFORE THE ACTUAL START OF OCCUPANCY TO OBTAIN THE REQUIRED BUILDING COMPONENT OF VENTILATION PER ASHRAE 62. SPECIFIC TIMES SHALL BE AS DIRECTED BY THE A/E & OWNER. MINIMUM OA FLOW SETPOINT SHALL BE AS SCHEDULED ON THE DRAWINGS. "NORMAL"' SETPOINTS SHALL APPLY.
      b. UNOCCUPIED PERIOD: MINIMUM OA FLOW SHALL BE 0 CFM AND THE MINIMUM OA DAMPER POSITION SHALL BE 0%. IF DURING THE UNOCCUPIED PERIOD THERE IS A REQUEST FOR OCCUPANCY OVERRIDE, THE OCCUPANCY MODES HALL BECOME ACTIVE FOR AN ADJUSTABLE PERIOD. TILE UNOCCUPIED PERIOD AND THE PREOCCUPANCY PERIOD WILL TYPICALLY OVERLAP.
      c. SETBACK PERIOD: THE BAS SHALL DEENERGIZE THE UNIT EXCEPT AS REQUIRED TO MAINTAIN A SETBACK TEMPERATURE AS INDICATED IN THE INDIVIDUAL SEQUENCES WITH A 5°F CYCLE DIFFERENTIAL. GENERALLY, WHERE SETBACK TEMPERATURES APPLY IN MULTIPLE ZONES, THE WORST ZONE SHALL CONTROL THE SYSTEM. SETBACK SETPOINTS GENERALLY APPLY EXCEPT DURING PREOCCUPANCY. IF DURING THE UNOCCUPIED PERIOD THERE IS A REQUEST FOR OCCUPANCY OVERRIDE, THE OCCUPANCY MODE SHALL BECOME ACTIVE FOR AN ADJUSTABLE PERIOD. GENERALLY, DURING HEATING SETBACK, COOLING SHALL BE DISABLED. DURING COOLING SETBACK, BOTH HEATING AND COOLING SHALL BE ENABLED.
      d. PREOCCUPANCY: BAS SHALL ENERGIZE THE AHU CONTINUOUSLY DURING THE PREOCCUPANCY PERIOD. MINIMUM OA FLOW SHALL BE 0 CFM OR THE MINIMUM OA DAMPER POSITION SHALL BE 0%. "NORMAL" SPACE SETPOINTS SHALL APPLY FOR THE CONNECTED TERMINAL UNITS. PREOCCUPANCY DURATION SHALL BE OPTIMIZED SO THAT THE PRESET START TIME IS MINIMIZED BUT ALL ZONES ACHIEVE SETPOINT AT THE START OF THE OCCUPIED PERIOD. THE BAS SHALL CONTINUOUSLY ADJUST TO THE PREOCCUPANCY PERIOD (UP TO A USER DEFINED MAXIMUM AMOUNT OF TIME) TO OPTIMIZE THE PREOCCUPANCY START PERIOD. GENERALLY, DURING WARM-UP MODE, COOLING SHALL BE DISABLED. DURING MORNING COOLDOWN, BOTH HEATING AND COOLING SHALL BE ENABLED.
   2. SEQUENCED HEATING AND COOLING: BAS SHALL CONTROL THE HEATING AND COOLING COILS AND AIR SIDE ECONOMIZER AS DETAILED FOR THE PARTICULAR AHU. PROGRAM LOGIC SHALL DIRECTLY PROHIBIT THE HEATING AND COOLING VALVES AS WELL AS THE HEATING VALVE AND ECONOMIZER DAMPER TO BE OPEN (OR ABOVE MINIMUM) SIMULTANEOUSLY. THIS DOES NOT APPLY TO COOLING VALVES AND REHEAT THAT ARE USED SIMULTANEOUSLY FOR DEHUMIDIFICATION.
   3. MIXED AIR LOW LIMIT OVERRIDE: BAS SHALL OVERRIDE THE SIGNAL TO THE OA & RA DAMPERS VIA A PROPORTIONAL ONLY LOOP TO MAINTAIN A MINIMUM MIXED AIR TEMPERATURE. THE MAXIMUM ALLOWED OUTPUT OF THE OA/RA DAMPERS SHALL DROP FROM 100% TO 0% AS THE MIXED AIR TEMPERATURE DROPS FROM 47°F TO 42°F (ALL VALUES BEING ADJUSTABLE).
   4. FREEZE SAFETY: UPON A DROP IN TEMPERATURE BELOW 40°F AT THE HEATING COIL DISCHARGE AIR TEMPERATURE SENSOR, THE SUPPLY AIR FANS SHALL STOP, THE OA & EA DAMPERS WILL CLOSE, THE RA DAMPER WILL OPEN, THE SECONDARY CHILLED WATER PUMP SHALL START, AND THE HEATING WATER AND CHILLED WATER CONTROL VALVES AT THE AIR HANDLING UNIT SHALL OPEN FULLY. AFTER A TIME DELAY OF 20 MINUTES (ADJ.), IF THE HEATING COIL DISCHARGE AIR TEMPERATURE HAS RISEN ABOVE 40°F (ADJ.), THE UNIT SUPPLY AIR FANS SHALL START AGAIN. IF THE HEATING COIL DISCHARGE AIR TEMPERATURE FALLS BELOW 40°F A SECOND TIME WITHIN ONE HOUR (ADJ.), INITIATE AN ALARM. PROCEED THROUGH THE FREEZE PROTECTION CYCLE AGAIN. THE OUTSIDE AIR DAMPER SHALL REMAIN CLOSED UNTIL MANUALLY RESET (VIA SOFTWARE).
   5. SMOKE/FIRE SAFETY: UPON INDICATION OF SMOKE OR FIRE BY THE FIRE ALARM SYSTEM (VIA A RELAY PROVIDED BY THE FAS CONTRACTOR), THE BAS SHALL DEENERGIZE THE AHU VIA A HARD WIRED INTERLOCK. ALL DAMPERS SHALL REVERT TO THEIR NORMAL "OFF" POSITIONS UNLESS SPECIFICALLY INDICATED OTHERWISE. THE BAS SHALL ENUNCIATE THE APPROPRIATE ALARM; THEN REMOVE AND LOCK OUT THE UNIT START COMMAND UNTIL THE ALARM CONDITION IS CLEARED.
   6. HIGH OR LOW PRESSURE SAFETY: UPON ACTIVATION OF A HIGH OR LOW PRESSURE SAFETY SWITCH, AHU SHALL BE DEENERGIZED VIA A HARD WIRED INTERLOCK AND AN INDICATION OF THE OPERATION SHALL BE INDICATED AT THE BAS. THE BAS SHALL ENUNCIATE THE APPROPRIATE ALARM; THEN REMOVE AND LOCK OUT THE UNIT START COMMAND UNTIL THE ALARM CONDITION IS CLEARED. AS CONFIRMED AS PART OF TEST AND BALANCE PROCESS:
      a. HIGH PRESSURE SAFETY SETPOINT SHALL BE 1" W.G. (ADJ.) ABOVE FAN MAXIMUM FINAL EXTERNAL STATIC PRESSURE.
      b. LOW PRESSURE SAFETY SETPOINT SHALL BE 50% (ADJ.) BELOW FAN FINAL MINIMUM EXTERNAL STATIC PRESSURE.
   7. SUPPLY AIR STATIC PRESSURE RESET CONTROL: RESET DUCT STATIC PRESSURE SET POINT(S) HIGHER OR LOWER BETWEEN MAXIMUM AND MINIMUM SET POINTS BASED ON BAS OPTIMIZATION LOGIC THAT USES THE TERMINAL UNIT AIR DAMPER POSITIONS. THE SET POINT(S) SHALL BE INCREASED TO MAINTAIN ALL DAMPERS AT LESS THAN 95% OPEN. THE SET POINTS(S) SHALL BE DECREASED TO MAINTAIN MINIMUM OF ONE DAMPER AT NO LESS THAN 90% OPEN. INITIAL AND MINIMUM SETPOINTS SHALL BE RECOMMENDED BY THE TAB CONTRACTOR AND APPROVED BY THE ENGINEER. MAXIMUM SET POINTS SHALL BE EQUAL TO THE INITIAL SETPOINTS PLUS 0.50 INCHES. RESET SET POINT IN 15 MINUTE INCREMENTS.
   8. HUMIDITY CONTROL: UPON A RISE IN HUMIDITY LEVEL ABOVE 60% (ADJUSTABLE) AND UNTIL RELATIVE HUMIDITY DROPS TO 55%, AS SENSED BY THE RETURN DUCT HUMIDITY SENSOR, THE COOLING COIL CONTROL VALVE SHALL MODULATE TO PROVIDE 55°F DISCHARGE AIR TEMPERATURE. THE UNIT FAN SPEED, TERMINAL BOX POSITION, AND REHEAT CONTROL SHALL BE MODULATED TO MAINTAIN SPACE TEMPERATURE 1 DEG LOWER THAN THE COOLING SETPOINT.

B. THE DETAILED LOGIC "STRATEGIES" ABOVE SHALL BE REQUIRED BY REFERENCE TO THEM IN EACH OF THE INDIVIDUAL SEQUENCES SPECIFIED FOR THIS PROJECT.

SPACE TEMPERATURE AND HUMIDITY CRITERIA

OCCUPIED PERIOD SETPOINTS:
1. TYPICAL: 68°F HEATING / 75°F COOLING / 60% RH MAXIMUM.
2. ELECTRICAL/DATA ROOMS: 60°F HEATING / 80°F COOLING / 60% RH MAXIMUM.
3. MECHANICAL ROOMS: 60°F HEATING.

UNOCCUPIED PERIOD SETPOINTS:
1. 60°F HEATING / 80°F COOLING / 60% RH MAXIMUM.

CONFIRM ALL SETPOINTS WITH OWNER

SAWYER SHERWOOD & ASSOCIATE ARCHITECTURE
124 Market St, Wilmington, NC 28401
910 762-0892 s2a3.com
CHEATHAM AND ASSOCIATES, P.A.
CONSULTING ENGINEERS
3412 ENTERPRISE DRIVE
WILMINGTON, NORTH CAROLINA 28405
PHONE: (910) 452-4210
FAX: (910) 452-4211
OFFICE@CHEATHAMPA.COM
WWW.CHEATHAMPA.COM
NC LICENSE# C-1073
18048
NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 17655 KENNETH LYNCH

Brunswick County Courthouse Addition & Renovations

Bolivia, NC

CONSTRUCTION DRAWINGS
SEPTEMBER 23, 2019

Revisions:

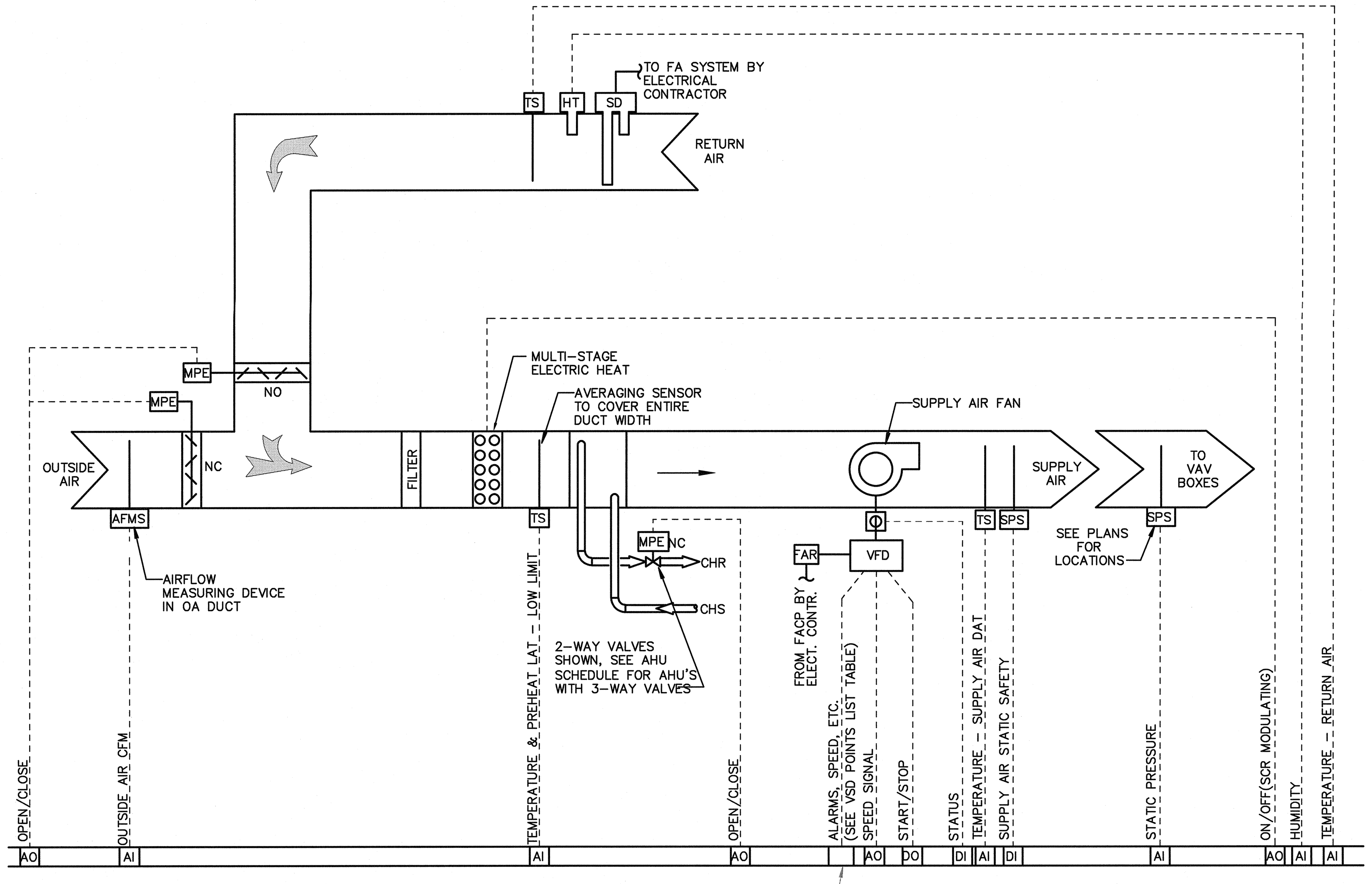
1 ADDENDUM #3 01-10-2020

MECHANICAL CONTROL DIAGRAMS

M8.0

OF 20

© 2019 Sawyer Sherwood & Associate- All Rights Reserved



VARIABLE AIR VOLUME AIR HANDLING UNIT (NEW AHU# 13 & 14)

SEQUENCE OF OPERATION

SINGLE DUCT VAV AHU WITH PH & CHW COILS

A. SUPPLY FAN: BAS SHALL CONTROL THE STARTING AND STOPPING OF THE SUPPLY FAN AS FOLLOWS:
   1. START/STOP: BAS SHALL COMMAND THE OPERATION OF THE SUPPLY FAN AND IT SHALL RUN CONTINUOUSLY WHENEVER THE AHU IS "ENERGIZED" AS SPECIFIED FOR THE APPLICABLE LOGIC STRATEGIES SPECIFIED IN ITEM "AIR HANDLING UNITS – GENERAL".
   2. PROOF: BAS SHALL PROVE FAN OPERATION AND USE THE STATUS INDICATION TO ACCUMULATE RUNTIME. UPON FAILURE OF THE FAN, BAS SHALL ENUNCIATE AN ALARM.
   3. VFD CONTROL: WHENEVER THE FAN IS ENERGIZED, BAS SHALL CONTROL THE SPEED OF THE VFD TO MAINTAIN THE SUPPLY DUCT STATIC PRESSURE SETPOINT. ON START AND STOP, THE VFD SHALL RAMP TO SPEED AND SLOW DOWN WITHIN ADJUSTABLE ACCELERATION AND DECELERATION LIMITS.
   4. VFD INTERFACE: BAS SHALL MONITOR THE VFD VIA A DIRECT INTERFACE. ALL AVAILABLE INFORMATION SHALL BE ACCESSIBLE VIA THE INTERFACE FOR DISPLAY ON THE VFD GRAPHIC. THE VFD ALARM POINT SHALL BE DISPLAYED ON THE MAIN GRAPHIC AND SHALL BE ALARMED VIA THE BAS. ALL OTHER POINTS MAY BE DISPLAYED ON A SEPARATE GRAPHIC THAT IS SELECTED FROM THIS SYSTEM'S GRAPHIC.
   5. SUPPLY DUCT STATIC PRESSURE SETPOINT:
      a. SETPOINT SHALL BE RESET BETWEEN THE LIMITS OF 0.5" TO 2" TO MAINTAIN PRESSURE REQUESTS OF THE VAV BOXES. THE PRELIMINARY SETPOINT SHALL BE 1.2" STATIC PRESSURE. RESET SHALL BE IMPLEMENTED SO THAT THE STATIC PRESSURE IS PROPORTIONALLY RESET DOWN OR UP TO MAINTAIN AT LEAST ONE VAV BOX NO MORE THAN 95% OPEN. STEP STATIC 0.1" W.G. EVERY 2 MINUTES.
      b. BAS SHALL UTILIZE A SAMPLE AND BUMP OUTPUT STRATEGY OR OTHER SIMILAR LOOP OUTPUT OR LOGIC TO RESET THE STATIC SETPOINT.
      c. RESET VALUES SHALL BE ADJUSTED FOR OPTIMIZED BUILDING AND ENERGY PERFORMANCE.

B. OUTSIDE AIR (OA)/ RETURN AIR (RA) DAMPERS: BAS SHALL CONTROL THE DAMPERS AS FOLLOWS:
   1. CLOSED: WHEN AHU IS DEENERGIZED, DAMPERS SHALL REMAIN IN THEIR "OFF" POSITIONS. WHEN AHU IS ENERGIZED DURING UNOCCUPIED PERIOD THE MINIMUM OA FLOW SETPOINT WILL BE 0 CFM WHICH WILL CLOSE THE OA DAMPER.
   2. MINIMUM OA CONTROL: OA DAMPER SHALL MODULATE TO MAINTAIN MINIMUM OA CFM. THE MINIMUM OA VENTILATION REQUIREMENTS SHALL BE AS INDICATED ON THE DRAWINGS AND AS SPECIFIED BY THE ENGINEER, DAMPER POSITIONS ESTABLISHED BY THE AIR BALANCER, AND BAS PROGRAMMED BY THE BAS CONTRACTOR.
   3. MIXED AIR LOW LIMIT: PER THE MIXED AIR LOW LIMIT LOGIC STRATEGY, THE OA AND RA DAMPERS' POSITION SHALL BE LIMITED TO PREVENT THE MIXED AIR TEMPERATURE FROM FALLING BELOW THE LOW LIMIT SETPOINT. THE LIMIT SHALL OVERRIDE THE OUTPUT FROM THE ECONOMIZER AND MINIMUM OA FLOW CONTROL LOOP OUTPUTS.

C. SPACE TEMPERATURE CONTROL: THE SPACE TEMPERATURES SHALL BE CONTROLLED VIA INDIVIDUAL VAV BOXES.

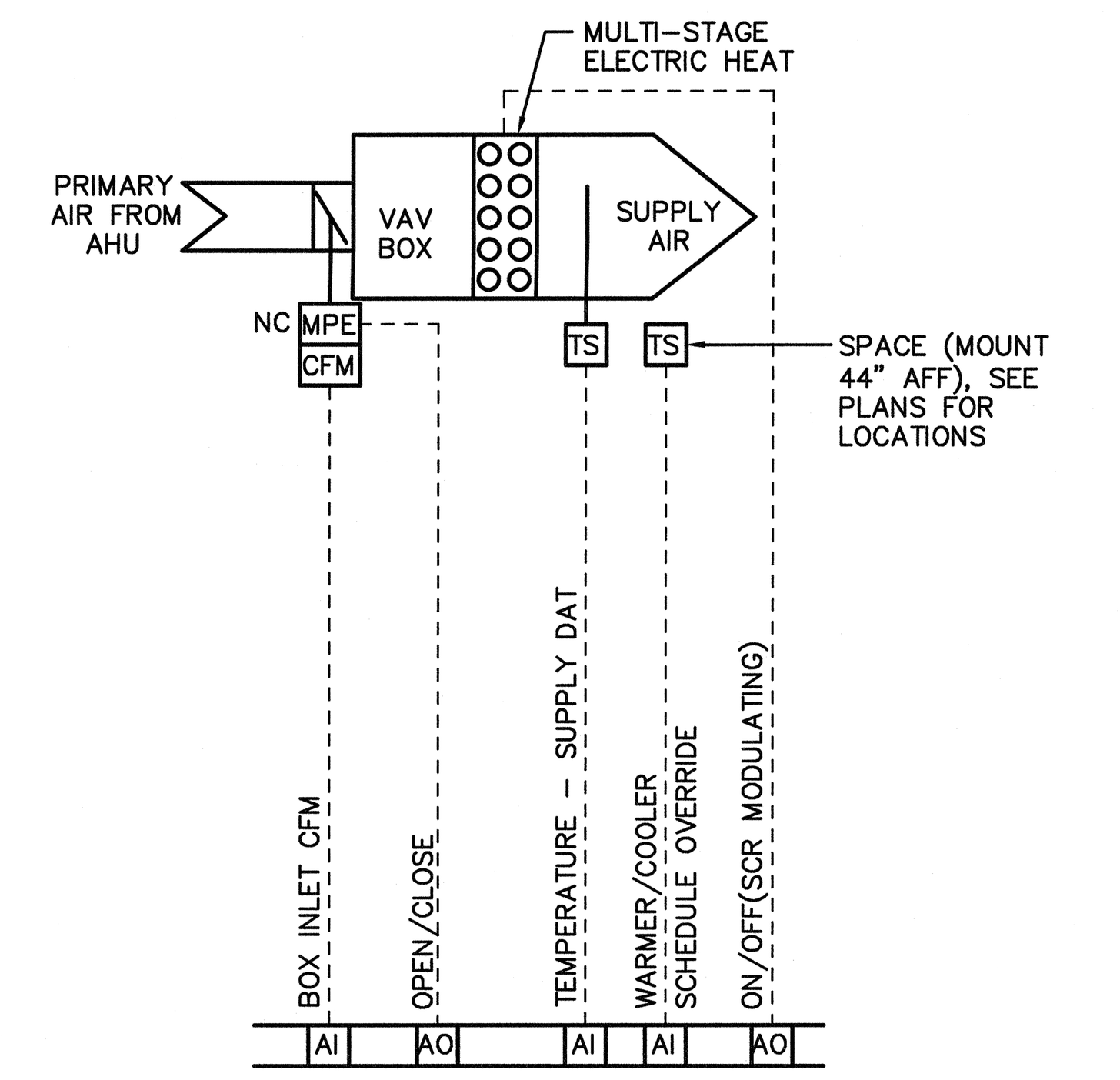
D. DISCHARGE TEMPERATURE CONTROL: THE DISCHARGE TEMPERATURE SETPOINT SHALL BE SET TO THE LOWER OF THE FOLLOWING:
   1. THE BAS SHALL UTILIZE A SAMPLE AND BUMP OUTPUT STRATEGY OR OTHER SIMILAR LOOP OUTPUT/LOGIC TO CALCULATE A RESULTANT VALUE BASED ON THE NUMBER OF "NEED COOLING" REQUESTS FROM ASSOCIATED TERMINAL VAV UNITS. THE UPPER AND LOWER LIMITS OF THIS RESET SETPOINT SHALL INITIALLY BE SET TO 65°F AND 55°F (BOTH ADJUSTABLE), RESPECTIVELY. THE OUTPUT OF THIS LOOP SHALL INPUT TO A DEHUMIDIFICATION LOOP AS THE HIGH LIMIT OF ITS RESET RANGE (SEE BELOW).
   2. A DEHUMIDIFICATION LOOP SHALL BE A PROPORTIONAL ONLY LOOP OUTPUT RESET FROM THE HIGH LIMIT OUTPUT FROM THE TEMPERATURE RESET LOOP (AS DESCRIBED ABOVE) TO 55°F (ADJ.) AS THE RETURN AIR HUMIDITY RISES FROM 55% TO 65% (BOTH ADJUSTABLE).
   3. THE RESULTANT TEMPERATURE OUTPUT AFTER PASSING THROUGH THE TWO LOOPS (AS DESCRIBED ABOVE) SHALL BE THE EFFECTIVE DISCHARGE TEMPERATURE SETPOINT. THIS VALUE SHALL BE TRENDED, ALARMED (VS ACTUAL TEMPERATURE) AND SHOWN ON THE BAS GRAPHIC.

E. ALL RESET VALUES SHALL BE ADJUSTED FOR OPTIMIZED BUILDING AND ENERGY PERFORMANCE.

F. PREHEATING SECTION:
   1. ELECTRIC HEATING: SCR MODULATING CONTROL PER THE HIGHER OF:
      a. A PID LOOP TO MAINTAIN A LEAVING COIL TEMPERATURE AT 55°F (ADJ.), AND
      b. A PROPORTIONAL ONLY LOOP THAT IS RESET FROM 0 TO 100% AS THE PREHEAT AIR TEMPERATURE DROPS FROM 48°F (ADJ.) TO 40°F (ADJ.).
   2. HEATING LOOPS SHALL REMAIN ACTIVE EVEN WHEN THE AHU IS NOT ENABLED.
   3. FREEZE CONDITION: WHENEVER A FREEZE CONDITION IS INITIATED (AS DESCRIBED IN ITEM "AIR HANDLING UNITS– GENERAL – FREEZE SAFETY"), THE HEATING SHALL BE COMMANDED TO 100% OPEN (ADJ.).

G. COOLING SECTION:
   1. COOLING COIL VALVE: WHENEVER THE AHU IS ENERGIZED AND STATUS IS PROVEN ON, NC COOLING COIL VALVE SHALL MODULATE VIA A DA PID LOOP TO MAINTAIN DISCHARGE TEMPERATURE AT SETPOINT.
   2. DURING SETBACK OR MORNING WARM-UP MODES, THE CHW VALVE SHALL REMAIN CLOSED.
   3. FREEZE CONDITION: WHENEVER A FREEZE CONDITION IS INITIATED (AS DESCRIBED IN ITEM "AIR HANDLING UNITS– 4. GENERAL– FREEZE SAFETY"), THE CHW VALVE SHALL BE COMMANDED TO 100% OPEN (ADJ.).

H. OCCUPANCY OVERRIDE: WHEN THE OCCUPANCY OVERRIDE BUTTON ON ANY OF THE ROOM SENSORS IS DEPRESSED MOMENTARILY, THE UNIT SHALL BE INDEXED TO THE OCCUPIED PERIOD FOR 120 MIN. (ADJ.).



VAV BOX

SEQUENCE OF OPERATION

SINGLE DUCT VAV BOX WITH REHEAT CONTROL

A. GENERAL: CONTROL SHALL BE PRESSURE INDEPENDENT WITH MINIMUM, MAXIMUM AND HEATING MAXIMUM FLOW SETPOINTS, SCHEDULED OCCUPANCY WITH OPTIMUM PREOCCUPANCY.

B. SPACE TEMPERATURE CONTROL: FOUR SETPOINTS SHALL APPLY. NORMAL HEATING, NORMAL COOLING, SETBACK HEATING, AND SETBACK COOLING. THESE FOUR VALUES SHALL BE THE ONLY VALUES CHANGED BY THE OPERATOR TO ADJUST SPACE TEMPERATURE SETPOINT. ALL OTHER DEADBANDS, DIFFERENTIALS, ETC. SHALL BE CALCULATED IN THE PROGRAM LOGIC (UNLESS ANOTHER MEANS IS PROVIDED TO PROHIBIT OVERLAP OF THE HEATING AND COOLING LOOPS AND ENSURE A DEAD BAND SUCH AS FUNCTION BLOCK TEMPLATES THAT RESTRICT THE SETPOINT INPUT).

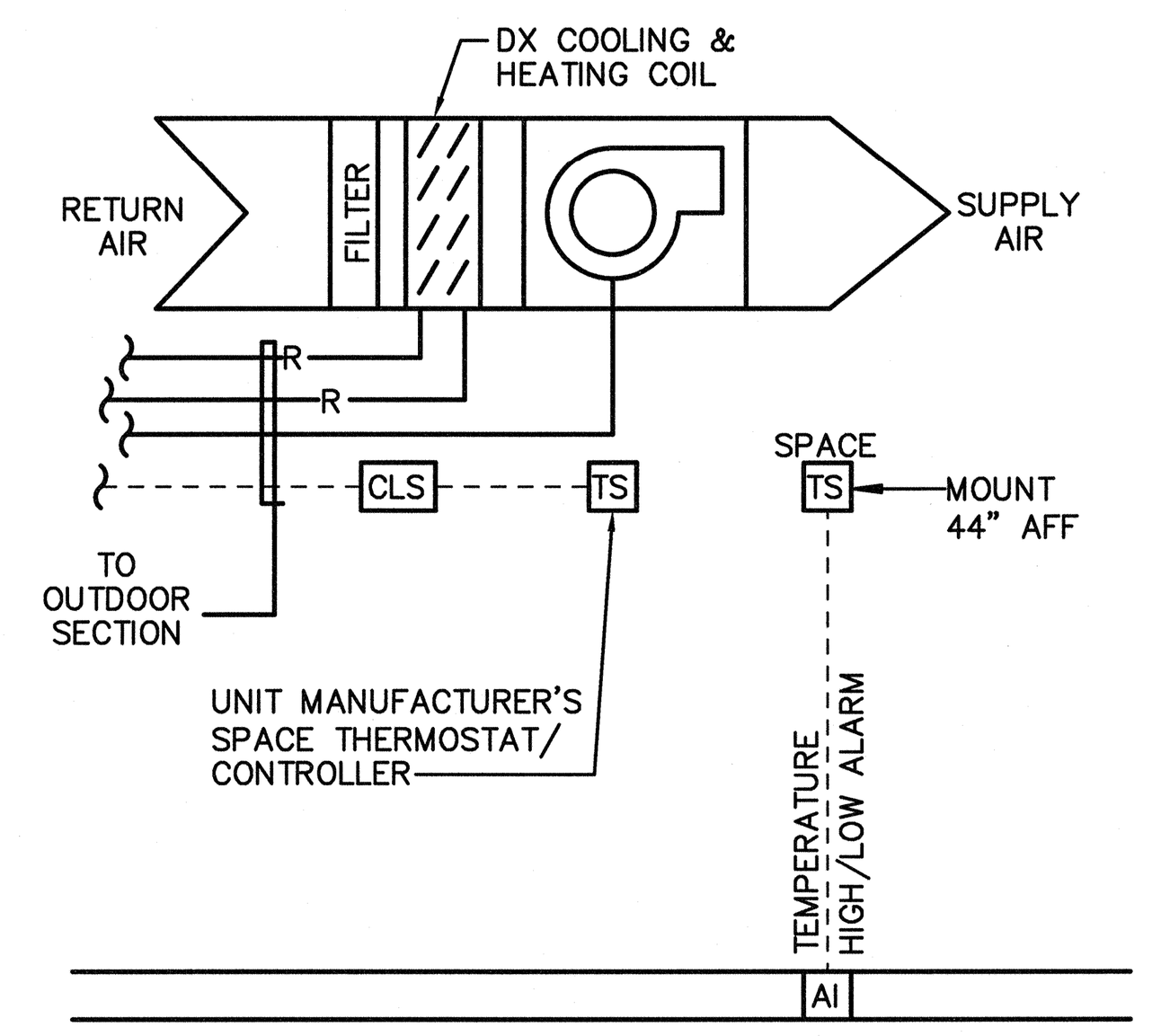
C. TEMPERATURE SENSORS SHALL HAVE WARMER/COOLER ADJUSTMENT AND AN OVERRIDE PUSH BUTTON, THE HVAC SYSTEM SHALL BE OPERATED IN OCCUPIED MODE FOR A TWO HOUR PERIOD (ADJ.).

D. ZONE DAMPER: ZONE DAMPER SHALL MODULATE IN A PI LOOP TO MAINTAIN ZONE VOLUME SETPOINT. ZONE VOLUME SETPOINT SHALL BE RESET AS FOLLOWS BASED ON THE PARENT AHU DISCHARGE AIR TEMPERATURE:
   1. WHENEVER THE PARENT AHU DAT IS < 65°F (ADJ.), THE FOLLOWING SEQUENCE SHALL APPLY:
      a. COOLING: THE ZONE VOLUME SETPOINT SHALL BE RESET BETWEEN THE MINIMUM AND THE COOLING MAXIMUM VOLUME SETTINGS TO MAINTAIN THE SPACE TEMPERATURE AT THE COOLING SPACE TEMPERATURE SETPOINT VIA A PID LOOP OUTPUT. THE ZONE VOLUME SETPOINT SHALL BE RESET LINEARLY BETWEEN THE MINIMUM AND COOLING MAXIMUM VOLUME SETPOINTS AS THE LOOP OUTPUT INCREASES FROM 0 TO 100%.
      b. HEATING: THE ZONE VOLUME SETPOINT SHALL BE RESET BETWEEN THE MINIMUM AND THE HEATING MAXIMUM VOLUME SETTINGS TO MAINTAIN THE SPACE TEMPERATURE AT THE HEATING SPACE TEMPERATURE SETPOINT VIA A PID LOOP OUTPUT. NOTE THAT A COMMON SPACE HEATING PID LOOP OUTPUT WILL BE USED TO RESET THE ZONE VOLUME SETPOINT (IN THE HEATING MODE) AND THE HW REHEAT VALVE (SEE BELOW). THE ZONE VOLUME SETPOINT SHALL BE RESET LINEARLY BETWEEN THE MINIMUM AND HEATING MAXIMUM VOLUME SETPOINTS AS THE LOOP OUTPUT INCREASES FROM 25 TO 100% (ADJ.).
      c. DEAD BAND: WHEN THE SPACE TEMPERATURE IS BETWEEN THE EFFECTIVE SPACE TEMPERATURE HEATING AND COOLING SETPOINTS (HEATING AND COOLING PID OUTPUTS ARE BOTH AT 0%), THE ZONE VOLUME SETPOINT SHALL REMAIN AT THE MINIMUM FLOW SETPOINT.
   2. WHENEVER THE PARENT AHU DAT IS > 65°F (ADJ.), THE FOLLOWING SEQUENCE SHALL APPLY:
      a. COOLING: THE ZONE VOLUME SETPOINT SHALL REMAIN AT MINIMUM WHENEVER THE SPACE TEMPERATURE IS ABOVE THE COOLING SETPOINT AS NO COOLING IS AVAILABLE IN THIS MODE.
      b. HEATING: THE ZONE VOLUME SETPOINT SHALL BE RESET BETWEEN THE MINIMUM AND THE COOLING MAXIMUM VOLUME SETTINGS TO MAINTAIN THE SPACE TEMPERATURE AT THE HEATING SPACE TEMPERATURE SETPOINT VIA A PID LOOP OUTPUT. NOTE THAT A COMMON SPACE HEATING PID LOOP OUTPUT WILL BE USED TO RESET THE ZONE VOLUME SETPOINT (IN THE HEATING MODE) AND THE HW REHEAT VALVE (SEE BELOW). THE ZONE VOLUME SETPOINT SHALL BE RESET LINEARLY BETWEEN THE MINIMUM AND COOLING MAXIMUM VOLUME SETPOINTS AS THE LOOP OUTPUT INCREASES FROM 0 TO 100% (ADJ.).
      c. DEAD BAND: WHEN THE SPACE TEMPERATURE IS BETWEEN THE EFFECTIVE SPACE TEMPERATURE HEATING AND COOLING SETPOINTS (HEATING AND COOLING PID OUTPUTS ARE BOTH AT 0%), THE ZONE VOLUME SETPOINT SHALL REMAIN AT THE MINIMUM FLOW SETPOINT.
   3. ZONE VOLUME FLOW SETPOINTS SHALL BE AS SCHEDULED ON THE DRAWINGS.

E. REHEAT: ELECTRIC REHEAT SHALL MODULATE VIA SCR CONTROL IN A PID LOOP OUTPUT (SAME LOOP OUTPUT THAT RESETS THE VOLUME SETPOINT IN THE HEATING MODE) TO MAINTAIN THE SPACE TEMPERATURE AT THE HEATING SETPOINT AS DEFINED ABOVE. REHEAT SHALL MODULATE FROM 0 TO 100% ON A PID LOOP OUTPUT OF 0–75% (ADJ.). REHEAT SHALL BE OFF WHENEVER ALL THE PARENT AIR UNITS IS OFF.

F. STATIC PRESSURE REQUEST: THIS TERMINAL SHALL ISSUE A "PRESSURE REQUEST" AS FOLLOWS"
   1. WHENEVER THE DAMPER OUTPUT IS > 95%, A PRESSURE REQUEST SHALL BE ISSUED
   2. WHENEVER THE DAMPER OUTPUT FALLS BELOW 85%, THE PRESSURE REQUEST SHALL STOP

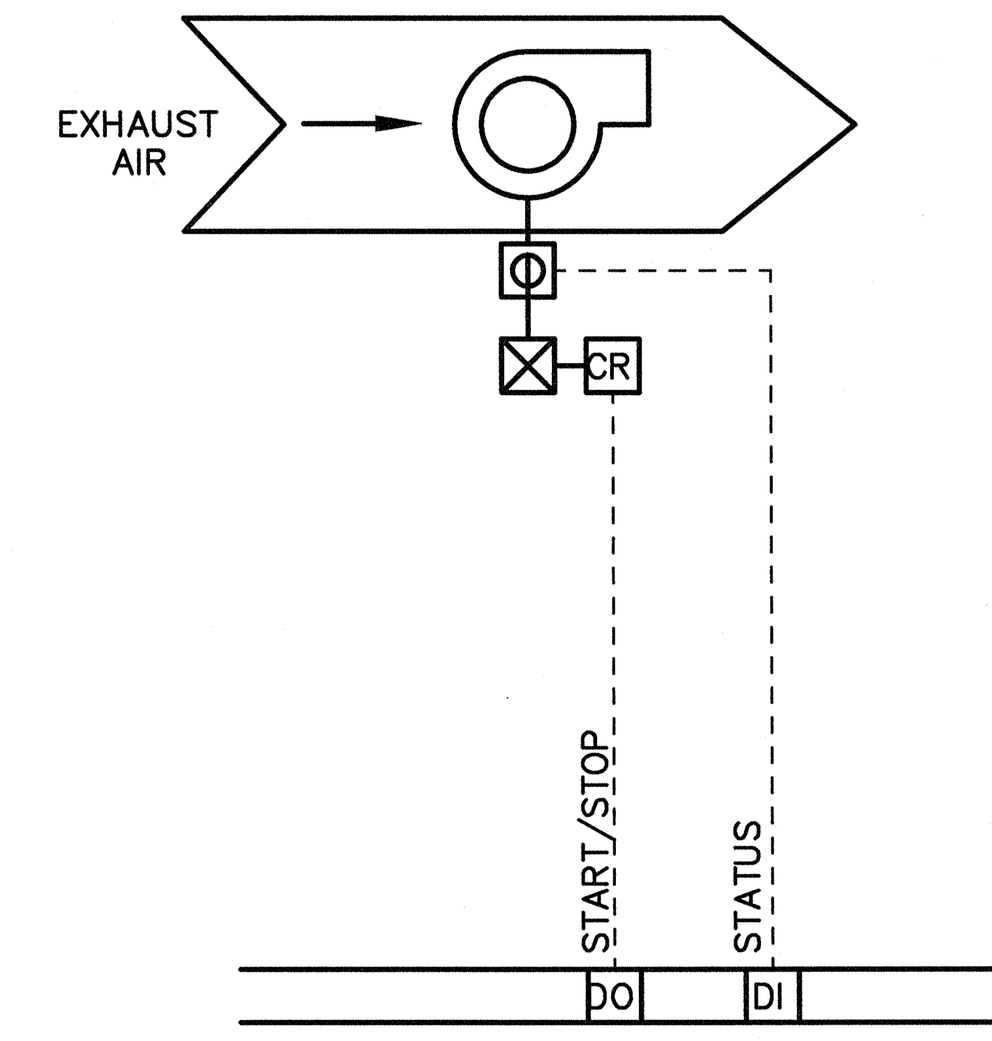
ALTERNATE NO. M-1 SHALL BE TO REPLACE THE DDC CONTROLS ON THE EXISTING SERIES FAN POWER TERMINAL UNITS, EXISTING PARALLEL FAN POWER TERMINAL UNITS, AND EXISTING VAV ROOM TERMINAL BOXES AS INDICATED ON REVISED DRAWINGS M6.0 AND M8.1. NEW DDC BAS CONTROLS FOR THESE EXISTING UNITS SHALL BE TURNKEY COMPLETE FOR EACH UNIT INCLUDING:
1. ALL MATERIALS AND LABOR.
2. CONNECTION TO THE EXISTING TRANE TRACER SC+ SYSTEM WITH 100% COMPATIBILITY AND FUNCTIONALITY TO VIEW, COMMAND, TREND AND SCHEDULE THE EXISTING EQUIPMENT.
3. ALL PROGRAMMING AND GRAPHICS.
4. SEQUENCES OF OPERATION FOR EXISTING TERMINAL UNITS AND BOXES SHALL MATCH EXISTING.
5. TERMINAL UNIT AND BOX CONTROLLERS SHALL BE WIRELESS WI-FI AS SPECIFIED TO CONNECT TO EXISTING DDC WIRELESS MESH SYSTEM.
6. SPACE TEMPERATURE SENSORS SHALL BE WIRELESS WI-FI TYPE AS SPECIFIED TO CONNECT TO EXISTING DDC WIRELESS MESH SYSTEM. INSTALL SENSORS IN SAME LOCATION AS EXISTING SPACE SENSORS. PATCH AND/OR PAINT WALLS AS NECESSARY TO COVER EXISTING SENSOR INSTALLATION OR PROVIDE STAINLESS STEEL COVER PLATES.
7. REPLACE OR PROVIDE NEW DISCHARGE AIR TEMP SENSOR FROM EACH TERMINAL UNIT OR BOX.
8. REMOVE EXISTING UNUSED CONTROL WIRING, CONDUITS MAY REMAIN.
9. AFTER CONTROLLERS ARE REPLACED ON EACH TERMINAL UNIT AND BOX, TEST AND BALANCE AIRFLOW FOR THE TERMINAL UNIT AND BOX.



DUCTLESS SPLIT SYSTEM HEAT PUMP

SEQUENCE OF OPERATION

A. MANUFACTURER FURNISHED WALL MOUNTED HARD WIRED THERMOSTAT SHALL CONTROL UNIT.
B. BAS SYSTEM SPACE TEMPERATURE SENSOR SHALL MONITOR SPACE TEMPERATURE AND ALARM ON HIGH OR LOW SPACE TEMPERATURE.
C. LEVEL SWITCH IN CONDENSATE PUMP SHALL DEENERGIZE HEAT PUMP ON HIGH LEVELS



POWER VENTILATOR

SEQUENCE OF OPERATION

A. POWER VENTILATORS CONTROLLED BY THE ENERGY MANAGEMENT SYSTEM:
   1. OCCUPIED PERIOD: FANS SHALL OPERATE
   2. UNOCCUPIED PERIOD: FANS ARE OFF.
   3. PREPARATORY PERIOD: FANS ARE OFF
B. REMAINING POWER VENTILATORS SHALL BE LIGHTING CONTROL'S OCCUPANCY SENSOR CONTROLLED.
C. SEE POWER VENTILATOR SCHEDULE FOR DEFINITION OF POWER VENTILATOR CONTROL.
D. SOO FOR EXISTING POWER VENTILATORS SHALL REMAIN AS EXISTING.

SAWYER SHERWOOD & ASSOCIATE ARCHITECTURE
124 Market St, Wilmington, NC 28401
910 762-0892 s2a3.com
CHEATHAM AND ASSOCIATES, P.A. CONSULTING ENGINEERS
3412 ENTERPRISE DRIVE
WILMINGTON, NORTH CAROLINA 28405
PHONE: (910) 452-4210
FAX: (910) 452-4211
OFFICE@CHEATHAMPA.COM
WWW.CHEATHAMPA.COM
NC LICENSE# C-1073
18048

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 17655 KENNETH LYNCH

Brunswick County Courthouse Addition & Renovations

Bolivia, NC

CONSTRUCTION DRAWINGS
SEPTEMBER 23, 2019

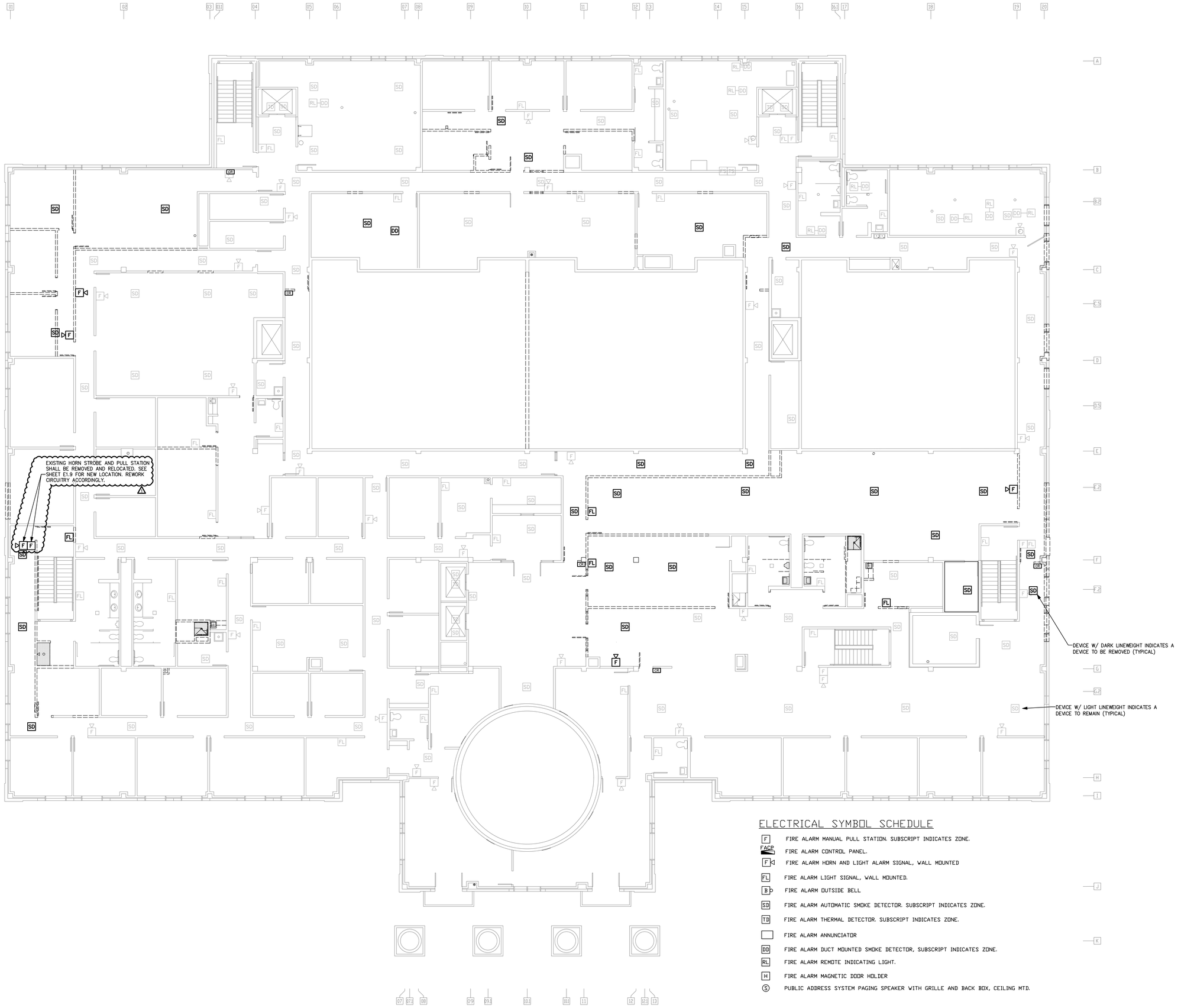
Revisions:

1 ADDENDUM#3 – 01-09-2020

MECHANICAL CONTROL DIAGRAMS

M8.1

© 2019 Sawyer Sherwood & Associate- All Rights Reserved



ELECTRICAL SYMBOL SCHEDULE

F	FIRE ALARM MANUAL PULL STATION. SUBSCRIPT INDICATES ZONE.
FACP	FIRE ALARM CONTROL PANEL.
F	FIRE ALARM HORN AND LIGHT ALARM SIGNAL, WALL MOUNTED
FL	FIRE ALARM LIGHT SIGNAL, WALL MOUNTED.
B	FIRE ALARM OUTSIDE BELL
SD	FIRE ALARM AUTOMATIC SMOKE DETECTOR. SUBSCRIPT INDICATES ZONE.
TD	FIRE ALARM THERMAL DETECTOR. SUBSCRIPT INDICATES ZONE.
	FIRE ALARM ANNUNCIATOR
DD	FIRE ALARM DUCT MOUNTED SMOKE DETECTOR, SUBSCRIPT INDICATES ZONE.
RL	FIRE ALARM REMOTE INDICATING LIGHT.
H	FIRE ALARM MAGNETIC DOOR HOLDER
S	PUBLIC ADDRESS SYSTEM PAGING SPEAKER WITH GRILLE AND BACK BOX, CEILING MTD.

1 ED1.9 ELECTRICAL 3RD FLOOR AUXILIARY SYSTEMS DEMOLITION PLAN
SCALE: 1/8" = 1'-0"

GRAPHIC SCALE: 1/8"=1'-0"
0 2 4 8 16

TRUE NORTH

SAWYER SHERWOOD & ASSOCIATE ARCHITECTURE
124 Market St, Wilmington, NC 28401
910 762-0892 s2a3.com
CHEATHAM AND ASSOCIATES, P.A.
CONSULTING ENGINEERS
3412 ENTERPRISE DRIVE
WILMINGTON, NORTH CAROLINA 28405
PHONE: (910) 452-4210
FAX: (910) 452-4211
OFFICE@CHEATHAMPA.COM
WWW.CHEATHAMPA.COM
NC LICENSE# C-1073
18048

NORTH CAROLINA
17593
10 JAN 2020
MARK A. CIARROCCHI

Brunswick County Courthouse Addition & Renovations

Bolivia, NC

CONSTRUCTION DRAWINGS
SEPTEMBER 23, 2019

Revisions:
1 ADDENDUM #3 1/10/20

ELECTRICAL
3RD FLOOR
AUXILIARY SYSTEMS
DEMOLITION PLAN

ED1.9

© 2019 Sawyer Sherwood & Associate- All Rights Reserved

ELECTRICAL NOTES

1. ELECTRICAL WORK SHALL BE PERFORMED IN ACCORDANCE WITH THE NATIONAL ELECTRICAL CODE AND REQUIREMENTS OF THE LOCAL AUTHORITY HAVING JURISDICTION.
2. PERMITS FOR ELECTRICAL WORK SHALL BE OBTAINED BY AND PAID BY THE ELECTRICAL CONTRACTOR. THE ELECTRICAL CONTRACTOR SHALL PAY FOR ANY ADDITIONAL FEES FOR INSPECTIONS, TESTS, AND OTHER SERVICES AS REQUIRED FOR THE COMPLETION OF THE WORK.
3. THE ELECTRICAL CONTRACTOR AND ANY OF HIS SUBCONTRACTORS SHALL VISIT THE PROJECT SITE TO WITNESS EXISTING CONDITIONS AND BECOME FAMILIAR WITH THE SCOPE OF THE WORK REQUIRED PRIOR TO SUBMITTING PROPOSALS. WORK REQUIRED BY EXISTING JOB CONDITIONS NOT INDICATED ON DRAWINGS SHALL BE INCLUDED IN THE BID.
4. THE DRAWINGS AND SPECIFICATIONS ARE INTENDED TO RESULT IN THE PRODUCTION OF A COMPLETE AND FUNCTIONAL ELECTRICAL SYSTEM. THE ELECTRICAL CONTRACTOR SHALL PROVIDE ALL MATERIAL, LABOR, EQUIPMENT, AND OTHER SERVICES AS NECESSARY TO COMPLETE THE WORK.
5. DISCREPANCIES IN THE DRAWINGS AND SPECIFICATIONS THAT WILL AFFECT THE WORK SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT, ENGINEER, AND/OR OWNER PRIOR TO SUBMITTING PROPOSALS.
6. UNLESS NOTED OTHERWISE, ALL MATERIALS AND EQUIPMENT SHALL BE NEW AND INCLUDE A 3RD PARTY LABEL (I.E.: UL, CSA, ETL, ETC.) LISTING APPROVAL FOR ITS INSTALLED APPLICATION.
7. REVIEW PLANS OF OTHER TRADES FOR COORDINATION OF WORK AND FOR RELATED AND ADJOINING WORK.
8. REVIEW COMPLETE PLAN SET FOR CONSTRUCTION TYPE, FINISHES, HEADROOM, ROOF FINISHES, CEILINGS, ETC. REVIEW COMPLETE PLAN SET FOR PROJECT PHASING AND STAGING. REVIEW COMPLETE PLAN SET FOR WORK COVERED BY ALTERNATE BID ITEMS.
9. COORDINATE DEVICE AND EQUIPMENT MOUNTING HEIGHTS WITH OTHER DISCIPLINE DRAWINGS, CASEWORK DETAILS & SUBMITTALS, EQUIPMENT DETAILS & SUBMITTALS, ETC.
10. PENETRATIONS OF FIRE-RATED WALLS, FLOORS, CEILINGS, AND PARTITIONS SHALL BE FIRE STOPPED IN ACCORDANCE WITH REQUIREMENTS OF THE STATE BUILDING CODE. COORDINATE WORK TO INSURE THAT FIRE STOPPING IS COMPLETED.
11. PENETRATIONS OF SMOKE PARTITIONS SHALL BE SEALED IN ACCORDANCE WITH REQUIREMENTS OF THE STATE BUILDING CODE. COORDINATE WORK TO INSURE THAT SMOKE PARTITION SEALING IS COMPLETED.
12. PENETRATIONS OF EXTERIOR BUILDING WALLS, FLOORS, OR ROOFS SHALL BE SEALED WATERTIGHT. INTERIORS OF RACEWAY PENETRATIONS THROUGH EXTERIOR WALLS SHALL BE SEALED WITH NON-HARDENING ELECTRICAL PUTTY.
13. CUTTING AND PATCHING TO INSTALL DEVICES AND EQUIPMENT SHALL BE PERFORMED WITH FINISHES RESTORED TO THEIR ORIGINAL CONDITION. SUCH WORK SHALL BE COMPLETED TO A DEGREE THAT IS ACCEPTABLE TO THE ARCHITECT, ENGINEER, AND/OR OWNER.
14. SEE SPECIFICATIONS FOR DIVISION OF RESPONSIBILITY FOR PROVIDING DISCONNECTS, STARTERS, DRIVES, ETC. FOR EQUIPMENT SUPPLIED BY OTHER SUBCONTRACTORS.
15. COORDINATE PRECISE LOCATION OF HVAC EQUIPMENT WITH THE MECHANICAL CONTRACTOR.
16. FOR HVAC EQUIPMENT, VERIFY CIRCUIT BREAKER RATINGS, FUSE RATINGS, AND WIRE SIZES. IF RATINGS DIFFER FROM THOSE INDICATED ON THE DRAWINGS, NOTIFY THE ARCHITECT, ENGINEER, AND OWNER FOR DIRECTION. PROVIDE OVERCURRENT PROTECTION IN ACCORDANCE WITH EQUIPMENT MANUFACTURER NAMEPLATE DATA. IF THE EQUIPMENT LISTING LABEL REQUIRES FUSED PROTECTION, ENSURE THAT FUSES IN A FUSED DISCONNECT SWITCH AT THE EQUIPMENT ARE SIZED AS INDICATED ON THE EQUIPMENT LABEL.
17. VERIFY PROPER SIZING OF OVERLOAD DEVICES IN STARTERS BASED ON EQUIPMENT NAMEPLATE DATA.
18. IF HORSEPOWER OR LOAD RATINGS OF EQUIPMENT DIFFER FROM THOSE INDICATED ON THE DRAWINGS, NOTIFY THE ARCHITECT, ENGINEER, AND OWNER FOR DIRECTION.
19. PROVIDE NATIONAL ELECTRICAL CODE REQUIRED CLEARANCES FOR ALL ELECTRICAL EQUIPMENT. COORDINATE RESOLUTION OF CONFLICTS WITH OTHER TRADES.
20. RECEPTACLE, SWITCH, DATA/TELEPHONE OUTLETS SHALL BE FLUSH MOUNTED IN FINISHED SPACES UNLESS OTHERWISE NOTED.
21. WHERE INSTALLED IN PLENUM SPACES, CABLES SHALL BE PLENUM-RATED OR INSTALLED IN METAL RACEWAY.
22. PRIOR TO ORDERING LIGHT FIXTURES, CONTRACTOR SHALL VERIFY TYPE OF CEILING OR WALL BY REVIEW OF ARCHITECTURAL FINISH SCHEDULES AND PROVIDE SUITABLE TRIM AND APPURTENANCES TO MOUNT FIXTURES IN TYPE OF CEILING OR WALL INDICATED.
23. RECESSED LIGHT FIXTURES INSTALLED IN CEILINGS HAVING INSULATION INSTALLED OVER CEILING AND FIXTURES (AS INDICATED IN ARCHITECTURAL PLANS, OR FOUND AS EXISTING CONDITIONS) SHALL BE U.L. RATED FOR DIRECT CONTACT WITH INSULATION.
24. RECESSED LIGHT FIXTURES INSTALLED IN FIRE RATED CEILING SHALL BE U.L. RATED FOR USE IN FIRE RATED CEILINGS OR SHALL BE INSTALLED WITH "TENTING' IN ACCORDANCE WITH RATING REQUIREMENTS OF THE CEILING ASSEMBLY.
25. EXIT AND EMERGENCY LIGHTS SHALL BE CONNECTED TO THE NEAREST UNSWITCHED CIRCUIT THAT SERVES LIGHT FIXTURES WITHIN THE SAME SPACE.
26. NO MOUNTING HARDWARE SHALL BE ATTACHED TO ROOF DECKS. ATTACHMENTS SHALL BE MADE TO THE ROOF SUPPORTING STRUCTURE.
27. WHERE WORKING IN EXISTING BUILDINGS, FACILITIES, OR STRUCTURES; PROTECT AND MAINTAIN IN OPERATION EXISTING LIFE SAFETY SYSTEMS, PUBLIC ADDRESS SYSTEMS, ELECTRICAL SYSTEMS, ETC. IF SHUTDOWNS ARE REQUIRED, NOTIFY THE ARCHITECT, ENGINEER, AND OWNER FOR COORDINATION WELL IN ADVANCE OF ANY SYSTEM SHUTDOWN. WHERE AN OUTAGE OF EXTENDED DURATION IS NOT ACCEPTABLE TO THE OWNER, PROVIDE TEMPORARY CONNECTIONS AS REQUIRED TO MAINTAIN SERVICE.
28. WHERE WORKING IN EXISTING BUILDINGS, FACILITIES, OR STRUCTURES; WORK MAY BE REQUIRED TO BE PERFORMED WHILE REMAINING OCCUPIED BY OWNER STAFF. WORK SHALL BE COORDINATED WITH THE OWNER TO MINIMIZE DISRUPTION TO THE OWNER.
29. WHERE WORKING IN EXISTING BUILDINGS, FACILITIES, OR STRUCTURES; EXISTING ABANDONED CIRCUITS USED TO CONNECT NEW LOADS IN THE SAME AREA SHALL BE CLEARLY IDENTIFIED ON AS-BUILT MARK-UP DRAWINGS WITH REGARD TO PANEL-CIRCUIT AND CIRCUITRY ROUTING CONFIGURATION.
30. ABANDONED CIRCUITRY (RACEWAY & CONDUCTORS) SHALL BE REMOVED IN ITS ENTIRETY FROM ITS SOURCE. ABANDONED LOW VOLTAGE CABLING SHALL BE REMOVED IN ITS ENTIRETY UNLESS OTHERWISE NOTED.
31. PANEL BUS MATERIAL: COPPER.
32. SHARED NEUTRAL CONDUCTORS SHALL NOT BE USED UNLESS SPECIFICALLY INDICATED SO ON HOMERUN CIRCUITRY DESIGNATIONS.
33. PANEL BREAKER CONFIGURATIONS SHALL BE INSTALLED AS INDICATED ON THE PANEL SCHEDULES OR AS NOTED. BREAKER POSITION REVISIONS WILL NOT BE ACCEPTED UNLESS APPROVED IN WRITING BY THE ENGINEER.
34. LOAD CIRCUITS SHALL BE INSTALLED AS INDICATED ON THE DRAWINGS. CIRCUITRY REVISIONS WILL NOT BE ACCEPTED UNLESS APPROVED IN WRITING BY THE ENGINEER.

ABBREVIATIONS

ADA	AMERICAN DISABILITIES ACT
AFF	ABOVE FINISHED FLOOR
AFG	ABOVE FINISHED GRADE
AHU	AIR HANDLER UNIT
AIC	AMPS INTERRUPTING CAPABILITY
BAS	BUILDING AUTOMATION SYSTEM
BKR	BREAKER
C	CONDUIT
C/B	CIRCUIT BREAKER
CCTV	CLOSED CIRCUIT TELEVISION
CLG	CEILING
CKT	CIRCUIT
COMP	COMPRESSOR
CU	COPPER\
DAS	DISTRIBUTED ANTENNA SYSTEM
DIA	DIAMETER
DDC	DIRECT DIGITAL CONTROL
DWG	DRAWING
EMT	ELECTRICAL METALLIC TUBING
ENCL	ENCLOSED
ERRCS	EMERGENCY RADIO RESPONDER COVERAGE SYSTEM
EXSTG	EXISTING
FACP	FIRE ALARM CONTROL PANEL
FACU	FIRE ALARM CONTROL UNIT
G	EQUIPMENT GROUND
GEC	GROUNDING ELECTRODE CONDUCTOR
GFCI	GROUND FAULT CIRCUIT INTERRUPTER
GFI	GROUND FAULT INTERRUPTER
HP	HEAT PUMP
HP	HORSEPOWER
IMC	INTERMEDIATE METAL CONDUIT
K	KILO (THOUSAND)
LED	LIGHT EMITTING DIODE
LTG	LIGHTING
LTS	LIGHTS
MCB	MAIN CIRCUIT BREAKER
MDP	MAIN DISTRIBUTION PANEL
MFR	MANUFACTURER
MLO	MAIN LUG ONLY
MTG	MOUNTING
N/A	NOT APPLICABLE
NEC	NATIONAL ELECTRICAL CODE
NEMA	NATIONAL ELECTRICAL MANUFACTURERS ASSOC.
NHCS	NEW HANOVER COUNTY SCHOOLS
NTS	NOT TO SCALE
P	PHASE OR POLE
PH	PHASE
PNL	PANEL
PROJ	PROJECTOR
PVC	POLYVINYL CHLORIDE
REC	RECEPTACLE
RECPT	RECEPTACLE
REQ.	REQUIRED
S.S.	STAINLESS STEEL
SYS	SYSTEM
S/N	SOLID NEUTRAL
TYP	TYPICAL
UL	UNDERWRITERS LABORATORY
UNO	UNLESS NOTED OTHERWISE
UON	UNLESS OTHERWISE NOTED
V	VOLTS
VA	VOLT-AMPS
VFD	VARIABLE FREQUENCY DRIVE
W	WATTS
W	WIRE
W/	WITH
WP	WEATHERPROOF
XFMR	TRANSFORMER

APPENDIX B, BUILDING CODE SUMMARY
ELECTRICAL SUMMARY

METHOD OF COMPLIANCE
- ENERGY CODE: ☒ PRESCRIPTIVE ☐ PERFORMANCE
- ASHRAE 90.1: ☐ PRESCRIPTIVE ☐ PERFORMANCE

LIGHTING SCHEDULE
- Lamp Type Required in Fixtures
- Number of Lamps in Fixtures
- Ballast Types Used in Fixtures
- Number of Ballasts Used in Fixtures
- Total Wattage per Fixture

SEE LIGHT FIXTURE / LUMINAIRE SCHEDULE

TOTAL WATTAGE SPECIFIED VERSUS ALLOWED

Interior Specified: **9727 Watts** Exterior Specified: **44 Watts**
Interior Allowed: **11546 Watts** Exterior Allowed: **60 Watts**

ADDITIONAL METHOD OF COMPLIANCE:
- ☐ 506.2.1 More Efficient Mechanical Equipment
- ☒ 506.2.2 Reduced Lighting Power Density
- ☐ 506.2.3 Energy Recovery Ventilation System
- ☐ 506.2.4 Higher Efficiency Service Water Heating
- ☐ 506.2.5 On-Site Supply of Renewable Energy
- ☐ 506.2.6 Automatic Daylighting Control Systems

DESIGNER STATEMENT

To the best of my knowledge and belief, the design of this building complies with the electrical systems and equipment requirements of the North Carolina State Building Code, Section 505 of the North Carolina Energy Conservation Code.

SIGNED: [signature]
NAME: Mark A. Ciarrocca, P.E.
TITLE: Engineer

MISC. ELECTRICAL SYMBOL LEGEND

SYMBOL	DESCRIPTION
	ENCLOSED CIRCUIT BREAKER, NEMA 1 INSIDE, NEMA 3R OUTSIDE (UNO); AMPERAGE AS INDICATED OR BASED ON SUPPLY CIRCUIT RATING.
	EQUIPMENT CONNECTION
	SAFETY SWITCH DISCONNECT, HEAVY-DUTY, NON-FUSED, NEMA 1 INSIDE, NEMA 3R OUTSIDE (UNO), AMPERAGE AS INDICATED OR BASED ON SUPPLY CIRCUIT BREAKER RATING.
	SAFETY SWITCH DISCONNECT, HEAVY-DUTY, FUSED AT NAMEPLATE RATING OF EQUIPMENT SERVED, NEMA 1 INSIDE, NEMA 3R OUTSIDE (UNO), AMPERAGE AS INDICATED OR BASED ON SUPPLY CIRCUIT BREAKER RATING.
	PANELBOARD, SEE PANEL SCHEDULE
T	TRANSFORMER, DRY TYPE, RATINGS INDICATED, NEMA 1 ENCLOSURE (UNO). PROVIDE 4" CONCRETE HOUSE KEEPING PAD IF A FLOOR MOUNTED UNIT IS PROVIDED.

1 HR WALL DESIGNATION
2 HR WALL DESIGNATION
3 HR WALL DESIGNATION

BY EC
PROVIDED BY EC, INSTALLED BY EC
CONDUCTOR TERMINATIONS IN EQUIPMENT BY MC & PC
BY EC

HOMERUN DESIGNATION, #12 CONDUCTORS UNLESS NOTED OTHERWISE.
EQUIPMENT GROUND CONDUCTOR
PHASE CONDUCTOR
NEUTRAL CONDUCTOR

A / E0.1
LETTER INDICATES ELEVATION OR DETAIL; NUMBER INDICATES PLAN OR SECTION
SHEET NUMBER WHERE PLAN, SECTION, ELEVATION OR DETAIL IS DRAWN

SHEET LIST

E0.1	ELECTRICAL NOTES, LEGENDS, SCHEDULES
ED1.1	ELECTRICAL 1ST FLOOR POWER DEMOLITION PLAN
ED1.2	ELECTRICAL 1ST FLOOR LIGHTING DEMOLITION PLAN
ED1.3	ELECTRICAL 1ST FLOOR AUXILIARY SYSTEMS DEMOLITION PLAN
ED1.4	ELECTRICAL 2ND FLOOR POWER DEMOLITION PLAN
ED1.5	ELECTRICAL 2ND FLOOR LIGHTING DEMOLITION PLAN
ED1.6	ELECTRICAL 2ND FLOOR AUXILIARY SYSTEMS DEMOLITION PLAN
ED1.7	ELECTRICAL 3RD FLOOR POWER DEMOLITION PLAN
ED1.8	ELECTRICAL 3RD FLOOR LIGHTING DEMOLITION PLAN
ED1.9	ELECTRICAL 3RD FLOOR AUXILIARY SYSTEMS DEMOLITION PLAN
E1.1	ELECTRICAL 1ST FLOOR POWER PLAN
E1.2	ELECTRICAL 1ST FLOOR LIGHTING PLAN
E1.3	ELECTRICAL 1ST FLOOR AUXILIARY SYSTEMS PLAN
E1.4	ELECTRICAL 2ND FLOOR POWER PLAN
E1.5	ELECTRICAL 2ND FLOOR LIGHTING PLAN
E1.6	ELECTRICAL 2ND FLOOR AUXILIARY SYSTEMS PLAN
E1.7	ELECTRICAL 3RD FLOOR POWER PLAN
E1.8	ELECTRICAL 3RD FLOOR LIGHTING PLAN
E1.9	ELECTRICAL 3RD FLOOR AUXILIARY SYSTEMS PLAN
E4.1	ELECTRICAL 1ST FLOOR ENLARGED POWER PLAN
E5.1	ELECTRICAL DETAILS
E5.2	ELECTRICAL DETAILS
E6.1	ELECTRICAL LUMINAIRE SCHEDULE
E6.2	ELECTRICAL PANEL SCHEDULES
E7.1	ELECTRICAL RISERS

JUNCTION BOX SCHEDULE

SYMBOL	DESCRIPTION	NOTES
J	JUNCTION BOX	AS A MINIMUM, SIZE BASED ON REQUIREMENTS OF NEC
	WALL SLEEVE, RATED WALLS, COMMUNICATIONS CABLING	ABOVE CEILING, FOR LOW VOLTAGE CABLES; PRE-ENGINEERED FIRE-RATED PASS-THROUGH; DESIGN BASIS: STI EZ-PATH SERIES 44

COURTROOM SYSTEM INFRASTRUCTURE SCHEDULE

SYMBOL	DESCRIPTION	MOUNTING	NOTES
M J	MICROPHONE CONNECTOR	JUDGE'S DECK OR WITNESS STAND, STANDARD 3-PIN FLUSH MOUNTED MICROPHONE OUTLET ON STAINLESS STEEL PLATE.	(1) 3/4"C TO SOUND SYSTEMS RACK.
M	MICROPHONE CONNECTOR	FLOOR, STANDARD 3-PIN FLUSH MOUNTED MICROPHONE OUTLET MOUNTED IN A FLUSH CAST IRON FLOOR BOX	(1) 3/4"C TO SOUND SYSTEMS RACK.
PA	PA SPEAKER	CEILING	
PN	PUSHBUTTON FOR PINK NOISE	WALL	(1) 3/4"C TO SOUND SYSTEMS RACK

SWITCH LEGEND

SYMBOL	DESCRIPTION	NOTES
$ D	DIMMER SWITCH	RATED FOR VOLTAGE WHERE APPLIED, 20A; MTD 42" AFF UNO
$ D3	DIMMER SWITCH FOR 3-WAY CONTROL	RATED FOR VOLTAGE WHERE APPLIED, 20A; MTD 42" AFF UNO
$ OD	OCCUPANCY SENSOR WALL SWITCH, DIMMER; DUAL TECHNOLOGY	RATED FOR VOLTAGE WHERE APPLIED, 20A; MTD 42" AFF UNO
$ O2	OCCUPANCY SENSOR WALL SWITCH, DUAL CKT, DUAL TECHNOLOGY	RATED FOR VOLTAGE WHERE APPLIED, 20A; CONFIGURE OUTPUT FOR DUAL LEVEL SWITCHING; MTD 42" AFF UNO
$ O1	OCCUPANCY SENSOR WALL SWITCH, SINGLE CKT, DUAL TECHNOLOGY	RATED FOR VOLTAGE WHERE APPLIED, 20A; MTD 42" AFF UNO
OS	OCCUPANCY SENSOR, DUAL TECHNOLOGY; CEILING MTD	INCORPORATE POWER PACK FOR CIRCUITRY SWITCHING, SEE WIRING DIAGRAMS
$	TOGGLE SWITCH, SINGLE POLE	RATED FOR VOLTAGE WHERE APPLIED, 20A; MTD 42" AFF UNO; WHERE SHOWN PAIRED, PROVIDE DUAL LEVEL SWITCHING.
$ 3	3-WAY SWITCH	RATED FOR VOLTAGE WHERE APPLIED, 20A; MTD 42" AFF UNO

TELEPHONE AND DATA SCHEDULE

SYMBOL	DESCRIPTION	MOUNTING	NOTES
CTV	CEILING MOUNTED TV OUTLET	NO MOUNTING PROVISIONS REQUIRED BY CONTRACTOR.	CABLING WILL RUN DIRECTLY DOWN TV MOUNTING MAST.
TV	TV OUTLET	WALL, LOCATED BEHIND TV MOUNT IN RECESSED LCD OUTLET BOX (COORDINATE SPECIFIC LOCATION AND MOUNTING HEIGHT WITH OWNER/ARCHITECT).	SEE POWER PLANS FOR SHARED BOX WITH POWER OUTLET. DESIGN BASIS ARLINGTON #TVBS613 WITH COVER.
C	DATA / TELEPHONE OUTLET	WALL, MTD 6" ABOVE COUNTER HEIGHT AFF UNO; 5" SQUARE, 2.875" DEEP BOX, 64 CUBIC INCHES, WITH CABLE MANAGEMENT POSTS. DESIGN BASIS: STEEL CITY #82181T SERIES	STUB (2) 1"C TO 6" ABOVE CEILING
	DATA / TELEPHONE OUTLET	WALL, 18" AFF UNO; 5" SQUARE, 2.875" DEEP BOX, 64 CUBIC INCHES, WITH CABLE MANAGEMENT POSTS. DESIGN BASIS: STEEL CITY #82181T SERIES	STUB (2) 1"C TO 6" ABOVE CEILING.
	DATA / TELEPHONE OUTLET	FLOOR, INTEGRAL TO POWER POKE-THRU WITH DIVIDER SEPARATING POWER & COMMUNICATIONS	ROUTE (1) 2" C BELOW FLOOR SLAB TO WALL AND TURNED UP TO 6" ABOVE ACCESSIBLE CEILING OR ROUTE (1) 2"C BELOW FLOOR SLAB IN CEILING CAVITY TO DATA ROOM.
	DATA / TELEPHONE OUTLET	FLOOR, INTEGRAL TO POWER FLOOR BOX WITH DIVIDER SEPARATING POWER & COMMUNICATIONS	ROUTE (2) 1" C UNDERGROUND, TURN UP INTO WALL CAVITY, & STUB UP TO 6" ABOVE CEILING.

FIRE ALARM LEGEND

SYMBOL	DESCRIPTION	MOUNTING
F 15	HORN/STROBE, 15 CANDELA	CEILING
F 30	HORN/STROBE, 30 CANDELA	CEILING
F 75	HORN/STROBE, 75 CANDELA	CEILING
F 95	HORN/STROBE, 95 CANDELA	CEILING
F 115	HORN/STROBE, 115 CANDELA	CEILING
S 15	STROBE, 15 CANDELA	CEILING
S 30	STROBE, 30 CANDELA	CEILING
S 75	STROBE, 75 CANDELA	CEILING
S 115	STROBE, 115 CANDELA	CEILING
CM	CONTROL / RELAY MODULE	
D	DUCT DETECTOR - PROVIDED BY FIRE ALARM VENDOR	BY MECH CONTRACTOR
ERRCS	EMERGENCY RESPONDER RADIO COVERAGE SYSTEM	WALL
ERRCS RA	EMERGENCY RESPONDER RADIO COVERAGE SYSTEM REMOTE ANNUNCIATOR	WALL
FACP	FIRE ALARM CONTROL PANEL	
H	HEAT DETECTOR	CEILING
F 15 (revision 1)	HORN/STROBE, 15 CANDELA	WALL
F 30	HORN/STROBE, 30 CANDELA	WALL
F 75 (revision 1)	HORN/STROBE, 75 CANDELA	WALL
F 95 (revision 1)	HORN/STROBE, 95 CANDELA	WALL
MM	MONITOR MODULE FOR MONITORING A DRY CONTACT CLOSURE DEVICE	
F	PULL STATION	WALL
RA	REMOTE ANNUNCIATOR	WALL
SD	SMOKE DETECTOR	CEILING
SD	SMOKE DETECTOR	WALL
S 15 (revision 1)	STROBE, 15 CANDELA	WALL

RECEPTACLE LEGEND

SYMBOL	NEMA	VOLTS	DESCRIPTION
	5-20R	120V 1P 2W	DUPLEX, MTD 18" AFF UNO
CP	5-20R	120V 1P 2W	DUPLEX FOR CONDENSATE PUMP; COORDINATE LOCATION W/ MECH CONTRACTOR
COPIER	5-20R	120V 1P 2W	DUPLEX FOR COPIER, MTD 18" AFF UNO
	5-20R	120V 1P 2W	DUPLEX, MTD 6" ABOVE COUNTER HEIGHT UNO
G	5-20R	120V 1P 2W	DUPLEX GFCI, MTD 6" ABOVE COUNTER HEIGHT UNO
EWC	5-20R	120V 1P 2W	DUPLEX ELECTRIC WATER COOLER OUTLET; SUPPLY FROM GFCI TYPE C/B; COORDINATE MTG LOCATION TO CONCEAL OUTLET WHEN COOLER IS INSTALLED.
W/G	5-20R	120V 1P 2W	DUPLEX GFCI, MTD 18" AFG UNO; LISTED WEATHER-RESISTANT TYPE; PROVIDE CAST ALUMINUM WEATHERPROOF IN-USE COVER WITH CAST ALUMINUM FD WEATHERPROOF BOX
	5-20R	120V 1P 2W	DUPLEX; MTD IN FLUSH FLOOR BOX; SEE AUX SYS PLANS FOR SHARED BOX; PROVIDE DIVIDER FOR POWER SEPARATION FROM VOICE/DATA
R	5-20R	120V 1P 2W	DUPLEX FOR REFRIGERATOR; MOUNT 48" AFF UNO. SUPPLY FROM GFCI TYPE C/B.
TV	5-20R	120V 1P 2W	DUPLEX, LOCATED BEHIND TV MOUNT IN RECESSED LCD OUTLET BOX (COORDINATE SPECIFIC LOCATION WITH OWNER/ARCHITECT). SEE AUXILIARY SYSTEMS PLANS FOR SHARED BOX WITH DATA OUTLET. DESIGN BASIS ARLINGTON #TVBS613 WITH COVER. SEE DETAIL D/E5.2. MTD 66" AFF UNO.
CTV	5-20R	120V 1P 2W	DUPLEX, MTD FLUSH IN CEILING FOR TV
UCR	5-20R	120V 1P 2W	DUPLEX FOR UNDER COUNTER REFRIGERATOR; COORDINATE MOUNTING HEIGHT WITH CASEWORK DRAWINGS.
V	5-20R	120V 1P 2W	DUPLEX FOR VENDING MACHINE, MTD 30" AFF UNO. SUPPLY FROM GFCI TYPE C/B.
J DDC		120V 1P 2W	J-BOX ABOVE CLG LEVEL FOR DDC OR MECHANICAL CONTROL POWER SOURCE
J ERRCS		120V 1P 2W	POWER FOR EMERGENCY RESPONDER RADIO COVERAGE SYSTEM
J HH		120V 1P 2W	POWER FOR HARD OF HEARING SOUND EMITTER
J HT	5-20R	120V 1P 2W	JUNCTION BOX FOR HEAT TRACE; SUPPLY FROM GFEP (30mA) TYPE CIRCUIT BREAKER
J T (revision 1)		120V 1P 2W	POWER FOR TURNSTILE. TURNSTILE DESIGN BASIS: ALVARADO MFG #SU3000
	5-20R	120V 1P 2W	QUAD, MTD 18" AFF UNO
	5-20R	120V 1P 2W	QUAD, MTD IN FLUSH FLOOR BOX; SEE AUX SYS PLANS FOR SHARED BOX; PROVIDE DIVIDER FOR POWER SEPARATION FROM VOICE/DATA
	5-20R	120V 1P 2W	QUAD; MTD IN POKE-THRU ASSEMBLY; SEE AUX SYS PLANS FOR SHARED ASSEMBLY; 8" POKE-THRU WITH 5-GANG CAPACITY; COVER FINISH SELECTION BY ARCHITECT.
EF		120V 1P 2W	EXHAUST FAN; SEE MECHANICAL SCHEDULE. PROVIDE POWER PACK FOR SWITCHING WITH LIGHTING CEILING OCCUPANCY SENSOR.

SAWYER SHERWOOD & ASSOCIATE ARCHITECTURE
124 Market St, Wilmington, NC 28401
910 762-0892 s2a3.com

CHEATHAM AND ASSOCIATES, P.A.
CONSULTING ENGINEERS
3412 ENTERPRISE DRIVE
WILMINGTON, NORTH CAROLINA 28405
PHONE: (910) 452-4210
FAX: (910) 452-4211
OFFICE@CHEATHAMPA.COM
WWW.CHEATHAMPA.COM
NC LICENSE# C-1073
18048

Brunswick County Courthouse Addition & Renovations

Bolivia, NC

CONSTRUCTION DRAWINGS
SEPTEMBER 23, 2019

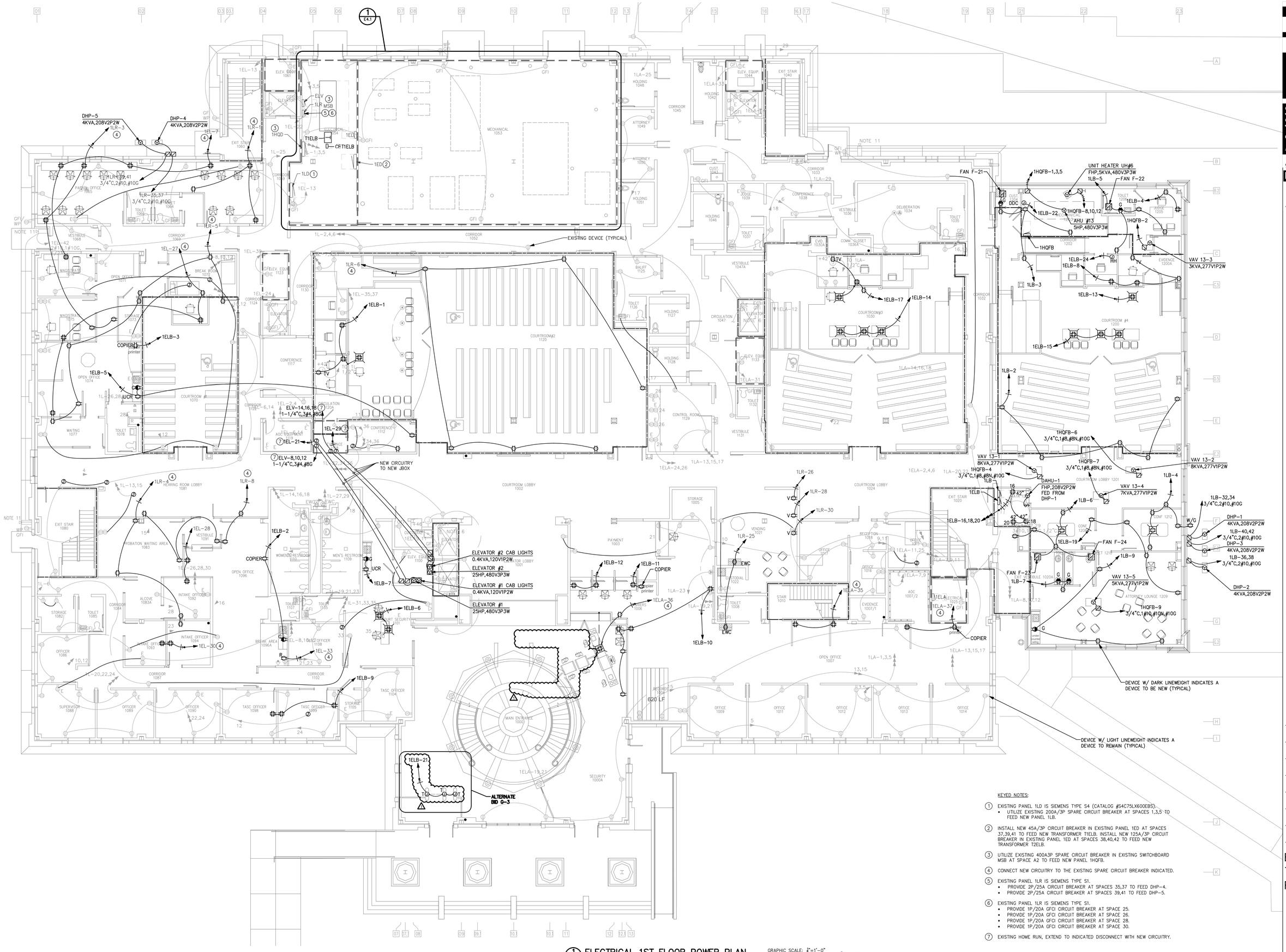
Revisions:

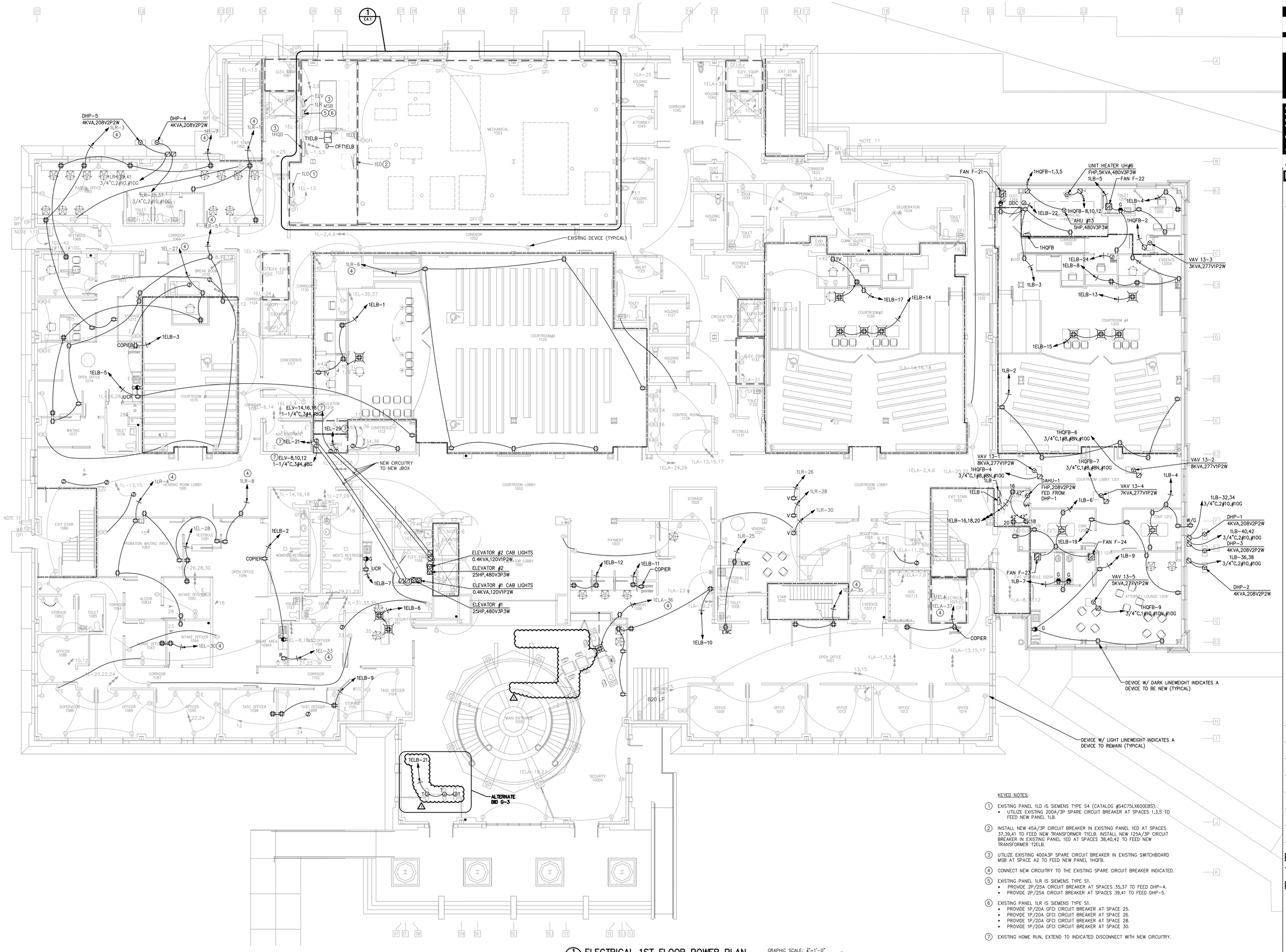
1	ADDENDUM #3	1/10/20

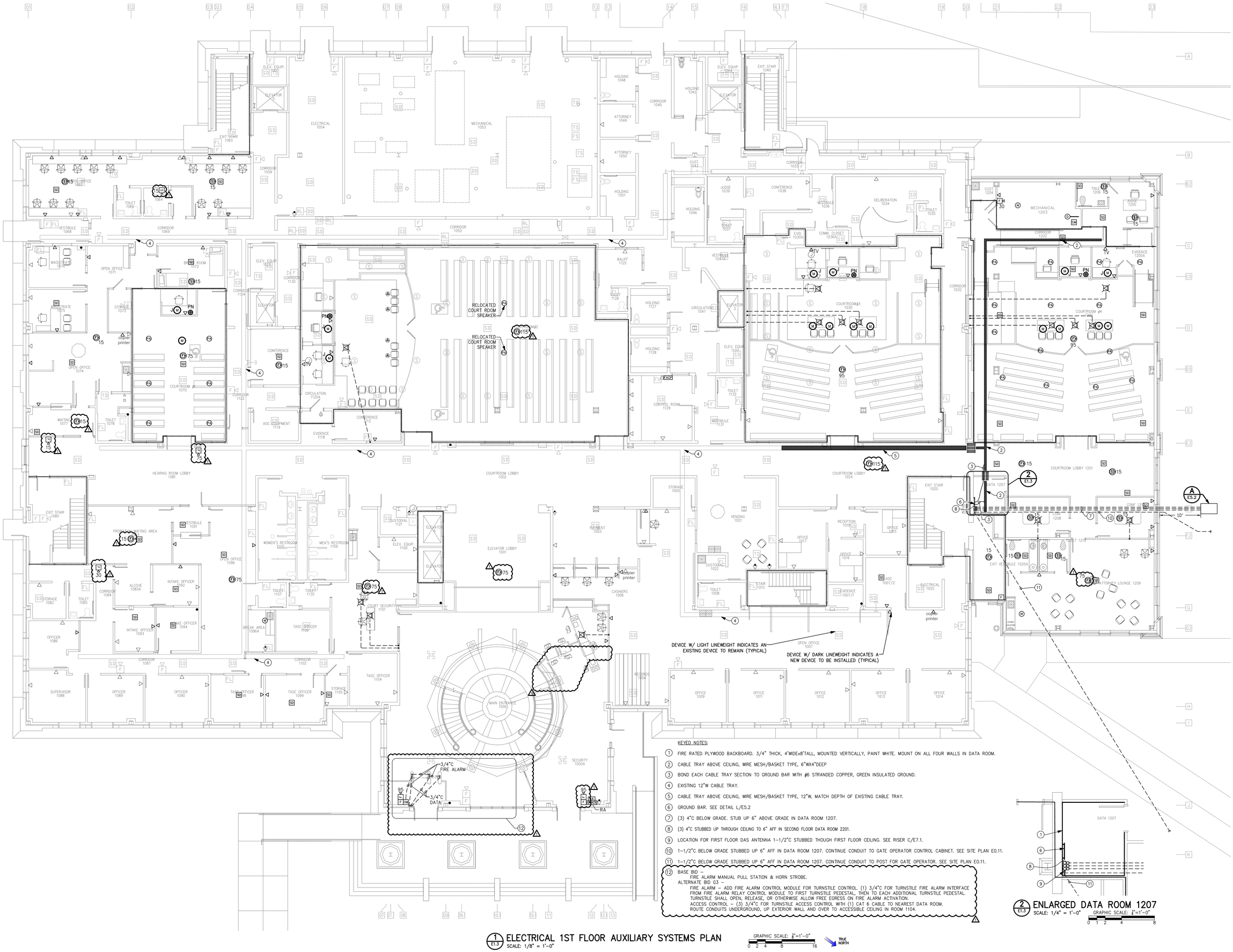
ELECTRICAL NOTES, LEGENDS, SCHEDULES

E0.1

© 2019 Sawyer Sherwood & Associate- All Rights Reserved


DHP-5
4KVA,208V2P2W
DHP-4
4KVA,208V2P2W
1LR-3
1LR-1
1LR-2
1LR-4
1LR-5
1LR-6
1LR-8
1LR-25
1LR-26
1LR-28
1LR-30
1HQD
1TELB
CFT1ELB
1ED
1LD
1ELB-1
1ELB-2
1ELB-3
1ELB-4
1ELB-5
1ELB-6
1ELB-7
1ELB-8
1ELB-9
1ELB-10
1ELB-11
1ELB-12
1ELB-13
1ELB-14
1ELB-15
1ELB-17
1ELB-21
1ELB-22
1ELB-24
1ELB-29
1ELB-30
1ELB-33
1ELB-35
1ELB-36
1ELB-37
1ELB-41
1ELB-42
1EL-7
1EL-13
1EL-21
1EL-24
1EL-27
1EL-28
1EL-29
1EL-33
1EL-35
1EL-37
1EL-39
1EL-41
1EL-42
ELV-14,16,18
1-1/4"C,3#4,#8G
ELV-8,10,12
1-1/4"C,3#4,#8G
NEW CIRCUITRY TO NEW JBOX
EXISTING DEVICE (TYPICAL)
ELEVATOR #2 CAB LIGHTS
0.4KVA,120V1P2W
ELEVATOR #2
25HP,480V3P3W
ELEVATOR #1 CAB LIGHTS
0.4KVA,120V1P2W
ELEVATOR #1
25HP,480V3P3W
ALTERNATE
BID 6-3
620 LF
UNIT HEATER UH-6
FHP,5KVA,480V3P3W
FAN F-21
FAN F-22
FAN F-23
FAN F-24
AHU #13
5HP,480V3P3W
1HQFB
1HQFB-1,3,5
1HQFB-2
1HQFB-4
1HQFB-6
1HQFB-7
1HQFB-8,10,12
1HQFB-9
DAHU-1
FHP,208V2P2W
FED FROM
DHP-1
VAV 13-1
8KVA,277V1P2W
VAV 13-2
8KVA,277V1P2W
VAV 13-3
3KVA,277V1P2W
VAV 13-4
7KVA,277V1P2W
VAV 13-5
5KVA,277V1P2W
DHP-1
4KVA,208V2P2W
1LB-40,42
3/4"C,2#10,#10G
DHP-3
4KVA,208V2P2W
1LB-36,38
3/4"C,2#10,#10G
DHP-2
4KVA,208V2P2W
1LB-32,34
3/4"C,2#10,#10G
DEVICE W/ DARK LINEWEIGHT INDICATES A DEVICE TO BE NEW (TYPICAL)
DEVICE W/ LIGHT LINEWEIGHT INDICATES A DEVICE TO REMAIN (TYPICAL)
COPIER
printer
UCR
TV
EWC
COURTROOM#2 1120
COURTROOM#3 1030
COURTROOM #4 1200
COURTROOM #5 1070
MECHANICAL 1053
CONFERENCE 1117
CONFERENCE 1112
CONFERENCE 1038
CONFERENCE 1212
CONTROL ROOM 1129
MAIN ENTRANCE 1000
SECURITY 1000A
RECORDS 1004
PAYMENT 1003
COURTROOM LOBBY 1002
COURTROOM LOBBY 1024
COURTROOM LOBBY 1201
HEARING ROOM LOBBY 1081
PROBATION WAITING AREA 1083
EXIT STAIR 1080
EXIT STAIR 1020
EXIT STAIR 1040
EXIT STAIR 1060
CORRIDOR 1052
CORRIDOR 1033
CORRIDOR 1032
CORRIDOR 1202
CORRIDOR 1135
CORRIDOR 1124
CORRIDOR 1102
CORRIDOR 1087
CORRIDOR 1084
CORRIDOR 1069
CORRIDOR 1045
CORRIDOR 1026
CIRCULATION 1047
CIRCULATION 1047A
HOLDING 1048
HOLDING 1042
HOLDING 1046
HOLDING 1127
HOLDING 1128
ATTORNEY 1049
ATTORNEY 1050
ATTORNEY 1051
JUDGE 1039
JUDGE 1035
CUST. 1043
CUST. 1004
DDC
VESTIBULE 1068
VESTIBULE 1091
VESTIBULE 1047A
VESTIBULE 1131
VESTIBULE 1034
BAILIFF 1125
EVID. 1003A
COMM. CLOSET 1036A
EVIDENCE 1200A
EVIDENCE 1007/1
ELEV. EQUIP. 1044
ELEV. EQUIP. 1123
ELEV. EQUIP. 1133
ELEV. 1061
ELEVATOR
STENTORIAN 1054
MAGISTRATE 1075
MAGISTRATE 1076
OPEN OFFICE 1074
OPEN OFFICE 1096
OPEN OFFICE 1007
OPEN OFFICE 1090
STORAGE 1077
STORAGE 1082
STORAGE 1105
TOILET 1078
TOILET 1085
TOILET 1107
TOILET 1135
TOILET 1126
TOILET 1037
TOILET 1035
TOILET 1130
TOILET 1008
TOILET 1205
WOMEN'S RESTROOM 1110
MEN'S RESTROOM 1109
BREAK ROOM 1073
BREAK AREA 1096A
BREAK AREA 1201A
ALCOVE 1083A
INTAKE OFFICER 1092
INTAKE OFFICER 1093
INTAKE OFFICER 1094
OFFICER 1086
OFFICER 1088
OFFICER 1089
OFFICER 1090
OFFICER 1009
OFFICER 1011
OFFICER 1012
OFFICER 1013
OFFICER 1014
SUPERVISOR 1088
TASC OFFICER 1098
TASC OFFICER 1099
TASC OFFICER 1104
COURT SECURITY 1101
COURT SECURITY 1201
WAITING 1077
ATTORNEY LOUNGE 1209
RECEPTION 1018
OFFICE 1017
OFFICE 1016
OFFICE 1022
AOC 1007/2
STAIR 1010
STORAGE 1005
VENDING 1021
ELECTRICAL 1029
ELECTRICAL 1135
ELECTRICAL 1096
ELECTRICAL 1200
ELECTRICAL 1202
ELECTRICAL 1203
ELECTRICAL 1204
ELECTRICAL 1206
ELECTRICAL 1207
ELECTRICAL 1208
ELECTRICAL 1210
ELECTRICAL 1211
ELECTRICAL 1212
ELECTRICAL 1213
ELECTRICAL 1214
ELECTRICAL 1215
ELECTRICAL 1216
ELECTRICAL 1217
ELECTRICAL 1218
ELECTRICAL 1219
ELECTRICAL 1220
ELECTRICAL 1221
ELECTRICAL 1222
ELECTRICAL 1223
ELECTRICAL 1224
ELECTRICAL 1225
ELECTRICAL 1226
ELECTRICAL 1227
ELECTRICAL 1228
ELECTRICAL 1229
ELECTRICAL


DHP-5
4KVA,208V2P2W
DHP-4
4KVA,208V2P2W
1LR-3
1LR-1
1LR-2
1LR-4
1LR-5
1LR-6
1LR-8
1LR-25
1LR-26
1LR-28
1LR-30
1HQD
1TELB
CFT1ELB
1ED
1LD
1ELB-1
1ELB-2
1ELB-3
1ELB-4
1ELB-5
1ELB-6
1ELB-7
1ELB-8
1ELB-9
1ELB-10
1ELB-11
1ELB-12
1ELB-13
1ELB-14
1ELB-15
1ELB-17
1ELB-21
1ELB-22
1ELB-24
1ELB-29
1ELB-30
1ELB-33
1ELB-35
1ELB-36
1ELB-37
1ELB-41
1ELB-42
1EL-7
1EL-13
1EL-21
1EL-24
1EL-27
1EL-28
1EL-29
1EL-33
1EL-35
1EL-37
1EL-39
1EL-41
1EL-42
ELV-14,16,18
1-1/4"C,3#4,#8G
ELV-8,10,12
1-1/4"C,3#4,#8G
NEW CIRCUITRY TO NEW JBOX
EXISTING DEVICE (TYPICAL)
ELEVATOR #2 CAB LIGHTS
0.4KVA,120V1P2W
ELEVATOR #2
25HP,480V3P3W
ELEVATOR #1 CAB LIGHTS
0.4KVA,120V1P2W
ELEVATOR #1
25HP,480V3P3W
ALTERNATE
BID 6-3
620 LF
UNIT HEATER UH-6
FHP,5KVA,480V3P3W
FAN F-21
FAN F-22
FAN F-23
FAN F-24
AHU #13
5HP,480V3P3W
1HQFB
1HQFB-1,3,5
1HQFB-2
1HQFB-4
1HQFB-6
1HQFB-7
1HQFB-8,10,12
1HQFB-9
DAHU-1
FHP,208V2P2W
FED FROM
DHP-1
VAV 13-1
8KVA,277V1P2W
VAV 13-2
8KVA,277V1P2W
VAV 13-3
3KVA,277V1P2W
VAV 13-4
7KVA,277V1P2W
VAV 13-5
5KVA,277V1P2W
DHP-1
4KVA,208V2P2W
1LB-40,42
3/4"C,2#10,#10G
DHP-3
4KVA,208V2P2W
1LB-36,38
3/4"C,2#10,#10G
DHP-2
4KVA,208V2P2W
1LB-32,34
3/4"C,2#10,#10G
DEVICE W/ DARK LINEWEIGHT INDICATES A DEVICE TO BE NEW (TYPICAL)
DEVICE W/ LIGHT LINEWEIGHT INDICATES A DEVICE TO REMAIN (TYPICAL)
COPIER
printer
UCR
TV
EWC
COURTROOM#2 1120
COURTROOM#3 1030
COURTROOM #4 1200
COURTROOM #5 1070
MECHANICAL 1053
CONFERENCE 1117
CONFERENCE 1112
CONFERENCE 1038
CONFERENCE 1212
CONTROL ROOM 1129
MAIN ENTRANCE 1000
SECURITY 1000A
RECORDS 1004
PAYMENT 1003
COURTROOM LOBBY 1002
COURTROOM LOBBY 1024
COURTROOM LOBBY 1201
HEARING ROOM LOBBY 1081
PROBATION WAITING AREA 1083
EXIT STAIR 1080
EXIT STAIR 1020
EXIT STAIR 1040
EXIT STAIR 1060
CORRIDOR 1052
CORRIDOR 1033
CORRIDOR 1032
CORRIDOR 1202
CORRIDOR 1135
CORRIDOR 1124
CORRIDOR 1102
CORRIDOR 1087
CORRIDOR 1084
CORRIDOR 1069
CORRIDOR 1045
CORRIDOR 1026
CIRCULATION 1047
CIRCULATION 1047A
HOLDING 1048
HOLDING 1042
HOLDING 1046
HOLDING 1127
HOLDING 1128
ATTORNEY 1049
ATTORNEY 1050
ATTORNEY 1051
ATTORNEY LOUNGE 1209
JUDGE 1039
JUDGE 1205
CUST. 1043
CUST. 1204
DDC
VESTIBULE 1068
VESTIBULE 1091
VESTIBULE 1047A
VESTIBULE 1131
VESTIBULE 1034
TOILET 1037
TOILET 1035
TOILET 1126
TOILET 1130
TOILET 1008
TOILET 1107
TOILET 1055
TOILET 1064
TOILET 1078
TOILET 1085
TOILET 1206
TOILET 1208
ELEV. EQUIP. 1044
ELEV. EQUIP. 1123
ELEV. EQUIP. 1133
ELEVATOR 1100
ELEVATOR 1001
ELEVATOR 1036
ELEVATOR 1124
ELEVATOR 1047
ELEVATOR 1109
ELEVATOR 1110
ELEVATOR 1061
ELEVATOR 1062
STAIRWELL 1006
STAIRWELL 1125
STAIRWELL 1010
STAIRWELL 1020A
STAIRWELL 1212
STAIRWELL 1096
STAIRWELL 1096A
STAIRWELL 1054
STAIRWELL 1101
STAIRWELL 1202
STAIRWELL 1208
STAIRWELL 1209
STORAGE 1005
STORAGE 1082
STORAGE 1105
STORAGE 1207
VENDING 1021
RECEPTION 1018
OFFICE 1016
OFFICE 1017
OFFICE 1009
OFFICE 1011
OFFICE 1012
OFFICE 1013
OFFICE 1014
OPEN OFFICE 1074
OPEN OFFICE 1096
OPEN OFFICE 1007
OPEN OFFICE 1097
MAGISTRATE 1076
MAGISTRATE 1075
BREAK ROOM 1073
BREAK ROOM 1208
BREAK AREA 1096A
WAITING 1077
SUPERVISOR 1088
OFFICER 1089
OFFICER 1090
OFFICER 1086
TASC OFFICER 1098
TASC OFFICER 1104
TASC OFFICER 1099
INTAKE OFFICER 1092
INTAKE OFFICER 1093
INTAKE OFFICER 1094
OFFICER 1108
SHERIFF 1202
SHERIFF 1203
SHERIFF 1204
SHERIFF 1205
SHERIFF 1206
SHERIFF 1207
COURT SECURITY 1101
COURT SECURITY 1201
EVIDENCE 1007/1
EVIDENCE 1200A
AOC 1007/2
AOC ELECTRICAL 1135A
COMM. CLOSET 1036A
COMM. CLOSET 1202A
DEVICE 1035
DEVICE 1037
DEVICE 1039
DEVICE 1044
DEVICE 1046
DEVICE 1048
DEVICE 1049
DEVICE 1050
DEVICE 1051
DEVICE 1053
DEVICE 1054
DEVICE 1060
DEVICE 1061
DEVICE 1062
DEVICE 1069
DEVICE 1080
DEVICE 1081
DEVICE 1083
DEVICE 1084
DEVICE 1085
DEVICE 1086
DEVICE 1087
DEVICE 1088
DEVICE 1089
DEVICE 1090
DEVICE 1091
DEVICE 1092
DEVICE 1093
DEVICE 1094
DEVICE 1096
DEVICE 1096A
DEVICE 1098
DEVICE 1099
DEVICE 1102
DEVICE 1104
DEVICE 1105
DEVICE 1107
DEVICE 1108
DEVICE 1109
DEVICE 1110
DEVICE 1112
DEVICE 1117
DEVICE 1120
DEVICE 1123
DEVICE 1124
DEVICE 1125
DEVICE 1126
DEVICE 1127
DEVICE 1128
DEVICE 1129
DEVICE 1130
DEVICE 1131
DEVICE 1133
DEVICE 1135
DEVICE 1202
DEVICE 1203
DEVICE 1204
DEVICE 1205
DEVICE 1206
DEVICE 1207
DEVICE 1208
DEVICE 1209
DEVICE 1212
DEVICE 1215
DEVICE 1216
DEVICE 1218
DEVICE 1219
DEVICE 1220
DEVICE 1221
DEVICE 1222
DEVICE 1223
DEVICE 1224
DEVICE 1225
DEVICE 1226
DEVICE 1227
DEVICE 1228
DEVICE 1229
DEVICE 1230
DEVICE 1231
DEVICE 1232
DEVICE 1233
DEVICE 1234
DEVICE 1235
DEVICE 1236
DEVICE 1237
DEVICE



KEYED NOTES:

1. FIRE RATED PLYWOOD BACKBOARD. 3/4" THICK, 4'WIDEx8'TALL, MOUNTED VERTICALLY, PAINT WHITE. MOUNT ON ALL FOUR WALLS IN DATA ROOM.
2. CABLE TRAY ABOVE CEILING, WIRE MESH/BASKET TYPE, 6"WX4"DEEP
3. BOND EACH CABLE TRAY SECTION TO GROUND BAR WITH #6 STRANDED COPPER, GREEN INSULATED GROUND.
4. EXISTING 12"W CABLE TRAY.
5. CABLE TRAY ABOVE CEILING, WIRE MESH/BASKET TYPE, 12"W, MATCH DEPTH OF EXISTING CABLE TRAY.
6. GROUND BAR. SEE DETAIL L/E5.2
7. (3) 4"C BELOW GRADE. STUB UP 6" ABOVE GRADE IN DATA ROOM 1207.
8. (3) 4"C STUBBED UP THROUGH CEILING TO 6" AFF IN SECOND FLOOR DATA ROOM 2201.
9. LOCATION FOR FIRST FLOOR DAS ANTENNA 1-1/2"C STUBBED THOUGH FIRST FLOOR CEILING. SEE RISER C/E7.1.
10. 1-1/2"C BELOW GRADE STUBBED UP 6" AFF IN DATA ROOM 1207. CONTINUE CONDUIT TO GATE OPERATOR CONTROL CABINET. SEE SITE PLAN E0.11.
11. 1-1/2"C BELOW GRADE STUBBED UP 6" AFF IN DATA ROOM 1207. CONTINUE CONDUIT TO POST FOR GATE OPERATOR. SEE SITE PLAN E0.11.
12. BASE BID –
    FIRE ALARM MANUAL PULL STATION & HORN STROBE.
    ALTERNATE BID G3 –
    FIRE ALARM – ADD FIRE ALARM CONTROL MODULE FOR TURNSTILE CONTROL. (1) 3/4"C FOR TURNSTILE FIRE ALARM INTERFACE FROM FIRE ALARM RELAY CONTROL MODULE TO FIRST TURNSTILE PEDESTAL, THEN TO EACH ADDITIONAL TURNSTILE PEDESTAL. TURNSTILE SHALL OPEN, RELEASE, OR OTHERWISE ALLOW FREE EGRESS ON FIRE ALARM ACTIVATION.
    ACCESS CONTROL – (3) 3/4"C FOR TURNSTILE ACCESS CONTROL WITH (1) CAT 6 CABLE TO NEAREST DATA ROOM. ROUTE CONDUITS UNDERGROUND, UP EXTERIOR WALL AND OVER TO ACCESSIBLE CEILING IN ROOM 1104.

1 E1.3 ELECTRICAL 1ST FLOOR AUXILIARY SYSTEMS PLAN
SCALE: 1/8" = 1'-0"

GRAPHIC SCALE: 1/8"=1'-0"
0 2 4 8 16

TRUE NORTH

2 E1.3 ENLARGED DATA ROOM 1207
SCALE: 1/4" = 1'-0"
GRAPHIC SCALE: 1/4"=1'-0"
0 1 2 4 8

SAWYER SHERWOOD & ASSOCIATE ARCHITECTURE
124 Market St, Wilmington, NC 28401
910 762-0892 s2a3.com
CHEATHAM AND ASSOCIATES, P.A.
CONSULTING ENGINEERS
3412 ENTERPRISE DRIVE
WILMINGTON, NORTH CAROLINA 28405
PHONE: (910) 452-4210
FAX: (910) 452-4211
OFFICE@CHEATHAMPA.COM
WWW.CHEATHAMPA.COM
NC LICENSE# C-1073

18048

NORTH CAROLINA PROFESSIONAL ENGINEER 17593 10 Jan 2020 MARK A. CIARROCCHI

Brunswick County Courthouse Addition & Renovations

Bolivia, NC

CONSTRUCTION DRAWINGS
SEPTEMBER 23, 2019

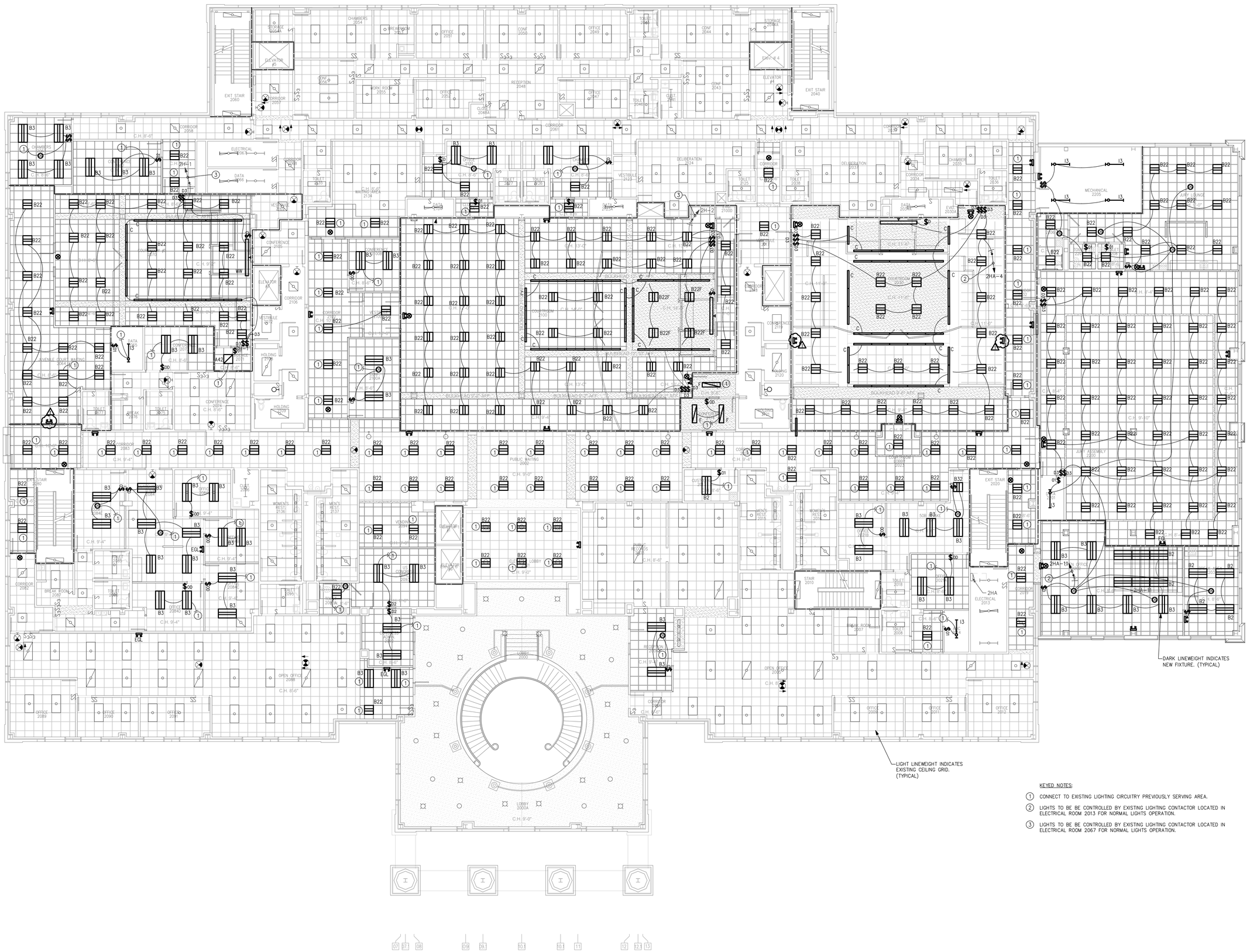
Revisions:

△1 ADDENDUM #3	1/10/20

ELECTRICAL
1ST FLOOR
AUXILIARY SYSTEMS
PLAN

E1.3

© 2019 Sawyer Sherwood & Associate- All Rights Reserved



KEYED NOTES:

1. CONNECT TO EXISTING LIGHTING CIRCUITRY PREVIOUSLY SERVING AREA.
2. LIGHTS TO BE BE CONTROLLED BY EXISTING LIGHTING CONTACTOR LOCATED IN ELECTRICAL ROOM 2013 FOR NORMAL LIGHTS OPERATION.
3. LIGHTS TO BE BE CONTROLLED BY EXISTING LIGHTING CONTACTOR LOCATED IN ELECTRICAL ROOM 2067 FOR NORMAL LIGHTS OPERATION.

1 E1.5 ELECTRICAL 2ND FLOOR LIGHTING PLAN
SCALE: 1/8" = 1'-0"

GRAPHIC SCALE: 1/8"=1'-0"
0 2 4 8 16

TRUE NORTH

SAWYER SHERWOOD & ASSOCIATE ARCHITECTURE
124 Market St. Wilmington, NC 28401
910 762-0892 s2a3.com

CHEATHAM AND ASSOCIATES, P.A.
CONSULTING ENGINEERS
3412 ENTERPRISE DRIVE
WILMINGTON, NORTH CAROLINA 28405
PHONE: (910) 452-4210
FAX: (910) 452-4211
OFFICE@CHEATHAMPA.COM
WWW.CHEATHAMPA.COM
NC LICENSE# C-1073

18048

NORTH CAROLINA REGISTERED 17505 PROFESSIONAL ENGINEER MARK A. CIARROCCHI 1/10/2020

Brunswick County Courthouse Addition & Renovations

Bolivia, NC

CONSTRUCTION DRAWINGS
SEPTEMBER 23, 2019

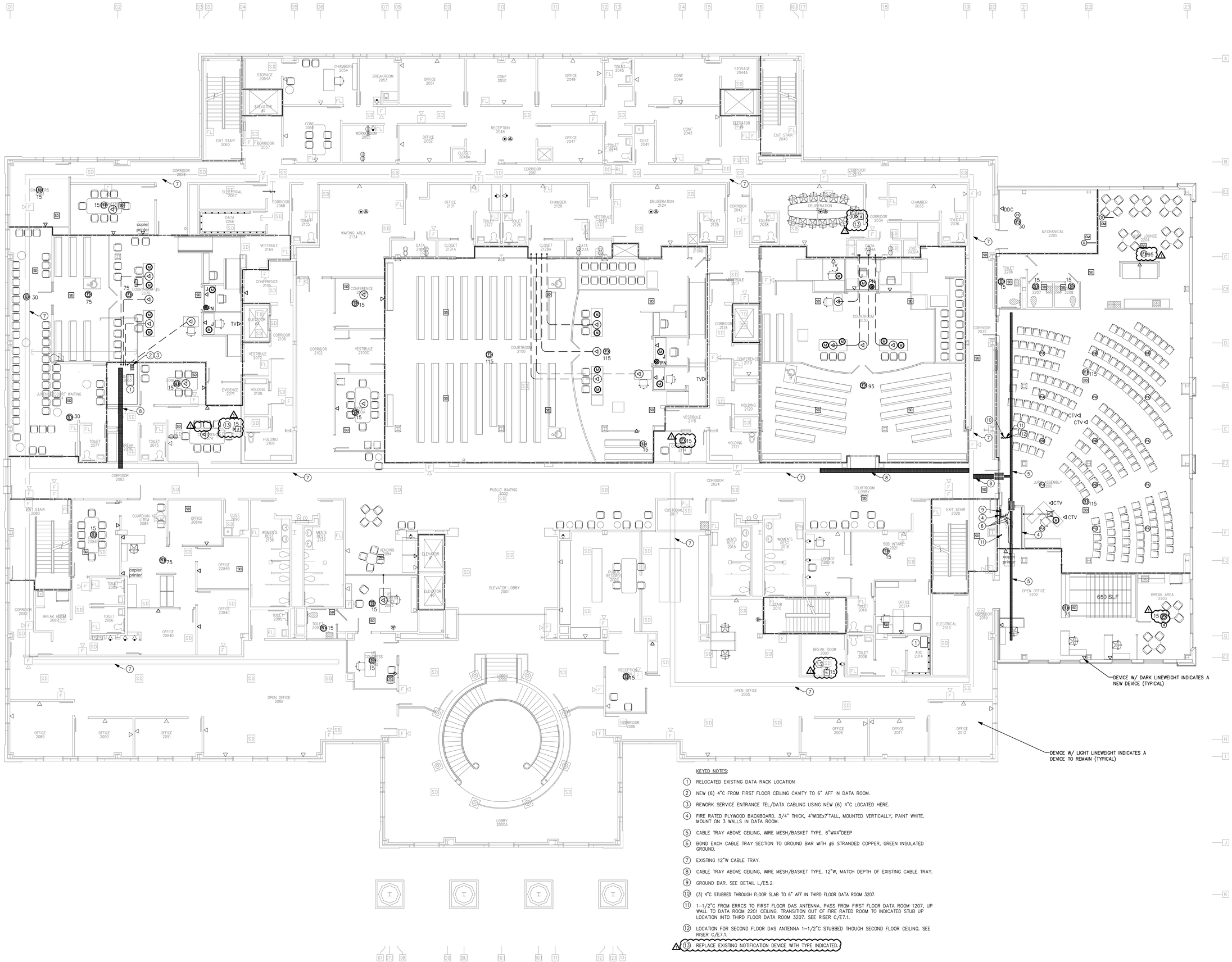
Revisions:

⚠ ADDENDUM #3	1/10/20

ELECTRICAL
2ND FLOOR
LIGHTING PLAN

E1.5

© 2019 Sawyer Sherwood & Associate- All Rights Reserved



KEYED NOTES:

1. RELOCATED EXISTING DATA RACK LOCATION
2. NEW (6) 4"C FROM FIRST FLOOR CEILING CAVITY TO 6" AFF IN DATA ROOM.
3. REWORK SERVICE ENTRANCE TEL/DATA CABLING USING NEW (6) 4"C LOCATED HERE.
4. FIRE RATED PLYWOOD BACKBOARD. 3/4" THICK, 4'WIDEx7'TALL, MOUNTED VERTICALLY, PAINT WHITE. MOUNT ON 3 WALLS IN DATA ROOM.
5. CABLE TRAY ABOVE CEILING, WIRE MESH/BASKET TYPE, 6"WX4"DEEP
6. BOND EACH CABLE TRAY SECTION TO GROUND BAR WITH #6 STRANDED COPPER, GREEN INSULATED GROUND.
7. EXISTING 12"W CABLE TRAY.
8. CABLE TRAY ABOVE CEILING, WIRE MESH/BASKET TYPE, 12"W, MATCH DEPTH OF EXISTING CABLE TRAY.
9. GROUND BAR. SEE DETAIL L/E5.2.
10. (3) 4"C STUBBED THROUGH FLOOR SLAB TO 6" AFF IN THIRD FLOOR DATA ROOM 3207.
11. 1-1/2"C FROM ERRCS TO FIRST FLOOR DAS ANTENNA. PASS FROM FIRST FLOOR DATA ROOM 1207, UP WALL TO DATA ROOM 2201 CEILING. TRANSITION OUT OF FIRE RATED ROOM TO INDICATED STUB UP LOCATION INTO THIRD FLOOR DATA ROOM 3207. SEE RISER C/E7.1.
12. LOCATION FOR SECOND FLOOR DAS ANTENNA 1-1/2"C STUBBED THOUGH SECOND FLOOR CEILING. SEE RISER C/E7.1.
13. REPLACE EXISTING NOTIFICATION DEVICE WITH TYPE INDICATED.

1 E1.6 ELECTRICAL 2ND FLOOR AUXILIARY SYSTEMS PLAN
SCALE: 1/8" = 1'-0"

GRAPHIC SCALE: 1/8"=1'-0"
0 2 4 8 16
TRUE NORTH

SAWYER SHERWOOD & ASSOCIATE ARCHITECTURE
124 Market St, Wilmington, NC 28401
910 762-0892 s2a3.com
CHEATHAM AND ASSOCIATES, P.A.
CONSULTING ENGINEERS
3412 ENTERPRISE DRIVE
WILMINGTON, NORTH CAROLINA 28405
PHONE: (910) 452-4210
FAX: (910) 452-4211
OFFICE@CHEATHAMPA.COM
WWW.CHEATHAMPA.COM
NC LICENSE# C-1073
18048

NORTH CAROLINA PROFESSIONAL ENGINEER 17 OCT 2019 MARK A. CIARROCCHI
10 JAN 2020

Brunswick County Courthouse Addition & Renovations

Bolivia, NC

CONSTRUCTION DRAWINGS
SEPTEMBER 23, 2019

Revisions:
1 ADDENDUM #3 1/10/20

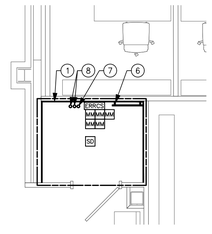
ELECTRICAL 2ND FLOOR AUXILIARY SYSTEMS PLAN

E1.6

© 2019 Sawyer Sherwood & Associate- All Rights Reserved

KEYED NOTES:

1. FIRE RATED PLYWOOD BACKBOARD. 3/4" THICK, 4'WIDEx7'TALL, MOUNTED VERTICALLY, PAINT WHITE. MOUNT ON 3 INDICATED WALLS IN DATA ROOM.
2. CABLE TRAY ABOVE CEILING, WIRE MESH/BASKET TYPE, 6"WX4"DEEP
3. BOND EACH CABLE TRAY SECTION TO GROUND BAR WITH #6 STRANDED COPPER, GREEN INSULATED GROUND.
4. EXISTING 12"W CABLE TRAY.
5. CABLE TRAY ABOVE CEILING, WIRE MESH/BASKET TYPE, 12"W, MATCH DEPTH OF EXISTING CABLE TRAY.
6. GROUND BAR. SEE DETAIL L/E5.2.
7. 1-1/2"C FROM ERRCS TO ROOF FOR DONOR ANTENNA, PENETRATE THROUGH THIRD FLOOR CEILING TO ROOF. INSTALL WEATHERHEAD ON ROOF. SEE RISER C/E7.1.
8. LOCATION FOR DAS ANTENNA (2) 1-1/2"C STUBBED THOUGH SECOND FLOOR CEILING. SEE RISER C/E7.1.
9. RELOCATE EXISTING PULL STATION AND HORN STROBE AS INDICATED. ⚠1



2 E1.9 ENLARGED DATA ROOM 3207
SCALE: 1/4" = 1'-0"
GRAPHIC SCALE: 1/4"=1'-0"
0 1 2 4 8

1 E1.9 ELECTRICAL 3RD FLOOR AUXILIARY SYSTEMS PLAN
SCALE: 1/8" = 1'-0"
GRAPHIC SCALE: 1/8"=1'-0"
0 2 4 8 16
TRUE NORTH

SAWYER SHERWOOD & ASSOCIATE ARCHITECTURE
124 Market St. Wilmington, NC 28401
910 762-0892 s2a3.com
CHEATHAM AND ASSOCIATES, P.A.
CONSULTING ENGINEERS
3412 ENTERPRISE DRIVE
WILMINGTON, NORTH CAROLINA 28405
PHONE: (910) 452-4210
FAX: (910) 452-4211
OFFICE@CHEATHAMPA.COM
WWW.CHEATHAMPA.COM
18048 NC LICENSE# C-1073

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 033693 MARK A. CIARROCCA 10/1/2020

Brunswick County Courthouse Addition & Renovations

Bolivia, NC

CONSTRUCTION DRAWINGS
SEPTEMBER 23, 2019

Revisions:

⚠1	ADDENDUM #3	1/10/20

ELECTRICAL
3RD FLOOR
AUXILIARY SYSTEMS
PLAN

E1.9

© 2019 Sawyer Sherwood & Associate- All Rights Reserved