

# USC UPSATE - MODIFICATIONS TO BURROUGHS

800 UNIVERSITY WAY  
SPARTANBURG, SC 29303

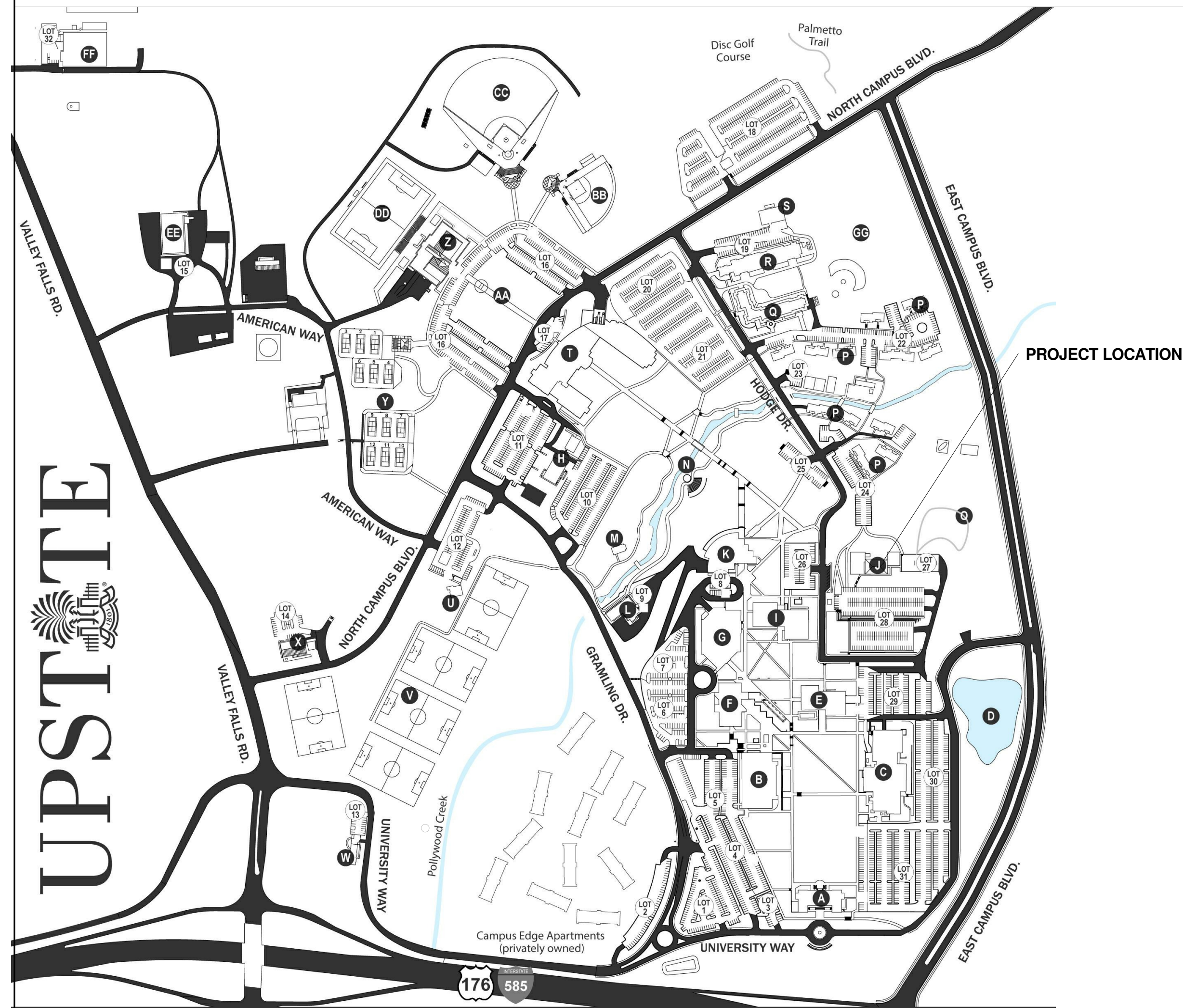
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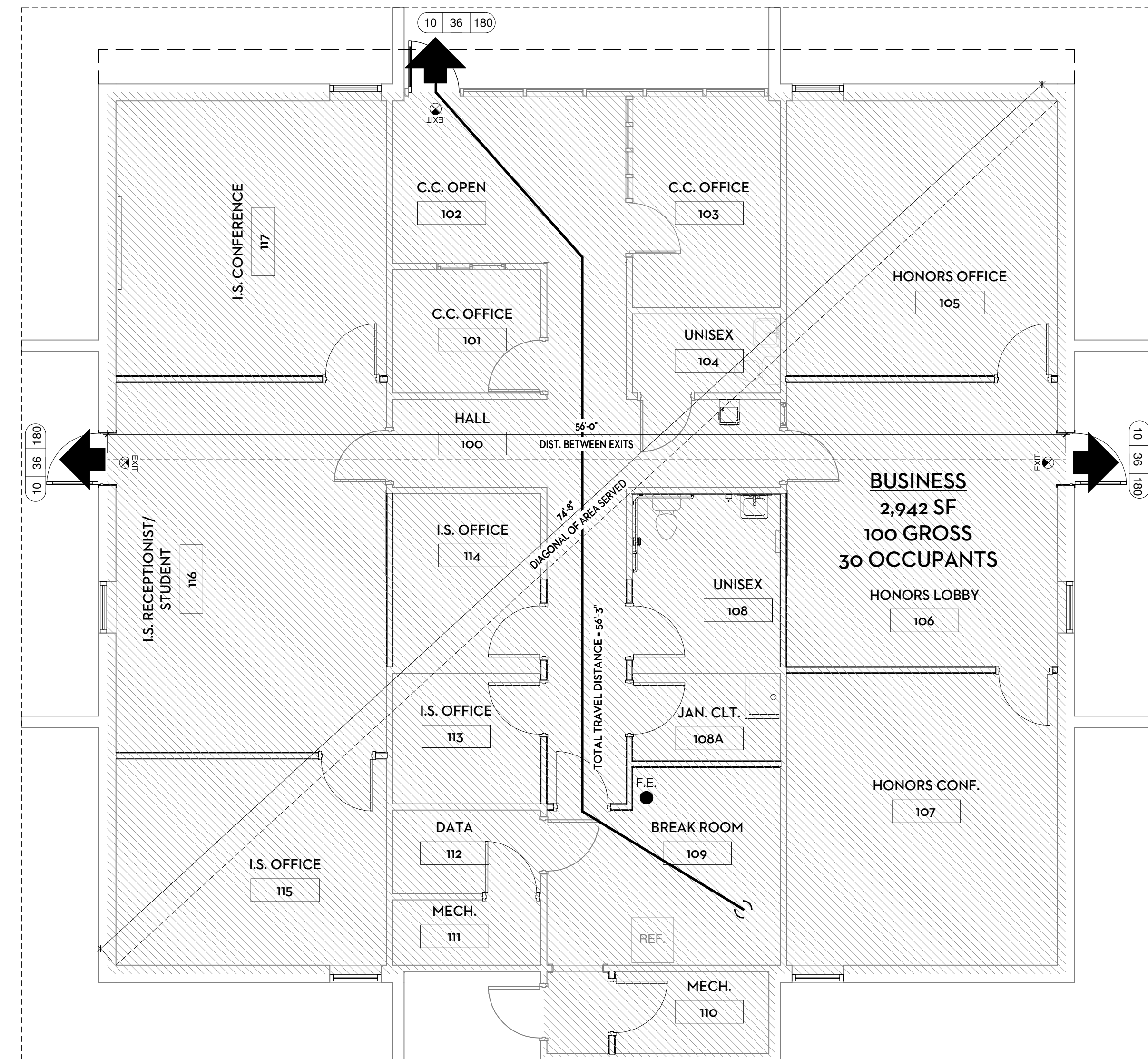
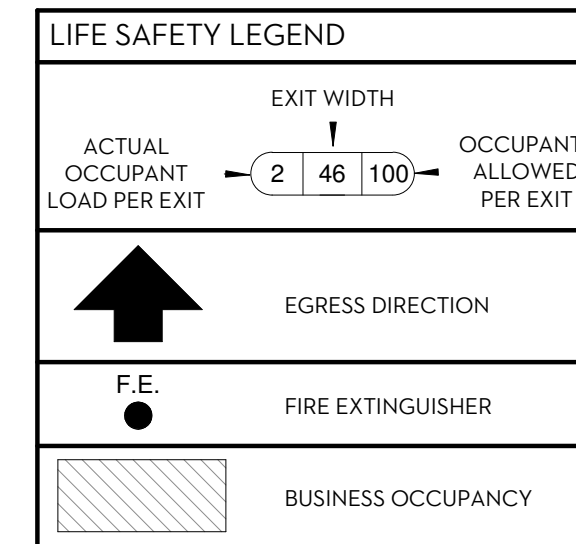
## PROJECT TEAM

ARCHITECTS  
INTERIOR DESIGNERS  
ELECTRICAL ENGINEERS  
MECHANICAL ENGINEERS

GOODWYN MILLS AND CAWOOD, INC.  
GOODWYN MILLS AND CAWOOD, INC.  
CAVINNESS LAMBERT ENGINEERING  
CAVINNESS LAMBERT ENGINEERING



Campus Map Legend



**1 LIFE SAFETY FLOOR PLAN**  
SCALE: 3/16" = 1'-0"

## BUILDING CODE SUMMARY

Name of Project: USC UPSATE - MODIFICATIONS TO BURROUGHS  
Address: 800 UNIVERSITY WAY SPARTANBURG, S.C. 29303  
Proposed Use: BUSINESS  
Owner or Authorized Agent: USC - UPSATE Phone # 864.503.5538  
Owned By:  City/County  Private  State  County  OSE  
Code Enforcement Jurisdiction:  City  County

LEAD DESIGN PROFESSIONAL: Michael Keeshen, Architect 864.527.0460 mike.keeshen@gmcnetwork.com  
DESIGNER FIRM NAME PHONE # E-MAIL  
Project Mgr Goodwyn, Mills & Cawood Matthew King 864.527.0460 matthew.king@gmcnetwork.com

YEAR EDITION OF CODE: 2012 International Building Code  
 New Construction  Renovation (Existing Bldg.)  Upfit  Alteration

## BUILDING DATA

IBC  
Construction Type:  V-B  
Sprinklers:  No  Yes  
Standpipes:  No  Yes  
Fire District:  No  Yes  
Building Height: 1 Story  
Mezzanine:  No  Yes  
High Rise:  No  Yes

Gross Building Area (sq. ft.):

FLOOR	EXISTING	NEW	RENO/ UPFIT
FIRST FLOOR	2,942	0	2,942
TOTAL	2,942	0	2,942

## ALLOWABLE AREA

Primary Occupancy:  Business 2,942/100 Gross= 30 Occupants  
Mixed Occupancy:  No

## FIRE PROTECTION REQUIREMENTS

Life Safety Plan Sheet #, if provided: A0.01

## BUILDING ELEMENT

Corridor Separation	NOT RATED, ONLY 1 EXIT REQUIRED <49 OCCUPANTS
Tenant Separation	0 HOUR

## LIFE SAFETY SYSTEM REQUIREMENTS

Emergency Lighting:  No  Yes  
Exit Signs:  No  Yes  
Fire Alarm:  No  Yes  
Smoke Detection Systems:  No  Yes

## EXIT REQUIREMENTS

### NUMBER AND ARRANGEMENT OF EXITS

1 REQUIRED, 3 PROVIDED EXITS CLEARLY MARKED IN THE SPACE

No.	Sheet Name
A-0.01	TITLE SHEET
A0.02	ARCHITECTURAL SITE PLAN
A1.00	DEMOLITION PLANS
A1.01	FLOOR PLAN
A5.00	DOOR TYPES, DETAILS AND SCHEDULE
A5.01	WINDOW DETAILS & TYPES, ROOM FINISH SCHEDULES, AND FINISH LEGEND
M-101	MECHANICAL PLAN
P-101	PLUMBING PLAN
E-101	ELECTRICAL PLAN

USC UPSATE - MODIFICATIONS TO  
BURROUGHS

800 UNIVERSITY WAY  
SPARTANBURG, SC 29303  
GMC # 140048  
USC# CP00418380  
Issue for Bid

TITLE SHEET

A-0.01  
sheet of

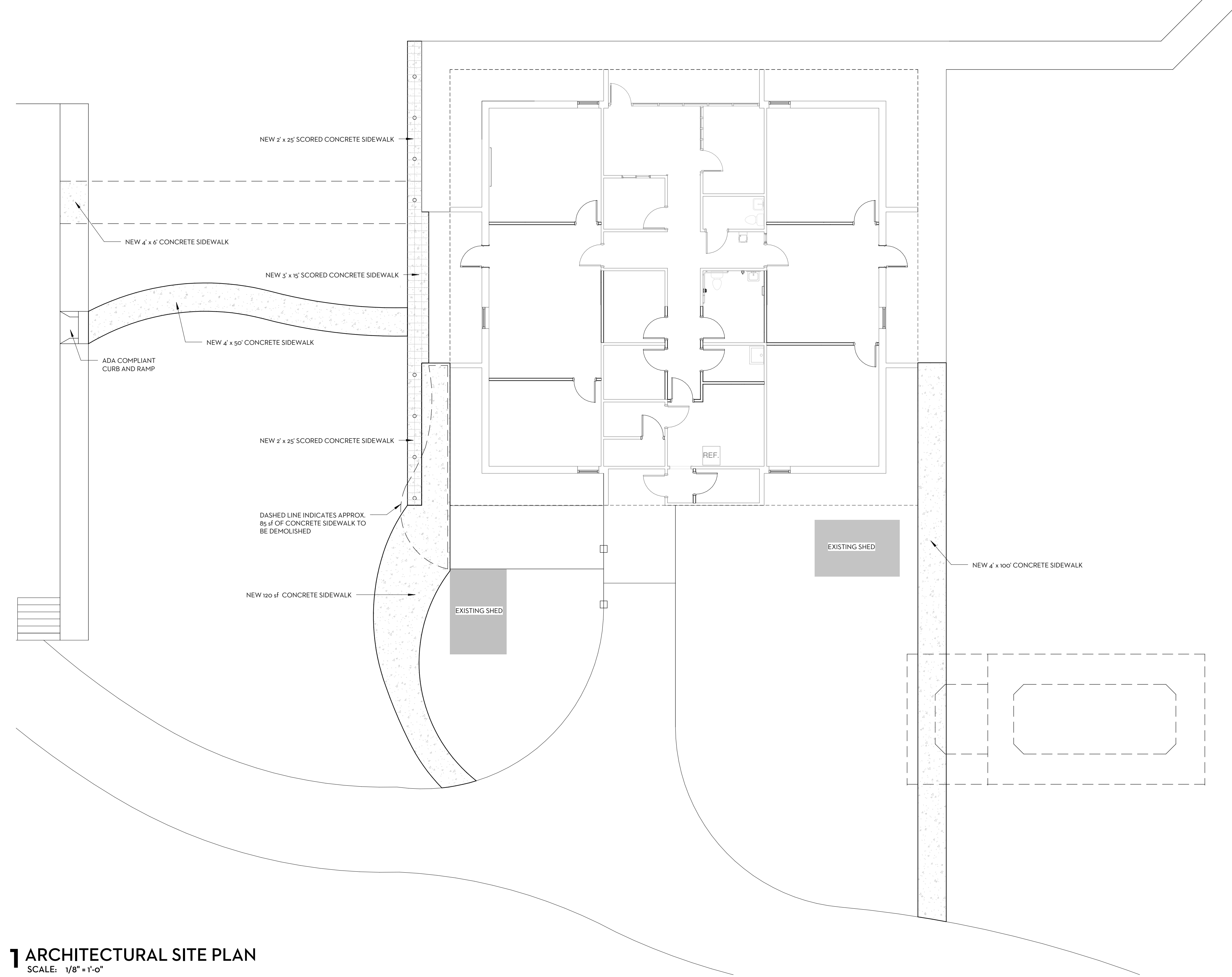
ISSUE DATE

Issue for Bid 03/26/15

drawn by: MEL/JJN  
checked by: MEK

GOODWYN MILLS CAWOOD

101 East Washington Street, Suite 200 | Greenville, SC 29601  
Tel 864.527.0460 | GMCNETWORK.COM



1 ARCHITECTURAL SITE PLAN  
SCALE: 1/8" = 1'-0"

ARCHITECTURAL SITE LEGEND

[Stippled pattern]	NEW 4' CONCRETE SIDEWALK
[Grid pattern]	NEW CONCRETE SIDEWALK, 1' X 1' SQUARE
[Small circle]	NEW FLAG POLE
[Dashed line]	DEMOLISHED CONCRETE SIDEWALK, DISCARD OFFSITE
[Solid line]	EXISTING CONCRETE SIDEWALK TO REMAIN

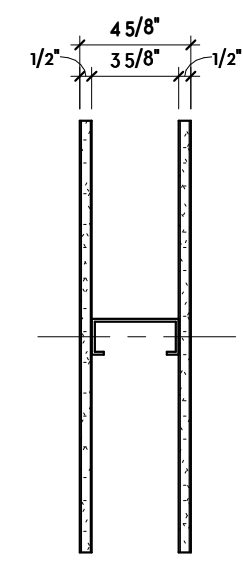
ISSUE	DATE
Issue for Bid	03/26/15

drawn by: WAS  
checked by: MEK

USC UPSTATE - MODIFICATIONS TO  
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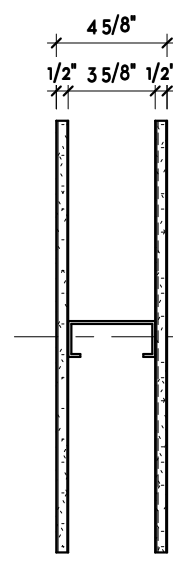
ARCHITECTURAL SITE  
PLAN  
Ao.02  
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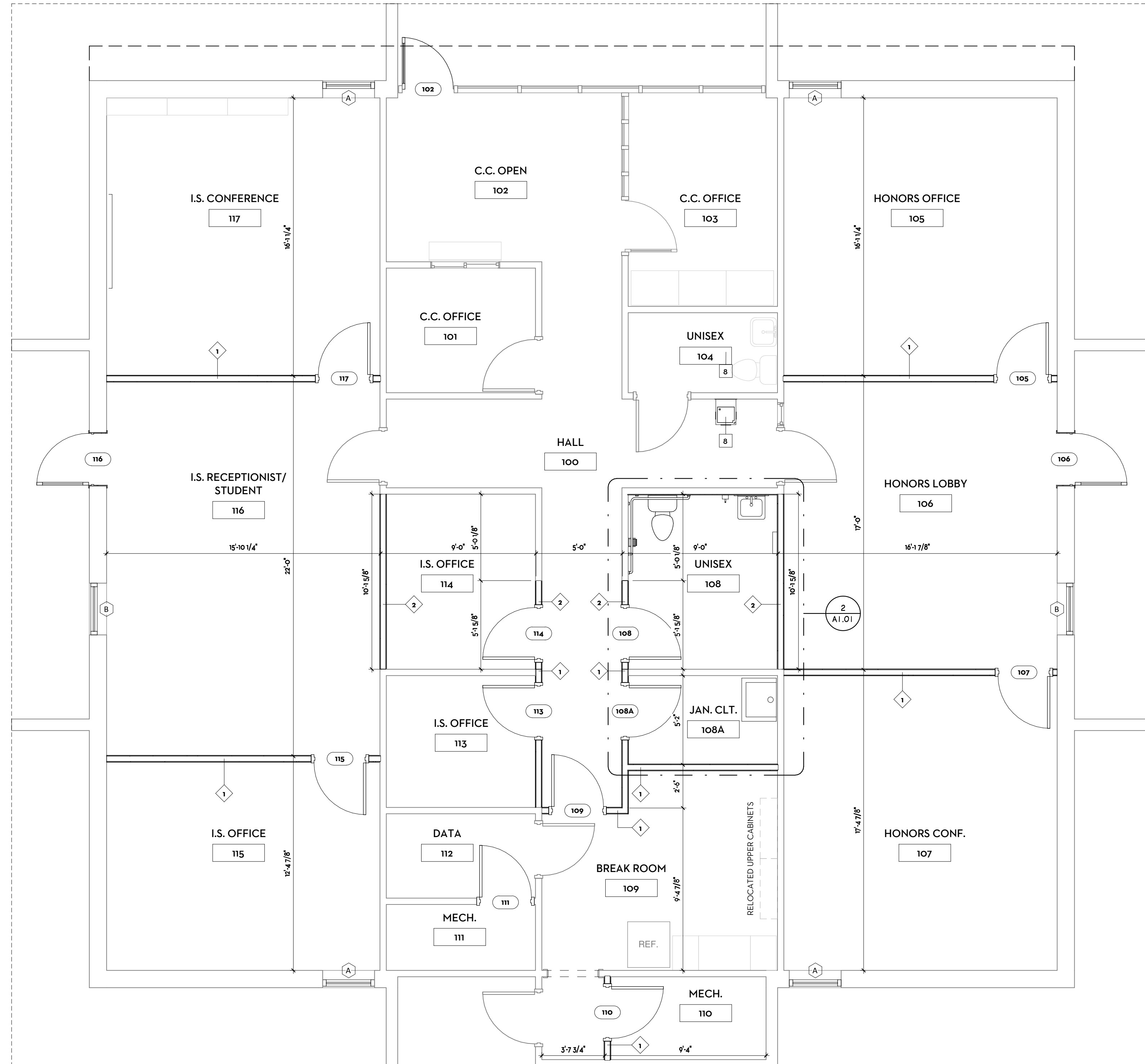
WALL TYPE 1

FRAMING:  
3 5/8" METAL STUDS @ 16" O.C.  
22 GA MINIMUM  
SHEATHING:  
1/2" GYPSUM BOARD EACH SIDE  
PARTITION HEIGHT:  
BOTTOM OF CEILING

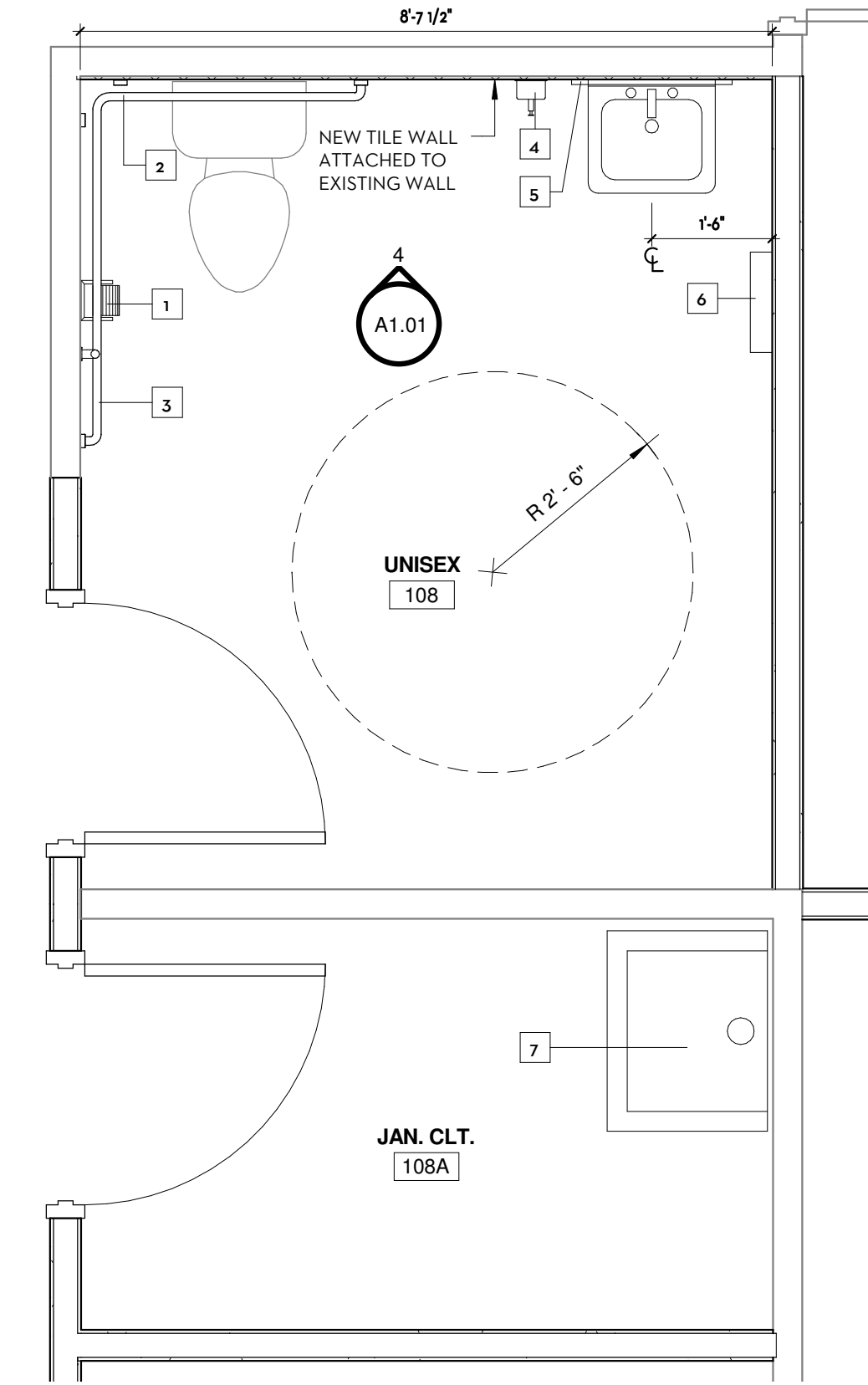


WALL TYPE 2

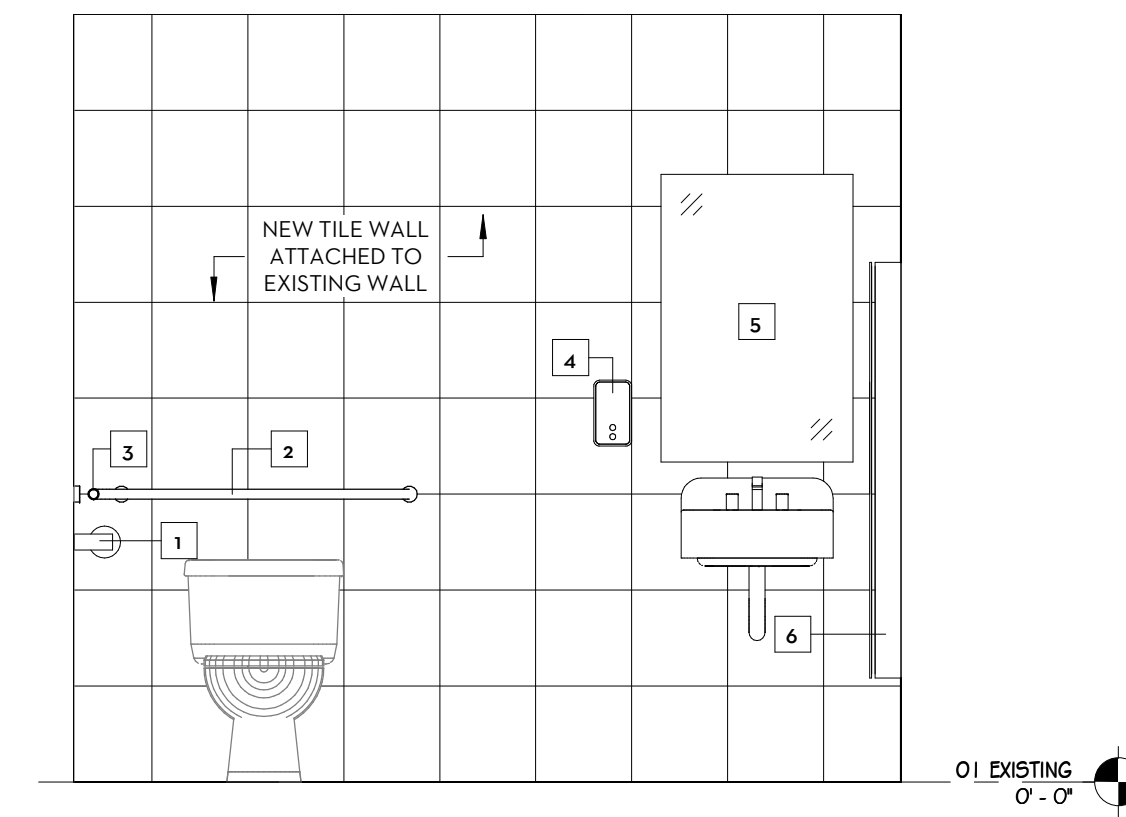
FRAMING:  
3 5/8" METAL STUDS @ 16" O.C.  
22 GA MINIMUM  
SHEATHING:  
1/2" GYPSUM BOARD EACH SIDE  
PARTITION HEIGHT:  
EXTEND 6" ABOVE CEILING



**1 RENOVATED FLOOR PLAN**  
SCALE: 1/4" = 1'-0"



**2 ROOM 108 - ENLARGED PLAN**  
SCALE: 1/2" = 1'-0"

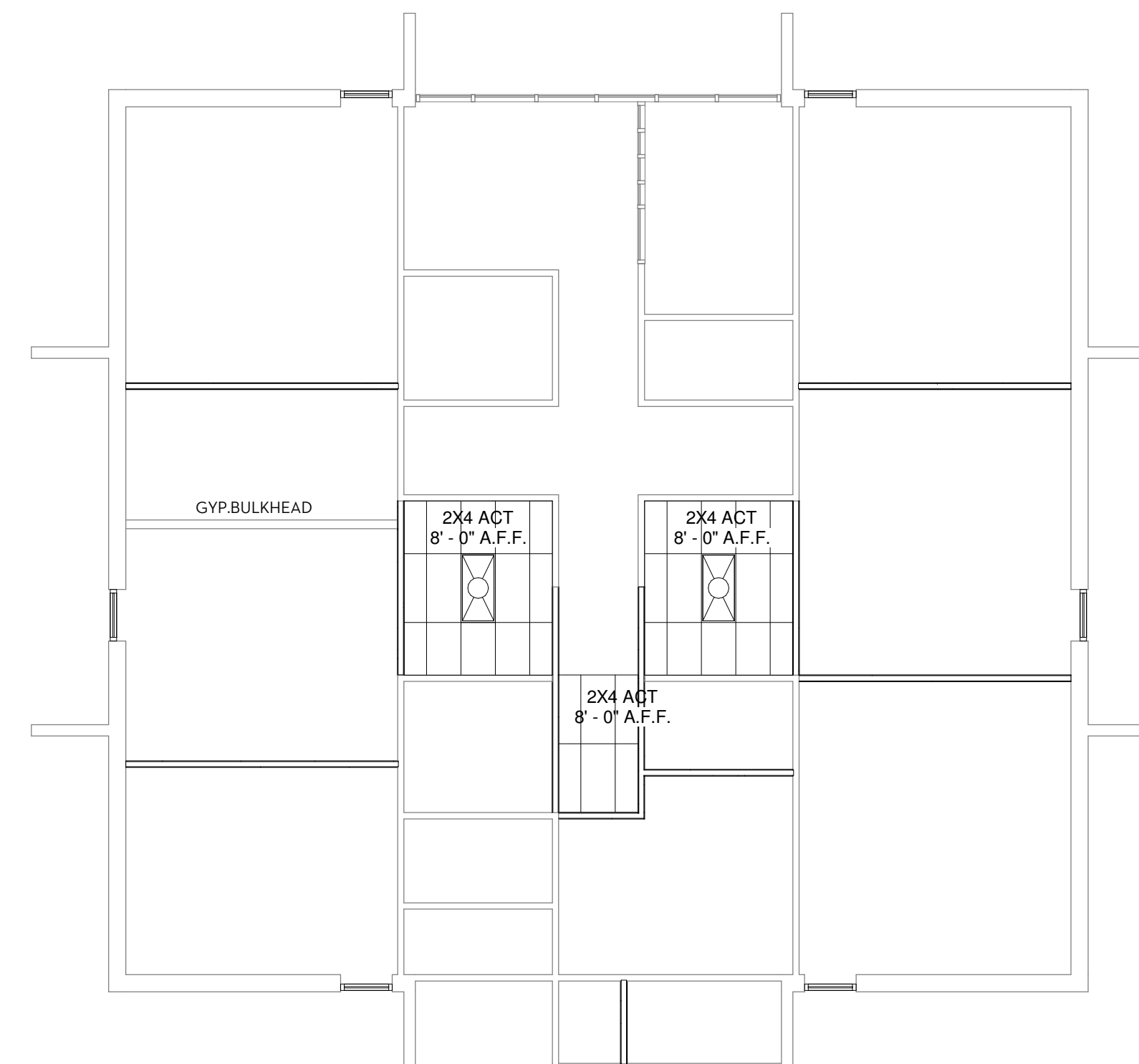


**4 ROOM 108 - INT. ELEV.**  
SCALE: 1/2" = 1'-0"

**TOILET ACCESSORIES LEGEND**

- 1 TOILET PAPER DISPENSER, OFCI
- 2 36" GRAB BAR
- 3 42" GRAB BAR
- 4 SOAP DISPENSER, OFCI
- 5 24" W X 36" H MIRROR
- 6 PAPER TOWEL DISP./TRASH RECP., OFCI
- 7 MOP SINK
- 8 ADA ACCESSIBLE DRINKING FOUNTAIN

\*OFCI - OWNER FURNISHED, CONTRACTOR INSTALLED



**3 RENOVATED RCP**  
SCALE: 1/8" = 1'-0"

**ISSUE DATE**

Issue for Bid 03/26/15

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806 UNIVERSITY WAY  
SPARTANBURG, SC 29503

**GMC # 140048**

**USC# CP00418380**

Issue for Bid

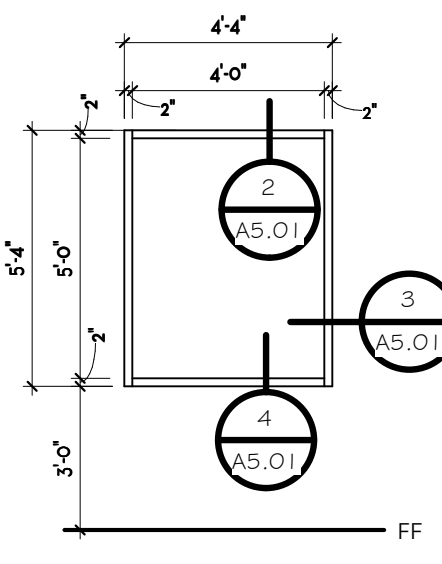
drawn by: JUN/MEL

checked by: MEK

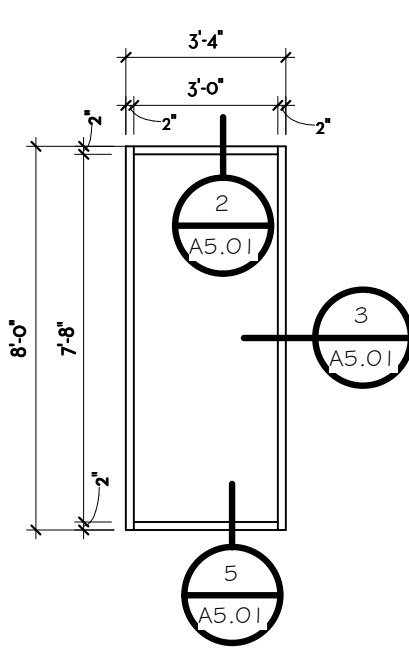
**FLOOR PLAN**

**A1.01**  
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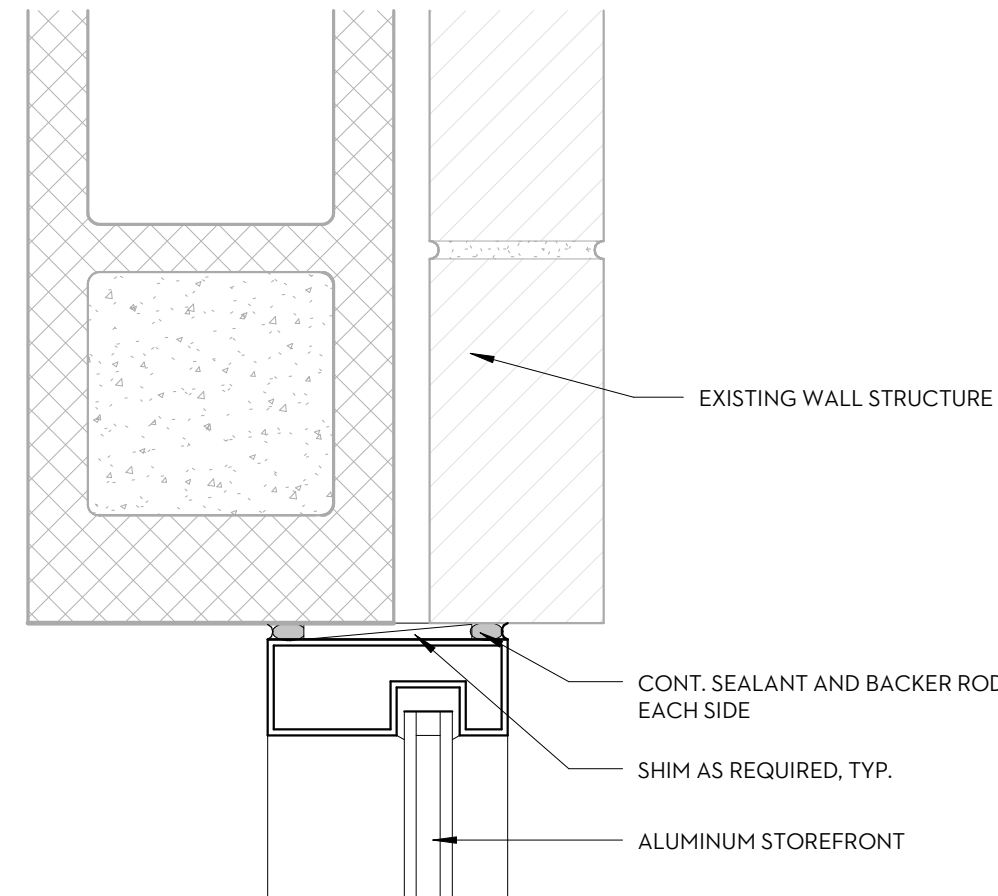
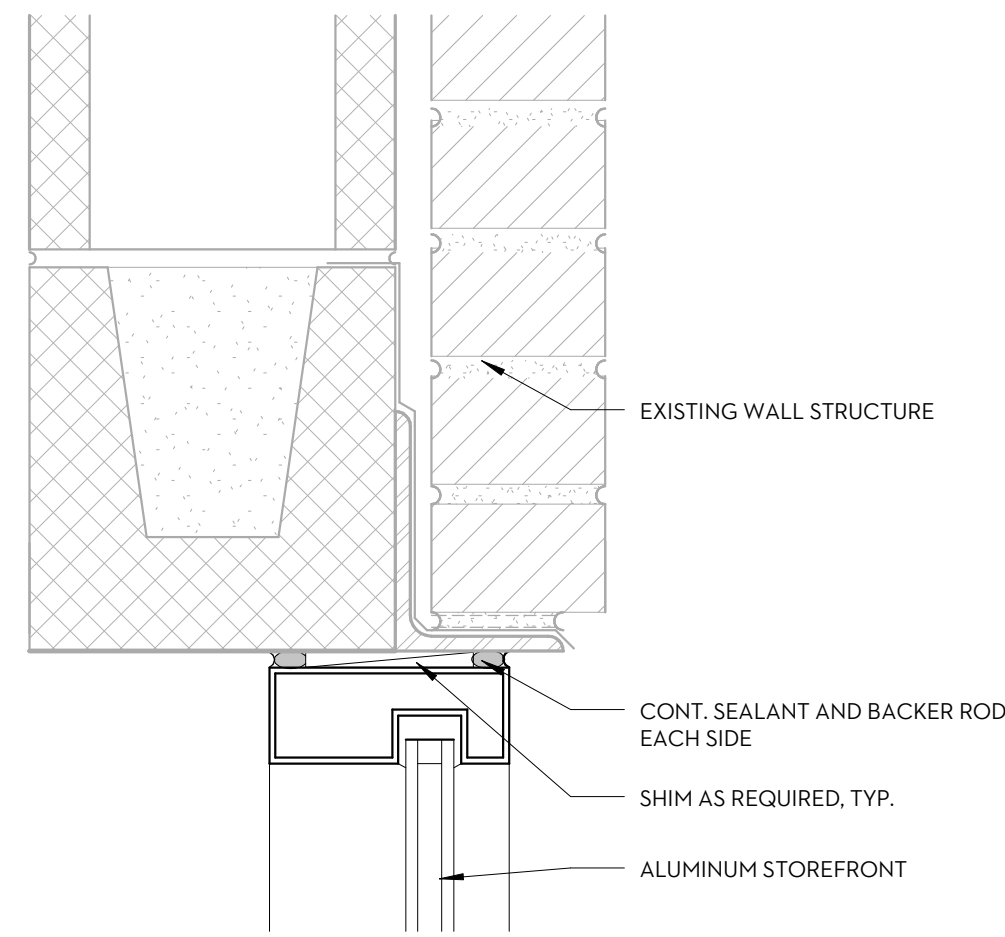
A  
ALUMINUM STOREFRONT SYSTEM



B  
ALUMINUM STOREFRONT SYSTEM

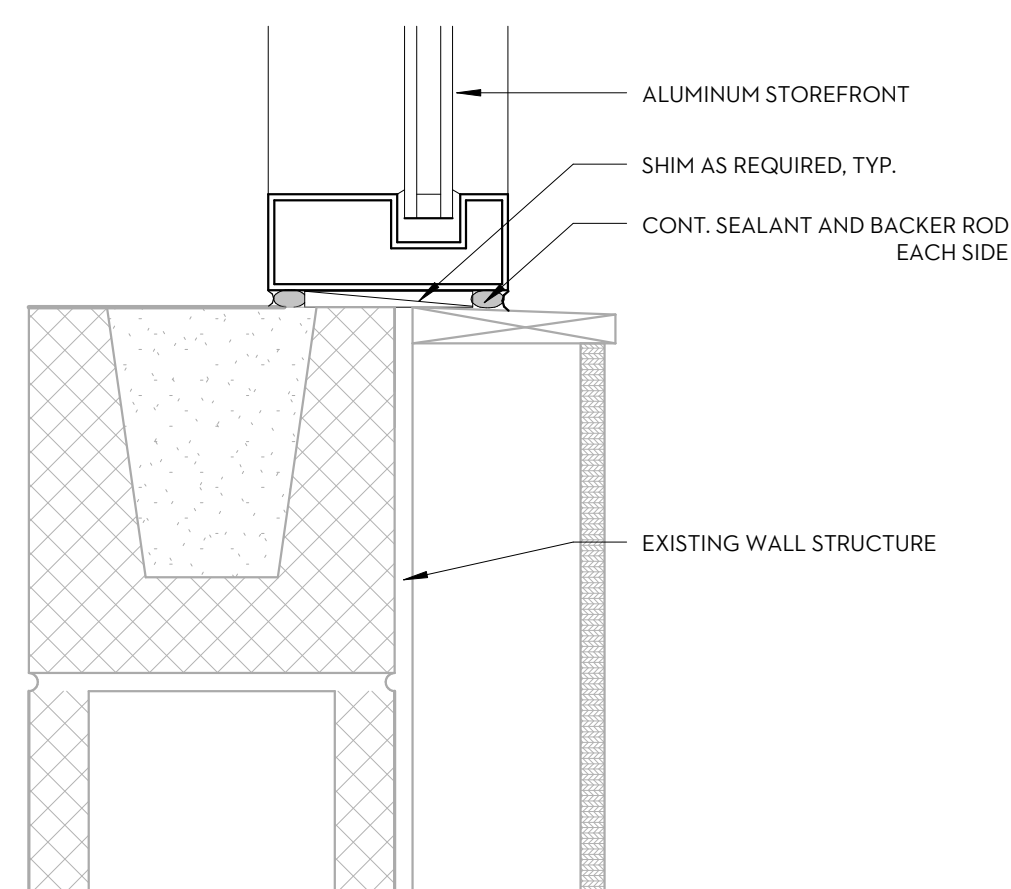
## 1 WINDOW TYPE

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



## 2 H<sub>1</sub>

SCALE: 3" = 1'-0"

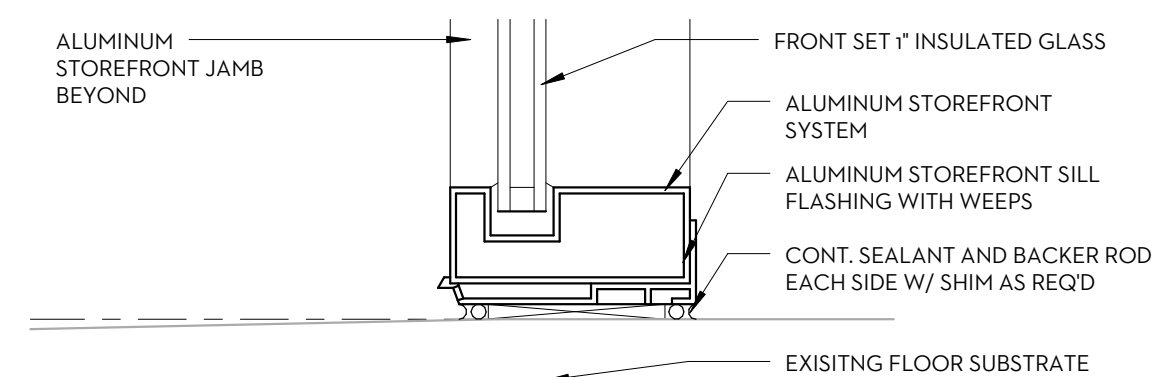


## 4 S<sub>1</sub>

SCALE: 3" = 1'-0"

## 3 J<sub>1</sub>

SCALE: 3" = 1'-0"



## 5 S<sub>2</sub>

SCALE: 3" = 1'-0"

## ROOM FINISH SCHEDULE

Room Number	Room Name	Floors		Walls				Ceilings	Comments
		Floor Finish	Base Finish	N Wall Finish	E Wall Finish	S Wall Finish	W Wall Finish	Ceiling Material	
100	HALL	BY OWNER	BY OWNER	PNT-1	PNT-1	PNT-1	PNT-1	EXISTING TO REMAIN	
101	C.C. OFFICE	BY OWNER	BY OWNER	PNT-1	PNT-1	PNT-1	PNT-1	EXISTING TO REMAIN	
102	C.C. OPEN	BY OWNER	BY OWNER	PNT-1	PNT-1	PNT-1	PNT-1	EXISTING TO REMAIN	
103	C.C. OFFICE	BY OWNER	BY OWNER	PNT-1	PNT-1	PNT-1	PNT-1	EXISTING TO REMAIN	
104	UNISEX	BY OWNER	BY OWNER	PNT-1	PNT-1	PNT-1	PNT-1	EXISTING TO REMAIN	
105	HONORS OFFICE	BY OWNER	BY OWNER	PNT-1	PNT-1	PNT-1	PNT-1	EXISTING TO REMAIN	
106	HONORS LOBBY	BY OWNER	BY OWNER	PNT-1	PNT-1	PNT-1	PNT-1	EXISTING TO REMAIN	
107	HONORS CONF.	BY OWNER	BY OWNER	PNT-1	PNT-1	PNT-1	PNT-1	EXISTING TO REMAIN	
108	UNISEX	CT-1	N/A	CT-2	PNT-1	PNT-1	PNT-1	ACT	
108A	JAN. CLT.	BY OWNER	BY OWNER	PNT-1	PNT-1	PNT-1	PNT-1	EXISTING TO REMAIN	
109	BREAK ROOM	BY OWNER	BY OWNER	PNT-1	PNT-1	PNT-1	PNT-1	EXISTING TO REMAIN	
110	MECH.	BY OWNER	BY OWNER	PNT-1	PNT-1	PNT-1	PNT-1	EXISTING TO REMAIN	
111	MECH.	BY OWNER	BY OWNER	PNT-1	PNT-1	PNT-1	PNT-1	EXISTING TO REMAIN	
112	DATA	BY OWNER	BY OWNER	PNT-1	PNT-1	PNT-1	PNT-1	EXISTING TO REMAIN	
113	I.S. OFFICE	BY OWNER	BY OWNER	PNT-1	PNT-1	PNT-1	PNT-1	EXISTING TO REMAIN	
114	I.S. OFFICE	BY OWNER	BY OWNER	PNT-1	PNT-1	PNT-1	PNT-1	ACT	
115	I.S. OFFICE	BY OWNER	BY OWNER	PNT-1	PNT-1	PNT-1	PNT-1	EXISTING TO REMAIN	
116	I.S. RECEPTIONIST/ STUDENT	BY OWNER	BY OWNER	PNT-1	PNT-1	PNT-1	PNT-1	EXISTING TO REMAIN	
117	I.S. CONFERENCE	BY OWNER	BY OWNER	PNT-1	PNT-1	PNT-1	PNT-1	EXISTING TO REMAIN	

## FINISH LEGEND

FLOOR			WALL			CEILING		
NUMBER	TYPE	DETAIL DESCRIPTION	NUMBER	TYPE	DETAIL DESCRIPTION	NUMBER	TYPE	DETAIL DESCRIPTION
CPT	CARPET	PROVIDED BY OWNER	PNT-1	FIELD PAINT	Manufacturer: Sherwin Williams Paints Type: TBD Color: ANTIQUE WHITE	ACT	NEW ACOUSTICAL CEILING TILE SYSTEM	PRODUCT EQUAL TO Manufacturer: TBD Name: n/a Style: Match Existing Suspension System 15/16" Grid Color: White Size: 24" x 48"
LVT	LUXURY VINYL TILE	PROVIDED BY OWNER	PNT-2	HOLLOW METAL DOOR FRAME PAINT	Manufacturer: Sherwin Williams Paints Type: TBD Color: TBD			
CT-1	CERAMIC TILE	Manufacturer: TBD Name: TBD Style: TBD Color: TBD Size: 18" X 18"	CT-2	CERAMIC TILE	Manufacturer: TBD Name: TBD Style: TBD Color: TBD Size: 12" X 12"			
BASE								
RB	RUBBER BASE	PROVIDED BY OWNER						

ISSUE DATE

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drawn by: MEL/WAS  
checked by: MEK

WINDOW DETAILS & TYPES, ROOM FINISH SCHEDULES, AND FINISH LEGEND

**A5.01**  
sheet of

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# ELECTRICAL LEGEND

CRA	CEILING MOUNTED LUMINAIRE, LETTERS DENOTE TYPE	S	SWITCH, SPST, 20A, 120/277V
FSB	LUMINAIRES, SIZE AND SHAPE AS INDICATED, LETTERS DENOTE TYPE	S1	SWITCH, 20A, 120/277V, "2" DENOTES DPST, "3" DENOTES THREE-WAY, "4" DENOTES FOUR-WAY
FSD		S2	SWITCH, "P" DENOTES PILOT LIGHT, "D" DENOTES DIMMING, "T" DENOTES ADJUSTABLE TIMER
FSA		Mw	WALL MOUNTED OCCUPANCY SENSOR, DUAL TECHNOLOGY BY WATTSTOPPER
FRA	LUMINAIRE WITH EMERGENCY BALLAST	*	DENOTES RECEPTACLE MOUNTED 6" ABOVE COUNTER TOP OR BACKSPASH, OR 42" AFF.
FPA	LUMINAIRE WITH EMERGENCY BALLAST	TV	TV OUTLET, COORDINATE WITH OWNER FOR CONDUIT/WIRING REQUIREMENTS
FWA	WALL MOUNTED LUMINAIRE, LETTERS DENOTE TYPE	P	MANUAL RELEASE STATION
EXA	EXIT SIGN, ARROWS AS INDICATED, LETTERS DENOTE TYPE DARKENED AREA DENOTES LIGHTED FACE	Q	SMOKE DETECTOR
EMA	EMERGENCY LUMINAIRE WITH BATTERY PACK, LETTERS DENOTE TYPE	S	STROBE
RH	EMERGENCY REMOTE DUAL HEAD	H/S	HORN/STROBE
Duplex	DUPLEX WALL RECEPTACLE, NEMA 5-20R (UNO), 20A, 125V	R	RATE-OF-RISE HEAT DETECTOR
Junction	JUNCTION BOX	D	DUCT DETECTOR, "R" INDICATES RETURN SIDE (FURNISHED AND WIRED BY FIRE ALARM CONTRACTOR; INSTALLED BY MECHANICAL CONTRACTOR)
Flush	FLUSH FLOOR TELECOMM OUTLET W/FLUSH FLOOR DUPLEX RECEPTACLE		
WMO	WALL MOUNTED COMBINATION DATA/TELEPHONE OUTLET, SEE NOTE 19		
Disconnect	DISCONNECT (SAFETY) SWITCH "200/3/150" DENOTES AMPERES/POLE/FUSE, "NF" DENOTES NON-FUSED, "N-3R" DENOTES NEMA ENCLOSURE TYPE (PROVIDE NEMA 1 UNO)		

## ABBREVIATIONS

A AMPERES	GFI GROUND FAULT INTERRUPTER	NIC NOT IN CONTRACT
AFF ABOVE FINISHED FLOOR	IAW IN ACCORDANCE WITH	PH,# PHASE
AFG ABOVE FINISHED GRADE	KVA KILOVOLTAMPERES	RCPT RECEPTACLE
AWG AMERICAN WIRE GAUGE	KW KILOWATTS	RE: REFER TO
CU COPPER	LTG LIGHTING	TYP TYPICAL
EQPT EQUIPMENT	MCB MAIN CIRCUIT BREAKER	UNO UNLESS NOTED OTHERWISE
E EXISTING TO REMAIN	MLO MAIN LUGS ONLY	V VOLTS
ER EXISTING TO BE RELOCATED	NEC NATIONAL ELECTRICAL CODE	W WIRE
FWE FURNISHED WITH EQUIPMENT	NEMA NATIONAL ELECTRICAL MANUFACTURERS ASSOCIATION	WP WEATHERPROOF
		x EXISTING TO BE REMOVED

## ELECTRICAL DEMOLITION NOTES

- REMOVE EACH ITEM OF EQUIPMENT, DEVICE, AND FIXTURE AFFECTED BY THIS RENOVATION (THAT ARE NOT REQUIRED TO REMAIN OR TO BE RELOCATED) AND ALL ASSOCIATED WIRING/CIRCUITRY BACK TO THE PROTECTIVE DEVICE IN THE PANEL, OR CONTROLLER, EXCEPT AS OTHERWISE INDICATED.
- ASSOCIATED CIRCUITRY INCLUDES CONDUIT, CABLE/CONDUCTORS, BOXES, WIRING DEVICES, COVER PLATES, LAMPS, FIXTURES, WIREWAYS, SWITCHES, STARTERS, ETC., WHICH ARE ASSOCIATED WITH THE ITEM TO BE REMOVED.
- THE PROTECTIVE DEVICE SHALL REMAIN AS AN INTEGRAL PART OF THE EXISTING PANEL OR SWITCHBOARD. LABEL AS SPARE OR USE FOR NEW CIRCUITS AS INDICATED.
- WHERE CONDUIT, ASSOCIATED WITH AN ITEM SHOWN TO BE REMOVED, IS IN AN INACCESSIBLE AREA, SUCH AS ENCASED IN CONCRETE, ABANDON INACCESSIBLE CONDUIT IN PLACE AND CAP OR SEAL.
- WHERE SUCH INACCESSIBLE CONDUIT ENDS OR MUST BE TERMINATED IN FINISHED SPACE, REMOVE THE CONDUIT OR BOX TO BELOW THE FINISHED SURFACE OF WALL, CEILING OR FLOOR. FILL VOID WITH NON-SHRINKING GROUT AND FINISH TO MATCH SURROUNDING SURFACES.
- WHERE ONLY A PORTION OF A CIRCUIT LOAD IS SCHEDULED TO BE REMOVED, REMOVE ONLY THAT PORTION ASSOCIATED WITH THE DEMOLISHED DEVICE TO A POINT WHERE THE REMAINING LOAD IS ACTIVE AND MAINTAIN IN A GOOD OPERATING CONDITION.
- WHERE EXTENSION OF AN EXISTING CIRCUIT IS REQUIRED, RUN CONDUIT AND WIRE CONCEALED FROM THE ITEM'S EXISTING LOCATION TO THE NEW LOCATION.
- WHERE AN ITEM OF EQUIPMENT IS REQUIRED TO BE REMOVED AND RELOCATED, ALL ASSOCIATED CIRCUITRY SHALL ALSO BE REMOVED AS PER NOTES ABOVE ALONG WITH ASSOCIATED DISCONNECT SWITCH, DEVICES, ETC. AS REQUIRED, AND RELOCATED TO THE NEW LOCATION. PROVIDE CONNECTION OF SUCH RELOCATED ITEMS TO NEW OR EXTENDED CIRCUITRY AS SHOWN ON THE DRAWINGS.

## POWER PLAN NOTES

- REFER TO EXISTING DRAWINGS FOR ADDITIONAL INFORMATION.
- CIRCUITS ARE SIZED ASSUMING NO MORE THAN THREE CURRENT CARRYING CONDUCTORS IN A SINGLE CONDUIT. FOR CONDUITS CONTAINING MORE THAN THREE, PROVIDE APPROPRIATE DERATING OF CONDUCTORS PER NEC.
- COORDINATE WITH MECHANICAL/PLUMBING CONTRACTOR FOR EXACT LOCATIONS AND REQUIREMENTS OF ALL MECHANICAL/PLUMBING EQUIPMENT, IF APPLICABLE.
- ELECTRICAL CONTRACTOR SHALL VERIFY AND ADJUST LOCATIONS, CIRCUIT BREAKERS, FUSES, CONDUCTORS, SWITCHES AND CONDUIT SIZES FOR ALL MECHANICAL/PLUMBING EQUIPMENT, IF APPLICABLE. ELIMINATE NEUTRAL CONDUCTOR WHERE NOT REQUIRED.
- COORDINATE EXACT LOCATIONS AND MOUNTING HEIGHTS OF ALL DEVICES WITH OWNER/ARCHITECT PRIOR TO ROUGH-IN.
- PROVIDE 20A/1-POLE CIRCUIT BREAKER IN PANEL MP FOR EACH CIRCUIT NOTED. CIRCUIT BREAKER TYPE AND AIC RATING SHALL MATCH EXISTING. UPDATE PANELBOARD SCHEDULE TO INDICATE NEW CIRCUITS.
- UTILIZE EXISTING CIRCUIT FOR DEVICE/EQUIPMENT NOTED. UPDATE PANELBOARD SCHEDULE TO INDICATE NEW CIRCUIT ASSIGNMENT.
- WIRING DEVICES (RECEPTACLES AND VOICE/DATA OUTLETS) IN THIS SPACE ARE EXISTING TO REMAIN.
- PROVIDE RG6 COAXIAL CABLE FROM EACH TV BOX TO IT ROOM IN 1" CONDUIT. COORDINATE EXACT REQUIREMENTS WITH OWNER.
- ALL CONDUIT AND WIRING SHALL BE CONCEALED WHERE POSSIBLE. WHERE SURFACE MOUNT RACEWAY IS REQUIRED, UTILIZE WIREMOLD ALUMINUM SURFACE RACEWAY WITH APPROPRIATE FITTINGS AND BOXES AS REQUIRED FOR A COMPLETE INSTALLATION. WHERE SURFACE RACEWAY IS REQUIRED FOR BOTH POWER AND VOICE/DATA, UTILIZE WIREMOLD DUAL CHANNEL ALUMINUM SURFACE RACEWAY.
- PROVIDE GFI RECEPTACLE FOR WATER FOUNTAIN WITH DEDICATED CIRCUIT FROM EXISTING PANEL MP. CONCEAL RECEPTACLE BEHIND EQUIPMENT HOUSING WHERE ALLOWED BY LOCAL AHJ.
- PROVIDE FIRE ALARM SYSTEM DEVICES AS REQUIRED FOR A COMPLETE FIRE ALARM SYSTEM. COORDINATE WITH EXISTING FIRE ALARM SYSTEM MANUFACTURER FOR ADDITIONAL REQUIREMENTS.
- PROVIDE 15A/3-POLE CIRCUIT BREAKER IN PANEL MP FOR AIR HANDLER FAN USING 4#12, #12G IN 1/2" CONDUIT. IF EXISTING CIRCUIT BREAKER IS AVAILABLE, IT MAY BE UTILIZED FOR THIS CIRCUIT. CIRCUIT BREAKER TYPE AND AIC RATING SHALL MATCH EXISTING. UPDATE PANELBOARD SCHEDULE TO INDICATE NEW CIRCUITS.
- PROVIDE 100A/3-POLE CIRCUIT BREAKER IN PANEL MP FOR ELECTRIC HEAT USING 4#3, #8G IN 1 1/2" CONDUIT. REMOVE EXISTING 125A/6-POLE CIRCUIT BREAKER. CIRCUIT BREAKER TYPE AND AIC RATING SHALL MATCH EXISTING. UPDATE PANELBOARD SCHEDULE TO INDICATE NEW CIRCUITS.
- PROVIDE 60A/3-POLE HACR RATED CIRCUIT BREAKER IN PANEL MP FOR CONDENSING UNIT USING 4#6, #10G IN 1" CONDUIT. IF EXISTING HACR CIRCUIT BREAKER IS AVAILABLE, IT MAY BE UTILIZED FOR THIS CIRCUIT. CIRCUIT BREAKER TYPE AND AIC RATING SHALL MATCH EXISTING. UPDATE PANELBOARD SCHEDULE TO INDICATE NEW CIRCUITS. PROVIDE 20A GFI RECEPTACLE WITH WEATHERPROOF COVER AT UNIT AND CONNECT TO EXISTING RECEPTACLE CIRCUIT IN BUILDING USING 2#12, #12G IN 1/2" CONDUIT.
- CONNECT EXHAUST FAN TO LIGHTING CIRCUIT AND SWITCH WITH LIGHTS OR SWITCH AS INDICATED ON MECHANICAL PLANS.
- PROVIDE 2" CONDUIT (RGS OR EMT) FROM IT ROOM TO ACCESSIBLE AREA ABOVE CEILING IN CORRIDOR OR BREAK ROOM TO ALLOW FUTURE VOICE/DATA WIRING INSTALLATION BY OWNER.

THE CONTRACTOR SHALL COORDINATE WITH THE STATE AND/OR LOCAL FIRE MARSHALL TO DETERMINE ALL REQUIREMENTS FOR A FIRE ALARM SYSTEM. PROVIDE A COMPLETE, OPERATIONAL FIRE ALARM SYSTEM, AS REQUIRED, TO MEET ALL REQUIREMENTS FOR THE PROJECT AND COMPLY WITH THE REQUIREMENTS OF THE STATE AND/OR LOCAL FIRE MARSHALL. NOTE THAT ALL DEVICES REQUIRED FOR THIS PROJECT MAY NOT BE INDICATED ON THESE DRAWINGS. PROVIDE ADDITIONAL DEVICES AND EQUIPMENT AS REQUIRED. COORDINATE WITH THE OWNER FOR SYSTEM OPTIONS INCLUDING, BUT NOT LIMITED TO, THE FOLLOWING: SYSTEM TYPE, WIRING OPTIONS, EQUIPMENT AND DEVICE SELECTION/LOCATION, CONDUIT REQUIREMENTS, FUTURE EXPANSION, CENTRAL STATION MONITORING, AND EQUIPMENT INTERFACES. COORDINATE WITH OTHER TRADES TO DETERMINE AND INCORPORATE REQUIREMENTS FOR OTHER SYSTEMS (SUCH AS HVAC SHUTDOWN, FIRE SPRINKLER FLOW/TAMPER SWITCHES, ETC.). PROVIDE THE SERVICES OF A LICENSED ENGINEER TO PRODUCE PERMIT DRAWINGS AND CONSTRUCTION DRAWINGS AS APPLICABLE TO THE PROJECT. THE CONTRACTOR IS RESPONSIBLE FOR ALL REQUIRED REVIEW, PERMITTING AND CONSTRUCTION DOCUMENTATION, SHOP DRAWINGS AS WELL AS AS-BUILT DRAWINGS. COORDINATE WITH MECHANICAL CONTRACTOR FOR DUCT DETECTOR REQUIREMENTS.

## LIGHTING FIXTURE SCHEDULE

(NOTE - ALL FIXTURES ON SCHEDULE MAY NOT BE USED ON PLANS - REFER TO DRAWINGS)

TYPE	MOUNTING	LENS	VOLT	VA/FIX	LAMPS	NO. OF BALLAST	DESCRIPTION	ACCEPTABLE MANUFACTURERS
EMA	SURFACE	NA	MVOLT	2 3	LED NA	NA	LED EMERGENCY LIGHT, DUAL HEAD, 90 MINUTE BATTERY, SELF DIAGNOSTICS, COLOR AS SELECTED BY ARCHITECT	LITHONIA ELM2 LED SERIES
EXA	AS REQUIRED	NONE	MVOLT	5 -	LED NA	NA	LED EXIT LIGHT, 90 MINUTE BATTERY, RED LETTERS, SELF-DIAGNOSTICS, HIGH OUTPUT CAPACITY FOR REMOTE HEADS	LITHONIA LQC SERIES
FSA	SURFACE	ACRYLIC	MVOLT	85 3	F32T8 4100° / 85	1	FLUORESCENT, SURFACE, 4' LONG, 3-LAMP, ELECTRONIC BALLAST	MATCH EXISTING
RH	WALL	TBD	-	NA 2	LED NA	NA	LED REMOTE DUAL HEAD ASSEMBLY, HOUSING COLOR BY ARCHITECT, WET LOCATION RATED	AS REQUIRED

NOTE: LIGHT FIXTURE ALTERNATES WILL BE ACCEPTED FROM LITHONIA, HUBBELL, OR COOPER.

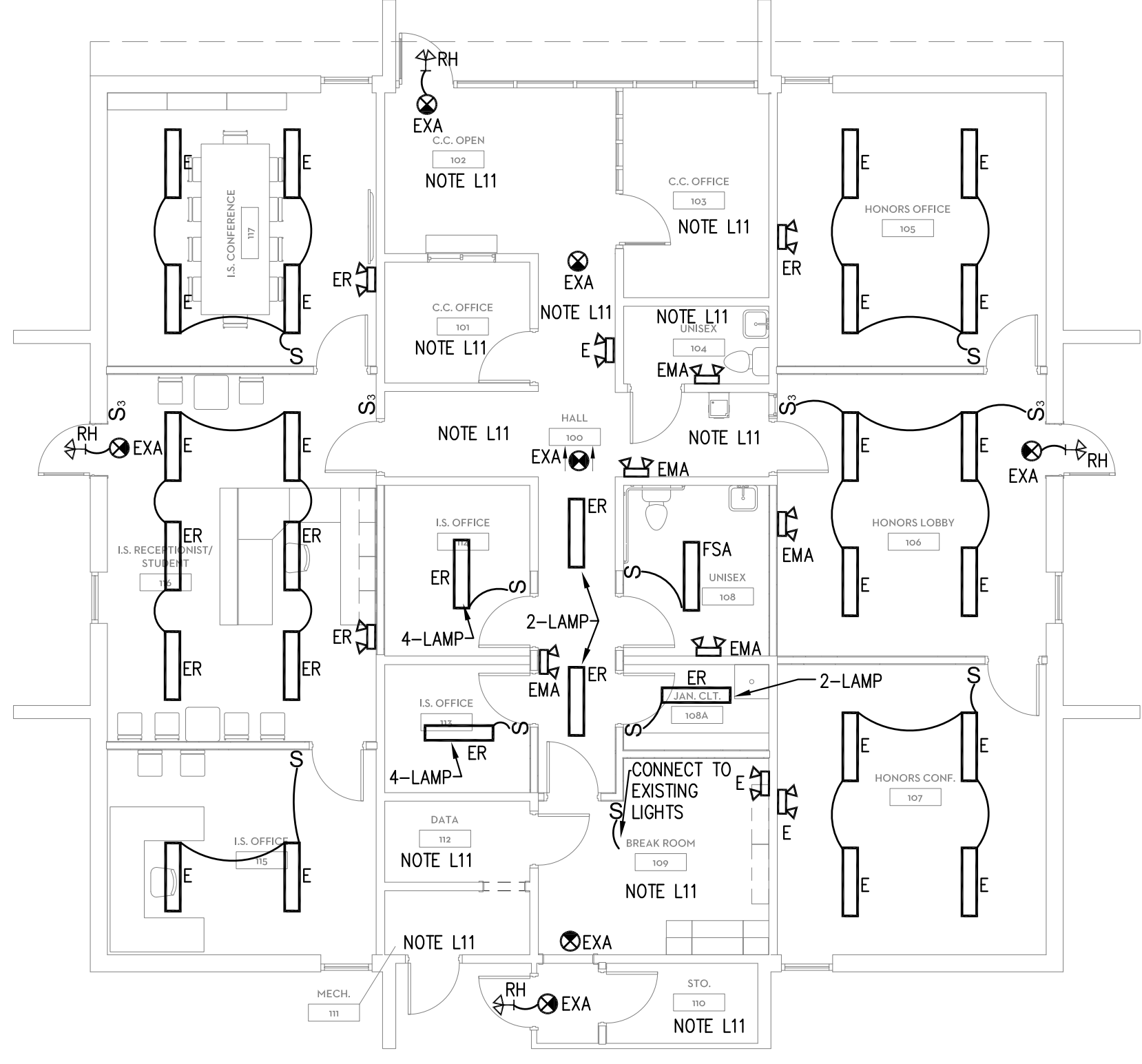
## GENERAL NOTES

- THE CONTRACTOR SHALL MAKE A PERSONAL INSPECTION OF THE PROJECT SITE TO BECOME FAMILIAR WITH THE SCOPE OF WORK PRIOR TO BID AND SHALL PROVIDE ALL WORK NECESSARY TO COMPLETE THE SCOPE OF WORK AS INDICATED IN THE CONSTRUCTION DOCUMENTS.
- NOTIFY CAVINESS LAMBERT ENGINEERING, LLC OF ANY INCONSISTENCIES FOUND BETWEEN THE CONSTRUCTION DOCUMENTS AND ACTUAL CONDITIONS. ALL WORK SHALL COMPLY WITH ALL FEDERAL, STATE, AND LOCAL CODES AND REGULATORY AUTHORITIES HAVING JURISDICTION.
- BEFORE BEGINNING WORK, LAY-OUT AND MARK ALL EQUIPMENT LOCATIONS FOR APPROVAL BY THE OWNER. AS APPROVED BY THE OWNER, PROVIDE ALL WORK REQUIRED TO ACHIEVE COMPLIANCE WITH ALL EQUIPMENT MANUFACTURER INSTRUCTIONS AND RECOMMENDATIONS.
- LOCATIONS SHOWN FOR NEW EQUIPMENT AND WIRING ARE APPROXIMATE. VERIFY LOCATIONS AND SIZES OF WORK BEFORE PURCHASING OR FABRICATING WORK.
- PROVIDE ADDITIONAL HORIZONTAL OR VERTICAL ELBOWS, DROPS, RISES, OFFSETS, SUPPORTS, ACCESSORIES, AND REROUTING REQUIRED FOR A COMPLETE INSTALLATION. COORDINATE EXACT ROUTING OF WORK AND EQUIPMENT INSTALLATION WITH OTHER TRADES AND FIELD CONDITIONS. CLEAN AND POLISH FIXTURES, EQUIPMENT, AND MATERIALS THOROUGHLY, AND RETURN TO "AS NEW" CONDITION.
- REMOVE EXCESS PAINT, MATERIAL AND DEBRIS. PLACE ELECTRICAL SYSTEMS IN COMPLETE WORKING ORDER BEFORE REQUEST FOR FINAL REVIEW.
- PENETRATIONS THROUGH FLOORS OR FIRE WALLS SHALL BE SEALED TO MAINTAIN THE FIRE RATING INTEGRITY OF THE WALLS AND FLOORS UTILIZING MATERIALS/METHODS APPROVED BY UL. COORDINATE FLOOR AND ROOF PENETRATIONS WITH FIELD CONDITIONS, OTHER TRADES, AND ARCHITECTURAL/STRUCTURAL WORK. LOCATE PENETRATIONS SO AS NOT TO AFFECT STRUCTURAL INTEGRITY OR WEATHER-TIGHTNESS OF BUILDING.
- ALL CONDUCTOR TERMINATIONS OF CIRCUIT BREAKERS AND ALL PANEL ENCLOSURES SHALL BE 75°C RATED FOR USE WITH 75°C WIRE. WHITE/NEUTRAL, GREEN/GROUND SHALL BE MAINTAINED THROUGHOUT THE SITE ELECTRICAL SYSTEM (TAPE WILL NOT BE ACCEPTABLE ON CONDUCTOR SIZES 6 AWG AND SMALLER). FEEDERS AND BRANCH CIRCUITS LARGER THAN NO. 6 AWG SHALL USE COPPER, STRANDED CONDUCTOR WITH 600 VOLT INSULATION, THW, THHN/THWN, XHHW, RHW IN ACCORDANCE WITH NEMA WCS AND NEMA WC3. FEEDERS AND BRANCH CIRCUITS NO. 6 AWG AND SMALLER SHALL USE COPPER CONDUCTOR, 600 VOLT INSULATION, THW, THHN/THWN; SMALLER THAN NO. 8 AWG, SOLID CONDUCTOR IN ACCORDANCE WITH NEMA WCS. CONTROL CIRCUITS SHALL USE COPPER, STRANDED CONDUCTOR WITH 600 VOLT INSULATION, THW, THHN/THWN.
- PULL ALL CONDUCTORS INTO A RACEWAY AT THE SAME TIME. USE UL LISTED WIRE-PULLING LUBRICANT. DO NOT EXCEED MANUFACTURER'S RECOMMENDED TENSION. COMPLETELY AND THOROUGHLY SWAB RACEWAY SYSTEM BEFORE INSTALLING CONDUCTORS.
- REMOVE AND DISCARD CONDUCTORS CUT TOO SHORT OR INSTALLED IN WRONG RACEWAY. DO NOT RE-INSTALL CONDUCTORS WHICH HAVE BEEN REMOVED FROM A RACEWAY.
- ENSURE THAT GROUNDING CONDUCTOR IS ELECTRICALLY CONTINUOUS. TEST BRANCH CIRCUITS AGAINST GROUNDS, SHORTS, OR OTHER FAULTS.
- ALL POWER DISTRIBUTION EQUIPMENT SHALL BE UL LISTED AND LABELED.
- ELECTRICAL LAYOUT DRAWINGS ARE PARTIALLY DIAGRAMMATIC. REFER TO MECHANICAL, ARCHITECTURAL, AND STRUCTURAL DRAWINGS FOR GUIDANCE ON DIMENSIONS, DUCTS, PIPES, AND STEEL LOCATIONS, ETC. INSTALL ELECTRICAL SYSTEMS WITHOUT INTERFERING WITH OTHER SYSTEMS.
- PROVIDE PERMANENT LABEL ON EACH WIRING DEVICE (COVER PLATE), DISCONNECT SWITCH, STARTER, ETC. INDICATING PANELBOARD AND CIRCUIT FROM WHICH THE DEVICE/EQUIPMENT IS FED.
- PROVIDE CIRCUITS SIZED AT 2#12, 1#12G, 3/4" UNLESS NOTED OTHERWISE ON THE DRAWINGS OR IN THE SPECIFICATIONS. MINIMUM CONDUIT SIZE IS 3/4" AND MINIMUM WIRE SIZE IS #12 AWG. CONDUIT SHALL BE RGS OR EMT WITH COMPRESSION FITTINGS.
- WHERE PERFORMING NEW CONSTRUCTION IN EXISTING FACILITY, ENSURE THAT THE FACILITY STAYS OPERATIONAL IF REQUIRED DURING THE INSTALLATION OF NEW EQUIPMENT BY PHASING THE INSTALLATION OF NEW EQUIPMENT.
- THREE-PHASE CONDUCTORS (CONNECTED TO DIFFERENT PHASES) MAY SHARE A SINGLE NEUTRAL CONDUCTOR. PROVIDE SEPARATE NEUTRAL FOR 120 CIRCUITS AS INDICATED ON THE DRAWINGS.
- CIRCUITS ARE SIZED ASSUMING NO MORE THAN THREE CURRENT CARRYING CONDUCTORS IN A SINGLE CONDUIT. FOR CONDUITS CONTAINING MORE THAN THREE, PROVIDE APPROPRIATE DERATING OF CONDUCTORS PER NEC.
- UNLESS NOTED OTHERWISE, PROVIDE A 1" EMPTY CONDUIT WITH PULL STRING FROM EACH COMMUNICATION OUTLET UP TO ABOVE ACCESSIBLE CEILING OR TO BUILDING STRUCTURE IN OPEN AREAS. ALL VOICE/DATA CABLING WILL BE FURNISHED AND INSTALLED BY OWNER.
- WHERE EQUIPMENT, DEVICES OR BOXES ARE LOCATED ABOVE AN INACCESSIBLE CEILING, PROVIDE APPROPRIATE ACCESS PANELS AS REQUIRED.

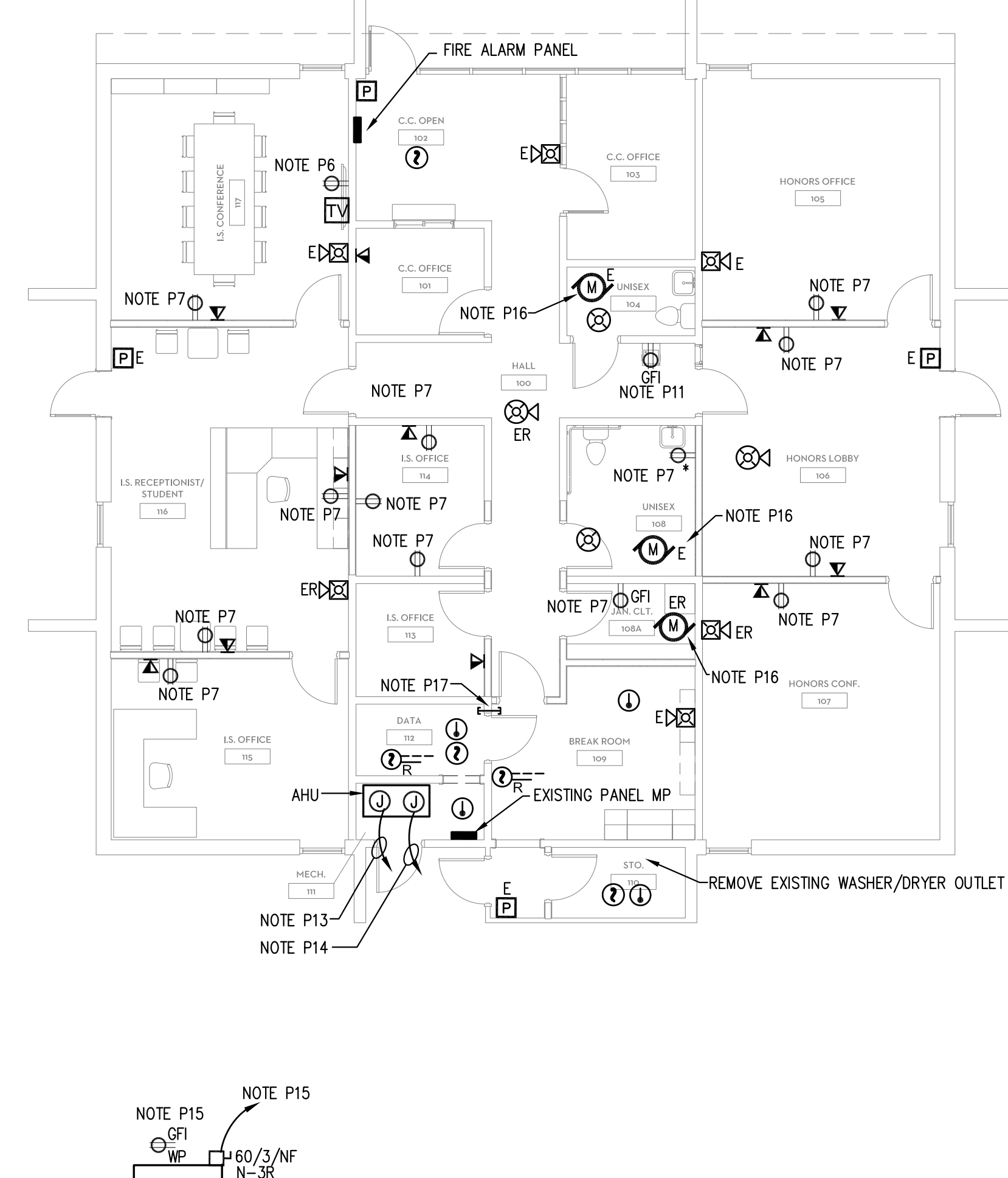
## GENERAL LIGHTING NOTES

- LIGHTING FIXTURES, INSTALLATION, SUPPORT, WIRING AND RELATED WORK SHALL COMPLY WITH GENERAL NOTES, DETAILS, SPECIFICATIONS AND ALL CONTRACT DRAWINGS.
- PROVIDE ALL ACCESSORIES REQUIRED FOR A COMPLETE INSTALLATION AND COORDINATE WITH WORK BY OTHER TRADES. RECESSED FIXTURES (OTHER THAN LED/FLUORESCENT TROFFERS LOCATED IN LAY-IN GRID CEILINGS) SHALL BE COMPLETELY SERVICEABLE FROM THE FIXTURE OPENING. PROVIDE ALL REQUIRED MOUNTING HARDWARE, SUPPORTS, ACCESSORIES, AND TRIM REQUIRED FOR A COMPLETE INSTALLATION. COORDINATE FIXTURE MOUNTING WITH CEILING AND WALL CONSTRUCTION WHERE INSTALLED. PROVIDE SEPARATION BETWEEN RECESSED FIXTURES AND SURROUNDING INSULATION TO COMPLY WITH UL LISTING REQUIREMENTS AND MANUFACTURER INSTRUCTIONS. FIXTURES SHALL BE SUPPORTED FROM THE SURROUNDING STRUCTURE, AND BE COMPLETELY INDEPENDENT FROM THE CEILING SYSTEM OR ITS SUPPORTS.
- FIXTURES SHALL BE CBM APPROVED, LISTED AND LABELED BY ETL OR UL FOR DRY, DAMP, WET OR HAZARDOUS/CLASSIFIED LOCATIONS AS APPROPRIATE FOR THE INSTALLATION, UNLESS MORE STRINGENT REQUIREMENTS ARE INDICATED OR SPECIFIED.
- BALLASTS SHALL BE CBM APPROVED AND LISTED BY ETL OR UL. PROVIDE INTERNAL GREEN GROUNDING SCREW FOR ALL FIXTURES.
- ALL EMERGENCY LIGHTS, WALL PACKS AND EXIT LIGHTS SHALL BE CONNECTED TO UNSWITCHED AREA LIGHTING CIRCUITS. EMERGENCY LIGHTING SHALL COMPLY WITH NEC 700.12.
- THE MANUFACTURERS AND MODELS LISTED ON THE LIGHTING FIXTURE SCHEDULE ARE LISTED TO INDICATE THE OVERALL LEVEL OF QUALITY REQUIRED, AND LISTING OF A MANUFACTURER OR MODEL DOES NOT AMEND OR SUPERSEDE LIGHTING FIXTURE REQUIREMENTS SPECIFIED OR INDICATED. MODEL DESIGNATIONS INDICATE MODEL SERIES AND ARE NOT INTENDED TO DEFINE ALL REQUIRED FEATURES/ACCESSORIES; LIGHTING FIXTURES SHALL COMPLY WITH ALL DRAWING AND SPECIFICATION REQUIREMENTS.
- UTILIZE EXISTING LIGHTING CIRCUITS. ALL NEW AND RELOCATED LIGHTS SHALL BE CONNECTED TO EXISTING AREA LIGHTING CIRCUITS. PROVIDE SWITCHING OF LIGHT FIXTURES AS INDICATED.
- ALL CIRCUITS SHALL BE MINIMUM #12 AWG THHN/THWN COPPER IN 3/4" CONDUIT. CONDUIT SHALL BE EMT WITH COMPRESSION FITTINGS. FIELD VERIFY VOLTAGE REQUIRED.
- PROVIDE SEISMIC SUPPORTS AND CLIPS FOR ALL LIGHT FIXTURES AS REQUIRED BY CODE. PROVIDE A MINIMUM OF TWO INDEPENDENT SUPPORTS FROM BUILDING STEEL ON OPPOSITE CORNERS OF EACH 2X4 LIGHT FIXTURE.
- ALL EXISTING LIGHT FIXTURES IN THE SPACE NOTED SHALL REMAIN, EXCEPT AS INDICATED. REMOVE ALL INTERIOR LIGHT FIXTURES THAT ARE NOT NOTED TO REMAIN OR THAT ARE BEING RELOCATED. COORDINATE EXACT REQUIREMENTS WITH OWNER.

NOTE: ELECTRICAL LOAD FOR THIS RENOVATION WILL RESULT IN AN OVERALL REDUCTION IN ELECTRICAL LOAD.



1 LIGHTING PLAN  
E-101 SCALE: 1/8"=1'-0"



2 POWER PLAN  
E-101 SCALE: 1/8"=1'-0"

**ELECTRICAL PLAN**

**USC UPSTATE - MODIFICATIONS TO BURROUGHS**

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SPARTANBURG, SC 29303  
**GMC # 140048**  
**USC# CP00418380**  
CONSTR. DCMTS.

**GOODWYN MILLS CAWOOD**

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CONSTRUCTION	03/26/15
ISSUE FOR BID	

drawn by: DM/L  
checked by: CLE

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