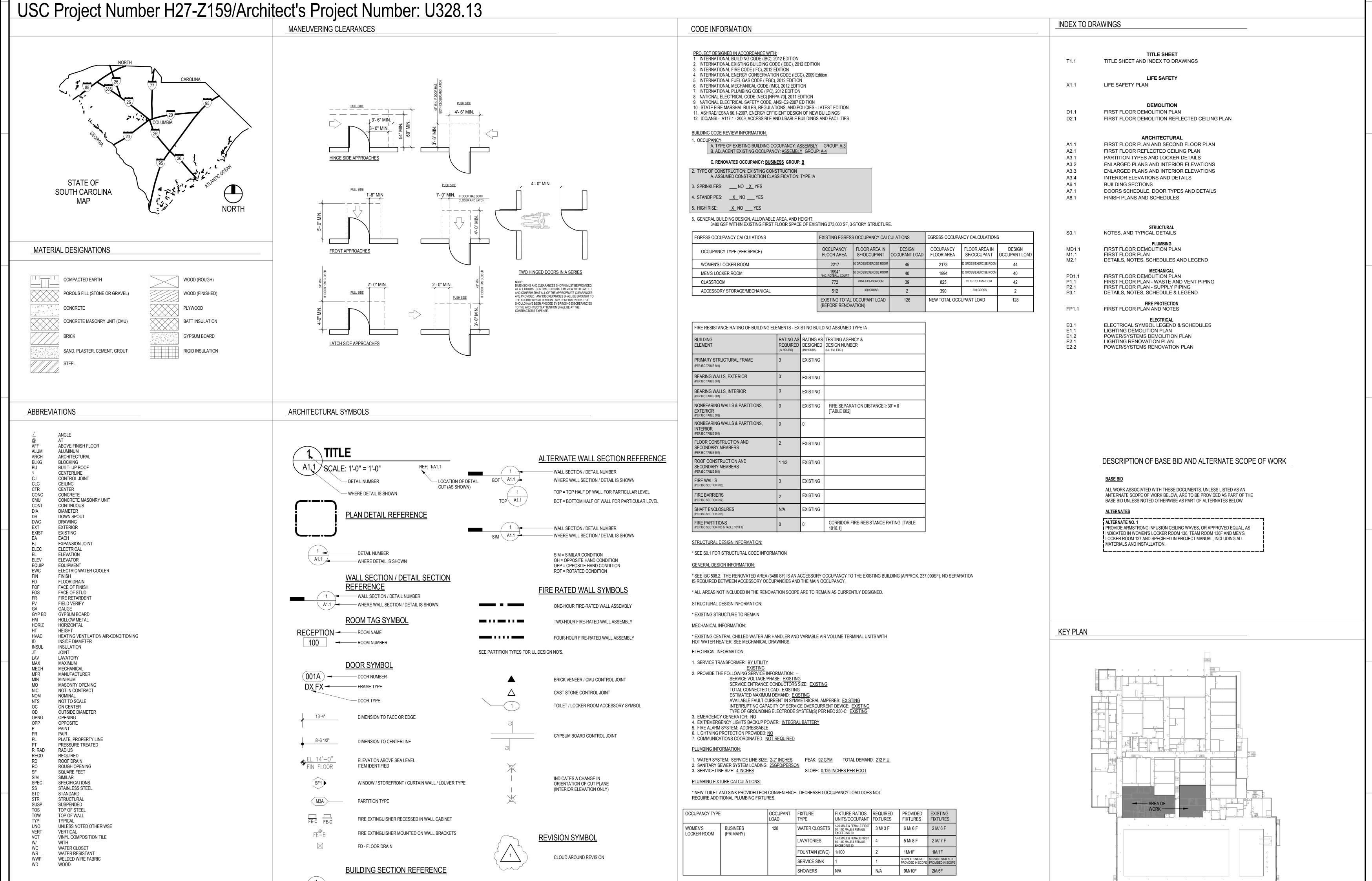
UNIVERSITY OF SOUTH CAROLINA SWIM TEAM LOCKER ROOM RENOVATIONS

Solomon Blatt Physical Education Center 1300 Wheat Street

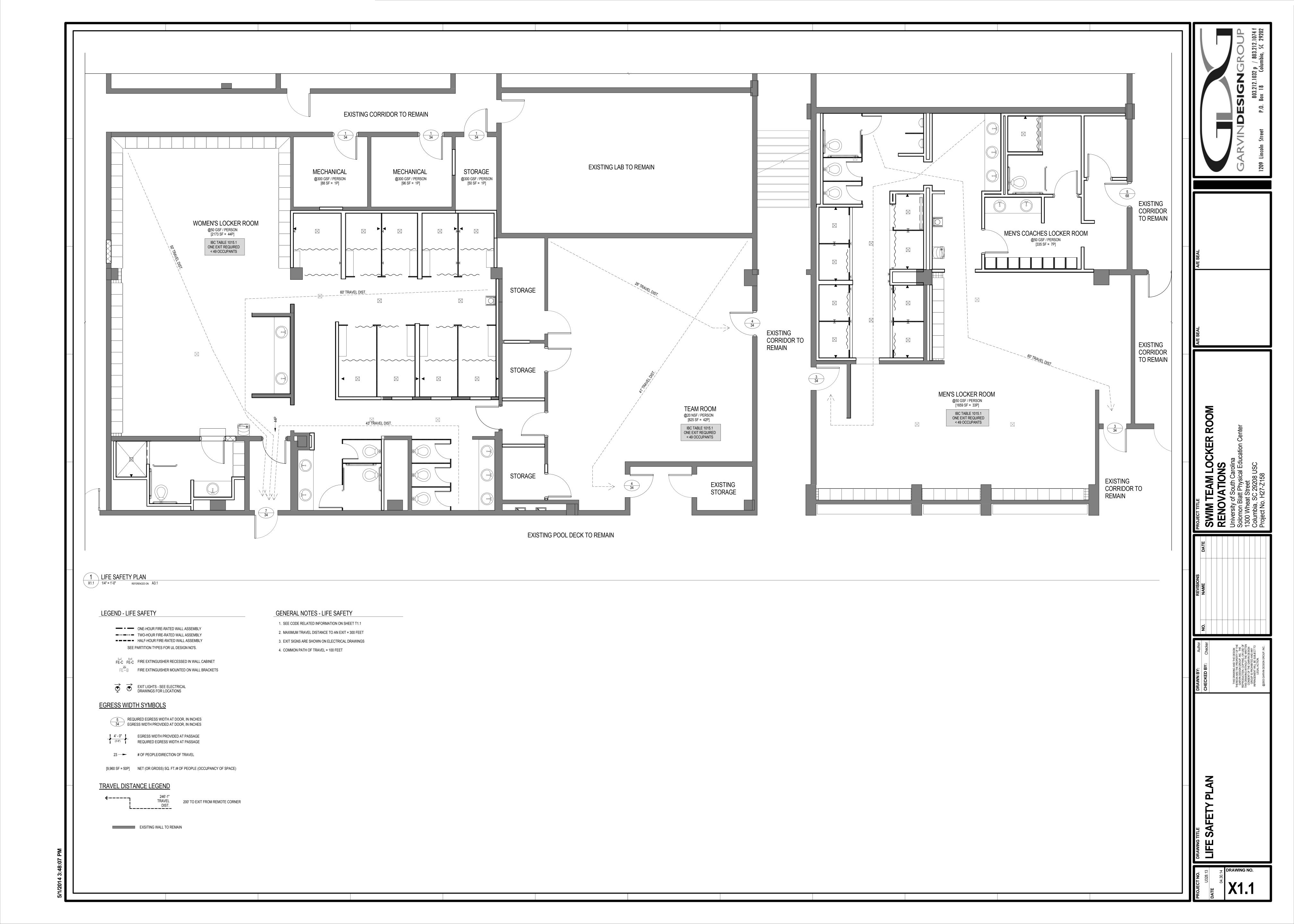
Columbia, SC 29208

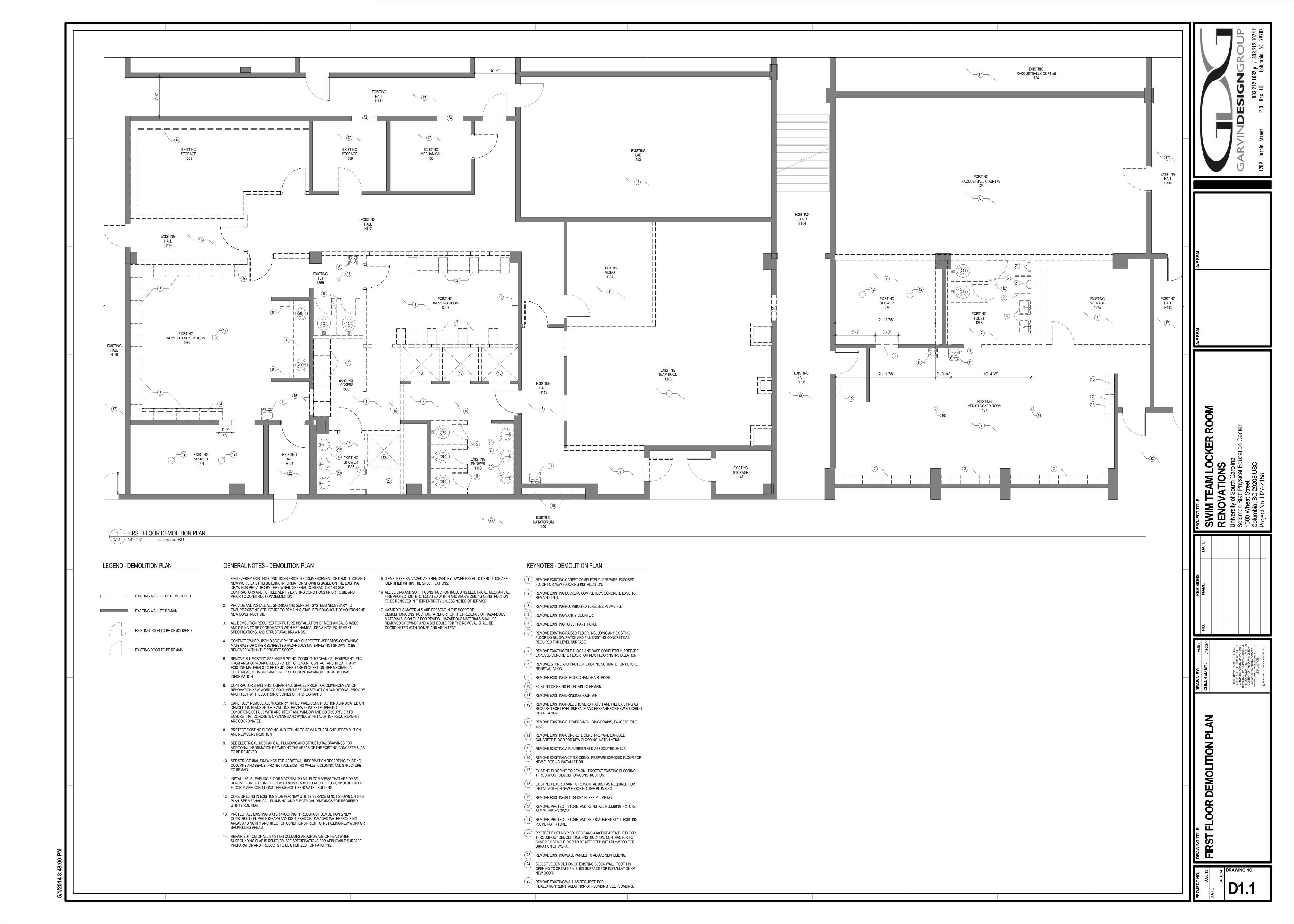
100% BID DOCUMENTS 30 APRIL 2014

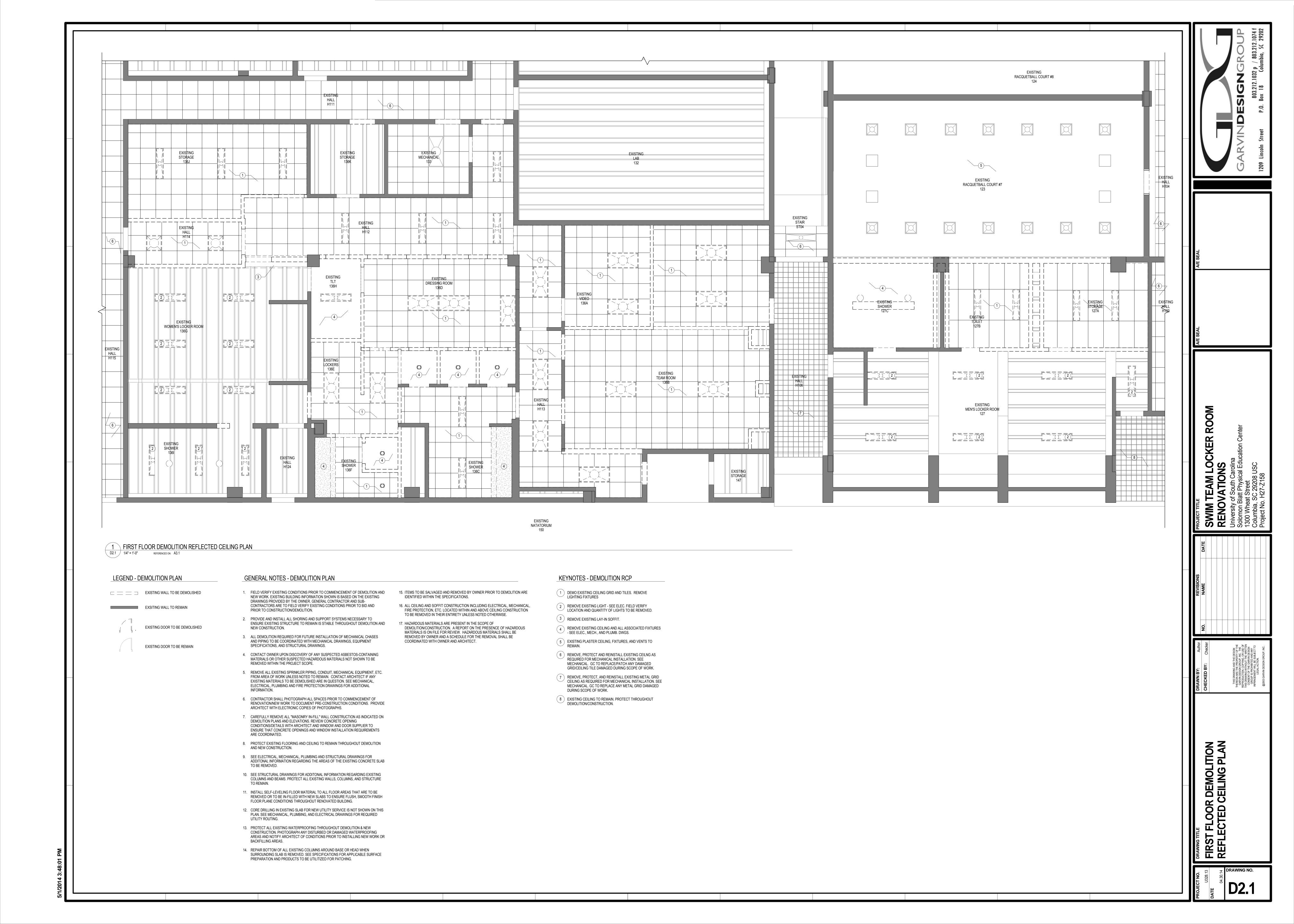


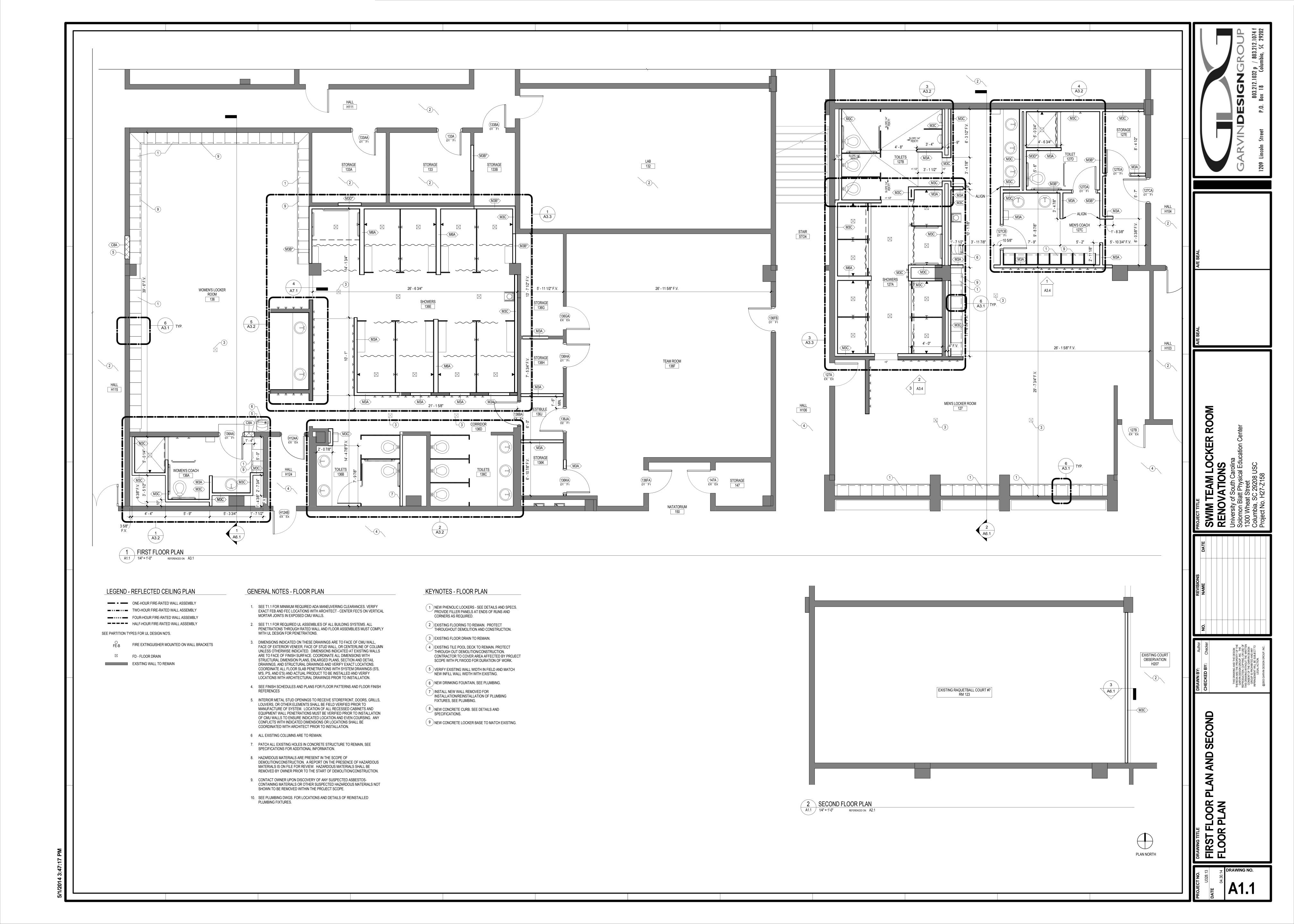
EXTERIOR WALL / ROOF CONSTRUCTION TYPE

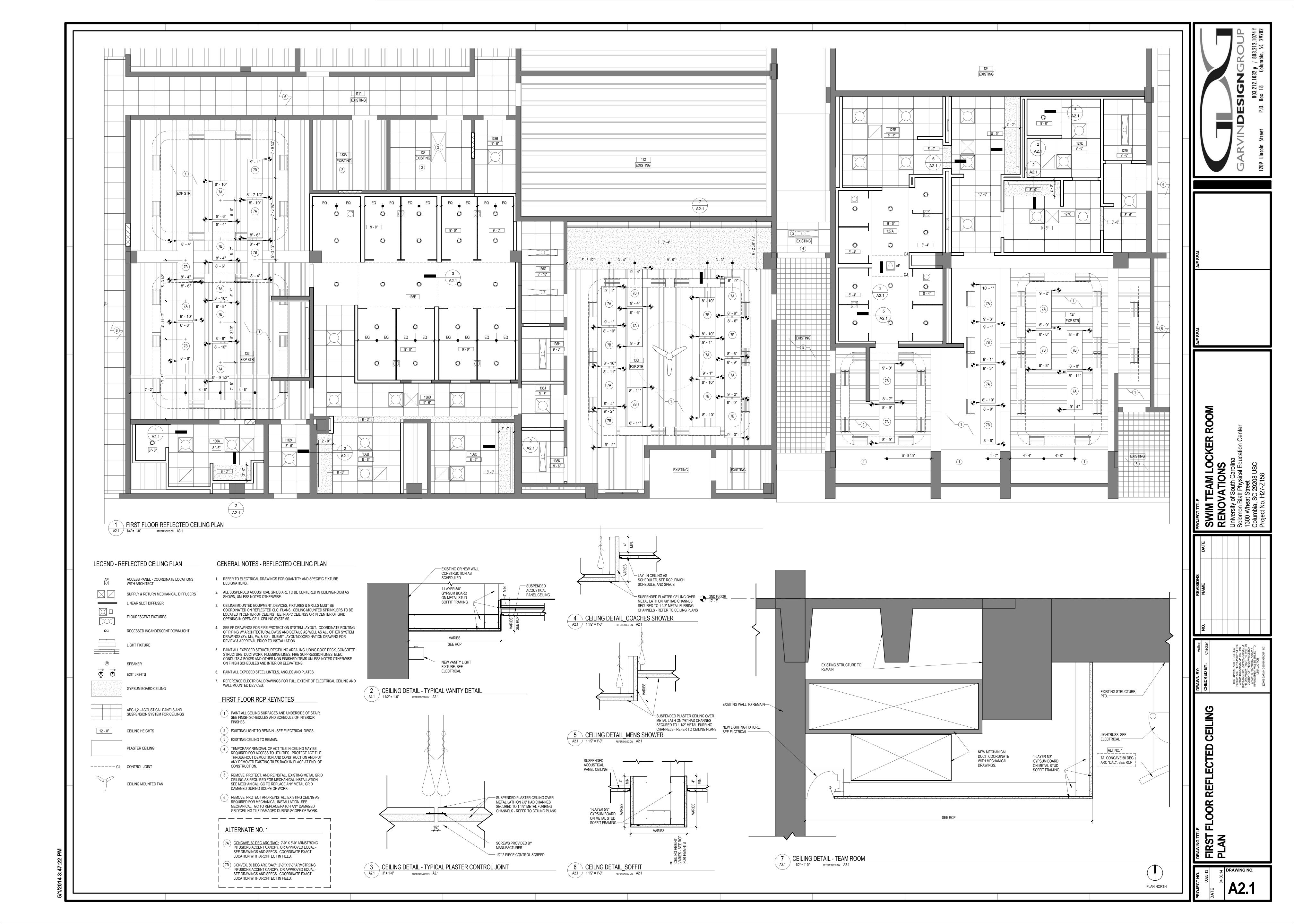


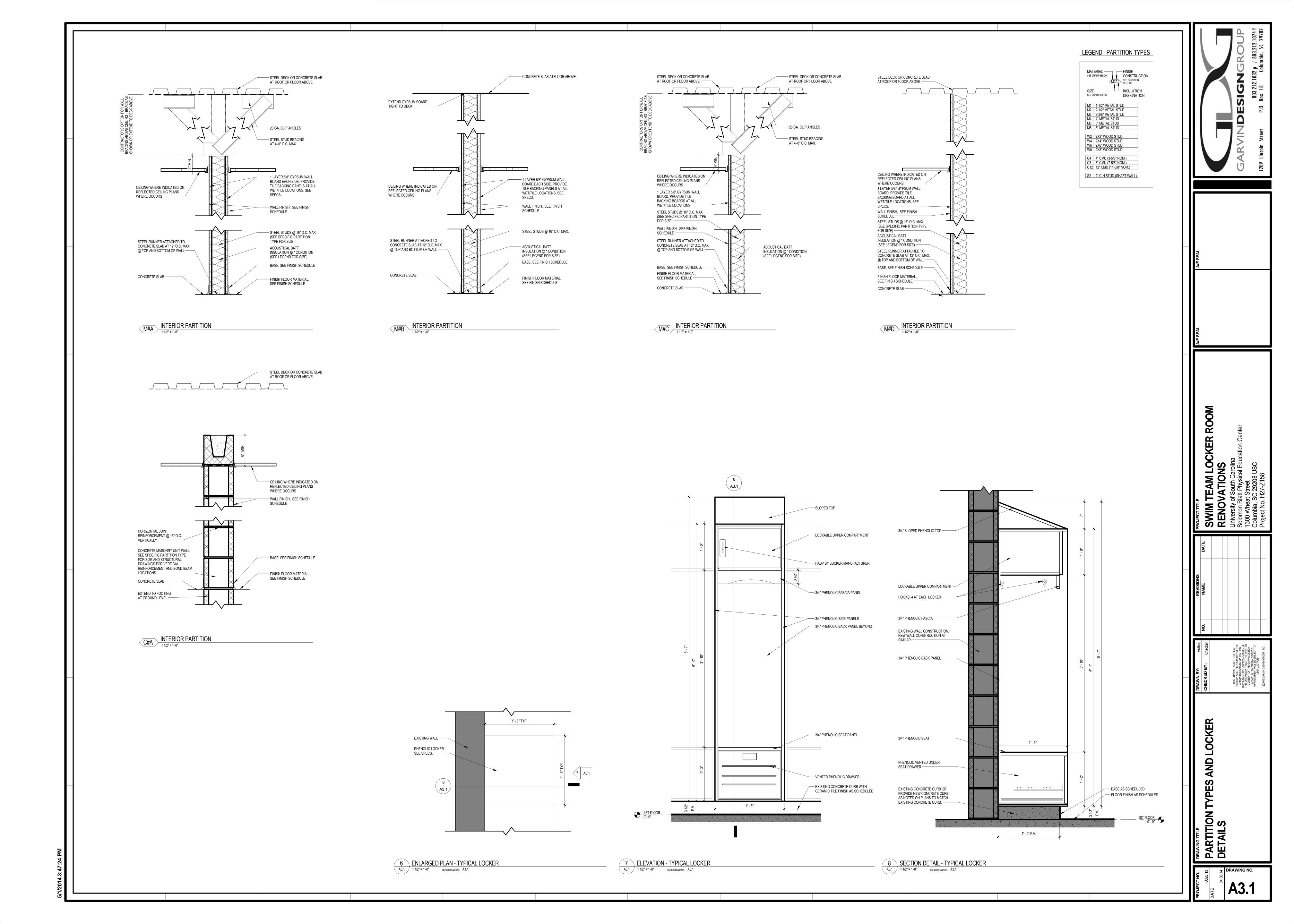


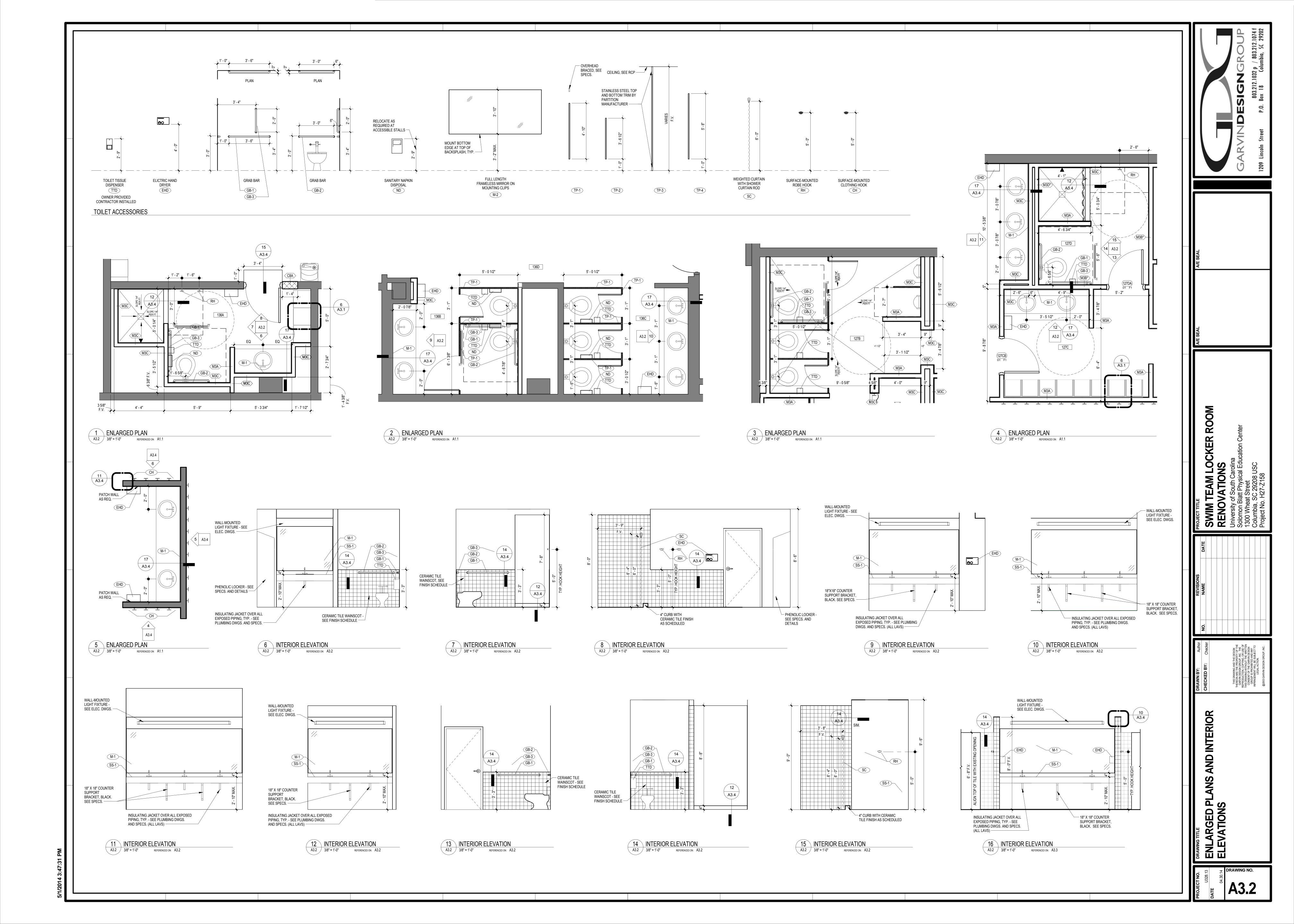


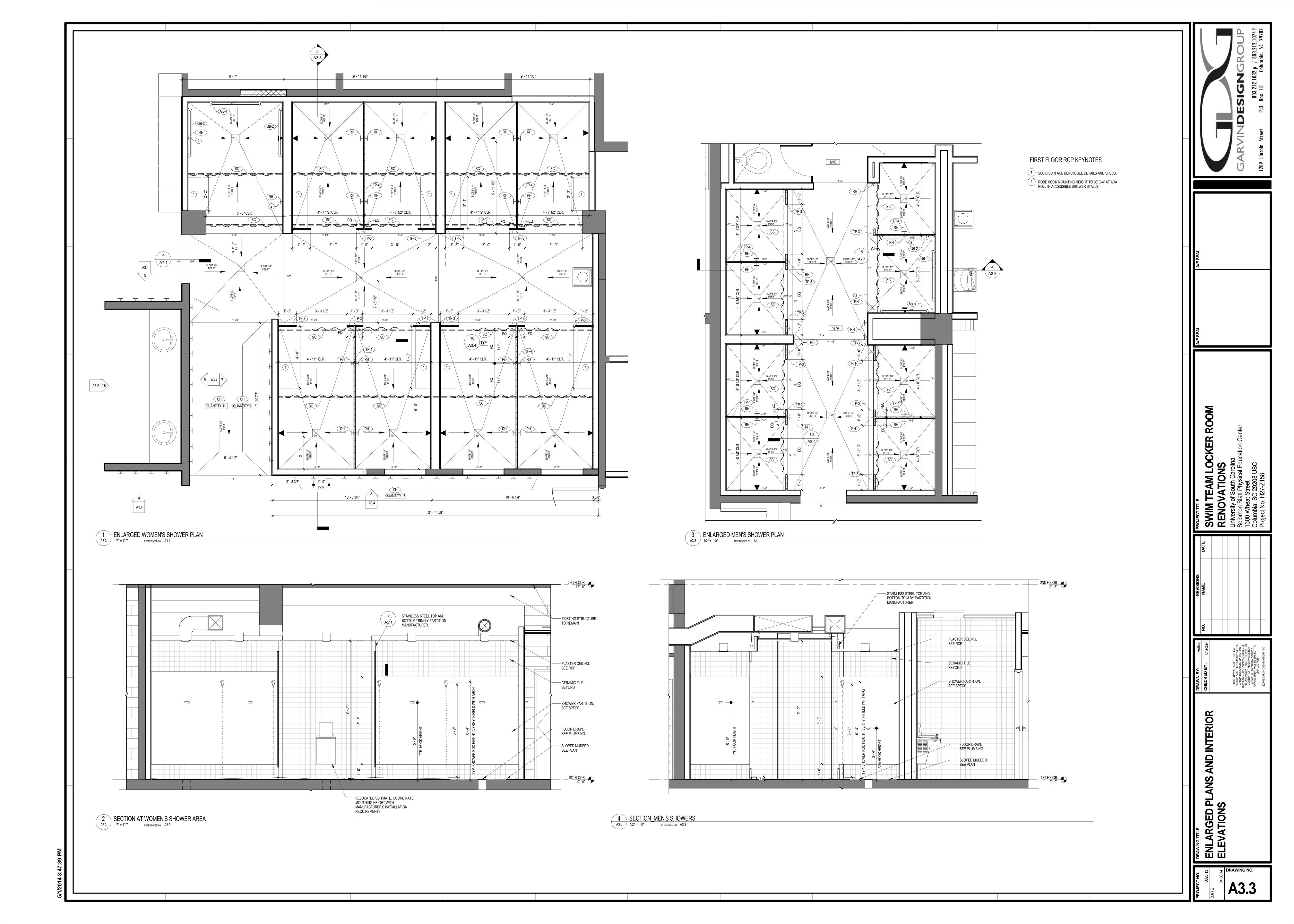


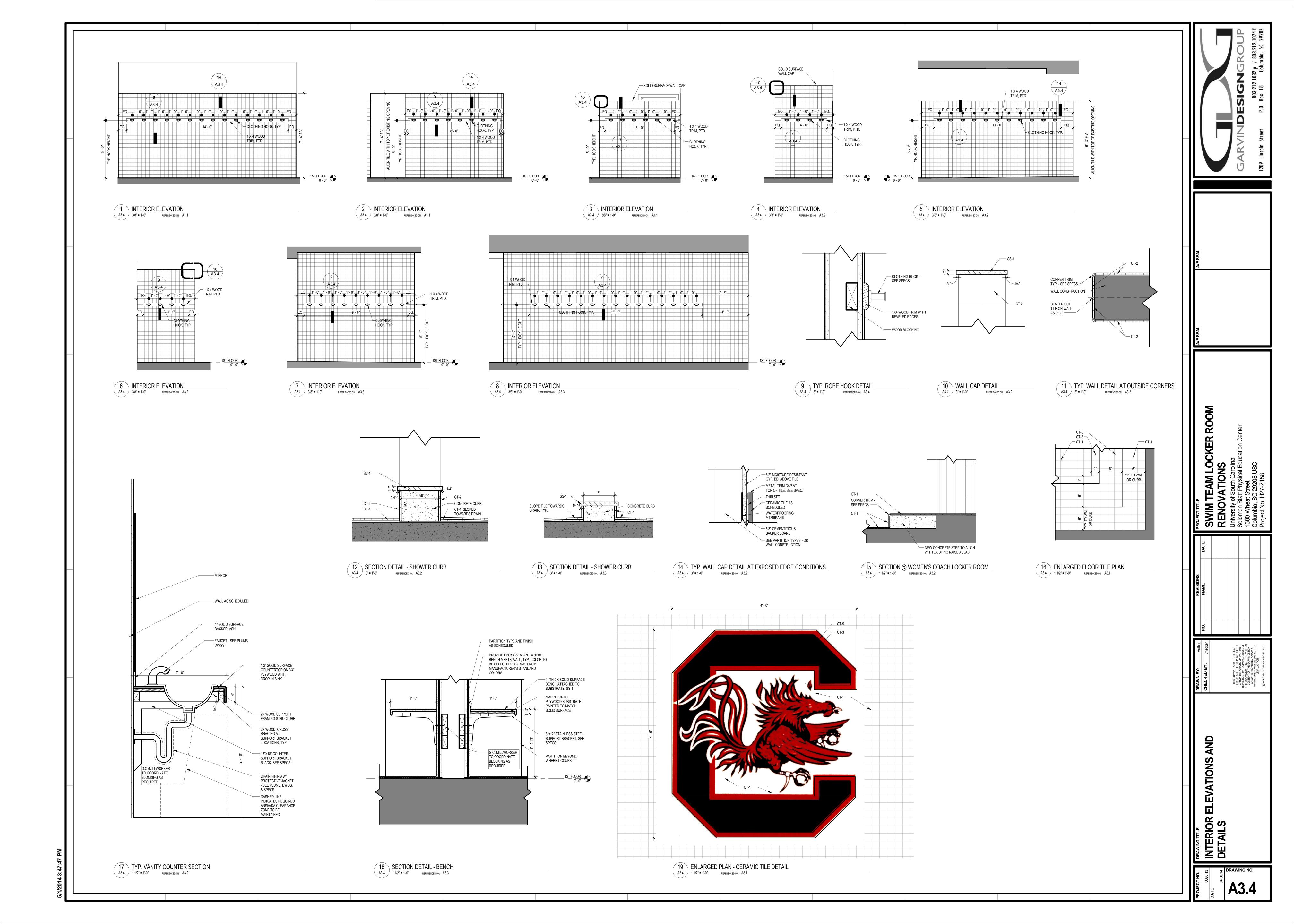


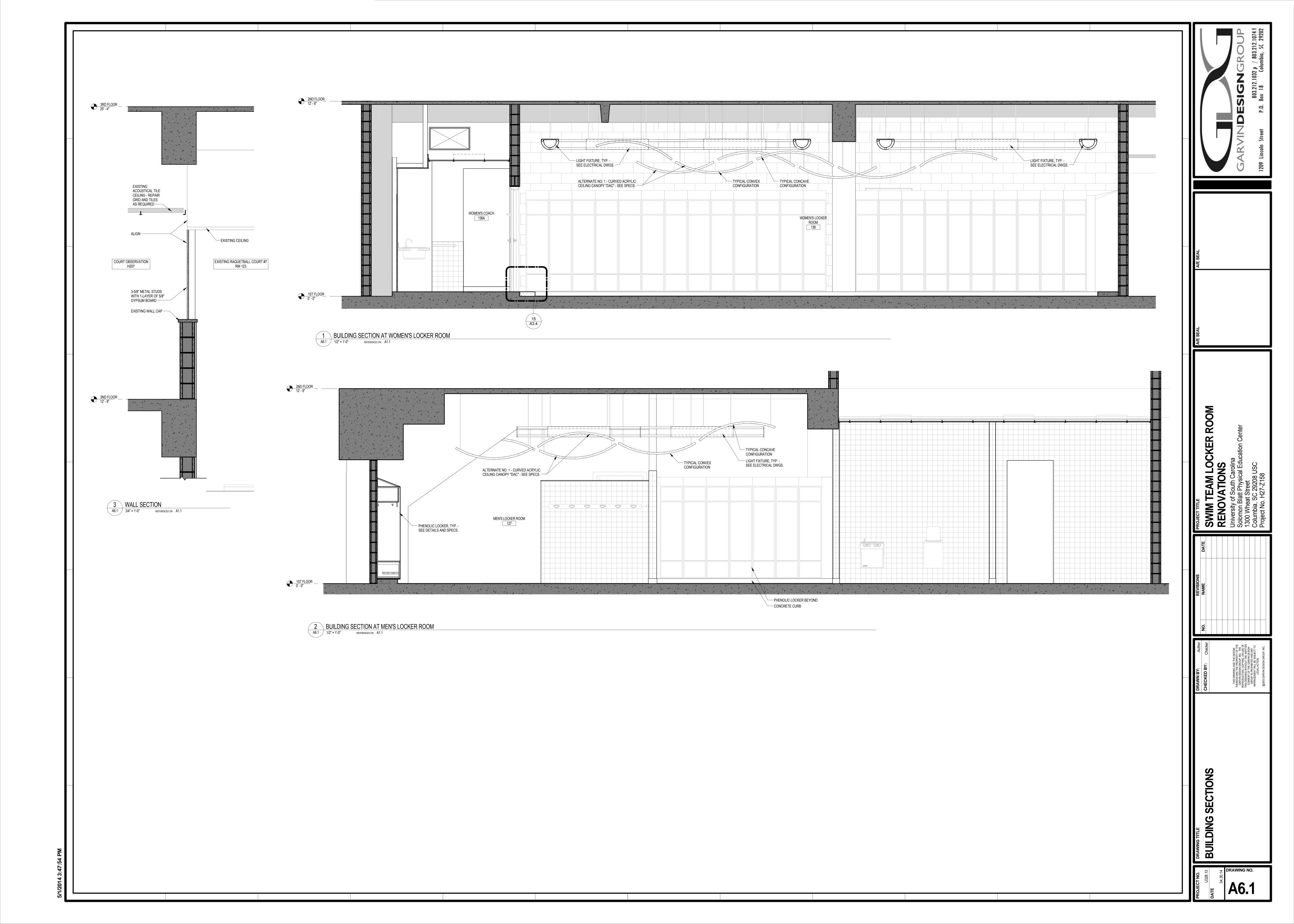


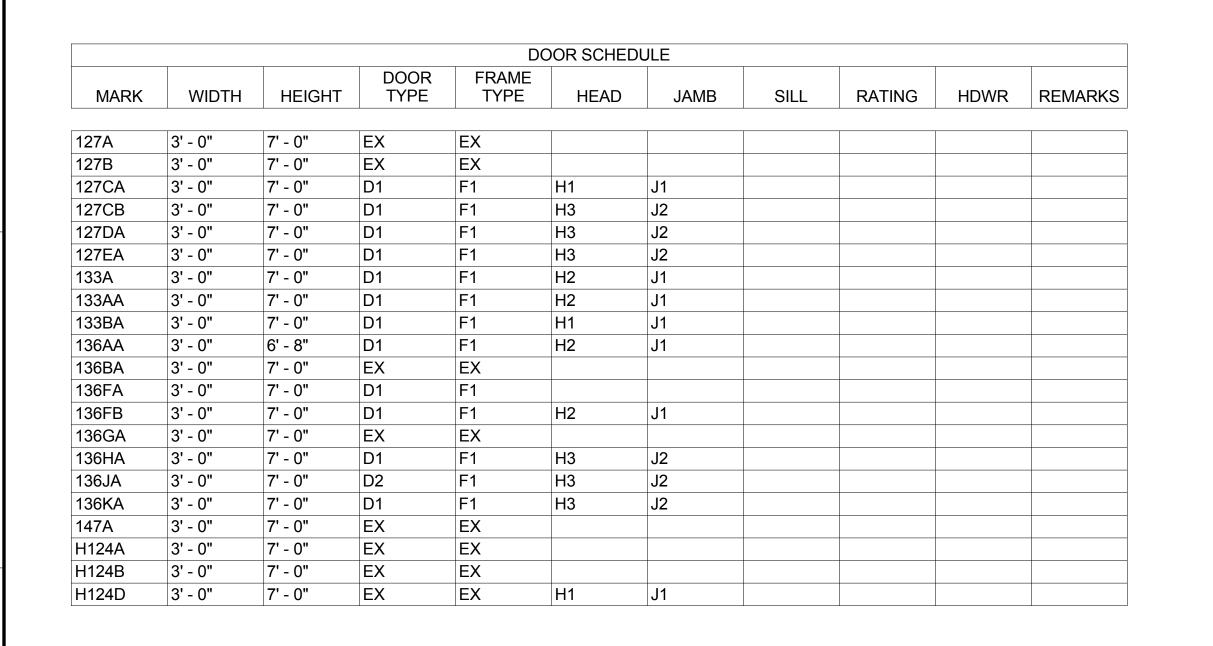


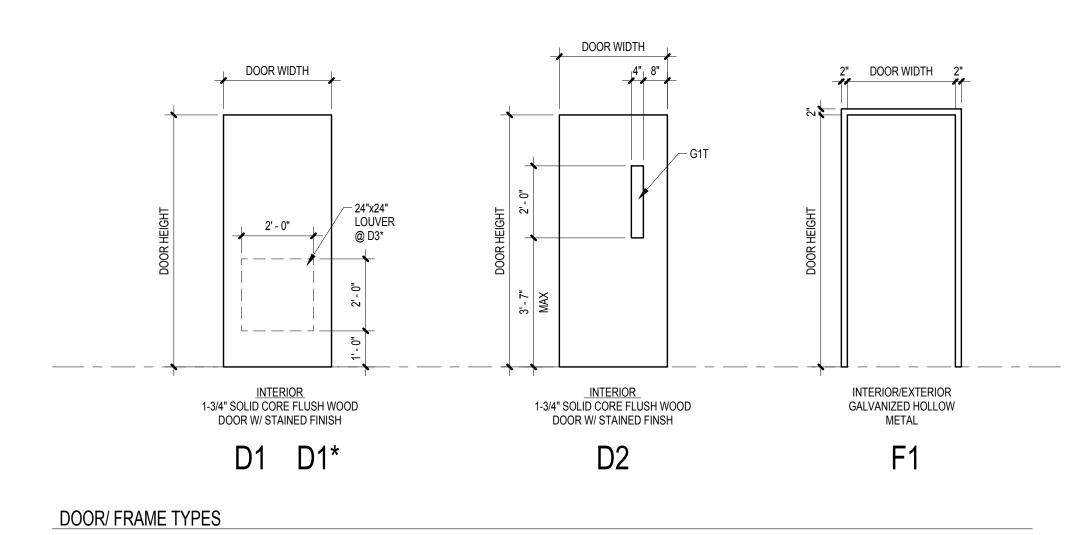














LEGEND - GLAZING TYPES

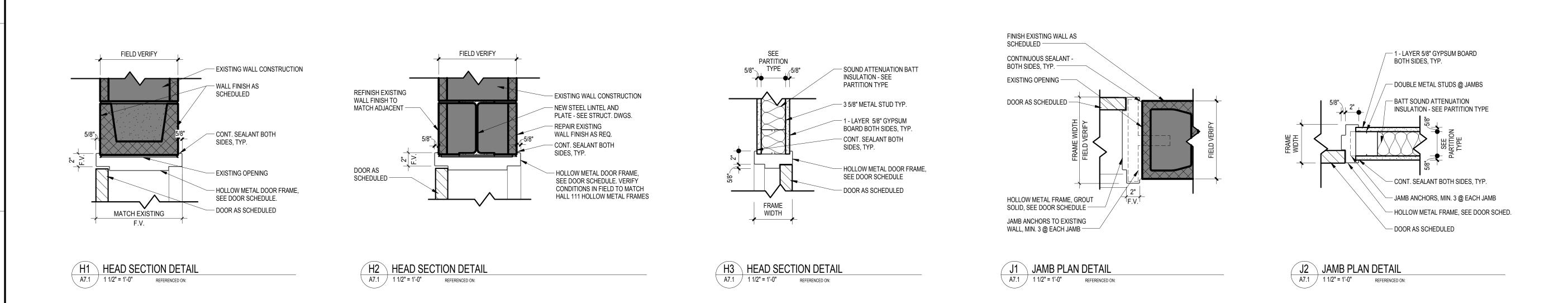
G1 1/4-INCH CLASS 1 CLEAR FLOAT GLASS

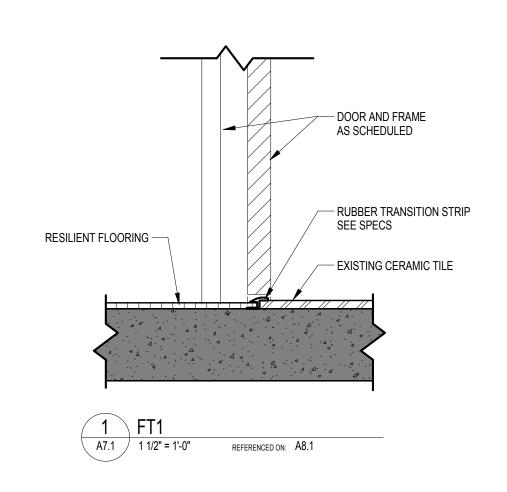
CURRENT INTERNATIONAL BUILDING CODE.

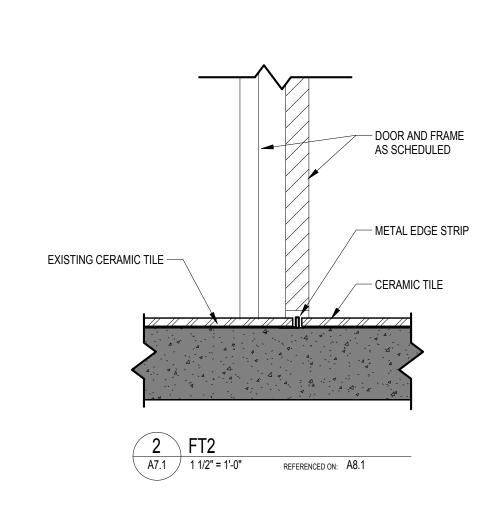
G1T SAME AS G1 WITH 1/4" TEMPERED GLAZING

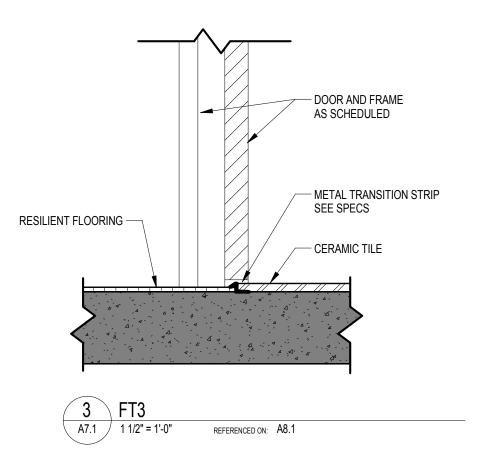
SEE SPECIFICATIONS FOR ADDITIONAL GLASS TYPE INFORMATION.
 PROVIDE SAFETY OR TEMPERED GLASS WHERE REQUIRED BY

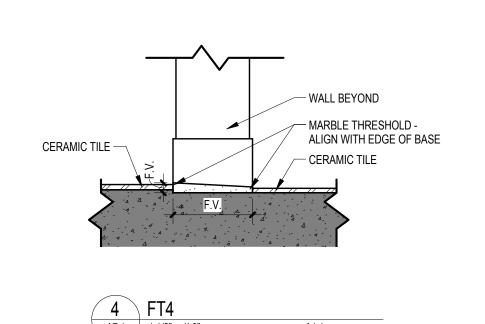
GLASS DISCRIPTION

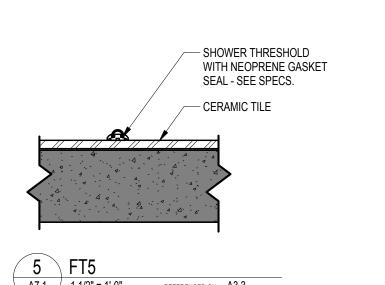


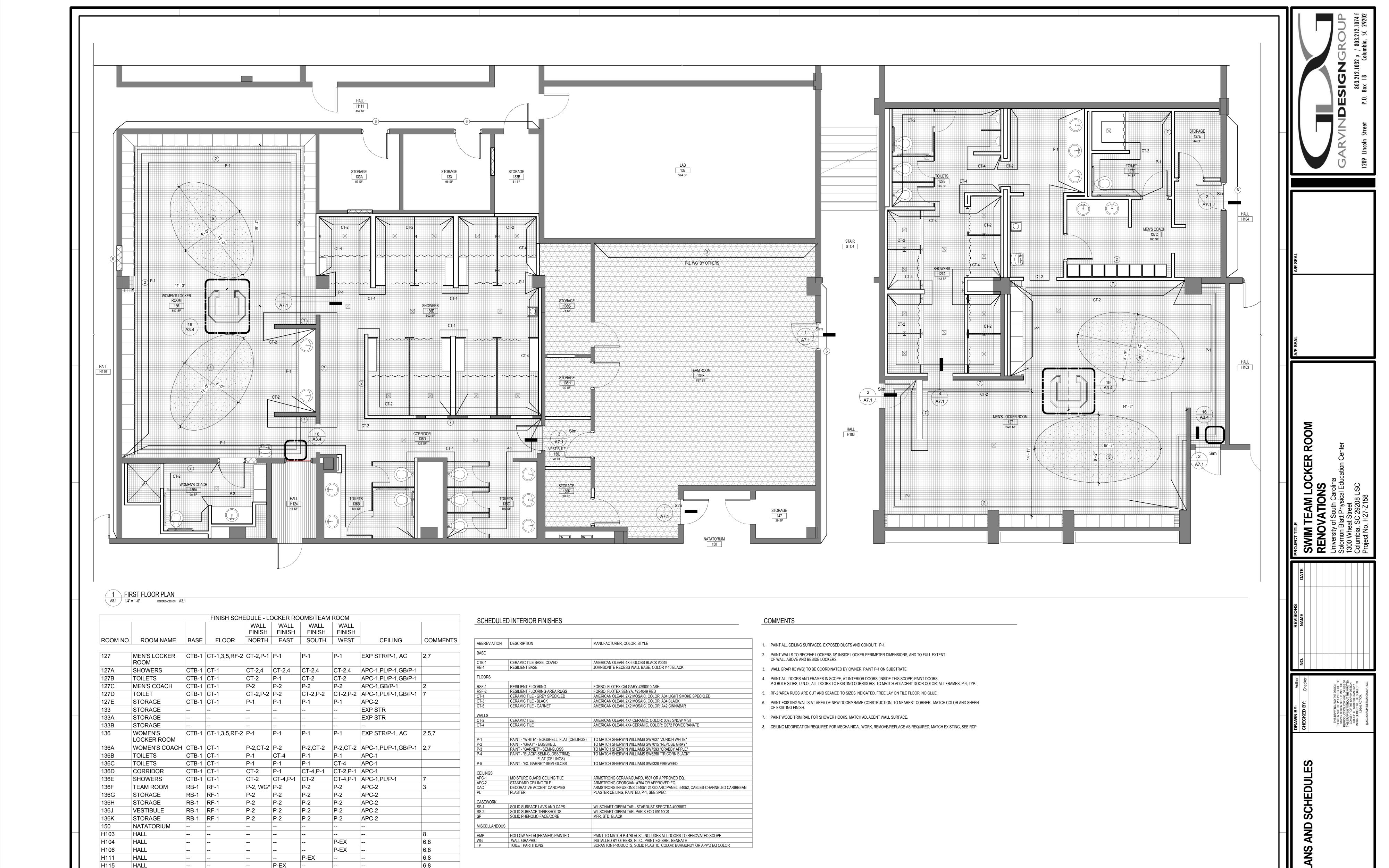












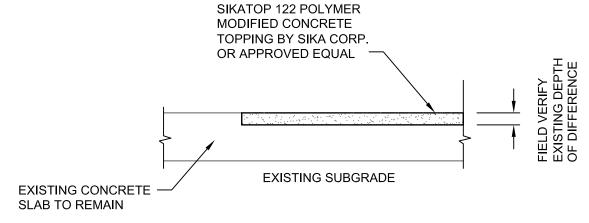
STO4

-- EX CT-1 P-1 P-1

P-1

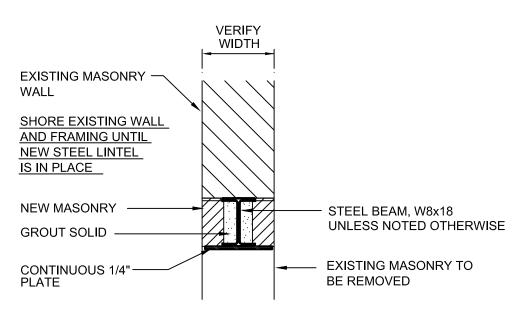
GENERAL NOTES:

- A. LIVE LOADS:
- ASSEMBLY...... 100 PSF, 2000 LB CONCENTRATED B. DEAD LOADS: ACTUAL WEIGHTS OF MATERIALS, EQUIPMENT, AND ETC. C. ROOF, SNOW, WIND, AND SEISMIC LOADS: EXISTING BUILDING NOT BROUGHT UP TO MEET REQUIREMENTS OF
- CURRENT BUILDING CODE. 2. BUILDING CODE - INTERNATIONAL BUILDING CODE 2012 3. CAST-IN-PLACE CONCRETE COMPRESSIVE STRENGTH AT 28 DAYS: NORMAL WEIGHT (150 PCF) 4000 PSI FOR ALL CONCRETE.
- LIMIT FLY ASH CONTENT TO 25% MAXIMUM BY WEIGHT. 4. ALL REINFORCING BARS TO HAVE A MINIMUM YIELD STRENGTH OF
- 5. FOOTINGS ARE LOCATED AT COLUMN LINES OR CENTER OF WALLS UNLESS SHOWN OTHERWISE ON PLANS.
- 6. CONCRETE FORMWORK: A. ALL FORMWORK SHALL BE DESIGNED, ERECTED, SUPPORTED, BRACED, AND MAINTAINED ACCORDING TO ACI STANDARD 347
- RECOMMENDED PRACTICE FOR CONCRETE FORMWORK. B. RESPONSIBILITY: THE DESIGN, CONSTRUCTION, AND SAFETY OF ALL FORMWORK SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. ALL FORM, SHORES, BACKSHORES, FALSEWORK, BRACING, AND OTHER TEMPORARY SUPPORTS SHALL BE ENGINEERED TO SUPPORT ALL LOADS IMPOSED INCLUDING THE WET WEIGHT OF CONCRETE, CONSTRUCTION EQUIPMENT, LIVE LOAD, LATERAL LOADS DUE TO WIND AND WET CONCRETE IMBALANCE. SEE
- SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS. C. TOLERANCE: UNLESS SPECIFIED OTHERWISE, ALL TOLERANCES FOR CONCRETE FORMWORK SHALL CONFORM TO ACI STANDARD 117, STANDARD TOLERANCE FOR CONCRETE CONSTRUCTION AND MATERIALS.
- D. ALL PERMANENTLY VISIBLE EDGES OF CONCRETE SHALL HAVE A 3/4" CONTINUOUS CHAMFER. THIS INCLUDES ALL SLABS, BEAMS, COLUMNS, AND WALLS.
- 7. CHECK WITH VARIOUS TRADES FOR SLEEVES, OPENINGS, CONDUITS, ETC. BEFORE POURING CONCRETE.
- 8. PROVIDE AND INSTALL ALL PLATES, ANGLES, REINFORCING, ETC., EMBEDDED IN CAST-IN-PLACE CONCRETE.
- 9. SEE ARCHITECTURAL DRAWINGS FOR MISCELLANEOUS DETAILS NOT SHOWN ON STRUCTURAL DRAWINGS. 10. CONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS AND ELEVATIONS
- BEFORE ANY FABRICATION HAS STARTED. 11. PROVIDE AND INSTALL ALL TEMPORARY BRACING AS REQUIRED FOR SAFETY / STABILITY OF THE STRUCTURE UNTIL STRUCTURE IS COMPLETE.
- 12. ALL CONCRETE SLABS ON GRADE TO BE 4" THICK REINFORCED WITH WELDED WIRE FABRIC 6x6-W1.4xW1.4, UNLESS NOTED OTHERWISE REFER TO FOUNDATION PLAN FOR SLAB THICKNESS AND REINFORCING REQUIREMENTS.
- 13. ALL CONCRETE SLABS TO SLOPE TO FLOOR DRAINS, IN ROOMS OR AREAS THAT HAVE FLOOR DRAINS. SEE ARCHITECTURAL PLANS AND PLUMBING PLANS FOR LOCATIONS, FIELD VERIFY EXISTING CONDITIONS.
- 14. ALL REINFORCING REBARS SHALL HAVE CLASS "A" TENSION SPLICES UNLESS NOTED OR SPECIFIED OTHERWISE.
- 15. DRAWINGS INDICATE GENERAL ARRANGEMENT AND DIMENSIONS AND ARE, GENERALLY, DRAWN TO SCALE. HOWEVER, SCALE DIMENSIONS SHALL NOT BE USED. OBTAIN DIMENSIONS FROM ARCHITECT, WHEN NOT GIVEN IN FIGURES. REFER TO THE ARCHITECT AND ENGINEER IF ANY INCONSISTENCIES ARE FOUND. 16. WHERE CONFLICTS EXIST BETWEEN STRUCTURAL AND ARCHITECTURAL, USE
- STRUCTURAL FOR ITEMS RELATING TO STRUCTURAL STRENGTH SUCH AS VERTICAL REINFORCING IN CONCRETE WALLS, FOOTING SIZE, FOOTING ELEVATION, REINFORCING, MEMBER SIZE, ETC.
- 17. STRUCTURAL STEEL: A. STEEL SHALL CONFORM TO THE FOLLOWING ASTM SPECIFICATIONS, UNLESS NOTED OTHERWISE ON PLANS:
 - a. ALL ROLLED ANGLES, CHANNELS, PLATES, BARS, ETC A36 (Fy=36ksi). b. ALL ROLLED W SHAPES, BEAMS, COLUMNS, ETC A992 (Fy=50ksi). c. STRUCTURAL STEEL PIPE ----- A53 (Fy=35ksi) d. STRUCTURAL STEEL TUBE ----- A500 (Fy=46ksi)
 - B. BOLTED CONNECTIONS: a. ALL CONNECTIONS (UNLESS NOTED OTHERWISE) SHALL BE MADE WITH 3/4" DIAMETER A-325X OR A-490X BOLTS. ALL FIELD BOLTED CONNECTIONS SHALL BE LOAD INDICATOR/
 - TENSION CONTROL TYPE BOLTS, UNLESS NOTED OTHERWISE b. OVERSIZE OR LONG SLOTTED HOLES ARE NOT ALLOWED UNLESS SHOWN ON STRUCTURAL PLANS.
 - c. THE SHOP DRAWINGS SHALL CLEARLY INDICATE THE TYPE OF BOLTS USED IN EACH CONNECTION AND THE ALLOWABLE
 - VALUES USED FOR THE VARIOUS BOLT TYPES. d. THE FOLLOWING MINIMUM STANDARDS APPLY:
 - (1) MINIMUM PLATE THICKNESS = 3/8" (2) MINIMUM BOLT DIAMETER = 3/4" (3) MINIMUM WELD = 3/16" THICK THROAT
 - (4) MINIMUM DESIGN LOAD ON ANY CONNECTION = 15kips C. WELDED CONNECTIONS:
 - a. ALL SHOP AND FIELD WELDING SHALL CONFORM TO AWS STRUCTURAL WELDING CODE-STEEL, ANSI/AWS - D1.1 b. MINIMUM WELD = 3/16" THICK THROAT



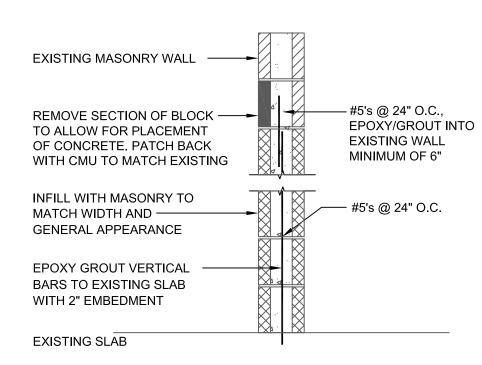
CLEAN AND PREPARE EXISTING CONCRETE TO RECEIVE FILLER/ FOLLOW ALL MANUFACTURER'S RECOMMENDATIONS FOR PREPARATION, PROCEDURES, AND WORKMANSHIP. PROVIDE COURSE AGGREGATE IN THE MIX WHEN DEPTH IS GREATER THAN 1" IN DEPTH PER MANUFACTURER'S RECOMMENDATIONS. EQUAL PRODUCTS SHALL BE SUBMITTED FOR REVIEW.

TYPICAL PATCHING AT EXISTING SLABS SCALE: 3/4" = 1'-0"



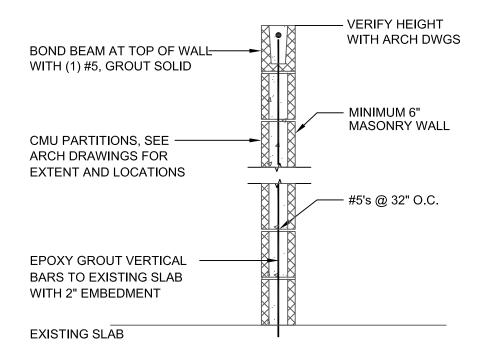
NOTE: PROVIDE BEARING PLATES @ EACH END OF NEW LINTEL, MASONRY, TO SET PLATE, AND FILL SOLID UNDER PLATE W/ NON-SHRINK GROUT, REPAIR MASONRY AFTER PLACEMENT.

NEW LINTEL IN EXISTING WALL NOT TO SCALE



TYPICAL CMU INFILL DETAIL SCALE: 3/4"=1'-0"

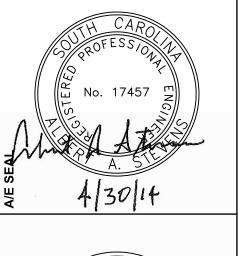
REFER TO ARCHITECTURAL DRAWINGS FOR REQUIRED LOCATIONS, EXTENTS, AND CONFIGURATION



TYPICAL CMU PARTITION DETAIL

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

REFER TO ARCHITECTURAL DRAWINGS FOR REQUIRED LOCATIONS, EXTENTS, AND CONFIGURATION



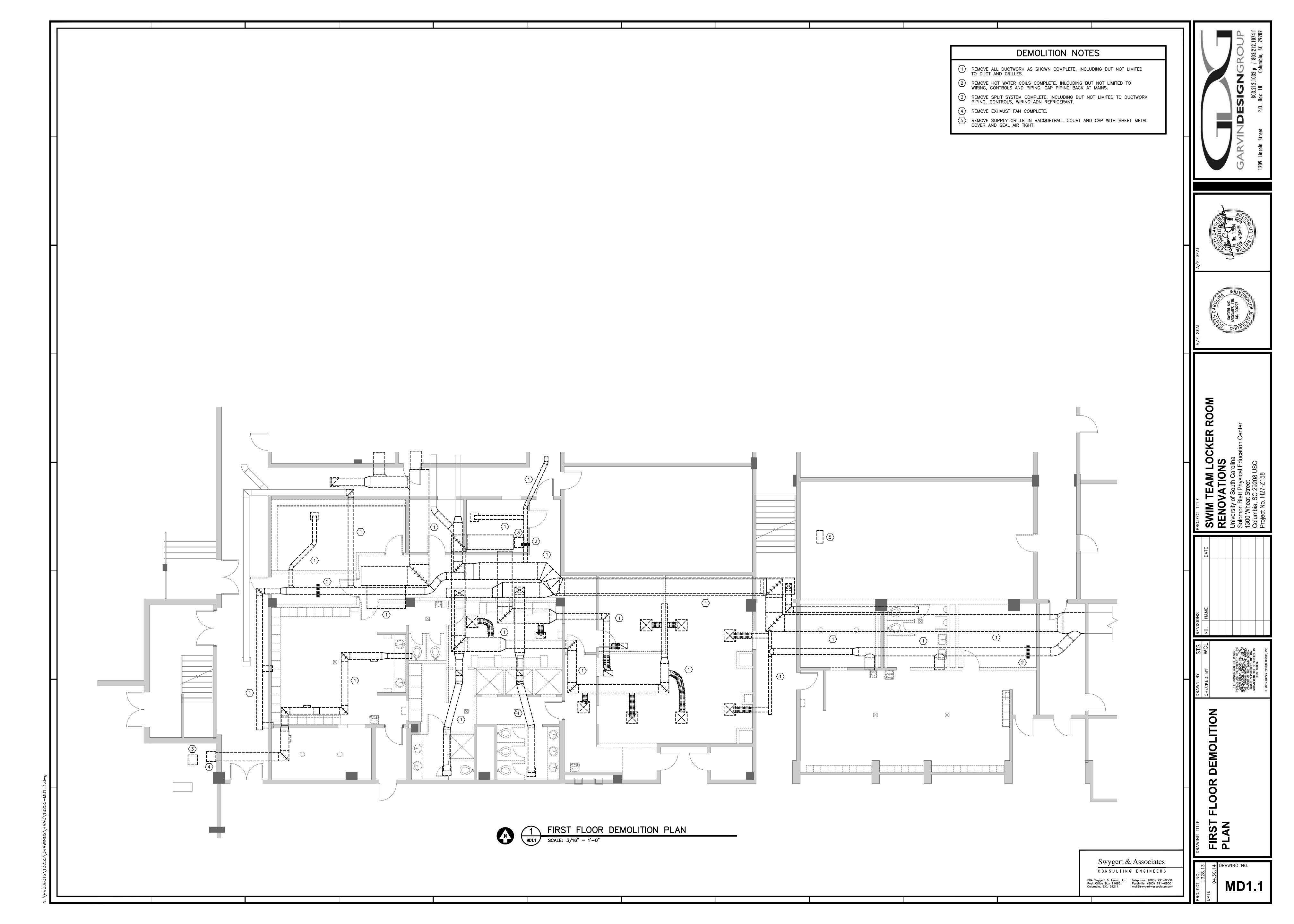


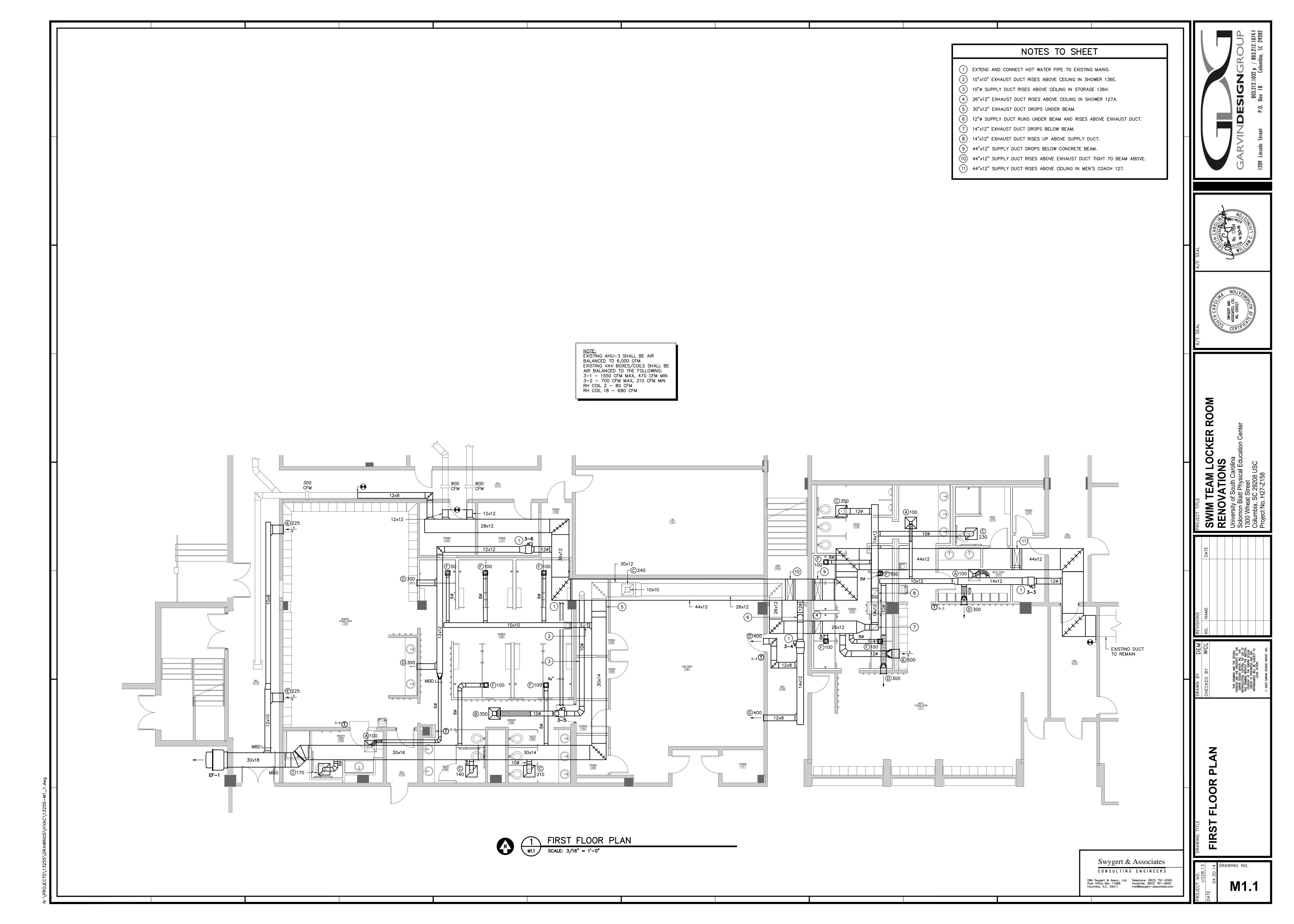
NOTES DETAIL

DRAWING NO.

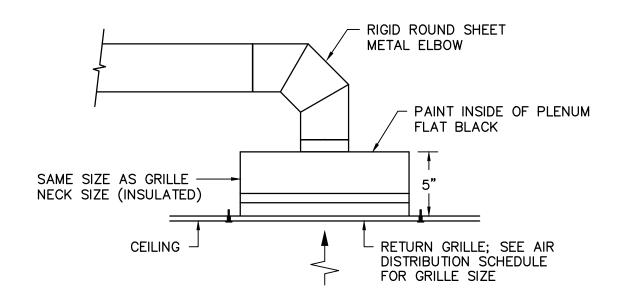
840 Shull Street
Suite 100 West Columbia, SC 29169 (803) 926-0000 FAX (803) 926-7600 MEAI# 14-759

StructuralEngineers



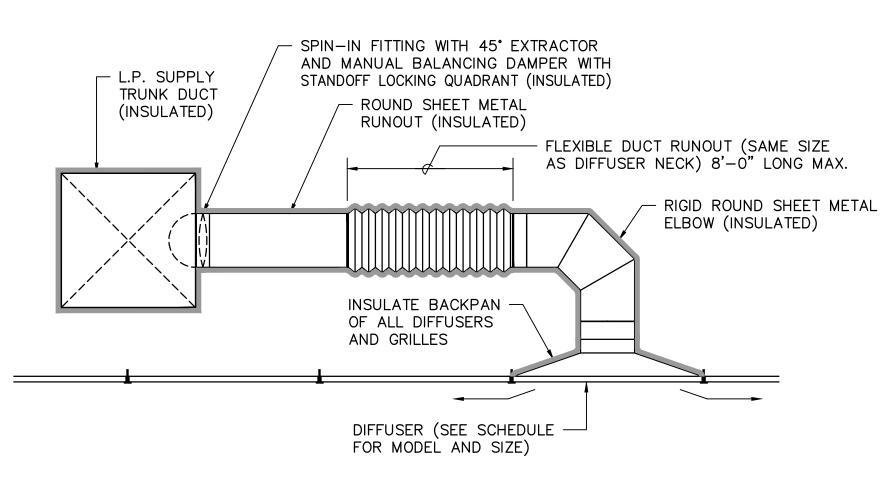


NOTE:
EXISTING AHU-3 SHALL BE AIR
BALANCED TO 6,000 CFM.
EXISTING VAV BOXES/COILS SHALL BE
AIR BALANCED TO THE FOLLOWING:
3-1 - 1550 CFM MAX, 470 CFM MIN
3-2 - 700 CFM MAX, 210 CFM MIN
RH COIL 2 - 80 CFM
RH COIL 18 - 680 CFM



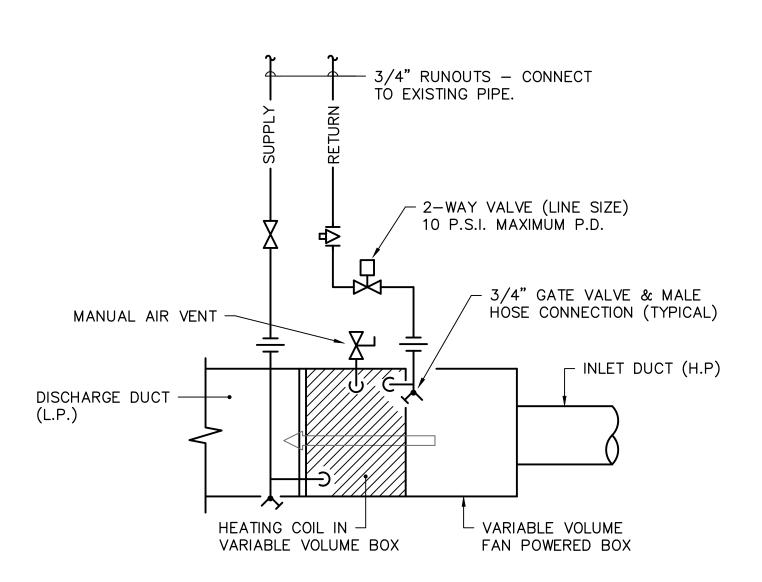
EXHAUST GRILLE DETAIL

NO SCALE



CEILING DIFFUSER DETAIL

NO SCALE



HOT WATER HEATING COIL PIPING DETAIL

NO SCALE

VARIABLE VOLUME BOX SCHEDULE AIR INLET MAX. UNIT P.D MAX. NC TAG REMARKS MODEL (NOM. DIA.) INCHES W.C. LEVEL MAX/MIN | HEATING MBH 800/800 12"ø 800 37.3 1,2 SDR 2.5 0.25 30 3-4 SDR 12"ø 800/240 240 15.8 30 1,2 1.1 0.25 3-5 SDR 10"ø 350/350 350 21.7 1.5 30 1,2 0.25 SDR 12"ø 700/700 700 34.0 2.3 0.25 30 1,2

1. HEATING COIL SELECTION BASED ON 150°F EWT WITH 30°F DROP. 2. PROVIDE WITH STAND ALONE JOHNSON CONTROLS CONTROLLER, CONTROL VALVE AND WALL MOUNTED THERMOSTAT.

		AIR D	ISTRIB	UTION	SCHEE	ULE			
TAG	DESCRIPTION	MANUFACTURER	MODEL	FRAME	CFM	NECK SIZE	FACE SIZE	MAX NC	REMARKS
A	UNI-FLOW SUPPLY	PRICE	ASPD	LAY-IN	0-125	6"ø	24"x24"	30	1,2
B	UNI-FLOW SUPPLY	PRICE	ASPD	LAY-IN	251-350	10"ø	24"x24"	30	1,2
0	PERFORATED EXHAUST	PRICE	APDDR	LAY-IN	0-1000	22"x22"	24"x24"	30	1,2
0	SIDEWALL SUPPLY	PRICE	620	SURFACE	300-400	12"x8"	14"x10"	30	1,2,3
E	SIDEWALL RETURN	PRICE	630	SURFACE	0-500	18"x8"	20"x10"	30	1,2
F	PERFORATED EXHAUST	PRICE	APDDR	SURFACE	0-100	10"x10"	12"x12"	30	1,2,3

- 1. PROVIDE WITH STANDARD WHITE FINISH.
 2. PROVIDE ALLIMINIUM OR ALLIMINIZED STEEL CONSTRUCTION
- PROVIDE ALUMINUM OR ALUMINIZED STEEL CONSTRUCTION.
 PROVIDE WITH OPPOSED BLADE DAMPER.

	E>	(HAUS	T FAN	SCH	EDUL	=	
TAG	GREENHECK MODEL NO.	TYPE	CFM	ESP	MOTOR H.P./W	SONES (MAX.)	REMARKS
EF-1	CWB-180-7	SIDEWALL	3140	0.5	3/4	15.4	1,2

 PROVIDE SIDEWALL CENTRIFUGAL FAN WITH BELT DRIVE, ALUMINUM CONSTRUCTION AND NEMA 1 TOGGLE SWITCH.
 INTERLOCK WITH AHU-3 OPERATION.

	LEGEND
SYMBOL	DESCRIPTION
HWS	HOT WATER SUPPLY LINE
├ ── HWR ── -	HOT WATER RETURN LINE
(A)100	TYPE "A" DIFFUSER, 100 CFM
Û	THERMOSTAT
\boxtimes	RECTANGULAR SUPPLY DUCTWORK
	RETURN, EXHAUST, FRESH AIR DUCTWORK
48×24	48"x24" RECTANGULAR DUCT
•	CONNECTION POINT OF NEW TO EXISTING
	1" DOOR UNDERCUT BY GENERAL CONTRACTOR

GENERAL NOTES

1. VISIT SITE PRIOR TO BIDDING. THIS CONTRACTOR SHALL DETERMINE DIFFICULTY OF INSTALLATION AND REFLECT THIS IN HIS BIDDING.

PLANS FOR EXACT LOCATIONS OF DOORS, WINDOWS, AIR DISTRIBUTION, ETC.

- 2. DO NOT SCALE DRAWINGS. SEE ARCHITECTURAL DRAWINGS AND REFLECTED CEILING
- 3. DO NOT SCALE DRAWINGS. THIS CONTRACTOR SHALL VERIFY ALL EXISTING ITEMS AND LOCATIONS IN THE FIELD.
- 4. ALL PIPING AND DUCTWORK LOCATIONS SHALL BE COORDINATED WITH WORK UNDER OTHER DIVISIONS OF THE SPECIFICATIONS TO AVOID INTERFERENCE.
- 5. EXISTING PIPE, DUCTWORK, CONDUIT, ETC THAT INTERFERES WITH THE ROUTING OF NEW SYSTEMS SHALL BE RELOCATED. THIS CONTRACTOR SHALL INCLUDE THE COST OF SUCH IN HIS BID UNLESS NOTED OTHERWISE.
- 6. WATER SYSTEMS SHALL BE DRAINED AS REQUIRED FOR INSTALLATION OF WORK. UPON COMPLETION, SYSTEM SHALL BE FILLED WITH WATER AND VENTED OF ALL
- 7. ALL PIPING AND DUCTWORK INSULATION SHALL BE RUN CONTINUOUSLY THROUGH FLOORS, ROOFS AND PARTITIONS.
- 8. ALL MECHANICAL ITEMS EXTENDING THROUGH WALLS SHALL BE FLASHED AND COUNTERFLASHED.
- 9. ALL PIPING IS SHOWN DIAGRAMMATIC. HOWEVER, THIS CONTRACTOR SHALL PROVIDE ALL REQUIRED FITTINGS, PIPING AND INSULATION FOR ALL OFFSETS AND/OR CHANGES IN ELEVATION.
- 10. ALL VALVES AND SPECIALTIES SHALL BE LINE SIZE UNLESS NOTED OTHERWISE, USING ECCENTRIC REDUCERS ON PUMP SUCTION AND CONCENTRIC REDUCERS ON PUMP DISCHARGE. USE ECCENTRIC REDUCERS ON AUTOMATIC VALVES AS
- 11. MINIMUM PIPE SIZE SHALL BE 3/4-INCH UNLESS INDICATED OTHERWISE.

REQUIRED.

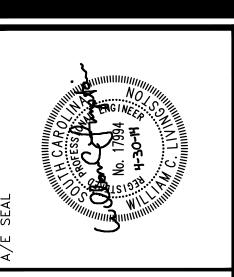
- 12. ALL PIPING SHALL BE SUPPORTED IN ACCORDANCE WITH THE SPECIFICATIONS AND FURTHER SUPPORTS OR HANGERS SHALL BE PROVIDED TO PREVENT WEIGHT OF PIPING BEING PLACED ON EQUIPMENT.
- 13. SPACE ABOVE CEILING TO BE USED AS RETURN AIR PLENUM WHERE DUCT IS NOT INDICATED ABOVE RETURN AIR GRILLES.
- 14. ALL OPEN END DUCTS SHALL HAVE 1/4-INCH MESH GALVANIZED SCREEN IN REMOVABLE FRAME.
- 15. PROVIDE FOR ACCESS TO ALL EQUIPMENT REQUIRING CLEANING OR ADJUSTMENT.
- 16. INSTALL ALL VAV BOXES WITHIN 24" OF CEILING TO ALLOW FOR SERVICE ACCESS.

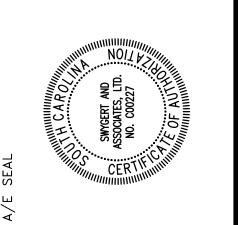
17. THIS CONTRACTOR SHALL PROVIDE ALL ITEMS OF MISCELLANEOUS STEEL AS

- REQUIRED FOR INSTALLATION OF ALL MECHANICAL ITEMS.

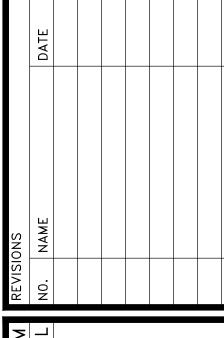
 18 THIS CONTRACTOR SHALL DO ALL CONTROL WIRING AND PROVIDE TRANSFORMER
- 18. THIS CONTRACTOR SHALL DO ALL CONTROL WIRING AND PROVIDE TRANSFORMER TO CONTROL POWER AS REQUIRED. DIVISION 16 WILL DO ALL POWER WIRING. ALL WIRING SHALL BE IN ACCORDANCE WITH NATIONAL ELECTRIC CODE. CONTROL WIRING SHALL BE CONCEALED WITHIN WALL.
- 19. LOCATE ALL SPACE CONTROL INSTRUMENTS 4'-0" ABOVE FINISHED FLOOR.
- 20. CAP PNEUMATIC LINES AS REQUIRED DURING DEMOLITION TO MAINTAIN OPERABLE SYSTEM.
- 21. CORRECT SETTINGS ON ALL BALANCING FITTINGS SHALL BE PERMANENTLY MARKED. PROVIDE ORANGE FLAGGING RIBBON ON EACH DAMPER HANDLE FOR EASY IDENTIFICATION
- 22. THIS CONTRACTOR SHALL BE RESPONSIBLE FOR ANY NECESSARY DISMANTLING OF EQUIPMENT TO BE REMOVED. ITEMS REMOVED UNDER THIS CONTRACT SHALL BECOME THE PROPERTY OF THE CONTRACTOR AND SHALL BE DISPOSED OF PROPERLY.
- 23. THE HVAC SYSTEMS SHALL NOT BE OPERATED DURING HEAVY CONSTRUCTION OPERATIONS INCLUDING MASONRY, GYPSUM BOARD SANDING, HEAVY CLEANUP ACTIVITIES, OR OTHER ACTIVITIES THAT CREATE AIRBORNE PARTICLES OR DEBRIS. ALL SYSTEMS SHALL BE CLEAN OF CONSTRUCTION DEBRIS, DUST AND DIRT AT FINAL COMPLETION. DUCT CLEANING AND UNIT/COIL CLEANING SHALL BE PERFORMED IF REQUIRED.







SWIM I EAM LOCKER RORED RENOVATIONS
University of South Carolina
Solomon Blatt Physical Education Center
1300 Wheat Street



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DETAILS, NOTES, SCHEDULES AND LEGEN

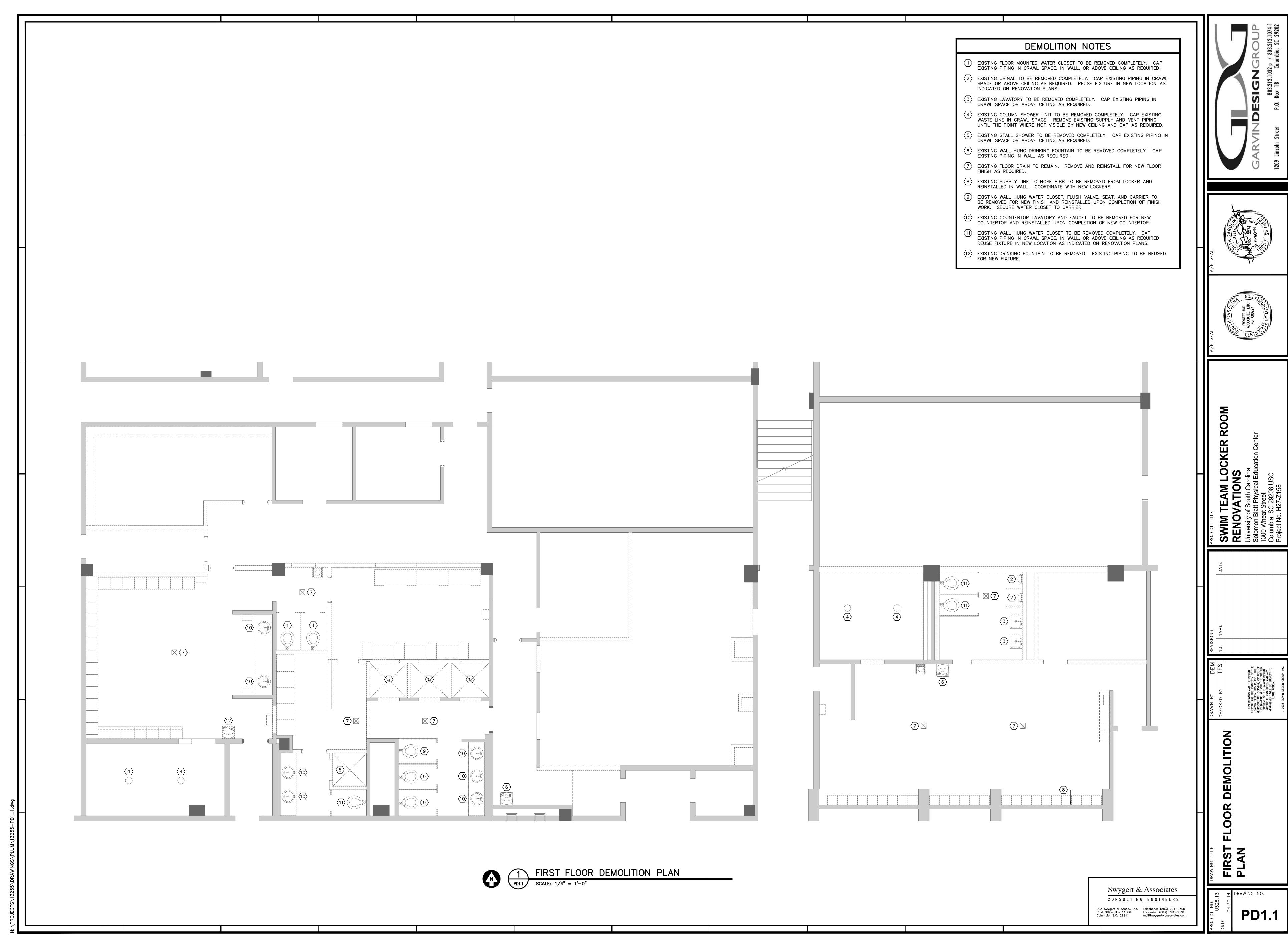
Swygert & Associates

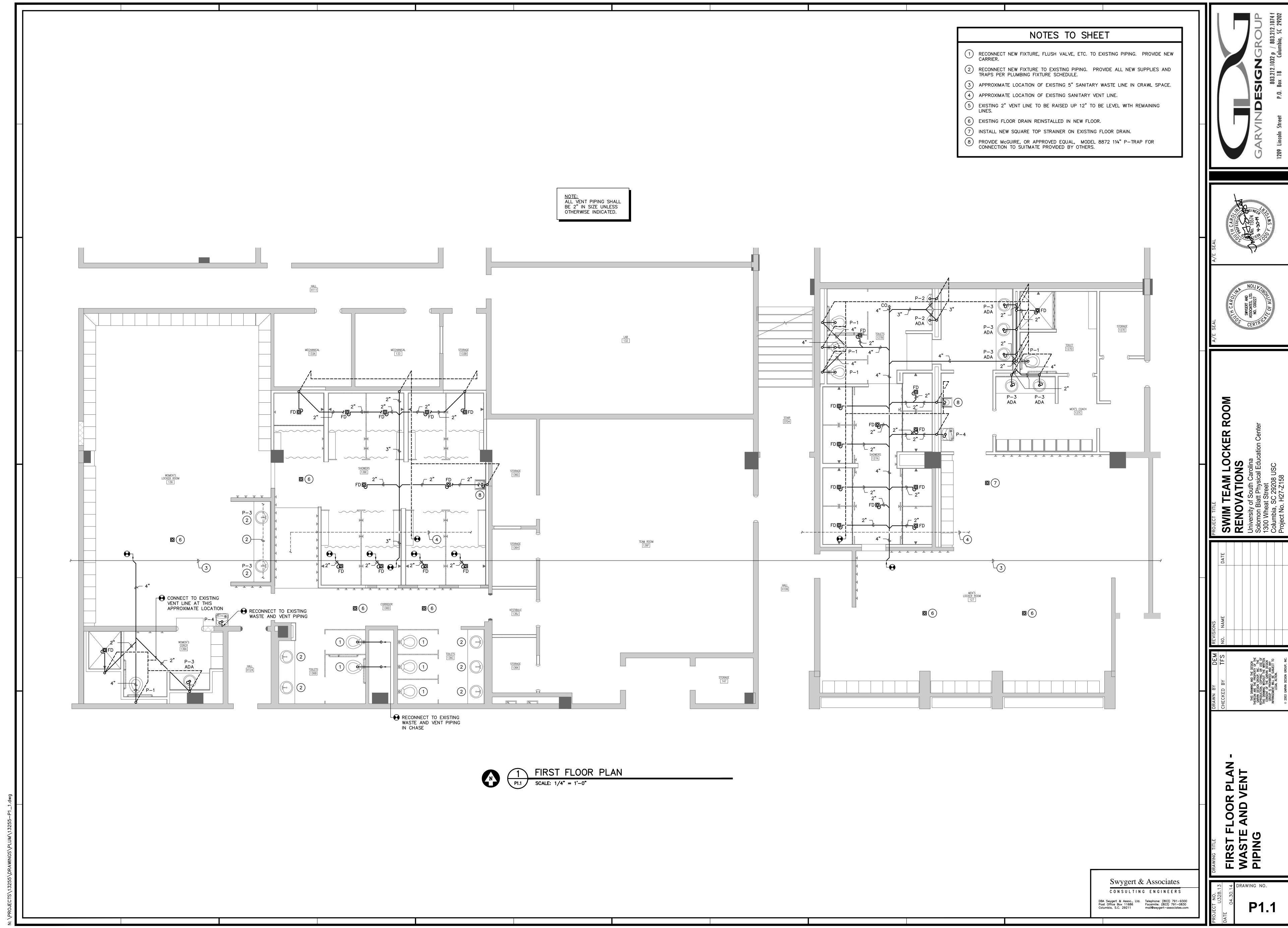
CONSULTING ENGINEERS

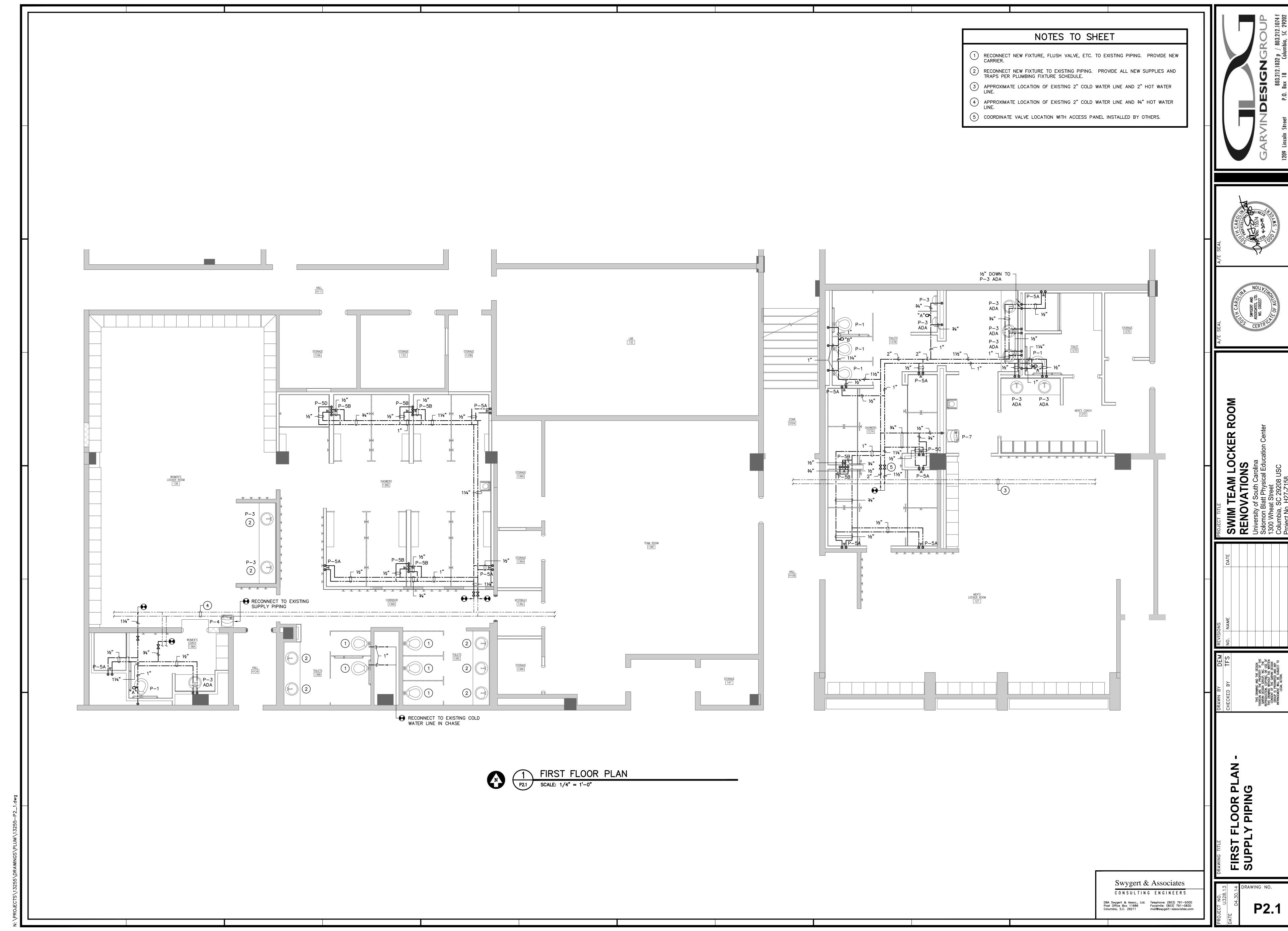
DBA Swygert & Assoc., Ltd.
Post Office Box 11686
Columbia, S.C. 29211

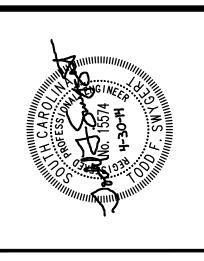
Telephone: (803) 791-9300
Facsimile: (803) 791-0830
mail@swygert-associates.com

DECT NO. 0328.13 04.30.14 04.30.14 04.30.14

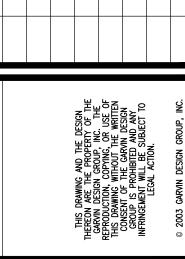










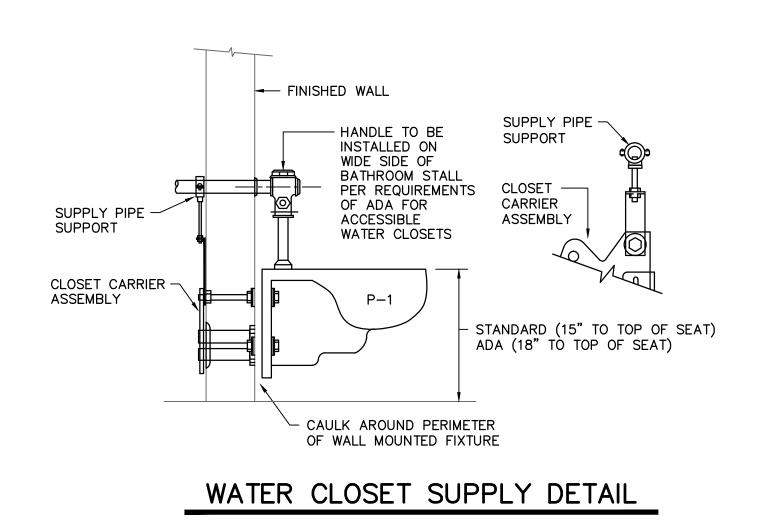


		Р	LUMBIN	G FIXTUR	RE SCHE	DUL	Ε	
						MIN. S	UPPLY	
P. NO.	FIXTURE	MFGR.	NAME	MFGRS. NO.	SIZE	CW	HW	REMARKS
P-1	WATER CLOSET	KOHLER	KINGSTON	K-4325		1"	-	WITH SLOAN MODEL 111-XL-1. FLUSH VALVE, BENEKE 527 SEAT, CHAIR CARRIER, AND BOLT CAPS.
P-2	URINAL	KOHLER	DEXTER	K-5016-ET		3/4"	1	WITH SLOAN MODEL 186-0.5- FLUSH VALVE, AND CHAIR CARRIER.
P-3	LAVATORY	KOHLER	FARMINGTON	K-2905-4	191⁄4"x161⁄4"	3/8"	3/8"	WITH DELTA MODEL 501-WFHD FAUCET, McGUIRE 155A GRID DRAIN, McGUIRE H165 3/8" CAST BRASS SUPPLIES WITH STOPS, AND McGUIRE 8872 1-1/4" P-TRAP.
P-4	ELECTRIC WATER COOLER	OASIS		P8AC				WITH STAINLESS STEEL FINISH McGUIRE H165 3/8" CAST BRASS SUPPLY WITH STOP, A McGUIRE 8872 1-1/4" P-TRA MOUNT PER ADA REQUIREMEN
P-5A	SHOWER TRIM	SYMMONS	TEMPTROL	C-96-1-295 -X		1/2"	1/2"	WITH FIXED SHOWER HEAD AN INTEGRAL STOPS.
P-5B	SHOWER TRIM	SYMMONS	TEMPTROL	C-96-1-295 -X-REV		1/2"	1/2"	WITH FIXED SHOWER HEAD, INTEGRAL STOPS, AND REVERS CORING.
P-5C	ACCESSIBLE SHOWER TRIM	SYMMONS	TEMPTROL	25-500-B30- V-X-REV		1/2"	1/2"	WITH FIXED SHOWER HEAD, HAND HELD SHOWER, AND INTEGRAL STOPS.
P-5D	ACCESSIBLE SHOWER TRIM	SYMMONS	TEMPTROL	25-500-B30- V-X-REV		1/2"	1/2"	WITH FIXED SHOWER HEAD, HAND HELD SHOWER, INTEGRA STOPS, AND REVERSE CORING
FD	FLOOR DRAIN	ZURN		ZN-415-S				WITH 6"x6" NICKLE BRONZE STRAINER AND TRAP GUARD E PROSET, OR APPROVED EQUAI

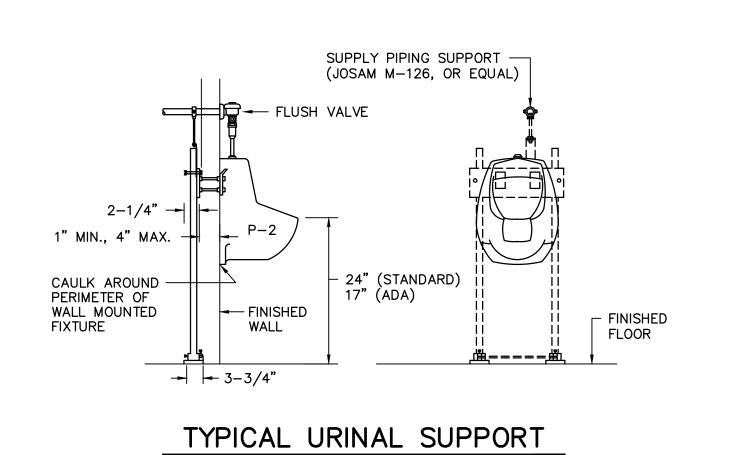
GENERAL NOTES

- ALL WORK SHALL BE PERFORMED ACCORDING TO ALL LOCAL, STATE, NATIONAL CODES, AND THE 2012 INTERNATIONAL PLUMBING CODE.
- DO NOT SCALE DRAWINGS. SEE ARCHITECTURAL DRAWINGS FOR EXACT DIMENSIONS, FIXTURE LOCATIONS, ETC.
- 3. EXCEPT WHERE PIPE SPACE IS PROVIDED OR UNLESS NOTED OTHERWISE, ALL SUPPLY, WASTE AND VENT RISERS SHALL BE RUN IN WALLS AND PARTITIONS.
- 4. COORDINATE CLOSELY WITH ALL WORK DONE UNDER OTHER DIVISIONS OF THE SPECIFICATIONS TO AVOID INTERFERENCE AND CONFLICT.
- VENTS SHALL BE COLLECTED ABOVE THE CEILING AND EXTENDED TO EXISTING VENT PIPING AS INDICATED.
- 6. ALL VALVES WITH THREADED HOSE CONNECTIONS SHALL BE EQUIPPED WITH A WATTS REGULATOR COMPANY, NO. NF8 BACK—SIPHONAGE, BACKFLOW PREVENTER.
- 7. EXPOSED WASTE AND WATER PIPING UNDER LAVATORIES MARKED "ADA" SHALL BE INSULATED WITH HANDI LAV—GUARD KIT MODEL NUMBER 102W AS MANUFACTURED BY TRUEBRO, INC., OR APPROVED EQUAL.
- 8. ALL PIPING INSULATION SHALL BE RUN CONTINUOUSLY.

	LEGEND
SYMBOL	DESCRIPTION
	SANITARY WASTE LINE
۶	SANITARY VENT LINE
~— <i>-</i> —~	DOMESTIC COLD WATER LINE
~~	DOMESTIC HOT WATER LINE
\longrightarrow	SHUTOFF VALVE
ج <u>"</u> A" و	SHOCK ARRESTOR (P.D.I. RATING OF "A")
رے ، و	PIPE TURNS TO, AWAY
← 1 CO	CLEANOUT (IN CRAWL SPACE)
FD FD	FLOOR DRAIN
ADA	FIXTURE FOR USE ACCORDING TO THE AMERICANS WITH DISABILITIES ACT
•	CONNECTION POINT OF NEW TO EXISTING

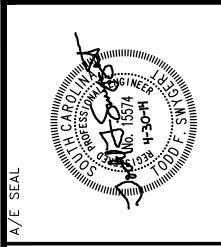


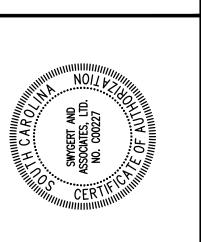
NO SCALE

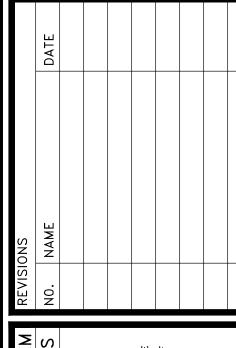


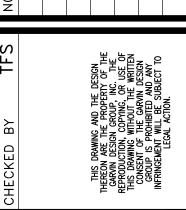
NO SCALE

Swygert & Associates CONSULTING ENGINEERS DBA Swygert & Assoc., Ltd. Telephone: (803) 791-9300 Facsimile: (803) 791-9300 Columbia, S.C. 29211 mail@swygert-associates.com





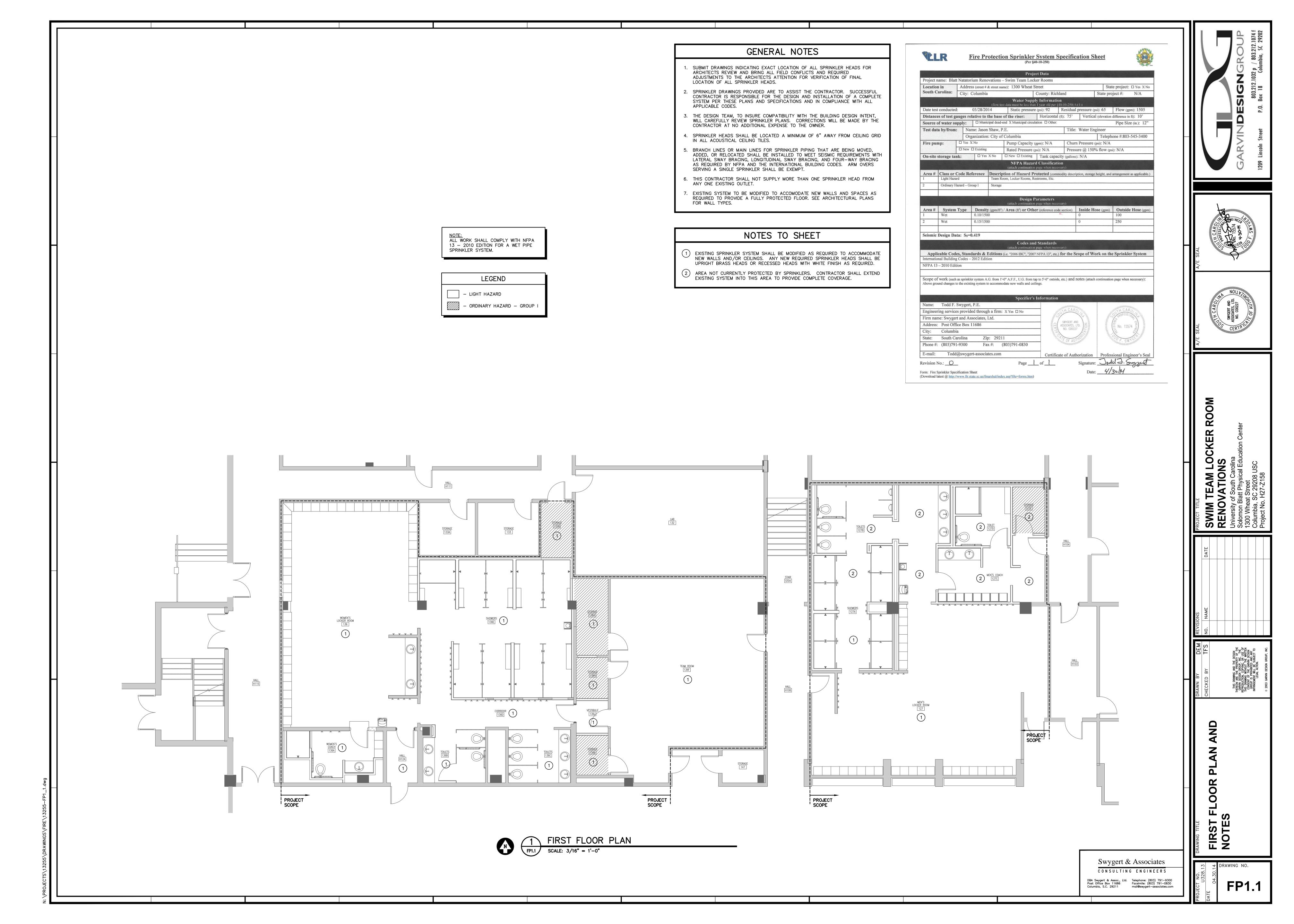


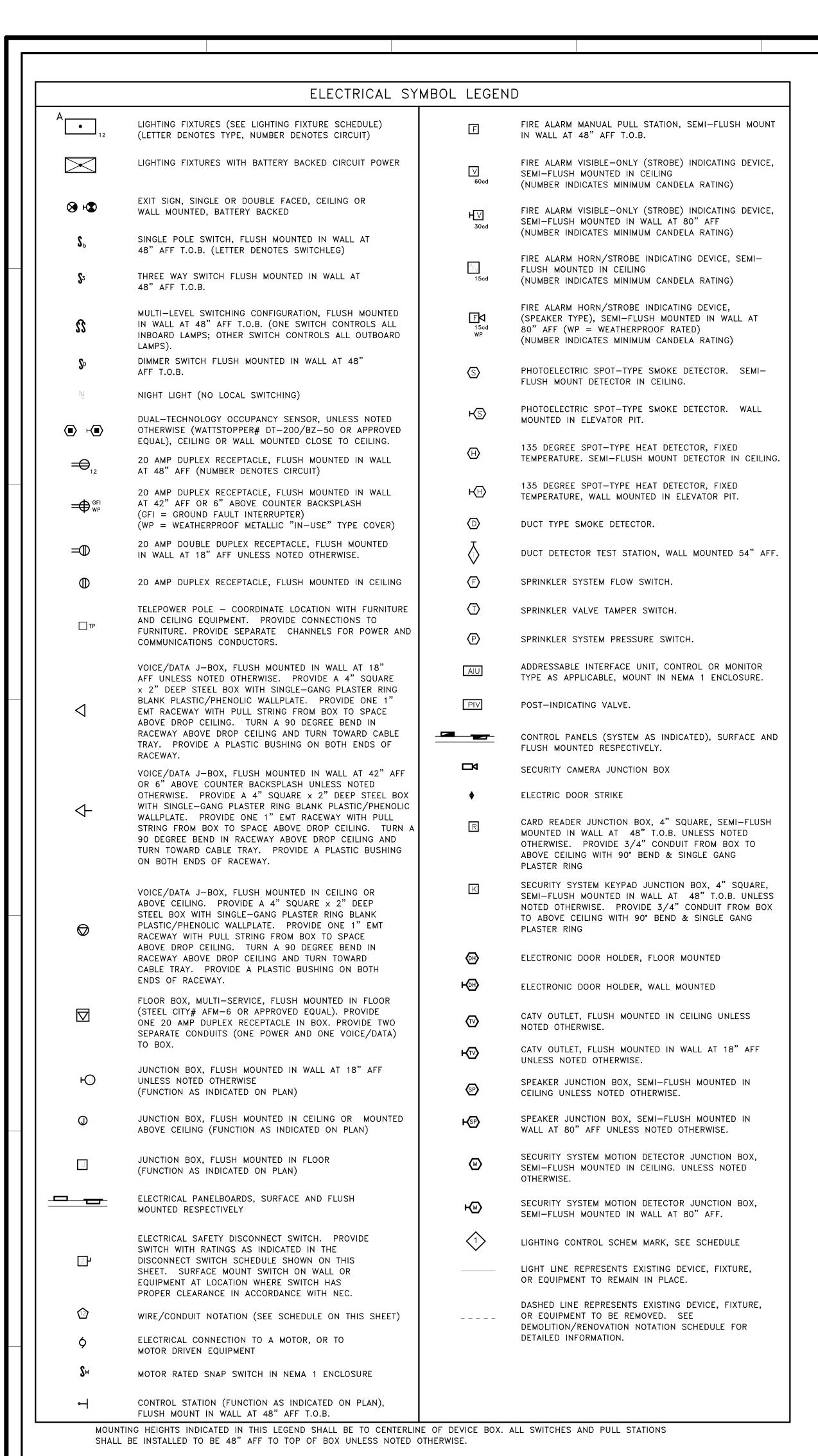


DETAILS, NOT SCHEDULE, A

DRAWING NO.

P3.1





	GENERAL NOTES
1.	EXISTING BRANCH CIRCUITS LISTED WERE TAKEN FROM AS-BUILT DOCUMENTS AND
	HAVE NOT BEEN FIELD VERIFIED. CONTRACTOR SHALL FIELD VERIFY SOURCE
2.	OF BRANCH CIRCUITS PRIOR TO WORK. ALL CIRCUITS SHALL BE 2#12, 1#12 GND.
3.	IN 3/4"C. UNLESS NOTED OTHERWISE. COMMUNICATIONS, SECURITY CAMERAS, AND
0.	ACCESS CONTROL SYSTEM RACEWAYS SHALL
	BE ROUTED FROM DEVICE LOCATIONS TO CONSOLIDATION JUNCTION BOX. SEE PLANS
4.	FOR DETAILS. ALL WORK SHALL COMPLY WITH
5.	NFPA70.2011 (NATIONAL ELECTRIC CODE). ELECTRICAL LAYOUT DRAWINGS ARE
	DIGRAMMATIC. COORDINATE ALL WORK WITH ARCHITECTURAL, CIVIL, STRUCTURAL, AND MECHANICAL CONTRACT DOCUMENTS.
6.	INSTALL THE ELECTRICAL SYSTEM WITHOUT INTERFERING WITH DUCTS, PIPES,
7.	STRUCTURAL STEEL, OR OTHER SYSTEMS. LOCATE LIGHTING FIXTURES SYMMETRICALLY
, .	IN THE PROPER RELATION TO FINISHED
	AREAS, EXCEPT WHERE DIMENSIONED ON DRAWINGS OR LOCATED ON REFLECTED CEILING PLANS.
8.	PROVIDE TWO #12 STEEL, SLACK CABLES
	TO STRUCTURE FROM EACH FIXTURE MOUNTED IN A GRID CEILING.
9.	MOUNT GROUPED DEVICES IN A SINGLE CONTINUOUS MULTI-GANG BOX.
10.	EMT FITTINGS SHALL BE OF THE
	COMPRESSION TYPE. SET SCREW OR INDENTOR TYPE FITTINGS SHALL NOT BE USED.
11.	OUTLETS WHICH OCCUR ON OPPOSITE SIDES OF A COMMON WALL SHALL BE
10	OFFSET A MINIMUM OF 12 INCHES.
12.	WALL PENETRATIONS FOR RACEWAYS SHALL BE PROVIDED BY ELECTRICAL CONTRACTOR. PROVIDE FIRESTOPPING AROUND RACEWAYS
	PENETRATING RATED WALLS PER ARCHITECTURAL DRAWINGS. PROVIDE DRAFTSTOP SEAL AT NON-RATED WALLS.

ELE	CTRICAL ABBREVIATIONS
AFF AFG AIU AL BECC BOF C DACT FAA FACP FBO GFI J-B MH MLCE NF NIC NF NI	ABOVE FINISHED FLOOR ABOVE FINISHED GRADE ADDRESSABLE INTERFACE UNIT ALUMINUM BY ELECTRICAL CONTRACTOR BY GENERAL CONTRACTOR BOTTOM OF FIXTURE CONDUIT COPPER DIGITAL ALARM COMMUNICATOR TRANSMITTER FIRE ALARM ANNUNCIATOR FIRE ALARM CONTROL PANEL FURNISHED BY OTHERS GROUND FAULT INTERRUPTER ISOLATED GROUND JUNCTION BOX MAIN BREAKER MOTOR DAMPER MOUNTING HEIGHT MAIN LUGS ONLY NOT CONCRETE ENCASED NATIONAL ELECTRICAL CODE NON-FUSIBLE NOT IN CONTRACT POST INDICATING VALVE SMOKE DAMPER SWITCH TOP OF BOX TOP OF FIXTURE UNDERCOUNTER WEATHERPROOF

	Туре				Optical			
Symbol	Mark	Description	Manufacturer	Model	Element	Mounting	Voltage	Lamps
$\overline{\cdot}$	A	2'x2' FLUORESCENT GRID TROFFER, WET LISTED	LITHONIA	WRT G317 A12125V MVOLT GEB10IS	.125 ACRYLIC LENS	GRID	277 V	3 - 17W T8 / 841
\boxtimes	AE	2'x2' FLUORESCENT GRID TROFFER, 2 LAMPS, BATT. PACK INCLUDED, WET LISTED	LITHONIA	WRT G317 A12125V MVOLT GEB10IS EL14DW	.125 ACRYLIC LENS	GRID	277 V	3 - 17W T8 / 841
•	В	1'x4' SURFACE MOUNTED FLUORESCENT FIXTURE	LITHONIA	LB 232 MVOLT GEB10IS	ACRYLIC LENS	CEILING	277 V	2 - 32W TB / 841
0	С	WET LISTED LED DOWNLIGHT	LITHONIA	DOM6 LED 600L 40K DL61	GLASS LENS	CEILING	277 V	LED (15.6W, 500 LUMENS, 840)
•	CE	WET LISTED LED DOWNLIGHT	LITHONIA	DOM6 LED 600L 40K DL61 ELRB722	GLASS LENS	CEILING	277 V	LED (15.6W, 500 LUMENS, 840)
•	D	FLUORESCENT PERIMETER SYSTEM FIXTURE	FOCAL POINT	FW3 NS 1T8 1C 277 E RC SS WH *LENGTH*	NONE	RECESSED	277 V	1 - 32W TB / 841
	F	SMALL STRUCTURAL TRUSS SYSTEM — LINEAR FLUORESCENT FIXTURE WITH NATATORIUM FINISH	SPI LIGHTING	LFL 1454	-	SUSPENDED TO 9'-6" AFF	277 V	4 - 54WT5H0 / 841
	F2	DIRECTIONAL FLOOD LIGHT SUPPORTED FROM LIGHTRUSS SYSTEM	CONTECH LIGHTING	8051 VT M 4 N-S WITH PIPE CLAMP	-	TIED TO LIGHTRUSS SYSTEM	277 V	LED (14W, 1000 LUMENS, 840)
	FE	SAME AS TYPE "F" EXCEPT WITH INTEGRAL 1400-LUMEN BATTERY PACK.	SPI LIGHTING	LFL 1454 EMI	_	SUSPENDED TO 9'-6" AFF	277 V	4 - 54WT5H0 / 841
	G4	4' WET-LISTED VANITY FIXTURE	AXIS LIGHTING	WBW S 4 T5 2 AP 277 ERS 1	SATIN LENS	WALL MOUNT ABOVE VANITY	277 V	2 - 28W T5 / 840
	G6	6' WET-LISTED VANITY FIXTURE	AXIS LIGHTING	WBW S 6 T5 2 AP 277 ERS 1	SATIN LENS	WALL MOUNT ABOVE VANITY	0 V	4 - 21W T5 / 840
	G8	8' WET-LISTED VANITY FIXTURE	AXIS LIGHTING	WBW S 8 T5 2 AP 277 ERS 1	SATIN LENS	WALL MOUNT ABOVE VANITY	0 V	4 - 28W T5 / 840
	Н	4' HORIZONTAL WALL MOUNT FIXTURE WITH NATATORIUM FINISH	SPI LIGHTING	SFWZ 1 F28 120 4' SBC 004	SATIN LENS	WALL MOUNT ABOVE VANITY	277 V	1 - 28W T5 / 840
	Х	LED EXIT SIGN WITH NICad BATT., RED LETTERS AND WHITE CANOPY, 1 FACE	LITHONIA	LQM S W 3 R 120/277 ELN	NONE	AS SHOWN	277 V	L.E.D. INCLUDED

1. VOLTAGE DIFFERS BASED ON EACH PARTICULAR SCHOOL. CONTRACTOR SHALL FIELD VERIFY SOURCE OF EXISTING LIGHTING BRANCH CIRCUITS IN SCOPE OF WORK AND DETERMINE VOLTAGE REQUIRED BASED ON FINDINGS.

2. LIGHTING FIXTURE MANUFACTURERS LISTED ARE BASIS OF DESIGN. PRIOR APPROVED EQUAL IS DEFINED TO BE A MANUFACTURER CAPABLE OF PROVIDING A FIXTURE EQUAL TO THE BASIS OF DESIGN. PRIOR APPROVED EQUAL MANUFACTURERS ARE AS LISTED BELOW:

2.1. TYPE A, AE, B: HE WILLIAMS, COLUMBIA, DAY-BRITE, METALUX. JUNO, PRESCOLITE, LIGHTOLIER, PORTFOLIO. 2.3. TYPE D: PINNACLE, PRUDENTIAL, LIGHTOLIER, NEO-RAY

3. LOCATE LIGHTING FIXTURES SYMMETRICALLY IN THE PROPER RELATION TO FINISHED AREAS, EXCEPT WHERE DIMENSIONED ON DRAWINGS OR LOCATED ON REFLECTED CEILING PLANS. COORDINATE LIGHTING FIXTURE LOCATIONS WITH EQUIPMENT IN EQUIPMENT ROOMS. NOTIFY A/E OF CONFLICTS PRIOR TO ANY ROUGH-IN INSTALLATION.

4. LIGHTING FIXTURE CATALOG NUMBERS ARE INDICATIVE OF THE STYLE OF THE FIXTURE REQUIRED. CONTRACTOR SHALL PROVIDE FIXTURES WITH THE PROPER TRIM, VOLTAGE, AND OPTIONS NECESSARY FOR

5. PROVIDE TWO #12 STEEL, SLACK CABLES TO STRUCTURE FROM EACH FIXTURE MOUNTED IN A GRID CEILING.

6. WHERE *LENGTH* IS INDICATED IN THE SCHEDULE, THE CONTRACTOR SHALL PROVIDE FIXTURE LENGTHS AS REQUIRED TO EXTEND THE ENTIRE LENGTH OF THE WALL SHOWN ON THE LIGHTING PLANS. UTILIZE THE MOST COST EFFECTIVE COMBINATION OF LENGTHS TO ACHIEVE TOTAL LENGTH.

7. FOR TYPES "F", "FE", "FB" PROVIDE ALL COMPONENTS NECESSARY TO PROVIDE A COMPLETE TRUSS SYSTEM AS SHOWN ON DRAWINGS. SUBMIT SHOP DRAWINGS FOR ENTIRE TRUSS SYSTEM FOR ARCHITECTURAL AND ENGINEERING REVIEW. COORDINATE MOUNTING HEIGHTS WITH ARCHITECT PRIOR TO INSTALLTION.

EXISTING PANEL "L2" EXISTING PANEL "H2"	
AREA OF WORK	

1	KEYPL	1A.	1
E0.1	SCALE: NOT	ТО	SCALE

 	AMPS	POLES	VOLTAGE	NEMA ENCLOSURE
_				
1	30	2	208V	1
2 3	30	2 2 3	208V	3R
	30		208V	1
4 5	30	3 3	208V	3R
5 6	60 60		208V 208V	1 3R
7	100	3 3	208V 208V	3K 1
8	100	3	208V 208V	3R
9	200		208V	1
10	200	3 3	208V	3R
11	30	3	480V	1
12	30	3	480V	3R
13	60	3 3	480V	1
14	60	3	480V	3R
15	100	3 3	480V	1
16	100		480V	3R
17	200	3	480V	1
18	200	3	480V	3R
19	400	3	480V	1
20	400	3	480V	3R

FUSIBLE UNLESS NOTED WITH "NF" (NON-FUSIBLE) DENOTES DISCONNECT SWITCH INTEGRAL WITH MECHANICAL EQUIPMENT.

ELEVATOR EQUIPMENT ROOM DISCONNECTS SHALL HAVE AUXILIARY CONTACT WITH TWO WIRE CONTROL CIRCUIT TO ELEVATOR UNIT.

DEMOLITION/RENOVATION NOTATION

- E EXISTING FIXTURE OR DEVICE TO REMAIN IN PLACE. REPLACE ANY BROKEN DEVICES OR PLATES; COLOR TO MATCH EXISTING.
- R EXISTING FIXTURE OR DEVICE TO BE REMOVED BY THE ELECTRICAL CONTRACTOR, MAINTAIN CONTINUITY OF REMAINING PORTIONS OF BRANCH
- RE EXISTING DEVICE TO BE REMOVED BY THE ELECTRICAL CONTRACTOR. EXISTING CIRCUIT SHALL BE RETAINED. PROVIDE NEW DEVICE AS SHOWN ON RENOVATION PLANS.
- RR EXISTING FIXTURE TO BE RELOCATED BY THE ELECTRICAL CONTRACTOR TO NEW LOCATION SHOWN ON RENOVATION PLAN.
- RN RELOCATED FIXTURE (NEW LOCATION)

WIRE/CONDUIT SCHEDULE					
<u> 10</u>	<u>)</u>	WIRE	CONDUIT		
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 27 28 29 31 32 33 34 35 37 37 37 37 37 37 37 37 37 37 37 37 37		2#12, 1#12 GND. 3#12, 1#12 GND. 4#12, 1#12 GND. 2#10, 1#10 GND. 3#10, 1#10 GND. 2#8, 1#10 GND. 3#8, 1#10 GND. 3#8, 1#10 GND. 3#8, 1#10 GND. 3#6, 1#8 GND. 4#6, 1#8 GND. 4#4, 1#8 GND. 3#4, 1#6 GND. 3#1, 1#6 GND. 3#1/0, 1#6 GND. 3#1/0, 1#6 GND. 3#1/0, 1#6 GND. 3#2/0, 1#6 GND. 4#1/0, 1#6 GND. 3 #2/0, 1#6 GND. 3 #3/0, 1#6 GND. 4 #2/0, 1#6 GND. 3 #4/0, 1#4 GND. 3 #4/0, 1#4 GND. 3 #3/0, 1#6 GND. 4 #3/0, 1#6 GND. 3 #4/0, 1#4 GND. 3 -250KCMII, 1#4 GND. 3 -250KCMII, 1#3 GND. 4-250KCMII, 1#3 GND. 4-350KCMII, 1#3 GND. 4-350KCMII, 1#3 GND. 4-500KCMII, 1#2 GND. 3-750KCMII, 1#2 GND. 4-750KCMII, 1#2 GND. 4-750KCMII, 1#2 GND. 4-750KCMII, 1#2 GND.	3/4" 3/4" 3/4" 3/4" 3/4" 3/4" 3/4" 1" 1" 1-1/4" 1-1/4" 1-1/2" 1-1/2" 1-1/2" 2" 2" 2" 2" 2" 2" 2" 2-1/2" 2-1/2" 2-1/2" 3" 3" 3" 4" 3-1/2" 4" 5"		

ELECTRICAL DRAWING INDEX

ALL OTHER CIRCUITS SHALL BE 2#12, 1#12 GND., 3/4"C.,

EO.1 ELECTRICAL SYMBOL LEGEND & SCHEDULES

E1.1 LIGHTING DEMOLITION PLAN

UNLESS NOTED.

E1.2 POWER/SYSTEMS DEMOLTION PLAN

E2.1 LIGHTING RENOVATION PLAN

E2.2 POWER/SYSTEMS RENOVATION PLAN

GA21404

7 CLUSTERS COURT, SUITE 201 COLUMBIA, SOUTH CAROLINA 29210 (803) 731-0650 fax (803) 731-2880 EMAIL: JAreheart@bellsouth.net

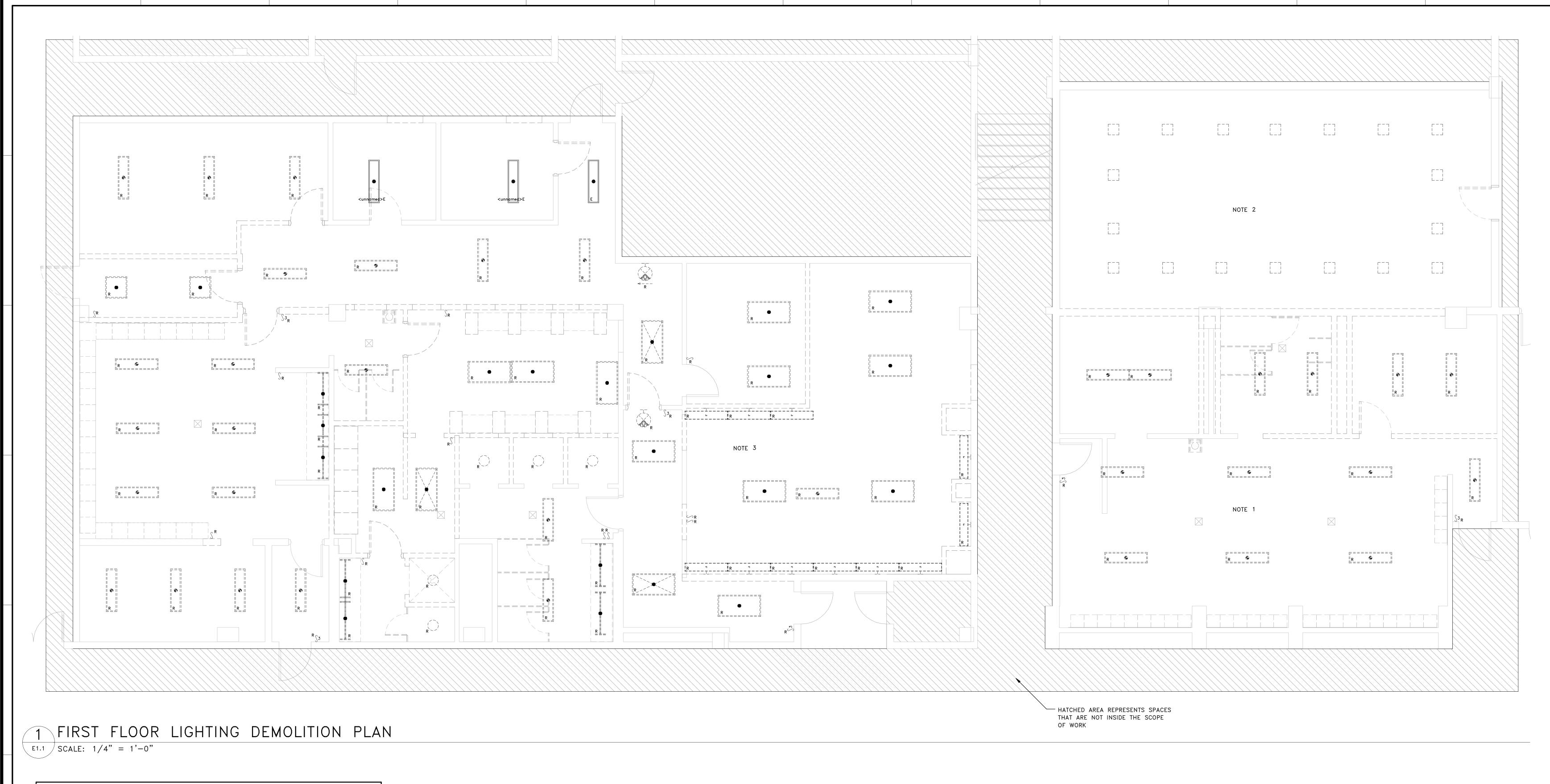
ARVINDESIGNG chitecture interiors

BELKA

ENGINEERING

ASSOC. INC.

No. C00953



LIGHTING DEMOLITION NOTES

AS-BUILT DRAWINGS INDICATE THE EXISTING LIGHTING IN THE MEN'S LOCKER ROOM IS SERVED FROM BRANCH CIRCUIT H2-3. CONTRACTOR SHALL FIELD VERIFY SOURCE PRIOR TO WORK.

AS-BUILT DRAWINGS INDICATE THE EXISTING LIGHTING IN THE RACQUETBALL COURT IS SERVED FROM BRANCH CIRCUIT H2-15. CONTRACTOR SHALL FIELD VERIFY SOURCE PRIOR TO WORK. DISCONNECT EXISTING LIGHTING FIXTURES AND REMOVE ASSOCIATED LAMPS. ABANDON FIXTURES IN PLACE. DISCONNECT AND REMOVE ALL ASSOCIATED LIGHT SWITCHES. PROVIDE BLANK COVER PLATES WHERE SWITCHES ARE REMOVED.

3 AS-BUILT DRAWINGS INDICATE THE EXISTING LIGHTING IN THE WOMEN'S LOCKER ROOM AND TEAM ROOM IS SERVED FROM BRANCH CIRCUIT H2-4. CONTRACTOR SHALL FIELD VERIFY SOURCE PRIOR TO WORK.



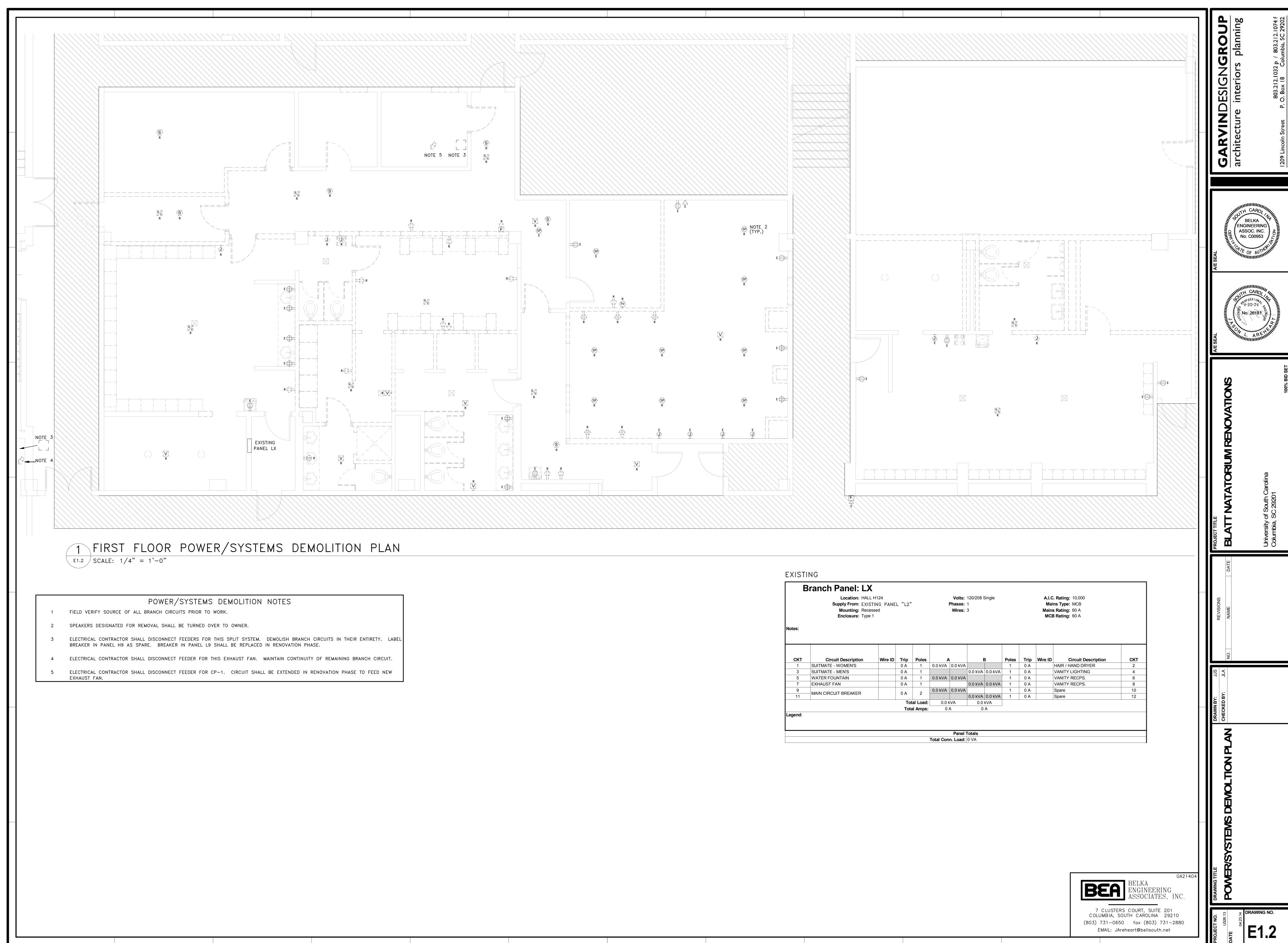
EING ES, INC.

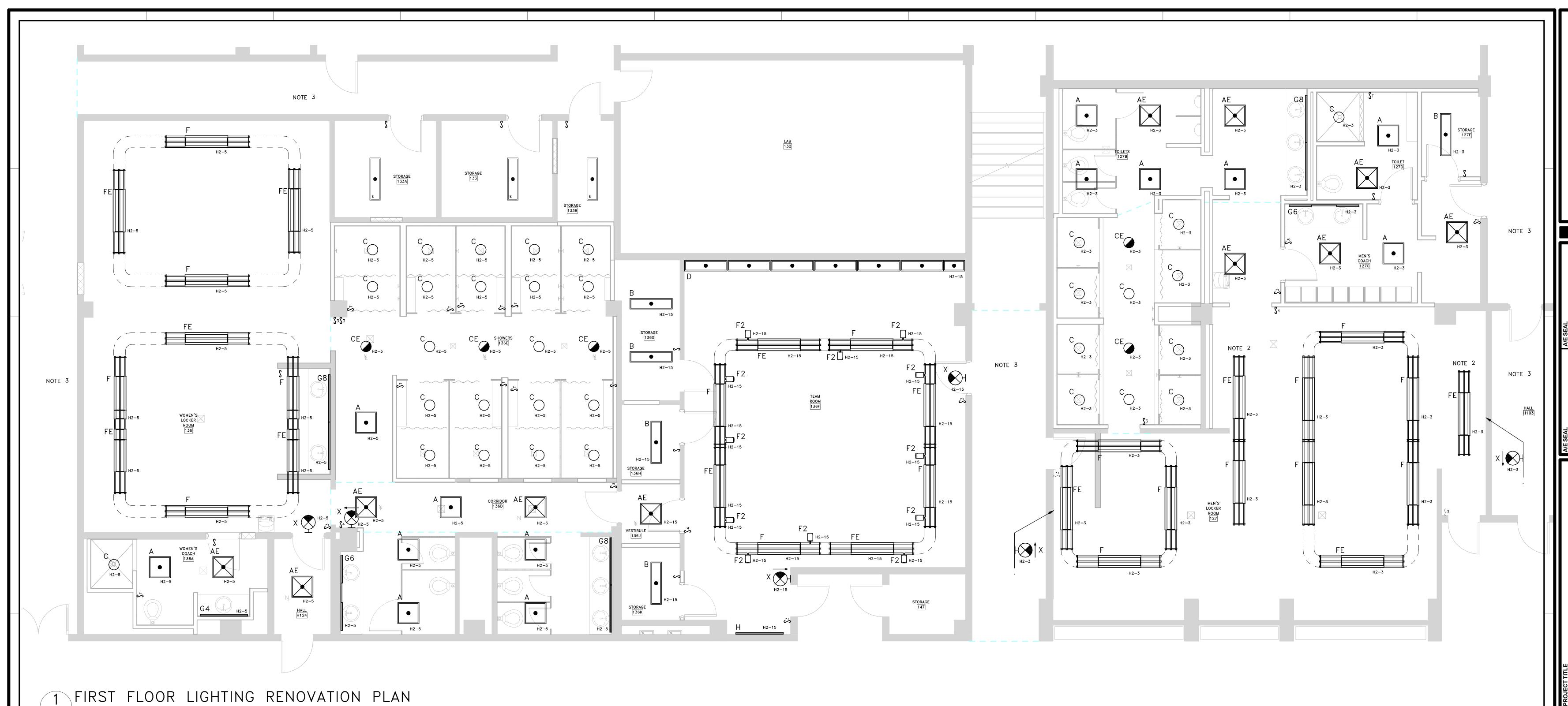
E 201 29210 731-2880 n.net

DATE

TOWNING NO.

E 1.1





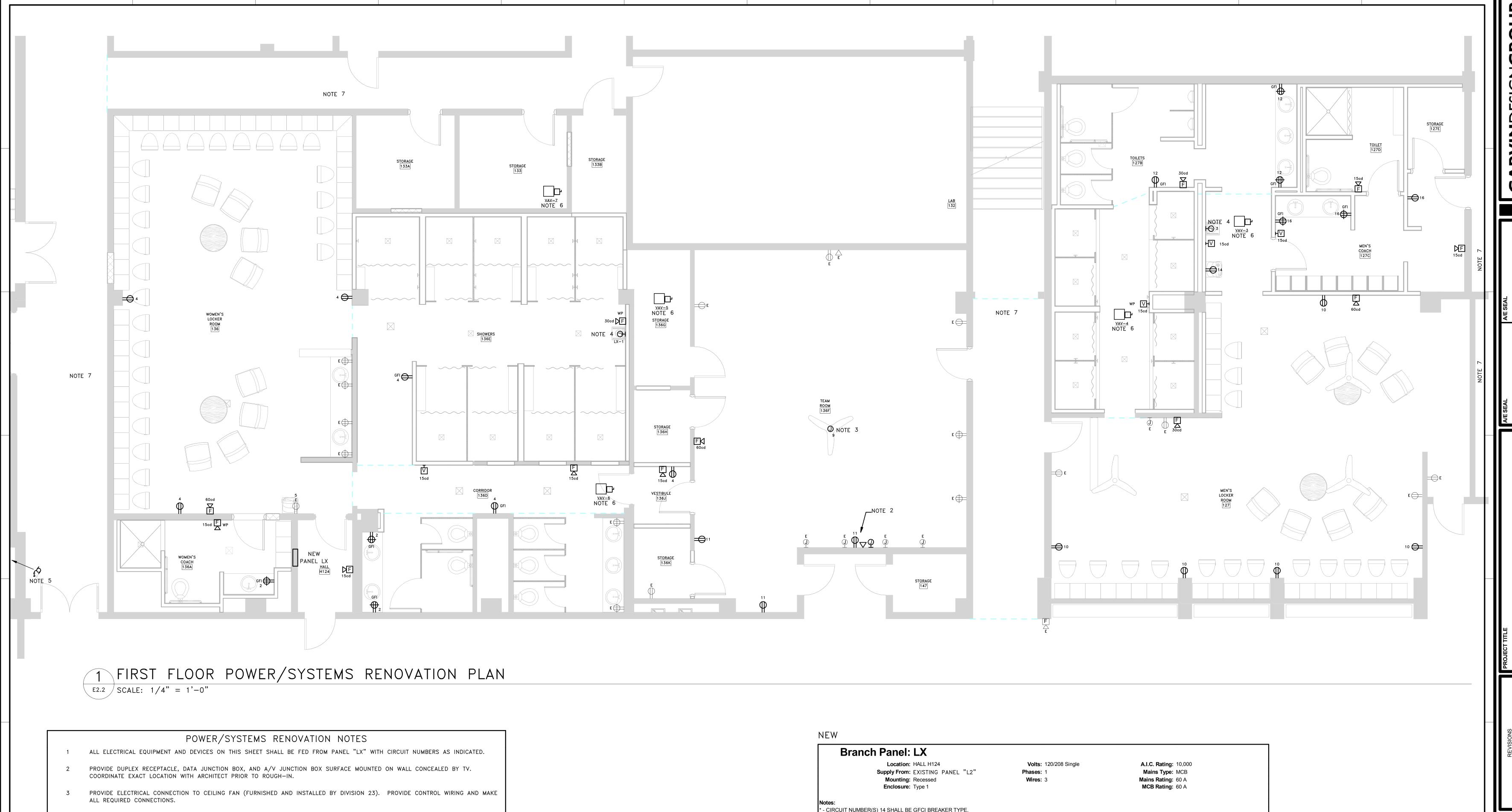
E2.1 SCALE: 1/4" = 1'-0"

LIGHTING RENOVATION NOTES

- INTENT IS FOR EXISTING LIGHTING BRANCH CIRCUIT IN EACH SPACE TO BE USED FOR NEW LIGHTING SYSTEMS. FIELD VERIFY SOURCE OF EACH BRANCH CIRCUIT PRIOR TO WORK.
- INVERT TYPE "F" FIXTURES REFERENCED TO THIS NOTE SUCH THAT FIXTURES' LENS ARE DOWN. ALL OTHER TYPE "F" FIXTURES SHALL BE ORIENTED FOR INDIRECT TYPE LIGHTING.
- CEILING IN THIS AREA SHALL BE REMOVED TO ACCOMODATE DIVISION 23 WORK. PROTECT ALL EXISTING LIGHTING FIXTURES, FIRE ALARM DEVICES, AND ANY OTHER ELECTRICAL SYSTEMS FROM DAMAGE DURING WORK. TEMPORARILY DISCONNECT AND REMOVE EXISTING LIGHTING FIXTURES AND OTHER CEILING MOUNTED EQUIPMENT DURING MECHANICAL WORK AND RE-INSTALL ONCE DUCT WORK IS COMPLETE.



DRAWING NO. E23.1



4 PROVIDE HARDWIRED CONNECTION TO EXISTING RELOCATED SUITMATE EQUIPMENT PER MANUFACTURER'S INSTRUCTIONS.

5 EXTEND CIRCUIT THAT PREVIOUSLY FED CP-1 TO NEW EXHAUST FAN LOCATION.

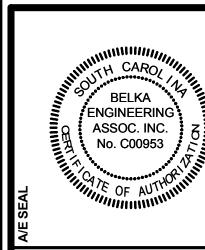
6 CONTRACTOR SHALL PROVIDE TWO 20 AMP SINGLE POLE BREAKERS IN THE PLACE OF THE 20 AMP TWO POLE BREAKER WHICH PREVIOUSLY FED AH—1. LABEL ONE BREAKER AS A SPARE. THE OTHER BREAKER SHALL FEED NEW VAVS.

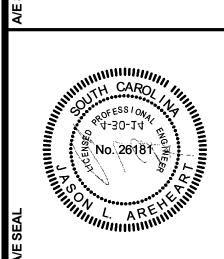
7 CEILING IN THIS AREA SHALL BE REMOVED TO ACCOMODATE DIVISION 23 WORK. PROTECT ALL EXISTING LIGHTING FIXTURES, FIRE ALARM DEVICES, AND ANY OTHER ELECTRICAL SYSTEMS FROM DAMAGE DURING WORK. TEMPORARILY DISCONNECT AND REMOVE EXISTING LIGHTING FIXTURES AND OTHER CEILING MOUNTED EQUIPMENT DURING MECHANICAL WORK AND RE—INSTALL ONCE DUCT WORK IS

* - CIRCUIT NUMBER(S) 14 SHALL BE GFCI BREAKER TYPE. Circuit Description SUITMATE - WOMEN'S 20 A 1 1.4 kVA 0.6 kVA RECPS. - WOMEN'S 1.4 kVA | 1.2 kVA | 1 | 20 A 3 SUITMATE - MEN'S RECPS. - WOMEN'S 0.2 kVA | 0.4 kVA | WATER FOUNTAIN VANITY RECPS. - WOMEN'S EXHAUST FAN 0.0 kVA | 0.4 kVA | 1 | 20 A 9 CEILING FAN 20 A 1 1.0 kVA 1.0 kVA 0.6 kVA | 0.6 kVA | 1 | 20 A RECPS. / TV 20 A 1 0.0 kVA 0.2 kVA EWC - GFI BREAKER * Spare 20 A 1 0.0 kVA 0.6 kVA 1 20 A 15 Spare 17 Spare VANITY RECPS. - MEN'S COACH 20 A 1 0.0 kVA 0.0 kVA 1 20 A Total Load: 4.8 kVA 4.8 kVA Total Amps: 46 A Panel Totals Total Conn. Load: 9600 VA



GARVINDESIGNGI architecture interiors p





BLATT NATATORIUM RENOVATION
University of South Carolina

CHECKED BY: JLA NO.

POWER/SYSTEMS RENOVATION
PLAN

E28.13

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PAGE

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PAGE

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