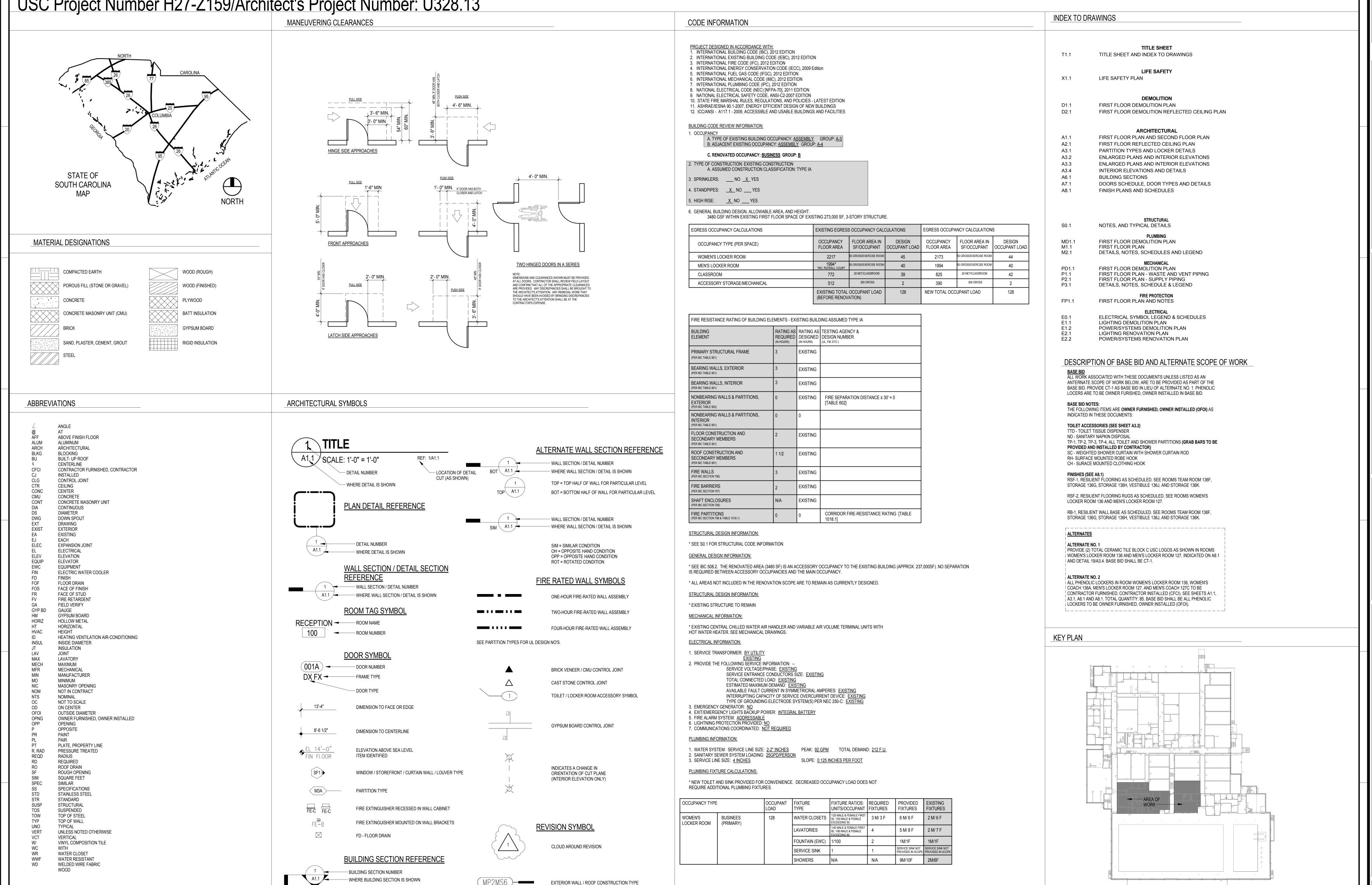
UNIVERSITY OF SOUTH CAROLINA SWIM TEAM LOCKER ROOM RENOVATIONS - REBID

Solomon Blatt Physical Education Center 1300 Wheat Street

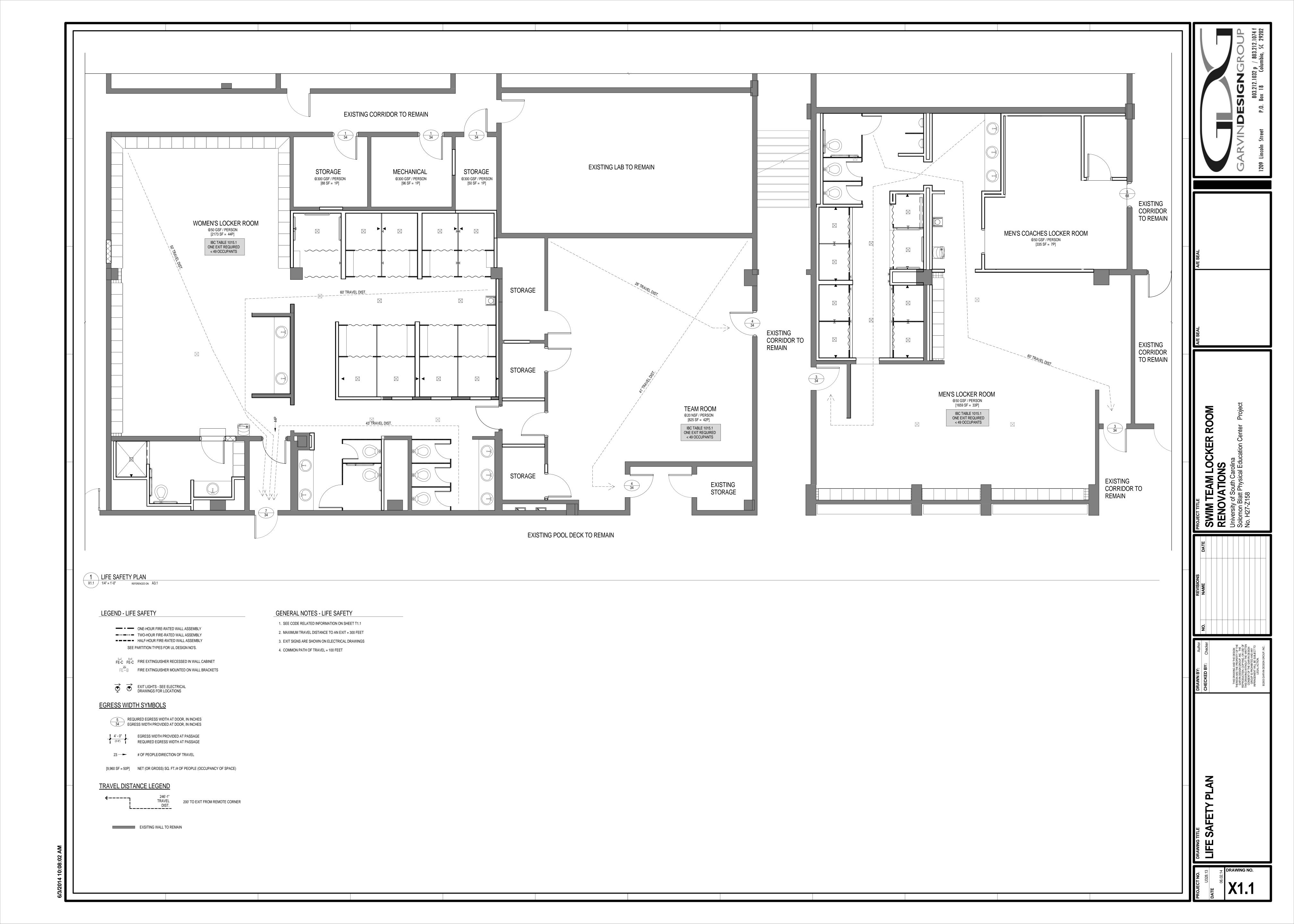
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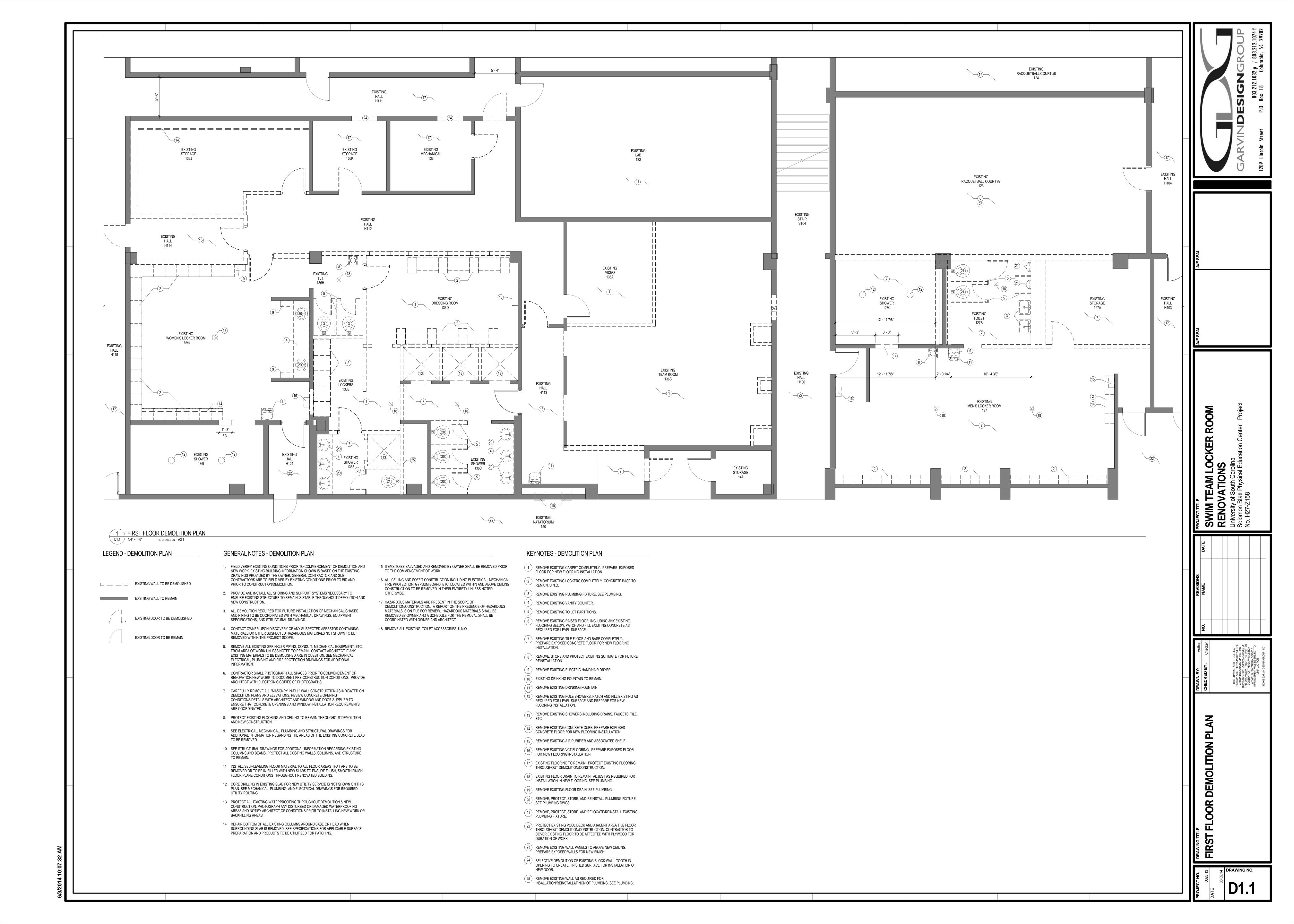
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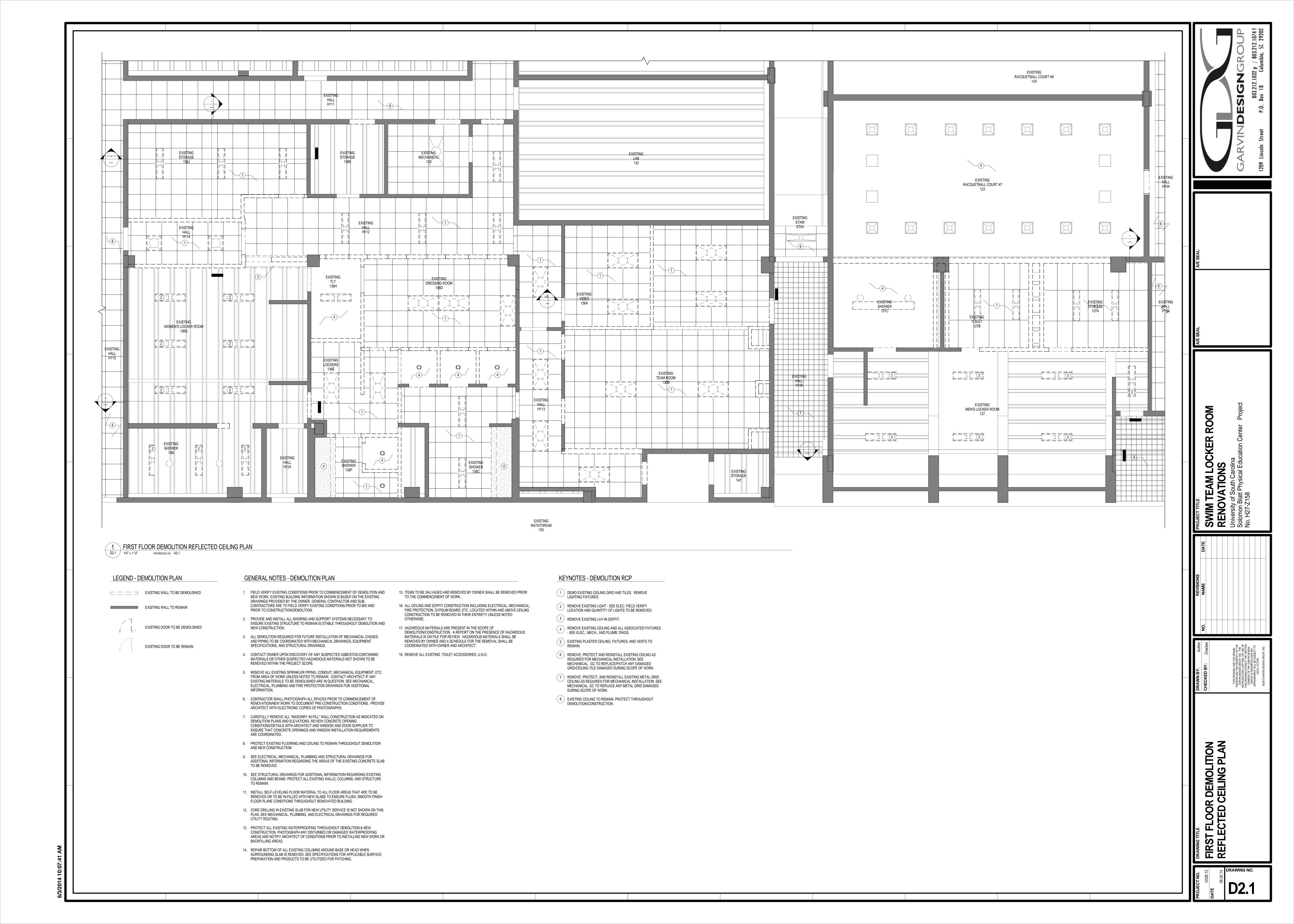
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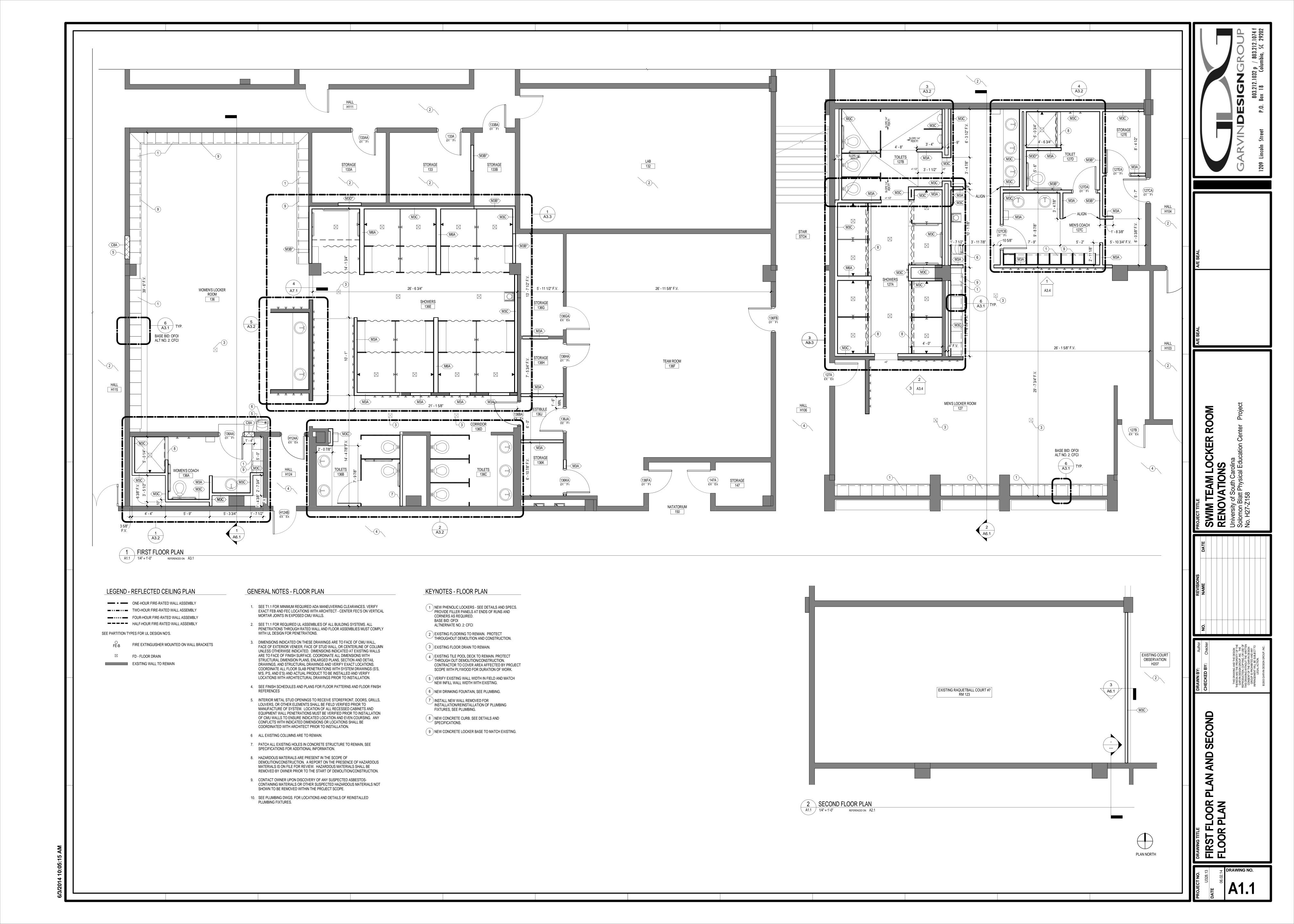


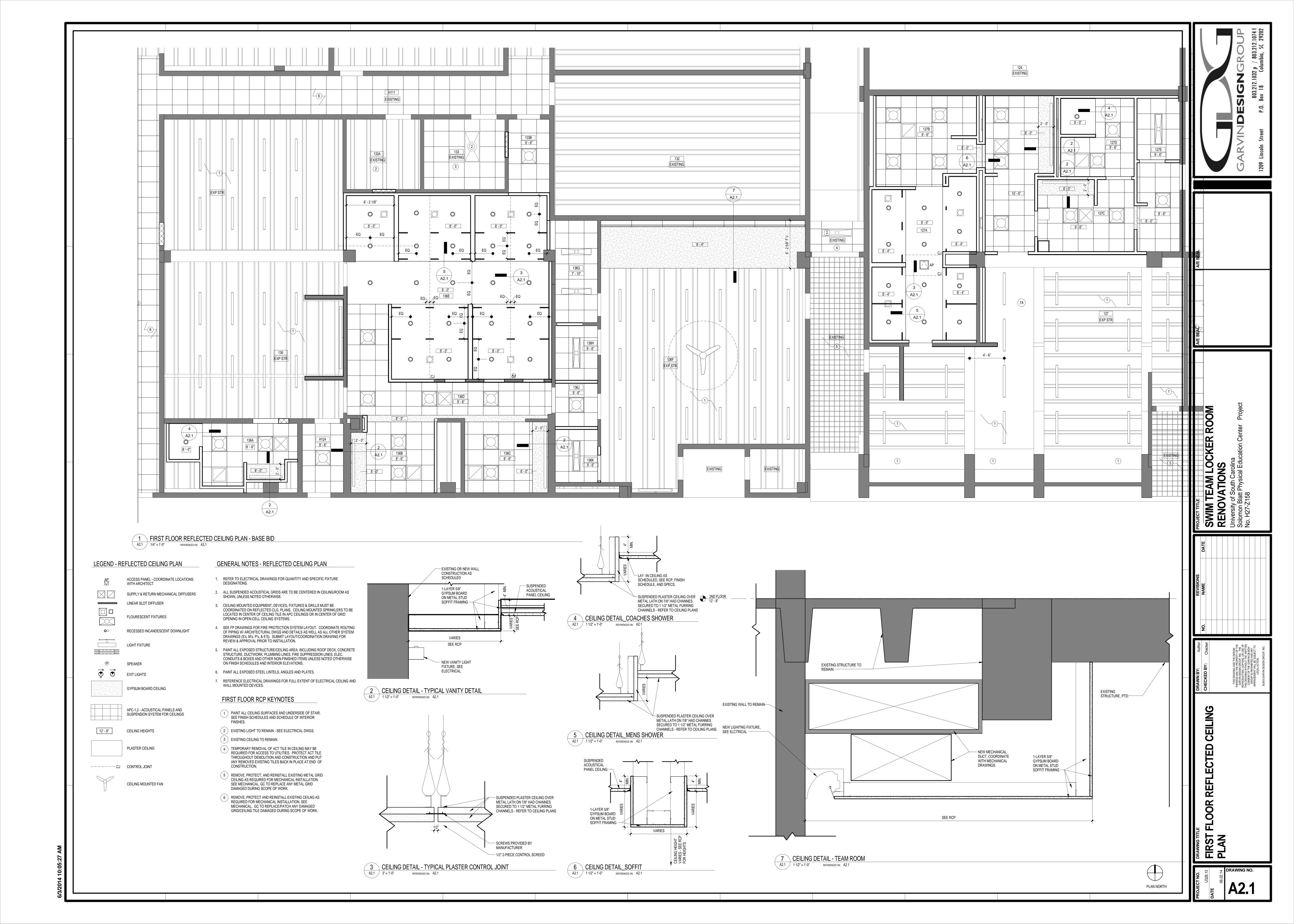


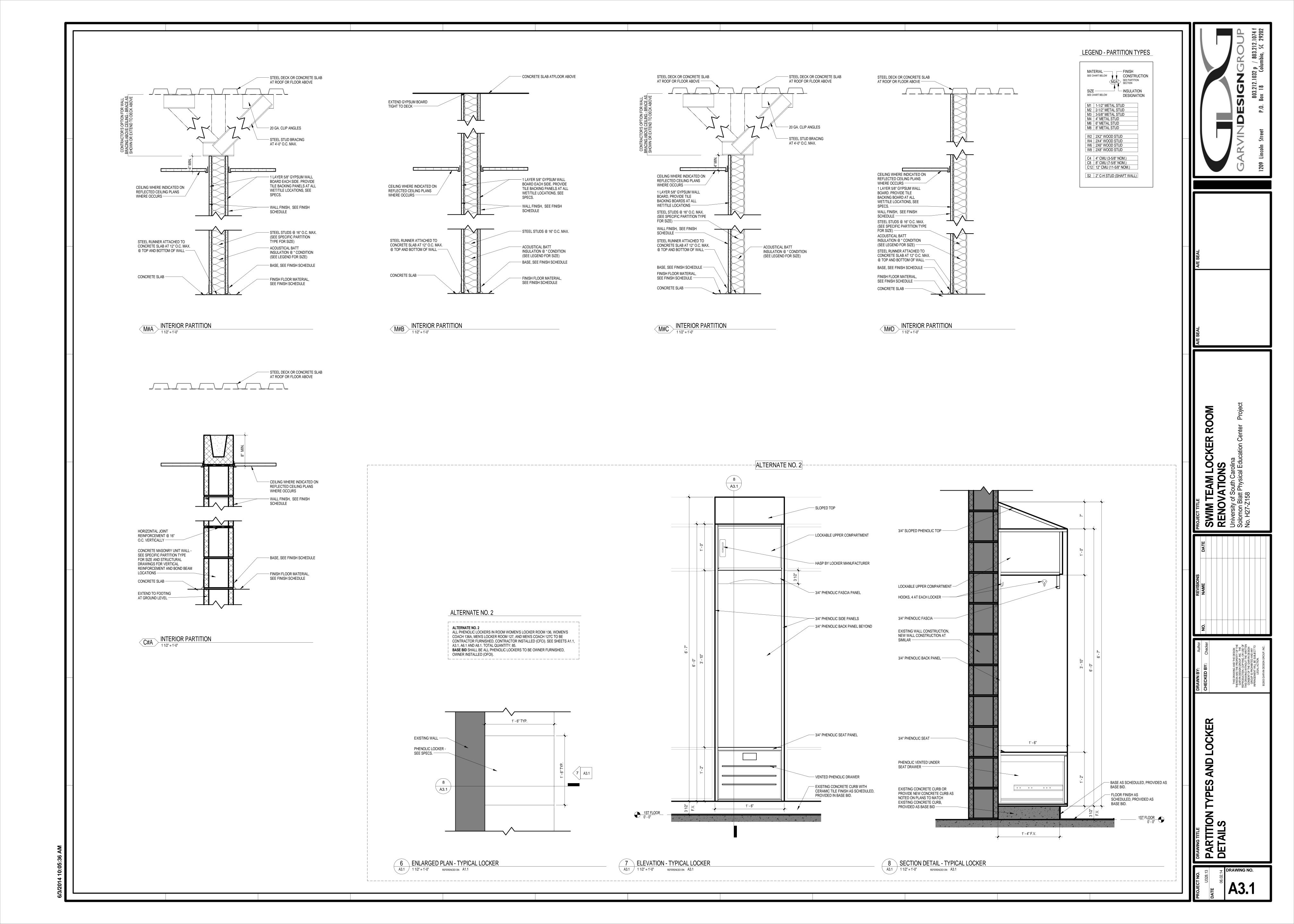


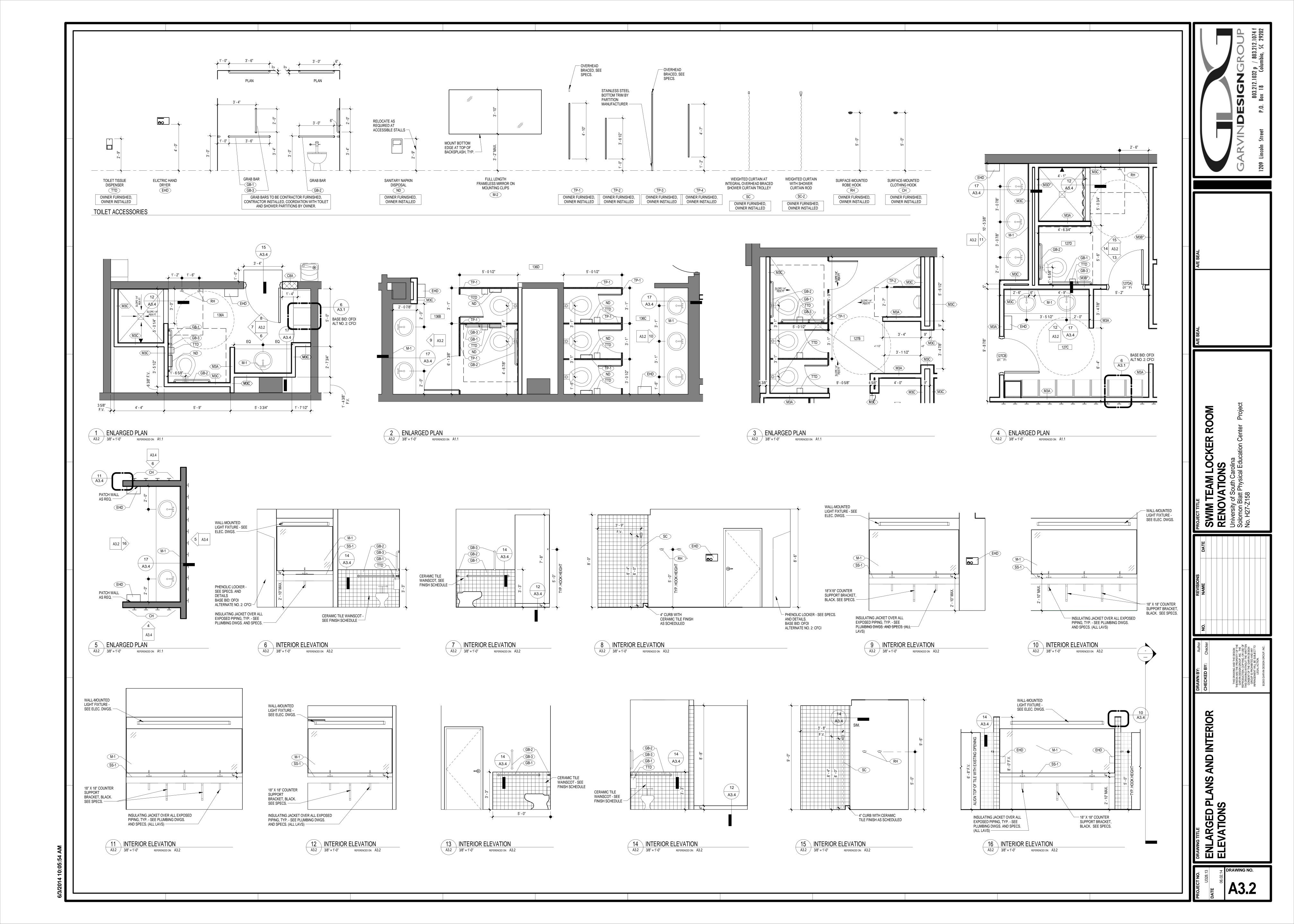


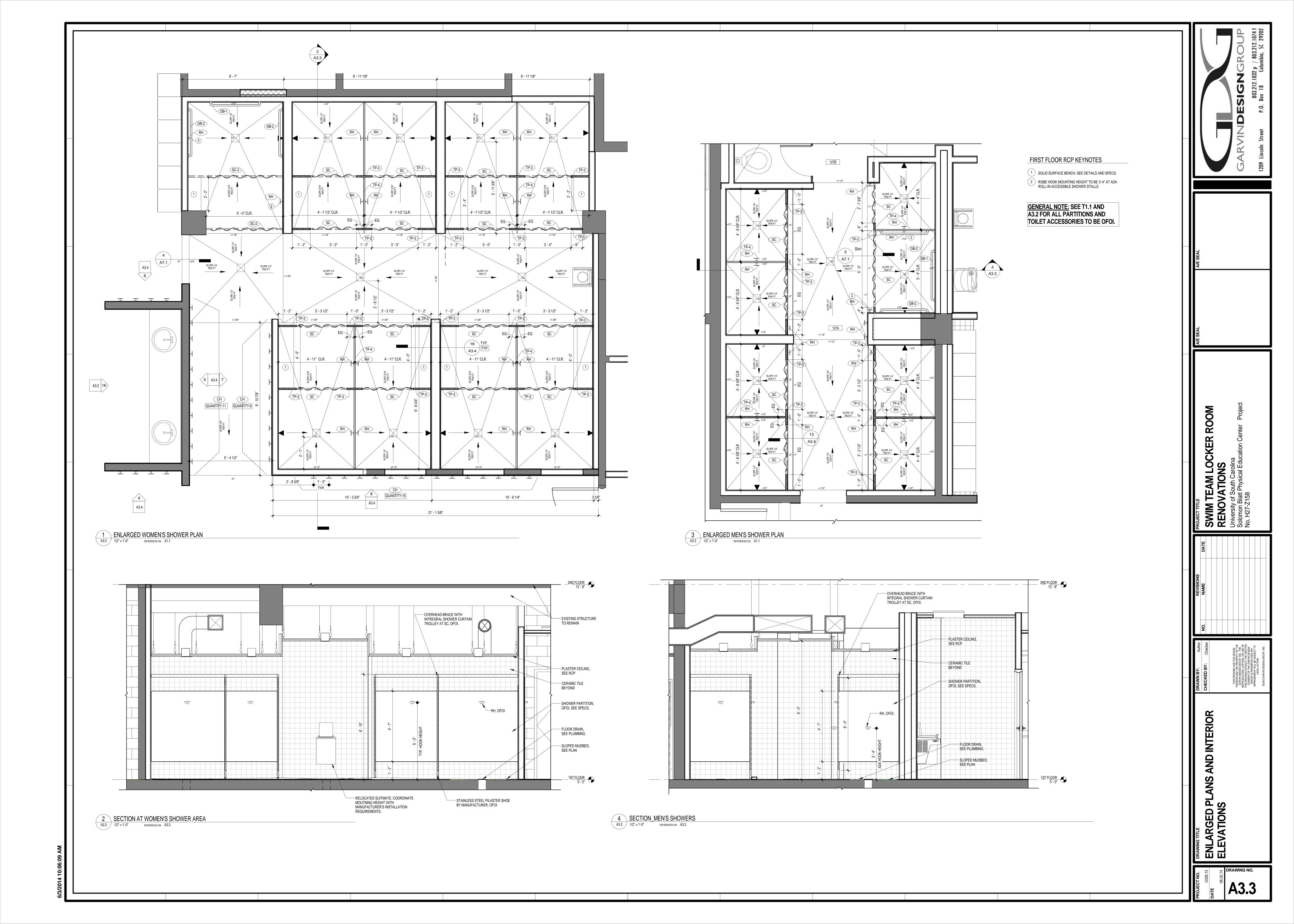


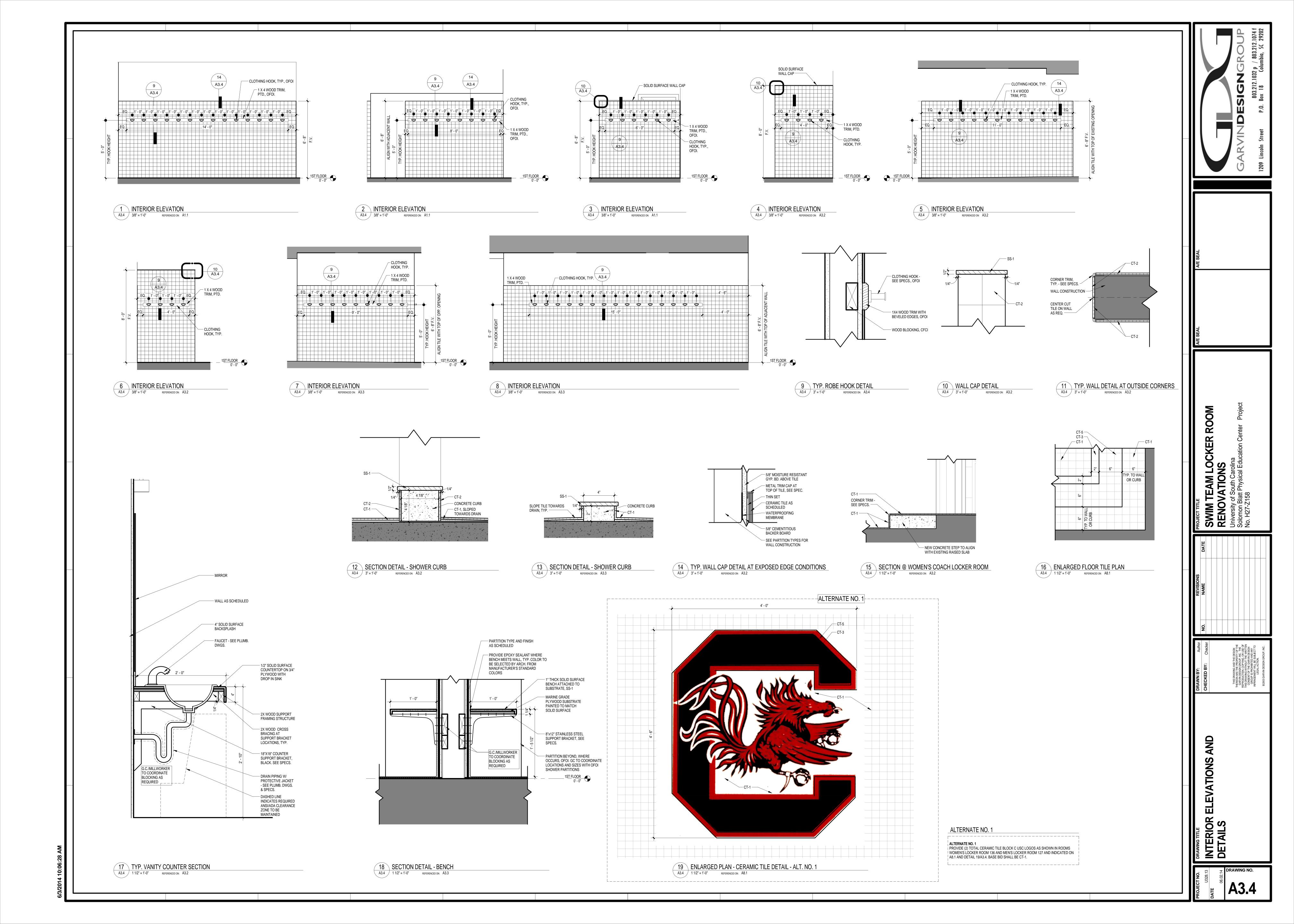


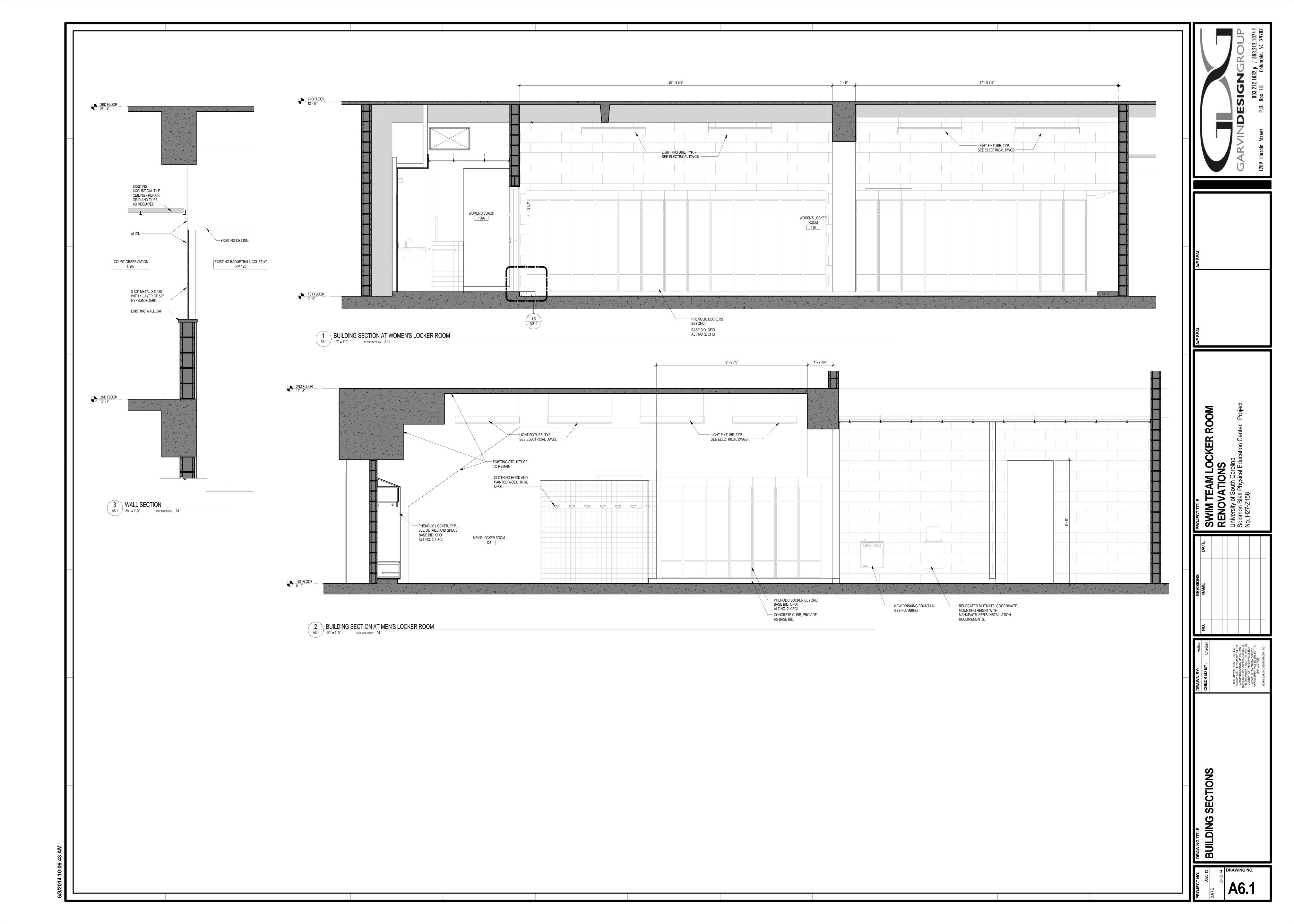


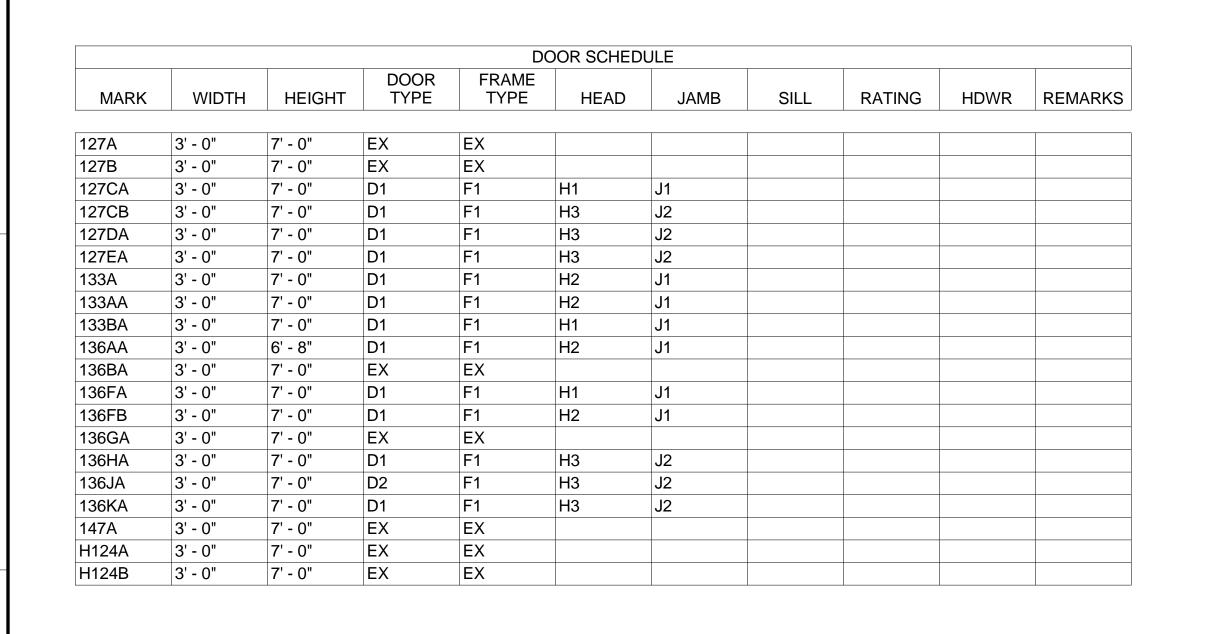


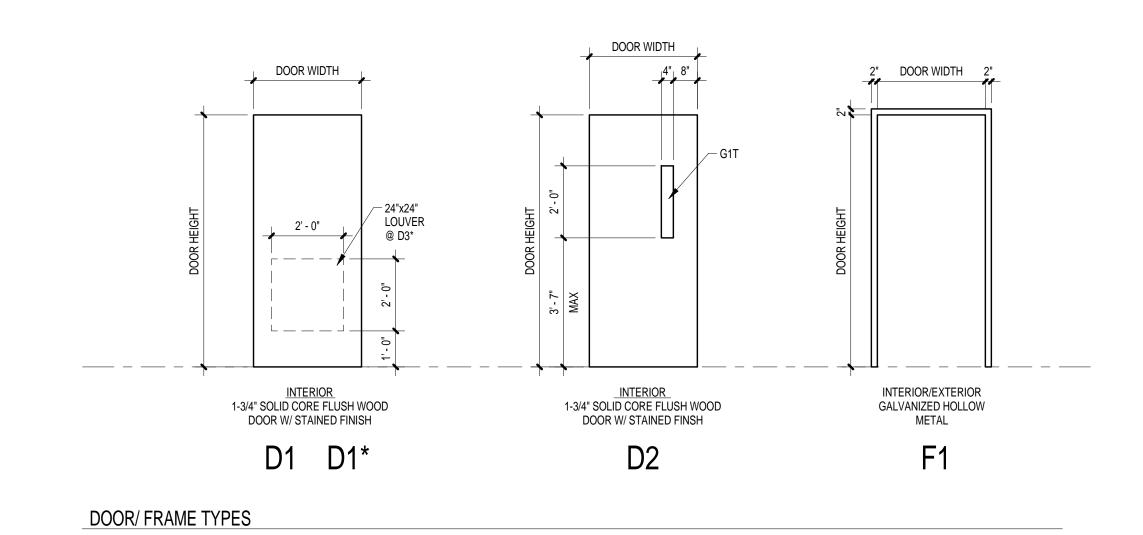


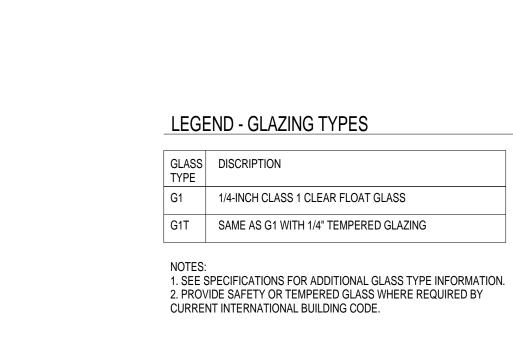


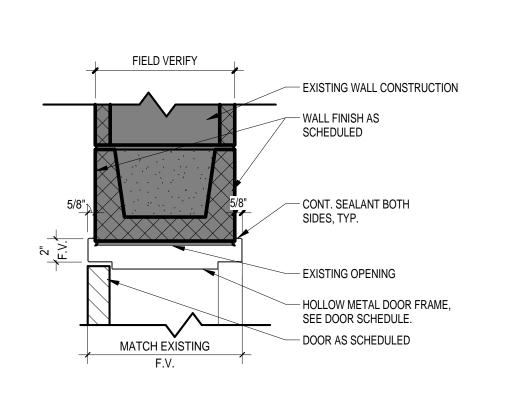


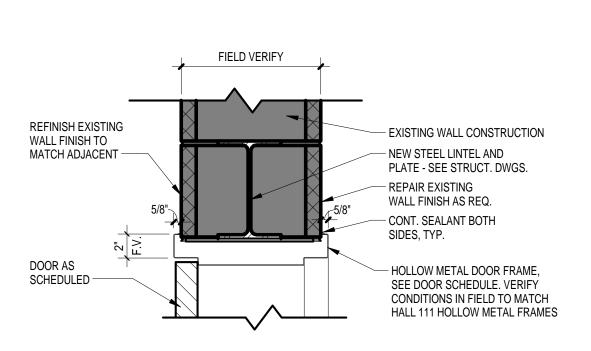


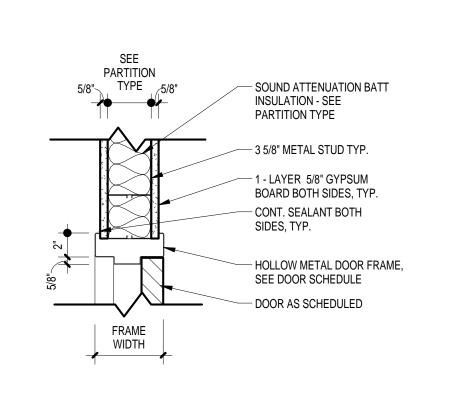


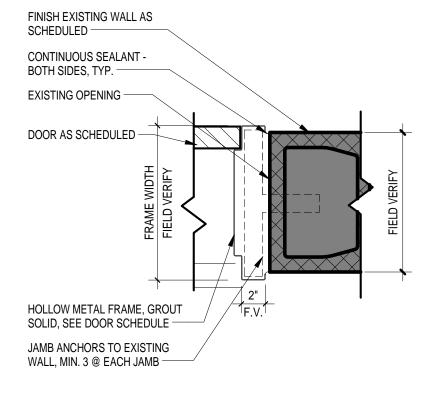


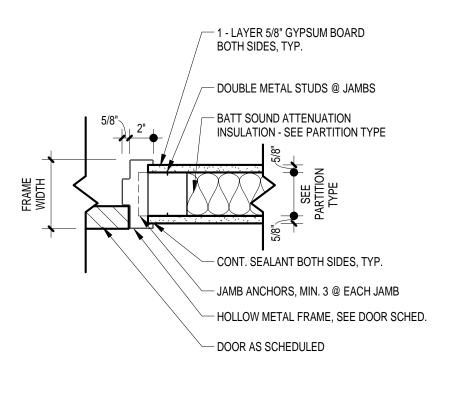












H1	HEAD SE	CTION DETAIL	
A7.1	1 1/2" = 1'-0"	REFERENCED ON:	

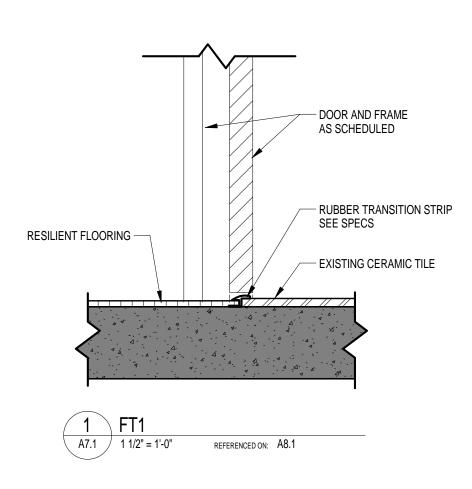
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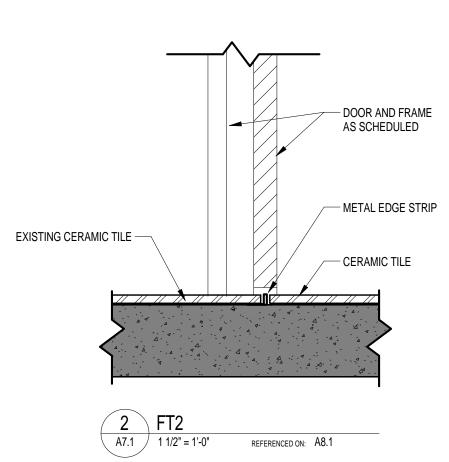
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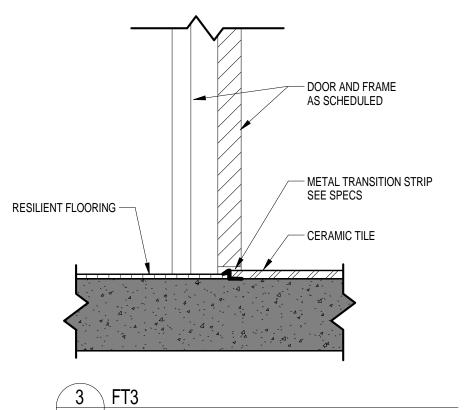
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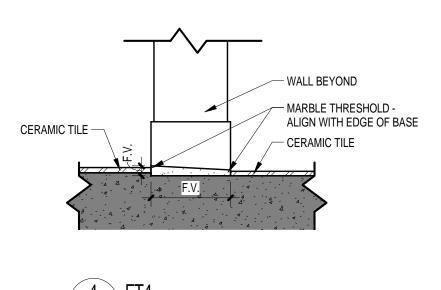
J1 JAMB PLAN DETAIL
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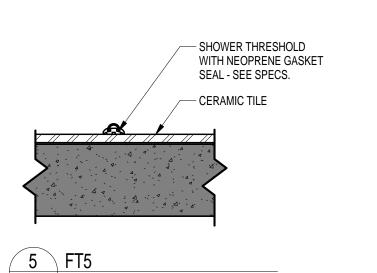
J2 JAMB PLAN DETAIL
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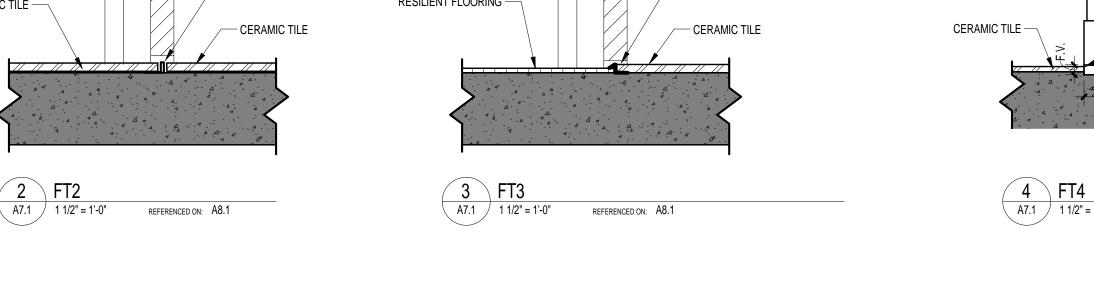


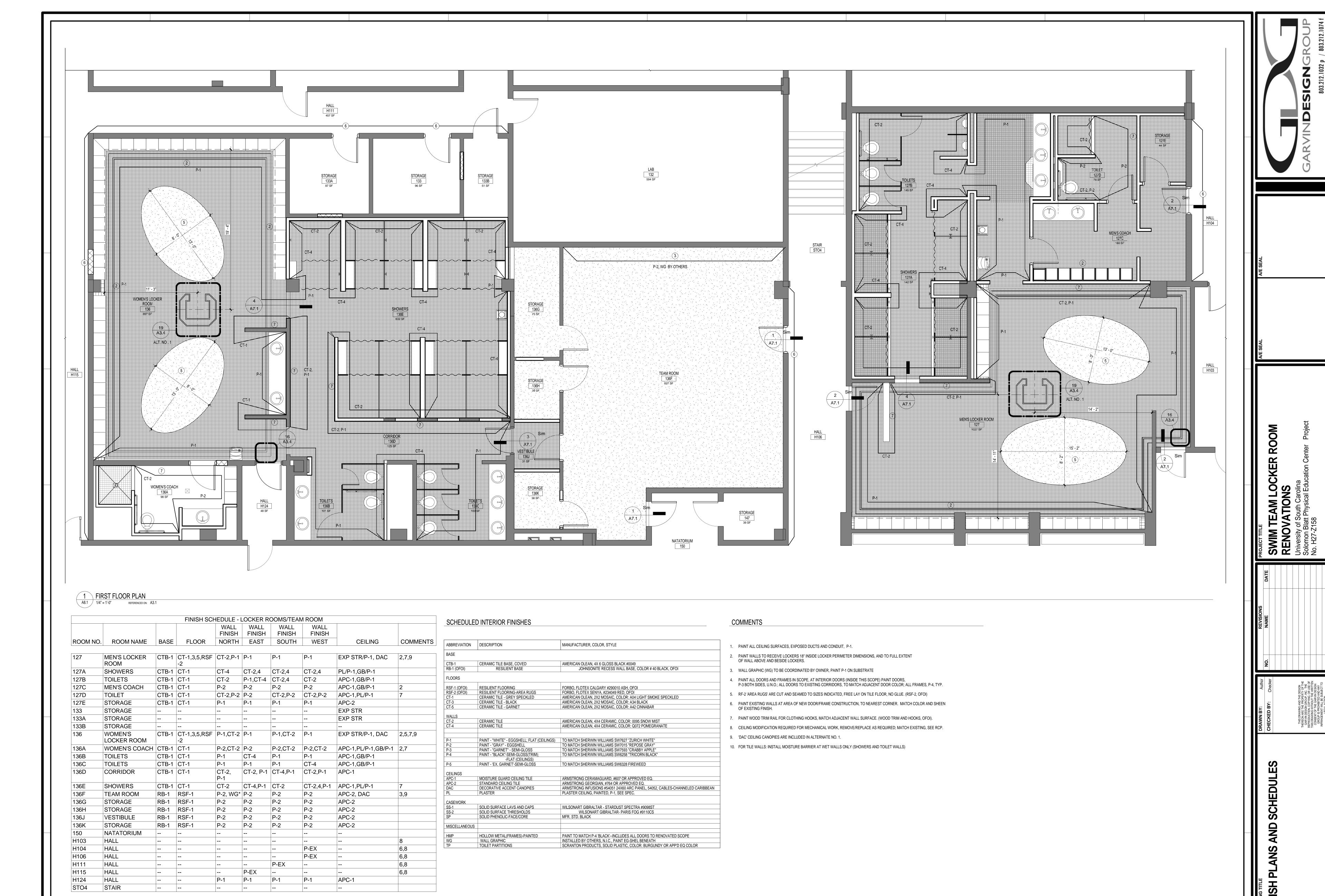










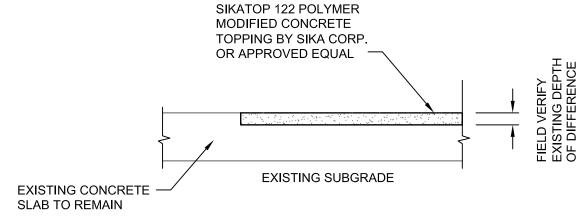


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A8.1

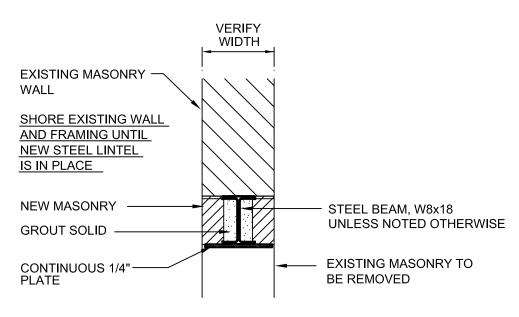
GENERAL NOTES:

- 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

EXISTING MASONRY WALL -- #5's @ 24" O.C., REMOVE SECTION OF BLOCK ---EPOXY/GROUT INTO TO ALLOW FOR PLACEMENT **EXISTING WALL** OF CONCRETE. PATCH BACK MINIMUM OF 6" WITH CMU TO MATCH EXISTING INFILL WITH MASONRY TO — #5's @ 24" O.C. MATCH WIDTH AND —— GENERAL APPEARANCE EPOXY GROUT VERTICAL BARS TO EXISTING SLAB WITH 2" EMBEDMENT EXISTING SLAB

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

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

- VERIFY HEIGHT WITH ARCH DWGS BOND BEAM AT TOP OF WALL WITH (1) #5, GROUT SOLID - MINIMUM 6" MASONRY WALL CMU PARTITIONS, SEE -ARCH DRAWINGS FOR EXTENT AND LOCATIONS — #5's @ 32" O.C. EPOXY GROUT VERTICAL BARS TO EXISTING SLAB WITH 2" EMBEDMENT EXISTING SLAB

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

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

SWIM TEAM LOCKER F
RENOVATIONS
University of South Carolina
Solomon Blatt Physical Education

ENGINEERING

ASSOCIATES, INC

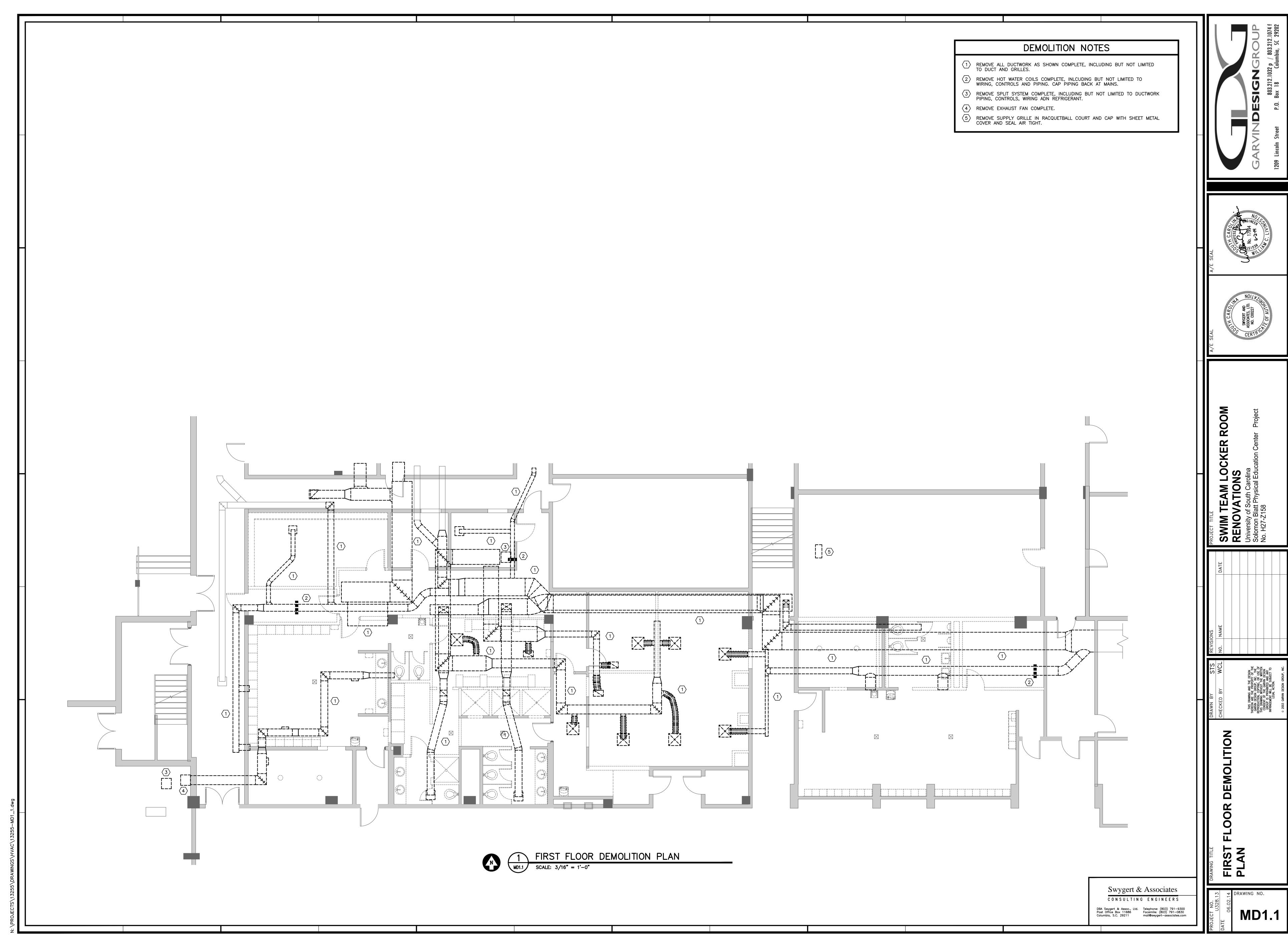
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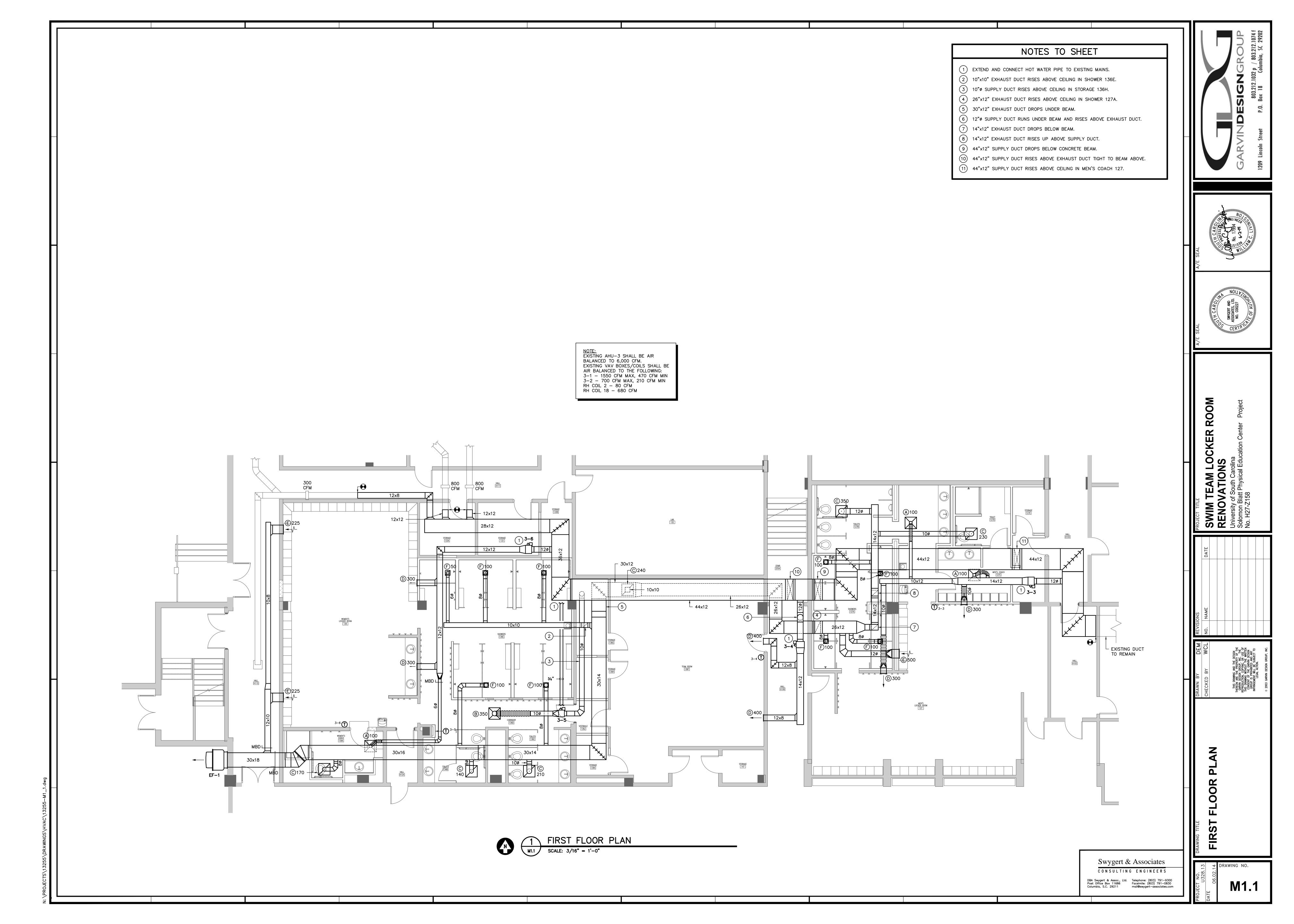
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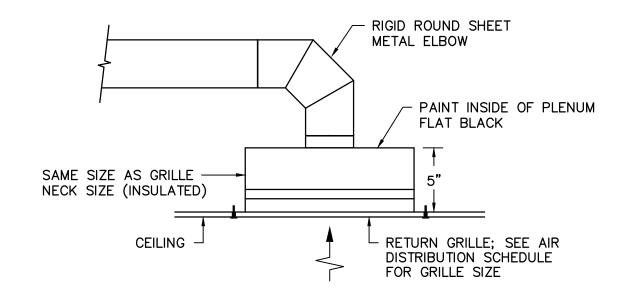
840 Shull Street
Suite 100 West Columbia, SC 29169 (803) 926-0000 FAX (803) 926-7600 MEAI# 14-759

StructuralEngineers



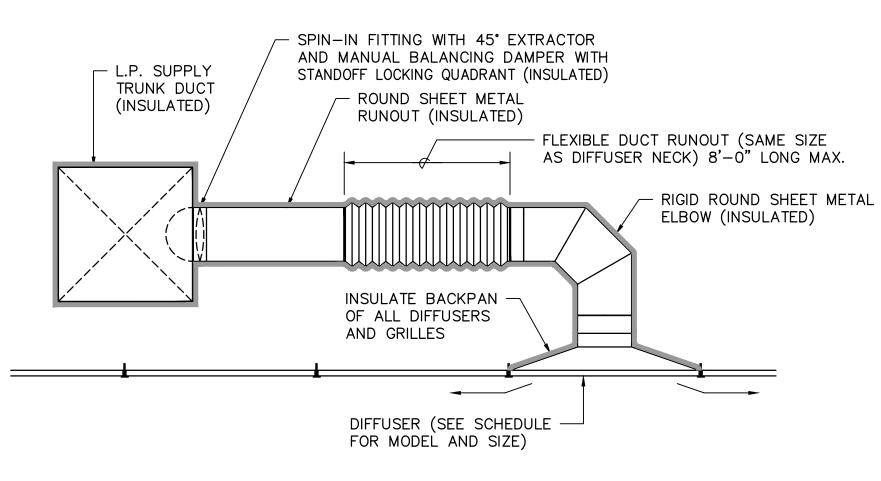


<u>NOTE:</u> EXISTING AHU—3 SHALL BE AIR BALANCED TO 6,000 CFM. EXISTING VAV BOXES/COILS SHALL BE AIR BALANCED TO THE FOLLOWING: 3-1 - 1550 CFM MAX, 470 CFM MIN 3-2 - 700 CFM MAX, 210 CFM MIN RH COIL 2 - 80 CFM RH COIL 18 - 680 CFM



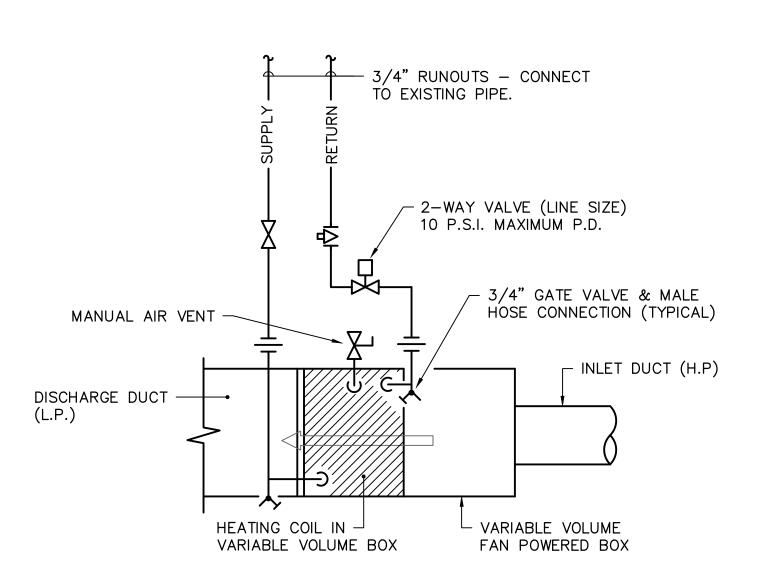
EXHAUST GRILLE DETAIL

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 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

. 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 DISTRIBUTION SCHEDULE									
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"×24"	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

PROVIDE WITH STANDARD WHITE FINISH. PROVIDE ALUMINUM OR ALUMINIZED STEEL CONSTRUCTION.

3. PROVIDE WITH OPPOSED BLADE DAMPER.

EXHAUST FAN SCHEDULE							
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. 2. INTERLOCK WITH AHU-3 OPERATION.

LEGEND					
SYMBOL	DESCRIPTION				
HWS>	HOT WATER SUPPLY LINE				
├ ── HWR ── -	HOT WATER RETURN LINE				
<u>(A)</u> 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				

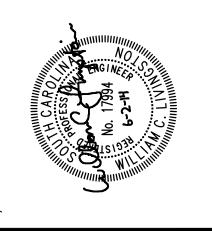
GENERAL NOTES

- VISIT SITE PRIOR TO BIDDING. THIS CONTRACTOR SHALL DETERMINE DIFFICULTY OF INSTALLATION AND REFLECT THIS IN HIS BIDDING.
- 2. DO NOT SCALE DRAWINGS. SEE ARCHITECTURAL DRAWINGS AND REFLECTED CEILING PLANS FOR EXACT LOCATIONS OF DOORS, WINDOWS, AIR DISTRIBUTION, ETC.
- 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 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
- 21. CORRECT SETTINGS ON ALL BALANCING FITTINGS SHALL BE PERMANENTLY MARKED. PROVIDE ORANGE FLAGGING RIBBON ON EACH DAMPER HANDLE FOR EASY
- 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.







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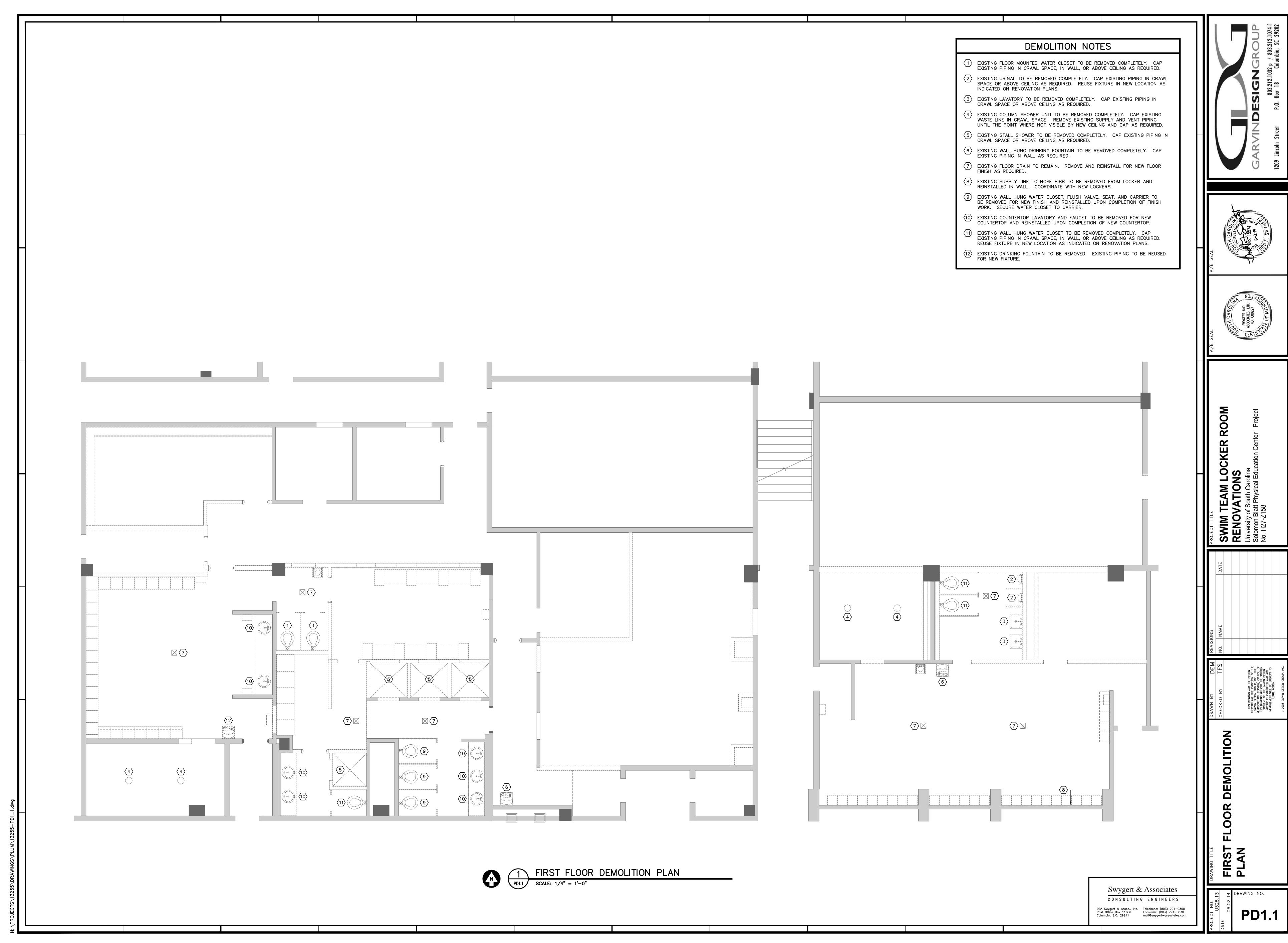
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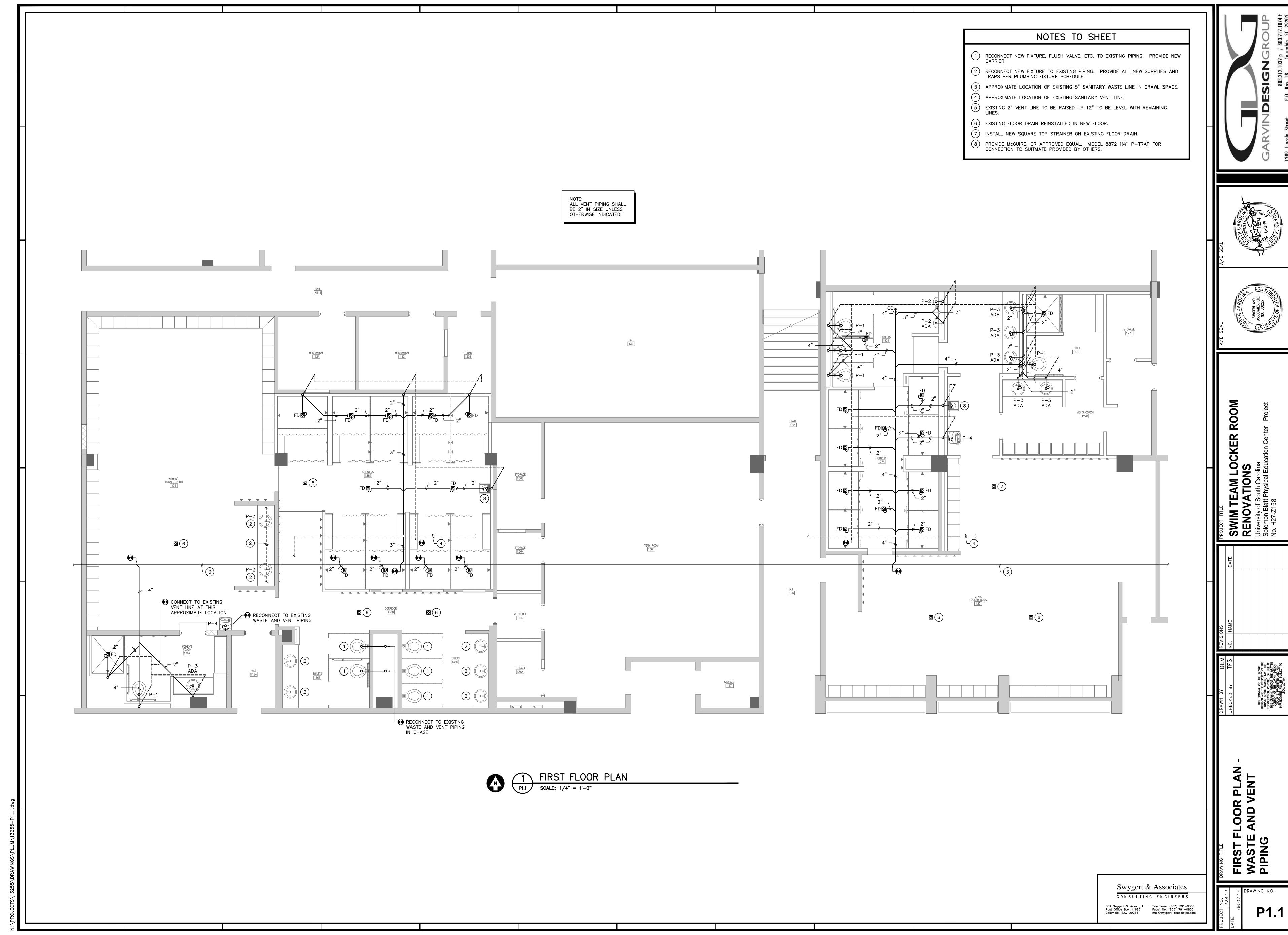
Swygert & Associates CONSULTING ENGINEERS

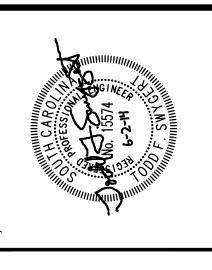
DBA Swygert & Assoc., Ltd.
Post Office Box 11686
Columbia, S.C. 29211

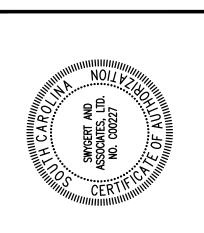
Telephone: (803) 791-9300
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mail@swygert-associates.com

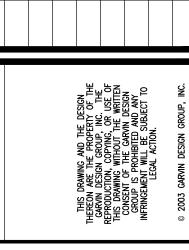
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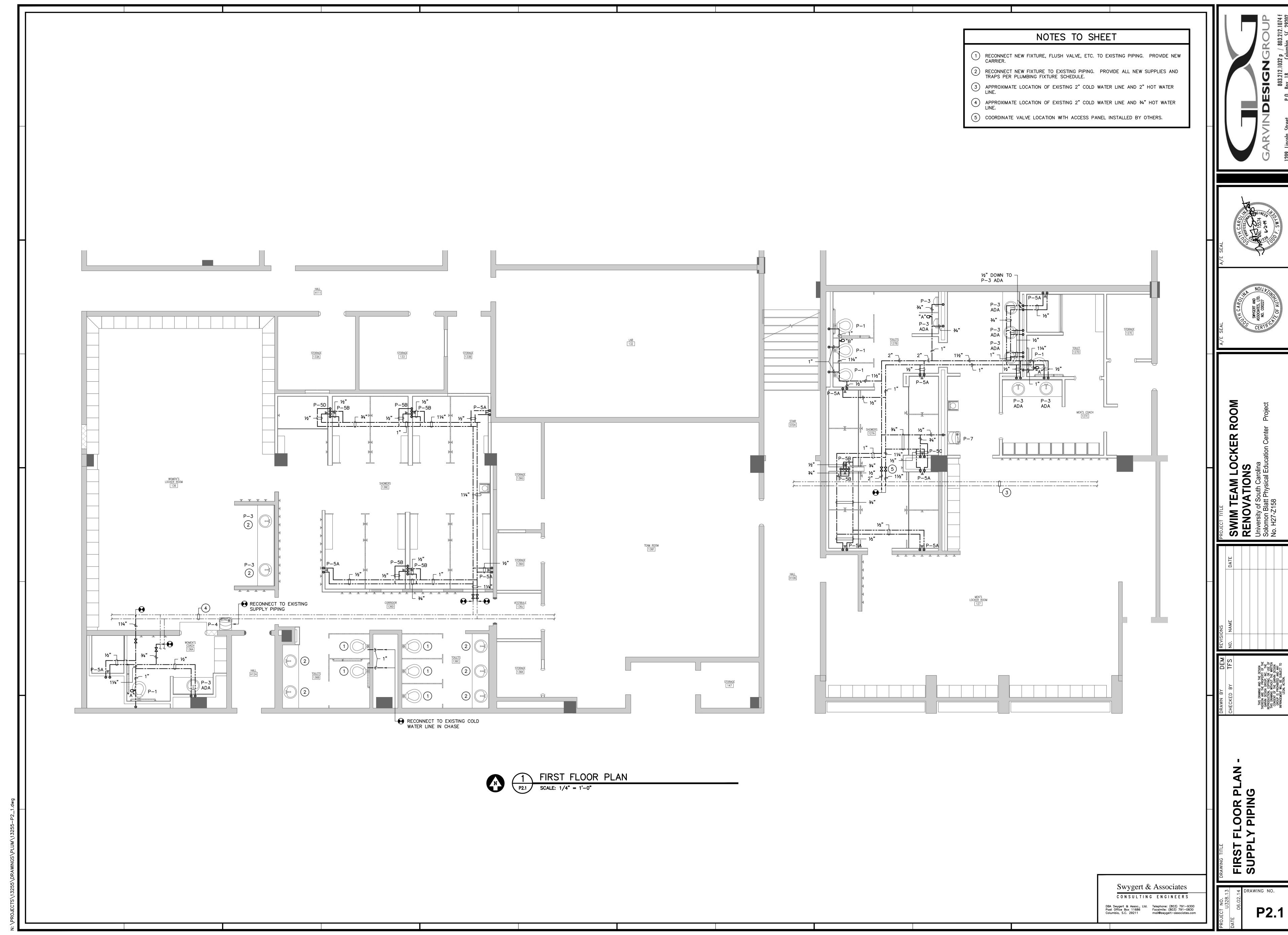


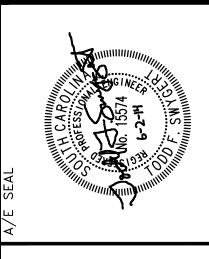




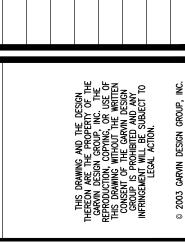










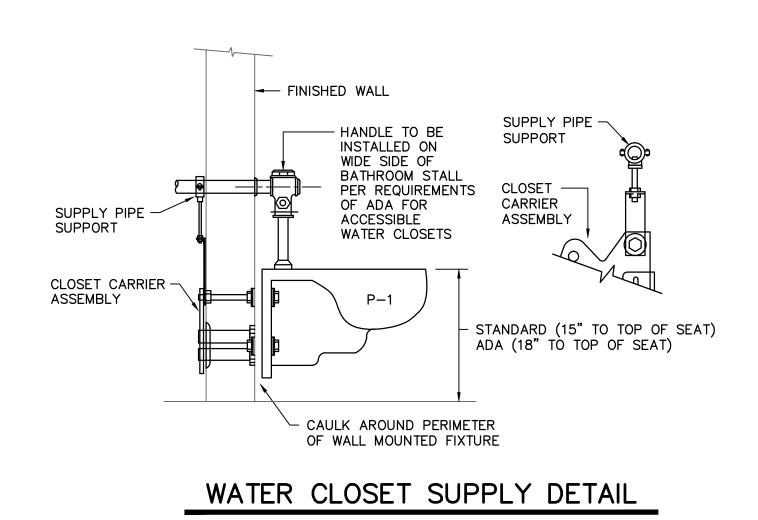


	PLUMBING FIXTURE SCHEDULE							
						MIN. S	SUPPLY	
P. NO.	FIXTURE	MFGR.	NAME	MFGRS. NO.	SIZE	CW	HW	REMARKS
P-1	WATER CLOSET	KOHLER	KINGSTON	K-4325		1"		WITH SLOAN MODEL 111-XL-1.28 FLUSH VALVE, BENEKE 527 SEAT, CHAIR CARRIER, AND BOLT CAPS.
P-2	URINAL	KOHLER	DEXTER	K-5016-ET		3/4"		WITH SLOAN MODEL 186-0.5-XL FLUSH VALVE, AND CHAIR CARRIER.
P-3	LAVATORY	KOHLER	FARMINGTON	K-2905-4	19¼"×16¼"	3/8"	3/8"	WITH DELTA MODEL 501-WFHDF 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, AND McGUIRE 8872 1-1/4" P-TRAP. MOUNT PER ADA REQUIREMENTS
P-5A	SHOWER TRIM	SYMMONS	TEMPTROL	C-96-1-295 -X		1/2"	1/2"	WITH FIXED SHOWER HEAD AND 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 REVERSE 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, INTEGRAL STOPS, AND REVERSE CORING.
FD	FLOOR DRAIN	ZURN		ZN-415-S				WITH 6"x6" NICKLE BRONZE STRAINER AND TRAP GUARD BY PROSET, OR APPROVED EQUAL.

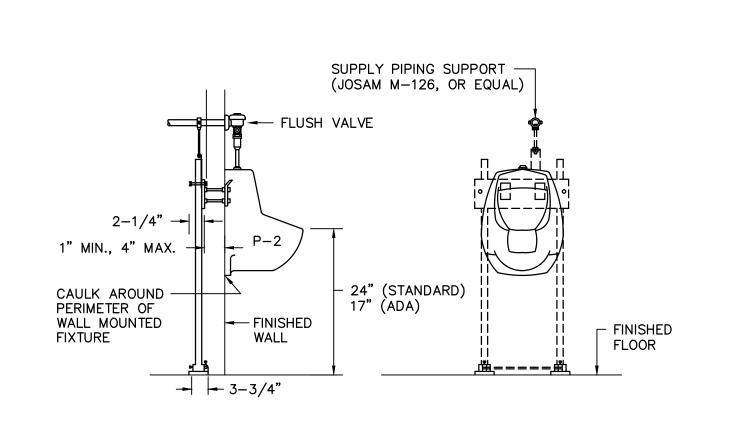
GENERAL NOTES

- 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				
	DOMESTIC COLD WATER LINE				
	DOMESTIC HOT WATER LINE				
$\longleftarrow \bowtie$	SHUTOFF VALVE				
ې "A" ي ح	SHOCK ARRESTOR (P.D.I. RATING OF "A")				
ر ر	PIPE TURNS TO, AWAY				
←	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				



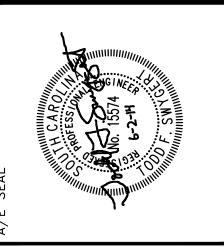
NO SCALE

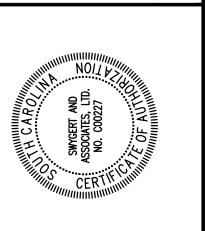


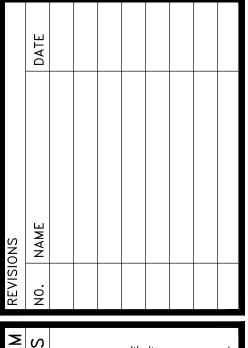
TYPICAL URINAL SUPPORT

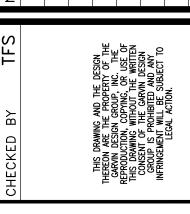
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Swygert & Associates CONSULTING ENGINEERS DBA Swygert & Assoc., Ltd. Telephone: (803) 791-9300 Facsimile: (803) 791-9300 Columbia, S.C. 29211 mail@swygert-associates.com



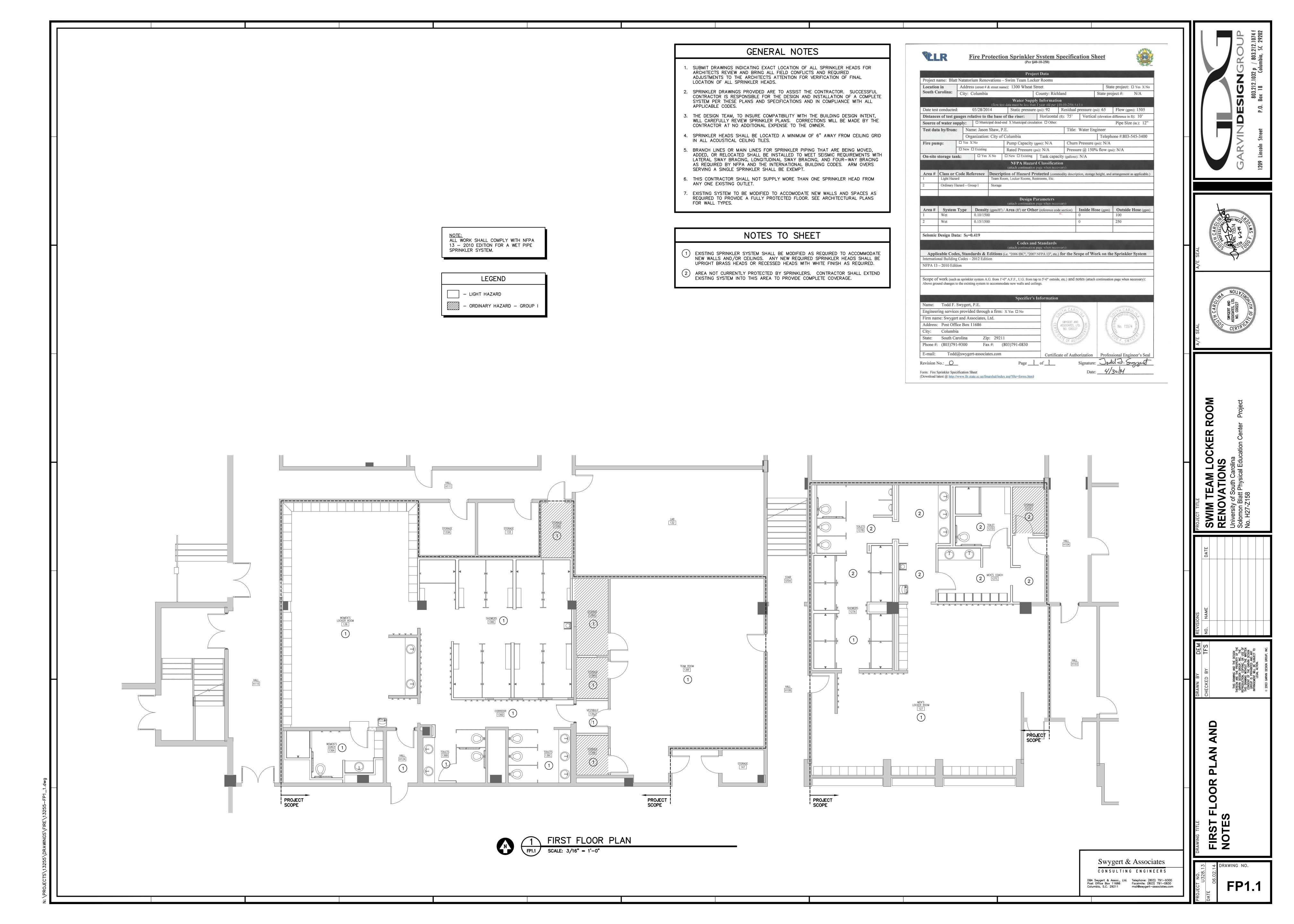


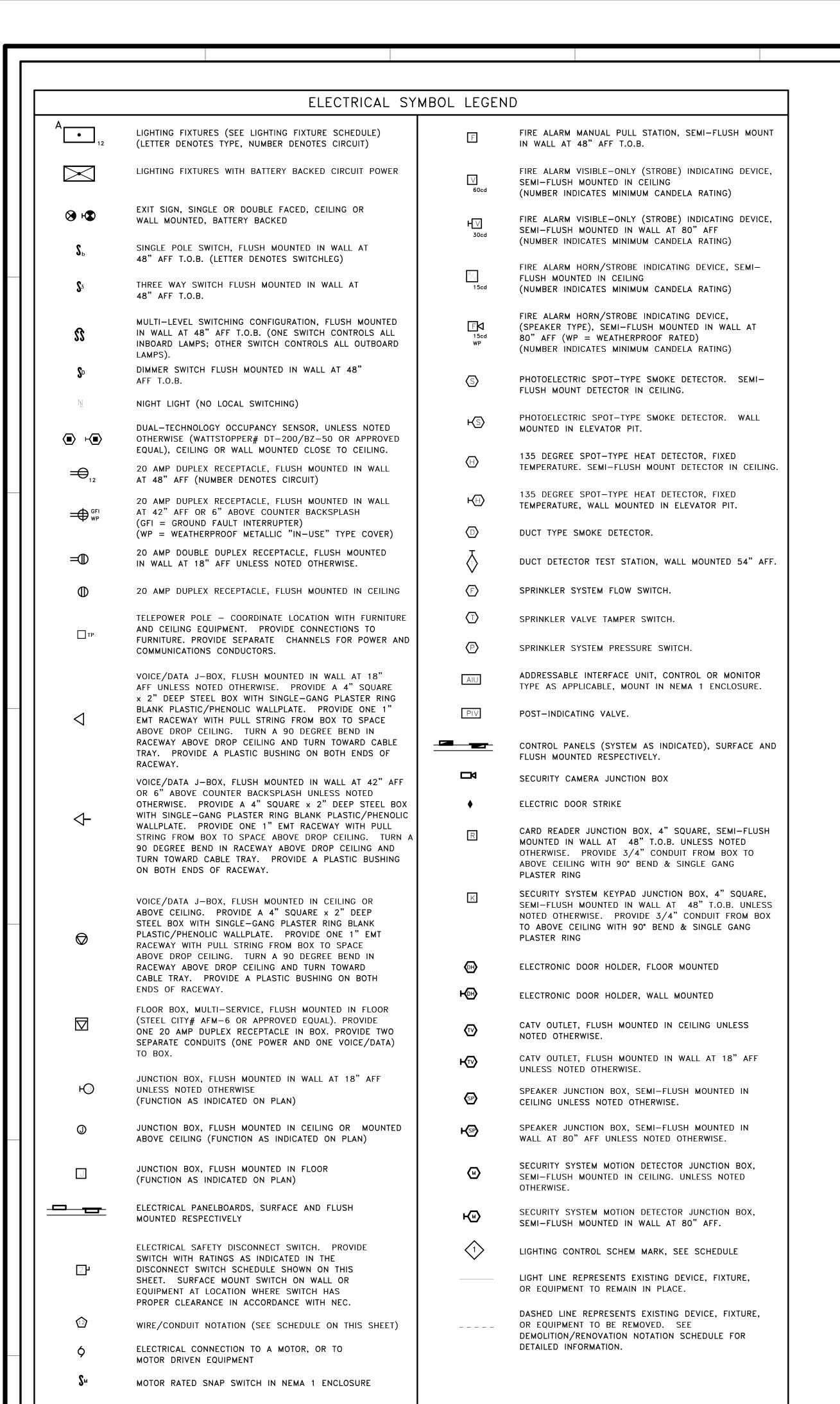




DETAILS, NOT SCHEDULE, A

DRAWING NO. P3.1





CONTROL STATION (FUNCTION AS INDICATED ON PLAN),

SHALL BE INSTALLED TO BE 48" AFF TO TOP OF BOX UNLESS NOTED OTHERWISE.

MOUNTING HEIGHTS INDICATED IN THIS LEGEND SHALL BE TO CENTERLINE OF DEVICE BOX. ALL SWITCHES AND PULL STATIONS

DEMOLITION/RENOVATION NOTATION

PLACE. REPLACE ANY BROKEN DEVICES OR

CONTINUITY OF REMAINING PORTIONS OF BRANCH

ELECTRICAL CONTRACTOR. EXISTING CIRCUIT SHALL BE RETAINED. PROVIDE NEW DEVICE AS

E EXISTING FIXTURE OR DEVICE TO REMAIN IN

PLATES; COLOR TO MATCH EXISTING.

RE EXISTING DEVICE TO BE REMOVED BY THE

RR EXISTING FIXTURE TO BE RELOCATED BY THE ELECTRICAL CONTRACTOR TO NEW LOCATION

SHOWN ON RENOVATION PLANS.

SHOWN ON RENOVATION PLAN.

RN RELOCATED FIXTURE (NEW LOCATION)

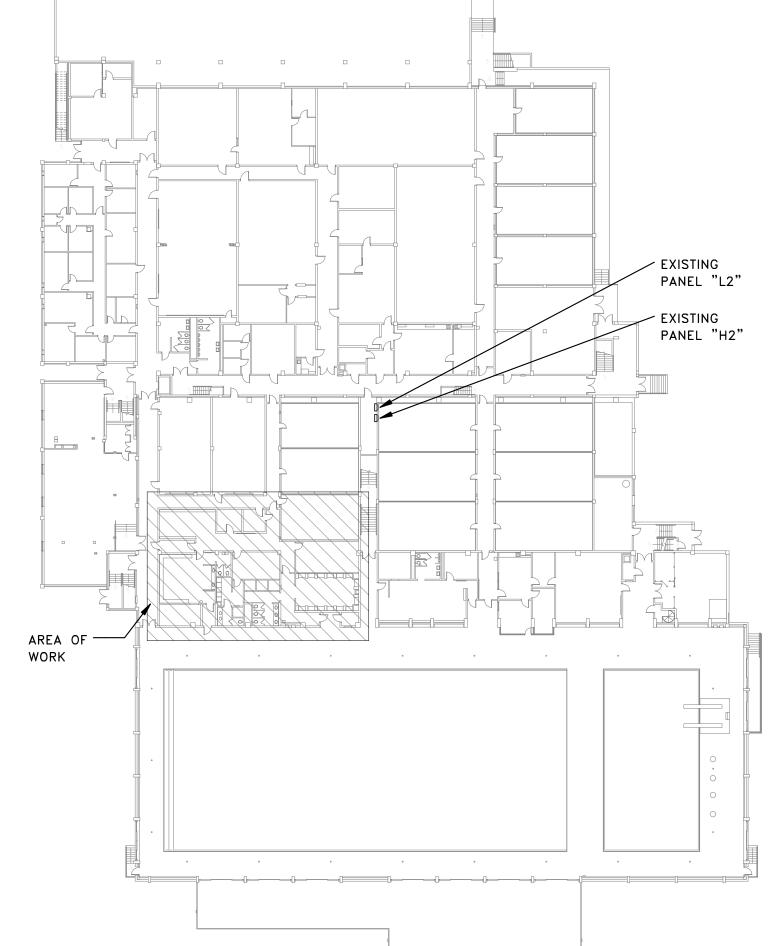
CIRCUIT.

R EXISTING FIXTURE OR DEVICE TO BE REMOVED BY THE ELECTRICAL CONTRACTOR. MAINTAIN

FLUSH MOUNT IN WALL AT 48" AFF T.O.B.

LIGHTING FIXTURE SCHEDULE Optical | Symbol | Mark | Manufacturer Description Model |Element| Mounting |Voltage Lamps A 2'x2' FLUORESCENT GRID TROFFER, WET LITHONIA 277 V 3 - 17W T8 / 841 WRT G317 A12125V MVOLT .125 ACRYLIC WRT G317 A12125V MVOLT | .125 ACRYLIC | AE 2'x2' FLUORESCENT GRID TROFFER, 2 277 V 3 - 17W T8 / 841 LAMPS, BATT. PACK INCLUDED, WET LISTED GEB10IS EL14DW LB 232 MVOLT GEB10IS B 1'x4' SURFACE MOUNTED FLUORESCENT ACRYLIC LENS 277 V | 2 - 32W TB / 841 C WET LISTED LED DOWNLIGHT DOM6 LED 600L 40K DL61 | GLASS LENS | 277 V | LED (15.6W, 500 LUMENS, 840) CEILING CE | WET LISTED LED DOWNLIGHT DOM6 LED 600L 40K DL61 | GLASS LENS | 277 V | LED (15.6W, 500 LUMENS, 840) D | FLUORESCENT PERIMETER SYSTEM FIXTURE | FOCAL POINT 277 V |1 - 32W TB / 841 FW3 NS 1T8 1C 277 E RC | NONE RECESSED SS WH *LENGTH* 277 V |2 - 28W T5 / 840 G4 | 4' WET-LISTED VANITY FIXTURE AXIS LIGHTING |WBW S 4 T5 2 AP 277 | SATIN LENS | WALL MOUNT ABOVE VANITY G6 6' WET-LISTED VANITY FIXTURE AXIS LIGHTING | WBW S 6 T5 2 AP 277 | SATIN LENS | WALL MOUNT 0 V |4 - 21W T5 / 840 ABOVE VANITY WBW S 8 T5 2 AP 277 | SATIN LENS | WALL MOUNT G8 8' WET-LISTED VANITY FIXTURE AXIS LIGHTING 0 V |4 - 28W T5 / 840 ABOVE VANITY J 4' SUSPENDED FLUORESCENT INDIRECT AXIS LIGHTING FIXTURE 9'-6" AFF UNV E 2 SA# JE SAME AS TYPE "J" EXCEPT WITH INTEGRAL AXIS LIGHTING WBDI S 4 T5HO 0 2 AP SATIN LENS SUSPENDED TO 277 V |2 - 54WT5H0 / 841 EMERGENCY BATTERY PACK UNV E 2 SA# B14 9'-6" AFF X LED EXIT SIGN WITH NiCad BATT., RED LQM S W 3 R 120/277 NONE AS SHOWN 277 V L.E.D. INCLUDED LETTERS AND WHITE CANOPY, 1 FACE GENERAL LIGHTING NOTES

- 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. PATHWAY, PRESCOLITE, LIGHTOLIER, PORTFOLIO. 2.2. TYPE C:
- 2.3. TYPE D: PINNACLE, METALUMEN, LIGHTOLIER, NEO-RAY 2.4. TYPE G: PINNACLE, ALIGHT
- 2.5. TYPE J: PINNACLE, ALIGHT
- 2.6. TYPE X: EMERGI-LITE, COMPASS
- 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 INSTALLATION.
- 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.



			EXISTING PANEL "L2" EXISTING PANEL "H2"
			<u> </u>
AREA OF WORK			
		 	. #

GENERAL NOTES

EXISTING BRANCH CIRCUITS LISTED WERE

TAKEN FROM AS-BUILT DOCUMENTS AND

CONTRACTOR SHALL FIELD VERIFY SOURCE

ALL CIRCUITS SHALL BE 2#12, 1#12 GND.

COMMUNICATIONS, SECURITY CAMERAS, AND

ACCESS CONTROL SYSTEM RACEWAYS SHALL

CONSOLIDATION JUNCTION BOX. SEE PLANS

DIGRAMMATIC. COORDINATE ALL WORK WITH

ARCHITECTURAL, CIVIL, STRUCTURAL, AND

INSTALL THE ELECTRICAL SYSTEM WITHOUT

STRUCTURAL STEEL, OR OTHER SYSTEMS.

IN THE PROPER RELATION TO FINISHED

AREAS, EXCEPT WHERE DIMENSIONED ON

DRAWINGS OR LOCATED ON REFLECTED

MOUNT GROUPED DEVICES IN A SINGLE

COMPRESSION TYPE. SET SCREW OR

11. OUTLETS WHICH OCCUR ON OPPOSITE SIDES

12. WALL PENETRATIONS FOR RACEWAYS SHALL

ARCHITECTURAL DRAWINGS. PROVIDE

PENETRATING RATED WALLS PER

ABOVE FINISHED FLOOR

ABOVE FINISHED GRADE

BOTTOM OF FIXTURE

ALUMINUM

CONDUIT

COPPER

FBO

J-BOX

MLO

NEC

PIV

INDENTOR TYPE FITTINGS SHALL NOT BE

OF A COMMON WALL SHALL BE OFFSET A

BE PROVIDED BY ELECTRICAL CONTRACTOR.

PROVIDE FIRESTOPPING AROUND RACEWAYS

DRAFTSTOP SEAL AT NON-RATED WALLS.

ELECTRICAL ABBREVIATIONS

ADDRESSABLE INTERFACE UNIT

DIGITAL ALARM COMMUNICATOR TRANSMITTER

BY ELECTRICAL CONTRACTOR

BY GENERAL CONTRACTOR

FIRE ALARM ANNUNCIATOR

FURNISHED BY OTHERS

NOT CONCRETE ENCASED

POST INDICATING VALVE

NATIONAL ELECTRICAL CODE

ISOLATED GROUND JUNCTION BOX

MAIN BREAKER

MOTOR DAMPER

NON-FUSIBLE

MOUNTING HEIGHT

MAIN LUGS ONLY

NOT IN CONTRACT

SMOKE DAMPER

TOP OF FIXTURE

UNDERCOUNTER

WEATHERPROOF

KEYPLAN

/ SCALE: NOT TO SCALE

TOP OF BOX

FIRE ALARM CONTROL PANEL

GROUND FAULT INTERRUPTER

CONTINUOUS MULTI-GANG BOX.

10. EMT FITTINGS SHALL BE OF THE

MINIMUM OF 12 INCHES.

LOCATE LIGHTING FIXTURES SYMMETRICALLY

PROVIDE TWO #12 STEEL, SLACK CABLES TO

STRUCTURE FROM EACH FIXTURE MOUNTED IN

BE ROUTED FROM DEVICE LOCATIONS TO

4. ALL WORK SHALL COMPLY WITH NFPA70.2011

ELECTRICAL LAYOUT DRAWINGS ARE

MECHANICAL CONTRACT DOCUMENTS.

INTERFERING WITH DUCTS, PIPES,

(NATIONAL ELECTRIC CODE).

OF BRANCH CIRCUITS PRIOR TO WORK.

IN 3/4"C. UNLESS NOTED OTHERWISE.

HAVE NOT BEEN FIELD VERIFIED.

FOR DETAILS.

CEILING PLANS.

A GRID CEILING.

	AMPS	POLES	VOLTAGE	NEMA ENCLOSURE
1	30	2	208V	1
2	30	2	208V	3R
3	30	3	208V	1
4	30	3	208V	3R
5	60	3	208V	1
6	60	3	208V	3R
7	100	3	208V	1
8 9	100	3	208V	3R 1
10	200 200	3 3	208V 208V	3R
11 12	30 30	3 3	480V 480V	1
13	50 60	3 3	480V 480V	3R 1
14	60	3	480V 480V	3R
15	100	3	480V	1
16	100	3	480V	3R
17	200	3	480V	1
18	200	3	480V	3R
19	400	3	480V	1
20	400	3	480V	3R
			GENERAL DU' TH "NF" (N	TY TYPE, ON-FUSIBLE)
M			ECT SWITCH EQUIPMENT.	INTEGRAL

CIRCUIT TO ELEVATOR UNIT.

	ELECTRICAL DRAWING INDEX	
E0.1	ELECTRICAL SYMBOL LEGEND & SCHEDULES	
E1.1	LIGHTING DEMOLITION PLAN	
E1.2	POWER/SYSTEMS DEMOLTION PLAN	
E2.1	LIGHTING RENOVATION PLAN	
E2.2	POWER/SYSTEMS RENOVATION PLAN	

WIRE/	CONDUIT SCHE	DULE
<u>ID</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 26 27 28 29 30 31 32 33 34 35 36 37	2#12, 1#12 GND. 3#12, 1#12 GND. 4#12, 1#10 GND. 3#10, 1#10 GND. 4#10, 1#10 GND. 2#8, 1#10 GND. 3#8, 1#10 GND. 3#8, 1#10 GND. 3#6, 1#8 GND. 4#6, 1#8 GND. 3#44, 1#8 GND. 3#3, 1#8 GND. 4#47, 1#6 GND. 3#1/0, 1#6 GND. 3#1/0, 1#6 GND. 3#1/0, 1#6 GND. 4#1/0, 1#6 GND. 3#2/0, 1#6 GND. 4#1/0, 1#6 GND. 3#2/0, 1#6 GND. 4#1/0, 1#6 GND. 3#2/0, 1#6 GND. 4#2/0, 1#6 GND. 4#2/0, 1#6 GND. 3#4/0, 1#4 GND. 3#4/0, 1#4 GND. 3#4/0, 1#4 GND. 3-250KCMiI, 1#4 GND. 4-250KCMiI, 1#3 GND. 4-350KCMiI, 1#3 GND. 4-350KCMiI, 1#3 GND. 4-500KCMiI, 1#3 GND. 4-500KCMiI, 1#2 GND. 3-750KCMII, 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" 1-1/4" 1-1/4" 1-1/4" 1-1/2" 1-1/2" 1-1/2" 2" 2" 2" 2" 2" 2" 2" 2" 2" 2" 2" 2" 2
37	3-750KCMil, 1#2 GND. 4-750KCMil, 1#2 GND. ITS SHALL BE 2#12, 1#1	4" 5"

UNLESS NOTED.

GA21404

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

VINDESIGNGE

BELKA

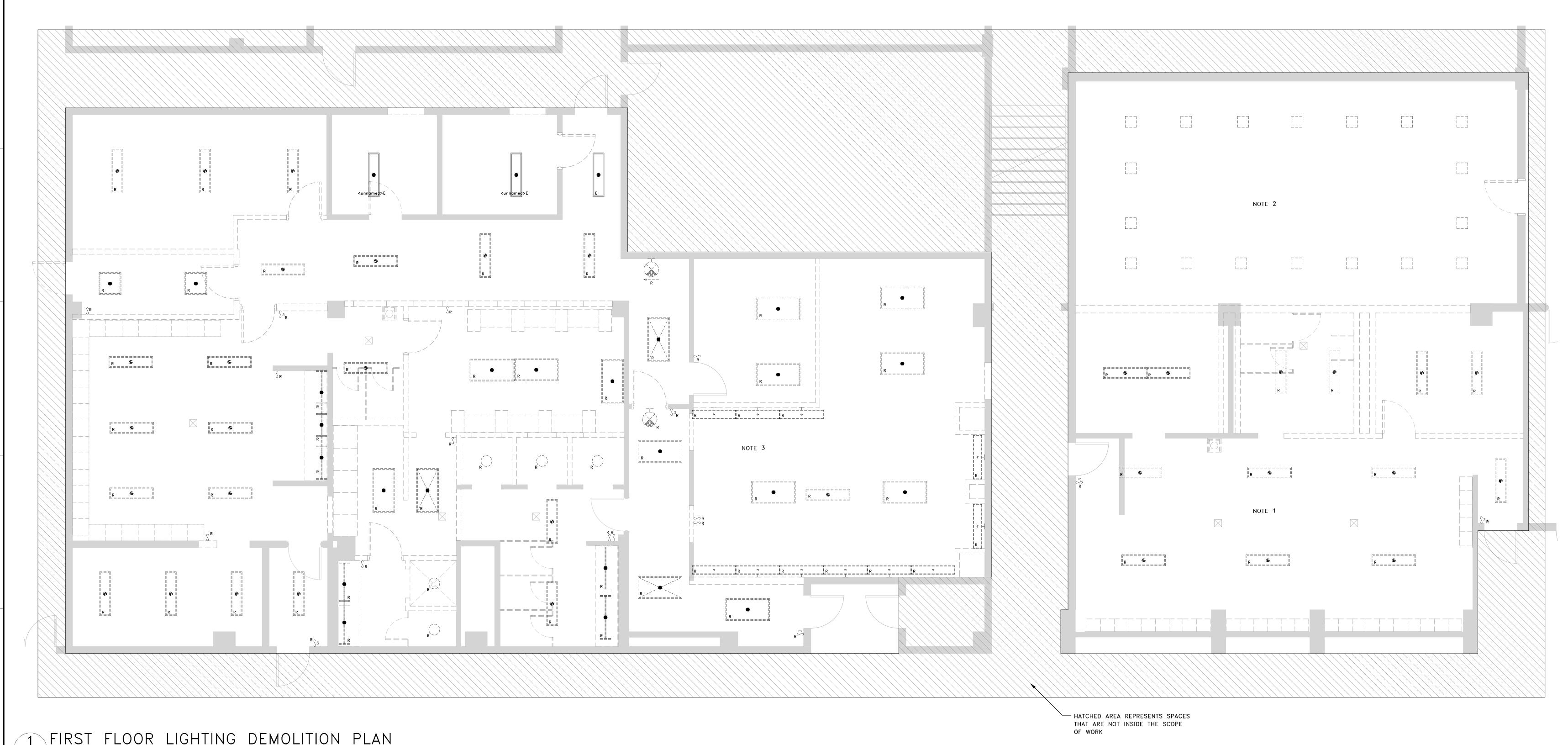
ENGINEERING

ASSOC. INC.

No. C00953

No. 26181

SWIM TEAM LO RENOVATIONS



1 FIRST FLOOR LIGHTING DEMOLITION PLAN E1.1 SCALE: 1/4" = 1'-0"

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.

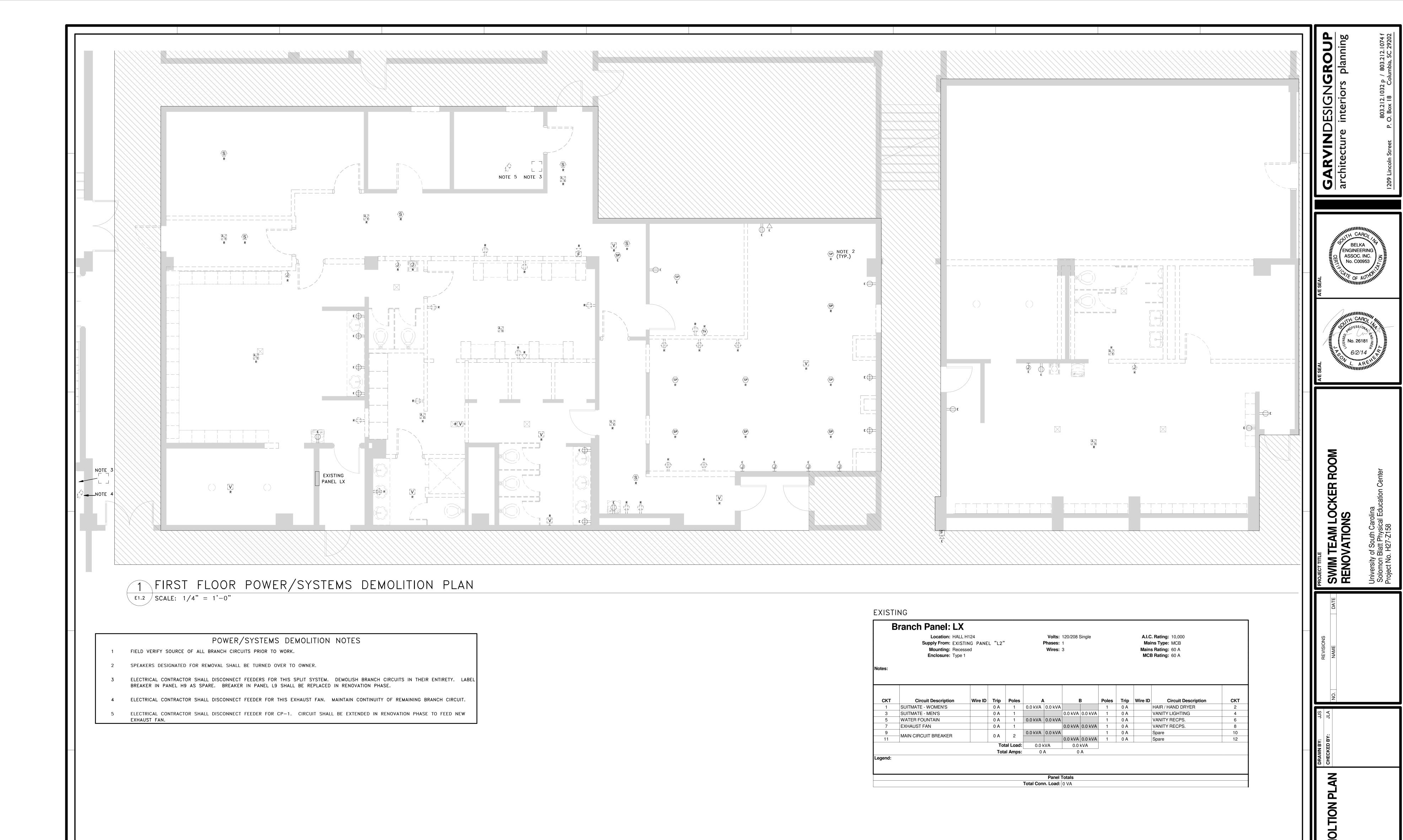
AS-BUILT DRAWINGS INDICATE THE EXISTING LIGHTING IN THE RACQUETBALL COURT IS SERVED FROM BRANCH CIRCUIT H2-15. CONTRACTOR SHALL FIELD VERIFY SOURCE PRIOR TO WORK. DISCONNECT EXISTING LIGHTING FIXTURES AND REMOVE ASSOCIATED LAMPS. ABANDON FIXTURES IN PLACE. DISCONNECT AND REMOVE ALL ASSOCIATED LIGHT SWITCHES.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

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.



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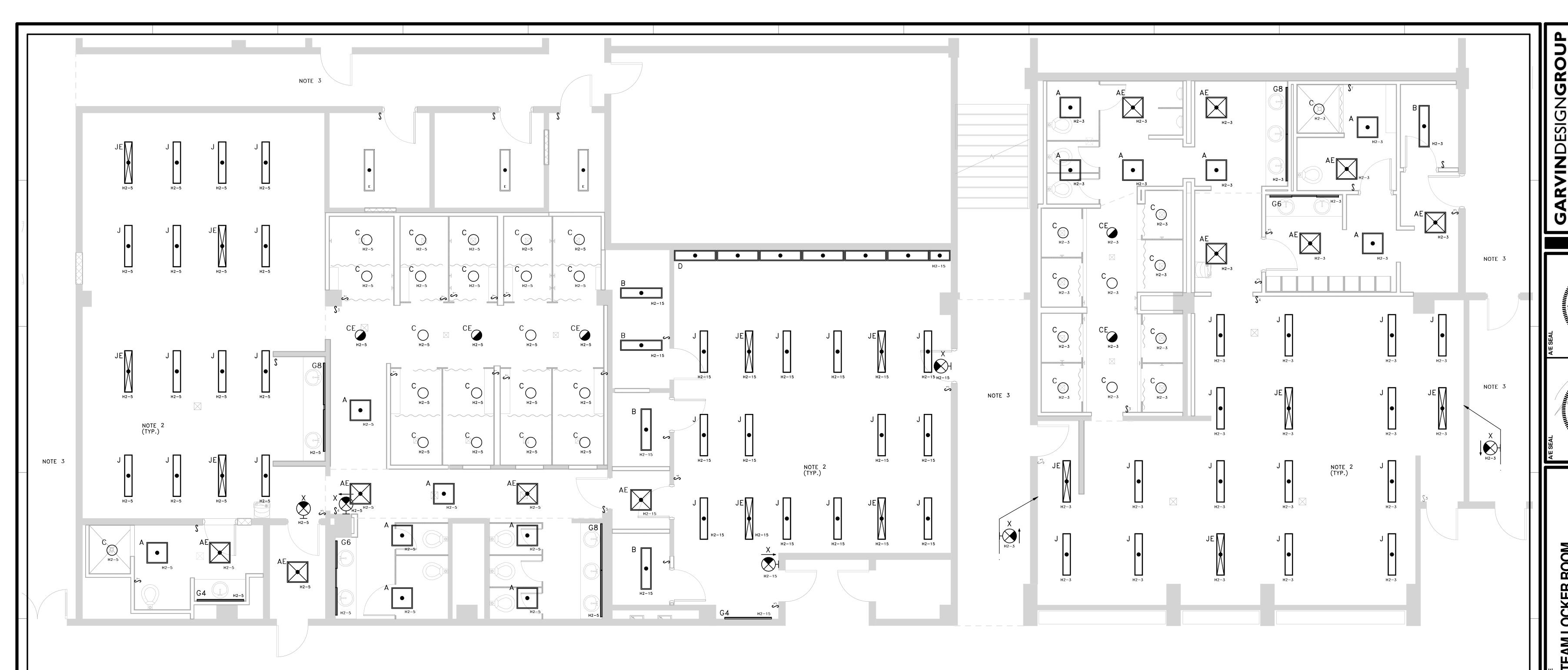
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7 CLUSTERS COURT, SUITE 201 COLUMBIA, SOUTH CAROLINA 29210 (803) 731-0650 fax (803) 731-2880 EMAIL: JAreheart@bellsouth.net DRAWING NO.

E1.30.90

E1.30.90

E1.30.90



1 FIRST FLOOR LIGHTING RENOVATION PLAN — BASEBID

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

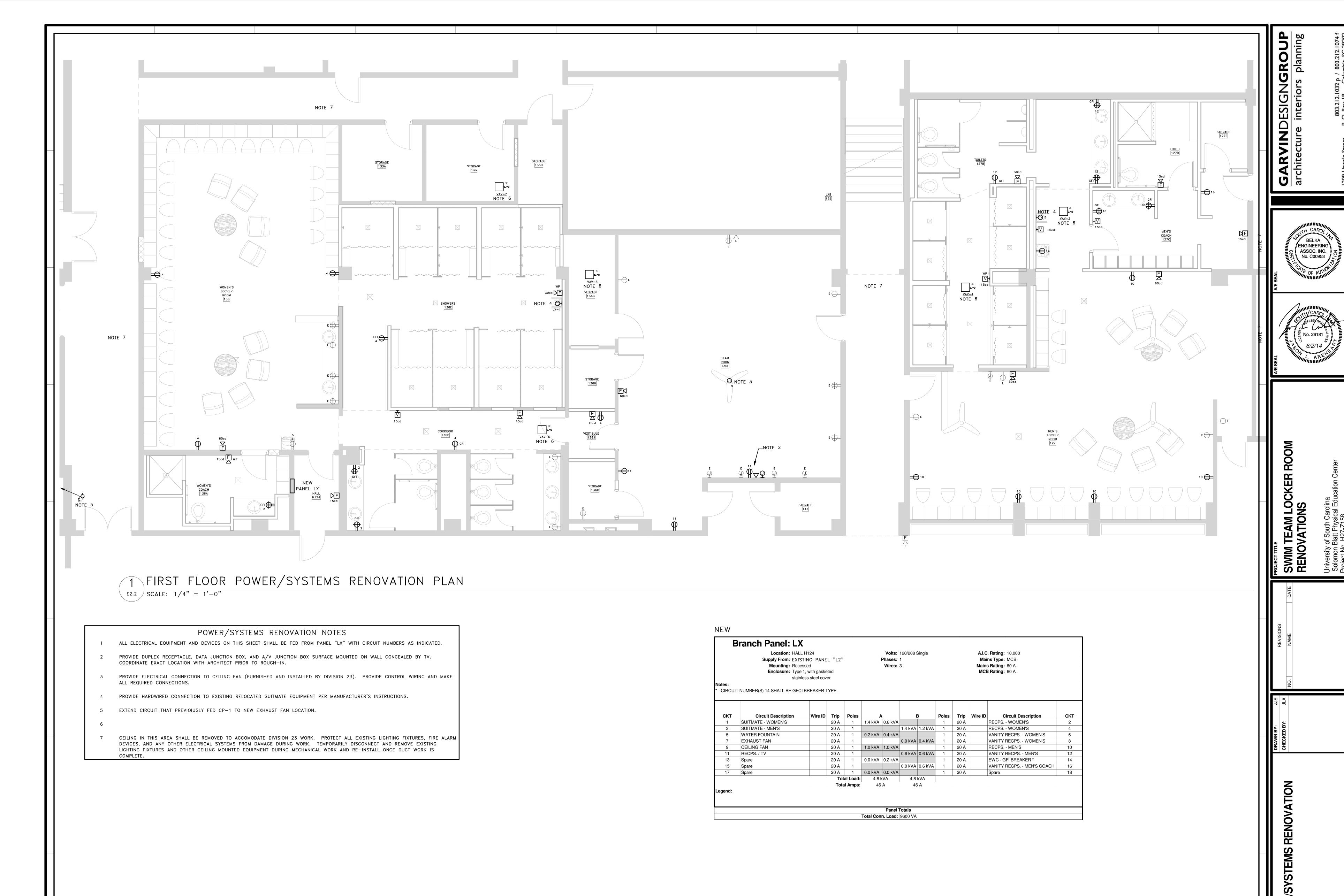
LIGHTING RENOVATION NOTES — BASE BID

- 1 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.
- CONTRACTOR SHALL COORDINATE PENDANT LENGTHS AS REQUIRED TO PROVIDE A LEVEL FIXTURE. FIXTURES MAY BE SUPPORTED FROM TWO DIFFERENT LEVELS OF STRUCTURE. COORDINATE EXACT LOCATION OF ALL FIXTURES WITH ARCHITECTAL PLANS TO AVOID CONFLICTS WITH SUSPENDED TRANSLUCENT PANELS AND ANY OTHER CONFLICTS.
- 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.



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DRAWING NO **E2.**13



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E2.2