March 13, 2013

Garvin Design Group 1209 Lincoln St. Columbia, SC 29201

#### ADDENDUM NO. 1

The following items shall take precedence over the drawings and specifications for the above named project and shall become a part of the contract documents. Where any item called for in the specifications, or indicated on the drawings, is not supplemented hereby, the original requirements shall remain in effect. Where any original item is amended, voided, or superseded hereby, the provisions of such item not specifically amended, voided or superseded shall remain in effect.

#### General

9.

<u>Item No.</u>	<u>Description</u>
1.	<u>General:</u> See attached non-mandatory Pre-Bid Conference sign-in sheet for meeting attendees.
2.	<u>General:</u> General Contractor shall coordinate with the University and the Band and Dance Facility Faculty/Staff in the adjacent building to assure that their daily operations are not disturbed by construction activities. Access to the band practice field itself, for general site access and for water and sewer installation per the Documents, must be coordinated with the University in advance and the timing/duration of this work approved before construction commences.
3.	<u>General:</u> The University will coordinate with the General Contractor concerning site access and parking provisions.
4.	General: Temporary construction fencing will not be required.
5.	<u>General:</u> General Contractor will be responsible for providing protection for the concrete and brick paver plaza area to be used for site access. Any and all damaged concrete, brick pavers, or other parts of the existing site must be repaired to original condition at the General Contractor's expense.
6.	<u>General:</u> Concrete slab in the open shelter area to be pitched slightly from center to outboard edges of the slab to avoid standing water under shelter. Final slope to be set and verified in field with Architect.
7.	<u>General:</u> Building permit will be issued by the University, not the City of Columbia. No other permits are required.
8.	General: No sewer or water tap fees are required, and no water meter to be included.

ADDENDUM NO.1

the existing fenced-in enclosure under the pedestrian bridge.

<u>Clarification:</u> Reference Drawing E1.0: Electrical panel noted as "Existing Panel A" is located in

- 10. <u>Clarification:</u> Reference Drawing S1: All 12" diameter wood posts are to be preservative treated, and a consistent 12" diameter for full height.
- 11. <u>Clarification:</u> Please see attached re-issued complete set of bid Drawings, which are being re-issued only due to printing issues reported from downloading the set from the University purchasing website. During printing, certain letter characters in title blocks are changed to "rectangles," due to compression of the electronic files. No scope of work content has changed in the documents. Bidders are to use this re-issued set of bid Drawings.

#### **Project Manual / Specifications**

#### <u>Item No.</u> <u>Description</u>

- 1. <u>Revision:</u> Reference Section 074113 Metal Roof Panels and Trim. In paragraph 2.4, B.,1. add: Construction Metal Products, Inc. (Statesville, NC) and Metal Roofing Systems, Inc. (Stanley, NC) as approved manufacturers. Submitted products must meet all specified criteria, subject to Architect's review and approval.
- 2. <u>Revision:</u> Reference Section 087100 Door Hardware. In the Hardware Schedule on page 087100-10, revise the following:
  - a. Hardware Set #1, revise ND53PD (F109) to L9050L 06A. Finish remains 626.
  - b. Hardware Set #1, add one Best 1E-74 STD 626 cylinder with each lock. Furnish as Best construction core.
  - c. In Hardware Set #2, revise ND70PD (F84) to L9070L 06A. Finish remains 626.
  - d. Hardware Set #2, add one Best 1E-74 STD 626 cylinder with each lock. Furnish as Best construction core.

#### END OF ADDENDUM NO. 1

#### Attachments:

- 1. Non-mandatory Pre-Bid Conference sign-in sheet.
- 2. Re-issued complete set of bid Drawings (to correct printing issues only).

ADDENDUM NO.1 2



Pre Bid for Challenge Course Building and Fence Construction/H27-I981 March 7, 2013 @ 10am

ATTENDEE'S NAME	COMPANY NAME & MAILING ADDRESS
Les Harmersta	- Hammer Construction uc
	785 Hampton Creek Way
	Columbia S.C. 29209
	PHONE# 803.309.0364
	FAX# 803-783.7035
7 11 8 0 (	EMAIL Lee @ Hammer Construction company. com
Kelf Dans	Lindle Const. Co. Ans.
/	531 S. Edial . Oumus
	Cala, S.C. 29205
	PHONE# 803-252-9948
	FAX# 803779 3609
LAW POWERS	EMAIL WBAUKY3DSC. RR. Com
DAW (DWERS)	HUSS, INC.
	POBOX 12339
	CHARLES 30, SC 29412
	PHONE# 843. 937. 0023
	FAX# 843 937,0095
RII Mail	EMAIL HUSSINC @ BELSONTH, NET
todolog itteratures	PYRAMID CONTRATION LIC
	1138-A LYES IAL
	12mp, Sc 79n/2
	PHONE# 808. 132. 7.50
	FAX# 803 732 . SBRI
	EMAIL A LO
	EMAIL WIFE E PY CAMING COM

Make sure to include your company name (on this form) as registered with LLR.



## Pre Bid for Challenge Course Building and Fence Construction/H27-I981 March 7, 2013 @ 10am

ATTENDEE'S NAME	COMPANY NAME & MAILING ADDRESS
Gavry Hayhos	PHONE# 803 926 60000  FAX# 863 926 7600  EMAIL ghagner e malayeng. com
James & Sms	PHONE# 803 78/ 3/41  FAX# 803 78/ 3/42  EMAIL J(M @ R. B. TODO. Com
JAMES GREGORY Cherokee Ista	PHONE# 803 7764870  FAX# 7765507  EMAIL 1 GREGORY Cheroker-SC, Com
	PHONE# FAX# EMAIL

Make sure to include your company name (on this form) as registered with LLR.



### Pre Bid for Challenge Course Building and Fence Construction/H27-I981 March 7, 2013 @ 10am

ATTENDEE'S NAME	COMPANY NAME & MAILING ADDRESS
Severy Mullen	M. D. lon Construction Inc.
	PO Bux 90472
	Columbia, SC 29290
	PHONE# 803-35/-7894
	FAX# 877-401-8388
1/	EMAIL severy gmdillonconstruction, com
hirsten Wer	Tyler Construction Group
	P.O. BOX 25037
	Columbia SC 29224
	PHONE# 803-865-1404
	FAX# 803-865-1415
- 1111	EMAIL Kyler @ Ylev-construction com
John Willare	Hird Const. Co
	1050 Thap Rd. Suite A
	Calo, 56. 29201
	PHONE# 813-765-2946
	FAX# 803. 771-0449
CRYS LYBRAND	EMAIL Johnwalluce @ hoolconstruction. con
CNYS LYBRANC	CONSTRUCTION SERVICES OF SC, LLC
	500 GREENWOOD Rd
	West Columbia Sc 29/69
	PHONE# 803-603-3963
	FAX# 903 - 794 - 4755
	EMAIL CLybrand - McI Cyahoo, com
	1 underscore

Make sure to include your company name (on this form) as registered with LLR.



## Pre Bid for Challenge Course Building and Fence Construction/H27-I981 March 7, 2013 @ 10am

ATTENDEE'S NAME	COMPANY NAME & MAILING ADDRESS
- Ulaguana Brookers -	- USC-PROCLUENCECT =
JEFF ABRAMS	PHONE# 777-3596 FAX# EMAIL USC FAQUITIES
Dominique Robinson	PHONE# FAX# EMAIL  USC Facilities
TEIRM BUCHMANN	PHONE# FAX# EMAIL  GRIVIN DESIGN GROUP.
	PHONE# FAX# EMAIL

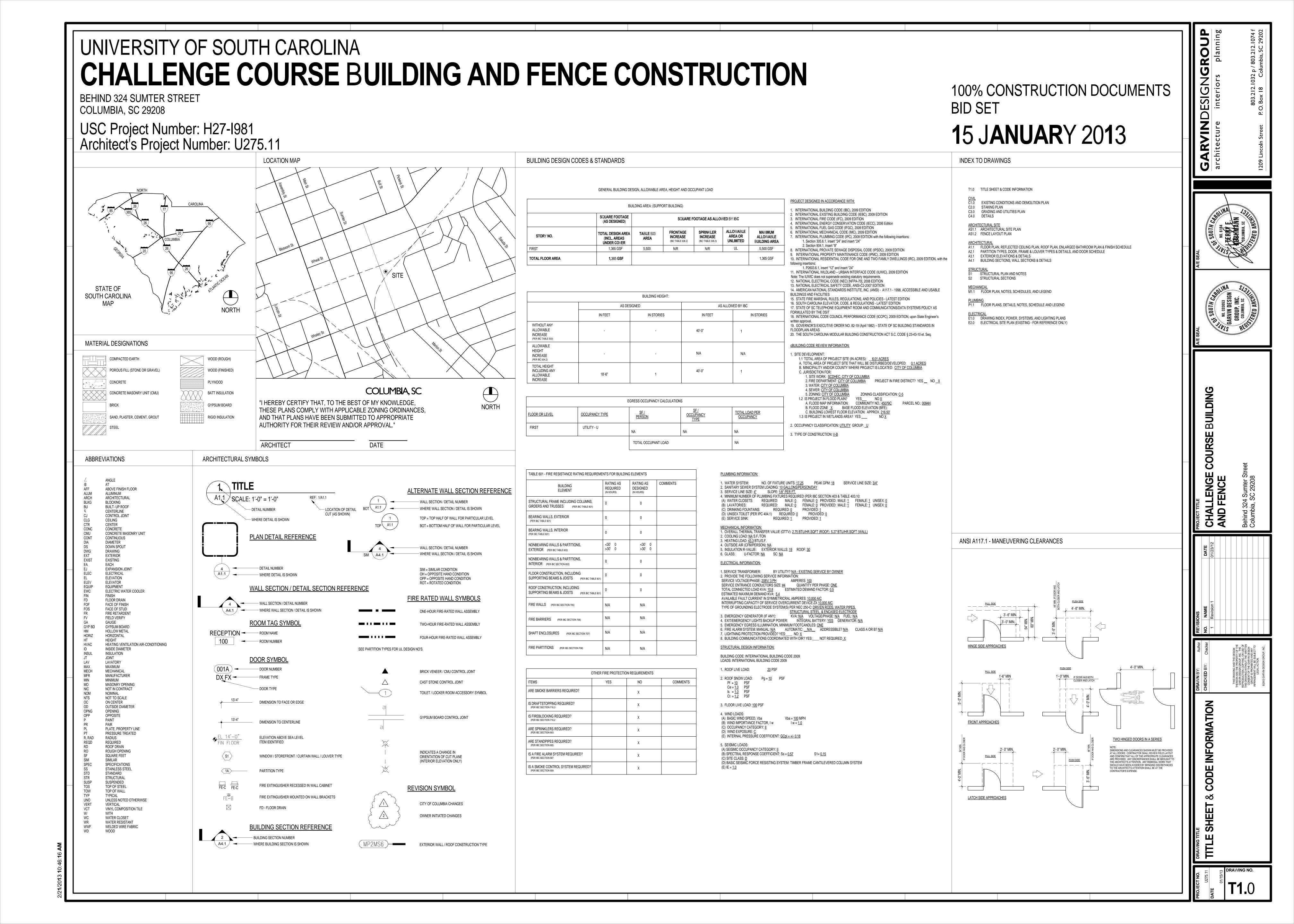
Make sure to include your company name (on this form) as registered with LLR.

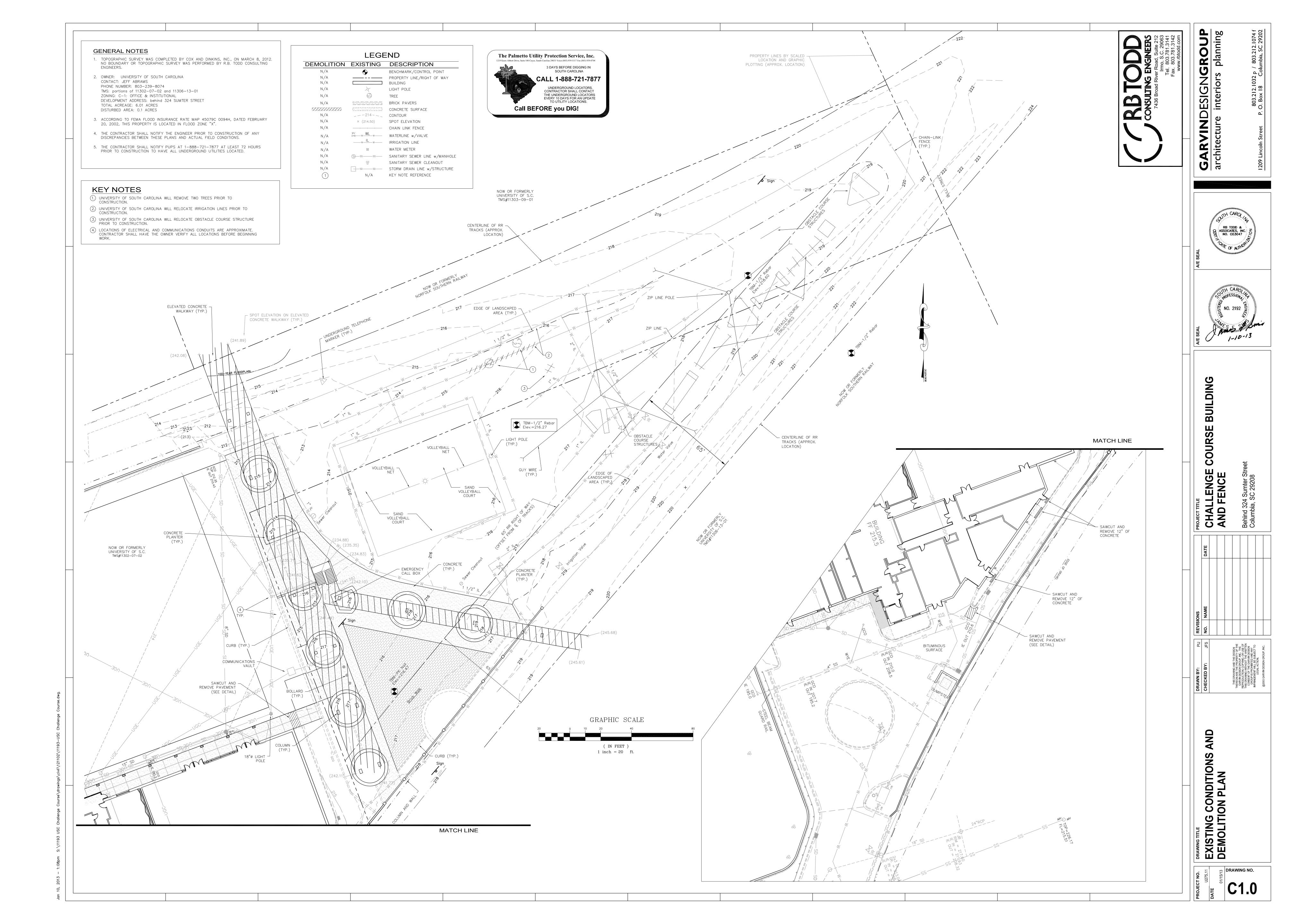


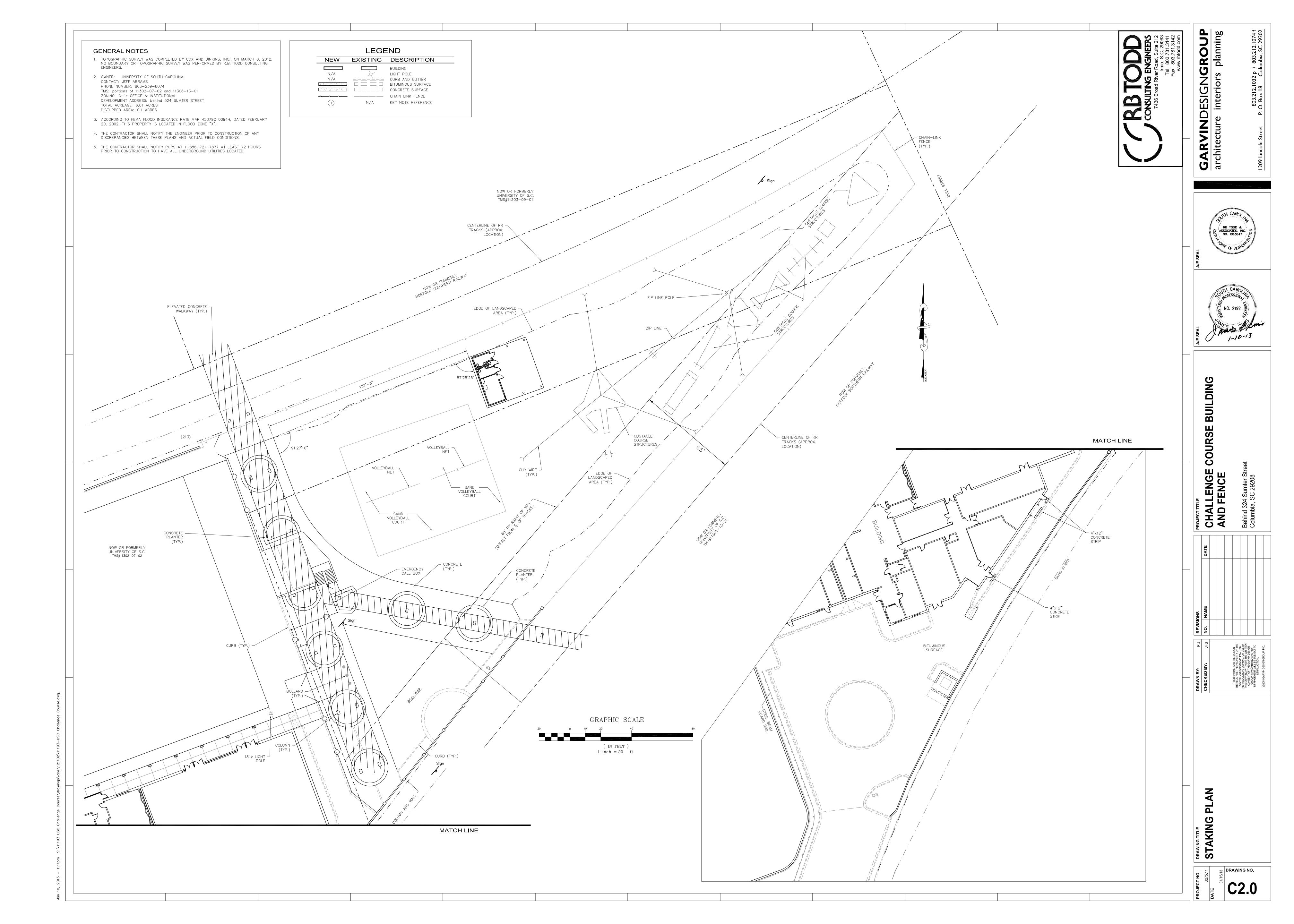
## Pre Bid for Challenge Course Building and Fence Construction/H27-I981 March 7, 2013 @ 10am

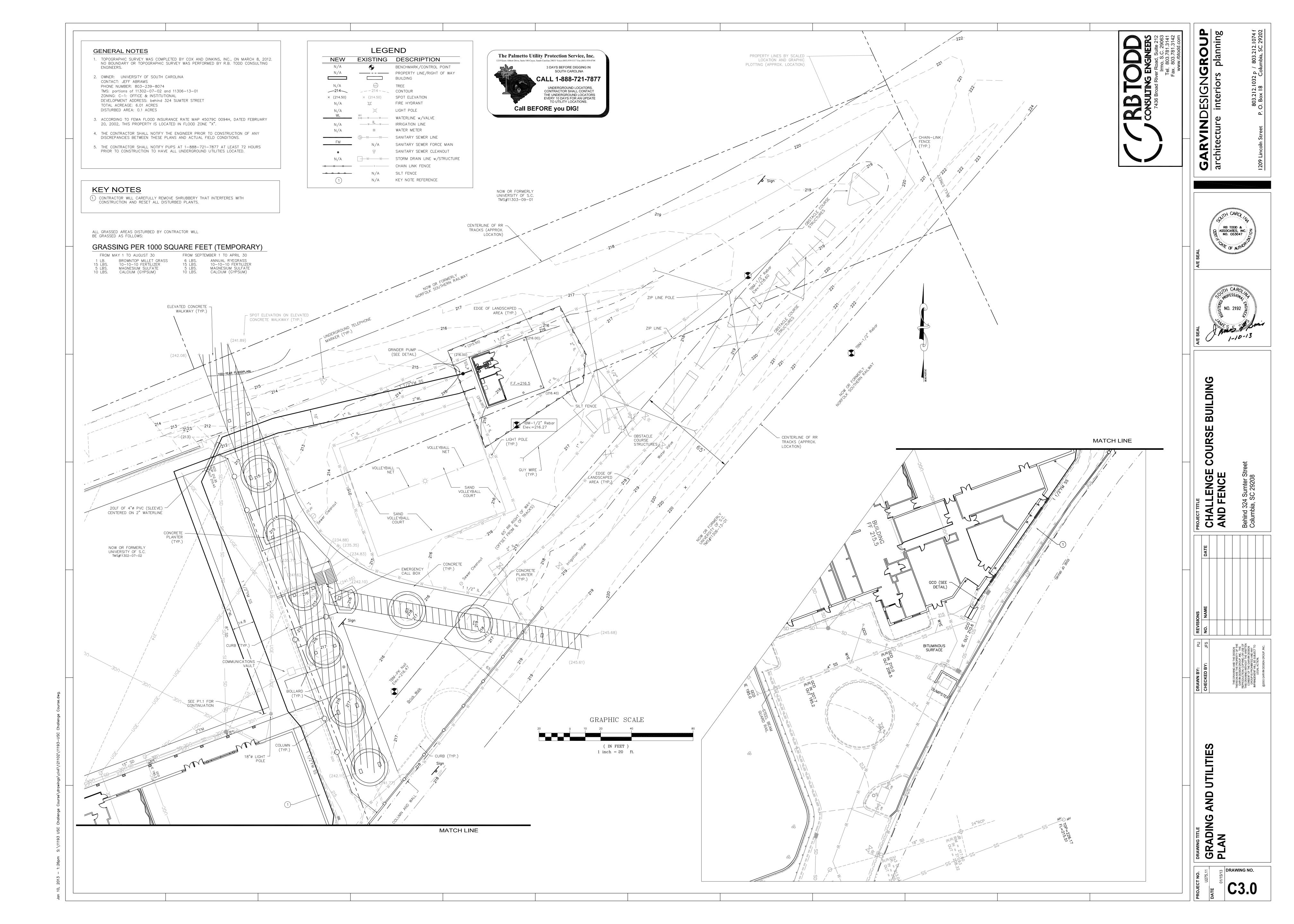
ATTENDEE'S NAME	COMPANY NAME & MAILING ADDRESS
SHANNON B. CROUCH	P.O. BOX 5496  COLUMBIA, SOUTH CAROLINA  PHONE# 803.743.2650  FAX# 803.779.3609  EMAIL Shancrovoh@sc.rr.com
	PHONE# FAX# EMAIL
	PHONE# FAX# EMAIL
	PHONE# FAX# EMAIL

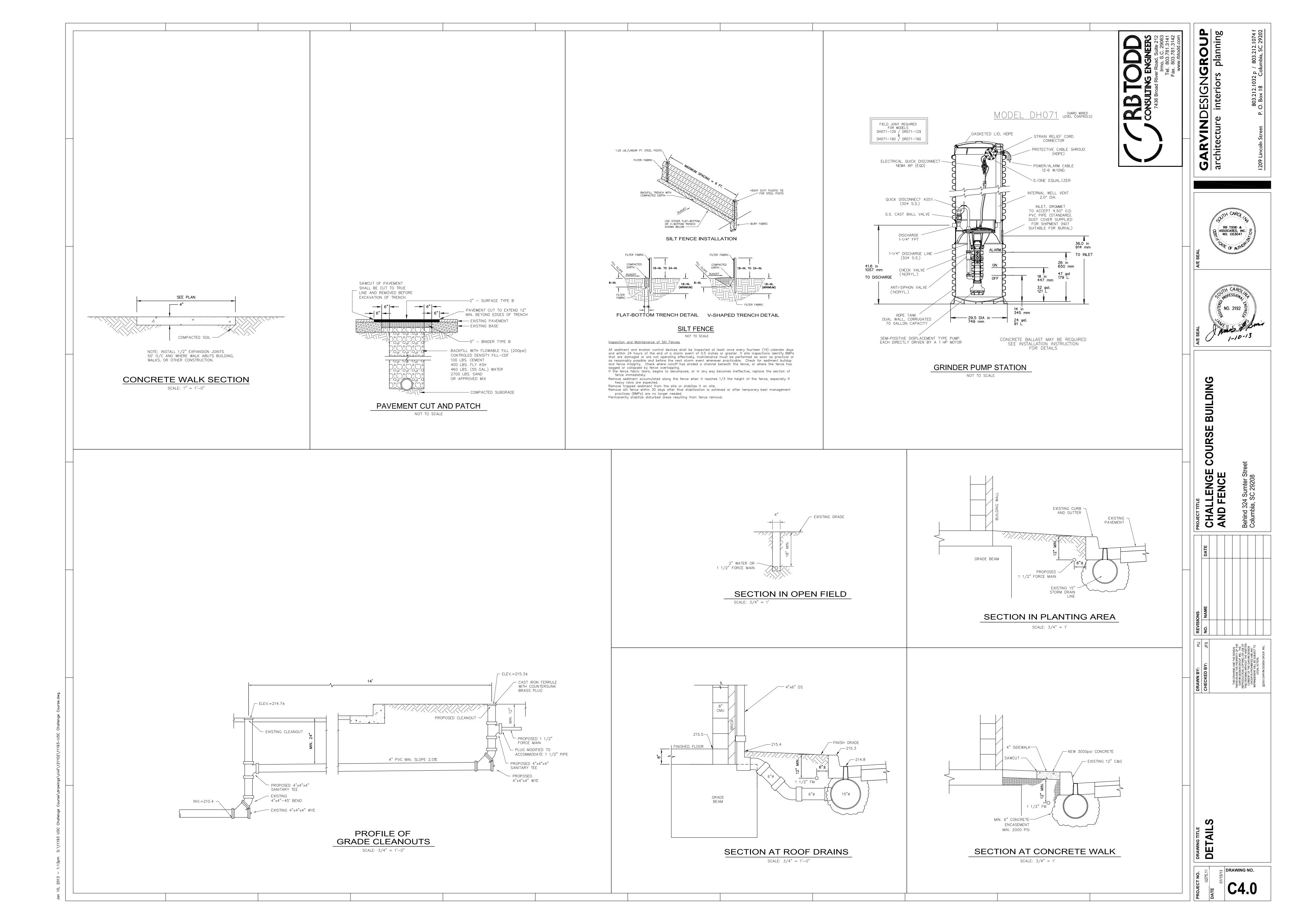
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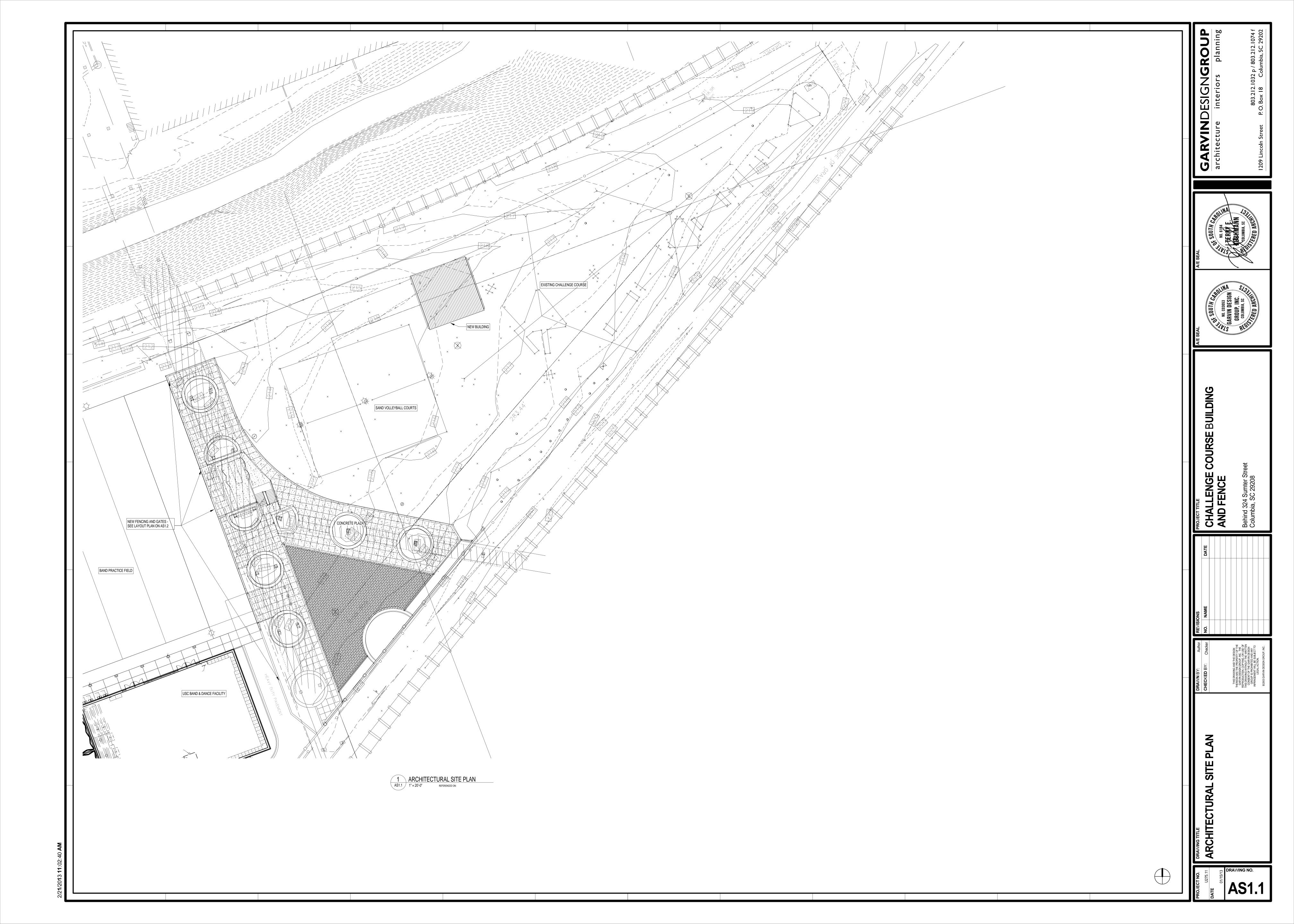


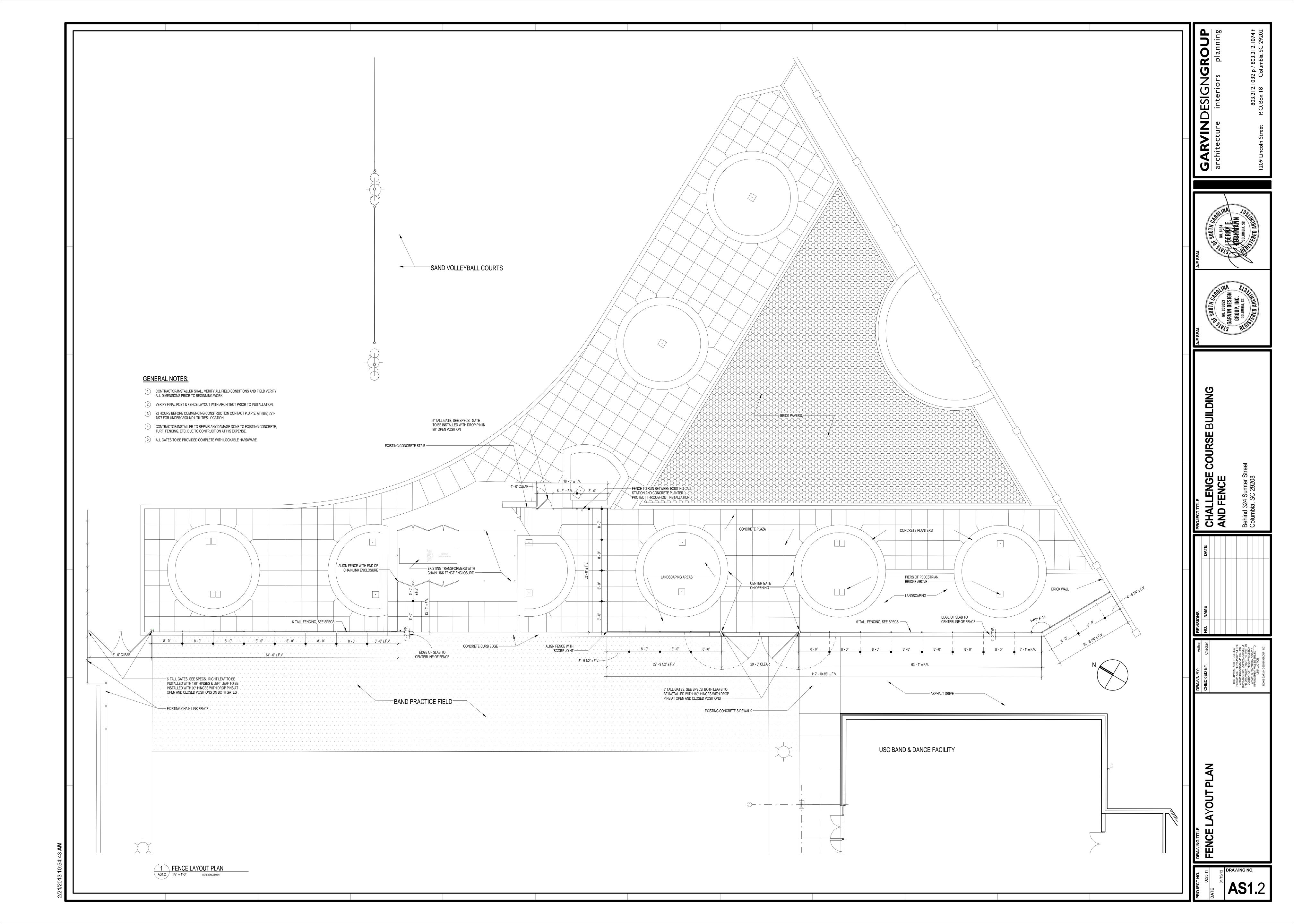


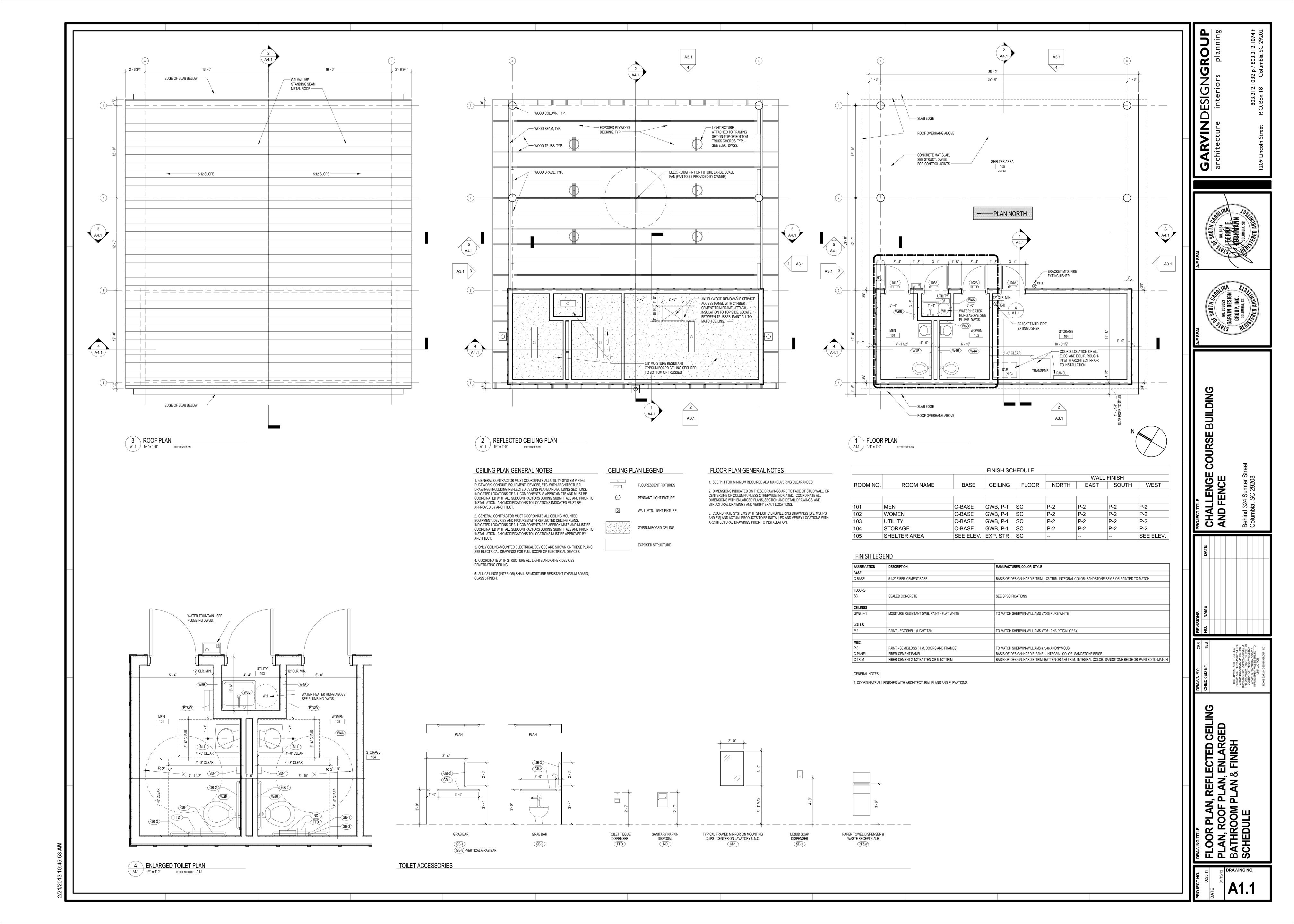


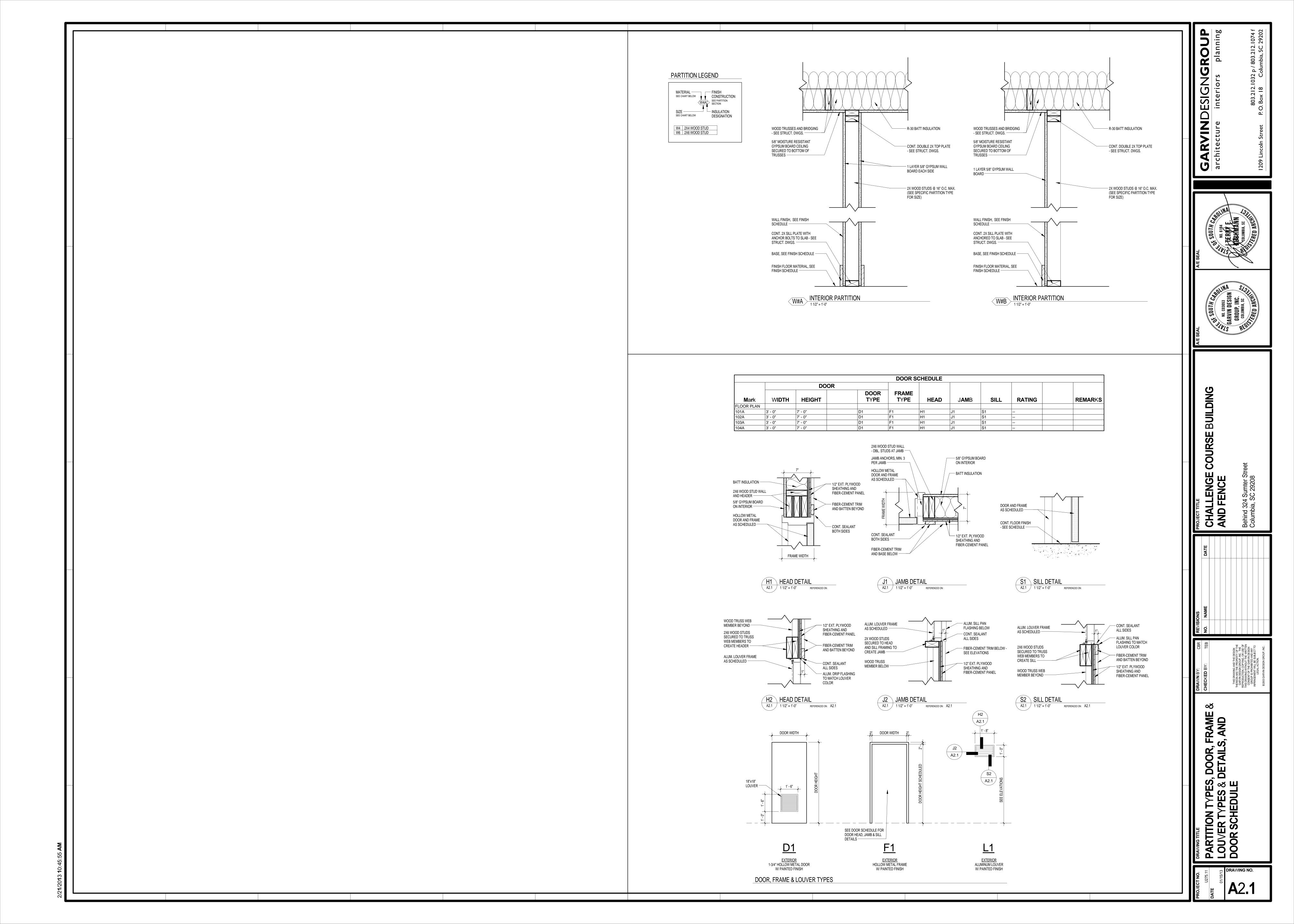


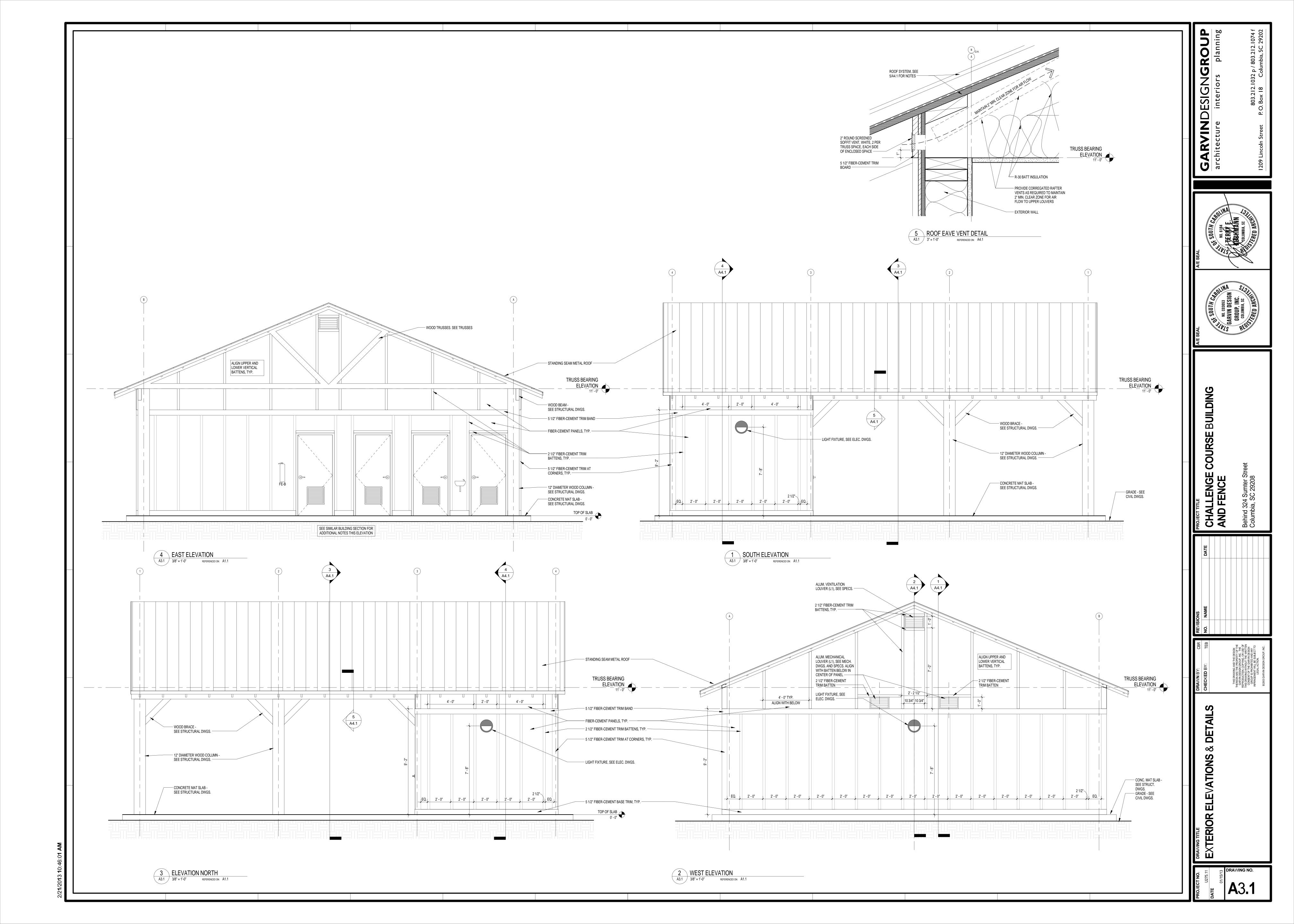


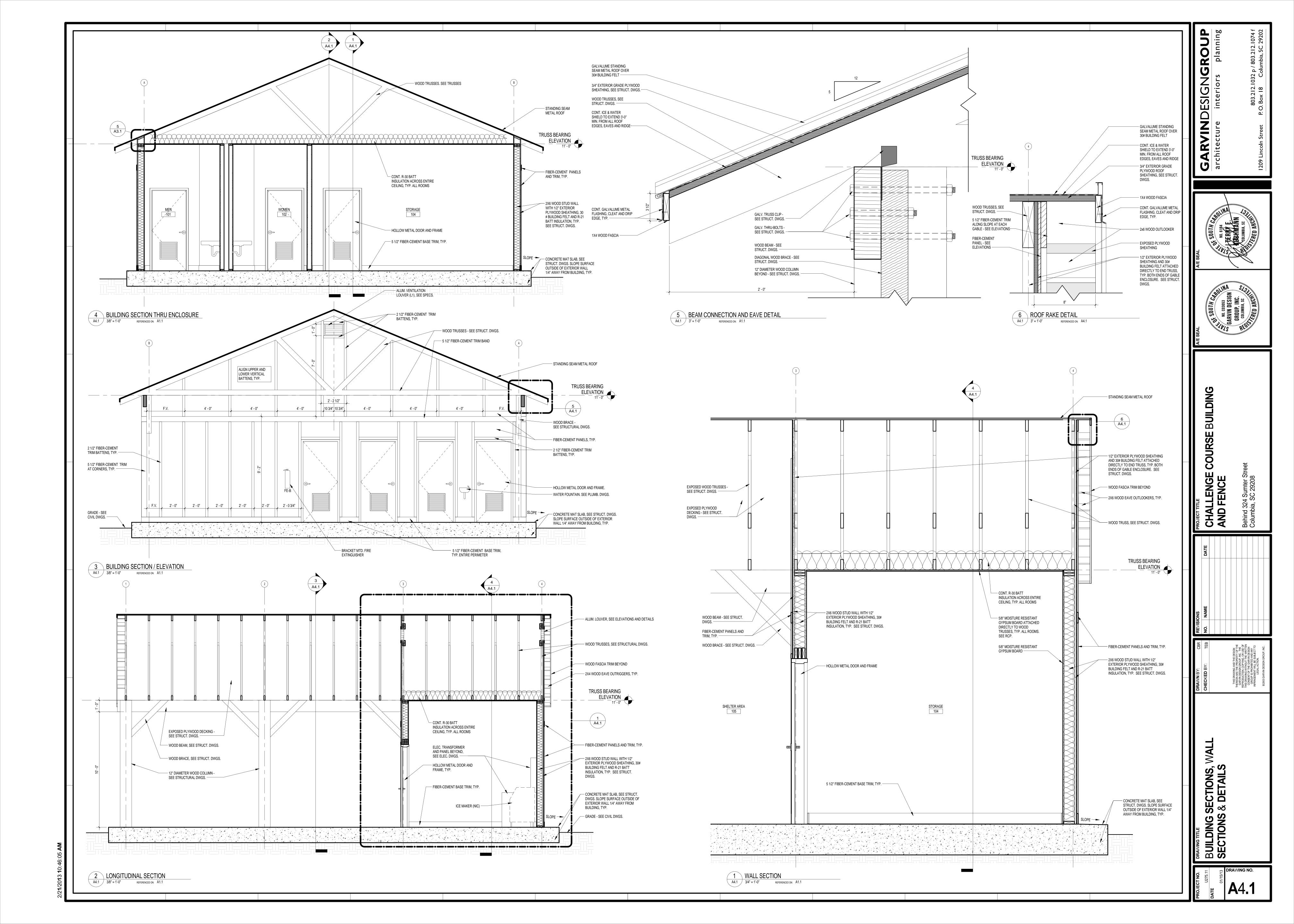












# **GENERAL NOTES**

A. LIVE LOADS:

D. WIND LOAD:

ASSEMBLY AREAS...... 100 PSF, 2000 LB CONCENTRATED ROOF.... .. 20 PSF, UNREDUCED

B. DEAD LOADS: ACTUAL WEIGHTS OF MATERIALS, EQUIPMENT, AND ETC. C. ROOF SNOW LOADS: (1) GROUND SNOW LOAD: 10 PSF (2) SLOPED ROOF SNOW LOAD: 10 PSF (3) SNOW EXPOSURE FACTOR Ce = 1.00

(4) SNOW LOAD IMPORTANCE FACTOR I = 1.00 (5) THERMAL FACTOR Ct = 1.20 (6) RAIN ON SNOW SURCHARGE: 5 PSF

(1) BASIC WIND SPEED 100 MPH (2) WIND IMPORTANCE FACTOR I = 1.00 (3) BUILDING CATEGORY II (4) WIND EXPOSURE C (5) INTERNAL PRESSURE COEFFICIENT GCpi = +/- 0.00

(6) DESIGN PRESSURES FOR COMPONENTS AND CLADDING ROOF LOAD: CORNER ZONE OR ZONE 3 USE -36.9 PSF PERIMETER ZONES OR ZONE 2 USE -22.2 PSF

E. SEISMIC DESIGN DATA (1) SEISMIC USE GROUP II, IMPORTANCE FACTOR I = 1.00 (2) MAPPED SPECTRAL RESPONSE ACCELERATIONS:

INTERIOR ZONE OR ZONE 1 USE -14.8 PSF

 $S_s = 0.567$ ,  $S_1 = 0.152$ (3) SITE CLASS D - ASSUMED (4) SPECTRAL RESPONSE COEFFICIENTS:

 $S_{DS} = 0.509$ ;  $S_{D1} = 0.222$ (5) SEISMIC DESIGN CATEGORY D (6) BASIC STRUCTURAL SYSTEM AND SEISMIC RESISTING SYSTEM TIMBER FRAME CANTILEVERED COLUMN SYSTEM

(7) DESIGN BASE SHEAR V = 15.6 KIPS (8) SEISMIC RESPONSE COEFFICIENT Cs = 0.339 (9) RESPONSE MODIFICATION FACTOR R = 1 1/2 (10) ANALYSIS PROCEDURE

EQUIVALENT LATERAL FORCE PROCEDURE

2. BUILDING CODE - INTERNATIONAL BUILDING CODE 2009 CAST-IN-PLACE CONCRETE COMPRESSIVE STRENGTH AT 28 DAYS: NORMAL WEIGHT (150 PCF) 4000 PSI FOR ALL CONCRETE 4. ALL REINFORCING BARS TO HAVE A MINIMUM YIELD STRENGTH OF 60 KSI.

5. 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 & MATERIALS. D. ALL PERMANENTLY VISIBLE EDGES OF CONCRETE SHALL HAVE A

3/4" CONTINUOUS CHAMFER. THIS INCLUDES ALL SLABS, BEAMS, COLUMNS, AND WALLS. 6. CHECK WITH VARIOUS TRADES FOR SLEEVES, OPENINGS, CONDUITS, ETC.

BEFORE POURING CONCRETE. 7. ALL CONCRETE WALLS, BEAMS, RAILS, ETC. SHALL HAVE CORNER BARS SAME SIZE AND SPACING AS HORIZONTAL REINFORCEMENT UNLESS NOTED OTHERWISE 8. PROVIDE AND INSTALL ALL PLATES, ANGLES, REINFORCING, ETC.,

EMBEDDED IN CAST-IN-PLACE CONCRETE. 9. VERIFY LOCATIONS OF ALL WALLS, OPENINGS, DEPRESSIONS, CHAMFERS, BRICK LEDGES, ANCHOR SLOTS, REGLETS, ETC, WITH ARCHITECTURAL DRAWINGS. 10. VERIFY ALL ELEVATIONS AND DIMENSIONS WITH ARCHITECTURAL DRAWINGS. 11. SEE ARCHITECTURAL DRAWINGS FOR MISCELLANEOUS DETAILS NOT SHOWN ON STRUCTURAL DRAWINGS.

12. SEE ARCHITECTURAL DRAWINGS FOR EXTREMITIES OF CONCRETE SLABS. 13. CONTRACTOR SHALL VERIFY ALL EXISTING DIMENSIONS AND ELEVATIONS BEFORE ANY FABRICATION HAS STARTED.

14. PROVIDE AND INSTALL ALL TEMPORARY BRACING AS REQUIRED FOR SAFETY/STABILITY OF THE STRUCTURE UNTIL STRUCTURE IS COMPLETE. 15. ALL CONCRETE SLABS ON GRADE TO BE 4" THICK REINFORCED WITH

WELDED WIRE FABRIC 6x6-W1.4xW1.4, UNLESS NOTED OTHERWISE. 16. ALL CONCRETE SLABS TO SLOPE TO FLOOR DRAINS, IN ROOMS OR AREAS THAT HAVE FLOOR DRAINS. SEE ARCHITECTURAL PLANS AND PLUMBING PLANS FOR LOCATIONS.

17. WHERE DETAIL IS SHOWN ON STRUCTURAL DRAWINGS FOR ONE CONDITION, IT SHALL APPLY TO ALL SIMILAR OR LIKE CONDITIONS, UNLESS NOTED OR SHOWN OTHERWISE ON PLANS.

18. ALL REINFORCING SPLICES SHALL HAVE A MINIMUM LAP OF 48 BAR DIAMETERS UNLESS NOTED OR SPECIFIED OTHERWISE. 19. PRE-ENGINEERED WOOD TRUSSES AND COMPONENTS: A. TRUSSES SHALL BE PREFABRICATED TYPE AND EQUAL TO THOSE

MANUFACTURED NOTED IN THE SPECIFICATIONS. MINIMUM CHORD SIZE SHALL BE 2X6. B. TRUSSES SHALL BE DESIGNED FOR THE FOLLOWING MIN. LOADS: (a.) LIVE LOAD: 20 PSF.

(b.) DEAD LOAD: 30 PSF. (c.) ANY ADDITIONAL LOADS FROM EQUIPMENT OR MATERIAL. (d.) GROSS WIND UPLIFT - SEE NOTE 1. ABOVE. SUBMIT LETTER TO STATE THAT THESE UPLIFT LOADS ARE USED IN THE

TRUSS DESIGN. USE ACTUAL DEAD LOAD IN UPLIFT CALCULATIONS. C. TRUSSES SHALL BE ERECTED AND BRACED IN STRICT ACCORDANCE WITH WOOD TRUSS COUNCIL OF AMERICA

SPECIFICATIONS D. TRUSSES SHALL BE SPACED AT 2'-0" MAXIMUM CENTERS OR AS E. SHOP DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER FOR

F. TRUSS MANUFACTURER SHALL SUBMIT SIGNED AND SEALEDDESIGN CALCULATIONS ALONG WITH COMPLETE SHOP DRAWINGS FOR APPROVAL. COMPUTER PRINTOUT OF LOADS, PLATE SIZES, PLATE POSITIONS, MEMBER SIZES AND LUMBER GRADES WILL BE ACCEPTABLE. THE TRUSS DESIGN SHALL BE PERFORMED BY OR UNDER DIRECT SUPERVISION OF A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF SOUTH CAROLINA. G. SEE ARCHITECTURAL DRAWINGS FOR DETAILS AND DIMENSIONS

H. ALL TOP CHORDS TO ALIGN FOR SMOOTH SHEATHING PLANE.

CAMBER TRUSS CONFIGURATIONS AS REQUIRED TO ACCOMPLISH I. BOTTOM CHORD TO BE LEVEL. TOP CHORD TO SLOPE AS SHOWN

J. CAMBER TRUSSES FOR TOTAL LOAD. 20. SEE ARCHITECTURAL DRAWINGS (WALL SECTIONS) FOR INFORMATION NOT SHOWN ON STRUCTURAL DRAWINGS 21. DRAWINGS INDICATE GENERAL ARRANGEMENT AND CONFIGURATIONS AND ARE GENERALLY DRAWN TO SCALE. HOWEVER, SCALE DIMENSIONS SHALL NOT BE

USED. OBTAIN DIMENSIONS FROM ARCHITECT WHEN NOT GIVEN ON DOCUMENTS. NOTIFY THE ARCHITECT AND ENGINEER IF ANY INCONSISTENCIES ARE FOUND. 22. WHERE CONFLICT EXISTS BETWEEN STRUCTURAL AND ARCHITECTURAL, USE STRUCTURAL FOR ITEMS RELATING TO STRUCTURAL STRENGTH SUCH AS VERTICAL REINFORCING IN MASONRY WALLS, FOOTING SIZE, FOOTING

ELEVATION, REINFORCING, MEMBER SIZE, ETC. 23. REVIEW OF SUBMITTAL AND/OR SHOP DRAWINGS BY THE STRUCTURAL ENGINEER OF RECORD DOES NOT RELIEVE THE CONTRACTOR OF THE SOLE RESPONSIBILITY TO REVIEW AND CHECK SHOP DRAWINGS BEFORE SUBMITTAL TO THE STRUCTURAL ENGINEER OF RECORD. THE CONTRACTOR REMAINS SOLELY RESPONSIBLE FOR ERRORS AND OMISSIONS ASSOCIATED WITH THE PREPARATION OF SHOP DRAWINGS AS THEY PERTAIN TO MEMBER SIZES, DETAILS, AND DIMENSIONS SPECIFIED IN THE CONTRACT DOCUMENTS. CONTRACTOR ALSO SHALL BE RESPONSIBLE FOR MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES OF CONSTRUCTION. SEE SPECIFIC PROVISIONS IN THE CONTRACT DOCUMENTS DEALING WITH THE APPROPRIATE DESIGN

RESPONSIBILITIES OF CONTRACTORS, SUBCONTRACTORS, AND SUPPLIERS. 24. THE DESIGN OF PRE-ENGINEERED SYSTEMS SPECIFIED IN THE CONTRACT DOCUMENTS WHICH ARE DESIGNED/ENGINEERED BY CONTRACTOR IS THE SOLE RESPONSIBILITY OF THE SUPPLIER AND ITS DESIGN ENGINEER, LICENSED IN THE PROJECT STATE. SUBMITTAL OF SUCH SYSTEMS TO THE STRUCTURAL ENGINEER OF RECORD SHALL BE REVIEWED FOR CONFORMANCE WITH THE CONTRACT DOCUMENTS WITH REGARD TO THE ARRANGEMENT AND OR SIZES OF MEMBERS, SHOWN ON THE STRUCTURAL CONTRACT DOCUMENTS, AND THE SUPPLIERS INTERPRETATION OF THE DESIGN INFORMATION INCLUDED IN THE CONTRACT DOCUMENTS. SUCH REVIEW BY THE STRUCTURAL ENGINEER OF RECORD SHALL NOT IMPLY ANY RESPONSIBILITY FOR THE ACTUAL DESIGN OF SUCH SYSTEMS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DIMENSIONAL ACCURACY AND CONFORMANCE WITH THE INFORMATION CONTAINED IN THE CONTRACT DOCUMENTS. SEE SPECIFIC SECTIONS OF GENERAL NOTES ABOVE AND SPECIFICATIONS FOR THE APPROPRIATE DESIGN RESPONSIBILITIES OF THE SUPPLIER AND IT'S LICENSED ENGINEER.

## REQUIRED SPECIAL INSPECTIONS **IBC SECTION 1704**

03000 REINFORCED CONCRETE 1. CONTINUOUS INSPECTION IS REQUIRED: A. SAMPLING FRESH CONCRETE & PERFORMING SLUMP, AIR CONTENT

AND DETERMINING TEMPERATURE OF FRESH CONCRETE AT THE TIME OF MAKING SPECIMENS FOR STRENGTH TESTS SUCH AS. CONCRETE CYLINDERS, BEAMS, CORES AND OR PANELS. B. PRIOR TO AND DURING THE PLACEMENT OF BOLTS INSTALLED IN CONCRETE WHEN APPLICABLE, PER SECTION 1912.5 OF THE I.B.C. C. PRIOR TO AND DURING THE INSTALLATION OF ADHESIVE AND OR GROUTED ANCHORS.

A. AT THE START AND DURING EACH PHASE OF THE PROJECT TO ASCERTAIN PROPOSED CONFORMITY OF MATERIALS, PERSONNEL QUALIFICATIONS AS REQUIRED AND PROCEDURES WITH APPLICABLE CODES, PLANS AND SPECIFICATIONS. B. REINFORCEMENT PRIOR TO CLOSING OF FORMS OR THE DELIVERY

OF CONCRETE TO THE PROJECT SITE. C. AT FREQUENCIES NECESSARY TO CLEARLY CONFIRM PLACEMENT OF THE TIES, STIRRUPS, CONNECTIONS, AND ADDITIONAL SPECIFIED REINFORCEMENT (i.e. OPENINGS, BEAMS, CORNERS, COLUMNS, AND OR PIERS) BEFORE THEY ARE CONCEALED.

06176 METAL-PLATE-CONNECTED WOOD TRUSSES

QUALIFICATIONS AS REQUIRED AND PROCEDURES WITH APPLICABLE

B. TRUSS MANUFACTURING, DELIVERY, AND INSTALLATION OPERATIONS.

D. FOR VERIFICATION OF DELIVERED MIX DESIGN BEFORE ANY

1. CONTINUOUS INSPECTION IS REQUIRED: A. ALL FIELD GLUING OPERATIONS. 2. PERIODIC INSPECTION IS REQUIRED: A. AT THE START AND DURING EACH PHASE OF THE PROJECT TO ASCERTAIN PROPOSED CONFORMITY OF MATERIALS, PERSONNEL

# SOIL NOTES

CODES, PLANS AND SPECIFICATIONS.

CONCRETE IS PLACED.

2. PERIODIC INSPECTION IS REQUIRED:

1. MAT SLAB DESIGNED FOR AN ALLOWABLE SOIL BEARING PRESSURE OF 1000 POUNDS PER SQUARE FOOT ON THE EXISTING UNIMPROVED SOIL PROFILE, GEOTECHNICAL REPORT DATED APRIL 25, 2012 PREPARED BY S&ME, INC. 2. THE MAT FOUNDATION SYSTEM IS DESIGNED AS A SINGLE UNIT WITH SIGNIFICANT RIGIDITY TO WITHSTAND POTENTIALLY SIGNIFICANT DIFFERENTIAL SETTLEMENTS WITHOUT FAILURE. PERIODIC MAINTENANCE FOR SLAB CRACKING, POTENTIAL PLUMBING ISSUES ARISING FROM SHIFTING PIPE ELEVATIONS AND POSSIBLE DAMAGE TO THE STRUCTURE MAY RESULT AND REQUIRE PERIODIC REPAIR. 3. BEFORE ANY CONSTRUCTION, THE ENTIRE SITE AREA SHALL BE STRIPPED OF ANY ROOT SYSTEMS, SURFACE VEGETATION, ORGANIC SURFACE SOILS, EXISTING CONCRETE SLABS, FOOTINGS, BURIED FUEL TANKS, UNDERGROUND UTILITIES, AND ANY OTHER UNSUITABLE NEAR SURFACE MATERIALS. ALSO, ALL EXISTING MATERIAL BENEATH THE BUILDING AREAS SHALL BE COMPLETELY REMOVED TO A DEPTH AS DETERMINED BY THE GEOTECHNICAL ENGINEER. THE UNDERCUTTING SHALL EXTEND AT LEAST FIVE FEET OUTSIDE THE BUILDING AREA.

AFTER STRIPPING AND UNDERCUTTING, THE EXPOSED SUBGRADE SHALL BE EVALUATED BY THE GEOTECHNICAL ENGINEER TO CONFIRM THAT ALL UNSUITABLE MATERIALS HAVE BEEN REMOVED. THE EXPOSED SUBGRADE SHALL THEN BE PROOFROLLED AND DENSIFIED. IN THE PRESENCE OF THE GEOTECHNICAL ENGINEER WITH APPROVED EQUIPMENT. PROOFROLLING SHALL BE DONE

FOLLOWING A PERIOD OF DRY WEATHER TO AVOID DAMAGING A OTHERWISE SUITABLE SUBGRADE. A MINIMUM OF FOUR (4) PASSES SHALL BE MADE OVER EACH LOCATION WITH TWO OF THESE PASSES MADE PERPENDICULAR TO THE INITIAL LINE. ADDITIONAL PASSES REQUIRED FOR COMPACTION SHALL BE MADE. ANY AREAS FOUND TO "PUMP" OR DEFLECT EXCESSIVELY SHALL BE UNDERCUT TO STABLE MATERIAL. TESTING LABORATORY PERSONNEL SHALL DETERMINE THE NECESSITY OF FURTHER UNDERCUTTING. THE EXPOSED BASE SOILS SHALL BE DENSIFIED TO 95 % MODIFIED PROCTOR. TEST EXISTING BASE SOIL TO VERIFY THAT 95 % COMPACTION HAS BEEN OBTAINED. DEPENDING UPON SOIL MOISTURE AT TIME OF GRADING, MOISTURE SHALL BE ADDED OR THE SOIL SHALL BE AERATED AND DRIED TO WITHIN +/- 2 PERCENT OPTIMUM MOISTURE. IF WET CONDITIONS ARE ENCOUNTERED THE SUBGRADE SOILS SHALL BE SUFFICIENTLY AERATED TO PREVENT PUMPING UNDER HEAVY CONSTRUCTION EQUIPMENT.

PROPOSED BUILDING AREA SHALL BE REMOVED AND BACKFILLED WITH A WELL COMPACTED CRUSHED STONE. 5. ONCE THE EXPOSED SUBGRADE AREAS HAVE BEEN SATISFACTORILY STABILIZED, THE PLACED FILL SOILS SHALL BE COMPACTED IN LIFTS NOT EXCEEDING EIGHT (8") INCHES IN LOOSE THICKNESS. AN IN PLACE DRY DENSITY OF APPROXIMATELY NINETY FIVE PERCENT (95%) OF THE MAXIMUM MODIFIED PROCTOR DENSITY (ASTM D-1557) SHALL BE OBTAINED IN EACH LIFT, WITH THE UPPER 12 INCHES OF SUBGRADE COMPACTED TO 98% OF THE MAXIMUM MODIFIED PROCTOR DENSITY, ALL FILL MATERIAL SHALL BE TESTED BY LABORATORY PERSONNEL TO VERIFY THEIR SUITABILITY FOR USE AS A STRUCTURAL FILL. 6. THE TESTING LABORATORY SHALL DO A SUFFICIENT NUMBER OF IN

4. ALL EXISTING FOUNDATIONS, UTILITIES, TANKS, ETC. WITHIN THE

PLACE DENSITY TESTS TO CONFIRM THAT THE REQUIRED DEGREE OF COMPACTION IS OBTAINED. 7. PROVIDE 12" UNDER MAT GRANULAR BASE FILL AND PROVIDE VAPOR BARRIER OVER ENTIRE SUBGRADE IN INTERIOR OF BUILDING. GRANULAR BASE SHALL BE A COMPACTED #57 STONE AGGREGATE.

8. EACH FOOTING EXCAVATION SHALL BE THOROUGHLY TAMPED USING A MECHANICAL TAMPER BEFORE PLACING ANY STEEL OR CONCRETE. ALL SOFT, LOOSE, OR OTHERWISE QUESTIONABLE SOILS SHALL BE STABILIZED BY COMPACTING IN PLACE OR BY REMOVING AND REPLACING SUCH UNSUITABLE SOILS. IN AREAS THAT ARE DIFFICULT TO STABILIZE, A COARSE CRUSHED AGGREGATE SHALL BE USED TO STABILIZE THE EXCAVATIONS. TESTING LABORATORY SHALL VERIFY THAT THE FOOTING EXCAVATIONS HAVE BEEN COMPACTED AND THAT THE BEARING CAPACITY HAS BEEN ACHIEVE.

9. IT IS REQUIRED THAT MAT BE CONSTRUCTED AS SOON AS POSSIBLE AFTER EXCAVATION TO BEARING SOILS IS COMPLETED. IF THE BEARING SOILS ARE EXPOSED TO SURFACE OR RAIN WATER, THE SOFTENED SOIL SHALL BE THOROUGHLY REMOVED PRIOR TO PLACEMENT OF CONCRETE. IF IT IS ANTICIPATED THAT MAT EXCAVATIONS WILL REMAIN EXPOSED FOR MORE THAN 24 HOURS OR IF RAIN IS IMMINENT WHILE BEARING SOILS ARE EXPOSED, A 2 TO 4 INCH THICKNESS OF 2000 PSI MINIMUM STRENGTH CONCRETE MAY BE

PLACED OVER BEARING SOILS FOR PROTECTION. 10. IMMEDIATELY PRIOR TO CONSTRUCTING THE MAT SLAB OR PAVEMENT BASE COURSE, THE SUBGRADE SHALL BE RECOMPACTED TO REPAIR ANY SUBGRADE SOILS THAT HAVE BEEN DISTURBED DURING CONSTRUCTION. AFTER COMPACTION OF THE SUBGRADE, FIELD DENSITY TESTING SHALL BE PERFORMED TO EVALUATE THE CONDITIONS OF THE SUBGRADE BEFORE PLACING THE SLAB OR

PAVING BASE COURSE. 11. THE COMPACTION RECOMMENDATIONS GIVEN ABOVE APPLY TO BACK-FILL FOR TRENCH DRAINS, UTILITIES, ETC. WITHIN THE BUILDING AND PAVED AREAS. FIELD DENSITY TESTING SHALL BE PERFORMED THROUGH-OUT THE BACKFILLING PROCESS TO DOCUMENT THE CONTRACTOR'S COMPACTION PERFORMANCE IN THE UTILITY TRENCH BACKFILL.

## WALL SHEATHING NOTES AND ATTACHMENT PATTERN

A. 5/8" GYPSUM WALLBOARD SHALL BE ATTACHED TO STUD MEMBERS TO INCLUDE BLOCKING W/ 1 1/4" TYPE "S" OR W/ #6 DRYWALL SCREWS IN ACCORDANCE W/ ASTM C954 SPACED AT 7" CENTERS TYPICAL. BOTH FACES OF INTERIOR WALLS, INTERIOR FACE OF EXTERIOR WALLS. B. 1/2" EXTERIOR PLYWOOD STRUCTURAL I SHEATHING SHALL BE ATTACHED

O STUD MEMBERS TO INCLUDE BLOCKING W/ 10d GALVANIZED NALS SPACED AT 4" CENTERS TYPICAL. EXTERIOR FACE OF EXTERIOR WALLS. C. SOLID BLOCKING SHALL BE PROVIDED BETWEEN THE FIRST TWO END STUDS, TYPICAL AT ENDS & CORNERS OF ALL BEARING WALLS. D. GYPSUM WALLBOARD SHALL BE APPLIED PERPENDICULAR TO THE STUD FRAMING WITH SOLID BLOCKING BEHIND HORIZONTAL JOINTS. E. REFER TO ARCHITECTURAL DRAWINGS FOR ADDITIONAL SHEATHING

### PARALLAM FRAMING NOTES

PARALLAM MEMBERS SHALL BE PARALLEL STRAND LUMBER (PSL) OF SIZE AND STRENGTH INDICATED ON THE FRAMING PLANS AND DETAILS. DESIGN VALUES SHALL MEET OR EXCEED THE 2.0E PARALLAM PSL DESIGNATIONS BY ILEVEL TRUS JOIST BY WEYERHAEUSER OR EQUAL

## ROOF TRUSS NOTES:

3. 12' DIAMETER TREATED TIMBER POST (AWPA C4)

WOOD ROOF TRUSS LAYOUT IS FOR DIAGRAMATIC PURPOSES ONLY. ACTUAL TRUSS DESIGN SHALL BE BY TRUSS MFG. FOR GIVEN SPANS SLOPES, AND BEARING CONDITIONS. ROOF TRUSSES TO SUPPORT EQUIPMENT SUCH AS, BUT NOT LIMITED TO, SUSPENDED CEILINGS. MECH. EQUIP., LIGHT FIXTURES, ETC. VERIFY LOADS FROM SUCH EQUIPIMENT, REFER TO GENERAL NOTES FOR ADDITIONAL INFORMATION.

ROOF TRUSSES SHALL BE DESIGNED TO MEET THE REQUIREMENTS OF THE IBC 2009 BUILDING CODE - 100 M.P.H. DESIGN WIND SPEED.

PROVIDE "SIMPSON" TIE "H10A" AT EACH COMMON TRUSS BEARING. TYPICAL THROUGHOUT UNLESS NOTED OTHERWISE. PROVIDE "SIMPSON" STRAP AS REQUIRED WHERE UPLIFT LOADS CALCULATED BY TRUSS MANUFACTURER EXCEEDS "H10A" TIE CAPACITY (TYPICAL)

PROVDE BRACING AS REQ'D. FOR PRE-ENGINEERED WOOD ROOF TRUSSES, AS SPECIFIED BY WOOD TRUSS COUNCIL OF AMERICA.

# ROOF SHEATHING NOTES AND NAILING PATTERN

PROVIDE MINIMUM 2X6 CHORD SIZE FOR ALL TRUSS.

1. ALL PLYWOOD ROOF SHEATHING TO BE 3/4" EXTERIOR PLYWOOD SHEATHING (CDX), U.N.O.

2. ALL PLYWOOD ROOF SHEATHING SHALL HAVE STAGGERED ENDJOINTS. . PROVIDE BLOCKING AT ALL PANEL EDGES FROM BOUNDARY TO 8'-0"

4. ATTACH PLYWOOD SHEATHING TO WOOD MEMBERS TO INCLUDE ALL BLOCKING W/ 10d NAILS AS FOLLOWS: 4" CTR'S. AT PANEL EDGES LOCATED AT BOUNDARIES, RIDGES, VALLEYS, HIPS. AND DORMER VENTS. 6" CTR'S. AT PANEL EDGES BEARING ON TRUSS OR BLOCKING.

12" CTR'S. IN FIELD OF PANEL.

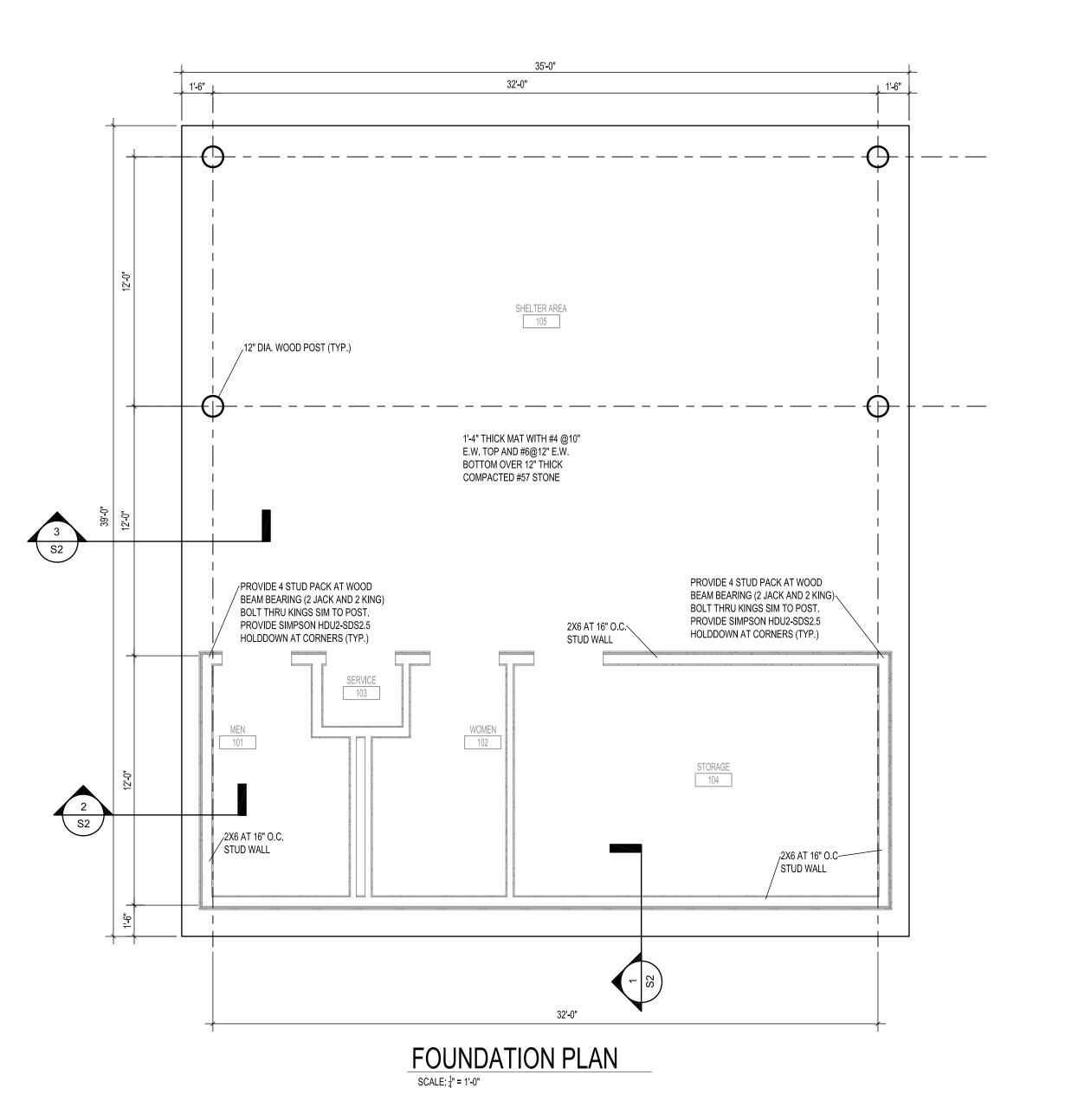
PROVIDE 4 STUD PACK AT WOOD PROVIDE 4 STUD PACK AT WOOD BEAM BEARING (2 JACK AND 2 KING) BEAM BEARING (2 JACK AND 2 KING) BOLT THRU KINGS SIM TO POST. BOLT THRU KINGS SIM TO POST. 2X6 STUD WALL TRUSS ON WALL, WITH 3" EXT. GRADE PLYWOOD SHEATHING \_2X6 STUD WALL <sub>2</sub>X6 STUD WALL END TRUSS ON WALL, WITH 1 EXT: GRADE PLYWOOD SHEATHING `2X6 CANTILEVER BLOCKING @ 16" O.C. UP SLOPE, NAIL TO TOP CHORD OF TRUSS AND PLYWOOD ROOF SHEATHING

\_2X6 CANTILEVER BLOCKING @ 16"

CHORD OF TRUSS AND PLYWOOD

O.C. UP SLOPE, NAIL TO TOP

ROOF FRAMING PLAN



Sas SPZ

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MABRY

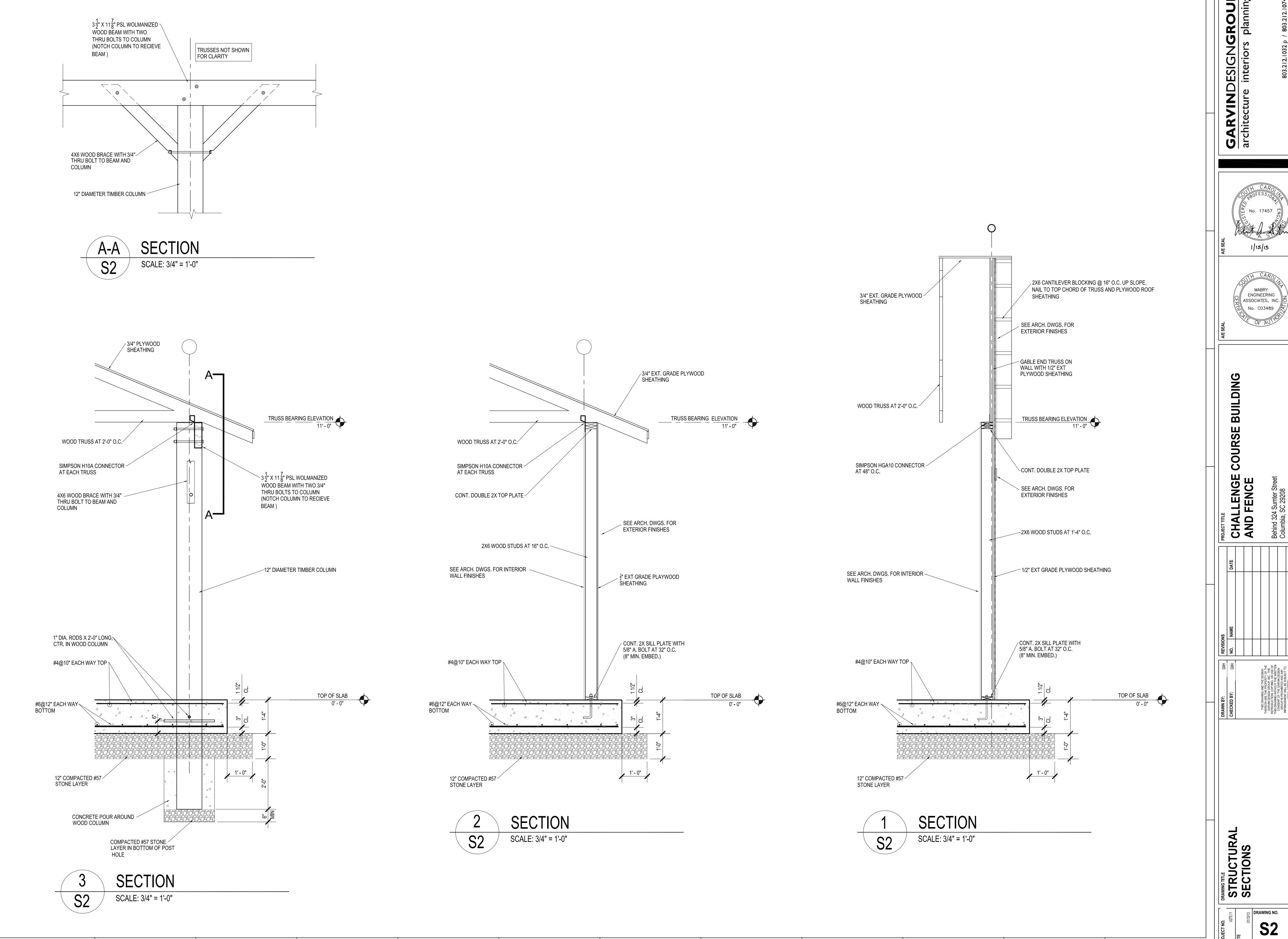
ENGINEERING

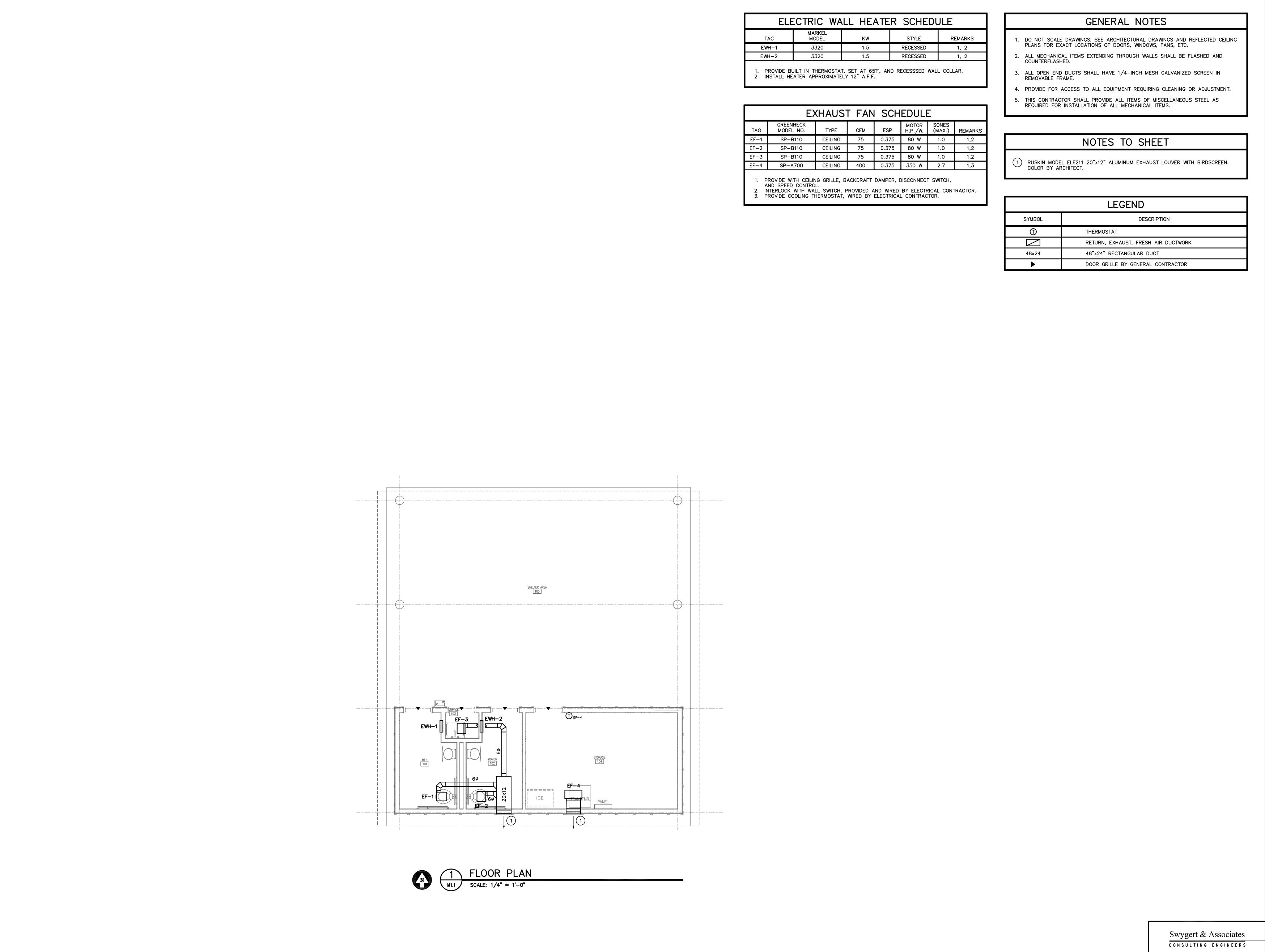
ASSOCIATES, INC.

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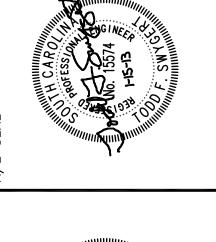
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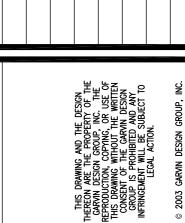




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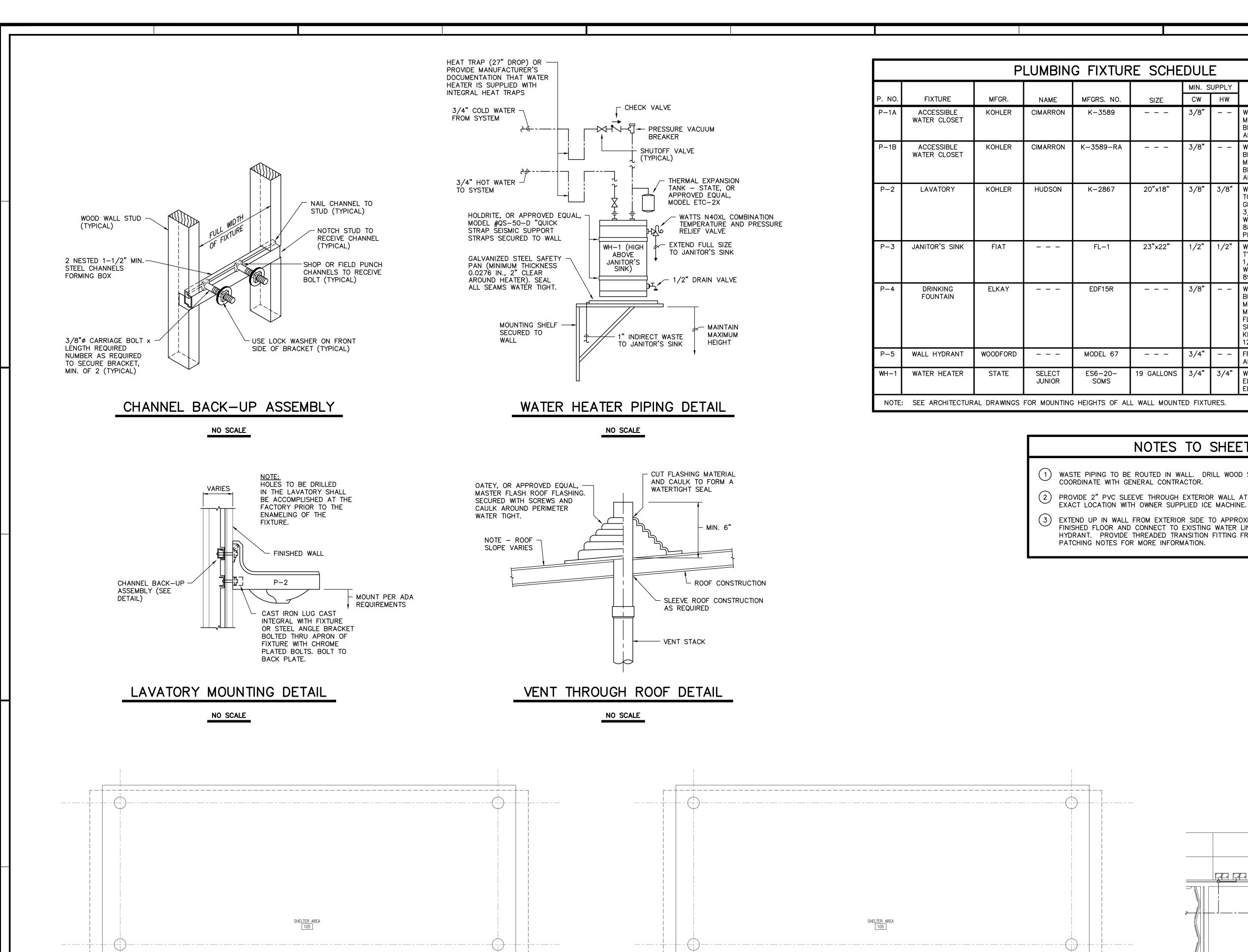


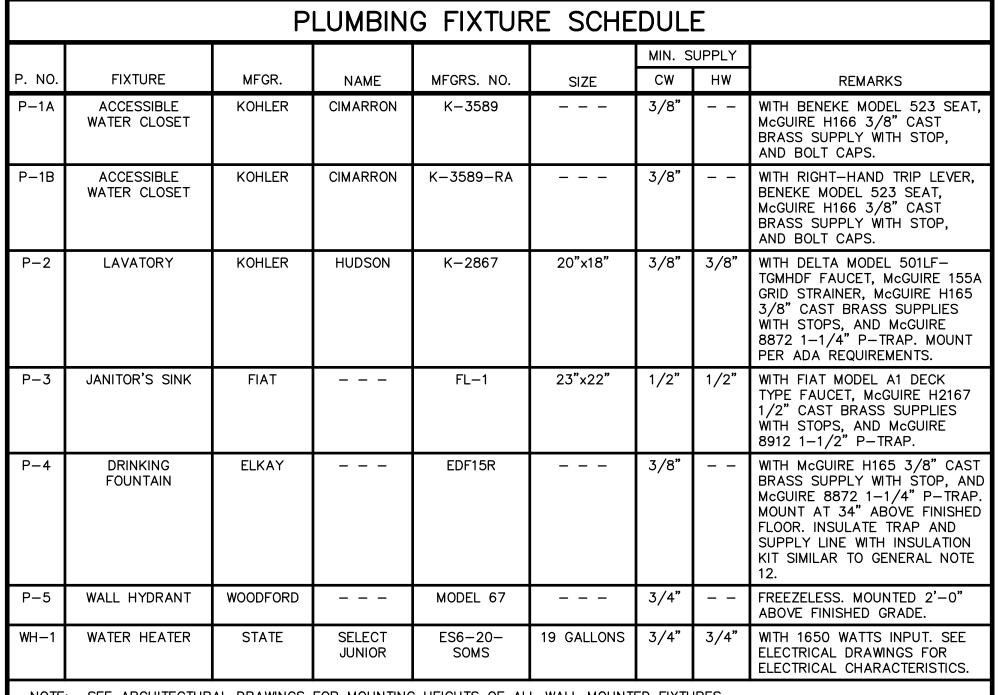




DBA Swygert & Assoc., Ltd. Telephone: (803) 791-9300 Facsimile: (803) 791-0830 mail@swygert-associates.com

ာ DRAWING NO.





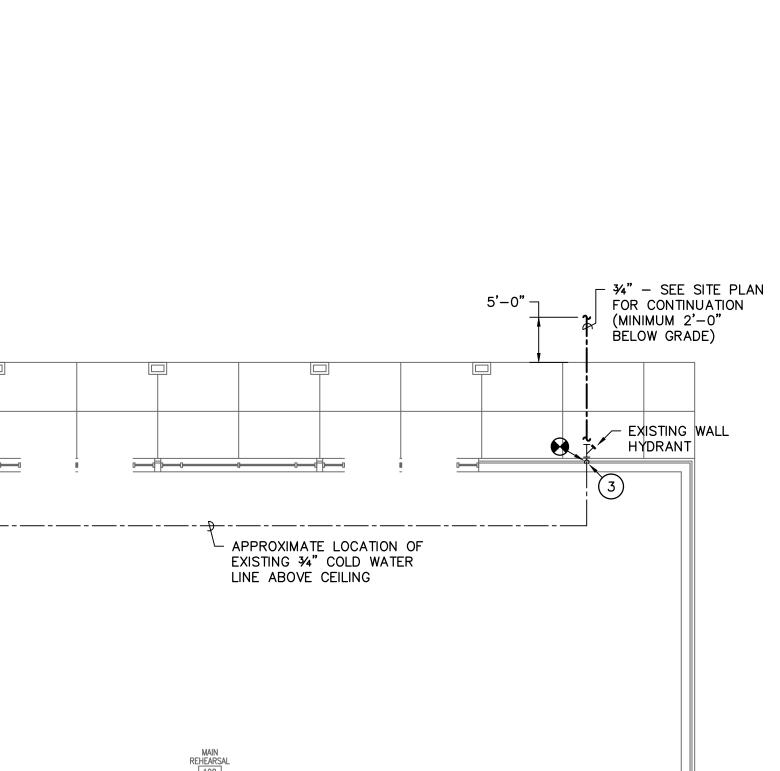
F	ALL	WALL	MOUNTED	FIXTURES.	

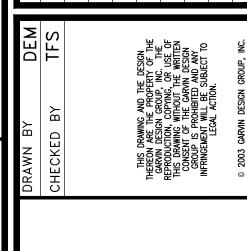
- (1) WASTE PIPING TO BE ROUTED IN WALL. DRILL WOOD STUDS AS REQUIRED.
- (2) PROVIDE 2" PVC SLEEVE THROUGH EXTERIOR WALL AT FLOOR SLAB. COORDINATE EXACT LOCATION WITH OWNER SUPPLIED ICE MACHINE.
- (3) EXTEND UP IN WALL FROM EXTERIOR SIDE TO APPROXIMATELY 24" ABOVE FINISHED FLOOR AND CONNECT TO EXISTING WATER LINE SERVING EXISTING WALL HYDRANT. PROVIDE THREADED TRANSITION FITTING FROM COPPER TO CPVC. SEE

# GENERAL NOTES

- . ALL WORK SHALL BE PERFORMED ACCORDING TO ALL LOCAL, STATE, NATIONAL CODES, AND THE 2006 INTERNATIONAL PLUMBING CODE.
- 2. SEE SITE PLAN FOR CONTINUATION OF UTILITIES.
- 3. ALL CONNECTIONS WITH SITE AT 5'-0" FROM BUILDING SHALL BE MADE BY THIS CONTRACTOR. THIS CONTRACTOR SHALL ALSO PROVIDE ALL NECESSARY TRANSITIONS IN PIPE SIZE AND/OR MATERIALS.
- 4. DO NOT SCALE DRAWINGS. SEE ARCHITECTURAL DRAWINGS FOR EXACT DIMENSIONS, FIXTURE LOCATIONS, ETC.
- 5. EXCEPT WHERE PIPE SPACE IS PROVIDED OR UNLESS NOTED OTHERWISE, ALL SUPPLY, WASTE AND VENT RISERS SHALL BE RUN IN WALLS AND PARTITIONS.
- 6. VENTS SHALL BE COLLECTED ABOVE THE CEILING AND EXTENDED THROUGH THE ROOF AS A SINGLE VENT AS INDICATED.
- 7. ALL VENT PIPING EXTENDING ABOVE ROOF LINE SHALL BE PAINTED THE SAME COLOR AS THE ROOF.
- 8. COORDINATE CLOSELY WITH ALL WORK DONE UNDER OTHER DIVISIONS OF THE SPECIFICATIONS TO AVOID INTERFERENCE AND CONFLICT.
- 9. PROVIDE FOR ACCESS TO ALL EQUIPMENT REQUIRING CLEANING OR ADJUSTMENT.
- 10. LOCATE ALL EXTERIOR WALL HYDRANTS 2'-0" ABOVE FINISHED GRADE.
- 11. VALVES WITH THREADED HOSE CONNECTIONS, AND WALL HYDRANTS SHALL BE EQUIPPED WITH A WATTS REGULATOR COMPANY, NO. NF8 BACK-SIPHONAGE, BACKFLOW PREVENTER.
- 12. 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.
- 13. ALL PIPING INSULATION SHALL BE RUN CONTINUOUSLY.

LEGEND									
SYMBOL	DESCRIPTION								
~	SANITARY WASTE LINE								
۶	SANITARY VENT LINE								
<del></del>	DOMESTIC COLD WATER LINE								
<del></del>	DOMESTIC HOT WATER LINE								
$\longrightarrow$	SHUTOFF VALVE								
حے ، <del>ص</del> ے	PIPE TURNS TO, AWAY								
<b>├</b> P−5	WALL HYDRANT								
ADA	FIXTURE FOR USE ACCORDING TO THE AMERICANS WITH DISABILITIES ACT								
VTR	VENT THROUGH ROOF								
•	CONNECTION POINT OF NEW TO EXISTING								

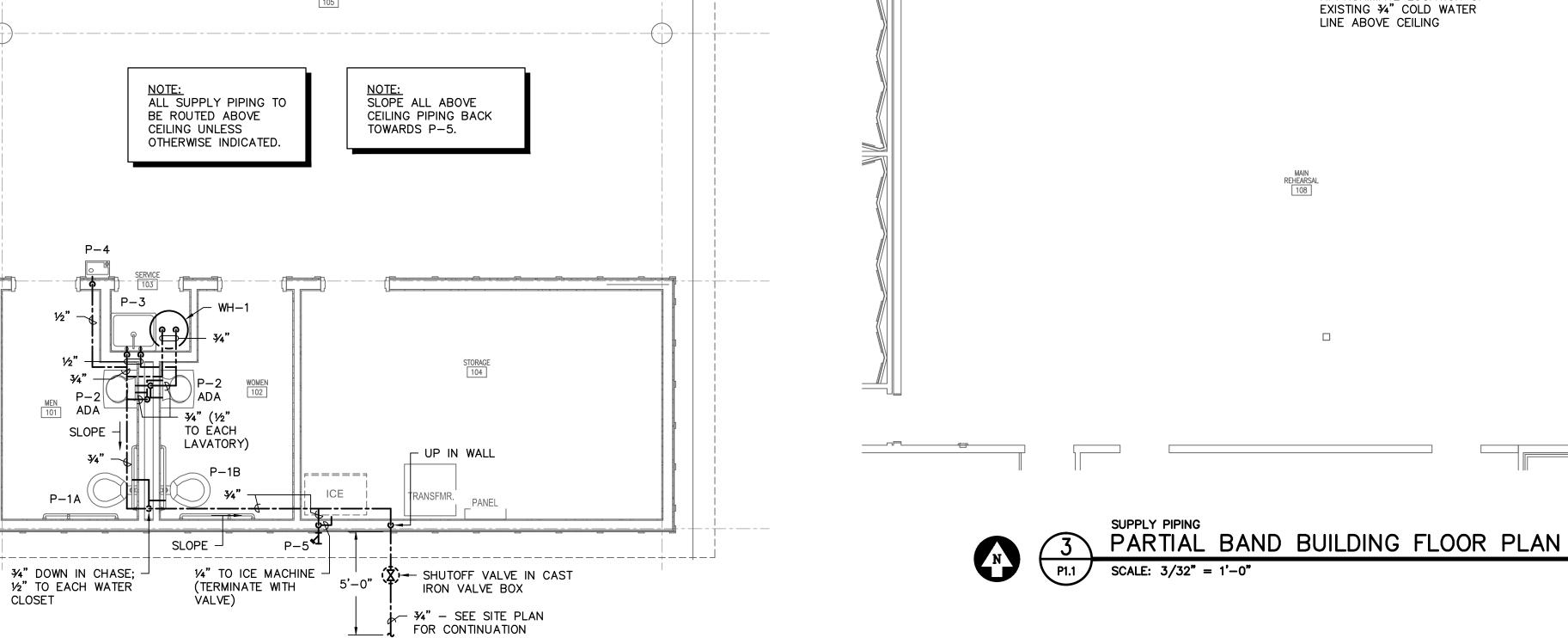


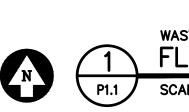


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FLOOR PL NOTES, S( LEGEND

Swygert & Associates CONSULTING ENGINEERS





DROP DOWN TO — BELOW SLAB

SUPPLY PIPING
FLOOR PLAN

WASTE AND VENT PIPING FLOOR PLAN

- 4" - SEE SITE PLAN FOR CONTINUATION

<u>NOTE:</u> ALL VENT PIPING SHALL BE 2" IN SIZE UNLESS

OTHERWISE INDICATED.

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MOUNTING HEIGHTS	INDICATED	IN	THIS	LEGEND	SHALL	ΒE	TO	TOP	OF	BOX.

	DRAWING INDEX
E1.0	DRAWING INDEX, POWER, SYSTEMS AND LIGHTING PLAN
E2.0	EXISTING ELECTRICAL SITE PLAN — FOR REFERENCE ONLY

	LIGHTING FIXTURE SCHEDULE										
SYMBOL	TYPE	DESCRIPTION	MANUFACTURER	MODEL NUMBER	OPTICAL ELEMENT	MOUNTING	VOLTS	LAMPS			
	А	4' FLUORESCENT SURFACE MOUNTED FIXTURE	KENALL	MLHA12 48 R MW PP 3 32 IS DV	POLYCARBONATE LENS	CEILING	120	3 - F32T8/TL741/ALTO			
	AE	4' FLUORESCENT SURFACE MOUNTED FIXTURE WITH BATT. PACK.	KENALL	MLHA12 48 R MW PP 3 32 IS DV EL14	POLYCARBONATE LENS	CEILING	120	3 - F32T8/TL741/ALTO			
н⊠	BE	WALL MOUNTED FLUORESCENT TAMPERPROOF FIXTURE	KENALL	MR13FED PP MB 32P 1 DV EL	POLYCARBONATE LENS	WALL 7'8" AFG	120	1 - PL-T 32W/41/4P/ALTO			
	С	2' FLUORESCENT SURFACE MOUNTED FIXTURE	KENALL	MLHA12 24 R MW PP 2 17 IS DV	POLYCARBONATE LENS	CEILING	120	2 - F17T8/TL741/ALTO			
¤	D	17" ROUND VANDAL RESISTANT FIXTURE	KENALL	MR17FFD PP MB 42P 2 DV	POLYCARBONATE LENS	UNISTRUT MTD 11'0 AFF	120	2 - PL-T 42W/41/4P/ALTO			
¤	DE	17" ROUND VANDAL RESISTANT FIXTURE WITH BATTERY PACK.	KENALL	MR17FFD PP MB 42P 2 DV EL	POLYCARBONATE LENS	UNISTRUT MTD 11'0 AFF	120	2 - PL-T 42W/41/4P/ALTO			

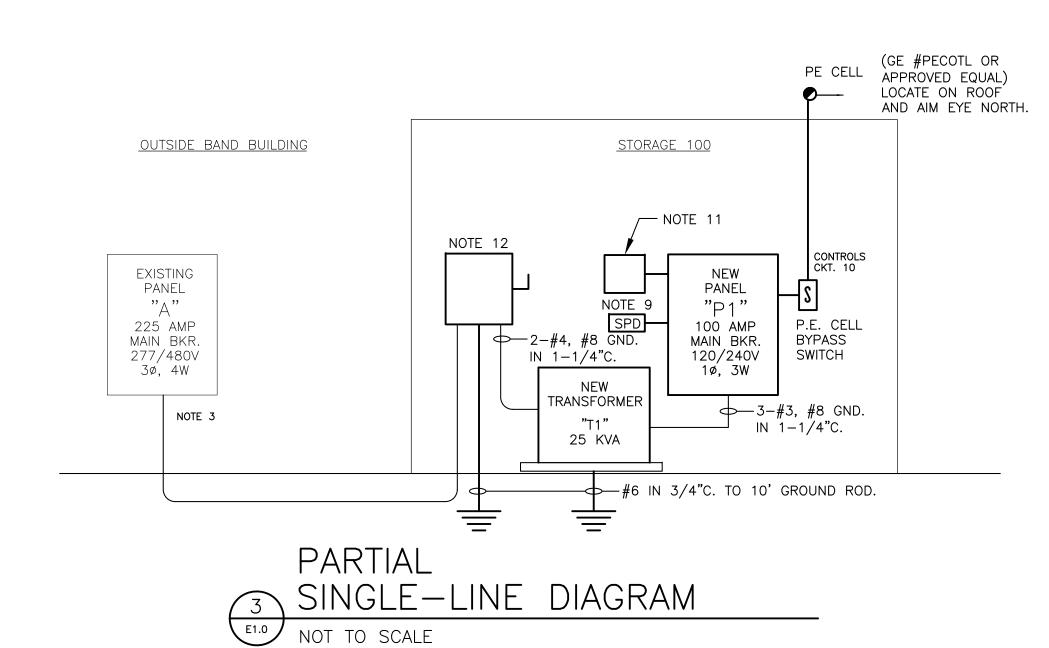
NOTE: LAMP DESCRIPTIONS ARE PHILIPS CATALOG NUMBERS (UNLESS NOTED OTHERWISE) OR APPROVED EQUAL.

# NOTES

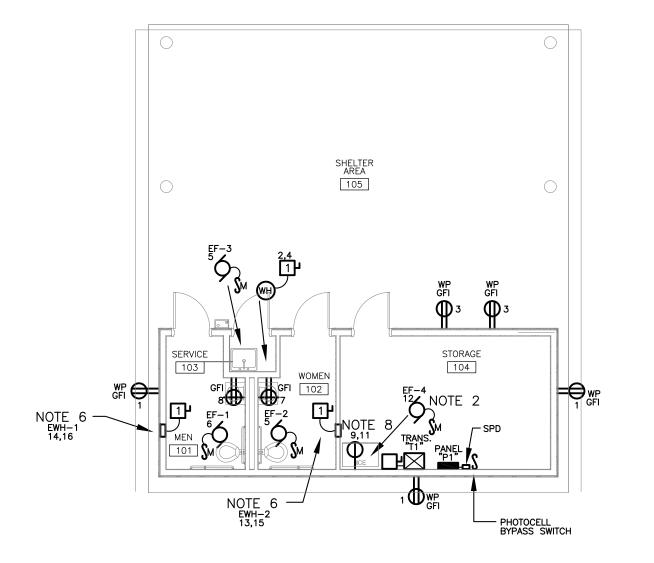
- ALL RECEPTACLES, EQUIPMENT, AND LIGHTING DEVICES SHALL BE FED FROM PANEL "P1" WITH 2#12, #12 GND IN 3/4" CONDUIT UNLESS NOTED OTHERWISE.
- 2. EXHAUST FAN SHALL BE CONTROLLED VIA LINE VOLTAGE COOLING STAT PROVIDED BY MECHANICAL CONTRACTOR, CONNECTED BY ELECTRICAL CONTRACTOR.
- TRANSFORMER "T1" SHALL BE FED FROM ONE NEW 2-POLE, 70 AMP BREAKER PROVIDED BY ELECTRICAL CONTRACTOR IN EXISTING 277/480V PANEL "A". FEED WITH 2-#4 AND 1-#8 GND. IN 1-1/4" CONDUIT. CONDUIT SHALL BE IMC FOR OUTDOOR ABOVE GRADE, RGS ELBOWS, PVC SCHEDULE 40 UNDER GROUND.
- 4. LOCATION SEE CIVIL DRAWING AND REFERENCE ONLY EXISTING ELECTRICAL SITE PLAM. THIS SITE IS EAST OF SUMTER ST. EAST OF THE BAND/DANCE BUILDING. SOUTHWEST OF BLATT PE CENTER.
- 5. PROVIDE JUNCTION BOX MOUNTED TO STRUCTURE WITH 2#12, #12 GND IN 3/4"C BACK TO PANEL "P1" FOR FUTURE CEILING FAN INSTALLATION. COORDINATE EXACT LOCATION OF JUNCTION BOX AND CONTROL SWITCH WITH OWNER.
- 6. PROVIDE CONNECTION TO WALL MOUNTED HEATER VIA 2 POLE DISCONNECT WITH PILOT LIGHT INDICATING "ON" STATUS.
- 7. PROVIDE ONE SINGLE POLE 20 AMP SWITCH FOR LIGHTING CONTROL AND ONE SINGLE POLE 20 AMP SWITCH FOR EXHAUST FAN CONTROL IN THIS ROOM.
- 8. PROVIDE 20 AMP 208V SINGLE PHASE CONNECTION TO NEW ICE MACHINE.

COORDINATE RECEPTACLE TYPE WITH ICE MACHINE SPECIFICATIONS.

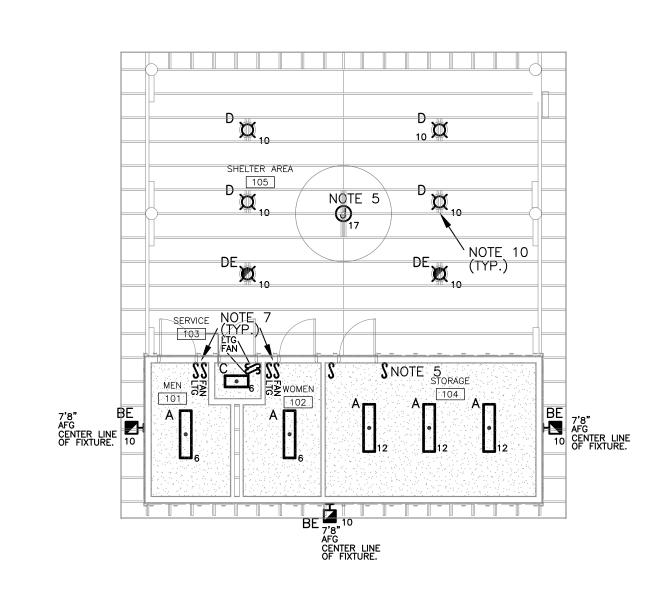
- 9. LEA USPS-M, 82.5KA OR EQUAL. TWIST LEADS, FEEDERS SHALL BE AS SHORT AS POSSIBLE MINIMIZING BENDS.
- 10. TYPE "D & DE" FIXTURES SHALL BE MOUNTED TO UNISTRUT BETWEEN THE TRUSSES SUCH THAT THE BOTTOM FACE (LENS) OF EACH FIXTURE IS JUST BELOW THE BOTTOM OF THE TRUSS.
- 11. PROVIDE VERIS INDUSTRIES POWER METER H8150-0100-0-2.
- 12. PROVIDE 100A 480V HEAVY DUTY SE RATED DISCONNECT FUSED 70A.



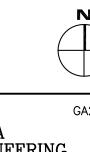
120/240V, 1 PH., 3W, 60 HZ 100 AMP M.B.										PANEL "P1"
SURFACE MOUNTED 10,000 A.I.C. SYM. (MINIMUM)										
LOADS SERVED	BKR.	LOAD KVA	NO.	(S	/	N)	CKT. NO.	KVA	BKR. AMP	LOADS SERVED
EXTERIOR RECEPTACLES EXTERIOR RECEPTACLES	20	0.8	3				2	0.9	20	WATER HEATER
WOMEN 101 - LTG./EF-1 WOMEN 101 - RECEPTACLE	20	0.2	5 7				6 8	0.3	20 20	MEN 101,SERVICE 103-LTG./EF- MEN 101 - RECEPTACLE
ICE MAKER	20	1.0	9				10	1.0	20	EXTERIOR/CANOPY FIXTURES  STORAGE 104 - LTG, EF-4
WOMEN 101 – WALL HEATER	20	0.8	13				14	0.8	20	MEN 101 – WALL HEATER
CEILING FAN	20	_	17				18	_	20	SPARE
SPD	20	_	19 21				20	-	20 20	SPARE SPARE
SPARE	20	_	23				24	_	20	SPARE
SPARE SPARE	20	_	25 27				26 28	_	20 20	SPARE SPARE
SPARE	20	_	29				30	_	20	SPARE
			CC	NNECTED	) LO,	ADS (KV	/A)			
				ØA 5.8			,			
				TOTAL L						
				_	10.8					







CHALLENGE COURSE BLDG. 2 LIGHTING PLAN





DRAWING INDEX, P SYSTEMS AND LIGH

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COURSE

