

GENERAL NOTES:

PART I. GENERAL:

- A. These GENERAL NOTES present and/or summarize key project information for the plans reader's convenience. See also individual PLAN NOTES and project specifications for further details and requirements.
- B. These notes shall apply unless otherwise indicated by drawings or specifications.
- C. Where a detail is shown for one condition it shall apply for all like or similar conditions even though not specifically marked on the drawings.
- D. Contractor shall provide adequate bracing or shoring for all work during the construction period.
- E. Backfill against walls shall be deposited evenly against both sides of the wall until the lower final grade is reached.
- F. Complete shop drawings for construction of each building component not designed by the design team-of-record and not specified on the project construction documents shall be sealed and signed by a professional engineer registered in the state of Georgia and shall be available at the job site during the times of inspections. (IBC Section 1603.1)

PART II. DESIGN CRITERIA:

- A. Building Code : 2018 International Building Code (2018 IBC), ASCE-7-16
- B. Superimposed Design Loads:
- See plan notes.
 - Wind:
 - Wind Speed = 105 mph (3 sec. Gust)
 - RISK CATEGORY II
 - Exposure = C
 - Internal Pressure Coefficients: ±0.55
 - Components and Cladding Pressures:

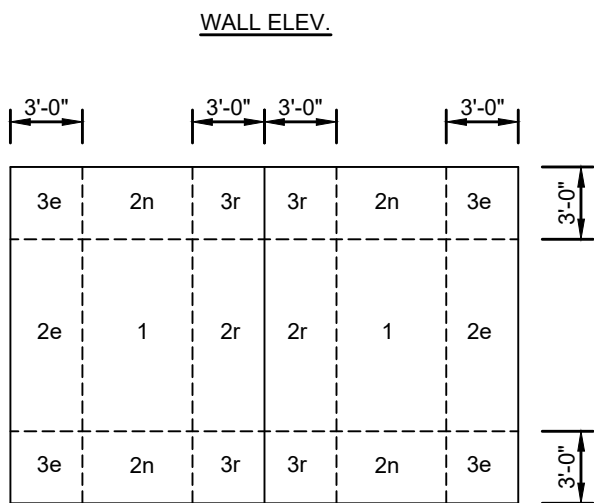
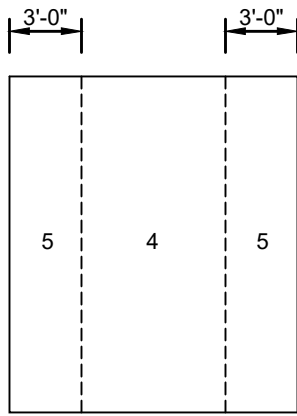
COMPONENTS & CLADDING, PSF (FIGURE 30.3.1 & 30.3.2A-D)				
TRIBUTARY AREA				
ZONE	10 SQFT	20 SQFT	50 SQFT	100 SQFT
1	+24.7/-48.9	+22.9/-46.9	+21.3/-41.2	+19.4/-37.3
2	N/A	N/A	N/A	N/A
3	N/A	N/A	N/A	N/A
4	+35.4/-37.7	+34.3/-36.4	+32.7/-35.0	+31.3/-33.8
5	+35.4/-44.6	+34.3/-42.3	+32.7/-38.9	+31.3/-36.6
1'	+24.7/-46.9	+24.7/-46.9	+24.7/-46.9	+24.7/-46.9
2e	+24.7/-46.9	+24.7/-46.9	+24.7/-41.2	+24.7/-37.7
2n	+24.7/-69.7	+24.7/-61.7	+24.7/-51.4	+24.7/-38.9
2r	+24.7/-69.7	+24.7/-61.7	+24.7/-51.4	+24.7/-38.9
3e	+24.7/-69.7	+24.7/-61.7	+24.7/-51.4	+24.7/-38.9
3r	+24.7/-74.3	+24.7/-66.3	+24.7/-53.7	+24.7/-53.7

3. Seismic:
- S_{ds} = 0.273, S_s = 0.315
 - S_{d1} = 0.100, S₁ = 0.100
 - Risk Category II
 - Seismic Design Category: C, CS=0.0420
 - Site Class = C
 - Basic Structural System: BEARING WALLS
 - Seismic Resisting System: LIGHT FRAMED WALLS WITH WOOD PANELS RATED FOR SHEAR
 - R = 6.5
 - C_d = 4
 - I_e = 1.00
 - Analysis procedure: 1617.4 Equivalent Lateral Force Procedure

4. Snow:
- Ground Snow Load = 5 psf
 - P_f = 5 psf
 - C_e = 1.0
 - I = 1.0
 - C_t = 1.0

C. Foundations:

- See Geotechnical/Subsurface Investigation Report by Contour Engineering Project # G21LEA02 dated Oct. 15, 2021.
- Shallow spread footings with a minimum soil bearing capacity of 3,000 psf.
 - All column and wall footing excavations shall be checked by a geotechnical engineer for a minimum soil bearing capacity. The results are to be submitted to the structural engineer.
 - If, after excavation, the condition of the soil indicates a bearing capacity of less than the minimum, the structural engineer shall be notified and the footings revised as necessary.
- All footings shall bear on original undisturbed soil, where possible. Any fill shall be placed and compacted per recommendations in soil report.



PLAN - GABLE ROOF

PART III. CONCRETE:

- A. Concrete shall be proportioned, mixed and placed in accordance with ACI 318 "Building Code Requirements for Reinforced Concrete" and ACI 301 "Specifications for Structural Concrete for Buildings." Minimum compressive strengths of concrete at the end of 28 days shall be: 3000 psi
- B. Cement to be Portland type I or approved equal.
- C. Mix design shall be documented in accord with ACI 301, Chapter 3 "Proportioning". Mix designs which are submitted without the required documentation will be rejected. Field slumps recorded at job site shall not exceed the slump established for the mix design.
- D. Concrete clear cover dimensions are 3 inches for faces cast against earth and 2 inches for all other faces except as noted.
- E. Concrete shall be cast against firm soil.
- F. Concrete shall not be poured in water or on frozen ground and shall be protected from frost during construction.
- G. All footing excavations shall be inspected by GeoTechnical Engineer before any concrete is placed.
- H. Slabs:
 - Construction or control joints shall be provided in slabs on grade so that the maximum area of slab between joints shall be 300 square feet.
 - Welded wire fabric shall conform to ASTM A185. Place welded wire fabric 1 inch from top of concrete unless otherwise noted.
 - Arrange control joints so that areas between joints do not have a length width ratio greater than 1.5.
- I. Reinforcement:
 - All detailing, fabrication and placing of reinforcing steel shall be in accordance with the latest "Manual of Standard Practice for Detailing Reinforced Concrete Structures" ACI 315. Reinforcing bars shall be new billet steel conforming to ASTM A615, Grade 60. Submit shop drawings for approval prior to construction.

PART IV. TESTING AND INSPECTION:

- A. Foundations and Earthwork, Geotechnical engineer/testing laboratory to be engaged by Contractor.
- B. Materials and Procedures. Testing laboratory to be engaged by Contractor.
- C. Concrete Testing:
 - One (1) set of FOUR (4) cylinders shall be made for each fifty (50) cubic yards or fraction thereof for each class of concrete in each day's pour. Of each set of test cylinders, one (1) shall be broken at seven (7) days, TWO (2) shall be broken at twenty eight (28) days, and one (1) held in reserve. Results of all concrete compressive strength tests shall be available on the job site for review by the inspector.

PART V. STRUCTURAL STEEL:

- A. Structural steel detailing, fabrication and erection to be in accordance with the latest edition of the "Manual of Steel Construction" of the American Institute of Steel Construction. All beam to beam and beam to column connections are to be made using ØØ ASTM A-325 bolts. Bolt holes shall be ØØ. Provide one standard washer under the hex head nut. Connections shall be bearing Type N.
- Structural steel shall conform to :
- All W-Shapes to be ASTM A992 - Grade 50.
 - Steel Plates and Angles ASTM A-36
 - Tube Steel ASTM A-500 Grade B.
- B. Submit complete set of shop drawings for approval prior to fabrication. Shop drawings shall give complete information including material, member sizes, assembly, erection details and welding, both shop and field, using AWS symbols.
- C. All Structural welded joints shall conform to the provisions of AWS D1.1-10, Structural Welding Code by American Welding Society and that proof of Welder Certification shall be available at the jobsite during times of inspection. Welding electrodes shall conform to AWS A5.1 E70XX series.
- D. All top of steels are constant between given points.
- E. All beams are to be equally spaced unless otherwise noted.
- F. Shop drawings for the following building components not specified on the project construction documents approved for building permit shall be sealed and signed by a professional engineer registered in the state of Georgia.
- Awnings / Canopies
- Handrails, Stairs, and Guards
- G. Bolted Connections shall be assembled and inspected in accordance with RCSC-2009 (Specification for Structural Joints using High-Strength Bolts)

PART VI. CLEANING AND PAINTING:

- A. All structural steel surfaces shall be cleaned as specified in SSPC-SP2.
- B. All structural steel shall be primed with one coat of standard shop primer. Coordinate with architectural drawings

PART VII. SPECIAL INSPECTIONS AND STRUCTURAL OBSERVATIONS:

- A. The Owner is to hire agencies to perform inspections during construction on the types of work listed under Section 1705 of the 2018 International Building Code. (See Sheet S0.2)
- B. Special inspectors shall keep records of inspections and furnish inspection reports to the building official and to the registered design professional in responsible charge on a weekly basis.
- C. The owner shall also employ a registered design professional to perform structural observations for structures assigned to Seismic Design Category D, E, or F and/or structures that fall into a wind region where the wind design velocity exceeds 110 mph. These required visual observations as prescribed in Section 1704.5 of the 2018 International Building Code do not waive the requirements for Special Inspections.

PART VIII. WOOD FRAMING:

- A. All load bearing sawn lumber shall be Southern Pine No. 2 (MC = 19 Percent) or equivalent. 6x6 post shall be Southern Pine No. 1 (MC = 19 Percent). Site-Specific engineer may revise lumber species based on local availability.
- B. All plywood sheathing shall be APA rated exposure I panel installed in accordance with APA recommendations and specifications.
- C. Nailing shall conform to requirements of the Building Code and as shown on drawings.
- D. Provide one row of bridging every 8 feet along span of joist.
- E. Studs and Joists shall not be cut to install plumbing or wiring unless metal or wood side pieces are provided to strengthen the member.
- F. Load-Bearing stud walls shall have solid blocking at mid-height. Stud walls in excess of 10 feet shall have solid blocking at third points. Wood blocking shall be used at wood stud walls only.
- G. Connections for structural members shall be Galvanized Strong-Tie connectors by the Simpson Company or an approved substitute. Install fasteners as specified by the manufacturer.
- H. Wood in contact with concrete shall be Foundation Grade pressure-treated Southern Pine. Use Galvanized nails in pressure-treated wood.

PART IX. MICROLAM INFORMATION:

- A. Fabrication / Cutting shall not proceed until the Architect / Engineer have approved the submittal package
- B. Materials shall comply with ICC ES Report No. ESR-1387.
- C. Adhesives shall be waterproof type conforming to the requirements of ASTM D-2559. Microlam shall be manufactured by Trus Joist in a plant listed in the reports referred to above, and under the supervision of a approved third-party inspection agency.
- D. It shall be manufactured from strands of wood fiber in continuous process, with all strands oriented to the length of the member and then fed into a press in the desired lay-up pattern.
- E. All members are to be free of finger joints, scarf joints, or mechanical connections in full-length members.
- F. Finish length (as specified): ± 1/2" Depth: ± 1/8" Width: ± 1/8"
- G. Each of the beams shall be identified by a stamp indicating the produce type and grade, ICC-EC Report Number, manufacturer's name, plant number and independent inspection agency's logo.
- H. Microlam, if stored prior to installation, shall be protected from the weather.
- I. Microlam shall be installed in the accordance with the plans and any Trus Joist drawings and installation suggestions.
- J. Temporary construction loads that cause stresses beyond designed limits are not permitted.
- K. Safety bracing is to be provided by the installer to keep the Microlam straight and plumb as required, and to insure adequate lateral support for the individual Microlam members and entire system until the sheathing material is applied.
- L. Products shall be proven by testing the evaluation in accordance with the provisions of ASTM D-5456.
- M. Alternate products will be permitted only if written approval and acceptance is obtained from Architect/Engineer.
- N. Modulus of Elasticity and size shall be specified on contract documents.

PART X. HEAVY TIMBER FRAMING

- A. QUALITY ASSURANCE
- All heavy timber construction shall conform to the requirements of the 2018 National Design Specification (NDS).
 - Provide a complete set of shop drawings for approval prior to fabrication. Shop drawings shall give complete information including material, member sizes, assembly, erection details, applied loads, support requirements, etc. Shop drawings shall bear the stamp and signature of the fabricator's engineer, licensed in the state of the project location.
- B. PRODUCT DELIVERY, STORAGE AND HANDLING
- Schedule timber delivery and installation to avoid extended on-site storage.
 - Keep timber members dry during delivery and storage. Cover timber with weathertight tarps. Do not store members in areas of high or low relative humidity.
 - Cut and stack timber so as not to encourage growth of sap-stain fungi, mold, carpenter ants, borers, etc.
 - Stack timbers with spacers to provide air circulation. Provide for air circulation around stacks and under coverings.
- C. MATERIALS
- Timbers shall be graded by a lumber grading agency certified by the American Lumber Standards Committee.
 - Locate grade stamps on timber surfaces not exposed to view in completed work. Grade certification can be submitted in lieu of grade stamping material.
 - Unless noted otherwise, all timber shall be #1 or #2 Southern Yellow Pine as specified on the drawings. Moisture content shall not be in excess of 19%.
 - Timbers shall be prepared to receive specified finishes. Refer to architectural drawings and specifications for timber finish requirements.
 - Steel connectors shall be prepped to receive a two component epoxy finish. Refer to architectural drawings.
- D. FABRICATION
- Shop fabricate members by cutting and restoring exposed surfaces to match specified surfacing. Predrill for fasteners and assembly of units.
 - Camber: Fabricate horizontal members and inclined members with slope of less than 1:1 with natural convex bow (crown) up to provide camber.
 - Warney edges are not permitted.
 - Timber sizes are nominal dimensions.
 - Timber truss webs shall be minimum 8x6 nominal.
 - Timber truss chords shall be minimum 8x10 nominal.
 - Cut joints accurately to make a neat, snug fit.
 - Layout marks and identification marks shall not be visible on completed frames.
- E. ERECTION AND INSTALLATION
- Apparent damage to trusses, if any, shall be reported to truss manufacturer prior to erection.
 - Trusses shall be set and secured level and plumb, and in correct location. Each truss shall be held in correct alignment until specified permanent restraint and bracing is installed.
 - Cutting and altering of trusses is not permitted. If any truss should become broken, damaged, or altered, written concurrence and approval by both the truss manufacturer's engineer and engineer of record is required.
 - Cutting: Avoid extra cutting after fabrication. Where field fitting is unavoidable, comply with finish and preservative treatment requirements for shop fabrication.
 - Repair damaged surfaces and finishes after completing erection.

PART XI. FASTENERS:

EXCEPT WHERE SPECIFICALLY NOTED OTHERWISE ON DRAWINGS:

- A. ALL POWDER ACTUATED FASTENERS (P.A.F.) TO BE .145" SHANK DIAMETER x 1 1/4" LONG HILTI X-DNI 32 P8 OR .177" SHANK DIAMETER x 1 1/4" LONG HILTI DS 37 P10, TYP. U.N.O.
- B. ALL EXPANSION ANCHORS TO BE HILTI KWIK BOLT II
- 5/8"Ø - MIN. EMBED = 4"
- 3/4"Ø - MIN. EMBED = 4 3/4"
- 1"Ø - MIN. EMBED = 6"
- C. ALL SLEEVE ANCHORS TO BE HILTI CARBON STEEL SLEEVE ANCHORS.
- 1/2"Ø - MIN. EMBED = 1 1/2"
- D. ALL EPOXY ANCHORS TO BE HILTI HIT HY150 ADHESIVE ANCHORS.
- 5/8"Ø - MIN. EMBED = 5"
- 3/4"Ø - MIN. EMBED = 6 5/8"
- 7/8"Ø - MIN. EMBED = 7 1/2"
- 1"Ø - MIN. EMBED = 8 1/4"
- E. ALL CONCRETE/MASONRY SCREWS TO BE HILTI KWIK-CON II+.
- 3/16"Ø - MIN. EMBED = 1"
- 1/4"Ø - MIN. EMBED = 1 3/4"
- F. ALL FASTENERS ARE SIZED PER HILTI SPECIFICATIONS. ALL FASTENERS MAY BE SUBSTITUTED BY AN EQUIVALENT THAT MUST BE SUBMITTED TO THE ENGINEER FOR APPROVAL.