

GENERAL PLAN NOTES:

- 1. All work not detailed, specified or noted shall be constructed the same as similar work shown in the construction documents. Where the work is not detailed, specified or noted it shall be in accordance with accepted trade standards for good and workmanship like construction.
2. Refer to Architectural drawings for elevation and location of roofs, floors, walls, partitions and non-structural elements together with their general configurations, size and location of door and window openings, roof and floor openings, size and location of elements such as but not limited to drains, curbs, depressed areas, level changes, chamfers, grooves, insets.
3. Refer to Mechanical, Plumbing, Heating and Air Conditioning, and Electrical drawings for size and location of elements such as but not limited to pipe and conduit, runs, sleeves and box outs, and hangers and equipment supports.
4. All dimensions on the structural drawings shall be compared with those on the architectural drawings by the Contractor prior to construction. The Contractor shall notify the Architect and Structural Engineer of discrepancies.

HARDWARE SUBSTITUTION SCHEDULE:

Table with columns: Simpson (Specified), USP (Alternate), Simpson (Specified), USP (Alternate). Lists hardware items like Simpson Strong-Tie products and their substitutes.

1. Hardware shown on the Structural Drawings is Simpson Strong-Tie company products. USP company products may be substituted in accordance with the following schedule:

DIVISION 5: WOOD

06050 FASTENERS AND SUPPORTS:

- 1. Generic nails shall be of steel wire and conform with ASTM F 1667 Standard Specification for Driven Fasteners, Nails, Spikes, and Staples. All nails shown on the drawings, and not specifically otherwise, shall be sinker or common nails. Sinker, box or other configuration of nails may not be substituted for common nails when common nails are shown on the drawings. Pasloda nails shall be substituted for joist hanger nails of the same size. Pasloda nails shall be manufactured by ITW Pasloda, Vernon Hills, Illinois (ICBO ESR-917).
2. Pneumatic nails may be substituted for generic nails provided they are of the same dimensions as generic nails with the exception of the nail head. Pneumatic nail dimensions shall be larger in diameter than generic nails by up to the size of a common nail within the same penny weight classification. The head may, in addition to being of a standard-diameter round-head type, be a T-shaped or modified round-head. Pneumatic nails shall be ICBO approved.
3. Nail sizes shall conform with the following table. When necessary to prevent splitting of the wood, a prebored pilot hole shall be drilled.

Nail Size Schedule table with columns: Nail Length, Wire Dia, Wire Gauge, Head Dia, Pre-bore Drill Dia. Lists various nail specifications.

4. Adhesives used to attach floor sheathing to framing shall conform with American Plywood Association Specification AFG-01, Adhesives for Field-Gluing Plywood to Wood Framing. The Adhesive shall be certified as conforming to AFG-01 by a testing agency approved by the Building Official or accepted by the Federal Testing Administration. Adhesive shall meet the requirements for wet condition of service. Alternatives may be used only with specific approval of the Structural Engineer, and only upon submittal of a listing of adhesives to be substituted.

5. Manufactured hardware shall be one of the following. Alternatives may be used only with specific approval of the Structural Engineer, and only upon submittal of a listing of products and sizes to be substituted.

- a) Simpson Company products, Brac, California, (ICBO report no. 121, 126, 4448, 4935, NER 209, NER 393, NER 418, NER 421, NER 422, NER 432, NER 443, NER 469.

6. Lag screws shall conform with ANSI/ASME B 18.21, Square and Hex Bolts and Screws (lock Series). Lag holes shall be bored prior to installation for the full length of the lag bolt. The threaded portion of the lag bolt shall be inserted in its lead hole by turning with a wrench not by driving with a hammer. Soap or other lubricant shall be used on the screws or in the lead hole to facilitate insertion and prevent damage to screws. In determining the penetration of the threaded portion of lag screw into a member, the reduced portion (threaded or gimlet point) of the shank shall not be considered as part of the penetration. Washers shall be used under all lag bolt heads and nuts bearing on wood. Lag bolts shall be installed in accordance with the following:

Lag Screwing Schedule table with columns: Diameter, Hole For Unthreaded Shank, Hole For Threaded Shank. Lists lag screw specifications.

7. Round washers shall be ANSI/ASME B 18.21, Plain Washers. Square washers shall be of mild steel. Washers shall be used under all bolt heads and nuts bearing on wood. Machine bolts shall be installed in accordance with the following:

Washer Schedule table with columns: Bolt Washer, Round Washer, Square Washer. Lists washer specifications.

Note: Round washers that are Type A Plain Washers, Wide (standard plate) conform with the above dimensions.

06100 ROUGH CARPENTRY:

1. Solid framing lumber shall be graded and marked in conformance with Western Wood Products Association (WWPA), Standard Grading and Dressing Rules, or with West Coast Lumber Inspection Bureau (WCLIB), Standard Grading Rules for West Coast Lumber, or with National Lumber Grades Authority (NLGA), Standard Grading Rules for Canadian Lumber, as noted below. Grading shall be performed by an agency certified by the American Lumber Standards Committee, Gementown, Maryland. Alternatives in species and grading agencies may be used only with specific approval of the Structural Engineer, and only upon submittal listing lumber grades, species and grading agencies to be substituted.

2. Lumber grades shall at least be:

Lumber Grade Schedule table with columns: Use, Grade mark, Grading Rules. Lists lumber grades and their corresponding rules.

3. Lumber grading agencies shall be:

Lumber Grading Agencies Schedule table with columns: Grading rules, Lumber Grading Agencies, Mark. Lists grading agencies and their marks.

4. Lumber shall be dry and well seasoned, and the moisture content shall not exceed 19% at the time the structure is wrapped. All lumber shall be air-seasoned not less than 30 days before being covered with finishing materials unless tests are made of its moisture content.

5. All wood resting on or abutting to concrete or masonry (mud sill) shall be preservative treated Douglas Fir. All wood embedded in concrete or in contact with soil shall be preservative treated Douglas Fir. In so far as practical all working of the wood shall be done prior to the preservative treatment. All treatment shall be in a plant except that cuts may be field treated. Cuts penetrating into the treated zone of the wood shall be field treated when they would result in the cut surface resting on, abutting to or being in contact with concrete, masonry or soil. After installation, exterior exposed surfaces shall be protected with a minimum of two coats of sealer. Framing or drywall shall cover interior surfaces. Treatment shall be as follows:

a) Plant treatment: Solid framing lumber required to be preservative treated shall be plant treated in accordance with American Wood Preservers Association, AWPFA Standard C-2, Lumber, Timbers, Bridges and Mills. This Pressure Treatment, Wood product panels required to be preservative treated shall be plant treated in accordance with American Wood Preservers Association, AWPFA Standard C-3, Plywood-Pressure-Treatment. Treatment shall be appropriate for the location of the wood being either above ground or ground contact. Treatment shall be with Ammoniacal Copper Zinc Arsenate (Chromite) or A grade mark indicated conformance to the treating standard and the type of treatment shall be affixed to the material. The inspection agency shall be independent of the treating plant. The inspection agency shall be under the supervision of the American Wood Preservers Bureau. Inspection shall be in accordance with AWPFA L.P. Standards.

b) Field treatment: Solid framing lumber and wood product panels required to be preservative treated shall be field treated with copper Naphthenate Solution containing a minimum of 2.0% copper metal. Application shall be in accordance with the manufacturer's directions.

6. Wood product panels (plywood, composite panels, wafer board, oriented strand board, structural particleboard) shall be in conformance with UBC Std. No. 23-2, based on US Product Standard PS 1, Construction and Industrial Plywood or shall conform with US Product Standard PS 2, Engineered Standard Wood-Based Structural-Like Panels, as noted below. A grade mark indicating conformance to the appropriate standard shall be affixed to the material by an independent grading agency. Grading shall be performed by the APA - The Engineered Wood Association, Tacoma, Washington, (ICBO report no. NER Q4387) or by Timber One, Inc. also, Teaco, Eugene, Oregon, (ICBO report no. NER Q4385). Panels which may have an exposure durability or weather or to moisture shall have an exposure durability of Exterior Grade, except that roof sheathing exposed only on the underside need only be Exposure I. The spacing in inches of roof and floor supports over which panels are applied shall not exceed the span rating of the panels. The number of ply and layers shall be at least that given below. Alternative grades, thickness, indices, species and grading agencies may be used only with specific approval of the Structural Engineer, and only upon submittal of a listing of grades, thickness, indices, species, and grading agencies to be substituted.

Wood Panel Grade Schedule table with columns: Use, Product, Panel Grade, Ply & Layer, Minimum Exposure Durability. Lists wood panel specifications.

Footnote: (1) Panel grade shall be Structural I where specifically noted in Shear Wall Schedule.

06181 GLUED LAMINATED TIMBER:

1. Materials, manufacture, fabrication, and quality control shall conform with ANSI/AITC A 190.1, Structural Glued-Laminated Timber.

2. The glued laminated timber members shall be Western species and provide stress values that meet or exceed the requirements for combination symbols as shown below:

Combination Symbol table with columns: Species - outer, Lims / Core Lims, Fb, Fv, E. Lists combination symbols and their properties.

a) Glue-Lam beams and headers (GLB) shall be 24F-18E, unless noted otherwise per plan.

b) 24F-18E beams and headers may be flat or with standard camber.

c) 24F-V4 beams are to be used for simple spans and have standard camber.

d) 24F-V8 beams are to be used for continuous spans and cantilevers and shall have zero camber, unless a specific value is noted per plan.

e) Standard camber shall be 3000 ft. radius.

3. Moisture content at time of glued laminated timber fabrication shall not exceed 16%.

4. Adhesives shall meet the requirements for wet condition of service.

5. Stock glued laminated timber members shall each be marked indicating conformance to ANSI/AITC A 190.1. Custom glued laminated timber members shall each have a Certificate of Inspection indicating conformance to ANSI/AITC A 190.1. The Certificate shall be issued by the American Institute of Timber Construction, Englewood, Colorado (ICBO report no. NER Q296) or by the Western Wood Products Association, Portland, Oregon, (ICBO report no. NER-Q4-210) or by the APA - The Engineered Wood Association, Tacoma, Washington, (ICBO report no. NER Q4387). A copy of the certificate shall be provided to the Building Official prior to erection of the prior to erection of the framing and to the Architect and Structural Engineer.

6. Glued laminated timber members exposed to weather shall be pressure treated in accordance with American Institute of Timber Construction, AITC Standard 109, Standard for Preservative Treatment of Structural Glued Laminated Timber, and American Wood Preservers Association, AWPFA Standard C-2B, Pressure Treatment of Structural Glued Laminated Timber. Treatment shall be with a grade mark or a certificate indicating conformance to the treating standard and the type of treatment shall be affixed to the material or provided to the Building Official prior to erection of the framing and to the Architect and Structural Engineer. The inspection agency shall be independent of the treating plant. The inspection agency shall be under the supervision of the American Wood Preservers Bureau. After installation, exterior exposed surfaces shall be protected with a minimum of two coats of sealer. Interior surfaces shall be covered by framing or drywall.

CEILING JOIST SPAN table with columns: Size and Spacing, Max. Span. Lists ceiling joist span specifications.

CEILING JOIST TO BE SFF No. 1 OR No. 2

06182 CERTIFIED GLUED LUMBER (RMT):

1. Certified Glued Lumber (RMT) materials, manufacture, fabrication, and quality control shall conform with WCLIB Standard No.17, Standard Grading and Dressing Rules, No.11.

2. Certified Glued Lumber (RMT) shall be of a species and provide stress values that meet or exceed the requirements for the solid sawn members specified.

3. Moisture content at time of glued-laminated timber fabrication shall not exceed 16%.

4. Adhesives shall meet the requirements for wet condition of service.

5. Certified Glued Lumber (RMT) members shall each be marked indicating conformance to the specifications. The stamp shall be issued by the West Coast Lumber Inspection Bureau (WCLIB).

6. Certified Glued Lumber (RMT) members may not be exposed to weather.

7. Certified Glued Lumber (RMT) may have zero camber.

06183-AZ LAMINATED VENEER LUMBER, PARALLEL STRAND LUMBER, & TIMBER STRAND LUMBER:

1. Manufactured Laminated Veneer Lumber (LVL) and Parallel Strand Lumber (PSL), and Timber Strand Lumber (TSL) shall be the following. Alternatives may be used only with specific approval of the Structural Engineer, and only upon submittal of a listing of products and sizes to be substituted.

a) L Level Trus Joist Products, Boise, Idaho (ICC ESR-1387).

LVL Grade Schedule table with columns: Size on plan, Grade & Grade Mark, Fb, Fv, E. Lists LVL specifications.

PSL Grade Schedule table with columns: Size on plan, Grade & Grade Mark, Fb, Fv, E. Lists PSL specifications.

TSL Grade Schedule table with columns: Size on plan, Grade & Grade Mark, Fb, Fv, E. Lists TSL specifications.

L&L Grade Schedule table with columns: Size on plan, Grade & Grade Mark, Fb, Fv, E. Lists L&L specifications.

LVL Grade Schedule table with columns: Size on plan, Grade & Grade Mark, Fb, Fv, E. Lists LVL specifications.

LVL Grade Schedule table with columns: Size on plan, Grade & Grade Mark, Fb, Fv, E. Lists LVL specifications.

LVL Grade Schedule table with columns: Size on plan, Grade & Grade Mark, Fb, Fv, E. Lists LVL specifications.

LVL Grade Schedule table with columns: Size on plan, Grade & Grade Mark, Fb, Fv, E. Lists LVL specifications.

LVL Grade Schedule table with columns: Size on plan, Grade & Grade Mark, Fb, Fv, E. Lists LVL specifications.

2. Manufactured Laminated Veneer Lumber (LVL) and Parallel Strand Lumber (PSL), and Timber Strand Lumber (TSL) shall be fabricated in the shop of a licensed fabricator. All pieces shall be stamped with the manufacturer's logo.

3. Parallel Strand Lumber (PSL) exposed to weather shall be preservative treated. Laminated Veneer Lumber (LVL), and Timber Strand Lumber (TSL) shall not be exposed to weather. Treatment shall be in accordance with AWPFA Standard C-3 for above ground use exposed to weather. Treatment shall be Chromated Copper Arsenate with a retention level of not less than QAC 10/04 ft. to a depth of 0.50 in. After installation, exterior exposed surfaces shall be protected with a minimum of two coats of sealer. Interior surfaces shall be covered by framing or drywall. A certificate indicating conformance to AWPFA C-3, and the type of treatment shall be affixed to the material. A copy of the certificate shall be provided to the Building Official prior to erection of the framing and to the Architect and Structural Engineer.

06180 WOOD TRUSSES, LIGHT METAL PLATE CONNECTED, DESIGN BUILD:

1. Materials, manufacture, fabrication, and quality control shall conform to ANSI/ITP National Design Standard for Metal Plate Connected Wood Trusses.

2. Steel metal plate connectors shall conform to UBC section 2321 and shall be ICBO approved.

3. Lumber species for truss chords shall be Douglas Fir-Larch, Spruce Pine-Fir or Hem-Fir. All lumber shall be surface dry or kiln dried to a moisture content less than 19% before fabrication.

4. The manufacturer shall retain the services of a qualified licensed engineer to design the trusses. The truss manufacturer shall be responsible for the adequacy of the design.

5. Light metal plate connected trusses shall be designed to support the more critical of the loads noted or the deflection limits noted.

Roof Trusses table with columns: Loading Conditions, Deflection Limitations, all cases. Lists roof truss specifications.

Floor Trusses table with columns: Loading Conditions, Deflection Limitations, all cases. Lists floor truss specifications.

6. The manufacturer shall have a Quality Control Inspection Agency or individual, approved by the Building Official, attest to the trusses manufacturer in accordance with IBC section 2303.4 and the ICBO approval for the metal plate connectors.

7. The manufacturer shall design for and specify all fasteners, hangers, and hardware that support truss to truss, truss to beam, or truss to ledger connections.

8. Installation of trusses shall be in accordance with the truss manufacturer's directions.

9. Bracing, bridging and blocking of trusses shall be in accordance with the more restrictive of the manufacturer's directions or the Construction Documents.

10. Each truss shall be legibly branded, marked or otherwise have permanently affixed thereto the following information located within 2 feet of the center of the span on the face of the bottom chord.

- a) Identity of the company manufacturing the truss.
b) The design load.
c) The spacing of trusses.

11. Trusses shall be cambered to relieve loading on non-bearing partitions.

DIVISION 5 FINISHES

09180 EXTERIOR CEMENT PLASTER (STUCCO) FOR APPLICATION TO WOOD FRAMING:

1. Exterior plaster (stucco) shall be installed in accordance with IBC section 2512.

2. Wire Lath shall be attached to all studs and top and bottom plates. Where weep screeds occur at plates, 6 penny galvanized box nails may be used in place of staples.

09250 GYPSUM WALLBOARD FOR APPLICATION TO WOOD FRAMING:

1. Gypsum wallboard shall be installed in accordance with IBC section 2508.

2. Gypsum wallboard shall be attached to all studs and top and bottom plates. Where blocking is required, it shall be attached thereto also.

3. Nails for attachment of drywall to wood shall conform with ASTM C 54, Nails for the Application of Gypsum Wallboard.



1820 North 7th Street, Suite 210 Phoenix, Arizona 85024 (623) 863-0601 Telephone (623) 863-0603 Facsimile

555 Arton Boulevard, Suite 800 Costa Mesa, California 92626 (714) 513-1800 Telephone (714) 513-1855 Facsimile

E-Mail: webmail@borm.com www.borm.com

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REFER TO 8N SHEETS FOR ALL NOTES AND SPECIFICATIONS PROJECT: Broadway at San Marcos

OWNER/DEVELOPER: Liberty Homes

ARCHITECT/DESIGNER: MDW Designs

SHEET: 8N2

STRUCTURAL NOTES & SPECIFICATIONS

REFERENCE DATE: 03-28-07

ISSUED FOR:

CLIENT DELIVERY: 03-29-07



ENGINEER OF RECORD: MICHAEL ERIC WILLIS, 35750, PROFESSIONAL ENGINEER, LICENSE NO. 35750, STATE OF ARIZONA, U.S.A.

CONTACTS:

For design questions regarding these plans and specifications contact the Project Manager: Steve Danner Telephone: (623) 863-0601 ext. 233 Facsimile: (623) 863-0603 Email: sdanner@borm.com

For scheduling site observation and for field changes contact the Construction Administrator: Allison Engelbreit Telephone: (623) 863-0601 ext. 232 Facsimile: (623) 863-0603 Email: allise@borm.com

FILE NO.: 12564 CAD NO.: 12564 8N DRAWN BY: KER ENGINEER: HI SCALE: 1/4" = 1'-0"

SHEET NO.: 8N2