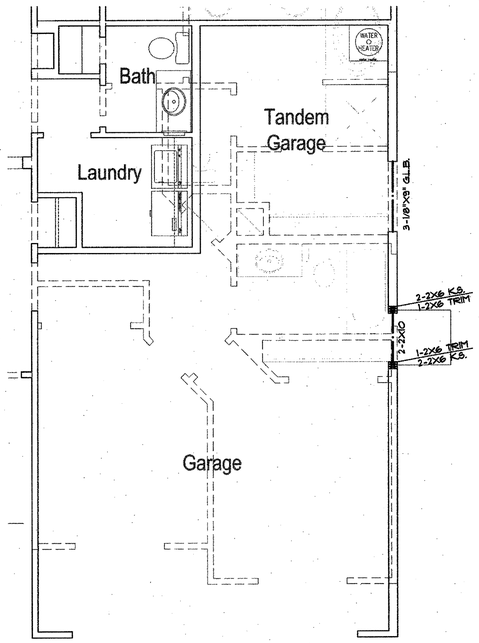
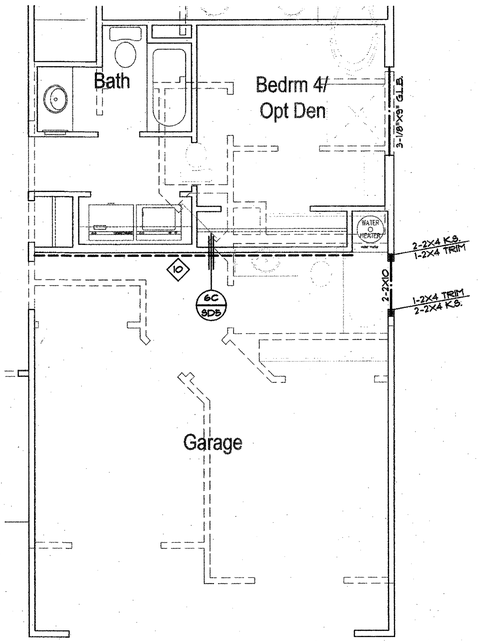


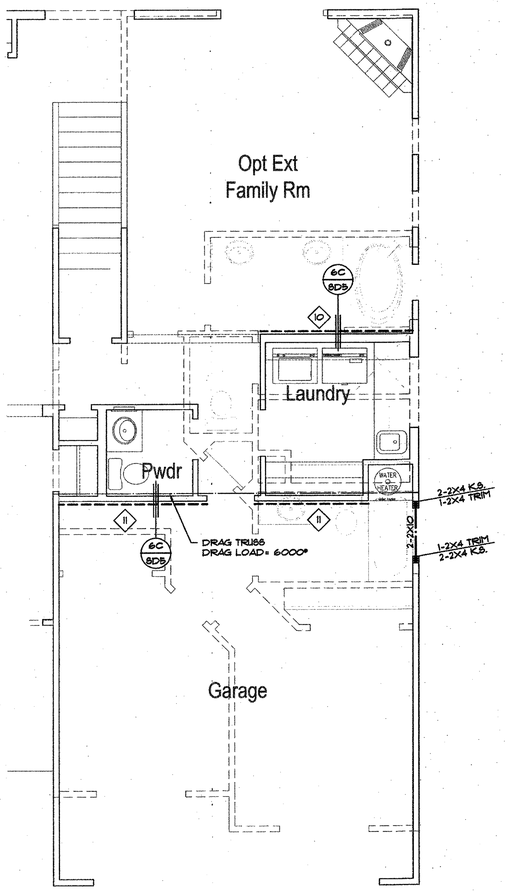
OPT. SIDE DOOR AND WINDOW AT GARAGE

ALL ELEVATIONS SIMILAR
REFER TO FLOOR FRAMING / SHEAR WALL PLAN 'A' FOR ALL INFORMATION NOT SHOWN. ONLY INFORMATION REVISED FROM FLOOR FRAMING / SHEAR WALL PLAN 'A' IS SHOWN FOR CLARITY.



OPT. BEDROOM 4 / DEN

ALL ELEVATIONS SIMILAR
REFER TO FLOOR FRAMING / SHEAR WALL PLAN 'A' FOR ALL INFORMATION NOT SHOWN. ONLY INFORMATION REVISED FROM FLOOR FRAMING / SHEAR WALL PLAN 'A' IS SHOWN FOR CLARITY.



OPT. EXT. FAMILY ROOM

ALL ELEVATIONS SIMILAR
REFER TO FLOOR FRAMING / SHEAR WALL PLAN 'A' FOR ALL INFORMATION NOT SHOWN. ONLY INFORMATION REVISED FROM FLOOR FRAMING / SHEAR WALL PLAN 'A' IS SHOWN FOR CLARITY.

OPTIONAL FLOOR FRAMING / LOWER SHEARWALL PLAN

GENERAL FRAMING NOTES, CONVENTIONAL, WOOD:

B&I NO.: GENED-AZ

1. See specifications and notes on 6N sheets for additional information and sheet 8D2.0 for typical construction details.

STUD MATERIAL

Provide wall stud as shown below U.N.O. on plans or details.

2.

Location	Studs
Exterior bearing wall	2X4 Spruce-Pine-Fir #1 / #2 grade studs at 16" o.c.
Exterior nonbearing wall	2X4 Spruce-Pine-Fir #1 / #2 grade studs at 16" o.c.
Interior bearing wall	2X4 Spruce-Pine-Fir #1 / #2 grade studs at 16" o.c.
Interior nonbearing wall	2X4 Spruce-Pine-Fir Stud grade at 24" o.c.

FLOOR FRAMING

1. Floor finish: Per architectural plans.
2. Floor Sheathing: 3/4" tongue and groove wood product panels. Span index shall be 48/24 group 1 with exterior glue. Orientation shall be with face grain perpendicular to support. Provide 2x4 flat blocking at all unsupported edges where blocking is indicated. Sheathing adhesive shall be applied to framing members prior to placement of sheathing. Sheathing to be fully fastened prior to setting time of adhesive. Refer to detail (2/8D2.0).
3. Typical floor sheathing nails shall be:

   10d common nails at 6 inches o.c. along all boundaries and edges and 12 inches o.c. in field. Blocking is not required.

   Alternate: USC 2L wood screws at 6" o.c. along boundaries and continuous edges and 12" o.c. in field. Screws shall be manufacture by Quick Drive USA, Inc. per ICBO # 5093.
4. Light metal plate connected wood floor trusses shall be designed to support the more critical of the loads and to limit deflections as follow. These requirements are in addition to those of ANSI/TPI 1.

Loading Conditions:	
Dead Load, including truss weight	16 PSF
Live Load	40 PSF
Partition Load	9 PSF
Lateral Load (at drag truss only)	As noted on plans or 2000# min.

Deflection Limitations, all cases:	
Vert. deflection under dead and live load	Span / 240 or 3/4" max.
Vert. deflection under live load only	Span / 480 or 3/4" max.
Vert. deflection between adj. trusses	1/2" max.

Prefabricated wood floor trusses to be provided by an approved fabricator with the shop drawings and calculations sealed by an Arizona registered engineer. Truss diagrams and keyed layouts shall be available to the field inspector at the job site at the time of floor nailing / framing inspection.

ROOF FRAMING

1. Roof Sheathing: 15/32" wood product panels. Span index shall be 32/16. Orientation shall be with face grain perpendicular to support. Refer to detail (2/8D2.0). Provide 2x4 flat blocking at all unsupported edges where blocking is indicated. Crickets and miscellaneous framing to overlay plywood sheathing. Nail sheathing as follows:
2. Typical roof sheathing nails shall be:

   8d common nails at 6 inches o.c. along all boundaries and edges and 12 inches o.c. in field. Blocking is not required.

   Alternate: 14 gauge x 2" long with 7/16" crown at 6" o.c. along all boundaries and edges and 12" o.c. in field. Blocking is not required.
   Alternate: 16 gauge x 2" long with 7/16" crown at 4" o.c. along all boundaries and edges and 8" o.c. in field. Blocking is not required.
3. Light metal plate connected wood roof trusses shall be designed to support the more critical of the loads and to limit deflections as follows: Trusses shall be cambered. Camber of the bottom chord of the trusses shall be as follow. These requirements are in addition to those of ANSI/TPI 1.

Loading Conditions:	
Dead Load, including truss weight	21 PSF
Live Load, typ.	16 PSF
Stucco Soffits	+10 PSF to bott. chord
Live Load, flat roofs (< 4 in 12 slope)	20 PSF
Lateral Load (at drag truss only)	As noted on plans or 2000# min.

Deflection Limitations, all cases:	
Vert. deflection under dead and live load	Span / 240 or 3/4" max.
Vert. deflection under live load	Span / 360 or 3/4" max.
Vert. deflection between adj. trusses	1/2" max.
Horz. deflection under dead and live load	3/8" max.

Camber:
Roof truss camber to equal dead load deflection

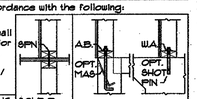
Prefabricated wood roof trusses to be provided by an approved fabricator with the shop drawings and calculations sealed by an Arizona registered engineer. Truss diagrams and keyed layouts shall be available to the field inspector at the job site at the time of roof nailing / framing inspection.

SHEAR WALL SCHEDULE: ARIZONA

B&I NO.: SHR-AZ

1. Sheath walls to resist racking forces in accordance with the following:

FRAMING LENGTH — Note: When an asterisk * accompanies the shear wall mark, apply sheathing prior to any adjacent framing.
A.B.'s @ N" OC / Ied @ N" OC — Spacing of anchor bolts / nails at sole plate.



MARK	SHEATHING AND FASTENING	MINIMUM FRAMING: Top Plate	Panel Joints Blkg.	Btm. Plate	SOLE PL FASTENING TO WOOD (1,6,7)	MUD SILL FASTENING TO CONC. (2,8,9): Exterior	Interior
A							
1	1/2" GWB, W/ 5d cooler nails at 7" o.c. along all edges parallel with framing and field (1,4,10)	2-2X	none	2X	16d Sinkers @ 12" O.C.	1/2" DIA. A.B. @ 72" O.C. OPT. MAS @ 32" O.C.	1/2" DIA. W.A. @ 72" O.C. OPT. SHOT PINS @ 18"
2	5/8" GWB, W/ 6d cooler nails at 7" o.c. along all edges and field (1,4,10)	2-2X	none	2X	16d Sinkers @ 8" O.C.	1/2" DIA. A.B. @ 72" O.C. OPT. MAS @ 32" O.C.	1/2" DIA. W.A. @ 72" O.C. OPT. SHOT PINS @ 18"
3	1/2" GWB, W/ 5d cooler nails at 4" o.c. along all edges parallel with framing and field (1,4,10)	2-2X	none	2X	16d Sinkers @ 8" O.C.	1/2" DIA. A.B. @ 64" O.C. OPT. MAS @ 32" O.C.	1/2" DIA. W.A. @ 64" O.C. OPT. SHOT PINS @ 12"
4	5/8" GWB, W/ 6d cooler nails at 4" o.c. along all edges and field (1,4,10)	2-2X	none	2X	16d Sinkers @ 8" O.C.	1/2" DIA. A.B. @ 64" O.C. OPT. MAS @ 32" O.C.	1/2" DIA. W.A. @ 64" O.C. OPT. SHOT PINS @ 12"
5	3/8" Wood product panel W/ 8d nails at 6" o.c. at panel edges 12" o.c. at field (1,3,5)	2-2X	2X	2X	16d Sinkers @ 4" O.C.	1/2" DIA. A.B. @ 32" O.C. OPT. MAS @ 32" O.C.	1/2" DIA. W.A. @ 32" O.C. OPT. SHOT PINS @ 6"
6	3/8" Wood product panel W/ 8d nails at 4" o.c. at panel edges 12" o.c. at field (1,3,5)	2-2X	2X	2X	16d Sinkers @ 3" O.C.	1/2" DIA. A.B. @ 24" O.C. OPT. MAS @ 24" O.C.	1/2" DIA. W.A. @ 24" O.C. OPT. SHOT PINS @ 4"
7	3/8" Wood product panel W/ 8d nails at 3" o.c. at panel edges 12" o.c. at field (1,3,5)	2-2X	2X	2X	16d Sinkers @ 2 1/2" O.C.	1/2" DIA. A.B. @ 16" O.C. OPT. MAS @ 16" O.C.	1/2" DIA. W.A. @ 16" O.C. NO SHOT PIN OPT.
8	3/8" Wood product panel W/ 8d nails at 2" o.c. at panel edges 12" o.c. at field (1,3,5)	2-2X	3X	2X	16d Sinkers @ 2" O.C.	1/2" DIA. A.B. @ 12" O.C. OPT. MAS @ 12" O.C.	1/2" DIA. W.A. @ 12" O.C. NO SHOT PIN OPT.

Footnotes:
(1) Sheathing is included as part of required nail penetration.
(2) Shot pins to be 0.145" shank dia. X 2.815" shank length.
(3) Refer to specifications for plywood grading and permitted alternatives.
(4) At GWB shear walls, sheet panels 4' wide and larger shall be applied parallel or perpendicular to studs. Sheet panels less than 4' wide shall be applied only perpendicular to studs.
(5) At wood product shearwalls, sheet panels shall be not less than 4' by 8' except at boundaries and changes where the minimum sheet panel dimension shall be 12 inches.
(6) Stagger is 1/2 inch.
(7) Space fasteners no closer than 1-1/2 inch. Over any 48 inch line of fasteners, the average spacing shall be at least as close as that given.
(8) 1/2" dia. wedge anchor (Simpson Wedge All, Ramset Redhead Trubolt, or Hilti Kwik Bolt) may be used in lieu of anchor bolts at interior shearwalls. Do not use wedge anchors at exterior shearwalls. Embed a minimum of 2 1/2".
(9) 1/2" dia. screw anchor (Simpson Titen HD or Ramset Redhead LDT) may be used in lieu of anchor bolts at exterior and interior shear walls. Embed a minimum of 2 1/2". Maintain minimum 1 3/4" edge distance.
(10) No. 6-1 1/4" type W or type S screws may be used in lieu of the 5d or 6d nails.

BORM ENGINEERS
COSTA MESA • BEIJING • DENVER • LAS VEGAS • PHOENIX • TUCSON
PLEASANTON • ROSEVILLE • SACRAMENTO

PHOENIX OFFICE:
19820 North 7th Street, Suite 210
Phoenix, Arizona 85024
(623) 869-0601 Telephone
(623) 869-0603 Facsimile

CORPORATE OFFICE:
555 Anton Boulevard, Suite 850
Costa Mesa, California 92626
(714) 513-7500 Telephone
(714) 513-7555 Facsimile

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

COPYRIGHT 2007, BORM ASSOCIATES, INC.
ALL RIGHTS RESERVED

NOTICE:
THESE DRAWINGS AND SPECIFICATIONS AND THE IDEAS, DESIGNS, AND ARRANGEMENTS REPRESENTED THEREBY ARE AND SHALL REMAIN THE PROPERTY OF BORM ASSOCIATES INC. AND NO PART THEREOF SHALL BE COPIED, DISCLOSED TO OTHERS, OR USED IN CONNECTION WITH ANY OTHER WORK OR PROJECT OTHER THAN THE SPECIFIC PROJECT FOR WHICH THEY HAVE BEEN PREPARED AND DEVELOPED WITHOUT THE WRITTEN CONSENT OF BORM ASSOCIATES, INC. VISUAL CONTACT WITH THESE DRAWINGS OR SPECIFICATIONS SHALL CONSTITUTE CONCLUSIVE EVIDENCE OF THESE RESTRICTIONS.

WRITTEN DIMENSIONS ON THESE DRAWINGS SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. CONTRACTORS SHALL VERIFY, AND BE RESPONSIBLE FOR, ALL DIMENSIONS AND CONDITIONS ON THE JOB. THIS OFFICE MUST BE NOTIFIED OF VARIATIONS FROM THE DIMENSIONS AND CONDITIONS SHOWN BY THESE DRAWINGS.

REFER TO 6N SHEETS FOR ALL NOTES AND SPECIFICATIONS

PROJECT:
Broadway at San Marcos

OWNER/DEVELOPER:
Liberty Homes

ARCHITECT/DESIGNER:
MDW Designs

SHEET:
PLAN 1786

FLOOR FRAMING / LOWER SHEAR WALL PLAN

REFERENCE DATE: 03-28-07
ISSUED FOR:
CLIENT DELIVERY 03-29-07

ENGINEER OF RECORD:
Registered Professional Engineer — Certificate No. 35750 — MICHAEL ERIC WILLIS — Date 3-29-07 — ARIZONA, U.S.A.

CONTACTS:
-For design questions regarding these plans and specifications contact the Project Manager:
Steve Diener
Telephone: (623) 869-0601 ext. 233
Facsimile: (623) 869-0609
Email: steved@borm.com
-For scheduling site observation and for field changes contact the Construction Administrator:
Alissa Engeby
Telephone: (623) 869-0601 ext. 232
Facsimile: (623) 869-0609
Email: alissae@borm.com

FILE NO: 12564
CAD NO. : 12564 1786 02-4 FRM OPT
DRAWN BY : KER
ENGINEER : HI
SCALE : 1/4" = 1'-0"

SHT NO. S2.4