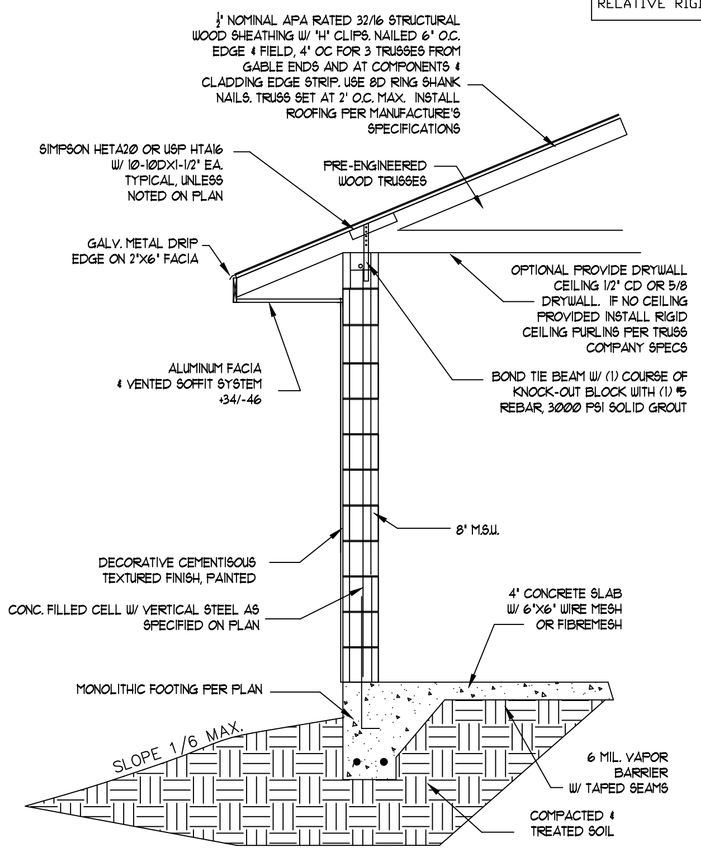
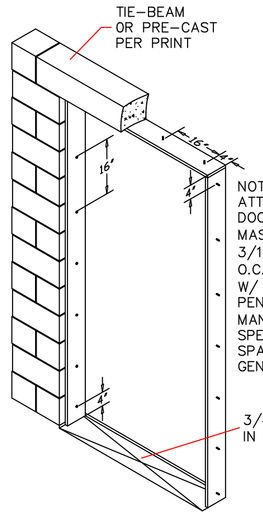
ALL EXTERIOR MASONARY WALLS WITH JAM STEEL ACT AS SHEAR WALLS/PIERS ACCORDING TO RELATIVE RIGIDITY

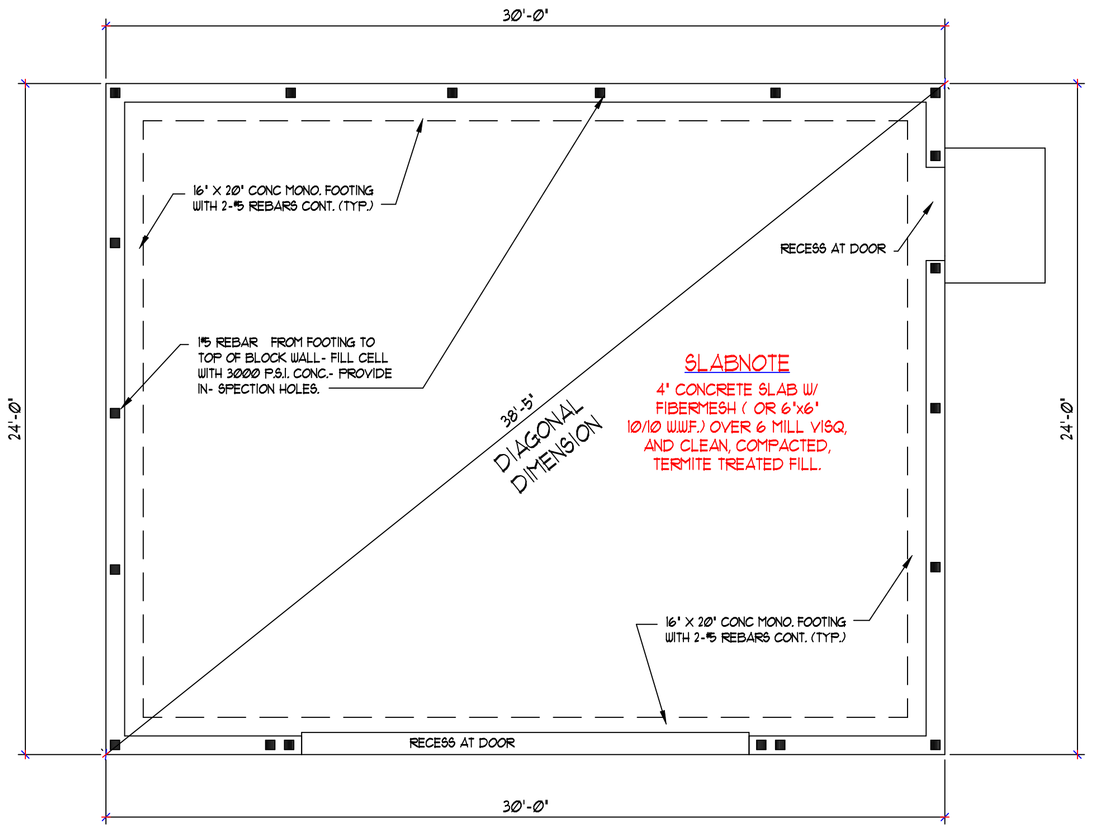


EXTERIOR WALL SECTION A (TYPICAL)

NOTE:
GENERAL CONTRACTOR AND OWNER TO VERIFY ALL DIMENSIONS AND SPECIFICATIONS PRIOR TO CONSTUCTION.

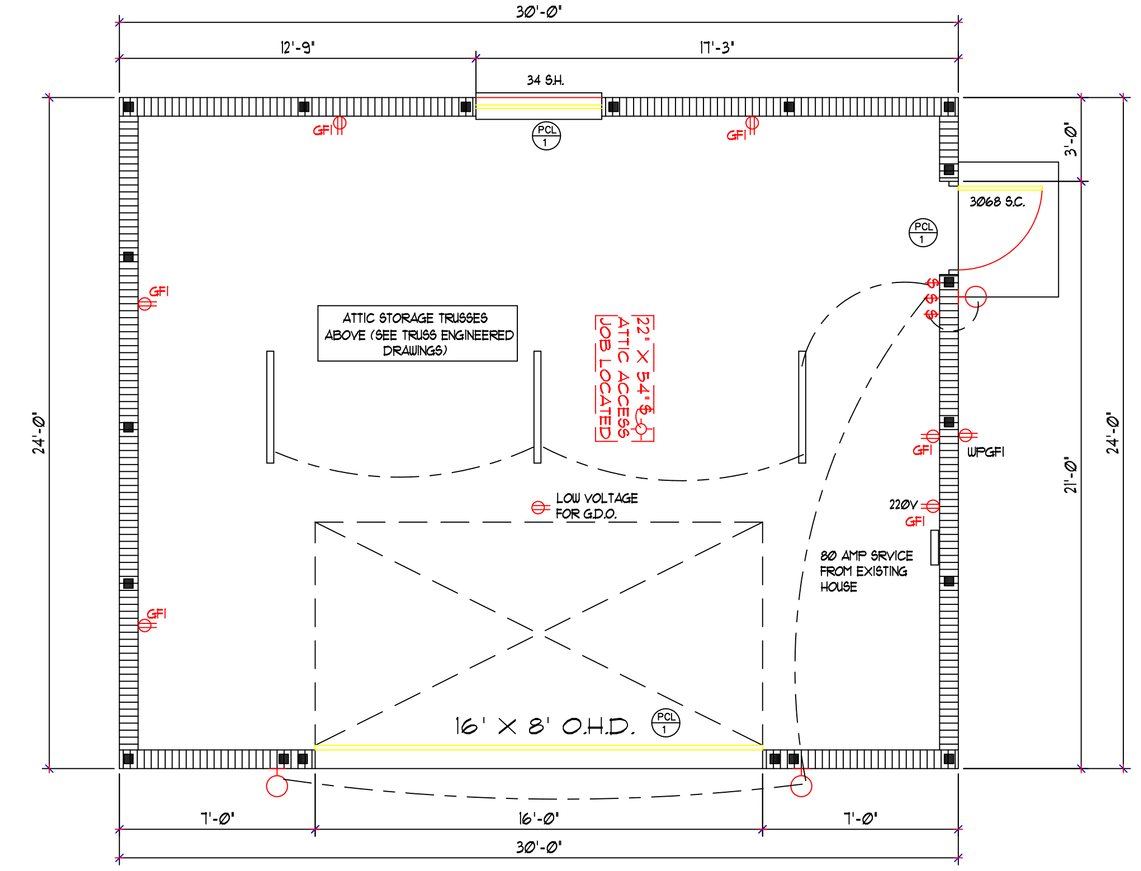


EXTERIOR DOOR BUCK DETAILS



FOUNDATION PLAN

SCALE = ¼"=1'-0"



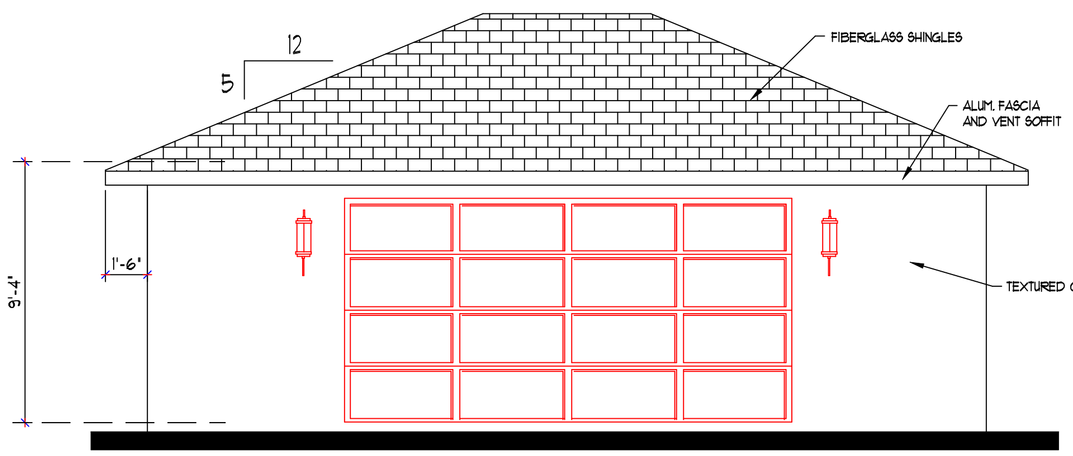
FLOOR PLAN

SCALE = ¼"=1'-0"

TOTAL AREA 720 S.F.

CONTROL JOINT NOTE

PROVIDE CONTROL JOINTS PER ACI 224.3R. JOINTS TO BE TOOLED WHEN FINISHING SLAB IN STRAIGHT LINE OR SAW CUT WHILE THE SLAB IS STILL GREEN. THE MINIMUM DEPTH OF THE JOINT IS TO BE 25% OF THE SLAB THICKNESS. LOCATE JOINTS APPROXIMATELY 10'-0" O.C. EACH WAY. JOINTS TO EXTEND TO OUTSIDE WALLS OR SLAB STEPS. LOCATE AT LEAST ONE JOINT TO INTERSECT EACH INSIDE CORNER OF SLAB STEPS OR EXTERIOR WALLS. JOINTS TO AVOID SHOWER RECESSES.

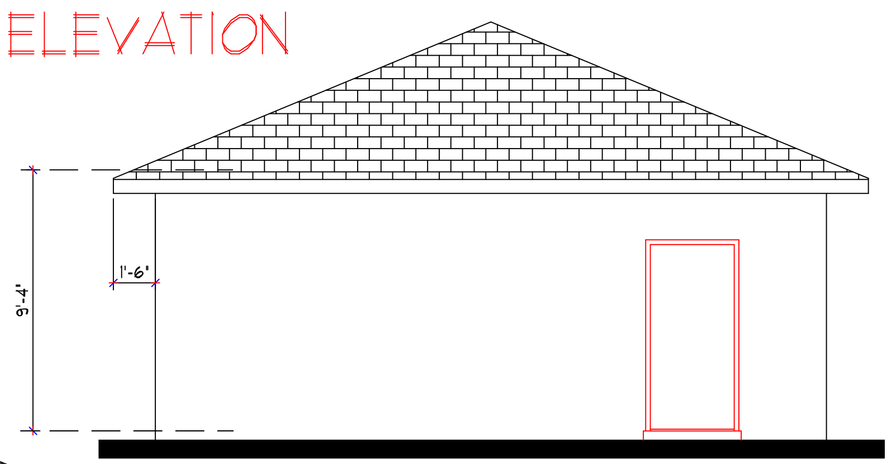


FRONT ELEVATION

SCALE = ¼"=1'-0"

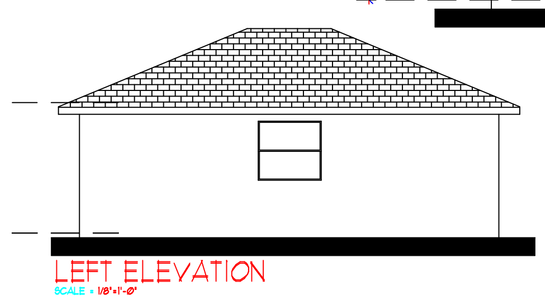
REAR ELEVATION

SCALE = 1/8"=1'-0"



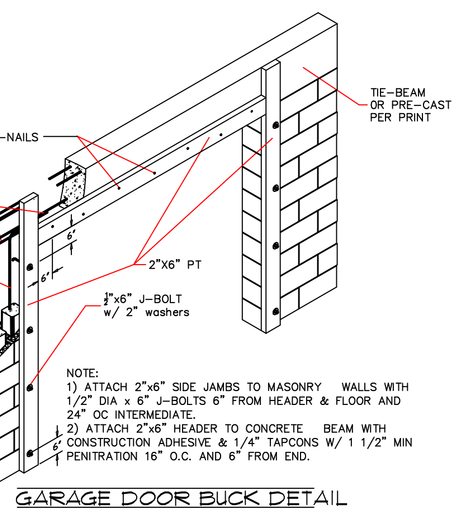
RIGHT ELEVATION

SCALE = ¼"=1'-0"



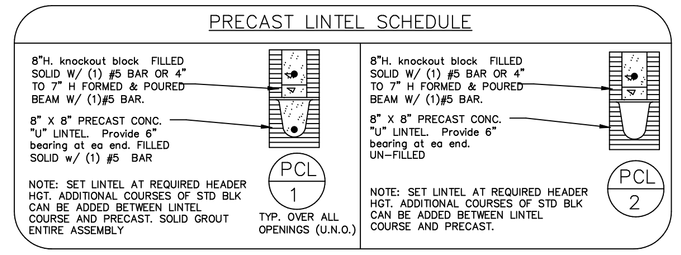
LEFT ELEVATION

SCALE = 1/8"=1'-0"



GARAGE DOOR BUCK DETAIL

PRECAST LINTEL SCHEDULE



CONNECTOR TABLE

SIMPSON	USP	UPLIFT (LBS)	FASTENING INFORMATION	ADDITIONAL INSTRUCTIONS
WOOD TO WOOD				
HTS20	HTW20	1450	(20) 10D NAILS TOTAL	
(2) HTS20	(2) HTW20	2900	(20) 10D NAILS EACH STRAP	
SPH4/6/8	SPTH4/6/8	1360	(12) 10D NAILS TO STUD	
WOOD TO CONCRETE				
META20	–	1450	(7) 10DX1-1/2" NAILS & 4" EMBEDMENT[2]	TYP FOR HIP JACKS OR 1-PLY TRUSSES
HETA20	–	1810	(10) 10DX1-1/2" NAILS & 4" EMBEDMENT[2]	TYP FOR HIP JACKS OR 1-PLY TRUSSES
–	HTA16	1500	(10) 10DX1-1/2" NAILS & 4" EMBEDMENT[2]	TYP FOR HIP JACKS OR 1-PLY TRUSSES
HTSM16	–	1175	(8) 10D NAILS & (4) 1/4"X1-3/4" TITENS	TYP FOR MISSED STRAPS (NO LIMIT) [3]
(2) META20	–	1985	(5) 10DX1-1/2" NAILS EACH STRAP	TYP FOR 1-PLY TRUSSES / GIRDERS
(2) HETA20	–	2500	(7) 10D NAILS EACH STRAP & 4" EMBEDMENT	TYP FOR 2-PLY TRUSSES / GIRDERS [4]
(2)HHETA20	–	3000	(11) 16D NAILS EACH STRAP & 4" EMBEDMENT	TYP FOR 2-PLY TRUSSES / GIRDERS [4]
–	(2) HTA16	3000	(10) 10D NAILS EACH STRAP & 4" EMBEDMENT	TYP FOR 2-PLY TRUSSES / GIRDERS [4]
OTHER CONNECTORS				
MGT	MUGT15	3965	5/8" ATR EMBED 6" & (22) 10D NAILS TO WOOD	ADD 4" TO EMBED FOR LINTEL BEAMS
HGT	HUGT	9790	(2)3/4" ATR EMBED 10" & (8) [16 FOR HGT] 10D NAILS	ADD 4" TO EMBED FOR LINTEL BEAMS
FGTR	–	5000	(2) 1/2"X5" TITEN HD & (18) SDS1/4X3 TO WOOD	MAY BE FGTRHL/R (3850 MAX UPLIFT)
(2) FGTR	–	9400	(2) 1/2"X5" TITEN HD & (18) SDS1/4X3 TO WOOD (EA)	MAY BE (2) FGTRHL/R (7200 MAX UPLIFT)
HD7	TDX6	4405	7/8" ATR EMBED 8" & (2)7/8" THRU BOLTS TO WOOD	ADD 4" TO EMBED FOR LINTEL BEAMS
HD7	TDX8	6465	7/8" ATR EMBED 12" & (3)7/8" THRU BOLTS TO WOOD	
HD9	TDX10	8310	7/8" ATR EMBED 12" & (4)7/8" THRU BOLTS TO WOOD	
HTT16	HTT16	4175	5/8" ATR EMBED 6" & (18) 16D NAILS TO WOOD	ADD 4" TO EMBED FOR LINTEL BEAMS
HTT22	HTT22	5260	5/8" ATR EMBED 6" & (32) 16D NAILS TO WOOD	ADD 4" TO EMBED FOR LINTEL BEAMS
MBHA	NFMXXU	3450	3/4"X8" ATR EMBED FACE & TOP (1/2" TOP FOR NFM)	ENGINEER TO SPECIFY USAGE ON PLANS
GENERAL NOTES				

1) ALSO APPLICABLE TO MASONRY. SEE ADDITIONAL INSTRUCTIONS FOR MASONRY ATTACHMENT MODIFICATIONS.
2) NAILING MAY BE REDUCED FOR LOWER UPLIFTS. PROVIDE (1) 10DX1-1/2" NAIL FOR EA 100 LBS OF UPLIFT (4 NAILS MIN).
3) 1-1/2" MIN EDGE DISTANCE. UNLIMITED USE. CARE MUST BE TAKEN TO ENSURE REPLACED STRAP LOCATION DOES NOT CONTAIN AN UPLIFT EXCEEDING 1175 LBS. CONTACT ENGINEER OF RECORD FOR MISSED STRAPS OF GREATER UPLIFTS.
4) WHERE ENGINEER SPECIFIES REFERENCED STRAP FOR 1-PLY TRUSSES, ADD 24" MIN 2X SCAB TO TRUSS CORD AT CONNECTOR LOCATION FOR REQUIRED CONNECTOR NAIL PENETRATION.

GENERAL: CONNECTOR REQUIRED AT EACH TRUSS BEARING POINT. TABLE IS FOR SIMPSON STRONG-TIE AND/OR USP.

STRUCTURAL NOTES

1) CODES:
1.1 FLORIDA BUILDING CODE, 2010
1.2 BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE (ACI 318-09).
1.3 AMERICAN SOCIETY OF CIVIL ENGINEERS MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES (ASCE 7-10).
1.4 SPECIFICATION FOR THE DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL FOR BUILDINGS (AISC 9TH EDITION).
1.5 "DESIGN SPECIFICATION FOR LIGHT METAL PLATE CONNECTED WOOD TRUSSES" BY THE TRUSS PLATE INSTITUTE (TPI) 2007 EDITION.

2) DESIGN CRITERIA UNLESS NOTE OTHERWISE ON PLAN:
2.1 DWELLING FLOORS – 40 PSF LIVE LOAD + 15 PSF DEAD LOAD.
2.2 BALCONIES – 40 PSF LIVE LOAD + 15 PSF DEAD LOAD.
2.4 SHINGLE ROOF LOADS (PSF) = 30 TC LL, 7 TC DL, 10 BC DL
2.4 TILE ROOF LOADS (PSF) = 30 TC LL, 15 TC DL, 10 BC DL
2.5 SEE DESIGN CRITERIA ON PLAN FOR ADDITIONAL PARAMETERS

3) SOILS:
FOUNDATIONS ARE DESIGNED FOR AN ALLOWABLE SOIL BEARING PRESSURE OF 2,000 PSF. AREAS FIVE FEET BEYOND BUILDING LINES SHOULD BE CLEARED AND GRUBBED OF ANY VEGETATION. FINISHED GRADE SHALL BE PLACED WITH A MAXIMUM LIFT OF 12" AND COMPACTED TO A MINIMUM 95% OF THE STANDARD PROCTOR DENSITY. FILL MATERIAL SHALL BE CLEAN TO SLIGHTLY SILTY FINE SAND, FREE OF ORGANIC MATERIAL. ALL WORK TO BE DONE IN ACCORDANCE WITH ASTM D-698 AND VERIFIED BY GENERAL CONTRACTOR.

4) CONCRETE:
4.1 CONCRETE COMPRESSIVE STRENGTH AT 28 DAYS: 3000 PSI (NORMAL WEIGHT) AT SLABS BEAMS AND FTGS.
4.2 REINFORCING BARS TO BE GRADE 60 W/ Fb=60 KSI, PER ASTM A615
4.3 WELDED WIRE FABRIC (WWF) WHEN SPECIFIED ON PLAN TO BE PER ASTM A185
4.4 DETAIL REINFORCEMENT IN ACCORDANCE WITH ACI 315.
4.5 CONCRETE COVERAGE OF REINFORCEMENT: FOOTINGS 3" BOTTOM AND SIDES, BEAMS 1 1/2" BOTTOM & SIDES
4.6 EARTH SUPPORTED SLABS: 3.5" THICK (min.)
THE FOLLOWING SLABS SHALL BE REINFORCED WITH FIBERMESH OR WWF PER PLAN: LIVING, GARAGE, DRIVEWAYS, ENTRY, LANAI, POOL DECKS
THE FOLLOWING SLABS MAY HAVE BUT DO NOT REQUIRE REINFORCEMENT: WALKWAYS, STEP, POOL EQUIP. PADS, SERVICE DOOR PADS, A/C PADS
4.7 CONCRETING OPERATIONS SHALL COMPLY WITH ACI STANDARDS.
4.8 LAP SPLICE TO BE 40xBAR DIA. FOR GRADE 40 & 48 DIAMETERS FOR GRADE 60
4.9 \pt198.25;MINIMUM PERIMETER FOOTING DEPTH TO BE 12" BELOW GRADE AND 4" ABOVE GRADE. INCREASE FOOTING DEPTH AS REQUIRED TO MEET SITE CONDITIONS. CONTRACTOR TO VERIFY FINAL GRADE IS 4" MINIMUM BELOW THE FINISHED FLOOR ELEVATION AND THAT THE FOOTING HAS A MINIMUM OF 12" OF SOIL COVER.
4.10 TYPICAL CONCRETE SLUMP TO BE 5" STANDARD OR 6" FOR PUMP MIX. HIGHER SLUMP VALUES MAY NOT BE ACHIEVED BY ADJUSTING WATER CONTENT BUT MAY BE OBTAINED W/ APPROVED PLASTICIZERS.
4.11 FIBERMESH TO BE ADDED TO CONCRETE PER MANF. SPECS.
4.12 CEMENT BASED PLASTER TO BE INSTALLED PER ASTM C 926 OVER LATHING, WHEN APPLICABLE, INSTALLED PER ASTM C 1063

5) MASONRY:
5.1 DESIGN AND CONSTRUCTION SHALL CONFORM TO THE SPECIFICATION OF THE NATIONAL CONCRETE MASONRY ASSOCIATION AND ACI 530.
5.2 MINIMUM MASONRY UNIT STRENGTH: f'm 1350 PSI.
5.3 MORTAR SHALL BE TYPE S.
5.4 FILL CELLS W/ (1) #5 BAR SHALL BE LOCATED @ 6'-- 0" O/C MAX, U.N.O., AT EACH CORNER AND EACH SIDE OF OPENINGS OR AS SPECIFIED BY ENGINEER AND PER PLAN
5.5 MISSED FILL CELLS MAY BE REPAIRED WITH 6" EPOXY EMBED #5 REBAR INTO SLAB AND TIEBEAM. LAP STEEL PER 4.8 AND FILL CELL WITH 3000 PSI GROUT

6) WOOD:
6.1 INTERIOR WOOD FRAMED PARTICIAN WALLS TO BE SPF STUD GRADE OR BETTER WITH A MINIMUM BENDING STRENGTH OF 600 PSI.
6.2 BEAMS AND HEADERS TO BE SYP #2 OR BETTERWITH A MINIMUM BENDING STRENGTH OF: 700 PSI (2x12), 725 PSI (2x10), 850 PSI (2x8), AND 950 PSI (2x6).
6.3 ALL OTHER LUMBER NOT SPECIFICALLY NOTED IN 6.1 OR 6.2 TO BE CONSIDERED STRUCTURAL AND TO BE SPF #2 OR SYP #2 OR BETTER WITH A MINIMUM BENDING STRENGTH OF 775 PSI.
6.4 DESIGN, FABRICATE AND ERECT WOOD TRUSSES IN ACCORDANCE WITH THE "DESIGN LIGHT METAL SPECIFICATIONS FOR PLATE CONNECTED WOOD TRUSSES" BY THE TRUSS PLATE INSTITUTE, 2007 EDITION, HIB-91 AND DSB-88.
6.5 ALL EXPOSED WOOD OR WOOD IN CONTACT WITH EARTH OR CONCRETE TO BE PRESSURE TREATED
6.6 UNTREATED WOOD SHALL NOT BE IN DIRECT CONTACT WITH CONCRETE. GALV. MTL. SEAT PLATES SHALL BE PROVIDED AT BEARING LOCATIONS WITHOUT WOODEN TOP PLATES
6.7 WOOD SHEATHING AT ALL EXTERIOR VERT. SURFACES TO BE BLOCKED AS REQUIRE TO MAINTAIN 16" OC SPACING – INCLUDING ENTRY ARCHES, NON-BRG WALLS & GABLE ENDS

7) ENGINEERED LUMBER:
7.1 MICRO-LAM,LVL,PARALLAM PRODUCTS SHALL HAVE THE FOLLOWING MIN. PROPERTIES: E = 1,900,000 PSI, Fb = 2,600 PSI, Fv = 285 PSI
7.2 TOP LOADED MULTI-PLY BEAM LESS THAN 144" DEEP OR MORE PROVIDE 3 ROWS 10D (0.128" X 3") NAILS AT 12" O.C.
7.3 TOP LOADED MULTI-PLY BEAM 14" DEEP OR MORE PROVIDE 4 ROWS 10D (0.128" X 3") NAILS AT 12" O.C.
7.4 ROOF DECKING SPECIFIED ON PLANS IS THE MINIMUM ALLOWED. VERIFY MATERIAL TYPE AND THICKNESS WITH ROOF COVERING PRODUCT APPROVAL.

8) GENERAL:
8.1 THE CONTRACTOR OF WORK IS RESPONSIBLE TO CONFIRM ALL DIMENSIONS AND DETAILS DESCRIBED IN THESE PLANS PRIOR TO THE COMMENCEMENT OF WORK. WRITTEN NOTIFICATION TO THE ENGINEER OF RECORD OF ANY ERRORS OR OMMISIONS TO BE PROVIDED PRIOR TO THE COMMENCEMENT OF WORK. THE ENGINEER OF RECORD IS NOT RESPONSIBLE FOR SUPERVISION, CONSTUCTION METHODS OR TEMPORARY BRACING DURING CONSTRUCTION. THIS PLAN IS APPROVED FOR SITE SPECIFIC PERMITTING ONLY. MASTER COPYING OF THIS PLAN WITHOUT WRITTEN CONSENT FROM THE ENGINEER OF RECORD IS NOT ALLOWED

8.2 UNLESS NOTED ON THE PLAN CEILINGS EXPOSED TO WIND ARE TO BE 5/8" SOFFIT BOARD ATTACHED TO BOTTOM OF TRUSS CHORDS W/ 6D COOLER NAILS X 1 7/8" L OR 12" DRYWALL SCREWS AT 6" OC EDGES AND FIELD.
8.3 PER R612.2 WINDOW SILLS IN ALL RESIDENTIAL OCCUPANCY TYPES WHERE THE OPENING OF AN OPERABLE WINDOW IS LOCATED MORE THAN 72 INCHES ABOVE THE OUTSIDE SURFACE BELOW, THE LOWEST PART OF THE CLEAR OPENING OF THE WINDOW SHALL BE A MINIMUM OF 24 INCHES ABOVE THE INTERIOR FINISHED FLOOR. ANY WINDOWS SILLS BELOW 24" MUST HAVE WINDOW GUARDS THAT COMPLY WITH ASTM F 2090.

DESIGN CRITERIA

DWELLING FLOORS/SLAB ON GRADE – 40 PSF LIVE LOAD + 55 PSF DEAD LOAD.
DWELLING FLOORS/WOOD DECKING – 40 PSF LIVE LOAD + 15 PSF DEAD LOAD.
BALCONIES & PORCHES – 40 PSF LIVE LOAD + 15 PSF DEAD LOAD.
ROOF LOADS = 30 PSF LIVE LOAD, 17 PSF DEAD LOAD
ULTIMATE WIND SPEED = 160 MPH, PER ASCE 7-10
IMPORTANCE FACTOR = 1.0
EXPOSURE = C, RICK CATEGORY II
INTERNAL PRESSURE COEFFICIENT = .55(BUILDING, PARTIALLY ENCLOSED)

WOOLF & ASSOCIATES
20000 VETERANS BLVD
PORT CHARLOTTE, FL
PH: (941) 764-0200

RAISED SEAL WITH ENGINEER'S SIGNATURE CERTIFIES THAT THE STRUCTURAL COMPONENTS OF THIS PLAN ARE IN COMPLIANCE TO THE 2007 FLORIDA BUILDING CODES WITH 2009 AMENDMENTS.RESISTANCE TO WIND PRESSURE IS IN COMPLIANCE TO SECTION 1609. PLAN IS VALID WITH RAISED SEAL ONLY.

MICHAEL S. WOOLF - FL PE 55307 - CERT OF AUTH. 26845

BUILDER
K.R. BROBST BUILDER

PROPOSED GARAGE FOR :
JIM BELL
5156 COLT TERRACE GULF COVE

SNYDERS DRAFTING
1578 EL JOBEAN RD.
PORT CHARLOTTE, FL 33948
(941) 766-7977

DRAWING DATE
8-8-14

REVISION DATE

DRAWN BY:
RLS

DRAWING NO.
BROBSTBELLGARAGE

SHEET
| OF |