Desai Residence

REVISION SUMMARY

NO.	DATE	REVISION DESCRIPTION	DESIGNER

ABBREVIATIONS

A.B.	Anchor Bolt	Flr. Sys.	Floor System	PSF	Pounds per square foot
Abv.	Above	F.O.M.	Face Of Masonry	P.T.	Pressure Treated
Adj.	Adjustable	Ft.	Foot / Feet	Rad.	Radius
A.F.F.	Above Finished Floor	Ftg.	Footing	Req'd.	Required
ALT.	Alternate	Galv.	Galvanized	Rm.	Room
Bm.	Beam	G.C.	General Contractor	Rnd.	Round
B/Beam	Bottom of Beam	G.F.I.	Ground Fault Interrupter	S.F.	Square Ft.
Brg.	Bearing	G.T.	Girder Truss	SHT	Sheet
Cant.	Cantilever	Hdr.	Header	S.L.	Side Lights
Cir.	Circle	Hgt.	Height	S.P.F.	Spruce Pine Fir
Clg.	Ceiling	Int.	Interior	Sq.	Square
CJ	Control Joint	K/Wall	Kneewall	S.Y.P.	Southern Yellow Pine
Col.	Column	L.F.	Linear Ft.	Thik'n.	Thicken
Cont.	Continuous	Mas.	Masonry	T.O.B.	Top of Block
Dbl.	Double	Max	Maximum	T.O.M.	Top of Masonry
Dia.	Diameter	Min	Minimum	T.O.P.	Top of Plate
Ea.	Each	M.L.	Microlam	Trans.	Transom Window
E.W.	Each Way	Mir.	Mirror	Typ.	Typical
Elec.	Electrical	Mono	Monolithic	U.N.O.	Unless Noted Otherwise
Elev.	Elevation	N.T.S.	Not to Scale	Vert.	Vertical
E.O.R	Engineering or Record	O.C.	On center	V.L.	Versalam
Ext.	Exterior	Opn'g.	Opening	VTR	Vent through Roof
Exp.	Expansion	Opt.	Optional	W	Washer
F.B.C.	Florida Bldg. Code	Pc.	Piece	W/	With
Fin. Flr.	Finished Floor	P.L.	Parallam	W.A.	Wedge Anchor
Flr.	Floor	PLF	Pounds per linear foot	Wd	Wood
Fdn.	Foundation	Plt. Ht.	Plate Height	WP	Water Proof

TERMITE SPECIFICATIONS

SECTION R318 PROTECTION AGAINST TERMITES

TERMITE PROTECTION SHALL BE PROVIDED BY REGISTERED TERMITICIDES, INCLUDING SOIL APPLIED PESTICIDES, BAITING SYSTEMS, AND PESTICIDES APPLIED TO WOOD, OR OTHER APPROVED METHODS OF TERMITE PROTECTION LABELED FOR USE A PREVENTIVE TREATMENT TO NEW CONSTRUCTION (SEE SECTION 202, REGISTERED TERMITICIDE). UPON COMPLETION OF THE APPLICATION OF THE TERMITE PROTECTIVE TREATMENT, A CERTIFICATE OF COMPLIANCE SHALL BE ISSUED TO THE BUILDING DEPARTMENT BY THE LICENSED PEST CONTROL COMPANY THAT CONTAINS THE FOLLOWING STATEMENT: "THE BUILDING HAS RECEIVED A COMPLETE TREATMENT FOR THE PREVENTION OF SUBTERRANEAN TERMITES. TREATMENT IS IN ACCORDANCE WITH RULES AND LAWS ESTABLISHED BY THE FLORIDA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES."

NOTES:
1. METHOD OF TREATMENT SHALL BE APPROVED BY THE GOVERNING JURISDICTION "LIQUID BORATE OR BOR-A-COR" PRODUCT METHODS MUST BE DETERMINED AT PERMIT STAGE AND PRODUCT APPROVAL DATA MUST BE ON FILE WITH THE BUILDING DEPARTMENT.
2. PRESSURE TREATED LUMBER THAT HAS BEEN CUT OR DRILLED THAT EXPOSES UNTREATED PORTIONS OF WOOD ARE REQUIRED TO BE FIELD TREATED TO PREVENT INSECT INFESTATION.
3. OPTIONAL BORATE APPLIED TO ALL FRAME MEMBERS WITHIN 24" A.F.F.

- -NOTICE TO BUILDER AND ALL SUBCONTRACTORS- -

IT IS THE INTENT OF THE ENGINEER LISTED IN THE TITLEBLOCK OF THESE DOCUMENTS THAT THESE DOCUMENTS BE ACCURATE, PROVIDING LICENSED PROFESSIONALS CLEAR INFORMATION. EVERY ATTEMPT HAS BEEN MADE TO PREVENT ERROR. THE BUILDER AND ALL SUBCONTRACTORS ARE REQUIRED TO:
1. REVIEW ALL THE INFORMATION CONTAINED IN THESE DOCUMENTS, PRIOR TO THE COMMENCEMENT OF ANY WORK. THE ENGINEER ARE NOT RESPONSIBLE FOR ANY PLAN ERRORS, OMISSIONS, OR MISINTERPRETATIONS UNDETECTED AND NOT REPORTED TO THE ENGINEER PRIOR TO CONSTRUCTION.
2. SHALL STRICTLY OBSERVE ALL APPLICATION CODES DURING THE COURSE OF CONSTRUCTION INCLUDING ALL STATE, CITY, AND COUNTY BUILDING, ZONING, ELECTRICAL, MECHANICAL, PLUMBING AND FIRE CODES. CONTRACTOR SHALL VERIFY ALL CODE REQUIREMENTS PRIOR TO COMMENCEMENT OF WORK.
3. THE ARCHITECT / ENGINEER SHALL NOT BE RESPONSIBLE FOR SAFETY PROCEDURES, THE MEANS AND METHODS OF CONSTRUCTION, TECHNOLOGIES, OR THE CONTRACTION TO CARRY OUT THE WORK IN ACCORDANCE WITH THE DRAWINGS AND SPECIFICTAIONS OR RELATED CODES.
4. THE FRAMING PLAN SHOWN INDICATES THE "TRUSS SYSTEM" AND IS THE RESPONSIBILITY OF THE TRUSS SYSTEM ENGINEER (DESIGN PROFESSIONAL OF RECORD). THE TRUSS DESIGN ENGINEER (DELEGATED ENGINEER) HAS FINAL, RESONSIBILITY FOR EACH INDIVIDUAL TRUSS AND TRUSS PROFILE, AND IS TO SUBMIT A FINAL SET OF TRUSS ENGINEERING SIGNED AND SEALED TRUSS DRAWINGS TO DESIGN PROFESSIONAL OF RECORD FOR REVIEW PRIOR TO FABRICATION
5. ANY DISCRPANCY OR ERROR IN DIMENSIONS OR NOTES WITH IN THIS PLAN SHALL BE BROUGHT TO THE ATTENTION OF THE DESIGN PROFESSIONAL FOR CLARIFICATION PRIOR TO CONSTRUCTION.
6. ALL CONSTRUCTION MUST BE IN ACCORDANCE TO THE INFORMATION FOUND IN THESE DOCUMENTS. ANY QUESTIONS REGARDING THE INFORMATION FOUND IN THESE PLANS SHOULD BE DIRECTED TO OUR QUALITY ASSURANCE MANAGER AT 321-972-0491 IMMEDIATELY. NO BACK CHARGES WILL BE CONSIDERED FOR REIMBURSEMENT BY THE THE ENGINEER WITHOUT ADVANCED NOTIFICATION AND APPROVAL BY THE ENGINEER. PAYMENTS WILL BE MADE IN ACCORDANCE TO THE TERMS OF THE AGREEMENT.

LATH AND LATH ATTACHMENTS SHALL BE OF CORROSION-RESISTANT MATERIALS. EXPANDED METAL OR WOVEN WIRE LATH SHALL BE ATTACHED TO WOOD SHEATHING WITH 1 1/2" LONG, 11 GAGE NAILS HAVING A 7/16" HEAD, OR 7/8" LONG, 16 GAUGE STAPLES, SPACED NOT MORE THAN 6 INCHES ON CENTER VERTICALLY AND HORIZONTALLY (REF. 2017 FRC R703.7.1).

GENERAL STRUCTURAL NOTES

CAST IN PLACE REINFORCED CONCRETE

1. ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS OF 2500 PSI (SLABS) 3000 PSI (COLUMNS AND BEAMS), A SLUMP OF 5" PLUS OR MINUS 1", AND HAVE 2 TO 5% AIR ENTRAINMENT, AND A MAXIMUM WATER/CEMENT RATIO OF 0.63
2. HOOKS SHALL BE PROVIDED AT DISCONTINUOUS ENDS OF ALL TOP BARS OF BEAMS.
3. HORIZONTAL FOOTING BARS SHALL BE BENT 25" AROUND CORNERS OR CORNER BARS WITH A 25" LAP PROVIDED EA WAY.
4. CONCRETE COVER MIN. 3" WHEN EXPOSED TO EARTH OR 1 1/2" TO FORM U.N.O.
5. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A1064A / A1064M. WWF SHALL BE LAPPED AT LEAST 6" AND CONTAIN AT LEAST ONE CROSS WIRE WITHIN THE 6". POLYPROPYLENE FIBERS FOR SLABS ON GRADE TO BE MIN 1.5 LBS OF FIBER PER CUBIC YARD
6. ALL REINFORCING STEEL / STIRRUPS AND TIES SHALL BE NEW DOMESTIC DEFORMED BARS FREE FROM RUST,SCALE & OIL & SHALL MEET ASTM A615/ A615M GRADE 60 U.N.O. REINFORCING FOR FOOTING SHALL BE SUPPORTED ON PRE-CAST CONCRETE PADS, STEEL WIRE OR PLASTIC SUPPORT. TOP REINFORCING SHALL BE POSITIVELY SUPPORTED BY TEMPORARY STRINGERS. DOWELS FOR COLUMNS & FILLED CELLS SHALL BE SECURED IN PLACE BY USING ADDITIONAL CROSS- REINFORCING TIED TO FOOTING REINFORCING. SPLICES IN REINFORCING WHERE PERMITTED SHALL BE AS PER DETAIL **MS05/L1**.
7. HIGH STRENGTH SIMPSON SET EPOXY-TIE WAS USED IN THE DESIGN OF THIS PRODUCT. IF CONTRACTORS WISH TO USE A DIFFERENT EPOXY, THEY MUST FIRST CONTACT THE ENGINEER OF RECORD FOR WRITTEN APPROVAL.
8. WHERE PROJECT IS TO BE LOCATED IN KNOWN RADON GAS PREVALENT AREAS, APPENDIX "F" OF THE FLORIDA BUILDING CODE 5TH EDITION (2014) IS TO BE IMPLEMENTED. F303.4 CONCRETE STRENGTH IN THESE AREAS ARE TO BE A MINIMUM OF 3000 P.S.I. THEREFORE, ANY AND ALL NOTES ON THESE PLANS THAT INDICATE 2500 P.S.I. SHALL BE REPLACED WITH 3000 P.S.I. FOR THE CONCRETE STRENGTH.

MASONRY

1. HOLLOW LOAD BEARING UNITS SHALL BE NORMAL WEIGHT, GRADE N, TYPE 2, CONFORMING TO ASTM C90-014, WITH A MINIMUM NET COMPRESSIVE STRENGTH OF 1900 PSI (f'm = 1500 PSI)
2. MORTAR SHALL BE TYPE "S", CONFORMING TO ASTM C270-12A.
3. COARSE GROUT SHALL CONFORM TO ASTM C476 WITH A MAXIMUM AGGREGATE SIZE OF 3/8" AND A MINIMUM COMPRESSIVE STRENGTH AT 28 DAYS OF 3000 PSI SLUMP 8" TO 11". CONTINUOUS MASONRY INSPECTIONS ARE REQUIRED DURING CONSTRUCTION
4. GRADE 60 U.N.O. VERTICAL REINFORCEMENT SHALL BE AS NOTED ON THE DRAWINGS WITH THE CELLS FILLED WITH COARSE GROUT.
5. GRADE 60 U.N.O.VERTICAL REINFORCEMENT SHALL BE HELD IN POSITION AT THE TOP AND BOTTOM AND AT A MAXIMUM SPACING OF 192 DIA OR 10FT WHICH EVER IS LESS. REINFORCING SHALL BE PLACED IN THE CENTER OF THE MASONRY CELL WITH MIN 1/2" CLEARANCE TO INSIDE FACE.
6. REINFORCING STEEL SHALL BE LAPPED PER DETAIL **MS05/L1**, UNLESS OTHERWISE NOTED ON THE DRAWINGS.
7. GROUT STOPS SHALL BE PROVIDED BELOW BOND BEAM. PLASTIC SCREEN, METAL LATH STRIP OR CAVITY CAPS MAY BE USED TO PREVENT THE FLOW OF GROUT INTO CELLS BELOW. THE USE OF FELT PAPER AS A STOP IS PROHIBITED.
8. TEMPORARY BRACING AND SHORING OF WALL TO PROVIDE STABILITY DURING CONSTRUCTION SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR
9. TYPICAL FILLED CELL REINFORCING SIZE AND SPACING SHALL BE ABOVE AND BELOW ALL WALL OPENINGS
10. DO NOT APPLY UNIFORM LOADS TO MASONRY WALLS FOR (3) DAYS AND NO CONCENTRATED LOADS FOR (7) DAYS. PER CODE ACI 318-14
11. CONSOLIDATE POURS EXCEEDING 12" IN HEIGHT BY MECHANICAL VIBRATION, AND RECONSOLIDATE BY MECHANICAL VIBRATION AFTER INITIAL WATER LOSS AND SETTLEMENT HAS OCCURRED. GROUT SHALL BE FLUSH WITH TOP OF WALL.

WOOD

1. ALL EXTERIOR WOOD STUDS WALLS, BEARING WALLS, SHEAR WALLS, AND MISC. STRUCTURAL WOOD FRAMING MEMBERS,(I.E. BLOCKING OR GABLE END BRACING) SHALL BE EITHER AS SPECIFIED IN PLAN OR IN DETAILS. IF CONFLICTS OCCUR BETWEEN PLAN AND DETAILS, THE STRONGEST MATERIAL SHALL BE USED. AT A MINIMUM, ALL WOOD STRUCTURAL FRAMING MEMBERS SHALL BE SPF #2.
2. ALL LUMBER SPECIFIED ON DRAWINGS ARE INTENDED FOR DRY USE ONLY (MOISTURE CONTENT 19% OR LESS), U.N.O. ALL WATERPROOFING AND FIRE SAFETY SYSTEMS ARE THE RESPONSIBILITY OF THE CONTRACTOR AND ARE TO BE DESIGNED AND DETAILED BY OTHERS
3. ANY WOOD FRAME INTERIOR BEARING WALL STUDS THAT HAVE HOLES IN THE CENTER OF THE STUD UP TO 1" DIA. SHALL HAVE STUD PROTECTION SHIELDS. ALL HOLES OVER 1" IN DIA. FOR PLUMBING LINES, ETC. SHALL BE REPAIRED WITH SIMPSON HSS2 STUD SHOES,TYP., U.N.O.
4. MANY OF THE NEW PRESSURE TREATED WOODS USE CHEMICALS THAT ARE CORROSIVE TO STEEL. IT IS THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE TYPE OF WOOD TREATMENT AND TO SELECT APPROPRIATE CONNECTORS THAT RESIST CORROSION. FOR EXAMPLE, ACQ-C, ACQ-D, CBA-A OR CA-B REQUIRE HOT-DIPPED GALVANIZED OR STAINLESS STEEL FASTENERS. DOT SODIUM BORATE (SBX) DOES NOT.
5. ALL EXPOSED WOOD OR WOOD IN CONTACT WITH EARTH OR CONCRETE TO BE PRESSURE TREATED.
6. UNTREATED WOOD SHALL NOT BE IN DIRECT CONTACT WITH CONCRETE OR MASONRY. SEAT PLATES SHALL BE PROVIDED AT BEARING LOCATIONS WITHOUT WOODEN TOP PLATES.
7. SEE PLAN FOR STUD PACK AND BEAM NAILING PATTERNS
8. ALL ENGINEERED LUMBER TO HAVE THE FOLLOWING MIN VALUES U.N.O.
   PARALLAM COLUMNS: 1.8E Fb = 2400 PSI
   MICROLAM (LVL) BEAMS: 2.0E Fb= 2600 PSI
   GLULAM BEAMS: SP/SP 24F-V5 LAYUP (1.7E FB=2400 PSI) MIN.
9. SEE PLAN NOTE FOR ADDITIONAL ROOF, WALL, SHEAR WALL AND FLOOR SHEATHING REQUIREMENTS ALONG W/ NAILING INFORMATION OTHERWISE:
   - 9.1. ROOF DECK: PLYWOOD C-C/C-D, EXTERIOR OR OSB
   - 9.2. FLOOR SHEATHING: T&G A-C GROUP 1 APA RATED (48/24) SHEATHING SHALL FINISH FLUSH TO EXTERIOR WALL FACE.
   - 9.3. WALL SHEATHING: 7⁄16" STUCTURAL I OSB EXPOSURE 1 OR 15⁄32" RATED OSB EXPOSURE 1. A MINIMUM 1⁄8" SPACE IS RECOMMENDED BETWEEN PANELS AT EDGE AND END JOINTS TO ALLOW FOR EXPANSION. PER R604.3 SHEATHING SHALL NOT BE USED AS WEATHER RESISTANCE BARRIER UNLESS SPECIFIED.

UPLIFT CONNECTORS

1. UPLIFT CONNECTORS SUCH AS HURRICANE CLIPS, TRUSS ANCHORS AND ANCHOR BOLTS ARE ONLY REQUIRED ON MEMBERS IN WALLS THAT ARE EXPOSED TO UPLIFT OR LATERAL FORCES. INTERIOR LOAD BEARING WALLS ARE NOT ALWAYS EXPOSED TO UPLIFT FORCES. THE MEMBERS OF THESE WALLS WOULD NOT NEED TO HAVE CONNECTORS APPLIED. PLEASE COORDINATE THE TRUSS ENGINEER FOR THE LOCATION OF THESE WALLS.AND STRUCTURAL PLANS FOR MORE INFO.

STRUCTURAL STEEL

1. MATERIAL SPECIFICATIONS: WIDE FLANGE SECTIONS: ASTM A992, GRADE 50, Fy=50 KSI TUBE STEEL (HSS): ASTM A500, GRADE B, Fy = 46 KSI PIPE STEEL: ASTM A53, TYPE E OR S, Fy = 35 KSI ALL OTHER STRUCTURAL & MISC. STEEL: A36 Fy=36 KSI STRUCTURAL CONNECTIONS: ALL STRUCTURAL BOLTS TO BE A325N U.N.O
2. STRUCTURAL BOLTS SMALLER THAN 5/8" DIA. TO BE A307 THREADED ROD SHALL CONFORM TO A36 OR A307 ANCHOR BOLTS SHALL CONFORM TO ASTM F1554 ALL BOLTS CAST IN CONCRETE: ASTM A36 OR ASTM A-307 SHOP AND FIELD WELDS: E70XX ELECTRODES STEEL REINFORCEMENT SHOP DRAWINGS TO BE PROVIDED TO ENGINEER OF RECORD BEFORE FABRICATION FOR REVIEW AND APPROVAL
3. STRUCTURAL CONNECTIONS: ALL STRUCTURAL BOLTS TO BE A325N U.N.O. ALL A325N BOLTS SHALL BE BROUGHT TO A "SNUG-TIGHT" CONDITION , AS DEFINED IN THE SPECIFICATION. SLIP CRITICAL (SC) BOLTS MUST BE FULLY TENSIONED PER SPECIFICATION STRUCTURAL BOLTS SMALLER THAN 5/8" DIA. TO BE A307 THREADED ROD SHALL CONFORM TO A36 OR A307 ANCHOR BOLTS SHALL CONFORM TO ASTM F1554 ALL BOLTS CAST IN CONCRETE: ASTM A36 OR ASTM A-307 SHOP AND FIELD WELDS: E70XX ELECTRODES STEEL REINFORCEMENT SHOP DRAWINGS TO BE PROVIDED TO ENGINEER OF RECORD BEFORE FABRICATION FOR REVIEW AND APPROVAL. WELDED CONNECTIONS: ELECTRODES - E70XX UNO (LOW HYDROGEN). FILLET WELDS SHALL BE 3⁄16" UNO.
4. SUBMIT SHOP DRAWINGS INDICATING ALL SHOP AND ERECTION DETAILS INCLUDING PROFILES, SIZES, SPACING, AND LOCATIONS OF STRUCTURAL MEMBERS, CONNECTION ATTACHMENTS, FASTENERS, LOAD, AND TOLERANCES.
5. STRUCTURAL STEEL SHALL RECEIVE SHOP COAT OF PRIMER (COLOR AS DIRECTED BY ARCHITECT) EXCEPT FOR AREAS WHICH WILL RECEIVE SPRAY-ON FIRE PROTECTION..
6. A CERTIFIED TESTING AGENCY SHALL BE ENGAGED TO PERFORM INDUSTRY STANDARD INSPECTIONS TO ENSURE CONFORMANCE WITH PLANS AND SPECIFICATIONS (IF PROVIDED). SUBMIT REPORTS TO ARCHITECT AND ENGINEER.

PRE ENGINEERED WOOD TRUSSES

1. ALL PREFABRICATED WOOD TRUSSES SHALL BE SECURELY FASTENED TO THEIR SUPPORTING WALLS OR BEAMS WITH HURRICANE CLIPS OR ANCHORS PER STRUCTURAL PLAN
2. PREFABRICATED WOOD TRUSSES SHALL BE DESIGNED IN ACCORDANCE WITH THE LATEST EDITION OF THE "NATIONAL DESIGN SPECIFICATION FOR STRESS-GRADE LUMBER AND ITS FASTENERS" AS RECOMMENDED BY THE NATIONAL FOREST PRODUCTS ASSOCIATION.
3. TRUSS MEMBERS AND CONNECTIONS SHALL BE PROPORTIONED (WITH A MAXIMUM ALLOWABLE STRESS INCREASE FOR LOAD DURATION OF 25%) TO WITHSTAND THE LIVE LOADS GIVEN IN THE NOTES AND TOTAL DEAD LOAD.
4. BRIDGING FOR PRE-ENGINEERED TRUSSES SHALL BE AS REQUIRED BY THE TRUSS MANUFACTURER UNLESS NOTED ON THE PLANS.
5. TRUSS ELEVATIONS AND SECTIONS ARE FOR GENERAL CONFIGURATION OF TRUSSES ONLY. WEB MEMBERS ARE NOT SHOWN, BUT SHALL BE DESIGNED BY THE TRUSS MANUFACTURER IN ACCORDANCE WITH THE FRAMING DESIGN LOADS:
6. DESIGN SPECIFICATIONS FOR LIGHT WEIGHT METAL PLATE CONNECTED WOOD TRUSSES PER THE TRUSS PLATE INSTITUTE TPI LATEST EDITION.
7. PRE-ENGINEERED WOOD TRUSSES SHALL BE DESIGNED BY THE MANUFACTURER IN ACCORDANCE WITH SPECIFIED LOADS AND GOVERNING CODES . SUBMITTALS SHALL INCLUDE TRUSS FRAMING PLANS AND DETAILS SHOWING MEMBER SIZES, BRACING, ANCHORAGE, CONNECTIONS, TRUSS LOCATIONS, AND PERMANENT BRACING AND/OR BRIDGING AS REQUIRED FOR ERECTION AND FOR THE PERMANENT STRUCTURE. EACH SUBMITTAL SHALL BE SIGNED AND SEALED BY A FLORIDA REGISTERED STRUCTURAL ENGINEER. SUBMIT 3 COPIES FOR REVIEW AND APPROVAL PRIOR TO FABRICATION.
8. THE TRUSS MANUFACTURER SHALL DETERMINE ALL SPANS WORKING POINTS, BEARING POINTS, AND SIMILAR CONDITIONS. TRUSS SHOP DRAWINGS SHALL SHOW ALL TRUSSES, ALL BRACING MEMBERS, AND ALL TRUSS TO TRUSS HANGERS.

FIELD REPAIR NOTES

1. MISSED "J" BOLTS FOR WOOD BEARING WALLS MAY BE SUBSTITUTED WITH 1/2" DIA. EPOXY ANCHORS WITH 7" EMBEDMENT. SIMPSON "SET" EPOXY ADHESIVE BINDER FOLLOWING ALL MANUFACTURER'S RECOMMENDATIONS OR SIMPSON 1/2" TITEN HD BOLTS WITH MINIMUM 7" EMBEDMENT. SEE PLAN FOR EMBEDMENT DEPTH AT FLOOR STEPS.
2. FOR MISSED VERT. DOWELS, DRILL A 3/4" DIAMETER HOLE 6" DEEP AT THE LOCATION OF THE OMITTED REBAR AND INSTALL A 32" LONG #5 BAR INTO THE EPOXY FILLED HOLE. USE A TWO PART EMBEDMENT EPOXY (SIMPSON HIGH STRENGTH EPOXY-TIE ANCHORING ADHESIVE) MIXED PER THE MANUFACTURER'S INSTRUCTIONS. ASSURE THAT ALL DUST AND DEBRIS FROM DRILLING ARE REMOVED FROM THE HOLE BY BRUSHING AND USING COMPRESSED AIR PRIOR TO APPLYING THE EPOXY. ALLOW THE EPOXY TO CURE TO THE MANUFACTURER'S SPECIFICATIONS, THEN FILL THE CELL IN THE NORMAL WAY DURING BOND BEAM POUR.
3. FOR MORTAR JOINTS LESS THAN 1/4", PROVIDE (1) #5 VERT. IN CONC. FILLED CELL EACH SIDE OF THE JOINT (BAR DOES NOT HAVE TO BE CONT. TO FOOTING).
4. MISSED LINTEL STRAPS FOR MASONRY CONSTRUCTION MAY BE SUBSTITUTED WITH (1) SIMPSON MTSM16 TWIST STRAP W/ (4) ¼"x 2¼" TITENS TO MASONRY AND (7)-10d NAILS TO TRUSS FOR UPLIFTS LESS THAN 860 LBS (USE (2) MTSM16 FOR UPLIFTS LESS THAN 1720#). IF CORNER STRAP IS MISSED, CONTRACTOR IS TO INSTALL (2) SIMPSON HGAM10 W/ (4) 1/4" x 1 1/2" SDS SCREWS AND (5) 1/4" x 2 1/4" TITENS ONE EACH SIDE OF TRUSS.
5. NO MORE THAN 10 STRAPS MAY BE SUBSTITUTED OR NO MORE THAN 3 IN A ROW WITHOUT APPROVAL FROM EOR. IF GIRDER TRUSS CONNECTIONS ARE MISSED, CONTACT THE EOR FOR SUBSTITUTION.
6. IF MISSED, MSTAM36 OR MSTAM40 STRAP IS MISSED FOR 2ND FLOOR JAMB STUD CONNECTION, CONTRACTOR MAY INSTALL SIMPSON HTT5 W/ (26) 16d x 21/2" NAILS AND 5/8" ANCHOR BOLT SET IN SIMPSON HIGH STRENGTH EPOXY W/ MIN 6" EMBEDMENT AND MIN 3" EDGE DISTANCE. CONTACT EOR IF STRAPS ARE MISSED UNDER GIRDER JAMB STUD LOCATIONS.

STRUCTURAL DESIGN CRITERIA

CODE CRITERIA

- FLORIDA BUILDING CODE 6TH EDITION (2017) RESIDENTIAL.
- FLORIDA FIRE PREVENTION CODE 6TH EDITION (2017)
- FLORIDA BUILDING CODE ACCESSIBILITY 6TH EDITION (2017)
- NFPA 70-14. NATIONAL ELECTRICAL CODES. (NEC 2014) & 6TH FBCR CH. 34-43
- BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE - (ACI 318-14).
- SPECIFICATIONS FOR STRUCTURAL CONCRETE - (ACI 301-10).
- BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES - (ACI 530-13)
- NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION - 2015 EDITION.
- WOOD FRAMED CONSTRUCTION MANUAL 2015 EDITION.
- APA PLYWOOD DESIGN SPECIFICATION 2012 EDITION.
- AMERICAN SOCIETY OF CIVIL ENGINEERS: ASCE/SEI 7-10
- ALUMINUM DESIGN MANUAL - 2015 EDITION

City of Ormond Beach
REVIEWED FOR
CODE COMPLIANCE*

*This does not grant permission to violate any applicable law, code or ordinance.

BP19-00003561

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GENERAL ROOF LOADING

	SHINGLE ROOF (PSF)	METAL ROOF (PSF)	TILE ROOF (PSF)	HEAVY ROOF (PSF)
TOP CHORD LL	20	20	20	20
TOP CHORD DL	10	10	15	25
BOTTOM CHORD LL*	0	0	0	0
BOTTOM CHORD DL	10	10	10	10
TOTAL (PSF)	40	40	45	55
BOTTOM CHORD LL (OPT)				
ATTICS W/ LIMITED STORAGE	20			
ATTICS W/ HEAVY STORAGE	50			
* ATTICS W/ NO STORAGE (NON-CONCURRENT)	10			

NOTE: LL REDUCTIONS ARE ALLOWED PER CODE BUT ONLY WITH WRITTEN APPROVAL FROM EOR OR INDICATED ON PLAN

GENERAL FLOOR LOADING

		COMMENTS:
TOP CHORD LL	40 (PSF)	
TOP CHORD DL	10 (PSF)	
BOTTOM CHORD LL	0 (PSF)	
BOTTOM CHORD DL	5 (PSF)	

SPECIAL FLOOR LOADING

GAME ROOM / READING ROOMS	60 (PSF)	COMMENTS:
BALCONIES/ DECKS	40(PSF)	d. A SINGLE CONCENTRATED LOAD APPLIED IN ANY DIRECTION AT ANY POINT ALONG THE TOP.
BALCONIES OVER 100 SQ:FT	100(PSF)	
LIGHT STORAGE	125(PSF)	
GUARDRAILS AND HANDRAILS	200(LBS)(d)	f. BALUSTERS AND PANELS FILLERS SHALL BE DESIGNED TO WITHSTAND A HORIZONTALLY APPLIED NORMAL LOAD OF 50 POUNDS ON AN AREA EQUAL TO 1 SQ. FT.
GUARDRAIL IN-FILL COMPONENTS	50 (LBS)(f)	
STAIRS / NON SLEEPING ROOMS	40 (PSF)	
SLEEPING ROOMS	30 (PSF)	
LIBRARIES - STACK ROOMS	150(PSF)	

DEFLECTION CRITERIA

			COMMENTS:
ROOF TRUSSES*	LL/360	TL/240	
ROOF RAFTERS	LL/180	TL/120	
ROOF RAFTERS (W/O CLG)	LL/360	TL/240	
FLOOR TRUSSES/ BEAMS **	LL/360	TL/240	
FLOOR I-JOIST***	LL/480	TL/240	

*TL MAX 2" UP TO 40FT SPAN
**TL MAX 3/4"
*** TL MAX 1/2"
****TL MAX 1/4" DIFFERENTIAL BETWEEN ADJACENT TRUSSES

WIND LOADING CRITERIA

WIND SPEED (ULTIMATE)	140.0 MPH
WIND SPEED (ALLOWABLE)	108.0 MPH
EXPOSURE CATEGORY	D
BUILDING CATEGORY	II
BUILDING TYPE	V
ENCLOSURE CLASSIFICATION	ENCLOSED
INTERNAL PRESSURE COEFFICIENT	+/- 0.18

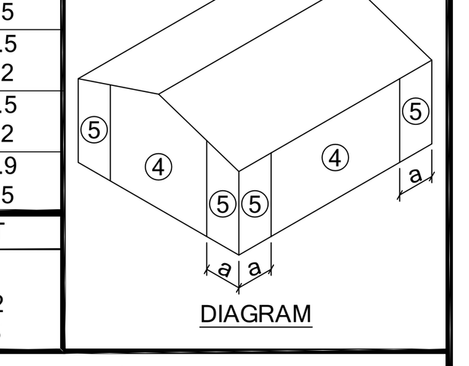
NOTE: MEAN ROOF HEIGHT FOR TYPICAL SINGLE STORY HOME IS 15FT, AND FOR 2 STORY HOME IS 30FT

ASCE 7-10 WALL DESIGN ALLOWABLE COMPONENTS AND CLADDING WIND PRESSURES AND SUCTIONS FOR MEAN ROOF HEIGHT ≤ 60 ft

EFFECTIVE WIND AREA (SQ FEET)	WIND PRESSURE AND SUCTION (PSF) (+) VALUE DENOTES PRESSURE (-) VALUE DENOTES SUCTION			
AREA	④		⑤	
10 - 19.99	A	(+) 35.2 (-) 36.5	B	(+) 35.2 (-) 46.5
20 - 49.99	C	(+) 33.5 (-) 36.5	D	(+) 33.5 (-) 43.2
50 - 99.99	E	(+) 31.5 (-) 33.2	F	(+) 31.5 (-) 38.2
> 100	G	(+) 29.9 (-) 31.5	H	(+) 29.9 (-) 36.5

GARAGE DOORS*		SOFFIT
9'-0" x 7'-0"	16'-0" x 7'-0"	
(+) 30.7 (-) 34.7 (J)	(+) 29.4 (-) 32.7 (K)	(+) 35.2 (-) 46.5

WIND PRESSURE AND SUCTION DIAGRAM



DIAGRAM

GENERAL PRESSURE NOTES

NOTES:
1. MULTIPLY THE ABOVE PRESSURES BY 1.67 TO GET ULTIMATE WIND PRESSURES.
2. "a" = END ZONE IS ONLY WITHIN 4'-0" OF ALL EXTERIOR BUILDING CORNERS. * INDICATED PRESSURES CAN BE INTERPOLATED FOR OTHER DOOR SIZES, OTHERWISE USE LOAD ASSOCIATED WITH THE LOWER EFFECTIVE AREAS.
3. DESIGNATED AREAS WHERE THE ULTIMATE WIND SPEED IS 140 MPH OR GREATER AND IS CONSIDER TO BE IN THE WIND-BOURNE DEBRIS AREA. CONTRACTOR TO PROVIDED ADDITIONAL INFO AS REQUIRED FOR PERMITTING.

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D4	CUSTOM DETAILS

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FDS ENGINEERING ASSOCIATES
DATE: March 26, 2019

PROJECT NAME: DESAI RESIDENCE
3435 PINEHURST AVE.
ORLANDO, FL 32804

SHEET TITLE:

PLAN REVISIONS:

DELTA	COMMENT	DATE
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△		
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DATE:	12/05/18
DRAWN BY:	MN, NK
CHECKED BY:	BH
APPROVED BY:	MG

SHEET NUMBER

S0