

VAPOR BARRIER NOTE

INSTALL 6 MIL VAPOR BARRIER IN CRAWL SPACE. ALL SEAMS MUST BE TAPED AND SEALED PROPERLY. VAPOR BARRIER MUST EXTEND AT LEAST 12" UP EACH PIER AND STEM WALL.

CONCRETE NOTES

- ALL CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI AT 28 DAYS.
- ALL CONCRETE WORK SHOULD BE IN ACCORDANCE WITH ACI 318 BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE.
- ALL REINFORCING STEEL TO BE NEW DOMESTIC DEFORMED SMOOTH STEEL CONFORMING TO ASTM A-615 GRADE 60.
- WELDED WIRE FABRIC SHALL CONFORM TO A-185. POLYPROPYLENE FIBERGLASS OR FIBER STRANDS MAY BE SUBSTITUTED FOR WELDED WIRE FOR NON STRUCTURAL SLAB.
- CONTRACTOR SHALL VERIFY LOCATIONS OF ALL OPENINGS, BEAMS, ANCHOR BOLTS, CHIMNEYS OR INSERTS MAY BE PLACED IN BEAMS OR SLABS UNLESS APPROVED BY THE ARCHITECT. ALL OPENINGS SHALL BE REINFORCED AND IF CONTACT PRESSURE IS LESS THAN 2000 P.S.F., FOUNDATION SHALL BE REDESIGNED. CONTACT SHALL SOIL TO 50% STANDARD PENETRATION TEST (SPT) BLOW COUNTS.
- ALL REINFORCING DETAILS TO CONFORM TO MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCED CONCRETE STRUCTURES, ACI 318, UNLESS DETAILED OTHERWISE ON STRUCTURAL DRAWINGS.
- REINFORCING BARS, BOLTS, ETC. AS REQUIRED TO ASSEMBLE, PLACE AND SUPPORT ALL REINFORCING IN PLACE.
- PROVIDE CORNER BARS FOR ALL FOOTINGS. ALL FOOTING CORNER BARS SHALL HAVE A STANDARD 90 DEGREE HOOK AND SHALL BE EMBEDDED IN INTERIOR FOOTINGS AND A MINIMUM OF 25".
- ALL LUMBER IN CONTACT WITH MASONRY OR CONCRETE SHALL BE PRESSURE TREATED.
- SOIL UNDER SLAB TO BE PRETREATED FOR TERMITES AS PER THE 2012 INTERNATIONAL RESISTANCE TO TERMITE TREATMENT SPECIFICATION.
- ALL FOOTINGS TO BE DESIGNED FOR AN ASSUMED SOIL PRESSURE OF 2000 P.S.F. UNLESS CONTRACTOR TO HAVE SOIL PRESSURE VERIFIED AND IF CONTACT PRESSURE IS LESS THAN 2000 P.S.F., FOUNDATION SHALL BE REDESIGNED. CONTACT SHALL SOIL TO 50% STANDARD PENETRATION TEST (SPT) BLOW COUNTS.
- PLUMBING WASTE PIPE PENETRATIONS FOOTING SHALL BE ACI 530.1-02 OR S.O.I. 40 P.V.C. CIRCUIT WORK AS PER ASTM C475-13. MASONRY WORK AS PER ACI 530.1-02.

STRUCTURAL STEEL COMPONENTS FASTENERS & DETAILS

- SHAPES, ANGLES, CHANNELS-ASTM A 36, F_y = 36 ksi, RND AND SQUARE METAL PIPE, ASTM A 513 GRADE B F_y = 36 ksi, SQUARE METAL TUBING-ASTM A 500, GRADE B, F_y = 36 ksi.
- ANCHORS AND TIE BARS SHALL CONSIST OF BUT NOT LIMITED TO: HIGH STRENGTH BOLT-ASTM A 307
- SHEET PILE ANCHORS SHALL CONFORM TO ASTM A 442 OR ASTM A 835 F_y = 43 ksi, ANCHORS SHALL BE GALVANIZED AND SHALL CONFORM WITH ANCHOR DIMENSIONS AS FOLLOWS: 20" x 1.31" LD = 1.60", 1.60" = 1.62"
- WELLS SHALL CONSIST OF BING CHANNELS WITH WING DIMENSIONS AS FOLLOWS: 20" x 1.31" LD = 1.60", 1.60" = 1.62"
- ALL FASTENERS AND TIE BARS EMBEDDED IN CONCRETE OR USED IN AN EXTERIOR APPLICATION ARE TO RECEIVE AN ANTI-CORROSION COATING PRIOR TO INSTALLATION.
- ALL FASTENERS AND TIE BARS ARE TO PROVIDE THE UPLIFT CAPACITY CALLED FOR IN THE PLANS AS A MINIMUM.
- ALL FASTENERS, TIE BARS, BEAM HANGERS, AND FLOOR TRUSS STRAPPING ARE TO BE INSTALLED IN ACCORDANCE WITH THE PLANS AND MANUFACTURERS' APPLICATIONS.
- CONCRETE EMBEDDED TIE BARS USED FOR TRUSS AND WALL TIE ARE TO BE PLACED AROUND EMBEDDED REINFORCING PIER TO BRACING BRACKET.
- POSTERS ARE TO BE GALVANIZED ROOFING NAILS WITH A MINIMUM 1/2" GULGE SHANK AND A MINIMUM 3/8" DIA. HEAD.
- ALL FASTENERS AND TIE BARS ARE TO PROVIDE THE SHINGLES AND STILL FOOTING AT LEAST 3/4" DIA. OR THROUGH THE ROOF SHINGLES. SEE 1 PLAN WALL.

FOUNDATION DESIGN ASSUMPTIONS

THE FOUNDATION SHALL BE PLACED ON UNDISTURBED SOIL OR ROCK WITH A BEARING CAPACITY WITH A SAFE WORKING JOINT DESIGNATED BY GEOTECHNICAL ENGINEER. IF PORTIONS OF THE SLAB ARE TO BE PLACED ON FILL OR FILL WITHIN 12" OF THE FOUNDATION BEARING CAPACITY, THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE CONDITIONS OF THE SOIL AND/OR SITE LOCATION PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY THE ENGINEER OF ANY DISCREPANCIES IN THIS DESIGN IMMEDIATELY.

SOIL BEARING CAPACITY

SOIL BEARING CAPACITY ASSUMED AT 1500 PSF OWNER DID NOT FURNISH TESTS TO VERIFY SOIL BEARING CAPACITY. CONTRACTOR ASSUMES ANY AND ALL RESPONSIBILITY FOR ANY AND ALL FOUNDATION DESIGN AND FIELD VERIFICATION.

ENTRY STEP NOTE

GENERAL CONTRACTOR SHALL DETERMINE IN FIELD THE LOCATIONS AND PLACEMENT OF ENTRY STEP AND LANDINGS AS PER SITE CONDITIONS. THESE STAIRS AND LANDINGS SHALL COMPLY WITH THE IRC 2012.

FOUNDATION NOTES

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FINISH SYSTEMS NOTE

ALL FINISH SYSTEMS ARE TO BE DESIGNED BY OTHER AND SUBMITTED FOR REVIEW BY ENGINEER UTILIZING LAPED DEFLECTION CRITERIA.

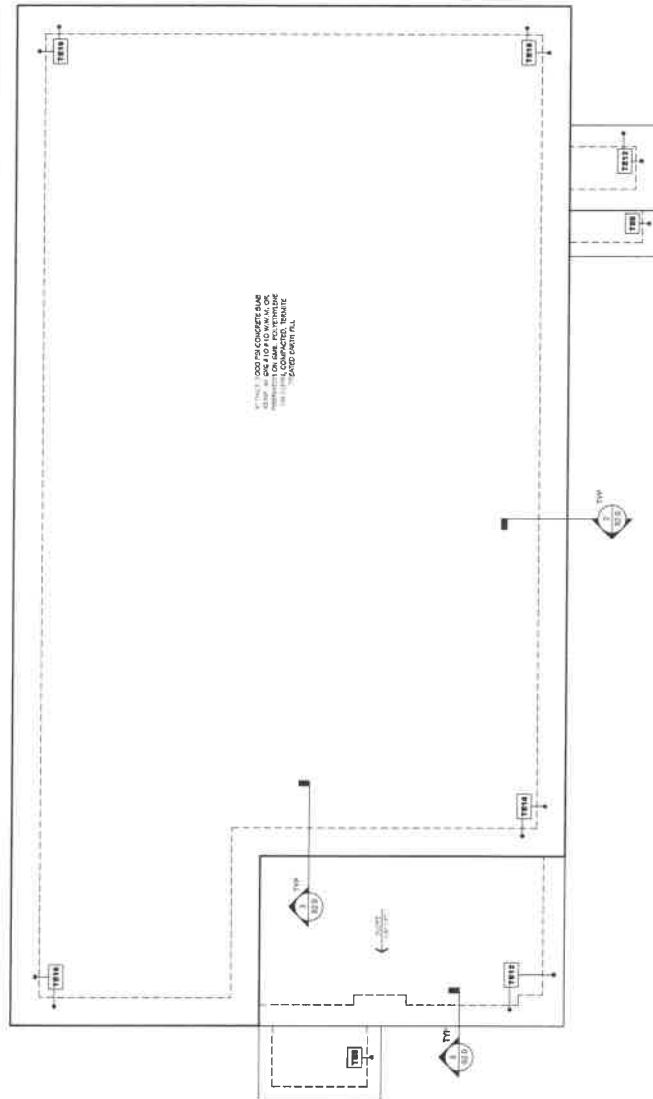
CONTROL JOINT NOTE

FOR A 4" THICK SLAB, JOINTS SHOULD BE SPACED @ 12' REET APART AND CUT 1" DEEP.

WELLS/ANCHORS NOTES

- ALL INTERIOR WALLS TO BE SHIPK WALLS WITH MAILING PATTERNS 1/2" CDX PLYWOOD W/ 3" MIN. CLEARANCE AT JOINT.
- INDIVIDUAL SIMPSON 1/11 H11 OR H12 @ EACH GAPER TO TOP FLAT.
- INDIVIDUAL WELLS THAT WILL BE SHIPK WALLS SHALL BE SHIPK WALLS AND BE CONSTRUCTION IS DESIGN FOR A COMPLETE CONDITION ONLY AND THEREFORE REQUIRED. ADDITIONAL TEMPORARY SUPPORT TO MAINTAIN STABILITY DURING CONSTRUCTION.

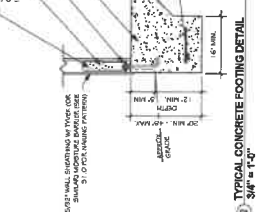
NOTE:
1) SEE ARCHITECTURAL DRAWINGS FOR DIMENSIONS AND CONDITIONS) NOT SHOWN HEREIN.
2) FINISHING BY OTHERS TO BE DESIGNED UTILIZING LAPED DESIGN CRITERIA. CONTRACTOR SHALL VERIFY THE DESIGNER'S DESIGN FOR APPROVAL. SEE ARCHITECTURAL DRAWINGS FOR DIMENSIONS AND CONDITIONS NOT SHOWN HEREIN.
3) SOIL BEARING CAPACITY ASSUMED AT 2000 P.S.F. OWNER DID NOT FURNISH TESTS TO VERIFY SOIL BEARING CAPACITY. CONTRACTOR ASSUMES ANY AND ALL RESPONSIBILITY FOR ANY AND ALL FOUNDATION DESIGN AND FIELD VERIFICATION.
4) FOUNDATION DESIGN FOR TRUSSES ONLY



1 FOUNDATION PLAN
36' x 14'

STRUCTURAL FOUNDATION SCHEDULE

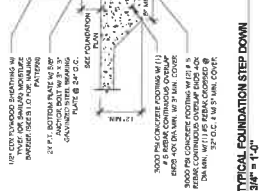
DESIGNATION	SIZE	REFERENCE
1E1	4" THICK CONCRETE FOOTING @ 36" O.C.	SEE 1E1
1E2	4" THICK CONCRETE FOOTING @ 14" O.C.	SEE 1E2
1E3	4" THICK CONCRETE FOOTING @ 12" O.C.	SEE 1E3
1E4	4" THICK CONCRETE FOOTING @ 12" O.C.	SEE 1E4



2 TYPICAL CONCRETE FOOTING DETAIL
36" x 14"



3 TYPICAL FOUNDATION STEP DOWN
36" x 14"



4 TYPICAL UTILITY STAIR SLAB
36" x 14'

STRUCTURAL

Thomas & Reel
Engineering Consultants, Inc.
www.thomasreel.com
912-920-0950



FOUNDATION PLAN
HABITAT FOR HUMANITY PHASE II
LOT# 50 THE GLEN PHASE 2
HILTON HEAD ISLANDS, SC



REVISIONS
DATE DESCRIPTION
1509-1586-07
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As Indicated

FOUNDATION PLAN

DO NOT REPRODUCE WITHOUT THE EXPRESSED WRITTEN PERMISSION OF THOMAS & REEL ENGINEERING CONSULTANTS, INC. OR SEAGULL ENGINEERING CONSULTANTS, INC. THE DESIGNER WILL NOT ACCEPT RESPONSIBILITY FOR CONTRACTOR ERRORS DUE TO SCALING OF THE DRAWING. VERIFY ALL DIMENSIONS, TOLERANCES, ETC. BEFORE BEGINNING CONSTRUCTION. IF DIMENSIONS OR DETAILS ARE OMITTED, CORRECT, OBTAIN LEADS, THE CONTRACTOR SHALL CONSULT WITH THE DESIGNER FOR CLARIFICATION.

ISSUE FOR REVIEW

HEADERS IN NON-LOAD BEARING WALLS & WINDOW SILL PLATES FOR NON-LOAD BEARING WALLS AND WINDOW SILL PLATES. (2) 2X4 (PLAT) CAN BE SUBSTITUTED FOR (1) 2X6

HEADER SPAN (FT)	MINIMUM HEADER SIZE	NUMBER OF FULL HEIGHT STUDS	UP/LIFT (LB)	LATERAL (LB)
2	(2) 2 X 4 (PLAT)	1	60 lb	157 lb
3	(2) 2 X 4 (PLAT)	2	90 lb	236 lb
4	(2) 2 X 4	3	114 lb	314 lb
5	(2) 2 X 4	4	138 lb	393 lb
6	(2) 2 X 4	5	162 lb	471 lb
7	(2) 2 X 4	6	186 lb	550 lb
8	(2) 2 X 4	7	210 lb	628 lb
9	(2) 2 X 4	8	234 lb	707 lb
10	(2) 2 X 4	9	258 lb	785 lb
11	(2) 2 X 4	10	282 lb	864 lb

HEADERS IN LOAD BEARING WALLS				
REQUIREMENT AT EACH END OF HEADER				
HEADER SPAN (FT)	MINIMUM HEADER SIZE	NUMBER OF FULL HEIGHT STUDS	UP/LIFT (LB)	LATERAL (LB)
2	(2) 2X4	1	64 lb	157 lb
3	(2) 2X4	2	96 lb	236 lb
4	(2) 2X4	3	128 lb	314 lb
5	(2) 2X4	4	160 lb	393 lb
6	(2) 2X4	5	192 lb	471 lb
7	(2) 2X4	6	224 lb	550 lb
8	(2) 2X4	7	256 lb	628 lb
9	(2) 2X4	8	288 lb	707 lb
10	(2) 2X4	9	320 lb	785 lb
11	(2) 2X4	10	352 lb	864 lb

FULL HEIGHT STUDS
 FULL HEIGHT STUDS SHALL MEET THE SAME REQUIREMENTS AS EXTERIOR WALL STUDS PER SEC. 4.1. TABLE 5 OF THE WOOD FRAME CONSTRUCTION MANUAL (30 MPH - WIND LOAD) FOR THE MINIMUM NUMBER OF FULL HEIGHT STUDS AT EACH END OF THE HEADER SHALL NOT BE LESS THAN THE MINIMUM NUMBER OF FULL HEIGHT STUDS AT EACH END OF THE WOOD FRAME CONSTRUCTION MANUAL, SECTION 4.3, TABLE B. FULL HEIGHT STUDS SHALL BE PERMITTED TO REPLACE AN EQUIVALENT NUMBER OF JACK STUDS, WHEN ADEQUATE GRAVITY CONNECTIONS ARE PROVIDED.

WINDOW SILL PLATES
 MINIMUM SPACING FOR WINDOW SILL PLATES USED IN EXTERIOR WALLS SHALL NOT EXCEED THE SPACING GIVEN IN WHICH - SEC. 4.2, TABLE B.

HEADERS AND/OR GIRDERS TO STUD CONNECTIONS
 HEADERS AND/OR GIRDERS TO STUD CONNECTIONS SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS - SEC. 4.3, TABLE B.

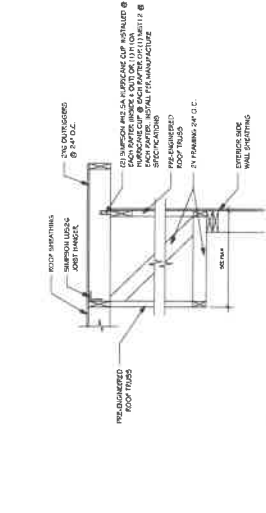
TOP AND BOTTOM PLATE TO FULL HEIGHT STUD
 EACH FULL HEIGHT STUD SHALL BE CONNECTED IN ACCORDANCE WITH THE REQUIREMENTS GIVEN IN WHICH - SEC. 4.2, TABLE B.

MISCELLANEOUS NOTES
 1. ALL EXTERIOR WALLS TO BE SHEAR WALLS WITH NAILING PATTERN 12" CDS IN WOOD W/ 3" MIN CLEARANCE AT EDGE.
 2. INSTALL SIMPSON 171 H10N OR (2) H12 E @ EACH RAFTER TO TOP PLATE.
 3. INDIVIDUAL MEMBERS THAT WILL BE STABLE DURING ALL STAGES OF CONSTRUCTION AND ITS STRUCTURE IS DESIGN FOR A COMPLETE CONDITION ONLY AND THEREFORE REQUIRES ADDITIONAL TEMPORARY SUPPORTS TO MAINTAIN STABILITY DURING CONSTRUCTION.

FLOOR JOIST SCHEDULE FOR SOUTHERN PINE #2 WITH A DEAD LOAD OF 20 PSF
 PER REC. 2015 5509.3.112)

JOIST SPACING	2X	MINIMUM SPAN
12" O.C.	2X6	9' 11"
12" O.C.	2X6	12' 6"
12" O.C.	2X10	14' 9"
12" O.C.	2X12	17' 5"
16" O.C.	2X6	8' 6"
16" O.C.	2X8	10' 10"
16" O.C.	2X10	12' 0"
16" O.C.	2X12	15' 1"

GENERAL ROOF FRAMING NOTES
 1. ALL RIDGE, HIP & VALLEY MEMBERS SHALL BE A 2X12 MINIMUM AND CONTIGUOUS IN LENGTH. USE 1-3/4" MINIMUM FOR CONTIGUOUS LENGTH, IF NECESSARY.
 2. WEA FRAMING: CLASSICAL BRACING, 2X4 STP. STUD GRADE OR BETTER.
 3. DOUBLE ROOF MATTERS @ ALL SIDE WALLS OF DOMES.
 4. DOUBLE ROOF MATTERS & HAZARD FRAMING @ CHIMNEY WELL WITHIN 2' CLEARANCE.
 5. GABLE ENDS ROOF FRAMING SHALL HAVE FULL DEPTH BRICKLAYER BLOCKING @ 48" O.C. & 48" IN FROM GABLE END WALL (PER SUB-C.C. (MFG. CO.)).
 6. ALL TRUSSES, UNLESS OTHERWISE NOTED, SHALL BE 2X6 @ 16" O.C.
 7. ALL RAFTERS TO BE STRUCTURALLY SUPPORTED BY TOP CHIMNEY AND/OR BEAMS) DESIGNED BY OTHERS.



STRUCTURAL

SEAGULL
 LOT# 50 THE GLEN PHASE 2
 HILTON HEAD ISLANDS, SC
 HABITAT FOR HUMINITY PHASE II
 ROOF DETAILS

REVISIONS

MARK	DATE	DESCRIPTION

ROOF Rafter Schedule
 PER REC. 2015 TABLE R.002.3.1161
 #8 SOUTHERN PINE DEAD LOAD = 10 PSF

2 X 6 @ O.C. UP TO 11'-7" UNSHORED SPAN
2 X 6 @ O.C. UP TO 12'-9" UNSHORED SPAN
2 X 10 @ O.C. UP TO 16'-0" UNSHORED SPAN

Ceiling Joist Schedule (Without Storage)
 PER REC. TABLE R.002.4

2 X 6 @ O.C. UP TO 16'-11" UNSHORED SPAN
2 X 6 @ O.C. UP TO 21'-7" UNSHORED SPAN
2 X 10 @ O.C. UP TO 28'-7" UNSHORED SPAN

Ceiling Joist Schedule (With Limited Storage)
 PER REC. TABLE R.002.4

2 X 6 @ O.C. UP TO 12'-0" UNSHORED SPAN
2 X 6 @ O.C. UP TO 16'-11" UNSHORED SPAN
2 X 10 @ O.C. UP TO 21'-7" UNSHORED SPAN

DO NOT SCALE THE DRAWING. THE DRAWING SHALL BE USED FOR CONSTRUCTION. VERIFY ALL DIMENSIONS, FINISHES, MATERIALS, ETC. BEFORE BEGINNING CONSTRUCTION. DESIGNERS ON THIS AND OTHER PROJECTS OF THIS CONTRACTOR SHALL CONSULT WITH THE DESIGNER FOR CLARIFICATION. DESIGNERS ON THIS AND OTHER PROJECTS OF THIS CONTRACTOR SHALL CONSULT WITH THE DESIGNER FOR CLARIFICATION. DESIGNERS ON THIS AND OTHER PROJECTS OF THIS CONTRACTOR SHALL CONSULT WITH THE DESIGNER FOR CLARIFICATION.

NO.	DATE	DESCRIPTION

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 Approved by: [blank]

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 As Indicated
 SECTION DETAILS

ISSUE FOR REVIEW

INDIVIDUAL 2x4 MEMBER BRACING INDIVIDUAL TRUSSES. SEE THE INFORMATION TO BE SUPPLIED BY THE TRUSS MANUFACTURER.

