

PROJECT ANALYSIS FOR ADDITION:

SQUARE FOOTAGE INFORMATION:

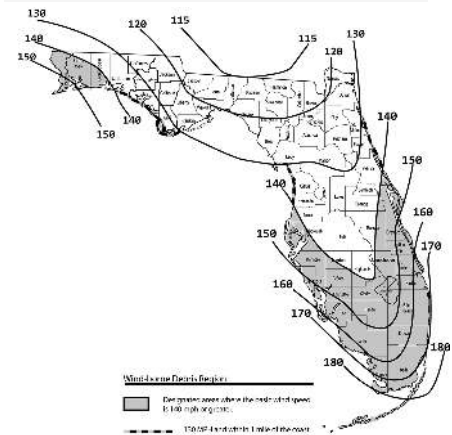
- \* CONDITIONED SPACE: 1800sf
- \* TOTAL COVERED SPACE: 1800sf

TYPE OF CONSTRUCTION:

- \* TYPE: V-B
- \* PROTECTION: UNPROTECTED & UNSPRINKLERED

INDEX OF DRAWINGS:

- \*A101 - SCOPE OF WORK, SITE PLAN, NOTES & ANALYSIS
- \*A102 - MAIN HOUSE INTERIOR LAYOUT, SECTIONS & DETAILS
- \*A103 - MAIN HOUSE ELECTRICAL FLOOR PLAN
- \*A104 - INTERIOR LAYOUT NOTES & OVERVIEW
- \*S101 - STRUCTURAL ANALYSIS & DESIGN CRITERIA
- \*S102 - FOUNDATION PLAN
- \*S103 - FOUNDATION NOTES
- \*S104 - FLOOR FRAMING PLAN
- \*S105- ROOF FRAMING PLAN
- \*S106 - GROSS SECTIONS
- \*S107 - ELEVATIONS
- \*S108 - ELEVATIONS
- \*S109 - ELEVATIONS
- \*S110 - STRUCTURAL DETAILS
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- \*S113 - STRUCTURAL DETAILS
- \*S114 - STRUCTURAL DETAILS
- \*S115 - STRUCTURAL DETAILS
- \*S116 - STRUCTURAL NOTES



WIND BORNE MAP  
SCALE - NO SCALE

GENERAL NOTES:

1. ALL CONSTRUCTION MUST COMPLY WITH ALL GOVERNING CODES.
2. ALL CONTRACTORS AND SUB-CONTRACTORS WILL THOROUGHLY FAMILIARIZE THEMSELVES WITH THESE CONSTRUCTION DOCUMENTS AND WILL VERIFY EXISTING SITE AND BUILDING CONDITIONS PRIOR TO SUBMITTING A BID.
3. SUB-CONTRACTORS BEFORE STARTING THEIR WORK WILL CHECK AND VERIFY THEIR PARTICULAR RELATED REQUIREMENTS FOR COMPLIANCE ALONG WITH MEASUREMENTS, SURFACE LEVELS, SURFACE CONDITIONS NEAR & ABOUT THEIR WORK. IT WILL BE CONCLUDED THAT EACH BIDDER UNDERSTANDS AND KNOWS WHAT WILL BE REQUIRED.
4. THIS ENGINEER AND HIS PROFESSIONAL CONSULTANTS WILL NOT HAVE CONTROL OF & WILL NOT BE RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, SEQUENCES, OR SAFETY PRECAUTIONS IN CONNECTION WITH THE WORK ON THE PROJECT OR FOR THE ACTS OR OMISSIONS OF THE CONTRACTOR, SUB-CONTRACTOR, OR ANY OTHER PERSONS PERFORMING ANY OF THE WORK ON THIS SITE.
5. ALL CONTRACTORS WILL PROVIDE ADEQUATE BRACING AND/OR SHORING TO INSURE STRUCTURAL STABILITY OF THE BUILDING AND ALL RELATED BUILDING COMPONENTS, I.E.: STRUCTURAL WALLS, INTERIOR WALL ASSEMBLIES ETC., DURING THE CONSTRUCTION PHASE OF THIS PROJECT.
6. ALL WORK WILL BE COORDINATED WITH OTHER TRADES IN ORDER TO AVOID INTERFERENCE & PRESERVE MAXIMUM HEADROOM & AVOID OMISSIONS. EACH CONTRACTOR WILL INCLUDE ALL MISCELLANEOUS ITEMS REQUIRED BY CODE AND NEEDS TO COMPLETE THIS WORK.
7. ALL MATERIAL USED WILL BE NEW & BEAR UL LABELS WHERE REQUIRED & MEET NEMA STANDARDS.
8. LAYOUT ALL PARTITIONS BEFORE BEGINNING CONSTRUCTION TO PREVENT ERRORS BY DISCREPANCY. ALL DRYWALL PARTITIONS WILL BE INSTALLED AS NOTED ON THE DRAWINGS. DO NOT SCALE THE DRAWINGS.
9. VERIFY ALL DIMENSIONS IN THE FIELD PRIOR TO ORDERING, CUTTING, AND/OR INSTALLING MATERIAL, PRODUCT OR EQUIPMENT. IN THE EVENT OF ANY DISCREPANCIES, CONTACT THE ARCHITECT BEFORE PROCEEDING WITH THAT WORK.
10. ALL SUB-CONTRACTORS WILL PROVIDE A CERTIFICATE OF INSURANCE TO THE OWNER PRIOR TO STARTING ANY WORK ON THIS PROJECT. CERTIFICATE OF INSURANCE CAN NOT BE TERMINATED OR CANCELED WITHOUT 10 DAYS PRIOR WRITTEN NOTICE TO THE OWNER.
11. NO SUBSTITUTIONS OF ANY KIND FOR MATERIALS SPECIFIED ON THESE CONSTRUCTION DOCUMENTS IS ALLOWED. NO "EQUIVALENT" SUBSTITUTIONS WILL BE MADE, UNLESS APPROVED IN WRITING BY THE ENGINEER & APPROVED BY THE OWNER DUE TO THE LACK OF AVAILABILITY OF ORIGINAL, U.O.N. IN THESE DOCUMENTS
12. EACH CONTRACTOR IS RESPONSIBLE FOR THE FIRST CLASS WORKMANSHIP & WILL ASSUME ALL RESPONSIBILITY FOR THE CARE AND PROTECTIONS OF HIS OWN WORK & MATERIAL FRO DAMAGE. HE WILL MAKE GOOD ANY DAMAGE TO HIS OWN OR OTHER WORK CAUSED BY HIMSELF OR WORKMAN EMPLOYED BY HIM.
13. EACH CONTRACTOR WILL ABIDE BY LOCAL AREA STANDARDS & RELATED OSHA STANDARDS FOR THE SAFETY OF THEIR EMPLOYEES ON SITE. THIS ENGINEER AND HIS PROFESSIONAL CONSULTANTS WILL BE HELD HARMLESS BY THE: OWNER, GC, AND RELATED AWARDED TRADES, ON THIS PROJECT FOR ACCIDENTS OR INJURIES CAUSED OR ACCRUED ON THIS PROPERTY DURING CONSTRUCTION PHASES OF THIS PROJECT.
14. SHOULD FIRE ALARM & SPRINKLER DRAWINGS BECOME A REQUIREMENT, IT WILL BE THE RESPONSIBILITY OF THE SUB-CONTRACTOR AND TO BE SUBMITTED AS SEPARATE PERMIT ISSUE.



LOCATION MAP  
SCALE - NO SCALE

SCOPE OF WORK:

PLANS ARE BASED ON CONSTRUCTION OF A NEW 1800sf RESIDENTIAL DWELLING.

CODES:

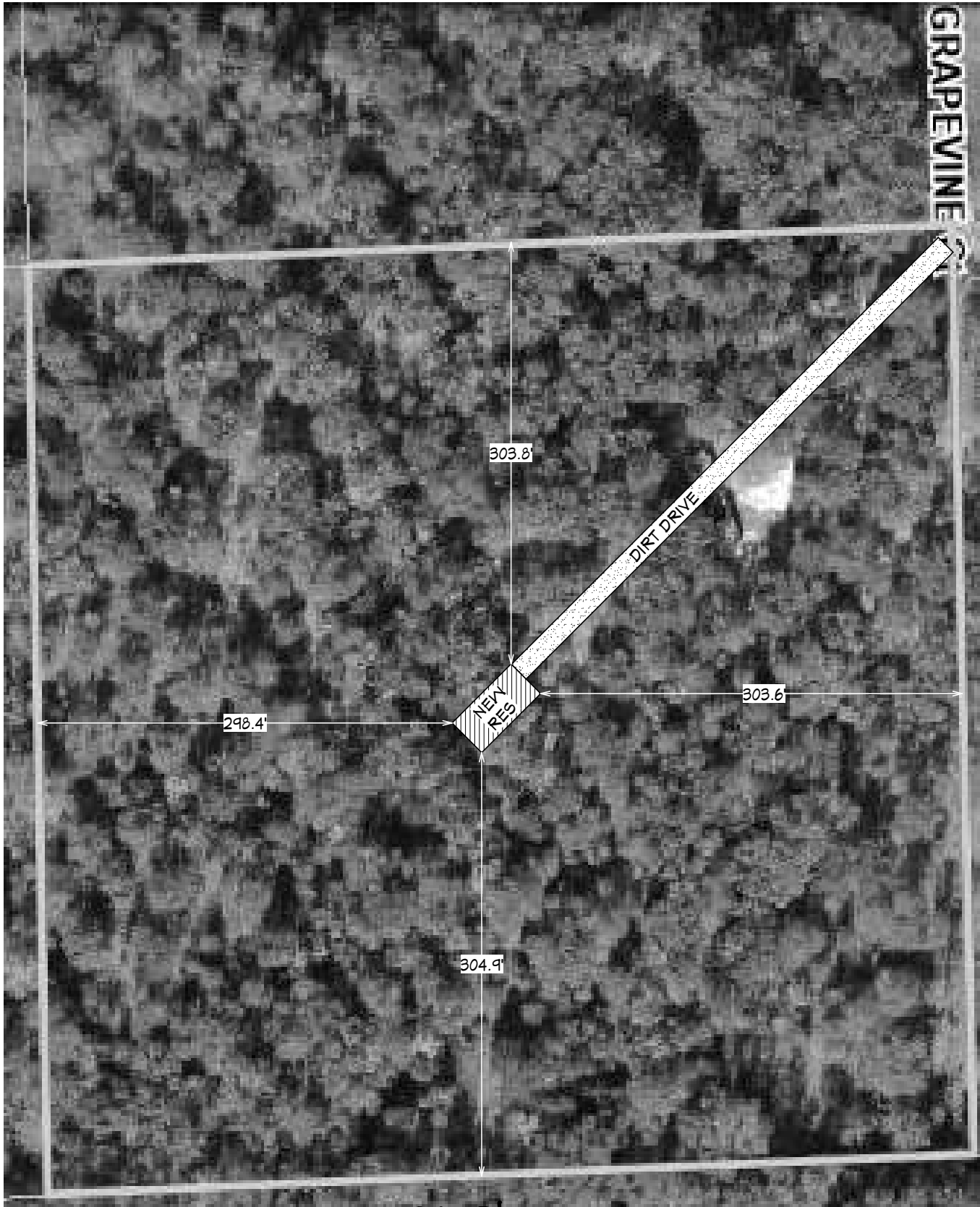
FLORIDA BUILDING CODE 2020, AMERICAN CONCRETE INSTITUTE, AMERICAN INSTITUTE OF TIMBER CONSTRUCTION

CODE ANALYSIS:

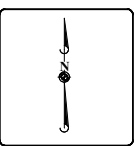
- \*2020 FLORIDA BUILDING CODE - BUILDING (TTH EDITION)
- \*2020 FLORIDA BUILDING CODE - RESIDENTIAL (TTH EDITION)
- \*2020 FLORIDA BUILDING CODE - PLUMBING (TTH EDITION)
- \*2020 FLORIDA BUILDING CODE - MECHANICAL (TTH EDITION)
- \*2017 NATIONAL ELECTRICAL CODE

LOT COVERAGE INFORMATION:

- \* LOT AREA: 437212sf
- \* RESIDENCE COVERAGE AREA: 1800sf
- \* PERCENT OF LOT COVERAGE: 1%

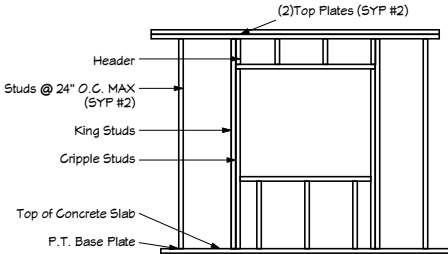


Site Plan  
Scale - 1" = 100'



King/Cripple Stud Schedule:

ALL OPENING DETAILS ARE FOR FIRRED INTERIOR FRAMING, EXTERIOR OPENINGS DETAILED & PROVIDED ON STRUCTURAL PAGES. USE 1 KING & 1 CRIPPLE AS SHOWN

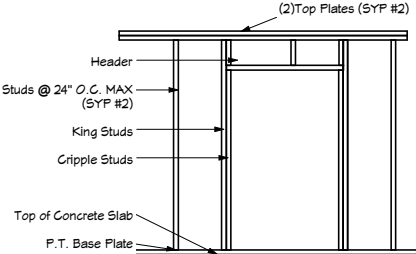


Typical Window Framing

Scale - No Scale

Header

ALL OPENING DETAILS ARE FOR FIRRED INTERIOR FRAMING, EXTERIOR OPENINGS DETAILED & PROVIDED ON STRUCTURAL PAGES. NO HEADERS REQUIRED



Typical Door Framing

Scale - No Scale

VERTICAL FRAMING:

USE 2x4 STUDS FOR ALL INTERIOR WALLS, UNLESS NOTED OTHERWISE IN THESE PLANS.  
SPACE STUDS @ 16" O.C. MINIMUM AT ALL INTERIOR BEARING WALLS AND INTERIOR SHEAR WALLS.  
SPACE STUDS @ 24" O.C. MINIMUM AT ALL INTERIOR NON-BEARING WALLS.  
USE SPF #2 (OR BETTER) FOR ALL WALLS.  
USE SYP #2 TOP PLATES AND PT SYP#2 SILL PLATES.  
IF "CONVENTIONAL STRAPPING" IS SHOWN ON THESE PLANS USE:  
SIMPSON SP2 W/ (6) 10D NAILS EACH END FOR WALL STUD TO TOP PLATE CONNECTIONS @ 32" O.C.  
SIMPSON CS20 STRAPPING W/ (7) 10Dx1.5" NAILS EACH END FOR SECOND-STORY WALL STUD CONNECTIONS @ 32" O.C.  
SIMPSON SP1 W/ (6) 10D NAILS TO STUD AND (4) 10D NAILS TO SILL PLATE @ 16" O.C. AND ANCHOR BOLTS AT 32" O.C.

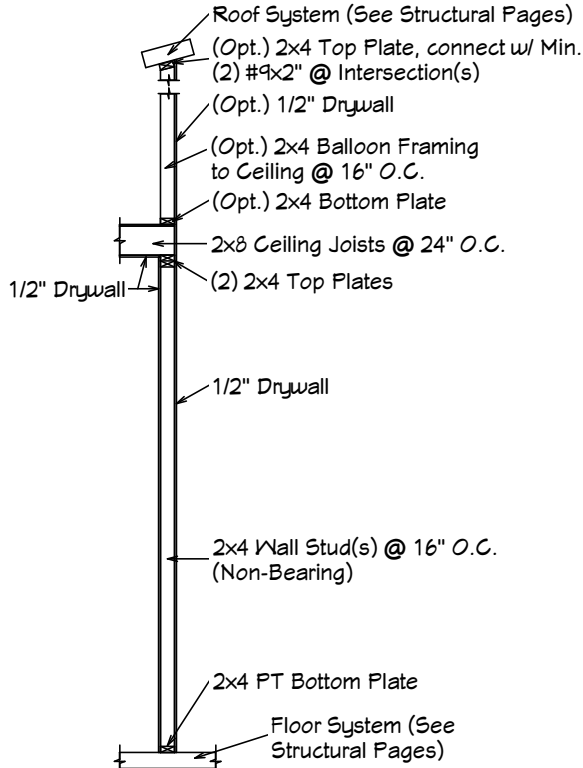
WOOD:

WOOD FRAMING SHALL BE IN ACCORDANCE WITH LOCAL BUILDING CODES, EXCEPT AS NOTED IN THESE PLANS.

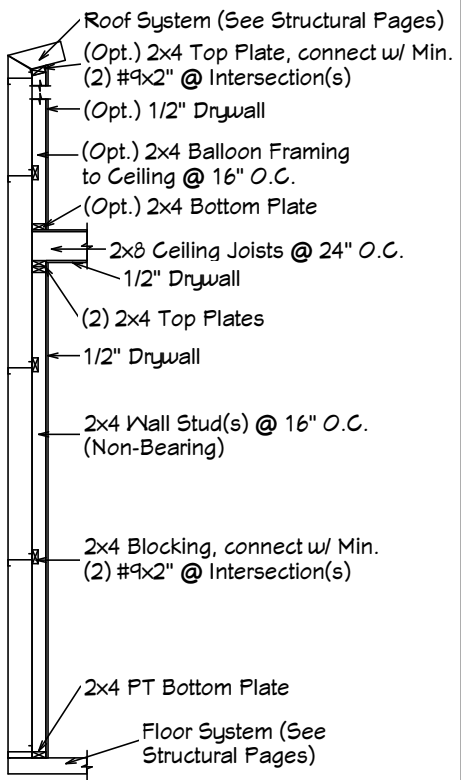
FASTENINGS:

THE DOUBLE TOP PLATE SHALL HAVE A 4' LAP AND SHALL BE FACE-NAILED WITH (8) 12D SINKERS.

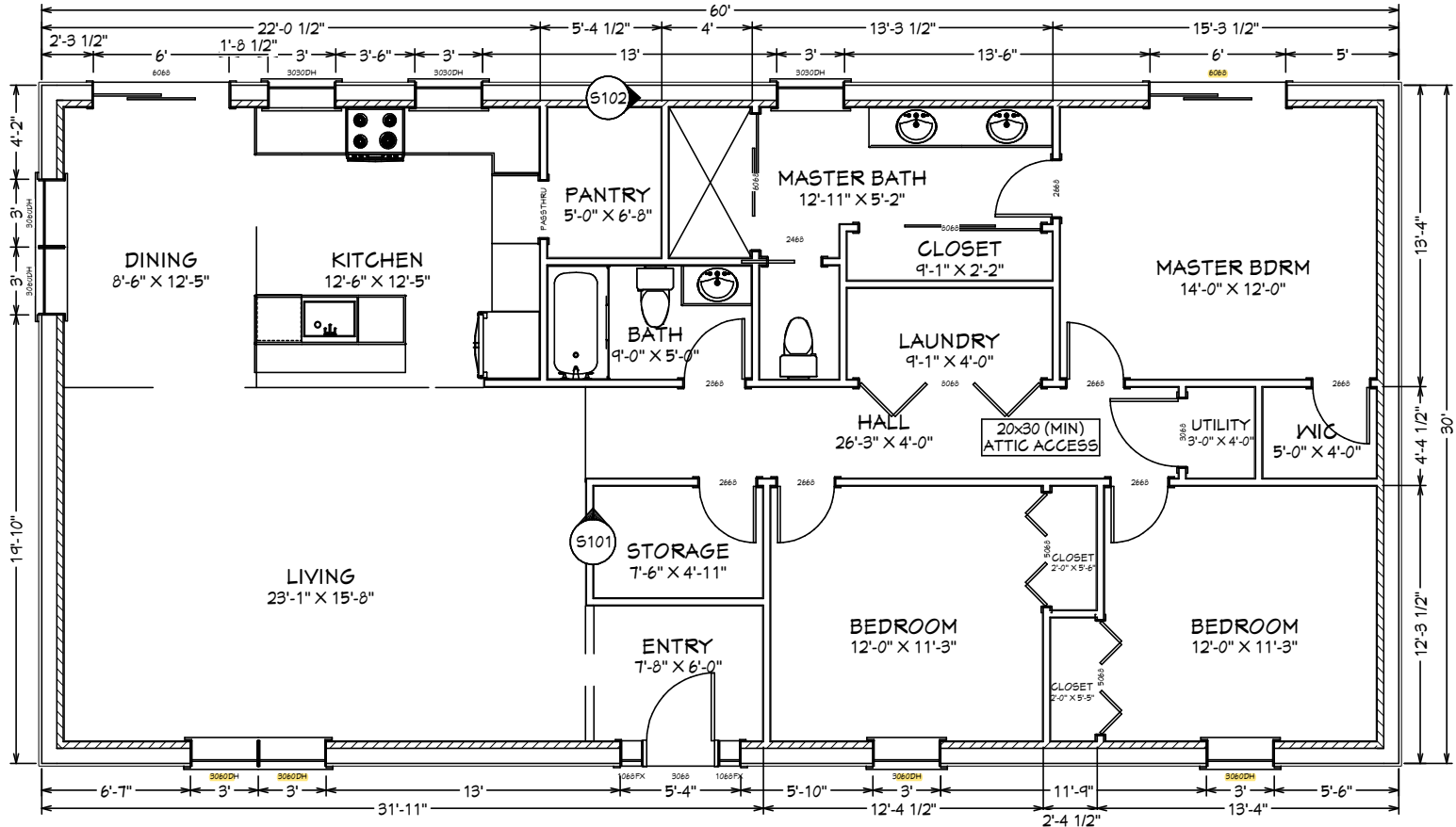
\*\*NOTE: ALL EERO FOR SLEEPING ROOMS SHALL COMPLY W/ FBC 2020 7TH EDITION SECTIONS: 310.1, 310.1.1, 310.2, 310.2.1, 310.2.2, 107.2.3, 107.3.5



S101 Wall Section Detail  
Scale - 1/4" = 1'



S102 Wall Section Detail  
Scale - 1/4" = 1'



Floor Plan

Scale - 1/8" = 1'

\*\*NOTE: INSULATION IS SPRAY FOAM, NO ATTIC VENTILATION CALCULATIONS ARE NEEDED\*\*



Interior Layout

Metal Building Engineering, LLC  
Lexington, SC 29073

Construction of New Residence  
**Laird Residence**  
480 SW Grapevine Ct, Fort White, FL 32038

07/28/21  
DESIGNED BY  
WEB  
DRAWN BY  
KM  
2021-217

A102

\*NOTE:  
-Location of electric outlets are a representation only.  
Outlets will be located per local building code.  
All is work is to be in compliance with FBC Energy Conservation (R403.7.1 & R404)

-Provide AFCI(arc-fault circuit interrupters) in all dwelling unit bedrooms per NEC article 210-12)

-100% of all fixed light fixtures inside and outside have CLF/LED Lamps.

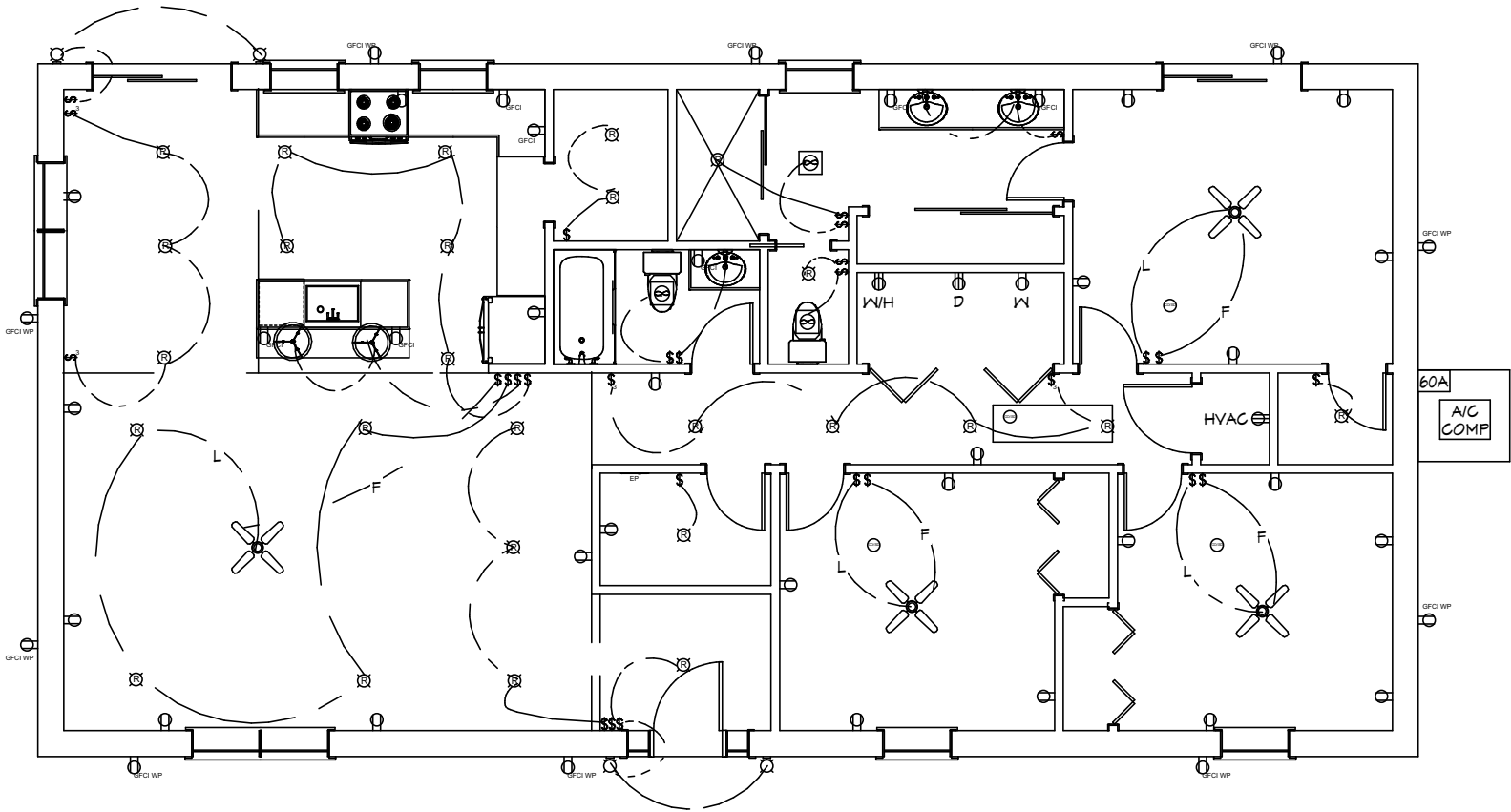
-The required GFCI outlets (dwelling units) bathrooms, kitchen countertops, outlets within 6ft of laundry, utility wet bar sinks, accord to NEC210

-All outlets are tamper resistant

- For attics, at least one lighting outlet containing a switch or controlled by a wall switch shall be installed. At least one point of control shall be at the usual point of entry to these spaces (NEC 210.70 A/3)

- AFCI Protection - 210.2 (B) Dwelling Units. All 120v, single phase, 15/20a branch circuit supplying outlets installed in: dwelling units, family rooms, dining rooms, living rooms, parlors, libraries, dens, bedrooms, sunrooms, recreation rooms, closets, hallways, or areas of similar use shall be protected by a listed AFCI combination type. Install to provide protections of the branch circuit (FBC R E3902.16)

ELECTRICAL - DATA - AUDIO LEGEND	
SYMBOL	DESCRIPTION
	Ceiling Fan w/ Light Fixtures
	Ventilation Fans: Ceiling Mounted
	Ceiling Mounted Light Fixtures: Surface, Recessed, Heat Lamp, Low Voltage
	Wall Mounted Light Fixtures: Flush Mounted, Wall Sconce
	Chandelier Light Fixture
	Fluorescent Light Fixture
	240V Receptacle
	110V Receptacles: Duplex, Weather Proof, GFCI
	Switches: Single Pole, Weather Proof, 3-Way, 4-Way
	Switches: Dimmer, Timer
	Electrical Breaker Panel
	Ceiling Mounted: Smoke Detector (SD), Carbon Monoxide Detector (CO)



# Electrical Layout

Metal Building Engineering, LLC  
Lexington, SC 29073

Construction of New Residence  
**Laird Residence**  
480 SW Grapevine Ct, Fort White, FL, 32038

07/28/21  
DRAWN BY: WEB  
CHECKED BY: KM  
DATE: 2021-217

1003



MATERIAL SPECIFICATIONS:

CAST - IN - PLACE CONCRETE IS DETAILED & PROVIDED BY OTHERS  
REINFORCING STEEL: SHALL BE ASTM A615, GRADE 40  
ANCHORING ADHESIVE: SHALL BE ONE OF THE FOLLOWING PRODUCTS (DUAL CARTRIDGE INSTALLATION ONLY):  
\*SIMPSON STRONG-TIE CO., PRODUCT: EPOXY-TIE SET  
\*SIMPSON STRONG-TIE CO., PRODUCT: ACRYLIC-TIE AT  
NAILS: ALL NAIL EXPOSED TO EXTERIOR SHALL BE GALVANIZED OR STAINLESS STEEL  
ALL NAILS EXPOSED TO FIRE-TREATED LUMBER SHALL BE STAINLESS STEEL

ROOF ASSEMBLIES:

ROOF ASSEMBLIES ARE DETAILED & PROVIDED ON STRUCTURAL PAGES

FOOTINGS AND FOUNDATIONS:

FOOTINGS AND FOUNDATIONS PER FBC AND ARE DETAILED & PROVIDED ON STRUCTURAL PAGES

SOILS:

MINIMUM ALLOWABLE SOIL BEARING CAPACITY = 1500 PSI  
SUBSURFACE SOIL CONDITIONS WERE NOT AVAILABLE AT THE TIME OF THIS DESIGN. THE OWNER SHALL PROVIDE TO THE CONTRACTOR A REPORT OF THE SUBSURFACE CONDITIONS. SOIL PREPARATIONS NOTED IN AID REPORT SHALL BE FOLLOWED UNLESS MORE STRINGENT DESIGN IS SPECIFIED WITHIN THESE PLANS.  
THE FILL BELOW THE FOUNDATION SHOULD BE FREE OF DEBRIS, ORGANIC MATERIAL, COHESIVE SOILDS OR ANY OTHER DELETRIOUS MATERIAL. SOIL MUST BE COMPACTED TO 95% MODIFIED PROCTOR MAXIMUM DRY DENSITY FOR A DEPTH OF 2'-0" BELOW THE BOTTOM OF THE FOOTING

CONCRETE:

CONCRETE AND STEEL REINFORCEMENT SHALL BE IN ACCORDANCE WITH FBC & AS DETAILED IN STRUCTURAL PAGES

EXTERIOR WALL & INTERIOR SHEARWALL SHEATHING:

EXTERIOR WALL SHEATHING IS DETAILED & PROVIDED ON STRUCTURAL PAGES. THERE ARE NO REQUIRED INTERIOR SHEAR WALLS FOR THIS STRUCTURE

HEADERS/ JACK STUDS:

REFER TO THESE PLANS FOR HEADER AND JACK STUD REQUIREMENTS.

VERTICAL FRAMING:

USE 2x4 STUDS FOR ALL INTERIOR WALLS, UNLESS NOTED OTHERWISE IN THESE PLANS.  
SPACE STUDS @ 16" O.C. MINIMUM AT ALL INTERIOR BEARING WALLS AND INTERIOR SHEAR WALLS.  
SPACE STUDS @ 24" O.C. MINIMUM AT ALL INTERIOR NON-BEARING WALLS.  
USE SPF #2 (OR BETTER) FOR ALL WALLS.  
USE SYP #2 TOP PLATES AND PT SYP#2 SILL PLATES.  
IN GENERAL THE THRU-BOLTS SERVE AS THE CONTINUOUS LOAD PATH FROM THE DOUBLE TOP PLATE TO THE FOUNDATION.  
WHERE " CONVENTIONAL STRAPPING" IS SHOWN ON THESE PLANS USE:  
SIMPSON SP2 W(6) 10D NAILS EACH END FOR WALL STUD TO TOP PLATE CONNECTIONS @ 32" O.C.  
SIMPSON CS20 STRAPPING W( 7) 10Dx1.5" NAILS EACH END FOR SECOND-STORY WALL STUD CONNECTIONS @ 32" O.C.  
SIMPSON SP1 W (6) 10D NAILS TO STUD AND (4) 10D NAILS TO SILL PLATE @ 16" O.C. AND ANCHOR BOLTS AT 32" O.C.

WOOD:

WOOD FRAMING SHALL BE IN ACCORDANCE WITH FBC, EXCEPT AS NOTED IN THESE PLANS.

FASTENINGS:

THE "FASTENING SCHEDULE" IN FBC SHALL BE USED UNLESS OTHERWISE IN THESE PLANS.  
THE DOUBLE TOP PLATE SHALL HAVE A 4' LAP AND SHALL BE FACE-NAILED WITH (8) 12D SINKERS.

ROOF AND CEILING FRAMING:

ALL ROOF FRAMING IS DETAILED AND PROVIDED ON STRUCTURAL PAGES. CEILING FRAMING IS SECURED TO FIRRED WALL FRAMING AS SHOWN IN WALL SECTION & IN THESE PLANS

ROOF SHEATHING AND DIAPHRAM ATTACHMENT:

ROOF SHEATHING AND FINISH IS DETAILED AND PROVIDED ON STRUCTURAL PAGES

SHEAR WALLS

EXTERIOR SHEAR WALLS ARE DETAILED & PROVIDED ON STRUCTURAL PAGES,  
THERE ARE NO REQUIRED INTERIOR SHEAR WALLS FOR THIS STRUCTURE.

SQUARE FOOTAGE INFORMATION:

\* CONDITIONED SPACE: 1800sf  
\* TOTAL COVERED SPACE: 1800sf

TYPE OF CONSTRUCTION:

\* TYPE: V-B  
\* PROTECTION: UNPROTECTED & UNSPRINKLERED

CODES:

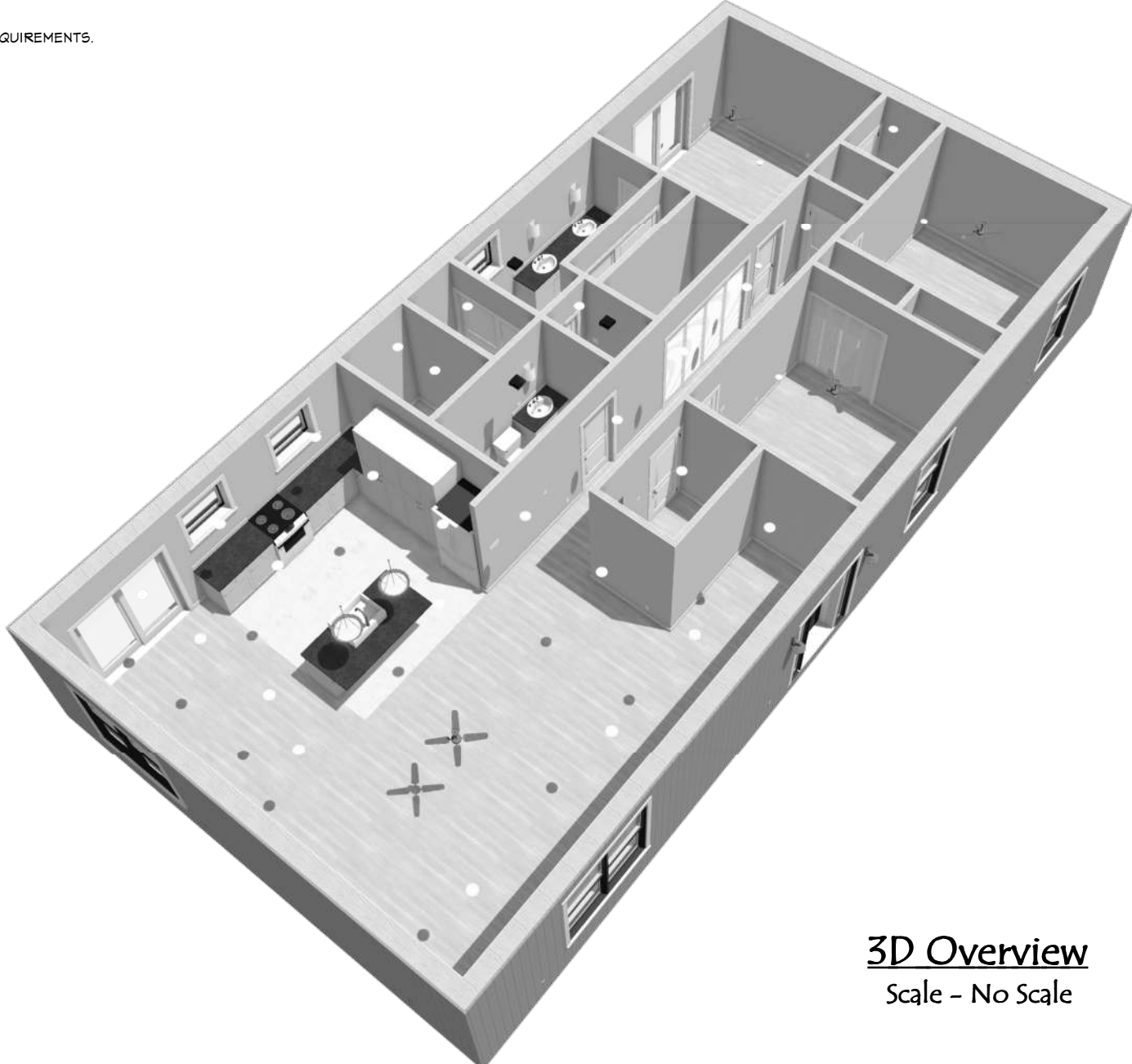
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CODE ANALYSIS:

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\*2020 FLORIDA BUILDING CODE - RESIDENTIAL (11TH EDITION)  
\*2020 FLORIDA BUILDING CODE - PLUMBING (11TH EDITION)  
\*2020 FLORIDA BUILDING CODE - MECHANICAL (11TH EDITION)  
\*2017 NATIONAL ELECTRICAL CODE

GENERAL NOTES

1. CODES USED: 2020 FLORIDA BUILDING CODE SEVENTH EDITION, AGI, NDS, APA AND ASCE-7-16. ALL LATEST EDITIONS USED.
2. ALL DESIGN, CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH APPLICABLE CODES AND AUTHORITIES HAVING JURISDICTION OVER THE WORK.
3. CONTRACTOR SHALL VERIFY DIMENSIONS AND CONDITIONS AT THE JOB SITE PRIOR TO COMMENCING CONSTRUCTION.
4. DETAILS FOUND WITHIN THESE DRAWINGS SHALL BE ASSUMED TO BE TYPICAL DETAILS FOR THIS JOB ONLY. DETAILS SHALL GOVERN CONSTRUCTION FOR THIS JOB UNLESS OTHERWISE NOTED ON THE PLANS.
5. DIMENSIONS ARE SHOWN FOR REFERENCE ONLY. REFER TO ARCHITECTURAL PLANS FOR ALL DIMENSIONS. IF DIMENSIONS CANNOT BE DETERMINED FROM THE ARCHITECTURAL PLANS, CONTACT THE ARCHITECT OF RECORD.
6. SUBSURFACE SOIL CONDITIONS WERE NOT AVAILABLE AT THE TIME OF THIS DESIGN. IT IS RECOMMENDED THAT THE OWNER PROVIDE TO THE CONTRACTOR A REPORT OF THE SUBSURFACE CONDITIONS. SOIL PREPARATIONS NOTED IN SAID REPORT SHALL BE FOLLOWED UNLESS MORE STRINGENT DESIGN IS SPECIFIED WITHIN THESE PLANS.



3D Overview  
Scale – No Scale

