PASCO COUNTY FLORIDA

REQUEST FOR PROPOSALS (RFP)

Individual Housing Program (IHP) Construction Services

Better FUTURE

Table of Contents

I. Executive Summary and Authority 5

A. Project Description 5

B. Anticipated Contract Term 6

II. Administrative Information 7

A. RFP Schedule 7

B. RFP Contact 7

C. RFP Questions and Clarifications 7

D. Prohibited Communications 8

E. Addenda 8

F. Extensions 8

III. Solicitation Response 9

A. Proposal Format 9

B. Page Limits and Support Documents 9

IV. Required Information 9

A. Respondent Information 9

B. Litigation History 10

C. Required Proposal Documents 11

V. Proposal Submission Procedures 13

A. Proposal and Addenda Acknowledgements 13

B. Submission of Proposals 14

C. Deadline 15

VI. Scope of Work 15

A. Location of Work 15

B. Requested Scope of Services 15

C. Services and Requirements 15

D. Reasonable Accommodation Requests 16

E. Rehabilitation 17

1. Not Suitable for Rehabilitation 17

2. Rehabilitation Scope 18
3. Lead-Based Paint 19
F. Reconstruction 19
1. Plan Sets 20
2. Reconstruction Scope 21
G. Manufactured Housing Units (MHU) Replacement 22
1. Unit Floorplans 22
2. MHU Replacement Scope 23
H. Demolition 24
I. Relocation 24
J. Innovative Construction Methods 25
VII. Budget and Costs 25
A. Overhead and Profit 26
B. Pricing by Project Types 26
Project Type 1: Rehabilitation Cost Budget 26
Project Type 2: Reconstruction Cost Budget 26
Project Type 3: MHU Replacement Cost Budget 27
Project Type 4: Demolition Cost Budget 28
Project Type 5: Relocation Cost Budget 28
VIII. Evaluation and Awards Process 29
A. Evaluation Criteria 29
1. Minimum Qualifications 29
2. Other Requirements 30
B. Selection Criteria 32
C. Awards 33
IX. Additional Requirements 33
A. Contract and Terms 35
B. No Guarantee of Volume or Usage 36
C. Contract Authorization and Compensation 36

D. Liquidated Damages 36
E. Right to Audit 37
F. Unsatisfactory Work and Cancellation 37
G. Financial Statements and Annual Reports 37
X. Terms, Conditions, and Exceptions 37
A. General Conditions 37
B. Insurance 38
C. Protests 38
D. Section 3 39
1. Small and Minority Business, Women's Business Enterprises, and Labor Surplus Area Firms: 39
2. Public Records Requirements 40
Appendix A: Reasonable Accommodations 41
Reasonable Accommodation for Housing Repair 41
Reasonable Accommodations for Reconstruction/Replacement 42
Appendix B: Required Respondent Information 44
Appendix C: Sample Plans for Reconstruction Projects 49
Appendix D: Required Contract Provisions 50

I. Executive Summary and Authority

In support of Pasco County, a recipient of United States Department of Housing and Urban Development ("HUD") Community Development Block Grant – Disaster Recovery (CDBG-DR) funding, IEM International, Inc. (IEM) seeking competitive proposals from highly qualified construction contractors to perform within the contract period, demolition, rehabilitation, reconstruction of single-family residential structures and rehabilitation or demolition and replacement of Manufactured Housing Units (MHUs) in compliance with local, state and federal statutory requirements for grants under CDBG-DR and the Pasco County Better Future Individual Housing Program (IHP). Pasco County has contracted IEM to provide Management and Implementation Consulting Services for program and contract administration services for the County's CDBG-DR programs and is required by that contract to issue this Request for Proposals (RFP).

IEM is authorized by Pasco County to use the competitive Request for Proposals (formal advertising) method of procurement for this contract opportunity in accordance with 2 CFR 200.320(b). IEM will subcontract qualified Respondents that are approved by the County to perform the tasks outlined in the RFP. Pasco County and IEM shall follow applicable local and State requirements except where these are inconsistent with Federal statutes, regulations, or grant conditions. If compliance with all applicable levels is not possible and no rule is more restrictive than another, the County and IEM shall follow the Federal rule to ensure the greatest compliance and secondly the County rule.

This Solicitation shall be funded, in whole or in part, with Federal grant monies. All Federal grant awards are subject to the Uniform Administrative Requirements and Cost Principles, codified at 2 CFR 200. This includes the standards for procurements under Federal grants, which applies to contracts for services, goods, construction, or repair.

A. Project Description

With approximately $205 million in CDBG-DR funding, the IHP seeks to restore and improve the housing stock damaged in Hurricanes Idalia, Helene, and/or Milton, ensuring properties meet minimum building code standards and enhancing their resiliency to future disasters.

To accomplish this, Pasco County is implementing four project types:

1. Single-family housing (1-4 units) and MHU rehabilitation
2. Single-family housing (1-4 units) reconstruction, which may include demolition and elevation
3. MHU Replacement, which may include demolition and elevation
4. Demolition of unsafe residential and bought out structures

The Subcontractor or General Contractor may select which of the above project types on which to bid, however, Pasco County and IEM make no guarantee of award, volume of assignments given to the contractor, or assignment project types the contractor will receive if awarded. General Contractors must clearly state in their proposal response which project type(s) listed above they are pursuing with their proposal. Assignments will not be made outside of the scope option selected by the General Contractor during this solicitation process.

Pasco County and IEM intend to select multiple qualified proposals for contracting to create a pool of contractors to perform the services requested under this Solicitation. Pasco County and IEM make no guarantee regarding the number of respondents awarded under this Solicitation. With the oversight of the County, IEM shall assign projects to contractors based upon capacity, capability, and performance.

Respondents to this Solicitation must demonstrate the ability to mobilize within 30 days of the subaward and complete assigned construction projects within the contracted time to reduce potential hazards to public welfare and safety. Responders will follow guidance in the Individual Housing Program Guidelines for timing and allowable costs of rehabilitation or repair, reconstruction, demolition, and MHU replacement activities. Respondents' ability to complete projects at 90 days for rehabilitation, 150 days for reconstruction, 75 days Manufactured Housing Replacement, and for Demolition only projects – 30 days, will be a high evaluation factor for proposal selection.

Scope outside of the guidelines will not be authorized and/or reimbursed unless prior written approval is granted.

The Individual Housing Guidelines may be found on the Pasco County Better Future website at: under CDBG-DR Program Information Documents near bottom of webpage.

B. Anticipated Contract Term

The Contract shall commence on the date on the Notice to Proceed Letter and shall remain in effect until Inspection and Final Acceptance of all required work for the Project and completion of all required services – including key turnover and homeowner move-in (if applicable). The anticipated Contract Term under this RFP is for one (1) year with a maximum of two (2) one-year renewal options. Required contract provisions are listed in Appendix D.

II. Administrative Information

A. RFP Schedule

Table 1 RFP Schedule

RFP Stage	Date
Issue Solicitation	January 7, 2026
Deadline for Questions	January 22, 2026 11:59 pm EST
Deadline for Proposal Submission	January 28, 2026 4pm EST
Evaluation and Selection	February 10, 2026
Contract Negotiation and Execution	February 18, 2026
Deadline for Bonds and Insurance	7 days after execution of contract

NOTE: These dates represent a tentative schedule of events. IEM reserves the right to modify these dates at any time prior to the deadline for submission of Solicitation Responses.

B. RFP Contact

All requests, questions or other communications about this Solicitation shall be made in writing to IEM, addressed to the person listed below.

Email: BetterFutureRFP@iem-fl.com

C. RFP Questions and Clarifications

It is the responsibility of each Respondent before submitting a Proposal, to:

- Examine the RFP Documents thoroughly;
- Understand local conditions that may affect costs, progress, performance or furnishing of the work; and
- Consider Pasco County, federal, state, and local laws, regulations, ordinances, and requirements that may affect costs, progress, performance, furnishing of the Work, or award.

During the period between issuance of this RFP and the proposal due date, no oral interpretation of the RFP's requirements will be provided to any prospective Respondent. Requests for interpretation (and other questions) must be made in writing by the questions deadline. IEM and the County will release other technical assistance information via the RFP website by January 20, 2026.

Written requests for clarification of this Solicitation and questions may be e-mailed to the email address listed in Section II. B. RFP Contact section above. Questions shall be submitted in the following format. Submissions that deviate from this format may not be accepted:

- Company name, address, phone number, e-mail address and name of contact person
- Paragraph number;
- Page number;
- Text of passage being questioned; and
- Question.

NOTE: The deadline for submitting questions is noted in RFP Schedule above.

Responses

All accepted questions will result in written responses posted to the RFP website at https://pascobetterfuturecontractors.com/. Responses shall be posted as an Addendum to the Solicitation. It is Respondent's responsibility to check the website for updated responses. Respondents' names shall be removed from questions in the responses released.

D. Prohibited Communications

Upon issuance of this Solicitation, except for the written inquiries described in the "Clarification" section above, Pasco County, IEM, its representative(s), or partners will not answer questions or otherwise discuss the contents of this Solicitation with any potential Respondent(s) or their representative(s). Attempts to ask questions by phone or in person will not be allowed or recognized as valid. Failure to observe this restriction may disqualify the Respondent. Respondents shall rely only on written statements issued by RFP's contact email (see Section II. B. RFP Contact). This restriction does not preclude discussions between affected parties for the purposes of conducting business unrelated to this Solicitation.

E. Addenda

Prior to the submission deadline, the County or IEM may wish to amend, add to, or delete from the contents of this RFP. IEM, on behalf of the County, may also issue clarifications resulting from any questions submitted. In such situations, an Addendum to the RFP setting forth the nature of the modification will be issued. Once an Addendum is issued, it will be uploaded to RFP website at https://pascobetterfuturecontractors.com/, and all Respondents who have downloaded the RFP will be notified via email that an Addendum is ready to be downloaded.

F. Extensions

IEM and the County reserve the right to extend the RFP due date and time prescribed above. However, unless IEM and the County issue a written Addendum to this RFP that extends the RFP due date and time for all Respondents, the due date and time prescribed above shall remain in effect.

III. Solicitation Response

The submission of a Proposal confirms that the Respondent has met all RFP requirements and that without exception, the Proposal is based on completing the Work outlined in the RFP Documents. It also indicates that the documents provided are adequate in scope and detail to convey understanding of all terms and conditions related to the Work.

A. Proposal Format

To facilitate evaluation, the Solicitation Response must be presented in a format that corresponds to, and references sections outlined within this Solicitation. Responses to each section and subsection shall be labeled clearly to indicate the item being addressed. Any deviations from this format will be taken into account during the evaluation process.

In general, the respondent should provide the information and sections listed in Section IV. Required Information in their proposals.

B. Page Limits and Support Documents

Proposals should not exceed 20 pages in length. This page limit **does not include** required attachments (as listed in Section IV. and Table 2). The Solicitation Response should be formatted using 12-point or larger font, except for charts, graphs or other graphical representations of data. Respondent must describe, as clearly, specifically and completely as possible, its proposed methodology and schedule for achieving the objectives and requirements of this Solicitation.

IV. Required Information

A. Respondent Information

In general, the Respondent should provide the following information and sections in their proposals.

A. Cover Page (with company contact information and what program(s) the Respondent is applying)
B. Company Narrative
    1. Company Profile
    2. Office Location and, if different, location(s) in Pasco County
    3. Key Staffing and staffing plan
    4. Qualifications
    5. Experience in construction and project management, including
        - Projects of similar scope and size

        - Projects in Pasco County
    6. Summary of Past Projects and References
    7. Summary of Audit and Annual Report
    8. Litigation History
C. Methods to Accomplish Scope of Work
    1. Cost Controls
    2. Quality Control
    3. Subcontractor Plan and Information
    4. Building Plans and Replacement Unit
    5. Relocation Coordination and Services
    6. Warranty Program
D. Conflicts of Interest narrative
E. Attachments (See Section IV.C. **Table 2** for list of Attachments)

See **Appendix B** in this document for additional information on proposal organization and required narrative.

B. Litigation History

Respondent must include in its Solicitation Response a complete disclosure of any actual or alleged breaches of contract, which have been asserted or claimed against it. In addition, Respondent must disclose any civil or criminal litigation or investigation pending at any point during the last three years to which Respondent is/was a party or in which Respondent has been judged guilty or liable.

For each instance of litigation or investigation, Respondent shall list:

1. Basic case information (e.g., cause number/case number, venue information, names of parties, name of investigating entity);
2. A description of claims alleged by or against Respondent or its parent, subsidiary, or other affiliate;
3. For each resolved case, a description of the disposition of Respondent's involvement (e.g., settled, dismissed, judgment entered, etc.).

Failure to comply with the terms of this provision may disqualify any Respondent. Solicitation Responses may be rejected based upon Respondent's prior history with any other party that demonstrates, without limitation, unsatisfactory performance, adversarial or contentious demeanor or significant failure(s) to meet contractual obligations. If Respondent has no litigation history, as described above, it must so indicate in the appropriate section of the Solicitation Response.

C. Required Proposal Documents

Respondent's RFP submission package must include the components list in **Table 2** below, in the order in which they are listed for the submission to be considered complete. Responders are asked to review the documentation to ensure all applicable parts are included. If any portion of this RFP or its attachments are missing, notify IEM via RFP email (See Section II. B. RFP Contact) immediately. Respondent should be thoroughly familiar with all the following items applicable to the RFP submission before submitting a proposal.

Table 2 Attachments and Required Documents

Attachment	Document
A	**Addenda Acknowledgement** – Respondent must sign and submit the *Proposal & Addenda Acknowledgement* form.
B	**Federal Affirmations** - Respondent must sign the Federal Affirmation form agreeing to comply with Federal requirements.
C	**Certification Regarding Lobbying** – Respondent must sign and submit the *Certification Regarding Lobbying* form, included as Attachment C.
D	**Statement of Respondent Qualifications** – Respondent must complete and submit the *Statement of Respondent Qualifications* form, included as Attachment D.
E	**Subcontractor Plan and Listing Form** – Respondent must provide a subcontractor plan (summarized in the proposal and complete and submit the *Subcontractor Listing Form*, (as Attachment E).
F	**References** – Respondent must complete and submit the *References* form, included as Attachment F.
G	**Contractor Profile** – Contractor information sheet for if the Respondent is selected (as Attachment G).
H	**Audited Financial Statements/Annual Reports -** Respondent shall submit the last two years of statements or reports**. (as Attachment H)**
I	**Non-Collusion Affidavit** – Respondents must attest the price and amount of any Solicitation Response have been arrived at independently and without consultation, communication, agreement or disclosure with or to any other contractor, Respondent, or prospective Respondent (as Attachment I).
J	**Minimum Insurance Requirements** - **Sample Insurance Certificate –** Respondent must provide a sample Insurance Certificate which adheres to the *Minimum Insurance Requirements* as Attachment J (does not supersede the "Hold Harmless" provision).
K	**Section 3 Proposal Requirements** - Offeror must complete and submit the *Obligation Summary for Contract Awardees and Initial Subcontracting Plan (as Attachment K)*, for any HUD-funded projects expected to exceed $200,000.

Attachment	Document
	Respondents intending to self-perform as Section 3 Businesses, or for any subcontractors of Respondent who qualify as Section 3 Businesses and wish to self-certify as Section 3, the Section 3 Business Concern Self-Certification Form (in Attachment K) must be included and submitted with the Proposal.
L	**Budget Pricing Form** - Respondent must complete the *Proposal Schedule / Pricing Form*, included as Attachment L.
M	**Conflict of Interest form -** A statement of conflicts (if any) the Respondent or key employees may have regarding these services (as Attachment M).
N	**Plans Sets** – Respondents will include a set of reconstruction plan sets of single-family homes and floorplan for MHU Replacement as Attachment N.
O	**System for Award Management (SAM) results** – Respondent must include verification that your company as well as the company's principal is not debarred through the System for Award Management (www.SAM.gov) (as Attachment O). Respondent must enclose a printout of the search results that includes the record date.
P	**Resumes of Key Staff -** Respondent must include resumes of key staff and/or staff hiring plan as discussed in Appendix B as Attachment P.
Q	**Responder and Subcontractor Licensing / Certifications** – Respondent must submit any applicable licensing and/or certifications required for the completion of the scope of work under this RFP (as Attachment Q).
R	**Additional Information and Documents -** Respondent may submit other documents request by this RFP as Attachment R.
S	**Bid Bond Authorization Form –** Respondent must sign and submit the Bid Bond Authorization Form as Attachment S.
T	**Sample Contract and Required Contract Provisions -** Contractors will be bound to specific terms and conditions found in their contract. Respondent should review this sample contract and provisions and provide suggested mark-ups (as Attachment T).
U	**Innovative Practices –** Respondent may include a short narrative regarding any innovations, efficiencies and/or resiliencies they will incorporate into their work as outlined in Section VI.J. of this RFP.

Additional Information: Contractors will be bound to specific terms and conditions found in the Sample Contract **(Attachment T). These terms and conditions are subject to change prior to the execution of any contract that may result from this Solicitation.** Respondents who wish to propose modifications to the Sample Contract must propose modifications, adjustments, objections, or other edits in an Attachment to the Proposal.

All Contracts shall be in writing, signed by both the Contractor and IEM, and shall include a scope of services, a list of tasks to be performed by Contractor, a time schedule, a list of

deliverables, if any, and such other information or special conditions as may be necessary for the work requested

V. Proposal Submission Procedures

A. Proposal and Addenda Acknowledgements

By submitting a Proposal in response to this RFP, Respondents accept the solicitation process as it has been outlined in this RFP.

1. All proposals are required to remain in effect for at least 120 days from the date of submission. This effective period should be considered when preparing the proposal.
2. IEM and the County will not be liable for any costs incurred by the Respondent in preparing a response to this RFP. Respondents submit Proposal(s) at their own risk and expense. IEM and the County make no guarantee that any products or services will be purchased as a result of this RFP and reserves the right to reject any and all Proposals. All Proposals and accompanying documentation will become the property of IEM and the County. By submitting a Proposal, Respondents acknowledge and accept that reference checks and/or background investigation may be conducted as a part of the due-diligence process. Award will be made to the lowest, responsible, and responsive Respondent who submits a response to this RFP.
3. Respondents must sign **Attachment A**, *Proposal & Addenda Acknowledgement*, and include with their Proposal submission.
4. In cases where an Addenda is issued under this solicitation, Respondent must ensure all Addenda are reflected within the *Proposal & Addenda Acknowledgement* document, and Respondent must sign and submit the actual Addenda documents with their Proposal. All Addenda shall become a part of the requirements for this RFP. In signing and submitting the *Proposal & Addenda Acknowledgment* (**Attachment A**) with its Proposal, Respondent acknowledges that it has examined all documents, attachments, forms, specifications, addenda, and all instructions. The County may deem a Proposal non-responsive for failure of Responder to acknowledge any and all Addenda.
5. Respondents are responsible for consulting the standards referenced in this RFP. Failure of Respondent to examine and inform itself shall be at its sole risk, and no relief for error or omission will be given except as required under State law.
6. **READ THIS ENTIRE DOCUMENT CAREFULLY AND FOLLOW ALL INSTRUCTIONS. THE RESPONDER IS RESPONSIBLE FOR FULFILLING ALL REQUIREMENTS AND SPECIFICATIONS.**

B. Submission of Proposals

Responders will submit their proposals in a digital format through the RFP website at https://pascobetterfuturecontractors.com/. Proposals submitted via e-mail will be rejected. Proposal must include:

- ONE (1) complete Proposal as ONE (1) PDF document including a cover page with Respondent name, contact information, and indication for which contract opportunities the Respondent is submitting, including all attachments.
- One (1) complete Budget/Pricing Form as MS Excel file (Attachment L).

It is the responsibility solely of Respondent to see that its Proposal is properly submitted in proper form and prior to the stated closing time. THE ELECTRONIC PROPOSAL MANAGEMENT SYSTEM WILL NOT ACCEPT LATE PROPOSALS.

IEM will only consider Proposals that have transmitted successfully and have been issued a confirmation communication indicating that the Proposal was submitted successfully. Respondents shall be solely responsible for informing themselves with respect to the proper utilization of the online Proposal management system, for ensuring the capability of their computer system to upload the required documents, and for the stability of their internet service. Failure of the Respondent to successfully submit an electronic Proposal shall be at the Respondent's sole risk, and no relief will be given for late and/or improperly submitted Proposals.

Respondents experiencing any technical difficulties with the Proposal submission process may contact RFP email (listed in Section II. B.). Neither IEM nor the County make any guarantee as to the timely availability of assistance or assurance that any given problem will be resolved by the Proposal submission date and/or time.

If, in its Proposal response, Respondent makes any changes whatsoever to IEM's published RFP specifications, IEM's RFP specifications and requirements, *as published,* remain in effect and are the standard to follow. Furthermore, if a Respondent has been found to have made an alteration of any kind to IEM's published RFP specifications, or the work under the Contract is not being performed, the Contract is subject to immediate cancellation.

Proposals are subject to public records requests. If any information in the Narrative Proposal or the Cost Proposal is considered confidential, proprietary, or trade secret information, a separate version with specific redactions and reference to the basis of the redaction of the Narrative Proposal and/or the Cost Proposal should be submitted. If no redacted version is provided, Respondent waives any rights of confidentiality, proprietary, or trade secret information and releases IEM from any liability associated with the release of said information. Acceptance by IEM of any redacted materials shall not constitute any agreement by IEM or

Pasco County that any redacted materials contain confidential, proprietary or trade secret information. Respondent shall be responsible for defending its determination that the redacted portions of its response are confidential, trade secret, or otherwise not subject to disclosure.

Further, Respondent shall protect, defend, indemnify, and hold harmless IEM and Pasco County for any and all claims, costs, fines, and attorney's fees arising from or relating to Respondent's determination that the redacted portions of its Solicitation Response are confidential, proprietary, trade secret, or otherwise not subject to disclosure.

The Solicitation Response shall be a public record and subject to production, disclosure, inspection and copying consistent with the requirements of Chapter 119 of Florida Statutes.

C. Deadline

IEM and the County will not accept late proposals. Late proposals will be rejected. If a solicitation is cancelled, submitted proposals will not be returned. The deadline is listed in Section II: Table 1 - RFP Schedule.

VI. Scope of Work

A. Location of Work

General Contractors (GCs) and their partners and subcontractors must be able and willing to accept and complete projects located within the incorporated and/or unincorporated areas of Pasco County.

B. Requested Scope of Services

The selected Contractors will perform, or cause to be performed, demolition, rehabilitation, or reconstruction of residential construction projects or replacement of Manufacture Housing Units (MHU) (the "Project") for the CDBG-DR program. Contractors will be awarded Projects at the sole discretion of Pasco County and/or IEM. Respondent(s) must demonstrate the ability to provide services in Pasco County.

Contractors will be bound to specific terms and conditions in the *Contract* (provided at award). These terms and conditions are subject to change prior to the execution of any contract that may result from this Solicitation.

C. Services and Requirements

In addition to the services and requirements described below, Contractors must perform any other ancillary construction-related services that may be required for a given property. Thus, it

is imperative that Respondent(s) enumerate any other services they can provide. These ancillary services may go beyond what would be required for the repair/construction and/or demolition of a property.

Respondent must be familiar with Florida Building Code, local Municipal Building Code, Pasco County Land Development Code, local and/or regional Housing Guidelines, and local minimum standards, if applicable. Each municipality will be nuanced depending on local construction requirements, community recovery needs, program goals and other applicable locally approved program requirements. A link to the Pasco County IHP Guidelines with information on the Housing Rehabilitation, Reconstruction, and/or Elevation Program (RRE) and MHU Replacement activities has been posted to RFP website at https://pascobetterfuturecontractors.com/ and are subject to change.

All reconstruction and rehabilitation activities will incorporate mitigation and resilient-design measures to reduce future disaster risk. Projects shall comply with:

- Florida Building Code (latest edition);
- ASHRAE 90.1 (2019) and 2021 IECC energy standards; and
- Elevation standards (minimum BFE + 2 ft).

A Mitigation Verification Checklist will be completed for each project and filed in the program record.

D. Reasonable Accommodation Requests

Physically disabled homeowners, or homeowners with a disabled household member, may be entitled to additional construction considerations such as low threshold showers, bathroom grab bars, outward swinging doors, exterior ramps, comfort height toilet with grab bars or other accessibility features that will assist with an individual's functional needs.

The program will evaluate eligibility for these features on a case-by-case basis per assistance benefit type. Awards may include expenses for additional costs related to accessibility modifications for individuals with disabilities, such costs will be approved by the Program prior to the issuance of the NTP.

Changes to the scope of work following the issuance of the NTP are discouraged. However, if the Program determines that a modification is both necessary and reasonable, written approval must be obtained prior to implementation through a change order.

Reasonable accommodations are available for repair, reconstruction, and MHU replacement projects. Standard reasonable accommodations to the bathroom for each repair or reconstruction award type are offered in 'tiers' to allow each applicant to select the level of modification most appropriate for his/her household.

Standard reasonable accommodations for home entrance and strobe smoke detectors are standard for all award types. A no step entrance is a home entrance that has no steps and a minimal threshold. Only one (1) no step entrance will be installed upon request, per property. If a home is above grade, a no step entrance may require installation of a ramp or lift. Homes on grade may not require installation of anything to accommodate a no step entrance. Ramps will be the preferred method to achieve a no step entry. Lifts will be considered on a case-by-case basis, based on cost reasonableness compared to the cost of a site-built ramp, site conditions, and local zoning/set back requirements.

Standard reasonable accommodations for kitchen and/or bathroom modifications vary slightly by award type. Award-type specific options for reasonable accommodations are outlined in each award type in **Appendix A**.

E. Rehabilitation

Eligible applicants with Concrete Block/Concrete Masonry Unit (CMU) or Wood Frame properties qualify for a rehabilitation/repair award type when the estimated cost to repair is $175,000 or less and the property is not otherwise deemed "not suitable for rehabilitation". Eligible applicants with manufactured housing unit (MHU) properties qualify for a repair award type when the estimated cost to repair is $30,000 or less, the MHU is fewer than eight (8) years old, does not require elevation over 12 inches, and the property is not otherwise deemed not suitable for rehabilitation.

Additional cost maximums are included in **Table 3**.

Table 3: RRE and MHR Other Costs Maximums for Rehabilitations

Project-Specific Cost Types	Maximum Costs
Historic Requirements	$50,000
Water Well	$10,000
Septic System	$25,000
Accessibility	$50,000
Lead-Based Paint/ Asbestos/Mold	$12,500
Temporary Relocation Assistance (moving, lodging, and storage)	$12,500

1. Not Suitable for Rehabilitation

RRE defines "not suitable for Repair" as:

- Structures condemned or determined substantial damaged or improved[1] by Pasco County or other authority having jurisdiction. Properties condemned or "red-tagged" by the local authorities will not be rehabilitated;
- Structures that cannot be repaired under existing Program caps, due to legal, engineering, or environmental constraints (permitting, extraordinary site conditions, etc.) will be considered not suitable for repair;
- Structures that are structurally unsafe or that have other conditions that make interior inspection by RRE impossible or unsafe;
- Structures that have already been demolished;
- The housing unit requires elevation;
- Structures with repetitive flood losses (verified via the NFIP Repetitive Loss Property list(s)) and subsequent damage due to Hurricanes Idalia, Helene or Milton

Eligible applicants with homes deemed not suitable for Repair may be offered reconstruction assistance, if the applicant owns the land on which the structure sits, and reconstruction is feasible.

Such eligibility determination will be made by the County.

2. Rehabilitation Scope

Program sponsored repairs are intended to repair remaining storm damage and to make the home decent, safe, and sanitary. RRE does not necessarily provide "like-for-like" repairs. RRE repairs will be completed using standard economy/builders' grade materials, not with materials that were there before. For example, if a Repair award calls for replacement of cabinets, the program will replace existing cabinets with standard grade cabinets, regardless of the grade of the pre-existing cabinets.

Repair scopes of work will be limited to those items identified by the program as in need of repair to bring the home back up to decent, safe, and sanitary conditions. Assigned general contractors are also responsible for checking for any written HOA requirements or deed restrictions.

Standard essential appliances that are not functioning or non-existent at the time of damage assessment will be replaced. Essential appliances are defined in Appendix A: Definitions and Acronyms. Dishwashers may be replaced, only if a dishwasher previously existed in the home. Repair awards will not receive dishwasher if a dishwasher was not present at time of damage assessment. Microwaves, stand-alone freezers, and other non-essential appliances are not eligible for replacement. Any obsolete products replaced as part of the repairs must be

[1] See Pasco County's Substantial Improvement and Damage information at https://www.pascocountyfl.gov/services/building_construction/substantial_improvement_and_damage.php

replaced with ENERGY STAR®, Water Sense, or other Federal Energy Management Program (FEMP)-designated products or appliances.

Luxury items, including but not limited to, high-end countertops, high-end appliances, stone flooring, security systems, swimming pools, spas, fireplaces, sheds, outbuildings, fences, and television satellite dishes are not eligible under RRE.

Because repair scopes of work only address items in need of repair for the home to be decent, safe, and sanitary, RRE does not guarantee that work completed as part of a Repair award will match other items in the home. Some examples of this include, but are not limited to:

- Flooring replaced in portions of a home may not match flooring in other rooms. RRE will replace flooring by room, to the nearest cased opening.
- Light fixtures replaced may not match pre-existing light fixtures or fixtures in other parts of the home.
- If only a portion of the windows require replacement, all the windows in the home may not match.
- If a portion of the home requires paint, paint in the repaired portion of the home may not match paint in other rooms (interior) or on other elevations (if exterior). RRE will paint whole interior rooms, to the door casing, or whole exterior sections to the next architectural break. Additional rooms or elevations will not be included for aesthetic reasons alone.

3. **Lead-Based Paint**

All properties with an initial award type determination of repair that were built prior to 1978 will be subject to a lead-based paint risk assessment by IHP. If present, the proposal should include process and costs for stabilization, encapsulation, or removal of lead-based paint.

F. Reconstruction

Eligible applicants with stick-built/CMU block homes qualify for a reconstruction award type when the estimated cost to repair is greater than $175,000. Eligible applicants with properties otherwise deemed not suitable for Repair may also qualify for a reconstruction award if the applicant owns the land and it is feasible to reconstruct the structure on the property. All elevated reconstruction projects will receive a stick-built home.

Additional cost maximums are included in **Table 4.**

Table 4 RRE and MHR Other Costs Maximums for Reconstruction

Project-Specific Cost Maximum	
Elevation	$100,000
Water Well	$10,000
Septic System	$25,000
Accessibility	$50,000
Lead-Based Paint/ Asbestos/Mold	$12,500
Temporary Relocation Assistance (moving, lodging, and storage)	$18,000

RRE will determine the size of the unit using HUD HOME standards. These standards are based on household occupancy (also referred to as household composition) and require two persons per bedroom, where reasonable. The RRE will use household occupancy at the time of application to determine unit size. The RRE will consider modifying unit size to reflect changes to household occupancy that occur after application on a case-by-case basis. It is the responsibility of the contractor to confirm with the applicant that the proposed plans are understood and accepted prior to the execution of the Homeowner Grant Agreement. However, changes to household occupancy made after the Project Review process is completed will not be considered because it is not cost reasonable to change the plans to the home after the process to obtain a permit begins.

1. Plan Sets

Proposals will include (as **Attachment N**) a set of reconstruction plan sets of single-family homes for 2-bedroom, 3-bedroom, and 4-bedroom in the following square footage ranges (**Table 5**). All standard floorplans should include two (2) bathrooms. Plans should have at least two different types of elevations for each bedroom configuration and provide accessibility option as discussed in Appendix A.

Table 5 Standard Bedroom Configuration to Square Footage

Bedroom/Bathroom Configuration	Square Footage
2 bedroom / 2 bathroom	1,000–1,200 SF
3 bedroom / 2 bathroom	1,200–1,500 SF
4 bedroom / 2 bathroom	1,300–1,700 SF

Exceptions to reconstructed home bedroom/bathroom configuration will only be considered if overcrowding exists within the home, for a reasonable accommodation, or if an applicant elects to reduce the number of bedrooms and/or bathrooms to reduce a DOB gap as long as it is compliant with HUD requirements.

Reconstructed homes do not include reconstruction of garages (attached or detached), sheds, pool houses or other outbuildings. Such outbuildings may be demolished during reconstruction to allow enough space for the new home to be built or because such structures pose a health or safety issue. Attached garages are allowable when required by code or HOA requirements. Plans for a one- and two-car garage should also be included in the proposal prior to the preconstruction meeting.

2. **Reconstruction Scope**

Assigned general contractors are responsible for completing property boundary surveys and engineering design, as applicable. Most reconstruction project types will require property boundary surveys to determine placement of the new home on the property within municipal set back boundaries. Assigned general contractors are also responsible for checking for any written HOA requirements or deed restrictions.

The scope of work for each reconstructed or newly constructed structure will vary but may include, although not be limited to, the following:

- Coordination with the property owner and his/her family from assignment to obtaining a certificate of occupancy for closing;
- Utility disconnection and deactivation;
- Demolition of existing structure(s);
- Debris removal in accordance with all federal, state, and local requirements, including the disposal of potential asbestos containing materials;
- Providing architectural and house plan renderings that meet the following requirements, at a minimum:
    - Comply with local code requirements;
    - Review and comply with any Site Specific conditions as outlined in the environmental review checklist;
    - Fiber cement siding or Stucco (for Concrete Block/CMU Homes);
    - Roof shall be constructed with radiant barrier sheathing, ice & water shield with architectural shingles;
    - Strapping and impact resistant window requirements per local code;
    - Vinyl windows;
    - Flooring shall be either carpet or vinyl plank flooring (no sheet goods);

- Plans must be adaptable for all 3 different accessibility accommodation scenarios outlined herein
- Bedrooms shall be a minimum of 100 SF with a minimum of 25 SF closet space; and
- Comply with energy efficiency and conservation program requirements.

- Conduct site specific analysis for surveying, zoning, plot plans and site specific engineering;
- Site preparation;
- Construction of new residential structures including 2-, 3-, and 4-bedroom floor plans in accordance with all applicable local and state codes and standards as well as the specified Resiliency Building and energy conservation standards; and
- Addressing special needs accessibility accommodations in accordance with program guidelines.
- Use of innovative construction methods such as 3D printing, container construction, etc.

G. Manufactured Housing Units (MHU) Replacement

Eligible applicants with mobile home unit (MHU) properties qualify for a replacement award type when the estimated cost to repair is greater than $30,000, the unit is older than eight (8) years or must elevate over 12 inches.

1. Unit Floorplans

For MHU Replacement projects, proposals will include (as **Attachment N**) a set of unit styles and floorplans for 2-bedroom, 3-bedroom, and 4-bedroom in the following square footage ranges (**Table 6**). General Contractor will provide applicants for replacement awards with 2-, 3-, and 4-bedroom single wide or double wide MHUs; all bedroom configurations include two (2) bathrooms; and provide accessibility option as discussed in Appendix A.

Table 6 MHU Configuration and Square Footage

Bedroom/Bathroom Configuration	Conditioned Square Footage
Singlewide 2 bedroom / 2 bathroom	750–900 SF
Singlewide 3 bedroom / 2 bathroom	1,000–1,200 SF
Singlewide 4 bedroom / 2 bathroom	1,200–1,400 SF
Doublewide 2 bedroom / 2 bathroom	1,000–1,250 SF
Doublewide 3 bedroom / 2 bathroom	1,250–1,500 SF
Doublewide 4 bedroom / 2 bathroom	1,400–1,800 SF

All MHU floorplans shall be the basis of any Respondent's reconstruction and MHU replacement projects cost proposal and Pasco County's evaluation of the reconstruction cost proposals. After contract award, Pasco County and IEM, in consultation with third-party experts, intends to approve Contractor-developed plans for use in Pasco County's CDBG-DR Individual Housing Programs.

After-market additions are not considered when determining the width or number of bedrooms in the storm damaged MHU (e.g., if a 3rd bedroom was added on to a single-wide 2-bedroom MHU, the home will be considered a 2-bedroom, single-wide MHU). Exceptions to replacement MHU bedroom configuration will only be considered if overcrowding exists within the home, for a reasonable accommodation, or if the applicant elects to reduce the number of bedrooms via scope reduction to reduce or eliminate a DOB gap.

The storm-damaged MHU width configuration will also be based on the width of the storm-damaged MHU. MHR only provides singlewide and doublewide units. Triple-wide or larger units will be considered on a case-by-case basis. If the storm damaged MHU was a singlewide, the applicant would receive a singlewide. If the storm damaged MHU was a doublewide, triple wide, or larger width configuration, the applicant will receive a doublewide. All MHUs sourced by the program must be HUD approved units.

MHR replacement MHUs do not include replacement or reconstruction of garages (attached or detached), sheds, pool houses, carports, or other outbuildings unless required by mobile home park, HOA or municipality. Such outbuildings may be demolished during construction to allow ample space for the new MHU to be delivered/installed or because such structures pose a health or safety issue.

2. MHU Replacement Scope

MHU replacement consists of the demolition and disposal of the existing MHU and installation of a new MHU, either substantially within the same footprint as the prior home (reconstruction) on a different footprint. The scope of work for each MHU replacement will vary but may include, although not be limited to, the following:

- Coordination with the property owner and his/her family for all activities, from assignment to obtaining a certificate of occupancy for closing;
- Utility disconnection / reconnection;
- Demolition of existing structure;
- Debris removal in accordance with all federal, state and local requirements, including the disposal of potential asbestos containing materials;
- Obtaining applicant approval of replacement MHU floorplan;

- Conduct site specific analysis for surveying, zoning, plot plans or any activity required to obtain permits/certificate of occupancy;
- Site preparation;
- Order, delivery and installation of new, HUD-certified MHU and all supporting activities to complete per industry standard;
- Elevation, as approved by program;
- Incorporation of accessibility needs prior to key turnover; and
- Provide MHU manufacturer's warranty registered in applicant's name.
- Use vendors with innovative construction methods such as CrossMod, etc.

H. Demolition

In certain cases, a property owner may only be eligible for the demolition of their residential structures and nearby outbuildings when they pose a health and safety risk to the community.

The scope of work for each demolition will vary but may include, although not be limited to, the following:

- Coordination to obtain permits;
- Utility disconnection and deactivation;
- Demolition of existing structure(s);
- Debris removal in accordance with all federal, state, and local requirements, including the disposal of potential asbestos containing materials;
- Conduct site specific analysis for surveying, zoning, and plot plans;
- Final site restoration to open space.

I. Relocation

In some cases, properties assisted by RRE and MHR must be vacant and empty of personal belongings during construction. Land/area surrounding the storm-impacted property must also be cleared of any debris, vehicles, derelict personal property, etc. The General Contractor will be responsible for the relocation of households identified for relocation assistance including the packing, moving and storage of household goods from the house for rehabilitation, reconstruction, and replacement activities. The proposal should budget for the costs of these activities within the program cap during the construction duration. The contractor is responsible for managing the timing of relocation activities. Delays due to permitting or utility disconnects are not considered valid reasons to exceed the relocation cap without prior approval of IEM and County.

Relocation nightly rate caps will be based on Government Services Agency (GSA) rates in the area, which may be exceeded due to spiking rates, lodging availability, or other factors. Applicants will be provided with necessary room that do not include luxury items, such as, internet, additional linen/laundry services, room service, meals, etc. Any of these charges will be charged to the applicant during the temporary housing stay. These maximums may be waived on a case-by-case basis, at the discretion of the program.

The General Contractor should have a relocation coordinator or similar staff member or subcontractor to work with applicants or tenants regarding their relocation, packing and moving in a timely manner. The proposal should budget for the costs of this position.

J. Innovative Construction Methods

The County is interested in innovative construction methods, energy efficiency and long-term resilience for housing. Respondents should explain any innovations, efficiencies and/or resiliencies they will incorporate into their work. This can include CrossMods, modular and prefabricated housing, concrete panel systems, 3-D printed components, and other durable, storm-resistant technologies capable of withstanding extreme weather and reducing lifecycle maintenance costs. Employing advanced systems such as smart grids, passive cooling designs, greywater reuse, and stormwater-resilient infrastructure that reduce environmental impact, decrease operating costs for the County, and lower utility expenses for homeowners and renters.

VII. Budget and Costs

The following information by project type shall be submitted with your cost proposal. Failure to submit this information in its entirety will negatively impact the evaluation of your cost proposal. Cost information must not be included with Respondent's narrative proposal but in the provided MS Excel file as Attachment L. Respondent must submit cost proposal (**Attachment L**) for the services described in this Solicitation. IEM shall consider the cost proposals provided by Respondent(s) along with site-specific construction cost data to establish the cost benchmarks for each Project.

The Program(s) will make use of Xactimate's Pricing Lists as the main source for pricing of construction works to be performed. Xactimate is an independent, third-party company that researches and reports on industry pricing. They use information from general contractors, subcontractors, insurance carriers, insurance adjusters, and a host of other industry professionals as they research and report on average market price for each price list item. Xactimate assures that no one party or industry segment has any undue influence on the pricing data that they research and report on.

A. Overhead and Profit

To items, as applicable, Construction Managers will add Overhead and Profit not to exceed 28 percent.

The fixed fee amount calculated by taking a specific line item's Unit Cost and multiplying it by the Overhead and Profit percentages set forth above, as applicable, will be the Construction Manger's entitlement for work completed in compliance with Program requirements. Profit will be calculated on a cumulative basis with overhead.

B. Pricing by Project Types

Project Type 1: Rehabilitation Cost Budget

Rehabilitation projects will be estimated through the use of an industry standard cost estimating software program, Xactimate. Xactimate estimates will be provided to the contractors for rehabilitation projects at the time of the assignment. General contractors will be required to conduct site visits prior to initiating construction activities to ensure the scope of work is complete and accurate without doing any destructive testing. Soft costs should be reasonable costs and included in the Proposal response.

Costs in Xactimate will not include contractor overhead and profit. Contractors, as part of their Proposal response, are required to propose their combined overhead and profit rate to be provided on top of approved Xactimate cost estimates. The combined overhead and profit (O&P) rate is not to exceed 28%. The O&P rates submitted by responsible respondents will be aggregated into Program Approved Pricing and utilized for all rehabilitation projects.

Please complete budget pricing form in **Attachment L**.

Project Type 2: Reconstruction Cost Budget

The pricing listed on the Reconstruction shall include all of Respondent's costs for completing the reconstruction of the sample plans included in the RFP **Appendix C** including all labor, profit, overhead, materials, tools, supplies, equipment, personnel, travel expenses, bonding and insurance, permitting, licensure, taxes, sales tax, and all other associated costs and incidental costs necessary to provide the products and services according to the minimum specifications, requirements, provisions, terms, and conditions set forth in this Solicitation.

The prices submitted by responsible respondents will be aggregated into Program Approved Pricing, including price per sq. ft for each size home and site-specific items, and utilized for all reconstruction projects. Please complete budget pricing form in **Attachment L**.

Respondents must also submit Construction Plan sets in **Attachment N** as discussed in Section VI. F.

Project Type 3: MHU Replacement Cost Budget

The policy of the program is to replace storm impacted MHUs with new MHUs with similar number of bedrooms and bathrooms as the damaged unit while addressing any overcrowding issues that may be present to the extent the program is able.

Respondent will provide floor plans for both single-wide and double-wide MHU configurations in the following layouts within the square footage ranges provided in the table above:

- 2-bedroom / 2-bathroom;
- 3-bedroom / 2-bathroom, and;
- 4-bedroom / 2-bathroom.

The Program desires to establish an "all inclusive" MHU price per square foot for the replacement of storm damaged MHUs. The "all inclusive" pricing provided by each respondent will be inclusive of the following activities:

- All required permits and fees;
- Disconnection of all utilities;
- Demolition and disposal of the existing storm damaged unit in an approved facility;
- Sitework and grading required to install new MHU including fill dirt to prepare pad;
- Purchase of a new HUD Certified MHU;
- All appliances shall be energy-star rated and shall include a refrigerator/freezer, oven/stove, and water heater;
- Hauling the new MHU to the applicant address;
- Installation of the new MHU to the applicant address in accordance with program and code requirements;
- Skirting;
- Connection of all appliances and central HVAC system (mini-split units will not be allowed);
- GC testing of all mechanical, electrical, and plumbing systems;
- Installation of 2 hose bibs (spigots);
- Reconnection of all utilities;
- All required code inspections;
- Fill dirt to be provided as required to construct MHU pad and to ensure proper site drainage;
- Placement of 4 pallets of sod;
- Completion of all required program inspections;
- Title work;

- New title for the new MHU must be issued in the applicant's name prior to requesting program final inspection;
- Certificate of Occupancy required prior to key turnover;
- Warranty requirements as stated in GC contract;
- All costs for overhead, profit, taxes, sales tax, labor, materials, tools, supplies, equipment, personnel, travel expenses, bonding/insurance, licensure and all other associated and incidental costs necessary to provide the products and services according to the specifications, requirements, provisions, terms and conditions set forth within the contract;
- Any costs for surveys and elevation certificates are included in the all-inclusive price.

Square footage of the units will be the conditioned square footage of the home and will not include eaves or trailer tongue dimensions.

Pricing for Accessible units will also be required. This site-specific cost will include widened doorways, low threshold shower, shower wand (on an accessible rail), shower seat, and a comfort height toilet with grab bars. The unit is required to have unobstructed access into/out of the unit and to the kitchen, bathroom, and at least one bedroom.

Please complete budget pricing form in **Attachment L** and floor plans in **Attachment N**.

Project Type 4: Demolition Cost Budget

Respondent's costs for completing the demolition and site restoration should include all labor, profit, overhead, materials, tools, supplies, equipment, personnel, travel expenses, bonding and insurance, permitting, licensure, taxes, sales tax, and all other associated costs and incidental costs necessary to provide the products and services according to the minimum specifications, requirements, provisions, terms, and conditions set forth in this Solicitation. Please complete budget pricing form in **Attachment L**.

Project Type 5: Relocation Cost Budget

Responders are required to complete the Relocation tab in Attachment N if they are providing rehabilitation, reconstruction or replacement services under this Solicitation. The maximum cost for relocation services for a rehabilitation project is $12,500 and for a reconstruction or replacement project $18,000. Services will include relocation coordination service support, moving (including packing), storage, and lodging. In some cases, moving an existing MHU may be necessary, please include pricing information in the budget form (Attachment L) for all inclusive price to move an existing MHU under 10 years of age within 50 miles of original site.

Please complete budget pricing form in **Attachment L**.

VIII. Evaluation and Awards Process

Proposals that are incomplete, contain material irregularities, or include alterations to or terms and conditions that do not conform to the terms and conditions of the RFP, or otherwise do not comply with the requirements of the RFP are subject to rejection as non-responsive. In accordance with the regulations of 2 CFR 200, Pasco County and IEM reserves the right to waive any informality or irregularity, to make awards to more than one Respondent, by total, by group, by item or as best serves the County and/or to reject any or all Proposals if there is a sound documented reason.

With the oversight and approval of Pasco County, IEM will select the responsive and responsible Proposal that, in the opinion of Pasco County, has been determined to have submitted the most responsive proposal to the RFP based on all identified factors.

Prices proposed by proposal shall be irrevocable until Contract award unless the proposal is withdrawn. A proposal may be withdrawn by a Respondent, provided an authorized representative of the Respondent submits a written request to withdraw the proposal.

A. Evaluation Criteria

Solicitation Responses shall be evaluated in accordance with criteria set forth below. IEM shall not be obligated to accept the lowest priced proposal but shall make an award to the Respondents that most responsive to the RFP requirements and provides the "Best Value" to the Program. Respondents' should complete projects at 90 days for rehabilitation, 150 days for reconstruction, 75 days Manufactured Housing Replacement, and 30 days for Demolition only projects. The adherence to these timeframes will be a high evaluation factor during RFP evaluation and future project assignments.

Proposal clarification discussions, at IEM's option, may be conducted with Respondents who submit Solicitation Responses determined to be acceptable and competitive. Respondents shall be accorded fair and equal treatment with respect to any opportunity for discussion and/or written revisions of the Solicitation Responses. Such revisions may be permitted after submission and prior to award to obtain Best and Final Offers. In conducting discussions, there shall be no disclosure by the Program of any information derived from the Solicitation Responses submitted by competing Respondents.

1. Minimum Qualifications

Respondent must meet the minimum qualifications listed below. Furthermore, Solicitation Responses that appear unrealistic in terms of technical commitment, which show a lack of technical competence, or that indicate a failure to comprehend the risk and complexity of a potential contract may be rejected. Respondent shall submit a summary (not to exceed two pages) that provides specific support for meeting the minimum qualifications outlined in this

Section and complete Statement of Respondent Qualifications (**Attachment D**). This support can specifically state how the Respondent meets each minimum qualification or can direct the evaluators to the appropriate section of the Solicitation Response, which provides support for the Respondent satisfying each minimum qualification.

1. Respondent must have been in the residential construction business for a minimum of five (5) years, or the principals/owners must have had a minimum of five (5) years of ownership/executive management experience in a previous company that provided residential construction services;
2. Respondent must either: 1) hold a current license (where applicable) issued by any jurisdictions which Respondent states are within the geographical boundaries covered in the Action Plan; or 2) commit to securing such licenses prior to entering any contractual obligations to work within those areas;
3. Respondent should demonstrate that they have a minimum of three (3) years' experience in the rehabilitation, reconstruction of residential housing funded by Federal funding particularly Community Development Block Grant Disaster-Recovery funds, or the principals/owners must have had a minimum of three (3) years' experience in the rehabilitation, reconstruction of residential housing funded by the Federal funding particularly Community Development Block Grant-Disaster Recovery funds;
4. Respondent must demonstrate the ability to carry projects to completion by the timelines defined in the Individual Housing Program Guidelines;
5. Respondent should demonstrate the ability to repair historic properties;
6. Respondent must demonstrate the ability to, and have experience with, lead based paint and asbestos removal and environmental mitigation related to the rehabilitation and reconstruction of residential properties;
7. Respondent and/or it's principals/owners must have experience in managing and completing projects of a similar size and nature with respect to disaster recovery;
8. Respondent must have experience in achieving compliance and reporting on compliance with local, state and federal construction laws, regulations and procedures, and producing the payroll documentation necessary for compliance;
9. Respondent must be financially solvent, adequately capitalized, and demonstrate it has the financial resources to perform and complete the work and to provide all required warranties.

2. Other Requirements

Respondent should indicate that it meets each of the following requirements by providing documentation and/or specific proof of experience and qualifications to carry out each task:

1) The work to be performed under a contract awarded pursuant to this Request for Proposals will utilize funds provided by HUD and is subject to the requirements of Section 3 of the Housing and Urban Development Act of 1968, as amended, 12 U.S.C. 1701u. Section 3 requires that to the greatest extent feasible and consistent with existing state and federal law, opportunities for training and employment be given to lower-income residents in the project area and contracts for work in connection with this project be awarded to business concerns which are located in or owned in substantial part by persons residing in the area of the program.
2) A Respondent that is not organized under the laws of the state of Florida must register with the State before it may transact business in Florida. The County and IEM will not award to a Respondent until they are authorized to work in Florida.
3) Responders must be registered as Active in the System for Award Management and not debarred or suspended. Respondent must include verification that their company as well as the company's principal(s) is not debarred through the System for Award Management (www.SAM.gov). Respondent must enclose a printout of the search results that includes the record date as Attachment O.
4) Responders are required to have and maintain any licenses, certifications, and registrations required by the State of Florida, Pasco County, or recognized professional organization governing the services performed under this contract (such as professional licensing requirements i.e. Licensed Plumbers) (Attachment Q).
5) Respondent is not in arrears to Pasco County upon debt or contract and is not a defaulter, as surety or otherwise, upon any obligation to the County.
6) That the Respondent or any officer of the Respondent has not been found guilty of a public entity crime or is on the convicted vendor list as set forth in Sections 287.132 and 287.133, F.S.
7) Respondent shall commit to make a demonstrated effort to provide subcontract opportunities to locally owned businesses, minority and women-owned businesses enterprises and low-income residents in the program area. Respondents should document efforts to engage minority and women-owned businesses.
8) Respondents must commit to securing and/or maintaining office space somewhere within the Pasco County area for the duration of the project. Respondents should indicate in their narrative proposal where the office(s) is/are anticipated to be located and provide the respondent's plan for staffing each office. Resumes should be attached as Attachment P.
9) Contractor must provide a one-year warranty on all materials and workmanship; Contractor will remain liable for defects as provided by Florida law.
10) Upon Project completion, Contractor must document certification by an Energy Efficiency official body.

11) 2 CFR 200.325 mandates the minimum federal bonding requirements. For this program, the contractor **must maintain performance and payment bonds** in an amount equal to the value of the active construction projects issued under the awarded contract. IEM will award contracts in different amounts based upon the work that is required. Respondent must provide evidence of the maximum performance and payment bonding capacity with the Solicitation Response, and the form of the bond that shall be executed and produced by the selected Respondent(s) at the time of Project assignment. Respondent must provide evidence of a minimum bonding capacity of Five Million and 00/100 Dollars ($5,000,000.00) with the Solicitation Response. For respondents whose intention it is to complete only MHU replacement or rehabilitation projects, IEM may consider the selection of Respondents who can provide evidence of a maximum performance and payment bonding capacity of not less than Two Million and 00/100 Dollars ($2,000,000.00) for a smaller number of projects. In no event shall the bond requirement be for less than one hundred percent (100%) of a Contractor's amount under contract at any given time. All bonds must be issued by a bonding agent with at least an "A" rating, and the bonding companies must be listed in the Department of the Treasury's Listing of Certified Companies.
12) Contractors who intend to perform reconstruction projects must submit reconstruction plan sets of single-family homes, including options for Stick-Built and CMU Block, for consideration by the program for use in the reconstruction phase of the program. The Contractor must obtain permission from the designers for free reuse by the program by any contractor selected by the Program. Contractors will be responsible for performing site-specific engineering requirements when using these plan sets. Plan sets will be required to have 2 bathrooms. Contractors must provide 2- bedroom, 3-bedroom, and 4-bedroom plan sets with at least two (2) elevations. Plans must allow for all accessibility options discussing in the IHP Guidelines and its RFP.

B. Selection Criteria

Solicitation Responses shall be consistently evaluated and scored in accordance with the criteria below.

- Experience, Qualifications, and References (35 points);
- Proposed Methodology/Technical Proposal (25 points);
- Cost (20 points);
- Reconstruction Plan Sets and/or MHU Replacement Floorplans Submitted (15 points)
- Overall responsiveness, clarity, and organization of Solicitation Response (5 points); and
- Proposer is listed as Section 3 business (Additional 5 points).

If respondent is not submitting a bid response to perform reconstruction projects, the total maximum number of points available for that respondent is 85 points. All respondents scoring 75% of available points or better may be selected for participation in the program. In the event that the program requires additional capacity, IEM reserves the right to resolicit contractors.

A firm is not required to be a Section 3 firm to participate in this solicitation and will not be deemed non-responsive should they not be a Section 3 business. However, to receive the additional 5 points allocated to Section 3 the firm must be a registered/certified Section 3 firm and meet the requirements for preference.

Verification of Performance

IEM may also consult with additional CDBG-DR programs and listed references to verify vendor performance on other CDBG-DR housing recovery contracts. The evaluation committee may utilize this information to:

- Identify vendors that have exceptional performance;
- Aid purchasers in making a best value determination based on vendor past performance;
- Protect the Program from vendors with unethical business practices.

C. Awards

It is the intent of the Program to award multiple contracts under this Solicitation. Award notice(s) will be sent to the selected Respondents. Any award is contingent upon the successful negotiation of final contract terms. Final contract amounts may be subject to negotiation between IEM and the selected Respondents. Final contract amounts must provide the best value for the Program, considering the effect of the purchase on agency productivity and all other best value factors described herein.

IEM shall consider the cost proposals provided by Respondent(s) along with site-specific construction cost data to establish the cost benchmarks for each Project. Respondents will be able to either accept or reject the benchmarks prior to Notification of Award(s).

The successful Respondent(s) shall not assign, transfer, convey, sublet, or otherwise dispose of any award or any or all of its rights, title, or interest therein, or delegate the duties hereunder without the prior written consent of IEM as reviewed and approved Pasco County.

IX. Additional Requirements

These requirements apply to all project types included in this solicitation:

- Provide professional labor, equipment, and materials adequate to perform the work in accordance with the scope of work issued for each eligible applicant's residential structure while ensuring that all applicable housing standards and codes are met;
- Comply with all applicable local, state and federal laws, regulations, and guidelines, which may include: HUD Community Development Block Grant disaster laws, regulations, and guidelines; the Davis Bacon Act, as applicable; and Section 3 of the Housing and Urban Development Act of 1968 (also see **Attachment B: Federal Affirmations**);
- Provide a subcontractor plan describing the subcontractors the General Contractor expects to utilize during its provision of services, complete **Attachment E: Subcontractor Listing Form**, and include letters of commitment from those sub-contractors confirming their intent to participate.
- Mobilize in the Pasco County area within 30 days from the execution of a Contract;
- Provide weekly reporting, documentation and tracking of construction progress for all assigned, active projects in IEM's provided reporting instrument or in a General Contractor's reporting system as long as the system can provide data in a format that IEM can upload into their tracking system. General Contractor representative will meet in person with IEM staff twice a month regarding construction status, reimbursement requests, permitting and construction challenges and/or other issues facing the construction/replacement pipeline. The General Contractor will, upon request by any IEM or Pasco County staff, provide data on individual projects;
- All communications, updates, interactions, site visits, etc. with any Pasco County applicant or in direct support for progressing a Pasco County applicant must be recorded in the IEM or General Contractors system of record. It is expected that General Contractors will input notes in the system no less than twice weekly for all assigned, active projects. Information should be entered into the weekly reporting and available for discussion in meetings;
- Meet with the program and individual property owners to review the scope of work to be performed, including establishing a work schedule acceptable to property owners and reviewing work upon final inspection. The initial meeting between the contractor, applicant and Program will be done through a unit walkthrough and preconstruction meeting at the home site;
- Contractors shall submit all payment requests, including complete and accurate supporting documentation, within sixty (60) calendar days of the completion of each project milestone. Failure to submit payment requests within this timeframe may result in a reduced performance score during contractor evaluations.

- Respond to Pasco County open records requests within 24 hours during a standard work week;
- Meet all federal, state and local requirements for the transport and disposal of municipal solid, industrial, hazardous and other wastes from demolished structures;
- Provide a one-year warranty for all work performed; and
- Assist homeowners in vacating and re-occupying their damaged home, if necessary.

A. Contract and Terms

IEM intends to select multiple qualified proposals for contracting to create a pool of contractors to perform the services requested under this Solicitation. IEM makes no guarantee regarding the number of respondents awarded under this solicitation. IEM shall assign projects to contractors based upon capacity, capability and performance.

Any contract resulting from this Solicitation, except for the exception noted below, shall be effective from contract execution until January 1, 2027. IEM, at its own discretion, may extend any contract awarded pursuant to this Solicitation for up to two additional one-year terms, subject to terms and conditions mutually agreeable to both parties.

The selected Contractors will be bound to the specific terms and conditions in the *Contractor Contract*, **provided at award**. Required contract provisions are listed in Appendix D. IEM reserves the right to utilize the vendors qualified under this RFP for any disaster recovery projects within Pasco County for which IEM is or becomes the contracting authority.

This solicitation and any resulting contract are governed by:

- 2 CFR Part 200 – Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards.
- HUD's Universal Notice, Federal Register Vol. 90, No. 6 (January 8, 2025) — Implementation of the CDBG-DR Consolidated Waivers and Alternative Requirements for 2023–2024 Disasters.
- HUD Allocation Announcement Notice, Federal Register Vol. 90, No. 10 (January 16, 2025) — Allocations for Community Development Block Grant Disaster Recovery Grants.
- HUD Memorandum 2025-02 (March 19, 2025) — Construction Cost Reasonableness and Benchmarking.
- HUD Memorandum 2025-03 (March 31, 2025) — Procurement and Contract Management Consistency.

Wherever federal, state, and local requirements conflict, the most stringent federal requirement shall control. All provisions contained or incorporated herein flow down to any subcontractor or lower-tier contract funded in whole or in part with CDBG-DR funds.

B. No Guarantee of Volume or Usage

General Contractor may select which of the above project types on which to Proposal, however, IEM makes no guarantee of award, volume of assignments given to the contractor, or assignment project types the contractor will receive. In the event that the program requires additional capacity, IEM reserves the right to resolicit contractors.

C. Contract Authorization and Compensation

During the term of any contract awarded under this Solicitation, IEM may request Contractors to perform certain Projects as described above, subject to specific work authorization in the form of a Notice to Proceed (NTP) for an individual application. No onsite construction activities are to proceed without an NTP. IEM will assign projects to general contractors based on the general contractor's performance history on Pasco County construction projects and the general contractor's capacity to take on additional jobs at the time the project is ready to be assigned.

IEM shall consider the Cost Proposal provided by Respondent along with site-specific construction cost data to establish the cost benchmarks for each Project.

All Contracts shall be in writing, signed by both the Contractor and IEM, and shall include a scope of services, a list of tasks to be performed by Contractor, a time schedule, a list of deliverables, if any, and such other information or special conditions as may be necessary for the work requested. Contractor Contract will be provided at award.

D. Liquidated Damages

The Program has set liquidated damages for not completing the work within described in the contract and program guidelines commencing on the date specified in written Notice to Proceed, including all officially approved extensions thereto, to be One Hundred Dollars and 00/100 ($100.00) **PER DAY**, per individually assigned Project. The Contractor may be liable for liquidated damages in the amount of One Hundred Dollars and No/100 ($100.00) **PER DAY**, per affected Projects, if Contractor fails to complete the work within the contracted period.

In addition, General Contractors have 60 calendar days after a passed inspection point date to submit a reimbursement request package to IEM. Packages, submitted after 60 days, will incur liquidated damages to be One Hundred Dollars and 00/100 ($100.00) **PER DAY**, per individually assigned Project.

E. Right to Audit

Contractor shall retain all records relevant to this Contract for a period of three years from the date of Pasco County's submission of the final expenditure report on this federal award to HUD, or for federal awards that are renewed quarterly or annually, from the date of Pasco County's submission of the quarterly or annual financial report, respectively, as reported to HUD.

F. Unsatisfactory Work and Cancellation

If, at any time during the contract term, the service performed or work done by the Respondent is considered by IEM and Pasco County to create a condition that threatens the health, safety, or welfare of the community, the Respondent shall, on being notified by IEM and Pasco County, immediately correct such deficient service or work. In the event the Respondent fails, after notice, to correct the deficient service or work immediately, IEM and Pasco County shall have the right to order the correction of the deficiency by separate contract or with its own resources at the expense of the Respondent.

Notwithstanding the above, IEM, with oversight of Pasco County, reserves the right to cancel a resulting contract, without cause, by giving thirty (30) days' prior written notice to the Respondent of the intention to cancel.

G. Financial Statements and Annual Reports

If Respondent is an entity that is required to prepare audited financial statements, Respondent shall submit the last two years of statements. If Respondent is a privately-owned entity or sole proprietorship for which audited financial statements are not required, Respondent shall submit an annual report that includes last two years of un-audited accrual-basis financial statements and full disclosure of any events, liabilities, or contingent liabilities that could affect the Respondent's financial ability to perform this contract (attach in **Attachment H**).

X. Terms, Conditions, and Exceptions

A. General Conditions

- IEM reserves the right to alter, amend or modify any provision of this Solicitation, or to withdraw this Solicitation, at any time prior to the award, if IEM determines it is in the best interest of the Program.
- Solicitation Responses shall be binding for a period of 120 days after they are opened. Respondent may extend the time for which their Solicitation Response will be honored. Upon contract execution, prices agreed upon by the Respondent are an irrevocable

offer for the term of the contract and any contract extension(s). No other costs, rates or fees shall be payable to the Respondent unless expressly agreed upon in writing by IEM.

- Respondent shall be solely responsible for the performance of all contractual obligations that may result from an award based on this Solicitation. Respondent shall not be relieved of its obligations for any nonperformance by its subcontractors.
- Respondent is prohibited from advertising that it is doing business with IEM or use a contract resulting from this Solicitation as a marketing or sales tool without prior written consent of IEM. Furthermore, Respondent may not distribute or disclose this Solicitation to any other vendors or companies without permission from IEM.
- All remedies available to IEM for breach or anticipatory breach of any contract that results from this Solicitation are cumulative and may be exercised concurrently or separately, and the exercise of any one remedy shall not be deemed an election of such remedy to the exclusion of other remedies. IEM may exercise any available legal or equitable remedy.

B. Insurance

- Required Coverages - For the duration of any contract resulting from this Solicitation, Respondent shall acquire insurance, bonds, or both, with financially sound and reputable independent insurers, in the type and amount listed in the Contract. The required coverage is to be with companies licensed in the state of Florida, with an “A” rating from A.M. Best, authorized to provide the corresponding coverage and must be listed in the Department of the Treasury's Listing of Certified Companies. Work on any contract shall not begin until after Respondent has submitted acceptable evidence of insurance. Failure to maintain insurance coverage or acceptable alternative methods of insurance shall be deemed a breach of contract. Respondent shall submit acceptable evidence of insurance and bonds not later than seven days following the effective date of a Contract.
- Alternative Insurability - Notwithstanding the preceding, IEM reserves the right to consider reasonable alternative methods of insuring the contract in lieu of the insurance policies customarily required. It will be Respondent’s responsibility to recommend to IEM alternative methods of insuring the contract. Any alternatives proposed by Respondent should be accompanied by a detailed explanation regarding Respondent’s inability to obtain the required insurance and/or bonds. IEM shall be the sole and final judge as to the adequacy of any substitute form of insurance coverage.

C. Protests

Any Respondent unsuccessful or aggrieved in connection with this Solicitation may file a letter of protest by emailing RFP email (see Section II. B.) within five (5) days of the award. The letter

of protest must (1) identify the Respondent and the Solicitation by the Solicitation number; (2) include a clear statement of the legal and factual grounds on which the Respondent's objection is based; (3) refer to the statutes, laws, ordinances or other legal authorities which the Respondent deems applicable to such grounds; and (4) specify the relief requested of the board by the aggrieved proposer. Such letter may request a re-evaluation of specific areas of the Solicitation Proposal(s) by IEM; and must specifically delineate the alleged omission, error, mistake, or incorrect evaluation, and include a suggested remedy which could be administered by IEM.

D. Section 3

Pasco County will comply with the requirements of Section 3 of the Housing and Urban Development Act (HUD) of 1968 pursuant to 24 CFR 570.607 (b). This legislative directive provides preference to low-income residents, and businesses that substantially employ said persons, for new employment, training, and contracting opportunities resulting from HUD-funded projects. As such it is the intent of the County to give, to the greatest extent feasible, (consistent with existing Federal, State, and local laws and regulations), employment, contracting and other economic opportunities arising in connection with a proposed project to low-income persons, Section 3 residents and business concerns in the local community, and that contracts be awarded to eligible business concerns which employ and/or are owned in substantial part by such low-income persons residing in Pasco County. Respondents should complete **Attachment K** and attach to their proposal.

Efforts to ensure that compliance is achieved include: 1) requiring that all VENDOR post information at job sites in affected areas regarding employment opportunities and preference in hiring Section 3 employees and 2) advertising projects identifying contracting opportunities and the preference to utilize Section 3 businesses. Proposer is required to indicate whether the Firm and/or any proposed sub-Vendors are Section 3 businesses. Pasco County encourages the utilization and participation of Section 3 Businesses in procurements, and evaluation proceedings will be conducted within the established guidelines regarding equal employment opportunity and nondiscriminatory action based upon the grounds of race, color, sex or national origin. Interested certified Section 3 firms are encouraged to respond.

1. **Small and Minority Business, Women's Business Enterprises, and Labor Surplus Area Firms:**

If subcontracts are to be let, the prime Contractor is required to take all necessary steps identified in 2 C.F.R. § 200.321(b)(1)-(5) to ensure that small and minority businesses, women's business enterprises, and labor surplus area firms are used when possible.

- Place qualified small and minority businesses and women's business enterprises on solicitation lists
- Assuring that small and minority businesses, and women's business enterprises are solicited whenever they are potential sources.
- Dividing total requirements, when economically feasible, into smaller tasks or quantities to permit maximum participation by small and minority businesses, and women's business enterprises.
- Establishing delivery schedules, where the requirement permits, which encourage participation by small and minority businesses, and women's business enterprises.

2. Public Records Requirements

Vendor specifically acknowledges its obligations to comply with Section 119.0701, Florida Statutes, with regard to public records, and shall:

1. Keep and maintain public records that ordinarily and necessarily would be required by the County in order to perform the services required under this Agreement;
2. Upon request from the County, provide the County with a copy of the requested records or allow the records to be inspected or copied within a reasonable time at a cost that does not exceed the cost provided in Chapter 119, Florida Statutes, or as otherwise provided by law;
3. Ensure that public records that are exempt or confidential and exempt from public records disclosure requirements are not disclosed, except as authorized by law; and
4. Meet all requirements for retaining public records and transfer, at no cost to the County, all public records in possession of Vendor upon termination of this Agreement and destroy any duplicate public records that are exempt or confidential and exempt from public records disclosure requirements. All records stored electronically must be provided to the County in a format that is compatible with the information technology system of the County.

Appendix A: Reasonable Accommodations

Reasonable Accommodation for Housing Repair

Bathroom Accommodations 1

Applicants who opt for Reasonable Accommodation 1 (RA-1) will be provided with one (1) bathroom with the following accessibility modifications:

- Tub/Shower combination with blocking and a grab bar
- Chair height toilet with grab bars

Bathroom Accommodations 2

Applicants who request Reasonable Accommodation 2 (RA-2) will be provided with one (1) bathroom with the following accessibility modifications:

- Tub/Shower combination with blocking, grab bars, seat, and shower wand
- Chair height toilet with grab bars

Bathroom Accommodations 3

Applicants who request Reasonable Accommodation 3 (RA-3) will be provided with one (1) bathroom with the following accessibility modifications:

- Roll-in shower compartment to fit existing tub/shower space, equipped with grab bars, seat, and shower wand
- Chair height toilet with grab bars
- Roll under vanity, only upon request

Kitchen Accommodation

Applicants may indicate reasonable accommodations to make a kitchen more accessible. Reasonable accommodations in kitchens for Repair award types must be accommodations to items included in the program scope of work, and may include:

- Wheelchair accessible cook top (knobs on front of the appliance)
- Roll under kitchen sink

Items not included in the program scope of work will not be modified for the sole purpose of providing an accessibility modification. Accessibility modifications will only be made to the primary kitchen at the property, in the event that more than one kitchen is available.

Reasonable Accommodations for Reconstruction/Replacement

All reconstructions/replacement will receive the following universal accommodations, regardless of whether a Reasonable Accommodation has been requested by the applicant:

- 36” hallways, wide enough to accommodate a standard wheelchair
- Adequate turning radius for a wheelchair in the kitchen
- Adequate turning radius for a wheelchair in bathroom8
- All doors installed with levers instead of knobs
- Exterior doors, bedroom doors, and bathroom doors are 36” wide

In addition, the applicant may request reasonable accommodation in the bathroom, kitchen, entrance, and/or strobe smoke detectors throughout.

Applicants who request accommodation in a bathroom may select one (1) of three (3) standard available options. Accessibility modifications will only be made in one (1) bathroom. By default, the modified bathroom will be the master bathroom, unless otherwise specified on a completed Reasonable Accommodation Request Form.

If the applicant requests reasonable accommodation for the bathroom, the reasonable accommodation will be installed in the bathroom with adequate turning radius for a wheelchair, unless otherwise specified on the Verification of Disability Form. If the applicant opts to remove a bathroom to resolve a DOB Gap, wheelchair turning radius may not be available in the remaining bathroom.

Bathroom Accommodations 1

Applicants who opt for Reasonable Accommodation 1 (RA-1) will be provided one (1) bathroom with the following accessibility modifications:

- Tub length of 60’’ and tub width of 36’’ in master bath. Hallway bathtub is 60’’ x 30’’, with no seat. Grab bars installed near the tub/shower enclosure.
- Chair height toilet with grab bars

Bathroom Accommodations 2

Applicants who request Reasonable Accommodation 2 (RA-2) will be provided one (1) bathroom with the following accessibility modifications:

- Tub/Shower combination with blocking, grab bars, seat, and shower wand
- Chair height toilet with grab bars

Bathroom Accommodations 3

Applicants who request Reasonable Accommodation 3 (RA-3) will be provided one (1) bathroom with the following accessibility modifications:

- 30”x60” roll-in shower compartment, equipped with grab bars, seat, and shower wand
- Chair height toilet with grab bars
- Roll under vanity

Kitchen Accommodations

Applicants may indicate reasonable accommodations to make a kitchen more accessible. Standard reasonable accommodations for kitchens in reconstruction project types include:

- Wheelchair accessible cook top (knobs on front of appliance)
- Roll under kitchen sink

Appendix B: Required Respondent Information

Responders should provide the following information as narrative or as identified in Attachments in the proposals.

Respondent must provide satisfactory evidence of their ability to manage and coordinate the types of activities described in this Solicitation and to produce the specified products or services on time. Respondent must provide the following information:

- Cover Page - with Respondent name, contact information, and indication for which contract opportunities the Respondent is submitting.
- Company Narrative - A detailed narrative explaining why Respondent is qualified to provide the services enumerated in Section 2, focusing on its company's key strengths and competitive advantages. Respondent must provide a summary of capacity based on past experience including, at minimum, number of projects completed annually on a single program, number of projects assigned at a single time on a single program.
- Company Profile - A company profile to include:
    - The company ownership structure (corporation, partnership, LLC, or sole proprietorship), including any wholly owned subsidiaries, affiliated companies, or joint ventures. (Please provide this information in a narrative and as a graphical representation). If Respondent is an Affiliate of, or has a joint venture or strategic alliance with, another company, please identify the percentage of ownership and the percentage of the parent's ownership. Finally, please provide a proposed operating structure for the services requested under this Solicitation and which entities (i.e. parent company, Affiliate, Joint Venture, subcontractor) will be performing them (also submit **Attachment G**);
    - The year the company was founded and/or legally organized. If organized as a business entity other than a sole proprietorship (e.g., corporation, LLC, LLP, etc.), please indicate the type of entity, the state under whose laws the company is organized and the date of organization;
    - The location of company headquarters and any field office(s) that may provide services for any resulting contract under this Solicitation, including subcontractors. Identify the location served by your company;
    - The number of employees in the company, both locally and nationally, and the location(s) from which employees may be assigned;
    - The name, title, mailing address, e-mail address, telephone number, and fax number of Respondent's point of contact for any resulting contract under this Solicitation;

- Whether the company has ever been engaged under a contract with IRM or Pasco County. If "Yes," specify when, for what duties, and for which project; and
- Whether the company has ever been engaged under a contract for CDBG funded residential construction and whether you were involuntarily terminated from participation in the program or voluntarily ceased participation in the program without completing all construction projects.
- NOTE: A Respondent that is not organized under the laws of the state of Florida must register with the State before it may transact business in Florida.

- Key Staffing Profile
  - Respondent must provide a key staffing profile and résumés (as **Attachment P**) for staff that will be responsible for the day-to-day performance of the services requested under this Solicitation. Respondent shall designate a dedicated construction lead in this section who will be located in the entire county response area.
  - Staff members listed in the Key Staffing Profile who are independent contractors and not employees of Respondent may also qualify as subcontractors. Respondent shall use only licensed subcontractors as required by the State of Florida.
  - Respondent's staffing profile must not reflect a greater than 8:1 jobsites to superintendent ratio. Respondent must identify which employees will be physically located in the responding area as regular face-to-face meetings with the program and applicants will be required (i.e., mandatory preconstruction meetings with applicants for each application).
  - Key staff must include the following:
    - Project Manager – The project manager is the individual who is ultimately responsible for all Pasco County CDBG-DR related operations. The project manager is accountable for planning and allocating resources, preparing budgets, monitoring progress, and keeping Pasco County stakeholders and IEM informed throughout the project lifecycle;
    - Superintendent(s) – Superintendents are responsible for managing a group of individual project sites. Superintendent(s) should manage a maximum of eight (8) active project sites at any given time.
    - Financial Manager – The financial manager is responsible for ensuring timely and accurate submission of reimbursement requests.

- Warranty Coordinator – The warranty coordinator is responsible for ensuring timely completion of all warranty claims assignable to the General Contractor. The warranty coordinator is responsible for recording warranty claims in the program system of record, communicating with the applicant to schedule warranty repairs and keep the applicant appraised of progress to completion of the repairs. The warranty coordinator is also responsible for providing evidence of completed warranty repairs to the program.

- Relocation Coordinator – The Relocation Coordinator is responsible for ensuring program applicant relocation, including moving/packing, storage, and lodging services. They will communicate with the applicant regarding their relocation needs, options, and timeline. The Relocation Coordinator will also work with moving/packing, storage, and lodging providers that are under the General Contractor, to schedule service to relocate the applicant from and returning to the home. The Relocation coordinator will also work to resolve any applicant or service supplier complaints. They will also maintain and provide weekly reports on applicant relocation status, complaints and their resolution, and timelines for IEM.

- Attach a list of key staff resumes and/or staff hiring plan in **Attachment P**.

- References

  - Respondent shall provide a **minimum of three** non-Pasco County and non-IEM references for projects of similar type and size performed within the last five years, preferably for state and/or local government entities (also attach **Attachment F**). IEM reserves the right to check references prior to making any award hereunder. Any negative responses received may be grounds for disqualification of the proposal. IEM reserves the right to contact programs other than those listed by the respondent in which IEM knows respondent participated. Respondent must verify current contacts. Information provided should include:

    - Client name;

    - Project description;

    - Total dollar amount of project;

    - Key staff assigned to the referenced project that will be designated for work under this Solicitation; and

        - Client project manager name, telephone number, and e-mail address. IEM checks references by e-mail. Respondents who do not provide accurate e-mail addresses waive the right to have

- Major Subcontractor Information

    - Respondent must identify any major subcontractors whom Respondent intends to utilize in performing fifty percent (50%) or more of the Project. Respondent must indicate whether or not Respondent holds any financial interest in any major subcontractor. It may be required as a condition of award that an authorized officer or agent of each proposed major subcontractor sign a statement to the effect that the subcontractor has read, and will agree to abide by, Respondent's obligations under any contract awarded pursuant to this Solicitation.

    - Respondents are not permitted to award more than 50% of an award for an individual home to one subcontractor to perform the work onsite. "Turn Key" subcontractors will not be permitted in the program.

    - Please also attach **Attachment E**.

- Litigation History - Respondent must include in its Solicitation Response a complete disclosure of any actual or alleged breaches of contract, which have been asserted or claimed against it. Discussed in Section IV of the document.

- Conflicts - Respondent must disclose any potential conflict of interest it may have in providing the services described in this Solicitation, including all existing or prior business dealings resulting in such conflicts. Respondent must also disclose any such activities of affiliated or parent organizations and individuals who may be assigned to manage this account. If there are no conflicts, as described herein, Respondent must indicate same in the appropriate section of the Solicitation Response. Respondents must complete the Conflict of Interest form in **Attachment M**.

- Audited Financial Statements/Annual Reports - If Respondent is an entity that is required to prepare audited financial statements, Respondent shall submit the last two years of statements. If Respondent is a privately-owned entity or sole proprietorship for which audited financial statements are not required, Respondent shall submit an annual report that includes last two years of un-audited accrual-basis financial statements and full disclosure of any events, liabilities, or contingent liabilities that could affect the Respondent's financial ability to perform this contract (attach in **Attachment H**).

- Safety Information - Respondent must provide its workers' compensation experience modification rate (EMR) for the last five years as **Attachment J**. Respondent shall

submit this information on its insurance carrier's letterhead, signed by the carrier. Respondent must also provide the name and job title of the person in its organization that manages its safety program, and a description of that program. A copy of Respondent's safety manual may also be required. The safety manual will become part of the Contract if your Solicitation Response is selected.

- Quality Control Program - Respondent must provide the name and job title of the person responsible for the Respondent's quality control program, as well as a description of the quality control program. A copy of Respondent's quality control manual may be required. The quality control manual will become part of the Contract if Respondent's Solicitation Response is selected.

- Cost Control Program - Respondent is encouraged to suggest any cost reduction items to be taken into consideration prior to awarding a contract under this Solicitation. Respondent should include cost reduction items in their Narrative Proposal and provide a full description of the alternative work and the estimated cost savings. In addition, Respondent should detail the necessity of any additional drawings, specifications, or revisions to the construction sequencing and schedule that may be needed because of the implementation of the cost saving measures.

- Warranty Program - Respondent must provide a description of their warranty program, including key personnel, and timeframes within which warranty complaints will be resolved. Warranty claims, communications, and resolutions will be required to be maintained in the County's System of Record.

- Non-Collusion Affidavit - The price and amount of any Solicitation Response must have been arrived at independently and without consultation, communication, agreement or disclosure with or to any other contractor, Respondent, or prospective Respondent. Complementary proposals are illegal and prohibited. No attempt may be made at any time to induce any firm or person to refrain from submitting a proposal or to submit any intentionally high or noncompetitive proposal. All proposals must be made in good faith and without collusion. Respondent must complete, sign, and notarize **Attachment I**, Non-Collusion Affidavit, which will become part of the Proposal.

Appendix C: Sample Plans for Reconstruction Projects

2 BEDROOM PROTOTYPE SOG

Address TBD
City. Florida Zip Code

50% PRELIMINARY DESIGN, NOT FOR CONSTRUCTION

GENERAL NOTES:

1. 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 AS A PREVENTATIVE TREATMENT TO NEW CONSTRUCTION. SEE 2020 FLORIDA RESIDENTIAL CODE 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."
2. ALL WORK SHALL MEET APPLICABLE REQUIREMENTS OF THE 2020 FLORIDA BUILDING CODE, BUILDING, 7TH EDITION AND 2020 FLORIDA BUILDING CODE, RESIDENTIAL 7TH EDITION.
3. APPLIANCES SHALL BE ENERGY STAR LABELED - CLOTHES WASHERS, DISHWASHERS, REFRIGERATORS AND CLOTHES DRYERS. SUPPLY HOSES TO WATER USING FIXTURES AND APPLIANCES MUST BE ARMORED, PEX OR METAL (EXCEPT COPPER)
4. CONTRACTOR TO VERIFY ALL EXISTING CONDITIONS AND NOTIFY ARCHITECT OF ANY DISCREPANCIES WITH PLANS AND AS-BUILT CONDITIONS PRIOR TO PROCEEDING WITH THE WORK.
5. DO NOT SCALE DRAWINGS; DIMENSIONS GOVERN. LARGE SCALE DETAILS GOVERN OVER SMALL SCALE DETAILS. NOTIFY ARCHITECT WITH ANY DISCREPANCIES OVER DIMENSIONS.
6. ALL DIMENSIONS ARE TO THE FACE OF THE STUDS (ROUGH) UNLESS OTHERWISE NOTED.
7. THE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL PERMITS, INSPECTION FEES, AND DEPOSITS REQUIRED FOR THE INSTALLATION OF ALL WORK. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO CALL FOR LOCAL INSPECTIONS AND OBTAIN APPROVAL FROM THE STATE FIRE MARHSAL IF REQUIRED.
8. ALL CONSTRUCTION WORK SHALL BE IN COMPLIANCE WITH ALL LOCAL CITY, COUNTY, STATE OF FLORIDA AND FEDERAL CODES. THE CONTRACTOR SHALL GIVE ALL NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS, AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY BEARING PERFORMANCE OF THE WORK.
9. VERIFY ROUGH OPENING SIZES WITH DOOR AND WINDOW MANUFACTURERS BEFORE CONSTRUCTION IS TO BEGIN.
10. SAFETY GLAZING SHALL BE PROVIDED AT HAZARDOUS LOCATIONS AS PER SECTION R308.4 OF THE FRC 2020.
11. COMBINATION SMOKE /CARBON MONOXIDE DETECTORS SHALL BE PROVIDED IN AND OUTSIDE ALL SLEEPING AREAS.
12. EACH SLEEPING ROOM MUST HAVE AT LEAST ONE OPERABLE WINDOW OR EXTERIOR DOOR APPROVED FOR EMERGENCY EGRESS OR RESCUE. UNIT MUST BE OPERABLE FROM INSIDE TO FULL CLEAR OPENING OF 5.7 SQUARE FEET, WITH SILL HEIGHT NO MORE THAN 44 INCHES ABOVE THE FLOOR, MINIMUM NET CLEAR OPENING HEIGHT OF 24 INCHES, AND MINIMUM NET CLEAR OPENING WIDTH OF 20 INCHES.
13. EXTERIOR WALLS WITH A FIRE SEPARATION DISTANCE LESS THAN 3'-0" FEET SHALL HAVE 1 HOUR PROTECTION OF 5/8" GYP BOARD AT BOTH SIDES OF THE WALL.
14. OVERHANG PROJECTIONS WITH A FIRE SEPARATION DISTANCE LESS THAN 3'-0" (FEET) SHALL BE PROVIDED WITH 5/8" GYP. BOARD UNDERSIDE FOR 1-HOUR PROTECTION.
15. ALL "GLASS OPENINGS" SHALL BE IMPACT RESISTANT GLAZING (COMPLY WITH REQUIREMENTS OF THE LARGE MISSILE TEST OF ASTM 1996 AND OF ASTME 1886 FASTENED IN ACCORDANCE WITH TABLE R301.2.1.2 OF FRC 2020.
16. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY SAFETY APPARATUS REQUIRED TO ENSURE THE HEALTH AND WELFARE OF THE GENERAL PUBLIC, THE OWNERS, AND ANY WORKERS.
17. THE CONTRACTOR SHALL HAVE THE WORK SITE CLEANED ON A DAILY BASIS. THE DISPOSAL OF ANY WASTE SHALL BE OFF SITE AND IN A MANNER PRESCRIBED UNDER THE LAW.
18. CONTRACT DRAWINGS AND SPECIFICATIONS REPRESENT FINISHED STRUCTURE. THEY DO NOT INDICATE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY TO PROTECT STRUCTURE AND PERSONNEL DURING CONSTRUCTION. SUCH MEASURES SHALL INCLUDE BUT NOT BE LIMITED TO BRACING, SHORING OF LOADS DUE TO CONSTRUCTION EQUIPMENT, EXCAVATION PROTECTIONS, SCAFFOLDING, JOB SITE SAFETY, ETC. OBSERVATION VISITS TO THE SITE BY ARCHITECT, OWNER, OR ENGINEER SHALL NOT INCLUDE INSPECTIONS OF ABOVE ITEMS.
19. IT IS RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE VARIOUS TRADES ON BUILDING TO ALLOW SUFFICIENT ROOM FOR ALL EQUIPMENT.
20. CONTRACTOR TO COORDINATE ALL UTILITIES INSTALLATION AND CONNECTION WITH LOCAL UTILITY COMPANY.
21. THE CONTRACTOR SHALL PROVIDE FOR POSITIVE DRAINAGE AROUND THE BUILDING INCLUDING ANY TEMPORARY MEASURES DURING THE CONSTRUCTION SO AS TO ENSURE NO WATER DAMAGE TO THE BUILDING.
22. ALL REMOVED TOPSOIL SHALL BE STORED AND USED FOR FINISH GRADING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVAL OF ALL DEBRIS MATERIAL PRIOR TO FINISH GRADING.
23. CONTRACTOR SHALL COORDINATE & INSTALL WOOD BLOCKING IN FRAMING AS NEEDED TO SUPPORT ANY ITEMS MOUNTED TO THE WALLS.
24. ALL PENETRATIONS THROUGH FIRE RATED WALLS ARE TO BE SEALED WITH CODE APPROVED FIRESTOPPING MATERIAL.
25. THE CONTRACTOR SHALL VERIFY THE MIN. F.F. ELEV. WITH THE CITY/PARISH FEMA ELEVATION AND BENCHMARK CERTIFICATE.
26. ALL DRIVEWAY AND SIDEWALKS SHALL MEET LOCAL DEPARTMENT OF PUBLIC WORKS STANDARD DETAILS IF APPLICABLE.
27. CONTRACTOR SHALL PROVIDE COLOR SCHEMES FOR ALL CABINETS, COUNTERTOPS, FLOORING AND EXTERIOR MATERIALS IN A NEUTRAL COLOR PALETTE. ALL INTERIOR WALLS, CEILINGS AND TRIM MUST BE WHITE.
28. CONTRACTOR SHALL PROVIDE ALL PLUMBING FIXTURES, ELECTRICAL FIXTURES, DOOR HARDWARE, BATHROOM HARDWARE, AND BATHROOM ACCESSORIES IN A CONSISTENT MATERIAL FINISH.
29. CONTRACTOR SHALL PROVIDE CLEAN OUT LOCATIONS, TIE-IN LOCATIONS, AND WATER AND SEWER LINE LOCATIONS ON SITE TO PERMIT DEPARTMENT FOR REVIEW.
30. CONTRACTOR SHALL PROVIDE ELECTRICAL LOAD CALCULATIONS AND ANY ADDITIONAL ELECTRICAL INFORMATION REQUESTED BY PERMIT DEPARTMENT NOT SHOWN IN DRAWINGS.

NOTE: THIS IS A PROTOTYPE DESIGN, NOT INTENDED FOR CONSTRUCTION. FACTORS SUCH AS LOCATION, SURVEY, ZONING, LOCAL CODES, BASE FLOOD ELEVATION REQUIREMENTS, SURVEY, GEOTECHNICAL REPORT, LOCAL CLIMATE, AND SITE SPECIFIC CONDITIONS WILL IMPACT THE FINAL DESIGN OF PROTOTYPE HOMES INTENDED FOR CONSTRUCTION. THESE DRAWINGS REQUIRE MODIFICATION AND APPROVAL BY THE ENGINEER AND ARCHITECT TO BE USED FOR CONSTRUCTION.

PROJECT INFORMATION:

OCCUPANCY:	SINGLE FAMILY RESIDENTIAL
BUILDING CODE:	2020 FLORIDA BUILDING CODE, BUILDING, 7TH EDITION 2020 FLORIDA BUILDING CODE, RESIDENTIAL, 7TH EDITION
PERMIT TYPE:	NEW CONSTRUCTION
TYPE OF CONSTRUCTION:	TYPE V

ZONING INFORMATION:

ZONING CLASSIFICATION:	TBD
USE:	DWELLING, SINGLE-FAMILY
MINIMUM LOT AREA:	SINGLE FAMILY: TBD SF/DU
MINIMUM LOT WIDTH:	SINGLE FAMILY: TBD
MAX. BUILDING HEIGHT:	SINGLE FAMILY: TBD
FRONT YD MIN. REQ:	SINGLE FAMILY: TBD
INT SIDE YD REQ:	SINGLE FAMILY: TBD
CORNER SIDE YD MIN. REQ:	SINGLE FAMILY: TBD
REAR YD MIN. REQ:	SINGLE FAMILY: TBD

FFE INFORMATION:

FLOOD ZONE:	TBD
FEMA BASE FLOOD ELEVATION:	TBD
HIGHEST ADJACENT GRADE:	TBD
CROWN OF THE ROAD:	TBD
PROPOSED FFE.:	TBD

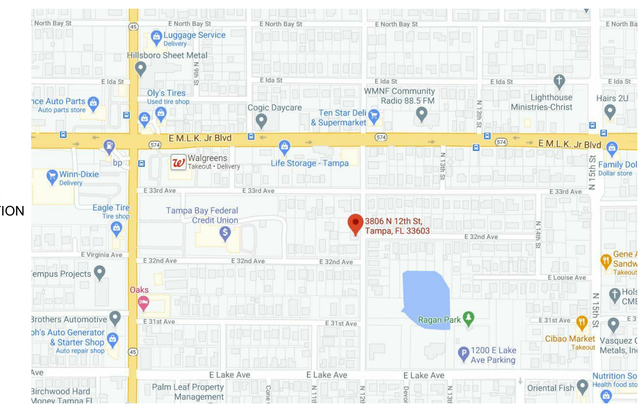
BUILDING INFORMATION:

FIRST FLOOR:	1251 SF
FRONT PORCH:	141 SF
REAR PORCH:	16 SF
BUILDING HEIGHT:	TBD
CONDITIONED AREA VOLUME:	8,840 CF

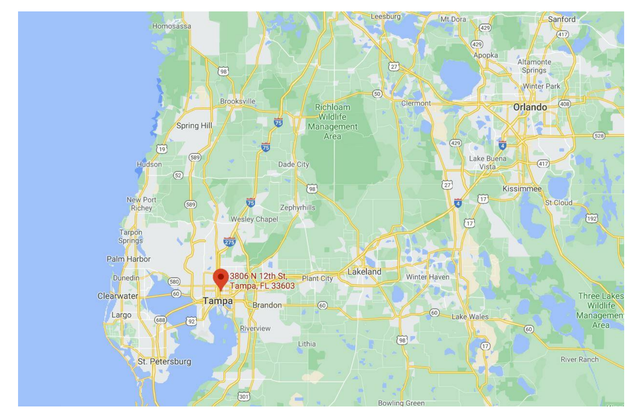
50% PRELIMINARY DESIGN NOTES:
THIS DRAWING SET IS PROVIDED TO ALLOW THE CONTRACTOR TO START PREPARATION OF SUBMITTALS FOR THIS PROJECT REQUIRED FOR PERMIT BY THE AUTHORITY HAVING JURISDICTION (AHJ). THIS DESIGN IS PRELIMINARY, AND NOT FOR CONSTRUCTION. THE CONTRACTOR MAY ELECT TO START PREPARATION OF DOCUMENTS FOR PERMIT NOT PROVIDED BY THE ENGINEER OF RECORD INCLUDING BUT NOT LIMITED TO:

- TRUSS DESIGN DRAWINGS AND ENGINEERING
- WINDOW AND DOOR PRODUCT APPROVALS REQUIRED BY THE AHJ
- ADDITIONAL COMPONENTS AND CLADDING PRODUCT APPROVALS REQUIRED BY THE AHJ.

INDEX OF DRAWINGS	
G-1	TITLE SHEET
C-1	SITE PLAN & DETAILS
A-1	ARCHITECTURAL PLANS
A-2	ELEVATIONS
A-3	REFLECTED CEILING PLAN AND INTERIOR ELEVATIONS
A-4	SCHEDULES AND NOTES
A-5	VINYL SIDING DETAILS FOR SLAB ON GRADE
E-1	ELECTRICAL PLANS
M-1	MECHANICAL
M-2	MECHANICAL
M-3	MECHANICAL
P-1	PLUMBING PLAN
S-1	STRUCTURAL NOTES
S-2	FOUNDATION PLANS & DETAILS
S-3	FRAMING PLANS
S-4	FRAMING DETAILS



STREET MAP



VICINITY MAP

No.	Description	Date

2 BEDROOM PROTOTYPE SOG

Address TBD
City. Florida Zip Code

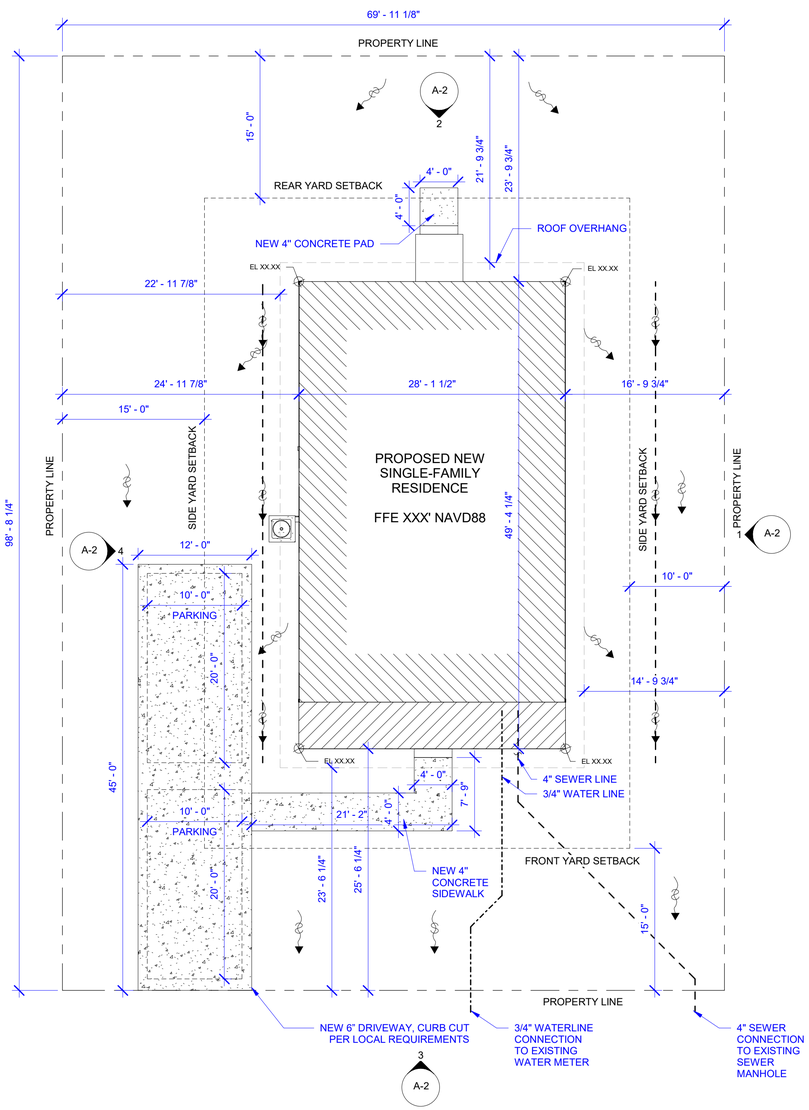
TITLE SHEET

Project Number	2019-15
Date	01/25/2022
Drawn By	CR
Checked By	IP

50% PRELIMINARY DESIGN, NOT FOR CONSTRUCTION

G-1

SITE PLAN IS PRELIMINARY, SUBJECT TO CHANGE AFTER RECEIVING SURVEY AND ELEVATION CERTIFICATE.



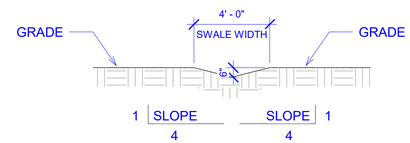
1 SITE PLAN
1/8" = 1'-0"

FFE INFORMATION:

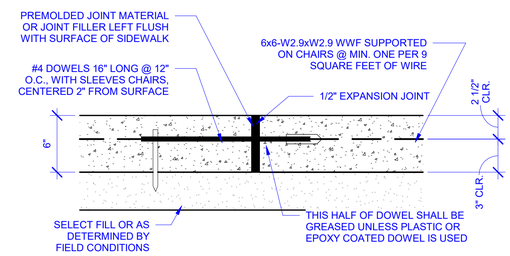
FLOOD ZONE:	TBD
FEMA BASE FLOOD ELEVATION:	TBD
HIGHEST ADJACENT GRADE:	TBD
CROWN OF THE ROAD:	TBD
PROPOSED FFE.:	TBD

SITE PLAN LEGEND

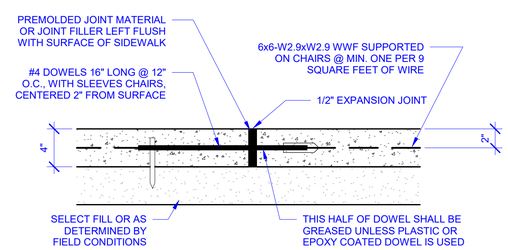
EL XX.XX	EXISTING GRADE
EL XX.XX	PROPOSED GRADE
MEX	MATCH EXISTING GRADE
FFE	FINISH FLOOR ELEVATION
L.P.	LOW POINT OF SWALE
	SLOPE ARROW



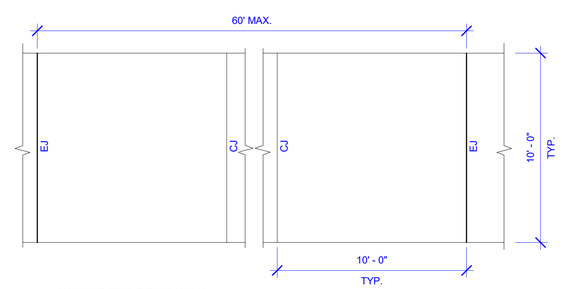
10 SWALES SECTIONS
1/4" = 1'-0"



5 DRIVEWAY EXPANSION JOINT (EJ)
NOT TO SCALE



8 SIDEWALK EXPANSION JOINT (EJ)
NOT TO SCALE



2 CONCRETE DRIVEWAY
NOT TO SCALE

GENERAL SITE PLAN NOTES:

1. ALL PAVEMENT IN PUBLIC RIGHT OF WAY SHALL MEET THE DETAILS AND REQUIREMENTS OF THE LOCAL AUTHORITY HAVING JURISDICTION.
2. ALL CURB CUTS AND DRIVEWAY APRONS SHALL MEET THE DETAILS AND REQUIREMENTS OF THE LOCAL AUTHORITY HAVING JURISDICTION.
3. ALL SIDEWALKS WITHIN THE PROPERTY BOUNDARY TO BE 4" THICK, 4000 PSI W/ 6x6-W2.9xW2.9 WWF, AND SHALL RECEIVE BROOM FINISH 90 DEG. TO THE DIRECTION OF TRAVEL.
4. ALL DRIVEWAYS WITHIN THE PROPERTY BOUNDARY TO BE 6" THICK, 4000 PSI W/ 6x6-W2.9xW2.9 WWF, AND SHALL RECEIVE BROOM FINISH 90 DEG. TO THE DIRECTION OF TRAVEL.
5. SLOPE ALL CONCRETE PAVING AWAY FROM BUILDING AT 1% MINIMUM. SLOPE ALL CONCRETE WALKS AWAY FROM BUILDING AT 2% MAXIMUM.
6. SLOPE ALL FINAL GRADING AWAY FROM BUILDING TO ENSURE POSITITVE DRAINAGE. MAXIMUM SLOPE FOR LANDSCAPED AREAS IS 25%.
7. LAY NEW SOD TO COVER ALL AREAS OF YARD DISTURBED BY CONSTRUCTION ACTIVITIES.
8. SLOPE ALL CONCRETE PAVING AWAY FROM BUILDING AT 1% MINIMUM. SLOPE ALL CONCRETE WALKS AWAY FROM BUILDING AT 2% MINIMUM.
9. SLOPE ALL FINAL GRADING AWAY FROM BUILDING TO ENSURE POSITIVE DRAINAGE.
10. LAY NEW SOD TO COVER ALL AREAS OF YARD DISTURBED BY CONSTRUCTION ACTIVITIES. SOD MUST BE BAHIA, ZOYSIA, OR BERMUDA, EXCEPT FOR MONROE COUNTY WHERE ALL DISTURBED AREAS SHALL BE LIMESTONE.
11. SITE GRADING PLAN BASED ON AVAILABLE SURVEY DATA. EXISTING DRAINAGE PATTERNS TO BE CONFIRMED IN FIELD BY THE CONTRACTOR.
12. CONTRACTOR SHALL REGRADE SITE IMMEDIATELY ADJACENT TO THE NEWLY CONSTRUCTED HOUSE TO PROVIDE POSITIVE DRAINAGE AWAY FROM THE FOUNDATION OF THE HOME.
13. THE CONTRACTOR SHALL NOT ALTER SITE DRAINAGE PATTERNS IN A WAY THAT DIRECTS ADDITIONAL FLOWS ONTO ADJACENT PROPERTIES.
14. UTILITY TIE-IN LOCATIONS ARE BASED ON LIMITED FIELD DATA.CONTRACTOR TO VERIFY SEWER AND WATER TIE-IN LOCATIONS IN FIELD AND NOTIFY ENGINEER OF ANY DISCREPANCY

SITE INFORMATION:

SITE AREA: **TBD SF**

EXISTING IMPERVIOUS AREA:

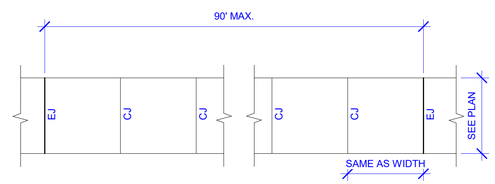
- EXISTING HOME: TBD SF
- EXISTING CONCRETE: TBD SF
- EXISTING COVERED AREA : TBD SF
- **TOTAL:** **TBD SF**

NEW IMPERVIOUS AREA:

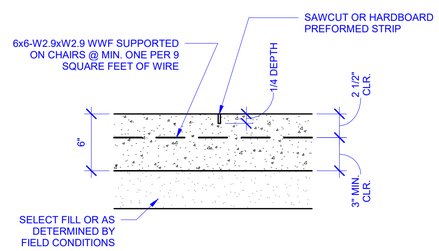
- NEW HOME WITH 2'
- ROOF OVERHANG: 1,714 SF
- CONCRETE : TBD SF
- **TOTAL:** **TBD SF**

% IMPERVIOUS AREA: **TBD %**
% PERVIOUS AREA: **TBD %**

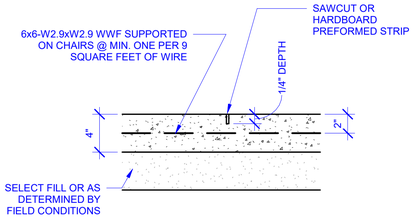
IMPERVIOUS AREA: TBD SF
PERVIOUS AREA: TBD SF



3 CONCRETE SIDEWALK
NOT TO SCALE



4 DRIVEWAY CONTROL JOINT (CJ)
NOT TO SCALE



7 SIDEWALK CONTROL JOINT (CJ)
NOT TO SCALE

No.	Description	Date

2 BEDROOM PROTOTYPE
SOG

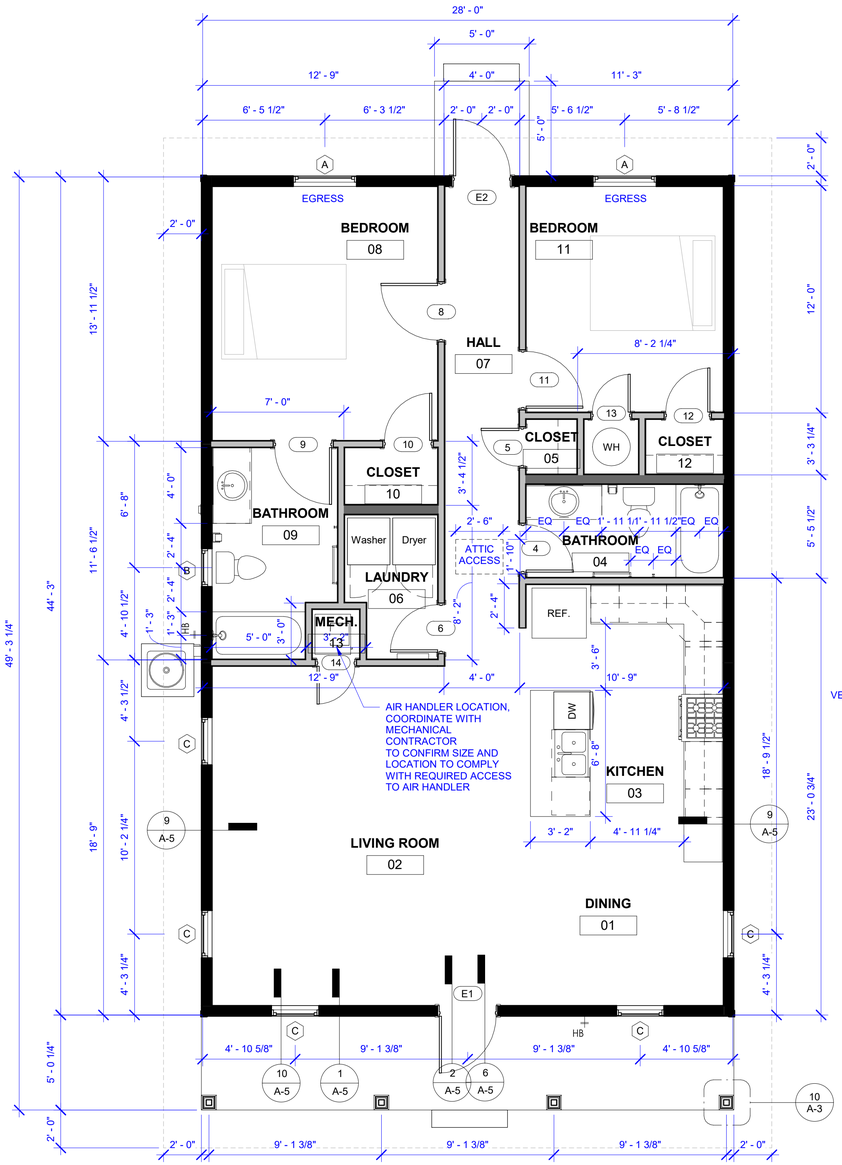
Adress TBD
City, Florida Zip Code

SITE PLAN & DETAILS

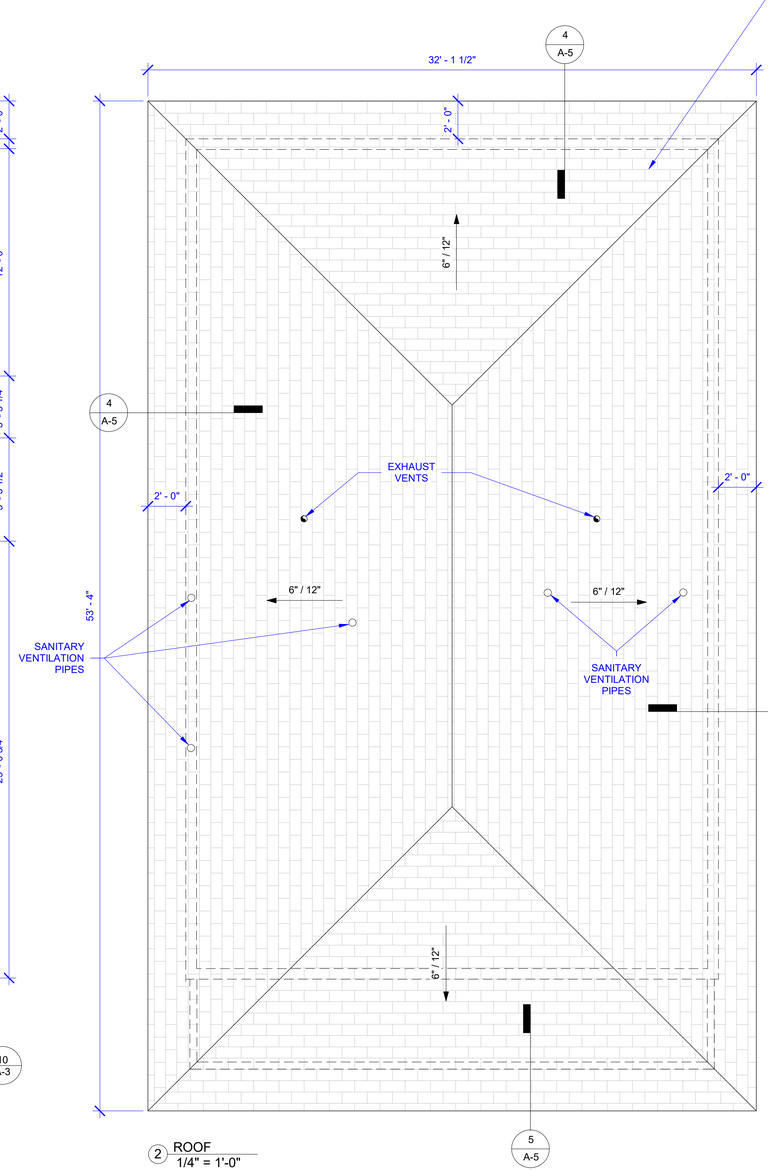
Project Number	2019-15
Date	01/25/2022
Drawn By	SM
Checked By	IP

50% PRELIMINARY DESIGN, NOT FOR CONSTRUCTION

C-1



1 FIRST FLOOR
1/4" = 1'-0"



2 ROOF
1/4" = 1'-0"

ASPHALT SHINGLE ROOF INSTALLED PER FRC 2020 905.2.
ROOF UNDERLAYMENT SHALL BE INSTALLED PER FRC 2020 905.1.1 METHOD NUMBER 2: INCLUDE A MINIMUM 4-INCH-WIDE (102 MM) STRIP OF SELF-ADHERING POLYMER-MODIFIED BITUMEN MEMBRANE COMPLYING WITH ASTM D1970, INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS FOR THE DECK MATERIAL, AND SHALL BE APPLIED OVER ALL JOINTS IN THE ROOF DECKING. AN APPROVED UNDERLAYMENT IN ACCORDANCE WITH TABLE R905.1.1.1 FOR THE APPLICABLE ROOF COVERING SHALL BE APPLIED OVER THE ENTIRE ROOF OVER THE 4-INCH-WIDE (102 MM) MEMBRANE STRIPS.
PROVIDE PIPE BOOT AT ALL ROOF PENETRATIONS PER DETAIL.
ASPHALT ROOF SHINGLES SHALL BE CLASSIFIED AS ASTM D3161 CLASS F, TAS 107 OR ASTM D7158 CLASS H.

BUILDING INFORMATION:

FIRST FLOOR:	1251 SF
FRONT PORCH:	141 SF
REAR PORCH:	16 SF
BUILDING HEIGHT:	TBD
CONDITIONED AREA VOLUME:	8,840 CF

ROOF VENTILATION (FIBER CEMENT):
ROOF AREA = 1713 SF
REQUIRED NET FREE AREA PER FBC R806.2 = 1713/150 = 11.42 SF
SOFFIT AREA = 326 SF
SOFFIT NET FREE AREA = 12.6 SQ INCHES/SF (BY MANUFACTURER, HARDIESOFFIT VENTEDPLUS BASIS OF DESIGN)
PROPOSED ROOF NET FREE AREA = 326*12.6/144 = **28.53 SF**

ROOF VENTILATION (VINYL):
ROOF AREA = 1713 SF
REQUIRED NET FREE AREA PER FBC R806.2 = 1713/150 = 11.42 SF
SOFFIT AREA = 326 SF
SOFFIT NET FREE AREA = 14.34 SQ INCHES/SF (BY MANUFACTURER, GEORGIA PACIFIC VENTED SOFFIT BASIS OF DESIGN)
PROPOSED ROOF NET FREE AREA = 326*14.34/144 = **32.46 SF**

WINDOW SCHEDULE

Type Mark	Width	Height	Description	Count	Head Height
A	3' - 4"	5' - 0"	DOUBLE HUNG VINYL WINDOW EGRESS	2	6' - 8"
B	2' - 0"	4' - 0"	DOUBLE HUNG VINYL WINDOW	1	6' - 8"
C	2' - 6"	5' - 0"	DOUBLE HUNG VINYL WINDOW	5	6' - 8"

WINDOW NOTES:

1. WINDOW ASSEMBLY SHALL BE IMPACT RESISTANT AND INSTALLED TO MEET THE SPECIFIED WIND LOAD
2. WINDOWS SHALL MEET THE REQUIREMENTS OF TABLE R402.1.2 OF THE FLORIDA ENERGY CONSERVATION CODE 2020.
3. FENESTRATION U-FACTOR SHALL BE ≤ 0.40
4. GLAZED FENESTRATION SHGC VALUE SHALL BE ≤ 0.25
5. WINDOWS SHALL BE ENERGY STAR QUALIFIED.
6. PROVIDE INSECT SCREENS AT ALL WINDOWS.

DOOR SCHEDULE

Mark	Width	Height	Rough Width	Rough Height	Description	Comments
4	2' - 6"	6' - 8"	2' - 8"	6' - 9"	6-PANEL INTERIOR DOOR	
5	2' - 0"	6' - 8"	2' - 2"	6' - 9"	6-PANEL INTERIOR DOOR	
6	2' - 6"	6' - 8"	2' - 8"	6' - 9"	6-PANEL INTERIOR DOOR	
8	3' - 0"	6' - 8"	3' - 2"	6' - 9"	6-PANEL INTERIOR DOOR	
9	3' - 0"	6' - 8"	3' - 2"	6' - 9"	6-PANEL INTERIOR DOOR	
10	2' - 6"	6' - 8"	2' - 8"	6' - 9"	6-PANEL INTERIOR DOOR	
11	3' - 0"	6' - 8"	3' - 2"	6' - 9"	6-PANEL INTERIOR DOOR	
12	2' - 4"	6' - 8"	2' - 6"	6' - 9"	6-PANEL INTERIOR DOOR	
13	2' - 0"	6' - 8"	2' - 2"	6' - 9"	6-PANEL INTERIOR DOOR	
14	2' - 0"	5' - 0"	2' - 2"	5' - 1"	6-PANEL INTERIOR DOOR	CONFIRM WITH HVAC CONTRACTOR.
E1	3' - 0"	6' - 8"	3' - 2"	6' - 9"	HALF LITE ENTRY DOOR	ENERGY STAR QUALIFIED, PROVIDE GLAZING MEETING REQUIREMENTS FOR HAZARDOUS GLASS LOCATIONS PER FBC-R308.3 AND R308.4
E2	3' - 0"	6' - 8"	3' - 2"	6' - 9"	HALF LITE ENTRY DOOR	ENERGY STAR QUALIFIED, PROVIDE GLAZING MEETING REQUIREMENTS FOR HAZARDOUS GLASS LOCATIONS PER FBC-R308.3 AND R308.4

DOOR HARDWARE TYPE SCHEDULE

MARK	DESCRIPTION	MANUFACTURER	MODEL	FINISH	COMMENTS	HARDWARE TYPE

WALL TYPE SCHEDULE

WALL TYPE	INTERIOR/EXTERIOR	DESCRIPTION (EXTERIOR TO INTERIOR)
1	EXTERIOR	VINYL SIDING, MOISTURE BARRIER, PLYWOOD WALL SHEATHING, 2x6 STUD @ 16" O.C., R-19 BATT INSULATION, 1/2" GYPSUM BOARD
2	INTERIOR	1/2" GYPSUM BOARD, 2X6 STUD @ 16" O.C., GYPSUM BOARD
3	INTERIOR	1/2" GYPSUM BOARD, 2X4 STUD @ 16" O.C., GYPSUM BOARD

FIRST FLOOR LEGEND

- EXTERIOR 2X6 FRAMED WALL
- INTERIOR 2X6 FRAMED WALL
- INTERIOR 2X4 FRAMED WALL

EXTERIOR DOOR INFORMATION

Mark	Width	Height	Description	DESIGN PRESSURE (POSITIVE) PSF	DESIGN PRESSURE (NEGATIVE) PSF
E1	3' - 0"	6' - 8"	HALF LITE ENTRY DOOR	41	-53
E2	3' - 0"	6' - 8"	HALF LITE ENTRY DOOR	41	-53

TABLE VALUES DETERMINED PER ASCE 7-16 (MINIMUM DESIGN LOADS AND ASSOCIATED CRITERIA FOR BUILDINGS AND OTHER STRUCTURES)

EXTERIOR WINDOW INFORMATION

Type Mark	Width	Height	Description	DESIGN PRESSURE (POSITIVE) PSF	DESIGN PRESSURE (NEGATIVE) PSF
A	3' - 4"	5' - 0"	DOUBLE HUNG VINYL WINDOW EGRESS	42	-55
B	2' - 0"	4' - 0"	DOUBLE HUNG VINYL WINDOW	43	-57
C	2' - 6"	5' - 0"	DOUBLE HUNG VINYL WINDOW	42	-56

TABLE VALUES DETERMINED PER ASCE 7-16 (MINIMUM DESIGN LOADS AND ASSOCIATED CRITERIA FOR BUILDINGS AND OTHER STRUCTURES)

No.	Description	Date

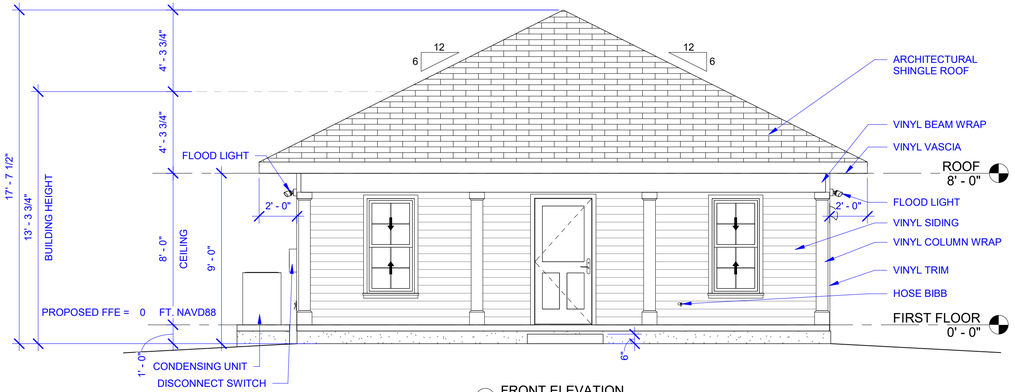
ARCHITECTURAL PLANS

Project Number	2019-15
Date	01/25/2022
Drawn By	SM
Checked By	IP

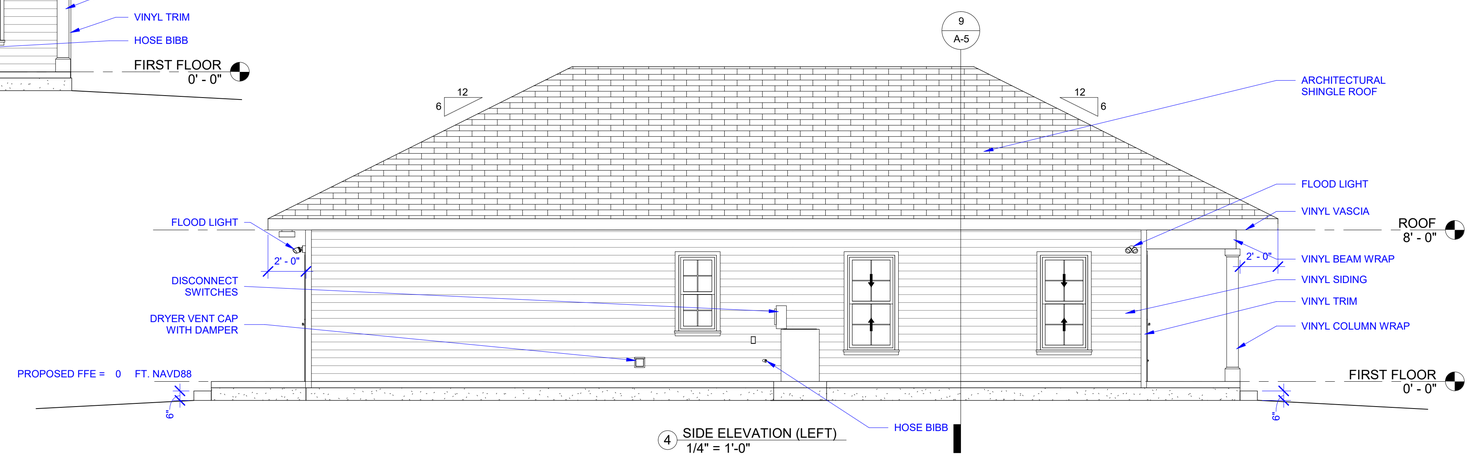
50% PRELIMINARY DESIGN, NOT FOR CONSTRUCTION

A-1

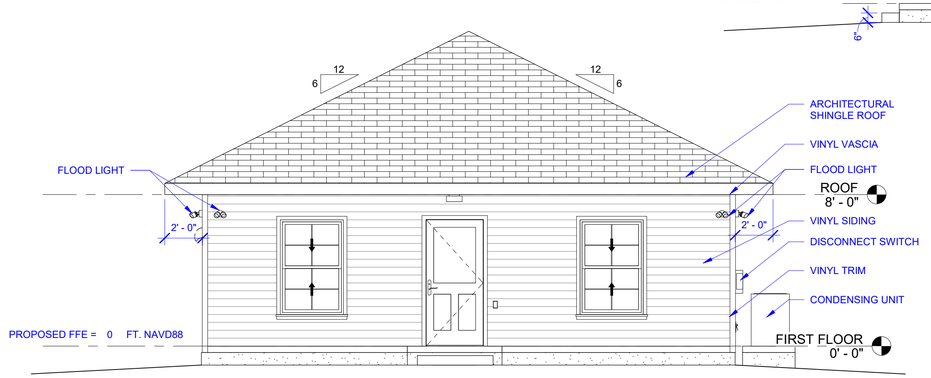
ALL EXTERIOR ELEMENTS MAKING UP THE BUILDING ENVELOPE INCLUDING SIDING, FASCIA, SOFFIT, WINDOWS, DOORS, GLAZING, TRIM, ETC. SHALL BE APRROVED TO COMPLY WITH THE FLORIDA BUILDING CODE INCLUDING THE **HIGH VELOCITY HURRICANE ZONE** BY THE MIAMI-DADE COUNTY DEPARTMENT OF REGULATORY AND ECONOMIC RESOURCES (RER) BOARD AND CODE ADMINISTRATION DIVISION. CONTRACTOR SHALL SUBMIT THE **MIAMI-DADE NOTICE OF ACCEPTANCE (NOA)** FOR EACH PROPOSED EXTERIOR PRODUCT FOR PERMIT APPROVAL, AND PRODUCTS SHALL BE INSTALLED PER THE APPROVED DETAILS IN THE NOA.



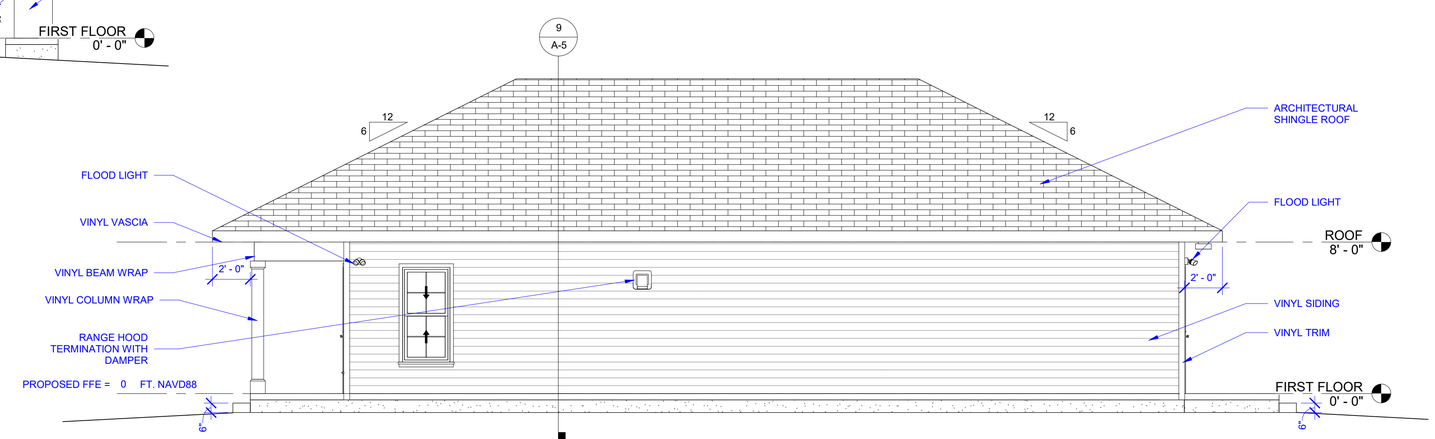
3 FRONT ELEVATION
1/4" = 1'-0"



4 SIDE ELEVATION (LEFT)
1/4" = 1'-0"



2 REAR ELEVATION
1/4" = 1'-0"



1 SIDE ELEVATION (RIGHT)
1/4" = 1'-0"

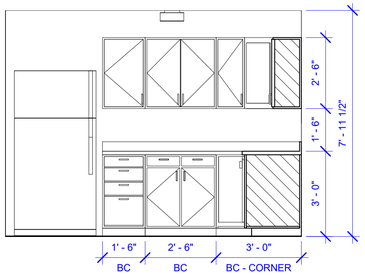
No.	Description	Date

ELEVATIONS

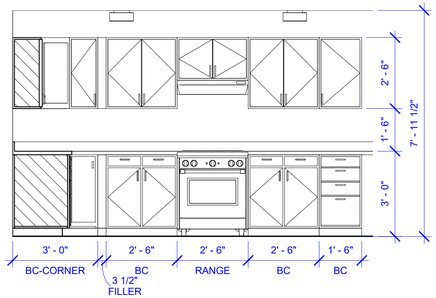
Project Number	2019-15
Date	01/25/2022
Drawn By	SM
Checked By	IP

50% PRELIMINARY DESIGN, NOT FOR CONSTRUCTION

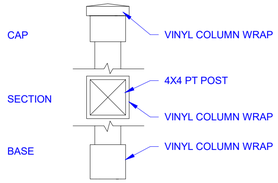
A-2



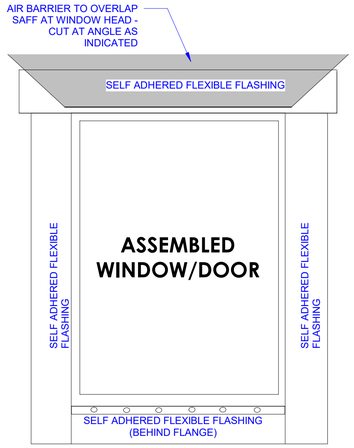
5 KITCHEN ELEVATION
3/8" = 1'-0"



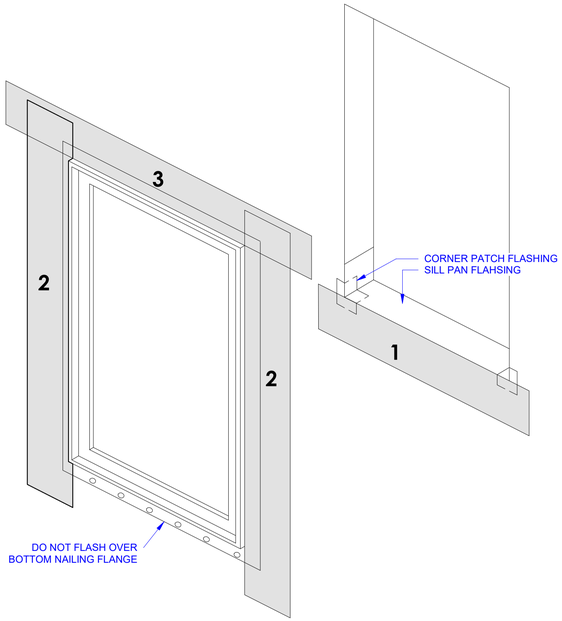
4 KITCHEN ELEVATION
3/8" = 1'-0"



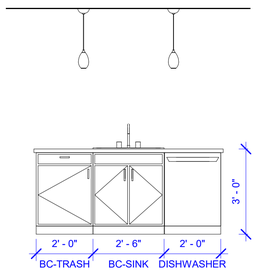
10 POST DETAIL
3/4" = 1'-0"



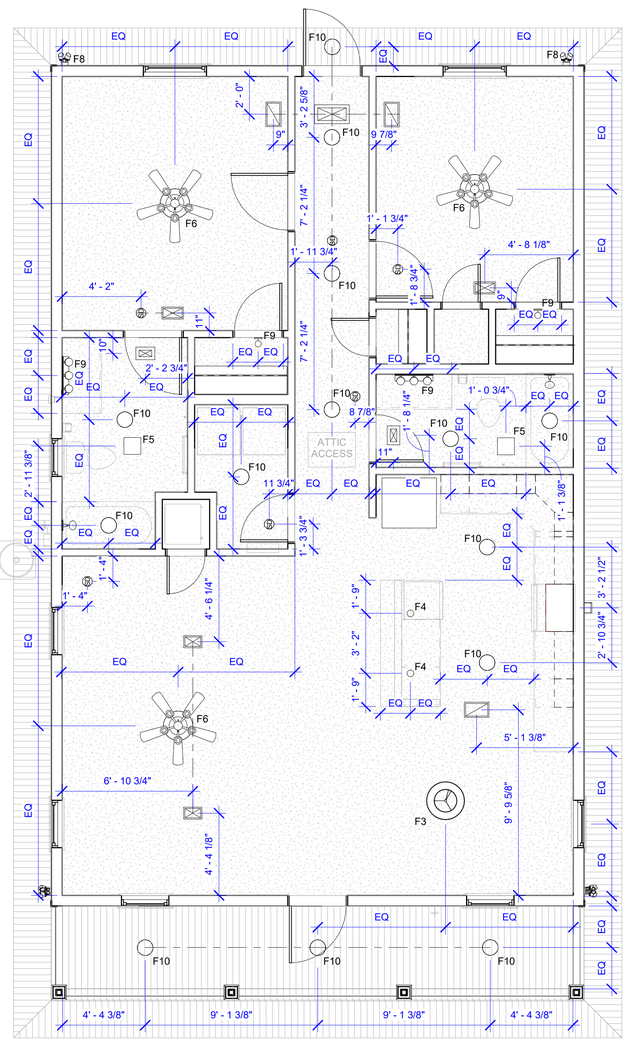
2 WINDOW AND DOOR FLASHING DETAIL
6" = 1'-0"



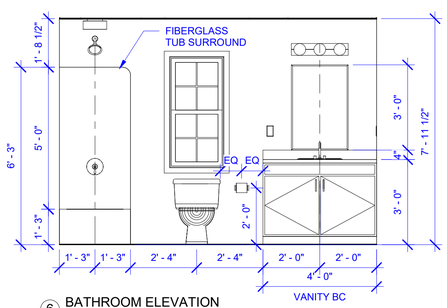
WINDOW AND DOOR FLASHING DIAGRAM
REFER TO MANUFACTURERS GUIDELINES FOR INSTALLING WINDOW, INCLUDING THE ADDITION OF FLEXIBLE CORNER FLASHING.



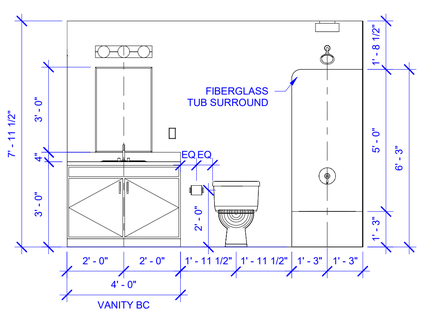
3 KITCHEN ELEVATION
3/8" = 1'-0"



9 FIRST FLOOR RCP
1/4" = 1'-0"



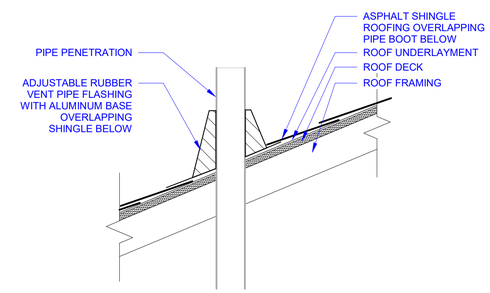
6 BATHROOM ELEVATION
3/8" = 1'-0"



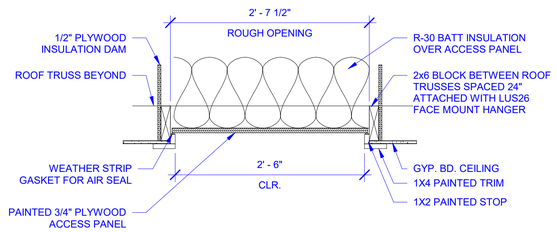
7 BATHROOM ELEVATION
3/8" = 1'-0"

REFLECTED CEILING PLAN LEGEND

- 1/2" GYPSUM BOARD
- VENTED VINYL SOFFIT
- F3 PENDANT LIGHT FIXTURE
- F9 WALL MOUNT FIXTURE
- F5 EXHAUST FAN
- F8 MOTION SENSOR FLOOD LIGHT
- F6 CEILING FAN W/ LIGHT KIT
- COMBO SMOKE & CARBON MONOXIDE DETECTOR
- F10 CEILING MOUNTED FIXTURE
- F4 ISLAND PENDANT FIXTURE
- 10x10 DIFFUSER, SEE MECHANICAL
- 8x4 DIFFUSER, SEE MECHANICAL
- 12x6 DIFFUSER, SEE MECHANICAL
- 10x6 DIFFUSER, SEE MECHANICAL
- 14x8 DIFFUSER, SEE MECHANICAL



8 ROOF PENETRATION DETAIL
1 1/2" = 1'-0"



1 ATTIC ACCESS
1" = 1'-0"

No.	Description	Date

REFLECTED CEILING PLAN AND INTERIOR ELEVATIONS

Project Number	2019-15
Date	01/25/2022
Drawn By	SM
Checked By	IP

50% PRELIMINARY DESIGN, NOT FOR CONSTRUCTION

A-3

FINISH TYPE SCHEDULE

MARK	DESCRIPTION	MANUFACTURER	MODEL	FINISH	NOTES
VPF	VINYL PLANK FLOORING	SEE SPECS	SEE SPECS	SEE SPECS	STANDARD GRADE, CERTIFIED BY FLOORSCORE OR GREENGAURD AS LOW VOC
CPT	CARPET	SEE SPECS	SEE SPECS	SEE SPECS	STANDARD GRADE, CERTIFIED BY THE CARPET AND RUG INSTITUTE (CRI) GREEN SEAL OF APPROVAL AND LOW-VOC OR NO ADHESIVES ARE USED FOR INSTALLATION
B1	WOOD BASE	SEE SPECS	SEE SPECS	SEE SPECS	BASEBOARDS WILL BE 3 1/4 INCH MDF. 3/4" SHOE MOULDING. NO EXPOSED UREA-FORMALDEHYDE WOOD PRODUCTS ALLOWED OR MUST BE SEALED
B2	WOOD BASE W/ SHOE MOULDING	SEE SPECS	SEE SPECS	SEE SPECS	BASEBOARDS WILL BE 3 1/4 INCH MDF. 3/4" SHOE MOULDING. NO EXPOSED UREA-FORMALDEHYDE WOOD PRODUCTS ALLOWED OR MUST BE SEALED
GYP. PTD.	PAINTED GYSPUM BOARD	SEE SPECS	SEE SPECS	SEE SPECS	LEVEL 4 FINISH WITH LIGHT ORANGE PEEL TEXTURE, PRIMED AND 2 FINISH COATS
WP GYP. PTD	1/2 MOISTURE RESISTANT GYPSUM BOARD	SEE SPECS	SEE SPECS	SEE SPECS	LEVEL 4 FINISH WITH LIGHT ORANGE PEEL TEXTURE, PRIMED AND 2 FINISH COATS
KIT-CAB	KITCHEN CABINETS	SEE SPECS	SEE SPECS	SEE SPECS	
KIT-COUN	KITCHEN COUNTERTOPS	SEE SPECS	SEE SPECS	SEE SPECS	POST-FORMED LAMINATE
BATH-CAB	BATHROOM CABINETS	SEE SPECS	SEE SPECS	SEE SPECS	STANDARD GRADE PREFINISHED WITH HARDWARE. NO EXPOSED UREA-FORMALDEHYDE WOOD PRODUCTS ALLOWED OR MUST BE SEALED
BATH-COUN	BATHROOM COUNTERTOPS	SEE SPECS	SEE SPECS	SEE SPECS	CULTURED MARBLE WITH MOLDED SINK

*CONFIRM ALL FINISH TYPES WITH PROGRAM PRIOR TO PURCHASE AND INSTALLATION

VOC LIMITS

PAINTS APPLIED TO INTERIOR WALLS:
FLATS: 50 G/L NONFLATS: 100 G/L
GREEN SEAL STANDARD GS-11, PAINTS & COATINGS, 3RD EDITION, AUGUST 17, 2011

ANTI CORROSIVE AND ANTI RUST PAINTS:
250 G/L GREEN SEAL STANDARD GS-11, PAINTS & COATINGS, 3RD EDITION, AUGUST 17, 2011

CLEAR WOOD FINISHES:
VARNISH: 350 G/L LACQUER: 550 G/L SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT RULE 1113, ARCHITECTURAL COATINGS

FLOOR COATINGS: 100 G/L

SEALERS:
WATERPROOFING: 250 G/L
SANDING: 275 G/L
ALL OTHERS: 200 G/L

SHELLACS CLEAR: 730 G/L PIGMENTED: 550 G/L

STAINS: 250 G/L

BATHROOM ACCESSORY NOTES:

1. PROVIDE BLOCKING FOR ALL ACCESSORIES AS REQUIRED
2. PROVIDE AND INSTALL 1 EACH OF THE FOLLOWING BATHROOM ACCESSORIES:
   A. TOILET PAPER HOLDER
   B. ROBE HOOK
   C. TOWEL BAR

CABINETERY / COUNTERTOP NOTES:

1. KITCHEN COUNTERTOPS WILL BE POST-FORMED LAMINATE WITH INTEGRAL 4" BACKSPLASH.
2. KITCHEN WILL HAVE DOUBLE BASIN STAINLESS STEEL SINK WITH GARBAGE DISPOSER AND FAUCET WITH SPRAYER.
3. BATHROOM CABINETS WILL BE STANDARD GRADE PREFINISHED WITH HARDWARE. NO EXPOSED UREA-FORMALDEHYDE WOOD PRODUCTS ALLOWED OR MUST BE SEALED.
4. BATHROOM COUNTERTOPS WILL BE CULTURED MARBLE WITH MOLDED SINK AND 4" BACKSPLASH.
5. BATHROOM WILL HAVE FAUCET AT EACH SINK.
6. BATHROOMS WILL HAVE A 6 SQUARE FOOT MIRROR AT EACH SINK.

FLOORING / MOLDING NOTES:

1. BEDROOM AND BEDROOM CLOSET FLOORING WILL BE STANDARD GRADE CARPET AND PAD. CARPET AND PAD MUST BE CERTIFIED BY THE CARPET AND RUG INSTITUTE (CRI) GREEN SEAL OF APPROVAL AND LOW-VOC OR NO ADHESIVES ARE USED FOR INSTALLATION.
2. ALL OTHER ROOMS AND CLOSETS WILL BE STANDARD GRADE VINYL PLANK FLOORING. VINYL PLANK FLOORING SHALL BE CERTIFIED BY FLOORSCORE OR GREENGUARD AS LOW VOC.
3. BASEBOARDS WILL BE 3 ¼ INCH MDF. NO EXPOSED UREA-FORMALDEHYDE WOOD PRODUCTS ALLOWED OR MUST BE SEALED
4. SHOE MOLD TO BE INSTALLED ON ALL AREAS WITH VINYL PLANK FLOORING.

APPLIANCE NOTES:

1. WHITE OR BLACK FINISHES
2. RANGE FREESTANDING ELECTRIC STANDARD GRADE. OVEN MUST BE SELF CLEANING.
3. MICROWAVE OVEN OVER RANGE WITH BUILT-IN HOOD STANDARD GRADE.
4. SUPPLY HOSES TO WATER USING FIXTURES AND APPLIANCES MUST BE ARMORED, PEX OR METAL (EXCEPT COPPER).
5. REFRIGERATOR TOP FREEZER 22 CUBIC FOOT STANDARD GRADE ENERGY STAR.
6. DISHWASHER STANDARD GRADE ENERGY STAR.
7. GARBAGE DISPOSER ½ HP STANDARD GRADE.
8. WASHING MACHINE TOP LOADING STANDARD GRADE ENERGY STAR.
9. DRYER ELECTRIC STANDARD GRADE ENERGY STAR.

CLOSET NOTES:

1. ALL CLOSETS WILL HAVE STANDARD GRADE VINYL-COATED WIRE MESH SHELVING.

DRYWALL NOTES:

1. ½ INCH SAG RESISTANT DRYWALL HUNG, TAPED, FLOATED, AND TEXTURED READY FOR PAINT ON WALLS AND CEILINGS.
2. ALL WET AREAS AS REQUIRED PER FLORIDA BUILDING CODE WILL HAVE ½ INCH WATER ROCK (GREENBOARD) DRYWALL HUNG, TAPED, FLOATED, AND TEXTURED READY FOR PAINT ON WALLS AND CEILINGS. IN LIEU OF GREENBOARD REQUIRE CEMENT BOARD WITH TAPED SEAMS. ALL SHOWER WALLS MUST BE SEALED WITH AN ELASTOMERIC WATERPROOFING SEALER PRIOR TO TILE INSTALL. ALL FIBERGLASS INSERT MUST HAVE EDGES SEALED WITH WATERPROOFING CAULK.

DOOR NOTES:

1. ALL DOORS AND TRIM WILL BE PAINTED. ALL PAINTS SHALL BE LOW VOC - MAXIMUM 50 G/L.
2. ALL EXTERIOR DOOR LOCKS WILL BE KEYED ALIKE.
3. ALL INTERIOR DOORS WILL CONTAIN THE APPROPRIATE DOOR KNOBS.
4. ALL INTERIOR DOORS WILL HAVE 2 ¼ INCH MDF TRIM. NO EXPOSED UREA-FORMALDEHYDE WOOD PRODUCTS ALLOWED OR SEALED
5. ATTIC ACCESS WILL BE PAINTED PLYWOOD ACCESS PANEL PER DETAIL MEETING REQUIREMENTS OF FBC R807.

FINISH SCHEDULE

Number	Name	Floor Finish	Base Finish	Wall Finish	Ceiling Finish	Perimeter	Area
01	DINING	VPF	B2	GYP. PTD.	GYP. PTD.	46.55	138 SF
02	LIVING ROOM	VPF	B2	GYP. PTD.	GYP. PTD.	62.83	242 SF
03	KITCHEN	VPF	B2	GYP. PTD.	GYP. PTD.	50.10	149 SF
04	BATHROOM	VPF	B2	WP GYP. PTD.	GYP. PTD.	30.67	51 SF
05	CLOSET	CPT	B1	GYP. PTD.	GYP. PTD.	11.17	8 SF
06	LAUNDRY	VPF	B2	WP GYP. PTD.	GYP. PTD.	25.08	34 SF
07	HALL	VPF	B2	GYP. PTD.	GYP. PTD.	58.88	100 SF
08	BEDROOM	CPT	B1	GYP. PTD.	GYP. PTD.	50.67	160 SF
09	BATHROOM	VPF	B2	WP GYP. PTD.	GYP. PTD.	35.58	69 SF
10	CLOSET	CPT	B1	GYP. PTD.	GYP. PTD.	15.83	15 SF
11	BEDROOM	CPT	B1	GYP. PTD.	GYP. PTD.	44.67	124 SF
12	CLOSET	CPT	B1	GYP. PTD.	GYP. PTD.	14.00	12 SF
13	MECH.	VPF	B2	GYP. PTD.	GYP. PTD.	10.25	7 SF
Grand total: 13							1108 SF

PLUMBING FIXTURE SCHEDULE

ROOM	ITEM	MANUFACTURER	MODEL	NOTES	QUANTITY
09	VANITY SINK	SEE SPECS	SEE SPECS		1
04	VANITY SINK	SEE SPECS	SEE SPECS		1
09	VANITY FAUCET	SEE SPECS	SEE SPECS	1.5 GPM	1
04	VANITY FAUCET	SEE SPECS	SEE SPECS	1.5 GPM	1
09	SHOWER AND TUB FAUCET	SEE SPECS	SEE SPECS	2.0 GPM	1
04	SHOWER AND TUB FAUCET	SEE SPECS	SEE SPECS	2.0 GPM	1
09	BATHTUB & ENCLOSURE	SEE SPECS	SEE SPECS		1
04	BATHTUB & ENCLOSURE	SEE SPECS	SEE SPECS		1
03	KITCHEN SINK	SEE SPECS	SEE SPECS	DOUBLE BASIN STAINLESS STEEL	1
03	KITCHEN FAUCET	SEE SPECS	SEE SPECS	2.0 GPM	1

*VERIFY FIXTURES AND LOCATIONS WITH ARCHITECTURAL PLAN AND OWNER. ALL PLUMBING FIXTURES SHALL BE WATERSENSE

THERMAL ENVELOPE REQUIREMENTS

TYPE	REQUIREMENT
SEALANT	SEAL ALL GAPS AND PENETRATIONS IN BUILDING ENVELOPE WITH LOW VOC SEALANT OR SPRAY FOAM. ALL INSULATION SHALL BE FORMALDEHYDE FREE.
RAISED FLOOR INSULATION	R-19 INSULATION IN CONTACT WITH THE SUBFLOOR. ALL BATT INSULATION SHALL BE UNFACED OR INSTALLED WITH PAPER BACKING TO THE OUTSIDE OF THE HOUSE.
WALL INSULATION	R-19 BATT INSULATION
ATTIC INSULATION	MIN. R-38 BLOW-IN INSULATION PER MANUFACTURER'S SPECIFICATIONS TO A MINIMUM DENSITY OF 3.5 LBS. PER CUBIC FOOT (CF).
MOISTURE BARRIER	CONTINUOUS UNBROKEN MOISTURE BARRIER (HOUSE WRAP)
RADIANT BARRIER	RADIANT BARRIER FOIL INSTALLED AT UNDERSIDE OF ROOF
ROOF	PLYWOOD ROOF SHEATHING PER STRUCTURAL, ROOF UNDERLAYMENT PER FBC - RESIDENTIAL R905.1.1, ASPHALT SHINGLE ROOF, SEE ROOF PLAN
VENTED ATTIC SPACE	1FT PER 150 FT ROOF AREA, SEE CALCULATIONS ON ROOF PLAN
WINDOWS	ENERGY STAR QUALIFIED, SEE WINDOW NOTES ON SHEET A1.1
EXTERIOR DOORS	ENERGY STAR QUALIFIED DOORS
FL ECC 2020	MEET REQUIREMENTS OF SECTION R402, AND TABLE R402.1.2
FORM R402-2020	CONTRACTOR REQUIRED TO COMPLETE FORM R402-2020 RESIDENTIAL BUILDING THERMAL ENVELOPE APPROACH FOR THE APPROPRIATE CLIMATE ZONE.

APPLIANCE SCHEDULE

ROOM	ITEM	MANUFACTURER	MODEL	FINISH	NOTES
KITCHEN	MICROWAVE	SEE SPECS	SEE SPECS	SEE SPECS	OR APPROVED EQUAL
KITCHEN	RANGE	SEE SPECS	SEE SPECS	SEE SPECS	FREESTANDING ELECTRIC STANDARD GRADE OR APPROVED EQUAL, OVEN MUST BE SELF CLEANING
KITCHEN	DISHWASHER	SEE SPECS	SEE SPECS	SEE SPECS	OR APPROVED EQUAL, ENERGY STAR RATED
KITCHEN	REFRIDGERATOR	SEE SPECS	SEE SPECS	SEE SPECS	REFRIDGERATOR TOP FREEZER 22 CUBIC FOOT STANDARD GRADE OR APPROVED EQUAL, ENERGY STAR RATED
LAUNDRY	WASHER	SEE SPECS	SEE SPECS	SEE SPECS	OR APPROVED EQUAL, ENERGY STAR RATED
LAUNDRY	DRYER	SEE SPECS	SEE SPECS	SEE SPECS	OR APPROVED EQUAL, ENERGY STAR RATED
MECH	HOT WATER HEATER	SEE SPECS	SEE SPECS	SEE SPECS	OR APPROVED EQUAL
KITCHEN	GARBAGE DISPOSAL	SEE SPECS	SEE SPECS	SEE SPECS	1/2 HP STANDARD GRADE OR APPROVED EQUAL

*SUPPLY HOSES TO WATER USING FIXTURES AND APPLIANCES MUST BE ARMORED, PEX OR METAL (EXCEPT COPPER)

STAIR AND RAILING REQUIREMENTS

TYPE	REQUIREMENT
MIN. WIDTH	36"
MIN. HEAD HEIGHT	6' 8"
MAX. RISER HEIGHT	7 3/4"
MIN. TREAD DEPTH	10"
TREAD NOSING	MIN. 3/4", MAX. 11/4"
MAX. TREAD SLOPE	1/4" FROM BACK TO NOSING
HANDRAILS	REQUIRED IF 4 OR MORE RISERS
HANDRAIL HEIGHT	34"-38"
HANDRAIL PROFILE	DIAMETER 1 1/4" - 2"
GUARDRAILS	REQUIRED AT OPEN PORCHES, BALCONIES, RAMPS, OR RAISED FLOOR SURFACES THAT ARE 30" OR MORE ABOVE THE FLOOR BELOW
MIN. GUARDRAIL HEIGHT	36"
GUARDRAIL OPENING LIMITATIONS	MUST NOT ALLOW PASSAGE OF 4" SPHERE
LANDINGS	REQUIRED AT TOP & BOTTOM
MIN. LANDING SIZE	36" x 36"
DOORS	ENERGY STAR QUALIFIED DOORS
MAX. STAIR VERTICAL RISE	147" BETWEEN LEVELS OR LANDINGS

LIGHT FIXTURE SCHEDULE

MARK	DESCRIPTION	MANUFACTURER	MODEL	COMMENTS	QUANTITY
F1	INTERIOR RECESSED CAN	SEE SPECS	SEE SPECS		0
F2	EXTERIOR RECESSED CAN	SEE SPECS	SEE SPECS		0
F3	CHANDELIER	SEE SPECS	SEE SPECS		1
F4	ISLAND PENDANT	SEE SPECS	SEE SPECS		2
F5	EXHAUST FAN	SEE SPECS	SEE SPECS		2
F6	CEILING FAN W/ LIGHT KIT	SEE SPECS	SEE SPECS		3
F7	RECESSED CAN (WET RATED)	SEE SPECS	SEE SPECS		0
F8	EXTERIOR FLOOD LIGHT	SEE SPECS	SEE SPECS		4
F9	VANITY FIXTURE	SEE SPECS	SEE SPECS		4
F10	CEILING MOUNTED FIXTURE	SEE SPECS	SEE SPECS		14

*CONFIRM ALL FIXTURES AND SWITCHING TYPES WITH OWNER PRIOR TO PURCHASE AND INSTALLATION

BATHROOM ACCESSORY SCHEDULE

ROOM	DESCRIPTION	MANUFACTURER	MODEL	FINISH	COMMENTS
04	TOILET PAPER HOLDER	SEE SPECS	SEE SPECS	SEE SPECS	PROVIDE AND INSTALL ONE
09	TOILET PAPER HOLDER	SEE SPECS	SEE SPECS	SEE SPECS	PROVIDE AND INSTALL ONE
04	ROBE HOOK	SEE SPECS	SEE SPECS	SEE SPECS	PROVIDE AND INSTALL ONE
09	ROBE HOOK	SEE SPECS	SEE SPECS	SEE SPECS	PROVIDE AND INSTALL ONE
04	TOWEL BAR	SEE SPECS	SEE SPECS	SEE SPECS	PROVIDE AND INSTALL ONE
09	TOWEL BAR	SEE SPECS	SEE SPECS	SEE SPECS	PROVIDE AND INSTALL ONE

*PROVIDE BLOCKING FOR ALL ACCESSORIES AS REQUIRED

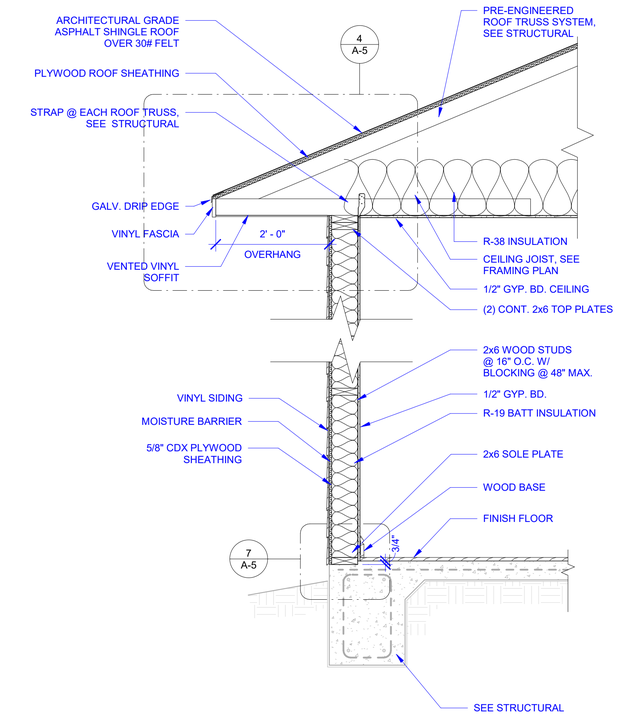
No.	Description	Date

SCHEDULES AND NOTES

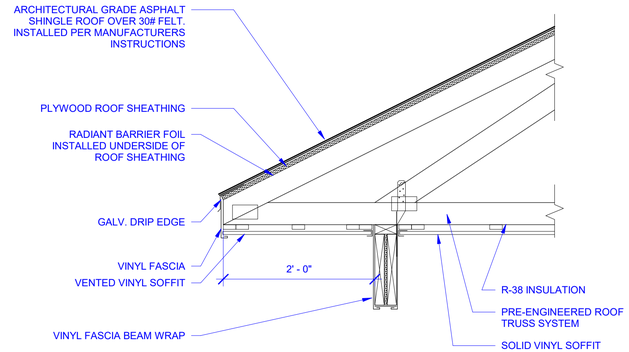
Project Number 2019-15
Date 01/25/2022
Drawn By ZP
Checked By IP

50% PRELIMINARY DESIGN, NOT FOR CONSTRUCTION

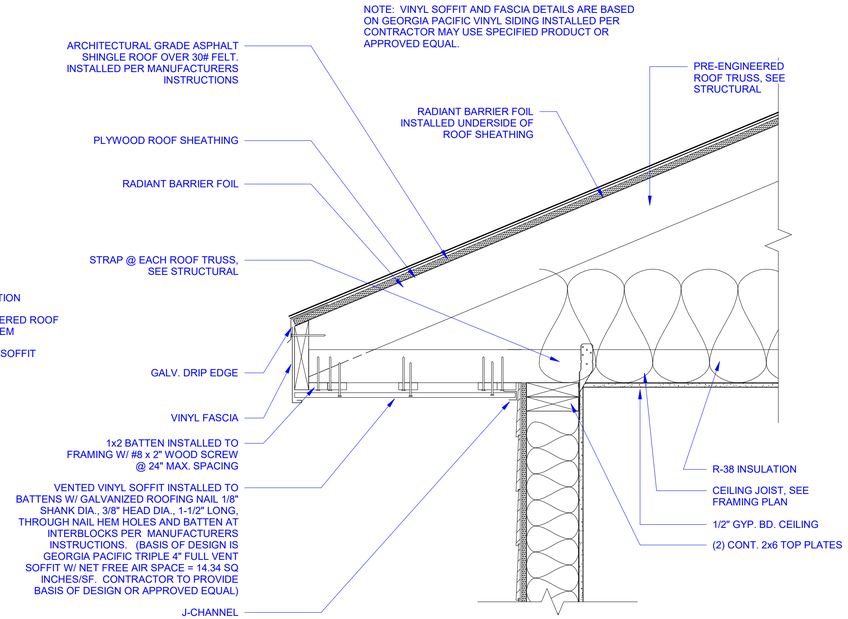
A-4



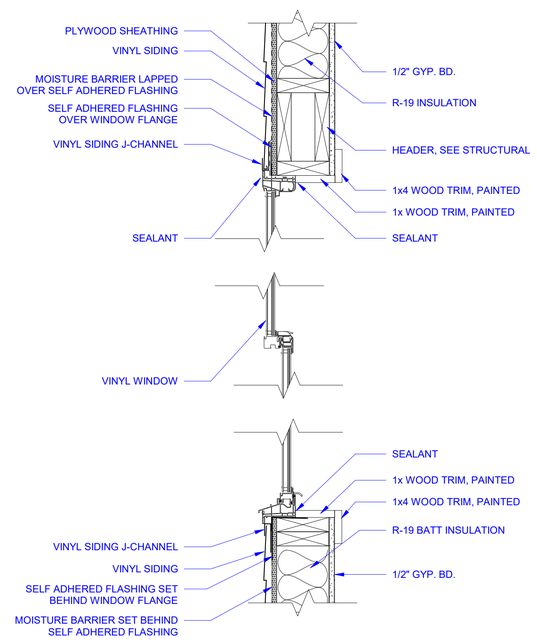
9 TYP. WALL SECTION
3/4" = 1'-0"



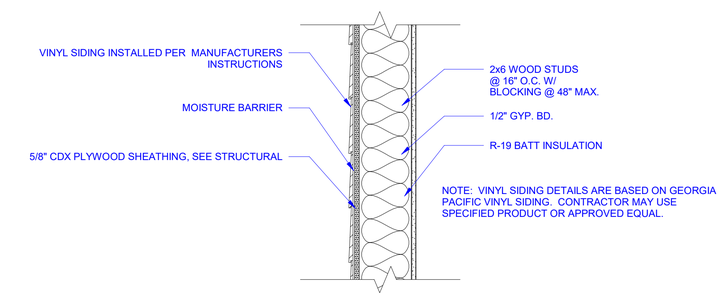
5 BEAM WRAP DETAIL
1" = 1'-0"



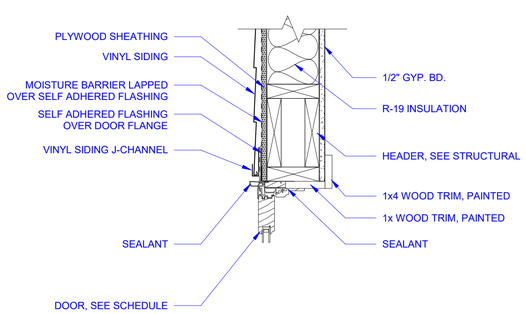
4 VINYL SOFFIT AND FASCIA DETAIL2
1 1/2" = 1'-0"



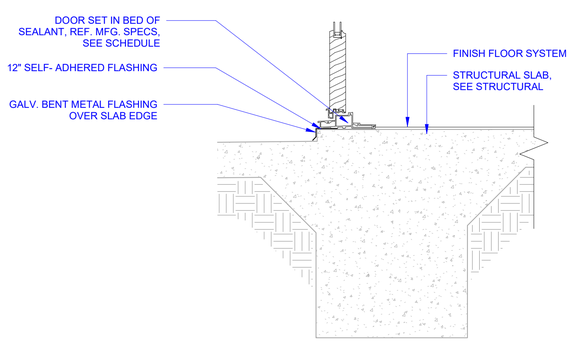
10 WINDOW HEADER AND SILL DETAIL
1 1/2" = 1'-0"



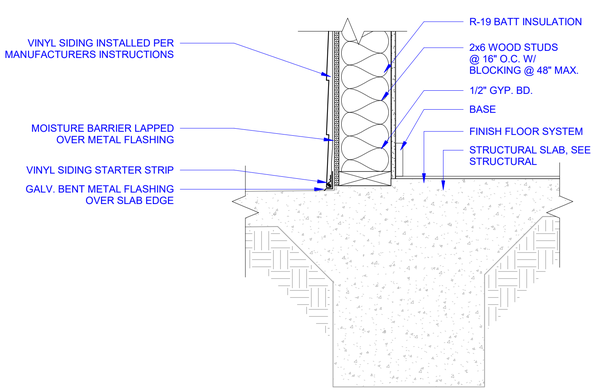
3 VINYL SIDING DETAIL2
1 1/2" = 1'-0"



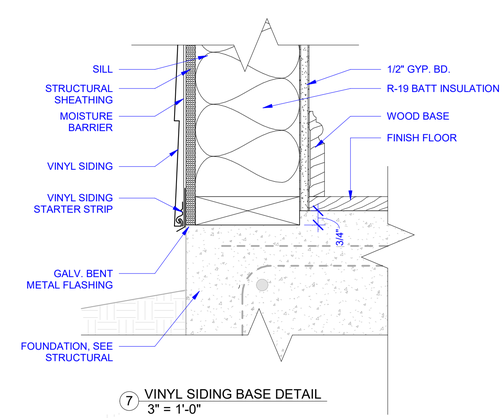
6 VINYL SIDING @ DOOR HEADER
1 1/2" = 1'-0"



2 DOOR THRESHOLD @ PORCH DETAIL
1 1/2" = 1'-0"



1 VINYL SIDING @ PORCH DETAIL
1 1/2" = 1'-0"



7 VINYL SIDING BASE DETAIL
3" = 1'-0"

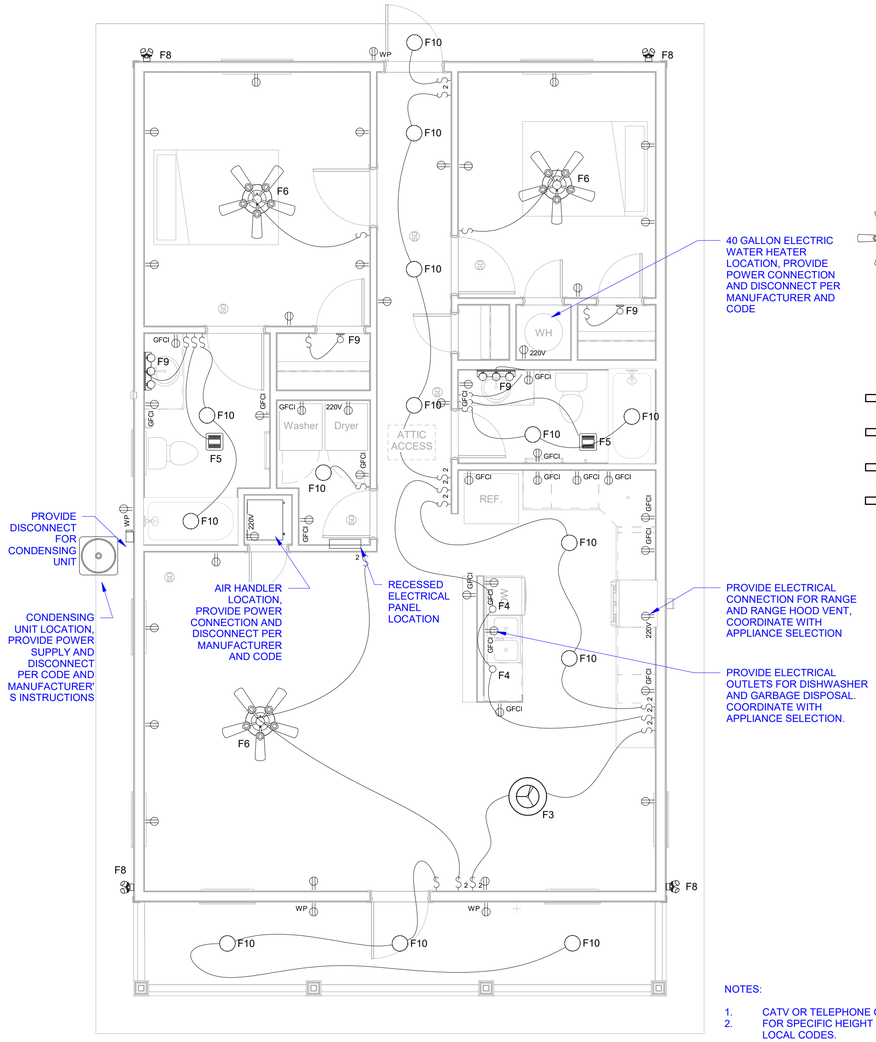
No.	Description	Date

VINYL SIDING DETAILS FOR SLAB ON GRADE

Project Number	2019-15
Date	01/25/2022
Drawn By	ZP
Checked By	IP

50% PRELIMINARY DESIGN, NOT FOR CONSTRUCTION

A-5



1 LIGHTING AND OUTLET LOCATION PLAN
1/4" = 1'-0"

ELECTRICAL LEGEND

- F3 PENDANT LIGHT FIXTURE
- F9 WALL MOUNT FIXTURE
- F5 EXHAUST FAN
- F8 MOTION SENSOR FLOOD LIGHT
- F6 CEILING FAN W/ LIGHT KIT
- CO COMBO SMOKE & CARBON MONOXIDE DETECTOR
- F10 CEILING MOUNTED FIXTURE
- F4 ISLAND PENDANT FIXTURE
- 220V 220V OUTLET
- WP GFCI WEATHERPROOF OUTLET
- S SINGLE POLE SWITCH
- S2 TWO-POLE SWITCH
- DISCONNECT

NOTES:

1. CATV OR TELEPHONE CABLE SHALL NOT BE ATTACHED TO THE SERVICE MAST.
2. FOR SPECIFIC HEIGHT REQUIREMENTS & CLEARANCE, REFER TO N.E.C. AND LOCAL CODES.
3. SERVICE RISER SHALL BE 2" MINIMUM RIGID METAL CONDUIT
4. SERVICE RISER MUST WITHSTAND 200 LBS. OF CONTINUOUS PULL.
5. MAXIMUM CONDUIT HEIGHT ABOVE THE ROOF IS 48".

ELECTRICAL NOTES:

1. ELECTRICAL WORK SHALL BE DESIGN BUILD BY ELECTRICAL SUBCONTRACTOR.
2. ELECTRICAL CONTRACTOR SHALL BE LICENSED AND RESPONSIBLE TO MEET ALL APPLICABLE REQUIREMENTS BY CODE
3. ELECTRICAL CONTRACTOR TO COORDINATE ELECTRICAL DRAWINGS WITH ARCHITECTURAL, STRUCTURAL, AND MECHANICAL DRAWINGS. CONTRACTOR IS RESPONSIBLE TO COORDINATE ANY DISCREPANCIES AND NOTIFY THE ARCHITECT PRIOR TO PROCEEDING WITH WORK.
4. PROVIDE SERVICE CONNECTION AND PROPER GROUNDING.
5. PROVIDE ALL WIRING AND EQUIPMENT FOR ALL FIXTURES AND EQUIPMENT INDICATED IN ARCHITECTURAL, MECHANICAL, AND ELECTRICAL DRAWINGS PER CODE.
6. NOTE THAT ELECTRICAL OUTLETS INDICATED ON DRAWINGS ARE SHOWN AS A REMINDER FOR EQUIPMENT LOCATIONS OR SPECIFIC REQUIREMENTS TO THIS PROJECT. OUTLETS SHALL BE INSTALLED THROUGHOUT AS REQUIRED BY CODE WHETHER INDICATED ON THE PLANS OR NOT.
7. COMBINATION SMOKE AND CARBON MONOXIDE DETECTORS SHALL BE INSTALLED OUTSIDE OF EACH SEPARATE SLEEPING AREA IN THE IMMEDIATE VICINITY OF THE BEDROOMS AND ON EACH ADDITIONAL STORY OF THE DWELLING. ALL DETECTORS SHALL BE APPROVED AND LISTED IN ACCORDANCE UL 217 and UL 2034 WITH THE MANUFACTURER'S INSTRUCTIONS. REQUIRED SMOKE DETECTORS SHALL RECEIVE THEIR PRIMARY SOURCES FROM THE BUILDING WIRING, AND WHEN PRIMARY POWER IS INTERUPTED, SHALL RECEIEVE POWER FROM A BATTERY. COMBINATION SMOKE AND CARBON MONOXIDE DETECTORS SHALL BE INSTALLED PER SECTIONS R314 AND R315 OF THE 2020 FRC
8. ALL LIGHTING FIXTURES SHALL BE ENERGY STAR QUALIFIED FIXTURES
9. ALL LIGHTING FIXTURES SHALL BE LED AND INCLUDE LED BULBS
10. ALL OUTLETS SHALL BE INSTALLED MIN. 15" FROM FFE
11. ALL LIGHT SWITCHES, THERMOSTAT, CONTROLS, SHALL BE INSTALLED AT HEIGHT MIN. 36" FROM FFE AND MAX. 48" FROM FFE.
12. PROVIDE POWER TO VERTICAL PLATFORM LIFT PER MANUFACTURER'S REQUIREMENTS.
13. ALL RECEPTACLES SHALL BE TAMPER RESISTANT
14. ALL FIXTURES AND DEVICES SHALL BE UL LISTED
15. ALL 120-VOLT, SINGLE-PHASE, 15- AND 20-AMPERE BRANCH CIRCUITS SUPPLYING OUTLETS OR DEVICES INSTALLED IN DWELLING UNIT KITCHENS, FAMILY ROOMS, DINING ROOMS, LIVING ROOMS, PARLORS, LIBRARIES, DENS, BEDROOMS, SUNROOMS, RECREATION ROOMS, CLOSETS, HALLWAYS, LAUNDRY AREAS, OR SIMILAR ROOMS OR AREAS SHALL BE PROTECTED BY AFCIs.
16. CONTRACTOR SHALL PROVIDE ELECTRICAL LOAD CALCULATIONS AND ANY ADDITIONAL ELECTRICAL INFORMATION REQUESTED BY PERMIT DEPARTMENT NOT SHOWN IN DRAWINGS.

LIGHT FIXTURE SCHEDULE

MARK	DESCRIPTION	MANUFACTURER	MODEL	COMMENTS	QUANTITY
F1	INTERIOR RECESSED CAN	SEE SPECS	SEE SPECS		0
F2	EXTERIOR RECESSED CAN	SEE SPECS	SEE SPECS		0
F3	CHANDELIER	SEE SPECS	SEE SPECS		1
F4	ISLAND PENDANT	SEE SPECS	SEE SPECS		2
F5	EXHAUST FAN	SEE SPECS	SEE SPECS		2
F6	CEILING FAN W/ LIGHT KIT	SEE SPECS	SEE SPECS		3
F7	RECESSED CAN (WET RATED)	SEE SPECS	SEE SPECS		0
F8	EXTERIOR FLOOD LIGHT	SEE SPECS	SEE SPECS		4
F9	VANITY FIXTURE	SEE SPECS	SEE SPECS		4
F10	CEILING MOUNTED FIXTURE	SEE SPECS	SEE SPECS		14

*CONFIRM ALL FIXTURES AND SWITCHING TYPES WITH OWNER PRIOR TO PURCHASE AND INSTALLATION

PANEL-A

SPECIFICATIONS:	SQUARE D QO OR EQUAL	MAINS:	MLO
AMPACITY:	200 AMPS	LOCATION:	LAUNDRY
VOLTAGE:	120/240V, 1PH, 3 WIRE	MOUNTING:	RECESSED

AMPS	POLE	TOTAL VA	WIRE SIZE	GRD SIZE	DESCRIPTION	CIRCUIT No.		CIRCUIT No.	DESCRIPTION	GRD SIZE	WIRE SIZE	TOTAL VA	POLE	AMPS
30	2	5672	10	10	AHU-1	1		2	DRYER	10	10	5000	2	30
30	2		10	10		3		4		10	10		2	30
30	2	*	10	10	AHU-1	5		6	RANGE	6	10	8500	2	50
30	2		10	10		7		8		6	10		2	50
30	2	4500	10	10	WATER HEATER	9		10	SPACE					
30	2		10	10		11		12	SPACE					
20	1	#	12	12	RECEPT. FRONT ENTRANCE	13		14	RECEPT. LIVING ROOM	12	12	#	1	20
20	1	#	12	12	RECEPT. BACK ENTRANCE	15		16	SPACE					
20	1	1500	12	12	RECEPT. DINING ROOM SMALL APPLIANCE	17		18	L.T.S. KITCHEN/LIVING	12	12	#	1	20
					SPACE	19		20	L.T.S. BEDROOMS/LAUNDRY	12	12	#	1	20
20	1	#	12	12	RECEPT. /LTS BATHROOM #1	21		22	L.T.S. OUTDOOR FLOOD LIGHTS	12	12	#	1	20
20	1	#	12	12	RECEPT. BEDROOM #1	23		24	SMALL APPLIANCE	12	12	1500	1	20
20	1	#	12	12	RECEPT. BEDROOM #2	25		26	SMALL APPLIANCE	12	12	1500	1	20
20	1	#	12	12	RECEPT. /LTS BATHROOM #2	27		28	SMALL APPLIANCE	12	12	1500	1	20
20	1	1500	12	12	RECEPT. LAUNDRY ROOM	29		30	DISPOSAL	12	12	1500	1	20
20	1	300	12	12	RECIRC. PUMP	31		32	DISHWASHER	12	12	1500	1	20
					SPACE	33		34	REFRIGERATOR	12	12	1200	1	20
					SPACE	35		36	MICROWAVE	12	12	1200	1	20
					SPACE	37		38	WASHER	12	12	1500	1	20
					SPACE	39		40	SPACE					
					SPACE	41		42	SPACE					

PANEL-A

DEMAND LOAD CALCULATIONS

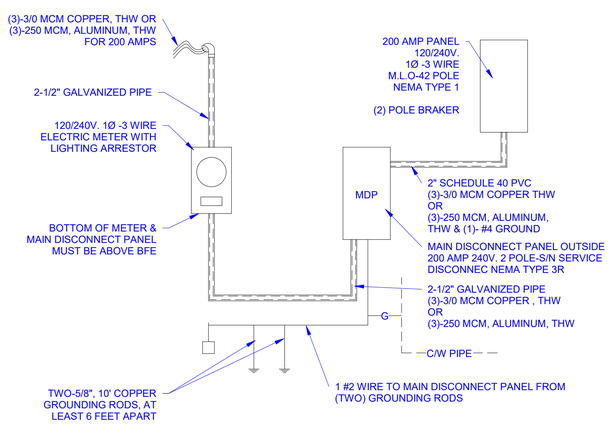
AREA (SQFT)	=	1,168		
GENERAL LIGHTING LOAD @ 3VA PER SQ.FT.	=	3,504		
TOTAL GENERAL LOAD	=	36,204		VA
RECEP. 1st 10,000 VA @ 100%	=	10,000 @ 100% =	10,000	VA
REST @40%	=	26,204 @ 40%=	10,482	VA
AIR CONDITIONERS @ 65%	=	5,672 @ 65%=	3,687	VA
OTHERS @ 100%	=	0 @ 100%=	0	VA
TOTAL LOAD	=		24,168	VA
CURRENT PER PHASE	=	TOTAL LOAD (VA) / (240V)		
	=	101	AMPS	

NOTES:

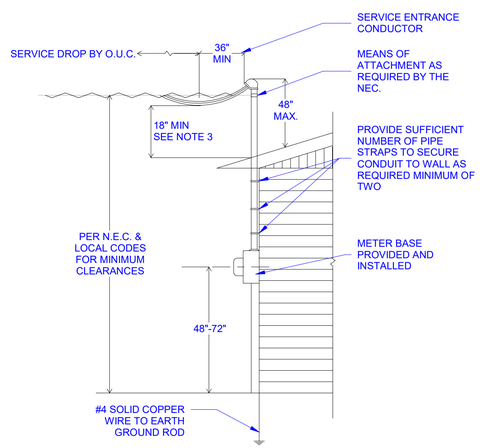
* NON SIMULTANEOUS LOAD. 100% OF COOLING IS LARGER THAN 65% OF HEAT.

INCLUDED IN GENERAL LIGHTING LOAD PER AREA.

VERIFY ALL EQUIPMENT LOAD, BREAKERS AND WIRE SIZES PRIOR TO INSTALLATION ORDERING OF MATERIALS



2 OVERHEAD ELECTRICAL RISER DIAGRAM
3/8" = 1'-0"



3 TYPICAL OVERHEAD RESIDENTIAL SERVICE INSTALLATION
3/8" = 1'-0"

No.	Description	Date

ELECTRICAL PLANS

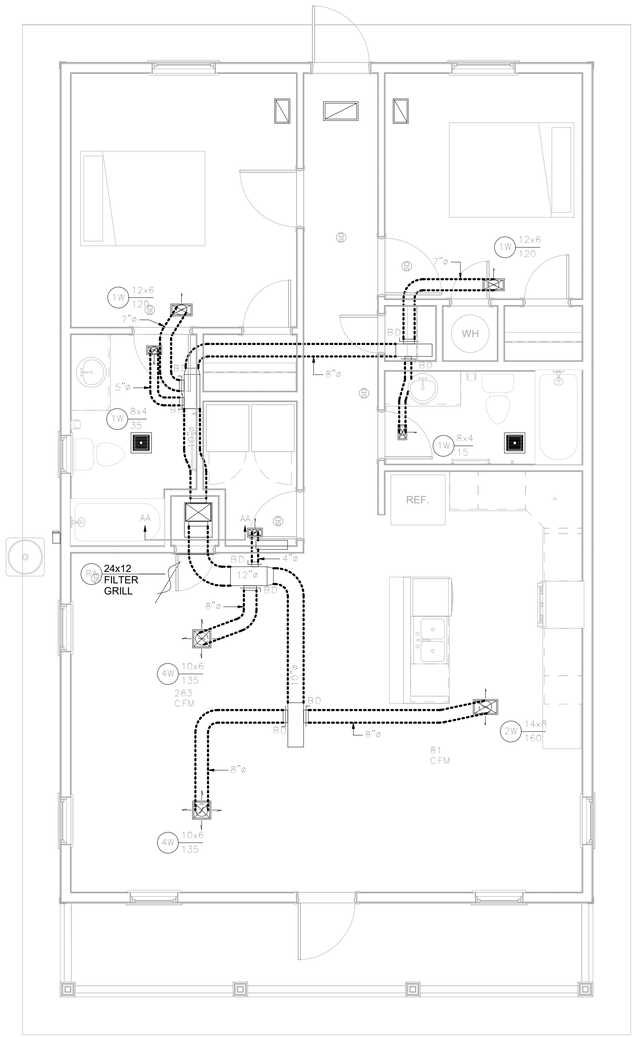
Project Number	2019-15
Date	01/25/2022
Drawn By	SM
Checked By	IP

50% PRELIMINARY DESIGN, NOT FOR CONSTRUCTION

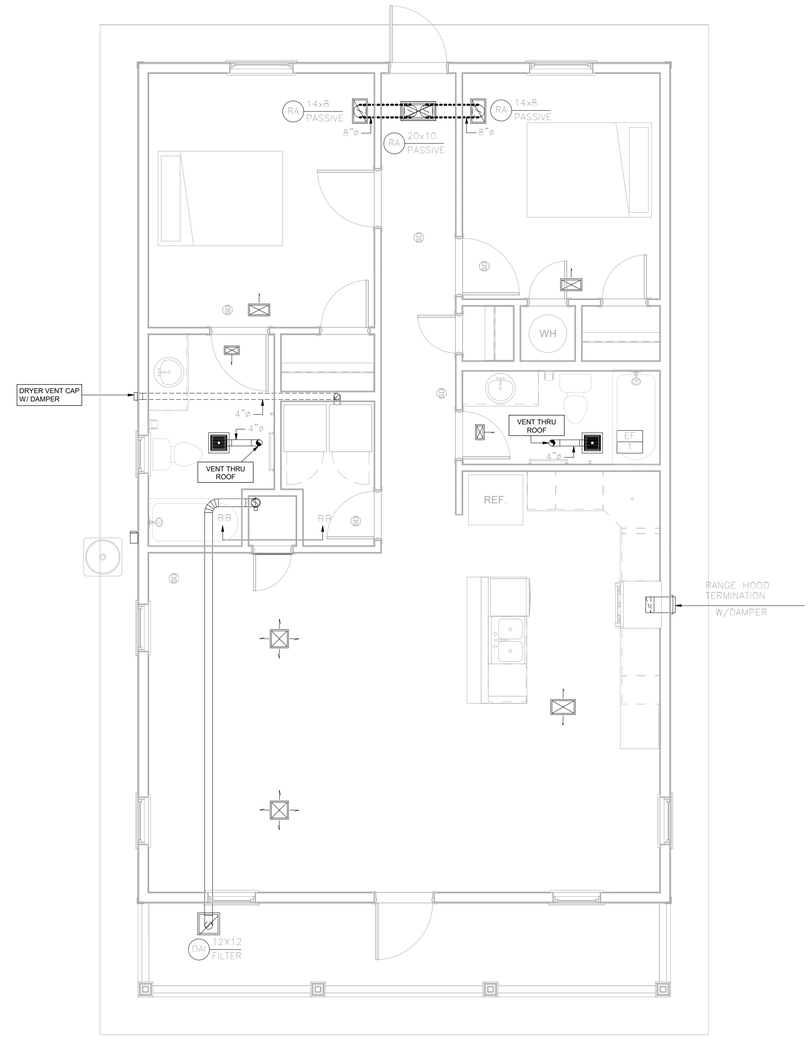
E-1

MECHANICAL NOTE:

FLOOR PLANS ON MECHANICAL SHEETS MAY DIFFER SLIGHTLY WITH ARCHITECTURAL. MECHANICAL SHEETS ARE DIAGRAMMATIC TO INDICATE SIZE AND APPROXIMATE LOCATION OF MECHANICAL EQUIPMENT, FIXTURES, AND COMPONENTS.



1 COOLING AND HEATING DUCT SYSTEM
1/4" = 1'-0"



2 EXHAUST, VENTILATION AND PASSIVE RETURN DUCT SYSTEMS
1/4" = 1'-0"

No.	Description	Date

MECHANICAL

Project Number	2019-15
Date	01/25/2022
Drawn By	RM
Checked By	DC

50% PRELIMINARY DESIGN, NOT FOR CONSTRUCTION

M-1

HVAC ABBREVIATION LEGEND

AHU	AIR HANDLING UNIT
CU	CONDENSING UNIT
OAI	OUTDOOR AIR INTAKE
OAD	OUTDOOR AIR DAMPER
OA	OUTDOOR AIR
EF	EXHAUST FAN
DH	DEHUMIDIFIER
CP	CONDENSATE PUMP
ZD	ZONE DAMPER
BD	BALANCE DAMPER
T	THERMOSTAT
DHC	DEHUMIDIFICATION CONTROL
AF	AIR FILTRATION
SA	SUPPLY AIR
RA	RETURN AIR

A/C DUCT WORK SPECIFICATIONS

SIZE/ROUND

FLEXIBLE DUCT

CLASS 1 FLEXIBLE DUCT WITH SILVER VAPOR JACKET.
R-VALUE 6
MANUFACTURER: ATCO MODEL #036

SIZE/ROUND

METAL DUCT ROUND

GALVANIZED METAL SNAPLOCK PIPE WITH SILVER DUCT WRAP.
R-VALUE = 6
MANUFACTURER: CERTAINTEED SOFT TOUCH

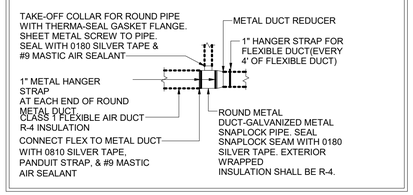
SIZE/WxH

DUCT RECTANGLE

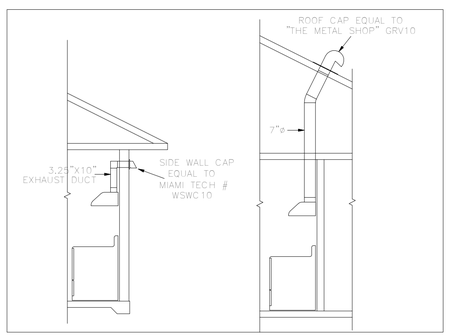
"TOUGHGARD" DUCT BOARD BLACK MAT
R-VALUE = 6
MANUFACTURER: CERTAINTEED

ALL DUCT SIZES LISTED ON PLANS ARE INSIDE DIAMETER AND ARE LISTED IN INCHES.
ADD 3" TO EACH DIMENSION FOR OUTSIDE DIAMETER

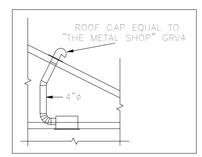
FLEX DUCT TO METAL DUCT CONNECTION DETAIL



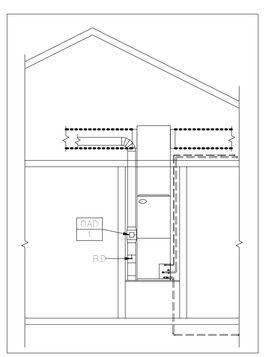
BALANCE DAMPER COLLAR



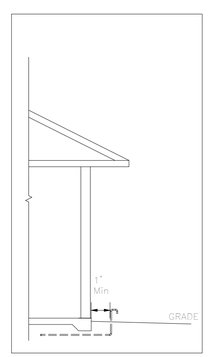
RANGE HOOD VENTING, SIDWALL VENTING AND VENTING THRU ROOF



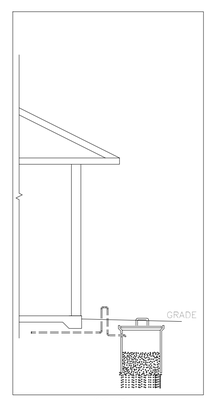
BATHROOM EXHAUST FAN VENT THRU ROOF



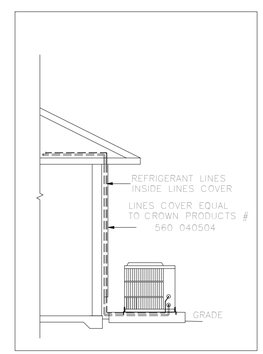
PVC CONDENSATE DRAIN LINE UNDERFLOOR BY THE PLUMBER



CONDENSATE DISCHARGE 1 FOOT MINIMUM FROM BUILDING FOUNDATION



DRYWELL ONLY WHEN REQUIRED BY LOCAL CODE



REFRIGERANT LINES RUN THROUGH ATTIC AND DOWN EXTERIOR WALL COVER LINES WITH APPROVED LINE COVER

HVAC NOTES:

GENERAL NOTES

1. ALL WORK TO BE DONE IN ACCORDANCE WITH THESE PLANS & THE FLORIDA BUILDING CODE 7th EDITION (2020)
2. MECHANICAL DRAWINGS ARE SCHEMATIC IN NATURE & ARE NOT INTENDED TO SHOW EVERY MINOR DETAIL. THE HVAC CONTRACTOR SHALL INCLUDE THE FURNISHINGS OF ALL LABOR AND MATERIALS TO COMPLETE THE AIR CONDITIONING, HEATING, AND VENTILATION SHOWN ON THE DRAWINGS TO INCLUDE, BUT NOT BE LIMITED TO THE FOLLOWING:
   - PERMIT FEES
   - ALL AIR CONDITIONING EQUIPMENT
   - EXHAUST FANS
   - SUPPLY, RETURN, VENTILATION, & EXHAUST AIR DUCT WORK
   - SUPPLY AND RETURN DIFFUSERS AND REGISTERS, DAMPERS, WEATHERPROOF VENTILATION & EXHAUST LOUVERS
   - AIR FILTRATION; MINIMUM MERV-8
   - THERMOSTATS, CO2 SENSORS, SHUT DOWN SWITCHES & RELATED CONTROL WIRING
   - EQUIPMENT SUPPORTS, HANGERS, & RACKS
   - CONDENSATE DRAIN PANS & PIPING
   - REFRIGERANT FIELD COPPER LINE SET & PIPING
3. ALL WORK SHALL BE PERFORMED BY A LICENSED HVAC CONTRACTOR CERTIFIED IN THE STATE OF FLORIDA.
4. THE HVAC CONTRACTOR SHALL VISIT THE JOB SITE, MEET WITH RELATED TRADES, & FAMILIARIZE THEMSELVES WITH ANY AND ALL CONDITIONS RELATED TO THEIR WORK.
5. ALL EQUIPMENT AND MATERIALS SHALL BE AS SPECIFIED OR APPROVED EQUAL. ANY CHANGES OR DEVIATIONS FROM THESE PLANS MUST BE APPROVED BY ENGINEER OF RECORD.
6. AIR CONDITIONING AND HEATING EQUIPMENT SHALL NOT BE SIZED BASED ON A.R.I. CAPACITY RATINGS, BUT RATHER BASED ON SPECIFIC DESIGN CONDITIONS.
7. REVISIONS OR CHANGES FROM THESE PLANS THAT MAY BE REQUIRED BECAUSE OF CONTRACTOR OPTED REVISIONS, SHALL BE COMPENSATED TO THE ENGINEER OF RECORD BY THE REQUESTING CONTRACTOR.
8. FOR ANY QUESTIONS REGARDING LOAD CALCULATIONS, ENERGY CALCULATIONS, MECHANICAL DESIGN OR EQUIPMENT SELECTION PLEASE CONTACT DENNIS STROER, CALCS-PLUS, 121 TRIPLE DIAMOND BLVD, UNIT 16, NORTH VENICE, FL 34275, 941-488-1700
9. ALL ROUGHED-IN DUCTWORK AND OR ANY MECHANICAL OPENINGS SHALL BE COVERED AND PROTECTED DURING CONSTRUCTION TO MINIMIZE DUST CONTAMINATION INSIDE THE DUCTWORK AND MECHANICAL SYSTEM. MATERIALS SUCH AS DUCK MASK, RIGID FOAM INSULATION, DUCT BOARD OR OTHER MEANS ACCEPTABLE TO SEAL THE OPENINGS.

DUCTWORK

1. DUCT CONSTRUCTION AND INSTALLATION SHALL COMPLY WITH SECTION M603 OF THE 2020 FLORIDA BUILDING CODE.
2. AIR CONDITIONING DUCT SYSTEM MATERIALS SHALL BE BASED ON THE FOLLOWING:
   - FLEXIBLE DUCT WORK - BRAND - ATCO #030 / UL 181, CLASS 1 AIR DUCT WITH REINFORCED METALLIZED POLYESTER JACKET WITH WIRE HELIX ENFORCED AIR TIGHT INNER LINER. INSULATION SHALL BE R- 4 .
   - RECTANGLE DUCT -GALVANIZED METAL DUCT WITH R-4 LINED INSULATION .
3. ALL DUCT SIZES LISTED ARE NET INSIDE DIMENSIONS.
4. ALL DUCTS AND PLENUMS SHALL BE MADE AIR TIGHT. DUCT WORK SHALL BE CONSTRUCTED AND INSTALLED IN ACCORDANCE WITH THE CURRENT EDITION OF CHAPTER 13 OF THE 2020 FLORIDA BUILDING CODE.
5. DUCT LEAKAGE SHALL NOT EXCEED 5% OF THE RATED AIR HANDLER FLOW.
6. FLEXIBLE DUCT SHALL BE EXTENDED TO ITS FULL LENGTH. EXCESS DUCT MATERIAL IN A RUN SHALL BE LESS THAN 5%.
7. FLEXIBLE DUCT SHALL BE SUPPORTED AT MANUFACTURERS RECOMMENDED INTERVALS, BUT AT NO GREATER DISTANCE THAN 4 FEET. MAXIMUM PERMISSIBLE SAG IS 1/2" PER FOOT OF SPACING BETWEEN SUPPORTS.
8. FIRE DAMPERS SHALL BE INSTALLED IN ACCORDANCE WITH SECTION 716 OF THE 2020 FLORIDA BUILDING CODE.
9. DUCTS AND TRANSFER OPENINGS THAT PENETRATE FIRE RESITANT-RATED ASSEMBLIES AND ARE NOT REQUIRED BY THIS SECTION TO HAVE DAMPERS, SHALL COMPLY WITH THE REQUIREMENTS OF SECTION 712 OF THE 2020 FLORIDA BUILDING CODE.
10. SMOKE DETECTORS SHALL BE INSTALLED IN ACCORDANCE WITH SECTION M606 OF 2020 FLORIDA BUILDING CODE.

CONDENSATE DISPOSAL

1. CONDENSATE DISPOSAL SHALL BE PROVIDED FOR EQUIPMENT AND APPLIANCES CONTAINING EVAPORATOR COILS.
2. CONDENSATE DRAIN SYSTEM SHALL BE DESIGNED, CONSTRUCTED AND INSTALLED IN ACCORDANCE WITH SECTIONS 307.2.1 THROUGH 307.2.4 OF THE 2020 FLORIDA BUILDING CODE.
3. ALL PRIMARY CONDENSATE PIPING LOCATED WITHIN THE INSIDE OF THE BUILDING SHALL BE INSULATED TO PREVENT CONDENSATION FROM FORMING ON THE EXTERIOR OF THE DRAIN LINE.
4. MAIN AND EMERGENCY CONDENSATE DRAIN LINES SHALL BE SCHEDULE 40 PVC.
5. AUXILIARY DRAIN LINE CONNECTION AT THE EVAPORATOR DRAIN PAN SHALL INCORPORATE AN SAFETY CUT-OFF SWITCH.
6. AIR HANDLERS SHALL INCORPORATE AN EMERGENCY DRAIN PAN THAT IS PIPED TO A CONSPICUOUS LOCATION AT THE EXTERIOR OF THE BUILDING OR INCORPORATES A SAFETY CUT-OFF SWITCH.
7. SLOPE HORIZONTAL CONDENSATE DRAINS A MINIMUM OF 1/4" PER FOOT.
8. CONDENSATE SHALL BE CONVEYED FROM THE DRAIN PAN OUTLET TO AN APPROVED PLACE OF DISPOSAL. CONDENSATE SHALL NOT DISCHARGE INTO A STREET, SIDEWALK, OR ANY OTHER LOCATION AS TO CAUSE A NUISANCE. IF NO APPROVED LOCATION IS AVAILABLE, THEN A DRY WELL SHALL BE INSTALLED.
9. ALL DRAIN LINES SHALL BE PROVED AND TESTED UPON EQUIPMENT START-UP.
10. ALL DRAIN LINE AND DRAIN PAN SAFETY CUT OFF CONTROLS SHALL BE TESTED UPON EQUIPMENT START-UP .

SPLIT SYSTEM AIR CONDITIONING EQUIPMENT

1. CONDENSING UNIT SHALL BE INSTALLED AS PER SECTION 304.1 AND 304.2 OF THE 2020 FLORIDA BUILDING CODE.
2. CONDENSING UNIT SHALL BE LOCATED ON SLAB ON GRADE. TIE DOWN WITH FBC APPROVED HURRICANE STRAPS.
3. CLEARANCE AROUND NON SERVICE SIDES OF THE CONDENSING UNIT SHALL COMPLY WITH MANUFACTURERS RECOMMENDATIONS AS PER MANUFACTURERS INSTALLATION INSTRUCTIONS.
4. CLEARANCE ABOVE THE CONDENSING UNIT SHALL COMPLY WITH MANUFACTURERS RECOMMENDATION AS PER MANUFACTURERS INSTALLATION INSTRUCTIONS.
5. AIR HANDLERS SHALL BE INSTALLED AS PER MANUFACTURERS INSTALLATION INSTRUCTIONS AND THE 2020 FLORIDA BUILDING CODE.
6. THE AIR HANDLER SHALL INCORPORATE A FILTER HOUSING WITH EASY ACCESS. THE FILTER COMPARTMENT SHALL NOT BE OBSTRUCTED IN ANY WAY BY THE REFRIGERANT PIPING, CONDENSATE PIPING, OR ANY OTHER ITEM WHICH MAY PREVENT REMOVAL AND INSTALLATION OF THE FILTER.
7. FILTERS SHALL BE LOCATED AT THE AIR HANDLER DIRECTLY BEFORE THE EVAPORATOR COIL. NO FILTER BACK GRILLS SHALL BE USED UNLESS NOTED ON THE DRAWING
8. CLEARANCE AROUND THE AIR HANDLER SHALL BE 4" FOR NON-SERVICE SIDES AND 36' FOR SERVICE SIDE.

OUTDOOR AIR & EXHAUST AIR SYSTEMS

1. ALL EXHAUST DUCTS SHALL TERMINATE TO EXTERIOR ROOF CAP, SIDEWALL CAP, OR SOFFIT HOOD AS INDICATED ON THE HVAC PLANS.
2. EXHAUST FANS SHALL HAVE BACK DRAFT DAMPER INSTALLED.
3. EF #1 & EF #2 SHALL BE WIRED TO WALL SWITCH ON/OFF.
4. OUTDOOR AIR DUCT SHALL BE CONNECTED TO THE RETURN SIDE OF THE AIR STREAM AT THE RETURN AIR PLENUM.
5. OUTDOOR AIR DUCT SHALL INCORPORATE A MANUAL VOLUME BALANCE DAMPER AT THE RETURN AIR PLENUM FOR INTAKE BALANCE.
6. OUTDOOR AIR DUCT SHALL INCORPORATE A NORMALLY CLOSE 24 VOLT DAMPER(VAD).
7. VAD SHALL BE WIRED TO OPEN VIA CORRESPONDING CO2 SENSOR.
8. CO2 SENSOR SHALL OPEN VAD ON CO2 RISE AND CLOSE UPON CO2 FALL. SEE CO2 CONTROL SCHEDULE.
9. OUTDOOR AIR INTAKES SHALL HAVE INSECT SCREEN AT INTAKE CAP.
10. KEEP ALL VENTILATION AIR INTAKES A MINIMUM 10' FROM EXHAUST FAN TERMINATION POINTS AND SANITARY SEWER VENT OUTLETS.
11. KEEP ALL OUTDOOR AIR INTAKES AND EXHAUST VENTS 3' FROM OPERABLE OPENINGS INTO BUILDING AND 3' FROM PROPERTY LINES

No.	Description	Date

MECHANICAL

Project Number	2019-15
Date	01/25/2022
Drawn By	RM
Checked By	DC

50% PRELIMINARY DESIGN, NOT FOR CONSTRUCTION

M-2

SPLIT AIR CONDITIONING SYSTEM SCHEDULE

	SEE EQUIPMENT SELECTION	"A" TYPE	"B" TYPE	"C" TYPE	"D" TYPE
SYSTEM	TOTAL CAPACITY BTUH *	21,815	26,220	21,986	26,394
	SENSIBLE CAPACITY BTUH	16,790	19,740	17,521	20,819
	HEATING CAPACITY BTUH (47* ODT)	23,840	25,988	N/A	N/A
	MANUFACTURER	CARRIER	CARRIER	CARRIER	CARRIER
	SEER / HSPF	15.00 / 8.50	15.00 / 8.50	16.00 / N/A	15.50 / N/A
	NOMINAL TONNAGE	2.0	2.5	2.0	2.5
	AHRI NUMBER	9156907	9154945	9844015	9777582
AIR HANDLING UNIT	DESIGNATION	AHU-1	AHU-1	AHU-1	AHU-1
	MODEL NO.	FX4DNF024L05	FX4DNF031L08	FX4DNF024L05	FX4DNF031L08
	SUPPLY AIR CFM	750	875	750	875
	OUTDOOR AIR (OA) CFM	23	45	23	45
	ENTERING AIR TEMP. DB/WB	75/63	75/63	75/63	75/63
	EXTERNAL STATIC PRESS. IN. W. G.	0.6"	0.6"	0.6"	0.6"
	INDOOR FAN FLA	2.80	4.10	2.80	4.10
	ELECTRIC HEAT KW	5.0	8.0	5.0	8.0
	MCA/MOCP	28.5 / 30	45.2 / 50	28.5 / 30	45.2 / 50
CONDENSING UNIT	DESIGNATION	CU-1	CU-1	CU-1	CU-1
	MODEL NO.	25HBC524A00300	25HBC530AP030	24AAA524A00300	24AAA530A00300
	COMPRESSOR R.L.A. / L.R.A.	12.8 / 58.3	14.1 / 73	10.9 / 62.9	12.8 / 67.8
	OUTDOOR FAN FLA	0.5	0.5	0.5	0.75
	OUTDOOR DESIGN TEMP. DB	95	95	95	95
	MCA / MOCP	16.5 / 25	18.1 / 30	14.5 / 20	16.8 / 25
	ELECTRIC SERVICE	208/230/1/60	208/230/1/60	208/230/1/60	208/230/1/60

* EQUIPMENT OUTPUT IS BASED ON MANUFACTURER'S EXPANDED PERFORMANCE TABLES USING INDOOR CONDITIONS OF 75 DEGREES AND 63 DEGREE WET BULB.

EXHAUST FAN SCHEDULE

DESIGNATION	EF #1		
FAN TYPE	CEILING		
DRIVE TYPE	DIRECT		
AIR FLOW CFM	50		
STATIC PRESS. IN. W.G.	0.25		
NOISE(SONES)	0.7		
ELECTRIC SERVICE	120/1/60		
MAX AMPS	.14		
MANUFACTURER	PANASONIC		
MODEL NO.	FV-05-11VKS1		
CONTROL	3		

SPEED SETTINGS AND CONTROL

1. SET TO 50 CFM.
2. STANDARD ON/OFF WALL SWITCH WITH MOTION SENSOR OPTION

VENTILATION AIR CALCULATION

ASHRAE 62.2-2010 - CHAPTER 4
REFERENCE TABLE 4.1
OCCUPANCY CATEGORY - RESIDENTIAL

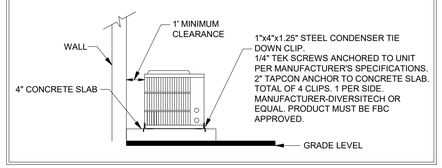
Rp 7.5	CFM/COMBINED OUTDOOR AIR FLOW RATE
Pz 3	OCCUPANTS
Ra .01	CFM/FT^2 - ZONE OCCUPIABLE AREA
Az 1,223	FT^2 - ZONE OCCUPIABLE AREA
Vbz 44.80	CFM, BREATHING ZONE OA FLOW
Ez 1.0	ZONE AIR DISTRIBUTION EFFECT
Voz 35	MINIMUM REQUIRED ZONE OUTDOOR AIR FLOW

*OUTSIDE AIR REQUIREMENTS ARE IN ACCORDANCE WITH FLORIDA MECHANICAL CODE 2014 AND ASHRAE 2014-62.2, VENTILATION FOR ACCEPTABLE INDOOR AIR QUALITY

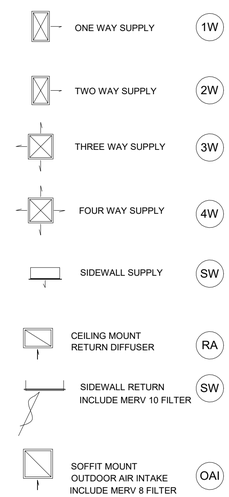
OAD-1 OUTDOOR AIR DAMPER

OUTDOOR AIR DAMPER TO BE EQUAL TO HONEYWELL EARD-6. DAMPER SHALL OPEN ONLY WHEN CONDENSING UNIT IS OPERATING. BALANCE OUTDOOR AIR TO 35 CFM.

CONDENSING UNIT MOUNTING DETAIL



AIR DIFFUSER & DESCRIPTION



HVAC DIFFUSER SPECIFICATIONS

SUPPLY DIFFUSER - CEILING

MANUFACTURER: AIRGUIDE
MODEL: CBHML-(1,2,3,4)ME
DESCRIPTION: WHITE ALUMINUM ADJUSTABLE CURVED BLADE WITH PARALLEL BLADE DAMPER

SUPPLY DIFFUSER - SIDEWALL

MANUFACTURER: AIRGUIDE
MODEL: VML-ME
DESCRIPTION: WHITE ALUMINUM SINGLE DEFLECTION WITH PARALLEL BLADE DAMPER

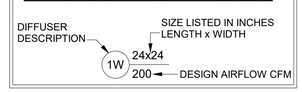
RETURN DIFFUSER - CEILING/SIDEWALL

MANUFACTURER: AIRGUIDE
MODEL: RA
DESCRIPTION: WHITE ALUMINUM 38" BLADE/NON-FILTER BACK

RETURN DIFFUSER - CEILING/SIDEWALL

MANUFACTURER: AIRGUIDE
MODEL: RF-2
DESCRIPTION: WHITE ALUMINUM 38" BLADE/FILTER BACK *FOR RANGE HOOD MAKE-UP AIR DIFFUSER. PROVIDE PERMANENT WASHABLE FILTER.

STANDARD DIFFUSER TAG LEGEND



EQUIPMENT SELECTION:

THE EQUIPMENT SCHEDULE SHOWS SEVERAL SPLIT SYSTEMS TO CHOOSE FROM. EQUIPMENT SELECTION SHALL BE BASED ON LOCATION, ORIENTATION AND THE 2020 FLORIDA BUILDING CODE - ENERGY CONSERVATION.

HVAC LOAD CALCULATIONS WERE BASED ON SIX LOCATIONS IN FLORIDA.

Pensacola

Front door Faces	Supply CFM	Sens Gain	Lat Gain	Net Tons	Rec Tons
South	615	16,112	4,757	1.74	1.79
Southwest	637	16,596	4,756	1.78	1.84
West	628	16,387	4,753	1.76	1.82
Northwest	640	16,655	4,751	1.78	1.85
North	615	16,115	4,757	1.74	1.79
Northeast	639	16,644	4,752	1.78	1.85
East	629	16,434	*4,763	1.77	1.83
Southeast	*645	*16,775	4,759	*1.79	*1.86

Gainsville AP, Florida

Front door Faces	Supply CFM	Sens Gain	Lat Gain	Net Tons	Rec Tons
South	590	15,505	*4,473	1.66	1.72
Southwest	614	16,021	4,470	1.71	1.78
West	596	15,632	4,464	1.67	1.74
Northwest	610	15,932	4,471	1.70	1.77
North	584	15,365	4,470	1.65	1.71
Northeast	614	16,034	4,469	1.71	1.78
East	605	15,830	4,467	1.69	1.76
Southeast	*622	*16,198	4,472	*1.72	*1.80

Jacksonville AP, Florida

Front door Faces	Supply CFM	Sens Gain	Lat Gain	Net Tons	Rec Tons
South	602	15,901	*4,393	1.69	1.77
Southwest	625	16,405	4,389	1.73	1.82
West	609	16,065	4,390	1.70	1.78
Northwest	622	16,342	4,390	1.73	1.82
North	596	15,773	4,388	1.68	1.75
Northeast	626	16,431	4,391	1.74	1.83
East	616	16,216	4,389	1.72	1.80
Southeast	*631	*16,543	4,381	*1.74	*1.84

Orlando AP, Florida

Front door Faces	Supply CFM	Sens Gain	Lat Gain	Net Tons	Rec Tons
South	602	15,866	*4,108	1.66	1.76
Southwest	626	16,397	4,106	1.71	1.82
West	611	16,063	4,106	1.68	1.78
Northwest	623	16,332	4,107	1.70	1.81
North	597	15,754	4,101	1.65	1.75
Northeast	626	16,402	4,106	1.71	1.82
East	618	16,204	4,102	1.69	1.80
Southeast	*634	*16,565	4,105	*1.72	*1.84

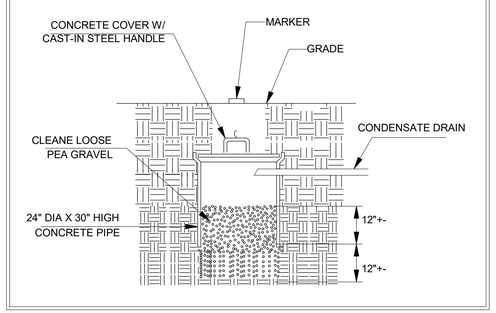
Fort Myers AP, Florida

Front door Faces	Supply CFM	Sens Gain	Lat Gain	Net Tons	Rec Tons
South	597	15,805	4,385	1.68	1.76
Southwest	624	16,394	4,391	1.73	1.82
West	609	16,071	4,390	1.71	1.79
Northwest	621	16,333	*4,391	1.73	1.81
North	596	15,776	4,388	1.68	1.75
Northeast	624	16,392	4,391	1.73	1.82
East	616	16,215	4,389	1.72	1.80
Southeast	*631	*16,532	4,382	*1.74	*1.84

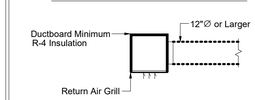
Miami AP, Florida

Front door Faces	Supply CFM	Sens Gain	Lat Gain	Net Tons	Rec Tons
South	586	15,335	4,612	1.66	1.70
Southwest	610	15,864	4,619	1.71	1.76
West	600	15,642	4,618	1.69	1.74
Northwest	611	15,901	4,620	1.71	1.77
North	586	15,335	4,612	1.66	1.70
Northeast	609	15,849	4,620	1.71	1.76
East	602	15,696	*4,621	1.69	1.74
Southeast	*617	*16,015	4,613	*1.72	*1.78

DRYWELL DETAIL



RETURN AIR GRILL PLENUM



RETURN DUCTS 12"Ø OR LARGER SHALL TERMINATE AT A PLENUM STYLE REGISTER BOX

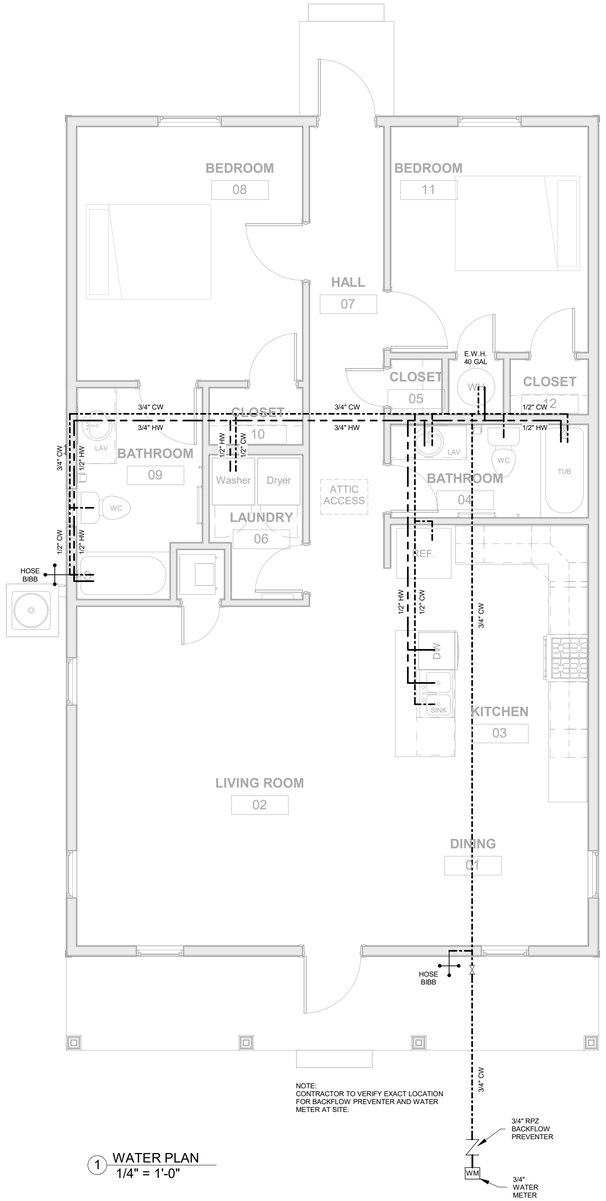
No.	Description	Date

MECHANICAL

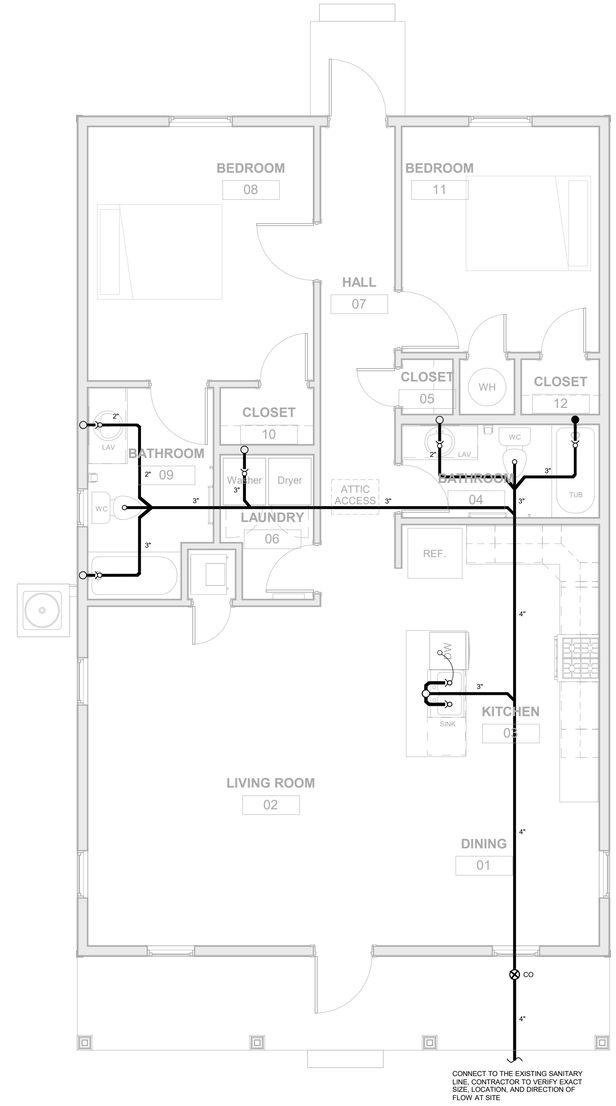
Project Number	2019-15
Date	01/25/2022
Drawn By	RM
Checked By	DC

50% PRELIMINARY DESIGN, NOT FOR CONSTRUCTION

M-3



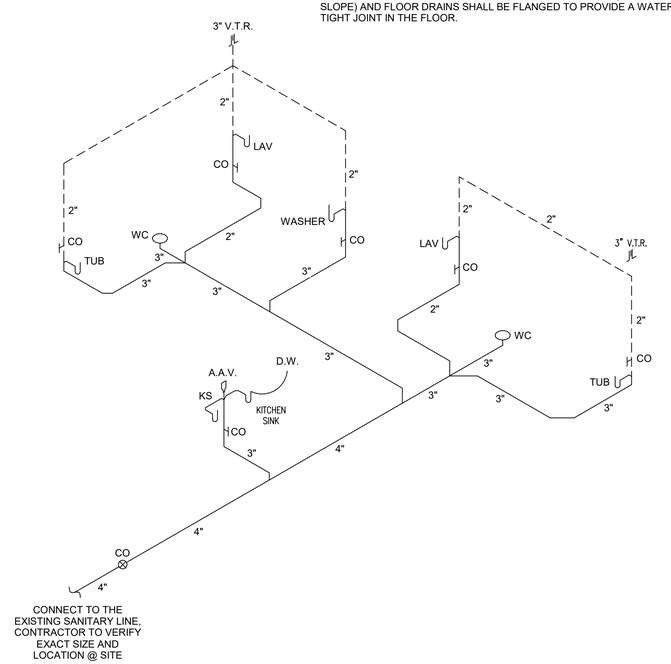
1 WATER PLAN
1/4" = 1'-0"



2 SANITARY PLAN
1/4" = 1'-0"

PLUMBING NOTES:

1. PLUMBING WORK SHALL BE DESIGN BUILD BY PLUMBING SUBCONTRACTOR AND RISER DIAGRAM SHALL BE REVIEWED AND SUBMITTED AS REQUIRED BY PERMITTING.
2. PLUMBING CONTRACTOR SHALL BE LICENSED AND RESPONSIBLE TO MEET ALL APPLICABLE REQUIREMENTS BY CODE
3. ALL PLUMBING FIXTURES AND PIPING SHALL CONFORM TO THE LOCAL PLUMBING CODES.
4. HOT WATER HEATER TO BE ELECTRIC AND MEET REQUIREMENTS OF ENERGY STAR REFERENCE HOME WITH MIN. EF=0.93.
5. INSULATE PIPES WITH MIN. R-4 PIPE INSULATION
6. USE WATER-CONSERVING FIXTURES MEETING THE FOLLOWING REQUIREMENTS:
   - A. TOILETS 1.28 GPF
   - B. SHOWERHEADS 2.0 GPM
   - C. KITCHEN FAUCETS 2.0 GPM
   - D. BATHROOM FAUCETS 1.5 GPM
   - E. ALL PLUMBING FIXTURES SHALL BE WATERSENSE. WATER CLOSETS MUST HAVE A MINIMUM MAP RATING OF 600.
7. VERIFY FIXTURES AND LOCATIONS WITH ARCHITECTURAL PLAN AND OWNER.
8. VERIFY ALL APPLIANCES/EQUIPMENT (HVAC, WATER HEATERS, EXHAUST FANS, ETC.) IN BID
9. PROVIDE SERVICE CONNECTIONS
10. VERIFY HOT WATER HEATER LOCATIONS AND PROVIDE PLASTIC DRAIN/DRIP PAN WITH DRAIN TO EXTERIOR
11. VERIFY HOSE BIB LOCATIONS (MIN. 2 EXTERIOR HOSE BIBS)
12. PROVIDE "NO-DRIP" SUPPLY/DRAIN @ WASHER
13. PROVIDE ACCESS PANELS TO TUB/SHOWER UNITS
14. PERFORM ALL TESTS BEFORE INSULATION AND BACKFILLING
15. PROVIDE ALL CLEAN OUTS, VACUUM BREAKERS AND OTHER COMPONENTS REQUIRED BY CODE WHETHER SHOWN ON DRAWING OR NOT.
16. SHUTOFF VALVES SHALL BE REQUIRED ON EACH FIXTURE SUPPLY PIPE TO EACH PLUMBING APPLIANCE AND TO EACH PLUMBING FIXTURE OTHER THAN BATHTUBS AND SHOWERS. VALVES SERVING INDIVIDUAL PLUMBING FIXTURES, PLUMBING APPLIANCES, RISERS AND BRANCHES SHALL BE ACCESSIBLE.
17. ALL SINKS AND LAVATORIES TO BE PROVIDED HOT AND COLD WATER
18. ALL PENETRATIONS THROUGH ROOF SHALL BE FLASHED USING DEKTITE PIPE FLASHING OR EQUAL AND DEKTITE RUBBER BOOT OR EQUAL.
19. ALL PIPING IN UNINSULATED AREAS AND EXPOSED TO EXTERIOR SHALL BE INSULATED
20. PLUMBING SUBCONTRACTOR SHALL PROVIDE AND INSTALL DRAIN LINES FOR ALL HVAC TO THE NEAREST PLUMBING LINES AND VERIFY LOCATION OF ALL EXISTING UTILITY LINES. (WATERS, SEWER, GAS, ETC.)
21. ALL DRAIN LINES SHALL HAVE WATER SEAL TRAPS AND EACH FIXTURE GROUP VENTED.
22. ALL SANITARY SEWER PIPING SHALL BE SCHEDULE 40 PVC DWV PIPE AND FITTING. MINIMUM SLOPE OF SANITARY SEWER LINE SHALL BE .004 PER FOOT.
23. CONTRACTOR SHALL PROVIDE CLEAN OUT LOCATIONS, TIE-IN LOCATIONS, AND WATER AND SEWER LINE LOCATIONS ON SITE TO PERMIT DEPARTMENT FOR REVIEW.
24. SHOWER DRAINS SHALL HAVE AN OUTLET SIZE OF NOT LESS THAN 1 1/2 INCHES [38 MM] IN DIAMETER.
25. WHERE A SHOWER RECEPTOR HAS A FINISHED CURB THRESHOLD, IT SHALL BE NOT LESS THAN 1 INCH (25 MM) BELOW THE SIDES AND BACK OF THE RECEPTOR. THE CURB SHALL BE NOT LESS THAN 2 INCHES (51 MM) AND NOT MORE THAN 9 INCHES (229 MM) DEEP WHEN MEASURED FROM THE TOP OF THE CURB TO THE TOP OF THE DRAIN. THE FINISHED FLOOR SHALL SLOPE UNIFORMLY TOWARD THE DRAIN NOT LESS THAN 1/4 UNIT VERTICAL IN 12 UNITS HORIZONTAL (2-PERCENT SLOPE) NOR MORE THAN 1/2 UNIT VERTICAL PER 12 UNITS HORIZONTAL (4-PERCENT SLOPE) AND FLOOR DRAINS SHALL BE FLANGED TO PROVIDE A WATER-TIGHT JOINT IN THE FLOOR.



3 SANITARY ISOMETRIC
1/4" = 1'-0"

No.	Description	Date

PLUMBING PLAN

Project Number	2019-15
Date	01/25/2022
Drawn By	GP
Checked By	IP

50% PRELIMINARY DESIGN, NOT FOR CONSTRUCTION

P-1

GENERAL NOTES:

1. STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH THE ARCHITECTURAL, MECHANICAL, ELECTRICAL, SHOP DRAWINGS AND SPECIFICATIONS.

2. CONSTRUCTION SHALL FOLLOW THE 2020 FLORIDA BUILDING CODE, 7th EDITION, THE 2020 FLORIDA RESIDENTIAL CODE, 7th EDITIONS, AND ALL LOCAL, STATE, AND FEDERAL REQUIREMENTS AND REGULATIONS. BUILDING CODE SHALL TAKE PRECENDENCE OVER DRAWINGS IF CONFLICT EXISTS.

3. 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 AS A PREVENTATIVE 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."

4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL FINAL DIMENSIONS AND FIT-UP OF THE STRUCTURE, INCLUDING VERIFYING ALL EXISTING CONDITIONS AND DIMENSIONS BEFORE COMMENCING WORK.

5. THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING ANY WORK. ANY INTERFERENCE SHALL BE BROUGHT TO THE ATTENTION OF THE STRUCTURAL ENGINEER.

6. THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL DIMENSIONS AND ELEVATIONS WITH ARCHITECT'S DRAWINGS BEFORE STARTING WORK.

7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN PLACEMENT, MAINTENANCE, ETC. OF ANY AND ALL SHORING, BRACING, TIE BACKS, ETC. NEEDED TO SUPPORT ANY PART OF THE NEW OR EXISTING CONSTRUCTION DURING THE ENTIRE CONSTRUCTION PROCESS TO ENSURE THE SAFETY AND INTEGRITY OF THE STRUCTURE UNTIL THE NECESSARY PERMANENT ELEMENTS ARE IN PLACE.

8. SEE ARCHITECTURAL, MECHANICAL, AND ELECTRICAL DRAWINGS FOR EXACT LOCATION OF ALL DEPRESSIONS, SLOPES, OPENINGS, PENETRATIONS, ETC. PENETRATION THROUGH BEAMS OR OPENINGS IN STRUCTURAL ELEMENTS NOT SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE BROUGHT TO THE ATTENTION OF THE STRUCTURAL ENGINEER.

9. UNLESS NOTED OTHERWISE, DETAILS SHOWN ON ANY DRAWING ARE TO BE CONSIDERED TYPICAL FOR ALL SIMILAR CONDITIONS.

DESIGN CRITERIA:

BUILDING CODE: 2020 FLORIDA BUILDING CODE, BUILDING, 7TH EDITION
ASCE 7-16 MINIMUM DESIGN LOADS AND ASSOCIATED CRITERIA FOR BUILDINGS AND OTHER STRUCTURES
2020 FLORIDA BUILDING CODE, RESIDENTIAL, 7TH EDITION

1. DESIGN GRAVITY LOADS:

• FIRST FLOOR	DL = 50 PSF LL = 40 PSF
• UNINHABITABLE ATTIC WITH LIMITED STORAGE	LL = 20 PSF
• BALCONIES (EXTERIOR) AND DECK	LL = 40 PSF
• GUARDS AND HANDRAILS	LL = 200 PSF
• GUARD IN-FILL COMPONENTS	LL = 50 PSF
• ROOMS OTHER THAN SLEEPING ROOMS	LL = 40 PSF
• SLEEPING ROOMS	LL = 30 PSF
• STAIRS	LL = 40 PSF
• ATTIC	DL = 10 PSF LL = 20 PSF
• ROOF	DL = 20 PSF LL = 20 PSF

3. WIND LOADS (ASCE 7-16)

• ULTIMATE WIND SPEED =	180 MPH
• NOMINAL WIND SPEED=	139 MPH
• RISK CATEGORY =	II
• WIND EXPOSURE CATEGORY =	C

FOUNDATION NOTES:

1. PLACE FOOTINGS ON UNDISTURBED SOIL. NOTIFY THE ENGINEER IF "SOFT SPOTS", UNDERGROUND OBSTRUCTIONS, OR ANY UNUSUAL CONDITION IS ENCOUNTERED DURING STRIPPING, EXCAVATION OR FILLING.

2. GRADE BEAMS MAY BE EARTH FORMED PROVIDED DIMENSIONAL TOLERANCES LISTED IN ACI 117-90 ARE ADHERED TO.

3. PLACE 10 MIL WATERPROOF MEMBRANE BENEATH ALL INTERIOR SLABS AND GRADE BEAMS. LAP 12" TO ACCOMMODATE CONCRETE POURING DIRECTION

CONCRETE NOTES:

1. ALL CONCRETE WORK SHALL CONFORM TO ACI 201 SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BULIDINGS

2. CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI AT 28 DAYS WITH A 5" SLUMP

3. CONCRETE SHALL BE NORMAL WEIGHT OF 150 LBS. PER CUBIC FOOT AND SHALL CONFORM TO THE LATEST ACI 301 SPECIFICATION.

4. PORTLAND CEMENT SHALL CONFORM TO ASTM C150, TYPE I OR II.

5. AGGREGATE FOR NORMAL WEIGHT CONCRETE SHALL MEET ASTM C33.

6. REINFORCING STEEL SHALL BE IN ACCORDANCE WITH ASTM A615 GRADE 60, WELDED WIRE FABRIC (WWF) SHALL BE IN ACCORDANCE WITH ASTM 185, WIRE SHALL CONFORM TO ASTM A82.

7. REINFORCING STEEL SHALL BE SPLICED WITH A CLASS "B" SPLICE IN ACCORDANCE WITH THE CURRENT ACI 318.

8. REINFORCING FABRIC ON GRADE SHALL BE CHAIRED WITH 3000 PSI CONCRETE BRICKETTES SPACED TO ADEQUATELY SUPPORT THE REINFORCING, BUT NOT GREATER THAN 3'-0" O.C. EACH WAY. LAP ALL FABRIC ONE WIRE SPACING PLUS 6 INCHES.

9. PROVIDE A 90 DEGREE HOOK ON ALL TOP REINFORCEMENT IN ALL BEAMS AT DISCONTINUOUS ENDS AND LAP SPLICE 30 BAR DIAMETERS AT MID SPAN. CONTINUOUS BOTTOM BARS SHALL BE LAP SPLICED 6" AT CENTER OF SUPPORT.

10. EXCEPT AS NOTED OTHERWISE WHERE CONTINUOUS REINFORCING IS SPECIFIED, HOOK BARS AT NON-CONTINUOUS ENDS, LAP BARS AS INDICATED BELOW:
    - A. #3 1'-3"
    - B. #4 1'-8"
    - C. #5 2'-2"
    - D. #6 2'-5"
    - E. #7 3'-6"

1. PROVIDE TWO (2) #5, 4'-0" LONGER THAN OPENING DIMENSION ON ALL SIDES OF OPENING IN SLAB

2. PROVIDE THE FOLLOWING COVER FOR REINFORCING:
    - A. FOOTINGS AND GRADE BEAMS: 3"
    - B. FORMED SURFACES EXPOSED TO SOIL: 3"
    - C. BEAMS, COLUMNS, AND WALLS: 1 1/2"
    - D. SLABS: 1 1/2"

3. DO NOT PENETRATE OR MAKE HOLES OR OPENINGS THROUGH FOUNDATION AND/OR FOOTINGS WITHOUT ENGINEER'S APPROVAL.

4. EXPOSED EDGES OF CONCRETE SHALL BE CHAMFERED 3/4"

CONCRETE MASONRY UNIT NOTES:

1. PROVIDE HOLLOW CONCRETE MASONRY UNITS MEETING ASTM C90, LIGHTWEIGHT, TYPE 1, WITH A MINIMUM COMPRESSIVE STRENGTH OF 2000 PSI ON THE NET AREA FOR INDIVIDUAL UNITS.

2. CMU MORTAR SHALL MEET ASTM C270, TYPE 'M' OR 'S', AND HAVE A COMPRESSIVE CUBE STRENGTH OF 1800 PSI AT 28 DAYS.

3. CMU GROUT, POURED OR PUMPED, SHALL MEET ASTM C476, AND HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 3000 PSI.

4. REINFORCING BARS SHALL MEET ASTM A615, GRADE 60, JOINT REINFORCING SHALL MEET ASTM A82.

5. REINFORCED MASONRY WALLS SHALL HAVE A MINIMUM F'M = 2000 PSI.

6. REINFORCEMENT SHALL BE HELD IN PLACE PRIOR TO GROUTING WITH WIRE POSITIONERS SPACED AT INTERVALS NOT EXCEEDING 192 REINFORCING BAR DIAMETERS FOR 10 FEET. ADDITIONAL POSITIONERS SHALL BE PLACED AT ALL REINFORCING BAR SPLICES.

7. PROVIDE DOWELS FOR CMU WALL CONNECTION TO CONCRETE BEAMS AND SLABS AND FOOTINGS, SEE DETAILS. LAP DOWELS 2'-0" (MIN.) WITH VERTICAL BARS.

8. CMU TO BE LAID IN RUNNING BOND PATTERN.

9. GROUT PLACEMENT SHALL CONFORM TO TABLE 5 OF ACI 530.1/ASCE 6/TMS 602; HOWEVER, THE MAXIMUM GROUT POUR HEIGHT SHALL NOT EXCEED 8 FEET AND THE MAXIMUM HEIGHT WHICH GROUT IS PLACED IN ONE CONTINUOUS OPERATION (GROUT LIFT) SHALL NOT EXCEED 4 FEET. THERE SHALL BE A MINIMUM OF 1 HOUR SETTING TIME BETWEEN EACH GROUT LIFT.

10. THE TOP OF EACH GROUT POUR SHALL BE 1" BELOW THE BED JOINT.

11. REINFORCEMENT, REBAR POSITIONERS, AND TIES SHALL BE PLACED PRIOR TO GROUTING.

12. CONTRACTOR SHALL DESIGN, FABRICATE, AND INSTALL BRACING THAT WILL ASSURE THE STABILITY OF THE MASONRY DURING CONSTRUCTION.

13. ALL CONCRETE MASONRY WORK SHALL CONFORM TO TMS 402-16 BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES AND TMS 602-16 SPECIFICATION FOR MASONRY STRUCTURES.

14. REINFORCING BARS SHALL HAVE A MASONRY COVER NOT LESS THAN THE FOLLOWING:
    - A. MASONRY FACE EXPOSED TO EARTH OR WEATHER: 2 INCHES FOR BARS LARGER THAN NO. 5; 1.5 INCHES FOR NO. 5 BARS OR SMALLER
    - B. MASONRY NOT EXPOSED TO EARTH OR WEATHER: 1.5 INCHES

15. EXCEPT AS NOTED OTHERWISE WHERE CONTINUOUS REINFORCING IS SPECIFIED, HOOK BARS AT NON-CONTINUOUS ENDS, LAP BARS AS INDICATED BELOW:
    A. #3 1'-5
    B. #4 2' 6"
    C. #5 3'-10"
    D. #6 4'-4"
    E. #7 7'-3"

WOOD FRAMING NOTES:

1. WOOD FRAMING FABRICATION AND ERECTION SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE 2020 FLORIDA BUILDING CODE (FBC), THE 2020 FLORIDA RESIDENTIAL CODE (FRC) AND SHALL CONFORM TO THE WOOD FRAME CONSTRUCTION MANUAL (WFCM) FOR ONE- AND TWO-FAMILY DWELLINGS, 2001 EDITION AND THE PLYWOOD DESIGN SPECIFICATIONS BY THE APA. ALL WOOD FRAMING CONNECTORS, STRAPS, AND TIE-DOWNS SHALL BE USED IN ADDITION TO AND CONJUNCTION WITH THE REQUIREMENTS STATED ABOVE. THE DESIGN AND NOTES BELOW ALSO COMPLY WITH THE WOOD FRAMING NOTES FOR SPECIFIC REQUIREMNTS MEETING FLORIDA BUILDING CODE (FBC) SECTIONS 2314-2330 RELATED TO WOOD CONSTRUCTION IN HIGH VELOCITY HURRICANE ZONES (HVHZ)

2. FRAMING LUMBER OF ALL SILLS, GIRDERS, AND HEADERS OF & SUPPORTING LOAD BEARING WALLS SHALL BE SOUTHERN PINE GRADE MARKED AND KILN DRIED, NO. 1 OR BETTER. ALL OTHER FRAMING LUMBER SHALL BE SOUTHERN PINE GRADE MARKED AND KILN DRIED, NO. 2 OR BETTER. ALL MEMBER PIECES, ENDS, JOINTS, OR SPLICES SHALL BE OVER SUPPORTS UNLESS NOTED OTHERWISE.

3. UNLESS NOTED OTHERWISE MULTIPLE PIECES OF LUMBER OR MANUFACTURED WOOD PRODUCTS USED TO FORM BEAM OR HEADER MEMBERS SHALL BE ATTACHED TOGETHER WITH 2 ROWS OF 12d NAILS SPACED AT 12" FOR PIECES UP TO 12" DEEP. ALL OTHER PIECES SHALL HAVE 3 ROWS OF 12d NAILS AT 12".

4. OPENINGS IN EXTERIOR WOOD-FRAMED WALLS SHALL HAVE THE FOLLOWING MINIMUM NUMBER OF FULL HEIGHT STUDS AT EACH JAMB AS PER TABLE 3.23c IN THE WFCM:

A.	OPENINGS LESS THAN 4'-0":	2 STUDS
B.	OPENINGS 4'-0" TO 6'-0":	3 STUDS
C.	OPENINGS 6'-0" TO 10'-0":	4 STUDS
D.	OPENINGS LESS THAN 4'-0":	2 STUDS

*ALL MULTIPLE STUDS SHALL BE CONNECTED TOGETHER WITH TWO ROWS OF NAILS SPACED AT 8" O.C.

5. UNLESS SHOWN OTHERWISE ALL OPENINGS IN WALLS SHALL HAVE HEADERS CONSISTING OF A MINIMUM OF TWO (2) 2x12's OR THREE (3) 2x10's.

6. PROVIDE DOUBLE FLOOR JOISTS UNDER ALL WALLS AND PROVIDE FULL DEPTH BLOCKING FOR ALL FLOOR JOISTS @ 8'-0" O.C. MAX.

7. PRESSURE TREATED (PT) WOOD SHALL BE TREATED WITH ACQ TO A MINIMUM RETENTION OF 0.40 LBS./CU. FT. IN ACCORDANCE WITH AWPA. PROTECTION OF WOOD AND WOOD-BASED PRODUCTS FROM DECAY SHALL BE PROVIDED IN THE FOLLOWING LOCATIONS BY THE USE OF WOOD THAT IS PRESERVATIVE-TREATED IN ACCORDANCE WITH AWPA U1 PER FRC 317 INCLUDING ALL LUMBER IN CONTACT WITH CONCRETE OR MASONRY, JOISTS WITHIN 12", FROM GRADE, AND SHEATHING, SIDING, AND FRAMING WITHIN 6" FROM GRADE. AND CONCRETE OR MASONRY EXTERIOR FOUNDATION WALLS AND ARE LESS THAN 8 INCHES FROM THE EXPOSED GROUND.

8. WOOD MEMBERS (INCLUDING PLYWOOD SHEATHING OR BRACING) SHALL BE CONNECTED OR FASTENED WITH STEEL NAILS, SCREWS, OR BOLTS. NO STAPLES WILL BE PERMITTED. ALL WOOD CONNECTIONS SHALL BE IN ACCORDANCE WITH THE FASTENING SCHEDULE OF THE 2020 FRC AND ALL CONNECTORS SHALL MEET FBC TABLE 2324.1.

9. JOIST AND BEAM HANGERS, HURRICANE CLIPS, AND OTHER TIES, ANCHORS, OR CONNECTORS SHALL BE AS MANUFACTURERED BY SIMPSON STRONG-TIE CO., INC. OR APPROVED EQUALS AND SHALL BE ATTACHED WITH NAILS OF THE SIZE AND TYPE RECOMMENDED BY THE MANUFACTURER. ALL HANGERS, CLIPS, CONNECTORS, ANCHORS, TIES, ETC. SHALL BE GALVANIZED. ALL SUCH UNITS THAT WILL BE EXPOSED TO WEATHER, IN CONTACT WITH EARTH, WATER, OR CONCRETE, OR BELOW THE FIRST FLOOR LEVEL SHALL RECEIVE THE SIMPSON "Z-MAX" TRIPLE ZINC COATING OR APPROVED EQUAL. ALL HANGERS SHOWN ARE IN ADDITION TO THE REQUIRED FASTENERS BY FLORIDA RESIDENTIAL CODE.

10. UNLESS SHOWN OTHERWISE ALL PLYWOOD WALL SHEATHING SHALL BE 5/8" THICK. WALL SHEATHING SHALL BE CONTINUOUS OVER THREE OR MORE SUPPORTS AND SHALL BE NAILED TO SUCH SUPPORTS WITH 8D COMMON NAILS. NAIL SPACING SHALL NOT EXCEED 6-INCHES (152 MM) ON CENTER AT PANEL EDGES AND ALL INTERMEDIATE SUPPORTS. NAIL SPACING SHALL BE 4-INCHES (102 MM) ON CENTER AT CORNER STUDS, IN ALL CASES.

11. PLYWOOD WALL SHEATHING SHALL HAVE SOLID BLOCKING AT ALL HORIZONTAL JOINTS.

12. UNLESS SHOWN OTHERWISE ALL PLYWOOD FLOOR SHEATHING SHALL BE APA RATED 48/24, 3/4" THICK AND FASTENED WITH GLUE AND 10d COMMON NAILS SPACED AT 6" O.C. MAX. ALONG SUPPORTING MEMBERS AT THE EDGES OF EACH SHEET AND 12" O.C. MAX. ALONG SUPPORTING MEMBERS ON THE INTERIOR OF EACH SHEET. 100% OF ALL SEALANTS USED ARE ≤ 250 G/L AND ADHESIVES ≤ 70 G/L.

13. THE TOP PLATE OF STUD BEARING WALLS SHALL BE DOUBLED AND LAPPED AT EACH INTERSECTION OF WALLS AND PARTITIONS.

14. CORNERS OF STUD WALLS AND PARTITIONS SHALL BE FRAMED SOLID BY NOT LESS THAN THREE STUDS.

15. STUDS, OTHER THAN END-JOINTED LUMBER, SHALL BE SPLICED ONLY AT POINTS WHERE LATERAL SUPPORT IS PROVIDED.

16. STUD WALLS AND PARTITIONS CONTAINING PIPES SHALL BE FRAMED TO GIVE PROPER CLEARANCE FOR THE PIPING.

17. WHERE WALLS AND PARTITIONS CONTAINING PIPING ARE PARALLEL TO FLOOR JOISTS, THE JOISTS SHALL BE DOUBLED AND MAY BE SPACED TO ALLOW VERTICAL PASSAGE OF PIPES.

18. WHERE VERTICAL PIPE POSITIONS NECESSITATE THE CUTTING OF PLATES, A METAL TIE NOT LESS THAN 1 INCH BY 1/8 INCH (25 MM BY 3 MM) SHALL BE PLACED ON EACH SIDE OF THE PLATE ACROSS THE OPENING AND NAILED WITH NOT LESS THAN TWO 16D OR THREE 8D NAILS AT EACH END.

NAIL CONNECTION FOR WOOD MEMBERS (FBC TABLE 2324.1)

CONNECTION	COMMON NAILS	NUMBER OR SPACING
JOISTS TO SILL OR GIRDER, TOE NAIL	16D	2
BRIDGING TO JOIST, TOE NAIL	8D	2 EACH END
1-INCH x 6-INCH SUBFLOOR OR LESS TO EACH JOIST, FACE NAIL	8D	2
OVER 1-INCH x 6-INCH SUBFLOOR TO EACH JOIST, FACE NAIL	8D	3 + 1 FOR EACH SIZE INCREASE
2-INCHES SUBFLOOR TO JOIST OR GIRDER, BLIND AND FACE NAIL	16D	2
SOLE PLATE TO JOIST OR BLOCKING, FACE NAIL	16D	16 INCHES O.C.
TOP OR SOLE PLATE TO STUD, END NAILED	16D	2
STUD TO SOLE PLATE, TOE NAIL	3D	3 or 2 16D
DOUBLED STUDS, FACE NAIL	16D	24 INCHES O.C.
DOUBLED TOP PLATES, FACE NAIL	16D	16 INCHES O.C.
TOP PLATES, LAPS AND INTERSECTIONS, FACE NAIL	16D	2
CONTINUOUS HEADER, TWO PIECES	16	16 INCHES O.C. ALONG EACH EDGE
CEILING JOISTS TO PLATE, TOE NAIL	16D	2
CONTINUOUS HEADER TO STUD, TOE NAIL	16D	3
CEILING JOISTS, LAPS OVER PARTITIONS, FACE NAIL	16D	3
CEILING JOISTS TO PARALLEL RAFTERS, FACE NAIL	16D	3
RAFTER PLATE, TOE NAIL	16D	3
1-INCH x 6-INCH SHEATHINGS OR LESS TO EACH BEARING, FACE NAIL	8D	2
OVER 1-INCH x 6-INCH SHEATHING, TO EACH BEARING, FACE NAIL	8D	3 + 1 FOR EACH SIZE INCREASE
BUILT-UP CORNER STUDS, FACE NAIL	16D	30 INCHES O.C.
BUILT-UP GIRDERS AND BEAMS	20D	32 INCHES O.C. AT TOP AND BOTTOM AND STAGGERED, 2 AT ENDS AND AT EACH SPLICE
2-INCH PLANKS	16D	2 EACH BEARING

PRE-ENGINEERED WOOD TRUSS NOTES:

1. TRUSSES SHALL BE DESIGNED IN ACCORDANCE WITH ANSI/TPI 1, *NATIONAL DESIGN STANDARD FOR METAL PLATE CONNECTED WOOD TRUSS CONSTRUCTION* AND THIS SPECIFICATION. WHERE ANY APPLICABLE DESIGN FEATURE IS NOT SPECIFICALLY COVERED BY ANSI/TPI 1 OR THIS SPECIFICATION, DESIGN SHALL BE IN ACCORDANCE WITH THE APPLICABLE PROVISIONS OF THE LATEST EDITION OF ANSI/AWC NDS - *NATIONAL DESIGN SPECIFICATION® (NDS®) FOR WOOD CONSTRUCTION*, AND ALL APPLICABLE LEGAL REQUIREMENTS.

2. TRUSSES SHALL BE DESIGNED TO MEET THE REQUIREMENTS OF THE BCSI: *GUIDE TO GOOD PRACTICE FOR HANDLING, INSTALLING, RESTRAINING & BRACING OF METAL PLATE CONNECTED WOOD TRUSSES* JOINTLY PRODUCED BY THE STRUCTURAL BUILDING COMPONENTS ASSOCIATION (SBCA) AND THE TRUSS PLATE INSTITUTE (TPI) AND THE 2020 FRC AND SHALL COMPLY WITH FBC SECTION 2319.17.2 PREFABRICATED WOOD TRUSSES.

3. TRUSS MANUFACTURER SHALL FURNISH TRUSS DESIGN DRAWINGS PREPARED IN ACCORDANCE WITH ALL APPLICABLE LEGAL REQUIREMENTS.

4. THE TRUSS MANUFACTURER SHALL FURNISH A TRUSS PLACEMENT DIAGRAM WHICH SHALL PROVIDE AT A MINIMUM THE LOCATION ASSUMED FOR EACH TRUSS BASED ON THE TRUSS MANUFACTURER'S INTERPRETATION OF THE CONSTRUCTION DOCUMENTS

5. THE TRUSS MANUFACTURER SHALL SUBMIT THE TRUSS SUBMITTAL PACKAGE TO THE BUILDING DESIGNER AND/OR THE LOCAL BUILDING OFFICIAL FOR REVIEW AND APPROVAL PRIOR TO THE MANUFACTURING OF THE TRUSSES.

6. THE DESIGN, CONFIGURATION, LAYOUT, SPACING, ETC OF ALL TRUSSES SHALL BE COORDINATED BY THE CONTRACTOR AND THE TRUSS DESIGNER WITH THE MECHANICAL EQUIPMENT, DUCTWORK, AND ALL ARCHITECTURAL DRAWINGS.

7. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OF THE TRUSSES FOR REVIEW BY THE ENGINEER. THE SHOP DRAWINGS SHALL BE STAMPED BY A PROFESSIONAL STRUCTURAL ENGINEER REGISTERED IN THE STATE OF FLORIDA.

8. CONTRACTOR TO VERIFY ALL DIMENSIONS OF DRAWINGS IN FIELD PRIOR TO COORDINATION OF THE DESIGN, CONFIGURATION, LAYOUT, SPACING, ETC OF ALL TRUSSES BY THE CONTRACTOR AND THE TRUSS DESIGNER.

9. CONTRACTOR TO CONFIRM UPLIFT ON TRUSSES DO NOT EXCEED THOSE SPECIFIED BY THE STRUCTURAL DRAWINGS.

SITE PREPARATION NOTES:

1. AFTER DEMOLITION OF THE EXISTING STRUCTURE AND REMOVAL OF ITS ENTIRE FOUNDATIONS AND DEBRIS, THE LOCATION OF ANY EXISTING CONFLICTING UNDERGROUND UTILITY LINES WITHIN THE CONSTRUCTION AREA SHOULD BE ESTABLISHED. PROVISIONS SHOULD BE MADE TO REMOVE OR RELOCATE ANY INTERFERING UTILITY LINES WITHIN THE CONSTRUCTION AREA. ABANDONED UTILITIES SHOULD BE REMOVED OR GROUTED TO REDUCE THE POSSIBILITY OF SUBSURFACE EROSION THAT COULD RESULT IN FUTURE SETTLEMENT. EXCAVATIONS RESULTING FROM THE REMOVAL OF ANY INTERFERING UTILITIES SHOULD BE BACKFILLED IN ACCORDANCE WITH THE RECOMMENDATIONS PRESENTED BELOW.

2. AT THE OUTSET OF CONSTRUCTION, CLEARING AND GRUBBING INCLUDING ROOT RAKING AND REMOVAL OF ANY ORGANIC-LADEN TOPSOIL OR ORGANIC SANDS THAT MAY REMAIN ON THE SITE SHOULD BE COMPLETED. AT A MINIMUM, A STRIPPING DEPTH OF ABOUT SIX INCHES IS RECOMMENDED. IT IS ALSO RECOMMENDED THAT THE CLEARING/STRIPPING OPERATIONS EXTEND AT LEAST 10 FEET BEYOND THE PROPOSED STRUCTURE PERIMETER, WHERE POSSIBLE.

3. FOLLOWING THE CLEARING/STRIPPING OPERATIONS, THE DEVELOPMENT AREAS MAY BE BROUGHT UP TO FINISHED SUBGRADE LEVELS, IF NEEDED, USING COMPACTED STRUCTURAL FILL. THE EXISTING ON-SITE SOILS CAN BE USED FOR STRUCTURAL FILL PROVIDED IT IS FREE OF ORGANIC OR DELETERIOUS MATERIALS AND MOISTURE CONTENT IS APPROPRIATE. FILL SOILS SHOULD BE TESTED PRIOR TO IMPORT AND PLACEMENT. IMPORTED FILL SHOULD CONSIST OF SAND WITH LESS THAN 12 PERCENT PASSING THE NO. 200 SIEVE, FREE OF ROCKS/RUBBLE, ORGANICS, CLAY, DEBRIS AND OTHER UNSUITABLE MATERIAL. APPROVED SAND FILL SHOULD BE PLACED IN LOOSE LIFTS NOT EXCEEDING EIGHT INCHES IN THICKNESS AND SHOULD BE COMPACTED TO AT LEAST 95 PERCENT OF THE MATERIAL'S MAXIMUM DRY DENSITY IN ACCORDANCE WITH ASTM D-1557, MODIFIED PROCTOR METHOD. DENSITY TESTS TO CONFIRM COMPACTION SHOULD BE PERFORMED IN EACH FILL LIFT BEFORE THE NEXT LIFT IS PLACED.

4. A MOISTURE CONTENT WITHIN THE PERCENTAGE RANGE NEEDED TO ACHIEVE COMPACTION (TYPICALLY +/- 3 PERCENT) IS RECOMMENDED PRIOR TO COMPACTION OF THE NATURAL GROUND AND FILL, BASED ON THE RESULTS OF THE MODIFIED PROCTOR COMPACTION TESTS.

5. THE BOTTOM OF THE FOUNDATION EXCAVATIONS SHOULD BE COMPACTED TO AT LEAST 95 PERCENT OF THE MATERIAL'S MAXIMUM DRY DENSITY IN ACCORDANCE WITH ASTM D-1557, MODIFIED PROCTOR METHOD, FOR A MINIMUM DEPTH OF ONE FOOT BELOW THE BOTTOM OF THE FOUNDATIONS. SOFT OR LOOSE SOIL ZONES ENCOUNTERED AT THE BOTTOM OF THE FOOTING EXCAVATIONS SHOULD BE REMOVED AND REPLACED WITH FILL SOILS, LEAN CONCRETE, OR DENSE GRADED CRUSHED STONE (FDOT NO. 57).

No.	Description	Date

STRUCTURAL NOTES

Project Number	2019-15
Date	01/25/2022
Drawn By	IP
Checked By	BT

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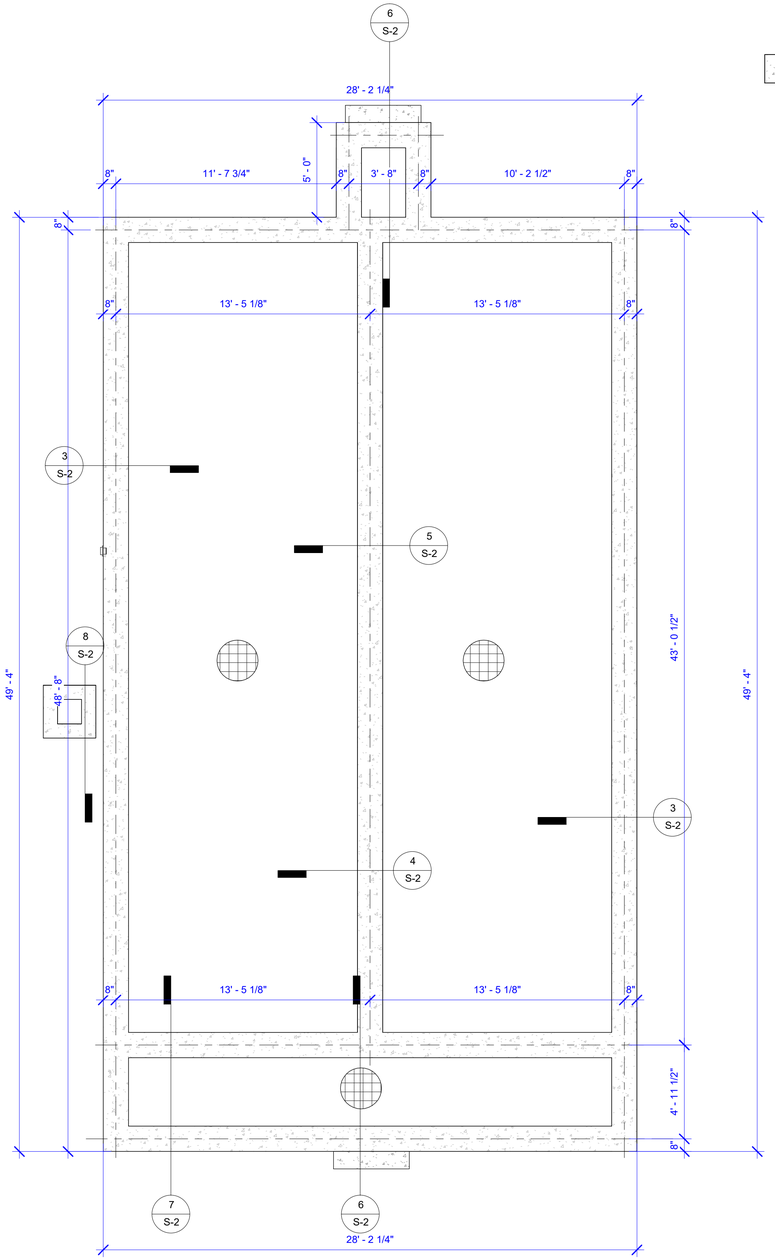
S-1



1 FOUNDATION PLAN
1/4" = 1'-0"

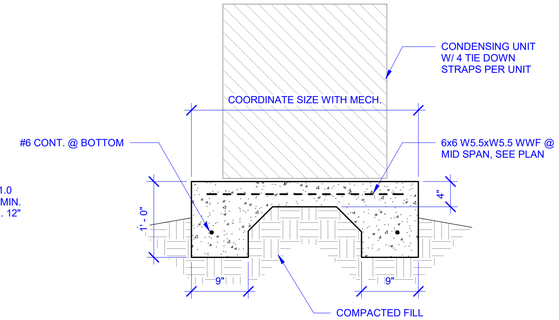
FOUNDATION PLAN LEGEND

CONCRETE GRADE BEAM

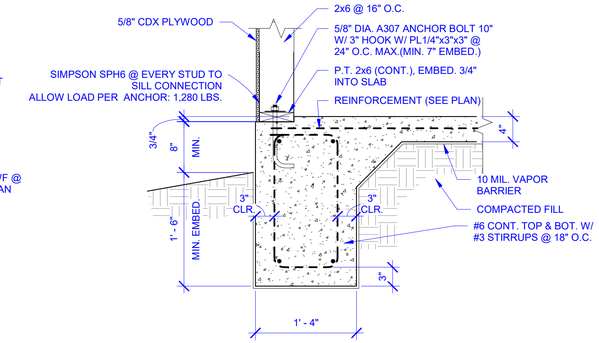
4" CONCRETE SLAB W/ 6X6-W2.9XW2.9 WELDED WIRE MESH @ MID-DEPTH

FOUNDATION PLAN NOTES

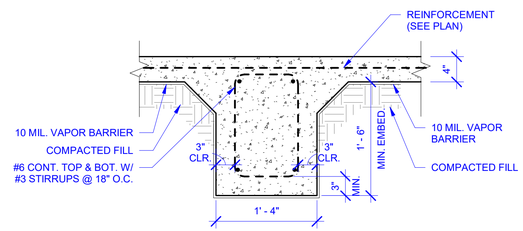
1. SEE STRUCTURAL NOTES ON S1.0
2. GRADE BEAM DEPTH SHALL BE MIN. 12" BELOW FROSTLINE AND MIN. 12" BELOW UNDISTURBED SOIL



8 CONDENSER SLAB
1" = 1'-0"



3 SECTION
1" = 1'-0"



4 SECTION
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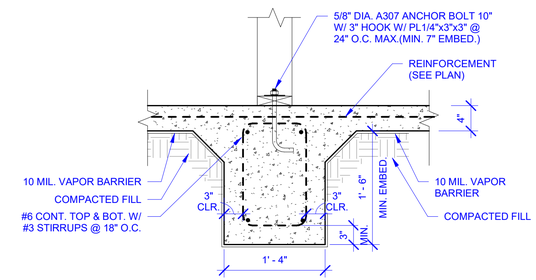

5 SECTION
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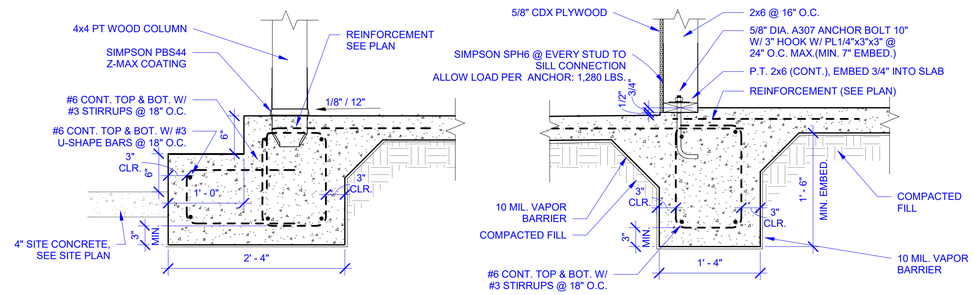
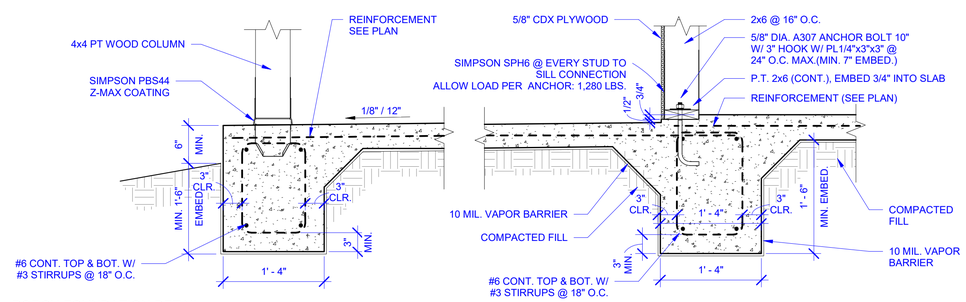


6 PORCH STEP FOUNDATION DETAIL
1" = 1'-0"



7 PORCH FOUNDATION DETAIL
1" = 1'-0"

No.	Description	Date

FOUNDATION PLANS & DETAILS

Project Number	2019-15
Date	01/25/2022
Drawn By	SM
Checked By	IP

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S-2

FRAMING PLAN LEGEND & NOTES

1. LOAD BEARING 2X6 STUD WALL SPACED @ 16" O.C. , MAX W/ BLOCKING @ 48" O.C. MAX. EXTERIOR WALLS - W/ 5/8" CDX PLYWOOD
2. BEAM (SEE PLAN FOR TYPE)
3. PROVIDE DOUBLE JOISTS UNDER ALL LOAD BEARING WALLS
4. PROVIDE TRIPLE STUDS UNDER ALL BEAMS AND DOUBLE JOISTS
5. PROVIDE 3/4" PLYWOOD DECKING A MINIMUM OF 30" AROUND THE PERIMETER OF ANY EQUIPMENT IN ATTIC SPACE AND MIN. 24" PASSAGEWAY TO ANY EQUIPMENT FROM THE ATTIC ACCESS LOCATION

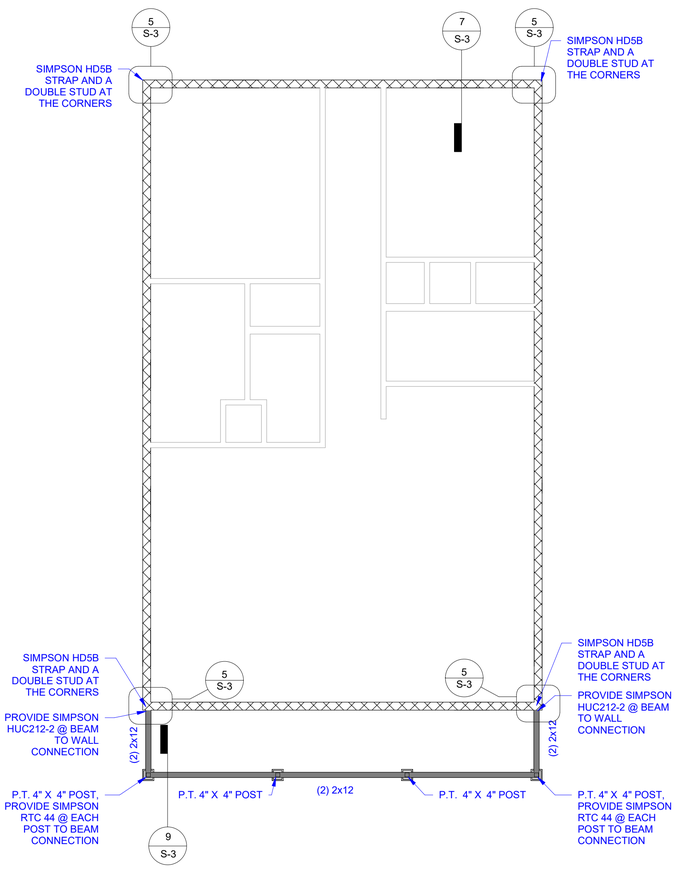
ROOF TRUSS NOTE:

CONTRACTOR SHALL PROVIDE PRE-ENGINEERED ROOF TRUSS SYSTEM. CONTRACTOR SHALL PROVIDE ENGINEERED STAMPED TRUSS DESIGN TO THE PERMIT DEPARTMENT AND ENGINEER OF RECORD. SEE ROOF TRUSS NOTES ON S1.0

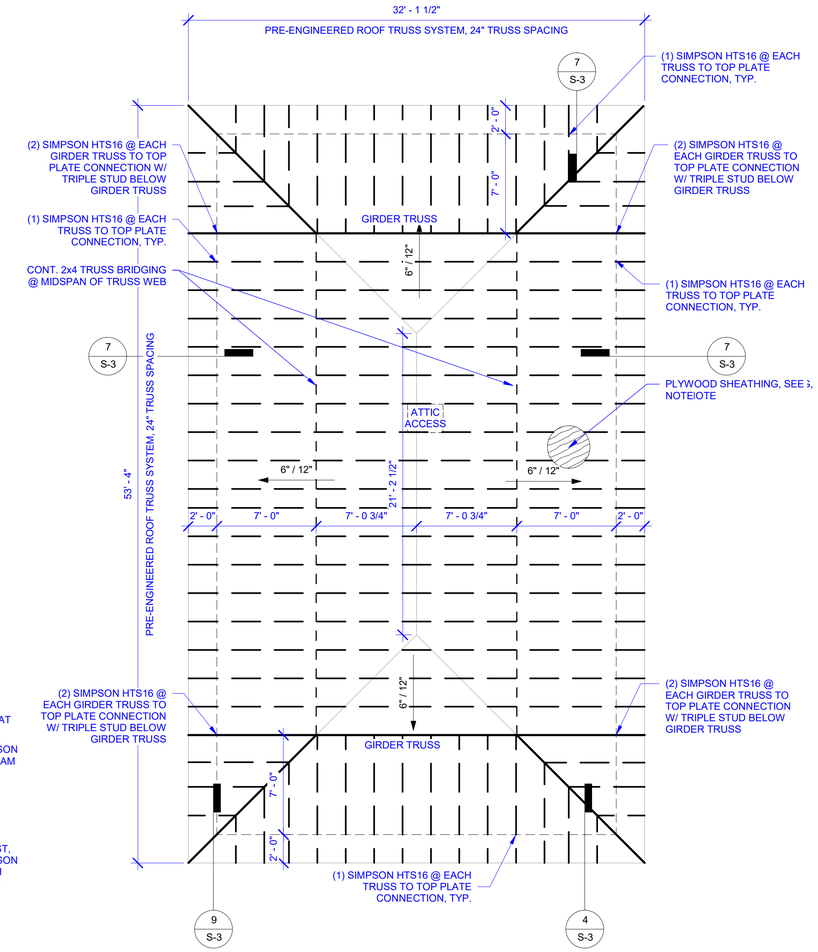
ROOF TRUSS LUMBER SHALL HAVE SPECIFIC GRAVITY (DENSITY) SG=0.49

PLYWOOD ROOF SHEATHING:

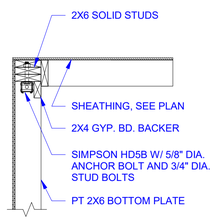
1. APA RATED 23/32" (48/24)
2. RATED FOR EXPOSURE 1
3. CONTINUOUS OVER TWO OR MORE SPANS WITH FACE GRAIN PERPENDICULAR TO SUPPORTS ROOF SHEATHING PANELS SHALL BE PROVIDED WITH MIN. OF 2x4 EDGEWISE BLOCKING AT ALL HORIZONTAL PANEL JOINTS WITH EDGE SPACING AT LEAST 4 FEET FROM EACH GABLE END
4. ROOF SHEATHING FASTENED WITH WITH ASTM F1667 RSRS-03 (21/2" × 0.131") NAILS OR ASTM F1667 RSRS-04 (3" × 0.120") NAILS SPACED AT 4" O.C. MAX. ALONG SUPPORTING MEMBERS AT THE EDGES OF EACH SHEET AND 4" O.C. MAX. ALONG SUPPORTING MEMBERS ON THE INTERIOR OF EACH SHEET
5. VERTICAL JOINTS OF PLYWOOD ROOF SHEATING SHALL BE STAGGERED EVERY FOUR FEET (4'-0") OR LESS.



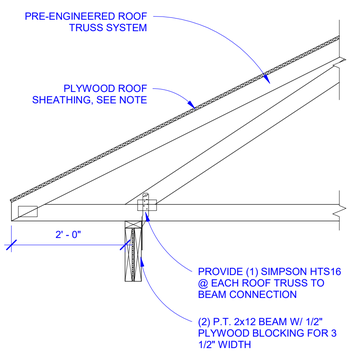
2 WALL FRAMING PLAN
3/16" = 1'-0"



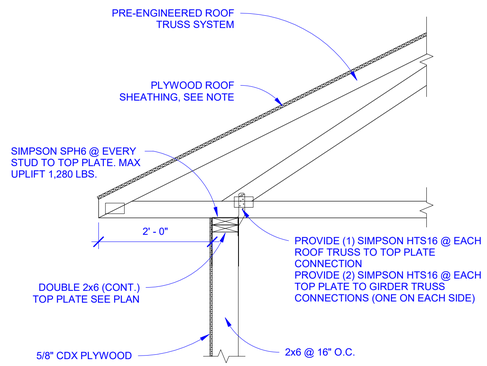
3 ROOF FRAMING PLAN
3/16" = 1'-0"



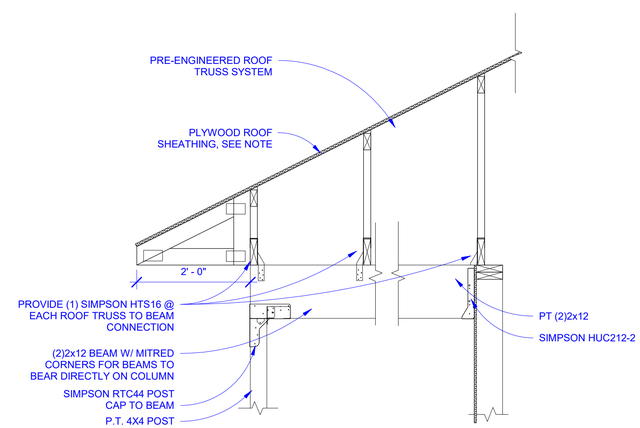
5 CORNER DETAIL - SOG
3/4" = 1'-0"



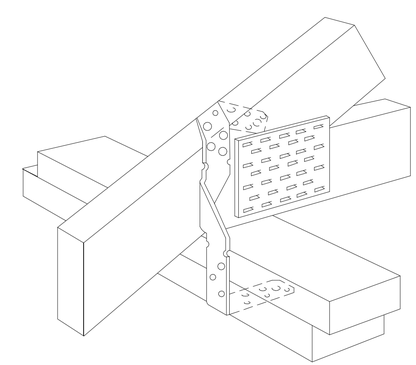
4 SECTION
3/4" = 1'-0"



7 SECTION
3/4" = 1'-0"



9 SECTION
3/4" = 1'-0"



1 HTS INSTALLATION AS A TRUSS-TO-TOP PLATE TIE
3/32" = 1'-0"

No.	Description	Date

FRAMING PLANS

Project Number	2019-15
Date	01/25/2022
Drawn By	SM
Checked By	IP

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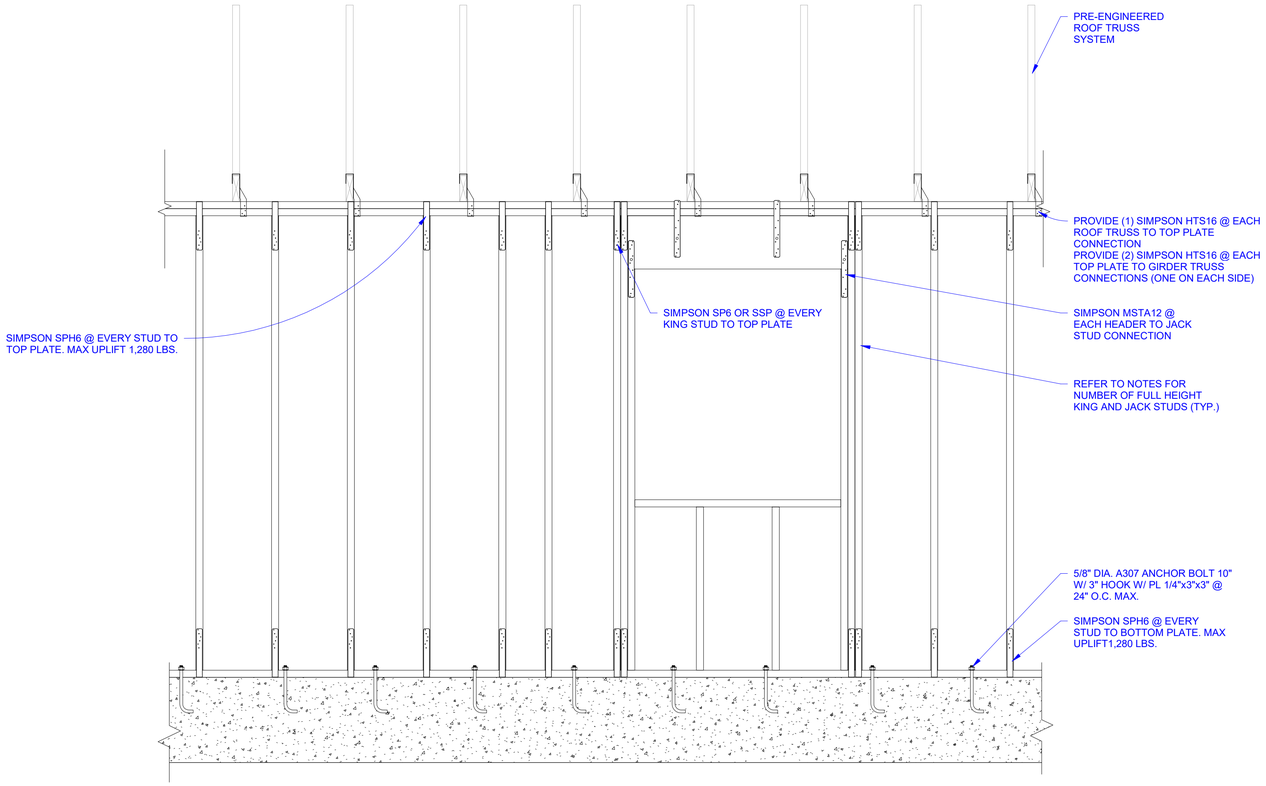
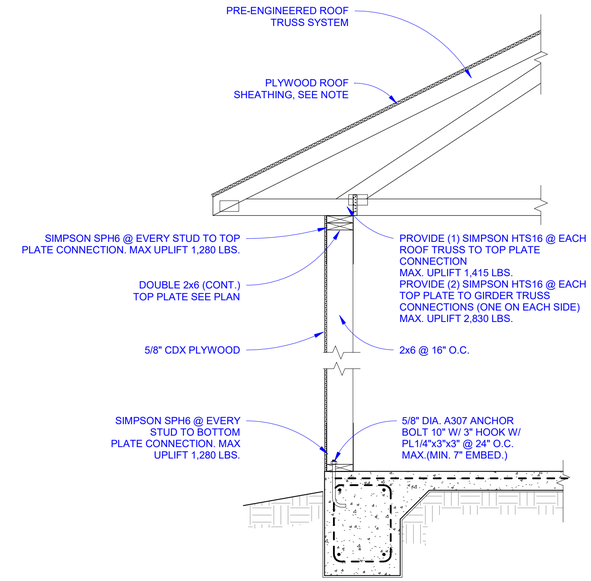
S-3



6 CONTINUOUS LOAD PATH DIAGRAM
NOT TO SCALE



1 SECTION
3/4" = 1'-0"

ANCHOR STRAP SCHEDULE

MANUFACTURER (OR EQUAL)	PRODUCT CODE	CONNECTED MEMBERS		FASTENERS	ALLOWABLE LOADS			APPROVAL NUMBER
					UPLIFT	UPLIFT	UPLIFT	
SIMPSON	LSTA36	RAFTER	RAFTER	(24) 0.148" x 2 1/2"	740			FL#10456.15
SIMPSON	HTS16	RAFTER	STUD/TOP PLATE	(16) 0.148" x 3" (16) 0.148" x 1 1/2"	1415	1415		FL#10456.12
SIMPSON	MTS12	RAFTER	STUD	(14) 0.148" x 3" Nails (14) 0.148" x 3" Nails	850	850		FL#13872.11
SIMPSON	HD5B	CORNER STUD	BOTTOM PLATE	5/8 Anchor Dia. Bolt (2) 3/4 Stud bolts	2405			FL#11496.3
	5/8" x 10" A307 ANCHOR BOLT W/ 3" HOOK	BOTTOM PLATE	SLAB/FOOTING					FL15731
SIMPSON	PC4Z	POST	HEADER	(8) 0.148" x 3" (10) 0.148" x 3"	1480			FL#10860.20
SIMPSON	MSTA12	JACK STUD	HEADER	(10) 0.148" x 2 1/2"	940			FL#10456.21
SIMPSON	PBS44	POST	SLAB/FOOTING	(14) 0.162" x 3 1/2" nails (2) 1/2" dia. Machine bolts	1235			FL#10860.17
SIMPSON	HUC212-2	STUD	HEADER	(18) 0.162" x 3 1/2" (10) 0.148" x 3"	4030			FL#10531.9
SIMPSON	LUS28	JOIST	HEADER	6-SS16d - Smooth-Shank Stainless Steel Nails 4-SS10d - Smooth - Shank Stainless Steel Nails 6-SSA10d - Ring-Shank Stainless Steel Nails 4-SSA10d Ring-Shank Stainless Steel Nails	915	1165		FL#10531.16

No.	Description	Date

FRAMING DETAILS

Project Number	2019-15
Date	01/25/2022
Drawn By	SM
Checked By	IP

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S-4

GENERAL NOTES:

1. 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 AS A PREVENTATIVE TREATMENT TO NEW CONSTRUCTION. SEE 2020 FLORIDA RESIDENTIAL CODE 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."
2. ALL WORK SHALL MEET APPLICABLE REQUIREMENTS OF THE 2020 FLORIDA BUILDING CODE, BUILDING, 7TH EDITION AND 2020 FLORIDA BUILDING CODE, RESIDENTIAL 7TH EDITION.
3. APPLIANCES SHALL BE ENERGY STAR LABELED - CLOTHES WASHERS, DISHWASHERS, REFRIGERATORS AND CLOTHES DRYERS. SUPPLY HOSES TO WATER USING FIXTURES AND APPLIANCES MUST BE ARMORED, PEX OR METAL (EXCEPT COPPER)
4. CONTRACTOR TO VERIFY ALL EXISTING CONDITIONS AND NOTIFY ARCHITECT OF ANY DISCREPANCIES WITH PLANS AND AS-BUILT CONDITIONS PRIOR TO PROCEEDING WITH THE WORK.
5. DO NOT SCALE DRAWINGS; DIMENSIONS GOVERN. LARGE SCALE DETAILS GOVERN OVER SMALL SCALE DETAILS. NOTIFY ARCHITECT WITH ANY DISCREPANCIES OVER DIMENSIONS.
6. ALL DIMENSIONS ARE TO THE FACE OF THE STUDS (ROUGH) UNLESS OTHERWISE NOTED.
7. THE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL PERMITS, INSPECTION FEES, AND DEPOSITS REQUIRED FOR THE INSTALLATION OF ALL WORK. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO CALL FOR LOCAL INSPECTIONS AND OBTAIN APPROVAL FROM THE STATE FIRE MARHSAL IF REQUIRED.
8. ALL CONSTRUCTION WORK SHALL BE IN COMPLIANCE WITH ALL LOCAL CITY, COUNTY, STATE OF FLORIDA AND FEDERAL CODES. THE CONTRACTOR SHALL GIVE ALL NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS, AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY BEARING PERFORMANCE OF THE WORK.
9. VERIFY ROUGH OPENING SIZES WITH DOOR AND WINDOW MANUFACTURERS BEFORE CONSTRUCTION IS TO BEGIN.
10. SAFETY GLAZING SHALL BE PROVIDED AT HAZARDOUS LOCATIONS AS PER SECTION R308.4 OF THE FRC 2020.
11. COMBINATION SMOKE /CARBON MONOXIDE DETECTORS SHALL BE PROVIDED IN AND OUTSIDE ALL SLEEPING AREAS.
12. EACH SLEEPING ROOM MUST HAVE AT LEAST ONE OPERABLE WINDOW OR EXTERIOR DOOR APPROVED FOR EMERGENCY EGRESS OR RESCUE. UNIT MUST BE OPERABLE FROM INSIDE TO FULL CLEAR OPENING OF 5.7 SQUARE FEET, WITH SILL HEIGHT NO MORE THAN 44 INCHES ABOVE THE FLOOR, MINIMUM NET CLEAR OPENING HEIGHT OF 24 INCHES, AND MINIMUM NET CLEAR OPENING WIDTH OF 20 INCHES.
13. EXTERIOR WALLS WITH A FIRE SEPARATION DISTANCE LESS THAN 3'-0" FEET SHALL HAVE 1 HOUR PROTECTION OF 5/8" GYP BOARD AT BOTH SIDES OF THE WALL.
14. OVERHANG PROJECTIONS WITH A FIRE SEPARATION DISTANCE LESS THAN 3'-0" (FEET) SHALL BE PROVIDED WITH 5/8" GYP. BOARD UNDERSIDE FOR 1-HOUR PROTECTION.
15. ALL "GLASS OPENINGS" SHALL BE IMPACT RESISTANT GLAZING (COMPLY WITH REQUIREMENTS OF THE LARGE MISSILE TEST OF ASTM 1996 AND OF ASTME 1886 FASTENED IN ACCORDANCE WITH TABLE R301.2.1.2 OF FRC 2020.
16. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY SAFETY APPARATUS REQUIRED TO ENSURE THE HEALTH AND WELFARE OF THE GENERAL PUBLIC, THE OWNERS, AND ANY WORKERS.
17. THE CONTRACTOR SHALL HAVE THE WORK SITE CLEANED ON A DAILY BASIS. THE DISPOSAL OF ANY WASTE SHALL BE OFF SITE AND IN A MANNER PRESCRIBED UNDER THE LAW.
18. CONTRACT DRAWINGS AND SPECIFICATIONS REPRESENT FINISHED STRUCTURE. THEY DO NOT INDICATE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY TO PROTECT STRUCTURE AND PERSONNEL DURING CONSTRUCTION. SUCH MEASURES SHALL INCLUDE BUT NOT BE LIMITED TO BRACING, SHORING OF LOADS DUE TO CONSTRUCTION EQUIPMENT, EXCAVATION PROTECTIONS, SCAFFOLDING, JOB SITE SAFETY, ETC. OBSERVATION VISITS TO THE SITE BY ARCHITECT, OWNER, OR ENGINEER SHALL NOT INCLUDE INSPECTIONS OF ABOVE ITEMS.
19. IT IS RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE VARIOUS TRADES ON BUILDING TO ALLOW SUFFICIENT ROOM FOR ALL EQUIPMENT.
20. CONTRACTOR TO COORDINATE ALL UTILITIES INSTALLATION AND CONNECTION WITH LOCAL UTILITY COMPANY.
21. THE CONTRACTOR SHALL PROVIDE FOR POSITIVE DRAINAGE AROUND THE BUILDING INCLUDING ANY TEMPORARY MEASURES DURING THE CONSTRUCTION SO AS TO ENSURE NO WATER DAMAGE TO THE BUILDING.
22. ALL REMOVED TOPSOIL SHALL BE STORED AND USED FOR FINISH GRADING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVAL OF ALL DEBRIS MATERIAL PRIOR TO FINISH GRADING.
23. CONTRACTOR SHALL COORDINATE & INSTALL WOOD BLOCKING IN FRAMING AS NEEDED TO SUPPORT ANY ITEMS MOUNTED TO THE WALLS.
24. ALL PENETRATIONS THROUGH FIRE RATED WALLS ARE TO BE SEALED WITH CODE APPROVED FIRESTOPPING MATERIAL.
25. THE CONTRACTOR SHALL VERIFY THE MIN. F.F. ELEV. WITH THE CITY/PARISH FEMA ELEVATION AND BENCHMARK CERTIFICATE.
26. ALL DRIVEWAY AND SIDEWALKS SHALL MEET LOCAL DEPARTMENT OF PUBLIC WORKS STANDARD DETAILS IF APPLICABLE.
27. CONTRACTOR SHALL PROVIDE COLOR SCHEMES FOR ALL CABINETS, COUNTERTOPS, FLOORING AND EXTERIOR MATERIALS IN A NEUTRAL COLOR PALETTE. ALL INTERIOR WALLS, CEILINGS AND TRIM MUST BE WHITE.
28. CONTRACTOR SHALL PROVIDE ALL PLUMBING FIXTURES, ELECTRICAL FIXTURES, DOOR HARDWARE, BATHROOM HARDWARE, AND BATHROOM ACCESSORIES IN A CONSISTENT MATERIAL FINISH.
29. CONTRACTOR SHALL PROVIDE CLEAN OUT LOCATIONS, TIE-IN LOCATIONS, AND WATER AND SEWER LINE LOCATIONS ON SITE TO PERMIT DEPARTMENT FOR REVIEW.

3 BEDROOM PROTOTYPE SOG

Address TBD
City. Florida Zip Code

50% PRELIMINARY DESIGN, NOT FOR CONSTRUCTION

NOTE: THIS IS A PROTOTYPE DESIGN, NOT INTENDED FOR CONSTRUCTION. FACTORS SUCH AS LOCATION, SURVEY, ZONING, LOCAL CODES, BASE FLOOD ELEVATION REQUIREMENTS, SURVEY, GEOTECHNICAL REPORT, LOCAL CLIMATE, AND SITE SPECIFIC CONDITIONS WILL IMPACT THE FINAL DESIGN OF PROTOTYPE HOMES INTENDED FOR CONSTRUCTION. THESE DRAWINGS REQUIRE MODIFICATION AND APPROVAL BY THE ENGINEER AND ARCHITECT TO BE USED FOR CONSTRUCTION.

PROJECT INFORMATION:

OCCUPANCY:	SINGLE FAMILY RESIDENTIAL
BUILDING CODE:	2020 FLORIDA BUILDING CODE, BUILDING, 7TH EDITION 2020 FLORIDA BUILDING CODE, RESIDENTIAL, 7TH EDITION
PERMIT TYPE:	NEW CONSTRUCTION
TYPE OF CONSTRUCTION:	TYPE V

ZONING INFORMATION:

ZONING CLASSIFICATION:	TBD
USE:	DWELLING, SINGLE-FAMILY
MINIMUM LOT AREA:	SINGLE FAMILY: TBD SF/DU
MINIMUM LOT WIDTH:	SINGLE FAMILY: TBD
MAX. BUILDING HEIGHT:	SINGLE FAMILY: TBD
FRONT YD MIN. REQ:	SINGLE FAMILY: TBD
INT SIDE YD REQ:	SINGLE FAMILY: TBD
CORNER SIDE YD MIN. REQ:	SINGLE FAMILY: TBD
REAR YD MIN. REQ:	SINGLE FAMILY: TBD

FFE INFORMATION:

FLOOD ZONE:	TBD
FEMA BASE FLOOD ELEVATION:	TBD
HIGHEST ADJACENT GRADE:	TBD
CROWN OF THE ROAD:	TBD
PROPOSED FFE.:	TBD

BUILDING INFORMATION:

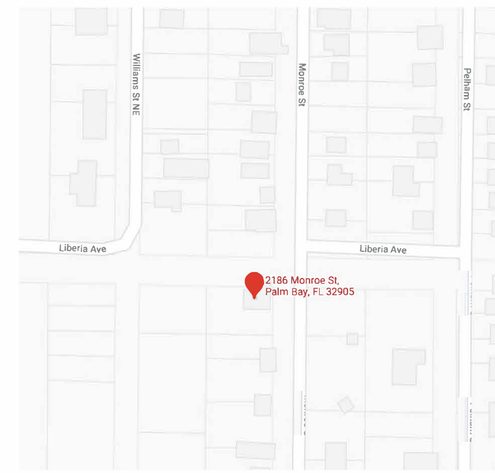
FIRST FLOOR:	1612 SF
FRONT PORCH:	193 SF
REAR PORCH:	121 SF
BUILDING HEIGHT:	TBD
CONDITIONED AREA VOLUME:	11,600 CF

50% PRELIMINARY DESIGN NOTES:
THIS DRAWING SET IS PROVIDED TO ALLOW THE CONTRACTOR TO START PREPARATION OF SUBMITTALS FOR THIS PROJECT REQUIRED FOR PERMIT BY THE AUTHORITY HAVING JURISDICTION (AHJ). THIS DESIGN IS PRELIMINARY, AND NOT FOR CONSTRUCTION. THE CONTRACTOR MAY ELECT TO START PREPARATION OF DOCUMENTS FOR PERMIT NOT PROVIDED BY THE ENGINEER OF RECORD INCLUDING BUT NOT LIMITED TO:

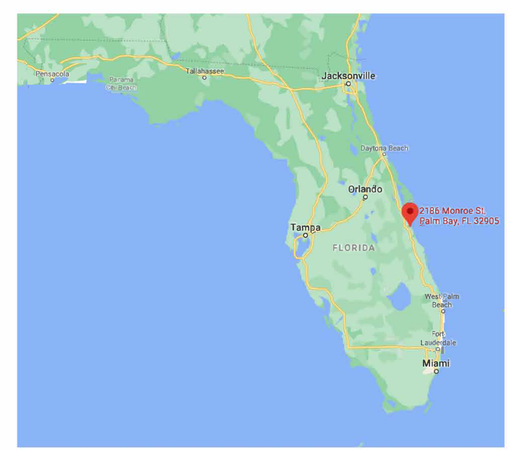
- TRUSS DESIGN DRAWINGS AND ENGINEERING
- WINDOW AND DOOR PRODUCT APPROVALS REQUIRED BY THE AHJ
- ADDITIONAL COMPONENTS AND CLADDING PRODUCT APPROVALS REQUIRED BY THE AHJ.

INDEX OF DRAWINGS

G-	TITLE SHEET
C-1	SITE PLAN & DETAILS
A-1	ARCHITECTURAL PLANS
A-2	ELEVATIONS
A-3	REFLECTED CEILING PLAN AND INTERIOR ELEVATIONS
A-4	SCHEDULES AND NOTES
A-5	VINYL SIDING DETAILS FOR SLAB ON GRADE
E-1	ELECTRICAL PLAN
M-1	MECHANICAL
M-2	MECHANICAL
M-3	MECHANICAL
P-1	PLUMBING PLAN
S-1	STRUCTURAL NOTES
S-2	FOUNDATION PLANS & DETAILS
S-3	FRAMING PLANS & DETAILS
S-4	FRAMING PLANS & DETAILS
S-5	FRAMING DETAILS



STREET MAP



VICINITY MAP

No.	Description	Date

3 BEDROOM PROTOTYPE SOG
Address TBD
City. Florida Zip Code

TITLE SHEET

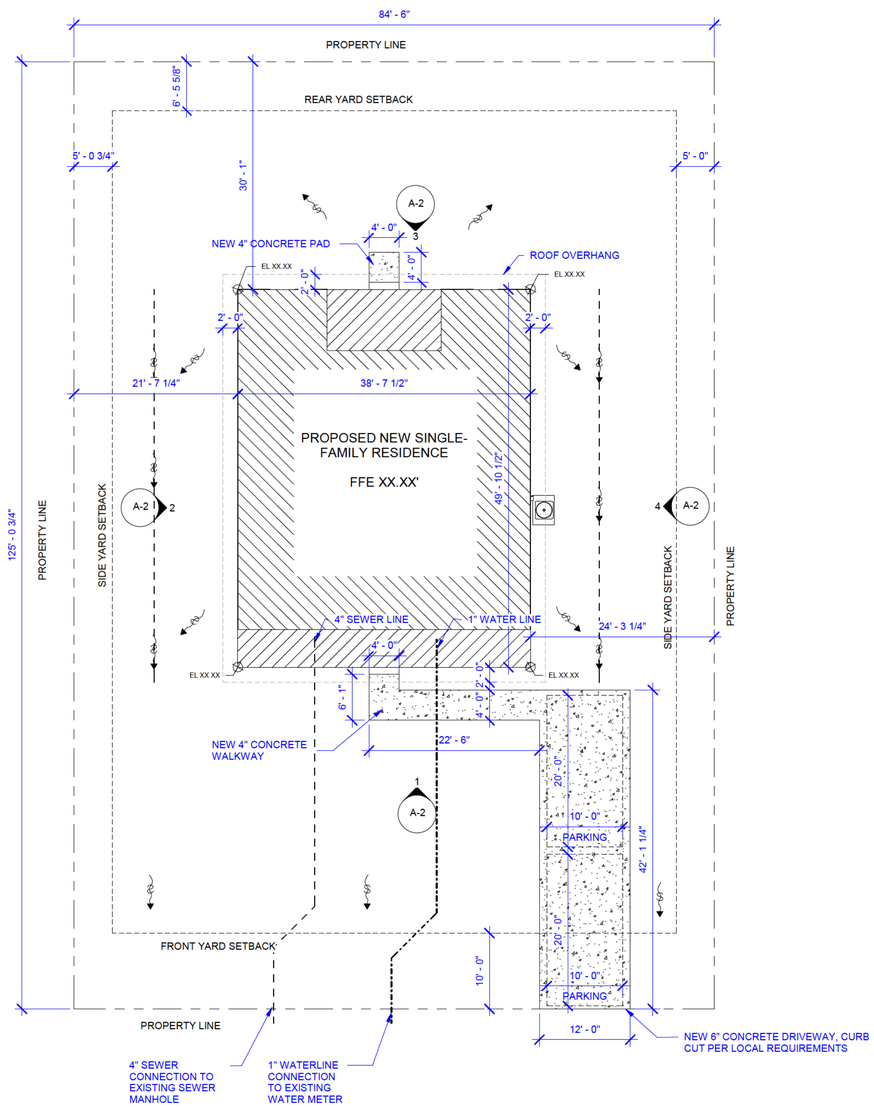
Project Number	2019-15
Date	12/27/2021
Drawn By	ZP
Checked By	IP

50% PRELIMINARY DESIGN, NOT FOR CONSTRUCTION

[redacted]

G-1

SITE PLAN IS PRELIMINARY, SUBJECT TO CHANGE AFTER RECEIVING SURVEY AND ELEVATION CERTIFICATE.



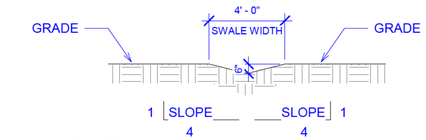
1 SITE PLAN
1" = 10'-0"

FFE INFORMATION:

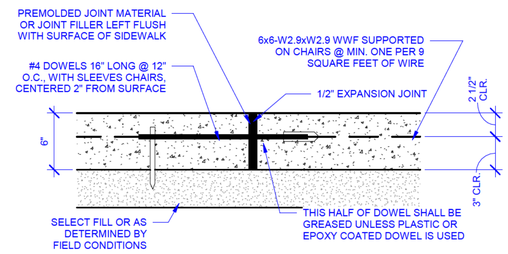
FLOOD ZONE:	TBD
FEMA BASE FLOOD ELEVATION:	TBD
HIGHEST ADJACENT GRADE:	TBD
CROWN OF THE ROAD:	TBD
PROPOSED FFE.:	TBD

SITE PLAN LEGEND

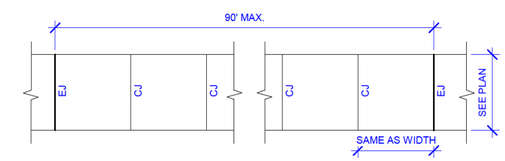
- EL XX.XX — EXISTING GRADE
- EL XX.XX — PROPOSED GRADE
- MEX — MATCH EXISTING GRADE
- FFE — FINISH FLOOR ELEVATION
- LOW POINT OF SWALE
- SLOPE ARROW



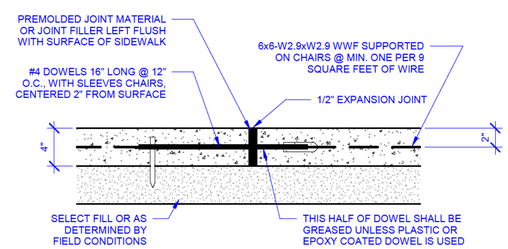
8 SWALE SECTION
1/4" = 1'-0"



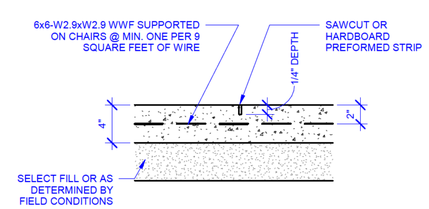
2 DRIVEWAY EXPANSION JOINT (EJ)
NOT TO SCALE



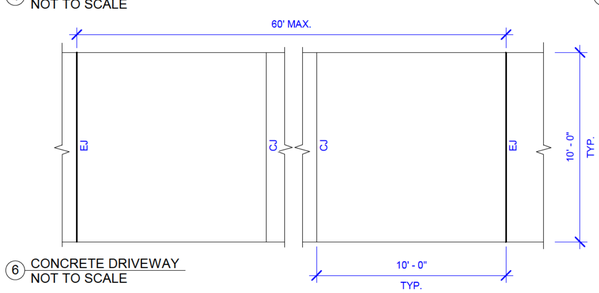
3 CONCRETE SIDEWALK
NOT TO SCALE



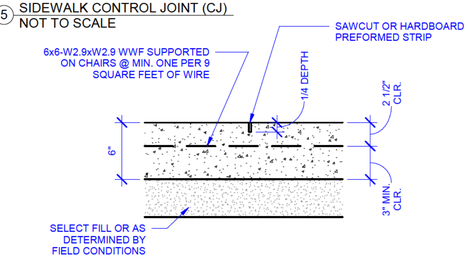
4 SIDEWALK EXPANSION JOINT (EJ)
NOT TO SCALE



5 SIDEWALK CONTROL JOINT (CJ)
NOT TO SCALE



6 CONCRETE DRIVEWAY
NOT TO SCALE



7 DRIVEWAY CONTROL JOINT (CJ)
NOT TO SCALE

GENERAL SITE PLAN NOTES:

1. ALL PAVEMENT IN PUBLIC RIGHT OF WAY SHALL MEET THE DETAILS AND REQUIREMENTS OF THE LOCAL AUTHORITY HAVING JURISDICTION.
2. ALL CURB CUTS AND DRIVEWAY APRONS SHALL MEET THE DETAILS AND REQUIREMENTS OF THE LOCAL AUTHORITY HAVING JURISDICTION.
3. ALL SIDEWALKS WITHIN THE PROPERTY BOUNDARY TO BE 4" THICK, 4000 PSI W/ 6x6-W2.9xW2.9 WWF, AND SHALL RECEIVE BROOM FINISH 90 DEG. TO THE DIRECTION OF TRAVEL.
4. ALL DRIVEWAYS WITHIN THE PROPERTY BOUNDARY TO BE 6" THICK, 4000 PSI W/ 6x6-W2.9xW2.9 WWF, AND SHALL RECEIVE BROOM FINISH 90 DEG. TO THE DIRECTION OF TRAVEL.
5. SLOPE ALL CONCRETE PAVING AWAY FROM BUILDING AT 1% MINIMUM. SLOPE ALL CONCRETE WALKS AWAY FROM BUILDING AT 2% MAXIMUM.
6. SLOPE ALL FINAL GRADING AWAY FROM BUILDING TO ENSURE POSITITVE DRAINAGE. MAXIMUM SLOPE FOR LANDSCAPED AREAS IS 25%.
7. LAY NEW SOD TO COVER ALL AREAS OF YARD DISTURBED BY CONSTRUCTION ACTIVITIES.
8. SLOPE ALL CONCRETE PAVING AWAY FROM BUILDING AT 1% MINIMUM. SLOPE ALL CONCRETE WALKS AWAY FROM BUILDING AT 2% MINIMUM.
9. SLOPE ALL FINAL GRADING AWAY FROM BUILDING TO ENSURE POSITIVE DRAINAGE.
10. LAY NEW SOD TO COVER ALL AREAS OF YARD DISTURBED BY CONSTRUCTION ACTIVITIES. SOD MUST BE BAHIA, ZOYSIA, OR BERMUDA. EXCEPT FOR MONROE COUNTY WHERE ALL DISTURBED AREAS SHALL BE LIMESTONE.
11. SITE GRADING PLAN BASED ON AVAILABLE SURVEY DATA. EXISTING DRAINAGE PATTERNS TO BE CONFIRMED IN FIELD BY THE CONTRACTOR.
12. CONTRACTOR SHALL REGRADE SITE IMMEDIATELY ADJACENT TO THE NEWLY CONSTRUCTED HOUSE TO PROVIDE POSITIVE DRAINAGE AWAY FROM THE FOUNDATION OF THE HOME.
13. THE CONTRACTOR SHALL NOT ALTER SITE DRAINAGE PATTERNS IN A WAY THAT DIRECTS ADDITIONAL FLOWS ONTO ADJACENT PROPERTIES.
14. UTILITY TIE-IN LOCATIONS ARE BASED ON LIMITED FIELD DATA.CONTRACTOR TO VERIFY SEWER AND WATER TIE-IN LOCATIONS IN FIELD AND NOTIFY ENGINEER OF ANY DISCREPANCY

SITE INFORMATION:

SITE AREA: TBD SF

EXISTING IMPERVIOUS AREA:

• EXISTING HOME:	TBD	SF
• EXISTING CONCRETE:	TBD	SF
• EXISTING COVERED AREA :	TBD	SF
• **TOTAL:**	**TBD**	**SF**

NEW IMPERVIOUS AREA:

• NEW HOME WITH 2' ROOF OVERHANG :	2,296	SF
• NEW STAIRS:	TBD	SF
• NEW CONCRETE :	TBD	SF
• **TOTAL:**	TBD	**SF**

% NEW IMPERVIOUS AREA: TBD %
% NEW PERVIOUS AREA: TBD %

No.	Description	Date

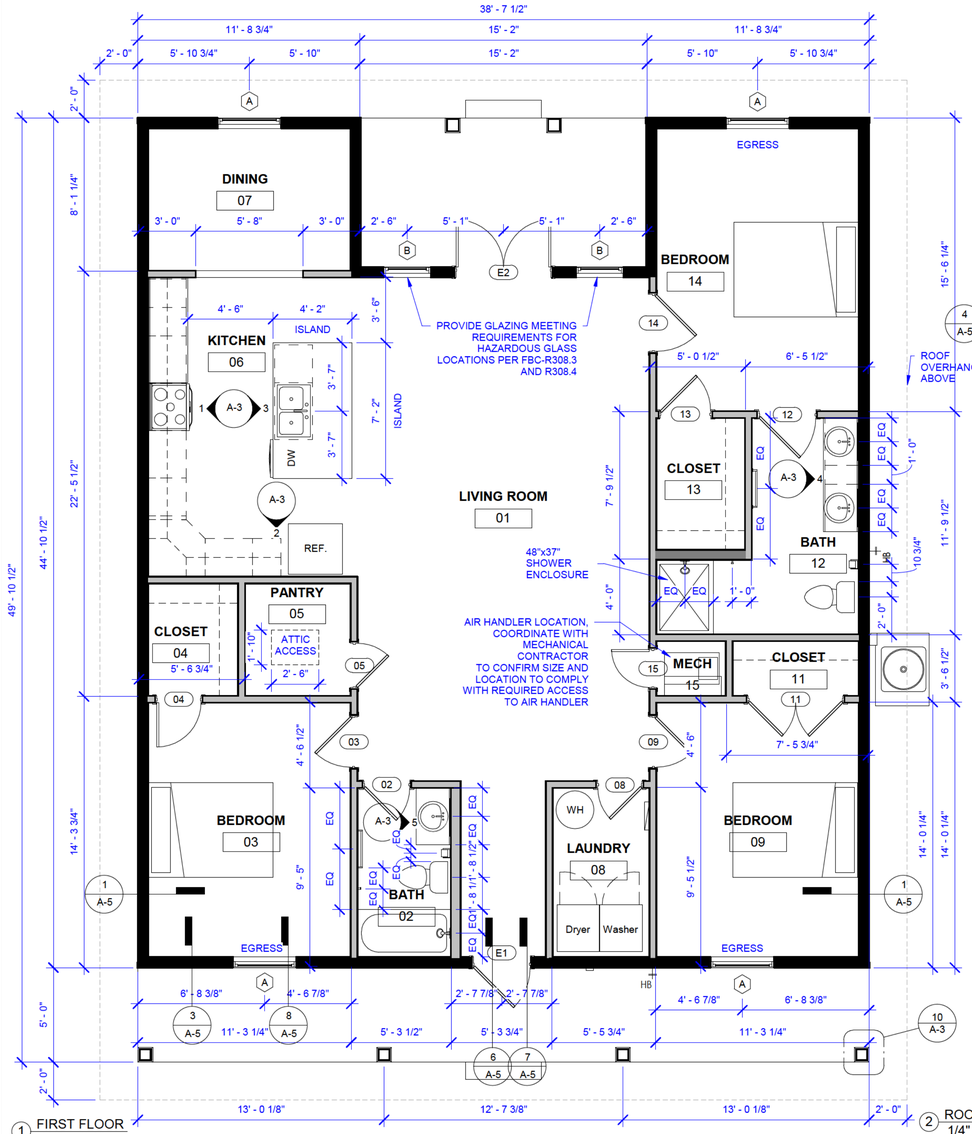
3 BEDROOM PROTOTYPE
SOG
Address TBD
City. Florida Zip Code

SITE PLAN & DETAILS

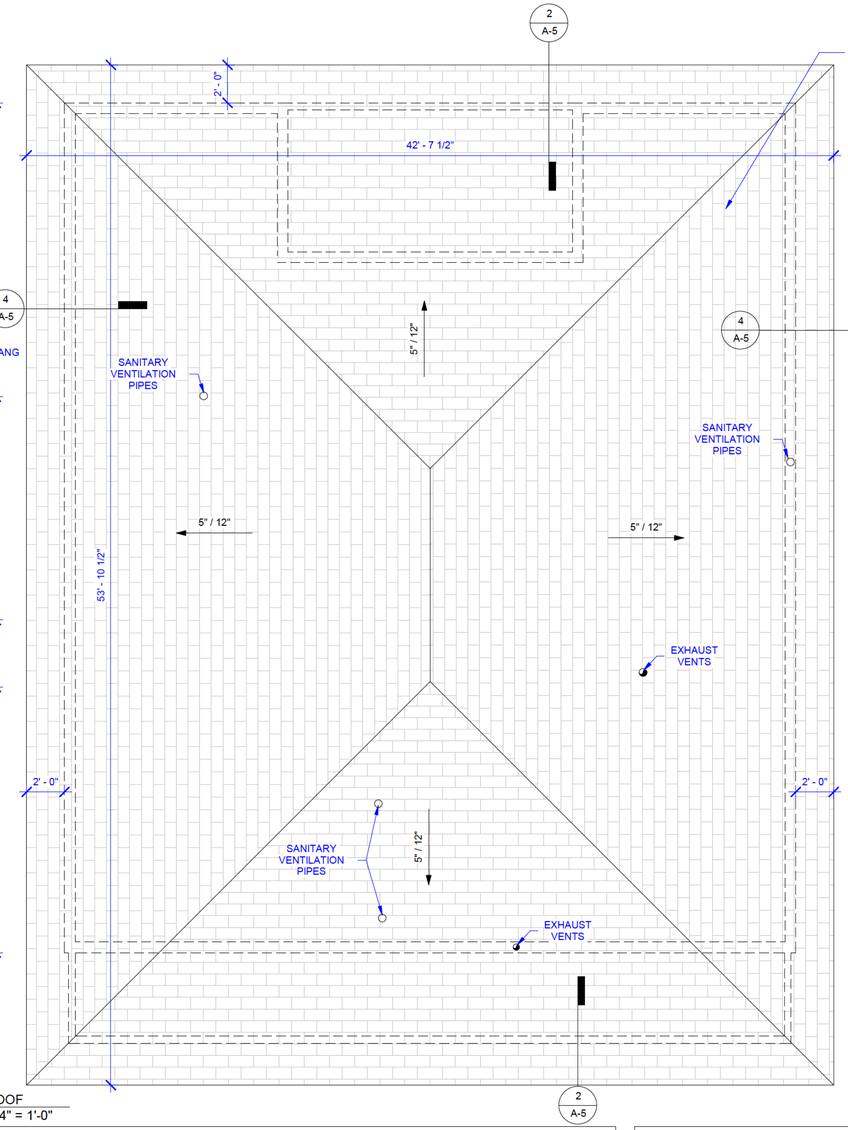
Project Number	2019-15
Date	12/27/2021
Drawn By	ZP
Checked By	IP

50% PRELIMINARY DESIGN, NOT FOR CONSTRUCTION

C-1



1 FIRST FLOOR
1/4" = 1'-0"



2 ROOF
1/4" = 1'-0"

ASPHALT SHINGLE ROOF INSTALLED PER FRC 2020 905.2.
ROOF UNDERLAYMENT SHALL BE INSTALLED PER FRC 2020 905.1.1 METHOD NUMBER 2: INCLUDE A MINIMUM 4-INCH-WIDE (102 MM) STRIP OF SELF-ADHERING POLYMER-MODIFIED BITUMEN MEMBRANE COMPLYING WITH ASTM D1970, INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS FOR THE DECK MATERIAL, AND SHALL BE APPLIED OVER ALL JOINTS IN THE ROOF DECKING. AN APPROVED UNDERLAYMENT IN ACCORDANCE WITH TABLE R905.1.1.1 FOR THE APPLICABLE ROOF COVERING SHALL BE APPLIED OVER THE ENTIRE ROOF OVER THE 4-INCH-WIDE (102 MM) MEMBRANE STRIPS.
ASPHALT ROOF SHINGLES SHALL BE CLASSIFIED AS ASTM D3161 CLASS F, TAS 107 OR ASTM D7158 CLASS H.
PROVIDE PIPE BOOT AT ALL ROOF PENETRATIONS PER DETAIL.

BUILDING INFORMATION:

FIRST FLOOR:	1612 SF
FRONT PORCH:	193 SF
REAR PORCH:	121 SF
BUILDING HEIGHT:	TBD
CONDITIONED AREA VOLUME:	11,600 CF

ROOF VENTILATION (FIBER CEMENT):
ROOF AREA = 2296 SF
REQUIRED NET FREE AREA PER FBC R806.2 = 2296/150 = 15.30 SF
SOFFIT AREA = 370 SF
SOFFIT NET FREE AREA = 12.6 SQ INCHES/SF (BY MANUFACTURER, HARDIESOFFIT VENTEDPLUS BASIS OF DESIGN)
PROPOSED ROOF NET FREE AREA = 370*12.6/144 = **32.37 SF**

ROOF VENTILATION:
ROOF AREA = 2296 SF
REQUIRED NET FREE AREA PER FBC R806.2 = 2296/150 = 15.30 SF
SOFFIT AREA = 370 SF
SOFFIT NET FREE AREA = 14.34 SQ INCHES/SF (BY MANUFACTURER)
PROPOSED ROOF NET FREE AREA = 370*14.34/144 = **36.84 SF**

WINDOW SCHEDULE

Type Mark	Width	Height	Description	Count	Head Height
A	3' - 4"	5' - 0"	DOUBLE HUNG VINYL WINDOW - EGRESS	4	6' - 8"
B	2' - 6"	5' - 0"	DOUBLE HUNG VINYL WINDOW	2	6' - 8"

WINDOW NOTES:

1. WINDOW ASSEMBLY SHALL BE IMPACT RESISTANT AND INSTALLED TO MEET THE SPECIFIED WIND LOAD
2. WINDOWS SHALL MEET THE REQUIREMENTS OF TABLE R402.1.2 OF THE FLORIDA ENERGY CONSERVATION CODE 2020.
3. FENESTRATION U-FACTOR SHALL BE ≤ 0.40
4. GLAZED FENESTRATION SHGC VALUE SHALL BE ≤ 0.25
5. WINDOWS SHALL BE ENERGY STAR QUALIFIED
6. PROVIDE INSECT SCREENS AT ALL WINDOWS

DOOR HARDWARE TYPE SCHEDULE

MARK	DESCRIPTION	MANUFACTURER	MODEL	FINISH	COMMENTS	HARDWARE TYPE

WALL TYPE SCHEDULE

WALL TYPE	INTERIOR/EXTERIOR	DESCRIPTION (EXTERIOR TO INTERIOR)
1	EXTERIOR	VINYL SIDING, MOISTURE BARRIER, PLYWOOD WALL SHEATHING, 2x6 STUD @ 16" O.C., R-19 BATT INSULATION, 1/2" GYPSUM BOARD
2	INTERIOR	1/2" GYPSUM BOARD, 2X6 STUD @ 16" O.C., GYPSUM BOARD
3	INTERIOR	1/2" GYPSUM BOARD, 2X4 STUD @ 16" O.C., GYPSUM BOARD

FIRST FLOOR LEGEND

- EXTERIOR 2X6 FRAMED WALL
- INTERIOR 2X6 FRAMED WALL
- INTERIOR 2X4 FRAMED WALL

DOOR SCHEDULE

Mark	Width	Height	Rough Width	Rough Height	Description	Comments
02	2' - 5"	6' - 8"	2' - 7"	6' - 9"		
03	2' - 8"	6' - 8"	2' - 10"	6' - 9"	6-PANEL INTERIOR DOOR	
04	2' - 4"	6' - 8"	2' - 6"	6' - 9"	6-PANEL INTERIOR DOOR	
05	2' - 4"	6' - 8"	2' - 6"	6' - 9"	6-PANEL INTERIOR DOOR	
08	2' - 4"	6' - 8"	2' - 6"	6' - 9"	6-PANEL INTERIOR DOOR	
09	2' - 8"	6' - 8"	2' - 10"	6' - 9"	6-PANEL INTERIOR DOOR	
11	5' - 0"	6' - 8"	5' - 2"	6' - 9"	PAIR 6-PANEL DOUBLE INTERIOR DOORS	
12	3' - 0"	6' - 8"	3' - 2"	6' - 9"	6-PANEL INTERIOR DOOR	

EXTERIOR DOOR INFORMATION

Mark	Width	Height	Description	DESIGN PRESSURE (POSITIVE) PSF	DESIGN PRESSURE (NEGATIVE) PSF
E1	3' - 0"	6' - 8"	HALF LITE ENTRY DOOR	41	-53
E2	5' - 0"	6' - 8"	PAIR 3/4 LITE DOUBLE EXTERIOR DOORS	40	-51

TABLE VALUES DETERMINED PER ASCE 7-16 (MINIMUM DESIGN LOADS AND ASSOCIATED CRITERIA FOR BUILDINGS AND OTHER STRUCTURES)

DOOR SCHEDULE

Mark	Width	Height	Rough Width	Rough Height	Description	Comments
13	2' - 8"	6' - 8"	2' - 10"	6' - 9"	6-PANEL INTERIOR DOOR	
14	3' - 0"	6' - 8"	3' - 2"	6' - 9"	6-PANEL INTERIOR DOOR	
15	2' - 0"	5' - 0"	2' - 2"	5' - 1"	6-PANEL INTERIOR DOOR	CONFIRM WITH HVAC CONTRACTOR
E1	3' - 0"	6' - 8"	3' - 2"	6' - 9"	HALF LITE ENTRY DOOR	ENERGY STAR QUALIFIED, PROVIDE GLAZING MEETING REQUIREMENTS FOR HAZARDOUS GLASS LOCATIONS PER FBC-R308.3 AND R308.4
E2	5' - 0"	6' - 8"	5' - 2"	6' - 9"	PAIR 3/4 LITE DOUBLE EXTERIOR DOORS	ENERGY STAR QUALIFIED, PROVIDE GLAZING MEETING REQUIREMENTS FOR HAZARDOUS GLASS LOCATIONS PER FBC-R308.3 AND R308.4

EXTERIOR WINDOW INFORMATION

Type Mark	Width	Height	Description	DESIGN PRESSURE (POSITIVE) PSF	DESIGN PRESSURE (NEGATIVE) PSF
A	3' - 4"	5' - 0"	DOUBLE HUNG VINYL WINDOW - EGRESS	42	-55
B	2' - 6"	5' - 0"	DOUBLE HUNG VINYL WINDOW	42	-56

TABLE VALUES DETERMINED PER ASCE 7-16 (MINIMUM DESIGN LOADS AND ASSOCIATED CRITERIA FOR BUILDINGS AND OTHER STRUCTURES)

No.	Description	Date

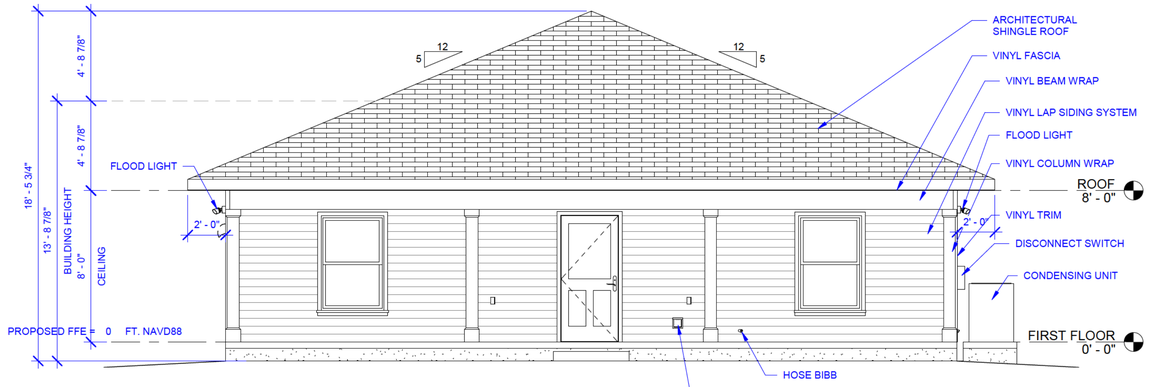
3 BEDROOM PROTOTYPE
SOG
Address TBD
City, Florida Zip Code

ARCHITECTURAL PLANS

Project Number 2019-15
Date 12/27/2021
Drawn By ZP
Checked By IP

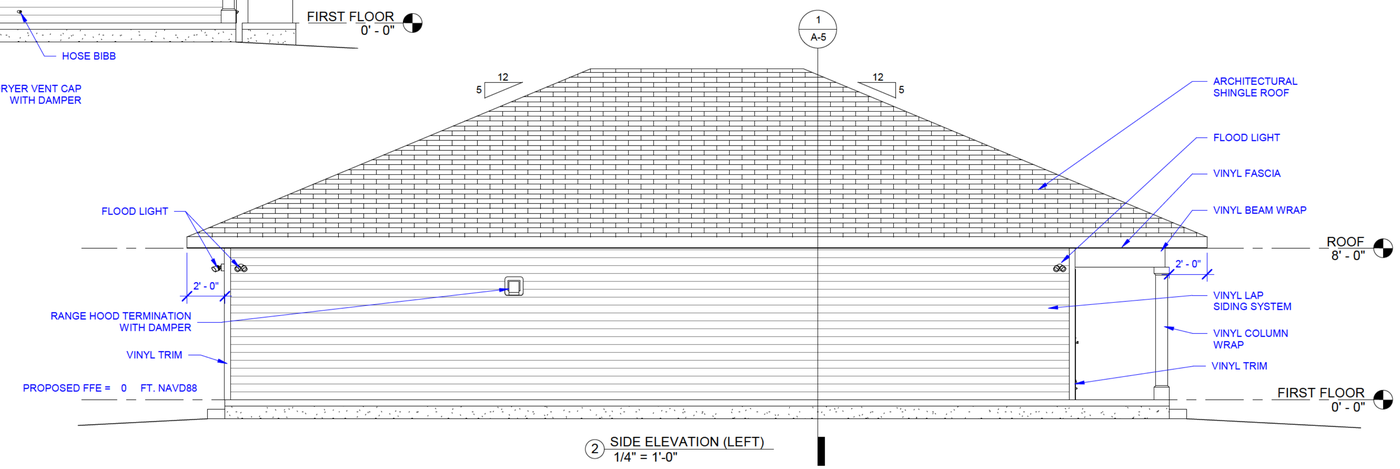
50% PRELIMINARY DESIGN, NOT FOR CONSTRUCTION

A-1



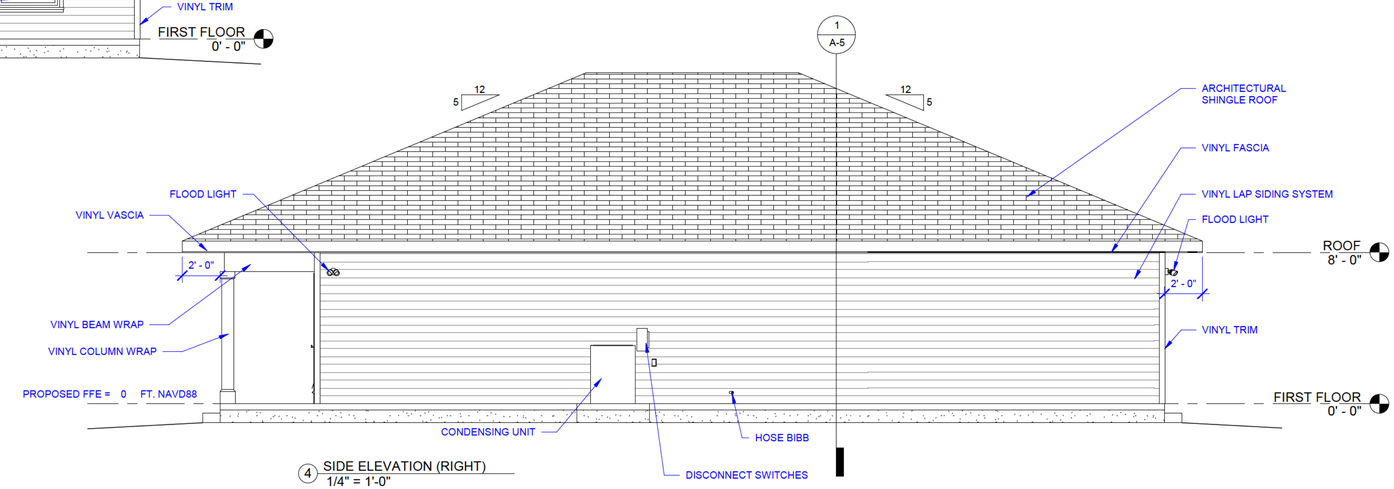
1 FRONT ELEVATION
1/4" = 1'-0"

ALL EXTERIOR ELEMENTS MAKING UP THE BUILDING ENVELOPE INCLUDING SIDING, FASCIA, SOFFIT, WINDOWS, DOORS, GLAZING, TRIM, ETC. SHALL BE APRROVED TO COMPLY WITH THE FLORIDA BUILDING CODE INCLUDING THE **HIGH VELOCITY HURRICANE ZONE** BY THE MIAMI-DADE COUNTY DEPARTMENT OF REGULATORY AND ECONOMIC RESOURCES (RER) BOARD AND CODE ADMINISTRATION DIVISION. CONTRACTOR SHALL SUBMIT THE **MIAMI-DADE NOTICE OF ACCEPTANCE (NOA)** FOR EACH PROPOSED EXTERIOR PRODUCT FOR PERMIT APPROVAL, AND PRODUCTS SHALL BE INSTALLED PER THE APPROVED DETAILS IN THE NOA.



2 SIDE ELEVATION (LEFT)
1/4" = 1'-0"

3 REAR ELEVATION
1/4" = 1'-0"



4 SIDE ELEVATION (RIGHT)
1/4" = 1'-0"

No.	Description	Date

3 BEDROOM PROTOTYPE SOG

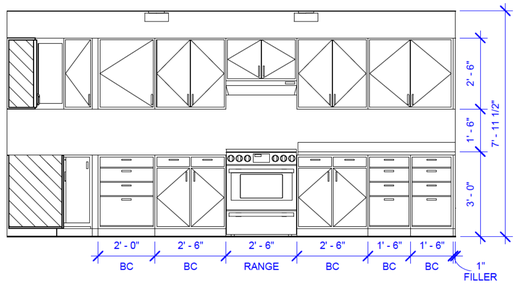
Address TBD
City, Florida Zip Code

ELEVATIONS

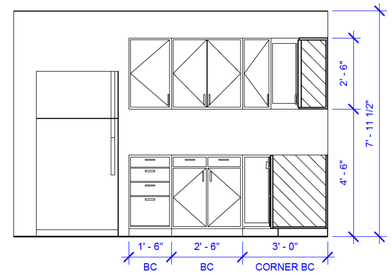
Project Number	2019-15
Date	12/27/2021
Drawn By	ZP
Checked By	IP

50% PRELIMINARY DESIGN, NOT FOR CONSTRUCTION

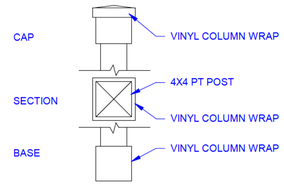
A-2



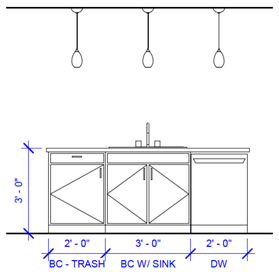
1 KITCHEN ELEVATION
3/8" = 1'-0"



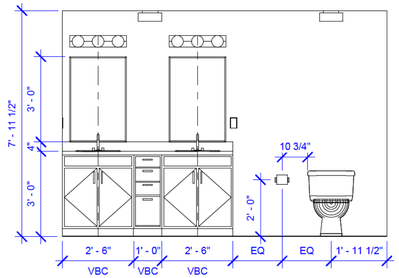
2 KITCHEN ELEVATION
3/8" = 1'-0"



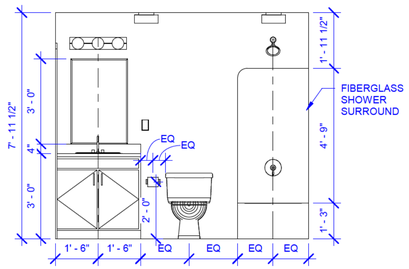
10 SECTION
3/4" = 1'-0"



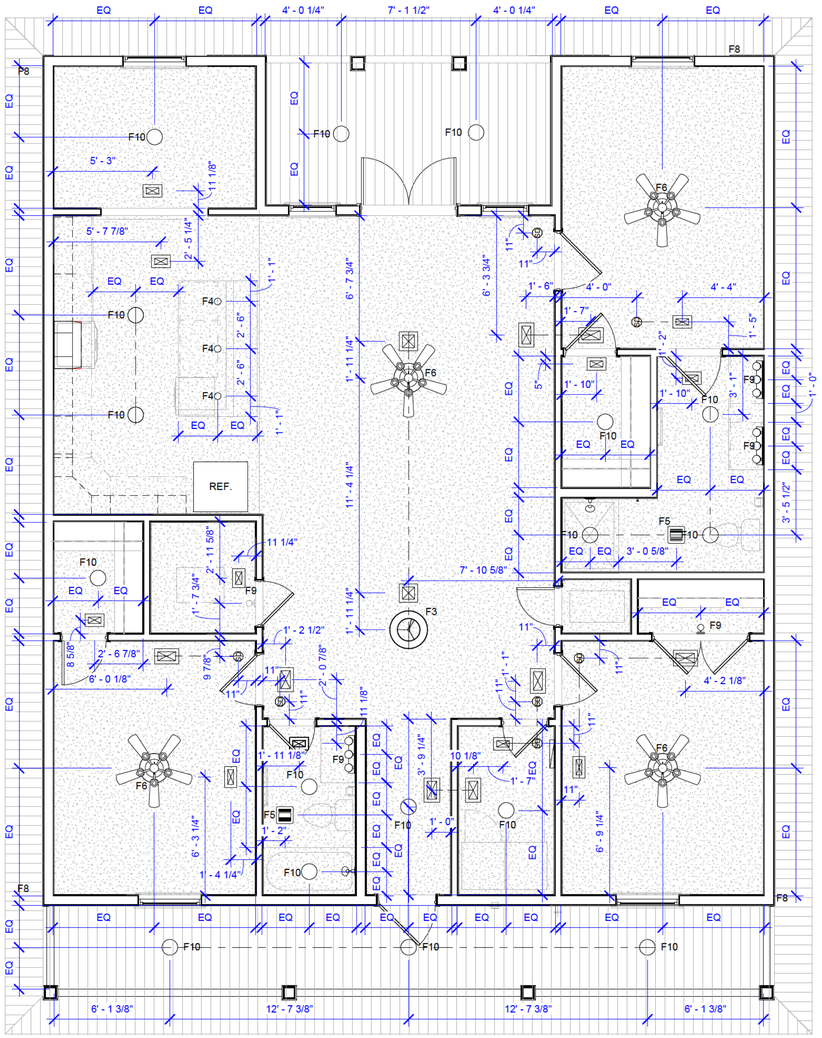
3 KITCHEN ELEVATION
3/8" = 1'-0"



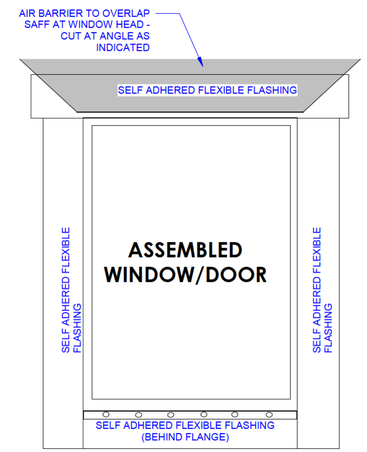
4 BATHROOM ELEVATION
3/8" = 1'-0"



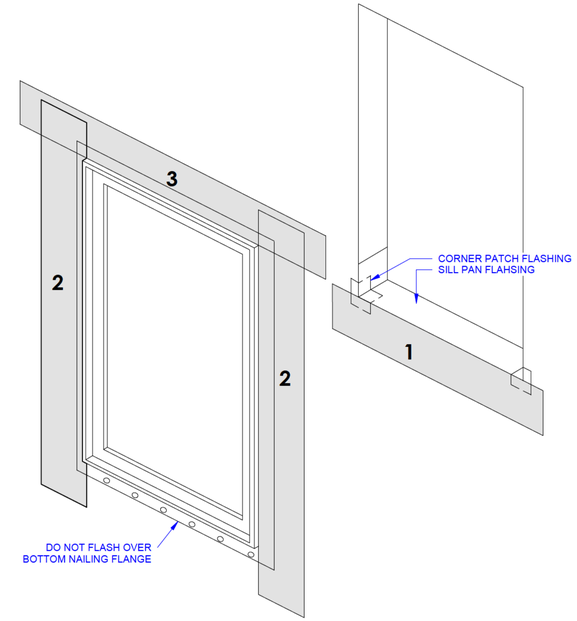
5 BATHROON ELEVATION
3/8" = 1'-0"



9 REFLECTED CEILING PLAN
1/4" = 1'-0"



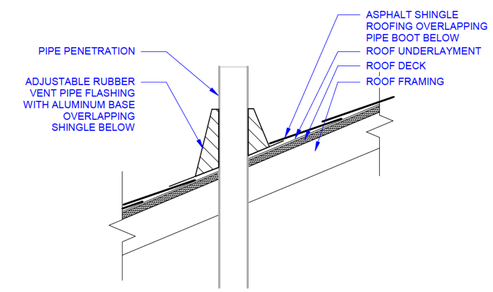
7 WINDOW AND DOOR FLASHING DIAGRAM
6" = 1'-0"



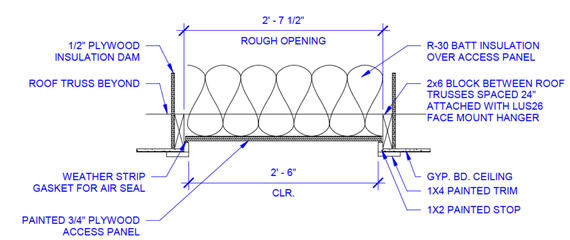
WINDOW AND DOOR FLASHING DIAGRAM
REFER TO MANUFACTURERS GUIDELINES FOR INSTALLING WINDOW,
INCLUDING THE ADDITION OF FLEXIBLE CORNER FLASHING.

REFLECTED CEILING PLAN LEGEND

- 1/2" GYPSUM BOARD
- VENTED VINYL SOFFIT
- F3 PENDANT LIGHT FIXTURE
- F9 WALL MOUNT FIXTURE
- F5 EXHAUST FAN
- F8 MOTION SENSOR FLOOD LIGHT
- F6 CEILING FAN W/ LIGHT KIT
- COMBO SMOKE & CARBON MONOXIDE DETECTOR
- F10 CEILING MOUNTED FIXTURE
- F4 ISLAND PENDANT FIXTURE
- 10x10 DIFFUSER, SEE MECHANICAL
- 8x4 DIFFUSER, SEE MECHANICAL
- 12x6 DIFFUSER, SEE MECHANICAL
- 10x6 DIFFUSER, SEE MECHANICAL
- 14x8 DIFFUSER, SEE MECHANICAL



8 ROOF PENETRATION DETAIL
1 1/2" = 1'-0"



6 ATTIC ACCESS
1" = 1'-0"

No.	Description	Date

REFLECTED CEILING PLAN
AND INTERIOR ELEVATIONS

Project Number	2019-15
Date	12/27/2021
Drawn By	ZP
Checked By	IP

50% PRELIMINARY DESIGN, NOT FOR CONSTRUCTION

A-3

FINISH TYPE SCHEDULE

MARK	DESCRIPTION	MANUFACTURER	MODEL	FINISH	COMMENTS
VPF	VINYL PLANK FLOORING	SEE SPECS	SEE SPECS	SEE SPECS	STANDARD GRADE, CERTIFIED BY FLOORSCORE OR GREENGAURD AS LOW VOC
CPT	CARPET	SEE SPECS	SEE SPECS	SEE SPECS	STANDARD GRADE, CERTIFIED BY THE CARPET AND RUG INSTITUTE (CRI) GREEN SEAL OF APPROVAL AND LOW-VOC OR NO ADHESIVES ARE USED FOR INSTALLATION
B1	WOOD BASE	SEE SPECS	SEE SPECS	SEE SPECS	BASEBOARDS WILL BE 3 1/4 INCH MDF. 3/4" SHOE MOULDING. NO EXPOSED UREA-FORMALDEHYDE WOOD PRODUCTS ALLOWED OR MUST BE SEALED
B2	WOOD BASE W/SHOE MOULDING	SEE SPECS	SEE SPECS	SEE SPECS	BASEBOARDS WILL BE 3 1/4 INCH MDF. 3/4" SHOE MOULDING. NO EXPOSED UREA-FORMALDEHYDE WOOD PRODUCTS ALLOWED OR MUST BE SEALED
GYP. PTD.	PAINTED GYPSUM BOARD	SEE SPECS	SEE SPECS	SEE SPECS	LEVEL 4 FINISH WITH LIGHT ORANGE PEEL TEXTURE, PRIMED AND 2 FINISH COATS
WP GYP. PTD.	1/2 MOISTURE RESISTANT GYPSUM BOARD	SEE SPECS	SEE SPECS	SEE SPECS	LEVEL 4 FINISH WITH LIGHT ORANGE PEEL TEXTURE, PRIMED AND 2 FINISH COATS
KIT-CAB	KITCHEN CABINETS	SEE SPECS	SEE SPECS	SEE SPECS	
KIT-COUN	KITCHEN COUNTERTOPS	SEE SPECS	SEE SPECS	SEE SPECS	POST-FORMED LAMINATE
BATH-CAB	BATHROOM CABINETS	SEE SPECS	SEE SPECS	SEE SPECS	STANDARD GRADE PREFINISHED WITH HARDWARE. NO EXPOSED UREA-FORMALDEHYDE WOOD PRODUCTS ALLOWED OR MUST BE SEALED
BATH-COUN	BATHROOM COUNTERTOPS	SEE SPECS	SEE SPECS	SEE SPECS	CULTURED MARBLE WITH MOLDED SINK

*CONFIRM ALL FINISH TYPES WITH OWNER PRIOR TO PURCHASE AND INSTALLATION

VOC LIMITS

PAINTS APPLIED TO INTERIOR WALLS:
FLATS: 50 G/L NONFLATS: 100 G/L
GREEN SEAL STANDARD GS-11, PAINTS & COATINGS, 3RD EDITION, AUGUST 17, 2011

ANTI CORROSIVE AND ANTI RUST PAINTS:
250 G/L GREEN SEAL STANDARD GS-11, PAINTS & COATINGS, 3RD EDITION, AUGUST 17, 2011

CLEAR WOOD FINISHES:
VARNISH: 350 G/L LACQUER: 550 G/L SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT RULE 1113, ARCHITECTURAL COATINGS

FLOOR COATINGS: 100 G/L

SEALERS:
WATERPROOFING: 250 G/L
SANDING: 275 G/L
ALL OTHERS: 200 G/L

SHELLACS CLEAR: 730 G/L PIGMENTED: 550 G/L

STAINS: 250 G/L

BATHROOM ACCESSORY NOTES:

1. PROVIDE BLOCKING FOR ALL ACCESSORIES AS REQUIRED
2. PROVIDE AND INSTALL 1 EACH OF THE FOLLOWING BATHROOM ACCESSORIES:
   A. TOILET PAPER HOLDER
   B. ROBE HOOK
   C. TOWEL BAR

CABINETERY / COUNTERTOP NOTES:

1. KITCHEN COUNTERTOPS WILL BE POST-FORMED LAMINATE WITH INTEGRAL 4" BACKSPLASH.
2. KITCHEN WILL HAVE DOUBLE BASIN STAINLESS STEEL SINK WITH GARBAGE DISPOSER AND FAUCET WITH SPRAYER.
3. BATHROOM CABINETS WILL BE STANDARD GRADE PREFINISHED WITH HARDWARE. NO EXPOSED UREA-FORMALDEHYDE WOOD PRODUCTS ALLOWED OR MUST BE SEALED.
4. BATHROOM COUNTERTOPS WILL BE CULTURED MARBLE WITH MOLDED SINK AND 4" BACKSPLASH.
5. BATHROOM WILL HAVE FAUCET AT EACH SINK.
6. BATHROOMS WILL HAVE A 6 SQUARE FOOT MIRROR AT EACH SINK.

FLOORING / MOLDING NOTES:

1. BEDROOM AND BEDROOM CLOSET FLOORING WILL BE STANDARD GRADE CARPET AND PAD. CARPET AND PAD MUST BE CERTIFIED BY THE CARPET AND RUG INSTITUTE (CRI) GREEN SEAL OF APPROVAL AND LOW-VOC OR NO ADHESIVES ARE USED FOR INSTALLATION.
2. ALL OTHER ROOMS AND CLOSETS WILL BE STANDARD GRADE VINYL PLANK FLOORING. VINYL PLANK FLOORING SHALL BE CERTIFIED BY FLOORSCORE OR GREENGUARD AS LOW VOC.
3. BASEBOARDS WILL BE 3 ¼ INCH MDF. NO EXPOSED UREA-FORMALDEHYDE WOOD PRODUCTS ALLOWED OR MUST BE SEALED
4. SHOE MOLD TO BE INSTALLED ON ALL AREAS WITH VINYL PLANK FLOORING.

APPLIANCE NOTES:

1. WHITE OR BLACK FINISHES
2. RANGE FREESTANDING ELECTRIC STANDARD GRADE. OVEN MUST BE SELF CLEANING.
3. MICROWAVE OVEN OVER RANGE WITH BUILT-IN HOOD STANDARD GRADE.
4. SUPPLY HOSES TO WATER USING FIXTURES AND APPLIANCES MUST BE ARMORED, PEX OR METAL (EXCEPT COPPER).
5. REFRIGERATOR TOP FREEZER 22 CUBIC FOOT STANDARD GRADE ENERGY STAR.
6. DISHWASHER STANDARD GRADE ENERGY STAR.
7. GARBAGE DISPOSER ½ HP STANDARD GRADE.
8. WASHING MACHINE TOP LOADING STANDARD GRADE ENERGY STAR.
9. DRYER ELECTRIC STANDARD GRADE ENERGY STAR.

CLOSET NOTES:

1. ALL CLOSETS WILL HAVE STANDARD GRADE VINYL-COATED WIRE MESH SHELVING.

DRYWALL NOTES:

1. ½ INCH SAG RESISTANT DRYWALL HUNG, TAPED, FLOATED, AND TEXTURED READY FOR PAINT ON WALLS AND CEILINGS.
2. ALL WET AREAS AS REQUIRED PER FLORIDA BUILDING CODE WILL HAVE ½ INCH WATER ROCK (GREENBOARD) DRYWALL HUNG, TAPED, FLOATED, AND TEXTURED READY FOR PAINT ON WALLS AND CEILINGS. IN LIEU OF GREENBOARD REQUIRE CEMENT BOARD WITH TAPED SEAMS. ALL SHOWER WALLS MUST BE SEALED WITH AN ELASTOMERIC WATERPROOFING SEALER PRIOR TO TILE INSTALL. ALL FIBERGLASS INSERT MUST HAVE EDGES SEALED WITH WATERPROOFING CAULK.

DOOR NOTES:

1. ALL DOORS AND TRIM WILL BE PAINTED. ALL PAINTS SHALL BE LOW VOC - MAXIMUM 50 G/L.
2. ALL EXTERIOR DOOR LOCKS WILL BE KEYED ALIKE.
3. ALL INTERIOR DOORS WILL CONTAIN THE APPROPRIATE DOOR KNOBS.
4. ALL INTERIOR DOORS WILL HAVE 2 ¼ INCH MDF TRIM. NO EXPOSED UREA-FORMALDEHYDE WOOD PRODUCTS ALLOWED OR SEALED
5. ATTIC ACCESS WILL BE PAINTED PLYWOOD ACCESS PANEL PER DETAIL MEETING REQUIREMENTS OF FBC R807.

FINISH SCHEDULE

Number	Name	Floor Finish	Base Finish	Wall Finish	Ceiling Finish	Perimeter	Area
01	LIVING ROOM	VPF	B2	GYP. PTD.	GYP. PTD.	102.96	454 SF
02	BATH	VPF	B2	GYP. PTD.	GYP. PTD.	27.67	44 SF
03	BEDROOM	CPT	B1	GYP. PTD.	GYP. PTD.	48.17	143 SF
04	CLOSET	CPT	B1	GYP. PTD.	GYP. PTD.	21.29	28 SF
05	PANTRY	VPF	B2	GYP. PTD.	GYP. PTD.	22.96	33 SF
06	KITCHEN	VPF	B2	GYP. PTD.	GYP. PTD.	53.67	170 SF
07	DINING	VPF	B2	GYP. PTD.	GYP. PTD.	37.46	83 SF
08	LAUNDRY	VPF	B2	WP GYP. PTD.	GYP. PTD.	28.04	46 SF
09	BEDROOM	CPT	B1	GYP. PTD.	GYP. PTD.	48.17	143 SF
11	CLOSET	CPT	B1	GYP. PTD.	GYP. PTD.	19.04	19 SF
12	BATH	VPF	B2	WP GYP. PTD.	GYP. PTD.	44.17	84 SF
13	CLOSET	CPT	B1	GYP. PTD.	GYP. PTD.	23.25	32 SF
14	BEDROOM	CPT	B1	GYP. PTD.	GYP. PTD.	51.17	159 SF
15	MECH	VPF	B1	GYP. PTD.	GYP. PTD.	13.04	10 SF
Grand total: 14							1450 SF

PLUMBING FIXTURE SCHEDULE

ROOM	ITEM	MANUFACTURER	MODEL	NOTES	QUANTITY
02	VANITY SINK	SEE SPECS	SEE SPECS		1
12	VANITY SINK	SEE SPECS	SEE SPECS		2
02	VANITY FAUCET	SEE SPECS	SEE SPECS	1.5 GPM	1
12	VANITY FAUCET	SEE SPECS	SEE SPECS	1.5 GPM	2
02	SHOWER AND TUB FAUCET	SEE SPECS	SEE SPECS	2.0 GPM	1
12	SHOWER FAUCET	SEE SPECS	SEE SPECS	2.0 GPM	1
02	BATHTUB & ENCLOSURE	SEE SPECS	SEE SPECS		1
12	SHOWER BASE & ENCLOSURE	SEE SPECS	SEE SPECS		1
06	KITCHEN SINK	SEE SPECS	SEE SPECS	DOUBLE BASIN STAINLESS STEEL	1
06	KITCHEN FAUCET	SEE SPECS	SEE SPECS	2.0 GPM	1

*VERIFY FIXTURES AND LOCATIONS WITH ARCHITECTURAL PLAN AND OWNER. ALL PLUMBING FIXTURES SHALL BE WATERSENSE

THERMAL ENVELOPE REQUIREMENTS

TYPE	REQUIREMENT
SEALANT	SEAL ALL GAPS AND PENETRATIONS IN BUILDING ENVELOPE WITH LOW VOC SEALANT OR SPRAY FOAM. ALL INSULATION SHALL BE FORMALDEHYDE FREE.
RAISED FLOOR INSULATION	R-19 INSULATION IN CONTACT WITH THE SUBFLOOR. ALL BATT INSULATION SHALL BE UNFACED OR INSTALLED WITH PAPER BACKING TO THE OUTSIDE OF THE HOUSE.
WALL INSULATION	R-19 BATT INSULATION
ATTIC INSULATION	MIN. R-38 BLOW-IN INSULATION PER MANUFACTURER'S SPECIFICATIONS TO A MINIMUM DENSITY OF 3.5 LBS. PER CUBIC FOOT (CF).
MOISTURE BARRIER	CONTINUOUS UNBROKEN MOISTURE BARRIER (HOUSE WRAP)
RADIANT BARRIER	RADIANT BARRIER FOIL INSTALLED AT UNDERSIDE OF ROOF
ROOF	PLYWOOD ROOF SHEATHING PER STRUCTURAL, ROOF UNDERLAYMENT PER FBC - RESIDENTIAL R905.1.1, ASPHALT SHINGLE ROOF, SEE ROOF PLAN
VENTED ATTIC SPACE	1FT PER 150 FT ROOF AREA, SEE CALCULATIONS ON ROOF PLAN
WINDOWS	ENERGY STAR QUALIFIED, SEE WINDOW NOTES ON SHEET A1.1
EXTERIOR DOORS	ENERGY STAR QUALIFIED DOORS
FL ECC 2020	MEET REQUIREMENTS OF SECTION R402, AND TABLE R402.1.2
FORM R402-2020	CONTRACTOR REQUIRED TO COMPLETE FORM R402-2020 RESIDENTIAL BUILDING THERMAL ENVELOPE APPROACH FOR THE APPROPRIATE CLIMATE ZONE.

APPLIANCE SCHEDULE

ROOM	ITEM	MANUFACTURER	MODEL	FINISH	NOTES
KITCHEN	MICROWAVE	SEE SPECS	SEE SPECS	SEE SPECS	OR APPROVED EQUAL
KITCHEN	RANGE	SEE SPECS	SEE SPECS	SEE SPECS	FREESTANDING ELECTRIC STANDARD GRADE OR APPROVED EQUAL, OVEN MUST BE SELF CLEANING
KITCHEN	DISHWASHER	SEE SPECS	SEE SPECS	SEE SPECS	OR APPROVED EQUAL, ENERGY STAR RATED
KITCHEN	REFRIDGERATOR	SEE SPECS	SEE SPECS	SEE SPECS	REFRIDGERATOR TOP FREEZER 22 CUBIC FOOT STANDARD GRADE OR APPROVED EQUAL
LAUNDRY	WASHER	SEE SPECS	SEE SPECS	SEE SPECS	OR APPROVED EQUAL, ENERGY STAR RATED
LAUNDRY	DRYER	SEE SPECS	SEE SPECS	SEE SPECS	OR APPROVED EQUAL, ENERGY STAR RATED
MECH	HOT WATER HEATER	SEE SPECS	SEE SPECS	SEE SPECS	OR APPROVED EQUAL
KITCHEN	GARBAGE DISPOSAL	SEE SPECS	SEE SPECS	SEE SPECS	1/2 HP STANDARD GRADE OR APPROVED EQUAL

*SUPPLY HOSES TO WATER USING FIXTURES AND APPLIANCES MUST BE ARMORED, PEX OR METAL (EXCEPT COPPER)

STAIR AND RAILING REQUIREMENTS

TYPE	REQUIREMENT
MIN. WIDTH	36"
MIN. HEAD HEIGHT	6' 8"
MAX. RISER HEIGHT	7 3/4"
MIN. TREAD DEPTH	10"
TREAD NOSING	MIN. 3/4", MAX. 11/4"
MAX. TREAD SLOPE	1/4" FROM BACK TO NOSING
HANDRAILS	REQUIRED IF 4 OR MORE RISERS
HANDRAIL HEIGHT	34"-38"
HANDRAIL PROFILE	DIAMETER 1 1/4" - 2"
GUARDRAILS	REQUIRED AT OPEN PORCHES, BALCONIES, RAMPS, OR RAISED FLOOR SURFACES THAT ARE 30" OR MORE ABOVE THE FLOOR BELOW
MIN. GUARDRAIL HEIGHT	36"
GUARDRAIL OPENING LIMITATIONS	MUST NOT ALLOW PASSAGE OF 4" SPHERE
LANDINGS	REQUIRED AT TOP & BOTTOM
MIN. LANDING SIZE	36" x 36"
DOORS	ENERGY STAR QUALIFIED DOORS
MAX. STAIR VERTICAL RISE	147" BETWEEN LEVELS OR LANDINGS

LIGHT FIXTURE SCHEDULE

MARK	DESCRIPTION	MANUFACTURER	MODEL	COMMENTS	QUANTITY
F1	INTERIOR RECESSED CAN	SEE SPECS	SEE SPECS		0
F2	EXTERIOR RECESSED CAN	SEE SPECS	SEE SPECS		0
F3	CHANDELIER	SEE SPECS	SEE SPECS		1
F4	ISLAND PENDANT	SEE SPECS	SEE SPECS		3
F5	EXHAUST FAN	SEE SPECS	SEE SPECS		2
F6	CEILING FAN W/ LIGHT KIT	SEE SPECS	SEE SPECS		4
F7	RECESSED CAN (WET RATED)	SEE SPECS	SEE SPECS		0
F8	EXTERIOR FLOOD LIGHT	SEE SPECS	SEE SPECS		4
F9	VANITY FIXTURE	SEE SPECS	SEE SPECS		5
F10	CEILING MOUNTED FIXTURE	SEE SPECS	SEE SPECS		17

*CONFIRM ALL FIXTURES AND SWITCHING TYPES WITH OWNER PRIOR TO PURCHASE AND INSTALLATION

BATHROOM ACCESSORY SCHEDULE

ROOM	DESCRIPTION	MANUFACTURER	MODEL	FINISH	COMMENTS
02	TOILET PAPER HOLDER	SEE SPECS	SEE SPECS	SEE SPECS	PROVIDE AND INSTALL ONE
12	TOILET PAPER HOLDER	SEE SPECS	SEE SPECS	SEE SPECS	PROVIDE AND INSTALL ONE
02	ROBE HOOK	SEE SPECS	SEE SPECS	SEE SPECS	PROVIDE AND INSTALL ONE
12	ROBE HOOK	SEE SPECS	SEE SPECS	SEE SPECS	PROVIDE AND INSTALL ONE
02	TOWEL BAR	SEE SPECS	SEE SPECS	SEE SPECS	PROVIDE AND INSTALL ONE
12	TOWEL BAR	SEE SPECS	SEE SPECS	SEE SPECS	PROVIDE AND INSTALL ONE

*PROVIDE BLOCKING FOR ALL ACCESSORIES AS REQUIRED

No.	Description	Date

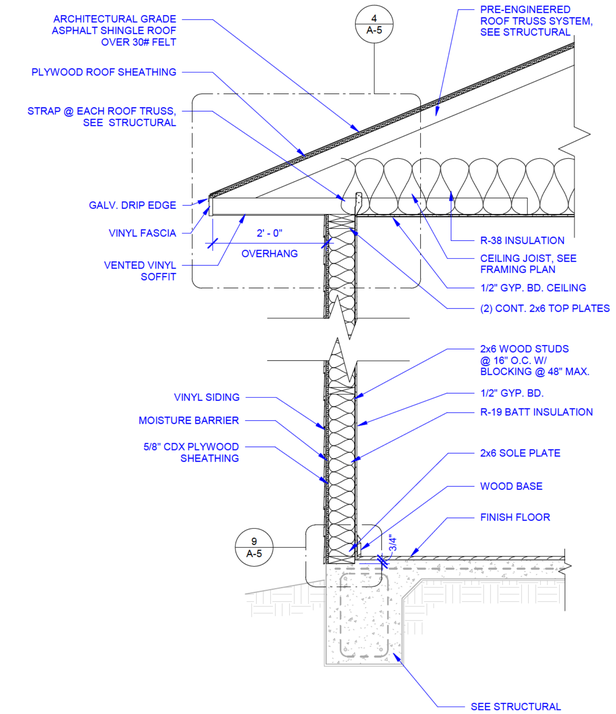
3 BEDROOM PROTOTYPE
SOG
Address TBD
City, Florida Zip Code

SCHEDULES AND NOTES

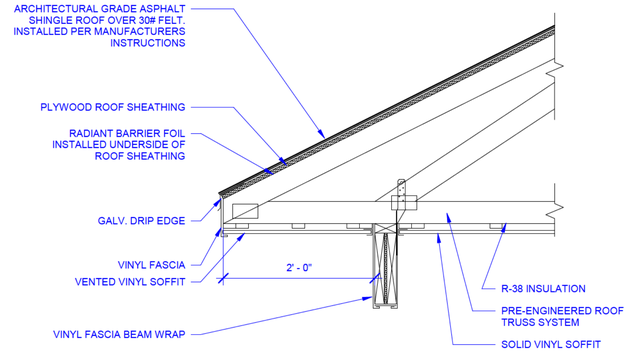
Project Number: 2019-15
Date: 12/27/2021
Drawn By: ZP
Checked By: IP

50% PRELIMINARY DESIGN, NOT FOR CONSTRUCTION

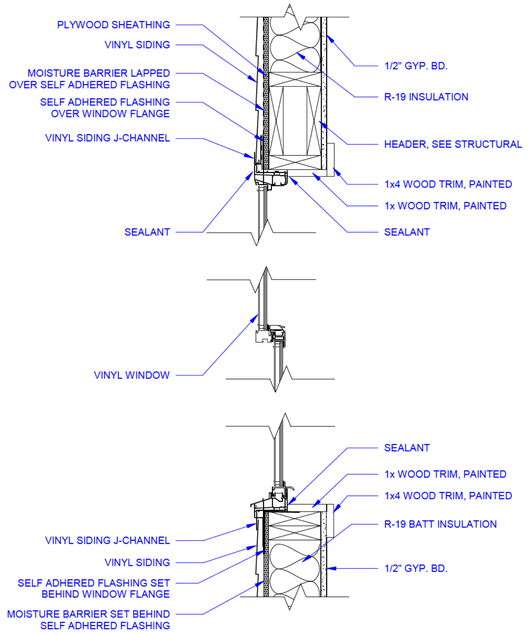
A-4



1 TYP. WALL SECTION
3/4" = 1'-0"

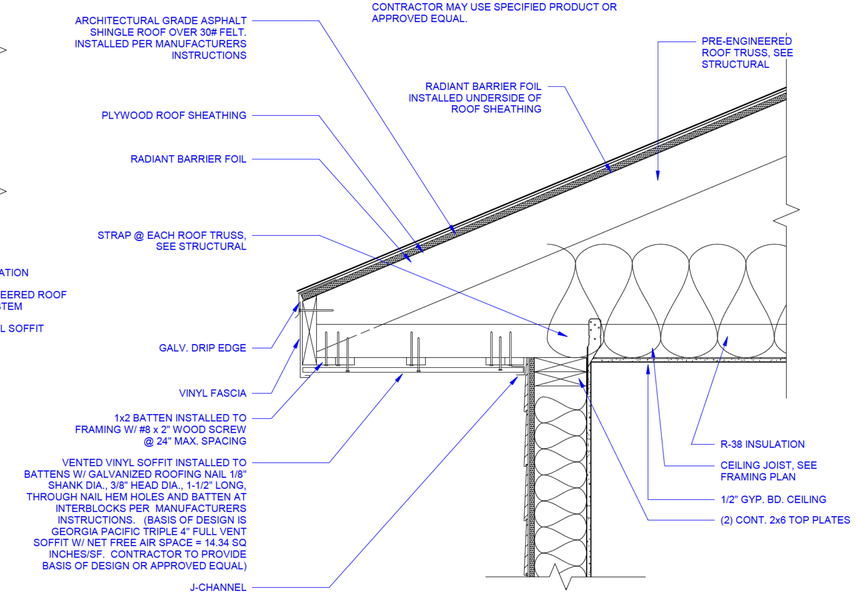


2 BEAM WRAP DETAIL3
1" = 1'-0"

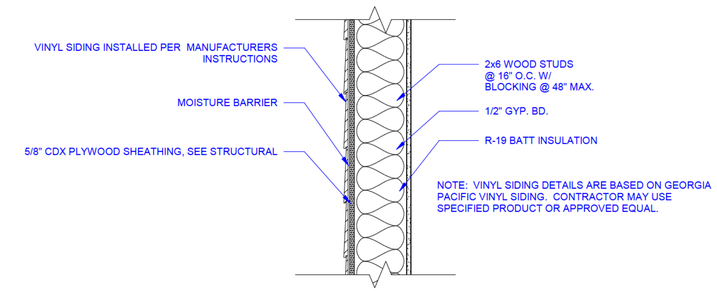


3 WINDOW HEADER AND SILL DETAIL3
1 1/2" = 1'-0"

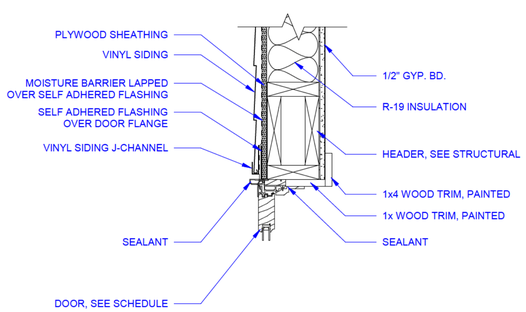
NOTE: VINYL SOFFIT AND FASCIA DETAILS ARE BASED ON GEORGIA PACIFIC VINYL SIDING INSTALLED PER CONTRACTOR MAY USE SPECIFIED PRODUCT OR APPROVED EQUAL.



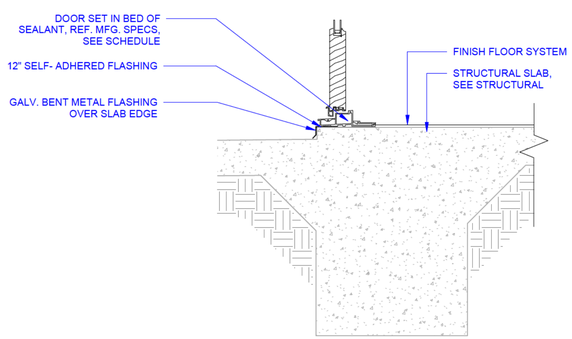
4 VINYL SOFFIT AND FASCIA DETAIL4
1 1/2" = 1'-0"



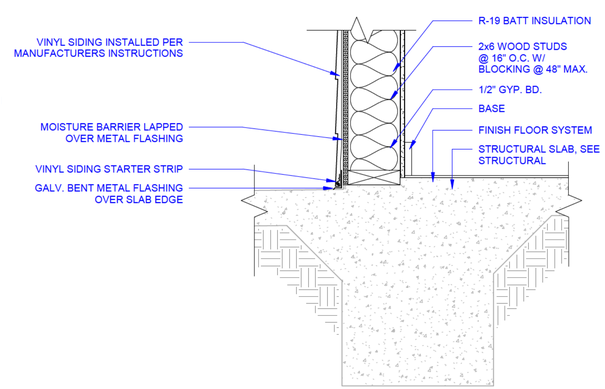
5 VINYL SIDING DETAIL4
1 1/2" = 1'-0"



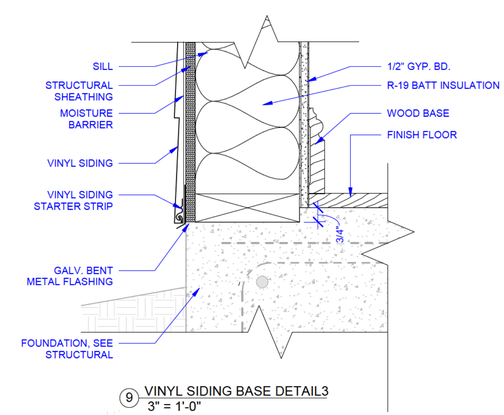
6 VINYL SIDING @ DOOR HEADER3
1 1/2" = 1'-0"



7 DOOR THRESHOLD @ PORCH DETAIL3
1 1/2" = 1'-0"



8 VINYL SIDING @ PORCH DETAIL3
1 1/2" = 1'-0"



9 VINYL SIDING BASE DETAIL3
3" = 1'-0"

No.	Description	Date

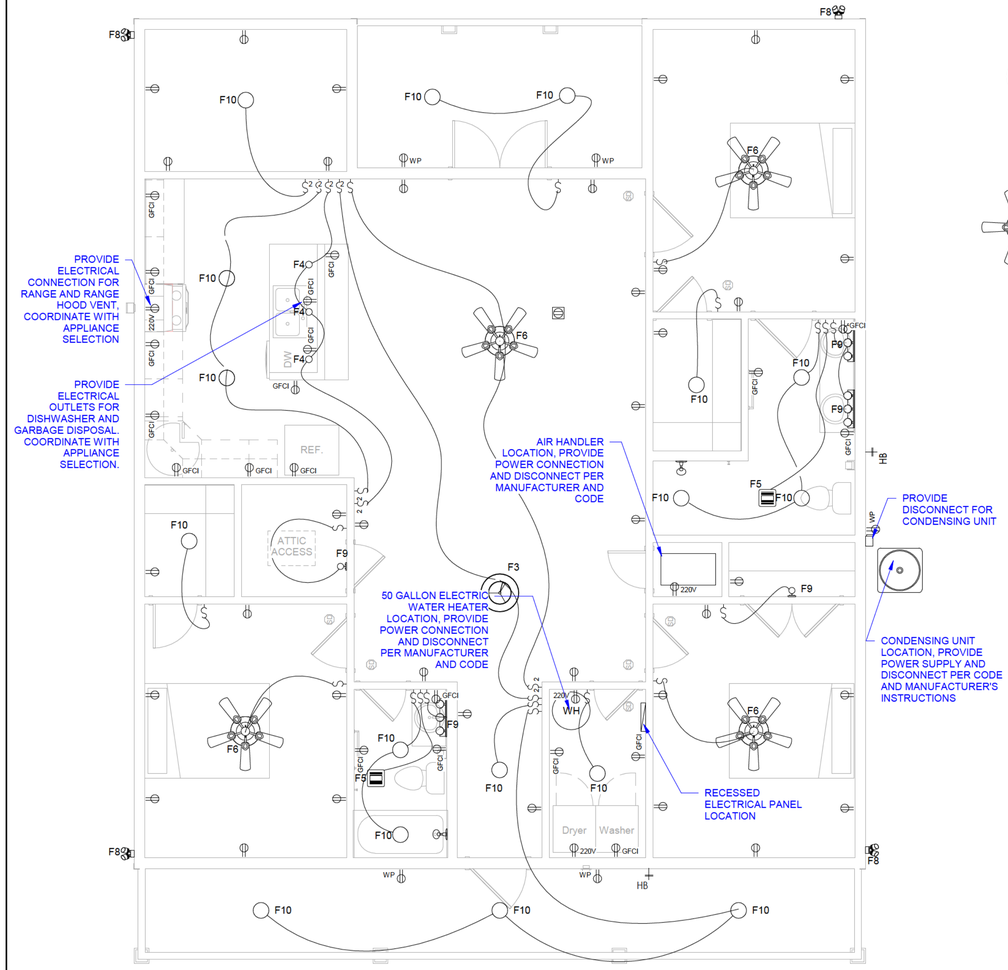
3 BEDROOM PROTOTYPE
SOG
Address TBD
City, Florida Zip Code

VINYL SIDING DETAILS FOR SLAB ON GRADE

Project Number	2019-15
Date	12/27/2021
Drawn By	ZP
Checked By	IP

50% PRELIMINARY DESIGN, NOT FOR CONSTRUCTION

A-5



1 LIGHTING AND OUTLET LOCATION PLAN
1/4" = 1'-0"

ELECTRICAL LEGEND

- F3 PENDANT LIGHT FIXTURE
- F9 WALL MOUNT FIXTURE
- F5 EXHAUST FAN
- F8 MOTION SENSOR FLOOD LIGHT
- F6 CEILING FAN W/ LIGHT KIT
- COMBO SMOKE & CARBON MONOXIDE DETECTOR
- F10 CEILING MOUNTED FIXTURE
- F4 ISLAND PENDANT FIXTURE
- 220V 220V OUTLET
- DUPLEX OUTLET
- GFCI GFCI OUTLET
- WP GFCI WEATHERPROOF OUTLET
- DUPLEX FLOOR OUTLET
- S SINGLE POLE SWITCH
- $_2$ TWO-POLE SWITCH
- DISCONNECT

SPECIFICATIONS:	SQUARE D QO OR EQUAL				**PANEL-A**					MAINS:	MLO		
AMPACITY:	200 AMPS									LOCATION:	LAUNDRY		
VOLTAGE:	120/240V, 1PH, 3 WIRE									MOUNTING:	RECESSED		
AMPS	POLE	TOTAL VA	WIRE SIZE	GRD SIZE	DESCRIPTION	CIRCUIT No.		CIRCUIT No.	DESCRIPTION	GRD SIZE	WIRE SIZE	TOTAL VA	POLE	AMPS
30	2	5984	10	10	AHU-1	1		2	DRYER	10	10	5000	2	30
30	2		10	10		3		4		10	10		2	30
25	2	*	10	10	AHU-1	5		6	RANGE	10	10	8500	2	50
25	2		10	10		7		8		10	10		2	50
30	2	4500	10	10	WATER HEATER	9		10	SPACE					
30	2		10	10		11		12	SPACE					
20	1	720	12	12	RECEPT. FRONT ENTRANCE	13		14	RECEPT. LIVING ROOM	12	12	720	1	20
20	1	900	12	12	RECEPT. BACK ENTRANCE	15		16	RECEPT. LIVING ROOM	12	12	720	1	20
20	1	900	12	12	RECEPT. DINING ROOM	17		18	L.T.S. MASTER BED/KITCHEN/LIVING	12	12	#	1	20
20	1	1260	12	12	RECEPT. MASTER BEDROOM	19		20	L.T.S. BEDROOMS/LAUNDRY/PANTRY	12	12	#	1	20
20	1	920	12	12	RECEPT. /LTS MASTER BATHROOM	21		22	L.T.S. OUTDOOR FLOOD LIGHTS	12	12	#	1	20
20	1	1260	12	12	RECEPT. BEDROOM #1	23		24	SMALL APPLIANCE	12	12	1500	1	20
20	1	1260	12	12	RECEPT. BEDROOM #2	25		26	SMALL APPLIANCE	12	12	1500	1	20
20	1	840	12	12	RECEPT. /LTS GUEST BATHROOM	27		28	SMALL APPLIANCE	12	12	1500	1	20
20	1	360	12	12	RECEPT. LAUNDRY ROOM	29		30	DISPOSAL	12	12	1500	1	20
20	1	300	12	12	RECIRC. PUMP	31		32	DISHWASHER	12	12	1500	1	20
					SPACE	33		34	REFRIGERATOR	12	12	1200	1	20
					SPACE	35		36	MICROWAVE	12	12	1200	1	20
					SPACE	37		38	WASHER	12	12	1500	1	20
					SPACE	39		40	SPACE					
					SPACE	41		42	SPACE					

PANEL-A

DEMAND LOAD CALCULATIONS

AREA (SQFT)	=	1,514		
GENERAL LIGHTING LOAD @ 3VA PER SQ.FT.	=	4,542		
TOTAL GENERAL LOAD	=	44,102		VA
RECEP. 1st 10,000 VA @ 100%	=	10,000 @ 100% =	10,000	VA
REST @40%	=	34,102 @ 40%=	13,641	VA
AIR CONDITIONERS @ 65%	=	5,984 @ 65%=	3,890	VA
OTHERS @ 100%	=	0 @ 100%=	0	VA
TOTAL LOAD	=		27,530	VA
CURRENT PER PHASE	=	TOTAL LOAD (VA) / (240V)		
	=	115	AMPS	

NOTES:

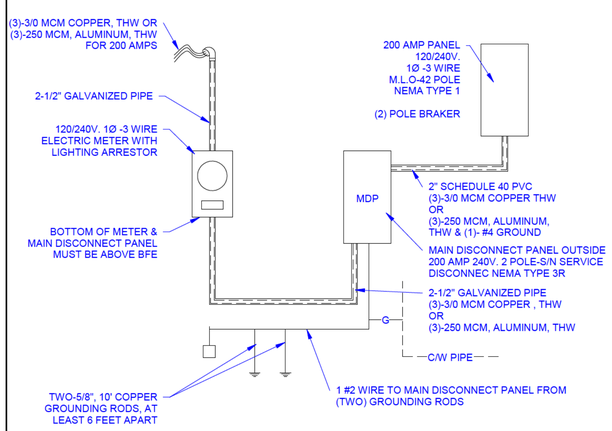
* NON SIMULTANEOUS LOAD. 100% OF COOLING IS LARGER THAN 65% OF HEAT.

INCLUDED IN GENERAL LIGHTING LOAD PER AREA.

VERIFY ALL EQUIPMENT LOAD, BREAKERS AND WIRE SIZES PRIOR TO INSTALLATION ORDERING OF MATERIALS

ELECTRICAL NOTES:

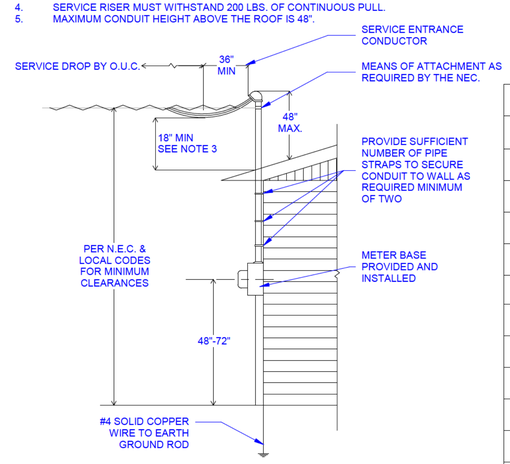
1. ELECTRICAL WORK SHALL BE DESIGN BUILD BY ELECTRICAL SUBCONTRACTOR.
2. ELECTRICAL CONTRACTOR SHALL BE LICENSED AND RESPONSIBLE TO MEET ALL APPLICABLE REQUIREMENTS BY CODE
3. ELECTRICAL CONTRACTOR TO COORDINATE ELECTRICAL DRAWINGS WITH ARCHITECTURAL, STRUCTURAL, AND MECHANICAL DRAWINGS. CONTRACTOR IS RESPONSIBLE TO COORDINATE ANY DISCREPANCIES AND NOTIFY THE ARCHITECT PRIOR TO PROCEEDING WITH WORK.
4. PROVIDE SERVICE CONNECTION AND PROPER GROUNDING
5. PROVIDE ALL WIRING AND EQUIPMENT FOR ALL FIXTURES AND EQUIPMENT INDICATED IN ARCHITECTURAL, MECHANICAL, AND ELECTRICAL DRAWINGS PER CODE.
6. NOTE THAT ELECTRICAL OUTLETS INDICATED ON DRAWINGS ARE SHOWN AS A REMINDER FOR EQUIPMENT LOCATIONS OR SPECIFIC REQUIREMENTS TO THIS PROJECT. OUTLETS SHALL BE INSTALLED THROUGHOUT AS REQUIRED BY CODE WHETHER INDICATED ON THE PLANS OR NOT.
7. COMBINATION SMOKE AND CARBON MONOXIDE DETECTORS SHALL BE INSTALLED OUTSIDE OF EACH SEPARATE SLEEPING AREA IN THE IMMEDIATE VICINITY OF THE BEDROOMS AND ON EACH ADDITIONAL STORY OF THE DWELLING. ALL DETECTORS SHALL BE APPROVED AND LISTED IN ACCORDANCE UL 217 and UL 2034 WITH THE MANUFACTURER'S INSTRUCTIONS. REQUIRED SMOKE DETECTORS SHALL RECEIVE THEIR PRIMARY SOURCES FROM THE BUILDING WIRING, AND WHEN PRIMARY POWER IS INTERUPTED, SHALL RECEIEVE POWER FROM A BATTERY. COMBINATION SMOKE AND CARBON MONOXIDE DETECTORS SHALL BE INSTALLED PER SECTIONS R314 AND R315 OF THE 2020 FRC
8. ALL LIGHTING FIXTURES SHALL BE ENERGY STAR QUALIFIED FIXTURES
9. ALL LIGHTING FIXTURES SHALL BE LED AND INCLUDE LED BULBS
10. ALL OUTLETS SHALL BE INSTALLED MIN. 15" FROM FFE
11. ALL LIGHT SWITCHES, THERMOSTAT, CONTROLS, SHALL BE INSTALLED AT HEIGHT MIN. 36" FROM FFE AND MAX. 48" FROM FFE.
12. PROVIDE POWER TO VERTICAL PLATFORM LIFT PER MANUFACTURER'S REQUIREMENTS.
13. ALL RECEPTACLES SHALL BE TAMPER RESISTANT
14. ALL FIXTURES AND DEVICES SHALL BE UL LISTED
15. ALL 120-VOLT, SINGLE-PHASE, 15- AND 20-AMPERE BRANCH CIRCUITS SUPPLYING OUTLETS OR DEVICES INSTALLED IN DWELLING UNIT KITCHENS, FAMILY ROOMS, DINING ROOMS, LIVING ROOMS, PARLORS, LIBRARIES, DENS, BEDROOMS, SUNROOMS, RECREATION ROOMS, CLOSETS, HALLWAYS, LAUNDRY AREAS, OR SIMILAR ROOMS OR AREAS SHALL BE PROTECTED BY AFCIs.
16. CONTRACTOR SHALL PROVIDE ELECTRICAL LOAD CALCULATIONS AND ANY ADDITIONAL ELECTRICAL INFORMATION REQUESTED BY PERMIT DEPARTMENT NOT SHOWN IN DRAWINGS.



2 OVERHEAD ELECTRICAL RISER DIAGRAM
3/8" = 1'-0"

NOTES:

1. CATV OR TELEPHONE CABLE SHALL NOT BE ATTACHED TO THE SERVICE MAST.
2. FOR SPECIFIC HEIGHT REQUIREMENTS & CLEARANCE, REFER TO N.E.C. AND LOCAL CODES.
3. SERVICE RISER SHALL BE 2" MINIMUM RIGID METAL CONDUIT
4. SERVICE RISER MUST WITHSTAND 200 LBS. OF CONTINUOUS PULL.
5. MAXIMUM CONDUIT HEIGHT ABOVE THE ROOF IS 48".



3 TYPICAL OVERHEAD RESIDENTIAL SERVICE INSTALLATION
3/8" = 1'-0"

LIGHT FIXTURE SCHEDULE

MARK	DESCRIPTION	MANUFACTURER	MODEL	COMMENTS	QUANTITY
F1	INTERIOR RECESSED CAN	SEE SPECS	SEE SPECS		0
F2	EXTERIOR RECESSED CAN	SEE SPECS	SEE SPECS		0
F3	CHANDELIER	SEE SPECS	SEE SPECS		1
F4	ISLAND PENDANT	SEE SPECS	SEE SPECS		3
F5	EXHAUST FAN	SEE SPECS	SEE SPECS		2
F6	CEILING FAN W/ LIGHT KIT	SEE SPECS	SEE SPECS		4
F7	RECESSED CAN (WET RATED)	SEE SPECS	SEE SPECS		0
F8	EXTERIOR FLOOD LIGHT	SEE SPECS	SEE SPECS		4
F9	VANITY FIXTURE	SEE SPECS	SEE SPECS		5
F10	CEILING MOUNTED FIXTURE	SEE SPECS	SEE SPECS		17

*CONFIRM ALL FIXTURES AND SWITCHING TYPES WITH OWNER PRIOR TO PURCHASE AND INSTALLATION

No.	Description	Date

3 BEDROOM PROTOTYPE SOG

Address TBD
City, Florida Zip Code

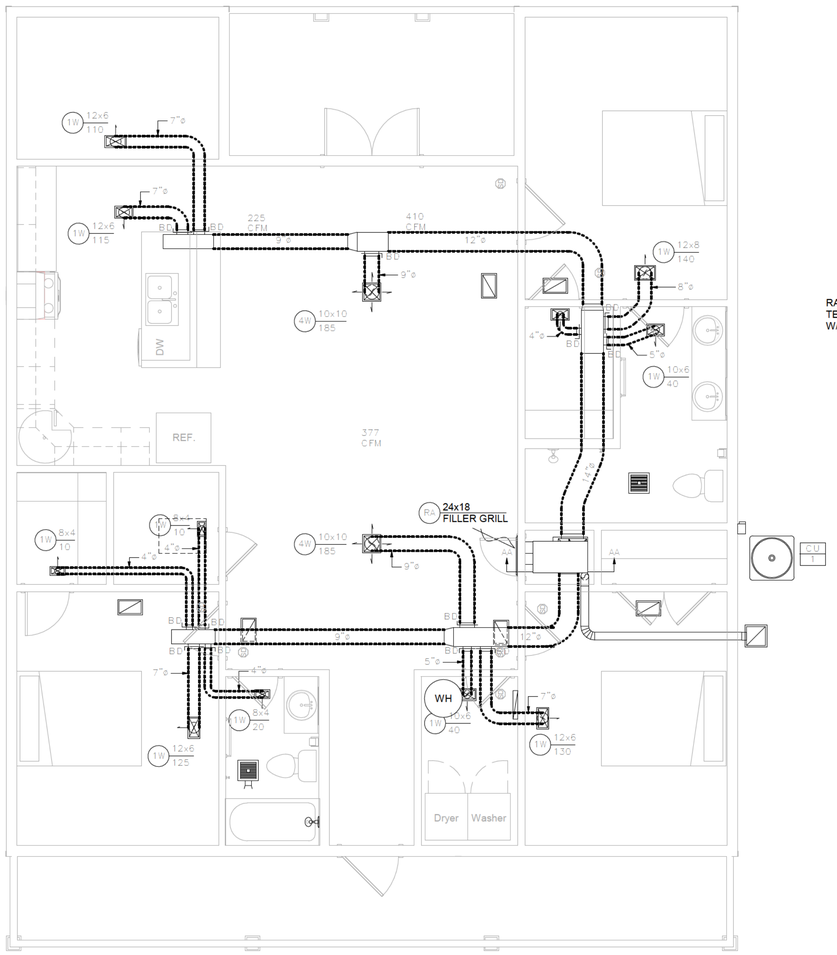
ELECTRICAL PLAN

Project Number	2019-15
Date	12/27/2021
Drawn By	IP
Checked By	JC

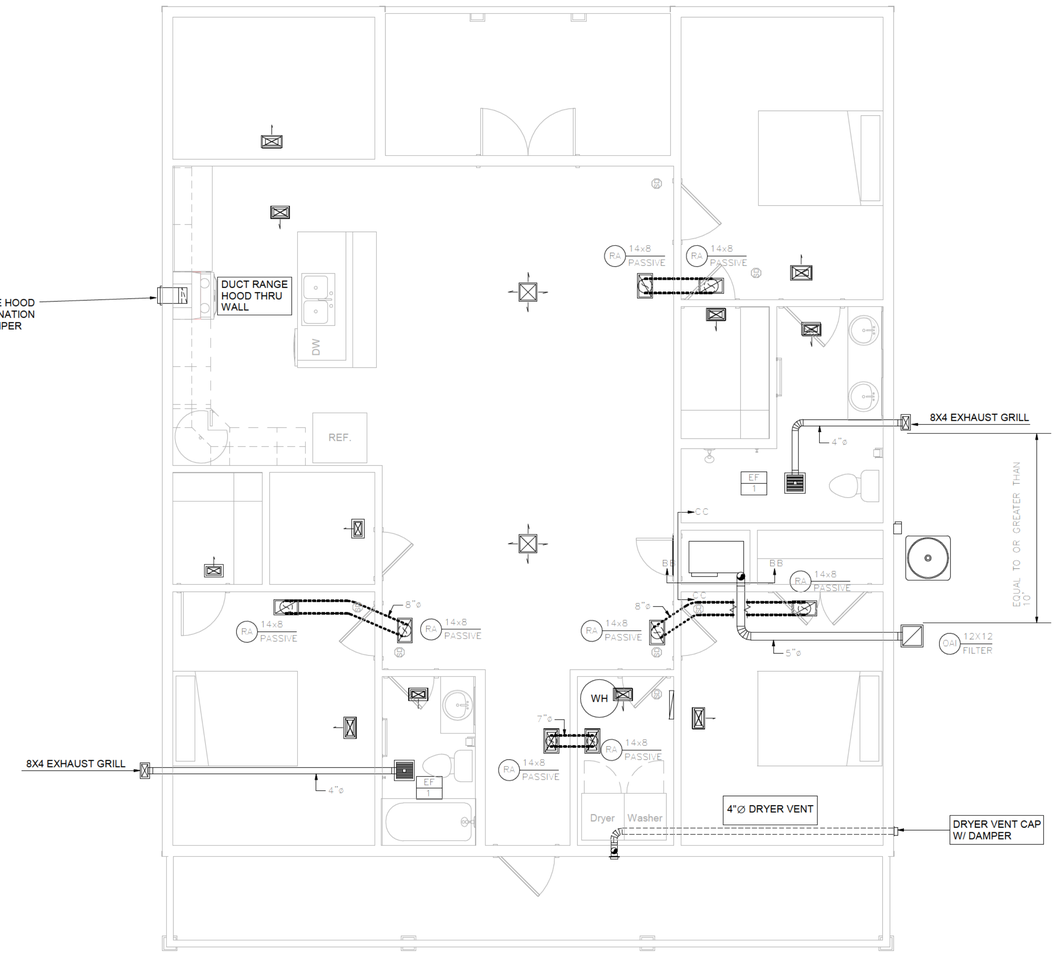
50% PRELIMINARY DESIGN, NOT FOR CONSTRUCTION

E-1

MECHANICAL NOTE:
FLOOR PLANS ON MECHANICAL SHEETS MAY DIFFER SLIGHTLY WITH ARCHITECTURAL. MECHANICAL SHEETS ARE DIAGRAMMATIC TO INDICATE SIZE AND APPROXIMATE LOCATION OF MECHANICAL EQUIPMENT, FIXTURES, AND COMPONENTS.



1 COOLING AND HEATING DUCT SYSTEM
1/4" = 1'-0"



2 EXHAUST, VENTILATION AND PASSIVE RETURN DUCT SYSTEMS
1/4" = 1'-0"

No.	Description	Date

MECHANICAL

Project Number	2019-15
Date	12/27/2021
Drawn By	RM
Checked By	DC

50% PRELIMINARY DESIGN, NOT FOR CONSTRUCTION

M-1

HVAC ABBREVIATION LEGEND

AHU	AIR HANDLING UNIT
CU	CONDENSING UNIT
OAI	OUTDOOR AIR INTAKE
OAD	OUTDOOR AIR DAMPER
OA	OUTDOOR AIR
EF	EXHAUST FAN
DH	DEHUMIDIFIER
CP	CONDENSATE PUMP
ZD	ZONE DAMPER
BD	BALANCE DAMPER
T	THERMOSTAT
DHC	DEHUMIDIFICATION CONTROL
AF	AIR FILTRATION
SA	SUPPLY AIR
RA	RETURN AIR

A/C DUCT WORK SPECIFICATIONS

SIZE/ROUND

FLEXIBLE DUCT

CLASS 1 FLEXIBLE DUCT WITH SILVER VAPOR JACKET.
R-VALUE 6
MANUFACTURER: ATCO MODEL #036

SIZE/ROUND

METAL DUCT ROUND

GALVANIZED METAL SNAPLOCK PIPE WITH SILVER DUCT WRAP.
R-VALUE = 6
MANUFACTURER: CERTAINTEED SOFT TOUCH

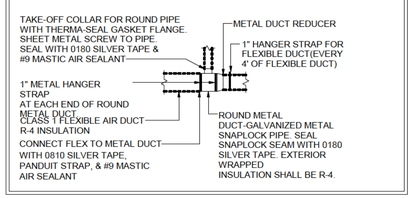
SIZE/WxH

DUCT RECTANGLE

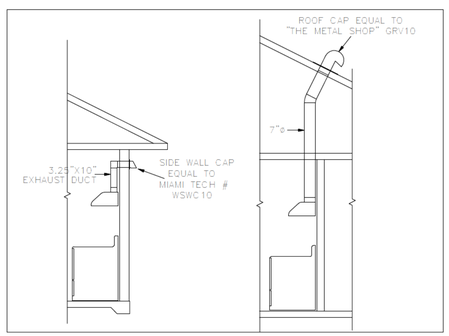
"TOUGHGARD" DUCT BOARD BLACK MAT
R-VALUE = 6
MANUFACTURER: CERTAINTEED

ALL DUCT SIZES LISTED ON PLANS ARE INSIDE DIAMETER AND ARE LISTED IN INCHES.
ADD 3" TO EACH DIMENSION FOR OUTSIDE DIAMETER

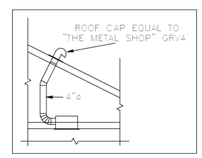
FLEX DUCT TO METAL DUCT CONNECTION DETAIL



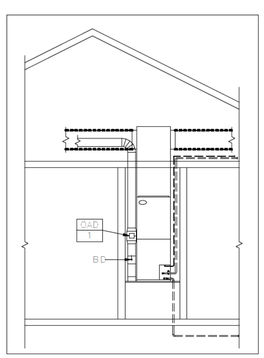
BALANCE DAMPER COLLAR



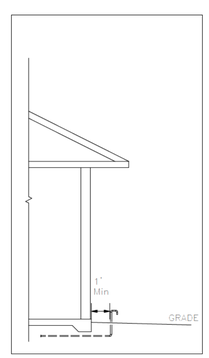
RANGE HOOD VENTING, SIDWALL VENTING AND VENTING THRU ROOF



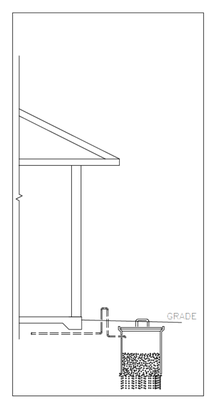
BATHROOM EXHAUST FAN VENT THRU ROOF



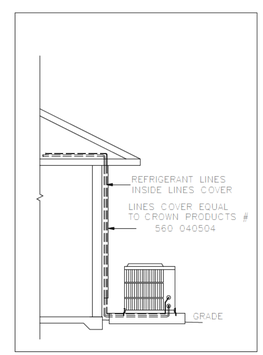
PVC CONDENSATE DRAIN LINE UNDERFLOOR BY THE PLUMBER



CONDENSATE DISCHARGE 1 FOOT MINIMUM FROM BUILDING FOUNDATION



DRYWELL ONLY WHEN REQUIRED BY LOCAL CODE



REFRIGERANT LINES RUN THROUGH ATTIC AND DOWN EXTERIOR WALL COVER LINES WITH APPROVED LINE COVER

HVAC NOTES:

GENERAL NOTES

1. ALL WORK TO BE DONE IN ACCORDANCE WITH THESE PLANS & THE FLORIDA BUILDING CODE 7th EDITION (2020)
2. MECHANICAL DRAWINGS ARE SCHEMATIC IN NATURE & ARE NOT INTENDED TO SHOW EVERY MINOR DETAIL. THE HVAC CONTRACTOR SHALL INCLUDE THE FURNISHINGS OF ALL LABOR AND MATERIALS TO COMPLETE THE AIR CONDITIONING, HEATING, AND VENTILATION SHOWN ON THE DRAWINGS TO INCLUDE, BUT NOT BE LIMITED TO THE FOLLOWING:
   - PERMIT FEES
   - ALL AIR CONDITIONING EQUIPMENT
   - EXHAUST FANS
   - SUPPLY, RETURN, VENTILATION, & EXHAUST AIR DUCT WORK
   - SUPPLY AND RETURN DIFFUSERS AND REGISTERS, DAMPERS, WEATHERPROOF VENTILATION & EXHAUST LOUVERS
   - AIR FILTRATION; MINIMUM MERV-8
   - THERMOSTATS, CO2 SENSORS, SHUT DOWN SWITCHES & RELATED CONTROL WIRING
   - EQUIPMENT SUPPORTS, HANGERS, & RACKS
   - CONDENSATE DRAIN PANS & PIPING
   - REFRIGERANT FIELD COPPER LINE SET & PIPING
3. ALL WORK SHALL BE PERFORMED BY A LICENSED HVAC CONTRACTOR CERTIFIED IN THE STATE OF FLORIDA.
4. THE HVAC CONTRACTOR SHALL VISIT THE JOB SITE, MEET WITH RELATED TRADES, & FAMILIARIZE THEMSELVES WITH ANY AND ALL CONDITIONS RELATED TO THEIR WORK.
5. ALL EQUIPMENT AND MATERIALS SHALL BE AS SPECIFIED OR APPROVED EQUAL. ANY CHANGES OR DEVIATIONS FROM THESE PLANS MUST BE APPROVED BY ENGINEER OF RECORD.
6. AIR CONDITIONING AND HEATING EQUIPMENT SHALL NOT BE SIZED BASED ON A.R.I. CAPACITY RATINGS, BUT RATHER BASED ON SPECIFIC DESIGN CONDITIONS.
7. REVISIONS OR CHANGES FROM THESE PLANS THAT MAY BE REQUIRED BECAUSE OF CONTRACTOR OPTED REVISIONS, SHALL BE COMPENSATED TO THE ENGINEER OF RECORD BY THE REQUESTING CONTRACTOR.
8. FOR ANY QUESTIONS REGARDING LOAD CALCULATIONS, ENERGY CALCULATIONS, MECHANICAL DESIGN OR EQUIPMENT SELECTION PLEASE CONTACT DENNIS STROER, CALCS-PLUS, 121 TRIPLE DIAMOND BLVD, UNIT 16, NORTH VENICE, FL 34275, 941-488-1700
9. ALL ROUGHED-IN DUCTWORK AND OR ANY MECHANICAL OPENINGS SHALL BE COVERED AND PROTECTED DURING CONSTRUCTION TO MINIMIZE DUST CONTAMINATION INSIDE THE DUCTWORK AND MECHANICAL SYSTEM. MATERIALS SUCH AS DUCK MASK, RIGID FOAM INSULATION, DUCT BOARD OR OTHER MEANS ACCEPTABLE TO SEAL THE OPENINGS.

DUCTWORK

1. DUCT CONSTRUCTION AND INSTALLATION SHALL COMPLY WITH SECTION M603 OF THE 2020 FLORIDA BUILDING CODE.
2. AIR CONDITIONING DUCT SYSTEM MATERIALS SHALL BE BASED ON THE FOLLOWING:
   - FLEXIBLE DUCT WORK - BRAND - ATCO #030 / UL 181, CLASS 1 AIR DUCT WITH REINFORCED METALLIZED POLYESTER JACKET WITH WIRE HELIX ENFORCED AIR TIGHT INNER LINER. INSULATION SHALL BE R- 4 .
   - RECTANGLE DUCT -GALVANIZED METAL DUCT WITH R-4 LINED INSULATION .
3. ALL DUCT SIZES LISTED ARE NET INSIDE DIMENSIONS.
4. ALL DUCTS AND PLENUMS SHALL BE MADE AIR TIGHT. DUCT WORK SHALL BE CONSTRUCTED AND INSTALLED IN ACCORDANCE WITH THE CURRENT EDITION OF CHAPTER 13 OF THE 2020 FLORIDA BUILDING CODE.
5. DUCT LEAKAGE SHALL NOT EXCEED 5% OF THE RATED AIR HANDLER FLOW.
6. FLEXIBLE DUCT SHALL BE EXTENDED TO ITS FULL LENGTH. EXCESS DUCT MATERIAL IN A RUN SHALL BE LESS THAN 5%.
7. FLEXIBLE DUCT SHALL BE SUPPORTED AT MANUFACTURERS RECOMMENDED INTERVALS, BUT AT NO GREATER DISTANCE THAN 4 FEET. MAXIMUM PERMISSIBLE SAG IS 1/2" PER FOOT OF SPACING BETWEEN SUPPORTS.
8. FIRE DAMPERS SHALL BE INSTALLED IN ACCORDANCE WITH SECTION 716 OF THE 2020 FLORIDA BUILDING CODE.
9. DUCTS AND TRANSFER OPENINGS THAT PENETRATE FIRE RESITANT-RATED ASSEMBLIES AND ARE NOT REQUIRED BY THIS SECTION TO HAVE DAMPERS, SHALL COMPLY WITH THE REQUIREMENTS OF SECTION 712 OF THE 2020 FLORIDA BUILDING CODE.
10. SMOKE DETECTORS SHALL BE INSTALLED IN ACCORDANCE WITH SECTION M606 OF 2020 FLORIDA BUILDING CODE.

CONDENSATE DISPOSAL

1. CONDENSATE DISPOSAL SHALL BE PROVIDED FOR EQUIPMENT AND APPLIANCES CONTAINING EVAPORATOR COILS.
2. CONDENSATE DRAIN SYSTEM SHALL BE DESIGNED, CONSTRUCTED AND INSTALLED IN ACCORDANCE WITH SECTIONS 307.2.1 THROUGH 307.2.4 OF THE 2020 FLORIDA BUILDING CODE.
3. ALL PRIMARY CONDENSATE PIPING LOCATED WITHIN THE INSIDE OF THE BUILDING SHALL BE INSULATED TO PREVENT CONDENSATION FROM FORMING ON THE EXTERIOR OF THE DRAIN LINE.
4. MAIN AND EMERGENCY CONDENSATE DRAIN LINES SHALL BE SCHEDULE 40 PVC.
5. AUXILIARY DRAIN LINE CONNECTION AT THE EVAPORATOR DRAIN PAN SHALL INCORPORATE AN SAFETY CUT-OFF SWITCH.
6. AIR HANDLERS SHALL INCORPORATE AN EMERGENCY DRAIN PAN THAT IS PIPED TO A CONSPICUOUS LOCATION AT THE EXTERIOR OF THE BUILDING OR INCORPORATES A SAFETY CUT-OFF SWITCH.
7. SLOPE HORIZONTAL CONDENSATE DRAINS A MINIMUM OF 1/4" PER FOOT.
8. CONDENSATE SHALL BE CONVEYED FROM THE DRAIN PAN OUTLET TO AN APPROVED PLACE OF DISPOSAL. CONDENSATE SHALL NOT DISCHARGE INTO A STREET, SIDEWALK, OR ANY OTHER LOCATION AS TO CAUSE A NUISANCE. IF NO APPROVED LOCATION IS AVAILABLE, THEN A DRY WELL SHALL BE INSTALLED.
9. ALL DRAIN LINES SHALL BE PROVED AND TESTED UPON EQUIPMENT START-UP.
10. ALL DRAIN LINE AND DRAIN PAN SAFETY CUT OFF CONTROLS SHALL BE TESTED UPON EQUIPMENT START-UP .

SPLIT SYSTEM AIR CONDITIONING EQUIPMENT

1. CONDENSING UNIT SHALL BE INSTALLED AS PER SECTION 304.1 AND 304.2 OF THE 2020 FLORIDA BUILDING CODE.
2. CONDENSING UNIT SHALL BE LOCATED ON SLAB ON GRADE. TIE DOWN WITH FBC APPROVED HURRICANE STRAPS.
3. CLEARANCE AROUND NON SERVICE SIDES OF THE CONDENSING UNIT SHALL COMPLY WITH MANUFACTURERS RECOMMENDATIONS AS PER MANUFACTURERS INSTALLATION INSTRUCTIONS.
4. CLEARANCE ABOVE THE CONDENSING UNIT SHALL COMPLY WITH MANUFACTURERS RECOMMENDATION AS PER MANUFACTURERS INSTALLATION INSTRUCTIONS.
5. AIR HANDLERS SHALL BE INSTALLED AS PER MANUFACTURERS INSTALLATION INSTRUCTIONS AND THE 2020 FLORIDA BUILDING CODE.
6. THE AIR HANDLER SHALL INCORPORATE A FILTER HOUSING WITH EASY ACCESS. THE FILTER COMPARTMENT SHALL NOT BE OBSTRUCTED IN ANY WAY BY THE REFRIGERANT PIPING, CONDENSATE PIPING, OR ANY OTHER ITEM WHICH MAY PREVENT REMOVAL AND INSTALLATION OF THE FILTER.
7. FILTERS SHALL BE LOCATED AT THE AIR HANDLER DIRECTLY BEFORE THE EVAPORATOR COIL. NO FILTER BACK GRILLS SHALL BE USED UNLESS NOTED ON THE DRAWING
8. CLEARANCE AROUND THE AIR HANDLER SHALL BE 4" FOR NON-SERVICE SIDES AND 36' FOR SERVICE SIDE.

OUTDOOR AIR & EXHAUST AIR SYSTEMS

1. ALL EXHAUST DUCTS SHALL TERMINATE TO EXTERIOR ROOF CAP, SIDEWALL CAP, OR SOFFIT HOOD AS INDICATED ON THE HVAC PLANS.
2. EXHAUST FANS SHALL HAVE BACK DRAFT DAMPER INSTALLED.
3. EF #1 & EF #2 SHALL BE WIRED TO WALL SWITCH ON/OFF.
4. OUTDOOR AIR DUCT SHALL BE CONNECTED TO THE RETURN SIDE OF THE AIR STREAM AT THE RETURN AIR PLENUM.
5. OUTDOOR AIR DUCT SHALL INCORPORATE A MANUAL VOLUME BALANCE DAMPER AT THE RETURN AIR PLENUM FOR INTAKE BALANCE.
6. OUTDOOR AIR DUCT SHALL INCORPORATE A NORMALLY CLOSE 24 VOLT DAMPER(VAD).
7. VAD SHALL BE WIRED TO OPEN VIA CORRESPONDING CO2 SENSOR.
8. CO2 SENSOR SHALL OPEN VAD ON CO2 RISE AND CLOSE UPON CO2 FALL. SEE CO2 CONTROL SCHEDULE.
9. OUTDOOR AIR INTAKES SHALL HAVE INSECT SCREEN AT INTAKE CAP.
10. KEEP ALL VENTILATION AIR INTAKES A MINIMUM 10' FROM EXHAUST FAN TERMINATION POINTS AND SANITARY SEWER VENT OUTLETS.
11. KEEP ALL OUTDOOR AIR INTAKES AND EXHAUST VENTS 3' FROM OPERABLE OPENINGS INTO BUILDING AND 3' FROM PROPERTY LINES

No.	Description	Date

MECHANICAL

Project Number	2019-15
Date	12/27/2021
Drawn By	RM
Checked By	DC

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M-2

SPLIT AIR CONDITIONING SYSTEM SCHEDULE

	SEE EQUIPMENT SELECTION	"A" TYPE	"B" TYPE	"C" TYPE	"D" TYPE
SYSTEM	TOTAL CAPACITY BTUH *	26,862	31,900	26,986	32,282
	SENSIBLE CAPACITY BTUH	21,546	24,600	22926	24,179
	HEATING CAPACITY BTUH (47* ODT)	26,282	34,500	N/A	N/A
	MANUFACTURER	CARRIER	CARRIER	CARRIER	CARRIER
	SEER / HSPF	15.00 / 8.50	15.00 / 8.5	15.50 / N/A	16.00 / N/A
	NOMINAL TONNAGE	2.5	3	2.5	3
	AHRI NUMBER	9154945	9155179	9777582	9311698
AIR HANDLING UNIT	DESIGNATION	AHU-1	AHU-1	AHU-1	AHU-1
	MODEL NO.	FX4DNF031L08	FX4DNF037L10	FX4DNF031L08	FX4DNF037L10
	SUPPLY AIR CFM	1,050	1,050	1,050	1,050
	OUTDOOR AIR (OA) CFM	45	45	45	45
	ENTERING AIR TEMP. DB/WB	75/63	75/63	75/63	75/63
	EXTERNAL STATIC PRESS. IN. W. G.	0.6"	0.6"	0.6"	0.6"
	INDOOR FAN FLA	4.10	4.10	4.10	4.10
	ELECTRIC HEAT KW	8.0	9.6	8.0	9.6
	MCA/MOCP	45.2 / 50	59 / 60	45.2 / 50	59 / 60
CONDENSING UNIT	DESIGNATION	CU-1	CU-1	CU-1	CU-1
	MODEL NO.	25HBC530AP030	25HBC536A003	24AAA530A00300	24AAA536A00300
	COMPRESSOR R.L.A. / L.R.A.	14.1 / 73	16.8 / 75	12.8 / 67.8	13.6/79
	OUTDOOR FAN FLA	0.5	0.6	0.75	1.1
	OUTDOOR DESIGN TEMP. DB	95	95	95	95
	MCA / MOCP	18.1 / 30	21.6 / 35	16.8 / 25	18.1 / 30
	ELECTRIC SERVICE	208/230/1/60	208/230/1/60	208/230/1/60	208/230/1/60

* EQUIPMENT OUTPUT IS BASED ON MANUFACTURER'S EXPANDED PERFORMANCE TABLES USING INDOOR CONDITIONS OF 75 DEGREES AND 63 DEGREE WET BULB.

EXHAUST FAN SCHEDULE

DESIGNATION	EF #1		
FAN TYPE	CEILING		
DRIVE TYPE	DIRECT		
AIR FLOW CFM	50		
STATIC PRESS. IN. W.G.	0.25		
NOISE(SONES)	0.7		
ELECTRIC SERVICE	120/1/60		
MAX AMPS	.14		
MANUFACTURER	PANASONIC		
MODEL NO.	FV-05-11VKS1		
CONTROL	3		

SPEED SETTINGS AND CONTROL

1. SET TO 50 CFM.
2. STANDARD ON/OFF WALL SWITCH WITH MOTION SENSOR OPTION

VENTILATION AIR CALCULATION

ASHRAE 62.2-2010 - CHAPTER 4
REFERENCE TABLE 4 1
OCCUPANCY CATEGORY - RESIDENTIAL

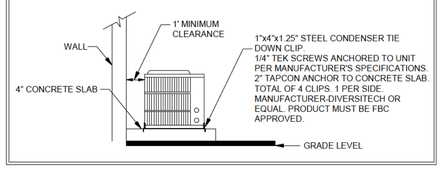
Rp 7.5	CFM/COMBINED OUTDOOR AIR FLOW RATE
Pz 4	OCCUPANTS
Ra .01	CFM/FT^2 - ZONE OCCUPIABLE AREA
Az 1,579	FT^2 - ZONE OCCUPIABLE AREA
Vbz 44.80	CFM, BREATHING ZONE OA FLOW
Ez 1.0	ZONE AIR DISTRIBUTION EFFECT
Voz 46	MINIMUM REQUIRED ZONE OUTDOOR AIR FLOW

*OUTSIDE AIR REQUIREMENTS ARE IN ACCORDANCE WITH FLORIDA MECHANICAL CODE 2014 AND ASHRAE 2014-62.2, VENTILATION FOR ACCEPTABLE INDOOR AIR QUALITY

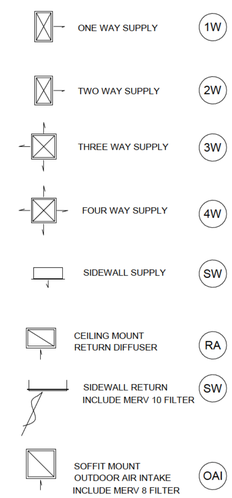
OAD-1 OUTDOOR AIR DAMPER

OUTDOOR AIR DAMPER TO BE EQUAL TO HONEYWELL EARD-6. DAMPER SHALL OPEN ONLY WHEN CONDENSING UNIT IS OPERATING BALANCE OUTDOOR AIR TO 46 CFM.

CONDENSING UNIT MOUNTING DETAIL



AIR DIFFUSER & DESCRIPTION



HVAC DIFFUSER SPECIFICATIONS

SUPPLY DIFFUSER - CEILING

MANUFACTURER: AIRGUIDE
MODEL: CBHML-(1,2,3,4)ME
DESCRIPTION: WHITE ALUMINUM ADJUSTABLE CURVED BLADE WITH PARALLEL BLADE DAMPER

SUPPLY DIFFUSER - SIDEWALL

MANUFACTURER: AIRGUIDE
MODEL: VML-ME
DESCRIPTION: WHITE ALUMINUM SINGLE DEFLECTION WITH PARALLEL BLADE DAMPER

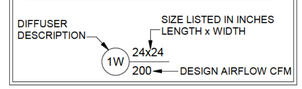
RETURN DIFFUSER - CEILING/SIDEWALL

MANUFACTURER: AIRGUIDE
MODEL: RA
DESCRIPTION: WHITE ALUMINUM 38" BLADE/NON-FILTER BACK

RETURN DIFFUSER - CEILING/SIDEWALL

MANUFACTURER: AIRGUIDE
MODEL: RF-2
DESCRIPTION: WHITE ALUMINUM 38" BLADE/FILTER BACK *FOR RANGE HOOD MAKE-UP AIR DIFFUSER. PROVIDE PERMANENT WASHABLE FILTER.

STANDARD DIFFUSER TAG LEGEND



EQUIPMENT SELECTION:

THE EQUIPMENT SCHEDULE SHOWS SEVERAL SPLIT SYSTEMS TO CHOOSE FROM. EQUIPMENT SELECTION SHALL BE BASED ON LOCATION, ORIENTATION AND THE 2020 FLORIDA BUILDING CODE - ENERGY CONSERVATION.

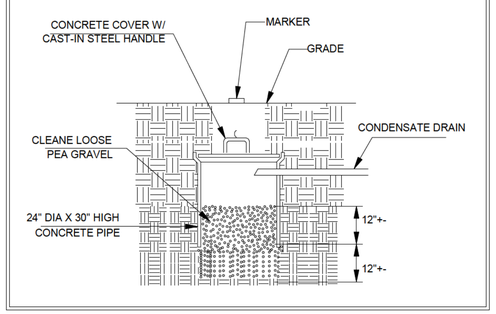
HVAC LOAD CALCULATIONS WERE BASED ON SIX LOCATIONS IN FLORIDA.

Pensacola						Gainsville AP, Florida					
Front door	Supply	Sens	Lat	Net	Rec	Front door	Supply	Sens	Lat	Net	Rec
Faces	CFM	Gain	Gain	Tons	Tons	Faces	CFM	Gain	Gain	Tons	Tons
South	748	19,787	5,808	2.13	2.20	South	708	18,839	5,444	2.02	2.09
Southwest	797	20,875	*5,817	2.22	2.32	Southwest	757	19,910	5,444	2.11	2.21
West	801	20,948	5,809	2.23	2.33	West	760	19,978	5,437	2.12	2.22
Northwest	785	20,614	5,812	2.20	2.29	Northwest	748	19,696	5,437	2.09	2.19
North	747	19,765	5,811	2.13	2.20	North	707	18,822	5,446	2.02	2.09
Northeast	801	20,965	5,807	2.23	2.33	Northeast	769	20,181	*5,446	2.14	2.24
East	*832	*21,645	5,806	*2.29	*2.40	East	*801	*20,863	5,438	*2.19	*2.32
Southeast	812	21,200	5,816	2.25	2.36	Southeast	780	20,426	5,444	2.16	2.27

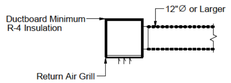
Jacksonville AP, Florida						Orlando AP, Florida					
Front door	Supply	Sens	Lat	Net	Rec	Front door	Supply	Sens	Lat	Net	Rec
Faces	CFM	Gain	Gain	Tons	Tons	Faces	CFM	Gain	Gain	Tons	Tons
South	722	19,329	5,339	2.06	2.15	South	723	19,297	4,969	2.02	2.14
Southwest	770	20,386	5,339	2.14	2.27	Southwest	773	20,391	4,971	2.11	2.27
West	774	20,473	5,335	2.15	2.27	West	776	20,454	4,965	2.12	2.27
Northwest	761	20,176	5,336	2.13	2.24	Northwest	762	20,148	4,966	2.09	2.24
North	721	19,307	*5,342	2.05	2.15	North	723	19,284	4,970	2.02	2.14
Northeast	783	20,663	5,340	2.17	2.30	Northeast	782	20,602	4,973	2.13	2.29
East	*813	*21,333	5,337	*2.22	*2.37	East	*815	*21,330	4,970	*2.19	*2.37
Southeast	791	20,829	5,330	2.18	2.31	Southeast	796	20,903	*4,974	2.16	2.32

Fort Myers AP, Florida						Miami AP, Florida					
Front door	Supply	Sens	Lat	Net	Rec	Front door	Supply	Sens	Lat	Net	Rec
Faces	CFM	Gain	Gain	Tons	Tons	Faces	CFM	Gain	Gain	Tons	Tons
South	722	19,320	5,341	2.06	2.15	South	712	18,801	5,625	2.04	2.09
Southwest	772	20,432	5,341	2.15	2.27	Southwest	764	19,967	*5,636	2.13	2.22
West	774	20,480	5,335	2.15	2.28	West	767	20,033	5,636	2.14	2.23
Northwest	760	20,175	5,337	2.13	2.24	Northwest	748	19,599	5,627	2.10	2.18
North	721	19,317	5,341	2.05	2.15	North	712	18,802	5,625	2.04	2.09
Northeast	777	20,523	5,331	2.15	2.28	Northeast	764	19,971	5,636	2.13	2.22
East	*814	*21,358	5,341	*2.22	*2.37	East	*801	*20,774	5,631	*2.20	*2.31
Southeast	795	20,952	*5,342	2.19	2.33	Southeast	783	20,395	5,636	2.17	2.27

DRYWELL DETAIL



RETURN AIR GRILL PLENUM



RETURN DUCTS 12"Ø OR LARGER SHALL TERMINATE AT A PLENUM STYLE REGISTER BOX

No.	Description	Date

MECHANICAL

Project Number	2019-15
Date	12/27/2021
Drawn By	RM
Checked By	DC

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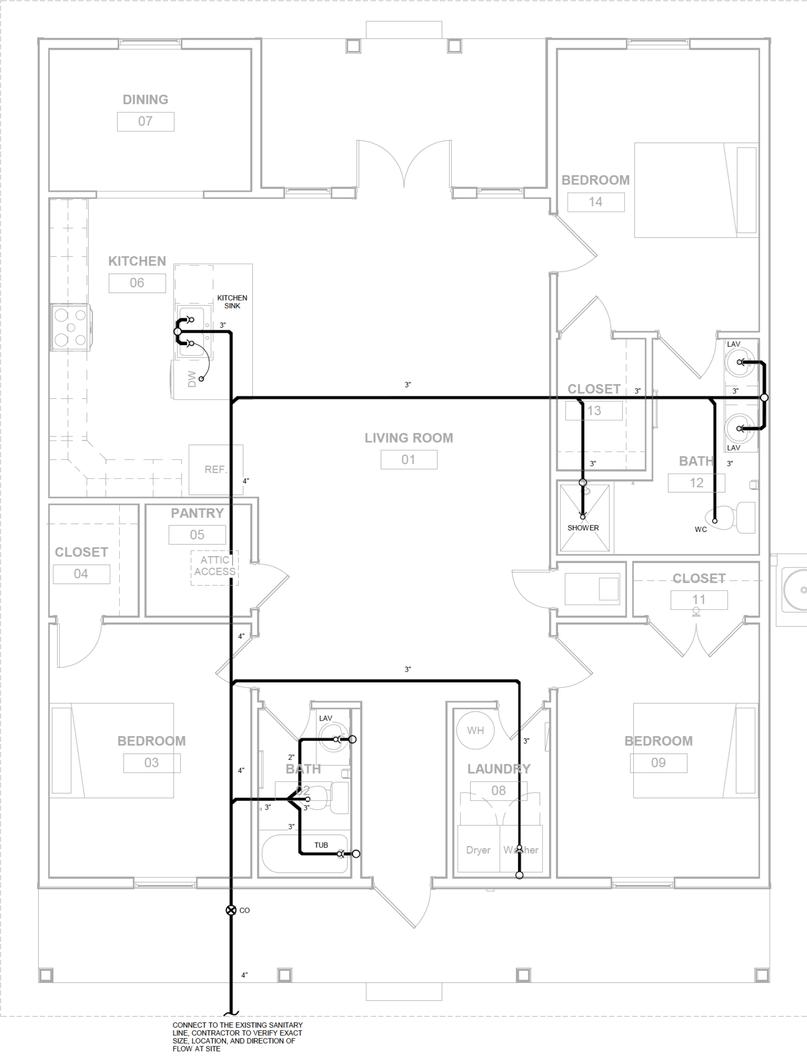
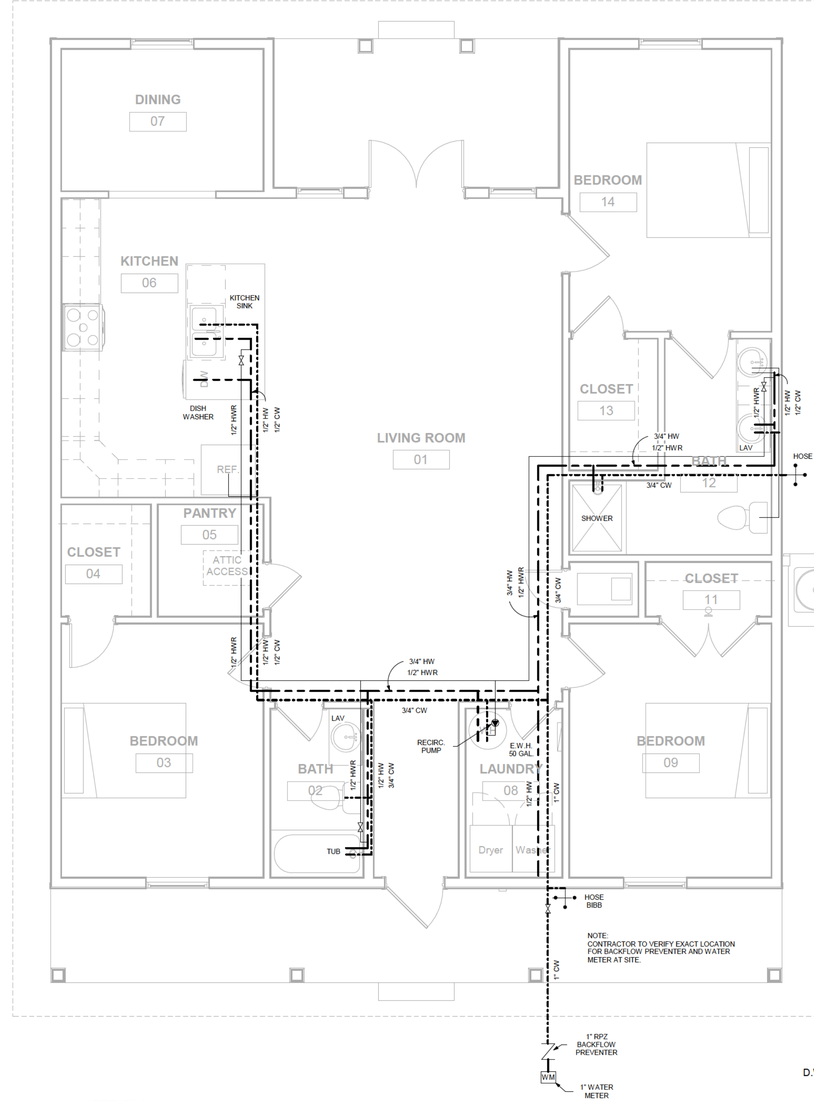
M-3



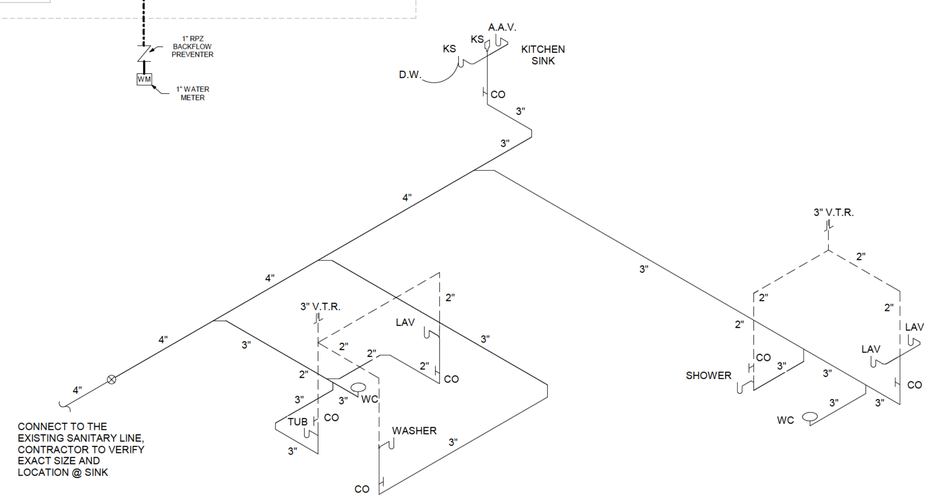
1 SANITARY PLAN
1/4" = 1'-0"



2 WATER PLAN
1/4" = 1'-0"

PLUMBING NOTES:

1. PLUMBING WORK SHALL BE DESIGN BUILD BY PLUMBING SUBCONTRACTOR AND RISER DIAGRAM SHALL BE REVIEWED AND SUBMITTED AS REQUIRED BY PERMITTING.
2. PLUMBING CONTRACTOR SHALL BE LICENSED AND RESPONSIBLE TO MEET ALL APPLICABLE REQUIREMENTS BY CODE
3. ALL PLUMBING FIXTURES AND PIPING SHALL CONFORM TO THE LOCAL PLUMBING CODES.
4. HOT WATER HEATER TO BE ELECTRIC AND MEET REQUIREMENTS OF ENERGY STAR REFERENCE HOME WITH MIN. EF=0.93.
5. INSULATE PIPES WITH MIN. R-4 PIPE INSULATION
6. USE WATER-CONSERVING FIXTURES MEETING THE FOLLOWING REQUIREMENTS:
   - A. TOILETS 1.28 GPF
   - B. SHOWERHEADS 2.0 GPM
   - C. KITCHEN FAUCETS 2.0 GPM
   - D. BATHROOM FAUCETS 1.5 GPM
   - E. ALL PLUMBING FIXTURES SHALL BE WATERSENSE. WATER CLOSETS MUST HAVE A MINIMUM MAP RATING OF 600.
7. VERIFY FIXTURES AND LOCATIONS WITH ARCHITECTURAL PLAN AND OWNER.
8. VERIFY ALL APPLIANCES/EQUIPMENT (HVAC, WATER HEATERS, EXHAUST FANS, ETC.) IN BID
9. PROVIDE SERVICE CONNECTIONS
10. VERIFY HOT WATER HEATER LOCATIONS AND PROVIDE PLASTIC DRAIN/DRIP PAN WITH DRAIN TO EXTERIOR
11. VERIFY HOSE BIB LOCATIONS (MIN. 2 EXTERIOR HOSE BIBS)
12. PROVIDE "NO-DRIP" SUPPLY/DRAIN @ WASHER
13. PROVIDE ACCESS PANELS TO TUB/SHOWER UNITS
14. PERFORM ALL TESTS BEFORE INSULATION AND BACKFILLING
15. PROVIDE ALL CLEAN OUTS, VACUUM BREAKERS AND OTHER COMPONENTS REQUIRED BY CODE WHETHER SHOWN ON DRAWING OR NOT.
16. SHUTOFF VALVES SHALL BE REQUIRED ON EACH FIXTURE SUPPLY PIPE TO EACH PLUMBING APPLIANCE AND TO EACH PLUMBING FIXTURE OTHER THAN BATHTUBS AND SHOWERS. VALVES SERVING INDIVIDUAL PLUMBING FIXTURES, PLUMBING APPLIANCES, RISERS AND BRANCHES SHALL BE ACCESSIBLE.
17. ALL SINKS AND LAVATORIES TO BE PROVIDED HOT AND COLD WATER
18. ALL PENETRATIONS THROUGH ROOF SHALL BE FLASHED USING DEKTITE PIPE FLASHING OR EQUAL AND DEKTITE RUBBER BOOT OR EQUAL
19. ALL PIPING IN UNINSULATED AREAS AND EXPOSED TO EXTERIOR SHALL BE INSULATED
20. PLUMBING SUBCONTRACTOR SHALL PROVIDE AND INSTALL DRAIN LINES FOR ALL HVAC TO THE NEAREST PLUMBING LINES AND VERIFY LOCATION OF ALL EXISTING UTILITY LINES. (WATERS, SEWER, GAS, ETC.)
21. ALL DRAIN LINES SHALL HAVE WATER SEAL TRAPS AND EACH FIXTURE GROUP VENTED.
22. ALL SANITARY SEWER PIPING SHALL BE SCHEDULE 40 PVC DWV PIPE AND FITTING. MINIMUM SLOPE OF SANITARY SEWER LINE SHALL BE .004 PER FOOT.
23. CONTRACTOR SHALL PROVIDE CLEAN OUT LOCATIONS, TIE-IN LOCATIONS, AND WATER AND SEWER LINE LOCATIONS ON SITE TO PERMIT DEPARTMENT FOR REVIEW.
24. SHOWER DRAINS SHALL HAVE AN OUTLET SIZE OF NOT LESS THAN 1 1/2 INCHES [38 MM] IN DIAMETER.
25. WHERE A SHOWER RECEPTOR HAS A FINISHED CURB THRESHOLD, IT SHALL BE NOT LESS THAN 1 INCH (25 MM) BELOW THE SIDES AND BACK OF THE RECEPTOR. THE CURB SHALL BE NOT LESS THAN 2 INCHES (51 MM) AND NOT MORE THAN 9 INCHES (229 MM) DEEP WHEN MEASURED FROM THE TOP OF THE CURB TO THE TOP OF THE DRAIN. THE FINISHED FLOOR SHALL SLOPE UNIFORMLY TOWARD THE DRAIN NOT LESS THAN 1/4 UNIT VERTICAL IN 12 UNITS HORIZONTAL (2-PERCENT SLOPE) NOR MORE THAN 1/2 UNIT VERTICAL PER 12 UNITS HORIZONTAL (4-PERCENT SLOPE) AND FLOOR DRAINS SHALL BE FLANGED TO PROVIDE A WATER-TIGHT JOINT IN THE FLOOR.



3 PLUMBING RISER DIAGRAM
1/4" = 1'-0"

No.	Description	Date

PLUMBING PLAN

Project Number	2019-15
Date	12/27/2021
Drawn By	Author
Checked By	Checker

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P-1

GENERAL NOTES:

1. STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH THE ARCHITECTURAL, MECHANICAL, ELECTRICAL, SHOP DRAWINGS AND SPECIFICATIONS.
2. CONSTRUCTION SHALL FOLLOW THE 2020 FLORIDA BUILDING CODE, 7th EDITION, THE 2020 FLORIDA RESIDENTIAL CODE, 7th EDITIONS, AND ALL LOCAL, STATE, AND FEDERAL REQUIREMENTS AND REGULATIONS. BUILDING CODE SHALL TAKE PRECENDENCE OVER DRAWINGS IF CONFLICT EXISTS.
3. 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 AS A PREVENTATIVE 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."
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL FINAL DIMENSIONS AND FIT-UP OF THE STRUCTURE, INCLUDING VERIFYING ALL EXISTING CONDITIONS AND DIMENSIONS BEFORE COMMENCING WORK.
5. THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING ANY WORK. ANY INTERFERENCE SHALL BE BROUGHT TO THE ATTENTION OF THE STRUCTURAL ENGINEER.
6. THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL DIMENSIONS AND ELEVATIONS WITH ARCHITECT'S DRAWINGS BEFORE STARTING WORK.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN PLACEMENT, MAINTENANCE, ETC. OF ANY AND ALL SHORING, BRACING, TIE BACKS, ETC. NEEDED TO SUPPORT ANY PART OF THE NEW OR EXISTING CONSTRUCTION DURING THE ENTIRE CONSTRUCTION PROCESS TO ENSURE THE SAFETY AND INTEGRITY OF THE STRUCTURE UNTIL THE NECESSARY PERMANENT ELEMENTS ARE IN PLACE.
8. SEE ARCHITECTURAL, MECHANICAL, AND ELECTRICAL DRAWINGS FOR EXACT LOCATION OF ALL DEPRESSIONS, SLOPES, OPENINGS, PENETRATIONS, ETC. PENETRATION THROUGH BEAMS OR OPENINGS IN STRUCTURAL ELEMENTS NOT SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE BROUGHT TO THE ATTENTION OF THE STRUCTURAL ENGINEER.
9. UNLESS NOTED OTHERWISE, DETAILS SHOWN ON ANY DRAWING ARE TO BE CONSIDERED TYPICAL FOR ALL SIMILAR CONDITIONS.

DESIGN CRITERIA:

BUILDING CODE: 2020 FLORIDA BUILDING CODE, BUILDING, 7TH EDITION
ASCE 7-16 MINIMUM DESIGN LOADS AND ASSOCIATED CRITERIA FOR BUILDINGS AND OTHER STRUCTURES
2020 FLORIDA BUILDING CODE, RESIDENTIAL, 7TH EDITION

1. DESIGN GRAVITY LOADS:

• FIRST FLOOR	DL = 50 PSF LL = 40 PSF
• UNINHABITABLE ATTIC WITH LIMITED STORAGE	LL = 20 PSF
• BALCONIES (EXTERIOR) AND DECK	LL = 40 PSF
• GUARDS AND HANDRAILS	LL = 200 PSF
• GUARD IN-FILL COMPONENTS	LL = 50 PSF
• ROOMS OTHER THAN SLEEPING ROOMS	LL = 40 PSF
• SLEEPING ROOMS	LL = 30 PSF
• STAIRS	LL = 40 PSF
• ATTIC	DL = 10 PSF LL = 20 PSF
• ROOF	DL = 20 PSF LL = 20 PSF

3. WIND LOADS (ASCE 7-16)

• ULTIMATE WIND SPEED =	180 MPH
• NOMINAL WIND SPEED=	139 MPH
• RISK CATEGORY =	II
• WIND EXPOSURE CATEGORY =	C

FOUNDATION NOTES:

1. PLACE FOOTINGS ON UNDISTURBED SOIL. NOTIFY THE ENGINEER IF "SOFT SPOTS", UNDERGROUND OBSTRUCTIONS, OR ANY UNUSUAL CONDITION IS ENCOUNTERED DURING STRIPPING, EXCAVATION OR FILLING.
2. GRADE BEAMS MAY BE EARTH FORMED PROVIDED DIMENSIONAL TOLERANCES LISTED IN ACI 117-90 ARE ADHERED TO.
3. PLACE 10 MIL WATERPROOF MEMBRANE BENEATH ALL INTERIOR SLABS AND GRADE BEAMS. LAP 12" TO ACCOMMODATE CONCRETE POURING DIRECTION

CONCRETE NOTES:

1. ALL CONCRETE WORK SHALL CONFORM TO ACI 201 SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BULIDINGS
2. CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI AT 28 DAYS WITH A 5" SLUMP
3. CONCRETE SHALL BE NORMAL WEIGHT OF 150 LBS. PER CUBIC FOOT AND SHALL CONFORM TO THE LATEST ACI 301 SPECIFICATION.
4. PORTLAND CEMENT SHALL CONFORM TO ASTM C150, TYPE I OR II.
5. AGGREGATE FOR NORMAL WEIGHT CONCRETE SHALL MEET ASTM C33.
6. REINFORCING STEEL SHALL BE IN ACCORDANCE WITH ASTM A615 GRADE 60, WELDED WIRE FABRIC (WWF) SHALL BE IN ACCORDANCE WITH ASTM 185, WIRE SHALL CONFORM TO ASTM A82.
7. REINFORCING STEEL SHALL BE SPLICED WITH A CLASS "B" SPLICE IN ACCORDANCE WITH THE CURRENT ACI 318.
8. REINFORCING FABRIC ON GRADE SHALL BE CHAIRED WITH 3000 PSI CONCRETE BRICKETTES SPACED TO ADEQUATELY SUPPORT THE REINFORCING, BUT NOT GREATER THAN 3'-0" O.C. EACH WAY. LAP ALL FABRIC ONE WIRE SPACING PLUS 6 INCHES.
9. PROVIDE A 90 DEGREE HOOK ON ALL TOP REINFORCEMENT IN ALL BEAMS AT DISCONTINUOUS ENDS AND LAP SPLICE 30 BAR DIAMETERS AT MID SPAN. CONTINUOUS BOTTOM BARS SHALL BE LAP SPLICED 6" AT CENTER OF SUPPORT.
10. EXCEPT AS NOTED OTHERWISE WHERE CONTINUOUS REINFORCING IS SPECIFIED, HOOK BARS AT NON-CONTINUOUS ENDS, LAP BARS AS INDICATED BELOW:
    A. #3 1'-3"
    B. #4 1'-8"
    C. #5 2'-2"
    D. #6 2'-5"
    E. #7 3'-6"

1. PROVIDE TWO (2) #5, 4'-0" LONGER THAN OPENING DIMENSION ON ALL SIDES OF OPENING IN SLAB
2. PROVIDE THE FOLLOWING COVER FOR REINFORCING:
    A. FOOTINGS AND GRADE BEAMS: 3"
    B. FORMED SURFACES EXPOSED TO SOIL: 3"
    C. BEAMS, COLUMNS, AND WALLS: 1 1/2"
    D. SLABS: 1 1/2"
3. DO NOT PENETRATE OR MAKE HOLES OR OPENINGS THROUGH FOUNDATION AND/OR FOOTINGS WITHOUT ENGINEER'S APPROVAL.
4. EXPOSED EDGES OF CONCRETE SHALL BE CHAMFERED 3/4"

CONCRETE MASONRY UNIT NOTES:

1. PROVIDE HOLLOW CONCRETE MASONRY UNITS MEETING ASTM C90, LIGHTWEIGHT, TYPE 1, WITH A MINIMUM COMPRESSIVE STRENGTH OF 2000 PSI ON THE NET AREA FOR INDIVIDUAL UNITS.
2. CMU MORTAR SHALL MEET ASTM C270, TYPE 'M' OR 'S', AND HAVE A COMPRESSIVE CUBE STRENGTH OF 1800 PSI AT 28 DAYS.
3. CMU GROUT, POURED OR PUMPED, SHALL MEET ASTM C476, AND HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 3000 PSI.
4. REINFORCING BARS SHALL MEET ASTM A615, GRADE 60, JOINT REINFORCING SHALL MEET ASTM A82.
5. REINFORCED MASONRY WALLS SHALL HAVE A MINIMUM F'M = 2000 PSI.
6. REINFORCEMENT SHALL BE HELD IN PLACE PRIOR TO GROUTING WITH WIRE POSITIONERS SPACED AT INTERVALS NOT EXCEEDING 192 REINFORCING BAR DIAMETERS FOR 10 FEET. ADDITIONAL POSITIONERS SHALL BE PLACED AT ALL REINFORCING BAR SPLICES.
7. PROVIDE DOWELS FOR CMU WALL CONNECTION TO CONCRETE BEAMS AND SLABS AND FOOTINGS, SEE DETAILS. LAP DOWELS 2'-0" (MIN.) WITH VERTICAL BARS.
8. CMU TO BE LAID IN RUNNING BOND PATTERN.
9. GROUT PLACEMENT SHALL CONFORM TO TABLE 5 OF ACI 530.1/ASCE 6/TMS 602; HOWEVER, THE MAXIMUM GROUT POUR HEIGHT SHALL NOT EXCEED 8 FEET AND THE MAXIMUM HEIGHT WHICH GROUT IS PLACED IN ONE CONTINUOUS OPERATION (GROUT LIFT) SHALL NOT EXCEED 4 FEET. THERE SHALL BE A MINIMUM OF 1 HOUR SETTING TIME BETWEEN EACH GROUT LIFT.
10. THE TOP OF EACH GROUT POUR SHALL BE 1" BELOW THE BED JOINT.
11. REINFORCEMENT, REBAR POSITIONERS, AND TIES SHALL BE PLACED PRIOR TO GROUTING.
12. CONTRACTOR SHALL DESIGN, FABRICATE, AND INSTALL BRACING THAT WILL ASSURE THE STABILITY OF THE MASONRY DURING CONSTRUCTION.
13. ALL CONCRETE MASONRY WORK SHALL CONFORM TO TMS 402-16 BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES AND TMS 602-16 SPECIFICATION FOR MASONRY STRUCTURES.
14. REINFORCING BARS SHALL HAVE A MASONRY COVER NOT LESS THAN THE FOLLOWING:
    A. MASONRY FACE EXPOSED TO EARTH OR WEATHER: 2 INCHES FOR BARS LARGER THAN NO. 5; 1.5 INCHES FOR NO. 5 BARS OR SMALLER
    B. MASONRY NOT EXPOSED TO EARTH OR WEATHER: 1.5 INCHES
15. EXCEPT AS NOTED OTHERWISE WHERE CONTINUOUS REINFORCING IS SPECIFIED, HOOK BARS AT NON-CONTINUOUS ENDS, LAP BARS AS INDICATED BELOW:
    A. #3 1'-5
    B. #4 2' 6"
    C. #5 3'-10"
    D. #6 4'-4"
    E. #7 7'-3"

WOOD FRAMING NOTES:

1. WOOD FRAMING FABRICATION AND ERECTION SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE 2020 FLORIDA BUILDING CODE (FBC), THE 2020 FLORIDA RESIDENTIAL CODE (FRC) AND SHALL CONFORM TO THE WOOD FRAME CONSTRUCTION MANUAL (WFCM) FOR ONE- AND TWO-FAMILY DWELLINGS, 2001 EDITION AND THE PLYWOOD DESIGN SPECIFICATIONS BY THE APA. ALL WOOD FRAMING CONNECTORS, STRAPS, AND TIE-DOWNS SHALL BE USED IN ADDITION TO AND CONJUNCTION WITH THE REQUIREMENTS STATED ABOVE. THE DESIGN AND NOTES BELOW ALSO COMPLY WITH THE WOOD FRAMING NOTES FOR SPECIFIC REQUIREMNTS MEETING FLORIDA BUILDING CODE (FBC) SECTIONS 2314-2330 RELATED TO WOOD CONSTRUCTION IN HIGH VELOCITY HURRICANE ZONES (HVHZ)
2. FRAMING LUMBER OF ALL SILLS, GIRDERS, AND HEADERS OF & SUPPORTING LOAD BEARING WALLS SHALL BE SOUTHERN PINE GRADE MARKED AND KILN DRIED, NO. 1 OR BETTER. ALL OTHER FRAMING LUMBER SHALL BE SOUTHERN PINE GRADE MARKED AND KILN DRIED, NO. 2 OR BETTER. ALL MEMBER PIECES, ENDS, JOINTS, OR SPLICES SHALL BE OVER SUPPORTS UNLESS NOTED OTHERWISE.
3. UNLESS NOTED OTHERWISE MULTIPLE PIECES OF LUMBER OR MANUFACTURED WOOD PRODUCTS USED TO FORM BEAM OR HEADER MEMBERS SHALL BE ATTACHED TOGETHER WITH 2 ROWS OF 12d NAILS SPACED AT 12" FOR PIECES UP TO 12" DEEP. ALL OTHER PIECES SHALL HAVE 3 ROWS OF 12d NAILS AT 12".
4. OPENINGS IN EXTERIOR WOOD-FRAMED WALLS SHALL HAVE THE FOLLOWING MINIMUM NUMBER OF FULL HEIGHT STUDS AT EACH JAMB AS PER TABLE 3.23c IN THE WFCM:

A.	OPENINGS LESS THAN 4'-0":	2 STUDS
B.	OPENINGS 4'-0" TO 6'-0":	3 STUDS
C.	OPENINGS 6'-0" TO 10'-0":	4 STUDS
D.	OPENINGS LESS THAN 4'-0":	2 STUDS

*ALL MULTIPLE STUDS SHALL BE CONNECTED TOGETHER WITH TWO ROWS OF NAILS SPACED AT 8" O.C.

5. UNLESS SHOWN OTHERWISE ALL OPENINGS IN WALLS SHALL HAVE HEADERS CONSISTING OF A MINIMUM OF TWO (2) 2x12's OR THREE (3) 2x10's.
6. PROVIDE DOUBLE FLOOR JOISTS UNDER ALL WALLS AND PROVIDE FULL DEPTH BLOCKING FOR ALL FLOOR JOISTS @ 8'-0" O.C. MAX.
7. PRESSURE TREATED (PT) WOOD SHALL BE TREATED WITH ACQ TO A MINIMUM RETENTION OF 0.40 LBS./CU. FT. IN ACCORDANCE WITH AWPA. PROTECTION OF WOOD AND WOOD-BASED PRODUCTS FROM DECAY SHALL BE PROVIDED IN THE FOLLOWING LOCATIONS BY THE USE OF WOOD THAT IS PRESERVATIVE-TREATED IN ACCORDANCE WITH AWPA U1 PER FRC 317 INCLUDING ALL LUMBER IN CONTACT WITH CONCRETE OR MASONRY, JOISTS WITHIN 12", FROM GRADE, AND SHEATHING, SIDING, AND FRAMING WITHIN 6" FROM GRADE. AND CONCRETE OR MASONRY EXTERIOR FOUNDATION WALLS AND ARE LESS THAN 8 INCHES FROM THE EXPOSED GROUND.
8. WOOD MEMBERS (INCLUDING PLYWOOD SHEATHING OR BRACING) SHALL BE CONNECTED OR FASTENED WITH STEEL NAILS, SCREWS, OR BOLTS. NO STAPLES WILL BE PERMITTED. ALL WOOD CONNECTIONS SHALL BE IN ACCORDANCE WITH THE FASTENING SCHEDULE OF THE 2020 FRC AND ALL CONNECTORS SHALL MEET FBC TABLE 2324.1.
9. JOIST AND BEAM HANGERS, HURRICANE CLIPS, AND OTHER TIES, ANCHORS, OR CONNECTORS SHALL BE AS MANUFACTURERED BY SIMPSON STRONG-TIE CO., INC. OR APPROVED EQUALS AND SHALL BE ATTACHED WITH NAILS OF THE SIZE AND TYPE RECOMMENDED BY THE MANUFACTURER. ALL HANGERS, CLIPS, CONNECTORS, ANCHORS, TIES, ETC. SHALL BE GALVANIZED. ALL SUCH UNITS THAT WILL BE EXPOSED TO WEATHER, IN CONTACT WITH EARTH, WATER, OR CONCRETE, OR BELOW THE FIRST FLOOR LEVEL SHALL RECEIVE THE SIMPSON "Z-MAX" TRIPLE ZINC COATING OR APPROVED EQUAL. ALL HANGERS SHOWN ARE IN ADDITION TO THE REQUIRED FASTENERS BY FLORIDA RESIDENTIAL CODE.
10. UNLESS SHOWN OTHERWISE ALL PLYWOOD WALL SHEATHING SHALL BE 5/8" THICK. WALL SHEATHING SHALL BE CONTINUOUS OVER THREE OR MORE SUPPORTS AND SHALL BE NAILED TO SUCH SUPPORTS WITH 8D COMMON NAILS. NAIL SPACING SHALL NOT EXCEED 6-INCHES (152 MM) ON CENTER AT PANEL EDGES AND ALL INTERMEDIATE SUPPORTS. NAIL SPACING SHALL BE 4-INCHES (102 MM) ON CENTER AT CORNER STUDS, IN ALL CASES.
11. PLYWOOD WALL SHEATHING SHALL HAVE SOLID BLOCKING AT ALL HORIZONTAL JOINTS.
12. UNLESS SHOWN OTHERWISE ALL PLYWOOD FLOOR SHEATHING SHALL BE APA RATED 48/24, 3/4" THICK AND FASTENED WITH GLUE AND 10d COMMON NAILS SPACED AT 6" O.C. MAX. ALONG SUPPORTING MEMBERS AT THE EDGES OF EACH SHEET AND 12" O.C. MAX. ALONG SUPPORTING MEMBERS ON THE INTERIOR OF EACH SHEET. 100% OF ALL SEALANTS USED ARE ≤ 250 G/L AND ADHESIVES ≤ 70 G/L.
13. THE TOP PLATE OF STUD BEARING WALLS SHALL BE DOUBLED AND LAPPED AT EACH INTERSECTION OF WALLS AND PARTITIONS.
14. CORNERS OF STUD WALLS AND PARTITIONS SHALL BE FRAMED SOLID BY NOT LESS THAN THREE STUDS.
15. STUDS, OTHER THAN END-JOINTED LUMBER, SHALL BE SPLICED ONLY AT POINTS WHERE LATERAL SUPPORT IS PROVIDED.
16. STUD WALLS AND PARTITIONS CONTAINING PIPES SHALL BE FRAMED TO GIVE PROPER CLEARANCE FOR THE PIPING.
17. WHERE WALLS AND PARTITIONS CONTAINING PIPING ARE PARALLEL TO FLOOR JOISTS, THE JOISTS SHALL BE DOUBLED AND MAY BE SPACED TO ALLOW VERTICAL PASSAGE OF PIPES.
18. WHERE VERTICAL PIPE POSITIONS NECESSITATE THE CUTTING OF PLATES, A METAL TIE NOT LESS THAN 1 INCH BY 1/8 INCH (25 MM BY 3 MM) SHALL BE PLACED ON EACH SIDE OF THE PLATE ACROSS THE OPENING AND NAILED WITH NOT LESS THAN TWO 16D OR THREE 8D NAILS AT EACH END.

NAIL CONNECTION FOR WOOD MEMBERS (FBC TABLE 2324.1)

CONNECTION	COMMON NAILS	NUMBER OR SPACING
JOISTS TO SILL OR GIRDER, TOE NAIL	16D	2
BRIDGING TO JOIST, TOE NAIL	8D	2 EACH END
1-INCH x 6-INCH SUBFLOOR OR LESS TO EACH JOIST, FACE NAIL	8D	2
OVER 1-INCH x 6-INCH SUBFLOOR TO EACH JOIST, FACE NAIL	8D	3 + 1 FOR EACH SIZE INCREASE
2-INCHES SUBFLOOR TO JOIST OR GIRDER, BLIND AND FACE NAIL	16D	2
SOLE PLATE TO JOIST OR BLOCKING, FACE NAIL	16D	16 INCHES O.C.
TOP OR SOLE PLATE TO STUD, END NAILED	16D	2
STUD TO SOLE PLATE, TOE NAIL	3D	3 or 2 16D
DOUBLED STUDS, FACE NAIL	16D	24 INCHES O.C.
DOUBLED TOP PLATES, FACE NAIL	16D	16 INCHES O.C.
TOP PLATES, LAPS AND INTERSECTIONS, FACE NAIL	16D	2
CONTINUOUS HEADER, TWO PIECES	16	16 INCHES O.C. ALONG EACH EDGE
CEILING JOISTS TO PLATE, TOE NAIL	16D	2
CONTINUOUS HEADER TO STUD, TOE NAIL	16D	3
CEILING JOISTS, LAPS OVER PARTITIONS, FACE NAIL	16D	3
CEILING JOISTS TO PARALLEL RAFTERS, FACE NAIL	16D	3
RAFTER PLATE, TOE NAIL	16D	3
1-INCH x 6-INCH SHEATHINGS OR LESS TO EACH BEARING, FACE NAIL	8D	2
OVER 1-INCH x 6-INCH SHEATHING, TO EACH BEARING, FACE NAIL	8D	3 + 1 FOR EACH SIZE INCREASE
BUILT-UP CORNER STUDS, FACE NAIL	16D	30 INCHES O.C.
BUILT-UP GIRDERS AND BEAMS	20D	32 INCHES O.C. AT TOP AND BOTTOM AND STAGGERED, 2 AT ENDS AND AT EACH SPLICE
2-INCH PLANKS	16D	2 EACH BEARING

PRE-ENGINEERED WOOD TRUSS NOTES:

1. TRUSSES SHALL BE DESIGNED IN ACCORDANCE WITH ANSI/TPI 1, *NATIONAL DESIGN STANDARD FOR METAL PLATE CONNECTED WOOD TRUSS CONSTRUCTION* AND THIS SPECIFICATION. WHERE ANY APPLICABLE DESIGN FEATURE IS NOT SPECIFICALLY COVERED BY ANSI/TPI 1 OR THIS SPECIFICATION, DESIGN SHALL BE IN ACCORDANCE WITH THE APPLICABLE PROVISIONS OF THE LATEST EDITION OF ANSI/AWC NDS - *NATIONAL DESIGN SPECIFICATION® (NDS®) FOR WOOD CONSTRUCTION*, AND ALL APPLICABLE LEGAL REQUIREMENTS.
2. TRUSSES SHALL BE DESIGNED TO MEET THE REQUIREMENTS OF THE BCSI: *GUIDE TO GOOD PRACTICE FOR HANDLING, INSTALLING, RESTRAINING & BRACING OF METAL PLATE CONNECTED WOOD TRUSSES* JOINTLY PRODUCED BY THE STRUCTURAL BUILDING COMPONENTS ASSOCIATION (SBCA) AND THE TRUSS PLATE INSTITUTE (TPI) AND THE 2020 FRC AND SHALL COMPLY WITH FBC SECTION 2319.17.2 PREFABRICATED WOOD TRUSSES.
3. TRUSS MANUFACTURER SHALL FURNISH TRUSS DESIGN DRAWINGS PREPARED IN ACCORDANCE WITH ALL APPLICABLE LEGAL REQUIREMENTS.
4. THE TRUSS MANUFACTURER SHALL FURNISH A TRUSS PLACEMENT DIAGRAM WHICH SHALL PROVIDE AT A MINIMUM THE LOCATION ASSUMED FOR EACH TRUSS BASED ON THE TRUSS MANUFACTURER'S INTERPRETATION OF THE CONSTRUCTION DOCUMENTS
5. THE TRUSS MANUFACTURER SHALL SUBMIT THE TRUSS SUBMITTAL PACKAGE TO THE BUILDING DESIGNER AND/OR THE LOCAL BUILDING OFFICIAL FOR REVIEW AND APPROVAL PRIOR TO THE MANUFACTURING OF THE TRUSSES.
6. THE DESIGN, CONFIGURATION, LAYOUT, SPACING, ETC OF ALL TRUSSES SHALL BE COORDINATED BY THE CONTRACTOR AND THE TRUSS DESIGNER WITH THE MECHANICAL EQUIPMENT, DUCTWORK, AND ALL ARCHITECTURAL DRAWINGS.
7. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OF THE TRUSSES FOR REVIEW BY THE ENGINEER. THE SHOP DRAWINGS SHALL BE STAMPED BY A PROFESSIONAL STRUCTURAL ENGINEER REGISTERED IN THE STATE OF FLORIDA.
8. CONTRACTOR TO VERIFY ALL DIMENSIONS OF DRAWINGS IN FIELD PRIOR TO COORDINATION OF THE DESIGN, CONFIGURATION, LAYOUT, SPACING, ETC OF ALL TRUSSES BY THE CONTRACTOR AND THE TRUSS DESIGNER.
9. CONTRACTOR TO CONFIRM UPLIFT ON TRUSSES DO NOT EXCEED THOSE SPECIFIED BY THE STRUCTURAL DRAWINGS.

SITE PREPARATION NOTES:

1. AFTER DEMOLITION OF THE EXISTING STRUCTURE AND REMOVAL OF ITS ENTIRE FOUNDATIONS AND DEBRIS, THE LOCATION OF ANY EXISTING CONFLICTING UNDERGROUND UTILITY LINES WITHIN THE CONSTRUCTION AREA SHOULD BE ESTABLISHED. PROVISIONS SHOULD BE MADE TO REMOVE OR RELOCATE ANY INTERFERING UTILITY LINES WITHIN THE CONSTRUCTION AREA. ABANDONED UTILITIES SHOULD BE REMOVED OR GROUTED TO REDUCE THE POSSIBILITY OF SUBSURFACE EROSION THAT COULD RESULT IN FUTURE SETTLEMENT. EXCAVATIONS RESULTING FROM THE REMOVAL OF ANY INTERFERING UTILITIES SHOULD BE BACKFILLED IN ACCORDANCE WITH THE RECOMMENDATIONS PRESENTED BELOW.
2. AT THE OUTSET OF CONSTRUCTION, CLEARING AND GRUBBING INCLUDING ROOT RAKING AND REMOVAL OF ANY ORGANIC-LADEN TOPSOIL OR ORGANIC SANDS THAT MAY REMAIN ON THE SITE SHOULD BE COMPLETED. AT A MINIMUM, A STRIPPING DEPTH OF ABOUT SIX INCHES IS RECOMMENDED. IT IS ALSO RECOMMENDED THAT THE CLEARING/STRIPPING OPERATIONS EXTEND AT LEAST 10 FEET BEYOND THE PROPOSED STRUCTURE PERIMETER, WHERE POSSIBLE.
3. FOLLOWING THE CLEARING/STRIPPING OPERATIONS, THE DEVELOPMENT AREAS MAY BE BROUGHT UP TO FINISHED SUBGRADE LEVELS, IF NEEDED, USING COMPACTED STRUCTURAL FILL. THE EXISTING ON-SITE SOILS CAN BE USED FOR STRUCTURAL FILL PROVIDED IT IS FREE OF ORGANIC OR DELETERIOUS MATERIALS AND MOISTURE CONTENT IS APPROPRIATE. FILL SOILS SHOULD BE TESTED PRIOR TO IMPORT AND PLACEMENT. IMPORTED FILL SHOULD CONSIST OF SAND WITH LESS THAN 12 PERCENT PASSING THE NO. 200 SIEVE, FREE OF ROCKS/RUBBLE, ORGANICS, CLAY, DEBRIS AND OTHER UNSUITABLE MATERIAL. APPROVED SAND FILL SHOULD BE PLACED IN LOOSE LIFTS NOT EXCEEDING EIGHT INCHES IN THICKNESS AND SHOULD BE COMPACTED TO AT LEAST 95 PERCENT OF THE MATERIAL'S MAXIMUM DRY DENSITY IN ACCORDANCE WITH ASTM D-1557, MODIFIED PROCTOR METHOD. DENSITY TESTS TO CONFIRM COMPACTION SHOULD BE PERFORMED IN EACH FILL LIFT BEFORE THE NEXT LIFT IS PLACED.
4. A MOISTURE CONTENT WITHIN THE PERCENTAGE RANGE NEEDED TO ACHIEVE COMPACTION (TYPICALLY +/- 3 PERCENT) IS RECOMMENDED PRIOR TO COMPACTION OF THE NATURAL GROUND AND FILL, BASED ON THE RESULTS OF THE MODIFIED PROCTOR COMPACTION TESTS.
5. THE BOTTOM OF THE FOUNDATION EXCAVATIONS SHOULD BE COMPACTED TO AT LEAST 95 PERCENT OF THE MATERIAL'S MAXIMUM DRY DENSITY IN ACCORDANCE WITH ASTM D-1557, MODIFIED PROCTOR METHOD, FOR A MINIMUM DEPTH OF ONE FOOT BELOW THE BOTTOM OF THE FOUNDATIONS. SOFT OR LOOSE SOIL ZONES ENCOUNTERED AT THE BOTTOM OF THE FOOTING EXCAVATIONS SHOULD BE REMOVED AND REPLACED WITH FILL SOILS, LEAN CONCRETE, OR DENSE GRADED CRUSHED STONE (FDOT NO. 57).

No.	Description	Date

STRUCTURAL NOTES

Project Number	2019-15
Date	12/27/2021
Drawn By	IP
Checked By	BT

50% PRELIMINARY DESIGN, NOT FOR CONSTRUCTION

S-1

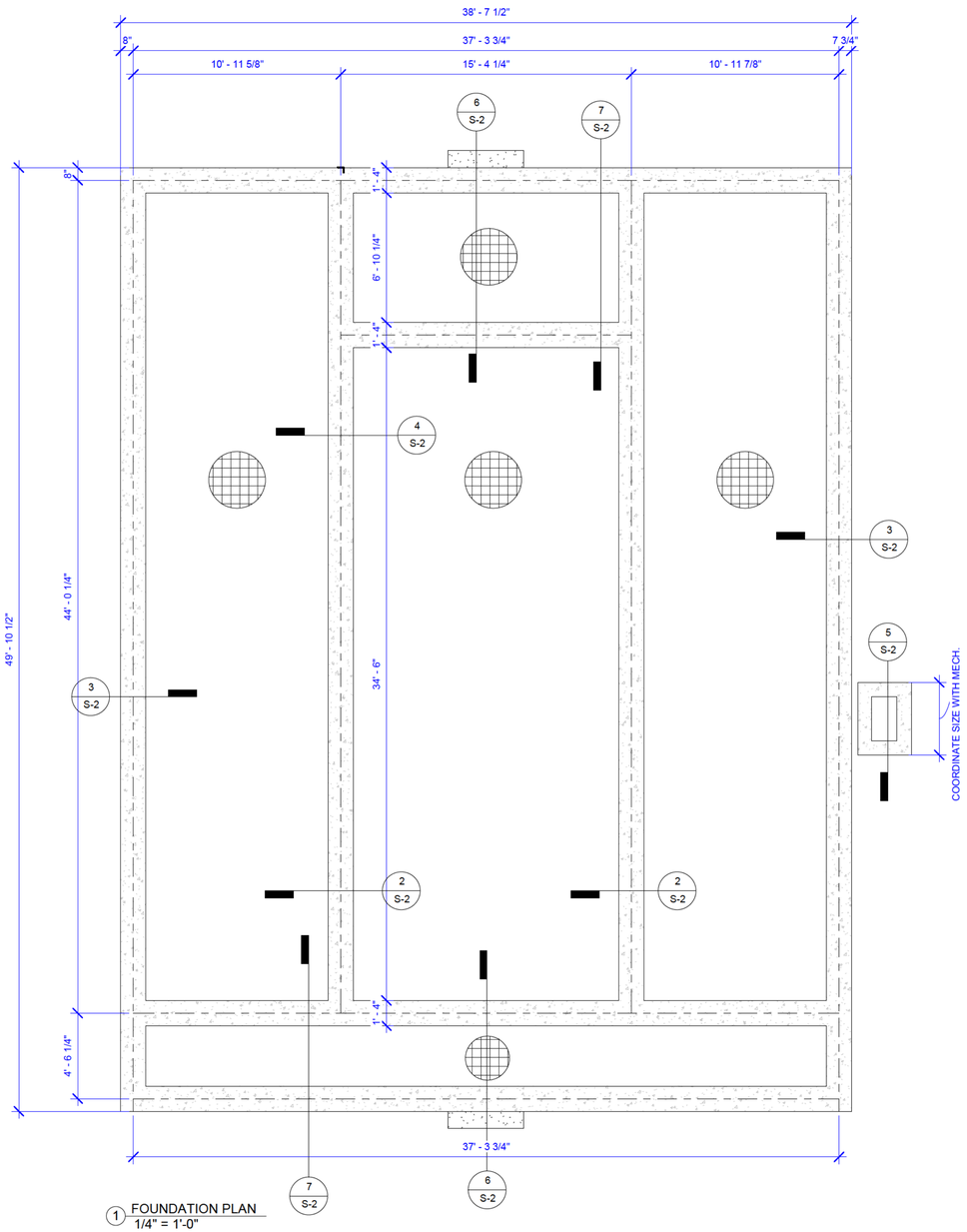
FOUNDATION PLAN LEGEND

CONCRETE GRADE BEAM

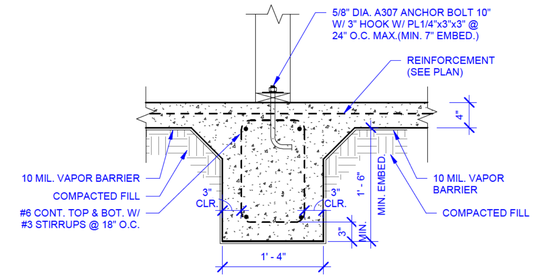
4" CONCRETE SLAB W/ 6X6-W2.9XW2.9 WELDED WIRE MESH @ MID-DEPTH

FOUNDATION PLAN NOTES

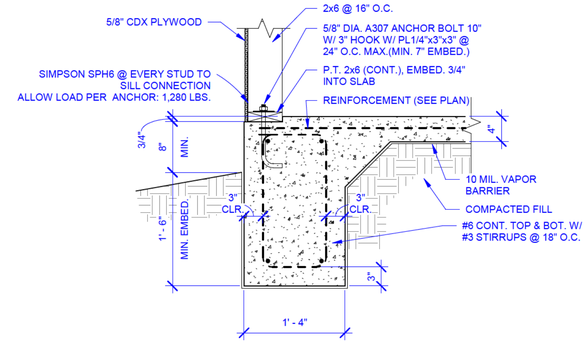
1. SEE STRUCTURAL NOTES ON S1.0
2. GRADE BEAM DEPTH SHALL BE MIN. 12" BELOW FROSTLINE AND MIN. 12" BELOW UNDISTURBED SOIL



1 FOUNDATION PLAN
1/4" = 1'-0"



2 SECTION
1" = 1'-0"



3 SECTION
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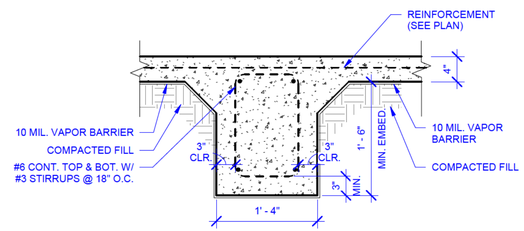

4 SECTION
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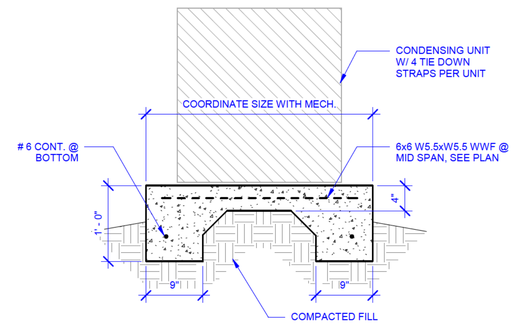
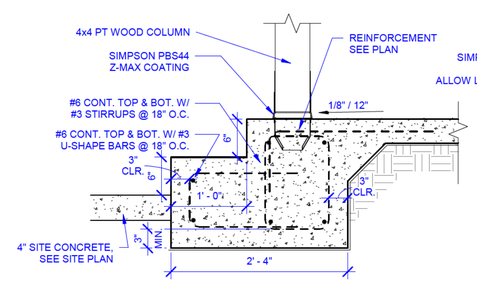
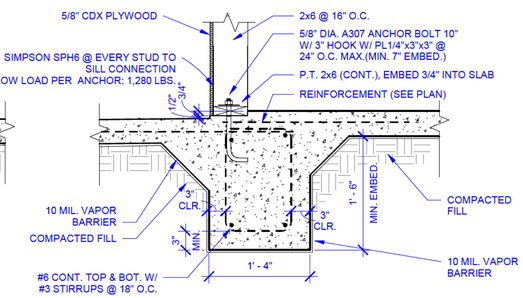


5 CONDENSER SLAB
1" = 1'-0"



6 PORCH FOUNDATION DETAIL
1" = 1'-0"



7 PORCH STEP FOUNDATION DETAIL
1" = 1'-0"

No.	Description	Date

FOUNDATION PLANS & DETAILS

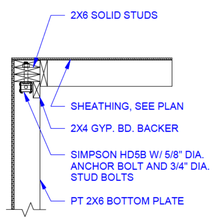
Project Number	2019-15
Date	12/27/2021
Drawn By	IP
Checked By	BT

50% PRELIMINARY DESIGN, NOT FOR CONSTRUCTION

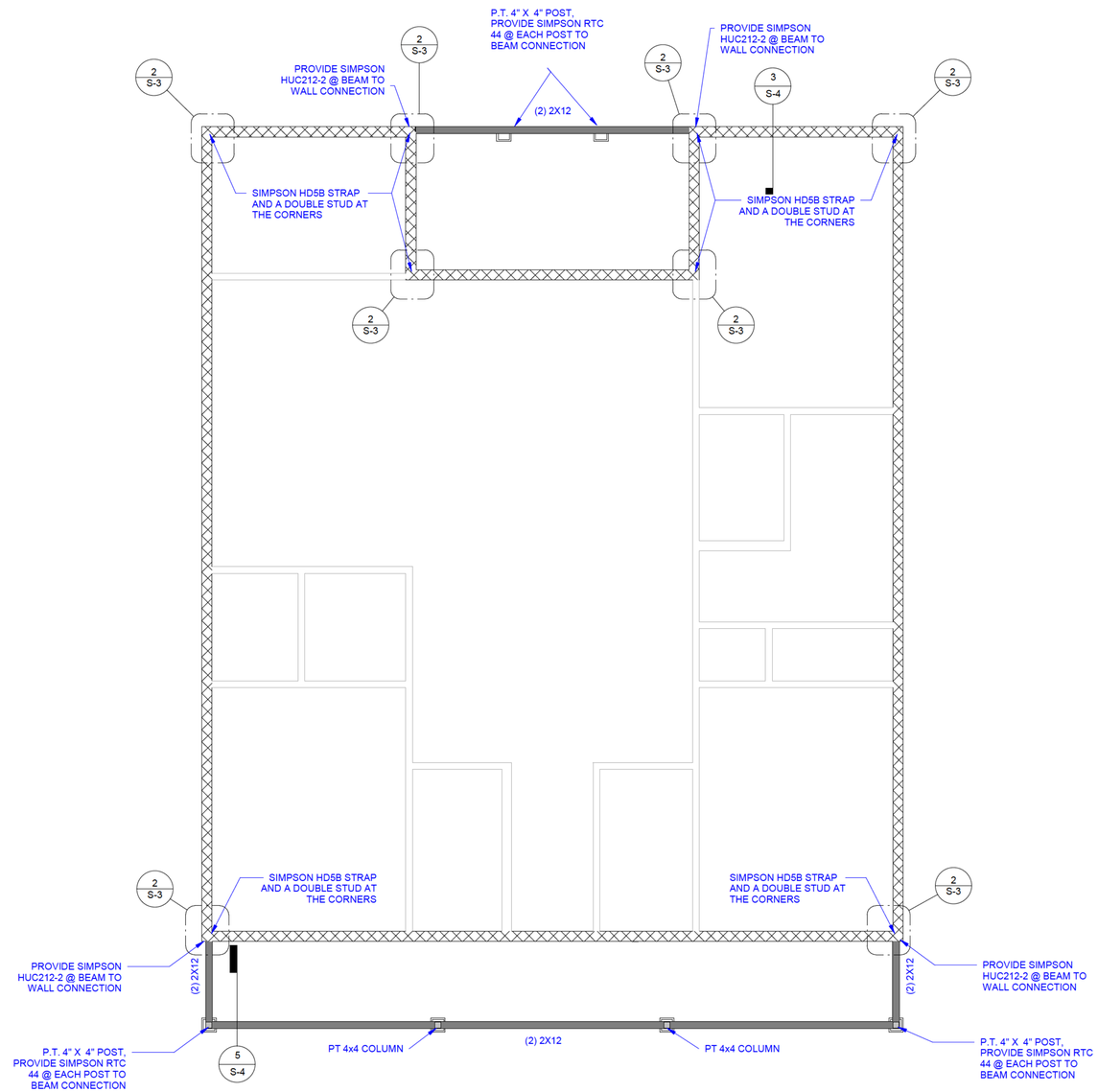
S-2

FRAMING PLAN LEGEND & NOTES

1. LOAD BEARING 2X6 STUD WALL SPACED @ 16" O.C. , MAX W/ 5/8" CDX PLYWOOD BLOCKING @ 48" O.C. MAX.
2. BEAM (SEE PLAN FOR TYPE)
3. PROVIDE DOUBLE JOISTS UNDER ALL LOAD BEARING WALLS
4. PROVIDE TRIPLE STUDS UNDER ALL BEAMS AND DOUBLE JOISTS
5. PROVIDE 3/4" PLYWOOD DECKING A MINIMUM OF 30" AROUND THE PERIMETER OF ANY EQUIPMENT IN ATTIC SPACE AND MIN. 24" PASSAGEWAY TO ANY EQUIPMENT FROM THE ATTIC ACCESS LOCATION



2 SECTION
3/4" = 1'-0"



1 WALL FRAMING PLAN
1/4" = 1'-0"

No.	Description	Date

FRAMING PLANS & DETAILS

Project Number	2019-15
Date	12/27/2021
Drawn By	IP
Checked By	BT

50% PRELIMINARY DESIGN, NOT FOR CONSTRUCTION

S-3

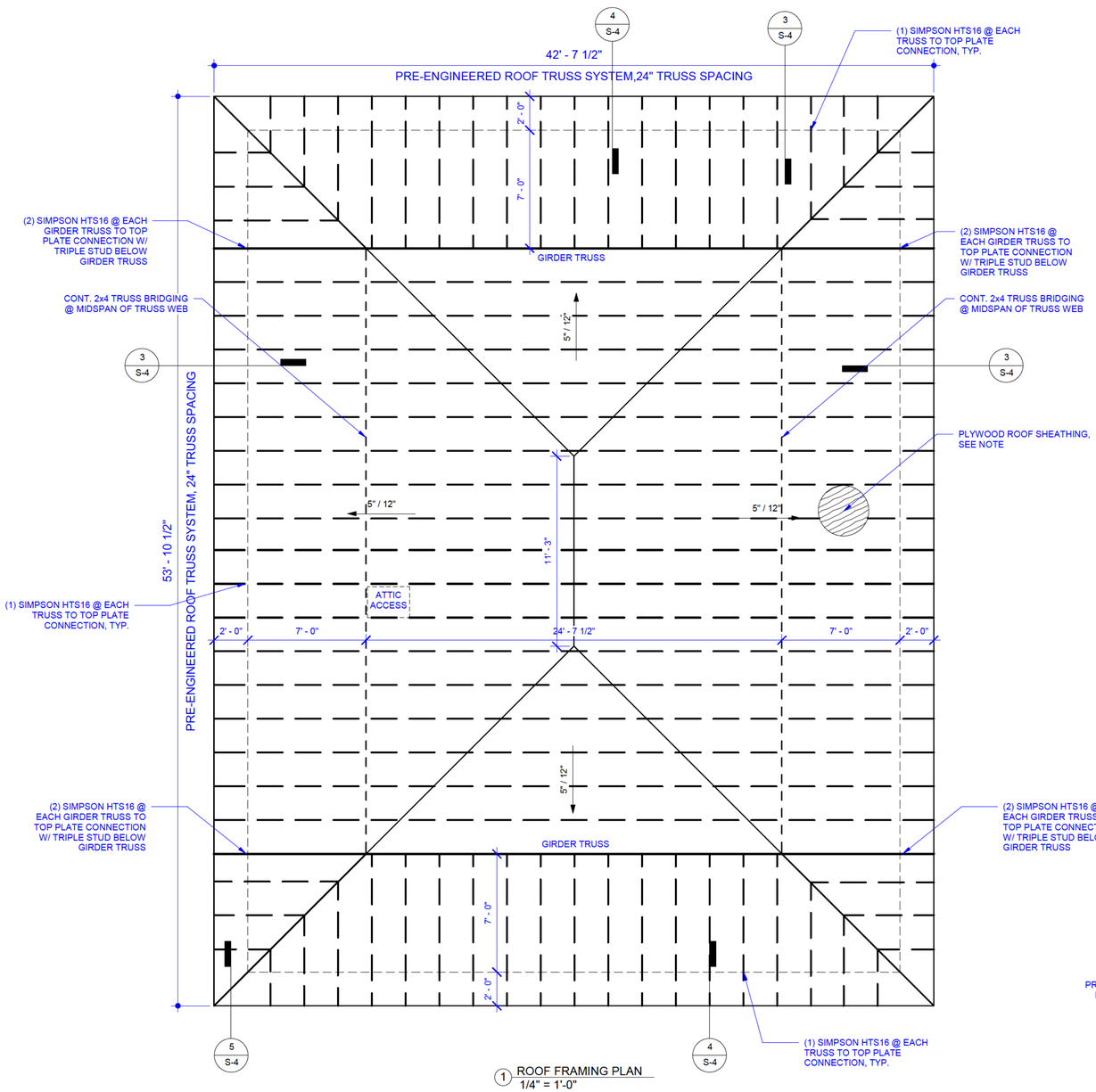
ROOF TRUSS NOTE:

CONTRACTOR SHALL PROVIDE PRE-ENGINEERED ROOF TRUSS SYSTEM. CONTRACTOR SHALL PROVIDE ENGINEERED STAMPED TRUSS DESIGN TO THE PERMIT DEPARTMENT AND ENGINEER OF RECORD. SEE ROOF TRUSS NOTES ON S1.0

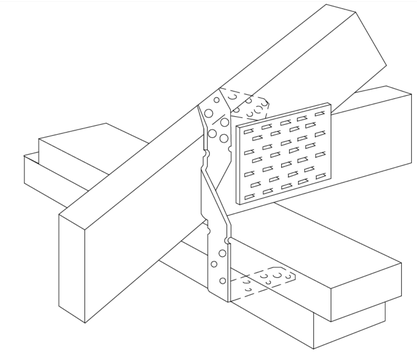
ROOF TRUSS LUMBER SHALL HAVE SPECIFIC GRAVITY (DENSITY) SG=0.49

PLYWOOD ROOF SHEATHING:

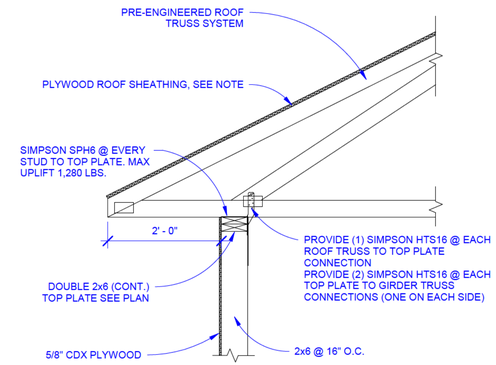
1. APA RATED 23/32" (48/24)
2. RATED FOR EXPOSURE 1
3. CONTINUOUS OVER TWO OR MORE SPANS WITH FACE GRAIN PERPENDICULAR TO SUPPORTS ROOF SHEATHING PANELS SHALL BE PROVIDED WITH MIN. OF 2x4 EDGEWISE BLOCKING AT ALL HORIZONTAL PANEL JOINTS WITH EDGE SPACING AT LEAST 4 FEET FROM EACH GABLE END
4. ROOF SHEATHING FASTENED WITH WITH ASTM F1667 RSRS-03 (21/2" × 0.131") NAILS OR ASTM F1667 RSRS-04 (3" × 0.120") NAILS SPACED AT 4" O.C. MAX. ALONG SUPPORTING MEMBERS AT THE EDGES OF EACH SHEET AND 4" O.C. MAX. ALONG SUPPORTING MEMBERS ON THE INTERIOR OF EACH SHEET
5. VERTICAL JOINTS OF PLYWOOD ROOF SHEATING SHALL BE STAGGERED EVERY FOUR FEET (4'-0") OR LESS.



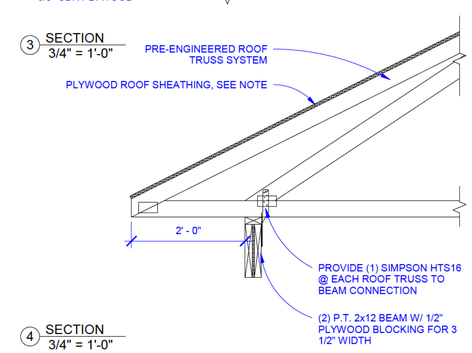
1 ROOF FRAMING PLAN
1/4" = 1'-0"



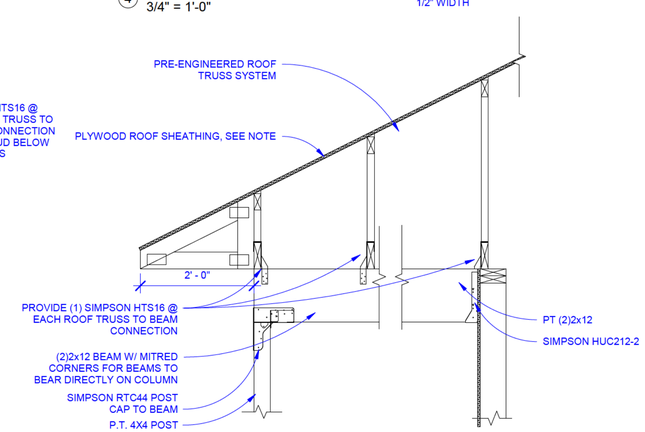
2 HTS INSTALLATION AS A TRUSS-TO-TOP PLATE TIE
3/32" = 1'-0"



3 SECTION
3/4" = 1'-0"



4 SECTION
3/4" = 1'-0"



5 SECTION
3/4" = 1'-0"

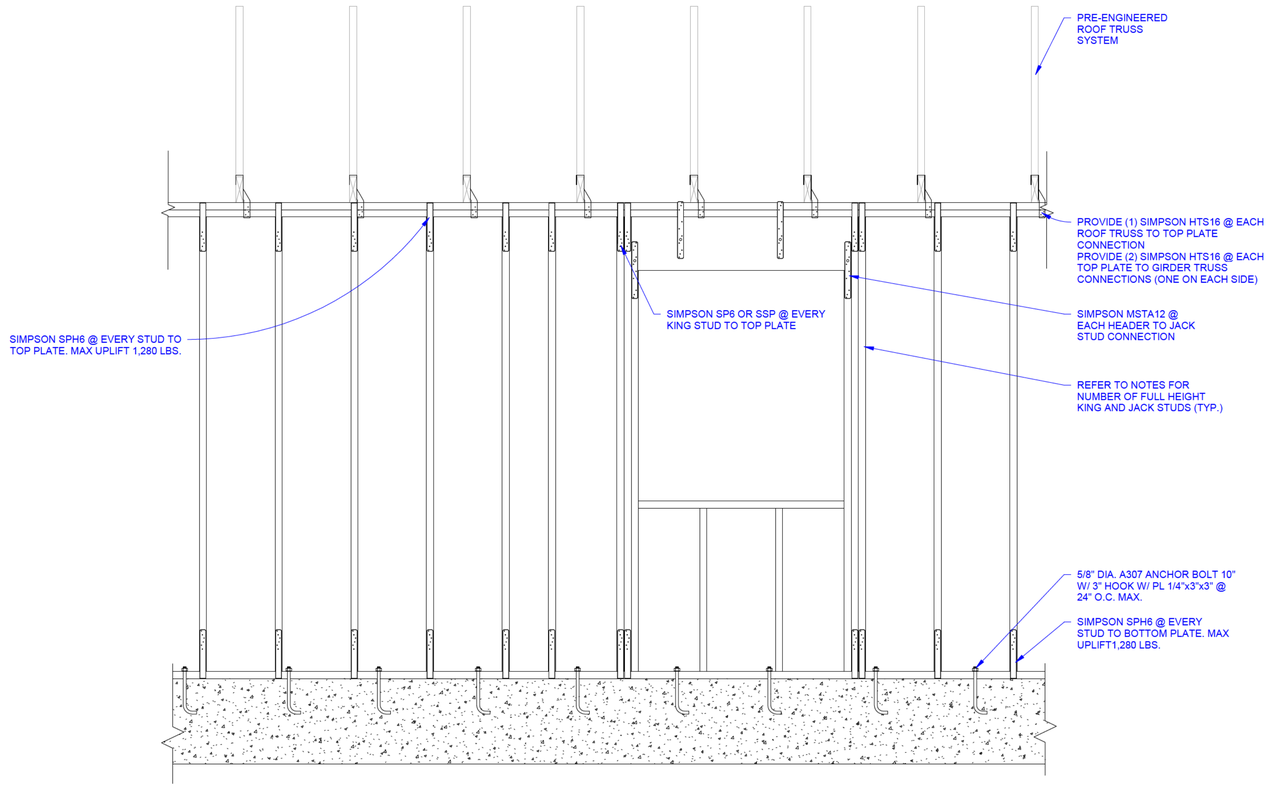
No.	Description	Date

FRAMING PLANS & DETAILS

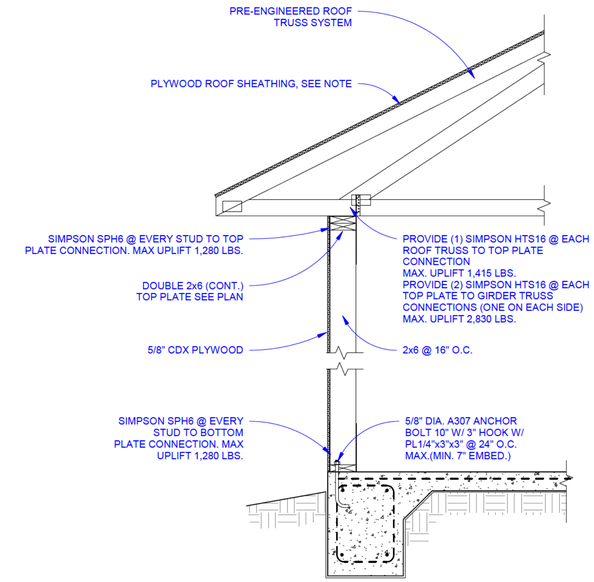
Project Number	2019-15
Date	12/27/2021
Drawn By	IP
Checked By	BT

50% PRELIMINARY DESIGN, NOT FOR CONSTRUCTION

S-4



1 CONTINUOUS LOAD PATH DIAGRAM
3/4" = 1'-0"



2 HURRICANE STRAPPING DIAGRAM
3/4" = 1'-0"

ANCHOR STRAP SCHEDULE

MANUFACTURER (OR EQUAL)	PRODUCT CODE	CONNECTED MEMBERS		FASTENERS	ALLOWABLE LOADS			APPROVAL NUMBER
					UPLIFT	UPLIFT	UPLIFT	
SIMPSON	LSTA36	RAFTER	RAFTER	(24) 0.148" x 2 1/2"	740			FL#10456.15
SIMPSON	HTS16	RAFTER	STUD/TOP PLATE	(16) 0.148" x 3" (16) 0.148" x 1 1/2"	1415	1415		FL#10456.12
SIMPSON	MTS12	RAFTER	STUD	(14) 0.148" x 3" Nails (14) 0.148" x 3" Nails	850	850		FL#13872.11
SIMPSON	HD5B	CORNER STUD	BOTTOM PLATE	5/8 Anchor Dia. Bolt (2) 3/4 Stud bolts	2405			FL#11496.3
	5/8" x 10" A307 ANCHOR BOLT W/ 3" HOOK	BOTTOM PLATE	SLAB/FOOTING					FL15731
SIMPSON	PC4Z	POST	HEADER	(8) 0.148" x 3" (10) 0.148" x 3"	1480			FL#10860.20
SIMPSON	MSTA12	JACK STUD	HEADER	(10) 0.148" x 2 1/2"	940			FL#10456.21
SIMPSON	PBS44	POST	SLAB/FOOTING	(14) 0.162" x 3 1/2" nails (2) 1/2" dia. Machine bolts	1235			FL#10860.17
SIMPSON	HUC212-2	STUD	HEADER	(18) 0.162" x 3 1/2" (10) 0.148" x 3"	4030			FL#10531.9
SIMPSON	LUS28	JOIST	HEADER	6-SS16d - Smooth-Shank Stainless Steel Nails 4-SS10d - Smooth - Shank Stainless Steel Nails 6-SSA10d - Ring-Shank Stainless Steel Nails 4-SSA10d Ring-Shank Stainless Steel Nails	915	1165		FL#10531.16

No.	Description	Date

FRAMING DETAILS

Project Number 2019-15
Date 12/27/2021
Drawn By IP
Checked By BT

50% PRELIMINARY DESIGN, NOT FOR CONSTRUCTION

S-5

4 BEDROOM PROTOTYPE SOG

Address TBD
City. Florida Zip Code

50% PRELIMINARY DESIGN, NOT FOR CONSTRUCTION

NOTE: THIS IS A PROTOTYPE DESIGN, NOT INTENDED FOR CONSTRUCTION. FACTORS SUCH AS LOCATION, SURVEY, ZONING, LOCAL CODES, BASE FLOOD ELEVATION REQUIREMENTS, SURVEY, GEOTECHNICAL REPORT, LOCAL CLIMATE, AND SITE SPECIFIC CONDITIONS WILL IMPACT THE FINAL DESIGN OF PROTOTYPE HOMES INTENDED FOR CONSTRUCTION. THESE DRAWINGS REQUIRE MODIFICATION AND APPROVAL BY THE ENGINEER AND ARCHITECT TO BE USED FOR CONSTRUCTION.

GENERAL NOTES:

1. 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 AS A PREVENTATIVE TREATMENT TO NEW CONSTRUCTION. SEE 2020 FLORIDA RESIDENTIAL CODE 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.”
2. ALL WORK SHALL MEET APPLICABLE REQUIREMENTS OF THE 2020 FLORIDA BUILDING CODE, BUILDING, 7TH EDITION AND 2020 FLORIDA BUILDING CODE, RESIDENTIAL 7TH EDITION.
3. APPLIANCES SHALL BE ENERGY STAR LABELED - CLOTHES WASHERS, DISHWASHERS, REFRIGERATORS AND CLOTHES DRYERS. SUPPLY HOSES TO WATER USING FIXTURES AND APPLIANCES MUST BE ARMORED, PEX OR METAL (EXCEPT COPPER)
4. CONTRACTOR TO VERIFY ALL EXISTING CONDITIONS AND NOTIFY ARCHITECT OF ANY DISCREPANCIES WITH PLANS AND AS-BUILT CONDITIONS PRIOR TO PROCEEDING WITH THE WORK.
5. DO NOT SCALE DRAWINGS; DIMENSIONS GOVERN. LARGE SCALE DETAILS GOVERN OVER SMALL SCALE DETAILS. NOTIFY ARCHITECT WITH ANY DISCREPANCIES OVER DIMENSIONS.
6. ALL DIMENSIONS ARE TO THE FACE OF THE STUDS (ROUGH) UNLESS OTHERWISE NOTED.
7. THE CONTRACTOR SHALL OBTAIN AND PAY FOR ALL PERMITS, INSPECTION FEES, AND DEPOSITS REQUIRED FOR THE INSTALLATION OF ALL WORK. IT SHALL BE THE CONTRACTORS RESPONSIBILITY TO CALL FOR LOCAL INSPECTIONS AND OBTAIN APPROVAL FROM THE STATE FIRE MARHSAL IF REQUIRED.
8. ALL CONSTRUCTION WORK SHALL BE IN COMPLIANCE WITH ALL LOCAL CITY, COUNTY, STATE OF FLORIDA AND FEDERAL CODES. THE CONTRACTOR SHALL GIVE ALL NOTICES AND COMPLY WITH ALL LAWS, ORDINANCES, RULES, REGULATIONS, AND LAWFUL ORDERS OF ANY PUBLIC AUTHORITY BEARING PERFORMANCE OF THE WORK.
9. VERIFY ROUGH OPENING SIZES WITH DOOR AND WINDOW MANUFACTURERS BEFORE CONSTRUCTION IS TO BEGIN.
10. SAFETY GLAZING SHALL BE PROVIDED AT HAZARDOUS LOCATIONS AS PER SECTION R308.4 OF THE FRC 2020.
11. COMBINATION SMOKE /CARBON MONOXIDE DETECTORS SHALL BE PROVIDED IN AND OUTSIDE ALL SLEEPING AREAS.
12. EACH SLEEPING ROOM MUST HAVE AT LEAST ONE OPERABLE WINDOW OR EXTERIOR DOOR APPROVED FOR EMERGENCY EGRESS OR RESCUE. UNIT MUST BE OPERABLE FROM INSIDE TO FULL CLEAR OPENING OF 5.7 SQUARE FEET, WITH SILL HEIGHT NO MORE THAN 44 INCHES ABOVE THE FLOOR, MINIMUM NET CLEAR OPENING HEIGHT OF 24 INCHES, AND MINIMUM NET CLEAR OPENING WIDTH OF 20 INCHES.
13. EXTERIOR WALLS WITH A FIRE SEPARATION DISTANCE LESS THAN 3'-0" FEET SHALL HAVE 1 HOUR PROTECTION OF 5/8" GYP BOARD AT BOTH SIDES OF THE WALL.
14. OVERHANG PROJECTIONS WITH A FIRE SEPARATION DISTANCE LESS THAN 3'-0" (FEET) SHALL BE PROVIDED WITH 5/8" GYP. BOARD UNDERSIDE FOR 1-HOUR PROTECTION.
15. ALL "GLASS OPENINGS" SHALL BE IMPACT RESISTANT GLAZING (COMPLY WITH REQUIREMENTS OF THE LARGE MISSILE TEST OF ASTM 1996 AND OF ASTME 1886 FASTENED IN ACCORDANCE WITH TABLE R301.2.1.2 OF FRC 2020.
16. THE CONTRACTOR SHALL PROVIDE ALL NECESSARY SAFETY APPARATUS REQUIRED TO ENSURE THE HEALTH AND WELFARE OF THE GENERAL PUBLIC, THE OWNERS, AND ANY WORKERS.
17. THE CONTRACTOR SHALL HAVE THE WORK SITE CLEANED ON A DAILY BASIS. THE DISPOSAL OF ANY WASTE SHALL BE OFF SITE AND IN A MANNER PRESCRIBED UNDER THE LAW.
18. CONTRACT DRAWINGS AND SPECIFICATIONS REPRESENT FINISHED STRUCTURE. THEY DO NOT INDICATE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE ALL MEASURES NECESSARY TO PROTECT STRUCTURE AND PERSONNEL DURING CONSTRUCTION. SUCH MEASURES SHALL INCLUDE BUT NOT BE LIMITED TO BRACING, SHORING OF LOADS DUE TO CONSTRUCTION EQUIPMENT, EXCAVATION PROTECTIONS, SCAFFOLDING, JOB SITE SAFETY, ETC. OBSERVATION VISITS TO THE SITE BY ARCHITECT, OWNER, OR ENGINEER SHALL NOT INCLUDE INSPECTIONS OF ABOVE ITEMS.
19. IT IS RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE VARIOUS TRADES ON BUILDING TO ALLOW SUFFICIENT ROOM FOR ALL EQUIPMENT.
20. CONTRACTOR TO COORDINATE ALL UTILITIES INSTALLATION AND CONNECTION WITH LOCAL UTILITY COMPANY.
21. THE CONTRACTOR SHALL PROVIDE FOR POSITIVE DRAINAGE AROUND THE BUILDING INCLUDING ANY TEMPORARY MEASURES DURING THE CONSTRUCTION SO AS TO ENSURE NO WATER DAMAGE TO THE BUILDING.
22. ALL REMOVED TOPSOIL SHALL BE STORED AND USED FOR FINISH GRADING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVAL OF ALL DEBRIS MATERIAL PRIOR TO FINISH GRADING.
23. CONTRACTOR SHALL COORDINATE & INSTALL WOOD BLOCKING IN FRAMING AS NEEDED TO SUPPORT ANY ITEMS MOUNTED TO THE WALLS.
24. ALL PENETRATIONS THROUGH FIRE RATED WALLS ARE TO BE SEALED WITH CODE APPROVED FIRESTOPPING MATERIAL.
25. THE CONTRACTOR SHALL VERIFY THE MIN. F.F. ELEV. WITH THE CITY/PARISH FEMA ELEVATION AND BENCHMARK CERTIFICATE.
26. ALL DRIVEWAY AND SIDEWALKS SHALL MEET LOCAL DEPARTMENT OF PUBLIC WORKS STANDARD DETAILS IF APPLICABLE.
27. CONTRACTOR SHALL PROVIDE COLOR SCHEMES FOR ALL CABINETS, COUNTERTOPS, FLOORING AND EXTERIOR MATERIALS IN A NEUTRAL COLOR PALETTE. ALL INTERIOR WALLS, CEILINGS AND TRIM MUST BE WHITE.
28. CONTRACTOR SHALL PROVIDE ALL PLUMBING FIXTURES, ELECTRICAL FIXTURES, DOOR HARDWARE, BATHROOM HARDWARE, AND BATHROOM ACCESSORIES IN A CONSISTENT MATERIAL FINISH.
29. CONTRACTOR SHALL PROVIDE CLEAN OUT LOCATIONS, TIE-IN LOCATIONS, AND WATER AND SEWER LINE LOCATIONS ON SITE TO PERMIT DEPARTMENT FOR REVIEW.

PROJECT INFORMATION:

OCCUPANCY:	SINGLE FAMILY RESIDENTIAL
BUILDING CODE:	2020 FLORIDA BUILDING CODE, BUILDING, 7TH EDITION 2020 FLORIDA BUILDING CODE, RESIDENTIAL, 7TH EDITION
PERMIT TYPE:	NEW CONSTRUCTION
TYPE OF CONSTRUCTION:	TYPE V

ZONING INFORMATION:

ZONING CLASSIFICATION:	TBD
USE:	DWELLING, SINGLE-FAMILY
MINIMUM LOT AREA:	SINGLE FAMILY: TBD SF/DU
MINIMUM LOT WIDTH:	SINGLE FAMILY: TBD
MAX. BUILDING HEIGHT:	SINGLE FAMILY: TBD
FRONT YD MIN. REQ:	SINGLE FAMILY: TBD
INT SIDE YD REQ:	SINGLE FAMILY: TBD
CORNER SIDE YD MIN. REQ:	SINGLE FAMILY: TBD
REAR YD MIN. REQ:	SINGLE FAMILY: TBD

FFE INFORMATION:

FLOOD ZONE:	TBD
FEMA BASE FLOOD ELEVATION:	TBD
HIGHEST ADJACENT GRADE:	TBD
PROPOSED FFE.:	TBD

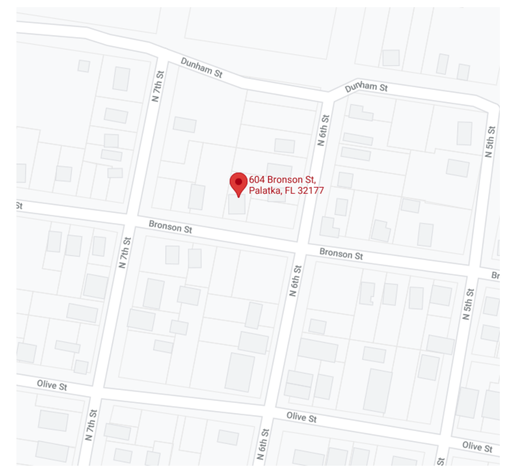
BUILDING INFORMATION:

FIRST FLOOR:	1992 SF
FRONT PORCH:	187 SF
REAR PORCH:	178 SF
BUILDING HEIGHT:	TBD
CONDITIONED AREA VOLUME:	14,472 CF

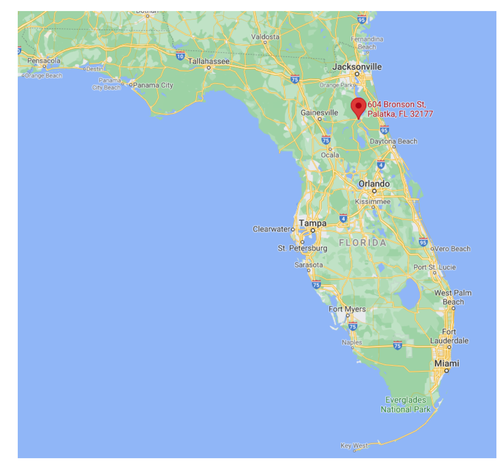
50% PRELIMINARY DESIGN NOTES:
THIS DRAWING SET IS PROVIDED TO ALLOW THE CONTRACTOR TO START PREPARATION OF SUBMITTALS FOR THIS PROJECT REQUIRED FOR PERMIT BY THE AUTHORITY HAVING JURISDICTION (AHJ). THIS DESIGN IS PRELIMINARY, AND NOT FOR CONSTRUCTION. THE CONTRACTOR MAY ELECT TO START PREPARATION OF DOCUMENTS FOR PERMIT NOT PROVIDED BY THE ENGINEER OF RECORD INCLUDING BUT NOT LIMITED TO:
- TRUSS DESIGN DRAWINGS AND ENGINEERING
- WINDOW AND DOOR PRODUCT APPROVALS REQUIRED BY THE AHJ
- ADDITIONAL COMPONENTS AND CLADDING PRODUCT APPROVALS REQUIRED BY THE AHJ.

INDEX OF DRAWINGS

G-1	TITLE SHEET
C-1	SITE PLAN & DETAILS
A-1	ARCHITECTURAL PLANS
A-2	ELEVATIONS
A-3	REFLECTED CEILING PLAN AND INTERIOR ELEVATIONS
A-4	SCHEDULES AND NOTES
A-5	VINYL SIDING DETAILS FOR SLAB ON GRADE
E-1	ELECTRICAL PLANS
P-1	PLUMBING PLANS
M-1	MECHANICAL
M-2	MECHANICAL
M-3	MECHANICAL
S-1	STRUCTURAL NOTES
S-2	FOUNDATION PLANS & DETAILS
S-3	FRAMING PLANS & DETAILS
S-4	FRAMING PLANS & DETAILS
S-5	FRAMING DETAILS



STREET MAP



VICINITY MAP

No.	Description	Date

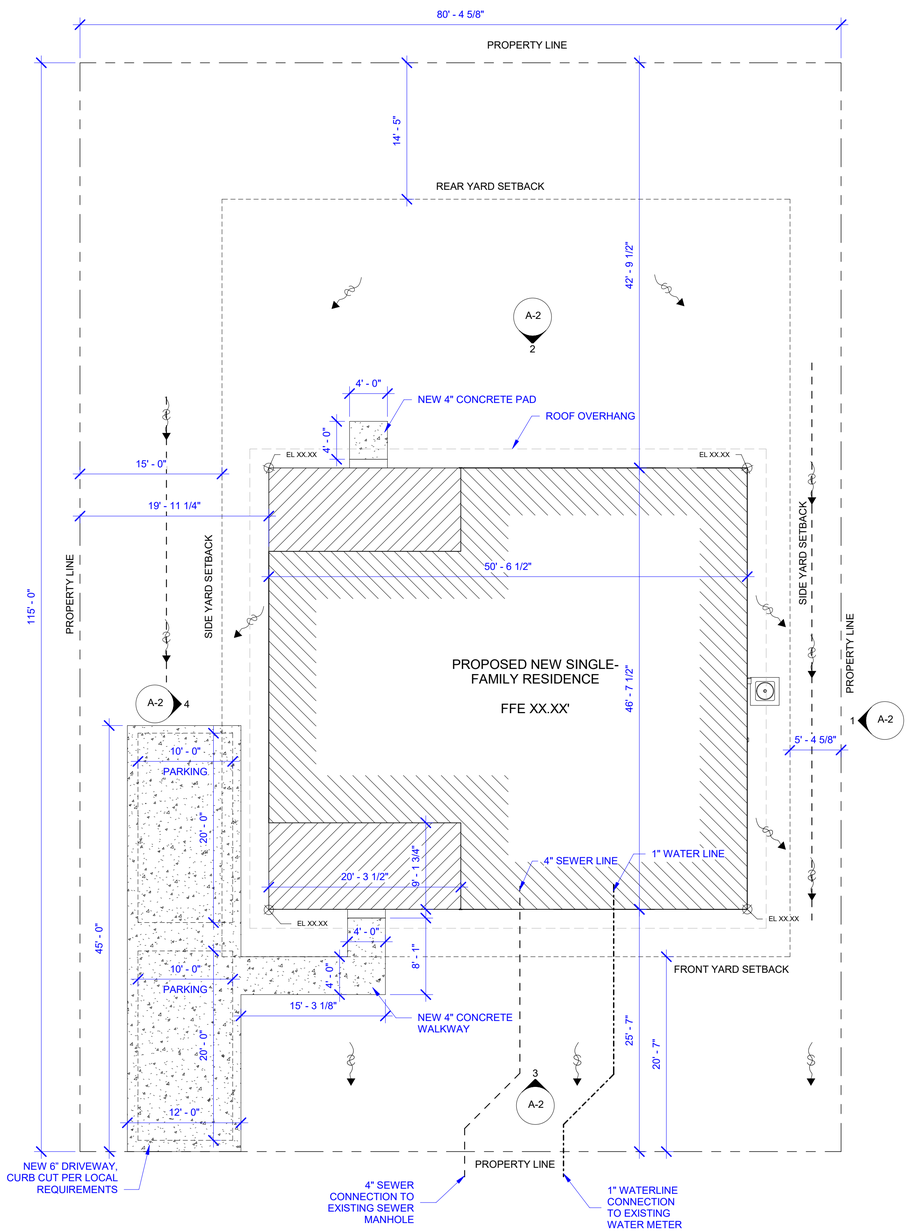
TITLE SHEET

Project Number	2019-15
Date	01/25/2022
Drawn By	ZP
Checked By	IP

50% PRELIMINARY DESIGN, NOT FOR CONSTRUCTION

G-1

SITE PLAN IS PRELIMINARY, SUBJECT TO CHANGE AFTER RECEIVING SURVEY AND ELEVATION CERTIFICATE.



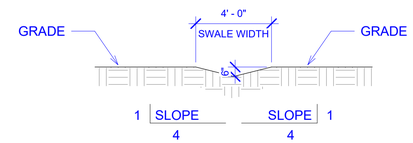
1 SITE PLAN
1/8" = 1'-0"

FFE INFORMATION:

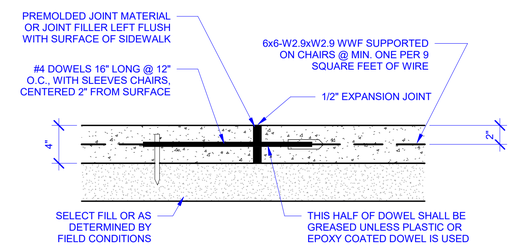
FLOOD ZONE:	TBD
FEMA BASE FLOOD ELEVATION:	TBD
HIGHEST ADJACENT GRADE:	TBD
PROPOSED FFE.:	TBD

SITE PLAN LEGEND

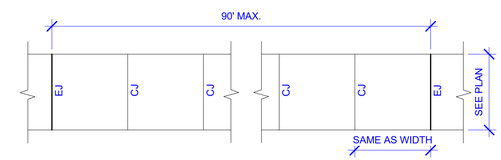
EL XX.XX	EXISTING GRADE
EL XX.XX	PROPOSED GRADE
MEX	MATCH EXISTING GRADE
FFE	FINISH FLOOR ELEVATION
L.P.	LOW POINT OF SWALE
	SLOPE ARROW



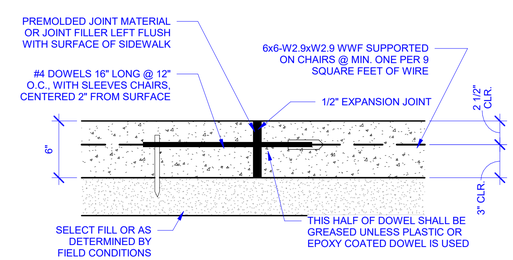
9 SWALE SECTION
1/4" = 1'-0"



8 SIDEWALK EXPANSION JOINT (EJ)
NOT TO SCALE



3 CONCRETE SIDEWALK
NOT TO SCALE



5 DRIVEWAY EXPANSION JOINT (EJ)
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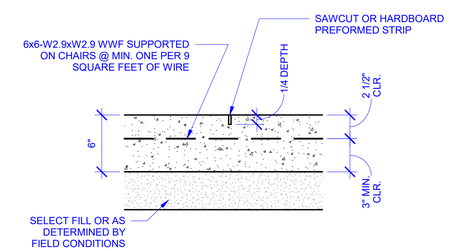
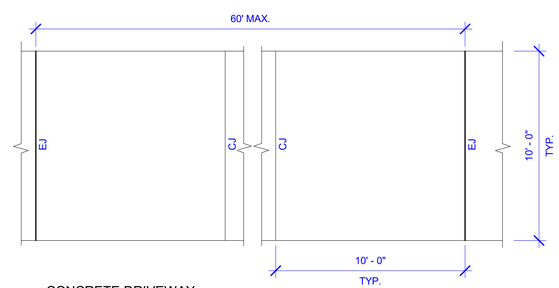
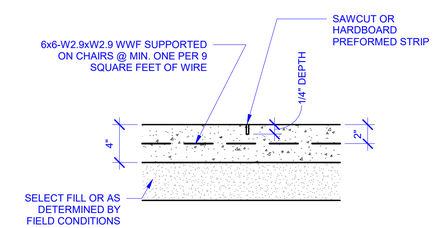


4 DRIVEWAY CONTROL JOINT (CJ)
NOT TO SCALE



2 CONCRETE DRIVEWAY
NOT TO SCALE



7 SIDEWALK CONTROL JOINT (CJ)
NOT TO SCALE

GENERAL SITE PLAN NOTES:

1. ALL PAVEMENT IN PUBLIC RIGHT OF WAY SHALL MEET THE DETAILS AND REQUIREMENTS OF THE LOCAL AUTHORITY HAVING JURISDICTION.
2. ALL CURB CUTS AND DRIVEWAY APRONS SHALL MEET THE DETAILS AND REQUIREMENTS OF THE LOCAL AUTHORITY HAVING JURISDICTION.
3. ALL SIDEWALKS WITHIN THE PROPERTY BOUNDARY TO BE 4" THICK, 4000 PSI W/ 6x6-W2.9xW2.9 WWF, AND SHALL RECEIVE BROOM FINISH 90 DEG. TO THE DIRECTION OF TRAVEL.
4. ALL DRIVEWAYS WITHIN THE PROPERTY BOUNDARY TO BE 6" THICK, 4000 PSI W/ 6x6-W2.9xW2.9 WWF, AND SHALL RECEIVE BROOM FINISH 90 DEG. TO THE DIRECTION OF TRAVEL.
5. SLOPE ALL CONCRETE PAVING AWAY FROM BUILDING AT 1% MINIMUM. SLOPE ALL CONCRETE WALKS AWAY FROM BUILDING AT 2% MAXIMUM.
6. SLOPE ALL FINAL GRADING AWAY FROM BUILDING TO ENSURE POSITITVE DRAINAGE. MAXIMUM SLOPE FOR LANDSCAPED AREAS IS 25%.
7. LAY NEW SOD TO COVER ALL AREAS OF YARD DISTURBED BY CONSTRUCTION ACTIVITIES.
8. SLOPE ALL CONCRETE PAVING AWAY FROM BUILDING AT 1% MINIMUM. SLOPE ALL CONCRETE WALKS AWAY FROM BUILDING AT 2% MINIMUM.
9. SLOPE ALL FINAL GRADING AWAY FROM BUILDING TO ENSURE POSITIVE DRAINAGE.
10. LAY NEW SOD TO COVER ALL AREAS OF YARD DISTURBED BY CONSTRUCTION ACTIVITIES. SOD MUST BE BAHIA, ZOYSIA, OR BERMUDA, EXCEPT FOR MONROE COUNTY WHERE ALL DISTURBED AREAS SHALL BE LIMESTONE.
11. SITE GRADING PLAN BASED ON AVAILABLE SURVEY DATA. EXISTING DRAINAGE PATTERNS TO BE CONFIRMED IN FIELD BY THE CONTRACTOR.
12. CONTRACTOR SHALL REGRADE SITE IMMEDIATELY ADJACENT TO THE NEWLY CONSTRUCTED HOUSE TO PROVIDE POSITIVE DRAINAGE AWAY FROM THE FOUNDATION OF THE HOME.
13. THE CONTRACTOR SHALL NOT ALTER SITE DRAINAGE PATTERNS IN A WAY THAT DIRECTS ADDITIONAL FLOWS ONTO ADJACENT PROPERTIES.
14. UTILITY TIE-IN LOCATIONS ARE BASED ON LIMITED FIELD DATA.CONTRACTOR TO VERIFY SEWER AND WATER TIE-IN LOCATIONS IN FIELD AND NOTIFY ENGINEER OF ANY DISCREPANCY

SITE INFORMATION:

SITE AREA: TBD SF

EXISTING IMPERVIOUS AREA:

• EXISTING HOME:	TBD	SF
• EXISTING CONCRETE:	TBD	SF
• EXISTING COVERED AREA :	TBD	SF
• **TOTAL:**	**TBD**	**SF**

NEW IMPERVIOUS AREA:

• NEW HOME WITH 2' ROOF OVERHANG :	2,761	SF
• NEW STAIRS:	TBD	SF
• NEW CONCRETE :	TBD	SF
• **TOTAL:**	TBD	**SF**

% NEW IMPERVIOUS AREA: TBD %
% NEW PERVIOUS AREA: TBD %

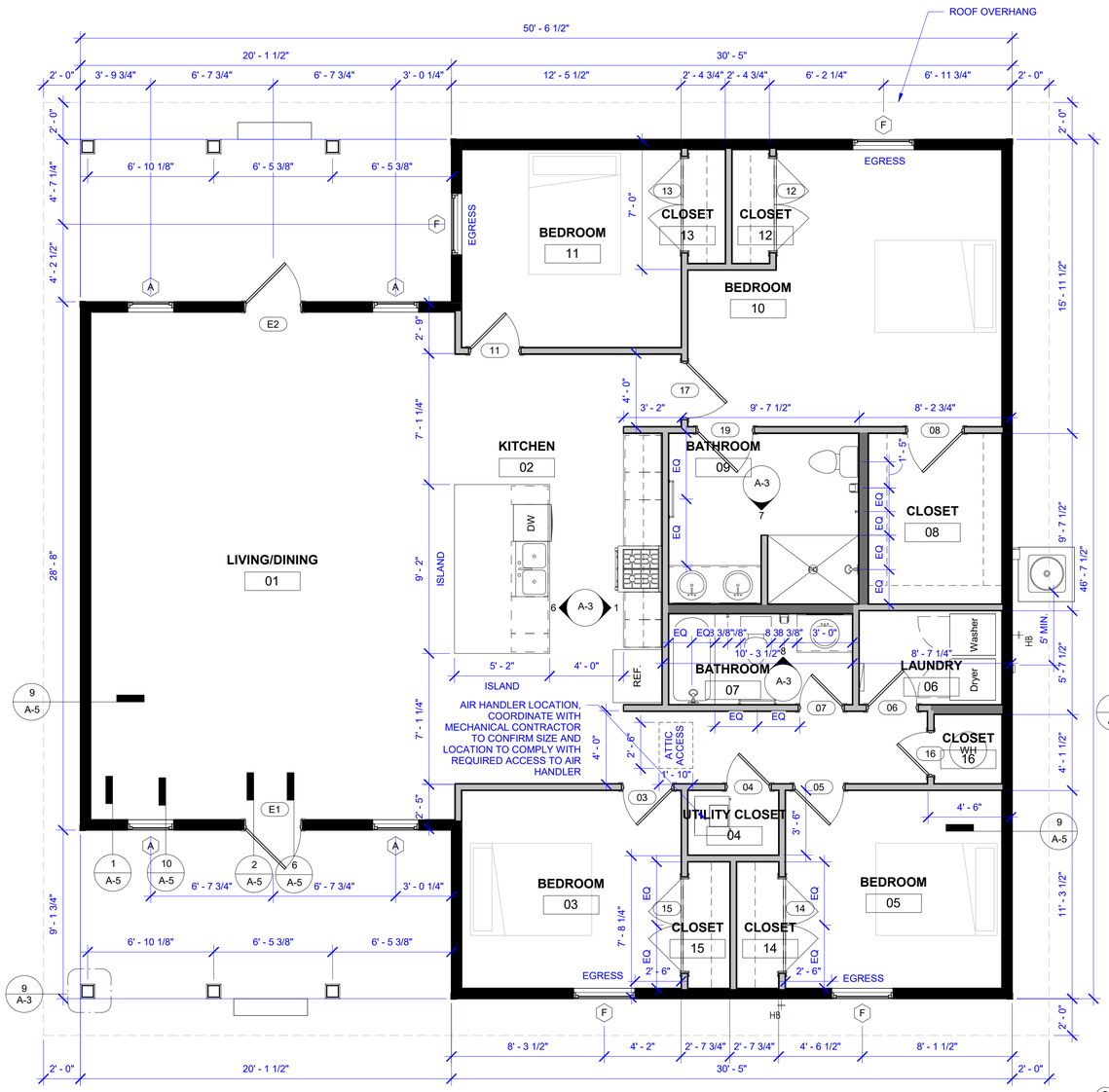
No.	Description	Date

SITE PLAN & DETAILS

Project Number	2019-15
Date	01/25/2022
Drawn By	ZP
Checked By	IP

50% PRELIMINARY DESIGN, NOT FOR CONSTRUCTION

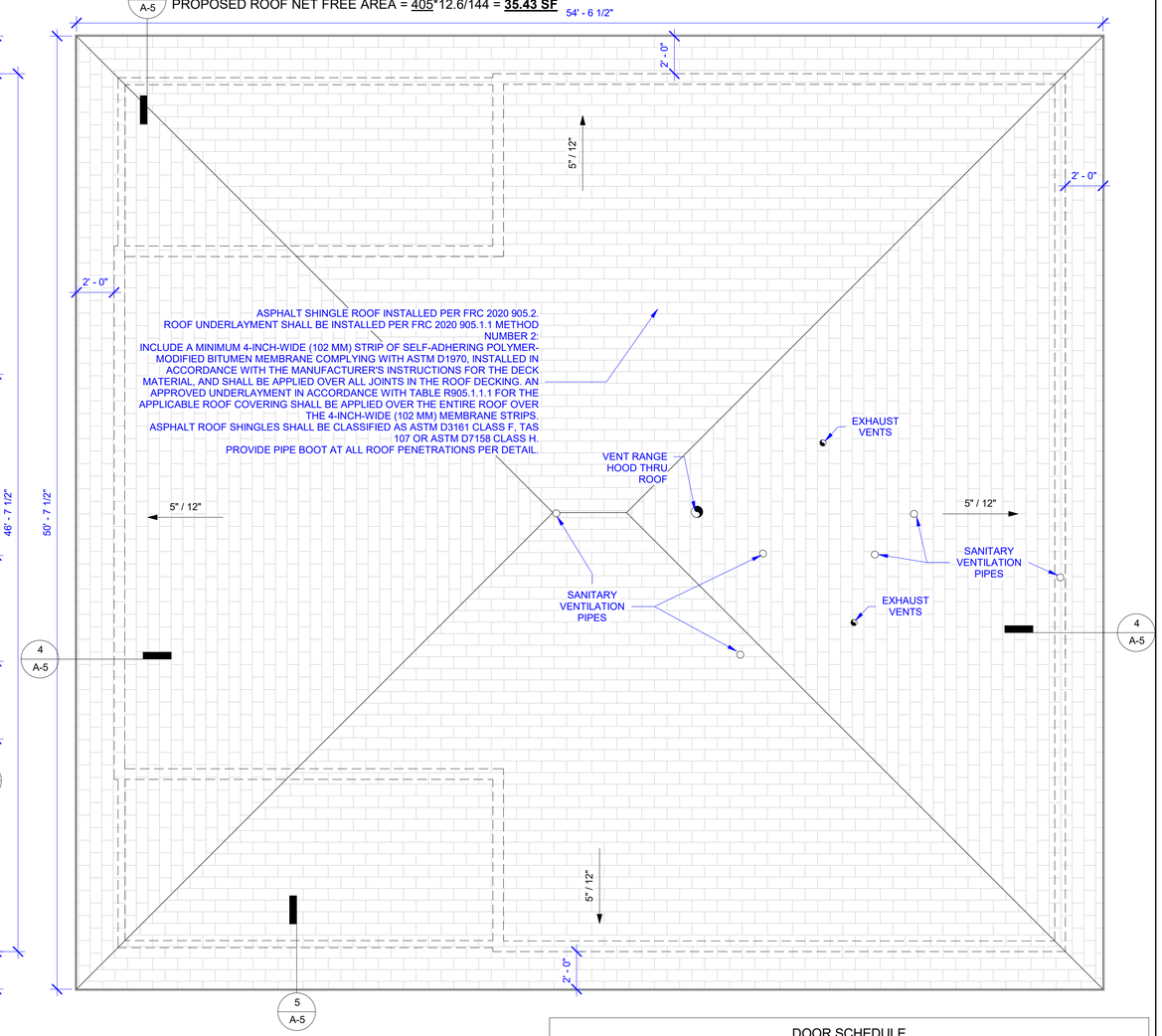
C-1



1 FIRST FLOOR
1/4" = 1'-0"

ROOF VENTILATION (FIBER CEMENT):
ROOF AREA = 2774 SF
REQUIRED NET FREE AREA PER FBC R806.2 = 2774/150 = 18.49 SF
SOFFIT AREA = 405 SF
SOFFIT NET FREE AREA = 12.6 SQ INCHES/SF (BY MANUFACTURER, HARDIESOFFIT VENTEDPLUS BASIS OF DESIGN)
PROPOSED ROOF NET FREE AREA = 405*12.6/144 = **35.43 SF**

ROOF VENTILATION:
ROOF AREA = 2774 SF
REQUIRED NET FREE AREA PER FBC R806.2 = 2774/150 = 18.49 SF
SOFFIT AREA = 405 SF
SOFFIT NET FREE AREA = 14.34 SQ INCHES/SF (BY MANUFACTURER)
PROPOSED ROOF NET FREE AREA = 405*14.34/144 = **40.33 SF**



2 ROOF
1/4" = 1'-0"

BUILDING INFORMATION:

FIRST FLOOR:	1992 SF
FRONT PORCH:	187 SF
REAR PORCH:	178 SF
BUILDING HEIGHT:	TBD
CONDITIONED AREA VOLUME:	14,472 CF

FIRST FLOOR LEGEND

- EXTERIOR 2X6 FRAMED WALL
- INTERIOR 2X6 FRAMED WALL
- INTERIOR 2X4 FRAMED WALL

WINDOW SCHEDULE

Type Mark	Width	Height	Description	Count	Head Height
A	2' - 6"	5' - 0"	DOUBLE HUNG VINYL WINDOW	4	6' - 8"
F	3' - 4"	5' - 0"	DOUBLE HUNG VINYL WINDOW EGRESS	4	6' - 8"

WINDOW NOTES:

1. WINDOW ASSEMBLY SHALL BE IMPACT RESISTANT AND INSTALLED TO MEET THE SPECIFIED WIND LOAD
2. WINDOWS SHALL MEET THE REQUIREMENTS OF TABLE R402.1.2 OF THE FLORIDA ENERGY CONSERVATION CODE 2020.
3. FENESTRATION U-FACTOR SHALL BE ≤ 0.40
4. GLAZED FENESTRATION SHGC VALUE SHALL BE ≤ 0.25
5. WINDOWS SHALL BE ENERGY STAR QUALIFIED

DOOR HARDWARE TYPE SCHEDULE

MARK	DESCRIPTION	MANUFACTURER	MODEL	FINISH	COMMENTS	HARDWARE TYPE

WALL TYPE SCHEDULE

WALL TYPE	INTERIOR/EXTERIOR	DESCRIPTION (EXTERIOR TO INTERIOR)
1	EXTERIOR	VINYL SIDING, MOISTURE BARRIER, PLYWOOD WALL SHEATHING, 2x6 STUD @ 16" O.C., R-19 BATT INSULATION, 1/2" GYPSUM BOARD
2	INTERIOR	1/2" GYPSUM BOARD, 2X6 STUD @ 16" O.C., GYPSUM BOARD
3	INTERIOR	1/2" GYPSUM BOARD, 2X4 STUD @ 16" O.C., GYPSUM BOARD

EXTERIOR DOOR INFORMATION

Mark	Width	Height	Description	DESIGN PRESSURE (POSITIVE) PSF	DESIGN PRESSURE (NEGATIVE) PSF
E2	3' - 0"	6' - 8"	HALF LITE ENTRY DOOR	44	-57
E1	3' - 0"	6' - 8"	HALF LITE ENTRY DOOR	44	-57

TABLE VALUES DETERMINED PER ASCE 7-16 (MINIMUM DESIGN LOADS AND ASSOCIATED CRITERIA FOR BUILDINGS AND OTHER STRUCTURES)

EXTERIOR WINDOW INFORMATION

Type Mark	Width	Height	Description	DESIGN PRESSURE (POSITIVE) PSF	DESIGN PRESSURE (NEGATIVE) PSF
A	2' - 6"	5' - 0"	DOUBLE HUNG VINYL WINDOW	45	-60
F	3' - 4"	5' - 0"	DOUBLE HUNG VINYL WINDOW EGRESS	44	-58

TABLE VALUES DETERMINED PER ASCE 7-16 (MINIMUM DESIGN LOADS AND ASSOCIATED CRITERIA FOR BUILDINGS AND OTHER STRUCTURES)

DOOR SCHEDULE

Mark	Width	Height	Description	Comments
03	2' - 8"	6' - 8"	6-PANEL INTERIOR DOOR	
04	2' - 4"	6' - 8"	6-PANEL INTERIOR DOOR	
05	2' - 8"	6' - 8"	6-PANEL INTERIOR DOOR	
06	2' - 8"	6' - 8"	6-PANEL INTERIOR DOOR	
07	2' - 4"	6' - 8"	6-PANEL INTERIOR DOOR	
08	3' - 0"	6' - 8"	6-PANEL INTERIOR DOOR	
11	2' - 8"	6' - 8"	6-PANEL INTERIOR DOOR	
12	5' - 0"	6' - 8"	PAIR 6-PANEL DOUBLE INTERIOR DOORS	
13	5' - 0"	6' - 8"	PAIR 6-PANEL DOUBLE INTERIOR DOORS	
14	5' - 0"	6' - 8"	PAIR 6-PANEL DOUBLE INTERIOR DOORS	
15	5' - 0"	6' - 8"	PAIR 6-PANEL DOUBLE INTERIOR DOORS	
16	2' - 4"	6' - 8"	6-PANEL INTERIOR DOOR	
17	3' - 0"	6' - 8"	6-PANEL INTERIOR DOOR	
19	3' - 0"	6' - 8"	6-PANEL INTERIOR DOOR	
E1	3' - 0"	6' - 8"	HALF LITE ENTRY DOOR	ENERGY STAR QUALIFIED, PROVIDE GLAZING MEETING REQUIREMENTS FOR HAZARDOUS GLASS LOCATIONS PER FBC-R308.3 AND R308.4
E2	3' - 0"	6' - 8"	HALF LITE ENTRY DOOR	ENERGY STAR QUALIFIED, PROVIDE GLAZING MEETING REQUIREMENTS FOR HAZARDOUS GLASS LOCATIONS PER FBC-R308.3 AND R308.4

No.	Description	Date

ARCHITECTURAL PLANS

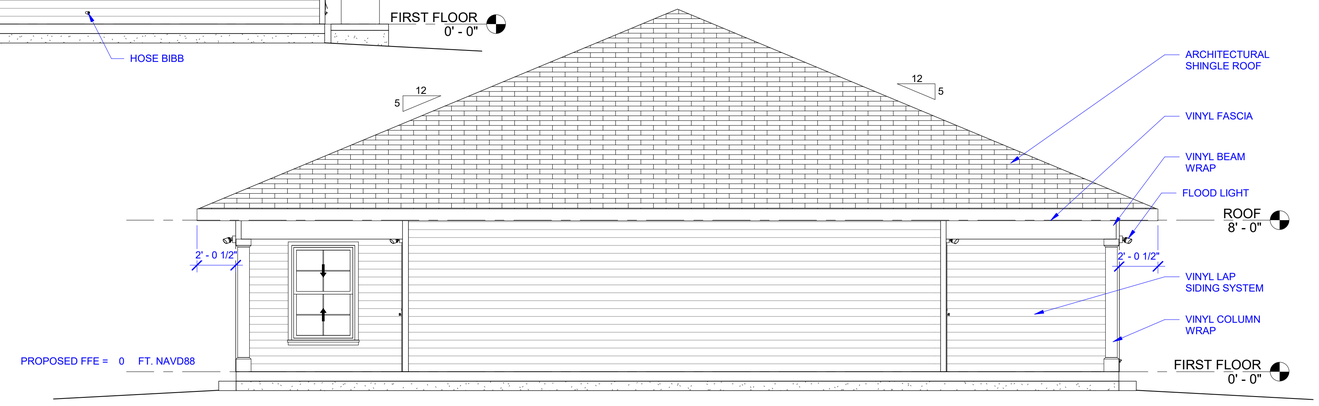
Project Number	2019-15
Date	01/25/2022
Drawn By	ZP
Checked By	IP

50% PRELIMINARY DESIGN, NOT FOR CONSTRUCTION

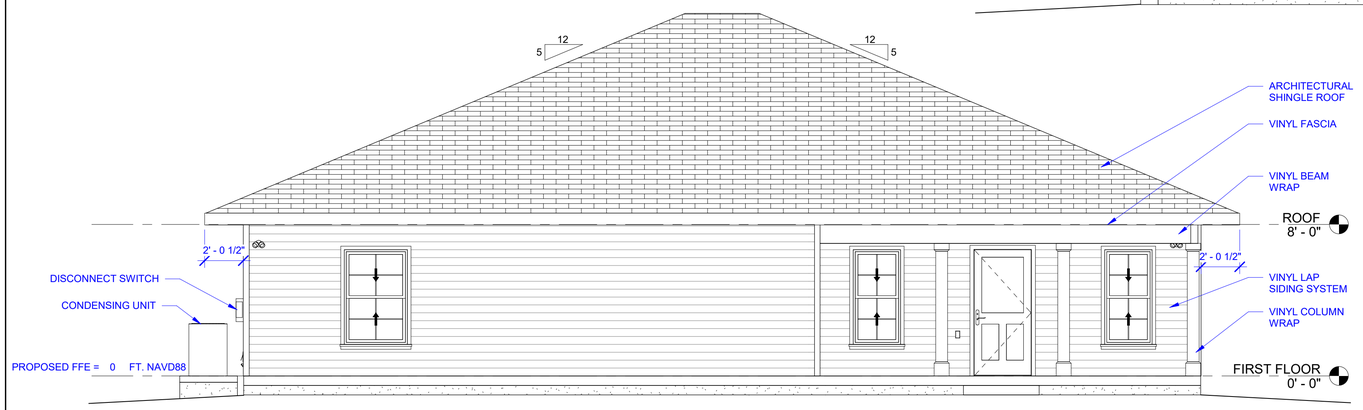
A-1

3 FRONT ELEVATION
1/4" = 1'-0"

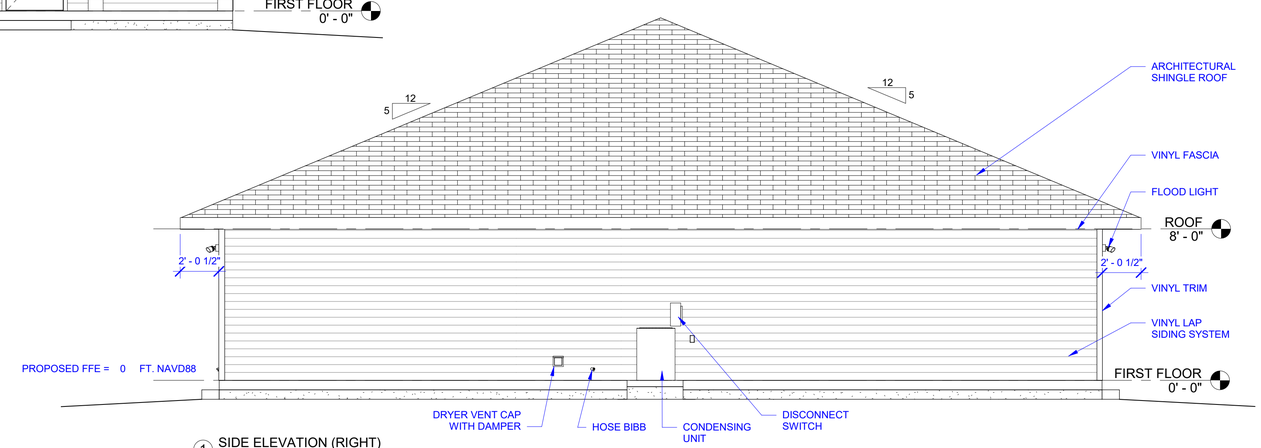
ALL EXTERIOR ELEMENTS MAKING UP THE BUILDING ENVELOPE INCLUDING SIDING, FASCIA, SOFFIT, WINDOWS, DOORS, GLAZING, TRIM, ETC. SHALL BE APRROVED TO COMPLY WITH THE FLORIDA BUILDING CODE INCLUDING THE **HIGH VELOCITY HURRICANE ZONE** BY THE MIAMI-DADE COUNTY DEPARTMENT OF REGULATORY AND ECONOMIC RESOURCES (RER) BOARD AND CODE ADMINISTRATION DIVISION. CONTRACTOR SHALL SUBMIT THE **MIAMI-DADE NOTICE OF ACCEPTANCE (NOA)** FOR EACH PROPOSED EXTERIOR PRODUCT FOR PERMIT APPROVAL, AND PRODUCTS SHALL BE INSTALLED PER THE APPROVED DETAILS IN THE NOA.



4 SIDE ELEVATION (LEFT)
1/4" = 1'-0"



2 REAR ELEVATION
1/4" = 1'-0"



1 SIDE ELEVATION (RIGHT)
1/4" = 1'-0"

No.	Description	Date

ELEVATIONS

Project Number	2019-15
Date	01/25/2022
Drawn By	ZP
Checked By	IP

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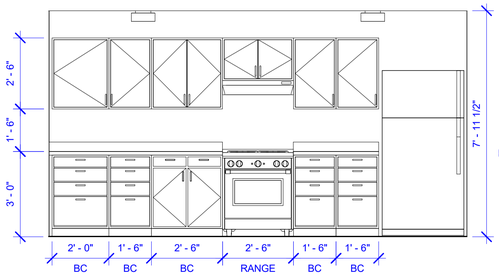
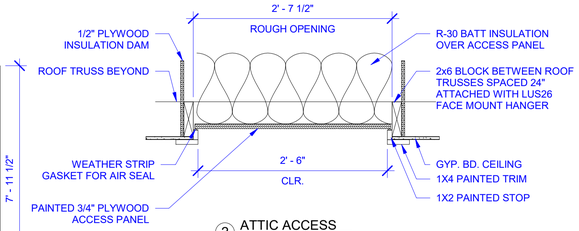
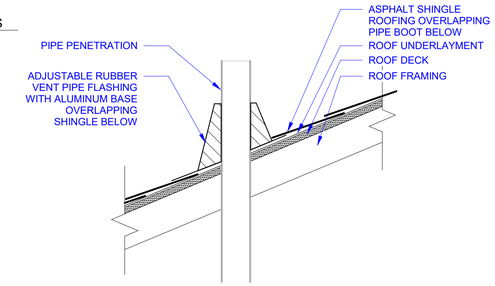
A-2



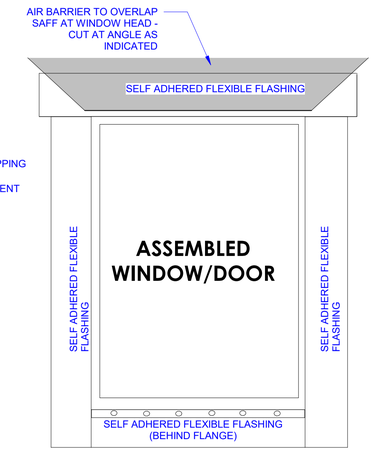
1 KITCHEN ELEVATION
3/8" = 1'-0"

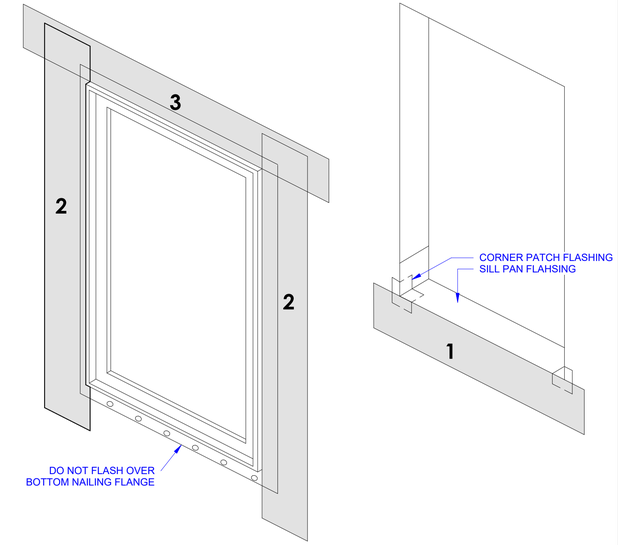


2 ATTIC ACCESS
1" = 1'-0"



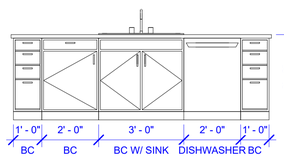
4 ROOF PENETRATION DETAIL
1 1/2" = 1'-0"



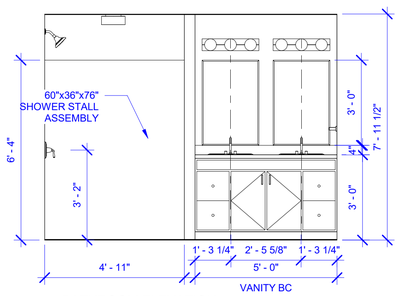


WINDOW AND DOOR FLASHING DIAGRAM
REFER TO MANUFACTURERS GUIDELINES FOR INSTALLING WINDOW, INCLUDING THE ADDITION OF FLEXIBLE CORNER FLASHING.

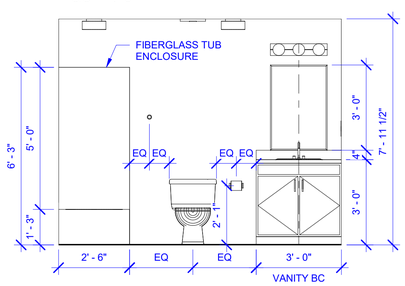
3 WINDOW AND DOOR FLASHING DETAIL
6" = 1'-0"



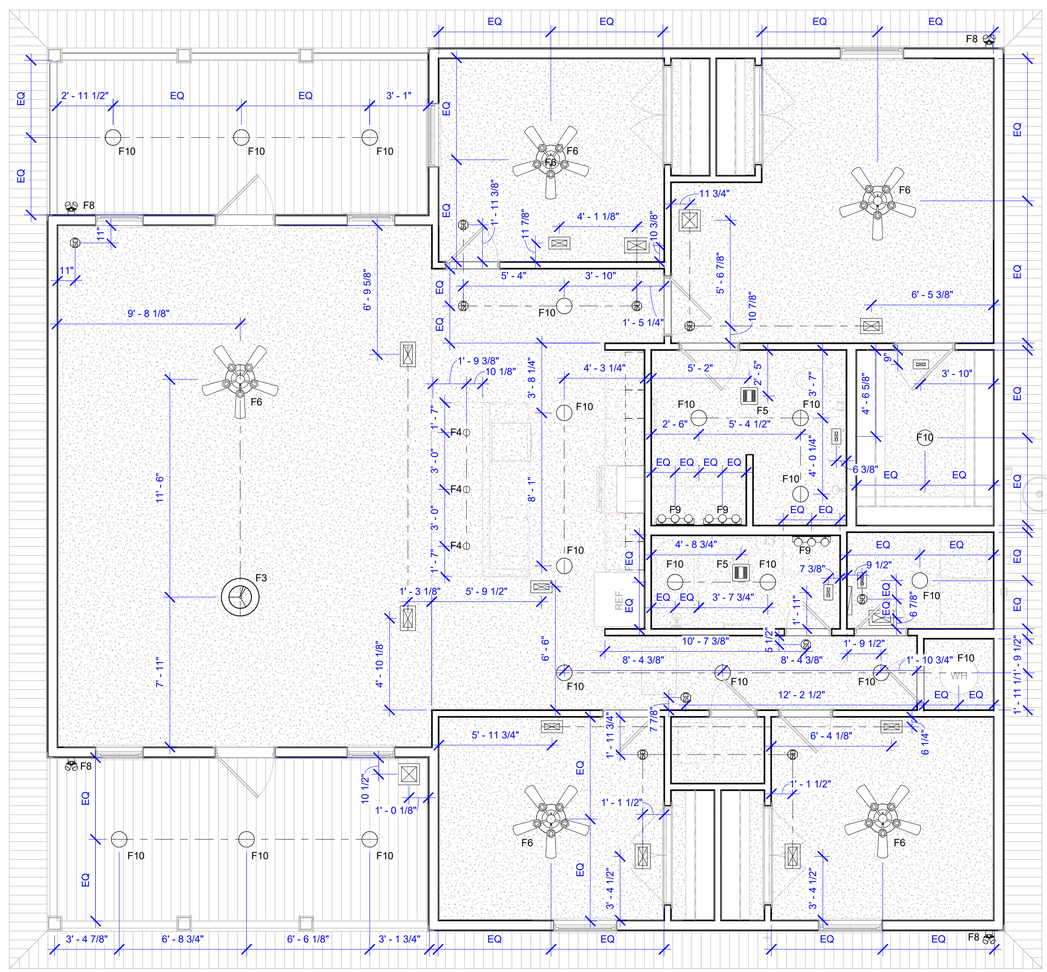
6 KITCHEN ELEVATION
3/8" = 1'-0"



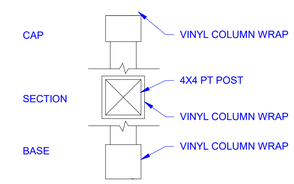
7 BATHROOM ELEVATION
3/8" = 1'-0"



8 BATHROOM ELEVATION
3/8" = 1'-0"



5 REFLECTED CEILING PLAN
1/4" = 1'-0"



9 POST DETAIL
3/4" = 1'-0"

REFLECTED CEILING PLAN LEGEND

- 1/2" GYPSUM BOARD
- VENTED VINYL SOFFIT
- F3 PENDANT LIGHT FIXTURE
- F9 WALL MOUNT FIXTURE
- F5 EXHAUST FAN
- F8 MOTION SENSOR FLOOD LIGHT
- F6 CEILING FAN W/ LIGHT KIT
- CO COMBO SMOKE & CARBON MONOXIDE DETECTOR
- F10 CEILING MOUNTED FIXTURE
- F4 ISLAND PENDANT FIXTURE
- 12x12 DIFFUSER, SEE MECHANICAL
- 8x4 DIFFUSER, SEE MECHANICAL
- 12x6 DIFFUSER, SEE MECHANICAL
- 12x8 DIFFUSER, SEE MECHANICAL
- 14x8 DIFFUSER, SEE MECHANICAL

No.	Description	Date

REFLECTED CEILING PLAN AND INTERIOR ELEVATIONS

Project Number	2019-15
Date	01/25/2022
Drawn By	ZP
Checked By	IP

50% PRELIMINARY DESIGN, NOT FOR CONSTRUCTION

A-3

FINISH TYPE SCHEDULE

MARK	DESCRIPTION	MANUFACTURER	MODEL	FINISH	COMMENTS
VPF	VINYL PLANK FLOORING	SEE SPECS	SEE SPECS	SEE SPECS	STANDARD GRADE, CERTIFIED BY FLOORSCORE OR GREENGAURD AS LOW VOC
CPT	CARPET	SEE SPECS	SEE SPECS	SEE SPECS	STANDARD GRADE, CERTIFIED BY THE CARPET AND RUG INSTITUTE (CRI) GREEN SEAL OF APPROVAL AND LOW-VOC OR NO ADHESIVES ARE USED FOR INSTALLATION
B1	WOOD BASE	SEE SPECS	SEE SPECS	SEE SPECS	BASEBOARDS WILL BE 3 1/4 INCH MDF. 3/4" SHOE MOULDING. NO EXPOSED UREA-FORMALDEHYDE WOOD PRODUCTS ALLOWED OR MUST BE SEALED
B2	WOOD BASE W/SHOE MOULDING	SEE SPECS	SEE SPECS	SEE SPECS	BASEBOARDS WILL BE 3 1/4 INCH MDF. 3/4" SHOE MOULDING. NO EXPOSED UREA-FORMALDEHYDE WOOD PRODUCTS ALLOWED OR MUST BE SEALED
GYP. PTD.	PAINTED GYPSUM BOARD	SEE SPECS	SEE SPECS	SEE SPECS	LEVEL 4 FINISH WITH LIGHT ORANGE PEEL TEXTURE, PRIMED AND 2 FINISH COATS
WP GYP. PTD.	1/2 MOISTURE RESISTANT GYPSUM BOARD	SEE SPECS	SEE SPECS	SEE SPECS	LEVEL 4 FINISH WITH LIGHT ORANGE PEEL TEXTURE, PRIMED AND 2 FINISH COATS
KIT-CAB	KITCHEN CABINETS	SEE SPECS	SEE SPECS	SEE SPECS	
KIT-COUN	KITCHEN COUNTERTOPS	SEE SPECS	SEE SPECS	SEE SPECS	POST-FORMED LAMINATE
BATH-CAB	BATHROOM CABINETS	SEE SPECS	SEE SPECS	SEE SPECS	STANDARD GRADE PREFINISHED WITH HARDWARE. NO EXPOSED UREA-FORMALDEHYDE WOOD PRODUCTS ALLOWED OR MUST BE SEALED
BATH-COUN	BATHROOM COUNTERTOPS	SEE SPECS	SEE SPECS	SEE SPECS	CULTURED MARBLE WITH MOLDED SINK

*CONFIRM ALL FINISH TYPES WITH OWNER PRIOR TO PURCHASE AND INSTALLATION

VOC LIMITS

PAINTS APPLIED TO INTERIOR WALLS:
FLATS: 50 G/L NONFLATS: 100 G/L
GREEN SEAL STANDARD GS-11, PAINTS & COATINGS, 3RD EDITION, AUGUST 17, 2011

ANTI CORROSIVE AND ANTI RUST PAINTS:
250 G/L GREEN SEAL STANDARD GS-11, PAINTS & COATINGS, 3RD EDITION, AUGUST 17, 2011

CLEAR WOOD FINISHES:
VARNISH: 350 G/L LACQUER: 550 G/L SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT RULE 1113, ARCHITECTURAL COATINGS

FLOOR COATINGS: 100 G/L

SEALERS:
WATERPROOFING: 250 G/L
SANDING: 275 G/L
ALL OTHERS: 200 G/L

SHELLACS CLEAR: 730 G/L PIGMENTED: 550 G/L

STAINS: 250 G/L

BATHROOM ACCESSORY NOTES:

1. PROVIDE BLOCKING FOR ALL ACCESSORIES AS REQUIRED
2. PROVIDE AND INSTALL 1 EACH OF THE FOLLOWING BATHROOM ACCESSORIES:
   A. TOILET PAPER HOLDER
   B. ROBE HOOK
   C. TOWEL BAR

CABINETERY / COUNTERTOP NOTES:

1. KITCHEN COUNTERTOPS WILL BE POST-FORMED LAMINATE WITH INTEGRAL 4" BACKSPLASH.
2. KITCHEN WILL HAVE DOUBLE BASIN STAINLESS STEEL SINK WITH GARBAGE DISPOSER AND FAUCET WITH SPRAYER.
3. BATHROOM CABINETS WILL BE STANDARD GRADE PREFINISHED WITH HARDWARE. NO EXPOSED UREA-FORMALDEHYDE WOOD PRODUCTS ALLOWED OR MUST BE SEALED.
4. BATHROOM COUNTERTOPS WILL BE CULTURED MARBLE WITH MOLDED SINK AND 4" BACKSPLASH.
5. BATHROOM WILL HAVE FAUCET AT EACH SINK.
6. BATHROOMS WILL HAVE A 6 SQUARE FOOT MIRROR AT EACH SINK.

FLOORING / MOLDING NOTES:

1. BEDROOM AND BEDROOM CLOSET FLOORING WILL BE STANDARD GRADE CARPET AND PAD. CARPET AND PAD MUST BE CERTIFIED BY THE CARPET AND RUG INSTITUTE (CRI) GREEN SEAL OF APPROVAL AND LOW-VOC OR NO ADHESIVES ARE USED FOR INSTALLATION.
2. ALL OTHER ROOMS AND CLOSETS WILL BE STANDARD GRADE VINYL PLANK FLOORING. VINYL PLANK FLOORING SHALL BE CERTIFIED BY FLOORSCORE OR GREENGUARD AS LOW VOC.
3. BASEBOARDS WILL BE 3 ¼ INCH MDF. NO EXPOSED UREA-FORMALDEHYDE WOOD PRODUCTS ALLOWED OR MUST BE SEALED
4. SHOE MOLD TO BE INSTALLED ON ALL AREAS WITH VINYL PLANK FLOORING.

APPLIANCE NOTES:

1. WHITE OR BLACK FINISHES
2. RANGE FREESTANDING ELECTRIC STANDARD GRADE. OVEN MUST BE SELF CLEANING.
3. MICROWAVE OVEN OVER RANGE WITH BUILT-IN HOOD STANDARD GRADE.
4. SUPPLY HOSES TO WATER USING FIXTURES AND APPLIANCES MUST BE ARMORED, PEX OR METAL (EXCEPT COPPER).
5. REFRIGERATOR TOP FREEZER 22 CUBIC FOOT STANDARD GRADE ENERGY STAR.
6. DISHWASHER STANDARD GRADE ENERGY STAR.
7. GARBAGE DISPOSER ½ HP STANDARD GRADE.
8. WASHING MACHINE TOP LOADING STANDARD GRADE ENERGY STAR.
9. DRYER ELECTRIC STANDARD GRADE ENERGY STAR.

CLOSET NOTES:

1. ALL CLOSETS WILL HAVE STANDARD GRADE VINYL-COATED WIRE MESH SHELVING.

DRYWALL NOTES:

1. ½ INCH SAG RESISTANT DRYWALL HUNG, TAPED, FLOATED, AND TEXTURED READY FOR PAINT ON WALLS AND CEILINGS.
2. ALL WET AREAS AS REQUIRED PER FLORIDA BUILDING CODE WILL HAVE ½ INCH WATER ROCK (GREENBOARD) DRYWALL HUNG, TAPED, FLOATED, AND TEXTURED READY FOR PAINT ON WALLS AND CEILINGS. IN LIEU OF GREENBOARD REQUIRE CEMENT BOARD WITH TAPED SEAMS. ALL SHOWER WALLS MUST BE SEALED WITH AN ELASTOMERIC WATERPROOFING SEALER PRIOR TO TILE INSTALL. ALL FIBERGLASS INSERT MUST HAVE EDGES SEALED WITH WATERPROOFING CAULK.

DOOR NOTES:

1. ALL DOORS AND TRIM WILL BE PAINTED. ALL PAINTS SHALL BE LOW VOC - MAXIMUM 50 G/L.
2. ALL EXTERIOR DOOR LOCKS WILL BE KEYED ALIKE.
3. ALL INTERIOR DOORS WILL CONTAIN THE APPROPRIATE DOOR KNOBS.
4. ALL INTERIOR DOORS WILL HAVE 2 ¼ INCH MDF TRIM. NO EXPOSED UREA-FORMALDEHYDE WOOD PRODUCTS ALLOWED OR SEALED
5. ATTIC ACCESS WILL BE PAINTED PLYWOOD ACCESS PANEL PER DETAIL MEETING REQUIREMENTS OF FBC R807.

FINISH SCHEDULE

Number	Name	Floor Finish	Base Finish	Wall Finish	Ceiling Finish	Perimeter	Area
01	LIVING/DINING	VPF	B2	GYP. PTD.	GYP. PTD.	94.58	544 SF
02	KITCHEN	VPF	B2	GYP. PTD.	GYP. PTD.	108.25	320 SF
03	BEDROOM	CPT	B1	GYP. PTD.	GYP. PTD.	45.25	128 SF
04	UTILITY CLOSET	VPF	B2	GYP. PTD.	GYP. PTD.	16.83	17 SF
05	BEDROOM	CPT	B1	GYP. PTD.	GYP. PTD.	44.92	126 SF
06	LAUNDRY	VPF	B2	WP GYP. PTD.	GYP. PTD.	25.63	39 SF
07	BATHROOM	VPF	B2	WP GYP. PTD.	GYP. PTD.	29.75	49 SF
08	CLOSET	CPT	B1	GYP. PTD.	GYP. PTD.	32.96	67 SF
09	BATHROOM	VPF	B2	WP GYP. PTD.	GYP. PTD.	39.08	95 SF
10	BEDROOM	CPT	B1	GYP. PTD.	GYP. PTD.	64.08	224 SF
11	BEDROOM	CPT	B1	GYP. PTD.	GYP. PTD.	45.25	128 SF
12	CLOSET	CPT	B1	GYP. PTD.	GYP. PTD.	16.38	12 SF
13	CLOSET	CPT	B1	GYP. PTD.	GYP. PTD.	16.38	12 SF
14	CLOSET	CPT	B1	GYP. PTD.	GYP. PTD.	18.25	16 SF
15	CLOSET	CPT	B1	GYP. PTD.	GYP. PTD.	18.25	16 SF
16	CLOSET	CPT	B1	GYP. PTD.	GYP. PTD.	14.83	14 SF
Grand total: 16							1807 SF

PLUMBING FIXTURE SCHEDULE

ROOM	ITEM	MANUFACTURER	MODEL	NOTES	QUANTITY
07	VANITY SINK	SEE SPECS	SEE SPECS		1
09	VANITY SINK	SEE SPECS	SEE SPECS		2
07	VANITY FAUCET	SEE SPECS	SEE SPECS	1.5 GPM	1
09	VANITY FAUCET	SEE SPECS	SEE SPECS	1.5 GPM	2
07	SHOWER AND TUB FAUCET	SEE SPECS	SEE SPECS	2.0 GPM	1
09	SHOWER FAUCET	SEE SPECS	SEE SPECS	2.0 GPM	1
07	BATHTUB & ENCLOSURE	SEE SPECS	SEE SPECS		1
09	SHOWER BASE & ENCLOSURE	SEE SPECS	SEE SPECS		1
02	KITCHEN SINK	SEE SPECS	SEE SPECS	DOUBLE BASIN STAINLESS STEEL	1
02	KITCHEN FAUCET	SEE SPECS	SEE SPECS	2.0 GPM	1

*VERIFY FIXTURES AND LOCATIONS WITH ARCHITECTURAL PLAN AND OWNER. ALL PLUMBING FIXTURES SHALL BE WATERSENSE

THERMAL ENVELOPE REQUIREMENTS

TYPE	REQUIREMENT
SEALANT	SEAL ALL GAPS AND PENETRATIONS IN BUILDING ENVELOPE WITH LOW VOC SEALANT OR SPRAY FOAM. ALL INSULATION SHALL BE FORMALDEHYDE FREE.
RAISED FLOOR INSULATION	R-19 INSULATION IN CONTACT WITH THE SUBFLOOR. ALL BATT INSULATION SHALL BE UNFACED OR INSTALLED WITH PAPER BACKING TO THE OUTSIDE OF THE HOUSE.
WALL INSULATION	R-19 BATT INSULATION
ATTIC INSULATION	MIN. R-38 BLOW-IN INSULATION PER MANUFACTURER'S SPECIFICATIONS TO A MINIMUM DENSITY OF 3.5 LBS. PER CUBIC FOOT (CF).
MOISTURE BARRIER	CONTINUOUS UNBROKEN MOISTURE BARRIER (HOUSE WRAP)
RADIANT BARRIER	RADIANT BARRIER FOIL INSTALLED AT UNDERSIDE OF ROOF
ROOF	PLYWOOD ROOF SHEATHING PER STRUCTURAL, ROOF UNDERLAYMENT PER FBC - RESIDENTIAL R905.1.1, ASPHALT SHINGLE ROOF, SEE ROOF PLAN
VENTED ATTIC SPACE	1FT PER 150 FT ROOF AREA, SEE CALCULATIONS ON ROOF PLAN
WINDOWS	ENERGY STAR QUALIFIED, SEE WINDOW NOTES ON SHEET A1.1
EXTERIOR DOORS	ENERGY STAR QUALIFIED DOORS
FL ECC 2020	MEET REQUIREMENTS OF SECTION R402, AND TABLE R402.1.2
FORM R402-2020	CONTRACTOR REQUIRED TO COMPLETE FORM R402-2020 RESIDENTIAL BUILDING THERMAL ENVELOPE APPROACH FOR THE APPROPRIATE CLIMATE ZONE.

APPLIANCE SCHEDULE

ROOM	ITEM	MANUFACTURER	MODEL	FINISH	NOTES
KITCHEN	MICROWAVE	SEE SPECS	SEE SPECS	SEE SPECS	OR APPROVED EQUAL
KITCHEN	RANGE	SEE SPECS	SEE SPECS	SEE SPECS	FREESTANDING ELECTRIC STANDARD GRADE OR APPROVED EQUAL, OVEN MUST BE SELF CLEANING
KITCHEN	DISHWASHER	SEE SPECS	SEE SPECS	SEE SPECS	OR APPROVED EQUAL, ENERGY STAR RATED
KITCHEN	REFRIDGERATOR	SEE SPECS	SEE SPECS	SEE SPECS	REFRIDGERATOR TOP FREEZER 22 CUBIC FOOT STANDARD GRADE OR APPROVED EQUAL
LAUNDRY	WASHER	SEE SPECS	SEE SPECS	SEE SPECS	OR APPROVED EQUAL, ENERGY STAR RATED
LAUNDRY	DRYER	SEE SPECS	SEE SPECS	SEE SPECS	OR APPROVED EQUAL, ENERGY STAR RATED
MECH	HOT WATER HEATER	SEE SPECS	SEE SPECS	SEE SPECS	OR APPROVED EQUAL
KITCHEN	GARBAGE DISPOSAL	SEE SPECS	SEE SPECS	SEE SPECS	1/2 HP STANDARD GRADE OR APPROVED EQUAL

*SUPPLY HOSES TO WATER USING FIXTURES AND APPLIANCES MUST BE ARMORED, PEX OR METAL (EXCEPT COPPER)

STAIR AND RAILING REQUIREMENTS

TYPE	REQUIREMENT
MIN. WIDTH	36"
MIN. HEAD HEIGHT	6' 8"
MAX. RISER HEIGHT	7 3/4"
MIN. TREAD DEPTH	10"
TREAD NOSING	MIN. 3/4", MAX. 11/4"
MAX. TREAD SLOPE	1/4" FROM BACK TO NOSING
HANDRAILS	REQUIRED IF 4 OR MORE RISERS
HANDRAIL HEIGHT	34"-38"
HANDRAIL PROFILE	DIAMETER 1 1/4" - 2"
GUARDRAILS	REQUIRED AT OPEN PORCHES, BALCONIES, RAMPS, OR RAISED FLOOR SURFACES THAT ARE 30" OR MORE ABOVE THE FLOOR BELOW
MIN. GUARDRAIL HEIGHT	36"
GUARDRAIL OPENING LIMITATIONS	MUST NOT ALLOW PASSAGE OF 4" SPHERE
LANDINGS	REQUIRED AT TOP & BOTTOM
MIN. LANDING SIZE	36" x 36"
DOORS	ENERGY STAR QUALIFIED DOORS
MAX. STAIR VERTICAL RISE	147" BETWEEN LEVELS OR LANDINGS

LIGHT FIXTURE SCHEDULE

MARK	DESCRIPTION	MANUFACTUREUR	MODEL	COMMENTS	QUANTITY
F1	INTERIOR RECESSED CAN	SEE SPECS	SEE SPECS		0
F2	EXTERIOR RECESSED CAN	SEE SPECS	SEE SPECS		0
F3	CHANDELIER	SEE SPECS	SEE SPECS		1
F4	ISLAND PENDANT	SEE SPECS	SEE SPECS		3
F5	EXHAUST FAN	SEE SPECS	SEE SPECS		2
F6	CEILING FAN W/ LIGHT KIT	SEE SPECS	SEE SPECS		5
F7	RECESSED CAN (WET RATED)	SEE SPECS	SEE SPECS		0
F8	EXTERIOR FLOOD LIGHT	SEE SPECS	SEE SPECS		4
F9	VANITY FIXTURE	SEE SPECS	SEE SPECS		2
F10	CEILING MOUNTED FIXTURES	SEE SPECS	SEE SPECS		18

*CONFIRM ALL FIXTURES AND SWITCHING TYPES WITH OWNER PRIOR TO PURCHASE AND INSTALLATION

BATHROOM ACCESSORY SCHEDULE

ROOM	DESCRIPTION	MANUFACTURER	MODEL	FINISH	COMMENTS
09	TOILET PAPER HOLDER	SEE SPECS	SEE SPECS	SEE SPECS	PROVIDE AND INSTALL ONE
07	TOILET PAPER HOLDER	SEE SPECS	SEE SPECS	SEE SPECS	PROVIDE AND INSTALL ONE
09	ROBE HOOK	SEE SPECS	SEE SPECS	SEE SPECS	PROVIDE AND INSTALL ONE
07	ROBE HOOK	SEE SPECS	SEE SPECS	SEE SPECS	PROVIDE AND INSTALL ONE
09	TOWEL BAR	SEE SPECS	SEE SPECS	SEE SPECS	PROVIDE AND INSTALL ONE
07	TOWEL BAR	SEE SPECS	SEE SPECS	SEE SPECS	PROVIDE AND INSTALL ONE

*PROVIDE BLOCKING FOR ALL ACCESSORIES AS REQUIRED

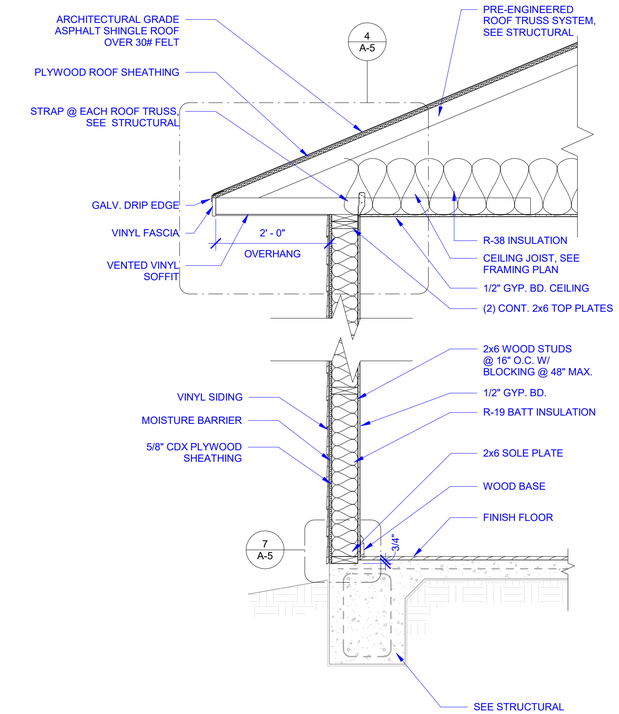
No.	Description	Date

SCHEDULES AND NOTES

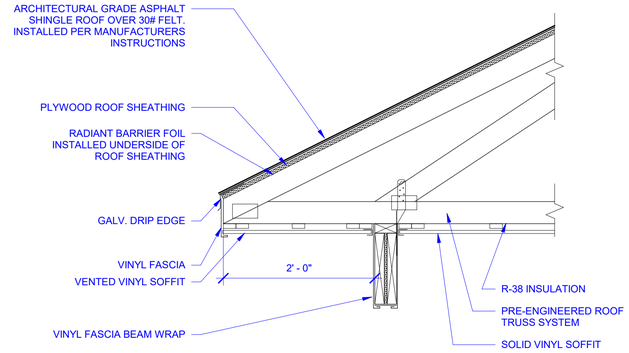
Project Number	2019-15
Date	01/25/2022
Drawn By	ZP
Checked By	IP

50% PRELIMINARY DESIGN, NOT FOR CONSTRUCTION

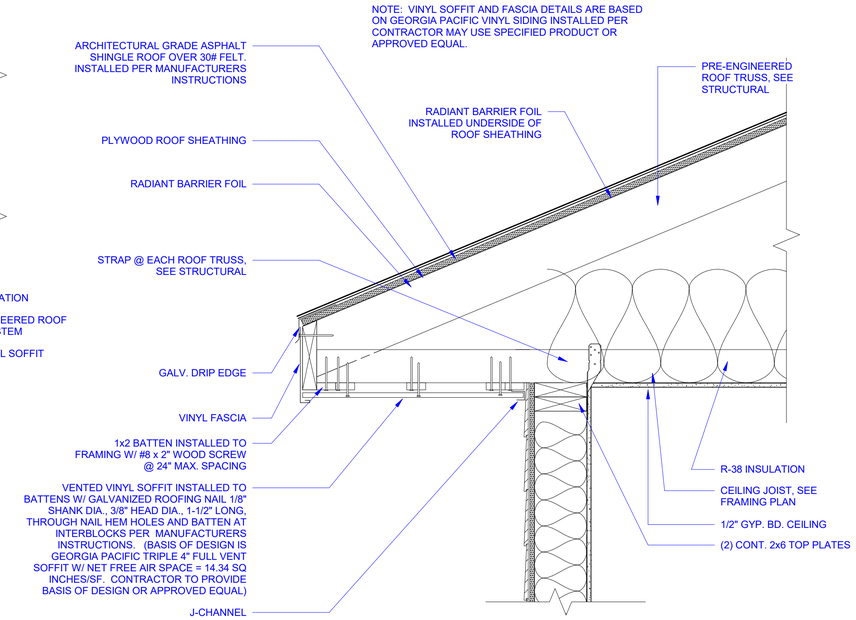
A-4



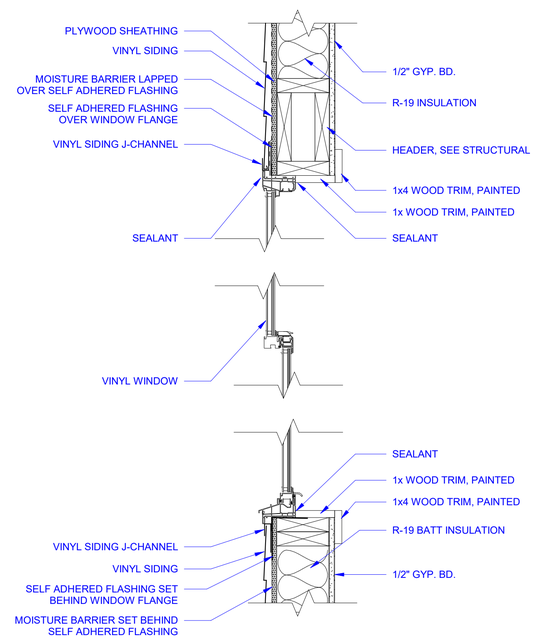
9 TYP. WALL SECTION
3/4" = 1'-0"



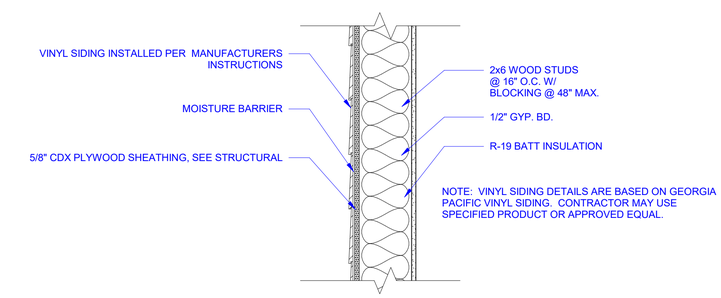
5 BEAM WRAP DETAIL1
1" = 1'-0"



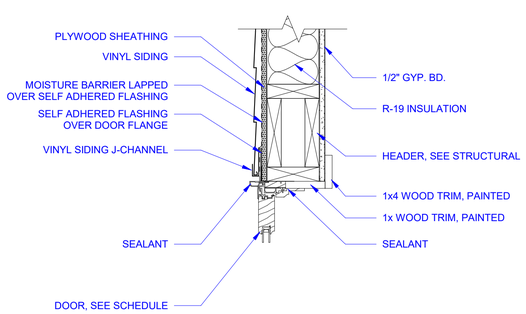
4 VINYL SOFFIT AND FASCIA DETAIL1
1 1/2" = 1'-0"



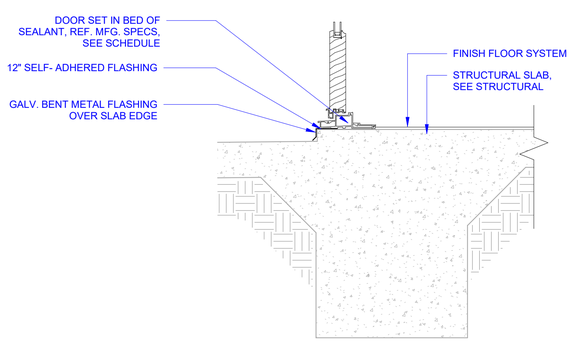
10 WINDOW HEADER AND SILL DETAIL1
1 1/2" = 1'-0"



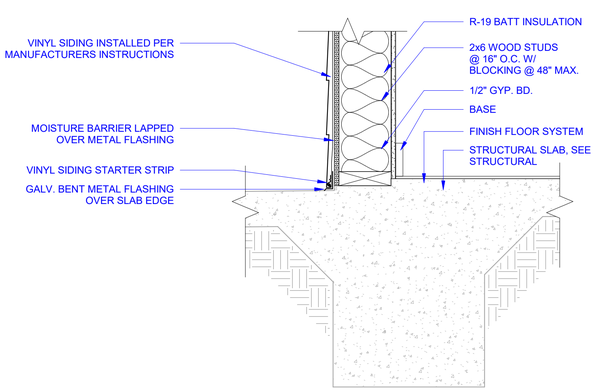
3 VINYL SIDING DETAIL1
1 1/2" = 1'-0"



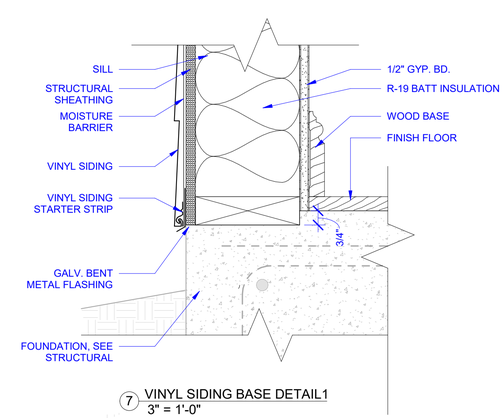
6 VINYL SIDING @ DOOR HEADER1
1 1/2" = 1'-0"



2 DOOR THRESHOLD @ PORCH DETAIL1
1 1/2" = 1'-0"



1 VINYL SIDING @ PORCH DETAIL1
1 1/2" = 1'-0"



7 VINYL SIDING BASE DETAIL1
3" = 1'-0"

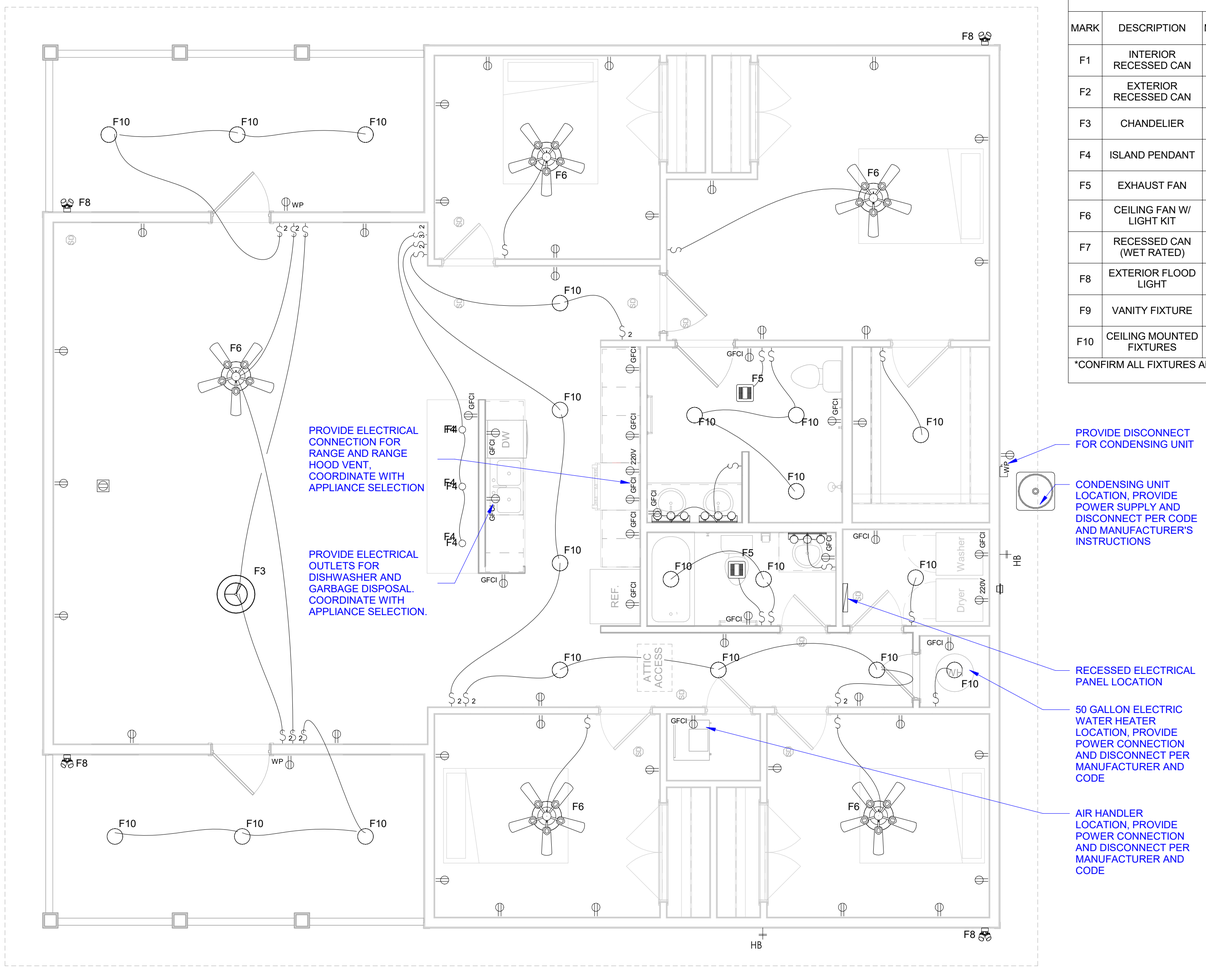
No.	Description	Date

VINYL SIDING DETAILS FOR SLAB ON GRADE

Project Number	2019-15
Date	01/25/2022
Drawn By	ZP
Checked By	IP

50% PRELIMINARY DESIGN, NOT FOR CONSTRUCTION

A-5



1 LIGHTING AND OUTLET LOCATION PLAN
1/4" = 1'-0"

LIGHT FIXTURE SCHEDULE					
MARK	DESCRIPTION	MANUFACTUREUR	MODEL	COMMENTS	QUANTITY
F1	INTERIOR RECESSED CAN	SEE SPECS	SEE SPECS		0
F2	EXTERIOR RECESSED CAN	SEE SPECS	SEE SPECS		0
F3	CHANDELIER	SEE SPECS	SEE SPECS		1
F4	ISLAND PENDANT	SEE SPECS	SEE SPECS		3
F5	EXHAUST FAN	SEE SPECS	SEE SPECS		2
F6	CEILING FAN W/ LIGHT KIT	SEE SPECS	SEE SPECS		5
F7	RECESSED CAN (WET RATED)	SEE SPECS	SEE SPECS		0
F8	EXTERIOR FLOOD LIGHT	SEE SPECS	SEE SPECS		4
F9	VANITY FIXTURE	SEE SPECS	SEE SPECS		2
F10	CEILING MOUNTED FIXTURES	SEE SPECS	SEE SPECS		18
*CONFIRM ALL FIXTURES AND SWITCHING TYPES WITH OWNER PRIOR TO PURCHASE AND INSTALLATION					

ELECTRICAL LEGEND

- F3 PENDANT LIGHT FIXTURE
- F9 WALL MOUNT FIXTURE
- F5 EXHAUST FAN
- F8 MOTION SENSOR FLOOD LIGHT
- F6 CEILING FAN W/ LIGHT KIT
- SD COMBO SMOKE & CARBON MONOXIDE DETECTOR
- F10 CEILING MOUNTED FIXTURE
- F4 ISLAND PENDANT FIXTURE
- 220V 220V OUTLET
- DUPLEX OUTLET
- GFCI GFCI OUTLET
- WP GFCI WEATHERPROOF OUTLET
- DUPLEX FLOOR OUTLET
- S SINGLE POLE SWITCH
- S2 TWO-POLE SWITCH
- DISCONNECT

ELECTRICAL NOTES:

1. ELECTRICAL WORK SHALL BE DESIGN BUILD BY ELECTRICAL SUBCONTRACTOR.
2. ELECTRICAL CONTRACTOR SHALL BE LICENSED AND RESPONSIBLE TO MEET ALL APPLICABLE REQUIREMENTS BY CODE
3. ELECTRICAL CONTRACTOR TO COORDINATE ELECTRICAL DRAWINGS WITH ARCHITECTURAL, STRUCTURAL, AND MECHANICAL DRAWINGS. CONTRACTOR IS RESPONSIBLE TO COORDINATE ANY DISCREPANCIES AND NOTIFY THE ARCHITECT PRIOR TO PROCEEDING WITH WORK.
4. PROVIDE SERVICE CONNECTION AND PROPER GROUNDING
5. PROVIDE ALL WIRING AND EQUIPMENT FOR ALL FIXTURES AND EQUIPMENT INDICATED IN ARCHITECTURAL, MECHANICAL, AND ELECTRICAL DRAWINGS PER CODE.
6. NOTE THAT ELECTRICAL OUTLETS INDICATED ON DRAWINGS ARE SHOWN AS A REMINDER FOR EQUIPMENT LOCATIONS OR SPECIFIC REQUIREMENTS TO THIS PROJECT. OUTLETS SHALL BE INSTALLED THROUGHOUT AS REQUIRED BY CODE WHETHER INDICATED ON THE PLANS OR NOT.
7. COMBINATION SMOKE AND CARBON MONOXIDE DETECTORS SHALL BE INSTALLED OUTSIDE OF EACH SEPARATE SLEEPING AREA IN THE IMMEDIATE VICINITY OF THE BEDROOMS AND ON EACH ADDITIONAL STORY OF THE DWELLING. ALL DETECTORS SHALL BE APPROVED AND LISTED IN ACCORDANCE UL 217 and UL 2034 WITH THE MANUFACTURER'S INSTRUCTIONS. REQUIRED SMOKE DETECTORS SHALL RECEIVE THEIR PRIMARY SOURCES FROM THE BUILDING WIRING, AND WHEN PRIMARY POWER IS INTERUPTED, SHALL RECEIEVE POWER FROM A BATTERY. COMBINATION SMOKE AND CARBON MONOXIDE DETECTORS SHALL BE INSTALLED PER SECTIONS R314 AND R315 OF THE 2020 FRC
8. ALL LIGHTING FIXTURES SHALL BE ENERGY STAR QUALIFIED FIXTURES
9. ALL LIGHTING FIXTURES SHALL BE LED AND INCLUDE LED BULBS
10. ALL OUTLETS SHALL BE INSTALLED MIN. 15" FROM FFE
11. ALL LIGHT SWITCHES, THERMOSTAT, CONTROLS, SHALL BE INSTALLED AT HEIGHT MIN. 36" FROM FFE AND MAX. 48" FROM FFE.
12. PROVIDE POWER TO VERTICAL PLATFORM LIFT PER MANUFACTURER'S REQUIREMENTS.
13. ALL RECEPTACLES SHALL BE TAMPER RESISTANT
14. ALL FIXTURES AND DEVICES SHALL BE UL LISTED
15. ALL 120-VOLT, SINGLE-PHASE, 15- AND 20-AMPERE BRANCH CIRCUITS SUPPLYING OUTLETS OR DEVICES INSTALLED IN DWELLING UNIT KITCHENS, FAMILY ROOMS, DINING ROOMS, LIVING ROOMS, PARLORS, LIBRARIES, DENS, BEDROOMS, SUNROOMS, RECREATION ROOMS, CLOSETS, HALLWAYS, LAUNDRY AREAS, OR SIMILAR ROOMS OR AREAS SHALL BE PROTECTED BY AFCIs.
16. CONTRACTOR SHALL PROVIDE ELECTRICAL LOAD CALCULATIONS AND ANY ADDITIONAL ELECTRICAL INFORMATION REQUESTED BY PERMIT DEPARTMENT NOT SHOWN IN DRAWINGS.

SPECIFICATIONS:	SQUARE D QO OR EQUAL	**PANEL-A**	MAINS:	MLO
AMPACITY:	200 AMPS		LOCATION:	LAUNDRY
VOLTAGE:	120/240V, 1PH, 3 WIRE		MOUNTING:	RECESSED

AMPS	POLE	TOTAL VA	WIRE SIZE	GRD SIZE	DESCRIPTION	CIRCUIT No.		CIRCUIT No.	DESCRIPTION	GRD SIZE	WIRE SIZE	TOTAL VA	POLE	AMPS
30	2	5984	10	10	AHU-1	1		2	DRYER	10	10	5000	2	30
30	2		10	10		3		4		10	10		2	30
25	2	*	10	10	AHU-1	5		6	RANGE	10	10	8500	2	50
25	2		10	10		7		8		10	10		2	50
30	2	4500	10	10	WATER HEATER	9		10	SPACE					
30	2		10	10		11		12	SPACE					
20	1	#	12	12	RECEPT. ENTRY	13		14	RECIRC. PUMP	12	12	300	1	20
20	1	#	12	12	RECEPT. BACK ENTRY	15		16	RECEPT. MASTER BEDROOM	12	12	#	1	20
20	1	#	12	12	RECEPT. LIVING ROOM	17		18	RECEPT. BEDROOM #2	12	12	#	1	20
					SPACE	19		20	RECEPT. BEDROOM #3	12	12	#	1	20
20	1	#	12	12	BEDROOM 3 AND 4 LIGHTS	21		22	RECEPT. BEDROOM #4	12	12	#	1	20
20	1	#	12	12	MASTER BEDROOM LIGHTS	23		24	SPACE					
20	1	1500	12	12	RECEPT. LAUNDRY	25		26	RECEPT. / LTS. MASTER BATH	12	12	#	1	20
20	1	#	12	12	LTS. LIVING ROOM	27		28	RECEPT. / LTS. BATH #1	12	12	#	1	20
20	1	#	12	12	KITCHEN LIGHTS	29		30	SPACE					
20	1	1500	12	12	SMALL APPLIANCE	31		32	DISPOSAL	12	12	1500	1	20
20	1	1500	12	12	SMALL APPLIANCE	33		34	DISHWASHER	12	12	1500	1	20
20	1	1500	12	12	SMALL APPLIANCE	35		36	REFRIGERATOR	12	12	1200	1	20
20	1	1200	12	12	MICROWAVE	37		38	WASHER	12	12	1500	1	20
					SPACE	39		40	SPACE					
					SPACE	41		42	SPACE					

PANEL-A

DEMAND LOAD CALCULATIONS

AREA (SQFT)	=	1,889		
GENERAL LIGHTING LOAD @ 3VA PER SQ.FT.	=	5,667		
TOTAL GENERAL LOAD	=	36,867		VA
RECEP. 1st 10,000 VA @ 100%	=	10,000 @ 100% =	10,000	VA
REST @40%	=	26,867 @ 40%=	10,747	VA
AIR CONDITIONERS @ 65%	=	5,984 @ 65%=	3,890	VA
OTHERS @ 100%	=	0 @ 100%=	0	VA
TOTAL LOAD	=		24,636	VA
CURRENT PER PHASE	=	TOTAL LOAD (VA) / (240V)		
	=	103	AMPS	

NOTES:

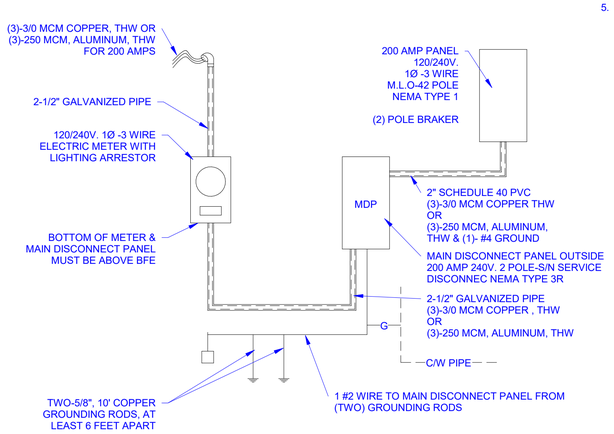
* NON SIMULTANEOUS LOAD. 100% OF COOLING IS LARGER THAN 65% OF HEAT.

INCLUDED IN GENERAL LIGHTING LOAD PER AREA.

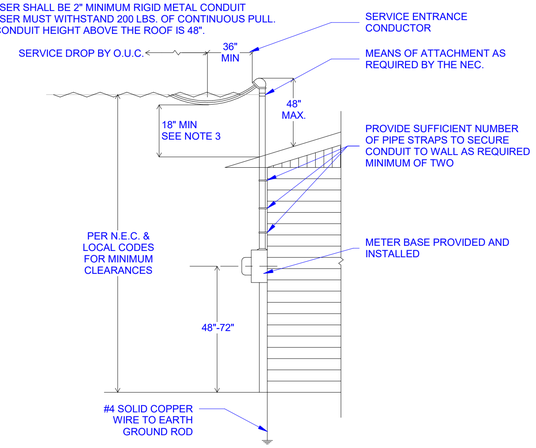
VERIFY ALL EQUIPMENT LOAD, BREAKERS AND WIRE SIZES PRIOR TO INSTALLATION ORDERING OF MATERIALS

NOTES:

1. CATV OR TELEPHONE CABLE SHALL NOT BE ATTACHED TO THE SERVICE MAST.
2. FOR SPECIFIC HEIGHT REQUIREMENTS & CLEARANCE, REFER TO N.E.C. AND LOCAL CODES.
3. SERVICE RISER SHALL BE 2" MINIMUM RIGID METAL CONDUIT
4. SERVICE RISER MUST WITHSTAND 200 LBS. OF CONTINUOUS PULL.
5. MAXIMUM CONDUIT HEIGHT ABOVE THE ROOF IS 48".



5 OVERHEAD ELECTRICAL RISER DIAGRAM
3/8" = 1'-0"



6 TYPICAL OVERHEAD RESIDENTIAL SERVICE INSTALLATION
3/8" = 1'-0"

No.	Description	Date

ROYAL ENGINEERS & CONSULTANTS
4298 ELYSIAN FIELDS AVENUE
SUITE B
NEW ORLEANS, LA 70122
(504) 283-9400
www.royalengineering.net

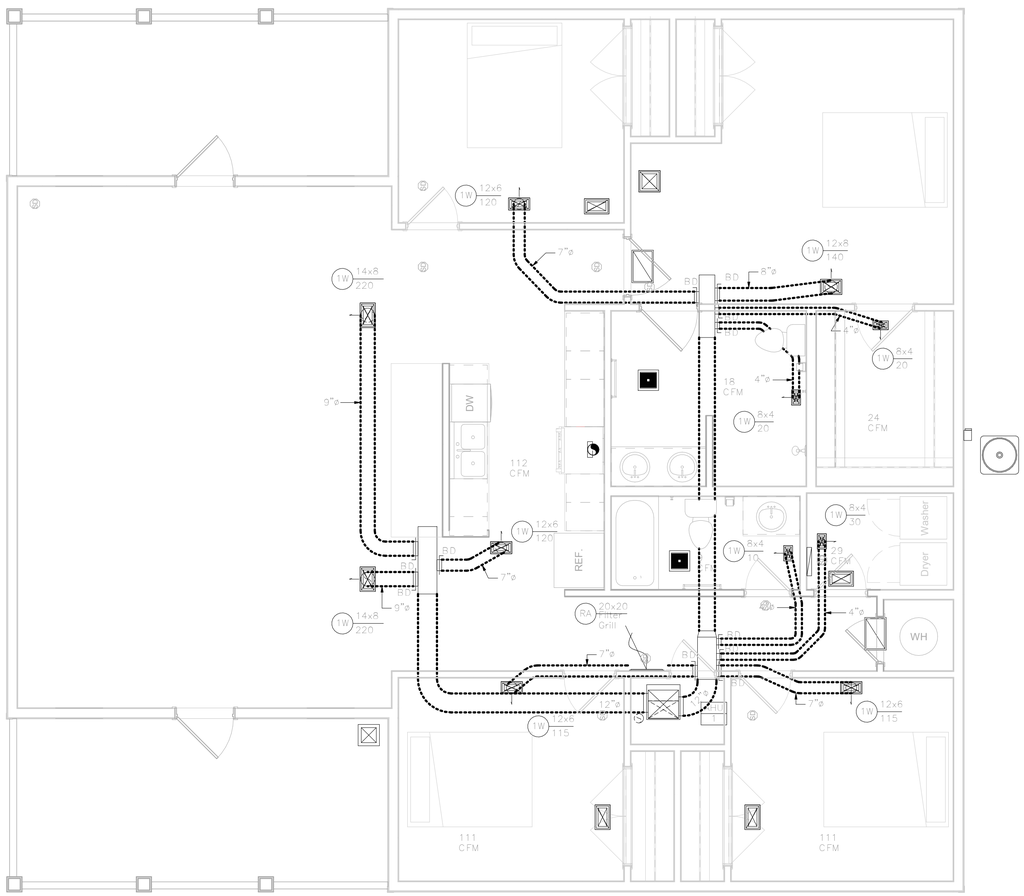
ELECTRICAL PLANS

Project Number	2019-15
Date	01/25/2022
Drawn By	SM
Checked By	IP

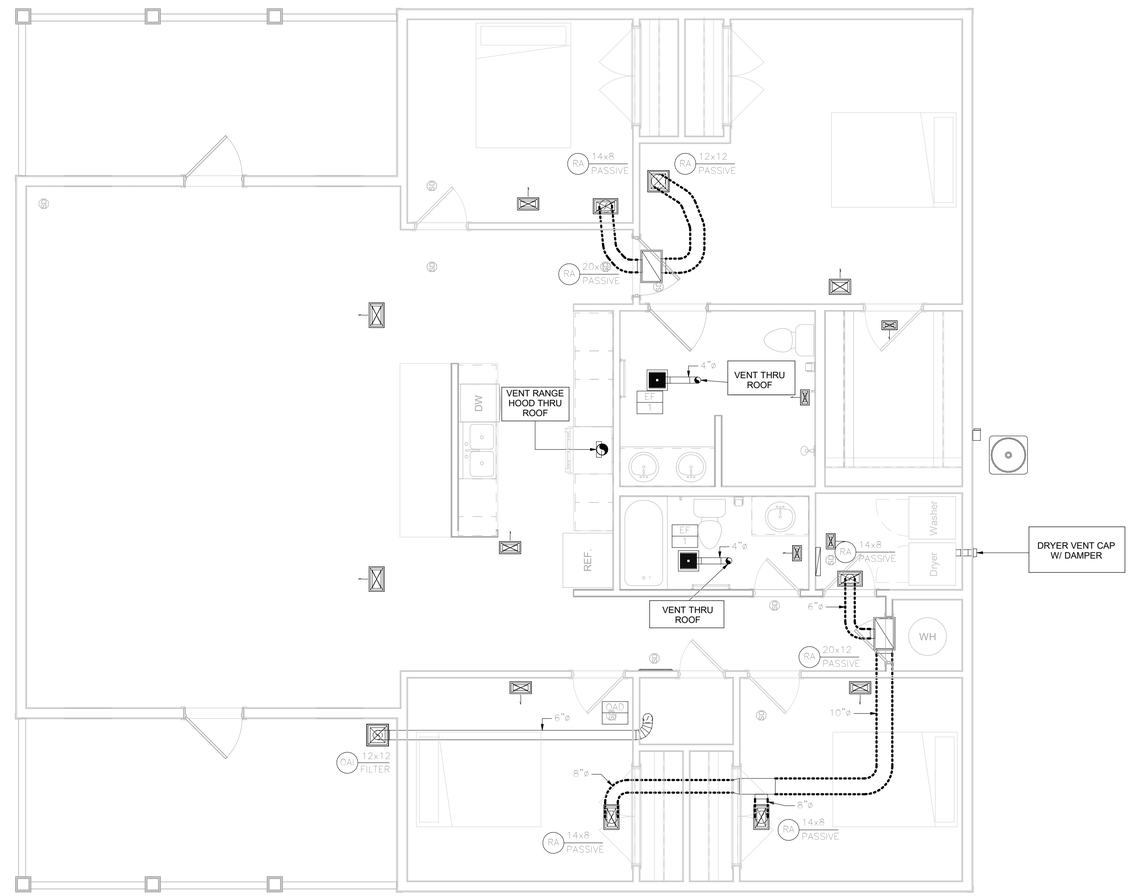
50% PRELIMINARY DESIGN, NOT FOR CONSTRUCTION

E-1

NOTE:
FLOOR PLANS ON MECHANICAL SHEETS MAY DIFFER SLIGHTLY WITH ARCHITECTURAL. MECHANICAL SHEETS ARE DIAGRAMMATIC TO INDICATE SIZE AND APPROXIMATE LOCATION OF MECHANICAL EQUIPMENT, FIXTURES, AND COMPONENTS.



1 COOLING AND HEATING DUCT SYSTEM
1/4" = 1'-0"



2 EXHAUST, VENTILATION AND PASSIVE RETURN DUCT SYSTEMS
1/4" = 1'-0"

No.	Description	Date

MECHANICAL

Project Number	2019-15
Date	01/25/2022
Drawn By	RM
Checked By	DC

50% PRELIMINARY DESIGN, NOT FOR CONSTRUCTION

M-1

HVAC ABBREVIATION LEGEND

AHU	AIR HANDLING UNIT
CU	CONDENSING UNIT
OAI	OUTDOOR AIR INTAKE
OAD	OUTDOOR AIR DAMPER
OA	OUTDOOR AIR
EF	EXHAUST FAN
DH	DEHUMIDIFIER
CP	CONDENSATE PUMP
ZD	ZONE DAMPER
BD	BALANCE DAMPER
T	THERMOSTAT
DHC	DEHUMIDIFICATION CONTROL
AF	AIR FILTRATION
SA	SUPPLY AIR
RA	RETURN AIR

A/C DUCT WORK SPECIFICATIONS

SIZE/ROUND

FLEXIBLE DUCT

CLASS 1 FLEXIBLE DUCT WITH SILVER VAPOR JACKET.
R-VALUE 6
MANUFACTURER: ATCO MODEL #036

SIZE/ROUND

METAL DUCT ROUND

GALVANIZED METAL SNAPLOCK PIPE WITH SILVER DUCT WRAP.
R-VALUE = 6
MANUFACTURER: CERTAINTEED SOFT TOUCH

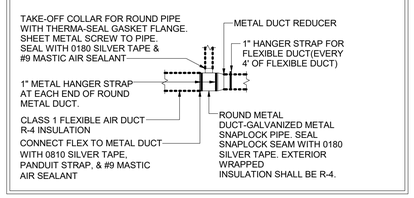
SIZE/WxH

DUCT RECTANGLE

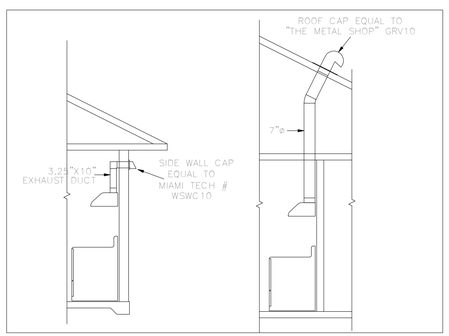
"TOUGHGARD" DUCT BOARD BLACK MAT
R-VALUE = 6
MANUFACTURER: CERTAINTEED

ALL DUCT SIZES LISTED ON PLANS ARE INSIDE DIAMETER AND ARE LISTED IN INCHES.
ADD 3" TO EACH DIMENSION FOR OUTSIDE DIAMETER

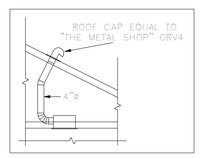
FLEX DUCT TO METAL DUCT CONNECTION DETAIL



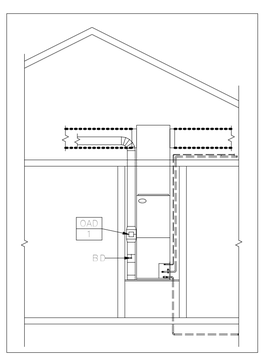
BALANCE DAMPER COLLAR



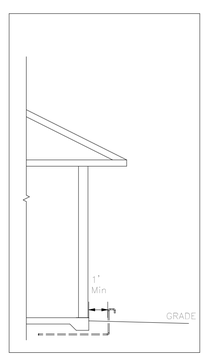
RANGE HOOD VENTING, SIDWALL VENTING AND VENTING THRU ROOF



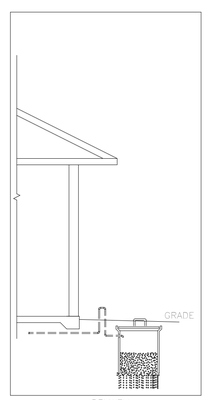
BATHROOM EXHAUST FAN VENT THRU ROOF



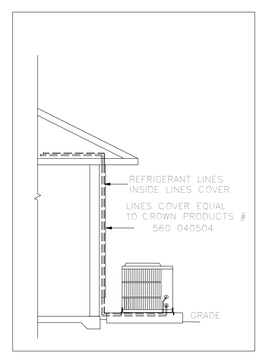
PVC CONDENSATE DRAIN LINE UNDERFLOOR BY THE PLUMBER



CONDENSATE DISCHARGE 1 FOOT MINIMUM FROM BUILDING FOUNDATION



DRYWELL ONLY WHEN REQUIRED BY LOCAL CODE



REFRIGERANT LINES RUN THROUGH ATTIC AND DOWN EXTERIOR WALL COVER LINES WITH APPROVED LINE COVER

HVAC NOTES:

GENERAL NOTES

1. ALL WORK TO BE DONE IN ACCORDANCE WITH THESE PLANS & THE FLORIDA BUILDING CODE 7th EDITION (2020)
2. MECHANICAL DRAWINGS ARE SCHEMATIC IN NATURE & ARE NOT INTENDED TO SHOW EVERY MINOR DETAIL. THE HVAC CONTRACTOR SHALL INCLUDE THE FURNISHINGS OF ALL LABOR AND MATERIALS TO COMPLETE THE AIR CONDITIONING, HEATING, AND VENTILATION SHOWN ON THE DRAWINGS TO INCLUDE, BUT NOT BE LIMITED TO THE FOLLOWING:
   - PERMIT FEES
   - ALL AIR CONDITIONING EQUIPMENT
   - EXHAUST FANS
   - SUPPLY, RETURN, VENTILATION, & EXHAUST AIR DUCT WORK
   - SUPPLY AND RETURN DIFFUSERS AND REGISTERS, DAMPERS, WEATHERPROOF VENTILATION & EXHAUST LOUVERS
   - AIR FILTRATION; MINIMUM MERV-8
   - THERMOSTATS, CO2 SENSORS, SHUT DOWN SWITCHES & RELATED CONTROL WIRING
   - EQUIPMENT SUPPORTS, HANGERS, & RACKS
   - CONDENSATE DRAIN PANS & PIPING
   - REFRIGERANT FIELD COPPER LINE SET & PIPING
3. ALL WORK SHALL BE PERFORMED BY A LICENSED HVAC CONTRACTOR CERTIFIED IN THE STATE OF FLORIDA.
4. THE HVAC CONTRACTOR SHALL VISIT THE JOB SITE, MEET WITH RELATED TRADES, & FAMILIARIZE THEMSELVES WITH ANY AND ALL CONDITIONS RELATED TO THEIR WORK.
5. ALL EQUIPMENT AND MATERIALS SHALL BE AS SPECIFIED OR APPROVED EQUAL. ANY CHANGES OR DEVIATIONS FROM THESE PLANS MUST BE APPROVED BY ENGINEER OF RECORD.
6. AIR CONDITIONING AND HEATING EQUIPMENT SHALL NOT BE SIZED BASED ON A.R.I. CAPACITY RATINGS, BUT RATHER BASED ON SPECIFIC DESIGN CONDITIONS.
7. REVISIONS OR CHANGES FROM THESE PLANS THAT MAY BE REQUIRED BECAUSE OF CONTRACTOR OPTED REVISIONS, SHALL BE COMPENSATED TO THE ENGINEER OF RECORD BY THE REQUESTING CONTRACTOR.
8. FOR ANY QUESTIONS REGARDING LOAD CALCULATIONS, ENERGY CALCULATIONS, MECHANICAL DESIGN OR EQUIPMENT SELECTION PLEASE CONTACT DENNIS STROER, CALCS-PLUS, 121 TRIPLE DIAMOND BLVD, UNIT 16, NORTH VENICE, FL 34275, 941-488-1700
9. ALL ROUGHED-IN DUCTWORK AND OR ANY MECHANICAL OPENINGS SHALL BE COVERED AND PROTECTED DURING CONSTRUCTION TO MINIMIZE DUST CONTAMINATION INSIDE THE DUCTWORK AND MECHANICAL SYSTEM. MATERIALS SUCH AS DUCK MASK, RIGID FOAM INSULATION, DUCT BOARD OR OTHER MEANS ACCEPTABLE TO SEAL THE OPENINGS.

DUCTWORK

1. DUCT CONSTRUCTION AND INSTALLATION SHALL COMPLY WITH SECTION M603 OF THE 2020 FLORIDA BUILDING CODE.
2. AIR CONDITIONING DUCT SYSTEM MATERIALS SHALL BE BASED ON THE FOLLOWING:
   - FLEXIBLE DUCT WORK - BRAND - ATCO #030 / UL 181, CLASS 1 AIR DUCT WITH REINFORCED METALLIZED POLYESTER JACKET WITH WIRE HELIX ENFORCED AIR TIGHT INNER LINER. INSULATION SHALL BE R- 4 .
   - RECTANGLE DUCT -GALVANIZED METAL DUCT WITH R-4 LINED INSULATION.
3. ALL DUCT SIZES LISTED ARE NET INSIDE DIMENSIONS.
4. ALL DUCTS AND PLENUMS SHALL BE MADE AIR TIGHT. DUCT WORK SHALL BE CONSTRUCTED AND INSTALLED IN ACCORDANCE WITH THE CURRENT EDITION OF CHAPTER 13 OF THE 2020 FLORIDA BUILDING CODE.
5. DUCT LEAKAGE SHALL NOT EXCEED 5% OF THE RATED AIR HANDLER FLOW.
6. FLEXIBLE DUCT SHALL BE EXTENDED TO ITS FULL LENGTH. EXCESS DUCT MATERIAL IN A RUN SHALL BE LESS THAN 5%.
7. FLEXIBLE DUCT SHALL BE SUPPORTED AT MANUFACTURERS RECOMMENDED INTERVALS, BUT AT NO GREATER DISTANCE THAN 4 FEET. MAXIMUM PERMISSIBLE SAG IS 1/2" PER FOOT OF SPACING BETWEEN SUPPORTS.
8. FIRE DAMPERS SHALL BE INSTALLED IN ACCORDANCE WITH SECTION 716 OF THE 2020 FLORIDA BUILDING CODE.
9. DUCTS AND TRANSFER OPENINGS THAT PENETRATE FIRE RESITANT-RATED ASSEMBLIES AND ARE NOT REQUIRED BY THIS SECTION TO HAVE DAMPERS, SHALL COMPLY WITH THE REQUIREMENTS OF SECTION 712 OF THE 2020 FLORIDA BUILDING CODE.
10. SMOKE DETECTORS SHALL BE INSTALLED IN ACCORDANCE WITH SECTION M606 OF 2020 FLORIDA BUILDING CODE.

CONDENSATE DISPOSAL

1. CONDENSATE DISPOSAL SHALL BE PROVIDED FOR EQUIPMENT AND APPLIANCES CONTAINING EVAPORATOR COILS.
2. CONDENSATE DRAIN SYSTEM SHALL BE DESIGNED, CONSTRUCTED AND INSTALLED IN ACCORDANCE WITH SECTIONS 307.2.1 THROUGH 307.2.4 OF THE 2020 FLORIDA BUILDING CODE.
3. ALL PRIMARY CONDENSATE PIPING LOCATED WITHIN THE INSIDE OF THE BUILDING SHALL BE INSULATED TO PREVENT CONDENSATION FROM FORMING ON THE EXTERIOR OF THE DRAIN LINE.
4. MAIN AND EMERGENCY CONDENSATE DRAIN LINES SHALL BE SCHEDULE 40 PVC.
5. AUXILIARY DRAIN LINE CONNECTION AT THE EVAPORATOR DRAIN PAN SHALL INCORPORATE AN SAFETY CUT-OFF SWITCH.
6. AIR HANDLERS SHALL INCORPORATE AN EMERGENCY DRAIN PAN THAT IS PIPED TO A CONSPICUOUS LOCATION AT THE EXTERIOR OF THE BUILDING OR INCORPORATES A SAFETY CUT-OFF SWITCH.
7. SLOPE HORIZONTAL CONDENSATE DRAINS A MINIMUM OF 1/4" PER FOOT.
8. CONDENSATE SHALL BE CONVEYED FROM THE DRAIN PAN OUTLET TO AN APPROVED PLACE OF DISPOSAL. CONDENSATE SHALL NOT DISCHARGE INTO A STREET, SIDEWALK, OR ANY OTHER LOCATION AS TO CAUSE A NUISANCE. IF NO APPROVED LOCATION IS AVAILABLE, THEN A DRY WELL SHALL BE INSTALLED.
9. ALL DRAIN LINES SHALL BE PROVED AND TESTED UPON EQUIPMENT START-UP.
10. ALL DRAIN LINE AND DRAIN PAN SAFETY CUT OFF CONTROLS SHALL BE TESTED UPON EQUIPMENT START-UP .

SPLIT SYSTEM AIR CONDITIONING EQUIPMENT

1. CONDENSING UNIT SHALL BE INSTALLED AS PER SECTION 304.1 AND 304.2 OF THE 2020 FLORIDA BUILDING CODE.
2. CONDENSING UNIT SHALL BE LOCATED ON SLAB ON GRADE. TIE DOWN WITH FBC APPROVED HURRICANE STRAPS.
3. CLEARANCE AROUND NON SERVICE SIDES OF THE CONDENSING UNIT SHALL COMPLY WITH MANUFACTURERS RECOMMENDATIONS AS PER MANUFACTURERS INSTALLATION INSTRUCTIONS.
4. CLEARANCE ABOVE THE CONDENSING UNIT SHALL COMPLY WITH MANUFACTURERS RECOMMENDATION AS PER MANUFACTURERS INSTALLATION INSTRUCTIONS.
5. AIR HANDLERS SHALL BE INSTALLED AS PER MANUFACTURERS INSTALLATION INSTRUCTIONS AND THE 2020 FLORIDA BUILDING CODE.
6. THE AIR HANDLER SHALL INCORPORATE A FILTER HOUSING WITH EASY ACCESS. THE FILTER COMPARTMENT SHALL NOT BE OBSTRUCTED IN ANY WAY BY THE REFRIGERANT PIPING, CONDENSATE PIPING, OR ANY OTHER ITEM WHICH MAY PREVENT REMOVAL AND INSTALLATION OF THE FILTER.
7. FILTERS SHALL BE LOCATED AT THE AIR HANDLER DIRECTLY BEFORE THE EVAPORATOR COIL. NO FILTER BACK GRILLS SHALL BE USED UNLESS NOTED ON THE DRAWING
8. CLEARANCE AROUND THE AIR HANDLER SHALL BE 4" FOR NON-SERVICE SIDES AND 36' FOR SERVICE SIDE.

OUTDOOR AIR & EXHAUST AIR SYSTEMS

1. ALL EXHAUST DUCTS SHALL TERMINATE TO EXTERIOR ROOF CAP, SIDEWALL CAP, OR SOFFIT HOOD AS INDICATED ON THE HVAC PLANS.
2. EXHAUST FANS SHALL HAVE BACK DRAFT DAMPER INSTALLED.
3. EF #1 & EF #2 SHALL BE WIRED TO WALL SWITCH ON/OFF.
4. OUTDOOR AIR DUCT SHALL BE CONNECTED TO THE RETURN SIDE OF THE AIR STREAM AT THE RETURN AIR PLENUM.
5. OUTDOOR AIR DUCT SHALL INCORPORATE A MANUAL VOLUME BALANCE DAMPER AT THE RETURN AIR PLENUM FOR INTAKE BALANCE.
6. OUTDOOR AIR DUCT SHALL INCORPORATE A NORMALLY CLOSE 24 VOLT DAMPER(VAD).
7. VAD SHALL BE WIRED TO OPEN VIA CORRESPONDING CO2 SENSOR.
8. CO2 SENSOR SHALL OPEN VAD ON CO2 RISE AND CLOSE UPON CO2 FALL. SEE CO2 CONTROL SCHEDULE.
9. OUTDOOR AIR INTAKES SHALL HAVE INSECT SCREEN AT INTAKE CAP.
10. KEEP ALL VENTILATION AIR INTAKES A MINIMUM 10' FROM EXHAUST FAN TERMINATION POINTS AND SANITARY SEWER VENT OUTLETS.
11. KEEP ALL OUTDOOR AIR INTAKES AND EXHAUST VENTS 3' FROM OPERABLE OPENINGS INTO BUILDING AND 3' FROM PROPERTY LINES

No.	Description	Date

MECHANICAL

Project Number	2019-15
Date	01/25/2022
Drawn By	RM
Checked By	DC

50% PRELIMINARY DESIGN, NOT FOR CONSTRUCTION

M-2

SPLIT AIR CONDITIONING SYSTEM SCHEDULE

	SEE EQUIPMENT SELECTION	"A" TYPE	"B" TYPE	"C" TYPE	"D" TYPE
SYSTEM	TOTAL CAPACITY BTUH *	32,107		32,425	
	SENSIBLE CAPACITY BTUH	25,140		24,746	
	HEATING CAPACITY BTUH (47* ODT)	34,707		N/A	
	MANUFACTURER	CARRIER		CARRIER	
	SEER / HSPF	15.00 / 8.5		15.00 / N/A	
	NOMINAL TONNAGE	3		3	
	AHRI NUMBER	9155179		9311698	
AIR HANDLING UNIT	DESIGNATION	AHU-1		AHU-1	
	MODEL NO.	FX4DNF037L10		FX4DNF037L10	
	SUPPLY AIR CFM	1,100		1,100	
	OUTDOOR AIR (OA) CFM	65		65	
	ENTERING AIR TEMP. DB/WB	75/63		75/63	
	EXTERNAL STATIC PRESS. IN. W. G.	0.6"		0.6"	
	INDOOR FAN FLA	4.10		4.10	
	ELECTRIC HEAT KW	9.6		9.6	
	MCA/MOCP	59 / 60		59 / 60	
CONDENSING UNIT	DESIGNATION	CU-1		CU-1	
	MODEL NO.	25HBC536A003		24AAA536A00300	
	COMPRESSOR R.L.A. / L.R.A.	16.8 / 75		13.6/79	
	OUTDOOR FAN FLA	0.6		1.1	
	OUTDOOR DESIGN TEMP. DB	95		95	
	MCA / MOCP	21.6 / 35		18.1 / 30	
	ELECTRIC SERVICE	208/230/1/60		208/230/1/60	

* EQUIPMENT OUTPUT IS BASED ON MANUFACTURER'S EXPANDED PERFORMANCE TABLES USING INDOOR CONDITIONS OF 75 DEGREES AND 63 DEGREE WET BULB.

EQUIPMENT SELECTION:

THE EQUIPMENT SCHEDULE SHOWS SEVERAL SPLIT SYSTEMS TO CHOOSE FROM. EQUIPMENT SELECTION SHALL BE BASED ON LOCATION, ORIENTATION AND THE 2020 FLORIDA BUILDING CODE - ENERGY CONSERVATION.

HVAC LOAD CALCULATIONS WERE BASED ON SIX LOCATIONS IN FLORIDA.

Pensacola

Front door Faces	Supply CFM	Sens Gain	Lat Gain	Net Tons	Rec Tons
South	871	23,296	6,980	2.52	2.59
Southwest	*919	*24,367	*6,990	*2.61	*2.71
West	913	24,228	6,981	2.60	2.69
Northwest	914	24,254	6,978	2.60	2.69
North	871	23,296	6,980	2.52	2.59
Northeast	898	23,890	6,982	2.57	2.65
East	895	23,846	6,988	2.57	2.65
Southeast	897	23,884	6,983	2.57	2.65

Gainsville AP, Florida

Front door Faces	Supply CFM	Sens Gain	Lat Gain	Net Tons	Rec Tons
South	824	22,172	6,524	2.39	2.46
Southwest	*873	*23,255	6,524	*2.48	*2.58
West	867	23,127	6,516	2.47	2.57
Northwest	869	23,156	6,512	2.47	2.57
North	820	22,100	*6,527	2.39	2.46
Northeast	851	22,778	6,526	2.44	2.53
East	848	22,715	6,526	2.44	2.52
Southeast	852	22,801	6,523	2.44	2.53

Jacksonville AP, Florida

Front door Faces	Supply CFM	Sens Gain	Lat Gain	Net Tons	Rec Tons
South	840	22,741	6,390	2.43	2.53
Southwest	*887	*23,779	6,379	*2.51	*2.64
West	883	23,705	6,388	2.51	2.63
Northwest	885	23,728	6,385	2.51	2.64
North	834	22,605	6,376	2.42	2.51
Northeast	867	23,348	*6,393	2.48	2.59
East	861	23,202	6,376	2.46	2.58
Southeast	868	23,365	6,391	2.48	2.60

Orlando AP, Florida

Front door Faces	Supply CFM	Sens Gain	Lat Gain	Net Tons	Rec Tons
South	840	22,700	5,930	2.39	2.52
Southwest	*890	*23,791	5,930	*2.48	*2.64
West	885	23,669	5,922	2.47	2.63
Northwest	889	23,768	5,932	2.47	2.64
North	839	22,673	*5,933	2.38	2.52
Northeast	868	23,300	5,928	2.44	2.59
East	866	23,259	5,932	2.43	2.58
Southeast	869	23,330	5,924	2.44	2.59

Fort Myers AP, Florida

Front door Faces	Supply CFM	Sens Gain	Lat Gain	Net Tons	Rec Tons
South	837	22,700	6,397	2.42	2.52
Southwest	886	23,756	6,383	2.51	2.64
West	883	23,710	6,388	2.51	2.63
Northwest	*886	*23,761	6,382	*2.51	*2.64
North	837	22,698	*6,397	2.42	2.52
Northeast	865	23,308	6,391	2.47	2.59
East	861	23,198	6,377	2.46	2.58
Southeast	868	23,375	6,391	2.48	2.60

Miami AP, Florida

Front door Faces	Supply CFM	Sens Gain	Lat Gain	Net Tons	Rec Tons
South	832	22,211	6,763	2.41	2.47
Southwest	878	23,237	6,762	2.50	2.58
West	875	23,174	6,762	2.49	2.57
Northwest	*879	*23,252	6,761	*2.50	*2.58
North	832	22,211	6,763	2.41	2.47
Northeast	858	22,802	6,761	2.46	2.53
East	854	22,689	6,751	2.45	2.52
Southeast	860	22,841	*6,764	2.47	2.54

EXHAUST FAN SCHEDULE

DESIGNATION	EF #1		
FAN TYPE	CEILING		
DRIVE TYPE	DIRECT		
AIR FLOW CFM	50		
STATIC PRESS. IN. W.G.	0.25		
NOISE(SONES)	0.7		
ELECTRIC SERVICE	120/1/60		
MAX AMPS	.14		
MANUFACTURER	PANASONIC		
MODEL NO.	FV-05-11VKS1		
CONTROL	3		

SPEED SETTINGS AND CONTROL

1. SET TO 50 CFM.
2. STANDARD ON/OFF WALL SWITCH WITH MOTION SENSOR OPTION

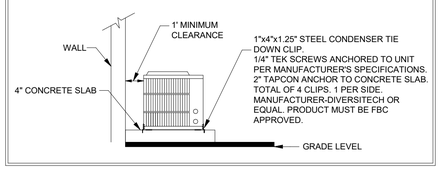
VENTILATION AIR CALCULATION

ASHRAE 62.2-2010 - CHAPTER 4
REFERENCE TABLE 4.1
OCCUPANCY CATEGORY - RESIDENTIAL

Rp 7.5	CFM/COMBINED OUTDOOR AIR FLOW RATE
Pz 5	OCCUPANTS
Ra .01	CFM/FT^2 - ZONE OCCUPIABLE AREA
Az 2,039	FT^2 - ZONE OCCUPIABLE AREA
Vbz 44.80	CFM, BREATHING ZONE OA FLOW
Ez 1.0	ZONE AIR DISTRIBUTION EFFECT
Voz 57	MINIMUM REQUIRED ZONE OUTDOOR AIR FLOW

*OUTSIDE AIR REQUIREMENTS ARE IN ACCORDANCE WITH FLORIDA MECHANICAL CODE 2014 AND ASHRAE 2014-62.2, VENTILATION FOR ACCEPTABLE INDOOR AIR QUALITY

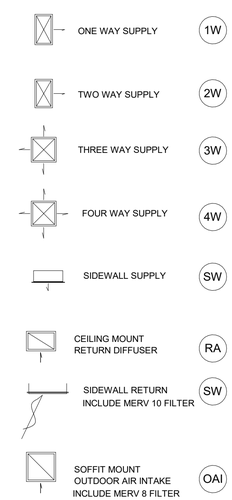
CONDENSING UNIT MOUNTING DETAIL



OAD-1 OUTDOOR AIR DAMPER

OUTDOOR AIR DAMPER TO BE EQUAL TO HONEYWELL EARD-6 DAMPER SHALL OPEN ONLY WHEN CONDENSING UNIT IS OPERATING BALANCE OUTDOOR AIR TO 57 CFM.

AIR DIFFUSER & DESCRIPTION



HVAC DIFFUSER SPECIFICATIONS

SUPPLY DIFFUSER - CEILING

MANUFACTURER: AIRGUIDE
MODEL: CBHML-(1,2,3,4)ME
DESCRIPTION: WHITE ALUMINUM ADJUSTABLE CURVED BLADE WITH PARALLEL BLADE DAMPER

SUPPLY DIFFUSER - SIDEWALL

MANUFACTURER: AIRGUIDE
MODEL: VML-ME
DESCRIPTION: WHITE ALUMINUM SINGLE DEFLECTION WITH PARALLEL BLADE DAMPER

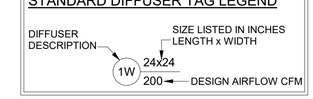
RETURN DIFFUSER - CEILING/SIDEWALL

MANUFACTURER: AIRGUIDE
MODEL: RA
DESCRIPTION: WHITE ALUMINUM 38" BLADE/NON-FILTER BACK

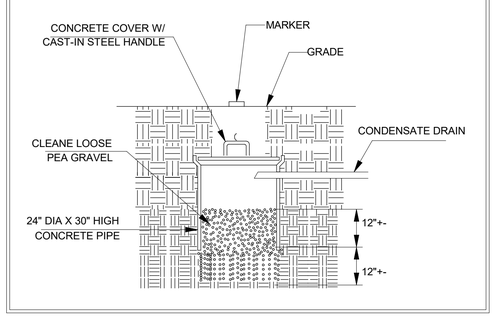
RETURN DIFFUSER - CEILING/SIDEWALL

MANUFACTURER: AIRGUIDE
MODEL: RF-2
DESCRIPTION: WHITE ALUMINUM 38" BLADE/FILTER BACK *FOR RANGE HOOD MAKE-UP AIR DIFFUSER. PROVIDE PERMANENT WASHABLE FILTER.

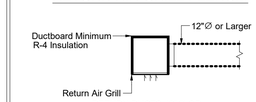
STANDARD DIFFUSER TAG LEGEND



DRYWELL DETAIL



RETURN AIR GRILL PLENUM



RETURN DUCTS 12"∅ OR LARGER SHALL TERMINATE AT A PLENUM STYLE REGISTER BOX

No.	Description	Date

MECHANICAL

Project Number	2019-15
Date	01/25/2022
Drawn By	RM
Checked By	DC

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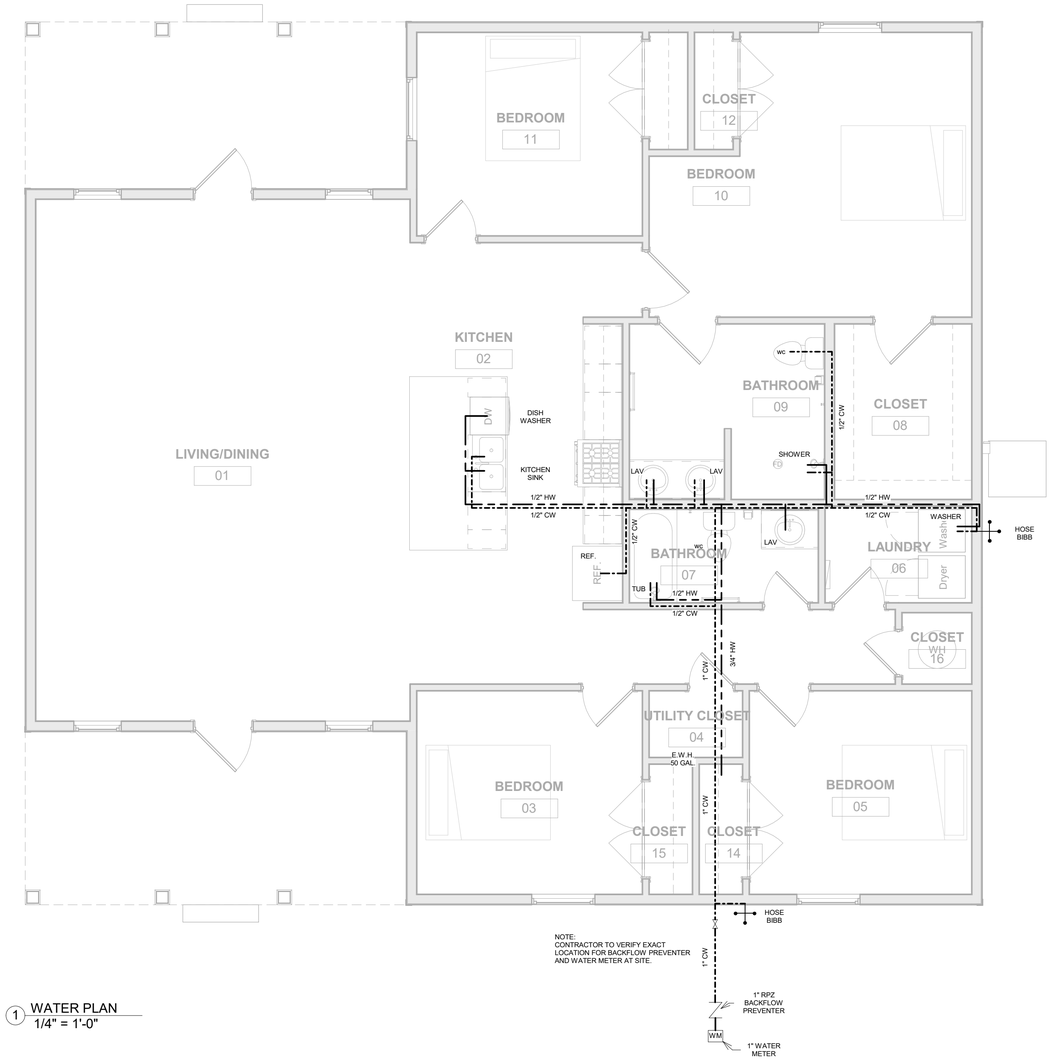
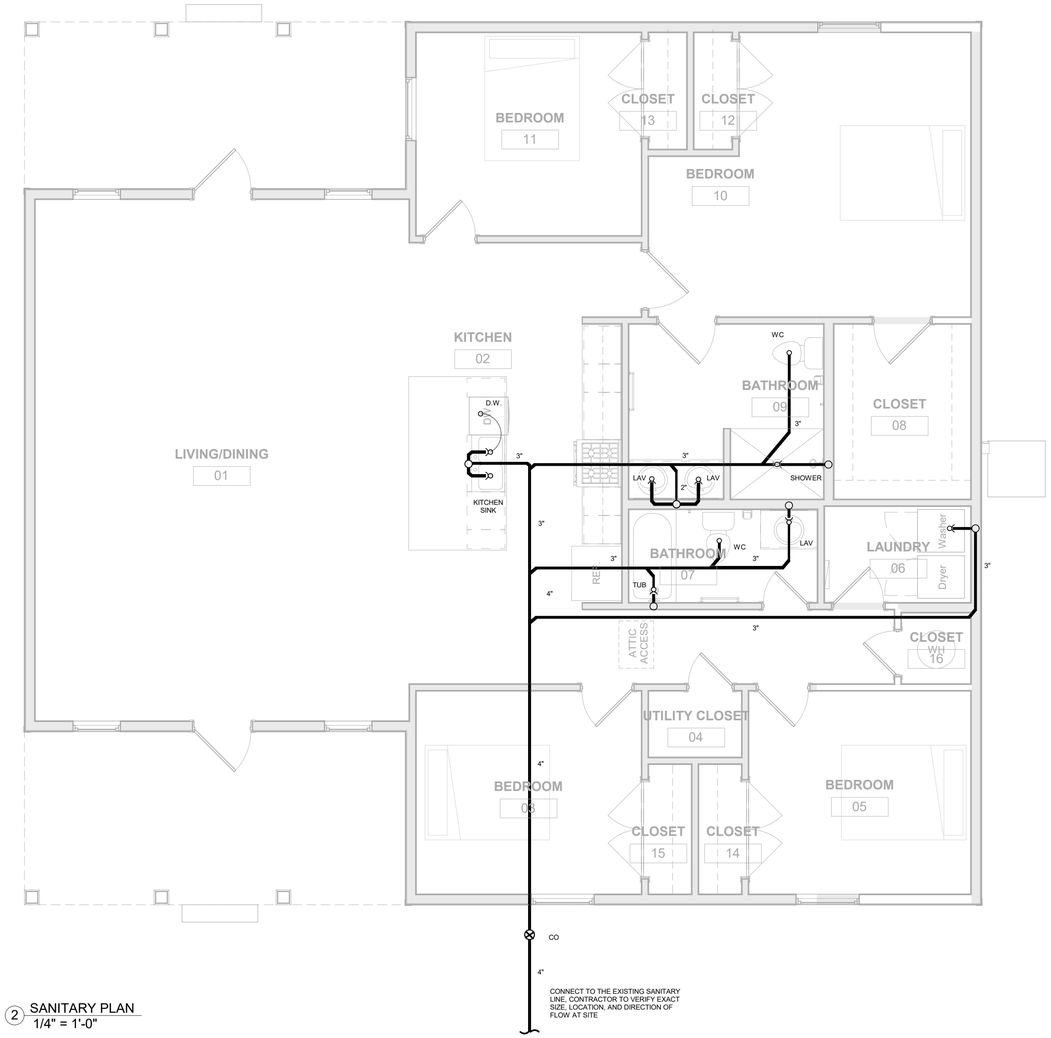
M-3



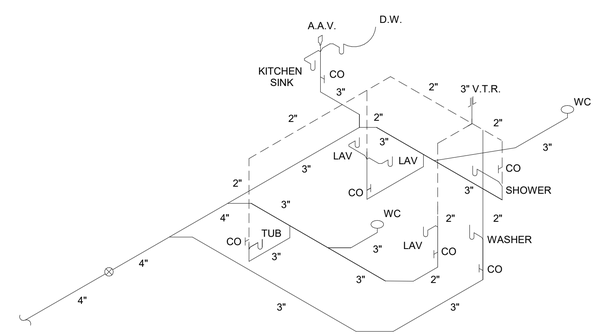
1 WATER PLAN
1/4" = 1'-0"



2 SANITARY PLAN
1/4" = 1'-0"

PLUMBING NOTES:

1. PLUMBING WORK SHALL BE DESIGN BUILD BY PLUMBING SUBCONTRACTOR AND RISER DIAGRAM SHALL BE REVIEWED AND SUBMITTED AS REQUIRED BY PERMITTING.
2. PLUMBING CONTRACTOR SHALL BE LICENSED AND RESPONSIBLE TO MEET ALL APPLICABLE REQUIREMENTS BY CODE
3. ALL PLUMBING FIXTURES AND PIPING SHALL CONFORM TO THE LOCAL PLUMBING CODES.
4. HOT WATER HEATER TO BE ELECTRIC AND MEET REQUIREMENTS OF ENERGY STAR REFERENCE HOME WITH MIN. UEF=0.93.
5. INSULATE PIPES WITH MIN. R-4 PIPE INSULATION
6. USE WATER-CONSERVING FIXTURES MEETING THE FOLLOWING REQUIREMENTS:
   - A. TOILETS 1.28 GPF
   - B. SHOWERHEADS 2.0 GPM
   - C. KITCHEN FAUCETS 2.0 GPM
   - D. BATHROOM FAUCETS 1.5 GPM
   - E. ALL PLUMBING FIXTURES SHALL BE WATERSENSE. WATER CLOSETS MUST HAVE A MINIMUM MAP RATING OF 600.
7. VERIFY FIXTURES AND LOCATIONS WITH ARCHITECTURAL PLAN AND OWNER.
8. VERIFY ALL APPLIANCES/EQUIPMENT (HVAC, WATER HEATERS, EXHAUST FANS, ETC.) IN BID
9. PROVIDE SERVICE CONNECTIONS
10. VERIFY HOT WATER HEATER LOCATIONS AND PROVIDE PLASTIC DRAIN/DRIP PAN WITH DRAIN TO EXTERIOR
11. VERIFY HOSE BIB LOCATIONS (MIN. 2 EXTERIOR HOSE BIBS)
12. PROVIDE "NO-DRIP" SUPPLY/DRAIN @ WASHER
13. PROVIDE ACCESS PANELS TO TUB/SHOWER UNITS
14. PERFORM ALL TESTS BEFORE INSULATION AND BACKFILLING
15. PROVIDE ALL CLEAN OUTS, VACUUM BREAKERS AND OTHER COMPONENTS REQUIRED BY CODE WHETHER SHOWN ON DRAWING OR NOT.
16. SHUTOFF VALVES SHALL BE REQUIRED ON EACH FIXTURE SUPPLY PIPE TO EACH PLUMBING APPLIANCE AND TO EACH PLUMBING FIXTURE OTHER THAN BATHTUBS AND SHOWERS. VALVES SERVING INDIVIDUAL PLUMBING FIXTURES, PLUMBING APPLIANCES, RISERS AND BRANCHES SHALL BE ACCESSIBLE.
17. ALL SINKS AND LAVATORIES TO BE PROVIDED HOT AND COLD WATER
18. ALL PENETRATIONS THROUGH ROOF SHALL BE FLASHED USING DEKTITE PIPE FLASHING OR EQUAL AND DEKTITE RUBBER BOOT OR EQUAL
19. ALL PIPING IN UNINSULATED AREAS AND EXPOSED TO EXTERIOR SHALL BE INSULATED
20. PLUMBING SUBCONTRACTOR SHALL PROVIDE AND INSTALL DRAIN LINES FOR ALL HVAC TO THE NEAREST PLUMBING LINES AND VERIFY LOCATION OF ALL EXISTING UTILITY LINES. (WATERS, SEWER, GAS, ETC.)
21. ALL DRAIN LINES SHALL HAVE WATER SEAL TRAPS AND EACH FIXTURE GROUP VENTED.
22. ALL SANITARY SEWER PIPING SHALL BE SCHEDULE 40 PVC DWV PIPE AND FITTING. MINIMUM SLOPE OF SANITARY SEWER LINE SHALL BE .004 PER FOOT.
23. **CONTRACTOR SHALL PROVIDE CLEAN OUT LOCATIONS, TIE-IN LOCATIONS, AND WATER AND SEWER LINE LOCATIONS ON SITE TO PERMIT DEPARTMENT FOR REVIEW.**



CONNECT TO THE EXISTING SANITARY LINE, CONTRACTOR TO VERIFY EXACT SIZE AND LOCATION @ SINK

3 PLUMBING RISER DIAGRAM
1/4" = 1'-0"

No.	Description	Date

PLUMBING PLANS

Project Number	2019-15
Date	01/25/2022
Drawn By	ZP
Checked By	BT

50% PRELIMINARY DESIGN, NOT FOR CONSTRUCTION

P-1

GENERAL NOTES:

1. STRUCTURAL DRAWINGS SHALL BE USED IN CONJUNCTION WITH THE ARCHITECTURAL, MECHANICAL, ELECTRICAL, SHOP DRAWINGS AND SPECIFICATIONS.

2. CONSTRUCTION SHALL FOLLOW THE 2020 FLORIDA BUILDING CODE, 7th EDITION, THE 2020 FLORIDA RESIDENTIAL CODE, 7th EDITIONS, AND ALL LOCAL, STATE, AND FEDERAL REQUIREMENTS AND REGULATIONS. BUILDING CODE SHALL TAKE PRECENDENCE OVER DRAWINGS IF CONFLICT EXISTS.

3. 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 AS A PREVENTATIVE 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."

4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL FINAL DIMENSIONS AND FIT-UP OF THE STRUCTURE, INCLUDING VERIFYING ALL EXISTING CONDITIONS AND DIMENSIONS BEFORE COMMENCING WORK.

5. THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING ANY WORK. ANY INTERFERENCE SHALL BE BROUGHT TO THE ATTENTION OF THE STRUCTURAL ENGINEER.

6. THE CONTRACTOR SHALL VERIFY THE LOCATION OF ALL DIMENSIONS AND ELEVATIONS WITH ARCHITECT'S DRAWINGS BEFORE STARTING WORK.

7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE DESIGN PLACEMENT, MAINTENANCE, ETC. OF ANY AND ALL SHORING, BRACING, TIE BACKS, ETC. NEEDED TO SUPPORT ANY PART OF THE NEW OR EXISTING CONSTRUCTION DURING THE ENTIRE CONSTRUCTION PROCESS TO ENSURE THE SAFETY AND INTEGRITY OF THE STRUCTURE UNTIL THE NECESSARY PERMANENT ELEMENTS ARE IN PLACE.

8. SEE ARCHITECTURAL, MECHANICAL, AND ELECTRICAL DRAWINGS FOR EXACT LOCATION OF ALL DEPRESSIONS, SLOPES, OPENINGS, PENETRATIONS, ETC. PENETRATION THROUGH BEAMS OR OPENINGS IN STRUCTURAL ELEMENTS NOT SHOWN ON THE STRUCTURAL DRAWINGS SHALL BE BROUGHT TO THE ATTENTION OF THE STRUCTURAL ENGINEER.

9. UNLESS NOTED OTHERWISE, DETAILS SHOWN ON ANY DRAWING ARE TO BE CONSIDERED TYPICAL FOR ALL SIMILAR CONDITIONS.

DESIGN CRITERIA:

BUILDING CODE: 2020 FLORIDA BUILDING CODE, BUILDING, 7TH EDITION
ASCE 7-16 MINIMUM DESIGN LOADS AND ASSOCIATED CRITERIA FOR BUILDINGS AND OTHER STRUCTURES
2020 FLORIDA BUILDING CODE, RESIDENTIAL, 7TH EDITION

1. DESIGN GRAVITY LOADS:

• FIRST FLOOR	DL = 50 PSF LL = 40 PSF
• UNINHABITABLE ATTIC WITH LIMITED STORAGE	LL = 20 PSF
• BALCONIES (EXTERIOR) AND DECK	LL = 40 PSF
• GUARDS AND HANDRAILS	LL = 200 PSF
• GUARD IN-FILL COMPONENTS	LL = 50 PSF
• ROOMS OTHER THAN SLEEPING ROOMS	LL = 40 PSF
• SLEEPING ROOMS	LL = 30 PSF
• STAIRS	LL = 40 PSF
• ATTIC	DL = 10 PSF LL = 20 PSF
• ROOF	DL = 20 PSF LL = 20 PSF

3. WIND LOADS (ASCE 7-16)

• ULTIMATE WIND SPEED =	180 MPH
• NOMINAL WIND SPEED=	139 MPH
• RISK CATEGORY =	II
• WIND EXPOSURE CATEGORY =	C

FOUNDATION NOTES:

1. PLACE FOOTINGS ON UNDISTURBED SOIL. NOTIFY THE ENGINEER IF "SOFT SPOTS", UNDERGROUND OBSTRUCTIONS, OR ANY UNUSUAL CONDITION IS ENCOUNTERED DURING STRIPPING, EXCAVATION OR FILLING.

2. GRADE BEAMS MAY BE EARTH FORMED PROVIDED DIMENSIONAL TOLERANCES LISTED IN ACI 117-90 ARE ADHERED TO.

3. PLACE 10 MIL WATERPROOF MEMBRANE BENEATH ALL INTERIOR SLABS AND GRADE BEAMS. LAP 12" TO ACCOMMODATE CONCRETE POURING DIRECTION

CONCRETE NOTES:

1. ALL CONCRETE WORK SHALL CONFORM TO ACI 201 SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BULIDINGS

2. CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI AT 28 DAYS WITH A 5" SLUMP

3. CONCRETE SHALL BE NORMAL WEIGHT OF 150 LBS. PER CUBIC FOOT AND SHALL CONFORM TO THE LATEST ACI 301 SPECIFICATION.

4. PORTLAND CEMENT SHALL CONFORM TO ASTM C150, TYPE I OR II.

5. AGGREGATE FOR NORMAL WEIGHT CONCRETE SHALL MEET ASTM C33.

6. REINFORCING STEEL SHALL BE IN ACCORDANCE WITH ASTM A615 GRADE 60, WELDED WIRE FABRIC (WWF) SHALL BE IN ACCORDANCE WITH ASTM 185, WIRE SHALL CONFORM TO ASTM A82.

7. REINFORCING STEEL SHALL BE SPLICED WITH A CLASS "B" SPLICE IN ACCORDANCE WITH THE CURRENT ACI 318.

8. REINFORCING FABRIC ON GRADE SHALL BE CHAIRED WITH 3000 PSI CONCRETE BRICKETTES SPACED TO ADEQUATELY SUPPORT THE REINFORCING, BUT NOT GREATER THAN 3'-0" O.C. EACH WAY. LAP ALL FABRIC ONE WIRE SPACING PLUS 6 INCHES.

9. PROVIDE A 90 DEGREE HOOK ON ALL TOP REINFORCEMENT IN ALL BEAMS AT DISCONTINUOUS ENDS AND LAP SPLICE 30 BAR DIAMETERS AT MID SPAN. CONTINUOUS BOTTOM BARS SHALL BE LAP SPLICED 6" AT CENTER OF SUPPORT.

10. EXCEPT AS NOTED OTHERWISE WHERE CONTINUOUS REINFORCING IS SPECIFIED, HOOK BARS AT NON-CONTINUOUS ENDS, LAP BARS AS INDICATED BELOW:
    A. #3 1'-3"
    B. #4 1'-8"
    C. #5 2'-2"
    D. #6 2'-5"
    E. #7 3'-6"

1. PROVIDE TWO (2) #5, 4'-0" LONGER THAN OPENING DIMENSION ON ALL SIDES OF OPENING IN SLAB

2. PROVIDE THE FOLLOWING COVER FOR REINFORCING:
    A. FOOTINGS AND GRADE BEAMS: 3"
    B. FORMED SURFACES EXPOSED TO SOIL: 3"
    C. BEAMS, COLUMNS, AND WALLS: 1 1/2"
    D. SLABS: 1 1/2"

3. DO NOT PENETRATE OR MAKE HOLES OR OPENINGS THROUGH FOUNDATION AND/OR FOOTINGS WITHOUT ENGINEER'S APPROVAL.

4. EXPOSED EDGES OF CONCRETE SHALL BE CHAMFERED 3/4"

CONCRETE MASONRY UNIT NOTES:

1. PROVIDE HOLLOW CONCRETE MASONRY UNITS MEETING ASTM C90, LIGHTWEIGHT, TYPE 1, WITH A MINIMUM COMPRESSIVE STRENGTH OF 2000 PSI ON THE NET AREA FOR INDIVIDUAL UNITS.

2. CMU MORTAR SHALL MEET ASTM C270, TYPE 'M' OR 'S', AND HAVE A COMPRESSIVE CUBE STRENGTH OF 1800 PSI AT 28 DAYS.

3. CMU GROUT, POURED OR PUMPED, SHALL MEET ASTM C476, AND HAVE A MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 3000 PSI.

4. REINFORCING BARS SHALL MEET ASTM A615, GRADE 60, JOINT REINFORCING SHALL MEET ASTM A82.

5. REINFORCED MASONRY WALLS SHALL HAVE A MINIMUM F'M = 2000 PSI.

6. REINFORCEMENT SHALL BE HELD IN PLACE PRIOR TO GROUTING WITH WIRE POSITIONERS SPACED AT INTERVALS NOT EXCEEDING 192 REINFORCING BAR DIAMETERS FOR 10 FEET. ADDITIONAL POSITIONERS SHALL BE PLACED AT ALL REINFORCING BAR SPLICES.

7. PROVIDE DOWELS FOR CMU WALL CONNECTION TO CONCRETE BEAMS AND SLABS AND FOOTINGS, SEE DETAILS. LAP DOWELS 2'-0" (MIN.) WITH VERTICAL BARS.

8. CMU TO BE LAID IN RUNNING BOND PATTERN.

9. GROUT PLACEMENT SHALL CONFORM TO TABLE 5 OF ACI 530.1/ASCE 6/TMS 602; HOWEVER, THE MAXIMUM GROUT POUR HEIGHT SHALL NOT EXCEED 8 FEET AND THE MAXIMUM HEIGHT WHICH GROUT IS PLACED IN ONE CONTINUOUS OPERATION (GROUT LIFT) SHALL NOT EXCEED 4 FEET. THERE SHALL BE A MINIMUM OF 1 HOUR SETTING TIME BETWEEN EACH GROUT LIFT.

10. THE TOP OF EACH GROUT POUR SHALL BE 1" BELOW THE BED JOINT.

11. REINFORCEMENT, REBAR POSITIONERS, AND TIES SHALL BE PLACED PRIOR TO GROUTING.

12. CONTRACTOR SHALL DESIGN, FABRICATE, AND INSTALL BRACING THAT WILL ASSURE THE STABILITY OF THE MASONRY DURING CONSTRUCTION.

13. ALL CONCRETE MASONRY WORK SHALL CONFORM TO TMS 402-16 BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES AND TMS 602-16 SPECIFICATION FOR MASONRY STRUCTURES.

14. REINFORCING BARS SHALL HAVE A MASONRY COVER NOT LESS THAN THE FOLLOWING:
    A. MASONRY FACE EXPOSED TO EARTH OR WEATHER: 2 INCHES FOR BARS LARGER THAN NO. 5; 1.5 INCHES FOR NO. 5 BARS OR SMALLER
    B. MASONRY NOT EXPOSED TO EARTH OR WEATHER: 1.5 INCHES

15. EXCEPT AS NOTED OTHERWISE WHERE CONTINUOUS REINFORCING IS SPECIFIED, HOOK BARS AT NON-CONTINUOUS ENDS, LAP BARS AS INDICATED BELOW:
    A. #3 1'-5
    B. #4 2' 6"
    C. #5 3'-10"
    D. #6 4'-4"
    E. #7 7'-3"

WOOD FRAMING NOTES:

1. WOOD FRAMING FABRICATION AND ERECTION SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE 2020 FLORIDA BUILDING CODE (FBC), THE 2020 FLORIDA RESIDENTIAL CODE (FRC) AND SHALL CONFORM TO THE WOOD FRAME CONSTRUCTION MANUAL (WFCM) FOR ONE- AND TWO-FAMILY DWELLINGS, 2001 EDITION AND THE PLYWOOD DESIGN SPECIFICATIONS BY THE APA. ALL WOOD FRAMING CONNECTORS, STRAPS, AND TIE-DOWNS SHALL BE USED IN ADDITION TO AND CONJUNCTION WITH THE REQUIREMENTS STATED ABOVE. THE DESIGN AND NOTES BELOW ALSO COMPLY WITH THE WOOD FRAMING NOTES FOR SPECIFIC REQUIREMNTS MEETING FLORIDA BUILDING CODE (FBC) SECTIONS 2314-2330 RELATED TO WOOD CONSTRUCTION IN HIGH VELOCITY HURRICANE ZONES (HVHZ)

2. FRAMING LUMBER OF ALL SILLS, GIRDERS, AND HEADERS OF & SUPPORTING LOAD BEARING WALLS SHALL BE SOUTHERN PINE GRADE MARKED AND KILN DRIED, NO. 1 OR BETTER. ALL OTHER FRAMING LUMBER SHALL BE SOUTHERN PINE GRADE MARKED AND KILN DRIED, NO. 2 OR BETTER. ALL MEMBER PIECES, ENDS, JOINTS, OR SPLICES SHALL BE OVER SUPPORTS UNLESS NOTED OTHERWISE.

3. UNLESS NOTED OTHERWISE MULTIPLE PIECES OF LUMBER OR MANUFACTURED WOOD PRODUCTS USED TO FORM BEAM OR HEADER MEMBERS SHALL BE ATTACHED TOGETHER WITH 2 ROWS OF 12d NAILS SPACED AT 12" FOR PIECES UP TO 12" DEEP. ALL OTHER PIECES SHALL HAVE 3 ROWS OF 12d NAILS AT 12".

4. OPENINGS IN EXTERIOR WOOD-FRAMED WALLS SHALL HAVE THE FOLLOWING MINIMUM NUMBER OF FULL HEIGHT STUDS AT EACH JAMB AS PER TABLE 3.23c IN THE WFCM:

A.	OPENINGS LESS THAN 4'-0":	2 STUDS
B.	OPENINGS 4'-0" TO 6'-0":	3 STUDS
C.	OPENINGS 6'-0" TO 10'-0":	4 STUDS
D.	OPENINGS LESS THAN 4'-0":	2 STUDS

*ALL MULTIPLE STUDS SHALL BE CONNECTED TOGETHER WITH TWO ROWS OF NAILS SPACED AT 8" O.C.

5. UNLESS SHOWN OTHERWISE ALL OPENINGS IN WALLS SHALL HAVE HEADERS CONSISTING OF A MINIMUM OF TWO (2) 2x12's OR THREE (3) 2x10's.

6. PROVIDE DOUBLE FLOOR JOISTS UNDER ALL WALLS AND PROVIDE FULL DEPTH BLOCKING FOR ALL FLOOR JOISTS @ 8'-0" O.C. MAX.

7. PRESSURE TREATED (PT) WOOD SHALL BE TREATED WITH ACQ TO A MINIMUM RETENTION OF 0.40 LBS./CU. FT. IN ACCORDANCE WITH AWPA. PROTECTION OF WOOD AND WOOD-BASED PRODUCTS FROM DECAY SHALL BE PROVIDED IN THE FOLLOWING LOCATIONS BY THE USE OF WOOD THAT IS PRESERVATIVE-TREATED IN ACCORDANCE WITH AWPA U1 PER FRC 317 INCLUDING ALL LUMBER IN CONTACT WITH CONCRETE OR MASONRY, JOISTS WITHIN 12". FROM GRADE, AND SHEATHING, SIDING, AND FRAMING WITHIN 6" FROM GRADE. AND CONCRETE OR MASONRY EXTERIOR FOUNDATION WALLS AND ARE LESS THAN 8 INCHES FROM THE EXPOSED GROUND.

8. WOOD MEMBERS (INCLUDING PLYWOOD SHEATHING OR BRACING) SHALL BE CONNECTED OR FASTENED WITH STEEL NAILS, SCREWS, OR BOLTS. NO STAPLES WILL BE PERMITTED. ALL WOOD CONNECTIONS SHALL BE IN ACCORDANCE WITH THE FASTENING SCHEDULE OF THE 2020 FRC AND ALL CONNECTORS SHALL MEET FBC TABLE 2324.1.

9. JOIST AND BEAM HANGERS, HURRICANE CLIPS, AND OTHER TIES, ANCHORS, OR CONNECTORS SHALL BE AS MANUFACTURERED BY SIMPSON STRONG-TIE CO., INC. OR APPROVED EQUALS AND SHALL BE ATTACHED WITH NAILS OF THE SIZE AND TYPE RECOMMENDED BY THE MANUFACTURER. ALL HANGERS, CLIPS, CONNECTORS, ANCHORS, TIES, ETC. SHALL BE GALVANIZED. ALL SUCH UNITS THAT WILL BE EXPOSED TO WEATHER, IN CONTACT WITH EARTH, WATER, OR CONCRETE, OR BELOW THE FIRST FLOOR LEVEL SHALL RECEIVE THE SIMPSON "Z-MAX" TRIPLE ZINC COATING OR APPROVED EQUAL. ALL HANGERS SHOWN ARE IN ADDITION TO THE REQUIRED FASTENERS BY FLORIDA RESIDENTIAL CODE.

10. UNLESS SHOWN OTHERWISE ALL PLYWOOD WALL SHEATHING SHALL BE 5/8" THICK. WALL SHEATHING SHALL BE CONTINUOUS OVER THREE OR MORE SUPPORTS AND SHALL BE NAILED TO SUCH SUPPORTS WITH 8D COMMON NAILS. NAIL SPACING SHALL NOT EXCEED 6-INCHES (152 MM) ON CENTER AT PANEL EDGES AND ALL INTERMEDIATE SUPPORTS. NAIL SPACING SHALL BE 4-INCHES (102 MM) ON CENTER AT CORNER STUDS, IN ALL CASES.

11. PLYWOOD WALL SHEATHING SHALL HAVE SOLID BLOCKING AT ALL HORIZONTAL JOINTS.

12. UNLESS SHOWN OTHERWISE ALL PLYWOOD FLOOR SHEATHING SHALL BE APA RATED 48/24, 3/4" THICK AND FASTENED WITH GLUE AND 10d COMMON NAILS SPACED AT 6" O.C. MAX. ALONG SUPPORTING MEMBERS AT THE EDGES OF EACH SHEET AND 12" O.C. MAX. ALONG SUPPORTING MEMBERS ON THE INTERIOR OF EACH SHEET. 100% OF ALL SEALANTS USED ARE ≤ 250 G/L AND ADHESIVES ≤ 70 G/L.

13. THE TOP PLATE OF STUD BEARING WALLS SHALL BE DOUBLED AND LAPPED AT EACH INTERSECTION OF WALLS AND PARTITIONS.

14. CORNERS OF STUD WALLS AND PARTITIONS SHALL BE FRAMED SOLID BY NOT LESS THAN THREE STUDS.

15. STUDS, OTHER THAN END-JOINTED LUMBER, SHALL BE SPLICED ONLY AT POINTS WHERE LATERAL SUPPORT IS PROVIDED.

16. STUD WALLS AND PARTITIONS CONTAINING PIPES SHALL BE FRAMED TO GIVE PROPER CLEARANCE FOR THE PIPING.

17. WHERE WALLS AND PARTITIONS CONTAINING PIPING ARE PARALLEL TO FLOOR JOISTS, THE JOISTS SHALL BE DOUBLED AND MAY BE SPACED TO ALLOW VERTICAL PASSAGE OF PIPES.

18. WHERE VERTICAL PIPE POSITIONS NECESSITATE THE CUTTING OF PLATES, A METAL TIE NOT LESS THAN 1 INCH BY 1/8 INCH (25 MM BY 3 MM) SHALL BE PLACED ON EACH SIDE OF THE PLATE ACROSS THE OPENING AND NAILED WITH NOT LESS THAN TWO 16D OR THREE 8D NAILS AT EACH END.

NAIL CONNECTION FOR WOOD MEMBERS (FBC TABLE 2324.1)

CONNECTION	COMMON NAILS	NUMBER OR SPACING
JOISTS TO SILL OR GIRDER, TOE NAIL	16D	2
BRIDGING TO JOIST, TOE NAIL	8D	2 EACH END
1-INCH x 6-INCH SUBFLOOR OR LESS TO EACH JOIST, FACE NAIL	8D	2
OVER 1-INCH x 6-INCH SUBFLOOR TO EACH JOIST, FACE NAIL	8D	3 + 1 FOR EACH SIZE INCREASE
2-INCHES SUBFLOOR TO JOIST OR GIRDER, BLIND AND FACE NAIL	16D	2
SOLE PLATE TO JOIST OR BLOCKING, FACE NAIL	16D	16 INCHES O.C.
TOP OR SOLE PLATE TO STUD, END NAILED	16D	2
STUD TO SOLE PLATE, TOE NAIL	3D	3 or 2 16D
DOUBLED STUDS, FACE NAIL	16D	24 INCHES O.C.
DOUBLED TOP PLATES, FACE NAIL	16D	16 INCHES O.C.
TOP PLATES, LAPS AND INTERSECTIONS, FACE NAIL	16D	2
CONTINUOUS HEADER, TWO PIECES	16	16 INCHES O.C. ALONG EACH EDGE
CEILING JOISTS TO PLATE, TOE NAIL	16D	2
CONTINUOUS HEADER TO STUD, TOE NAIL	16D	3
CEILING JOISTS, LAPS OVER PARTITIONS, FACE NAIL	16D	3
CEILING JOISTS TO PARALLEL RAFTERS, FACE NAIL	16D	3
RAFTER PLATE, TOE NAIL	16D	3
1-INCH x 6-INCH SHEATHINGS OR LESS TO EACH BEARING, FACE NAIL	8D	2
OVER 1-INCH x 6-INCH SHEATHING, TO EACH BEARING, FACE NAIL	8D	3 + 1 FOR EACH SIZE INCREASE
BUILT-UP CORNER STUDS, FACE NAIL	16D	30 INCHES O.C.
BUILT-UP GIRDERS AND BEAMS	20D	32 INCHES O.C. AT TOP AND BOTTOM AND STAGGERED, 2 AT ENDS AND AT EACH SPLICE
2-INCH PLANKS	16D	2 EACH BEARING

PRE-ENGINEERED WOOD TRUSS NOTES:

1. TRUSSES SHALL BE DESIGNED IN ACCORDANCE WITH ANSI/TPI 1, *NATIONAL DESIGN STANDARD FOR METAL PLATE CONNECTED WOOD TRUSS CONSTRUCTION* AND THIS SPECIFICATION. WHERE ANY APPLICABLE DESIGN FEATURE IS NOT SPECIFICALLY COVERED BY ANSI/TPI 1 OR THIS SPECIFICATION, DESIGN SHALL BE IN ACCORDANCE WITH THE APPLICABLE PROVISIONS OF THE LATEST EDITION OF ANSI/AWC NDS - *NATIONAL DESIGN SPECIFICATION® (NDS®) FOR WOOD CONSTRUCTION*, AND ALL APPLICABLE LEGAL REQUIREMENTS.

2. TRUSSES SHALL BE DESIGNED TO MEET THE REQUIREMENTS OF THE BCSI: *GUIDE TO GOOD PRACTICE FOR HANDLING, INSTALLING, RESTRAINING & BRACING OF METAL PLATE CONNECTED WOOD TRUSSES* JOINTLY PRODUCED BY THE STRUCTURAL BUILDING COMPONENTS ASSOCIATION (SBCA) AND THE TRUSS PLATE INSTITUTE (TPI) AND THE 2020 FRC AND SHALL COMPLY WITH FBC SECTION 2319.17.2 PREFABRICATED WOOD TRUSSES.

3. TRUSS MANUFACTURER SHALL FURNISH TRUSS DESIGN DRAWINGS PREPARED IN ACCORDANCE WITH ALL APPLICABLE LEGAL REQUIREMENTS.

4. THE TRUSS MANUFACTURER SHALL FURNISH A TRUSS PLACEMENT DIAGRAM WHICH SHALL PROVIDE AT A MINIMUM THE LOCATION ASSUMED FOR EACH TRUSS BASED ON THE TRUSS MANUFACTURER'S INTERPRETATION OF THE CONSTRUCTION DOCUMENTS

5. THE TRUSS MANUFACTURER SHALL SUBMIT THE TRUSS SUBMITTAL PACKAGE TO THE BUILDING DESIGNER AND/OR THE LOCAL BUILDING OFFICIAL FOR REVIEW AND APPROVAL PRIOR TO THE MANUFACTURING OF THE TRUSSES.

6. THE DESIGN, CONFIGURATION, LAYOUT, SPACING, ETC OF ALL TRUSSES SHALL BE COORDINATED BY THE CONTRACTOR AND THE TRUSS DESIGNER WITH THE MECHANICAL EQUIPMENT, DUCTWORK, AND ALL ARCHITECTURAL DRAWINGS.

7. THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OF THE TRUSSES FOR REVIEW BY THE ENGINEER. THE SHOP DRAWINGS SHALL BE STAMPED BY A PROFESSIONAL STRUCTURAL ENGINEER REGISTERED IN THE STATE OF FLORIDA.

8. CONTRACTOR TO VERIFY ALL DIMENSIONS OF DRAWINGS IN FIELD PRIOR TO COORDINATION OF THE DESIGN, CONFIGURATION, LAYOUT, SPACING, ETC OF ALL TRUSSES BY THE CONTRACTOR AND THE TRUSS DESIGNER.

9. CONTRACTOR TO CONFIRM UPLIFT ON TRUSSES DO NOT EXCEED THOSE SPECIFIED BY THE STRUCTURAL DRAWINGS.

SITE PREPARATION NOTES:

1. AFTER DEMOLITION OF THE EXISTING STRUCTURE AND REMOVAL OF ITS ENTIRE FOUNDATIONS AND DEBRIS, THE LOCATION OF ANY EXISTING CONFLICTING UNDERGROUND UTILITY LINES WITHIN THE CONSTRUCTION AREA SHOULD BE ESTABLISHED. PROVISIONS SHOULD BE MADE TO REMOVE OR RELOCATE ANY INTERFERING UTILITY LINES WITHIN THE CONSTRUCTION AREA. ABANDONED UTILITIES SHOULD BE REMOVED OR GROUTED TO REDUCE THE POSSIBILITY OF SUBSURFACE EROSION THAT COULD RESULT IN FUTURE SETTLEMENT. EXCAVATIONS RESULTING FROM THE REMOVAL OF ANY INTERFERING UTILITIES SHOULD BE BACKFILLED IN ACCORDANCE WITH THE RECOMMENDATIONS PRESENTED BELOW.

2. AT THE OUTSET OF CONSTRUCTION, CLEARING AND GRUBBING INCLUDING ROOT RAKING AND REMOVAL OF ANY ORGANIC-LADEN TOPSOIL OR ORGANIC SANDS THAT MAY REMAIN ON THE SITE SHOULD BE COMPLETED. AT A MINIMUM, A STRIPPING DEPTH OF ABOUT SIX INCHES IS RECOMMENDED. IT IS ALSO RECOMMENDED THAT THE CLEARING/STRIPPING OPERATIONS EXTEND AT LEAST 10 FEET BEYOND THE PROPOSED STRUCTURE PERIMETER, WHERE POSSIBLE.

3. FOLLOWING THE CLEARING/STRIPPING OPERATIONS, THE DEVELOPMENT AREAS MAY BE BROUGHT UP TO FINISHED SUBGRADE LEVELS, IF NEEDED, USING COMPACTED STRUCTURAL FILL. THE EXISTING ON-SITE SOILS CAN BE USED FOR STRUCTURAL FILL PROVIDED IT IS FREE OF ORGANIC OR DELETERIOUS MATERIALS AND MOISTURE CONTENT IS APPROPRIATE. FILL SOILS SHOULD BE TESTED PRIOR TO IMPORT AND PLACEMENT. IMPORTED FILL SHOULD CONSIST OF SAND WITH LESS THAN 12 PERCENT PASSING THE NO. 200 SIEVE, FREE OF ROCKS/RUBBLE, ORGANICS, CLAY, DEBRIS AND OTHER UNSUITABLE MATERIAL. APPROVED SAND FILL SHOULD BE PLACED IN LOOSE LIFTS NOT EXCEEDING EIGHT INCHES IN THICKNESS AND SHOULD BE COMPACTED TO AT LEAST 95 PERCENT OF THE MATERIAL'S MAXIMUM DRY DENSITY IN ACCORDANCE WITH ASTM D-1557, MODIFIED PROCTOR METHOD. DENSITY TESTS TO CONFIRM COMPACTION SHOULD BE PERFORMED IN EACH FILL LIFT BEFORE THE NEXT LIFT IS PLACED.

4. A MOISTURE CONTENT WITHIN THE PERCENTAGE RANGE NEEDED TO ACHIEVE COMPACTION (TYPICALLY +/- 3 PERCENT) IS RECOMMENDED PRIOR TO COMPACTION OF THE NATURAL GROUND AND FILL, BASED ON THE RESULTS OF THE MODIFIED PROCTOR COMPACTION TESTS.

5. THE BOTTOM OF THE FOUNDATION EXCAVATIONS SHOULD BE COMPACTED TO AT LEAST 95 PERCENT OF THE MATERIAL'S MAXIMUM DRY DENSITY IN ACCORDANCE WITH ASTM D-1557, MODIFIED PROCTOR METHOD, FOR A MINIMUM DEPTH OF ONE FOOT BELOW THE BOTTOM OF THE FOUNDATIONS. SOFT OR LOOSE SOIL ZONES ENCOUNTERED AT THE BOTTOM OF THE FOOTING EXCAVATIONS SHOULD BE REMOVED AND REPLACED WITH FILL SOILS, LEAN CONCRETE, OR DENSE GRADED CRUSHED STONE (FDOT NO. 57).

No.	Description	Date

STRUCTURAL NOTES

Project Number	2019-15
Date	01/25/2022
Drawn By	IP
Checked By	BT

50% PRELIMINARY DESIGN, NOT FOR CONSTRUCTION

S-1

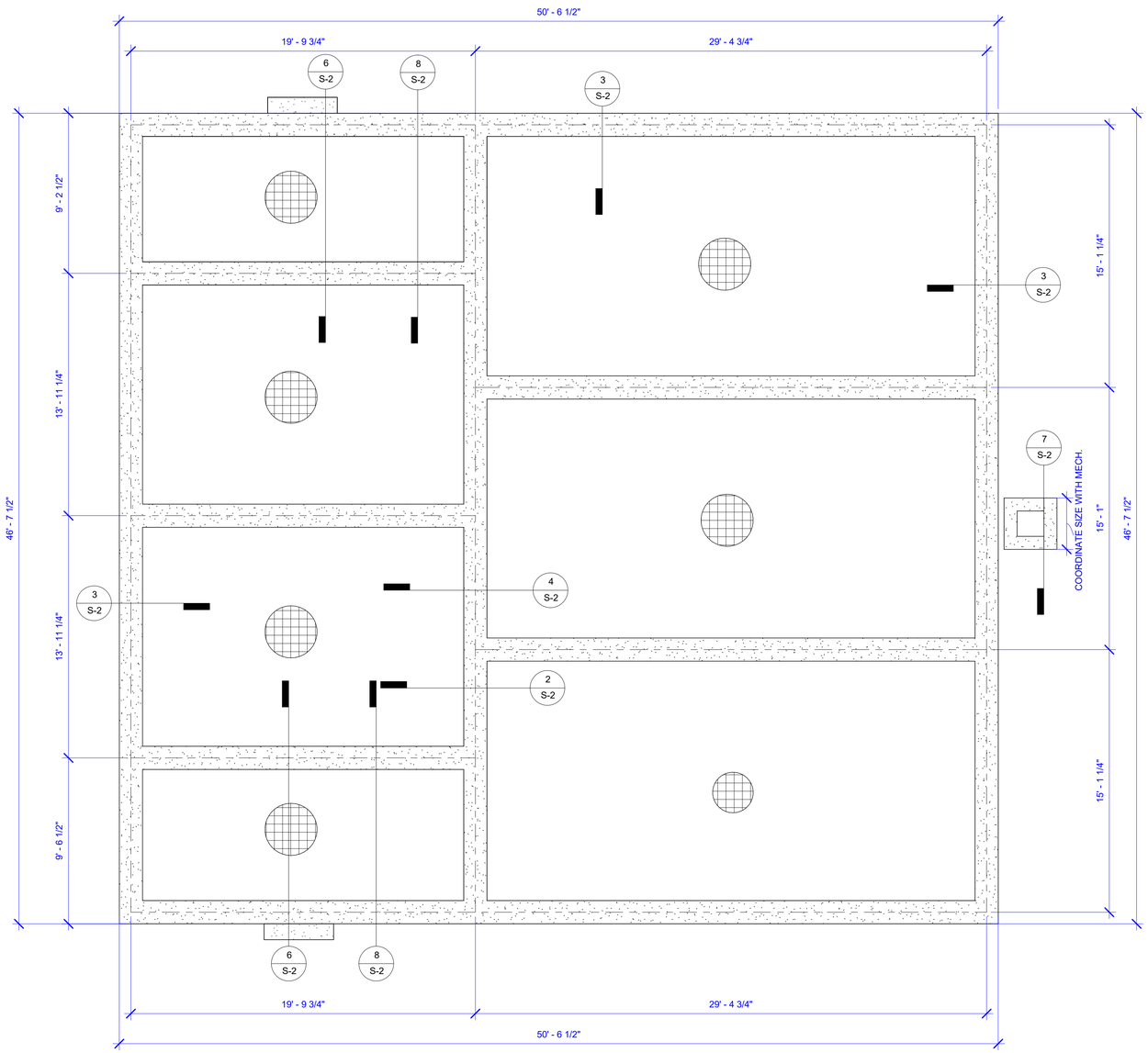
FOUNDATION PLAN LEGEND

CONCRETE GRADE BEAM

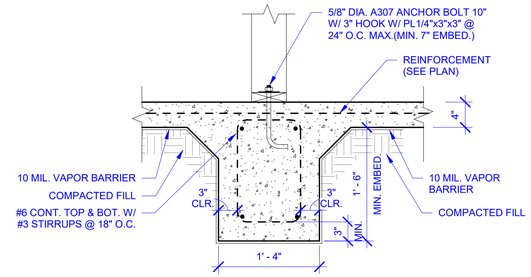
4" CONCRETE SLAB W/ 6X6-W2.9XW2.9 WELDED WIRE MESH @ MID-DEPTH

FOUNDATION PLAN NOTES

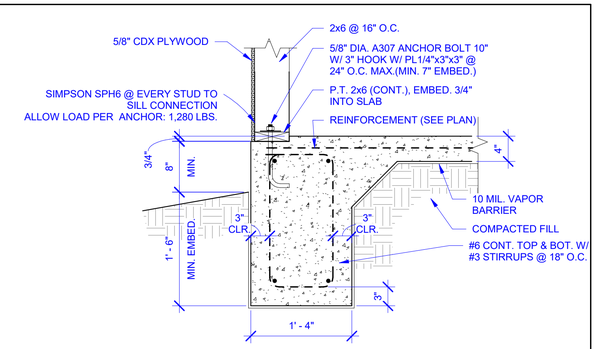
1. SEE STRUCTURAL NOTES ON S1.0
2. GRADE BEAM DEPTH SHALL BE MIN. 12" BELOW FROSTLINE AND MIN. 12" BELOW UNDISTURBED SOIL



1 FOUNDATION PLAN
1/4" = 1'-0"



2 SECTION
1" = 1'-0"



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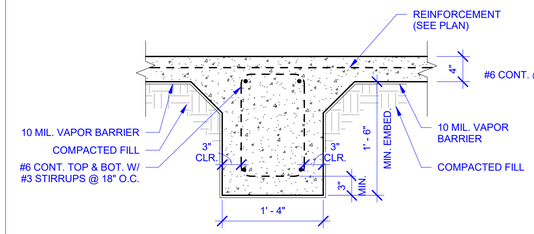

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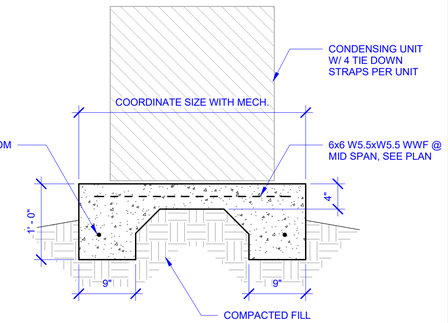
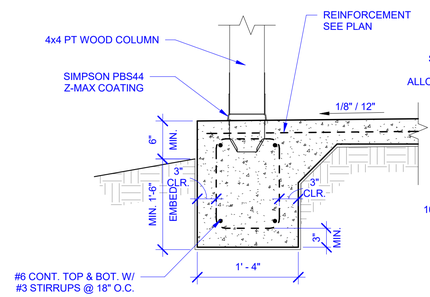
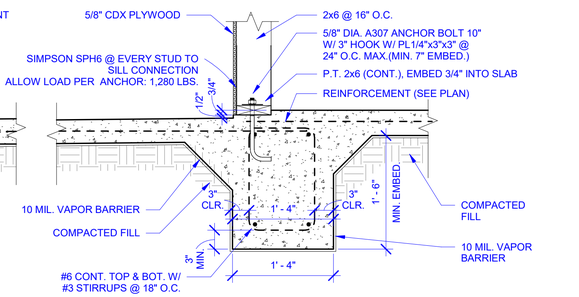
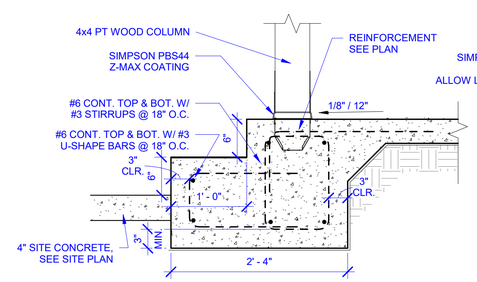


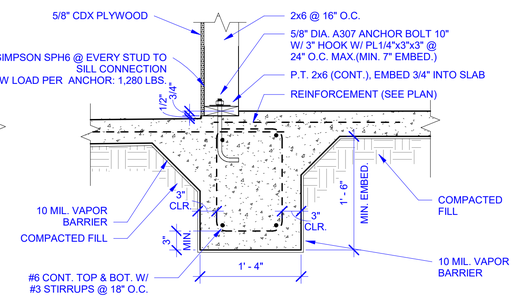
7 CONDENSER SLAB
1" = 1'-0"





8 PORCH STEP FOUNDATION DETAIL
1" = 1'-0"





6 PORCH FOUNDATION DETAIL
1" = 1'-0"

No.	Description	Date

FOUNDATION PLANS & DETAILS

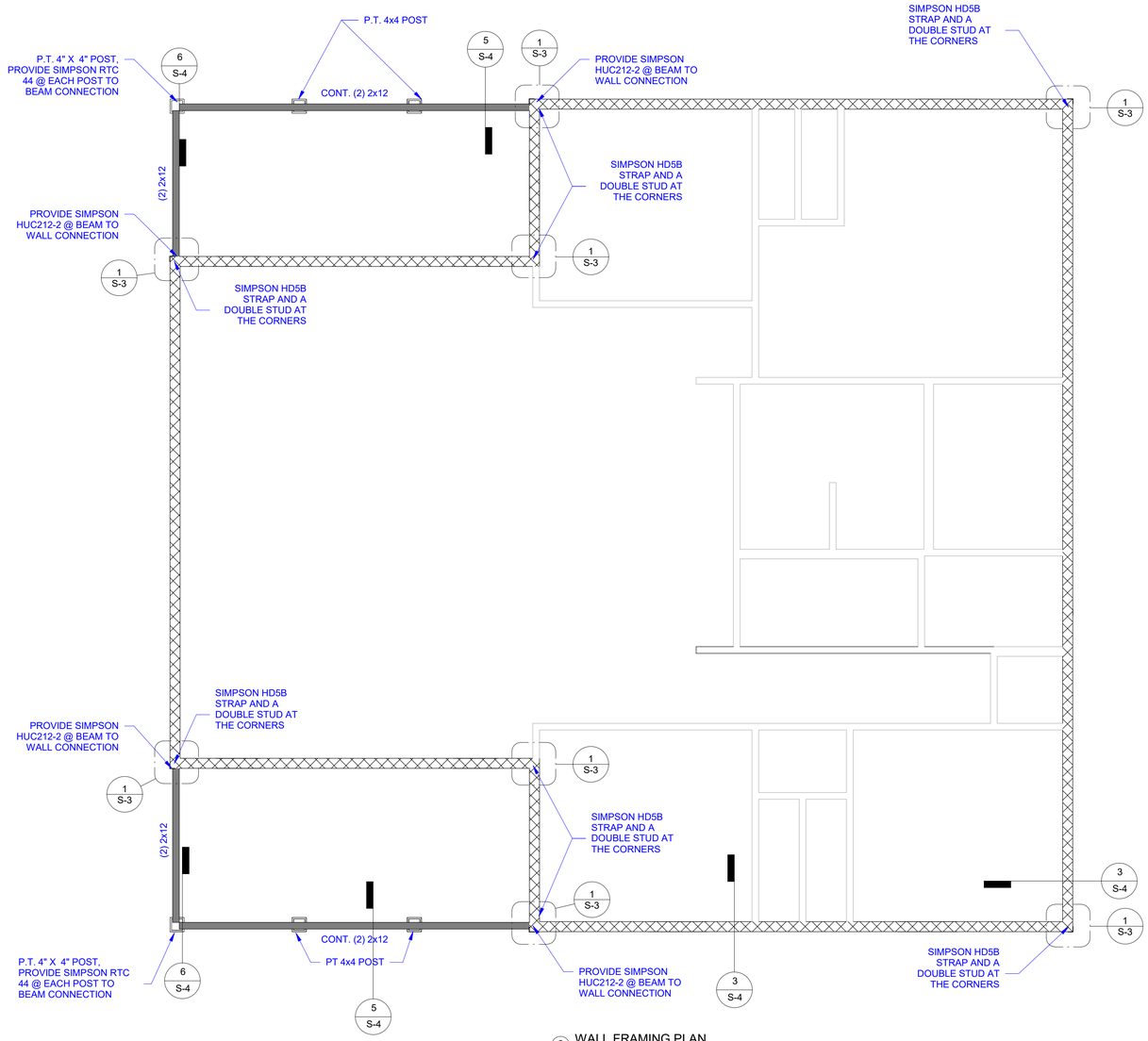
Project Number	2019-15
Date	01/25/2022
Drawn By	IP
Checked By	IP

50% PRELIMINARY DESIGN, NOT FOR CONSTRUCTION

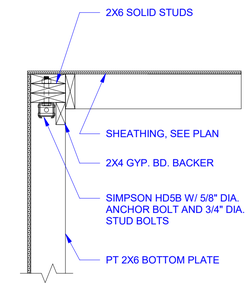
S-2

FRAMING PLAN LEGEND & NOTES

1. LOAD BEARING 2X6 STUD WALL SPACED @ 16" O.C. , MAX W/ BLOCKING @ 48" O.C. MAX. EXTERIOR WALL W/ 5/8" CDX PLYWOOD
2. BEAM (SEE PLAN FOR TYPE)
3. PROVIDE DOUBLE JOISTS UNDER ALL LOAD BEARING WALLS
4. PROVIDE TRIPLE STUDS UNDER ALL BEAMS AND DOUBLE JOISTS
5. PROVIDE 3/4" PLYWOOD DECKING A MINIMUM OF 30" AROUND THE PERIMETER OF ANY EQUIPMENT IN ATTIC SPACE AND MIN. 24" PASSAGEWAY TO ANY EQUIPMENT FROM THE ATTIC ACCESS LOCATION



2 WALL FRAMING PLAN
1/4" = 1'-0"



1 CORNER STUD DETAIL - SOG
1" = 1'-0"

No.	Description	Date

FRAMING PLANS & DETAILS

Project Number	2019-15
Date	01/25/2022
Drawn By	IP
Checked By	IP

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S-3

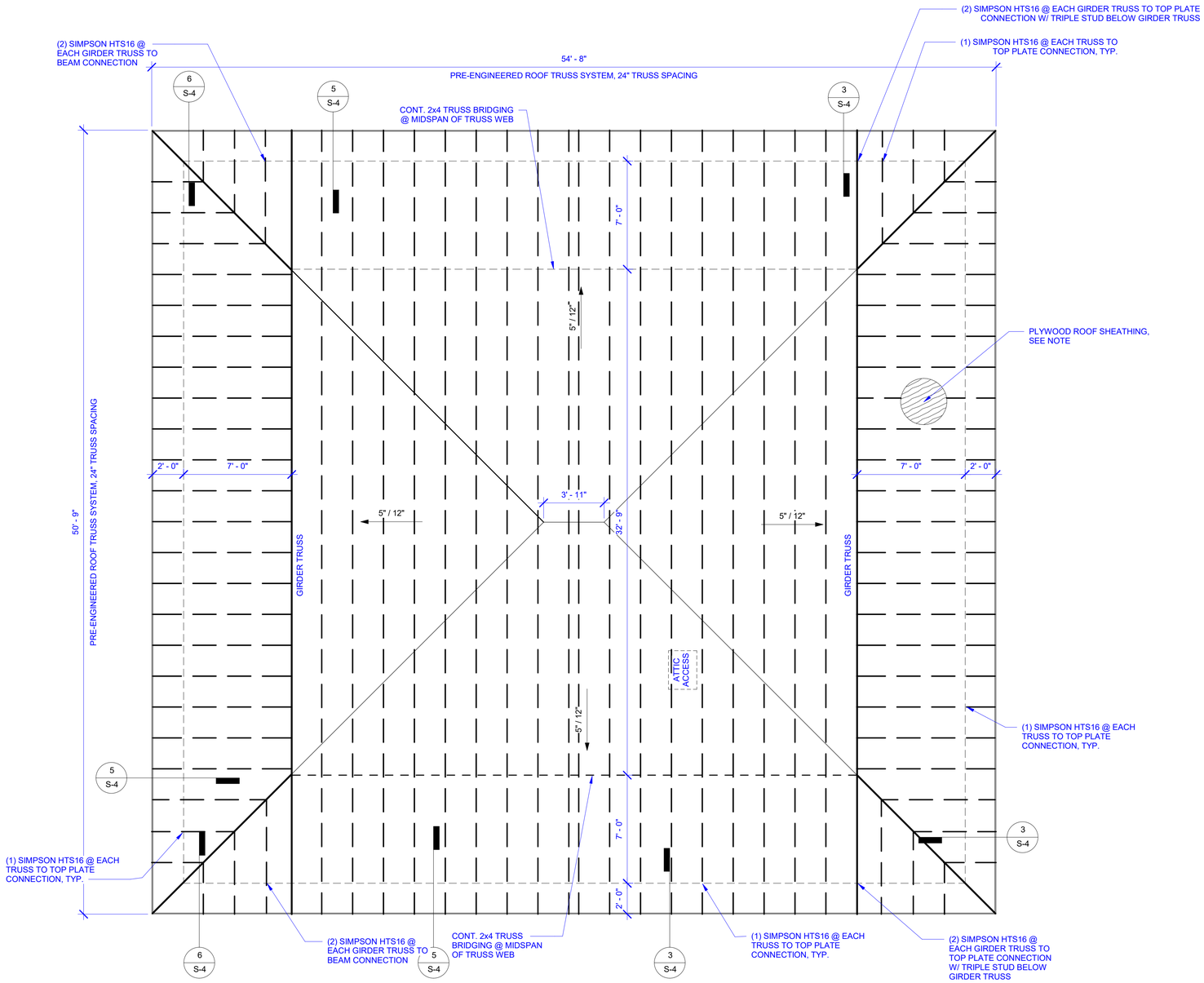
ROOF TRUSS NOTE:

CONTRACTOR SHALL PROVIDE PRE-ENGINEERED ROOF TRUSS SYSTEM. CONTRACTOR SHALL PROVIDE ENGINEERED STAMPED TRUSS DESIGN TO THE PERMIT DEPARTMENT AND ENGINEER OF RECORD. SEE ROOF TRUSS NOTES ON S1.0

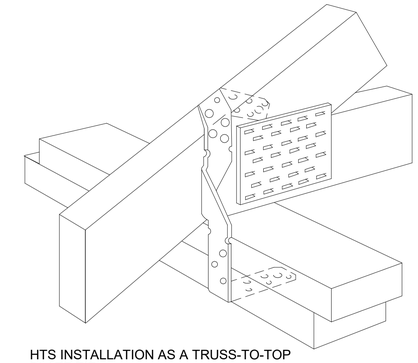
ROOF TRUSS LUMBER SHALL HAVE SPECIFIC GRAVITY (DENSITY) SG=0.49

PLYWOOD ROOF SHEATHING:

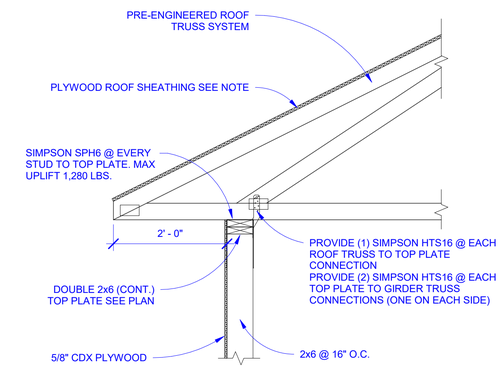
1. APA RATED 23/32" (48/24)
2. RATED FOR EXPOSURE 1
3. CONTINUOUS OVER TWO OR MORE SPANS WITH FACE GRAIN PERPENDICULAR TO SUPPORTS ROOF SHEATHING PANELS SHALL BE PROVIDED WITH MIN. OF 2x4 EDGEWISE BLOCKING AT ALL HORIZONTAL PANEL JOINTS WITH EDGE SPACING AT LEAST 4 FEET FROM EACH GABLE END
4. ROOF SHEATHING FASTENED WITH WITH ASTM F1667 RSRS-03 (21/2" × 0.131") NAILS OR ASTM F1667 RSRS-04 (3" × 0.120") NAILS SPACED AT 4" O.C. MAX. ALONG SUPPORTING MEMBERS AT THE EDGES OF EACH SHEET AND 4" O.C. MAX. ALONG SUPPORTING MEMBERS ON THE INTERIOR OF EACH SHEET
5. VERTICAL JOINTS OF PLYWOOD ROOF SHEATING SHALL BE STAGGERED EVERY FOUR FEET (4'-0") OR LESS.



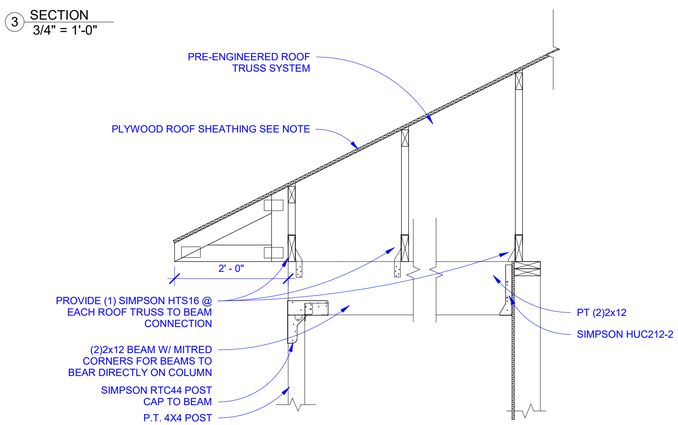
1 ROOF FRAMING PLAN
1/4" = 1'-0"



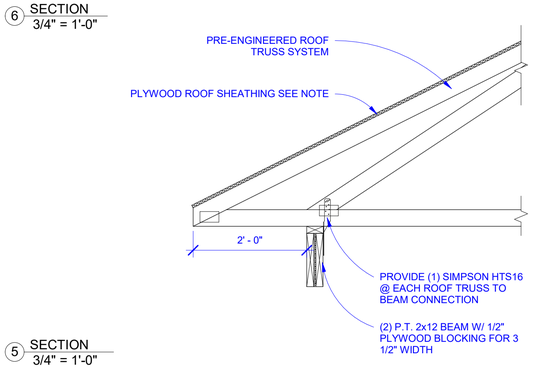
2 HTS INSTALLATION AS A TRUSS-TO-TOP PLATE TIE
3/32" = 1'-0"



3 SECTION
3/4" = 1'-0"



6 SECTION
3/4" = 1'-0"



5 SECTION
3/4" = 1'-0"

No.	Description	Date

FRAMING PLANS & DETAILS

Project Number	2019-15
Date	01/25/2022
Drawn By	ZP
Checked By	BT

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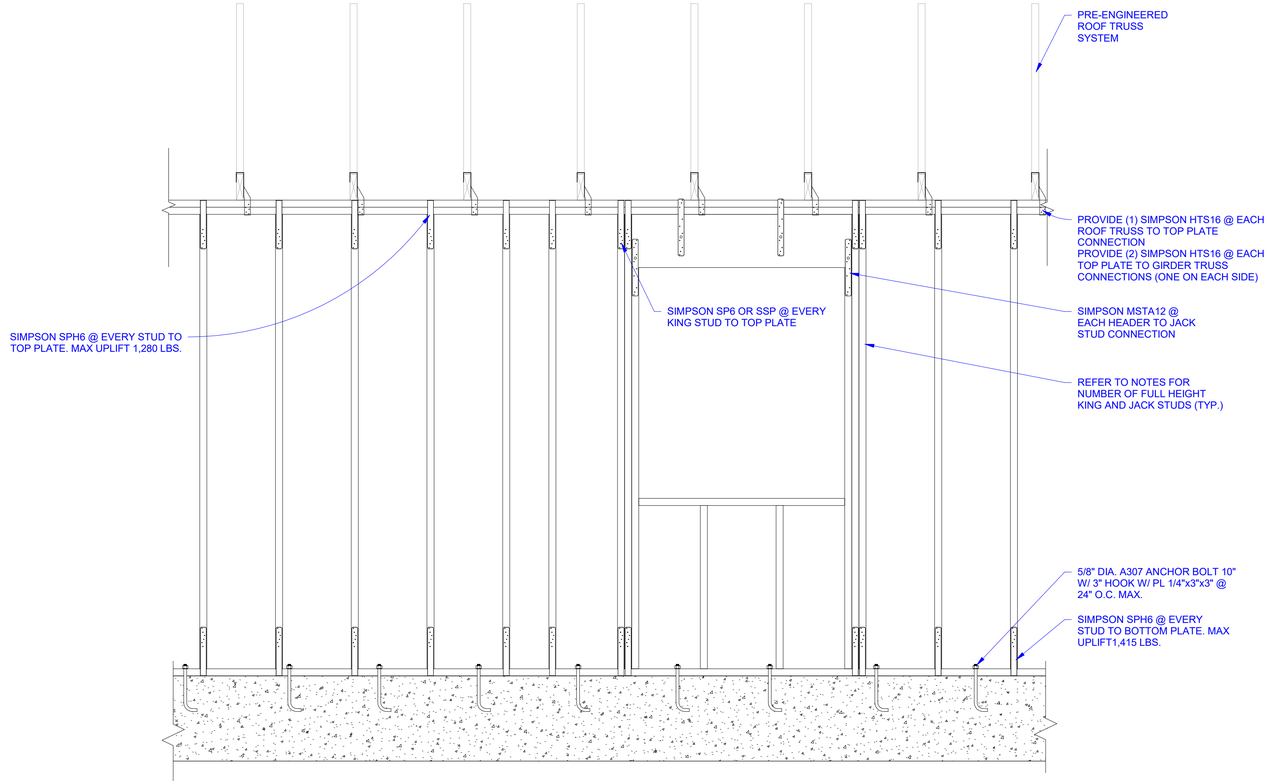
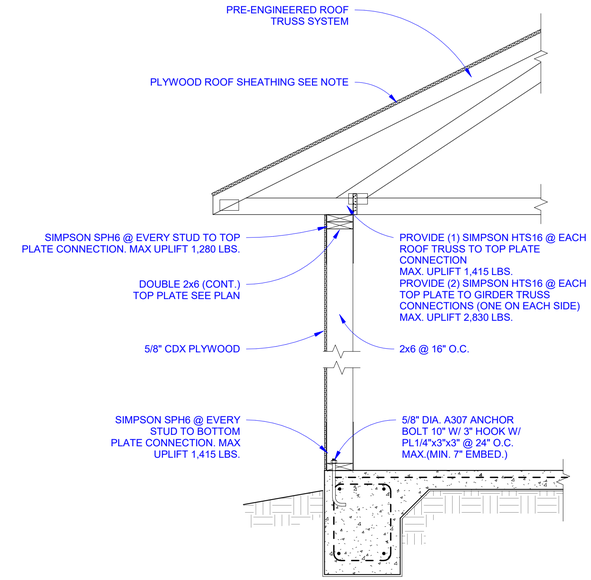
S-4



1 CONTINUOUS LOAD PATH DIAGRAM
3/4" = 1'-0"



2 HURRICANE STRAPPING DIAGRAM
3/4" = 1'-0"

ANCHOR STRAP SCHEDULE

MANUFACTURER (OR EQUAL)	PRODUCT CODE	CONNECTED MEMBERS		FASTENERS	ALLOWABLE LOADS			APPROVAL NUMBER
					UPLIFT	UPLIFT	UPLIFT	
SIMPSON	LSTA36	RAFTER	RAFTER	(24) 0.148" x 2 1/2"	740			FL#10456.15
SIMPSON	HTS16	RAFTER	STUD/TOP PLATE	(16) 0.148" x 3" (16) 0.148" x 1 1/2"	1415	1415		FL#10456.12
SIMPSON	MTS12	RAFTER	STUD	(14) 0.148" x 3" Nails (14) 0.148" x 3" Nails	850	850		FL#13872.11
SIMPSON	HD5B	CORNER STUD	BOTTOM PLATE	5/8 Anchor Dia. Bolt (2) 3/4 Stud bolts	2405			FL#11496.3
	5/8" x 10" A307 ANCHOR BOLT W/ 3" HOOK	BOTTOM PLATE	SLAB/FOOTING					FL15731
SIMPSON	PC4Z	POST	HEADER	(8) 0.148" x 3" (10) 0.148" x 3"	1480			FL#10860.20
SIMPSON	MSTA12	JACK STUD	HEADER	(10) 0.148" x 2 1/2"	940			FL#10456.21
SIMPSON	PBS44	POST	SLAB/FOOTING	(14) 0.162" x 3 1/2" nails (2) 1/2" dia. Machine bolts	1235			FL#10860.17
SIMPSON	HUC212-2	STUD	HEADER	(18) 0.162" x 3 1/2" (10) 0.148" x 3"	4030			FL#10531.9
SIMPSON	LUS28	JOIST	HEADER	6-SS16d - Smooth-Shank Stainless Steel Nails 4-SS10d - Smooth - Shank Stainless Steel Nails 6-SSA10d - Ring-Shank Stainless Steel Nails 4-SSA10d Ring-Shank Stainless Steel Nails	915	1165		FL#10531.16

No.	Description	Date

FRAMING DETAILS

Project Number	2019-15
Date	01/25/2022
Drawn By	SM
Checked By	IP

50% PRELIMINARY DESIGN, NOT FOR CONSTRUCTION

S-5

Appendix D: Required Contract Provisions

The Part 200 Uniform Requirements require that non-Federal entities' contracts contain the applicable provisions described in Appendix II to Part 200 — "Contract Provisions for Non-Federal Entity Contracts Under Federal Awards." Violations of law will be referred to the proper authority in the applicable jurisdiction. All Prime Contractors awarded contracts by Pasco County which are federally funded, in whole or in part, are required to comply with the provisions below. Additionally, Prime Contractors with Pasco County are required to include the provisions below in any contracts executed with subcontractors performing the scope of work and shall pass these requirements on to its subcontractors and third-party contractors, as applicable. In addition to other provisions required by the relevant Federal agency, State of Florida, Pasco County, or IEM Inc. (IEM), all contracts made by IEM as authorized by Pasco County under the Federal award shall contain provisions covering the following, as applicable.

ACCESS TO RECORDS & RECORD RETENTION (2 CFR 200.336)

Contractor must provide Pasco County, IEM, Inc. and the U.S. Department of Housing and Urban Development (HUD), the Inspectors General, the Comptroller General of the United States, or any of their pass-through entities or authorized representatives access to any books, documents, papers, and records of the Contractor and its subcontractors which are directly pertinent to this contract/project for the purposes of making/responding to audits, examinations, excerpts, and transcriptions. The right also includes timely and reasonable access to the Contractor's personnel for the purpose of interview and discussion related to such documents. Contractor must keep records within Pasco County or note in proposal that records will be available within the boundaries of Pasco County to those representatives within twenty-four (24) hours of request by the County or IEM. Contractor must maintain all records pertaining to the project for seven (7) years after receiving final payment and after all other pending matters have been closed.

ACCESSIBILITY (24 CFR 570.614) & SECTION 504 (29 U.S.C. Section 794 and 24 CFR Parts 8-9)

Contractor shall comply with all federal, state and local laws and regulations which prohibit recipients of federal funding from discriminating against individuals with disabilities. Applicable laws and regulations with which Contractor shall comply shall include, but are not limited to, the following: Section 504 of the Rehabilitation Act of 1973 (29 U.S.C. Section 794) (24 CFR Parts 8-9); Title II of the Americans with Disabilities Act of 1990; the Architectural Barriers Act of 1968 (42 U.S.C. 4151-4157); the Uniform Federal Accessibility Standards (Appendix A to 24 CFR Part 40 and Appendix A to 41 CFR Part 101-19, subpart 101-19.6); the Americans with Disabilities Act (42 U.S.C. 12131; 47 U.S.C. 155, 201, 218, and 225); Architectural Barriers Act (TABA); the Architectural Barriers (AB) Rules; and applicable State of Florida accessibility standards.

BYRD ANTI-LOBBYING AGREEMENT (2 CFR 200 APPENDIX II (J) AND 24 CFR 570.303)

Pursuant to 31 U.S.C.A. § 1352 (2003), if at any time during the contract term funding to contract exceeds $100,000.00, the Contractor shall file with Pasco County the Federal Standard Form LLL titled "Disclosure Form to Report Lobbying."

Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any Federal contract, grant or any other award covered by 31 U.S.C. 1352. Each tier must also disclose any lobbying with non-Federal funds that takes place in connection with obtaining any Federal award. Such disclosures are forwarded from tier to tier up to the non-federal award.

For purposes of this provision lobbying activities shall include, but not be limited to, influencing or attempting to influence action or non-action in connection with any requests for proposals, requests for statements of qualifications, invitations for bids, related processes or contracts through direct or indirect oral or written communication or an attempt to obtain goodwill of persons and/or entities specified in this provision. Such actions may cause any proposal, statement of qualification, bid, contract or any other response to be rejected.

CIVIL RIGHTS ACT OF 1964 (Title VI 42 U.S.C. § 2000d)

Title VI of the Civil Rights Act of 1964, Section 109 of the Community Development Act of 1974, Section 504 of the Rehabilitation Act of 1973 (29 U.S.C. Section 794) (24 CFR Parts 8-9), and The Florida Civil Rights Act of 1992, and the Americans with Disabilities Act of 1990 (42 U.S.C. 12131; 47 U.S.C. 155, 201, 218, and 225), prohibits Contractors from excluding or denying individuals benefits or participation in this project on the basis of race, color, religion, national origin, sex, or disability. The provisions require that no person in the United States shall on the ground of race, color, religion, national origin, sex, or disability be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity funded in whole or in part with community development funds made available pursuant to these Acts.

Title VI of the Civil Rights Act of 1964, Section 109 of the Community Development Act of 1974, Section 504 of the Rehabilitation Act of 1973 (29 U.S.C. Section 794) (24 CFR Parts 8-9), and the Americans with Disabilities Act of 1990 (42 U.S.C. 12131; 47 U.S.C. 155, 201, 218, and 225), prohibits Contractors from excluding or denying individuals benefits or participation in this project on the basis of race, color, religion, national origin, sex, or disability. The provisions require that no person in the United States shall on the ground of race, color, religion, national origin, sex, or disability be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity funded in whole or in part with community development funds made available pursuant to these Acts.

For purposes of this Part "program or activity" is defined as any function conducted by an identifiable administrative unit of the recipient, or private Contractor receiving community development funds or loans from the recipient. "Funded in whole or in part with community development funds" means that community development finds in any amount in the form of grants or proceeds from HUD guaranteed loans have been transferred by the recipient or a subrecipient to an identifiable administrative unit and disbursed in a program or activity. A Contractor may not, under any program or activity to which the regulations of this Part may apply directly or through contractual or other arrangements, on the grounds of race, color, national origin, or sex:

a. Deny any facilities, services, financial aid or other benefits provided under the program or activity;

b. Provide any facilities, services, financial aid or other benefits, which are different, or are provided in a different form from that provided to others under the program or activity;

c. Subject to segregated or separate treatment in any facility in, or in any matter of process related to receipt of any service or benefit under the program or activity;

d. Restrict in any way access to, or in the enjoyment of any advantage or privilege enjoyed by others in connection with facilities, services, financial aid or other benefits under the program or activity;

e. Treat an individual differently from others in determining whether the individual satisfies any admission, enrollment, eligibility, membership, or other requirement or condition which the individual must meet in order to be provided any facilities, services or other benefit provided under the program or activity; and

f. Deny an opportunity to participate in a program or activity as an employee.

CLEAN AIR ACT (2 CFR Appendix II to Part 200 (G))

Pursuant to 2 CFR Appendix II to Part 200 (G), if at any time during the contract term funding to contract exceeds $150,000, the Contractor must comply with all provisions of the Clean Air Act (42 U.S.C. 85) and Section 308 of the Federal Water Pollution Control Act (33 U.S.C. 1251-1387), as amended. Contractors securing a contract in excess of $150,000.00 shall not expend such funds by making use of subcontracting with facilities included on the Environmental Protection Agency List of Violating Facilities as per Section 306 of the Clean Air Act, Section 508 of The Clean Water Act, Executive Order 11738, and Environmental Protection Agency Regulations 40 CFR.

For any subcontractors under this contract receiving contracts in excess of $150,000 Contractor is required to include a provision that requires compliance with all applicable standards, orders or regulations issued pursuant to the Clean Air Act (42 U.S.C. 85) and Section 308 Federal Water Pollution Control Act as amended (33 U.S.C. 1251-1387). Violations shall be reported to the Federal awarding agency and the Regional Office of the Environmental Protection Agency (EPA).

CONTRACT WORK HOURS AND SAFETY STANDARDS ACT (2 CFR Appendix II to Part 200 (E))

Pursuant to 2 CFR 200 Appendix II (E), if at any time during the contract term funding to contract exceeds $100,000, the Contractor must comply with the Contract Work Hours and Safety Standards Act (40 U.S.C. 3701-3708). Where applicable, all contracts awarded in excess of $100,000 that involve the employment of mechanics or laborers must include a provision for compliance with 40 U.S.C. 3702 and 3704, as supplemented by Department of Labor regulations (29 CFR Part 5). Under 40 U.S.C. 3702 of the Act, each contractor must be required to compute the wages of every mechanic and laborer on the basis of a standard work week of 40 hours. Work in excess of the standard work week is permissible provided that the worker is compensated at a rate of not less than one and a half times the basic rate of pay for all hours worked in excess of 40 hours in the work week. The requirements of 40 U.S.C. 3704 are applicable to construction work and provide that no laborer or mechanic must be required to work in surroundings or under working conditions which are unsanitary, hazardous or dangerous. These requirements do not apply to the purchases of supplies or materials or articles ordinarily available on the open market, or contracts for transportation or transmission of intelligence

(1) Overtime Requirements – No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

(2) Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph (1) of this section the contractor and any subcontractor responsible therefore shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1) of this section, in the sum of

$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph (1) of this section.

(3) Withholding for unpaid wages and liquidated damages. The (write in the name of the Federal agency or the loan or grant recipient) shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2) of this section.

(4) Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (1) through (4) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (1) through (4) of this section.

COPELAND "ANTI-KICKBACK" ACT (40 U.S.C. 3145)

Pursuant to 2 CFR Appendix II to Part 200 (D), Contractor must comply with the provisions of the Copeland "Anti-Kickback" Act (40 U.S.C. 3145), as supplemented by Department of Labor regulations (29 CFR Part 3, "Contractors and Subcontractors on Public Building or Public Work Financed in Whole or in Part by Loans or Grants from the United States"). The Act provides that each vendor, contractor, subcontractor, or subrecipient shall be prohibited from inducing, by any means, any person employed in the construction, completion, or repair of public work, to give up any part of the compensation to which he or she is otherwise entitled. Contractor shall include this provision in all contracts between itself and any subcontractors in connection with the services performed under this Contract. Pasco County shall report all suspected or reported violations to the Federal awarding agency.

COST PLUS CONTRACTING PROHIBITED (2 CFR 200.323(D))

Cost-plus-a-percentage-of-cost (CPPC) contracts are prohibited by 2 CFR 200.323(d). The cost plus a percentage of cost and percentage of construction cost methods of contracting must never be used, including in subcontracts and third-party contracts. A cost-plus contract is one that is structured to pay the contractor or subcontractor their actual costs incurred, plus a fixed percent for profit or overhead.

A cost-plus-a-percentage-of-cost (CPPC) contract is a contract containing some element that obligates Pasco County or Contractor to pay a contractor or subcontractor an amount (in the form of either profit or cost), undetermined at the time the contract was made, to be incurred in the future, and based on a percentage of future costs. The inclusion of an overall contract ceiling price does not make these forms of contracts acceptable.

This type of contract is prohibited because there is no incentive for the contractor or subcontractor to keep its incurred costs low. Instead, there is a reverse incentive for the contractor or subcontractor to continue to incur additional costs in order to continue to drive the percentage of cost up. In other words, increased spending by the contractor will yield higher profits. This prohibition applies to all work, regardless of the circumstances, and applies to subcontracts of the contractor cases where the prime contract is a cost-reimbursement type contract or subject to price redetermination.

DAVIS BACON AND RELATED ACTS (2 CFR 200 APPENDIX II (D))

Pursuant to 2 CFR 200 Appendix II (D), for any contract in excess of $2,000, Contractor must comply with the Davis Bacon and Related Acts, and the requirements shall be applicable to any labor or mechanic work completed in connection with this contract which fall under the Davis Bacon Act. Any Contractor awarded under this contract is required to comply with the Davis Bacon Act (40 U.S.C. 3141-3144, and 3146-3148) as supplemented by Department of Labor regulations (29 CFR part 5) and with the Copeland "Anti-Kickback" Act (18 U.S.C. 874; 40 U.S.C. 3145) as supplemented in Department of Labor regulations (29 CFR part 3). In accordance with the statute, Contractors are required to pay wages to laborers and mechanics at a rate not less than the prevailing wages specified in a wage determination made by the Secretary of Labor. In addition, contractors must be required to pay wages not less than once a week.

If Davis Bacon is applicable, Pasco County will provide a copy of the current Davis Bacon Wage Decision with the solicitation. The decision to award a contract or subcontract shall be conditioned upon the acceptance of the wage determination. Contractor shall submit certified payroll of contractor and all subcontractors on a weekly basis in the format required by the County. At County's request, Contractor shall make available and shall require its subcontractors to make available, copies of cancelled checks and check stubs for comparisons by the County or its agents.

Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR Part 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided that the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under 29 CFR

Part 5.5(a)(1)(ii)) and the Davis Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following. The Statement of Compliance can be found on page 2 of the WH-347 form, and/or additional certifications of compliance may be required by Pasco County. Any Statement of Compliance is subject to the penalties provided by 18 U.S.C. § 1001, namely, a fine, possible imprisonment of not more than 5 years, or both. Accordingly, the party signing the statement should have knowledge of the facts represented as true.

Contractor must include this provision in all contracts between itself and any subcontractors in connection with the services performed under this Contract. Pasco County shall report all suspected or reported violations to the Federal awarding agency, as applicable.

DEBARMENT / SUSPENSION AND VOLUNTARY EXCLUSION (2 CFR Appendix II to Part 200 (I))

Pursuant to 2 CFR Appendix II to Part 200 (I), a Contract meeting the definition in 2 C.F.R. § 180.220 must not be made to parties listed on the System for Award Management (SAM) Exclusion lists, in accordance with the OMB guidelines at 2 CFR 180 that implement Executive Orders 12549 (3 CFR part 1986 Comp., p. 189) and 12689 (3 CFR part 1989 Comp., p. 235), “Debarment and Suspension.” SAM Exclusions contains the names of parties debarred, suspended, or otherwise excluded by agencies, as well as parties declared ineligible under statutory or regulatory authority other than Executive Order 12549.

By submitting a bid, the Bidder certifies that it is not currently debarred from submitting bids for contracts issued by any political subdivision or agency of the Federal Government of the United States, an agency of the State of Florida, or an agency within the Tampa Bay-Clearwater-St. Petersburg Metropolitan Statistical Area (MSA) and that it is not an agent of a person or entity that is currently debarred from submitting bids for contracts issued by any agency noted herein.

Pursuant to Executive Orders 12549 and 12689, a contract award shall not be made to parties listed on the government-wide exclusions in the System for Award Management (SAM), in accordance with the OMB guidelines at 2 CFR 180 that implement Executive Orders 12549 (3 CFR part 1986 Comp., p. 189) and 12689 (3 CFR part 1989 Comp., p. 235). SAM Exclusions contains the names of parties debarred, suspended, or otherwise excluded by agencies, as well as parties declared ineligible under statutory or regulatory authority other than Executive Order 12549. A contract award must not be made to parties listed in the SAM Exclusions. SAM exclusions can be accessed at www.sam.gov.

Additionally, no contracts shall be awarded to any Contractor that has been debarred, suspended, or otherwise excluded from or ineligible for participation in any federal programs, including but not limited to the Department of Health and Human Work (DHHS), Office of Inspector General (OIG) - List of Excluded Individuals & Entities (LEIE); U.S. General Services Administration (GSA) – Excluded Parties List System (EPLS); All States (50) Health & Human Work Commission Medicaid OIG Sanction List; Government Terrorist Watch List (OFAC / Patriot Act); Department of Commerce, Bureau of Industry and Security, Denied Persons List; and Department of Homeland Security, Immigration and Customs Enforcement (ICE) Most Wanted.

This contract is a covered transaction for purposes of compliance with Title 2 C.F.R. parts 180 and 3000, and as such the Contractor is required to verify that none of the contractor, its principals (as defined at 2 C.F.R. § 180.995), or its affiliates (as defined at 2 C.F.R. § 180.905) are excluded (as defined at 2 C.F.R. § 180.940) or disqualified (as defined at 2 C.F.R. § 180.935). These regulations restrict awards, subawards, and contracts with certain parties that are debarred, suspended, or otherwise excluded from or ineligible for participation in Federal assistance programs and activities (See 2 C.F.R Part 200, Appendix II). The Contractor must comply with 2

C.F.R. part 180, subpart C and 2 C.F.R. part 3000, subpart C and shall include this requirement and similar certification in all contracts between itself and any subcontractors in connection with the services performed under this Contract.

The Contractor confirms that it is eligible or otherwise not disqualified or prohibited from participation in federal or state assistance programs under Executive Order 12549, Debarment and Suspension. Additionally, the Contractor warrants that it is not debarred, suspended, or otherwise excluded from or ineligible for participation in any federal programs, including but not limited to the following: Department of Health and Human Work (DHHS), Office of Inspector General (OIG) - List of Excluded Individuals & Entities (LEIE);

U.S. General Services Administration (GSA) – Excluded Parties List System (EPLS); All States (50) Health & Human Work Commission Medicaid OIG Sanction List; Government Terrorist Watch List (OFAC / Patriot Act); Department of Commerce, Bureau of Industry and Security, Denied Persons List; and Department of Homeland Security, Immigration and Customs Enforcement (ICE) Most Wanted. Pasco County reserves the right to verify any contractor's status and document instances of debarment, suspension, or other ineligibility.

Contractor shall verify that all subcontractors performing work under this Contract are not debarred, disqualified, or otherwise prohibited from participation in accordance with the requirements above. The Contractor further must notify Pasco County in writing immediately if Contractor or its subcontractors are not in compliance with Executive Order 12549 during the term of this contract. Contractor shall include this provision in all contracts between itself and any subcontractors in connection with the services performed under this Contract.

If it is found that the Contractor did not comply or is not in compliance with Executive Order 12549 (2 C.F.R. part 180, subpart C and 2 C.F.R. part 3000, subpart C), the Contractor may be subject to available remedies, including but not limited to, refunding Pasco County for any payments made to the Contractor while ineligible, and also acknowledges that the Federal Government may pursue available remedies, including but not limited to suspension and/or debarment.

ENERGY EFFICIENCY (42 U.S.C. 6201 and 2 CFR 200 APPENDIX II (H))

Contractor must comply with standards and policies relating to energy efficiency, which are contained in the state energy conservation plan issued in compliance with the Energy Policy and Conservation Act (42 U.S.C. 6201). Contractor must include this provision in all contracts between itself and any subcontractors in connection with the services performed under this Contract.

EQUAL EMPLOYMENT OPPORTUNITY (41 CFR 60-1.4(b) and 2 CFR 200 APPENDIX II (C))

Contractor must comply with, and incorporate or cause to be incorporated into any contract for construction work, or modification thereof, the Equal Employment Opportunity provisions as follows:

During the performance of this contract, the contractor agrees as follows:

1. The contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, sexual orientation, gender identity, or national origin. The contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment without regard to their race, color, religion, sex, sexual orientation, gender identity, or national origin. Such action shall include, but not be limited to the following:

   Employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause.

2. The contractor will, in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, sexual orientation, gender identity, or national origin.

3. The contractor will not discharge or in any other manner discriminate against any employee or applicant for employment because such employee or applicant has inquired about, discussed, or disclosed the compensation of the employee or applicant or another employee or applicant. This provision shall not apply to instances

in which an employee who has access to the compensation information of other employees or applicants as a part of such employee's essential job functions discloses the compensation of such other employees or applicants to individuals who do not otherwise have access to such information, unless such disclosure is in response to a formal complaint or charge, in furtherance of an investigation, proceeding, hearing, or action, including an investigation conducted by the employer, or is consistent with the contractor's legal duty to furnish information.

4. The contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice to be provided advising the said labor union or workers' representatives of the contractor's commitments under this section, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

5. The contractor will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.

6. The contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the administering agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

7. In the event of the contractor's noncompliance with the nondiscrimination clauses of this contract or with any of the said rules, regulations, or orders, this contract may be canceled, terminated, or suspended in whole or in part and the contractor may be declared ineligible for further Government contracts or federally assisted construction contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

8. The contractor will include the portion of the sentence immediately preceding paragraph (1) and the provisions of paragraphs (1) through (8) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The contractor will take such action with respect to any subcontract or purchase order as the administering agency may direct as a means of enforcing such provisions, including sanctions for noncompliance:

   Provided, however, that in the event a contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the administering agency, the contractor may request the United States to enter into such litigation to protect the interests of the United States.

The Contractor further agrees that it will be bound by the above equal opportunity clause with respect to its own employment practices when it participates in federally assisted construction work: Provided, That if the Contractor so participating is a State or local government, the above equal opportunity clause is not applicable to any agency, instrumentality or subdivision of such government which does not participate in work on or under the contract.

The Contractor agrees that it will assist and cooperate actively with the administering agency and the Secretary of Labor in obtaining the compliance of contractors and subcontractors with the equal opportunity clause and the rules, regulations, and relevant orders of the Secretary of Labor, that it will furnish the administering agency and the Secretary of Labor such information as they may require for the supervision of such compliance, and that it will otherwise assist the administering agency in the discharge of the agency's primary responsibility for securing compliance.

The Contractor further agrees that it will refrain from entering into any contract or contract modification subject to Executive Order 11246 of September 24, 1965, with a contractor debarred from, or who has not demonstrated eligibility for, Government contracts and federally assisted construction contracts pursuant to the Executive Order and will carry out such sanctions and penalties for violation of the equal opportunity clause as may be imposed upon contractors and subcontractors by the administering agency or the Secretary of Labor pursuant to Part II, Subpart D of the Executive Order. In addition, the Contractor agrees that if it fails or refuses to comply with these undertakings, the administering agency may take any or all of the following actions: Cancel, terminate, or suspend in whole or in part this grant (contract, loan, insurance, guarantee); refrain from extending any further assistance to the Contractor under the program with respect to which the failure or refund occurred until satisfactory assurance of future compliance has been received from such Contractor; and refer the case to the Department of Justice for appropriate legal proceedings.

Contractor must include the equal opportunity clause in each of its nonexempt subcontracts, and to require all non-exempt subcontractors to include the equal opportunity clause in each of its nonexempt subcontracts.

EQUAL EMPLOYMENT OPPORTUNITY FOR WORKERS WITH DISABILITIES (48 CFR 52.222-36)

During the performance of this contract, the Contractor must comply with required Equal Employment Opportunity for Workers with Disabilities provisions.

Contractor shall include the following equal opportunity clause in each of its covered

Government contracts or subcontracts (and modifications, renewals, or extensions thereof if not included in the original contract):

a. Equal opportunity clause. The Contractor shall abide by the requirements of the equal opportunity clause at 41 CFR 60-741.5(a), as of March 24, 2014. This clause prohibits discrimination against qualified individuals on the basis of disability, and requires affirmative action by the Contractor to employ and advance in employment qualified individuals with disabilities.

b. Subcontracts. The Contractor shall include the terms of this clause in every subcontract or purchase order in excess of $15,000 unless exempted by rules, regulations, or orders of the Secretary, so that such provisions will be binding upon each subcontractor or vendor. The Contractor shall act as specified by the Director, Office of Federal Contract Compliance Programs of the U.S. Department of Labor, to enforce the terms, including action for noncompliance. Such necessary changes in language may be made as shall be appropriate to identify properly the parties and their undertakings.

EQUAL EMPLOYMENT OPPORTUNITY FOR VEVRAA PROTECTED VETERANS (41 CFR 60.300)

Pasco County is an equal opportunity employer of protected veterans. During the performance of this contract, the Contractor must comply with required Equal Employment Opportunity for VEVRAA Protected Veterans provisions.

Contractor shall include the following equal opportunity clause in each of its covered Government contracts or subcontracts (and modifications, renewals, or extensions thereof if not included in the original contract):

a. The definitions set forth in 41 CFR 60-300.2 apply to the terms used throughout this Clause, and they are incorporated herein by reference.

b. The contractor shall not discriminate against any employee or applicant for employment because he or she is a disabled veteran, recently separated veteran, active duty wartime or campaign badge veteran, or Armed Forces service medal veteran (hereinafter collectively referred to as “protected veteran(s)”) in regard to any position for which the employee or applicant for employment is qualified. The contractor agrees to take affirmative action to employ, advance in employment and otherwise treat qualified individuals without discrimination based on their status as a protected veteran in all employment practices, including the following:

    i. Recruitment, advertising, and job application procedures.

    ii. Hiring, upgrading, promotion, award of tenure, demotion, transfer, layoff, termination, right of return from layoff and rehiring.

iii. Rates of pay or any other form of compensation and changes in compensation.

iv. Job assignments, job classifications, organizational structures, position descriptions, lines of progression, and seniority lists.

v. Leaves of absence, sick leave, or any other leave.

vi. Fringe benefits available by virtue of employment, whether or not administered by the contractor.

vii. Selection and financial support for training, including apprenticeship, and on-the-job training under 38 U.S.C. 3687, professional meetings, conferences, and other related activities, and selection for leaves of absence to pursue training.

viii. Activities sponsored by the contractor including social or recreational programs.

ix. Any other term, condition, or privilege of employment.

c. The contractor shall immediately list all employment openings which exist at the time of the execution of this contract and those which occur during the performance of this contract, including those not generated by this contract and including those occurring at an establishment of the contractor other than the one where the contract is being performed, but excluding those of independently operated corporate affiliates, with the appropriate employment service delivery system where the opening occurs. Listing employment openings with the state workforce agency job bank or with the local employment service delivery system where the opening occurs will satisfy the requirement to list jobs with the appropriate employment service delivery system. In order to satisfy the listing requirement described herein, contractors must provide information about the job vacancy in any manner and format permitted by the appropriate employment service delivery system which will allow that system to provide priority referral of veterans protected by VEVRAA for that job vacancy. Providing information on employment openings to a privately run job service or exchange will satisfy the contractor's listing obligation if the privately run job service or exchange provides the information to the appropriate employment service delivery system in any manner and format that the employment service delivery system permits which will allow that system to provide priority referral of protected veterans.

d. Listing of employment openings with the appropriate employment service delivery system pursuant to this clause shall be made at least concurrently with the use of any other recruitment source or effort and shall involve the normal obligations which attach to the placing of a bona fide job order, including the acceptance of referrals of veterans and nonveterans. The listing of employment openings does not require the hiring of any particular job applicants or from any particular group of job applicants, and nothing

herein is intended to relieve the contractor from any requirements in Executive orders or regulations regarding nondiscrimination in employment.

e. Whenever a contractor, other than a state or local governmental contractor, becomes contractually bound to the listing provisions in paragraphs 2 and 3 of this clause, it shall advise the employment service delivery system in each state where it has establishments that: (a) It is a Federal contractor, so that the employment service delivery systems are able to identify them as such; and (b) it desires priority referrals from the state of protected veterans for job openings at all locations within the state. The contractor shall also provide to the employment service delivery system the name and location of each hiring location within the state and the contact information for the contractor official responsible for hiring at each location. The "contractor official" may be a chief hiring official, a Human Resources contact, a senior management contact, or any other manager for the contractor that can verify the information set forth in the job listing and receive priority referrals from employment service delivery systems. In the event that the contractor uses any external job search organizations to assist in its hiring, the contractor shall also provide to the employment service delivery system the contact information for the job search organization(s). The disclosures required by this paragraph shall be made simultaneously with the contractor's first job listing at each employment service delivery system location after the effective date of this final rule. Should any of the information in the disclosures change since it was last reported to the employment service delivery system location, the contractor shall provide updated information simultaneously with its next job listing. As long as the contractor is contractually bound to these provisions and has so advised the employment service delivery system, there is no need to advise the employment service delivery system of subsequent contracts. The contractor may advise the employment service delivery system when it is no longer bound by this contract clause.

f. The provisions of paragraphs 2 and 3 of this clause do not apply to the listing of employment openings which occur and are filled outside of the 50 states, the District of Columbia, the Commonwealth of Puerto Rico, Guam, the Virgin Islands, American Samoa, the Commonwealth of the Northern Mariana Islands, Wake Island, and the Trust Territories of the Pacific Islands.

g. As used in this clause:

    i. All employment openings includes all positions except executive and senior management, those positions that will be filled from within the contractor's organization, and positions lasting three days or less. This term includes full-time employment, temporary employment of more than three days' duration, and part-time employment.

    ii. Executive and senior management means: (1) Any employee (a) compensated on a salary basis at a rate of not less than $455 per week (or $380 per week, if employed in American Samoa by employers other than the Federal

Government), exclusive of board, lodging or other facilities; (b) whose primary duty is management of the enterprise in which the employee is employed or of a customarily recognized department or subdivision thereof; (c) who customarily and regularly directs the work of two or more other employees; and (d) who has the authority to hire or fire other employees or whose suggestions and recommendations as to the hiring, firing, advancement, promotion or any other change of status of other employees are given particular weight; or (2) any employee who owns at least a bona fide 20-percent equity interest in the enterprise in which the employee is employed, regardless of whether the business is a corporate or other type of organization, and who is actively engaged in its management.

iii. Positions that will be filled from within the contractor's organization means employment openings for which no consideration will be given to persons outside the contractor's organization (including any affiliates, subsidiaries, and parent companies) and includes any openings which the contractor proposes to fill from regularly established "recall" lists. The exception does not apply to a particular opening once an employer decides to consider applicants outside of his or her own organization.

h. The contractor shall comply with the rules, regulations, and relevant orders of the Secretary of Labor issued pursuant to the Act.

i. In the event of the contractor's noncompliance with the requirements of this clause, actions for noncompliance may be taken in accordance with the rules, regulations, and relevant orders of the Secretary of Labor issued pursuant to the Act.

j. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices in a form to be prescribed by the Director, Office of Federal Contract Compliance Programs, provided by or through the contracting officer. Such notices shall state the rights of applicants and employees as well as the contractor's obligation under the law to take affirmative action to employ and advance in employment qualified employees and applicants who are protected veterans. The contractor must ensure that applicants or employees who are disabled veterans are provided the notice in a form that is accessible and understandable to the disabled veteran (e.g., providing Braille or large print versions of the notice, posting the notice for visual accessibility to persons in wheelchairs, providing the notice electronically or on computer disc, or other versions). With respect to employees who do not work at a physical location of the contractor, a contractor will satisfy its posting obligations by posting such notices in an electronic format, provided that the contractor provides computers that can access the electronic posting to such employees, or the contractor has actual knowledge that such employees otherwise are able to access the electronically posted notices. Electronic notices for employees must be posted in a conspicuous location and format on the company's intranet or sent by electronic mail to employees. An electronic posting must be used by the contractor to notify job

applicants of their rights if the contractor utilizes an electronic application process. Such electronic applicant notice must be conspicuously stored with, or as part of, the electronic application.

k. The contractor will notify each labor organization or representative of workers with which it has a collective bargaining agreement or other contract understanding that the contractor is bound by the terms of VEVRAA, and is committed to take affirmative action to employ and advance in employment, and shall not discriminate against, protected veterans.

l. The contractor will include the provisions of this clause in every subcontract or purchase order of $100,000 or more, unless exempted by the rules, regulations, or orders of the Secretary issued pursuant to VEVRAA so that such provisions will be binding upon each subcontractor or vendor. The contractor will take such action with respect to any subcontract or purchase order as the Director, Office of Federal Contract Compliance Programs, may direct to enforce such provisions, including action for noncompliance.

m. The contractor must, in all solicitations or advertisements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive consideration for employment without regard to their protected veteran status.

n. The Contractor shall forfeit as a penalty to the County who administers the subject Project receiving Federal assistance, Sixty Dollars ($60.00) for each worker, employed for each calendar day, or a portion thereof, such worker is paid less than the said stipulated rates for any work done under this Project, by him/her or by any contractor under him/her.

o. All contractors shall keep, or cause to be kept, an accurate record showing the names of all workers, also the actual per diem wages paid to each of such workers.

FAIR LABOR STANDARDS ACT

Contractor must comply the Fair Labor Standards Act of 1938 (29 U.S.C. Section 201 et seq.) as now or hereafter amended, which regulates wage, hour and other employment practices that govern the use of funds provided and the employment of personnel under this contract. The Contractor warrants that it will pay all its workers all monies earned by its workers including, but not limited to regular wages, any overtime compensation, or any additional payments pursuant to the Fair Labor Standards Act, 29 United States Code (U.S.C.) Section 207 9a(1), as amended; the Equal Pay Act; Title VII of the Civil Rights Act of 1964, 42 U.S.C. Section 2000, et al., as amended; or any provisions of the State's Labor Code Ann., as amended.

FLOOD DISASTER PROTECTION ACT OF 1973 (24 CFR 570.605)

Contractor must comply with the provisions in 24 CFR 570.605, Section 202(a) of the Flood Disaster Protection Act of 1973 (42 U.S.C. 4106), and the regulations in 44 CFR Parts 59-79.

RESILIENT BUILDING STANDARDS

At a minimum, Contractors and subcontractors must comply with local codes and any applicable national building codes for any work involving rehabilitation or construction, including design. Resilient building and energy efficiency standards improve the lives of residents, support community revitalization, and protect the environment. There are significant social, environmental, financial and health benefits to incorporating a set of resiliency building and energy conservation standards. At minimum, RRE and MHR will follow:

- Florida Building Code, 8th Edition
- ENERGY STAR (Certified Homes or Multifamily High-Rise)

HOLD HARMLESS AGREEMENT

Contractor shall indemnify, defend, and hold harmless IEM and Pasco County from all claims for personal injury, death and/or property damage resulting directly or indirectly from contractor's performance. Contractor shall procure and maintain, with respect to the subject matter of this Request for Proposals, appropriate insurance coverage including, at a minimum, public liability and property damage with adequate limits to cover contractor's liability as may arise directly or indirectly from work performed under terms of this Request for Proposals. Certification of such coverage must be provided to the County upon request.

The Federal Government is not a party to this contract and is not subject to any obligations or liabilities to the non-Federal entity, contractor, or any other party pertaining to any matter resulting from the contract.

In any and all claims against IEM, Pasco County or any of its agents or employees by any employee of the contractor, any subcontractor, anyone directly or indirectly employed by any of them, or anyone for whose acts any of them may be liable, the indemnification obligation under the previous paragraph shall not be limited in any way as to the amount or type of damages, compensation, or benefits payable by or for the contractor or any subcontractor under Workers' Compensation Acts, disability benefit acts, or other employee benefit acts.

LEAD-BASED PAINT (24 CFR 570.608)

Contractor and subcontractors must comply with the provisions found in 24 CFR 570.608, the Lead-Based Paint Poisoning Prevention Act (42 U.S.C. 4821-4846), the Residential Lead Based Paint Hazard Reduction Act of 1992 (U.S.C. 4851-4856, and 24 CFR Part 35, subparts A, B, J, K, and R. This Article 2(f) is to be included in all subcontracts, for work in connection with this Contract, which relate to residential structures.

NON-COLLUSION (The Sherman Act)

Contractor must comply with the requirements of The Sherman Act, which prohibit collusion. Collusion occurs when two persons or representatives of an entity or organization make an agreement to deceive or mislead another. Such agreements are usually secretive and involve fraud or gaining an unfair advantage over a third party, competitors, consumers or others with whom they are negotiating. The collusion, therefore, makes the bargaining process inherently unfair. Collusion can involve promises of future benefits, price or wage fixing, kickbacks, or misrepresenting the independence of the relationship between the colluding parties.

The Sherman Act prohibits any agreement among competitors to fix prices, rig bids, or engage in other anticompetitive activity. Collusion, bid rigging, or other anticompetitive activity is considered a felony.

Contractor shall not in any way, directly or indirectly:

a. Collude, conspire, or agree with any other person, firm, corporation, Respondent or potential Respondent to the amount of this Proposal or the terms or conditions of this Proposal.

b. Pay or agree to pay any other person, firm, corporation Respondent or potential Respondent any money or anything of value in return for assistance in procuring or attempting to procure a contract or in return for establishing the prices in the attached Proposal or the Proposal of any other Respondent.

c. Assemble in coordination with any other organization in an attempt to fix the price of the work.

Contractors are expected to report any suspected fraud, collusion, or impropriety from the inception of solicitation through the end of the contract term.

NON-SEGREGATED FACILITIES

"Prohibition of Segregated Facilities"

a. Segregated facilities means any waiting rooms, work areas, rest rooms and wash rooms,

restaurants and other eating areas, time clocks, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees, that are segregated by explicit directive or are in fact segregated on the basis of race, color, religion, sex, sexual orientation, gender identity, or national origin because of written or oral policies or employee custom. The term does not include separate or single-user rest rooms or necessary dressing or sleeping areas provided to assure privacy between the sexes.

b. The Contractor agrees that it does not and will not maintain or provide for its employees any segregated facilities at any of its establishments, and that it does not and will not permit its employees to perform their services at any location under its control where segregated facilities are maintained. The Contractor agrees that a breach of this clause is a violation of the Equal Opportunity clause in this contract.

c. The Contractor shall include this clause in every subcontract and purchase order that is subject to the Equal Opportunity clause of this contract.

PARTICIPATION BY MINORITY & WOMEN-OWNED BUSINESS ENTERPRISES (2 CFR 200.321)

Contractor must comply with the Minority and Women-owned Business Enterprise participation requirements under 2 CFR 200.321. Contractors must take all affirmative steps necessary to subcontract with Minority and Women-owned Business Enterprises (MWBEs) to assure that MWBEs are used when possible. These affirmative steps shall include:

a. Placing qualified small and minority businesses and women's business enterprises on solicitation lists;

b. Assuring that small and minority businesses, and women's business enterprises are solicited whenever they are potential sources;

c. Dividing total requirements, when economically feasible, into smaller tasks or quantities to permit maximum participation by small and minority businesses, and women's business enterprises;

d. Establishing delivery schedules, where the requirement permits, which encourage participation by small and minority businesses, and women's business enterprises; and

e. Using the services and assistance, as appropriate, of such organizations as the Small Business Administration and the Minority Business Development Agency of the Department of Commerce.

Contractors and subcontractors are required to facilitate Minority & Women-Owned Business Enterprise participation. Contractors are encouraged to utilize MWBEs / HUB firms as

subcontractors, subconsultants, or suppliers in order to comply with the requirements.

Contractor and subcontractors must facilitate Minority & Women-Owned Business Enterprise participation and take all affirmative steps to utilize MWBEs / HUB firms as subcontractors, subconsultants, or suppliers throughout the life of the Contract.

POTENTIAL CONFLICTS OF INTEREST

Pursuant to 2 CFR 200.112, Contractor must comply with disclosure requirements. Contractor shall not use funds to directly or indirectly pay any person for influencing or attempting to influence any public employee or official in connection with the awarding of any contract or the extension, continuation, renewal, amendment or modification of any contract. By law, the *Conflict of Interest Questionnaire* must be filed with the records administrator of the local governmental entity not later than the 7th business day after the date the Contractor becomes aware of facts that require the statement to be filed.

PREVAILING WAGES (2 CFR 200 APPENDIX II (D)

Pursuant to 2 CFR 200 Appendix II (D), Contractor must comply with Prevailing Wage Rates. Accordingly, Contractor must submit a certified payroll records as required, and compensate any worker employed on a public works project not less than as applicable. As noted under "Davis Bacon and Related Acts", when required by Federal program legislation, construction contracts in excess of
$2,000 awarded by Pasco County shall require compliance with the Davis-Bacon Act (40 U.S.C. 3141-3144, and 3146-3148) as supplemented by Department of Labor regulations (29 CFR Part 5, "Labor Standards Provisions Applicable to Contracts Covering Federally Financed and Assisted Construction"). In accordance with the statute, Contractor must pay wages to laborers and mechanics at a rate not less than the local prevailing wages, or Davis Bacon wages, as applicable. If both Florida prevailing wages and Davis Bacon provide rates for a particular class, Contractors must pay the greater wage rate. In addition, Contractor must pay wages not less than once a week.

Contractor and any subcontractor hired by Contractor for the construction of any project, shall pay not less than the rates set forth in the Schedule of Prevailing Wages attached and incorporated by reference. In submitting a Proposal, Contractor warrants that it and its subcontractors shall comply with all requirements and worker ratios per the applicable Schedule of Prevailing Wages and Florida law.

Contractor must submit certified payroll of contractor and all subcontractors on a weekly

basis. At IEM's request, Contractor must make available and shall require its subcontractors to make available, copies of cancelled checks and check stubs for comparisons by the County or IEM. Regardless of whether Davis Bacon or Florida Prevailing Wages apply, the County reserves the right for its agents to visit the project site and to interview contractor, its subcontractors and employees of each on any date or time, as often as desired during the construction period, without prior notification.

IEM and the County will ascertain if proper wage rates are being paid to the employees as required. In the event of a discrepancy between the work performed and the wages paid, the IEM and/or County shall document same and notify Contractor. If, for any length of time and as determined by IEM as directed by Pasco County, discrepancies appear between the certified payrolls and the actual wage paid, the IEM shall require check stubs to be attached to each weekly certified payroll.

The IEM and the County reserves the right to withhold any monies due Contractor until such discrepancy is resolved and the necessary adjustment made. The Contractor shall forfeit as a penalty to the County, IEM or entity who administers the subject Project receiving Federal assistance, Sixty Dollars ($60.00) for each worker, employed for each calendar day, or a portion thereof, such worker is paid less than the said stipulated rates for any work done under this Project, by him/her or by any contractor/subcontractor under him/her.

All contractor/subcontractor shall keep, or cause to be kept, an accurate record showing the names of all workers, also the actual per diem wages paid to each of such workers. Contractor shall impose these same obligations upon its Subcontractors. Contractor understands that with weekly or monthly certified payrolls, contractor is responsible for any and all penalties that shall accrue during the month, regardless of the fact that any error could not be discovered by the Contract Compliance Officer until the following certified payroll.

PROCUREMENT OF RECOVERED MATERIALS (2 CFR 200.322)

Pursuant to 2 CFR 200.322, Contractor must comply with Section 6002 of the Solid Waste Disposal Act, Pub.
L. No. 89-272 (1965) (codified as amended by the Resource Conservation and Recovery Act at 42 U.S.C. § 6962). As such, any contractors awarded under this contract opportunity is subject to the requirements of Section 6002, which include procuring only items designated in guidelines of the EPA at 40 C.F.R. Part 247 that contain the highest percentage of recovered materials practicable, consistent with maintaining a satisfactory level of competition, where the purchase price of the item exceeds $10,000 or the value of the quantity acquired by the preceding fiscal year exceeded $10,000; procuring solid waste management services in a

manner that maximizes energy and resource recovery; and establishing an affirmative procurement program for procurement of recovered materials identified in the EPA guidelines.

PROGRAM FRAUD AND FALSE OR FRAUDULENT STATEMENTS OR RELATED ACTS

Contractor must comply with 31 U.S.C. Chapter 38, *Administrative Remedies for False Claims and Statements*, which shall apply to the activities and actions of the Contractor and its subcontractors pertaining to any matter resulting from the contract.

PROHIBITION ON CERTAIN TELECOMMUNICATIONS AND VIDEO SURVEILLANCE SERVICES OR EQUIPMENT (2 CFR 200.216)

Pasco County is prohibited from obligating or expending loan or grant funds to procure or obtain, extend, or renew a contract to procure or obtain, or enter into a contract (or extend or renew a contract) to procure or obtain equipment, services, or systems that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system.

Prohibition on certain telecommunications and video surveillance services or equipment (2 CFR 200.216) - Recipients and subrecipients are prohibited from obligating or expending loan or grant funds to:

(1) Procure or obtain;

(2) Extend or renew a contract to procure or obtain; or

(3) Enter into a contract (or extend or renew a contract) to procure or obtain equipment, services, or systems that uses covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system. As described in Public Law 115-232, section 889, covered telecommunications equipment is telecommunications equipment produced by Huawei Technologies Company or ZTE Corporation (or any subsidiary or affiliate of such entities).

> (i) For the purpose of public safety, security of government facilities, physical security surveillance of critical infrastructure, and other national security purposes, video surveillance and telecommunications equipment produced by Hytera Communications Corporation, Hangzhou Hikvision Digital Technology Company, or Dahua Technology Company (or any subsidiary or affiliate of such entities).
>
> (ii) Telecommunications or video surveillance services provided by such entities or using

such equipment.

(iii) Telecommunications or video surveillance equipment or services produced or provided by an entity that the Secretary of Defense, in consultation with the Director of the National Intelligence or the Director of the Federal Bureau of Investigation, reasonably believes to be an entity owned or controlled by, or otherwise connected to, the government of a covered foreign country.

(4) In implementing the prohibition under Public Law 115-232, section 889, subsection (f), paragraph (1), heads of executive agencies administering loan, grant, or subsidy programs shall prioritize available funding and technical support to assist affected businesses, institutions and organizations as is reasonably necessary for those affected entities to transition from covered communications equipment and services, to procure replacement equipment and services, and to ensure that communications service to users and customers is sustained. Page 16 of 16

(5) See Public Law 115-232, section 889 for additional information. (

6) See also § 200.471.

RESTRICTIONS ON PUBLIC BUILDINGS AND PUBLIC WORKS PROJECTS CERTIFICATION

a. Definitions. The definitions pertaining to this provision are those that are set forth on the clause entitled "Restrictions on Public Works Projects." (Set out under "Contract Clauses" below.)

b. Certification. Except as provided in paragraph (C) of this provision, by submission of its bid or proposal, Respondent certifies that it:

    i. Is not a Contractor of a foreign country included on the list of countries that discriminate against U.S. firms published by the Office of the United States Trade Representative (USTR) (see paragraph (H) of this provision);

    ii. Has not or will not enter into any subcontract with a subcontractor of a foreign country included on the list of countries that discriminate against U.S. firms published by the USTR, and

    iii. Will not provide any product of a country included on the list of foreign countries that discriminate against the U.S. firms published by the USTR.

c. Inability to certify. A Respondent unable to certify in accordance with paragraph (b) of this provision shall submit with its offer a written explanation fully describing the reasons for its inability to make the certification.

d. Applicability of 18 U.S.C. 1001. This certification is paragraph (B) of this provision concerns a matter within the jurisdiction of an agency of the United States, and the making of a false, fictitious, or fraudulent certification may render the maker subject to prosecution under Title 18 U.S.C. 1001.

e. Notice. Respondent shall provide written notice to the Contracting Officer if, at any time before the contract award, Respondent learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

f. Restrictions on contract award. Unless a waiver to these restrictions is granted by the Secretary of Housing and Urban Development, no contract will be awarded to a Respondent (1) who is owned or controlled by a citizen or national of a foreign country included on the list of foreign countries that discriminate against U.S. firms published by the USTR, (2) whose subcontractors are owned or controlled by citizens or national of a foreign country on the USTR list or, (3) who incorporates any product of a foreign country on the USTR list in the public works project.

g. USTR List. The USTR published an initial list in the Federal Register on December 30, 1987 (53 FR 49244), which identified one country-Japan. The USTR can add countries to the list, and remove countries from it, in accordance with section 109 (C) of PUB. L. 100-202.

RIGHTS TO INVENTIONS (2 CFR Appendix II to Part 200 (F))

Any discovery or invention that arises during the course of the contract shall be reported to Pasco County. This clause requires the Contractor to disclose promptly inventions to the County (within 2 months) after the inventor discloses it in writing to Contractor personnel responsible for patent matters. The awarding agency shall determine how rights in the invention/discovery shall be allocated consistent with "Government Patent Policy" and Title 37 C.F.R. § 401.

If the Federal award meets the definition of “funding agreement” under 37 C.F.R. §.401.2(a) and the recipient or subrecipient wishes to enter into a contract with a small business firm or nonprofit organization regarding the substitution of parties, assignment or performance of experimental, developmental, or research work under that “funding agreement,” the recipient or subrecipient must comply with the requirements of Title 37 C.F.R. § 401, “Rights to Inventions Made by Nonprofit Organizations and Small Business Firms Under Government Grants, Contracts and Cooperative Agreements,” and any implementing regulations issued by the awarding agency.

SECTION 109 OF THE HOUSING AND COMMUNITY DEVELOPMENT ACT OF 1974 (24 CFR 570.602)

Section 109 of the Act requires that no person in the United States shall on the grounds of race, color, national origin, religion, or sex be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance made available pursuant to the Act. Section 109 also directs that the prohibitions against discrimination on the basis of age under the Age Discrimination Act and the prohibitions against discrimination on the basis of disability under Section 504 shall apply to programs or activities receiving Federal financial assistance under Title I programs. The policies and procedures necessary to ensure enforcement of section 109 are codified in 24 CFR part 6.

SECTION 3 ACT OF 1968 (12 U.S.C. 1701u and 24 CFR Part 75) DISCLAIMER: THIS CONTRACT IS HUD-FUNDED AND THEREFORE SECTION 3 DOES APPLY TO THIS CONTRACT.

For any HUD-funded contract with a value in excess of $200,000, Contractor and subcontractors must comply with the Section 3 Act of 1968. The purpose of Section 3 is to ensure that employment and other economic opportunities generated by certain HUD financial assistance shall, to the greatest extent feasible, and consistent with existing Federal, State and local laws and regulations, be directed to low- and very low income persons, particularly those who are recipients of government assistance for housing, and to business concerns which provide economic opportunities to low- and very low-income persons. Section 3 is triggered when the normal completion of construction and rehabilitation projects creates the need for new employment, contracting, or training opportunities.

For any Section 3 Covered Contracts, Contractor and subcontractors must comply with all provisions of the Section 3 Act of 1968, contained under 24 CFR 75. Contractor and subcontractors must include the Section 3 Clause in its entirety, in every subcontract subject to compliance with regulations in 24 CFR 75.

Contractor and subcontractors must assure that to the greatest extent feasible, contracts for work to be performed in connection with the project are awarded to Section 3 Business Concerns. Contractor and subcontractors must post all new hire opportunities with the local workforce connects, in accordance with 24 CFR 75. The minimum numeric goals for Section 3 utilization are:

- 30 percent of total number of new hires are Section 3 Residents (i.e. 1 out of 3 new hires);
- 10 percent of all awarded construction contracts are awarded to Section 3 Business Concerns;

- 3 percent of all awarded non-construction contracts are awarded to Section 3 Business Concerns.

TERMINATION FOR CAUSE & CONVENIENCE (2 CFR Appendix II to Part 200 (A) and (B))

Pursuant to 2 CFR Appendix II to Part 200 (A), Contracts for more than the simplified acquisition threshold currently set at $150,000, which is the inflation adjusted amount determined by the Civilian Agency Acquisition Council and the Defense Acquisition Regulations Council (Councils) as authorized by 41 U.S.C. 1908, shall address administrative, contractual, or legal remedies in instances where contractors violate or breach contract terms, and provide for such sanctions and penalties as appropriate.

Pursuant to 2 CFR Appendix II to Part 200 (B), all contracts in excess of $10,000 shall address termination for cause and for convenience by the non-Federal entity including the manner by which it will be effected and the basis for settlement. Pasco County shall have the right to terminate this contract for cause and convenience.

In the event of a failure by Contractor to satisfactorily perform the services specified herein and/or a default by Contractor in abiding by the other terms and conditions of this Contract, Pasco County may terminate the Contract on written notice to Contractor and Contractor shall be liable for all damages, costs, and expenses (including attorney fees) incurred by County related to this default. Such termination is in addition to and not in lieu of any other remedies that IEM and/or Pasco County may have in law or equity. Administrative remedies for non-performance, violation or breach of contract terms, or termination of contract for default may include suspension and debarment. IEM may assess liquidated damages for failure to meet completion deadlines, contract breaches, or performance failures of the Contractor or its Subcontractors.

Contractor shall be provided the opportunity to cure certain performance failures or instances of default as described in the contract documents. IEM, Pasco County and Contractor(s) should attempt to resolve any claim for breach of contract made by Contractor, to the extent it is applicable to the Contract and not preempted by other law.

VENDORS/CONTRACTORS OWING TAXES OR OTHER DEBTS

If, during the performance of this contract, Contractor's taxes become delinquent or Contractor becomes otherwise indebted to IEM and/or Pasco County, IEM and/or Pasco County reserves the right to provide notice to the Auditor.

WHISTLEBLOWER PROTECTION ACT

Contractor, subcontractors, and employees working on this Project shall be subject 41 U.S. Code § 4712, which requires that an employee of a contractor, subcontractor, grantee, or subgrantee or personal services contractor may not be discharged, demoted, or otherwise discriminated against as a reprisal for disclosing information that the employee reasonably believes is evidence of gross mismanagement of a Federal contract or grant, a gross waste of Federal funds, an abuse of authority relating to a Federal contract or grant, a substantial and specific danger to public health or safety, or a violation of law, rule, or regulation related to a Federal contract (including the competition for or negotiation of a contract) or grant.

The Contractor shall inform its employees and subcontractors in writing, in the predominant language of the workforce, of employee whistleblower rights and protections under 41 U.S.C. 4712, as described in section 3.908 of the Federal Acquisition Regulation. The Contractor shall insert the substance of this clause, including this paragraph, in all subcontracts providing services for this Project.