



ENGINEERING • INSPECTIONS
CERTIFICATIONS • TESTING

June 8, 2022

New Baxley, LLC
DBA Impact Housing
137 West Park Dr.
Baxley, GA 31513

RE: Manufacturer: New Baxley/Impact Housing
S/N Size & Occupancy: 1672018GSH; IHG-43FL; 15'-4" X 72'-0"; SFD
HWC Plan #: 2773-0073F

To Whom It May Concern:

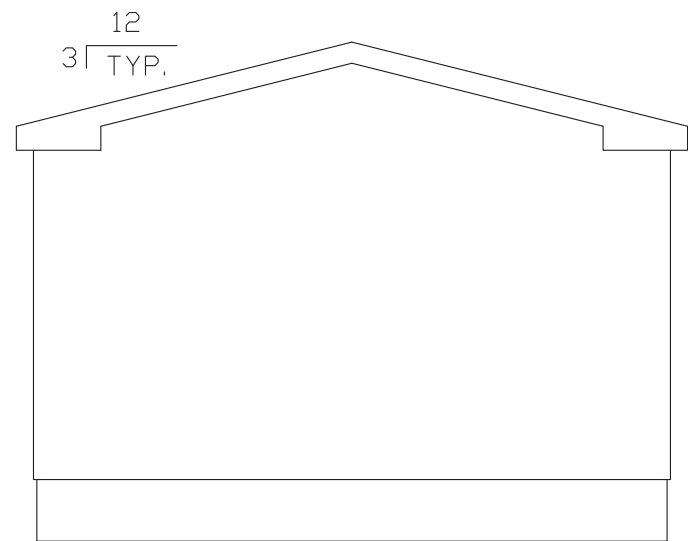
This is to certify that the plans for the referenced manufactured building have been reviewed and approved as being in compliance with the 2020 Florida Codes with 2021 Supplement and Standards, as noted on the approved drawings, subject to the following limitations:

1. Approval covers factory-built structure only. (Note: Any alterations to factory built structure on site voids state approval)
2. Items installed at the site are subject to review, approval, and inspection by the local authority having jurisdiction.
3. The Chapter 633 Plan Review and Inspection shall be conducted by the local fire safety inspector.
4. Signed and sealed plans shall be on file with HWC Engineering.
5. NOT approved for High Velocity Hurricane Zone (i.e. Broward and Dade Counties)

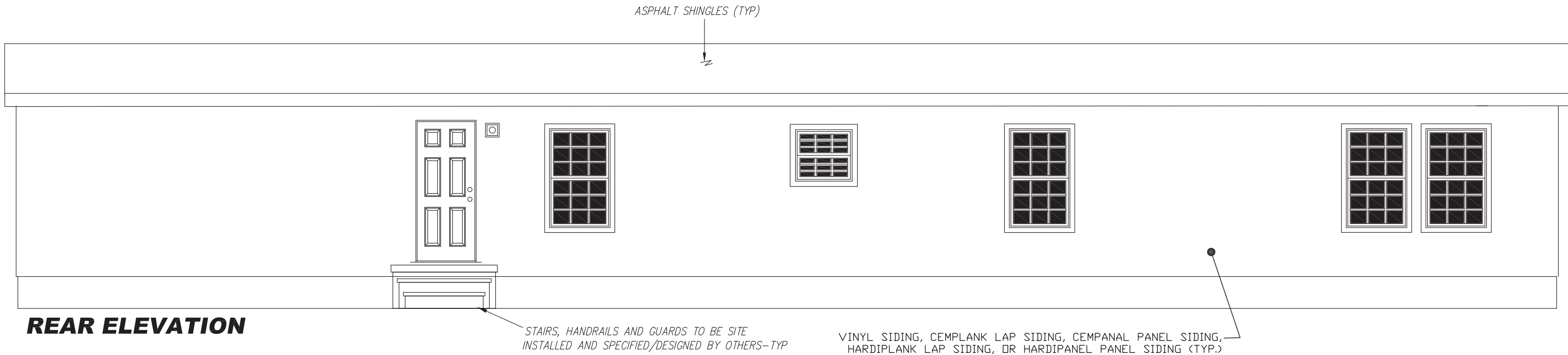
Sincerely,
HILBORN, WERNER, CARTER & ASSOCIATES, INC.


Plan Reviewer

HILBORN, WERNER, CARTER AND ASSOCIATES, INC.
1827 SOUTH MYRTLE AVENUE CLEARWATER, FLORIDA 33756
(727) 584-8151
FAX: (727) 588-3343 / (727) 585-2392 / (727) 587-0447
Modular Design Inspection



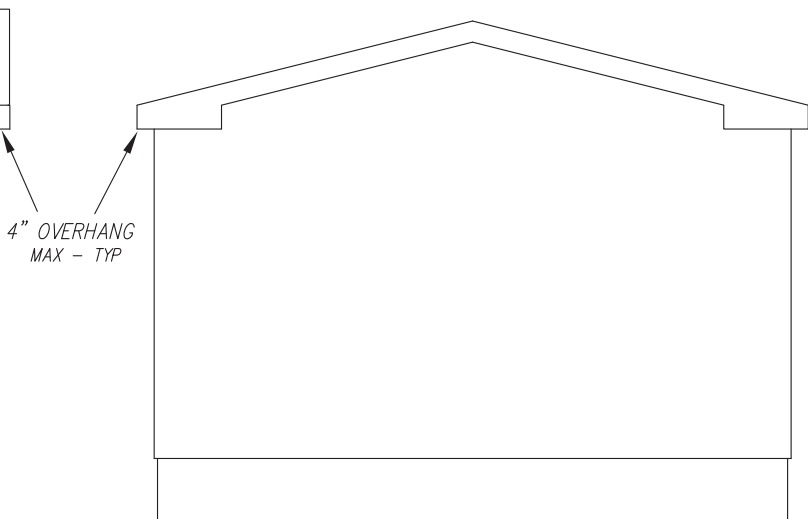
LEFT ELEVATION



REAR ELEVATION



FRONT ELEVATION



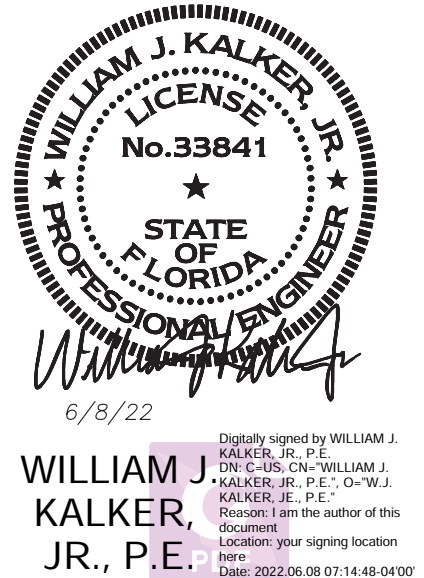
RIGHT ELEVATION

Date 06-08-22 Plan No. 2773-0073F
Approved By SCOTT S. FRANCIS

Scott S. Francis
Modular Building Plans Examiner
Florida License No. SMP-42

LISTING AGENCY APPROVAL	
THESE PRINTS COMPLY WITH THE FLORIDA MANUFACTURED BUILDING ACT OF 1979 CONSTRUCTION CODE AND ADHERE TO THE FOLLOWING CRITERIA:	
CONST. TYPE	VB
OCCUPANCY	SFD
ALLOWABLE NO. OF FLOORS	1
RISK CATEGORY	II
WIND VELOCITY (ULT)	150
WIND VELOCITY (ASD)	116
FIRE RATING OF EXT. WALLS	0
PLAN NO.	2773-0073F
ALLOW. FLOOR LOAD	40
APPROVAL DATE	06-08-2022
MANUFACTURER	New Baxley
HIGH VELOCITY HURRICANE ZONE	NO

IWGC
MUR-261



NOTE: THIS STRUCTURE IS A MODULAR (FACTORY-BUILT) BUILDING WHICH IS TO BE CONSTRUCTED AND INSPECTED IN ACCORDANCE WITH AN APPROVED THIRD-PARTY QUALITY ASSURANCE PROGRAM TO INSURE COMPLIANCE WITH THE REFERENCED CODES AND STANDARDS.

BUILDING SITE INSTALLATION REQUIREMENTS
ATTENTION LOCAL INSPECTIONS DEPARTMENT:

The following items have not been completed by the building manufacturer, have not been inspected by the third party inspection agency and are not certified by the state modular label and/or certification. Code compliance for these items must be determined at the local level:

- 1) The completed foundation support system and tiedown and/or anchorage system.
- 2) Ramps, stairs and general access to the building.
- 3) Building drains, cleanouts and hook-ups to plumbing system, and finish plumbing.
- 4) Electrical service hook-up (including feeders and the main Electrical Panel).
- 5) Connection of electrical circuits crossing over modular mating lines (multi-wide units only).
- 6) Structural and aesthetic interconnections between modules (multi-units only).
- 7) Installation of insulation at floor, ceiling and end-walls at mating lines (multi-wide units only).
- 8) Install R6.5 insulation on all piping installed in unconditioned spaces.
- 9) Install firestopping at all module mate lines at the marriage wall ceiling height and at the floor system.
- 10) Crawl space light and switch
- 11) HVAC system crossover ducts, and HVAC systems; HVAC system energy code compliance documentation to be provided by the HVAC designer
- 12) Ridge vents must be installed in accordance with the vent manufacturers instructions.
- 13) Storm Protection Panels Required For Glazed Openings
- 14) Lamps in permanent light fixtures to be site-installed.
- 15) On-site fastenings and framing at gable walls, truss transitions and/or hinged trusses.
- 16) Window Guards when required (see notes on Dwg #2)
- 17) Hose Bibbs and Backflow Preventors
- 18) Foundation Design
- 19) Floor Insulation
- 20) Installation of Air Admittance Valves After Drainage System Testing
- 21) Communications Outlet and Cable to be site-installed
- 22) Low Velocity Blade Fans
- 23) Fire Separation Distance for building to be 3 feet minimum from the property line or assumed property line
- 24) Thermal Envelope Blower Door Testing and Whole House Ventilation System to be Performed/Installed On-Site

NOTE: THE FLOOR AND ROOF DESIGN OF THIS BUILDING IS 'LIGHT-FRAME' TRUSS-TYPE CONSTRUCTION' AS REFERENCED IN FAC RULE 69A-3.012(6). THE POSTING OF NOTICE SIGN(S) AS REQUIRED BY FAC RULE 69A-3.012(6) SHALL BE SITE-INSTALLED AND IS THE RESPONSIBILITY OF THE BUILDING OWNER.

NOTE: ALL MATERIALS USED IN THE CONSTRUCTION OF THIS BUILDING WHICH ARE COVERED BY THE FLORIDA BUILDING COMMISSION FAC 61G20-3 RULES SHALL HAVE A CURRENT FLORIDA PRODUCT APPROVAL AND/OR SHALL BE APPROVED IN ACCORDANCE WITH FS 553.8425

NOTE: BUILDING IS DESIGNED TO MEET THE THERMAL ENVELOPE PRESCRIPTIVE REQUIREMENTS OF THE 2020 FBC-ENERGY CONSERVATION, 7TH EDITION, FOR CLIMATE ZONES 1 AND 2

NOTE: THIS STRUCTURE CANNOT BE LOCATED ON THE UPPER HALF OF AN 'ISOLATED HILL, RIDGE OR ESCARPMENT' WHICH IS EQUAL TO OR HIGHER THAN 15 FEET IN EXPC OR EXPD LOCATIONS OR EQUAL TO OR HIGHER THAN 60 FEET IN EXPB LOCATIONS

THIS STRUCTURE CANNOT BE LOCATED ON THE SEAWARD SIDE OF THE COASTAL CONSTRUCTION CONTROL LINE

NOTE THE BUILDING SPECIFIED ON THESE DRAWINGS IS EXCLUDED FROM COVERAGE OF THE MANUFACTURED HOUSING CONSTRUCTION AND SAFETY STANDARDS ACT, 42 U.S.C. 5401 ET SEQ, UNDER PROVISIONS OF 24 CFR 3282.12, IN THAT THE BUILDING IS:

- 1) INTENDED ONLY FOR ERECTION OR INSTALLATION ON A SITE-BUILT PERMANENT FOUNDATION;
- 2) NOT DESIGNED TO BE MOVED ONCE ERECTED OR INSTALLED; AND
- 3) DESIGNED AND MANUFACTURED TO COMPLY WITH A NATIONALLY RECOGNIZED MODEL BUILDING CODE OR AN EQUIVALENT BUILDING CODE FOR SITE-BUILT HOUSING.

FOUNDATION NOTES

IN ACCORDANCE WITH THE REQUIREMENTS OF THE FLORIDA DEPARTMENT OF BUSINESS AND PROFESSIONAL REGULATION, THESE BUILDING PLANS DO NOT CONTAIN FOUNDATION SUPPORT AND TIEDOWN SYSTEM DETAILS AND SPECIFICATIONS.

THE DESIGNER OF THE BUILDING PLANS SHOULD BE CONTACTED TO OBTAIN APPROPRIATE FOUNDATION PLANS. IF FOUNDATION PLANS ARE DESIGNED BY OTHERS, THE DESIGNER OF THE BUILDING PLANS SHALL NOT BE HELD RESPONSIBLE OR LIABLE FOR THE FOUNDATION DESIGN AND THE CONSEQUENTIAL PERFORMANCE OF THE SUPERSTRUCTURE'S STRUCTURAL COMPONENTS AND SYSTEMS RELATED THERETO.

THE FBC-R CODE REQUIRES THAT ALL BUILDINGS LOCATED IN AREAS WITH WIND SPEEDS (Vult) EQUAL TO OR GREATER THAN 140 MPH AND ALL BUILDINGS LOCATED IN AREAS WITH WIND SPEEDS (Vult) EQUAL TO OR GREATER THAN 130 MPH WHICH ARE WITHIN ONE MILE OF THE COASTAL MEAN WATER LINE MUST BE PROVIDED WITH EITHER OF THE FOLLOWING:

- (1) IMPACT RESISTANT GLAZING COMPLYING WITH AN IMPACT GLAZING STANDARD, ASTM E1996 AND ASTM E1886 AS MODIFIED IN SECTION 301.2.1.2.1, TAS 201, TAS 202 AND TAS 203 OR AAMA 506
- (11) STORM PROTECTION WOOD STRUCTURAL PANELS (I.E., MIN. 7/16" OSB OR PLY-WOOD) PRECUT TO FIT THE GLAZING OPENINGS WITH THE ATTACHMENT HARDWARE PROVIDED. THE PROTECTIVE PANELS MUST BE INSTALLED IN ACCORDANCE WITH THE FASTENING SPECIFICATIONS PROVIDED IN THE EXCEPTION LISTED IN SECTION R301.2.1.2.

NOTE, THE STORM PROTECTIVE PANELS MAY BE PROVIDED BY THE LOCAL CONTRACTOR OR INSTALLER RATHER THAN THE BUILDING MANUFACTURER.

IN ADDITION, EXTERIOR WINDOWS AND DOORS MUST BE DESIGNED TO RESIST THE DESIGN WIND LOADS SPECIFIED IN TABLE R301.2(2) OF THE FBC-R CODE ADJUSTED FOR HEIGHT AND EXPOSURE PER TABLE R301.2(3) OF THE FBC-R CODE.

ALL EXTERIOR WINDOWS AND GLASS DOORS MUST BE TESTED AND APPROVED BY AN APPROVED INDEPENDENT LABORATORY AND BEAR A LABEL INDICATING COMPLIANCE WITH AAMA/WDMA/CSA 101/1.5.2/A440 OR TAS 202 (HVHZ) SHALL COMPLY WITH TAS 202 AND ASTM E1300

ELEVATION NOTES: Typical

See cross section for method of roof ventilation.

Handicap ramp(s), Stair(s), and Handrails are site installed, designed by others, and subject to local jurisdiction review and approval.

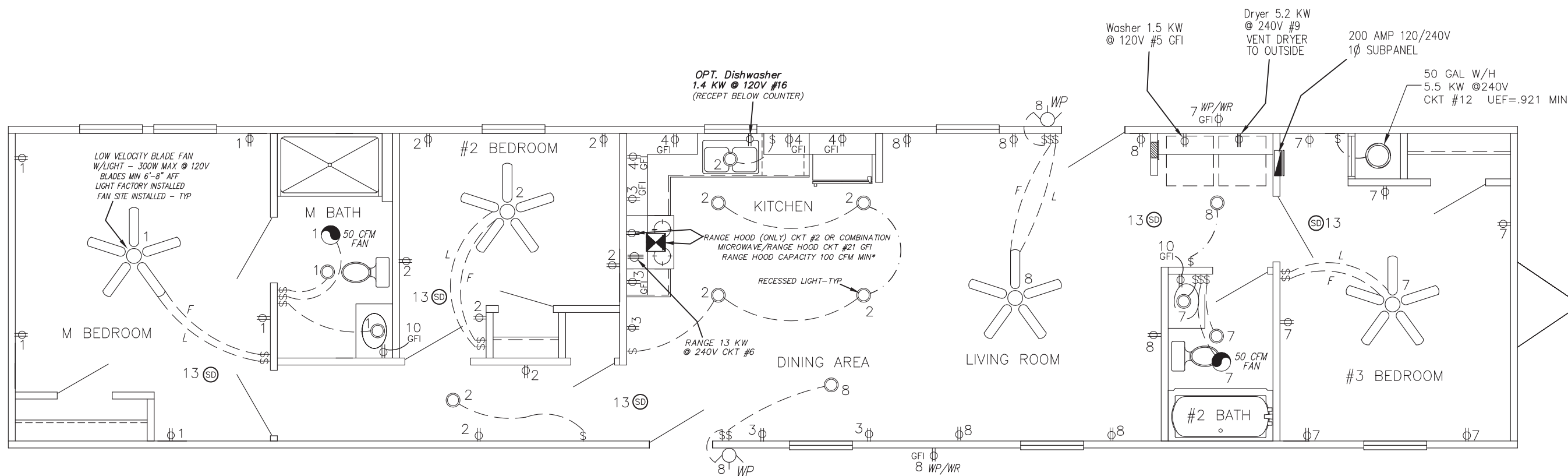
Foundation enclosure (when provided) must have 1 square foot net vent area per 1/150th of the floor area and an 18"x24" minimum crawl space access, site installed by others, subject to local jurisdiction, review & approval. (min 7.4 ft² net vent area req'd)

DRAWING INDEX:

- | | |
|------------|-----------------|
| DRAWING #1 | ELEVATIONS |
| DRAWING #2 | FLOOR PLAN |
| DRAWING #3 | ELECTRICAL PLAN |
| DRAWING #4 | FLOOR FRAMING |
| DRAWING #5 | PLUMBING |
| DRAWING #6 | CROSS SECTION |
| DRAWING #7 | DETAILS |
| DRAWING #8 | DETAILS |

NEW BAXLEY, LLC
DBA IMPACT HOUSING
137 WEST PARK DR.
BAXLEY, GA. 31513

DATE: 6/3/22			
CODES: FBC			
LABELS: FL		REVISIONS:	
SCALE: NTS		DRAWN BY: C.A. Leblanc	
MODEL: 1672018GSH ELEVATIONS		PLAN NO. IHG-43FL	SHEET I OF 8
WILLIAM J. KALKER, JR., P.E. CONSULTING ENGINEER		33 ROCKWOOD LANE MONROE, CT 06468 (203) 261-1167	



*HOOD EXHAUSTS TO EXTERIOR OF BUILDING

NOTE: ALL RECEPTACLES INSTALLED ON 15 AMP AND 20 AMP CIRCUITS MUST BE LISTED AS 'TAMPER RESISTANT'

NOTE: ALL APPLIANCES AND ELECTRICAL EQUIPMENT MUST BE INSTALLED IN ACCORDANCE WITH THE LISTINGS

LISTING
AGENCY APPROVAL

THESE PRINTS COMPLY WITH THE FLORIDA
MANUFACTURED BUILDING ACT OF 1979
CONSTRUCTION CODE AND ADHERE TO THE
FOLLOWING CRITERIA.

CONST. TYPE

VB

OCCUPANCY

SFD

ALLOWABLE NO.
OF FLOORS

1

RISK CATEGORY

II

WIND VELOCITY (ULT)

150

WIND VELOCITY (ASD)

116

FIRE RATING OF
EXT. WALLS

0

PLAN NO.

2773-0073F

ALLOW. FLOOR
LOAD

40

APPROVAL DATE

06-08-2022

MANUFACTURER

New Baxley

HIGH VELOCITY
HURRICANE ZONE

NO

IWC

MUR-261



WILLIAM J. KALKER, JR., P.E.
Digitally signed by WILLIAM J. KALKER, JR., P.E.
DN: C=US, CN=WILLIAM J. KALKER, JR., P.E., O=W.J. KALKER, JR., P.E.
Reason: I am the author of this document.
Location: your signing location here
Date: 2022.06.08 07:13:48-0400
Foxit PDF Reader Version: 11.2.1

NOTE: ALL BRANCH CIRCUITS SUPPLYING 15 AND 20 AMP OUTLETS IN KITCHENS, FAMILY ROOMS, DINING ROOMS, LAUNDRY AREAS, LIVING ROOMS, LIBRARIES, DENS, BEDROOMS, CLOSETS, SUN ROOMS, HALLWAYS, RECREATION ROOMS OR SIMILAR AREAS MUST BE PROTECTED BY AN ARC-FAULT CIRCUIT INTERRUPTER IN ACCORDANCE WITH SECTION 210.12 OF THE NEC. (CIRCUITS 1, 2, 3, 4, 5, 7, 8, 13 AND 16 MUST BE PROTECTED BY AN ARC-FAULT TYPE CIRCUIT BREAKER)

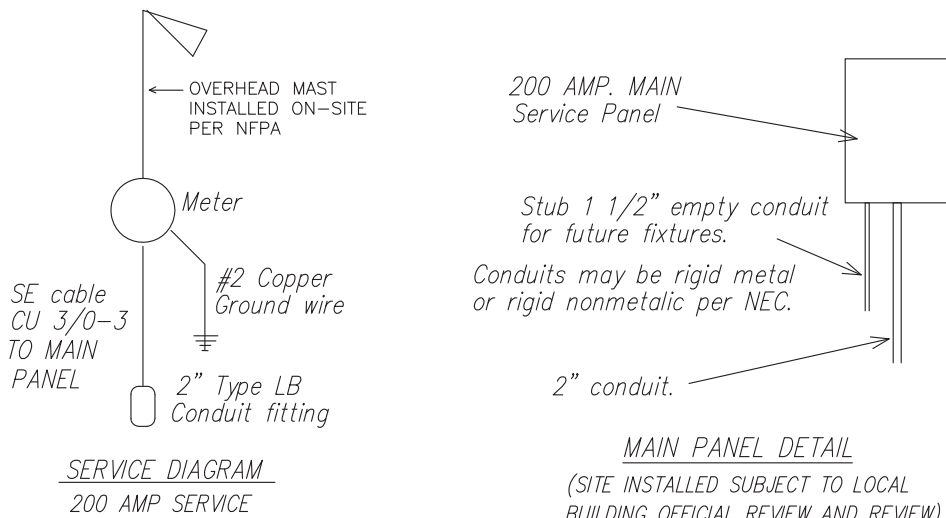
NOTE: THE HVAC SYSTEM IS TO BE SITE INSTALLED AND DESIGNED BY OTHERS, SUBJECT TO LOCAL BUILDING OFFICIAL REVIEW AND APPROVAL. (HVAC SYSTEM TO BE ALL ELECTRIC - GAS OR OIL FUEL NOT PERMITTED)

ELECTRICAL NOTES: NEC

- All circuits and equipment shall be grounded in accordance with the appropriate articles of the NEC.
- When light fixtures are installed in closets they shall be surface mounted or recessed. Incandescent fixtures shall have completely enclosed lamps. Surface mounted incandescent fixtures shall have minimum clearance of 12 inches and all other fixtures shall have a minimum clearance of 8 inches from the "Closet Storage Space" as defined by NEC 410-2.
- When water heaters are installed they shall be provided with readily accessible disconnects adjacent to the water heaters served. The branch circuit switch or circuit breakers shall be permitted to serve as disconnecting means only where the switch or circuit breaker is within sight from the water heater or is capable of being locked in the open position.
- HVAC equipment shall be provided with readily accessible disconnects adjacent to the equipment served. A unit switch with a marked "OFF" position that is a part of the HVAC equipment and disconnects all ungrounded conductors shall be permitted as the disconnecting means where other disconnecting means are also provided by a readily accessible circuit breaker.
- Prior to energizing the electrical system the interrupting rating of the main breaker must be designed and verified by as being in compliance with section 110-9 of the NEC by local electrical consultant.
- The main electrical panel, service disconnect (main circuit breakers) and feeders are site installed, designed by others and subject to local jurisdiction review and approval.
- All circuits crossing over modular mating line(s) shall be site connected with approved accessible junction boxes, located below the floor or in the attic.
- All circuits to be copper NM except HVAC and Range circuits to be copper SE cable. (75°C).
- Light and switch to be site-installed in the crawl space near the crawl space access door (light to be connected to any of the installed general lighting circuits).
- Receptacles installed in wet locations must be in a weatherproof enclosure the integrity of which is not affected when the attachment plug cap is inserted or removed. All 15 amp and 20 amp receptacles installed on the exterior of the building shall be listed as 'Weather Resistant'.
- Smoke alarms must be wired to activate all alarms simultaneously if any alarm is activated. All smoke alarms located within twenty feet of a cooking appliance shall be the photoelectric type.
- All fans must be ducted to the exterior of the building and terminate at an approved vent cap.
- Carbon monoxide alarms must have an audible alarm and must be listed to comply with either ANSI/UL 2034 or UL-2075.
- Minimum of 90% of lamps in permanently installed lighting fixtures shall have an efficacy of not less than 65 lumens per watt.
- A Communications Outlet and Cable to the Outlet to be Site-Installed.
- Recessed luminaires installed in the thermal envelope shall be sealed to limit air leakage to not more than 2 CFM per ASTM E283 at a 1.57 psf pressure differential and shall be IC-rated and labeled.

NOTE: NOT ALL CIRCUITS LISTED IN CIRCUIT SCHEDULES ARE USED IN THE ELECTRICAL PLAN ABOVE

ELECTRICAL CIRCUIT SCHEDULE			
CIR	DESCRIPTION	COND. SIZE (CU)	BRK(A)
1,2	General Lighting	14-2 w/GND	15
3,4	Small Appliance	12-2 w/GND	20
5	Washer	12-2 w/GND	20 GFI
6	Range	8-3 w/GND	40 2P
7,8	General Lighting	14-2 w/GND	15
9	Dryer	10-3 w/GND	30 2P
10	Bath	12-2 w/GND	20
12	Water Heater	10-2 w/GND	30 2P
13	Smoke Alarms	14-2 w/GND	15
14,15	General Lighting	14-2 w/GND	15
16	Dishwasher (opt)	12-2 w/GND	20 GFI
17	Freezer (opt)	12-2 w/GND	20
18,19	General Lighting	14-2 w/GND	15
20	Small Appliance	12-2 w/GND	20
21	Microwave	12-2 w/GND	20 GFI



PANEL SIZING

1104 Sq. Ft. @ 3 watts/Sq. Ft.	3.31 KW
2 -20 AMP Appliance circuits	3.00 KW
Laundry circuit	1.50 KW
Range	13.00 KW
Clothes Dryer	5.20 KW
Water Heater	5.50 KW
Opt. Dishwasher	1.40 KW
Fans	2.10 KW

TOTAL 35.01 KW

First 10 KW @ 100%	10.00 KW
Remainder @ 40% (25.01)(.4)=	10.00 KW
Assumed HVAC (max)	15.90 KW

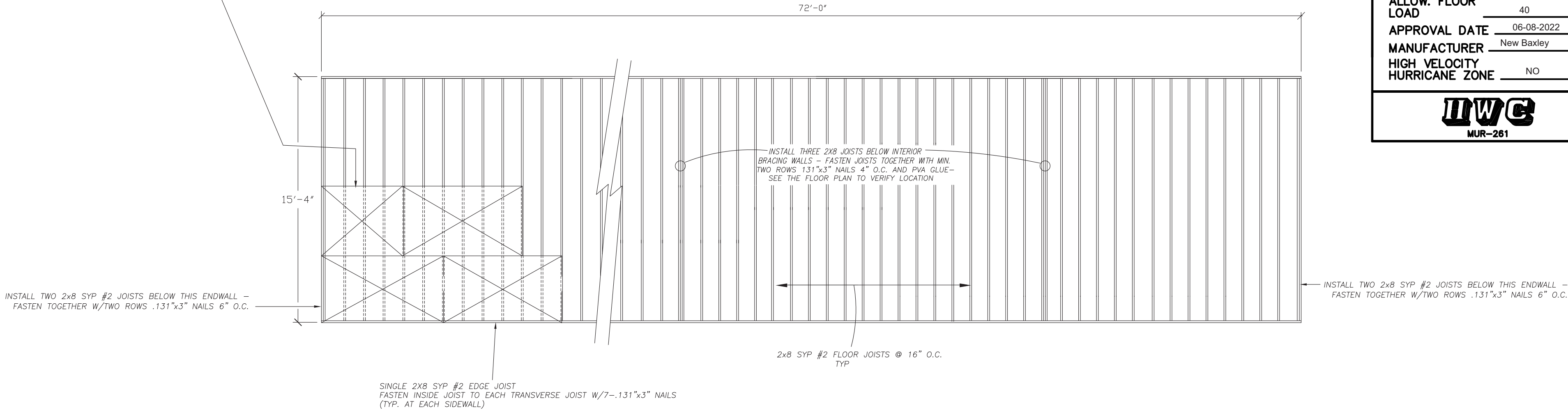
TOTAL 35.90 KW

Calculated Load for service size
35900 w/240 volts= 149.6 Amperes
200 AMP service standard

ELECTRICAL LEDGEND

- Light Switch
- Duplex Recept
- 240V Recept
- Thermostat
- Smoke Alarm W/Battery Backup
- Porch light W/P
- Incandescent Light
- Exhaust fan w/Light
- Panel box
- Exhaust fan
- Fluorescent Light
- Range hood w/Exhaust Fan and Light

19/32" PLYWOOD SHEATHING PERPENDICULAR TO JOISTS W/ NEXT ROW STAGGERED
@ MIN. 2'-8" (STURDIFLOOR, EXP 1, 20" O.C.) T&G EDGES FASTENED W/ 100% PVA FLUE
AND .120" X 2-1/2" NAILS @ 6" O.C. EDGES AND FIELD
OR
19/32" OSB SHEATHING PERPENDICULAR TO JOISTS W/ NEXT ROW STAGGERED
@ MIN. 2'-8" (STURDIFLOOR, EXP 1, 20" O.C.) T&G EDGES FASTENED W/ 100% PVA FLUE
AND .120" X 2-1/2" NAILS @ 6" O.C. EDGES AND FIELD



FRONT

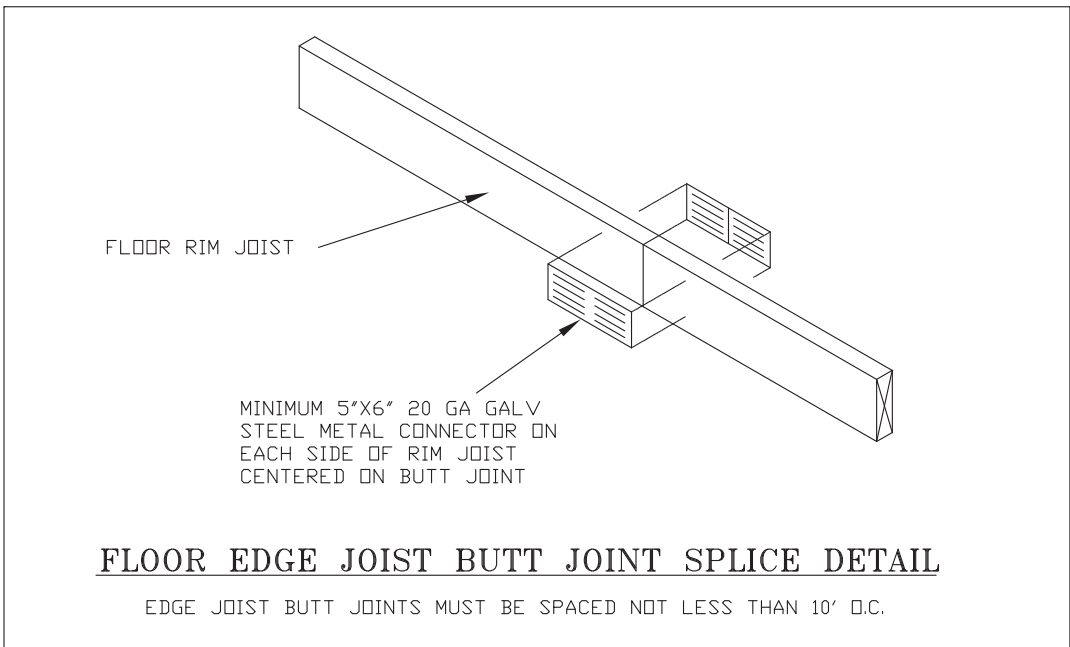
FLOOR FRAMING PLAN



WILLIAM J. KALKER, JR., P.E.
Digitally signed by WILLIAM J. KALKER, JR., P.E.
DN: cn=WILLIAM J. KALKER, JR., P.E., o=W.J. KALKER, JR., P.E.
Reason: I am the author of this document
Location: your signing location here
Date: 2022.06.08 07:13:29-04'00'
Foxit PDF Reader Version: 11.2.1

SUPPLEMENTAL NOTES:

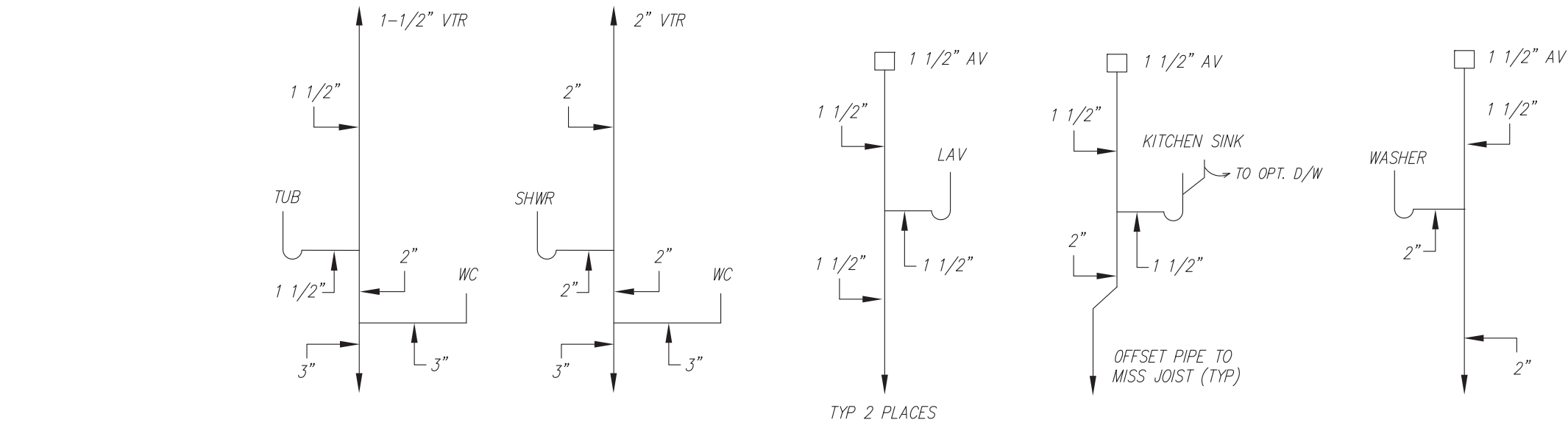
METAL PLATES, CONNECTORS, SCREWS, BOLTS, NUTS AND WASHERS EXPOSED DIRECTLY TO WEATHER OR SUBJECT TO SALT CORROSION IN COASTAL AREAS SHALL BE HOT DIPPED GALVANIZED STEEL WITH ZINC COATING WEIGHTS IN ACCORDANCE WITH ASTM A153.
ALL CUT ENDS, NOTCHES AND DRILLED HOLES OF PRESERVATIVE-TREATED WOOD SHALL BE TREATED IN ACCORDANCE WITH AWP4 M4



NOTE: THE FOUNDATION SYSTEM FOR THIS BUILDING MUST PROVIDE PIERS TO SUPPORT THE FLOOR EDGE JOISTS BELOW ALL OPENING STUDS ON EACH SIDE OF OPENINGS EXCEEDING 48" IN WIDTH BELOW EACH SIDEWALL AND MUST PROVIDE PIERS TO SUPPORT THE FLOOR EDGE JOISTS BELOW EACH SIDEWALL AT A MAXIMUM SPACING OF 8'-0" O.C. BETWEEN THE OPENING PIERS. THESE PIERS MUST BE DESIGNED TO SUPPORT THE ROOF LIVE LOADS AND THE ROOF AND WALL DEAD LOADS.

NEW BAXLEY, LLC
DBA IMPACT HOUSING
137 WEST PARK DR.
BAXLEY, GA. 31513

DATE: 3/1/22		
CODES: IRC		
LABELS: FL	REVISIONS:	DRAWN BY: C.A. Leblanc
SCALE: NTS		
MODEL: 1676010GSH FLOOR FRAMING	PLAN NO. IHG-37FL	SHEET
WILLIAM J. KALKER, JR., P.E. CONSULTING ENGINEER	33 ROCKWOOD LANE MONROE, CT 06468 (203) 261-1167	4 OF 8



DWV RISER
NTS

Change in direction in Schedule 40 DWV –PVC and ABS drainage piping shall be made by the appropriate use of 45° (0.785 rad) wyes, quarter bends or long sweep quarter bends, one-sixth, one-eighth, one-sixteenth bends, or by a combination of these or equivalent fittings. Single and double sanitary tees and quarter bends may be used in drainage lines only where the direction of flow is from the horizontal to the vertical.

Short sweeps not less than 3 inches diameter may be used in soil and waste lines where the change in direction of flow is from the horizontal to the vertical and may be for making necessary offsets between the ceiling and the next floor above.

LISTING
AGENCY APPROVAL

THESE PRINTS COMPLY WITH THE FLORIDA
MANUFACTURED BUILDING ACT OF 1979
CONSTRUCTION CODE AND ADHERE TO THE
FOLLOWING CRITERIA:

CONST. TYPE

VB

OCCUPANCY

SFD

ALLOWABLE NO.
OF FLOORS

1

RISK CATEGORY

II

WIND VELOCITY (ULT)

150

WIND VELOCITY (ASD)

116

FIRE RATING OF
EXT. WALLS

0

PLAN NO.

2773-0073F

ALLOW. FLOOR
LOAD

40

APPROVAL DATE

06-08-2022

MANUFACTURER

New Baxley

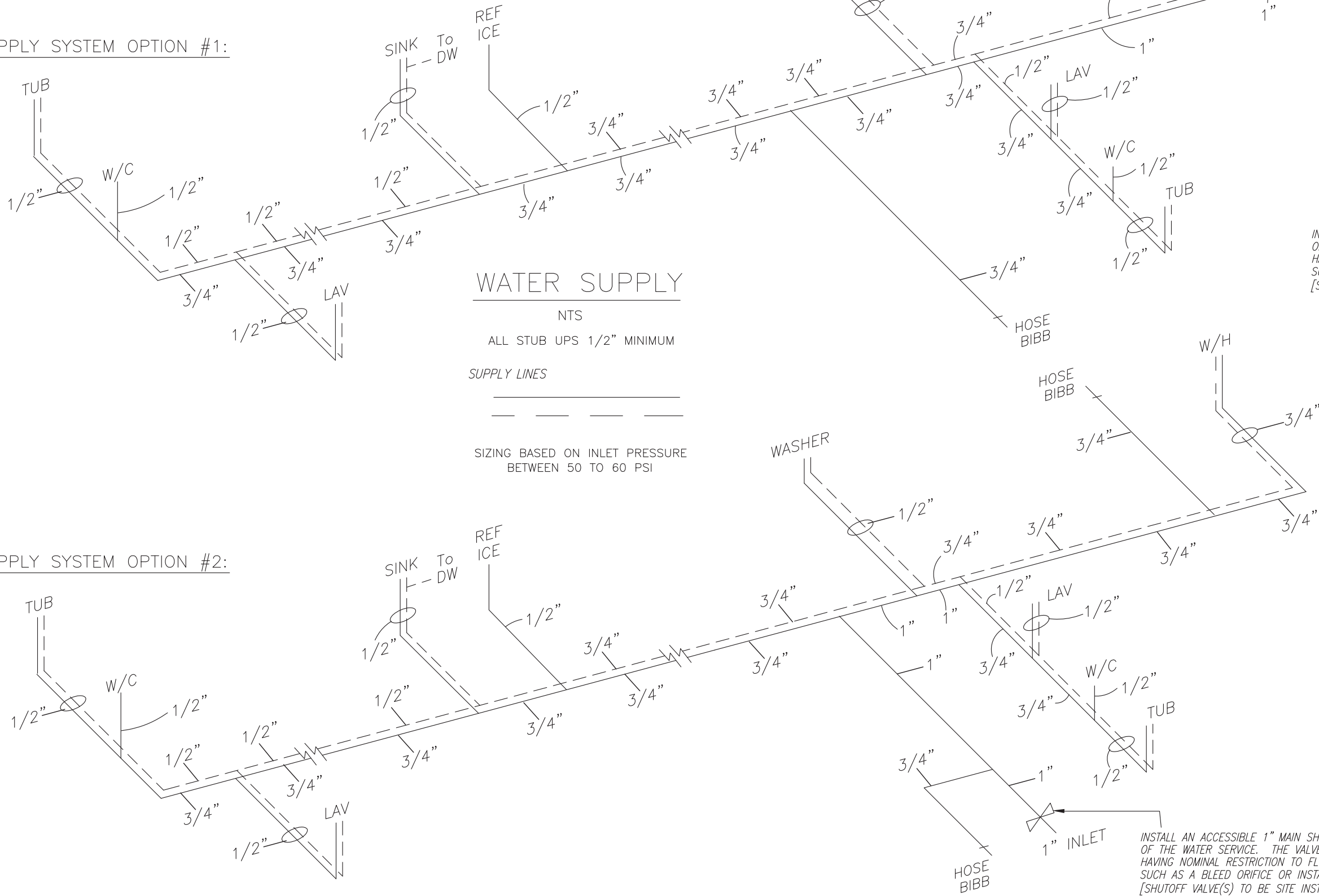
HIGH VELOCITY
HURRICANE ZONE

NO

IWC

MUR-261

WATER SUPPLY SYSTEM OPTION #1:



WATER SUPPLY
NTS

ALL STUB UPS 1/2" MINIMUM

SUPPLY LINES

SIZING BASED ON INLET PRESSURE
BETWEEN 50 TO 60 PSI

*NOTE: FOR WATER SUPPLY SYSTEM OPTION #1 (ONLY):
THE WATER INLET LOCATION MAY VARY FROM THE LOCATION SHOWN
PROVIDED A 1" DIA PIPE EXTENDS FROM THE REVISED INLET LOCATION
DIRECTLY TO THE WATER HEATER WITH ALL OTHER WATER PIPING AS
SHOWN IN THE SCHEMATIC.

INSTALL AN ACCESSIBLE 1" MAIN SHUTOFF VALVE NEAR THE ENTRANCE
OF THE WATER SERVICE. THE VALVE SHALL BE A FULL-OPEN TYPE
HAVING NOMINAL RESTRICTION TO FLOW WITH PROVISIONS FOR DRAINAGE
SUCH AS A BLEED ORIFICE OR INSTALLATION OF A SEPARATE DRAIN VALVE
[SHUTOFF VALVE(S) TO BE SITE INSTALLED]

INSTALL AN ACCESSIBLE 1" MAIN SHUTOFF VALVE NEAR THE ENTRANCE
OF THE WATER SERVICE. THE VALVE SHALL BE A FULL-OPEN TYPE
HAVING NOMINAL RESTRICTION TO FLOW WITH PROVISIONS FOR DRAINAGE
SUCH AS A BLEED ORIFICE OR INSTALLATION OF A SEPARATE DRAIN VALVE
[SHUTOFF VALVE(S) TO BE SITE INSTALLED]

SUPPLEMENTAL NOTES:

SHOWER UNITS TO BE PRE-MANUFACTURED AND SHALL HAVE AT LEAST 900 SQUARE INCHES OF INTERIOR CROSS-SECTIONAL AREA WITH AN INTERIOR DIMENSION OF NOT LESS THAN 30 INCHES, EXCLUSIVE OF FIXTURE VALVES, SHOWER HEADS, SOAP DISHES AND GRAB BARS OR RAILS, AND SHALL HAVE WATER RESISTANT WALL SURFACES EXTENDING A MINIMUM OF 72 INCHES ABOVE THE SHOWER DRAIN OUTLET. HINGED SHOWER DOORS SHALL OPEN OUTWARD. FOLD-DOWN SEATS ARE ACCEPTABLE PROVIDED THE REQUIRED 900 SQUARE INCH MINIMUM AREA IS MAINTAINED WITH THE SEAT IN THE FOLDED-UP POSITION.

A THERMAL EXPANSION TANK MUST BE INSTALLED BETWEEN THE INLET SHUTOFF VALVE AND ALL STORAGE WATER HEATER TANKS TO CONTROL PRESSURES IN THE WATER SUPPLY SYSTEM CAUSED BY WATER THERMAL EXPANSION. (TO BE SITE INSTALLED)

IN AREAS WHERE HOSE BIBBS ARE SUBJECT TO FREEZING, THE HOSE BIBBS SHALL BE EQUIPPED WITH AN ACCESSIBLE STOP-AND-WASTE-TYPE VALVE INSIDE THE BUILDING TO PERMIT DRAINING OF THE HOSE BIBB DURING COLD PERIODS.

STORAGE WATER HEATERS NOT EQUIPPED WITH INTEGRAL HEAT TRAPS AND HAVING VERTICAL PIPE RISERS SHALL HAVE HEAT TRAPS INSTALLED ON BOTH THE INLETS AND OUTLETS. EXTERNAL HEAT TRAPS SHALL CONSIST OF EITHER A COMMERCIALY AVAILABLE HEAT TRAP OR A DOWNWARD AND UPWARD BEND OF AT LEAST 3-1/2 INCHES IN THE HOT WATER LINE AND COLD WATER LINE AS CLOSE AS POSSIBLE TO THE STORAGE TANK.

INSULATION WITH A MINIMUM THERMAL RESISTANCE OF R-3 SHALL BE INSTALLED ON ALL HOT WATER PIPE FROM THE WATER HEATER TO A DISTRIBUTION MANIFOLD AND ON ALL HOT WATER PIPE LOCATED OUTSIDE THE CONDITIONED SPACE. IN ADDITION, INSULATION WITH A MINIMUM THERMAL RESISTANCE OF R-3 SHALL BE INSTALLED ON ALL 3/4" DIAMETER AND LARGER HOT HOT WATER SUPPLY PIPE.

FLOW RATES FOR PLUMBING FIXTURES SHALL NOT EXCEED THE FOLLOWING RATES:

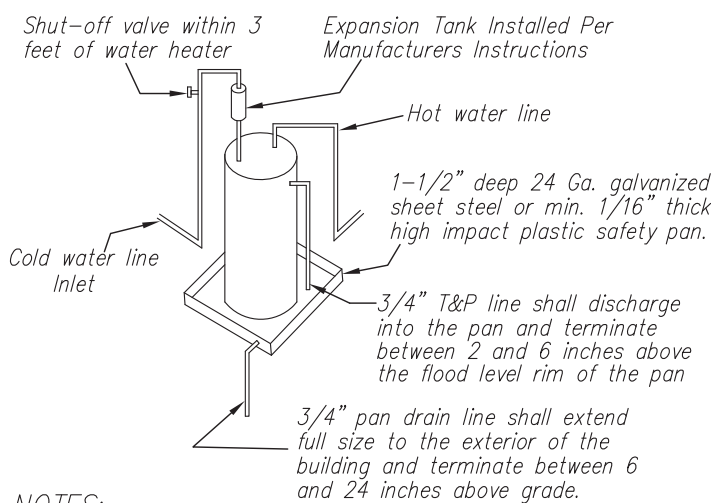
LAVATORY	2.2 GPM AT 60 PSI
SHOWER HEAD	2.5 GPM AT 80 PSI
HAND HELD SHOWER SPRAY	2.5 GPM AT 80 PSI
SINK FAUCET	2.2 GPM AT 60 PSI
WATER CLOSET	1.6 GALLONS PER FLUSH CYCLE



WILLIAM J. KALKER, JR., P.E.
Digitally signed by WILLIAM J. KALKER, JR., P.E.
DN: c=US, cn=WILLIAM J. KALKER, JR., P.E., o=W.J. KALKER, JR., P.E., Reason: I am the author of this document.
Location: your signing location here
Date: 2022.06.08 07:15:05-04'00'
Font: TTF Reader Version: 1.1.2.1

PLUMBING NOTES:

- Tub access provided under home unless otherwise noted.
- All plumbing fixtures shall have separate shut-off valves.
- Water heater shall have safety pan with drain to exterior. T & P relief valve with drain to exterior. And a shut-off valve within 3 feet on the cold water supply line.
- DWV system shall be either ABS or PVC-DWV.
- Water supply lines shall be Copper Tube (Type K or L) or PEX. Water supply lines may be stubbed through the floor (only) with the on-site installation of all lines below the floor to be in accordance with the specifications on this drawing.
- Water closets average water usage shall not exceed 1.6 gal./flush.
- Building drain and cleanouts are designed and site installed by others, subject to local jurisdiction approval. Underfloor trap arms not installed in the factory due to possible in-transit damage are to be site installed in accordance with the specifications on this drawing.
- An accessible shut off valve shall be provided ahead of the first outlet or branch connection to the service or distribution pipe. This shut-off valve may be site installed.
- Sinks and lavs shall not use more than 2.2 gal./min @ 60 PSI.
- Shower heads shall not use more than 2.5 gal/min @ 80 PSI per ANSI Std A 112.18.1M.
- All showers to have temperature of water controlled by a pressure-balance, thermostatic-mixing or combination pressure-balance/thermostatic-mixing valve to limit the water temp. to 120°F (valve to comply w/ASSE 1016 or CSA-B125)
- All bathtubs to have temperature of water controlled by a water-temperature-limiting device to limit the water temperature to 120°F (device to comply w/ASSE 1070) except when the water temp. protection is provided by a combination tub/shower valve as specified in note 11.
- Air admittance valves (AV) shall conform to ASSE 1051. The AV valves shall be located a minimum of 4 inches above the horizontal drain or fixture drain being vented and must be installed in well ventilated spaces or provided with ventilated access doors.
- When metal water supply lines are installed, water hammer arrestors must also be installed where quick closing valves are utilized (i.e., dishwashers, clothes washers, ice makers or other quick closing devices with solenoid valves). Arrestors must comply with ASSE/ANSI 1010 and must be installed in accordance with the manufacturers instructions.
- An approved thermal expansion device shall be installed in the water supply system in accordance with the manufacturers installation instructions. (this device is required when backflow preventors, pressure reducing valves, check valves or storage water heaters are installed in the water supply system which may prevent pressure relief in the system)
- Storage water heaters shall have automatic temperature controls capable of adjustment from the lowest to the highest acceptable temperature settings for the intended use. The minimum temperature setting range shall be from 100 Deg F to 140 Deg F.



NOTES:

- Water heater shall be provided with a cold water "Dip" tube with a hole at the top or a vacuum relief valve installed in the cold water supply line above the top of the water heater tank; bottom fed water heaters shall have a vacuum relief valve complying with ANSI Z21.22 installed.
- Water heaters shall be provided with a temperature and pressure relief valve complying with ANSI Z21.22 installed in the shell of the water heater tank. The valve shall be actuated by the water in the top 6 inches of the tank and shall have a temperature rating of not more than 210° F. and a pressure setting not exceeding the tanks rated working pressure or 150 psi, whichever is less.
- Water heaters shall be equipped with an energy cutoff device that will cut off the supply of heat energy to the water tank before the temperature of the water in the tank exceeds 210° F.

TYPICAL WATER HEATER DETAIL
NTS

NEW BAXLEY,LLC
DBA IMPACT HOUSING
137 WEST PARK DR.
BAXLEY, GA. 31513

DATE: 6/3/22

CODES: FBC

LABELS: FL

SCALE: NTS

REVISIONS:

DRAWN BY:

MODEL: 1672018GSH
PLUMBING

PLAN NO.
IHG-43FL

SHEET
5 OF 8

WILLIAM J. KALKER, JR., P.E.
CONSULTING ENGINEER

33 ROCKWOOD LANE
MONROE, CT 06468
(203) 261-1167

GENERAL NOTES

Exterior joints in the building envelope that are sources of air leakage. Such as around windows and door frames; Between wall cavities and windows or door frames; Between walls and foundations; Between walls and roof/ceiling and Between wall panels; Openings at penetrations of utility services through walls, floors and roofs; and all other such openings in the building envelope shall be caulked, gasketed. Weather stripped or otherwise sealed in an approved manner.

Soffit vents and ridge vents equal to 1/150 of total roof area (min 7.4 sq. ft. net vent air is required) with a minimum 1/2 of the total provided with soffit vents and minimum 1/2 of the total provided with ridge vent

UNIVERSAL COTTAGE TRUSS #P2092901

TRUSS DESIGN LOADS:

20 PSF ROOF LL ON TOP CHORD
7 PSF ROOF DL ON TOP CHORD
10 PSF ATTIC LL ON BTM CHORD***
7 PSF ROOF DL ON BTM CHORD

*** ATTIC LL NOT TO BE APPLIED CONCURRENTLY WITH OTHER LIVE LOADS

COTTAGE LISTED TRUSSES 24" O.C. EXCEPT
INSTALL TRUSSES 16" O.C. IN END ZONES
AND OVER PORCH

CONTINUOUS RIDGE VENT

R38 FIBERGLASS INSULATION OR R38 BLOWN INSULATION
USE BAFFLES AS REQUIRED AT SOFFITS TO MAINTAIN A
MINIMUM 1 INCH AIR PASSAGE GAP FROM THE INSULATION
TO THE ROOF SHEATHING (TYP)

7/16" RATED SHEATHING OSB, EXP1,
24/16 MIN ROOF SHEATHING

INSTALL 1/2" THICK X 3"
WIDE CONT. OSB OR PLY
BEARING STRIP ON SIDEWALL
TOP PLATES (REMOVE CEILING
INT. FINISH FOR BEARING
STRIPS) TO SUPPORT TRUSSES
(TYP EACH SIDEWALL)

ASPHALT SHINGLES INSTALLED PER MANUFACTURERS
INSTRUCTIONS OVER ONE LAYER OF UNDERLAYMENT FOR
ROOF PITCHES EQUAL TO AND EXCEEDING 4/12 AND TWO
LAYERS OF UNDERLAYMENT FOR ROOF PITCHES LESS THAN
4/12 (WIND RESISTANT SHINGLES; CLASS A)
INSTALL THE UNDERLAYMENT IN ACCORDANCE WITH SECTION
R905.2.7 OF THE FBC-R.

2X6 SYP #2 SUB-FASCIA (TYP)
(SEE SPLICE DETAIL BELOW)

INSTALL TRUSS ANCHORS/FASTENINGS
FROM EACH TRUSS TO WALL FRAMING
PER DETAIL ON DRAWING #7
(TYP EACH SIDEWALL)

GALV. STEEL EAVE DRIP EDGE
(TYP)

DBL TOP PLATE 2X4 SYP #2
OFFSET BUTT JOINTS 48" MIN
AND FASTEN TOGETHER WITH
.131"x3" NAILS 5" O.C.
(TYP AT EXT. WALLS)

EXTERIOR WALL CONSTRUCTION
AND UPLIFT STRAPPING AT OPENINGS
PER THE APPROVED STRUCTURAL
CONST. PACKAGE (SYP LUMBER REQ'D)

R13 FIBERGLASS BATT INSULATION
BETWEEN STUDS (TYP EXTERIOR WALLS)

1-1/2" X 26 GA UPLIFT STRAP
WITH 8-15 GA X 1" STAPLES EACH
END 16" O.C. MAX AND AT OPENINGS
FROM THE STUDS TO EDGE JOIST(S)
PER THE APPROVED STRUCTURAL
CONSTRUCTION PACKAGE
(TYP ALL EXTERIOR WALLS)

INSTALL 1-3/8" X 3" LAG SCREW
THROUGH FLANGE INTO EDGE
JOIST AT EACH OUTRIGGER (TYP)

INSTALL 1-3/8" X 3" LAG SCREW
W/STEEL FLANGE CLIP ON THE
OUTSIDE OF STEEL BEAM FLANGE ON
EACH JOIST BETWEEN THE OUTRIGGERS
AND INTO EACH JOIST BELOW INTERIOR
BRACING WALLS (TYP EACH STEEL BEAM)

NOTE: FLANGE CLIPS TO BE MIN 1-1/4"x2-3/8"
10 GA. A36 STEEL WITH 3/8" DIA HOLE

OUTRIGGER AND CROSSMEMBER
SPACING 96" O.C. MAX. (TYP)
INSTALL FIRST OUTRIGGER WITHIN
16" OF END OF FLOOR (TYP)

CROSS SECTION

NOTE: THE 'END ZONE' FOR THIS STRUCTURE EXTENDS 6.0 FEET FROM EACH CORNER FOR WALL
CONSTRUCTION AND WALL TO FLOOR UPLIFT STRAP SPECIFICATIONS AND 3.0 FEET FROM THE
GABLES/ENDWALLS FOR THE ROOF FRAMING AND TRUSS INSTALLATION SPECIFICATIONS

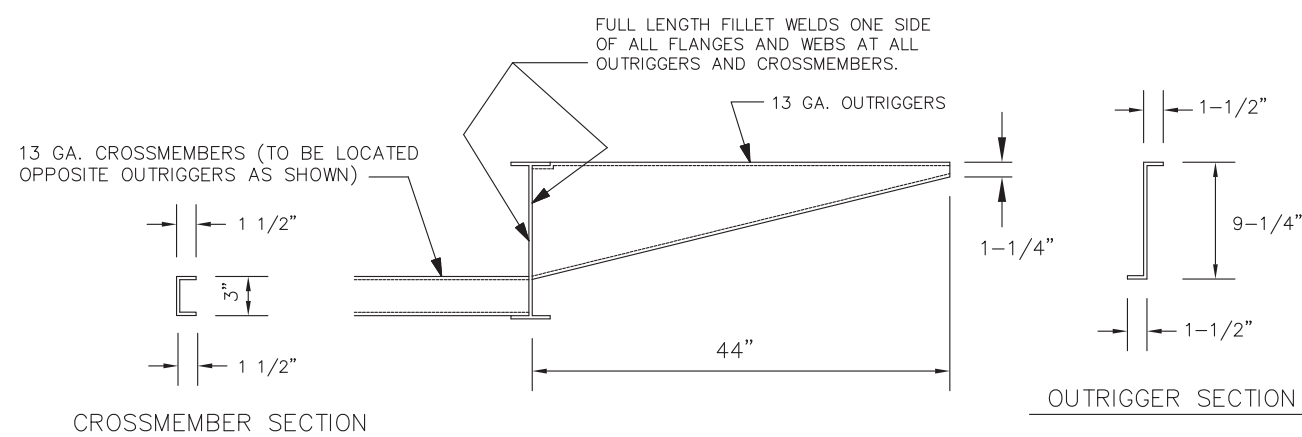
FASTEN SHTG TO EACH TRUSS
WITHIN 3' OF RIDGE AND WITHIN
3' OF GABLE END OF ROOF
WITH 8D CDM NAILS
6" O.C. EDGES AND FIELD (TYP)

FASTEN SHTG TO OUTSIDE TRUSS, 2X3
CONT. RAIL AND BLOCKING WITH 8D CDM NAILS
6" O.C. EDGES AND FIELD (TYP EACH ENDWALL)
(SEE ENDWALL BRACING DETAILS ON DWGS 7)

FASTEN SHTG TO EACH TRUSS
WITHIN 3' OF EAVE AND WITHIN
3' OF GABLE END OF ROOF
WITH 8D CDM NAILS
6" O.C. EDGES AND FIELD (TYP)

NOTE: ALL ROOF SHTG PANELS MUST SPAN
A MIN. OF TWO TRUSS BAYS W/LONG
DIMENSION PERPENDICULAR TO TRUSSES

ROOF SHEATHING DETAIL



.035" VINYL SIDING, 5/16" CEMPLANK LAP SIDING, 5/16" CEMPANEL PANEL
SIDING, 5/16" HARDPLANK LAP SIDING OR 5/16" HARDIPANEL PANEL SIDING
SHALL BE INSTALLED PER THE MANUFACTURERS INSTRUCTIONS OVER AN
APPROVED MOISTURE BARRIER ON 7/16" OSB RATED SHEATHING, EXP1, 24/16
FASTENED WITH 8D CDM NAIL 6" O.C. EDGES AND 6" O.C. FIELD ON ENDWALLS
AND 6" O.C. EDGES AND 6" O.C. FIELD ON SIDEWALLS (TYP)
ON ENDWALLS SHEATHING SHALL EXTEND CONTINUOUSLY FROM TOP OF TRUSS
TOP CHORD TO BOTTOM OF EDGE JOIST(S) WITH 2X SYP BLOCKING BEHIND
ALL HORIZONTAL SEAMS AND ALL PANELS SPANNING A MIN. OF 2 STUD BAYS)
ON SIDEWALLS SHEATHING SHALL EXTEND CONTINUOUSLY FROM TOP OF TOP
PLATE TO BOTTOM OF EDGE JOIST(S) WITH 2X SYP BLOCKING BEHIND BEHIND
ALL HORIZONTAL SEAMS AND ALL PANELS SPANNING A MIN. OF 2 STUD BAYS)

EXTERIOR WALL STUDS 2X4 SYP #2 MAX. 16" O.C.
(SEE THE APPROVED STRUCTURAL PACKAGE FOR THE LOCATIONS AND WALL
HEIGHTS WHICH WILL REQUIRE CLOSER SPACINGS AND/OR DOUBLE STUDS)

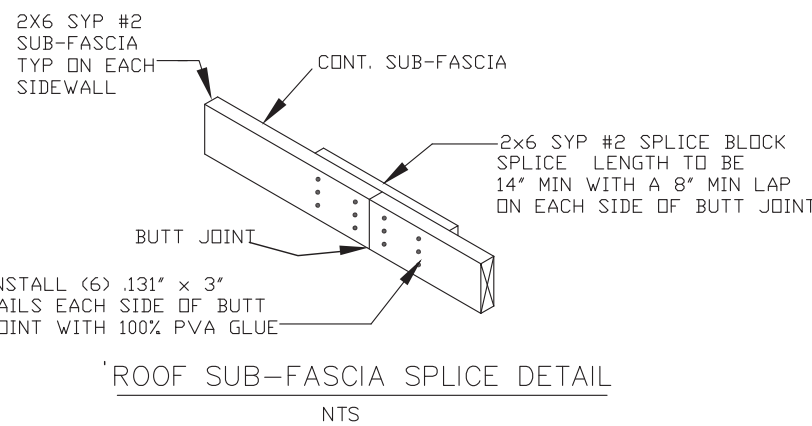
FASTEN EXTERIOR WALLS TO EDGE JOIST(S) WITH #8X3" SCREWS 6" O.C.
WITHIN 3' FROM EACH CORNER AND 7-1/2" O.C. IN OTHER LOCATIONS OR
FASTEN EXTERIOR WALLS TO EDGE JOIST(S) WITH .131"x3" NAILS 6" O.C.
WITHIN 3' OF EACH CORNER AND 7-1/2" O.C. IN OTHER LOCATIONS
(TYP EACH SIDEWALL AND ENDWALL)

1-2X8 SYP #2 RIM JOIST (TYP)
(SEE FLOOR CONST. DWG FOR SPECS)

R13 FIBERGLASS BATT INSULATION BETWEEN
JOISTS AND AT EXTERIOR WALL EDGE JOISTS (TYP)

VERMIN BARRIER (TYP)

SEE FOUNDATION DRAWING FOR
FOUNDATION, FOOTING AND PIER
SPECS (TYP)



SUPPLEMENTAL NOTES:

ATTIC VENTILATION OPENINGS MUST BE PROTECTED AGAINST
THE ENTRANCE OF RAIN OR SNOW AND PROVIDED WITH
CORROSION-RESISTANT WIRE MESH WITH 1/16 INCH MINIMUM
AND 1/4 INCH MAXIMUM OPENINGS.

ASPHALT SHINGLES MUST BE CLASSIFIED IN ACCORDANCE
WITH ASTM D3161 OR ASTM D7158. SHINGLES CLASSIFIED
AS ASTM D3161 CLASS D ARE ACCEPTABLE WITH WIND
SPEEDS UP TO 129 MPH V_{ult} AND SHINGLES CLASSIFIED AS
ASTM D7158 CLASS G ARE ACCEPTABLE WITH WIND SPEEDS
UP TO 155 MPH V_{ult}. SHINGLES CLASSIFIED AS ASTM D3161
CLASS F OR AS ASTM D7158 CLASS H ARE ACCEPTABLE FOR
USE IN ALL WIND SPEEDS.

ASPHALT SHINGLE UNDERLAYMENT AND METAL ROOF PANEL
UNDERLAYMENT SHALL COMPLY WITH ASTM D226, TYPE II OR
ASTM D4869, TYPE III OR TYPE IV OR ASTM D6757.

ASPHALT SHINGLE UNDERLAYMENT AND METAL ROOF PANEL
UNDERLAYMENT SHALL BE INSTALLED IN ACCORDRANCE WITH
TABLE R905.1.1.1 OF THE 2021 SUPP. OF THE 2020 FBC-R.

ALL WINDOWS AND DOORS SHALL BE INSTALLED AND FLASHED
IN ACCORDANCE WITH THE WINDOW MANUFACTURER'S WRITTEN
INSTALLATION INSTRUCTIONS

ALL EXTERIOR WALL OPENINGS, PROJECTING WOOD TRIM
AND ALL CONNECTIONS OF DECKS, STAIRS OR PORCHES TO
MODULAR BUILDING LUMBER CONSTRUCTION MUST BE PRO-
TECTED WITH APPROVED CORROSION-RESISTANT FLASHING
INSTALLED IN 'SHINGLE-FASHION' TO PREVENT ENTRY OF
WATER INTO THE BUILDING FRAMING CAVITIES. THE FLASHING
SHALL EXTEND TO THE SURFACE OF THE EXTERIOR WALL
FINISH.

ALL EXPOSED INSULATION INSTALLED IN ATTICS MUST HAVE
A CRITICAL RADIANT FLUX NOT LESS THAN .12 WATT PER
SQUARE CENTIMETER

METAL PLATES, CONNECTORS, SCREWS, BOLTS, NUTS AND
WASHERS EXPOSED DIRECTLY TO WEATHER OR SUBJECT TO
SALT CORROSION IN COASTAL AREAS SHALL BE HOT DIPPED
GALVANIZED STEEL WITH ZINC COATING WEIGHTS IN ACCOR-
DANCE WITH ASTM A153.



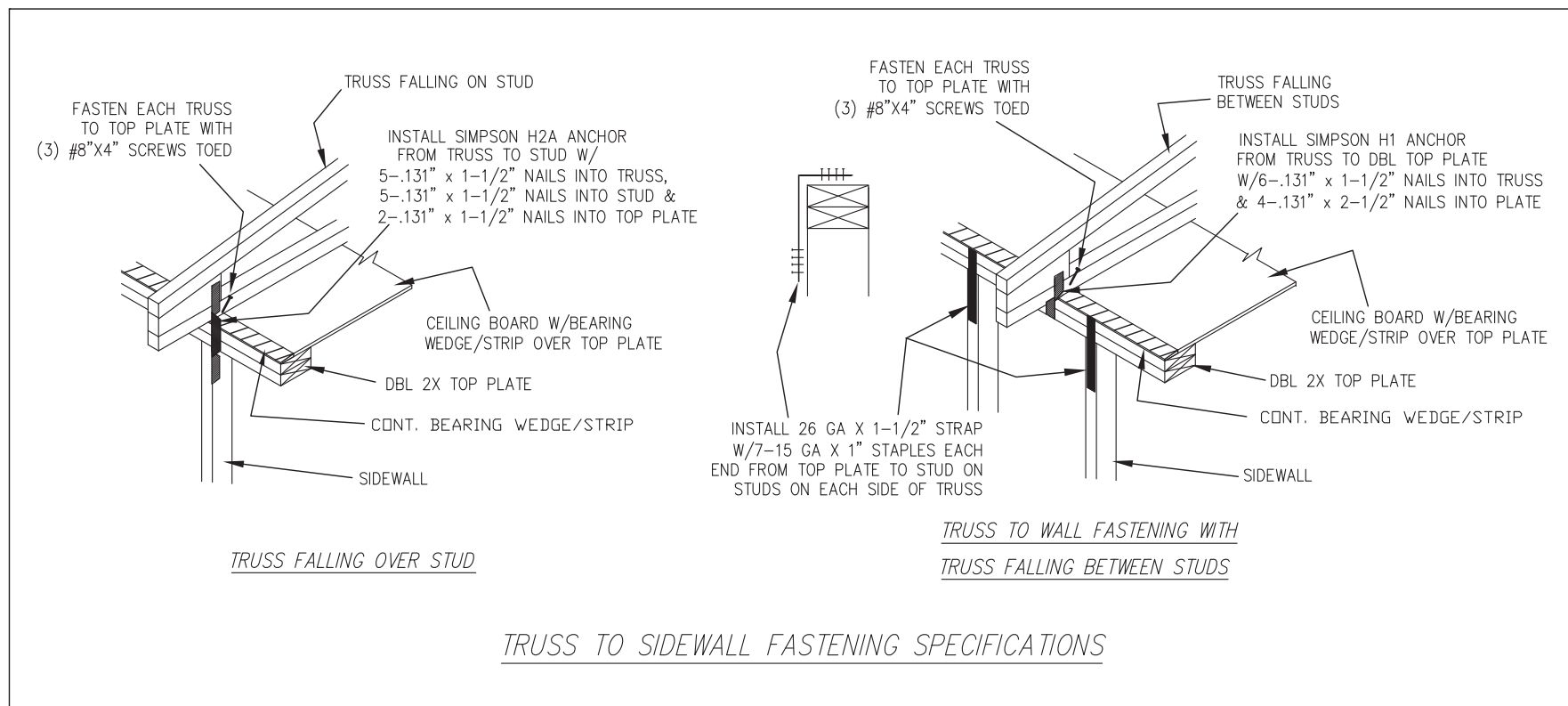
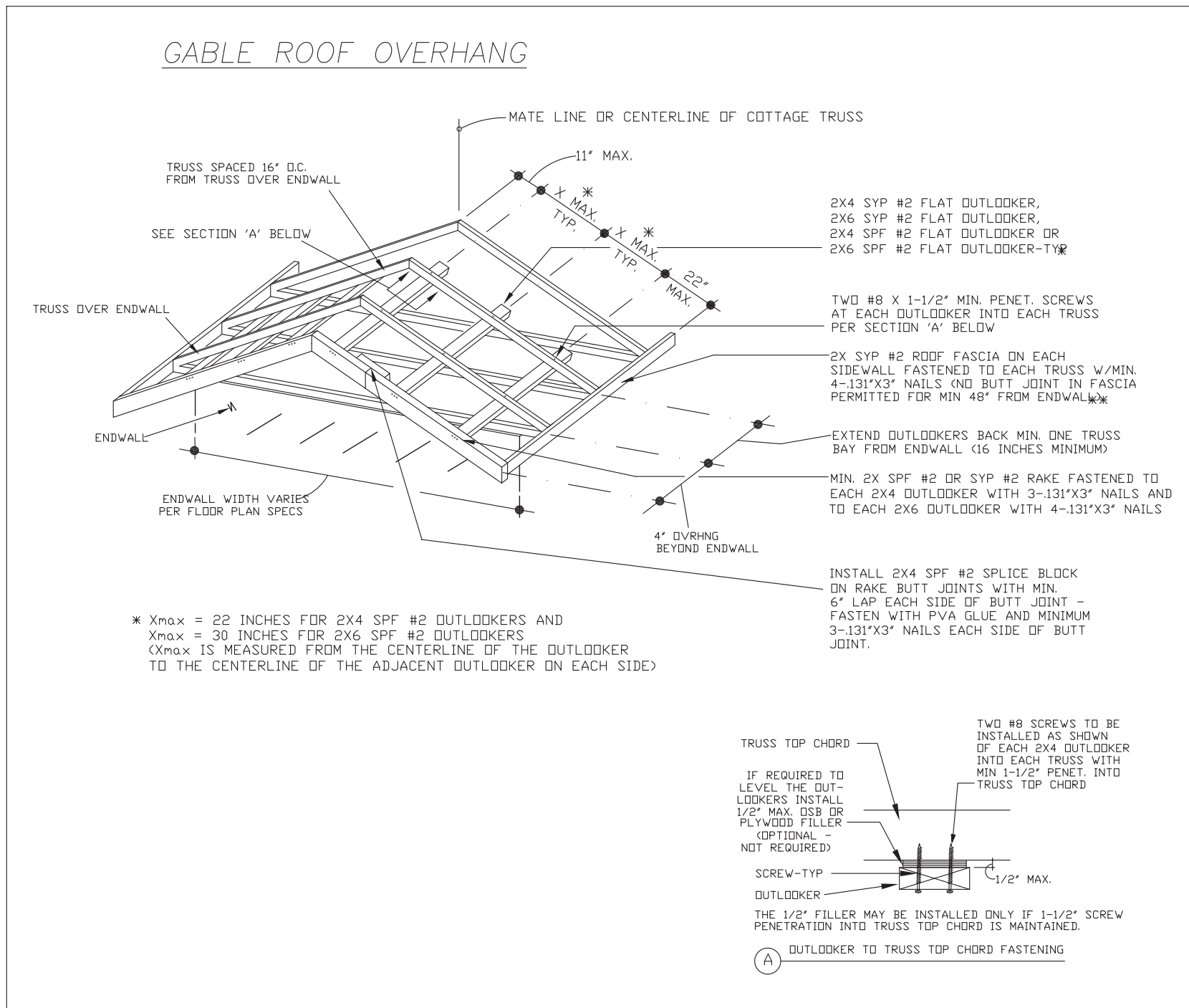
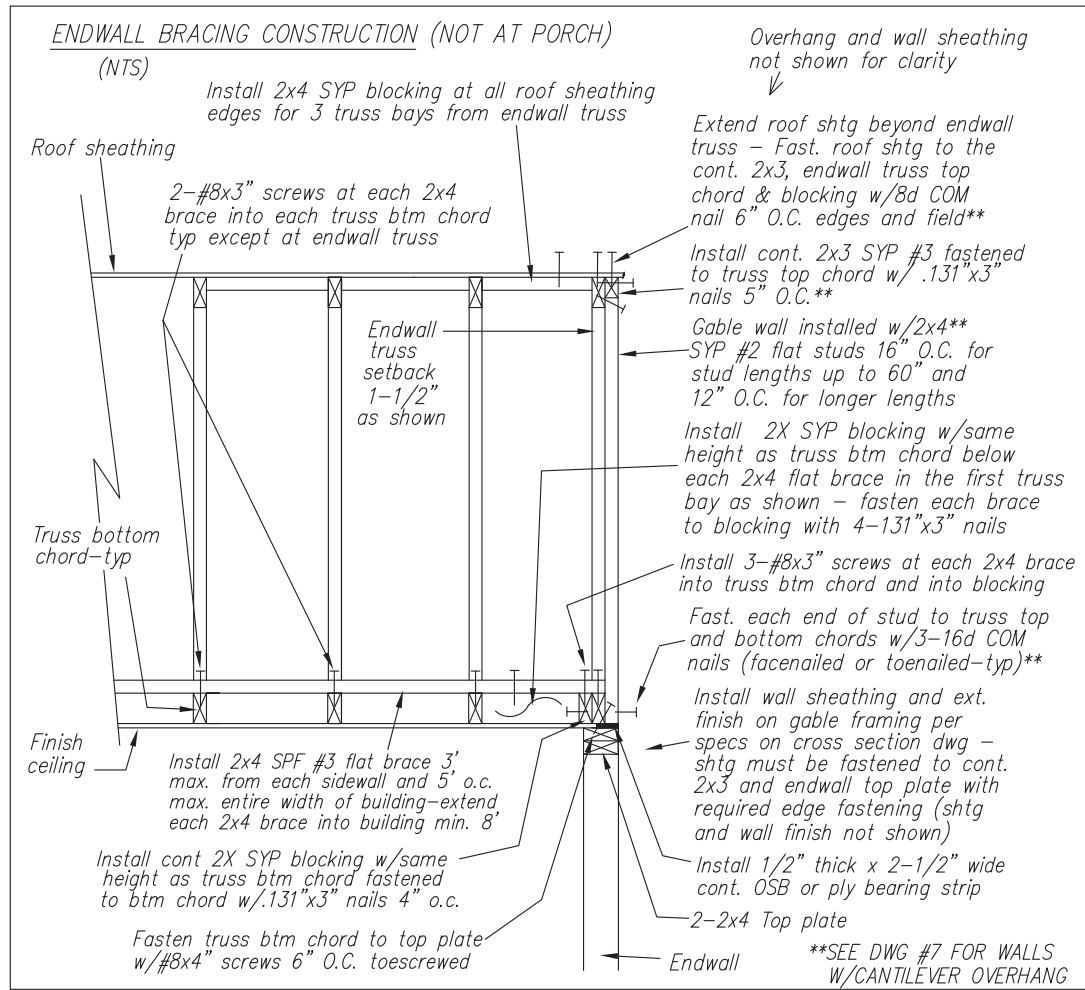
6/8/22

WILLIAM
J.
KALKER,
JR., P.E.

Digitally signed by WILLIAM J.
KALKER, JR. P.E.
DN: C=US, CN=WILLIAM J.
KALKER, JR. P.E., O=W.J.
KALKER, JR. P.E.
Reason: I am the author of this
document
Location: your signing location
here
Date: 2022.06.08 07:13:14-0400
Foxit PDF Reader Version:
11.2.1

NEW BAXLEY, LLC
DBA IMPACT HOUSING
137 WEST PARK DR.
BAXLEY, GA. 31513

DATE: 6/3/22		
CODES: IRC		
LABELS: FL	REVISIONS:	DRAWN BY: C.A. Leblanc
SCALE: NTS		
MODEL: 1672018GSH CROSS SECTION	PLAN NO. IHG-43FL	SHEET 6 OF 8
WILLIAM J. KALKER, JR., P.E. CONSULTING ENGINEER	33 ROCKWOOD LANE MONROE, CT 06468 (203) 261-1167	



Digitally signed by WILLIAM J. KALKER, JR., P.E.
DN: c=US, cn=WILLIAM J. KALKER, JR., P.E., o=W.J. KALKER, JR., P.E., Reason: I am the author of this document.
Location: your signing location
Date: 2022.06.08 07:12:58-0400
Foxit PDF Reader Version: 11.2.1

WILLIAM J. KALKER, JR., P.E.

LISTING AGENCY APPROVAL	
THESE PRINTS COMPLY WITH THE FLORIDA MANUFACTURED BUILDING ACT OF 1979 CONSTRUCTION CODE AND ADHERE TO THE FOLLOWING CRITERIA.	
CONST. TYPE	VB
OCCUPANCY	SFD
ALLOWABLE NO. OF FLOORS	1
RISK CATEGORY	II
WIND VELOCITY (ULT)	150
WIND VELOCITY (ASD)	116
FIRE RATING OF EXT. WALLS	0
PLAN NO.	2773-0073F
ALLOW. FLOOR LOAD	40
APPROVAL DATE	06-08-2022
MANUFACTURER	New Baxley
HIGH VELOCITY HURRICANE ZONE	NO

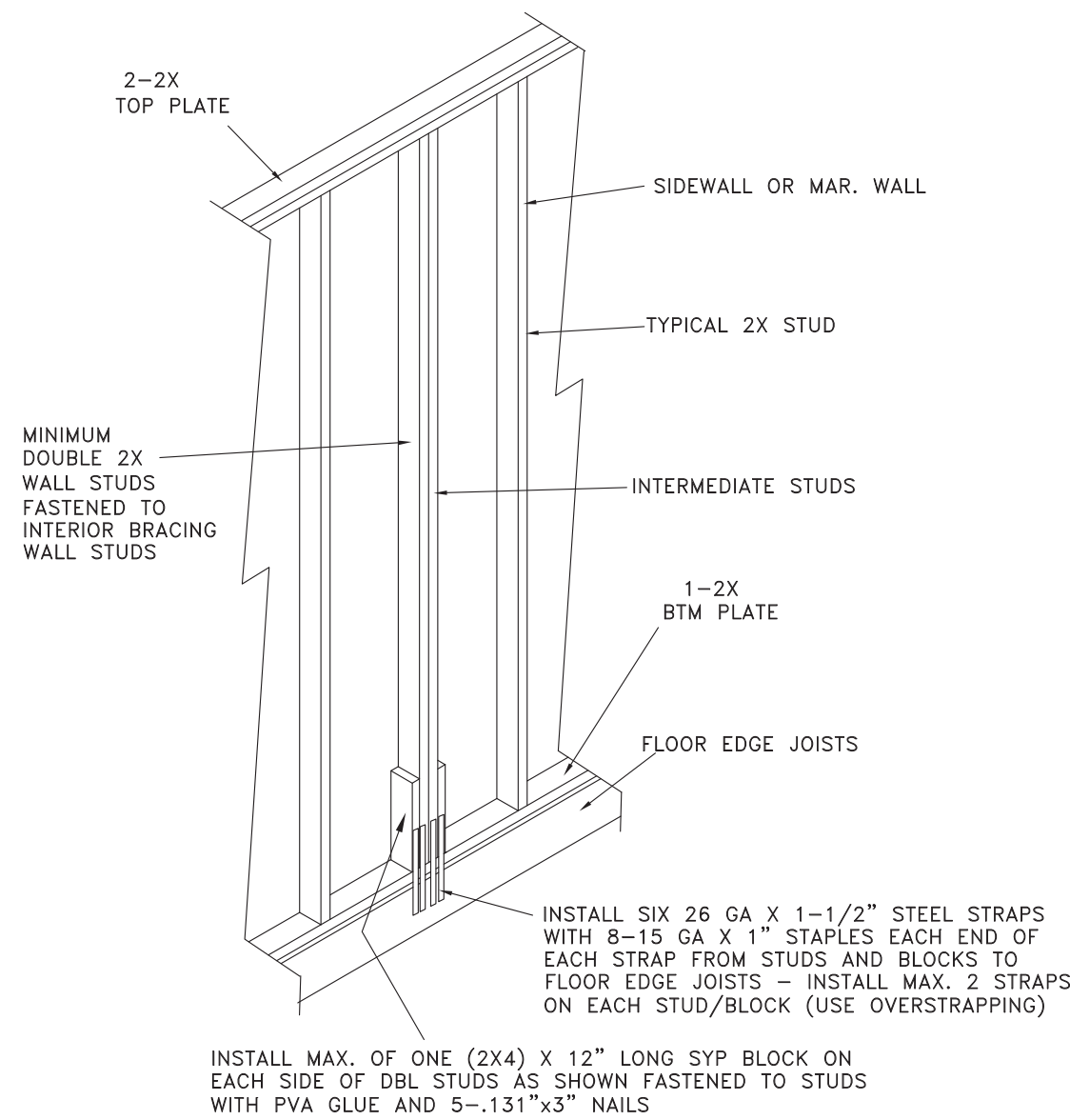


NEW BAXLEY, LLC DBA IMPACT HOUSING 137 WEST PARK DR. BAXLEY, GA. 31513		
DATE: 6/3/22		
CODES: FBC		
LABELS: FL	REVISIONS:	DRAWN BY: C.A. Leblanc
SCALE: NTS		
MODEL: 1672018GSH DETAILS	PLAN NO. IHG-43FL	SHEET
WILLIAM J. KALKER, JR., P.E. CONSULTING ENGINEER		7 OF 8
33 ROCKWOOD LANE MONROE, CT 06468 (203) 261-1167		

LISTING
AGENCY APPROVAL
THESE PRINTS COMPLY WITH THE FLORIDA
MANUFACTURED BUILDING ACT OF 1979
CONSTRUCTION CODE AND ADHERE TO THE
FOLLOWING CRITERIA

CONST. TYPE	VB
OCCUPANCY	SFD
ALLOWABLE NO. OF FLOORS	1
RISK CATEGORY	II
WIND VELOCITY (ULT)	150
WIND VELOCITY (ASD)	116
FIRE RATING OF EXT. WALLS	0
PLAN NO.	2773-0073F
ALLOW. FLOOR LOAD	40
APPROVAL DATE	06-08-2022
MANUFACTURER	New Baxley
HIGH VELOCITY HURRICANE ZONE	NO

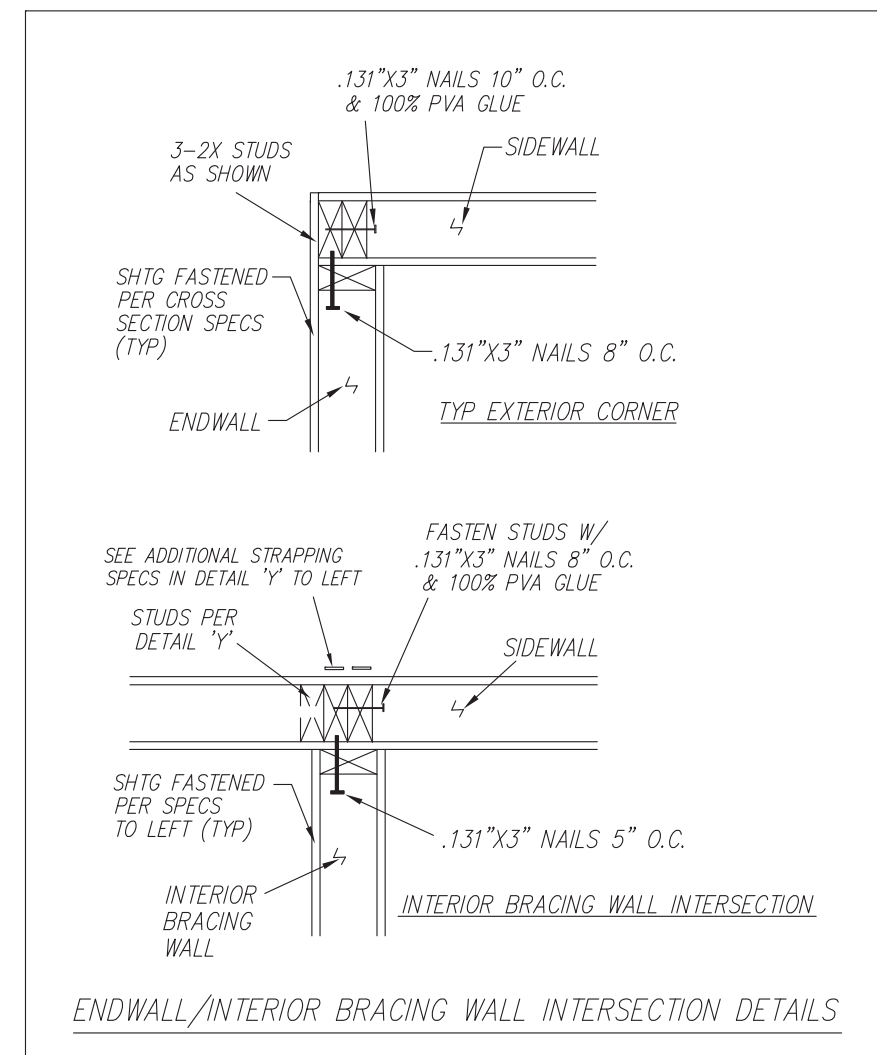
IWC
MUR-261



DETAIL 'Y'

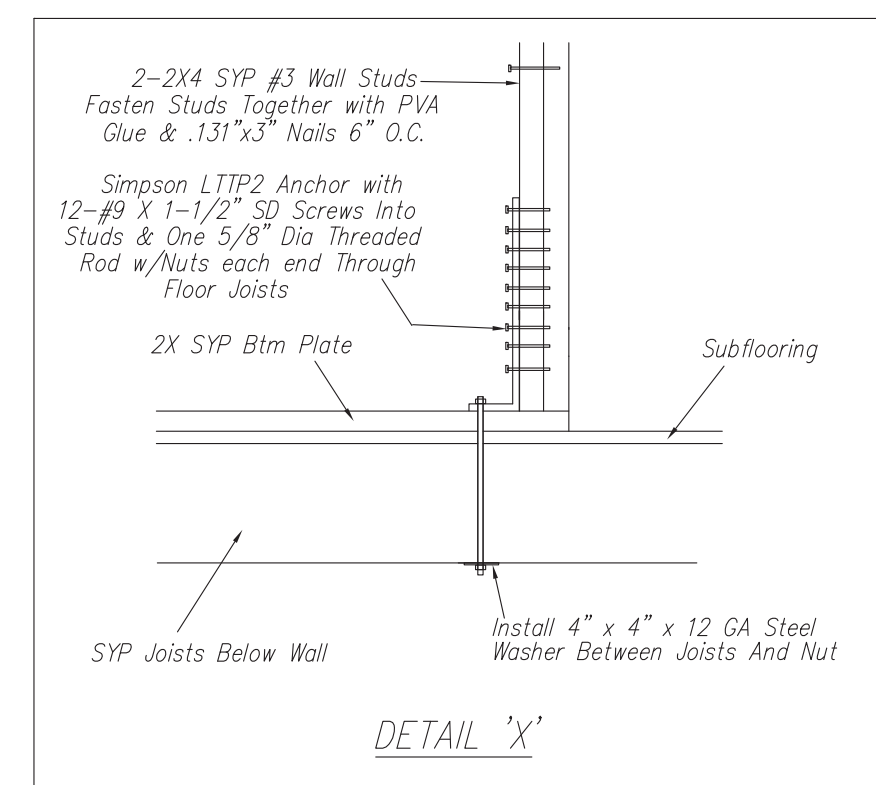
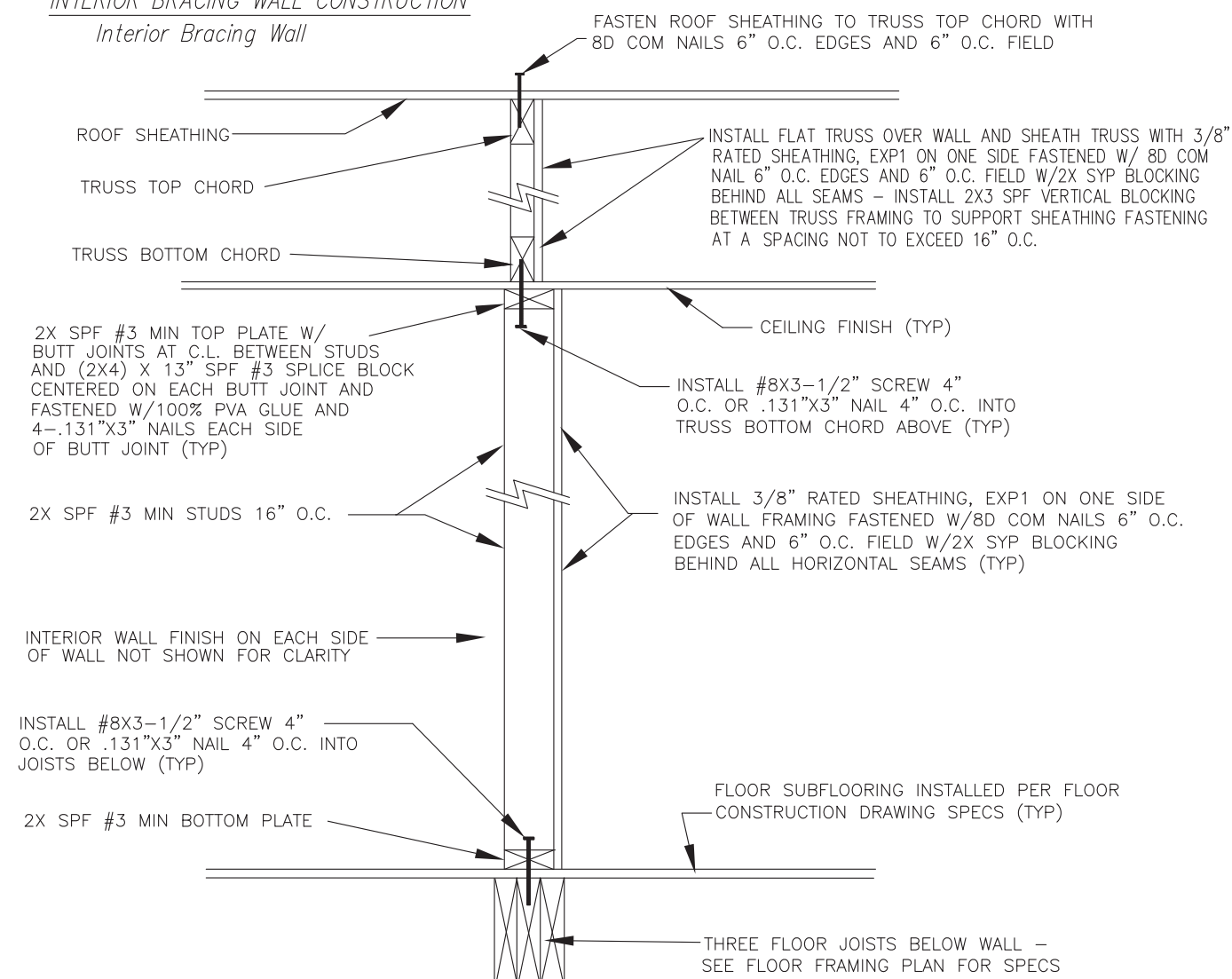
ADDITIONAL WALL TO FLOOR UPLIFT STRAPPING AT INTERIOR BRACING WALLS

TYP EACH END OF INTERIOR BRACING WALL UNLESS OTHERWISE NOTED ON FLOOR PLAN DRAWING



ENDWALL/INTERIOR BRACING WALL INTERSECTION DETAILS

INTERIOR BRACING WALL CONSTRUCTION
Interior Bracing Wall

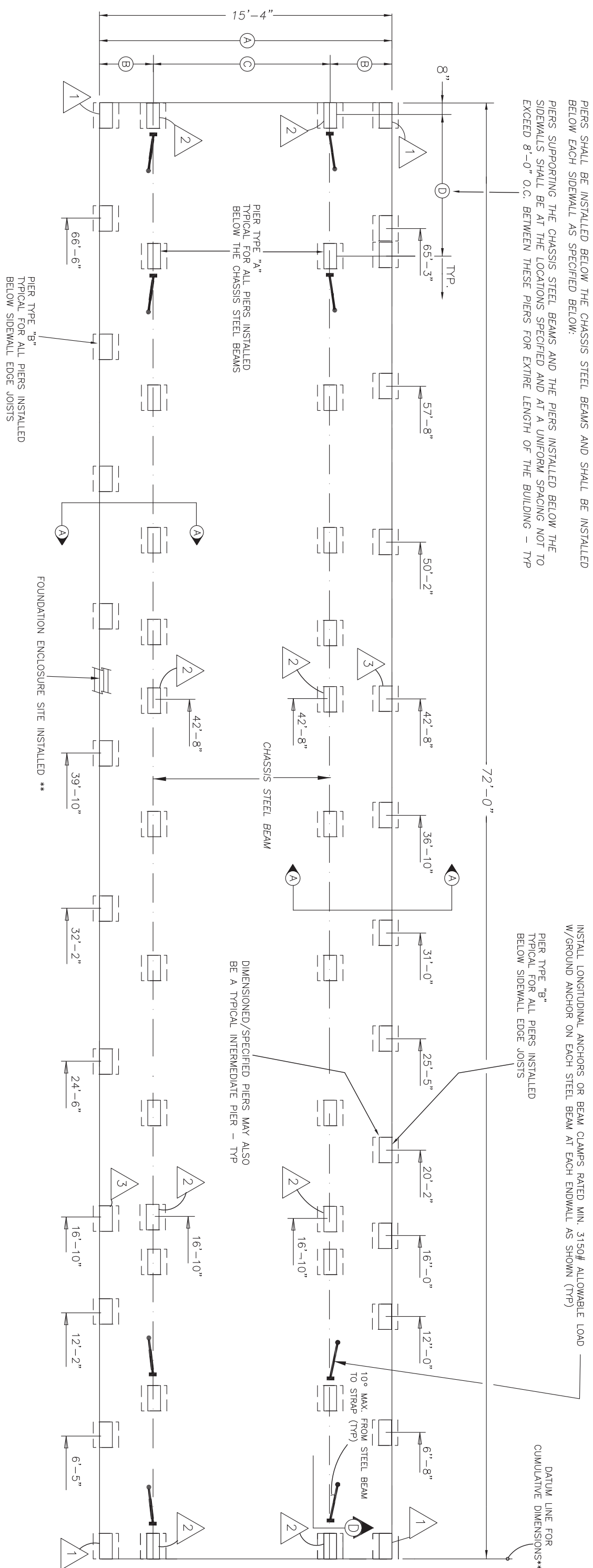


6/8/22

WILLIAM J. KALKER, JR., P.E.
Digitally signed by WILLIAM J. KALKER, JR., P.E.
DN: C=US, CN=WILLIAM J. KALKER, JR., P.E., O=W.J. KALKER, JR., P.E., Reason: I am the author of this document
Location: your signing location here
Date: 2022.06.08 07:14:08-04'00'
Foxit PDF Reader Version: 11.2.1

NEW BAXLEY, LLC
DBA IMPACT HOUSING
137 WEST PARK DR.
BAXLEY, GA. 31513

DATE: 6/3/22		
CODES: IRC		
LABELS: FL	REVISIONS:	DRAWN BY: C.A. Leblanc
SCALE: NTS		
MODEL: 1672018GSH	PLAN NO. IHG-43FL	SHEET 8 OF 8
DETAILS		
WILLIAM J. KALKER, JR., P.E. CONSULTING ENGINEER		33 ROCKWOOD LANE MONROE, CT 06468 (203) 261-1167



PIERS SHALL BE INSTALLED BELOW THE CHASSIS STEEL BEAMS AND SHALL BE INSTALLED BELOW EACH SIDEWALL AS SPECIFIED BELOW:

PIERS SUPPORTING THE CHASSIS STEEL BEAMS AND THE PIERS INSTALLED BELOW THE SIDEWALKS SHALL BE AT THE LOCATIONS SPECIFIED AND AT A UNIFORM SPACING NOT TO EXCEED 8'-0" O.C. BETWEEN THESE PIERS FOR EXTRE LENGTH OF THE BUILDING - TYPE

INSTALL LONGITUDINAL ANCHORS OR BEAM CLAMPS RATED MIN. 3150# ALLOWABLE W/GROUND ANCHOR ON EACH STEEL BEAM AT EACH ENDWALL AS SHOWN (TYP)

PIER TYPE "B"
TYPICAL FOR ALL PIERS INSTALLED
BELOW SIDEWALL EDGE JOISTS

CUMULATIVE DIMENSIONS**

FOUNDATION ENCLOSURE SITE INSTALLED **

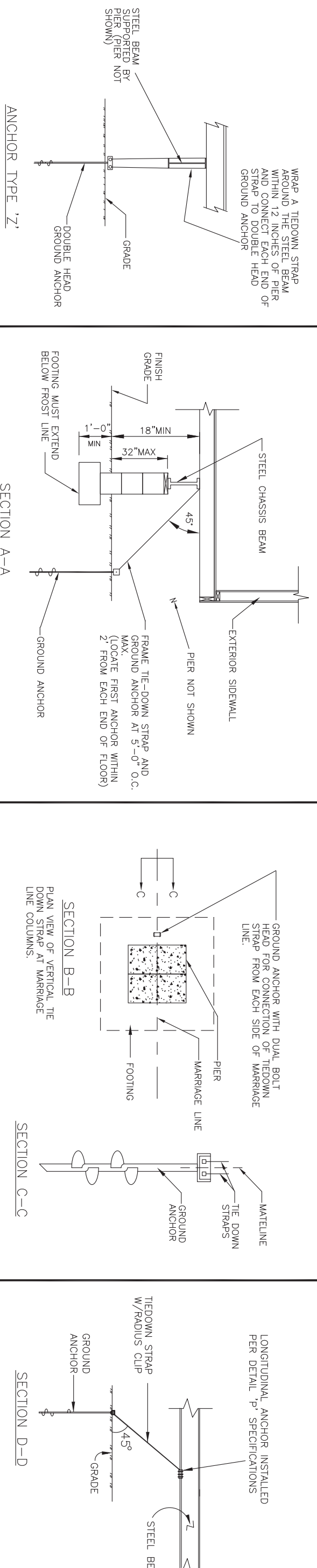
FRONT

ADD PLATFORMS, STAIRS AND RAILINGS AS REQUIRED FOR ACCESS TO BUILDING - ALL PLATFORMS, STAIRS AND RAILINGS TO BE DESIGNED BY SITE (LOCAL) ENGINEER, SUBJECT TO BUILDING OFFICIAL REVIEW AND APPROVAL - TYP

PIER FOUNDATION WITH STEEL FRAME

THIS REFERENCE FOUNDATION IS DESIGNED FOR A MAX. 150 MPH WIND SPEED (EXPC) PER THE 2020 FBC-R (7TH EDITION), SUPPLEMENT FOR MODEL '16/20186SH' (IHG-43FL) WITH THE STEEL FRAME CHASSIS (SEE THE MODEL DRAWINGS FOR FURTHER LIMITATIONS)

** FOUNDATION ENCLOSURE TO BE DESIGNED BY OTHERS. ENCLOSURE MUST HAVE VENTILATION OPENINGS WITH A MINIMUM NET VENT AREA OF NOT LESS THAN 1 SQ. FT. FOR EACH 150 SQUARE FEET OF CRAWL SPACE AREA. LOCATE OPENINGS WITHIN 3 FEET OF EACH CORNER AND UNIFORMLY SPACED BETWEEN THE CORNERS AROUND BUILDING PERIMETER. ALSO INSTALL A MINIMUM 18"x24" CRAWL SPACE ACCESS DOOR.



FOUNDATION NOTES:

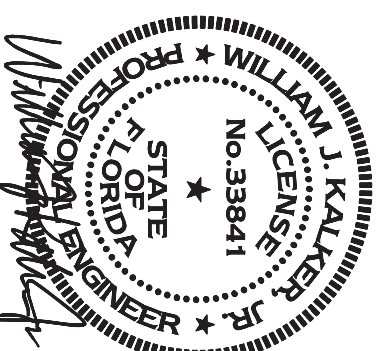
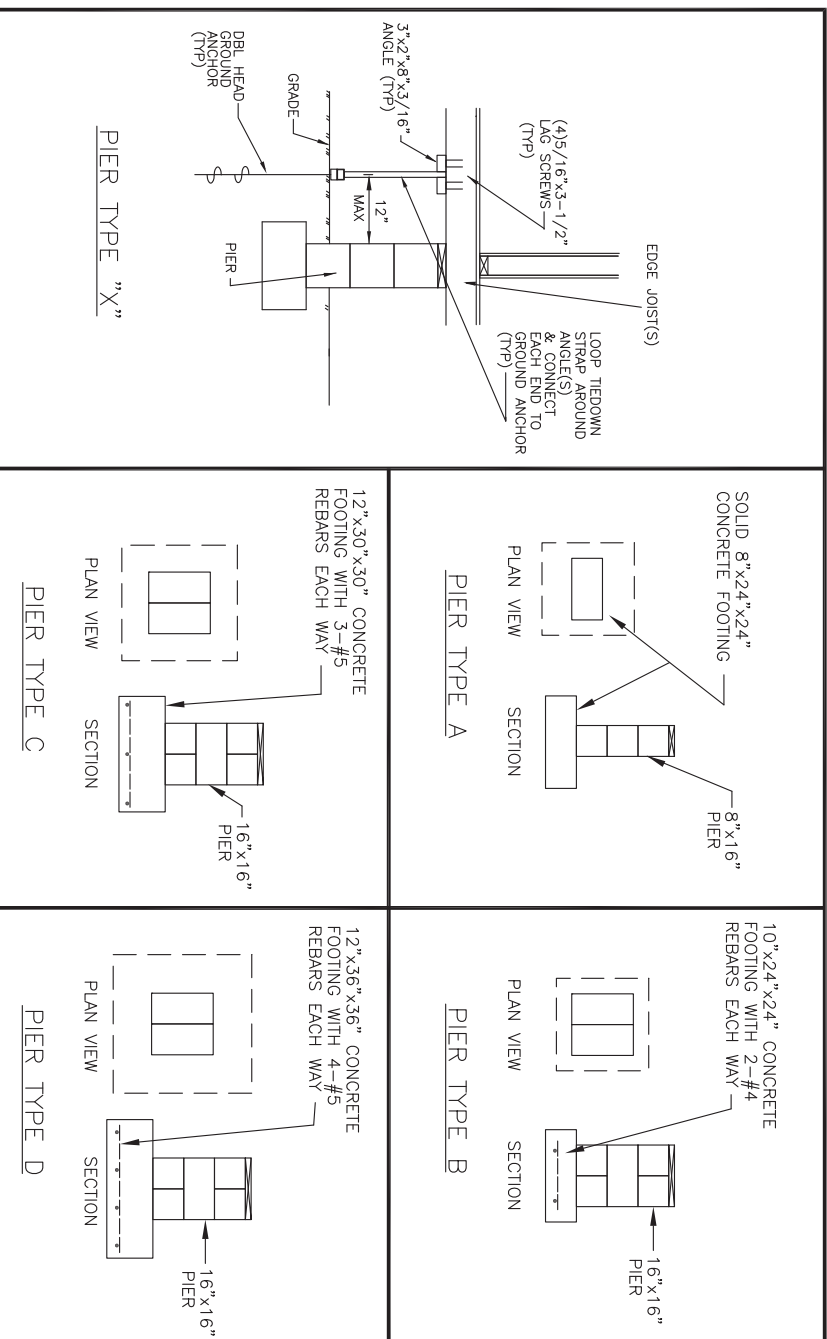
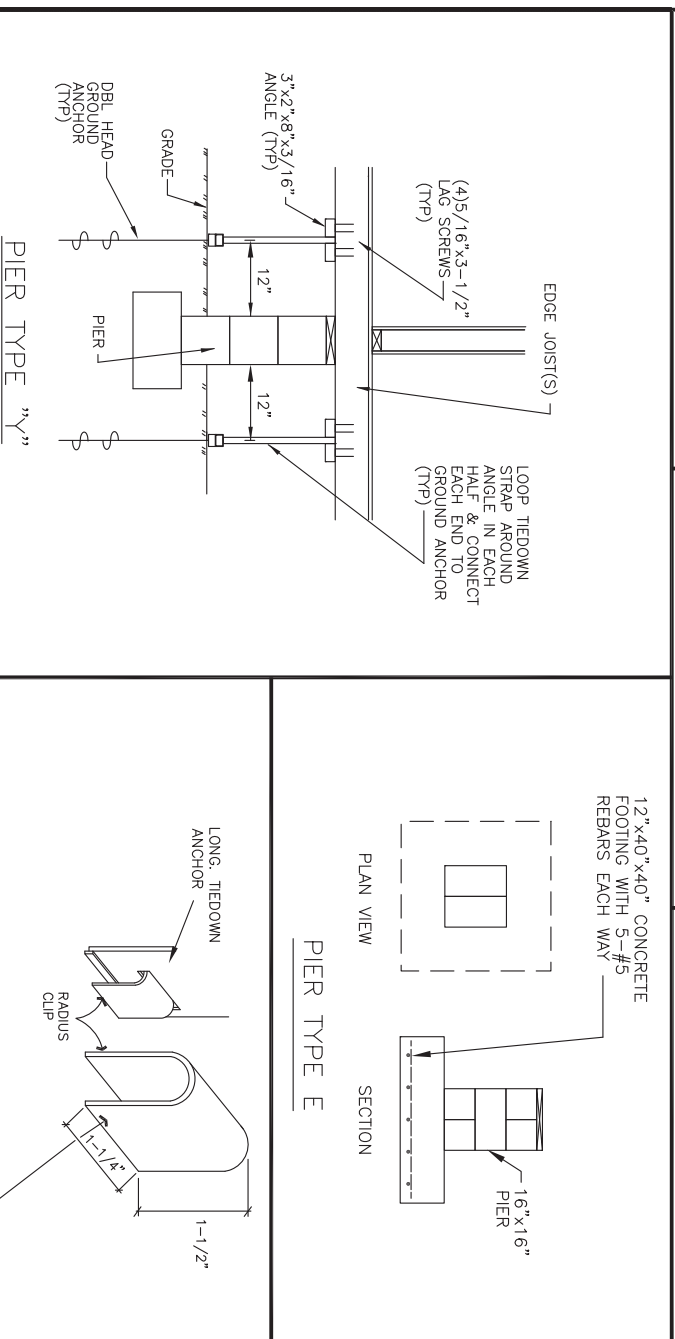
1. ALL FOUNDATION CONSTRUCTION, MATERIALS, AND INSTALLATION SHALL BE IN ACCORDANCE WITH ALL APPLICABLE STATE AND LOCAL CODES.
2. TIE-DOWN STRAPS TO BE 1-1/4" x .035" GALVANIZED STEEL TYPE-1, FINISH-B, GRADE-1 CONFORMING WITH ASTM D3933. TIEDOWN STRAPS AND CONNECTING HARDWARE SHALL HAVE A MINIMUM 4172MPa TENSILE LOAD CAPACITY.
3. GROUND ANCHORS SHALL HAVE A 5000# MINIMUM ULTIMATE LOAD CAPACITY, AND SHALL BE INSTALLED IN ACCORDANCE WITH THE FOLLOWING REQUIREMENTS:
 - A. ALL GROUND ANCHORS CONNECTED TO THE SHEAR OR LONGITUDINAL TIEBOLTS, MUST BE PROVIDED WITH STABILIZER PLATES TO MINIMIZE HORIZONTAL MOVEMENT.
 - B. THE DESIGN OF GROUND ANCHOR, INCLUDING SHAFT LENGTH, NUMBER AND DIAMETER OF REINFORCING BARS, SHALL BE BASED ON THE REQUIRED TENSILE AND SHEAR CAPACITIES OF GROUND ANCHORS. THE REQUIRED TENSILE AND SHEAR CAPACITIES OF GROUND ANCHORS ARE BELOW THE REQUIRED VALUES SPECIFIED ABOVE THE DESIGN ENGINEER MUST BE CONSULTED FOR AN ALTERNATE FOUNDATION DESIGN.
4. THE FIRST TIEDOWN STRAP FROM THE ENDWALLS MUST BE LOCATED NOT MORE THAN 2' FROM THE END OF THE FLOOR. (TYPICAL EACH END OF FLOOR)

5. CONCRETE MUST HAVE A MINIMUM COMPRESSIVE STRENGTH OF 2,500 PSI AT 28 DAYS.
6. ALL PIERS SHALL BE CONSTRUCTED OF 8"x8"x16" CONCRETE MASONRY UNITS REINFORCED WITH #5 BARS. BEARING BLOCKS SHALL BE PLACED ON BEARING BLOCKS. THE TOP OF EACH MORTAR JOINT WHEN PERMITTED BY THE OFFICIAL, MAY BE COVERED WITH SURFACE BONDING CEMENT. SURFACE BONDING CEMENT MUST BE APPLIED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS AND/OR THE PRODUCTS LISTING. ALL SURFACE BONDING CEMENTS MUST COMPLY WITH ASTM C887. (WHEN SURFACE BONDING CEMENT IS USED THE FIRST COURSE OF CONCRETE BLOCKS MUST BE LAID IN TYPE M OR S MORTAR). ALL FOUNDATION AND/OR PIER CONSTRUCTIONS MUST COMPLY WITH THE MINIMUM SPECIFICATIONS PROVIDED ABOVE.
7. ALL REINFORCEMENT BARS SHALL COMPLY WITH ASTM A615, GRADE 60. REINFORCEMENT BARS SHALL BE EQUALLY SPACED AND PLACED WITH 3" CLEARANCE FROM BOTTOM AND SIDES OF THE FOOTING.
8. CHASSIS STEEL BEAM SUPPORT PIERS MUST BE INSTALLED WITH THE CENTRELINE OF EACH PIER LOCATED DIRECTLY BELOW THE STEEL BEAM CENTRELINE.
9. ALL PIERS SHALL BE CARPED WITH 2x6 SYP PRESSURE TREATED SLIP PLATES INSTALLED OVER 4" THICK CONCRETE CAPPING COVERS THE ENTIRE PIER.
10. INSTALL A CONC. BLOCK PIER ON EACH SIDE OF ALL EXTERIOR DOOR OPENINGS. SLIGHT ADJUSTMENTS MAY BE REQUIRED TO INSURE OPENABILITY AFTER INSTALLATION OF BUILDING IS COMPLETE.
11. CHASSIS STEEL BEAM SUPPORT PIERS MAY BE ROTATED 90 DEGREES FROM THE ORIENTATION SHOWN ON THE FOUNDATION PLAN ABOVE (SEE NOTE #6).
12. MIN. 2000 PSF ALLOWABLE SOIL BEARING CAPACITY IS ASSUMED. IF THE ACTUAL BEARING CAPACITY IS LESS THAN 2000 PSF, DESIGN FOOTINGS MUST BE CONSULTED TO DETERMINE THE ACTUAL BEARING CAPACITY. FOOTINGS SHALL BE PLACED ON STABLE AND ON NON-EXPANSIVE SOILS ONLY.
13. ALL GROUND ANCHORS SPECIFIED ON THIS DRAWING MUST BE CERTIFIED BY A PROFESSIONAL ENGINEER OR REGISTERED PROFESSIONAL LABORATORY TO DEVELOP TENSILE SUPPORT LOADS OF 5000 LBS. WITHDRAWAL LOAD WHEN LOADED BOTH PARALLEL WITH THE ANCHOR SHANK AND AT A 45° ANGLE (WITH STABILIZER PLATE) IN THE ANCHOR SHANK.
14. THE GROUND ANCHORS MUST BE INSTALLED TO THEIR FULL DEPTH IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS. GROUND ANCHORS MUST BE APPROVED FOR INSTALLATION IN THE SOIL TYPE IN WHICH THEY WILL BE INSTALLED AND MUST EXTEND BELOW THE FROST DEPTH.

SUPPORT PIER REQUIREMENTS			
PIER NUMBER	MAXIMUM SOIL BEARING CAPACITY	PIER TYPE	NUMBER OF VERTICAL STRAPS REQUIRED (EACH MODULE)
1	2000 PSF	B & X	SEE DETAIL
	3000 PSF	B & X	SEE DETAIL
	2000 PSF	A & Z	SEE DETAIL
2	3000 PSF	A & Z	SEE DETAIL
	2000 PSF	B & Y	SEE DETAIL
	3000 PSF	B & Y	SEE DETAIL
3	2000 PSF	B & Y	SEE DETAIL
	3000 PSF	B & Y	SEE DETAIL
	2000 PSF		
	3000 PSF		
	2000 PSF		
	3000 PSF		
	2000 PSF		
	3000 PSF		
	2000 PSF		
	3000 PSF		
	2000 PSF		
	3000 PSF		

FOUNDATION DIMENSIONS			
A MODULE WIDTH	B PIER TO MODULE EDGE	C STEEL BEAM SPACING	
18"4"	44-1/4"	95-1/2"	
D MAXIMUM PIER SPACING		MINIMUM SOIL BEARING CAPACITY	
8'-0" O.C.		2000 PSF	

THE SUITABILITY OF THIS 'REFERENCE' FOUNDATION FOR A SPECIFIC SITE MUST BE DETERMINED AND/OR VERIFIED BY A DESIGN PROFESSIONAL FAMILIAR WITH THE SITE.



6/8/22

Digitally signed by WILLIAM J. KALKER, JR., P.E.
DN: c=US, cn=WILLIAM J. KALKER, JR., P.E., o=W.J. KALKER, JR., P.E.,
Reason: I am the author of this document

Location: your signing location here
Date: 2022.08.07 15:20:04-0700
Frost PDF Reader Version: 11.02

Date: 2022.06.08 07:15:20-0401
Foxit PDF Reader Version: 11.2

DATE: 6/3/22		REVISIONS:		DRAWN BY
CODES: IRC				C.A. Leblond
LABELS: FL				
SCALE: NTS				
MODEL: 1672018GSH		PLAN NO.		
REFERENCE FOUNDATION		IHG-43FL		
WILLIAM J. KALKER, JR., P.E.		33 ROCKWOOD LANE		1 OF 1
CONSULTING ENGINEER		MONROE, CT 06468		
		(203) 261-1167		

CONSULTING ENGINEER

33 ROCKWOOD LANE
MONROE, CT 06468
(203) 261-1167

105

WILLIAM J. KALKER JR., P.E.
33 ROCKWOOD LANE
MONROE, CT 06468

2020 FLORIDA ENERGY CODE
MODULAR BUILDING THERMAL ENVELOPE
PRESCRIPTIVE COMPLIANCE FORM R402-2020
FOR PLAN NO.

IHK-43FL

FLORIDA BUILDING CODE, ENERGY CONSERVATION	
Residential Building Thermal Envelope Approach	
R-Value Computation Method	
FORM R402-2020	1 & 2 Florida Climate Zone
PROJECT NAME AND ADDRESS:	BUILDER: SEE BELOW
OWNER:	PERMITTING OFFICE:
PERMIT TYPE:	JURISDICTION NUMBER:
WORST CASE?	PERMIT NUMBER:
	NUMBER OF UNITS:
	CONDITIONED FLOOR AREA: 1104 SF

Scope: Compliance with Section R402.1.2 of the Florida Building Code, Energy Conservation, shall be demonstrated by the use of Form R402 for single- and multiple-family residences of three stories or less in height, additions to existing residential buildings, alterations, renovations and building systems in existing buildings, as applicable. To comply, a building must meet or exceed all of the energy efficiency requirements and applicable mandatory requirements summarized on this form. If a building does not comply with this method, or by the UA Alternative method, it may still comply under Section R405 or R406 of the Florida Building Code, Energy Conservation.

General Instructions:

1. Fill in all the applicable spaces of the "INSTALLED" row in the INSULATION AND FENESTRATION REQUIREMENTS BY COMPONENT table with the information requested. All "INSTALLED" values must be equal to or more efficient than the required levels. "AVG" indicates an area weighted average is allowed; "LOWEST" indicates the lowest R-value to be installed must be entered.
2. Complete the tables for air infiltration and installed equipment.
3. Read the MANDATORY REQUIREMENTS table and check each box to indicate your intent to comply with all applicable items.
4. Read, sign and date the "Prepared By" certification statement at the bottom of this form. The owner or owner's agent must also sign and date the form.

INSULATION AND FENESTRATION REQUIREMENTS BY COMPONENT¹

REQUIREMENTS	FENESTRATION U-FACTOR ^{2, 3, 4}	SKYLIGHT ² U-FACTOR	GLAZED FENESTRATION SHGC ^{2, 3}	CEILING R-VALUE	WOOD FRAME WALL R- VALUE ⁵	MASS WALL R-VALUE ^{5, 6}	FLOOR R-VALUE	BASEMENT WALL R- VALUE	SLAB ⁷ R- VALUE & DEPTH	CRAWL SPACE WALL R- VALUE
CLIMATE ZONE 1	NR	0.75	0.25	30	13	3/4	13	0	0	0
CLIMATE ZONE 2	0.40	0.65	0.25	38	13	4/6	13	0	0	0
VALUE	AVG	AVG	AVG	LOWEST	LOWEST	LOWEST	LOWEST	LOWEST	LOWEST	LOWEST
INSTALLED:	35		25	R38	R13		R13			

R-Value Calculation Method - [PASS / FAIL]

For Sl: 1 foot = 304.8 mm; NR = No requirement.

- (1) R-values are minimums. U-factors and SHGC are maximums. When insulation is installed in a cavity which is less than the label or design thickness of the insulation, the installed R-value of the insulation shall not be less than the R-value specified in the table.
- (2) The fenestration U-factor column excludes skylights. The SHGC column applies to all glazed fenestration. Exception: Skylights may be excluded from glazed fenestration SHGC requirements in Climate Zones 1 through 3 where the SHGC for such skylights does not exceed 0.30.
- (3) For impact rated fenestration complying with Section R301.2.1.2 of the Florida Building Code, Residential or Section 1609.1.2 of the Florida Building Code, Building, the maximum U-factor shall be 0.65 in Climate Zone 2. An area-weighted average of U-factor and SHGC shall be accepted to meet the requirements, and up to 15 square feet of glazed fenestration area are exempted from the U-factor and SHGC requirement based on Section R402.3.1, R402.3.2 and R402.3.3.
- (4) One side-hinged opaque door assembly up to 24 square feet is exempted from this U-factor requirement based on Section R402.3.4.
- (5) R-values are for insulation material only as applied in accordance with manufacturer's installation instructions.
- (6) The second R-value applies when more than half the insulation is on the interior of the mass wall.
- (7) R-5 shall be added to the required slab edge R-values for heated slabs. Insulation depth shall be the depth of the footing or 2 feet, whichever is less in Climate Zones 1 through 3 for heated slabs.

Air Infiltration:	Blower door test is required on the building envelope to verify leakage 7 ACH50; test report must be provided to code official before CO is issued. Florida Building Code, Energy Conservation Section R402.4.1.2 testing exception may apply for additions, alterations, or renovations.
-------------------	---

NEW BAXLEY, LLC
dba IMPACT HOUSING

W. J. Kalk Jr.
4/8/22

Job 108483	Truss P2092901	Truss Type QUEENPOST	Qty 1	Ply 1	High Line Structures 407 GA
UFP Industries Inc., Grand Rapids, MI 49525, Weston Gorbey Copyright ©2021 UFP Industries, Inc. All Rights Reserved			Ref. #10014869 Tue Dec 14 14:40:49 2021 Page 1 of 1		

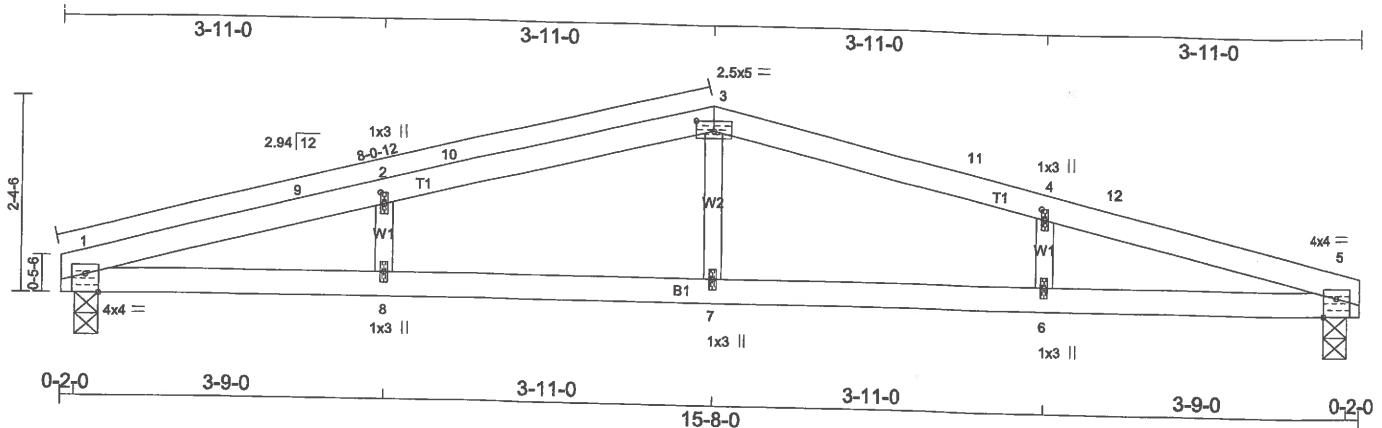


Plate Offsets (X,Y) - [1:0-2-0,Edge], [2:0-1-10,0-0-8], [3:0-2-8,0-1-7], [4:0-1-10,0-0-8], [5:0-2-0,Edge]

SPACING:-	2-0-0	SPACING:-	1-4-0	SPACING:-	2-0-0	CSI.	DEFL.	in	(loc)	l/defl	L/d	PLATES
LOADING (psf)		LOADING (psf)		Plate Grip DOL	1.25	TC	0.89	0.27	8	>683	240	WAVE
TCLL	20.0	TCLL	30.0	Plate Metal DOL	1.00	BC	0.98	0.24	8	>780	180	
TCDL	7.0	TCDL	10.5	Lumber DOL	1.25	WB	0.10	0.02	5	n/a	n/a	
BCLL	0.0 *	BCLL	0.0 *	Rep Stress Incr	YES	Matrix-P						Weight: 51 lb
BCDL	7.0	BCDL	10.5	Code FBC2020/TP12014								FT = 0%

LUMBER-
TOP CHORD 2x4 SP No.2
BOT CHORD 2x4 SP No.1
WEBS 2x3 SP No.2

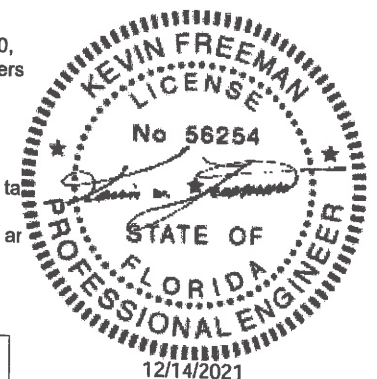
BRACING-
TOP CHORD Structural wood sheathing directly applied or 4-5-0 oc purlins.
BOT CHORD Rigid ceiling directly applied or 4-7-4 oc bracing.

REACTIONS. (lb/size) 1=523/0-3-8 (min. 0-1-8), 5=523/0-3-8 (min. 0-1-8)
Max Horz 1=-65(LC 15)
Max Uplift 1=-415(LC 6), 5=-415(LC 7)

FORCES. (lb) - Maximum Compression/Maximum Tension
TOP CHORD 1-9=-1173/1472, 2-9=-1133/1474, 2-10=-1149/1553, 3-10=-1132/1556, 3-11=-1132/1556,
4-11=-1149/1553, 4-12=-1133/1474, 5-12=-1173/1472
BOT CHORD 1-8=-1349/1100, 7-8=-1349/1100, 6-7=-1349/1100, 5-6=-1349/1100
WEBS 3-7=-339/303, 2-8=-128/294, 4-6=-128/294

NOTES-

- This truss has been checked for uniform roof live load only, except as noted.
- Wind: ASCE 7-16; Vult=150mph (3-second gust) Vasd=116mph @24in o.c.; TCDL=2.8psf; BCDL=2.8psf; (Alt. 180mph @16in o.c.; TCDL=4.2psf; BCDL=4.2psf); h=30ft; Cat. II; Exp C; Encl., GCpi=0.18; MWFRS (envelope) gable end zone and C-C Exterior(2E) 0-1-12 to 3-1-12, Interior(1) 3-1-12 to 4-10-0, Exterior(2R) 4-10-0 to 10-10-0, Interior(1) 10-10-0 to 12-6-4, Exterior(2E) 12-6-4 to 15-6-4 zone; cantilever left and right exposed; C-C for members and forces & MWFRS for reactions shown; Lumber DOL=1.60 plate grip DOL=1.60 Plate metal DOL=1.00
- Building Designer / Project engineer responsible for verifying applied roof live load shown covers rain loading requirements specific to the use of this truss component.
- This truss has been designed for a 10.0 psf bottom chord live load nonconcurrent with any other live loads.
- * This truss has been designed for a live load of 20.0psf on the bottom chord in all areas where a rectangle 3-6-0 to by 2-0-0 wide will fit between the bottom chord and any other members.
- Provide mechanical connection (by others) of truss to bearing plate capable of withstanding 415 lb uplift at joint 1 ar 415 lb uplift at joint 5.
- This design has been checked for Alpine Wave 20 gauge plates.



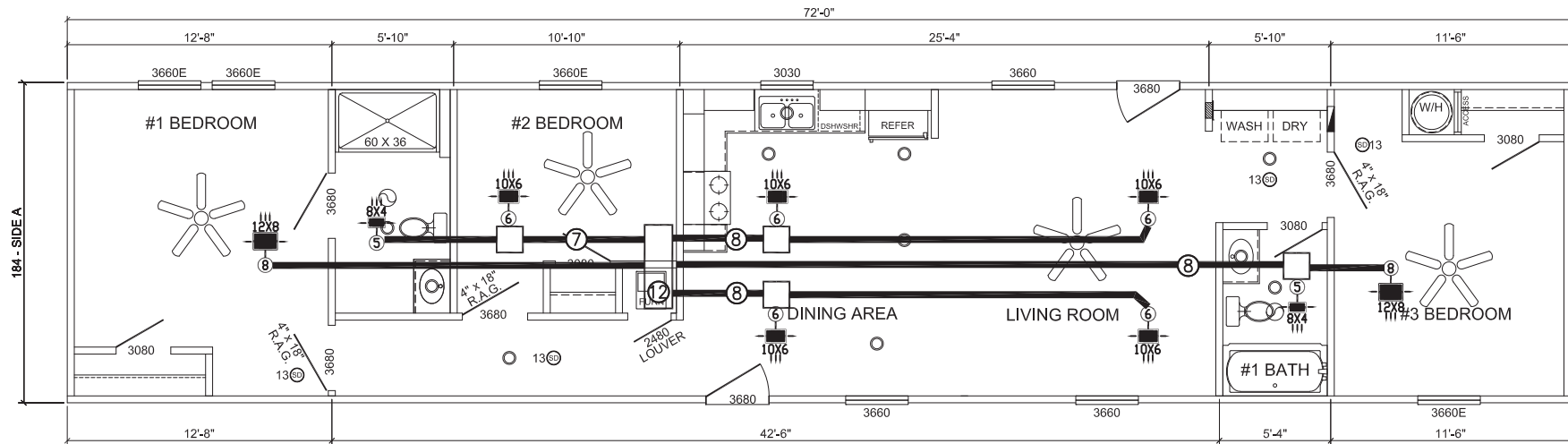
The professional engineering seal indicates that a licensed professional engineer has designed the truss under the standards referenced within this document, not necessarily the current state building code. The engineering seal is not an approval to use in a specific state. The final determination on whether a truss design is acceptable under the locally adopted building code rest with the building official or designated appointee.

WARNING - Verify design parameters and READ NOTES

Truss shall not be cut or modified without approval of the truss design engineer.
This component has only been designed for the loads noted on this drawing. Construction and lifting forces have not been considered. The builder is responsible for lifting methods and system design. Builder responsibilities are defined under TP11. This design is based only upon parameters shown, and is for an individual building component to be installed and loaded vertically. Applicability of design parameters and proper incorporation of component is responsibility of building designer - not truss designer. Bracing shown is for lateral support of individual web members only. Additional temporary bracing to insure stability during construction is the responsibility of the erector. Additional permanent bracing of the overall structure is the responsibility of the building designer. For general guidance regarding fabrication, quality control, storage, delivery, erection and bracing, consult BCSI 1-06 from the Wood Truss Council of America and Truss Plate Institute Recommendation available from WTCA, 6300 Enterprise LN, Madison, WI 53719

UFP Industries, Inc.
PHONE (616)-364-6161 FAX (616)-365-0060 2801 EAST BELTLINE RD, NE
GRAND RAPIDS, MI 49525





NOTES:

UNDERCUT BEDROOM DOORS 2" MINIMUM

ALL SUPPLY DUCTS INSTALLED IN ATTIC UNLESS NOTED OTHERWISE

ALL SUPPLY REGISTERS TO BE 3-WAY ADJUSTABLE (SEE SPECIFICATION ON PLAN FOR SIZE)

ALL ATTIC FLEX DUCT TO BE R-8 MINIMUM. ALL ATTIC PLENUMS AND MIXING BOXES TO BE FABRICATED FROM R-8.0 MIN DUCT BOARD; ALL DUCT AND PLENUM DIMENSIONS ARE INSIDE DIMENSIONS.

DUCT TIGHTNESS TO BE VERIFIED BY TESTING IN ACCORDANCE WITH SECTION R403.3.3 OF ENERGY CODE

DUCT PENETRATIONS OF THE CEILING SHOULD BE PROVIDED WITH 1/2" GYPSUM BOARD TIGHT FITTING FIREBLOCKING.

DUCT INSULATION SHALL BE INSTALLED WITH A VAPOR RETARDER HAVING A PERMEANCE OF NOT GREATER THAN .05 PERM IN ACCORDANCE WITH ASTM E96 OR ALUMINUM FOIL WITH A THICKNESS OF NOT LESS THAN 2 MILS INSTALLED ON THE EXTERIOR OF THE INSULATION ON ALL DUCTS LOCATED IN THE ATTIC.

THE  GROUP ELKHART, IN.	CUSTOMER: IMPACT HOUSING	
DESCRIPTION: DVHD	SCALE:	
MODEL: 1672018GSH	DATE: 5/23/22	
DRAWN: BPW CAD FILENAME: DS\IMPACT HOUSING		



Load Short Form Entire House AMS Of Indiana, Inc.



Job: 1672018GSH
Date: 5/23/22
By: AMS of Indiana, Inc.

3933 East Jackson Blvd., Elkhart, IN 46516

Project Information

For: IMPACT HOUSING
1672018GSH

Design Information

	Htg	Clg	Infiltration	
Outside db (°F)	18	99	Method	Simplified
Inside db (°F)	72	75	Construction quality	Average
Design TD (°F)	54	24	Fireplaces	1 (Average)
Daily range	-	M		
Inside humidity (%)	50	50		
Moisture difference (gr/lb)	48	50		

HEATING EQUIPMENT

Make	Generic
Trade	
Model	AFUE 100
AHRI ref	
Efficiency	100 AFUE
Heating input	7.9 kW
Heating output	26887 Btuh
Temperature rise	30 °F
Actual air flow	810 cfm
Air flow factor	0.034 cfm/Btuh
Static pressure	0.50 in H2O
Space thermostat	

COOLING EQUIPMENT

Make	Generic
Trade	
Cond	SEER 14.0
Coil	
AHRI ref	
Efficiency	12.2 EER, 14 SEER
Sensible cooling	20091 Btuh
Latent cooling	8610 Btuh
Total cooling	28701 Btuh
Actual air flow	810 cfm
Air flow factor	0.045 cfm/Btuh
Static pressure	0.50 in H2O
Load sensible heat ratio	0.79

ROOM NAME	Area (ft²)	Htg load (Btuh)	Clg load (Btuh)	Htg AVF (cfm)	Clg AVF (cfm)
B1	194	5479	4365	187	197
BA2	65	1268	612	43	28
LR\DR\KT	385	8611	7383	294	333
A	66	0	0	0	0
BA1	47	965	464	33	21
B3	172	4797	2926	164	132
U	40	0	0	0	0
B2	121	2623	2197	90	99

Calculations approved by ACCA to meet all requirements of Manual J 8th Ed.



Right-Suite® Universal 2022 22.0.01 RSU02009

2022-May-23 09:39:54

Page 1

...re)\Life Cottages)\1672018GSH-FL(OVHD-FURN).rup Calc = MJ8 Front Door faces: N

Entire House	1090	23743	17948	810	810
Other equip loads		3144	1389		
Equip. @ 1.04 RSM			20091		
Latent cooling			5013		
TOTALS	1090	26887	25104	810	810



Calculations approved by ACCA to meet all requirements of Manual J 8th Ed.



Component Constructions
Entire House
AMS Of Indiana, Inc.



Job: 1672018GSH
Date: 5/23/22
By: AMS of Indiana, Inc.

3933 East Jackson Blvd., Elkhart, IN 46516

Project Information

For: IMPACT HOUSING
 1672018GSH

Design Conditions

Location:			Indoor:		Heating	Cooling
Bob Sikes AP, FL, US			Indoor temperature (°F)		72	75
Elevation: 190 ft			Design TD (°F)		54	24
Latitude: 31 °N			Relative humidity (%)		50	50
			Moisture difference (gr/lb)		48.0	50.2
Outdoor:			Infiltration:			
	Heating	Cooling	Method		Simplified	
Dry bulb (°F)	18	99	Construction quality		Average	
Daily range (°F)	-	20 (M)	Fireplaces		1 (Average)	
Wet bulb (°F)	-	78				
Wind speed (mph)	15.0	7.5				

Construction descriptions

Walls

12C-0sw: Frm wall, vnl ext, 3/8" wood shth, r-13 cav ins, 2"x4" wood frn, 16" o.c. stud

Or	Area ft²	U-value Btuh/ft²-°F	Insul R ft²-°F/Btuh	Htg HTM Btuh/ft²	Loss Clg Btuh	HTM Btuh/ft²	Gain Btuh
n	137	0.091	13.0	4.92	676	2.78	381
e	578	0.091	13.0	4.92	2843	2.78	1603
s	137	0.091	13.0	4.92	676	2.78	381
w	556	0.091	13.0	4.92	2738	2.78	1544
all	1408	0.091	13.0	4.92	6933	2.78	3909

Partitions

(none)

Windows

2 glazing, clr low-e outr, argon gas, vnl frm mat, clr innr, clr strn, 1/4" gap, 1/8" thk; 2 glazing, clr low-e outr, argon gas, vnl frm mat, clr innr, clr strn, 1/4" gap, 1/8" thk; NFRC rated (SHGC=0.25); 6.67 ft head ht

e	45	0.350	0	18.9	852	32.3	1455
w	66	0.350	0	18.9	1254	32.3	2142
all	111	0.350	0	18.9	2107	32.3	3598

Doors

Door, wd sc type

e	21	0.350	0	18.9	398	12.4	261
w	21	0.350	0	18.9	398	12.4	261
all	42	0.350	0	18.9	795	12.4	522

Ceilings

16B-38ad: Attic ceiling, asphalt shingles roof mat, r-38 ceil ins

	1090	0.026	38.0	1.41	1534	1.53	1673
--	------	-------	------	------	------	------	------

Floors

19A-13cstp: Flr floor, frm flr, 6" thkns, r-13 cav ins, tight crwl ovr

	1090	0.065	13.0	2.57	2807	1.14	1240
--	------	-------	------	------	------	------	------



Project Information

For: IMPACT HOUSING
 1672018GSH

Notes:



Design Information

Weather: Bob Sikes AP, FL, US

Winter Design Conditions

Outside db	18 °F
Inside db	72 °F
Design TD	54 °F

Summer Design Conditions

Outside db	99 °F
Inside db	75 °F
Design TD	24 °F
Daily range	M
Relative humidity	50 %
Moisture difference	50 gr/lb

Heating Summary

Structure	19707 Btuh
Ducts	4036 Btuh
Central vent (53 cfm)	3144 Btuh
Outside air	
Humidification	0 Btuh
Piping	0 Btuh
Equipment load	26887 Btuh

Sensible Cooling Equipment Load Sizing

Structure	14395 Btuh
Ducts	3553 Btuh
Central vent (53 cfm)	1389 Btuh
Outside air	
Blower	0 Btuh
Use manufacturer's data	n
Rate/swing multiplier	1.04
Equipment sensible load	20091 Btuh

Infiltration

Method	Simplified
Construction quality	Average
Fireplaces	1 (Average)

Latent Cooling Equipment Load Sizing

Structure	2277 Btuh
Ducts	932 Btuh
Central vent (53 cfm)	1805 Btuh
Outside air	
Equipment latent load	5013 Btuh

	Heating	Cooling
Area (ft²)	1090	1090
Volume (ft³)	9813	9813
Air changes/hour	0.57	0.23
Equiv. AVF (cfm)	94	38

Equipment Total Load (Sen+Lat)	25104 Btuh
Req. total capacity at 0.70 SHR	2.4 ton

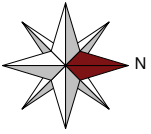
Heating Equipment Summary

Make	Generic
Trade	
Model	AFUE 100
AHRI ref	
Efficiency	100 AFUE
Heating input	7.9 kW
Heating output	26887 Btuh
Temperature rise	30 °F
Actual air flow	810 cfm
Air flow factor	0.034 cfm/Btuh
Static pressure	0.50 in H2O
Space thermostat	

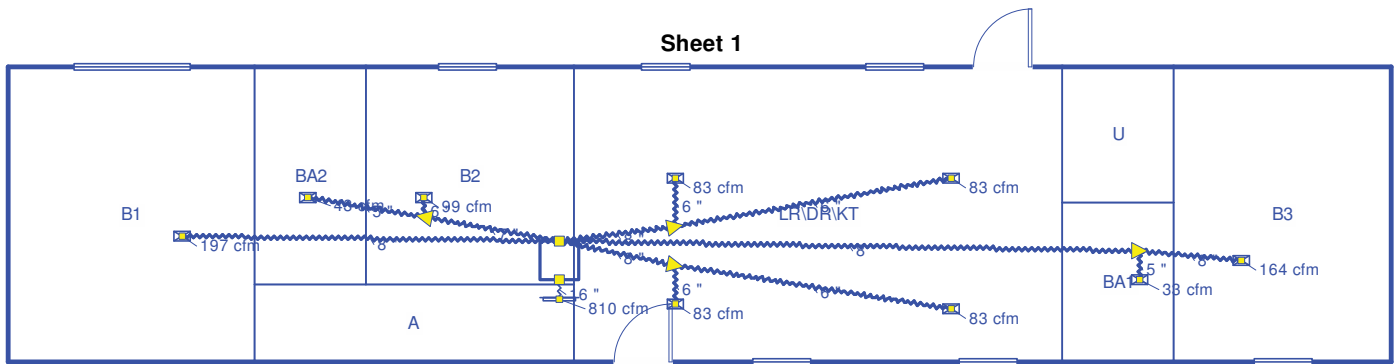
Cooling Equipment Summary

Make	Generic
Trade	
Cond	SEER 14.0
Coil	
AHRI ref	
Efficiency	12.2 EER, 14 SEER
Sensible cooling	20091 Btuh
Latent cooling	8610 Btuh
Total cooling	28701 Btuh
Actual air flow	810 cfm
Air flow factor	0.045 cfm/Btuh
Static pressure	0.50 in H2O
Load sensible heat ratio	0.79

Calculations approved by ACCA to meet all requirements of Manual J 8th Ed.



Sheet 1



Job #: 1672018GSH
Performed by AMS of Indiana, Inc. for:
IMPACT HOUSING
1672018GSH

AMS Of Indiana, Inc.

3933 East Jackson Blvd.
Elkhart, IN 46516

Scale: 1 : 119

Page 1
Right-Suite® Universal 2022
22.0.01 RSU02009
2022-May-23 09:39:56
...es)\1672018GSH-FL(OVHD-FUR...



Duct System Summary

Entire House

AMS Of Indiana, Inc.

Job: 1672018GSH
Date: 5/23/22
By: AMS of Indiana, Inc.

3933 East Jackson Blvd., Elkhart, IN 46516

Project Information

For: IMPACT HOUSING
1672018GSH

	Heating	Cooling
External static pressure	0.50 in H ₂ O	0.50 in H ₂ O
Pressure losses	0.26 in H ₂ O	0.26 in H ₂ O
Available static pressure	0.24 in H ₂ O	0.24 in H ₂ O
Supply / return available pressure	0.171 / 0.069 in H ₂ O	0.171 / 0.069 in H ₂ O
Lowest friction rate	0.114 in/100ft	0.114 in/100ft
Actual air flow	810 cfm	810 cfm
Total effective length (TEL)	211 ft	

Supply Branch Detail Table

Name	Design (Btuh)	Htg (cfm)	Clg (cfm)	Design FR	Diam (in)	H x W (in)	Duct Matl	Actual Ln (ft)	Ftg.Eqv Ln (ft)	Trunk
B1	c 4365	187	197	0.149	8.0	0x0	VIFx	19.5	95.0	
B2	c 2197	90	99	0.139	6.0	0x0	VIFx	8.1	115.0	st1
B3	h 4797	164	132	0.114	8.0	0x0	VIFx	35.3	115.0	st2
BA1	h 965	33	21	0.117	5.0	0x0	VIFx	31.5	115.0	st2
BA2	h 1268	43	28	0.133	5.0	0x0	VIFx	13.2	115.0	st1
LR\DR\KT	c 1846	73	83	0.138	6.0	0x0	VIFx	8.5	115.0	st4
LR\DR\KT-A	c 1846	73	83	0.126	6.0	0x0	VIFx	20.5	115.0	st4
LR\DR\KT-B	c 1846	73	83	0.139	6.0	0x0	VIFx	8.1	115.0	st3
LR\DR\KT-C	c 1846	73	83	0.126	6.0	0x0	VIFx	20.6	115.0	st3

Supply Trunk Detail Table

Name	Trunk Type	Htg (cfm)	Clg (cfm)	Design FR	Veloc (fpm)	Diam (in)	H x W (in)	Duct Material	Trunk
st1	Peak AVF	133	127	0.133	497	7.0	0 x 0	VinIFlx	
st2	Peak AVF	197	153	0.114	563	8.0	0 x 0	VinIFlx	
st3	Peak AVF	147	167	0.126	478	8.0	0 x 0	VinIFlx	
st4	Peak AVF	147	167	0.126	478	8.0	0 x 0	VinIFlx	

Bold/italic values have been manually overridden



Return Branch Detail Table

Name	Grille Size (in)	Htg (cfm)	Clg (cfm)	TEL (ft)	Design FR	Veloc (fpm)	Diam (in)	H x W (in)	Stud/Joist Opening (in)	Duct Matl	Trunk
rb1	0x0	810	810	61.0	0.114	580	16.0	0x 0		VIFx	

