<u>Designer:</u>

Building Designs by Marshall & Marine, Inc. 6406 US 27 S
Sebring, Fl. 33876
863-471-1525 Office
863-471-1121 Alt. Office
www.needplans.com

Structural Engineer:

WILLIAM F. STUHRKE, PHD, P.E. 12215 Rebecca's Run Dr. Winter Garden, FL 34787 407-920-3119 State of Florida PE #22150

Contractor:

Bryan Zecher Homes, Inc. 2370 FL-47 Lake City, FL. 32025 (386) 752-8653

<u>Project:</u>

Fred Elfers 381 SW Brothers Lane Lake City, FL. 32025

THIS STRUCTURE HAS BEEN DESIGNED IN ACCORDANCE WITH THE FLORIDA BUILDING CODE 7TH EDITION RESIDENTIAL CHAPTER R301, THE FLORIDA BUILDING CODE

THE BUILDING (INCLUDING ALL COMPONENTS AND CLADDINGS) SHALL BE DESIGNED FOR

LIVE LOAD (TRUSS BOTTOM CHORD) - 10 PSF NO STORAGE -PER FBC 1TH EDITION LIVE LOAD (TRUSS BOTTOM CHORD) - 20 PSF MIN. STORAGE PER FBC 1TH EDITION

PER FLORIDA BUILDING CODE 1TH EDITION RESIDENTIAL SECTION R301.2.1.1

BUILDING IS DESIGNED TO CONFORM TO ASCE 7-16, CHAPTER 6;

THE FOLLOWING SUPERIMPOSED LOADS.

LIVE LOAD (TRUSS TOP CHORD) - 20 PSF

DEAD LOAD (TRUSS TOP CHORD) - 10 PSF

COMPONENT AND CLADDING +21.2/-28.3 PSF

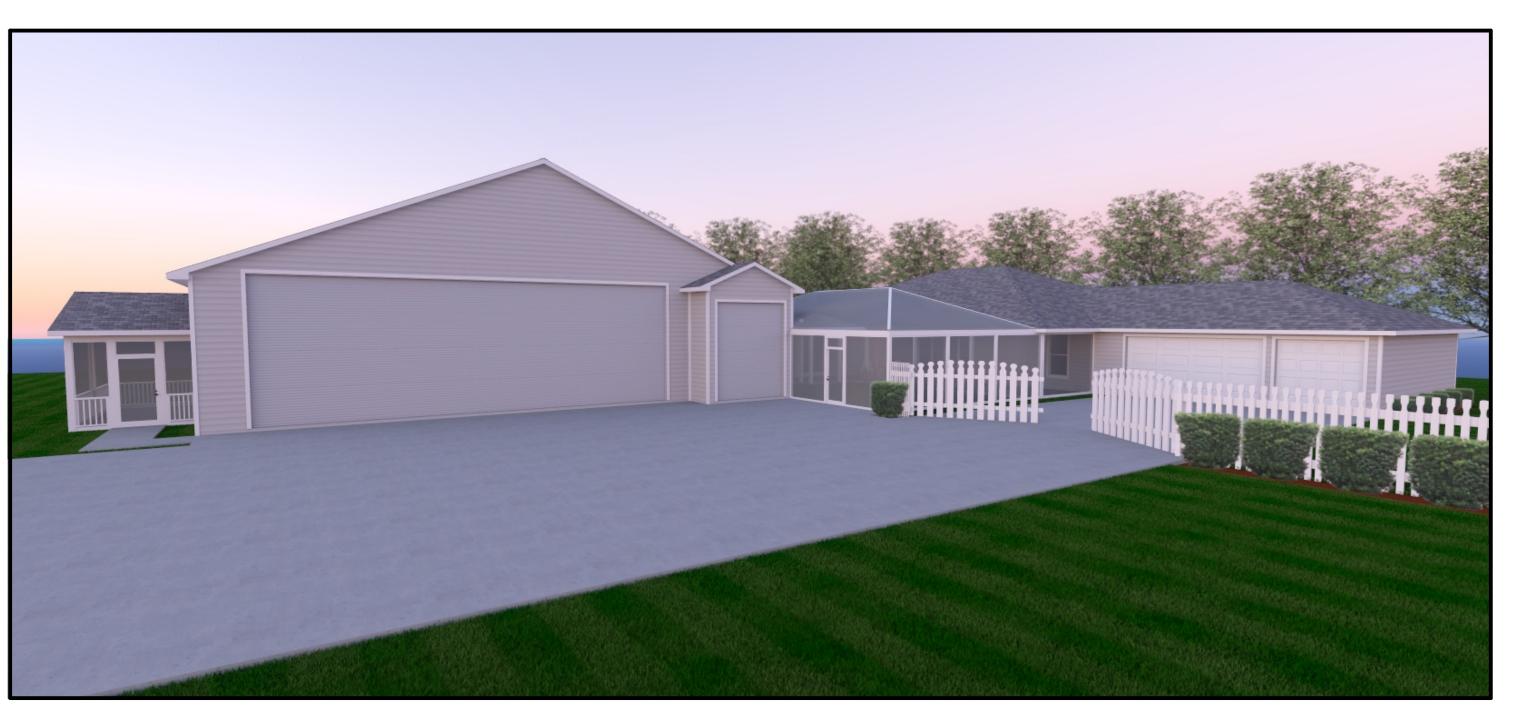
FLOORS: LIVE LOAD - 40 PSF

GARAGE SLAB: LIVE LOAD - 50 PSF DEAD LOAD - 10 PSF

DEAD LOAD - 10 PSF

NEW PROJECT FOR:

FRED ELFERS



3D RENDERING FOR ILLUSTRATION PURPOSE ONLY

GENERAL NOTES AND SPECIFICATIONS:

THE GENERAL CONTRACTOR SHALL FULLY COMPLY WITH THE FBC SEVENTH EDITION AND ALL ADDITIONAL STATE AND LOCAL CODE REQUIREMENTS.

THE CONTRACTOR SHALL ASSUME FULL RESPONSIBILITY FOR ANY WORK KNOWINGLY PERFORMED CONTRARY TO SUCH LAWS, ORDINANCES, OR REGULATIONS. THE CONTRACTOR SHALL ALSO PERFORM COORDINATION WITH ALL UTILITIES AND STATE SERVICE AUTHORITIES.

WRITTEN DIMENSIONS ON THESE DRAWINGS SHALL HAVE PRECEDENCE OVER SCALED DIMENSIONS. THE GENERAL CONTRACTOR SHALL VERIFY AND IS RESPONSIBLE FOR ALL DIMENSIONS (INCLUDING ROUGH OPENINGS) AND CONDITIONS ON THE JOB AND MUST NOTIFY THIS OFFICE OF ANY VARIATIONS FROM THESE DRAWINGS.

THE GENERAL CONTRACTOR IS RESPONSIBLE FOR THE DESIGN AND PROPER FUNCTION OF PLUMBING, HVAC AND ELECTRICAL SYSTEMS. THE GENERAL CONTRACTOR SHALL NOTIFY THIS OFFICE WITH ANY PLAN CHANGES REQUIRED FOR DESIGN AND FUNCTION OF PLUMBING, HVAC AND ELECTRICAL SYSTEMS.

THIS OFFICE SHALL NOT BE RESPONSIBLE FOR CONSTRUCTION MEANS AND METHODS, ACTS OR OMISSIONS OF THE CONTRACTOR OR SUBCONTRACTOR, OR FAILURE OF ANY OF THEM TO CARRY OUT WORK IN ACCORDANCE WITH THE CONSTRUCTION DOCUMENTS. AND DEFECT DISCOVERED IN THE CONSTRUCTION DOCUMENTS SHALL BE BROUGHT TO THE ATTENTION OF THIS OFFICE BY WRITTEN NOTICE BEFORE PROCEEDING WITH WORK. REASONABLE TIME NOT ALLOWED THIS OFFICE TO CORRECT THE DEFECT SHALL PLACE THE BURDEN OF COST AND LIABILITY FROM SUCH DEFECT UPON THE CONTRACTOR.

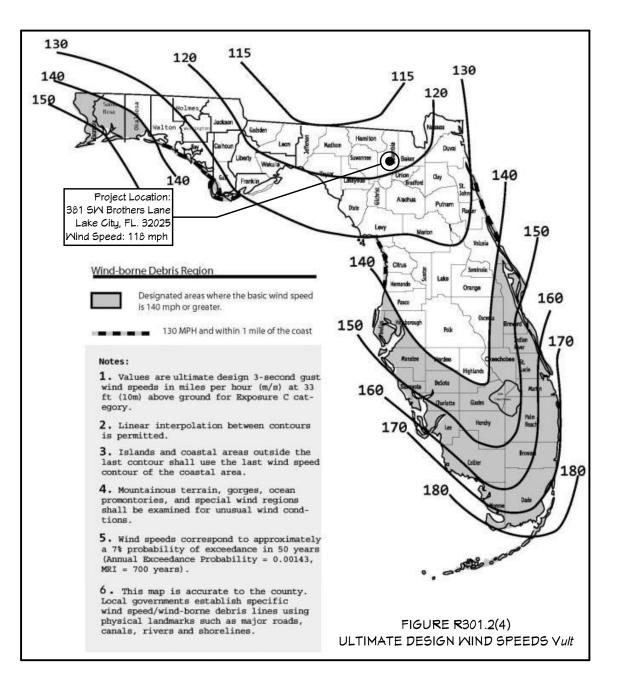
INSTALL WATERPROOF GYPSUM BOARD AT ALL WATER SPLASH AREAS TO MINIMUM 70" ABOVE SHOWER DRAINS

EXHAUST ALL VENTS AND FANS DIRECTLY TO OUTSIDE VIA METAL DUCTS, PROVIDE 90 CFM (MIN) FANS TO PROVIDE 5 AIR CHANGES PER HOUR IN BATHS CONTAINING TUB AND / OR SHOWER.

ALL RECESSED LIGHTS IN INSULATED CEILINGS TO HAVE THE I.C. LABEL.

DESIGN PARAMETERS		
■ Y ultimate = 118 mph, Y basic = 91 mph		EXPOSURE CATEGORY: □ C □ D
RISK CATEGORY: □ CATEGORY I ■ CATEGORY II	☐ CATEGORY III ☐ CATEGORY IV	WINDBORNE DEBRIS REGION: ■ NO □ YES □ IMPACT RESISTANT GLAZING
BUILDING OCCUPANCY CLASSIFICATION: GROUP A - ASSEMBLY GROUP B - BUSINESS GROUP D - DAY CARE CENTER GROUP E - EDUCATIONAL GROUP F - FACTORY	□GROUP H - HAZARDOUS □GROUP I - INSTITUTIONAL □GROUP M - MERCANTILE ■GROUP R - RESIDENTIAL □GROUP S - STORAGE	INTERNAL PRESSURE COEFFICIENTS: □ 0.00 (OPEN) ■ +0.18, -0.18 (ENCLOSED)
BUILDING CONSTRUCTION TYPE: TYPE I TYPE II.	□TYPE IV ■TYPE V	MEAN ROOF HEIGHT ■ 30'-0" OR LESS □GREATER THAN 30'-0"

SCHEDULE OF DRAWINGS		
Label	Title	
G1.00	Project Overview	
A1.00	Elevations	
A2.00	Floor Plan	
A2.10	Floor Plan - Hanger	
A3.00/E1.00	Electrical Plan / Furninture Plan	
E1,10	Electrical Plan Hanger	
C1.00	Proposed Site Plan	
51.00	Roof Plan	
51.10	Roof Plan - Hanger	



CATEGORY II WIND MAP

WIND SPEED: 118 MPH

PE #22150 Thursday hith 20, 2023

PROJECT:
FRED
ELFERS

381 SW Brothers Lane Lake City, FL. 32025 Square Footage 2,732 Living 792 Garage 636 F. Porch

2,732 Living
792 Garage
636 F. Porch
943 Screen Enclose
75 Breezeway
558 Hangar Living
1,956 Hangar
197 Hangar Porch
7,889 Total

BRYAN ZECHER HOMES, INC. 2370 FL-47

MARINE 33876 www.needplans.com

BULDING 1

BY

BY

MARSHALL 8

6406 US Hu

Sebring, FL.

(863) 471



Structural Plans only prepared by or under the strict supervision of Professional Structural Engineer. Structural Engineer is not responsible for any dimensional errors, drafting discrepancies, or any non-structural information

To the best of Designers knowledge these plans are drawn to comply with owner's and for builders's specifications. Any changes made on them after prints are made will be done at the owner's and/or builder's expense and responsibility. The contractor

shall verify all dimensions on drawings. Designer or

While every effort has been made in the preparation of this plan to avoid mistakes, the maker can not guarantee against human error. The Homeowner and or Contractor of the job must check all dimensions and other details prior to construction

and be solely responsible thereafter.

CONCEPT: 03/15/2023 TA

04/03/2023 TA

PRELIM: 04/12/2023 TA

04/20/2023 TA

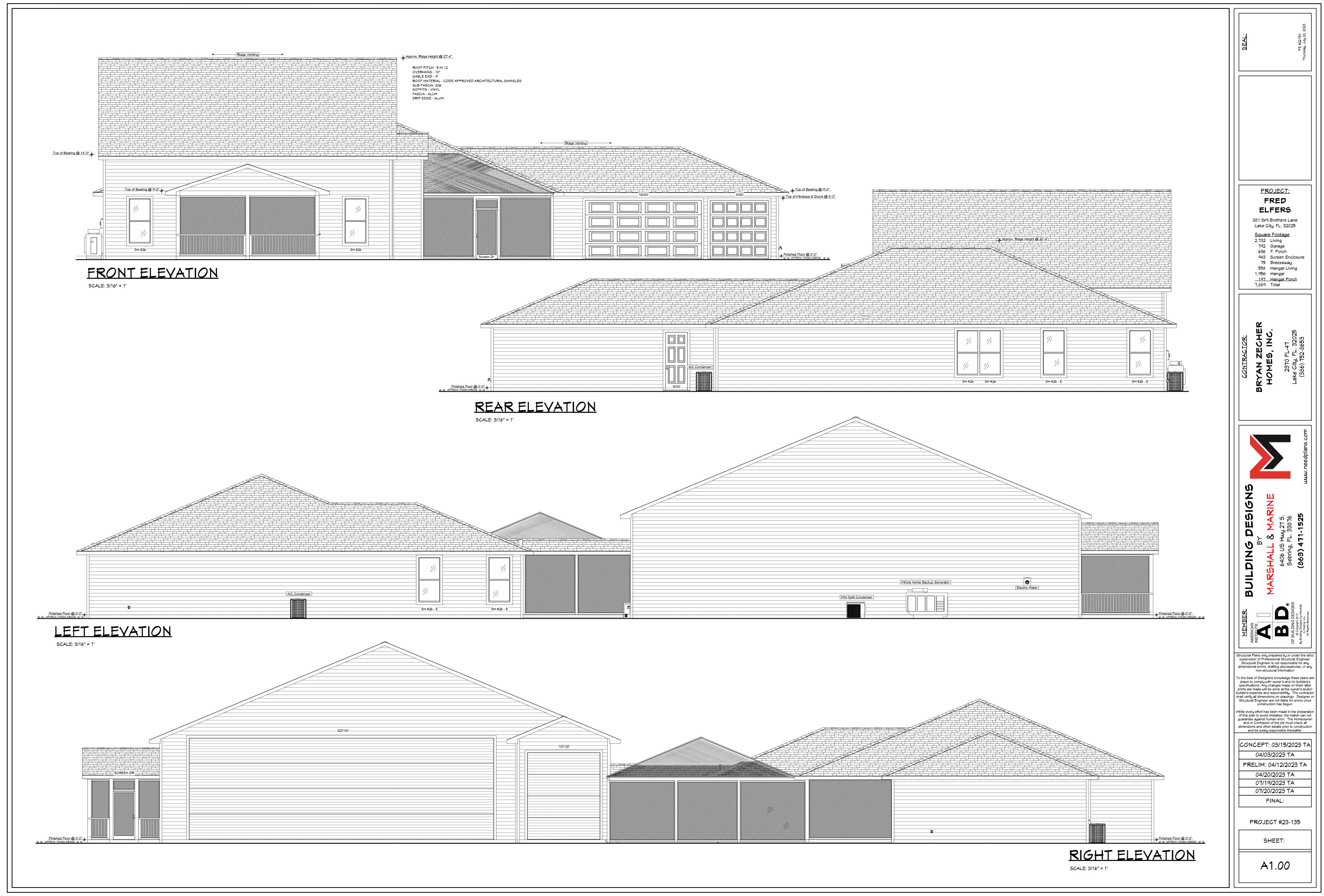
07/19/2023 TA

PROJECT #23-135

07/20/2023 TA

SHEET:

G1.00



DOORS & WINDOWS

EVERY BEDROOM SHALL BE PROVIDED WITH AN EGRESS WINDOW WITH FINISH SILL HEIGHT NOT GREATER THAN 44" ABOVE THE FINISH FLOOR HEIGHT AND SHALL HAVE A MINIMUM OPERABLE AREA OF 5.1 SQ. FT. EGRESS WINDOWS SHALL NOT HAVE AN OPERABLE AREA LESS THAN 20" WIDE OR 24" HIGH.

EGRESS WINDOWS LOCATED 12" OR MORE ABOVE FINISH GRADE SHALL HAVE A FINISH SILL HEIGHT OF 24" MIN.

ABOVE THE FINISH FLOOR OF THE ROOM IN WHICH IT IS LOCATED.

INTERIOR DOORS SHALL BE PAINTED. ENTRY DOOR TO BE DEFINED BY HOME OWNER PRIOR ORDERING

R302.5 DWELLING-GARAGE OPENING AND PENETRATION PROTECTION OPENINGS AND PENETRATIONS THROUGH THE WALLS OR CEILINGS SEPARATING THE DWELLING FROM THE GARAGE SHALL BE IN ACCORDANCE WITH SECTIONS R302.5.1 THROUGH R302.5.3.

OPENINGS FROM A PRIVATE GARAGE DIRECTLY INTO A ROOM USED FOR SLEEPING PURPOSES SHALL NOT BE PERMITTED. OTHER OPENINGS BETWEEN THE GARAGE AND RESIDENCE SHALL BE EQUIPPED WITH SOLID WOOD DOORS NOT LESS THAN 13/8 INCHES (35 MM) IN THICKNESS, SOLID OR HONEYCOMB-CORE STEEL DOORS NOT LESS THAN 1 3/8 INCHES (35 MM) THICK, OR 20-MINUTE FIRE-RATED DOORS.

R302.5.2 DUCT PENETRATION

DUCTS IN THE GARAGE AND DUCTS PENETRATING THE WALLS OR CEILINGS SEPARATING THE DWELLING FROM THE GARAGE SHALL BE CONSTRUCTED OF A MINIMUM NO. 26 GAGE (0.48 MM) SHEET STEEL, 1 INCH (25.4 MM) MINIMUM RIGID NON-METALLIC CLASS 0 OR CLASS 1 DUCT BOARD, OR OTHER APPROVED MATERIAL AND SHALL NOT HAVE OPENINGS INTO THE GARAGE.

R302.5.3 OTHER PENETRATIONS

PENETRATIONS THROUGH THE SEPARATION REQUIRED IN SECTION R302.6 SHALL BE PROTECTED AS REQUIRED BY SECTION R302.11, ITEM 4.

R302.6 DWELLING GARAGE FIRE SEPARATION

THE GARAGE SHALL BE SEPARATED AS REQUIRED BY TABLE R302.6. OPENINGS IN GARAGE WALLS SHALL COMPLY WITH SECTION R302.5. ATTACHMENT OF GYPSUM BOARD SHALL COMPLY WITH TABLE R702.3.5. THE WALL SEPARATION PROVISIONS OF TABLE R302.6 SHALL NOT APPLY TO GARAGE WALLS THAT ARE PERPENDICULAR TO THE ADJACENT DWELLING UNIT WALL. **TABLE R302.6**

DWELLING-GARAGE SEPARATION

SEPARATION	MATERIAL
FROM THE RESIDENCE AND ATTICS	NOT LESS THAN 1/2-INCH GYPSUM BOARD OR EQUIVALENT APPLIED TO THE GARAGE SIDE
FROM HABITABLE ROOMS ABOVE THE GARAGE	NOT LESS THAN 5/8-INCH TYPE X GYPSUM BOARD OR EQUIVALENT
STRUCTURE(5) SUPPORTING FLOOR/CEILING ASSEMBLIES USED FOR SEPARATION REQUIRED BY THIS SECTION	NOT LESS THAN 1/2-INCH GYPSUM BOARD OR EQUIVALENT
GARAGES LOCATED LESS THAN 3 FEET FROM A DWELLING UNIT ON THE SAME LOT	NOT LESS THAN 1/2-INCH GYPSUM BOARD OR EQUIVALENT APPLIED TO THE INTERIOR SIDE OF EXTERIOR WALLS THAT ARE WITHIN THIS AREA

AT LEAST ONE EXTERIOR EXIT DOOR WILL BE 36" MIN. NET CLEAR DOORWAY SHALL BE 32" MIN. DOOR SHALL BE OPERABLE FROM INSIDE WITHOUT THE USE OF A KEY OR ANY SPECIAL KNOWLEDGE OR EFFORT. GLAZING IN DOORS SHALL BE DUAL PANE SAFETY GLASS WITH MIN. U-VALUE OF 0.60

GARAGE DOORS TO BE SECTIONAL, OVERHEAD DOORS PER OWNER

SAFETY GLAZING:

THE FOLLOWING SHALL BE CONSIDERED SPECIFIC HAZARDOUS LOCATIONS FOR THE PURPOSES OF GLAZING:

- (1) GLAZING IN SWINGING DOORS, FIXED AND SLIDING PANELS OF SLIDING DOOR
- (2) GLAZING IN DOORS AND ENCLOSURES FOR HOT TUB, WHIRLPOOLS, SAUNAS, STEAM ROOMS, BATHTUBS, AND SHOWERS. GLAZING IN ANY PORTION OF A BUILDING WALL ENCLOSING THESE COMPARTMENTS WHERE THE BOTTOM EDGE OF THE GLAZING IS LESS THAN 60 INCHES ABOVE THE DRAIN INLET.
- (3) GLAZING IN AN INDIVIDUAL FIXED OR OPERABLE PANEL ADJACENT TO A DOOR WHERE THE NEAREST VERTICAL EDGE IS WITHIN A 24 INCH RADIUS OF THE DOOR IN A CLOSED POSITION AND WHOSE BOTTOM EDGE IS LESS THAN 60 INCHES ABOVE THE FINISHED FLOOR OR WALKING SURFACE.
- (4) GLAZING IN AN INDIVIDUAL FIXED OR OPERABLE PANEL, OTHER THAN THOSE LOCATIONS DESCRIBED IN ITEMS (2) AND (3) ABOVE. THAT MEETS ALL OF THE FOLLOWING

(A) EXPOSED AREA OF AN INDIVIDUAL PANE GREATER THAN 9 SQ. FT.

(B) BOTTOM EDGE LESS THAN 18 INCHES ABOVE THE FLOOR.

(C) TOP EDGE GREATER THAN 36 INCHES ABOVE THE FLOOR.

(D) ONE OR MORE WALKING SURFACES WITHIN 36 INCHES HORIZONTALLY OF THE PLANE OF THE GLAZING.

TIMBER MATERIALS - STRUCTURAL - : ALL TIMBER MATERIALS SHALL BE AS FOLLOWS:

MEASURED AT THE ROOF PEAK, IS LESS THAN 30 INCHES.

LVL BEAMS SHALL BE (1.9E) MICROLLAM LVL MATERIALS MANUFACTURED BY TRUSS JOIST

MACMILLAN (OR EQUAL).

LUMBER UTILIZED IN BOTTOM PLATES, TOP PLATES, POSTS, STUDS PACKS AND BEAMS SHALL BE #2 YELLOW PINE (OR BETTER). LUMBER WITH DIRECT CONTACT TO CONCRETE/MASONRY SHALL BE PRESSURE TREATED

EXTERIOR AND INTERIOR LOAD BEARING STUDS SHALL BE #2 YELLOW PINE (OR BETTER). ALL OTHER STUDS SHALL BE "STUD GRADE" SPRUCE.

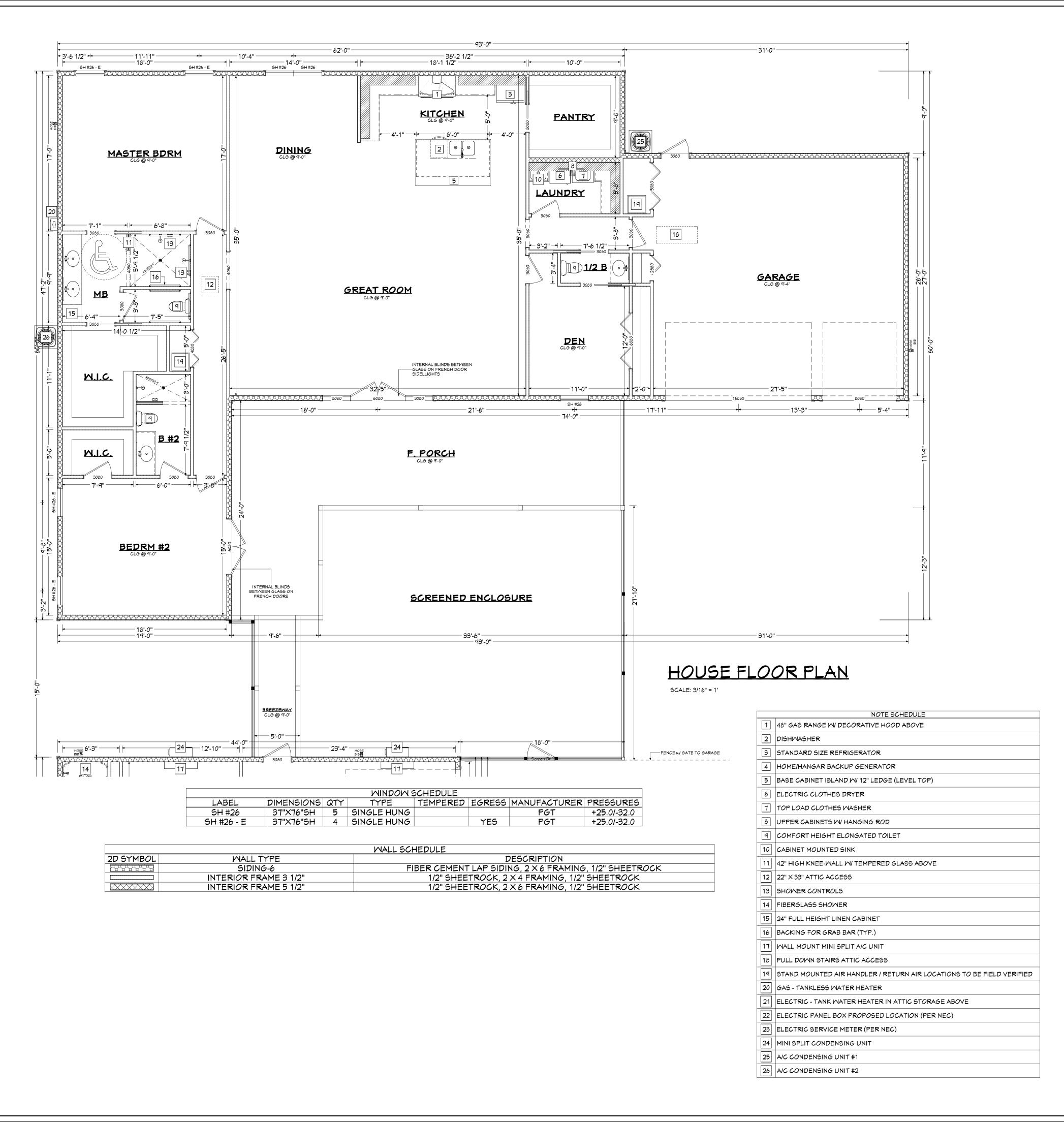
PSL POSTS SHALL BE (1.8E) PARALLAM PSL MATERIALS MANUFACTURED BY TRUSS JOIST MACMILLAN (OR EQUAL).

DRAFT STOPPING:

IN SINGLE FAMILY DWELLINGS, DRAFT STOPPING SHALL BE PROVIDED (PARALLEL TO THE MAIN FRAMING MEMBERS) IN FLOOR/CEILING ASSEMBLIES SEPARATING USEABLE SPACES. DRAFT STOPPING SHALL BE CONSTRUCTED SUCH THAT THE FLOOR/CEILING ASSEMBLY IS BROKEN UP INTO TWO OR MORE APPROXIMATE AREAS WITH NO AREA GREATER THAN 500 SQ. FT.

ATTIC SPACES SHALL BE PROVIDED WITH AN INTERIOR ACCESS OPENING NOT LESS THAN 22X30 INCHES. ACCESS OPENING SHALL BE ACCESSIBLE AND PROVIDED WITH LID OR DEVICE THAT IS EASILY REMOVED OR OPENED. WHEN MECHANICAL EQUIPMENT IS INSTALLED IN THE ATTIC, IT SHALL BE INSTALLED IN ACCORDANCE WITH THE CURRENT MECHANICAL CODE. ACCESS IS NOT REQUIRED WHEN THE CLEAR HEIGHT OF THE ATTIC SPACE,

IT IS THE RESPONSIBILITY OF THE OWNER / CONTRACTOR TO COORDINATE WITH FINAL WINDOW MANUFACTURER TO ENSURE THAT THE MINIMUM CLEAR EGRESS WINDOW OPENING OF 5.7 SQ FT (FIRST FLOOR) ARE PROVIDED WHERE APPLICABLE (TYP.)



381 SW Brothers Lane Lake City, FL. 32025

Square Footage 2,732 Living 792 Garage 636 F. Porch 943 Screen Enclosure 75 Breezeway 558 Hangar Living 1,956 Hangar 197 Hangar Porch 7,889 Total





Structural Plans only prepared by or under the stric supervision of Professional Structural Engineer. Structural Engineer is not responsible for any dimensional errors, drafting discrepancies, or any non-structural information drawn to comply with owner's and /or builders's

specifications. Any changes made on them after

prints are made will be done at the owner's and/or builder's expense and responsibility. The contractor

shall verify all dimensions on drawings. Designer or Structural Engineer are not liable for errors once construction has begun. While every effort has been made in the preparation of this plan to avoid mistakes, the maker can not

quarantee against human error. The Homeowner and or Contractor of the job must check all dimensions and other details prior to construction and be solely responsible thereafter.

CONCEPT: 03/15/2023 TA 04/03/2023 TA PRELIM: 04/12/2023 TA 04/20/2023 TA

07/19/2023 TA

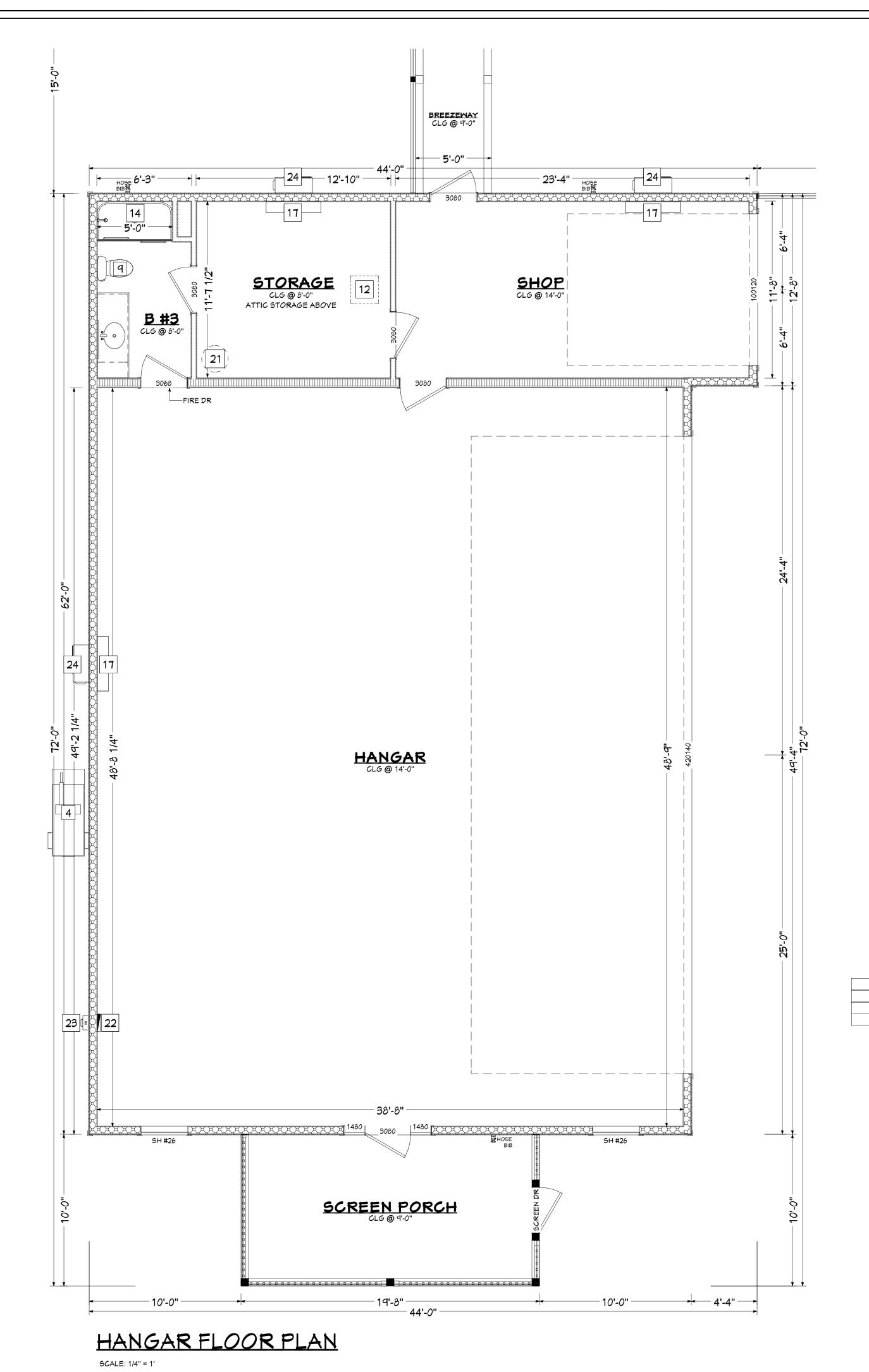
07/20/2023 TA

FINAL:

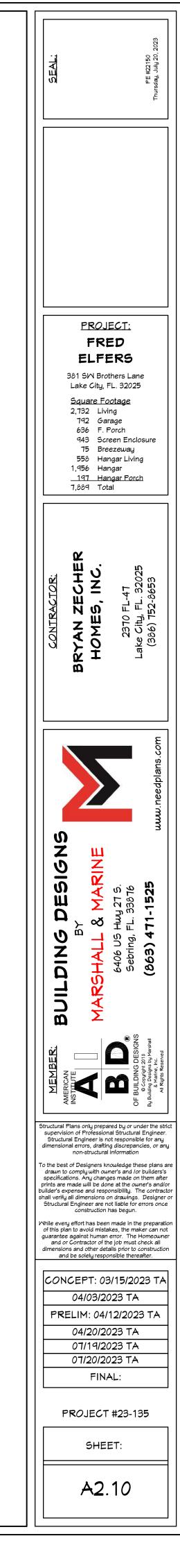
PROJECT #23-135

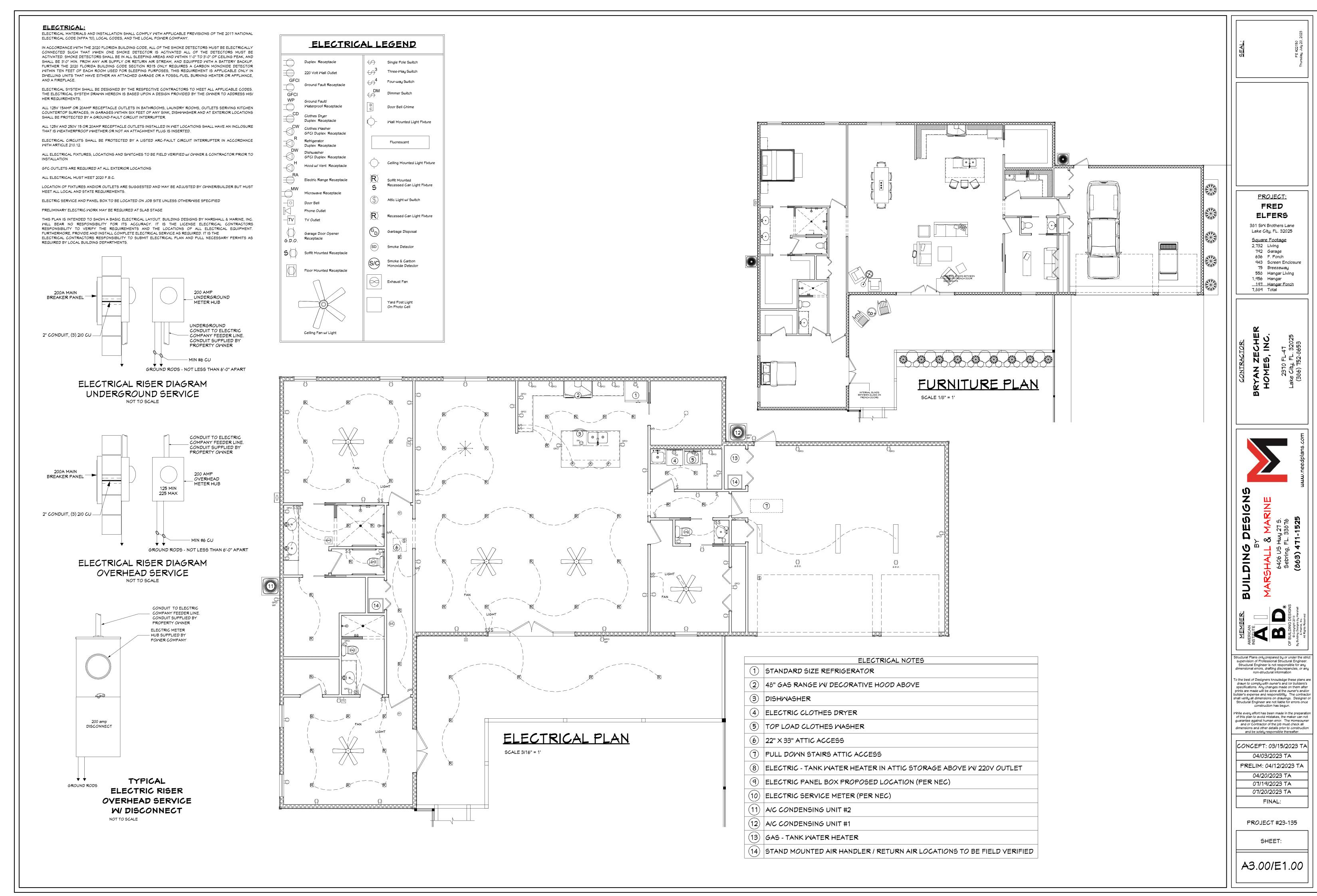
SHEET:

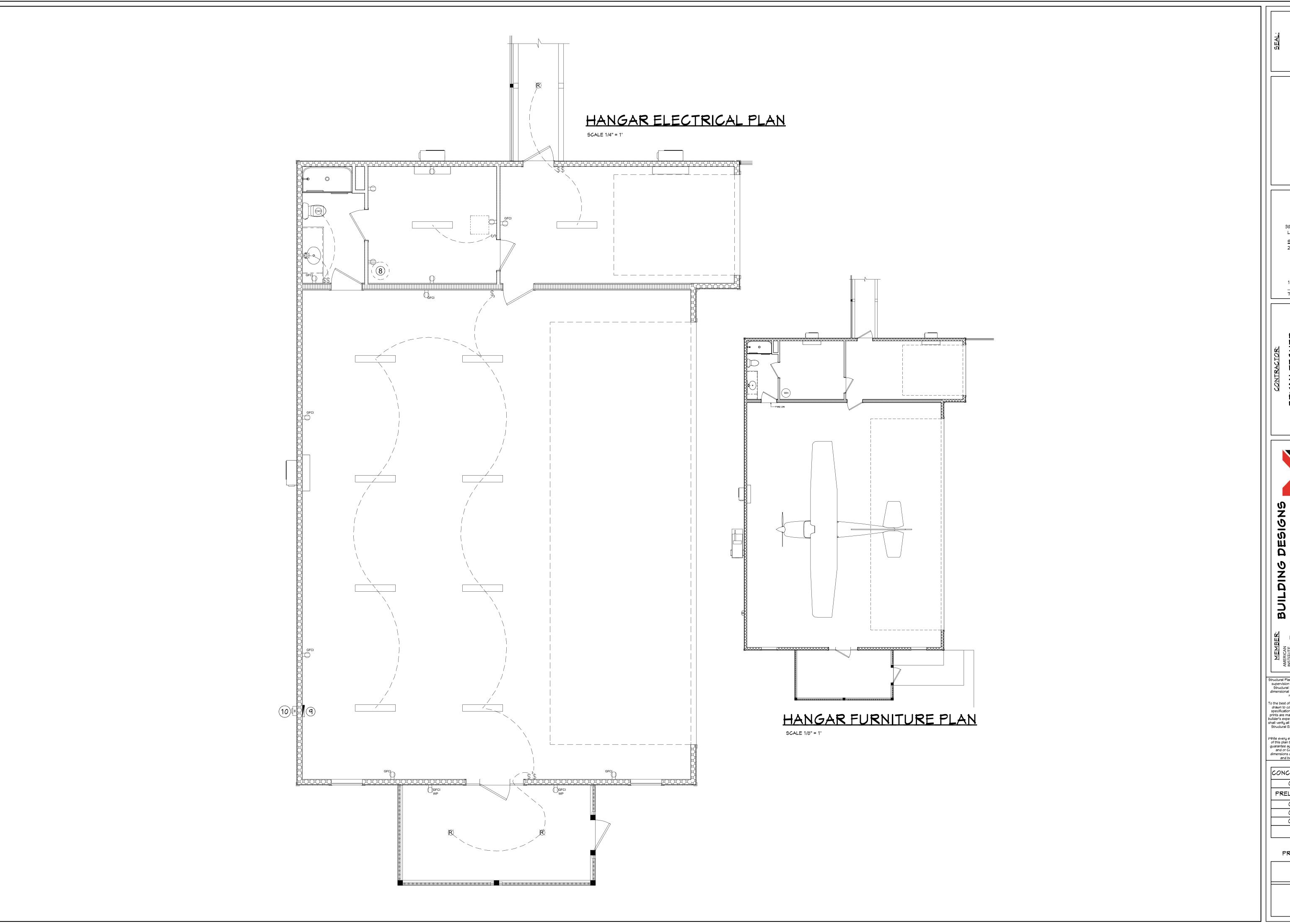
A2.00



	NOTE SCHEDULE				
1	48" GAS RANGE W/ DECORATIVE HOOD ABOVE				
2	DISHMASHER				
3	STANDARD SIZE REFRIGERATOR				
4	HOME/HANGAR BACKUP GENERATOR				
5	BASE CABINET ISLAND W/ 12" LEDGE (LEVEL TOP)				
6	ELECTRIC CLOTHES DRYER				
7	TOP LOAD CLOTHES WASHER				
8	UPPER CABINETS W/ HANGING ROD				
9	COMFORT HEIGHT ELONGATED TOILET				
10	CABINET MOUNTED SINK				
11	42" HIGH KNEE-WALL W/ TEMPERED GLASS ABOVE				
12	22" X 33" ATTIC ACCESS				
13	SHOWER CONTROLS				
14	FIBERGLASS SHOWER				
15	24" FULL HEIGHT LINEN CABINET				
16	BACKING FOR GRAB BAR (TYP.)				
17	WALL MOUNT MINI SPLIT A/C UNIT				
18	PULL DOWN STAIRS ATTIC ACCESS				
19	STAND MOUNTED AIR HANDLER / RETURN AIR LOCATIONS TO BE FIELD VERIFIED				
20	GAS - TANKLESS WATER HEATER				
21	ELECTRIC - TANK MATER HEATER IN ATTIC STORAGE ABOVE				
22	ELECTRIC PANEL BOX PROPOSED LOCATION (PER NEC)				
23	ELECTRIC SERVICE METER (PER NEC)				
24	MINI SPLIT CONDENSING UNIT				
25	A/C CONDENSING UNIT #1				
26	A/C CONDENSING UNIT #2				
	MINDOM SCHEDULE				
BEL	DIMENSIONS QTY TYPE TEMPERED EGRESS MANUFACTURER PRESSUI				







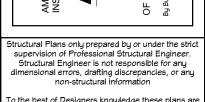
PROJECT:
FRED
ELFERS

381 SW Brothers Lane
Lake City, FL. 32025

Square Footage
2,732 Living
792 Garage
636 F. Porch
943 Screen Enclosure
75 Breezeuway
558 Hangar Living
1,956 Hangar
1971 Hangar Porch
7,889 Total

BRYAN ZECHER HOMES, INC. 2370 FL-47





To the best of Designers knowledge these plans are drawn to comply with owner's and /or builders's specifications. Any changes made on them after prints are made will be done at the owner's and/or builder's expense and responsibility. The contractor shall verify all dimensions on drawings. Designer or Structural Engineer are not liable for errors once construction has begun.

While every effort has been made in the preparation of this plan to avoid mistakes, the maker can not

While every effort has been made in the preparation of this plan to avoid mistakes, the maker can not guarantee against human error. The Homeowner and or Contractor of the job must check all dimensions and other details prior to construction and be solely responsible thereafter.

ONCEPT: 03/15/2023 TA

04/03/2023 TA

PRELIM: 04/12/2023 TA

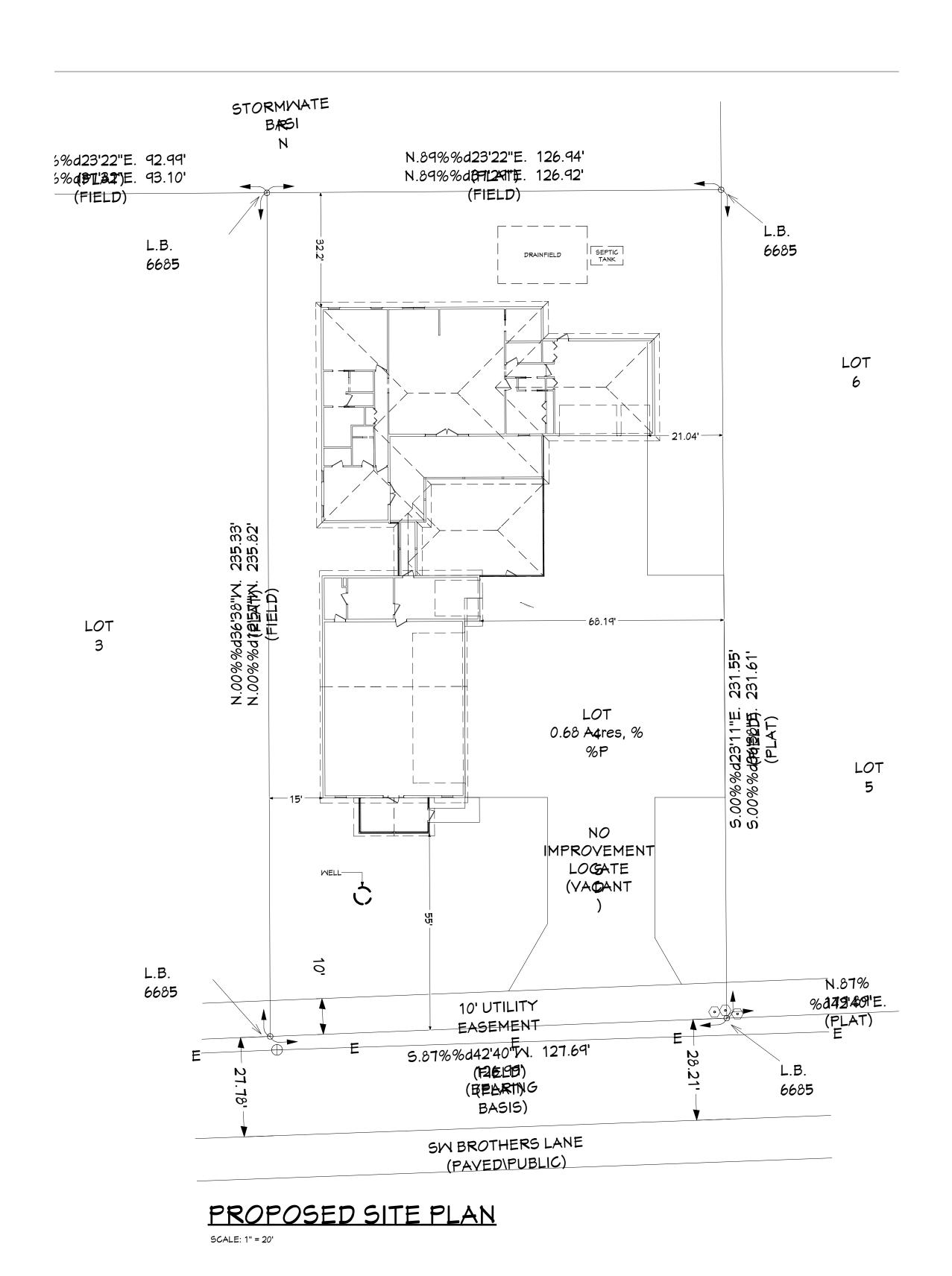
04/20/2023 TA 07/19/2023 TA 07/20/2023 TA

FINAL:

PROJECT #23-135

E1,10

SHEET:



PROJECT:
FRED
ELFERS

381 SM Brothers Lane
Lake City, FL. 32025

Square Footage

Lake City, FL. 32025

Square Footage

2,732 Living

792 Garage

636 F. Porch

943 Screen Enclosure

75 Breezeway

558 Hangar Living

1,956 Hangar

197 Hangar Porch

7,889 Total

4 ZECHER ES, INC. 10 FL-47 ftu FL, 32025

BUILDING DESIGNS

BY

MARSHALL & MARINE
6406 US HWJ 27 S.
Sebring El 33876

ERICAN

ERICAN

CANCELLO SECURITY

CANCELLO SECURIT

Structural Plans only prepared by or under the strict supervision of Professional Structural Engineer. Structural Engineer is not responsible for any dimensional errors, drafting discrepancies, or any non-structural information

To the best of Designers knowledge these plans are drawn to comply with owner's and /or builders's specifications. Any changes made on them after prints are made will be done at the owner's and/or builder's expense and responsibility. The contractor shall verify all dimensions on drawings. Designer or Structural Engineer are not liable for errors once construction has begun.

Structural Engineer are not liable for errors once construction has begun.

While every effort has been made in the preparation of this plan to avoid mistakes, the maker can not guarantee against human error. The Homeowner and or Contractor of the job must check all dimensions and other details prior to construction and be solely responsible thereafter.

CONCEPT: 03/15/2023 TA 04/03/2023 TA

04/03/2023 TA

PRELIM: 04/12/2023 TA

04/20/2023 TA

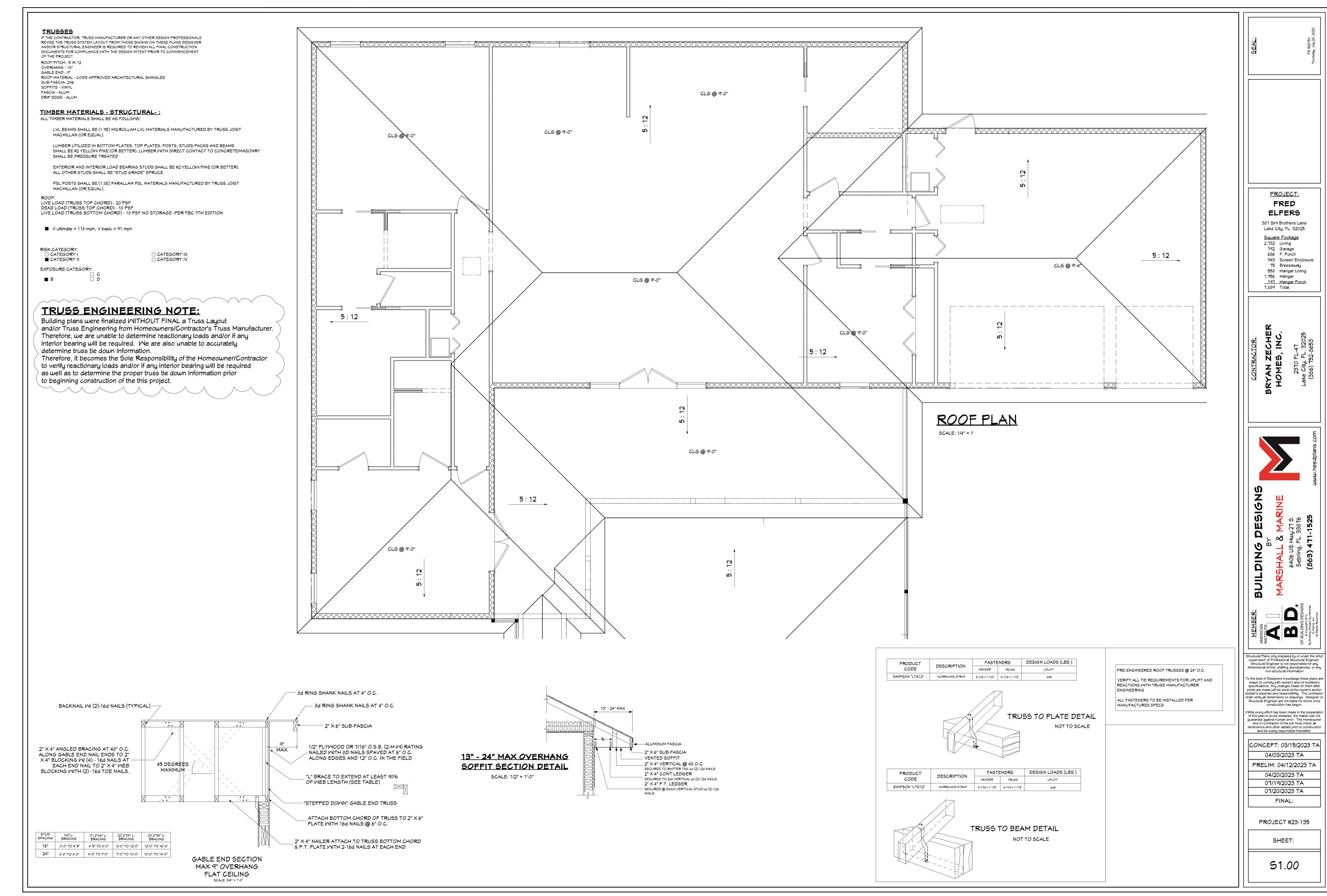
07/19/2023 TA

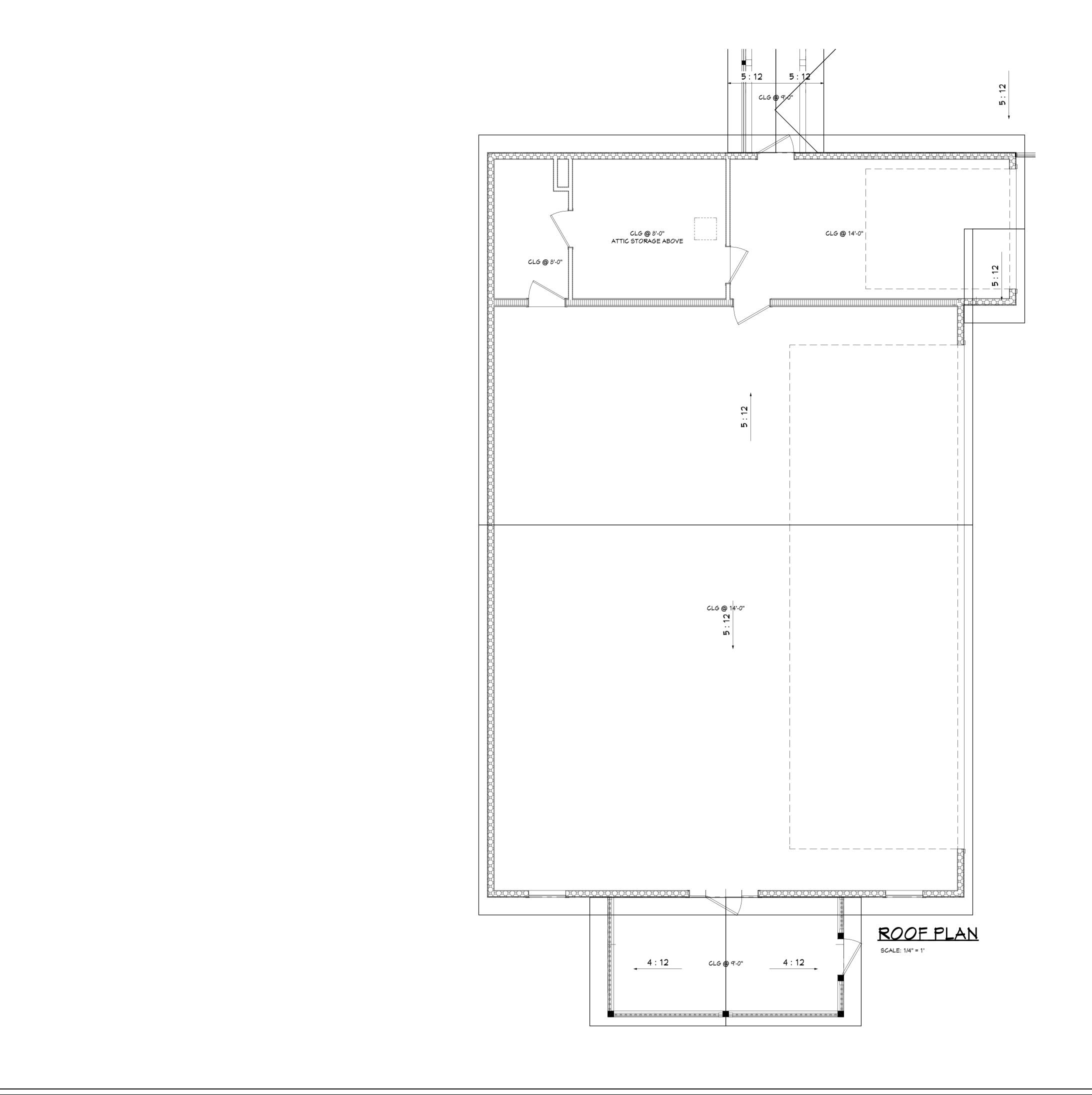
07/20/2023 TA FINAL:

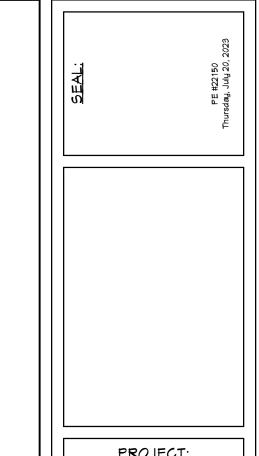
PROJECT #23-135

SHEET:

C1.00







PROJECT:
FRED
ELFERS

381 SM Brothers Lane Lake City, FL. 32025 Square Footage

Square Footage
2,732 Living
792 Garage
636 F. Porch
943 Screen Enclosure
75 Breezeway
558 Hangar Living
1,956 Hangar
197 Hangar Porch
7,889 Total

7,889 Total

BRYAN ZECHE HOMES, INC.



BUILDING DESIGNS

BY
MARSHALL & MARINE
6406 US Huy 27 S.

ICAN

TOTAL

TOT

Structural Plans only prepared by or under the strict supervision of Professional Structural Engineer.
Structural Engineer is not responsible for any dimensional errors, drafting discrepancies, or any non-structural information

To the best of Designers knowledge these plans are drawn to comply with owner's and /or builders's specifications. Any changes made on them after prints are made will be done at the owner's and/or builder's expense and responsibility. The contractor shall verify all dimensions on drawings. Designer or Structural Engineer are not liable for errors once construction has begun.

While every effort has been made in the preparation of this plan to avoid mistakes, the maker can not quarantee against human error. The Homeouner

While every effort has been made in the preparation of this plan to avoid mistakes, the maker can not guarantee against human error. The Homeowner and or Contractor of the job must check all dimensions and other details prior to construction and be solely responsible thereafter.

04/03/2023 TA 04/03/2023 TA

PRELIM: 04/12/2023 TA 04/20/2023 TA 07/19/2023 TA

07/20/2023 TA FINAL:

PROJECT #23-135

51.10

SHEET: