



Property Legal Description:

City of San Antonio Building Permit A/P Number:

Dear

(Choose one or both)

- The new roof framing associated with the change in pitch of the roof,
- The adequacy of the roof structural elements to support the change in heavier roof material to tile, at the above referenced address, was inspected for by our office. Qualified individuals from this office visited the site to check the construction. In our opinion, based on our experience, knowledge, information and belief, the structural elements that we observed is in general conformance with the current International Residential Code for residential sites or the current International Building Code for Commercial Sites.

These services do not constitute compliance with Section 1704, "Special Inspections", of the currently adopted International Building Code.

As denoted by the engineering seal on the construction documents and on this letter, we believe that we have fulfilled our obligations as an engineer under the Texas Engineering Practice Act pursuant to its requirements to protect the public health, safety, and welfare in the practice of engineering.

If you have any questions, please call.

Respectfully,

Engineer Signature  
Stephanie Soloff, PE

**GENERAL NOTES:**

**APPLICABLE CODES:**

A. These general notes apply to all structural drawings. This project is designed in accordance with the International Building Code (IBC), 2018 Edition and the Minimum Design Loads for Buildings and Other Structures (ASCE/SEI 7-16).  
B. All materials and workmanship shall be in accordance with applicable provisions of the codes specified above.

**LOADS USED IN DESIGN:**

<b>A. Gravity Loading</b>	
Roof Snow Load	5 psf
Roof Live Load	20 psf
Floor Dead Load	10 psf
Floor Live Load	40 psf
Floor Deck Load	10 psf
<b>B. Wind Loading</b>	
Velocity (3 sec gust)	115 mph
Exposure	C
Risk Factor	I
Internal Pressure Coeff. GCp	-0.18 / 0.18 (Enclosed)

**COORDINATION:**

A. **FIELD SCALE PLANS:** These construction documents were prepared with the information about the existing building provided from field measurements of the on-site building taken by personnel of Greenbush Engineering and Consulting on June 28, 2022. If the contractor discovers existing conditions which vary from those shown on these documents he shall notify Greenbush Engineering and Consulting immediately for guidance on necessary changes to be made.  
B. Contractor and/or client shall verify all dimensions and layout prior to construction. All dimensions shall be checked against the architectural plans referenced above and any discrepancies shall be brought to the attention of the Architect and Engineer of Record immediately. Refer to mechanical, electrical and architectural plans for openings not shown on the structural plans.  
C. Shop drawings shall be prepared by the fabricator. Copying of these construction documents for use on shop drawings will not be permitted.  
D. All temporary shoring shall be the responsibility of the contractor.  
E. Design is based on the current applicable building codes listed above and shall be void if the building code at the time of construction changes from the codes listed above.

**WOOD:**

A. Framing lumber shall be Southern Pine (unless noted otherwise) and as follows or better:  
2x6 studs . . . . . 15d Grade  
2x6 or larger studs . . . . . #2 Grade  
Rafters . . . . . #2 Grade  
Joists and Rafteres . . . . . #2 Grade  
2x and 4x Beams . . . . . #2 Grade  
6x or larger Beams . . . . . #1 Grade Beam and Stringer  
Structural Beams . . . . . 2x-14x 12' or 20' unless noted otherwise  
Posts . . . . . #1 Grade Post and Timber  
LVL . . . . . 2.1 E - Fx 2000  
B. All wood construction shall be in conformance with the provisions of "The National Design Specification for Wood Construction", latest edition.  
C. Laminated Veneer Lumber (LVL) and girth plates shall be manufactured by "TimberTech" or equivalent or shall meet APA Performance Standard, and installed per manufacturer's specifications. Supplier shall furnish shop drawings showing all joints, bridging, blocking and miscellaneous accessories for review by the structural engineer prior to fabrication. Where not otherwise shown on plans, bracing or sheathing shall be as indicated in the current Building Code. All sheathing must be nailed. Adhesives SHALL NOT be used in place of nailing.  
E. Metal connectors to be provided by "Timpan Strong-Tie" or equivalent.  
F. APA rated OSB may be used in lieu of plywood with prior approval from Engineer of Record.  
G. Minimum treatment for pressure treated lumber shall be as follows:  
1) Wood not in contact with soil . . . . . 0.25 ACO  
2) Wood in contact with soil . . . . . 0.40 ACO.  
H. Pressure treated lumber that has been cut shall be site treated at each cut.  
I. Bolt holes in lumber shall be drilled as bolt diameter plus 1/16".

**METAL WOOD FRAMING HARDWARE:**

A. All metal wood framing hardware shall be provided by "Timpan Strong-Tie" or equivalent.  
B. All metal hardware shall be installed per manufacturer's recommendations.  
C. All metal fasteners and hardware in contact with pressure treated lumber shall be hot dipped galvanized or Zinc coated (G-185).

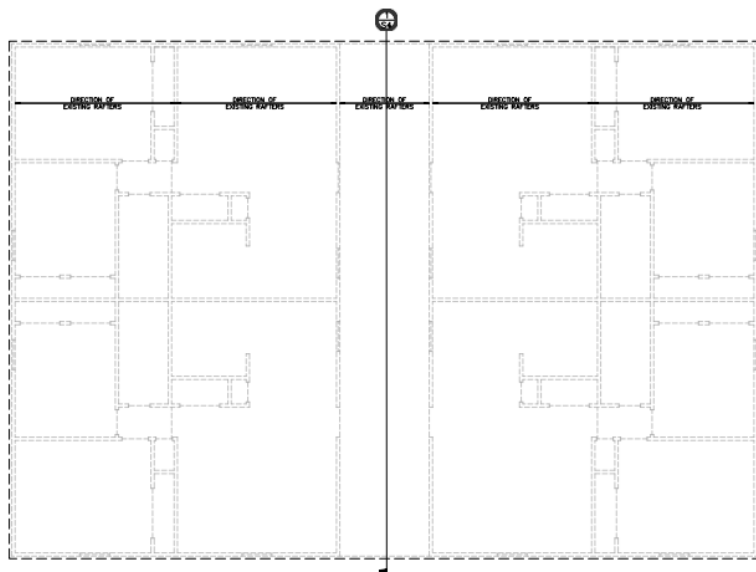
**SHIELDING AND DECOR:**

A. Roof sheathing/ceiling shall be a minimum of 7/16" thick CDX plywood or APA rated O.S.B. C-O similar grade with exterior glue. Minimum panel span rating of 48/24.  
B. Floor sheathing/ceiling shall be a minimum of 23/32" thick CDX plywood or APA rated O.S.B. C-O similar grade with exterior glue. Minimum panel span rating of 48/24.  
C. Gypsum sheathing for shear walls shall be a minimum of 1/2" thick and free of imperfections and shall conform to ASTM C79.  
D. Exterior wall sheathing shall be a minimum of 7/16" thick plywood or APA rated O.S.B.

**WIRE MESH:**

A. Mesh installation and materials shall be in compliance with A.I.T.C., NDS, and all applicable building code requirements.  
B. Gun nails must be used in lieu of hand nailing. Gun nail substitutions shall be as follows:  
8d . . . . . 0.115" x 2.5"  
10d . . . . . 0.125" x 3.0"  
12d . . . . . 0.137" x 3.2"  
8d . . . . . 0.133" x 3.2"  
C. Nails shall have a minimum penetration of 10 times the wire diameter unless otherwise in the plans.  
D. Edge distance for all nails shall be a minimum of 4 times the wire diameter unless noted otherwise in the plans.  
E. All nails listed /specified on the plans shall be Common.

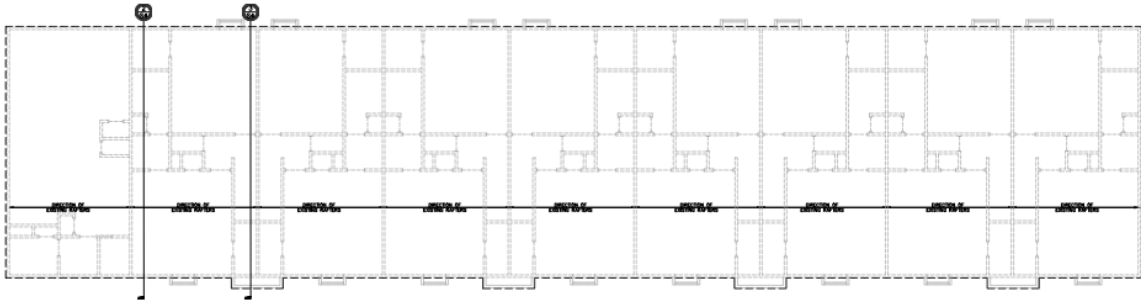
STRUCTURAL LEGEND	
	# DIAMETER
	(D) DROPPED BEAM
	EAL EDGE NAILING
	EXST. EXISTING
	F.F. FINISH FLOOR
	(F) FLUSH BEAM
	G.T. GIRDER TRUSS
	HSS HOLLOW STRUCTURAL SECTION
	K KING STUD
	K.P. KING POST
	L.L.H. LONG LEG HORIZONTAL
	L.L.V. LONG LEG VERTICAL
	L.V. LAMINATED VENEER LUMBER
	O.C. ON CENTER
	O.S.B. ORIENTED STRAND BOARD
	P. PLATE
	P.T. PRESSURE TREATED
	R.V. REVERSE
	R.S. RING SHANK
	S.M. SIMILAR
	S.P.N. SILL PLATE NAILING
	T. TRIMMER
	T.O. TOP OF
	TYP. TYPICAL



**BUILDINGS 3 & 20**  
**ROOF PLAN**

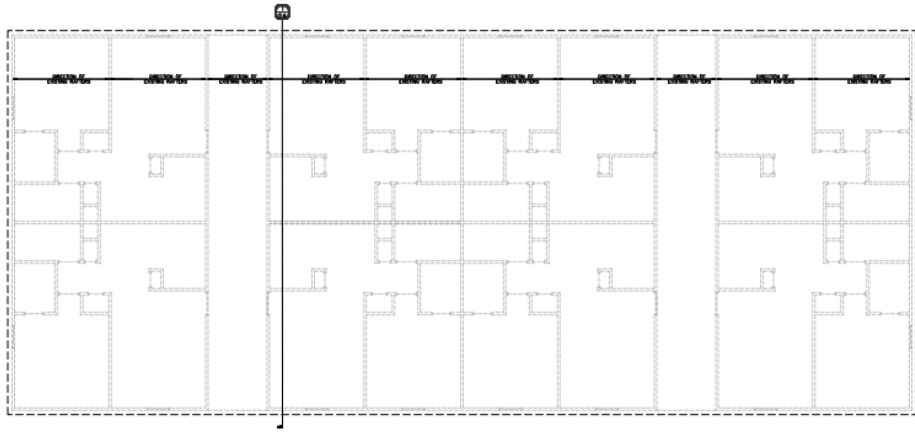
SCALE: 1/4" = 1'-0"

VERIFY ALL DIMENSIONS  
PRIOR TO CONSTRUCTION



BUILDING 14  
ROOF PLAN  
SCALE: 1/8" = 1'-0"

VERIFY ALL DIMENSIONS  
PRIOR TO CONSTRUCTION



BUILDING 19  
ROOF PLAN

SCALE: 3/8" = 1'-0"

VERIFY ALL DIMENSIONS  
PRIOR TO CONSTRUCTION

