

KINGS HIGHWAY INDUSTRIAL PARK WAREHOUSING PROJECT

Saint Lucie County, Florida



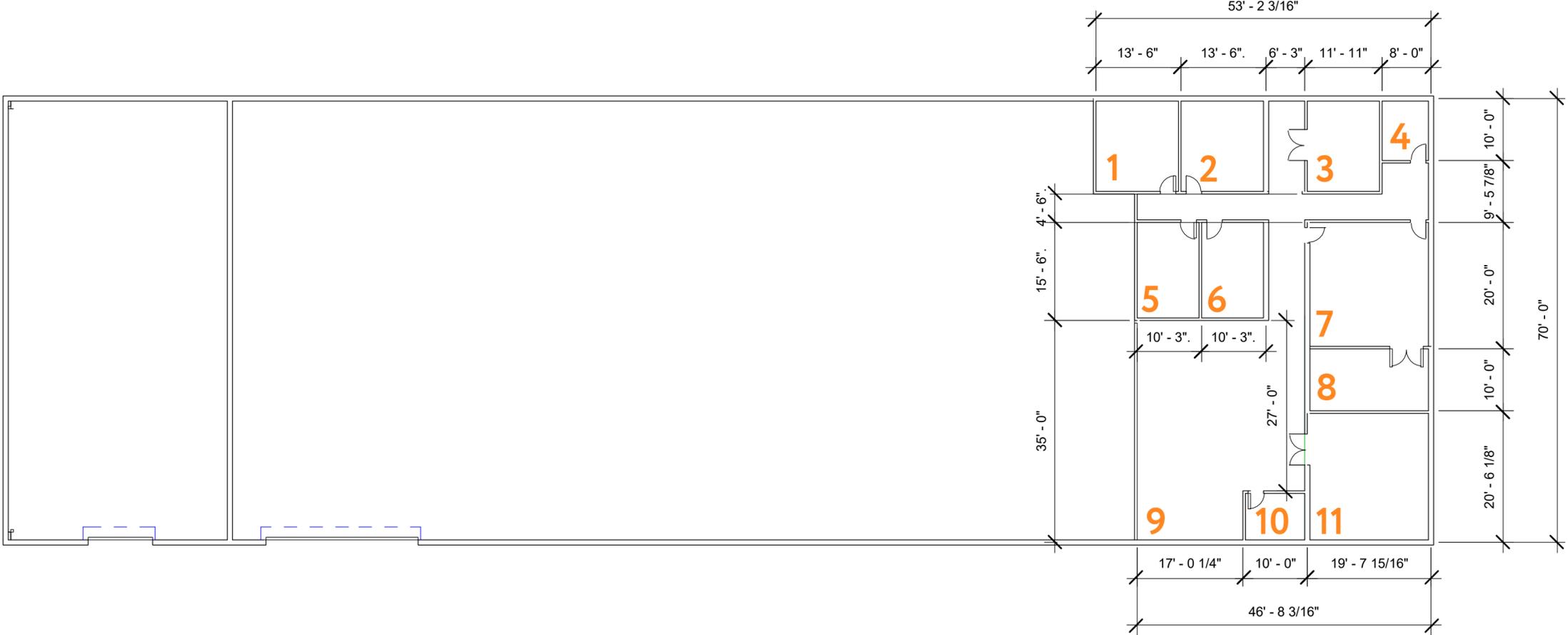
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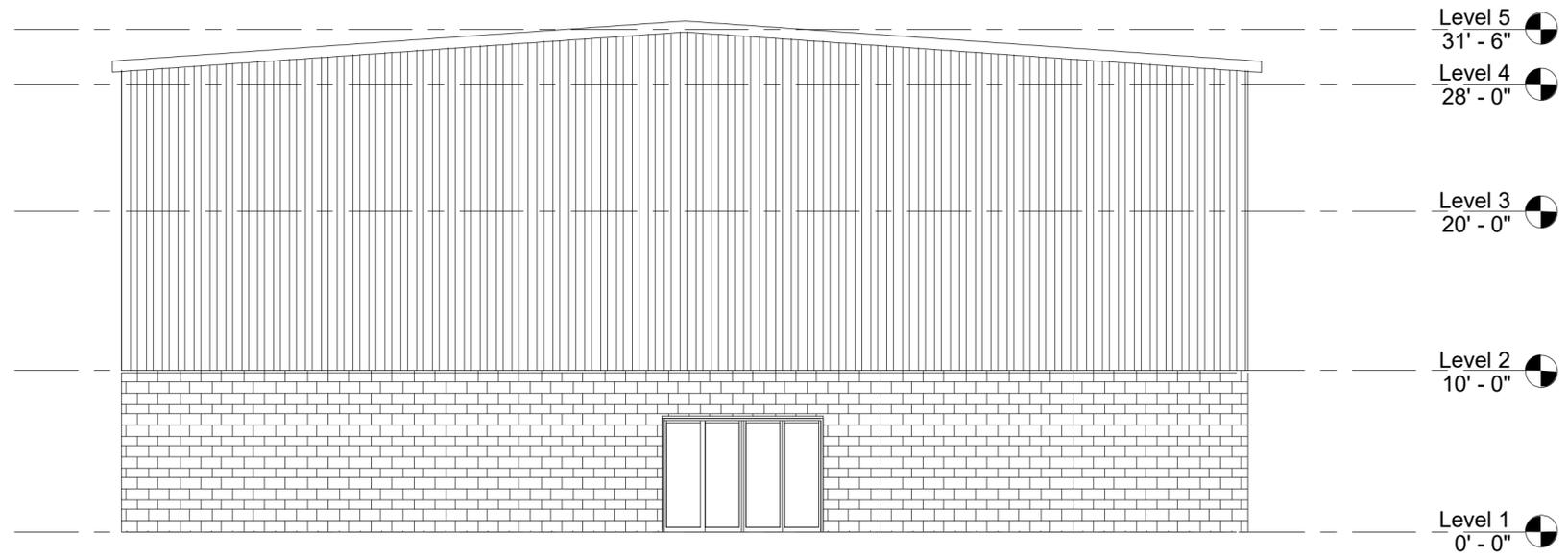
Programmatic Goals and Concepts

- 1. Provide storage space for personal and commercial items.**
 - 1. Integrate a separate RV storage area for personal item storage.**
 - 2. Implement the use of forklift accessible shelving to maximize storage.**
 - 3. Create second story spaces for flexible storage uses.**
- 2. Maximize square footage of warehouse per code, lot size, and financial parameters.**
 - 1. Employ a rectangular design approach for minimal construction cost.**
 - 2. Ensure building extends to, or close to, site setback requirements on all sides EXCEPT that which has been designated for vehicular traffic.**
 - 3. Apply a two-story construction method in order to maximize usable square footage.**
- 3. Utilize weather-proof building construction methods where viable.**
 - 1. Use weather resistant glazing systems and doors.**
 - 2. Execute concrete based construction methods for first story wall structure.**
 - 3. Engage cross bracing between vertical structural members for additional shear support.**
- 4. Allow for a variety of operational possibilities by providing a flexible space.**
 - 1. Integrate a track to allow for the addition of temporary or permanent partitions.**
 - 2. Add additional rooms on the second story for rentable income.**
 - 3. Provide a field office and employ break area to accommodate long term contracts.**

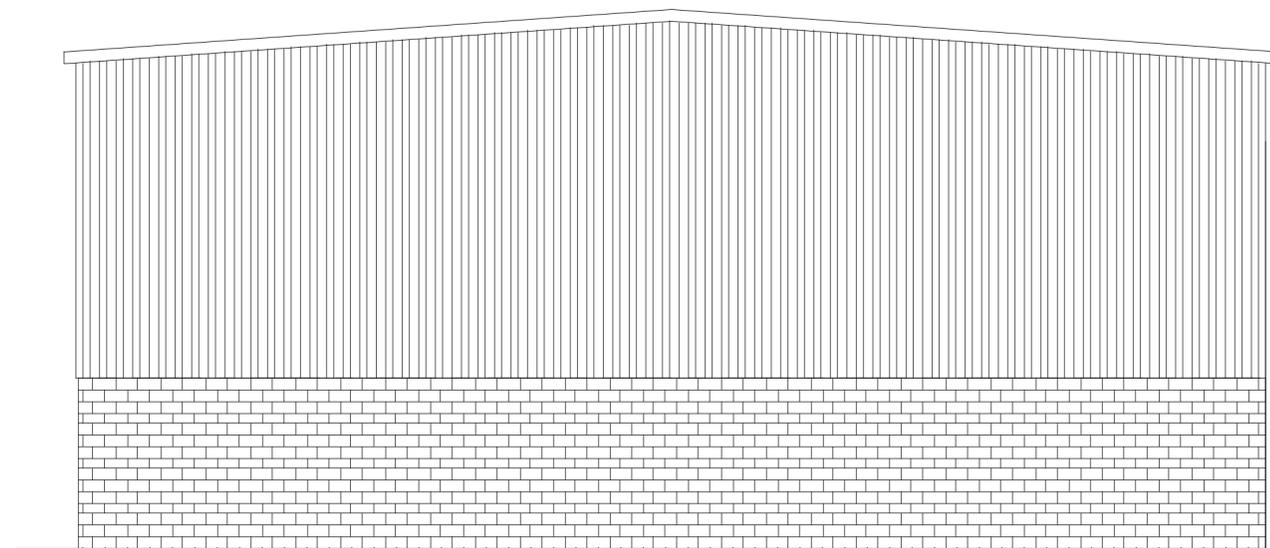
Second Floor Plan



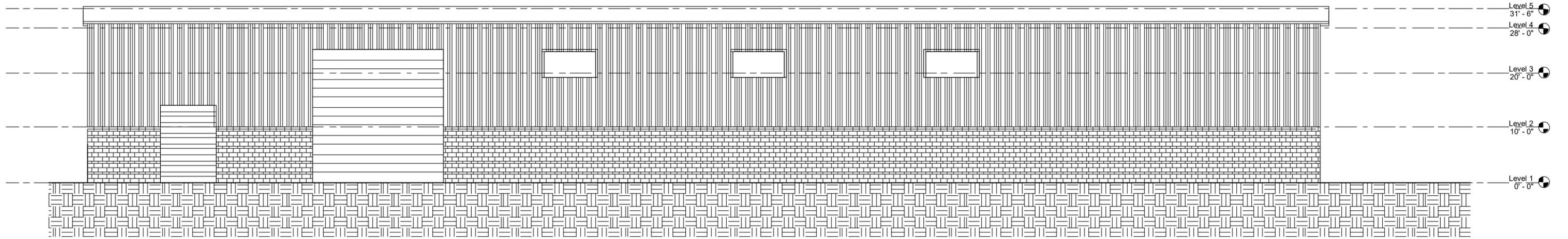
- 1** Men's Restroom: 187 Sq. Ft.
- 2** Women's Restroom: 187 Sq. Ft.
- 3** Temperature Controlled Storage: 164 Sq. Ft.
- 4** Stairwell: 70 Sq. Ft.
- 5** Side Office A: 146 Sq. Ft.
- 6** Side Office B: 146 Sq. Ft.
- 7** Private Office: 372 Sq. Ft.
- 8** Personal Storage: 181 Sq. Ft.
- 9** Open Meeting Space: 1,244 Sq. Ft.
- 10** Open Meeting Space: 1,244 Sq. Ft.
- 11** Sensitive Material Storage / Vault: 380 Sq. Ft.



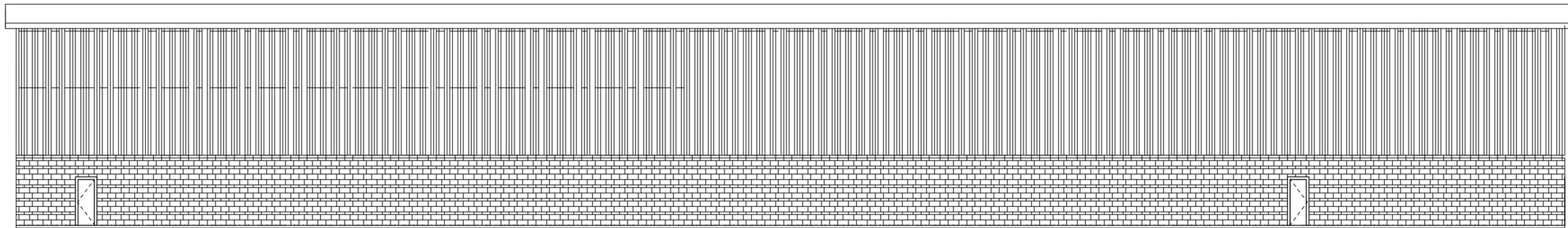
East Elevation



West Elevation



West Elevation



West Elevation

Preliminary Project Cost Estimations

Foundation

Foundation preliminary cost estimation created using Buildingjournal.com online construction foundation estimation tool. Information used; Type of Building: Warehouse. Project Location: Florida - Melbourne. Type of Work: Foundation. Cost Index: Median. Square Feet: 15,750 Sq. Ft.

Subtotal: \$33,460.57 / Additional Overhead Cost: \$1,673.03 (5%) / Total PPSF: \$2.23

Foundation Estimated Cost: \$35,133.60

<http://www.buildingjournal.com/commercial-construction-estimating-foundations.html>

Flooring Systems

The cost for the grade level flooring slab may or may not be included in foundation estimation. 50% of grade floor cost will be included in final calculation*

Grade Level Flooring Slab Dimensions: 225' x 70' x 6" (291.67 Cu. Yds.) +5% AO = 29.17 Cu. Yds.

Total Cu. Yds. = 320.84 Cu. Yds.

Second Story Slab Dimensions: 50' x 70' x 4" (45.37 Cu. Yds.) +5% AO = 4.54 Cu. Yds.

Total Cu. Yds. = 49.91 Cu. Yds.

Typ. Concrete PPCY: \$100 / Total Required Concrete: 370.785 Cu. Yds. / Unadj. Flooring Estimate: \$37,075

Flooring Estimated Cost: \$21,033.00*

Exterior Wall Systems

Exterior first story wall to be constructed of reinforced concrete masonry units, 8" x 8" x 16".

Total dimensions of first story wall: 590' x 10' x 8" / Total Sq. Ft. = 5,900 Sq. Ft. / PPSF: \$10.77

Total Estimated Cost: \$57,052.26 / +5% AOC = \$2,852.26

Total CMU Wall Cost: \$59,904.87

Insulated metal panels are used for all levels of exterior wall besides the first story (10' - 0")

Total Dimensions for insulated metal panel wall: 550' x 18' + 140' x 31 - 6" / Total Sq. Ft. = 14,310 / PPSF = \$7.66

Total Estimated Insulated Metal Panel Wall Cost: \$109,614.60

Interior Wall Systems

Interior wall preliminary cost estimate created using the www.homewyse.com online interior framing cost calculator. Interior wall to be metal stud and gypsum board construction.

Information Used: Zip Code: 34951 Square Feet: 5,770.5 Items: Interior Wall Framing Labor, Basic + Interior Wall Framing Jop Supplies

Interior wall dimensions: 69'-4" x 20'-0" + 69'-4" x 10'-0" + 130' x 10' + 239'-0" x 10'-0"

Interior wall Sq. Ft. = 1,387 + 693.5 + 1,300 + 2,390 = 5,770.5 Sq. Ft.

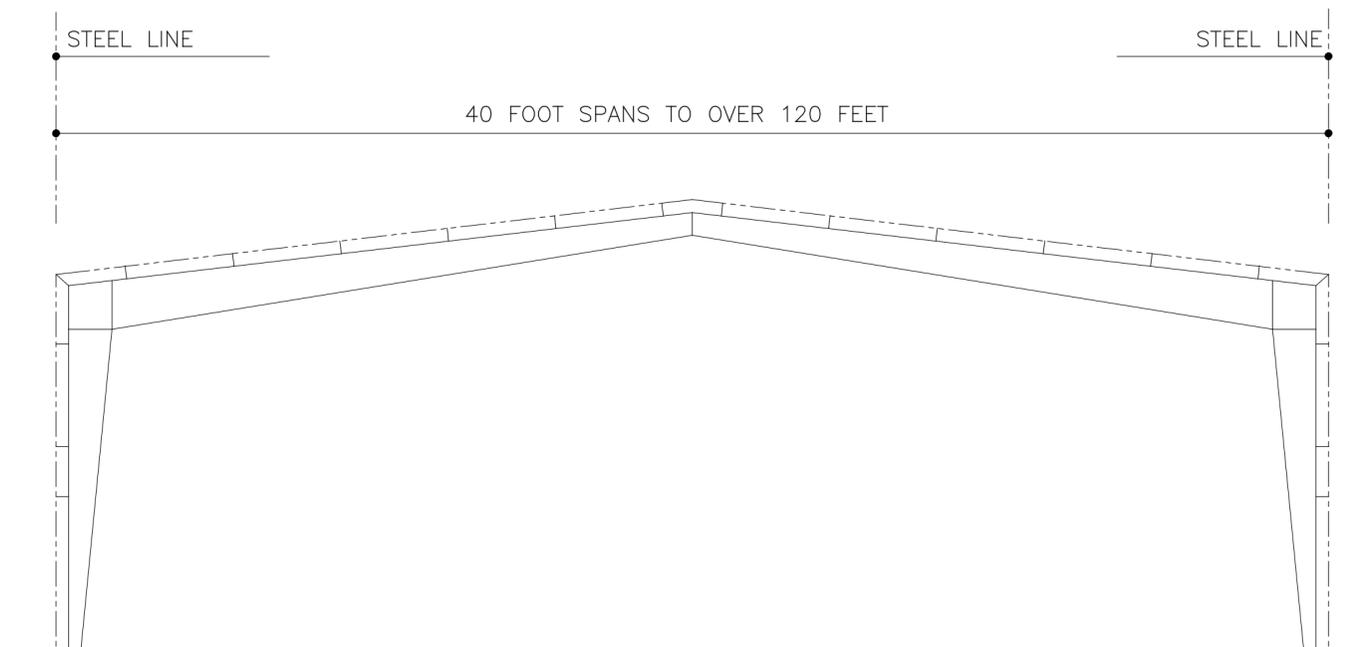
Estimated interior wall framing cost: \$20,776.50 (\$16,082 - \$25,471) / + Drywall at \$2 PSF = \$11,541

Total Estimated Interior Wall Cost: \$32,317.50

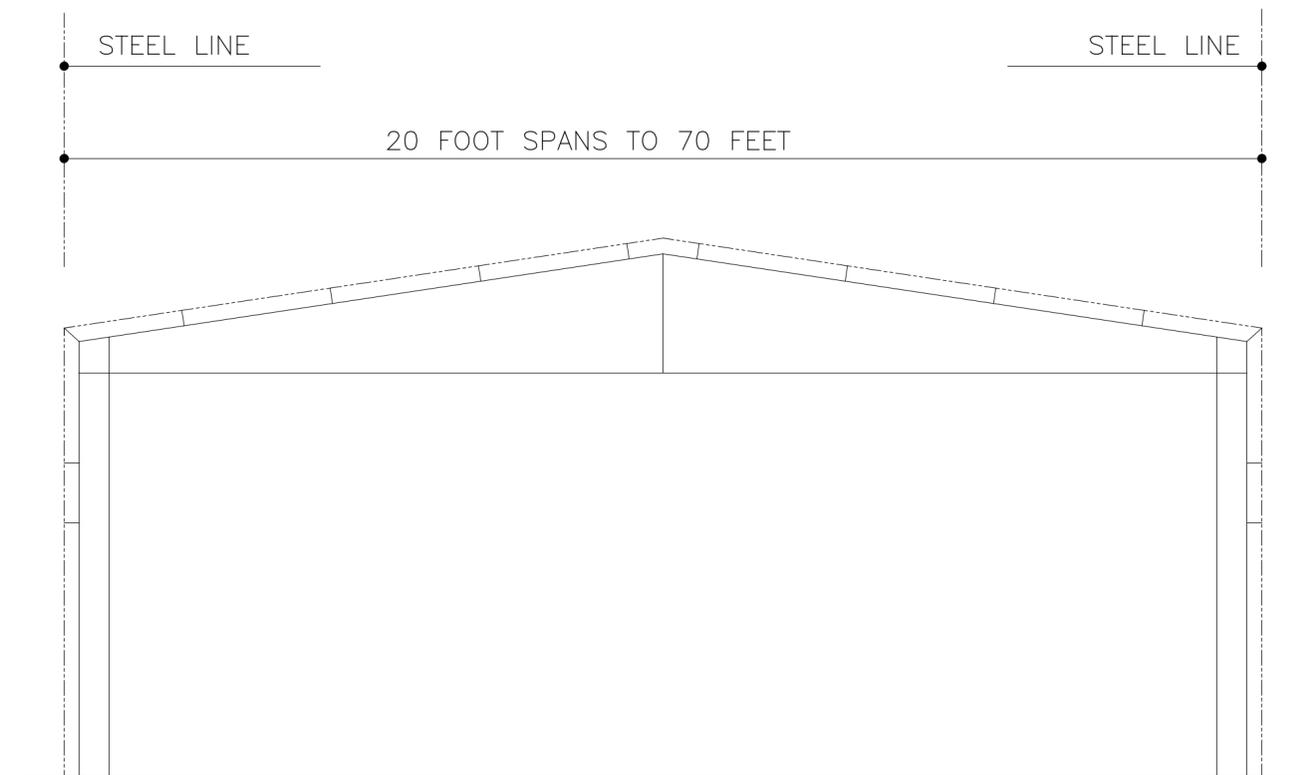
Structural Frame

The warehouse will employ a gabled rigid frame structural frame. The structural frame preliminary cost estimate was created using the <https://www.buildingsguide.com> online steel building price calculator. Information Used: Building Style: Rigid Frame. Dimensions: 70' x 225' x 22' Location: Florida.

Total Steel Frame Cost Estimate: \$153,749.00



TCG - Tapered Beam, Clear Span, Gable



RCG - Rigid Frame, Clear Span, Gable

Roofing System

Insulated metal panels are used as the roof cladding and are directly connected to the structural frame.

Total Dimensions for insulated metal panel wall: $35.5' \times 225' + 35.5' \times 225'$ / Total Sq. Ft. = 15,975 / PPSF = \$7.66

Total Estimated Insulated Metal Panel Wall Cost: \$122,368.50

First Floor Sq. Ft. = 15,750

Second Floor Sq. Ft. = 3,500

Project Total Square Feet: 19,250

Total Estimated Cost: 534,121.07

Estimated PPSF: \$27.7