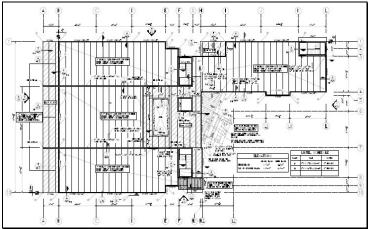


<u>Sugar Beach Villas</u>



Typical Floor Framing Plan

Apex Engineering & Management, Inc. was retained by the architect of record, Architecture Technology to provide complete structural engineering services for the permitting, bidding and construction phases for this project.

Sugar Beach Villas will consist of (2) separate East and West structures, each standing (3) stories tall. The roof framing consists of a combination of preengineered wood trusses and steel joist. The Second and Third floor framing is comprised of pre-cast engineered concrete plank with a non-structural concrete topping. The roof and floor framing is supported by a mix of reinforced concrete block bearing walls at the interior and structural steel beams and columns at the perimeter. Stair towers and elevator shafts are reinforced concrete block. Exterior walls are non-load bearing wood in-fill.

Incorporation of high wind exposure on this structure due to the close proximity of a large water area, poor soil bearing conditions in some areas and economical construction costs were all prime considerations included in this design.

PROJECT PROFILE

Project: Location:	Sugar Beach Villas Traverse City, MI
Architect:	Architecture Technology Richard Skendzel, AIA
Contractor:	Konwinski Construction Mt. Pleasant, MI
Project Type:	Multi-family
Structural System:	CMU bearing walls Steel columns/girders PC plank floor framing Steel joist/deck roof Wood roof trusses
Building size:	(2) buildings - (3) story ea 20,200 SF of total area
Completion date: Spring 2007	



Building under construction



Building under construction