

City of Frankfort Fire & Rescue Facility



Front Elevation

Apex Engineering & Management, Inc. was retained by the architect of record, aai Architects to provide structural engineering services for this project.

The City of Frankfort wanted to maximize size and functionality of this facility on a limited budget. This was achieved through concise planning, value engineering and collaborative efforts of the City, 45th Parallel Construction Management, aai and Apex Engineering.

The facility is comprised of two areas; the truck bay and the administration area. The truck bay consists of double pitched top chord steel joist supported by reinforced masonry walls with steel lintels spanning the overhead door openings. The pitched top chord minimizes tapered insulation costs and provides adequate interior draining of the roof area. The truck bay is designed as "drive-through" with integral floor drains and sloping concrete floors.

The administration area consists of engineered wood trusses bearing on masonry exterior walls. Interior walls are a mix of masonry and light gauge metal stud.

PROJECT PROFILE

Project: Fire & Rescue Facility

Location: Frankfort, MI

Architect: aai Architects

Robert Sommerville, AIA

Contractor: 45th Parallel Construction

Management Traverse City, MI

Project Type: Municipal

Structural CMU System: Steel

CMU bearing walls Steel joist/deck roof Wood roof trusses

Building size: (5) stall Truck Bay

Administration area 9,900 SF of total area

Completion date: June 2006



Building under construction



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