

JW Marriott

Grand Rapids, MI

Greg Kochalski

Structural

Project Team

Owner: Alticor Inc. – HP3, LLC.

General Contractors:

Rockford Construction Co.,
Pepper Construction Group

Architects: Goettsch Partners,
BETA Design Group

Engineers: Thornton Thomassetti
Cosentini Associates
Fishbeck, Thompson, Carr, Huber.

Structural

Highrise: Concrete

Two way reinforced slab 9.5 in. typ.
24 in. reinforced columns typ.
provide gravity load resistance.
4 concrete shear walls located within
the elevator core provided lateral force
resistance.

Lowrise: Steel

Columns/composite beams provide
gravity load resistance, W shape typ.
Diagonally braced frames provide
lateral force resistance, HSS typ.

Architecture

24 story multi-use facility including:
parking garage, business center,
restaurant/lounge, and fitness center.
Large aesthetic benefits from absence of
perimeter columns that maximize guest
views.

Glass cladding and elliptical shape creates a
strong presence in the conservative
Grand Rapids skyline.

Heated helipad on tower roof.

Mechanical

24th floor mechanical penthouse.
Snow melting zones located on walkway,
driveway, and helipad that total over
42,000sf.

100% Outdoor heat recovery for atrium
and guest rooms from 2 AHU's.

23,130 CFM supply to guest rooms.
15,120 CFM supply to atrium.

Electrical

Distribution at 480/277 and 208/120,
3 phase 4 wire typ.

Guest room voltage at 208/120.

Tower busway 480/277V 1600A.

Transformers every 3rd floor typ.
at 300kVA, 480-120/208V.

431,730 service demand VA.

(4) 208/120, 3 phase, 4 wire, 100A
emergency lighting switchboards.