

855 Godfrey Avenue SW
Grand Rapids, MI 49503
P: (616) 245-3100
F: (616) 245-3223
www.diamonddrilling.com



Amway Grand Plaza
Grand Rapids, MI

Project: Amway Grand Plaza
Location: Grand Rapids, MI
Owner: Amway
Contract Type: Firm Fixed Price
Contact: Tad Bultema, DTS Architects

Background

The [Amway Grand Plaza](#) in Grand Rapids, MI was originally The Pantlind in the part work was being done. This portion of the Amway Grand was built in 1913 and has been ranked as one of the top hotels in the United States ever since.

Scope

The Amway Grand Plaza hired DTS Arcitects to manage the project of adding new window washing units to the 1913 side of the hotel. This addition included a necessity of anchoring the units to the reinforced concrete roof. The concrete roof slab needed to be a certain thickness and possess a significant amount of reinforcement to be able to withstand the stress that would be added with the new window units. The knowledge of the structural design of the roof slab was very limited.

DTS Architects called upon Diamond, Inc. to provide radar survey and verify the thickness of the roof slab and the location of the reinforcement. The use of Ground Penetrating Radar greatly reduced the risk of doing massive structural damage to the building by carrying too much stress on the roof slab and the possibility of severe personal injury to anyone involved with the construction.

Technology and Manpower

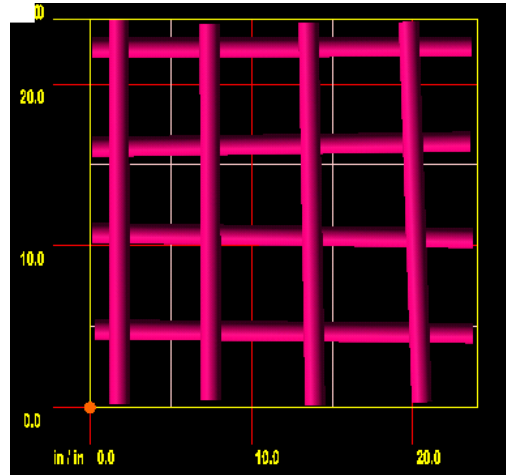
Ground Penetrating radar was performed by Diamond, Inc. using technology engineered and manufactured by Geophysical Survey Systems Inc. The SIR 20 system with onsite 3D capabilities with Radan software technology was used by the Diamond, Inc. technician. The 1500 mHz antenna along with the patented 3D Smart Pad technology was used to scan four different areas on the roof slab. The report requested by DTS Architects was delivered the next business day.



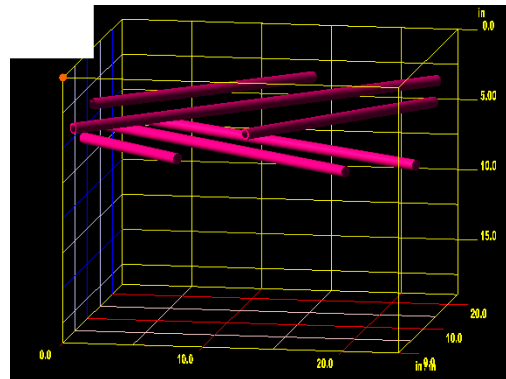
855 Godfrey Avenue SW
 Grand Rapids, MI 49503
 P: (616) 245-3100
 F: (616) 245-3223
 www.diamonddrilling.com



Amway Grand Plaza
 Grand Rapids, MI



Above: Top view of a 3-D scan with piping added manually for clarity.



Above: Horizontal view of a 3-D scan with piping added manually for clarity.