

FOUNDATION ENGINEERING & GROUND IMPROVEMENT

St. Regis Al Mouj Muscat

Luxury Resort & Residences

HOSPITALITY & LEISURE • RIGID INCLUSIONS • SECANT PILED WALLS • STRUTS • GROUND ANCHORS



Client

Alfardan Hotels & Resorts

Consultant

Ibrahim Jaidah Architects & Engineers

Main Contractor

NSCC International

Location

Muscat, Oman

Start Date

April 2019

Completion Date

December 2019

Project Details

Rigid Inclusions (RI)

RI columns : 2543 nos., 750 mm dia., 3 m long
Total length drilled : 7,629 LM

Secant Piled Wall

Perimeter : 983 m
Retained height : 7 m
Pile details : 780 mm dia. @ 680 mm c/c spacing,
16 m long, 1440 nos.
Total length drilled : 23,200 LM

Strutting system

1 level of struts : 700 mm & 600 mm dia.
Total strut pipes : 40 nos.

Ground anchors : 148 nos.

Reaction piles : 36 nos., 935 mm dia., 8.94 m long

Concrete volume : 19,170 m³

Reinforcement steel : 387 tons

Excavation volume : 303,000 m³