

## GOVERNMENT CONFERENCE CENTRE REHABILITATION PROJECT

PROPERTY: PUBLIC WORKS AND GENERAL CANADA SERVICES ( PWGCS )

GENERAL CONTRACTOR: PCL CONSTRUCTION CANADA

SCOPE OF WORK: ROCK ANCHORS , ROCK DOWELS AND LINE DRILLING

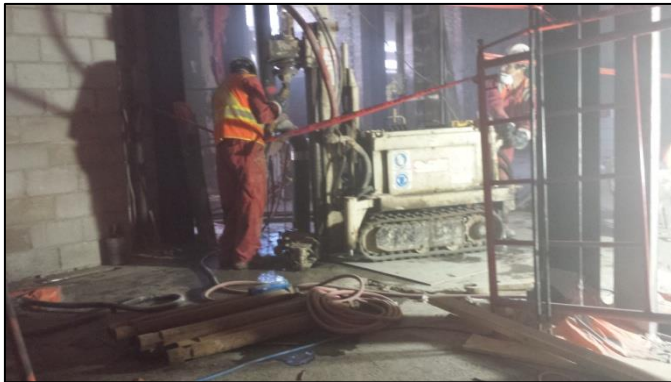
### INTRODUCTION

In the heart of the most visited place in Ottawa and outside the world heritage Rideau Canal, the Government Conference Centre Rehabilitation take part of the PWGCS Public Buildings rehabilitation program integrated in the 150<sup>th</sup> years of Canada independence celebration in 2017.

### SCOPE OF WORK

The Work of SITE CANADA consisted to drill, install and grout, rock anchors of 125mm diameter with a DSI DCP bar reinforcement to resist uplift pressure. Rock dowels were installed for consolidation between the wall of the building and the rock surface, and finally a line drilling to allow excavation and consequent building basement extension.

The drilling method used was a DTH Hammer with a small drill rig TES 20 of 5" drilling diameter, flushing a mix of water and air to avoid the silica dust contamination of the site.

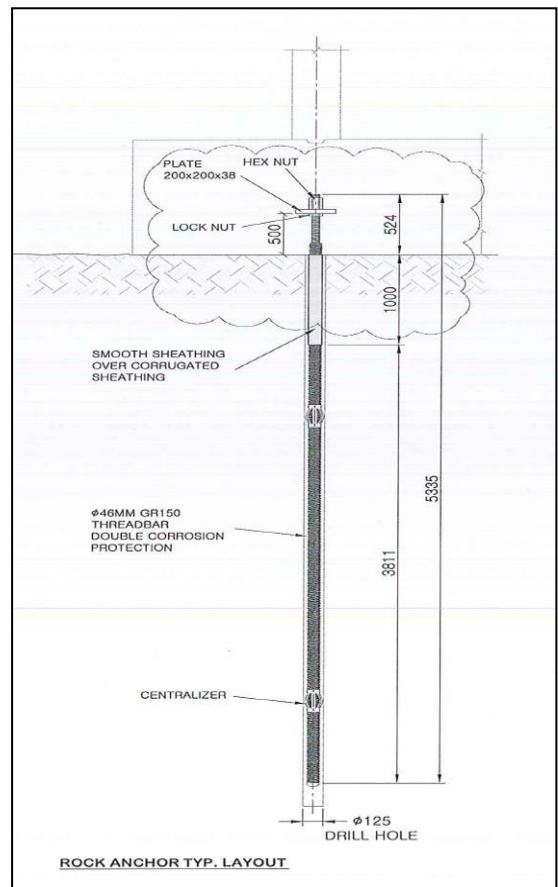


*TES -20 drilling the Shear Wall Rock Anchor.*



*Pull out Performance test of DSI DCP Shear Wall Rock Anchor.*

The reinforcement used are DSI DCP Ø46 mm thread bar as shown in the layout below. The grouting is a mixture of Water / Cement in a ratio of 0,5. The rock anchors with a Design Load of 750 kN were tested in accordance with the specifications at 1,33 DL, and the whole meet the design criteria.



*Shear Wall Rock Anchor Layout*

