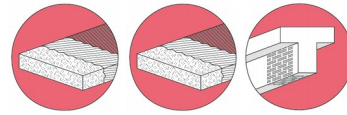




FREYSSINET



Repair

Additional prestressing - Carbon Fiber Laminates - Concrete Repair
Buildings

633 Bay Street
Toronto, CANADA



Work Zone

General contractor

Freycan Major Projects Ltd.

Customer/Owner

MTCC 723 Horizon on Bay

Engineer

WSP

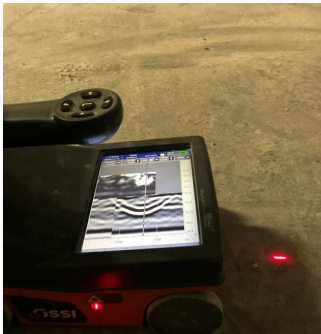
Freyssinet subsidiary

Freycan Major Project LTD

Works period

Start date: February 2020

End date: August 2020



GPR scan to locate the tendons

PROJECT DESCRIPTION

Toronto Bay street Car park - Unbonded post tensioning repair

FREYSSINET MISSION

Replacement of 36 tendons inside the 200 mm thick slab

The Owner hired WSP to assess the state of unbonded PT in a parking garage. Upon inspection, WSP concluded that there are significant numbers of PT strands broken because of corrosion of the PT strands inside the slab, and repair of PT strands is required. Freyssinet was awarded the contract to replace 36 tendons inside the 200 mm thick slab.

Freyssinet proposed sustainable solutions. As an example, since the intermediate anchors were at the cold joint and water penetration completely corroded the strands at these points, Freyssinet proposed to move the intermediate anchorage away from the cold joints. Hence, a solution with tensioning using 2 dogbone couplers was retained. These couplers were placed around 2 to 4 m away from the cold joint to completely avoid the penetration of corrosive elements in the PT elements and increase the durability of therepairs.

At some locations, carbon fiber laminates were also installed to lack of PT stress created by the opening required for the stressing anchors.

Freyssinet's high-quality work and coordination during the execution were appreciated by the client.

KEY SUCCESS FACTORS

Quality, Technical added value, Price, Minimised disruptions, Reactivity (in tender and/or intervention deadlines)



Tensioning operations

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