

BOX JACKING UNDER HIGHWAY – ANTIDRAG SYSTEM

CLIENT
SIS SCPA

PROJECT NAME
Construction of the A27 Venice-Belluno highway junction and Pedemontana Veneta toll expressway

YEAR
2022

LOCATION
VILLORBA (TV), ITALY

DESCRIPTION:
Box Jacking of two underpasses under Pedemontana Veneta toll expressway using the Petrucco Anti-drag system that allows for active traffic during the push underneath.

LAUNCH TYPE
 Open pit
 Partial diversion
 Tunnel
 Temporary bridges

TRAVEL DISTANCE
 Box MS3E013: 74,25 m - 243' 7"
 Box MS3E014: 82,90 m - 271' 11"

JACKING AVG. PRODUCTION
1m/h - 3' 3"/h

BOX SIZE
 MS3E013:
 - Base: 17,55 m - 57' 6"
 - Height: 10,35 m - 33' 11"
 - Length: 57,32 m - 188' 11"
 MS3E014 (divided in two segments):
 - Base: 14,60 m - 47' 10"
 - Height: 9,60 m - 31' 5"
 - Length: 69,32 m - 227' 5"

BOX WEIGHT
 MS3E013: 7815 ton - 17230 Kips
 MSE13E014: 7074 ton - 15595 Kips

EXCAVATION TYPOLOGY
 from the inside
 from the outside

DRAWINGS

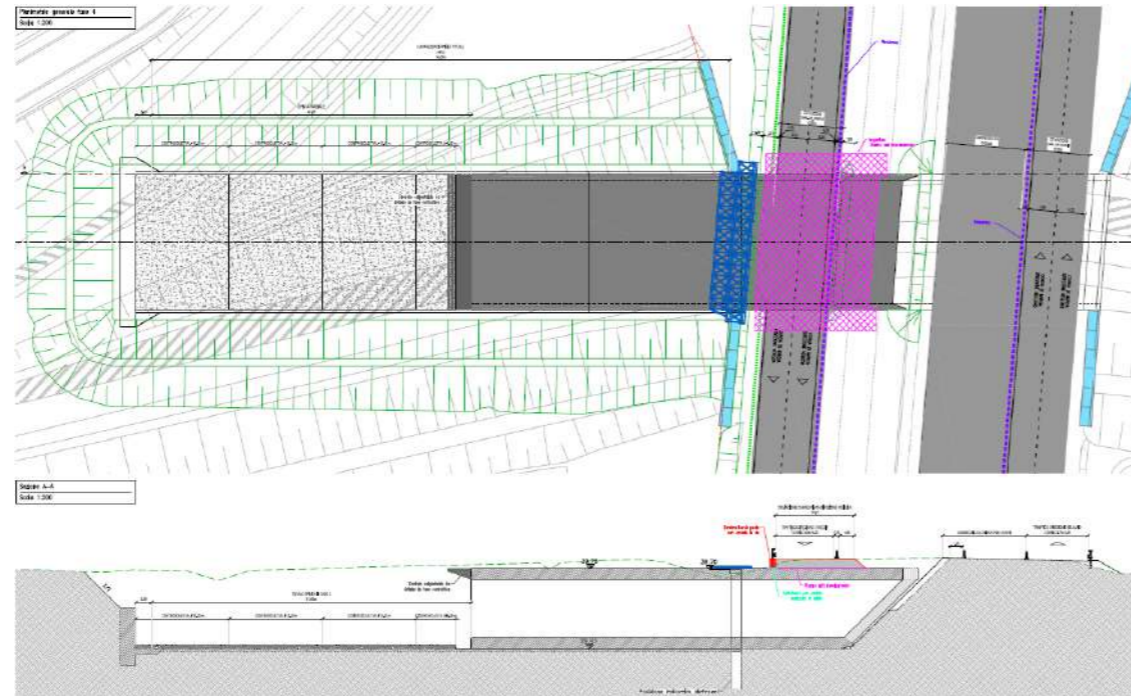


Figure 1 - Project plan MS3E013



Figure 2 - Project plan - Antidrag system plates MS3E014

PICTURES



Figure 3 - View of the two boxes - initial phase



Figure 4 - View of the two boxes and Anti-drag system intallation



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PICTURES



Figure 5- Restraining beam of the Anti-drag system installed on MS3E013



Figure 6 - Box sliding under highway with active traffic flow over Anti-drag system



Figure 7- Double-lane reconstruction over Anti-drag system



Figure 8 - Boxes jacked under highway and highway fully reconstructed