

SELF BUILT EXHIBITION SPACE N05

Additional Information for Underground structure of the lot N05

The present report describes the data available for the geotechnical characterization of the soil, water level, foundations system of the tensile roofing structure, on which it will be built the Self Built Exhibition Space N05.

1. Context of geotechnical investigations

a. Plan of survey of the existing ground (SS: Site survey)

The plan of survey of the existing ground is attached.

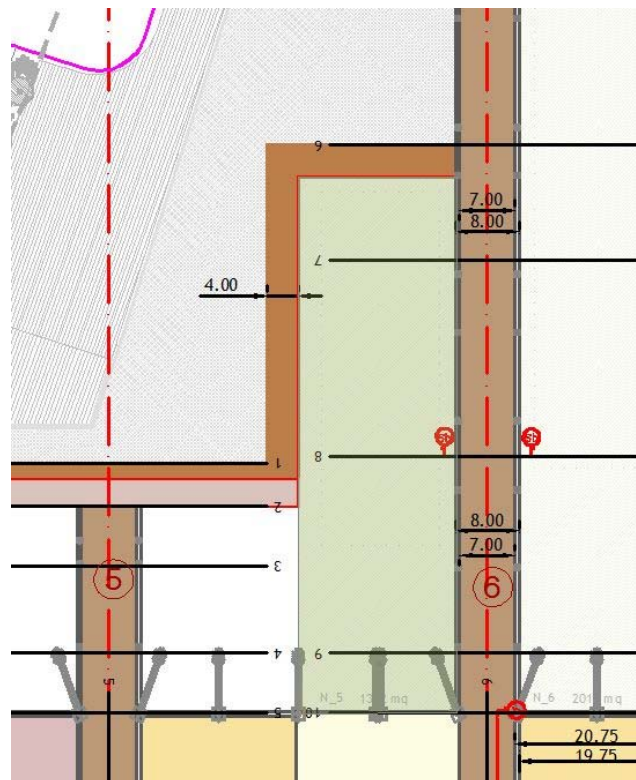
b. Longitudinal profiles of the secondary pathways (LP: Longitudinal profiles of the secondary pathways)

Longitudinal profiles of the secondary pathways next to the lot N05 are attached. In these annex the green line indicates the level of the Masterplan, the red one indicates the existing ground level.

Plan of the secondary pathways

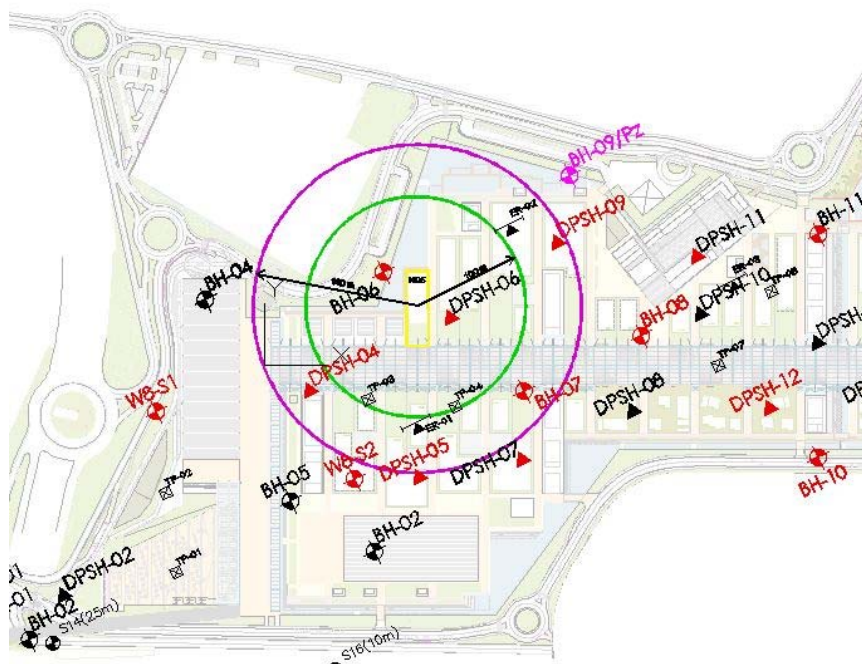
West: Secondary pathway 5

East: Secondary pathway 6



Identification of the secondary pathways and lot

c. Main geotechnical investigations information into a radius of 100/150 m from the centre of the lot N05



Geotechnical Investigations (GI_Geotechnical Investigations)

The picture above shows the geotechnical investigations carried out in the survey campaign conducted on March/May 2011 and integrated on July 2011.

The identification of the investigations, relating to the Exhibition Space N05 (yellow line), has been made considering a radius of 100 m (green) and a radius of 150 m (pink).

The data of this report belong to the following attachment: "GR" – "Relazione di caratterizzazione geotecnica – Studio Geotecnico Italiano". You can reference to this paper for any detailed information.

- Borehole – continuous core drilling with Standard Penetration Test:

- BH-05*
- BH-06
- BH-07
- BH-09/Pz*

(*) These boreholes refer to a radius bigger than 150 m.

The borehole selected are located at the vertices of triangles (maximum side 300 meters) covering the area of the Self Built Exhibition Space, making possible the interpolation of the data.

- Dynamic Probing Super Heavy:

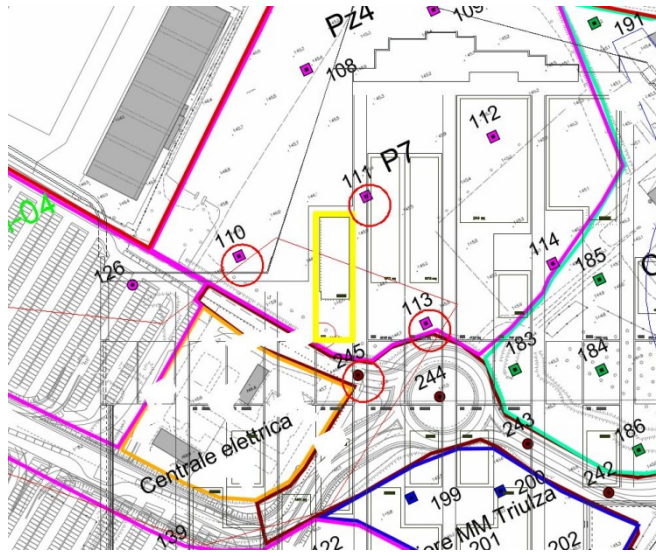
- DPSH-04
- DPSH-05
- DPSH-06
- DPSH-07*

(*) These boreholes refer to a radius bigger than 150 m.

- Cutting with/without plate load test:

- TP-3
- TP-4

d. Additional inspective boreholes:



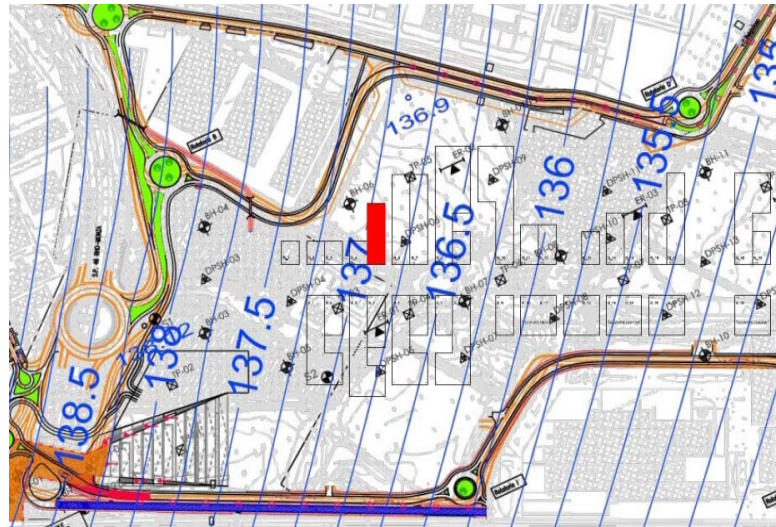
Additional inspective boreholes

- 110
- 111
- 113
- 245

These investigations are boreholes or cutting made until reaching 3 metres of depth.

N.B. The properties of the fill soil material, added to reach the Masterplan floor, will be provided in a future update

e. Ground water level (GW - Ground Water level)



Water table level on March 2011 (File Ground Water Level)

137.00
136.75

The water table level, recorded on March 2011, in the area of the N05 is:

- 136.75 m s.l.m. in the South of the area of the lot
- 137.00 m s.l.m. in the North of the area of the lot

Water Table: design parameters

In the design process the level of the groundwater, you have to consider, must be at least equal to the detected water table on March 2011 increased of 1.50 meter for temporary structure, as illustrated in the report GR "Relazione di caratterizzazione geotecnica – Studio Geotecnico Italiano".

In particular:

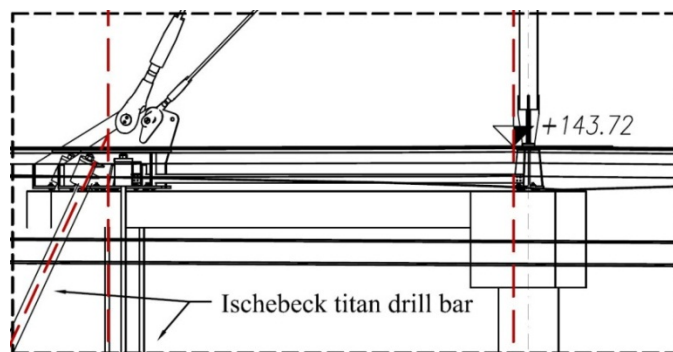
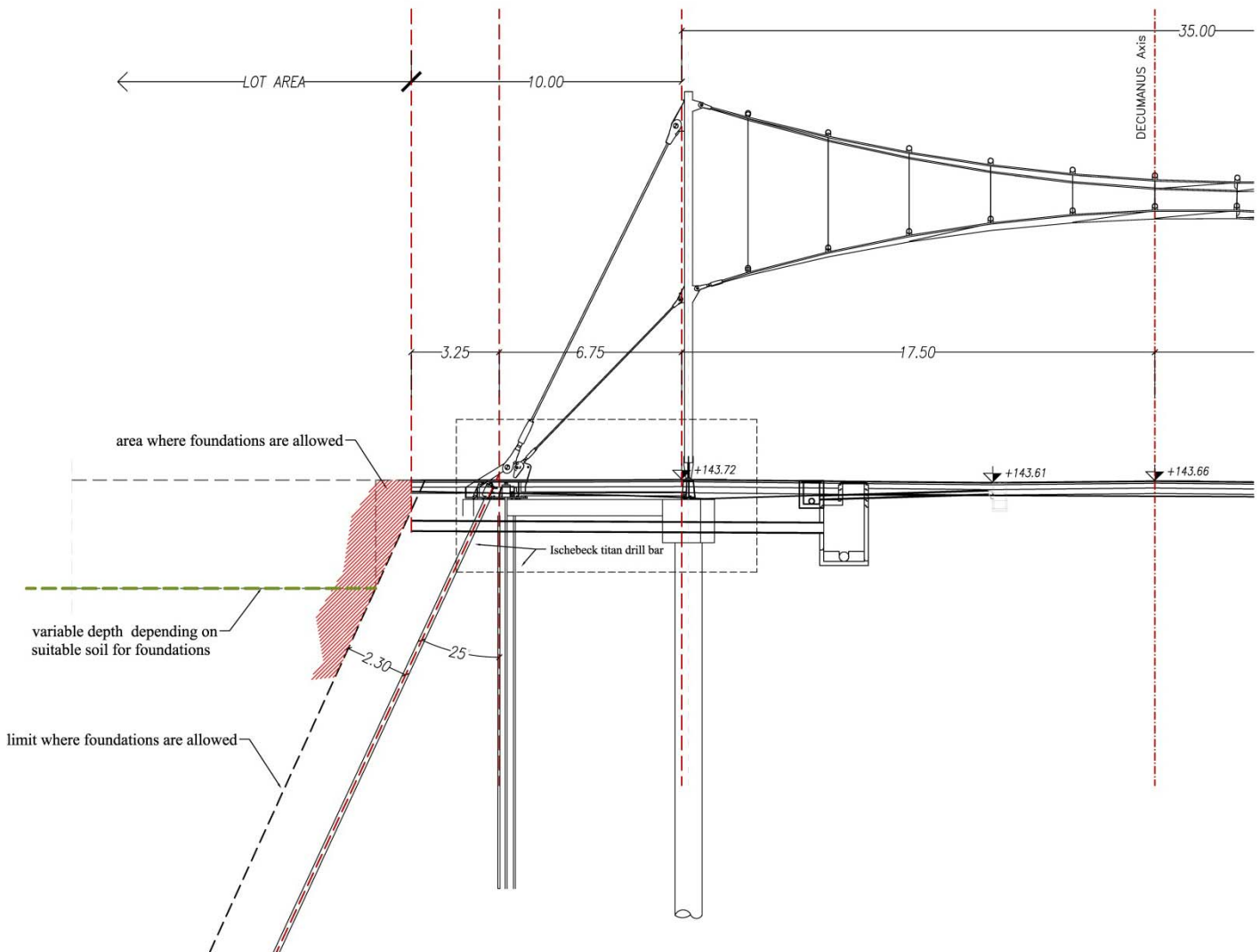
- $136.75 + 1.50 \text{ m} = 138.25 \text{ m s.l.m.}$ in the South of the area
- $137.00 + 1.50 \text{ m} = 138.50 \text{ m s.l.m.}$ in the North of the area

2. Informations about the foundations of the tensile roofing structures and related design parameters:

The foundations of the tensile roofing structure will be already carried out during the construction of the Self Built Exhibition Space.

So, the Participant must respect the following design parameters, because any structures or buildings must pay special attention to these foundations.

Minimum distances between subsurface structures of the lot and the underground anchor piles of the Decumanus roofing system:



Detail 1