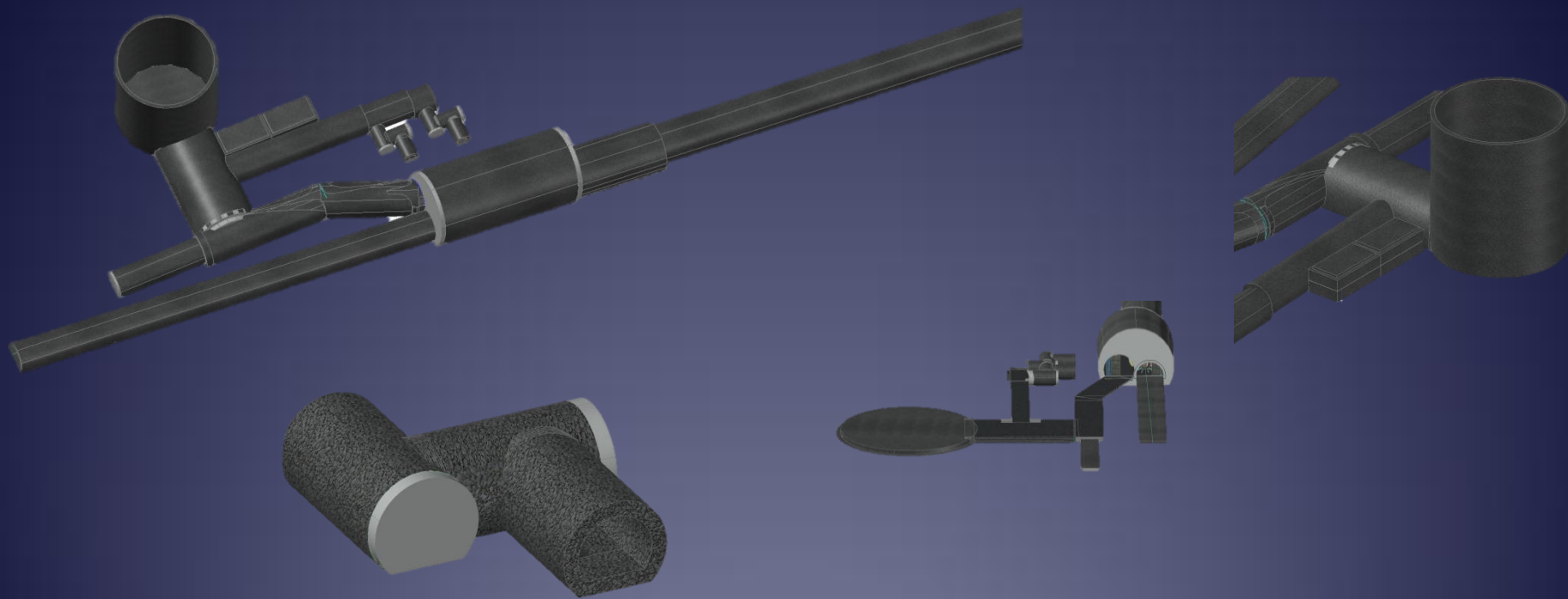




Secondary beam layout for LAGUNA-LBNO project



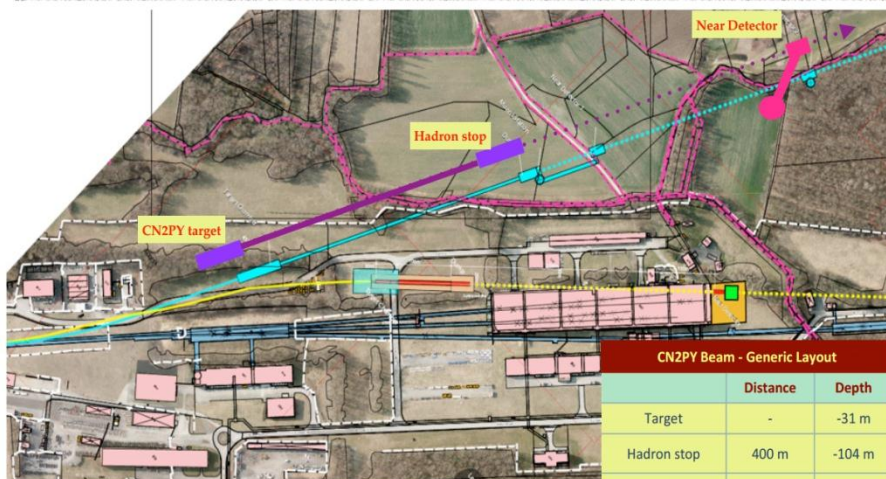
Diamanto Smargianaki & Ilias Efthymiopoulos
CERN CERN[EN/MEF-LE]

- 3D Models for Target chamber, Decay tunnel, Hadron stopper, Transport zone and Service gallery. Option A

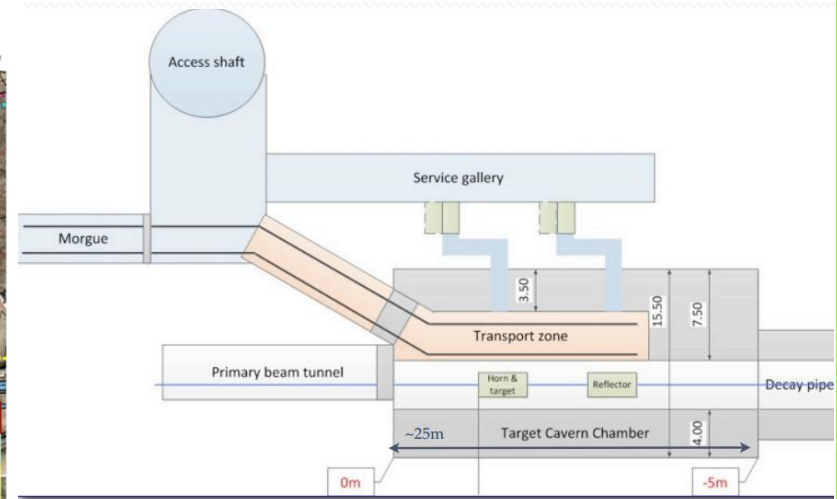
See talk of Ilias at previous meeting !



CN2PY - Option-B : Beam extraction from TT20



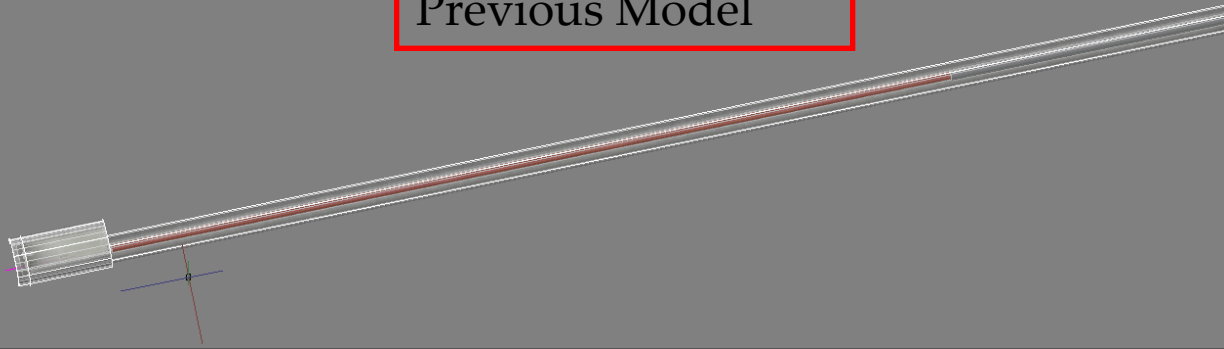
- Target location still inside the CERN area
- Hadron stop inside the reserved area
- ND just outside - no problem, use an access shaft!



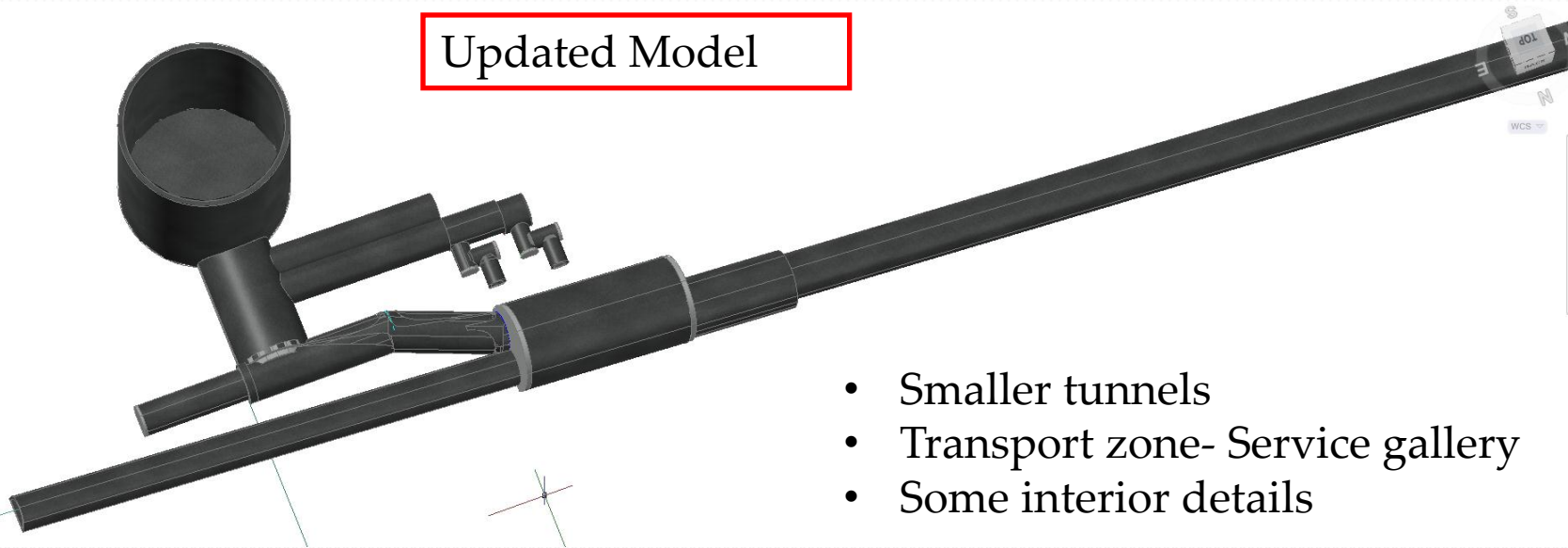
- Target cavern follows the beam slope
- Access galleries in horizontal surface
- Service gallery horizontal

Overview

Previous Model

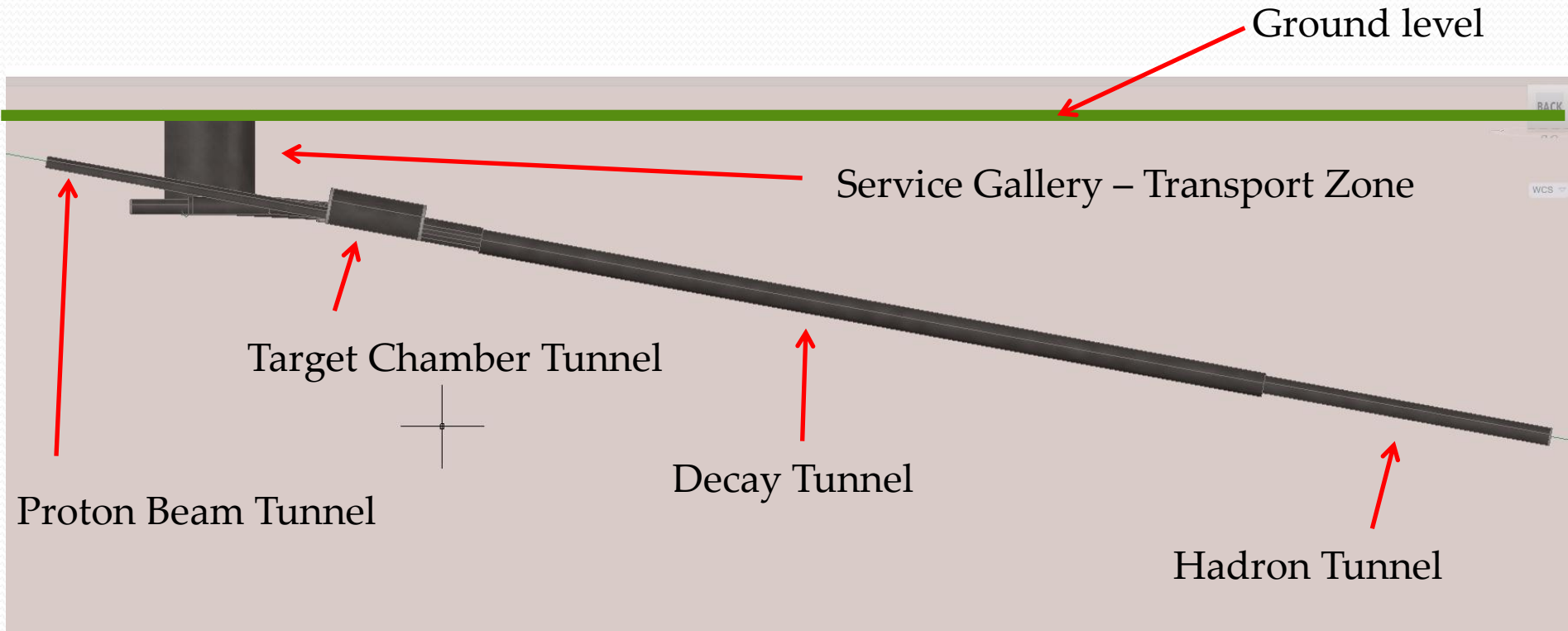


Updated Model

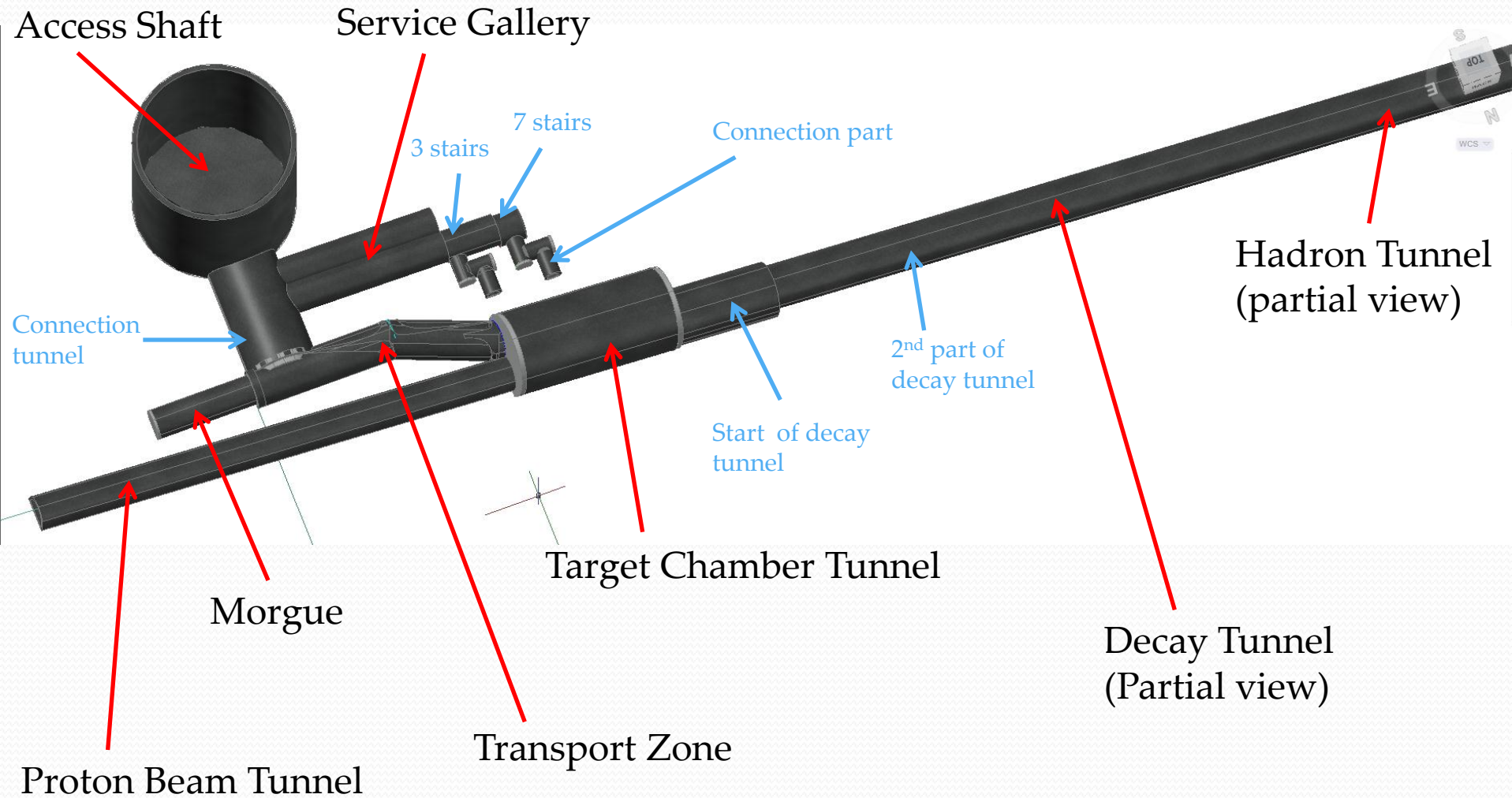


- Smaller tunnels
- Transport zone- Service gallery
- Some interior details

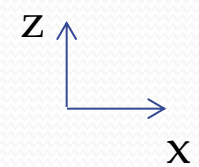
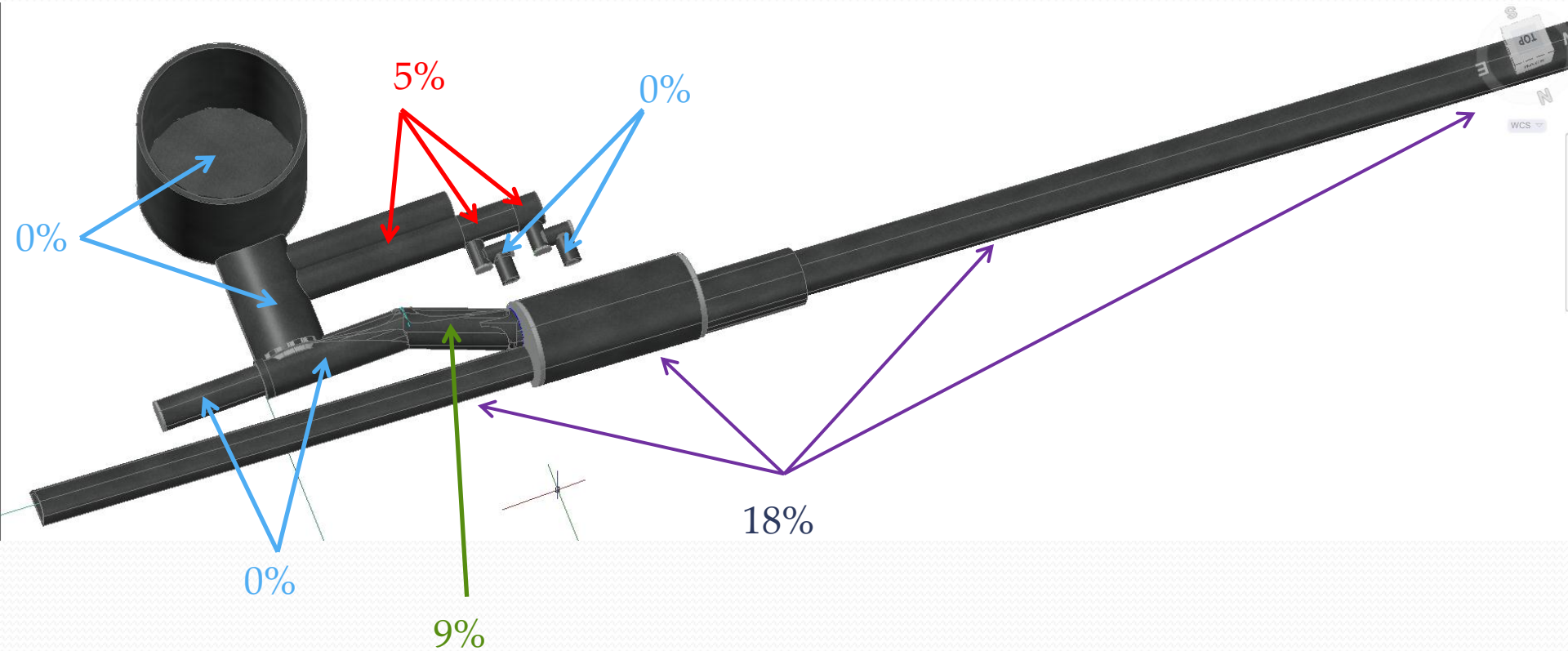
Side View



Top View

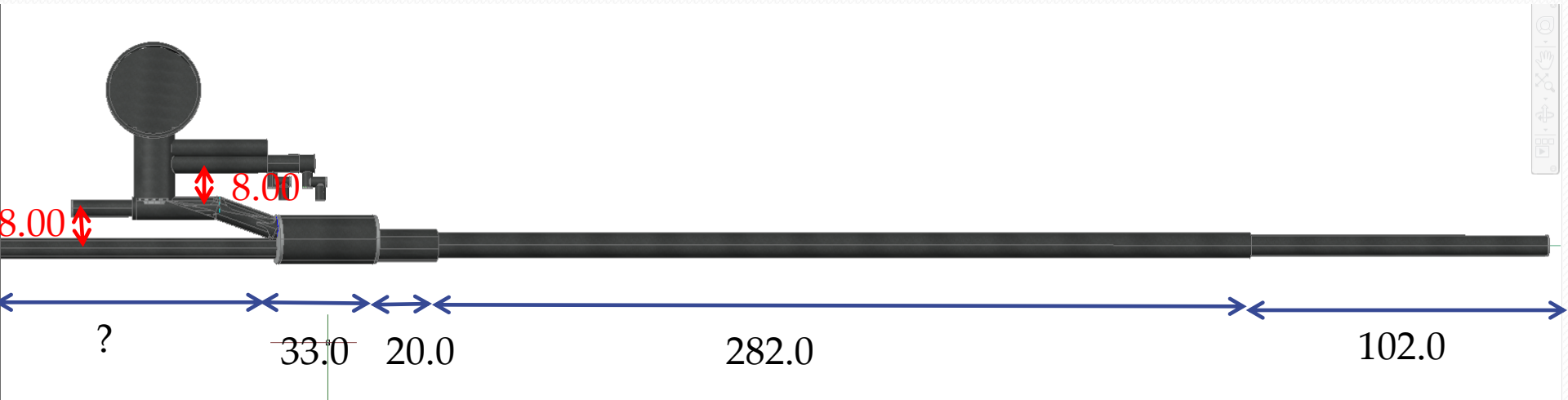


Slopes



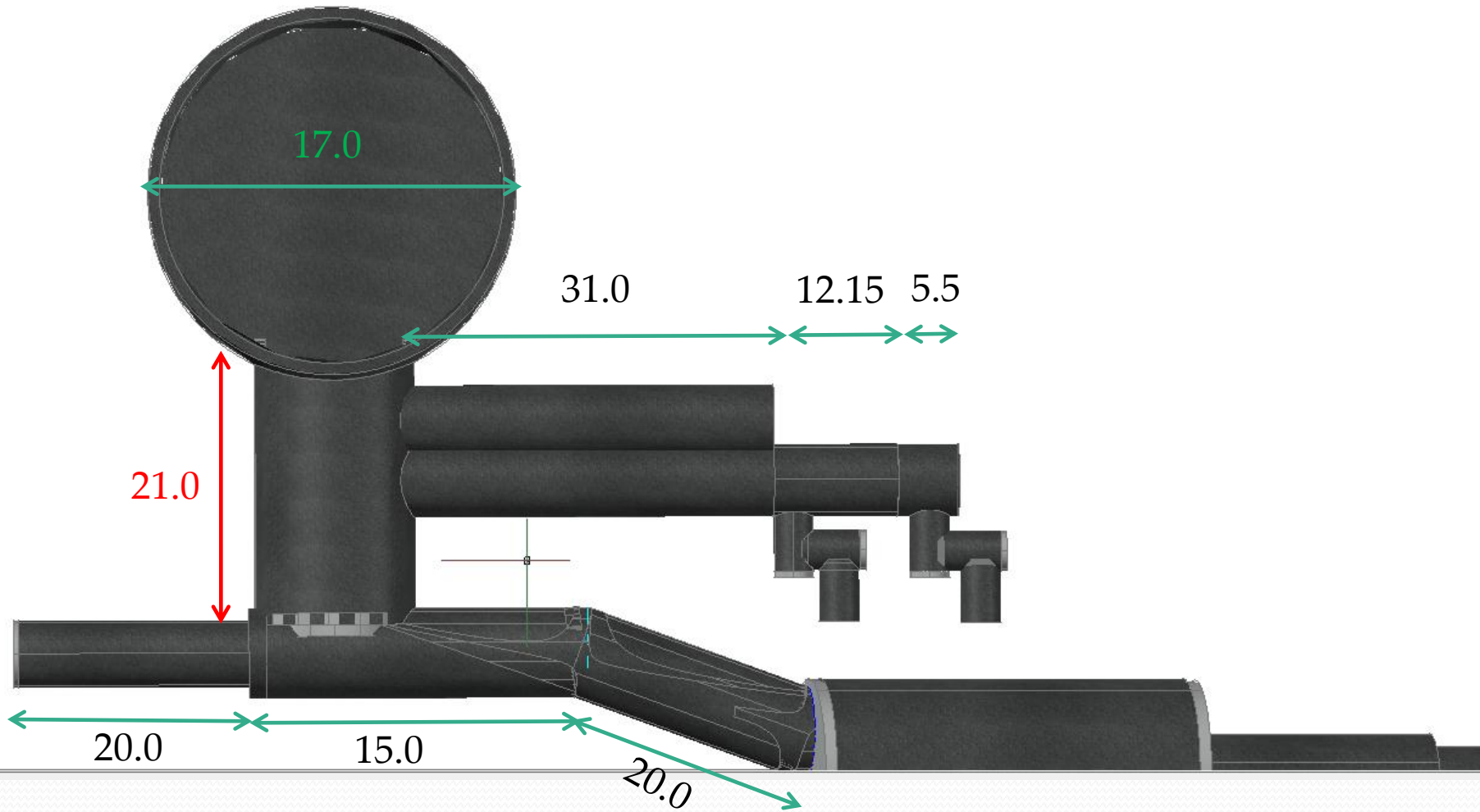
•x, is the horizontal axis and z is the vertical axis

Horizontal Dimensions



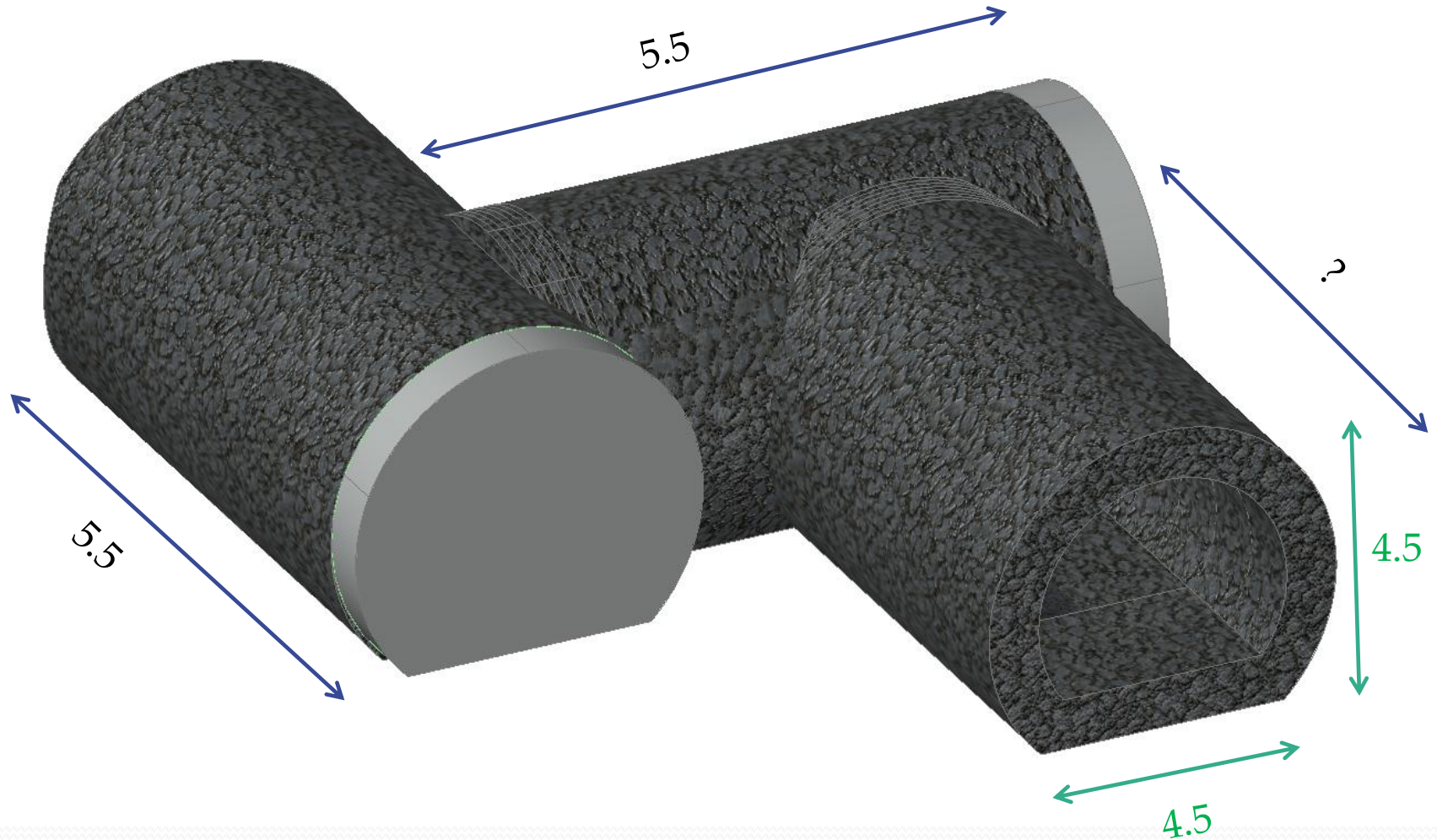
- All dimensions are in meters
- Dimensions for the tunnels are the outer dimensions

Dimensions- Service gallery- Transport zone



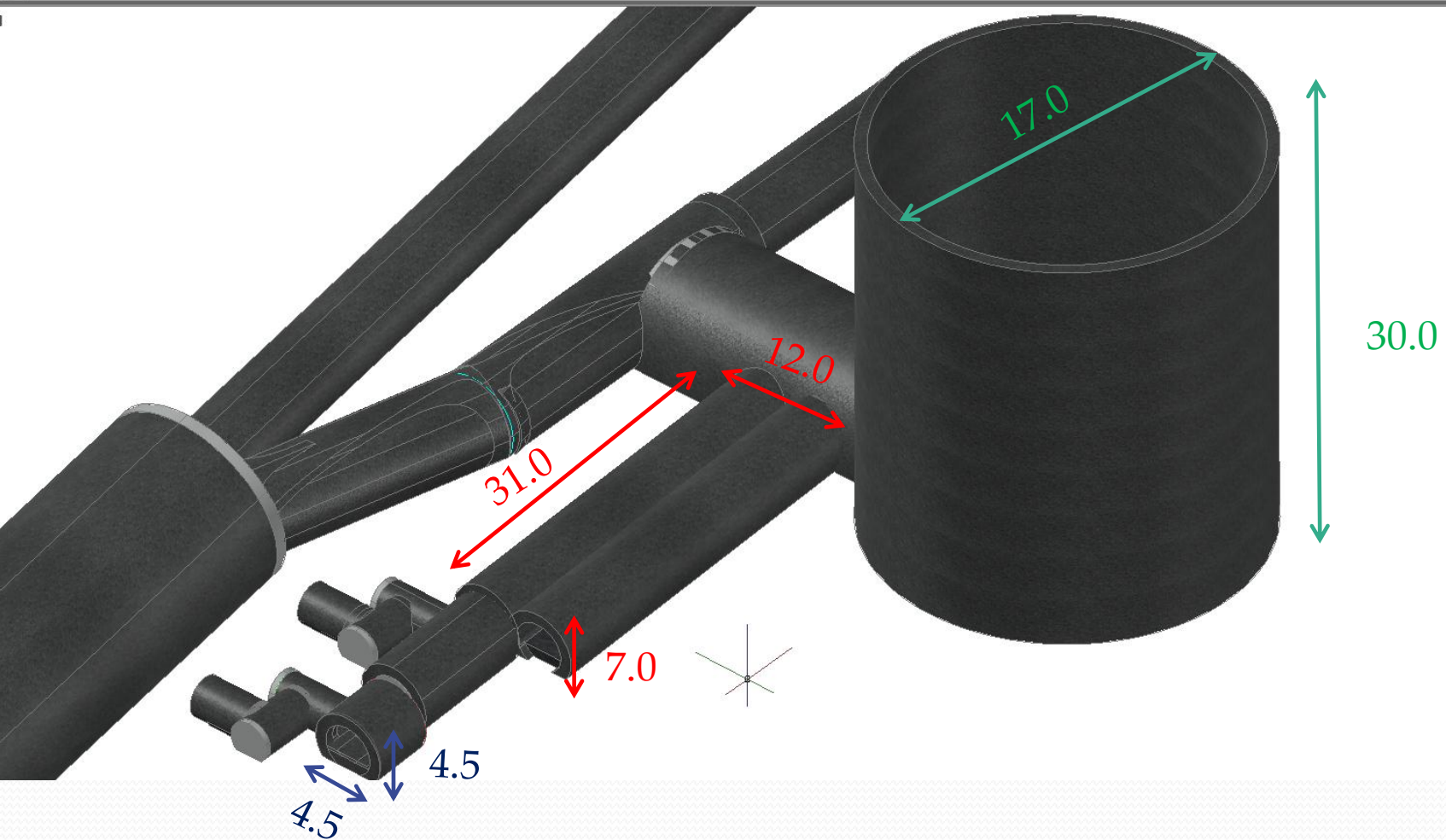
Horizontal-Vertical Dimensions

Connection part with target chamber tunnel



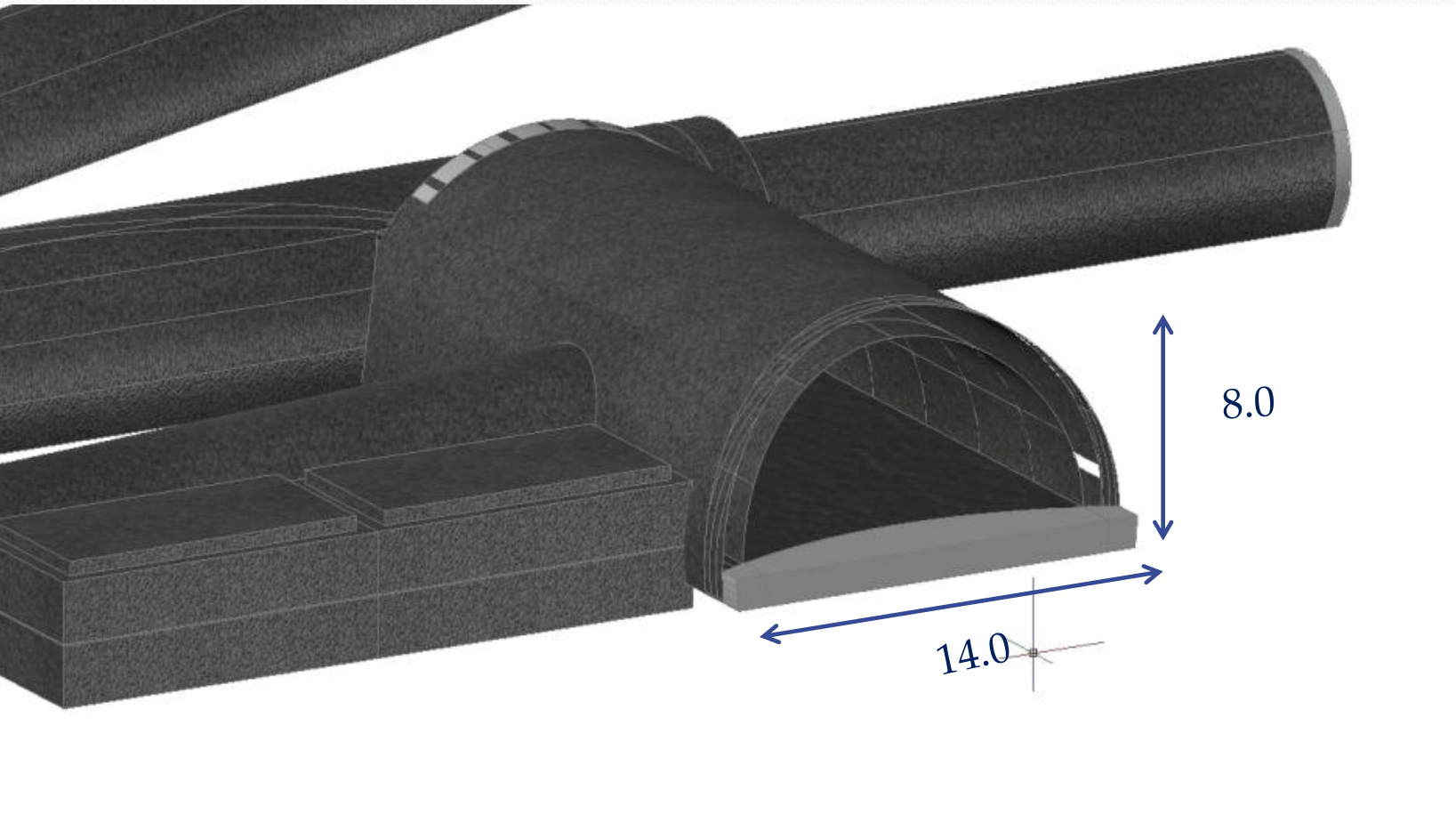
Horizontal-Vertical Dimensions

Access shaft- Service gallery



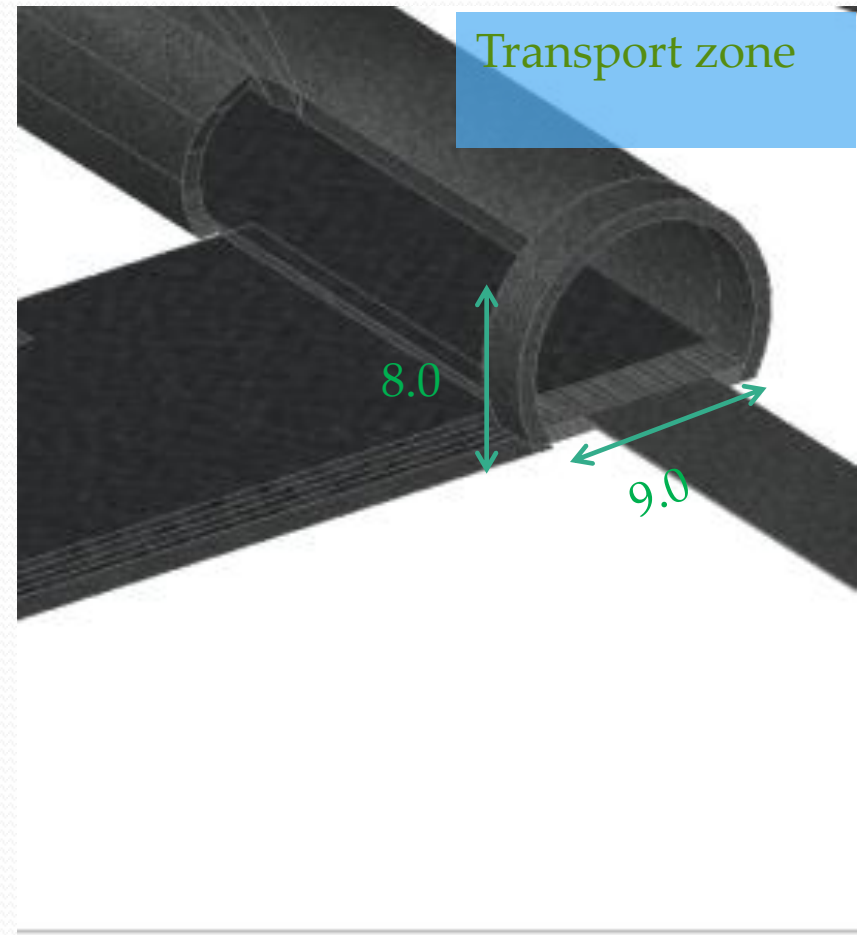
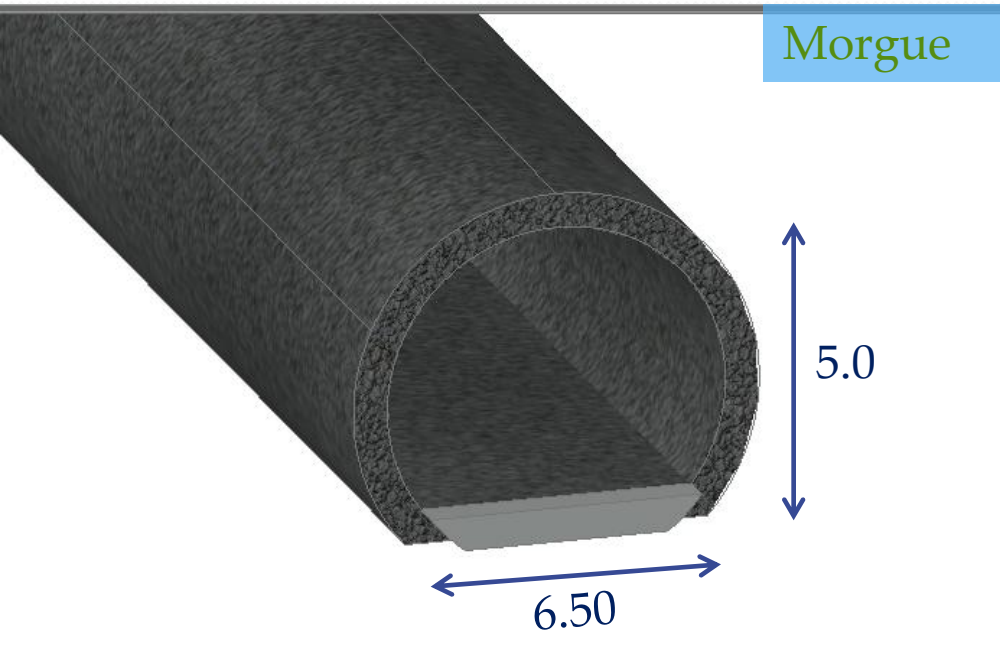
Horizontal-Vertical Dimensions

Connection tunnel between service gallery and transport zone

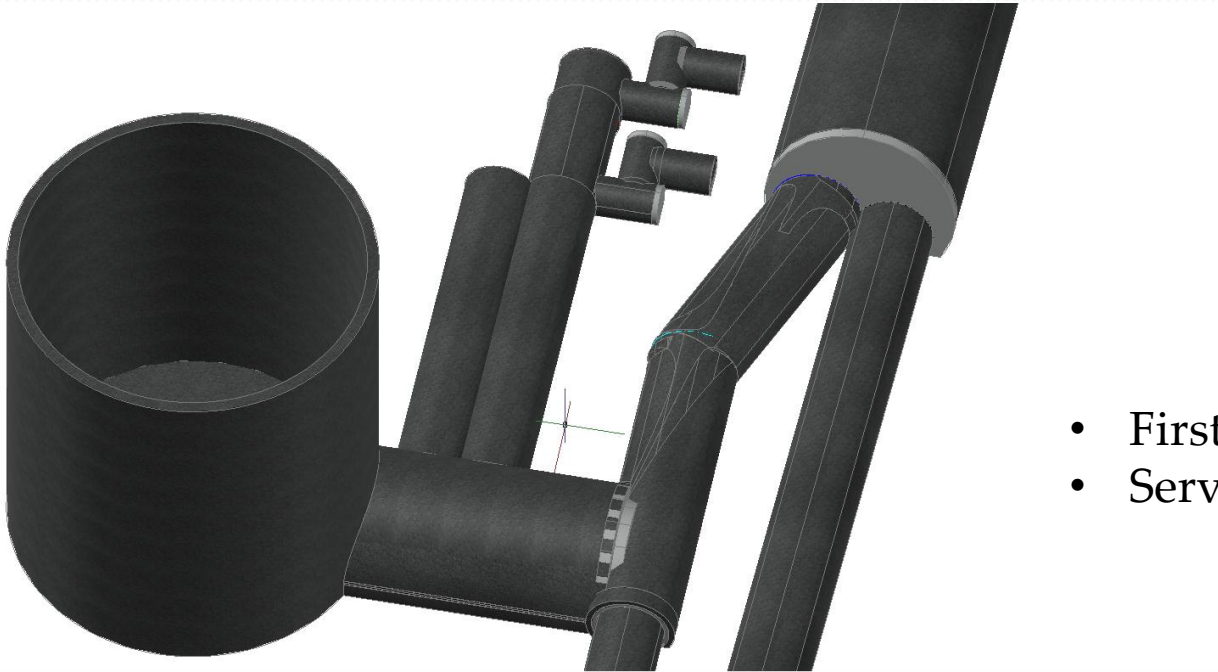


Horizontal-Vertical Dimensions

Morgue-Transport zone



Transport & Installation



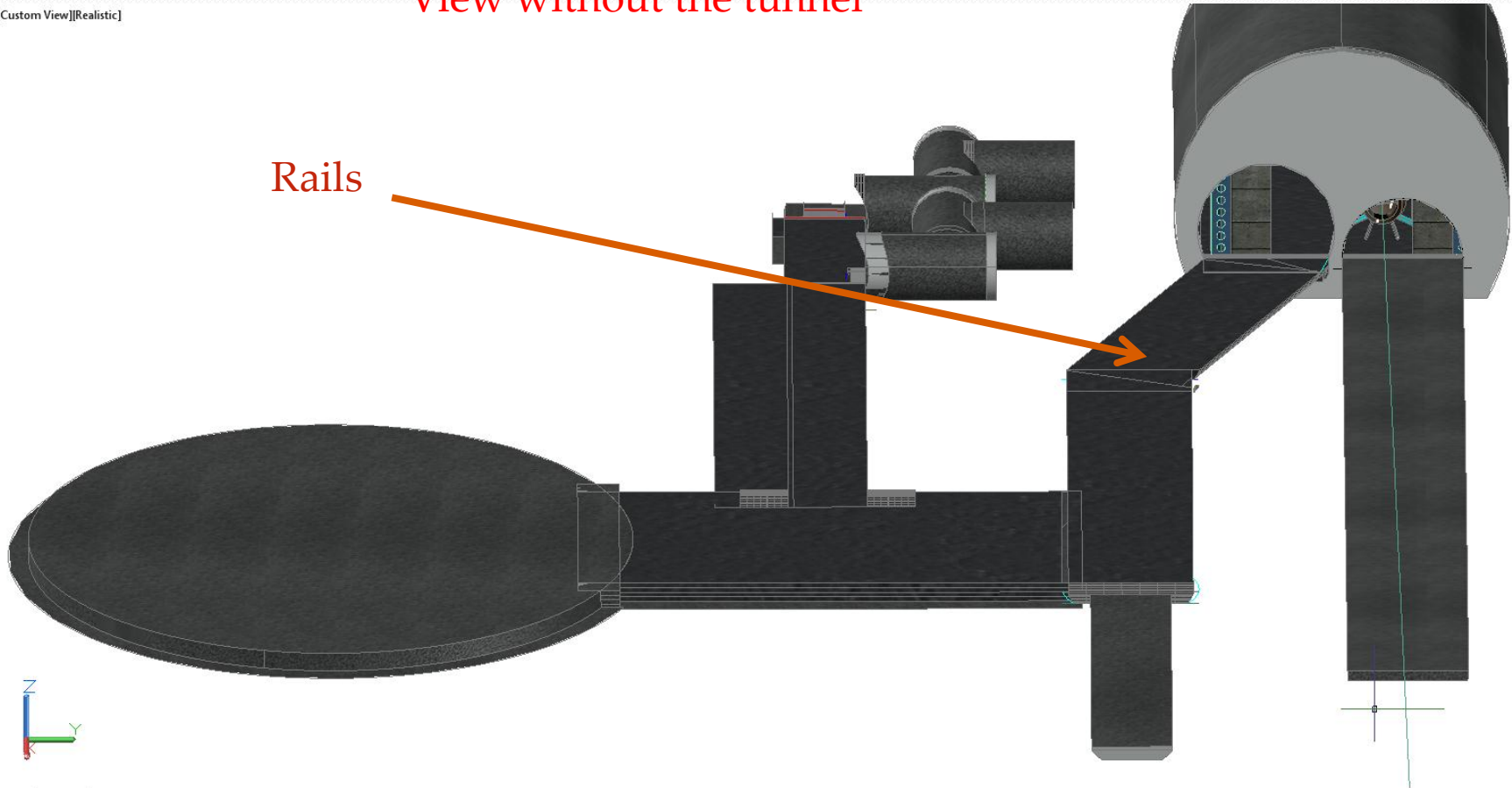
- First- order design
- Services connection to be added



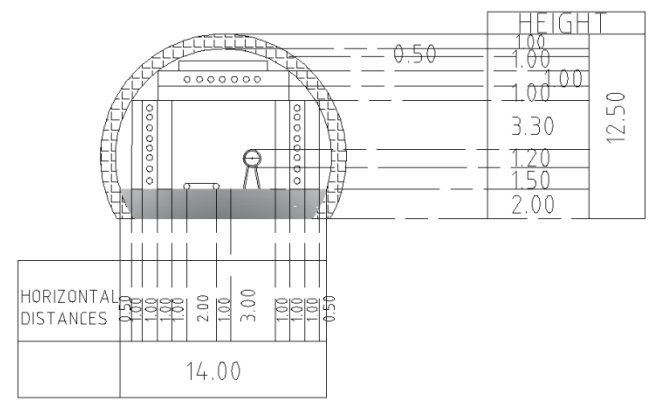
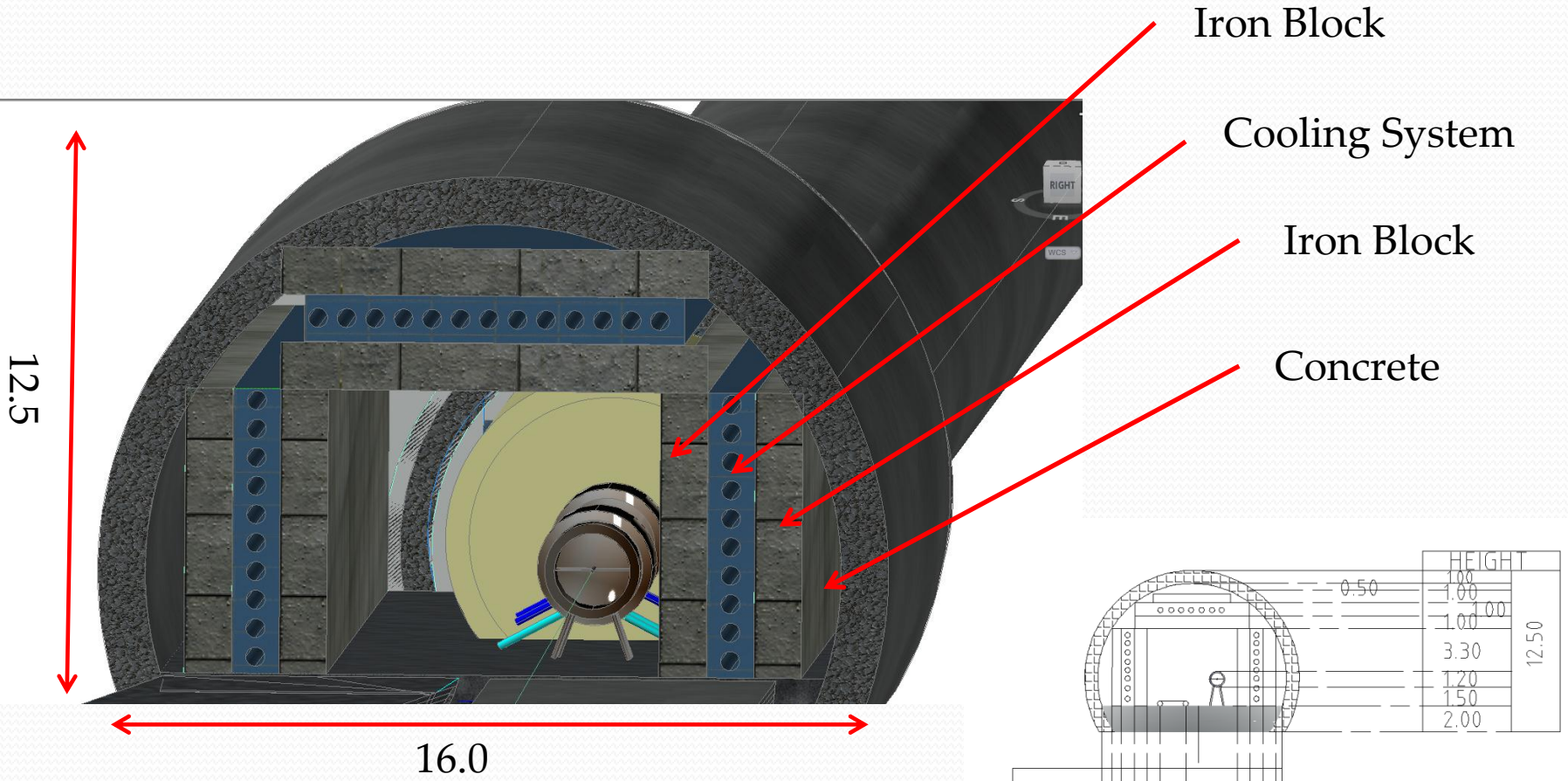
Access to the target area

View without the tunnel

Rails

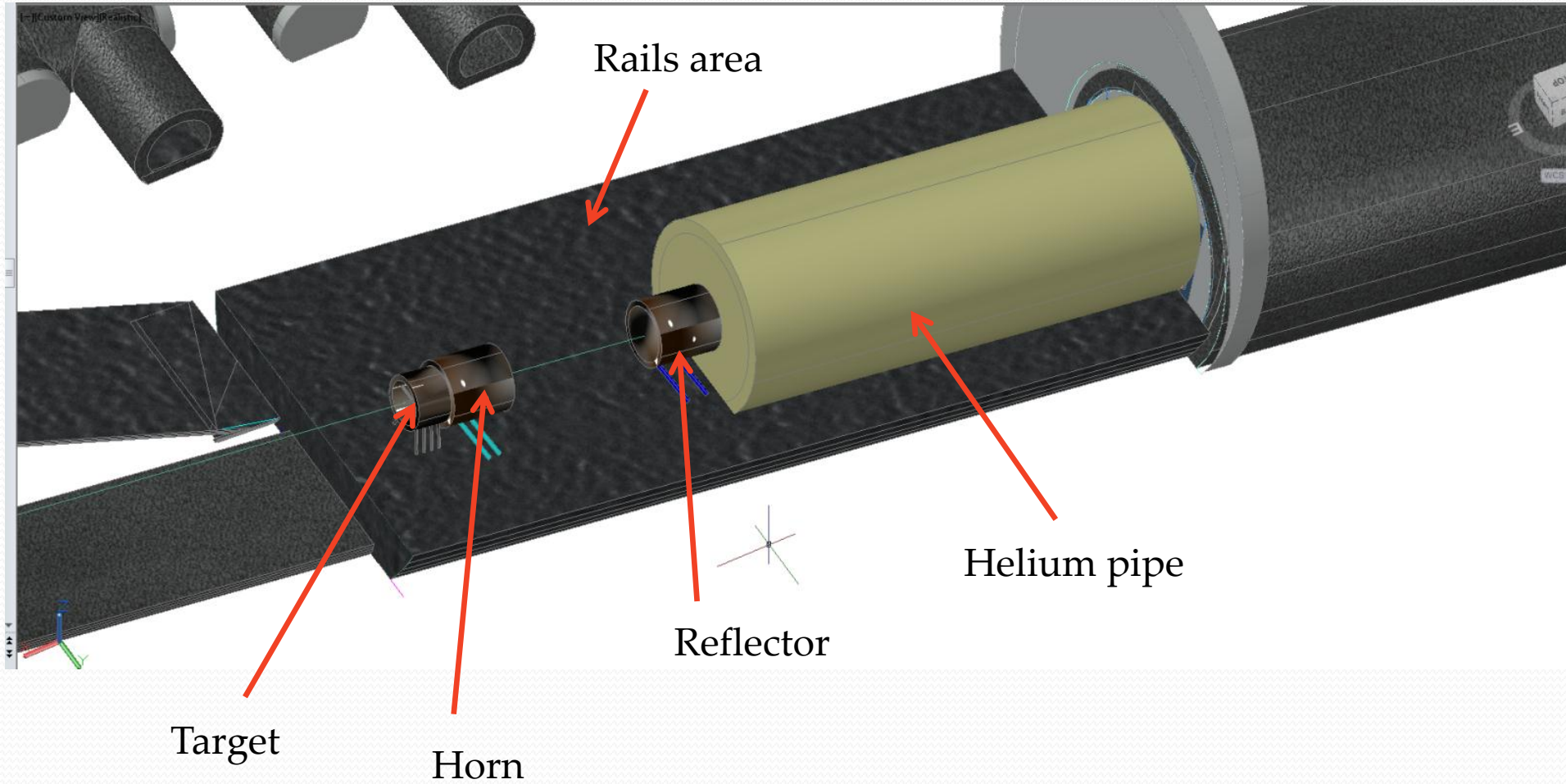


Target Area

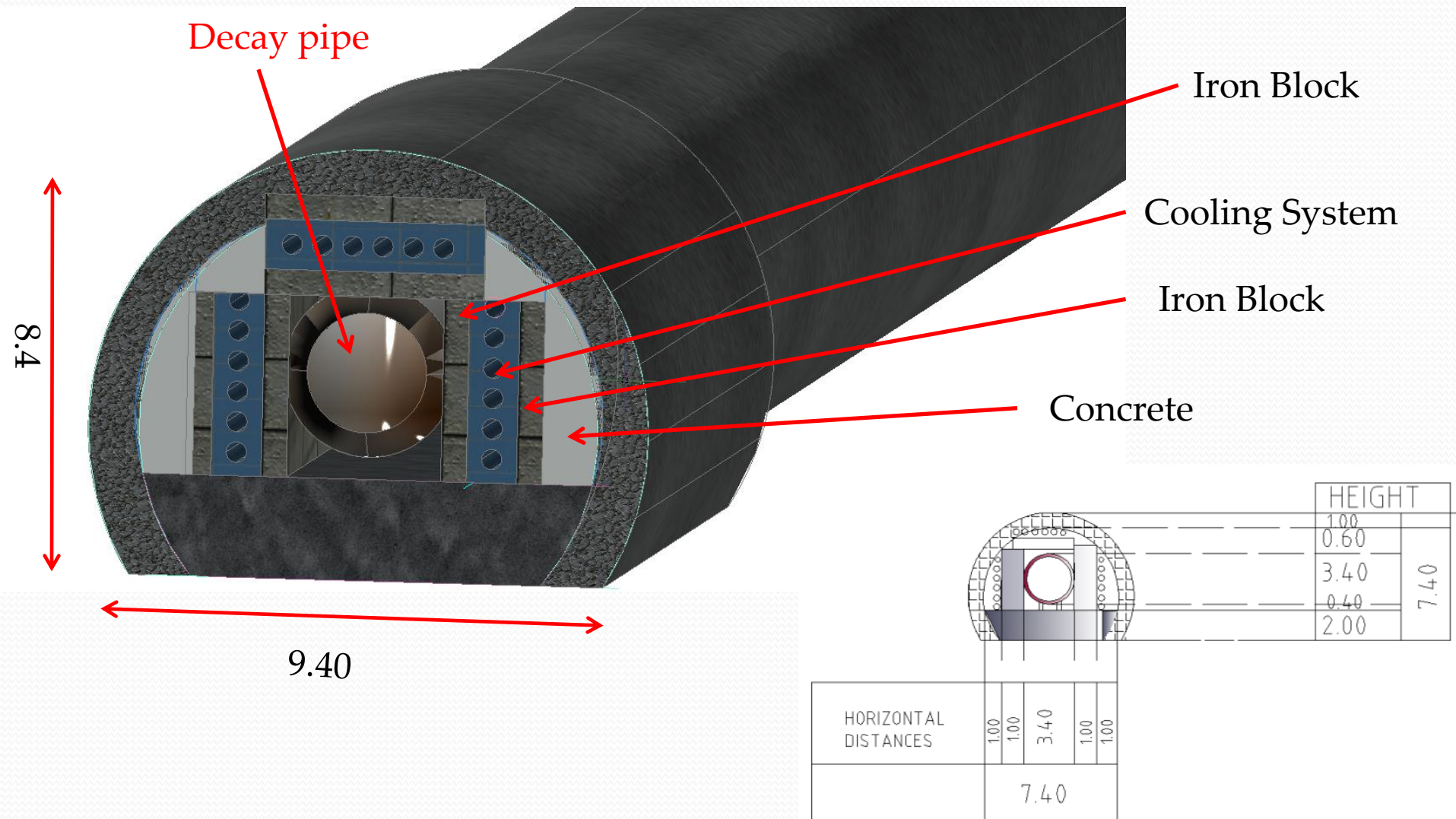


Target area-interior

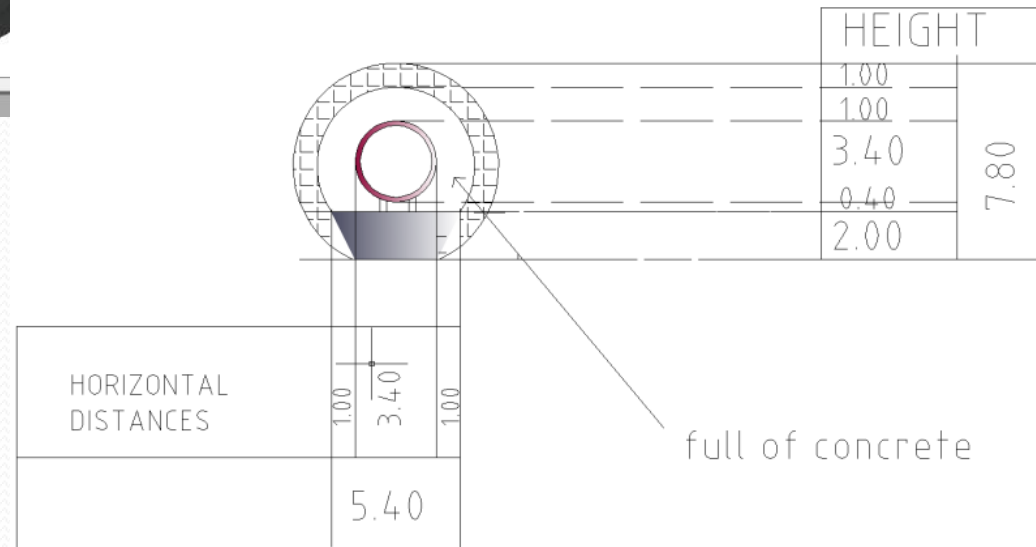
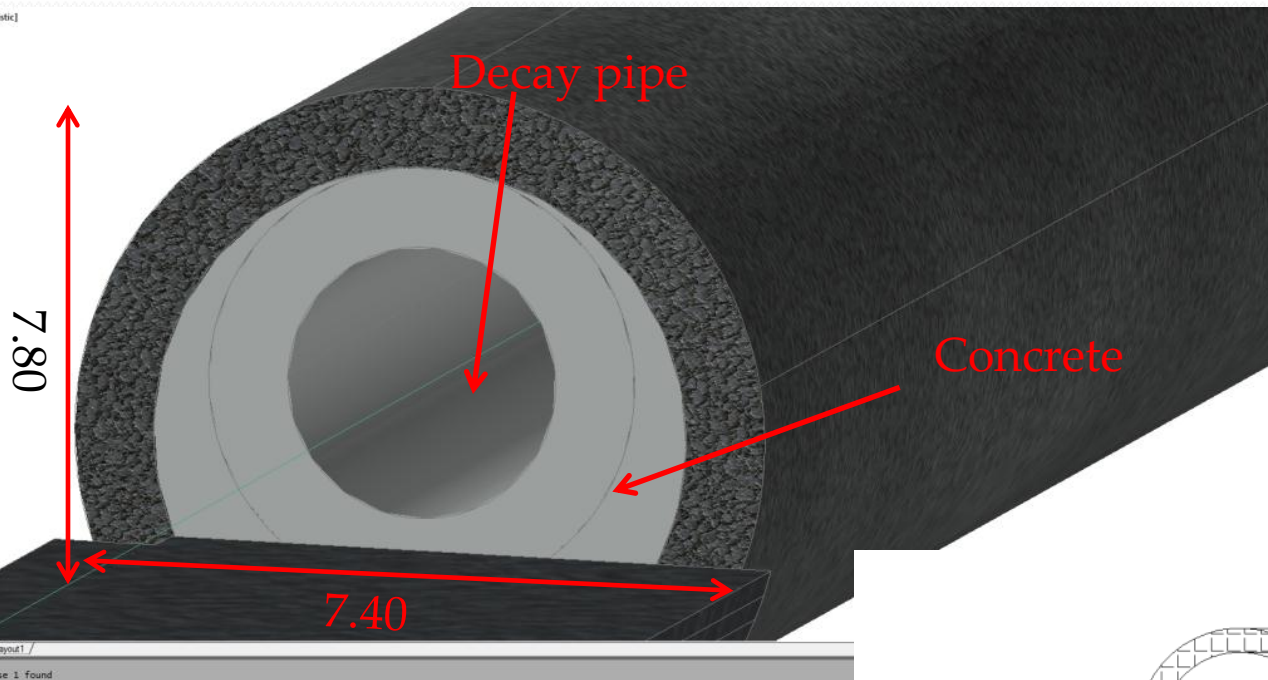
View without the tunnel



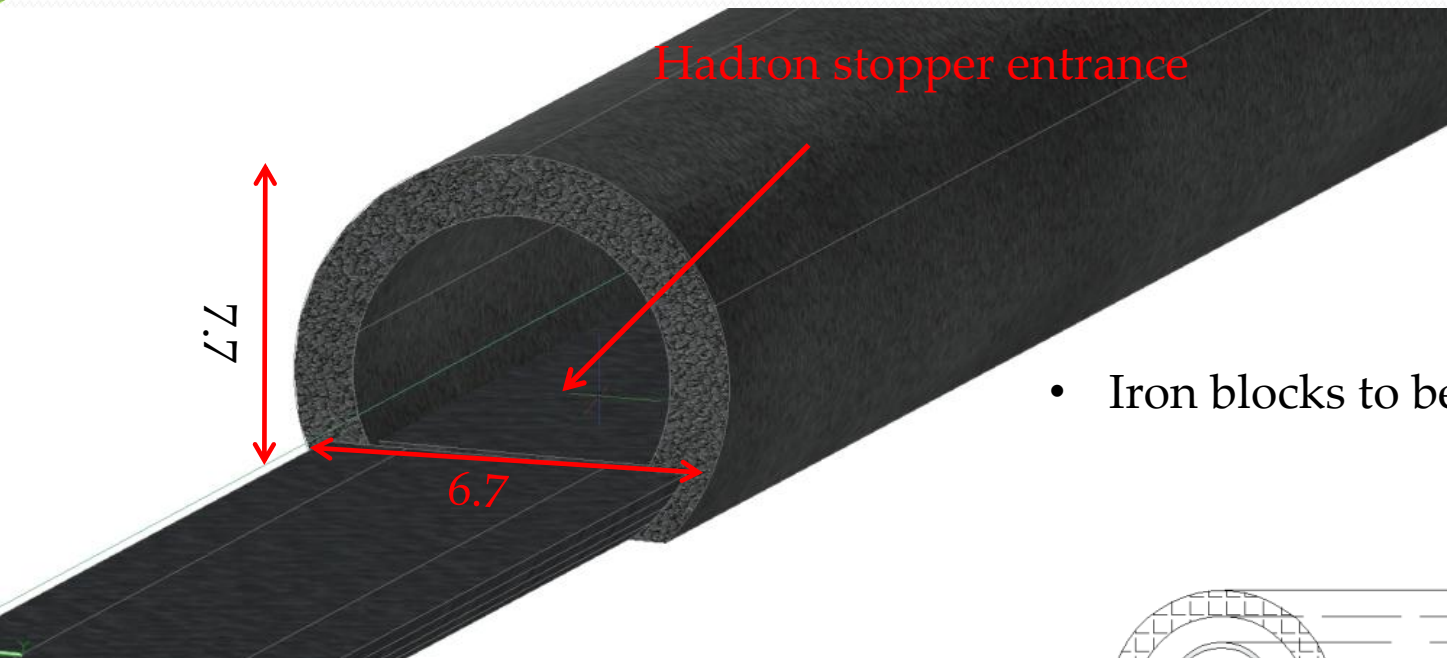
Start of decay tunnel



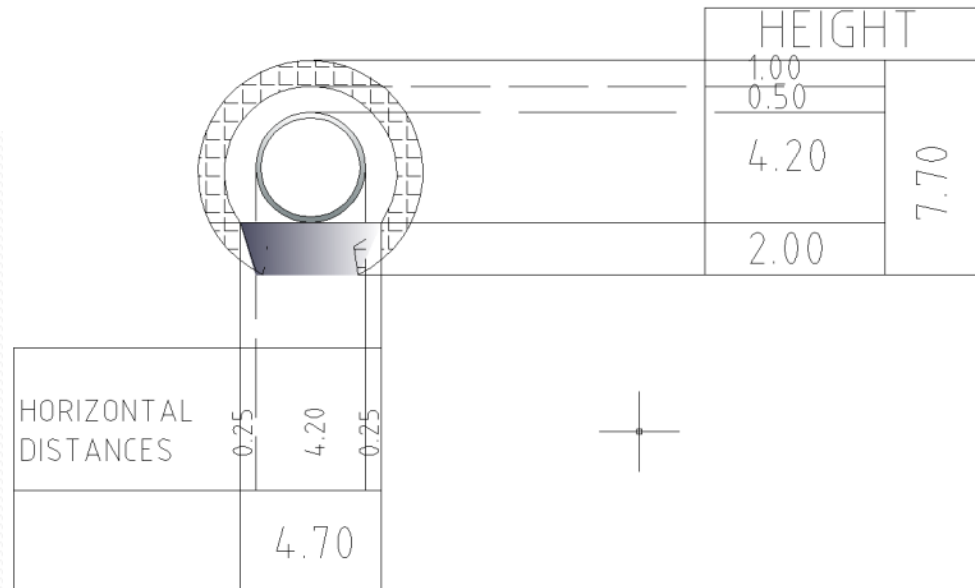
Second Part of Decay tunnel



Hadron stopper



- Iron blocks to be added in the design



Next Steps

- Evaluate other options for the transport zone and service gallery
- Evaluate dimensions
- Cost estimation
- Interior design

Thank you... questions?

Thank
You

