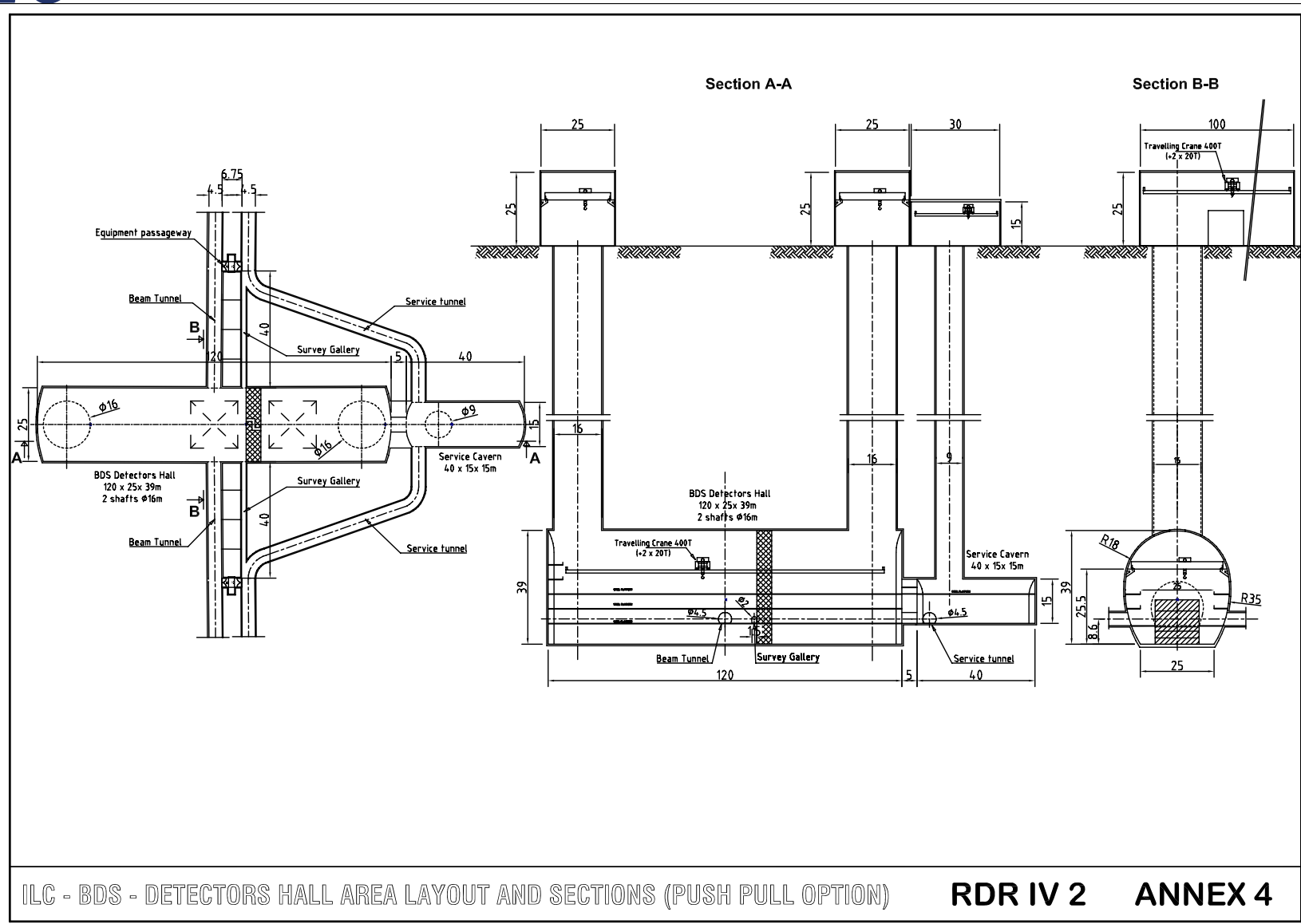


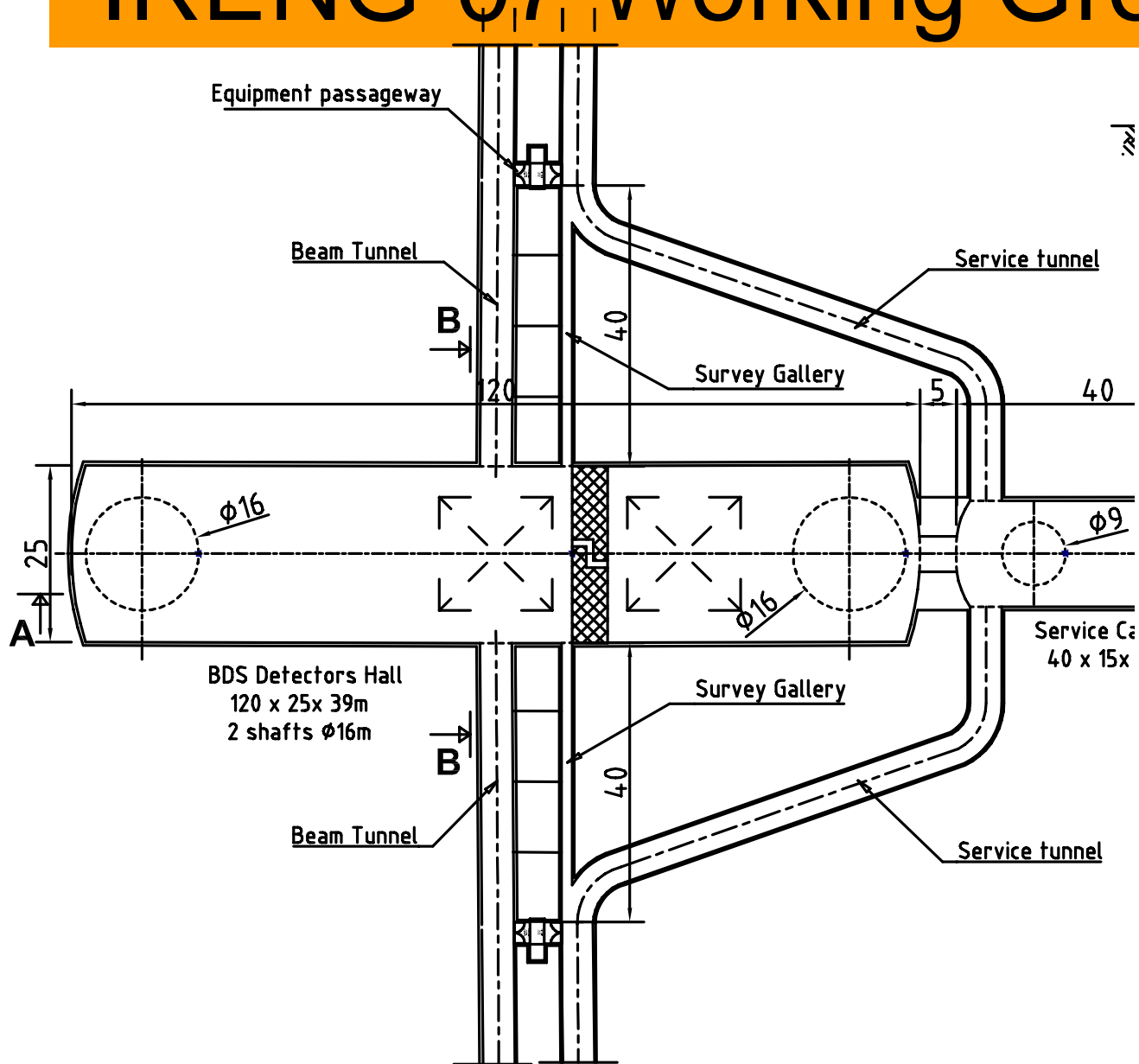


IRENG-07 Working Group C





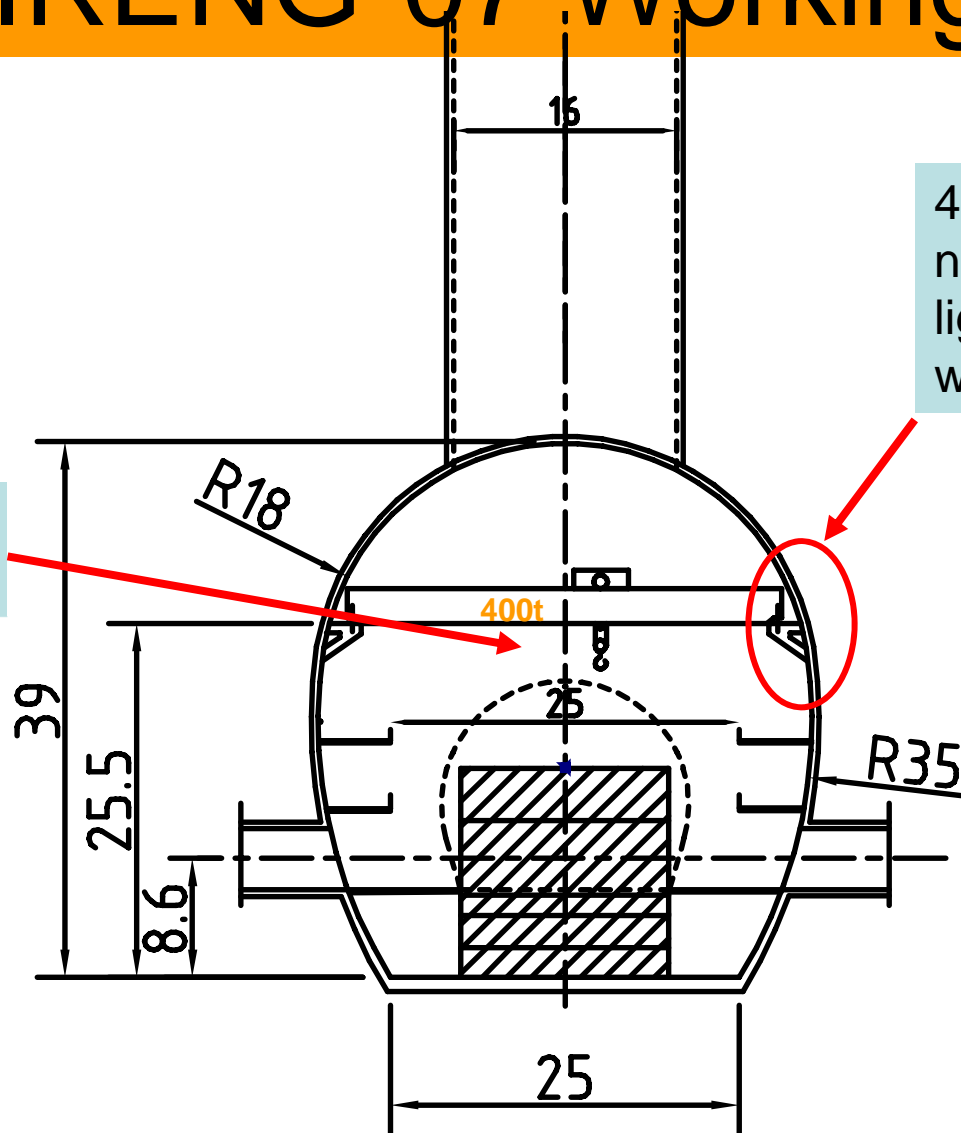
IRENG-07 Working Group C





IRENG-07 Working Group C

Lot of lost space

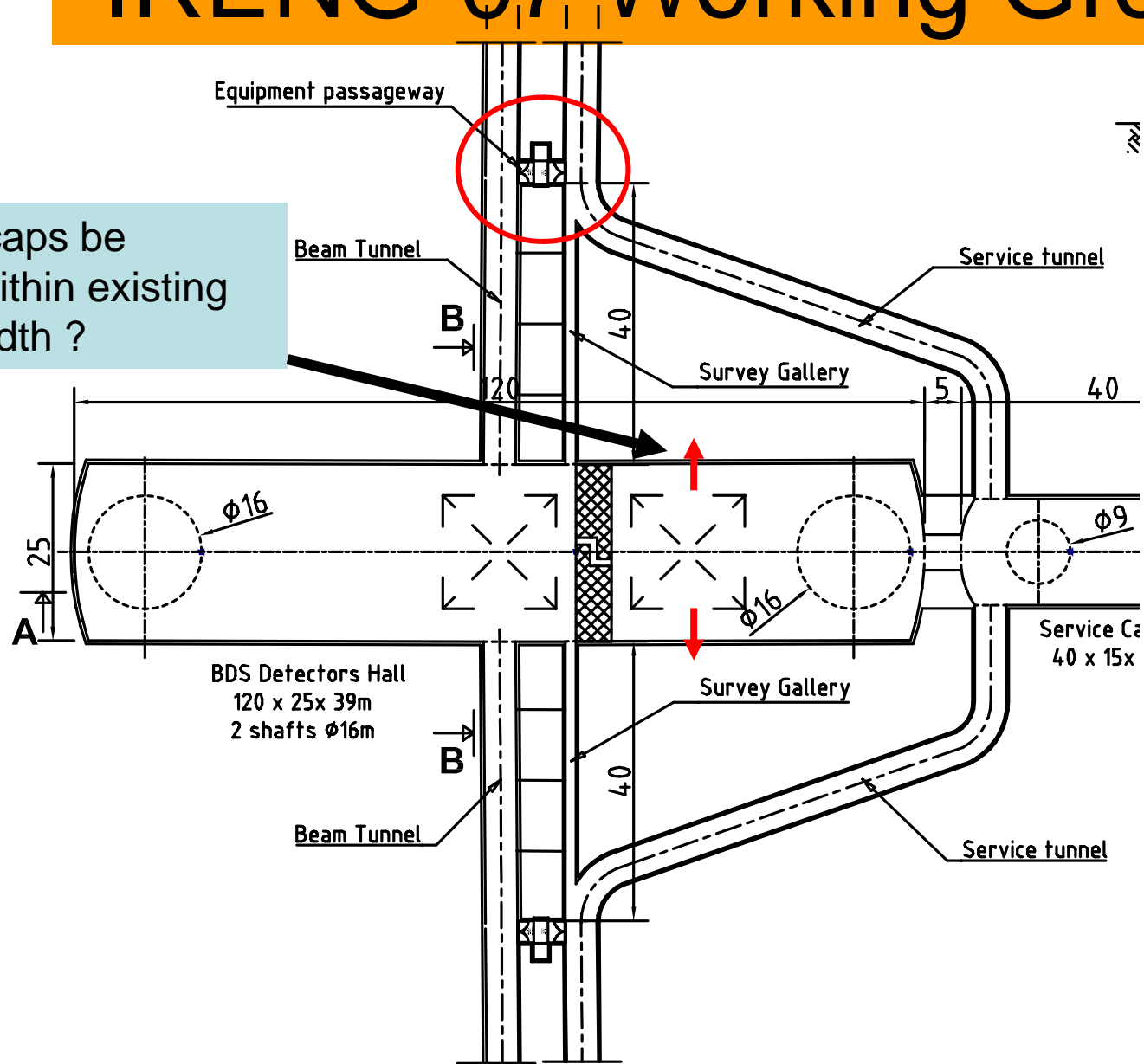


400 ton crane design needs to be checked, most lightly large steel columns will be needed



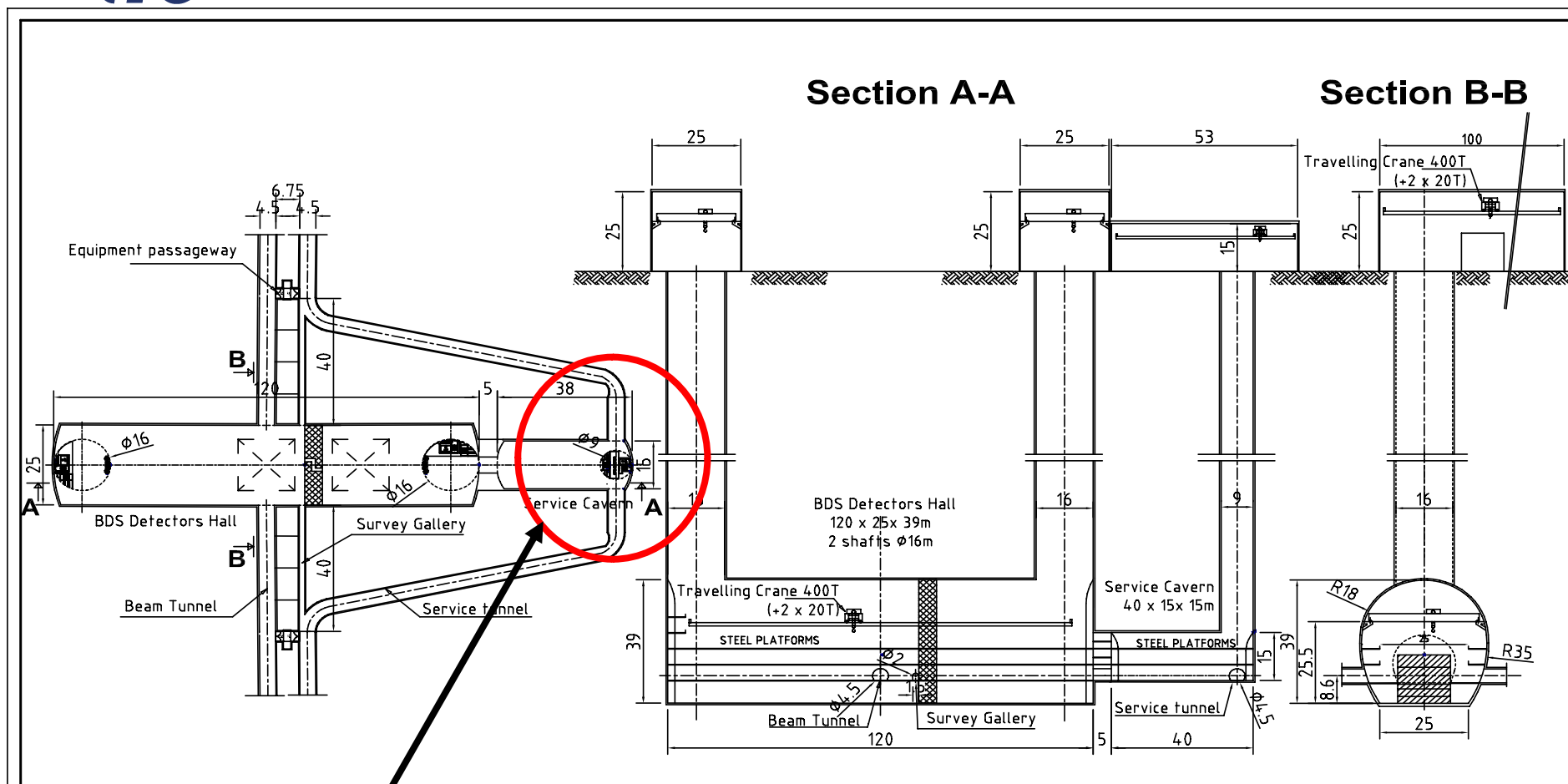
IRENG-07 Working Group C

Can Endcaps be opened within existing cavern width ?





IRENG-07 Working Group C



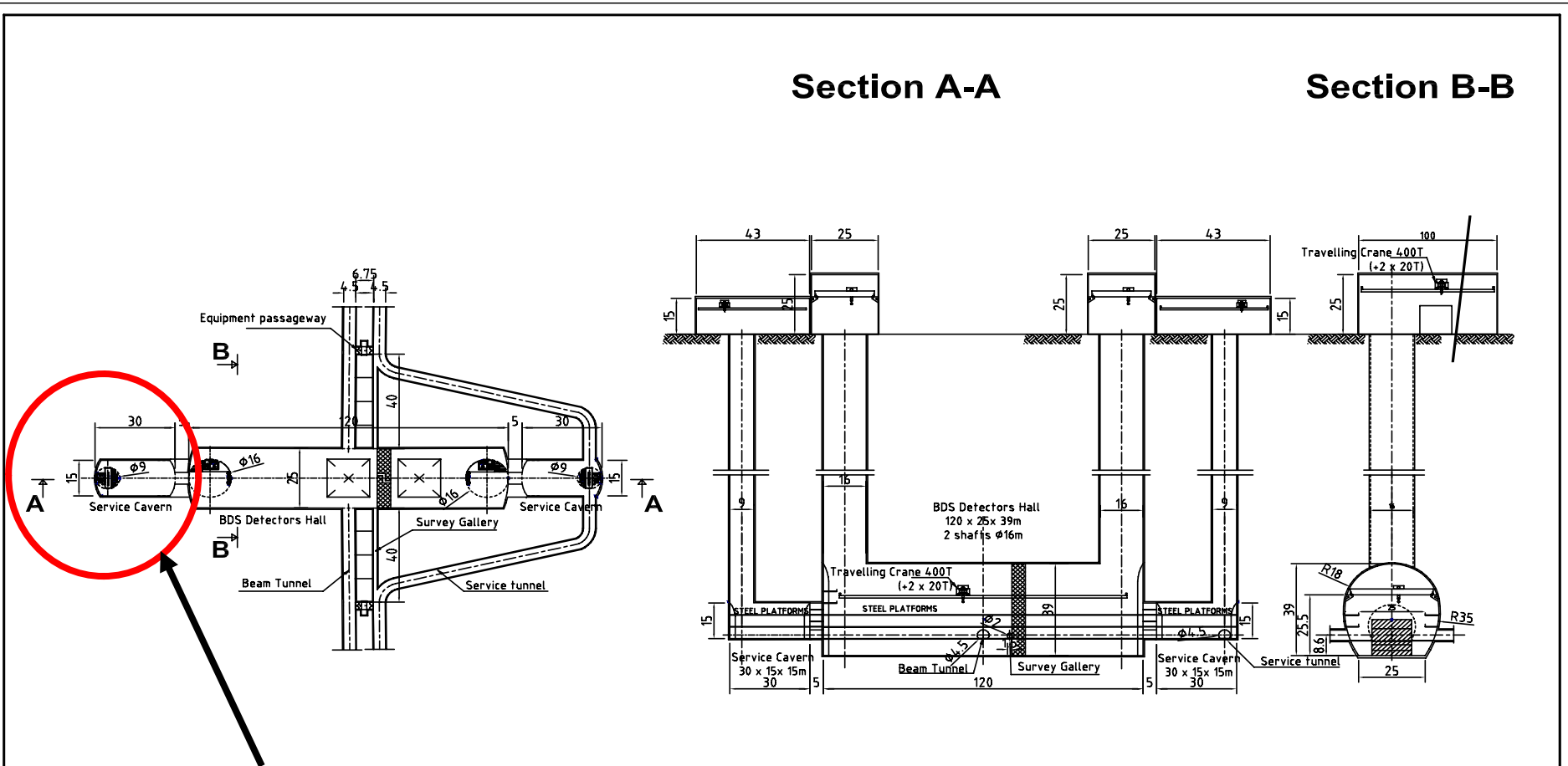
Service Cavern Shaft moved to the end of the cavern ?

Advantages :

- Shaft is over the bypass tunnel to ease machine installation
- Easier passage from detector hall into service cavern.



IRENG-07 Working Group C



Additional Service Caverns 30metres long ?

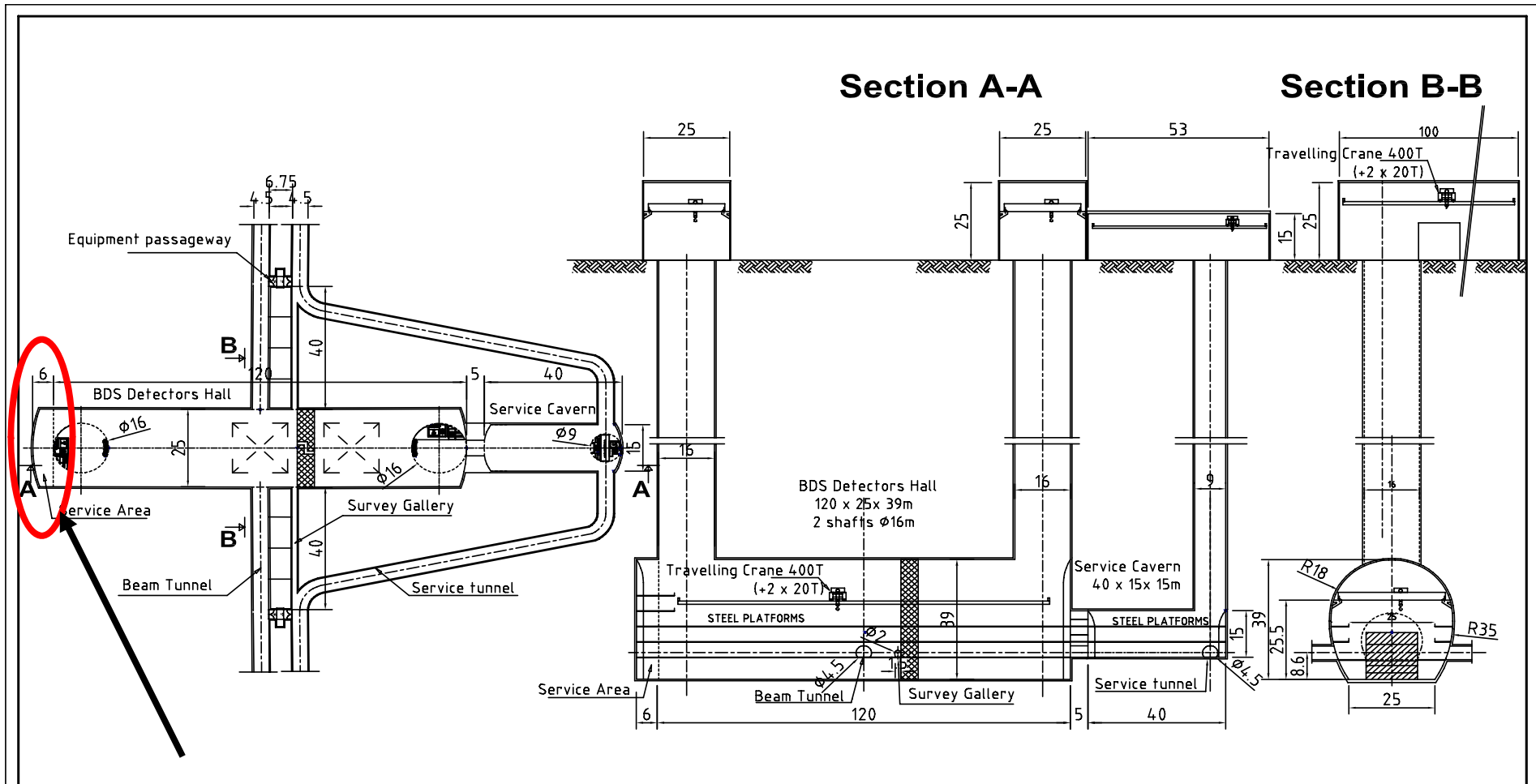
Extra costs for cavern v savings in services need to be assessed

With 2 service caverns, perhaps lifts, staircase could be removed in Exp. Cavern ?

SCALE : 1/1000(A2 FORMAT DATE : 18 JULY 2007
SUPERVISOR : J.LBALDY
DESIGNER : N.BADDAMS ILC-CE-1.1600.0008 2 -



IRENG-07 Working Group C

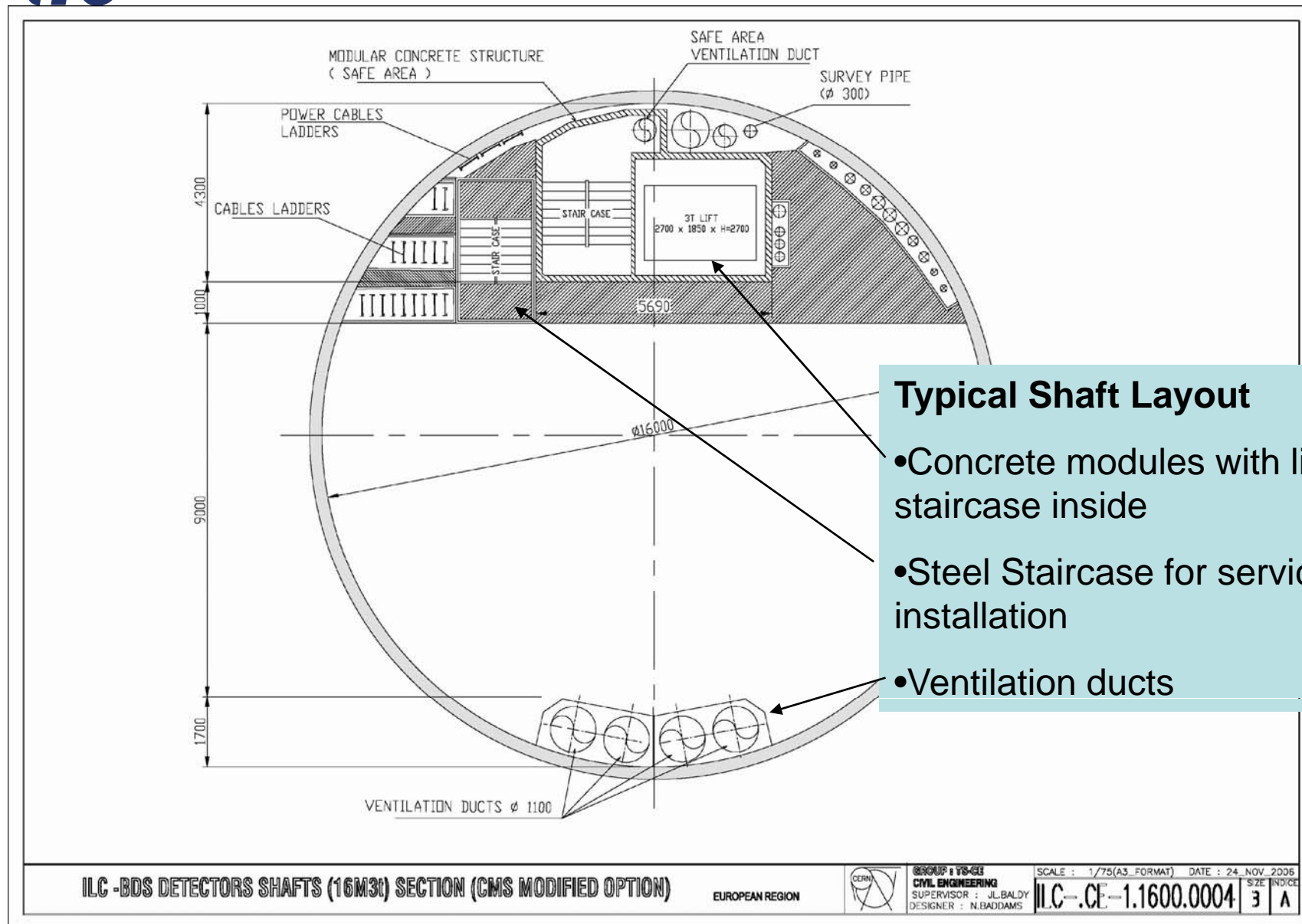


Extend Experimental Cavern by 6metres for Secondary Services such as : magnet electrical cooling circuits (transformer, DC power supply etc), cryogenic and vacuum components for the magnet, cooling water for the skids.....

SCALE : 1/1000 (A2) EDITION DATE : 18 JULY 2007
SUPERVISOR : J.L.BALDY
DESIGNER : H.BADDAMIS
ILC-CE-1.1600.0009 2 -

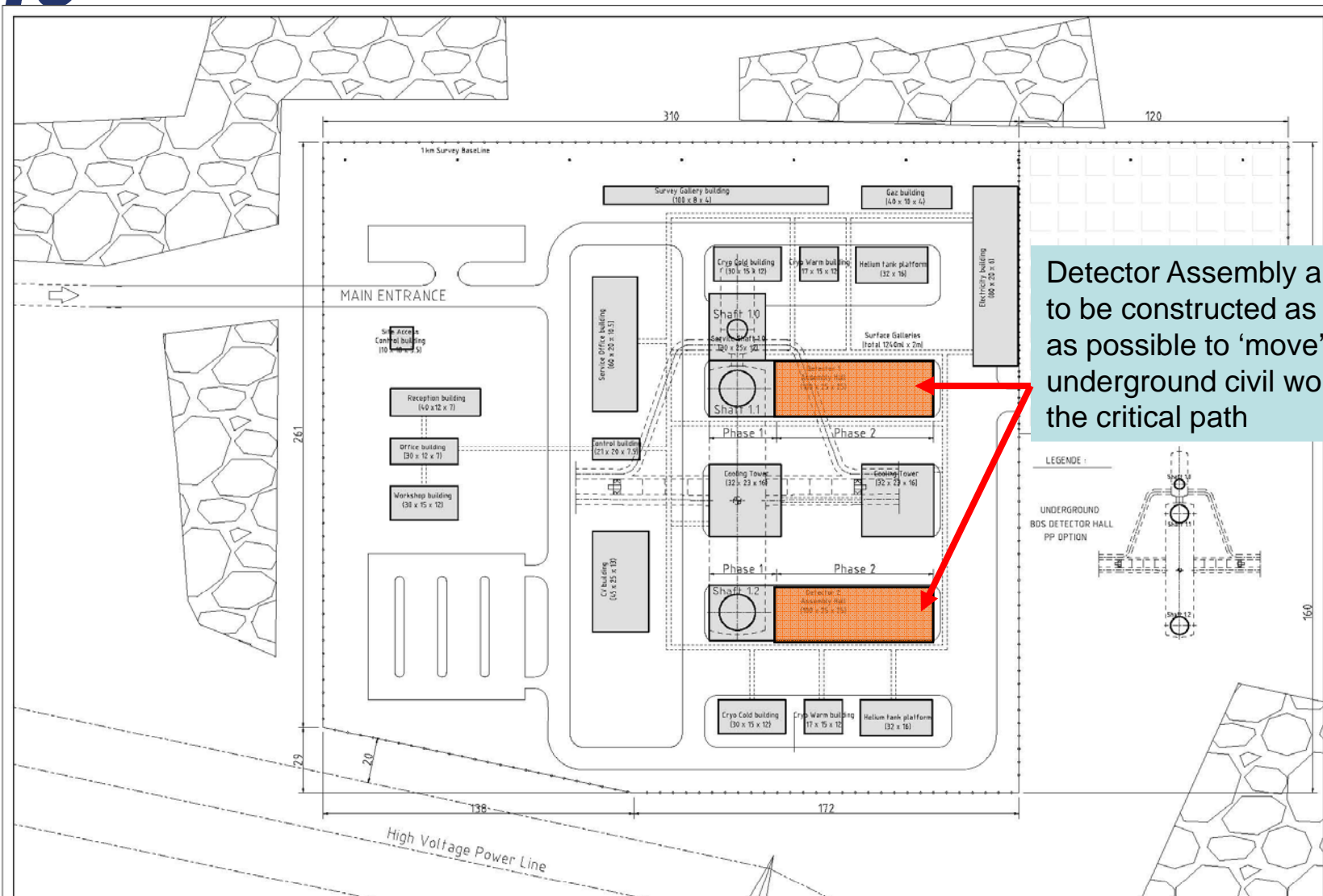


IRENG-07 Working Group C

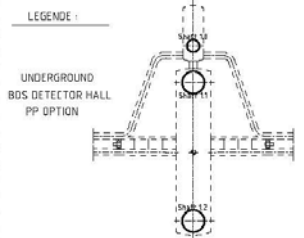




IRENG-07 Working Group C



Detector Assembly areas to be constructed as quick as possible to 'move' underground civil works off the critical path

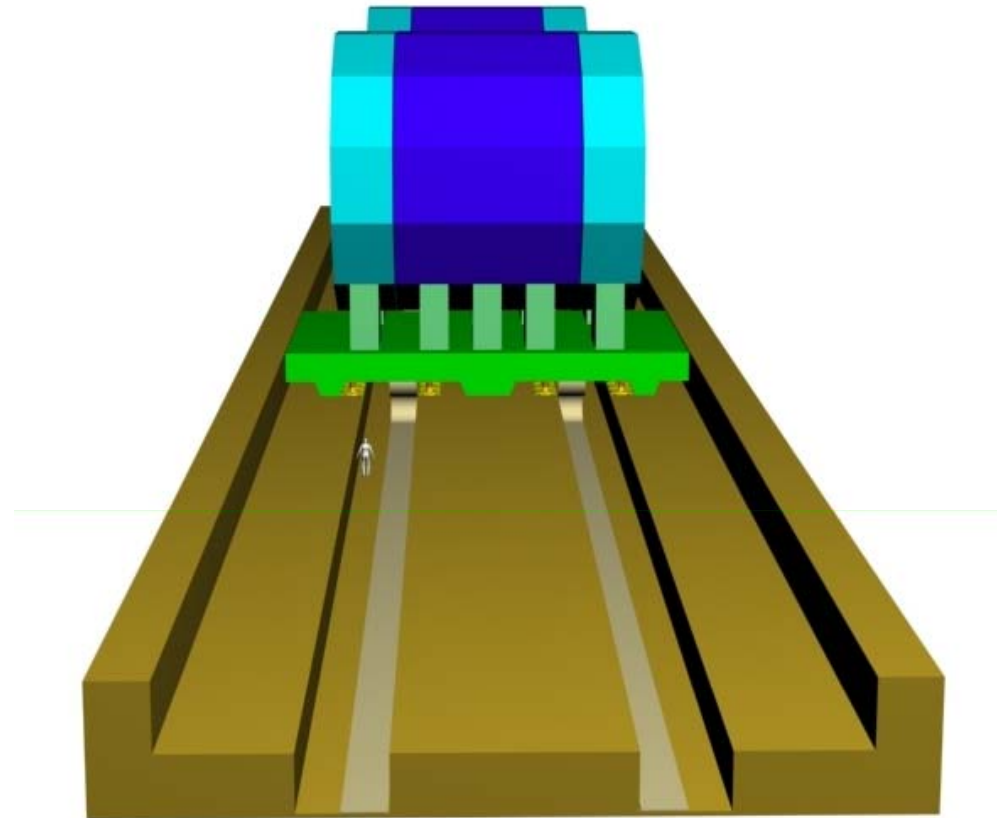


'RDR' Surface Building Layout for Interaction Region

SCALE: 1/1000(A2_FORMAT) DATE: 24 NOV 2006
ILC-CE-1.1650.0001 2 B



IRENG-07 Working Group C



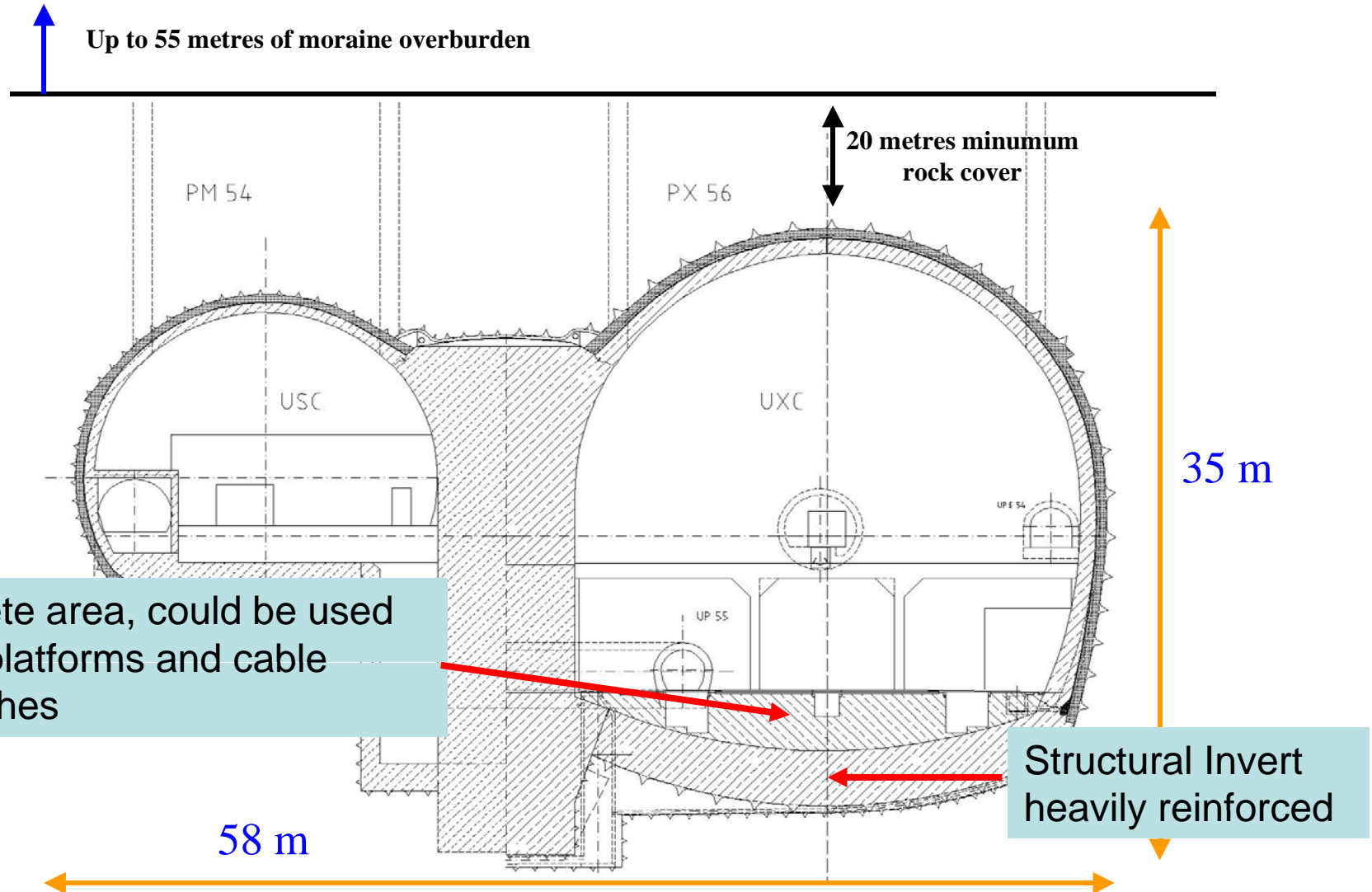
Cable chains : CERN propose at least 2 chains for detector services. (Concept by H.Gerwig & A.Gaddi)

Trenches to be formed in the cavern floor invert (non structural concrete)



IRENG-07 Working Group C

Section through cavern complex at point 5





IRENG-07 Working Group C

Conclusions / Comments

- Infinite number of Civil Engineering layouts possible : Feedback needed from Detector Communities at SLAC Workshop, to 'advance' the design.
- 'Concept' layouts & alternatives could be presented at SLAC Workshop to stimulate discussion and provoke Value Engineering exercises eg Two service caverns.
- Would it be useful to develop concept drawings for SLAC ?, indicating :
 - Surface Assembly / Sliding shaft cover
 - Underground Moving Platforms