

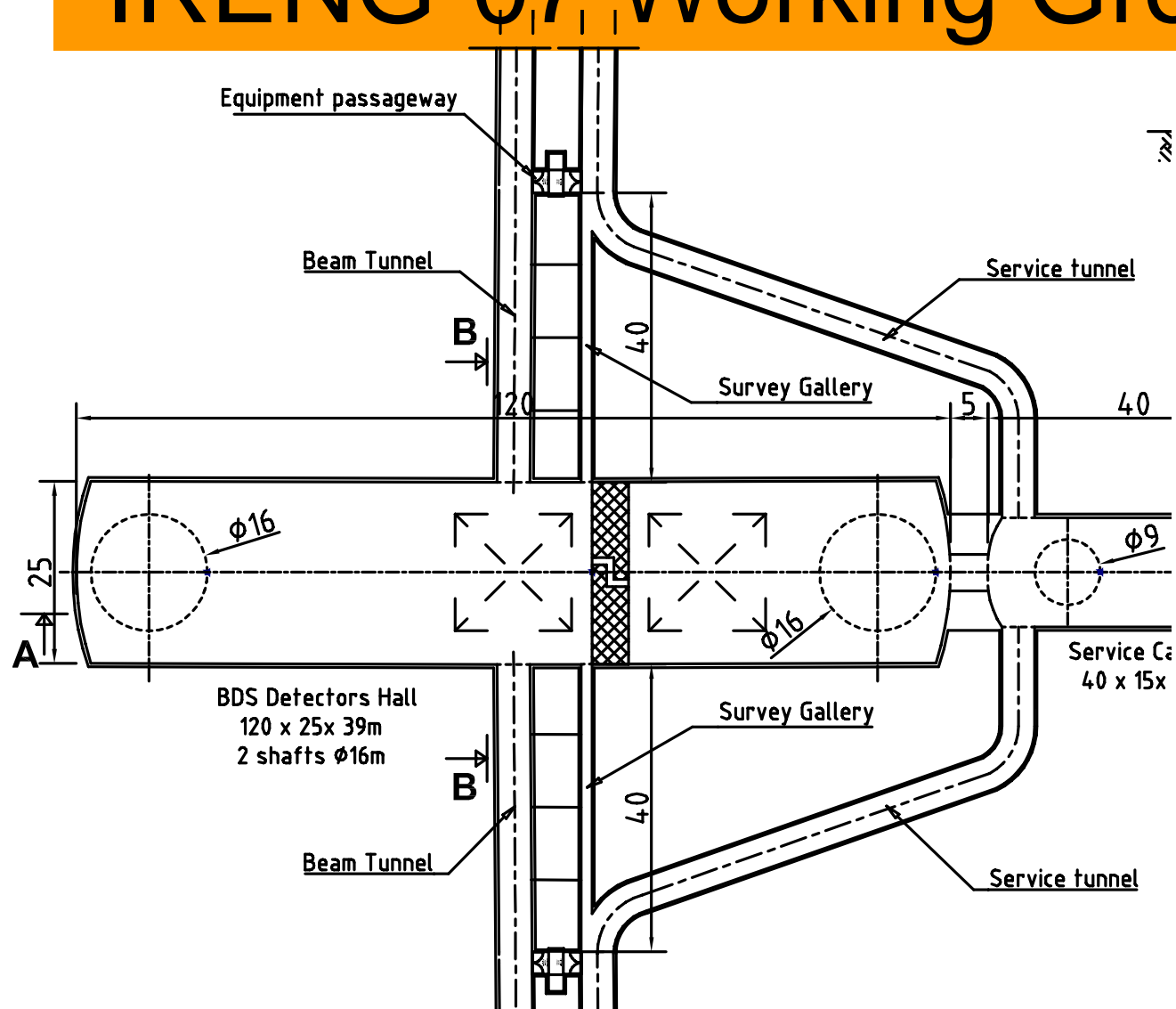


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Interaction Region Alternative Layouts



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**RDR Baseline Layouts for
Interaction Region**



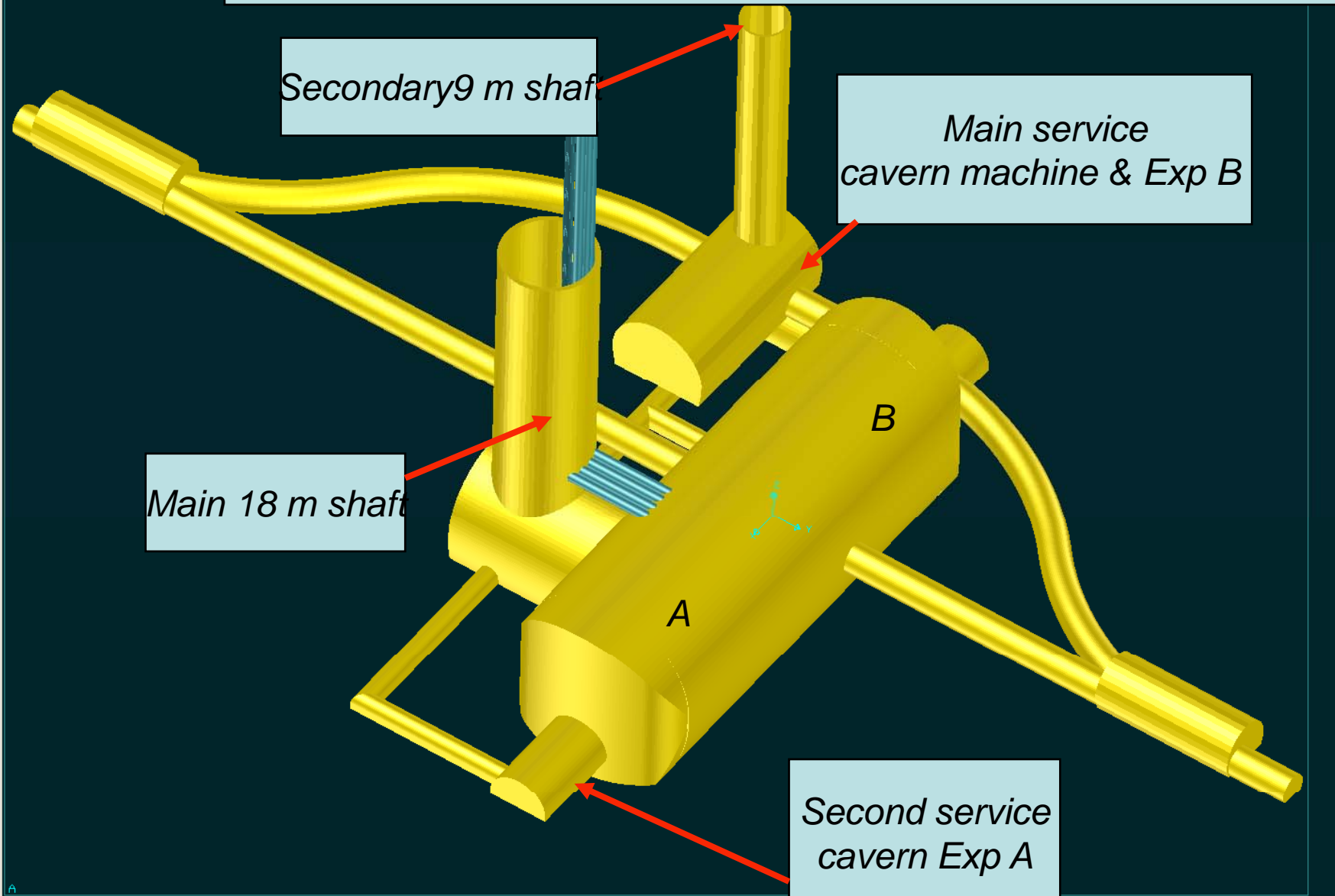
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- Why Single Shaft Alternative:
 - Cost savings for civil engineering (approx. \$10million)
 - Can simultaneously perform lowering in shaft and normal work in Experimental Cavern



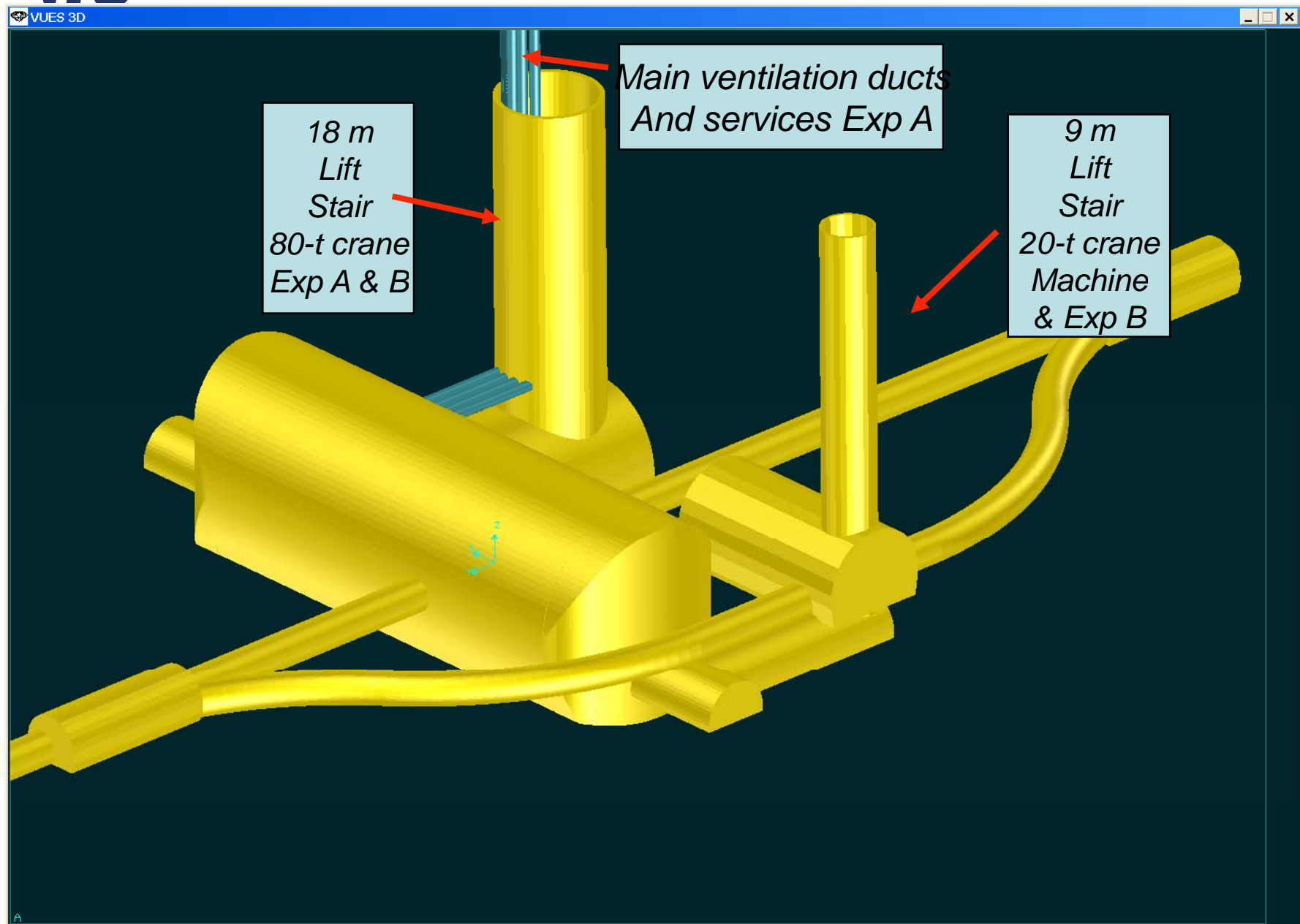
VUES 3D

General view of Proposed One Shaft Option



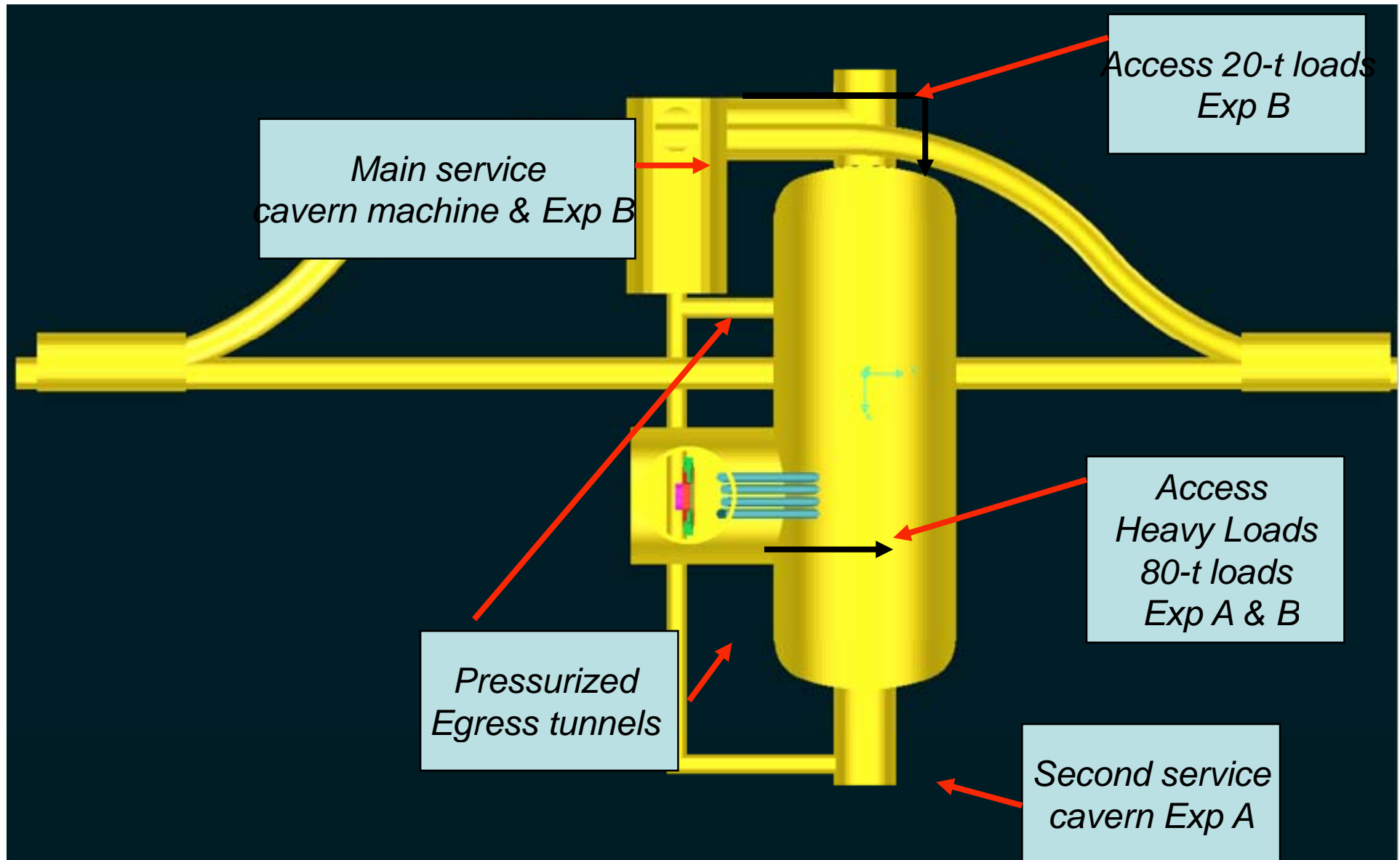


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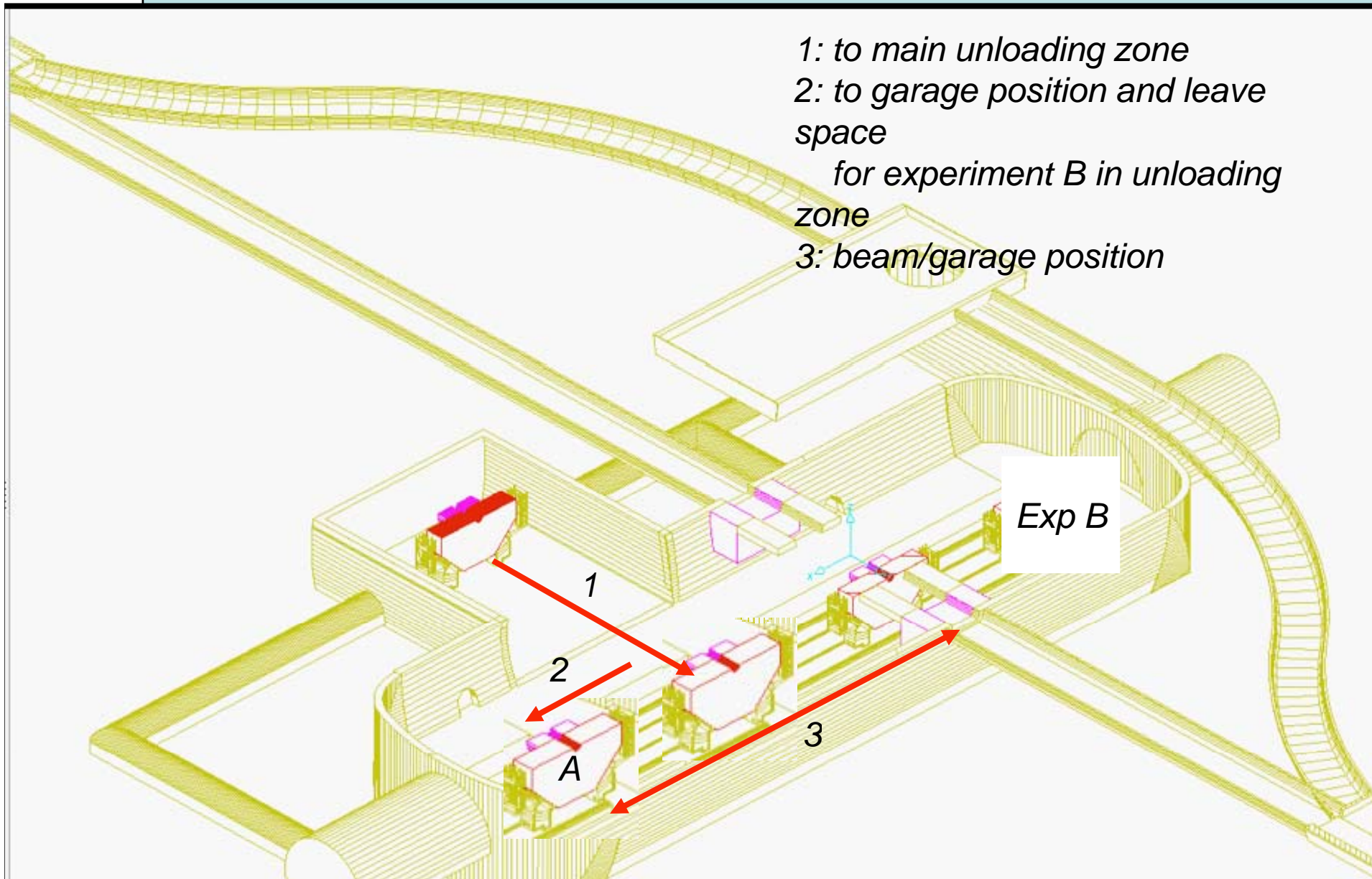
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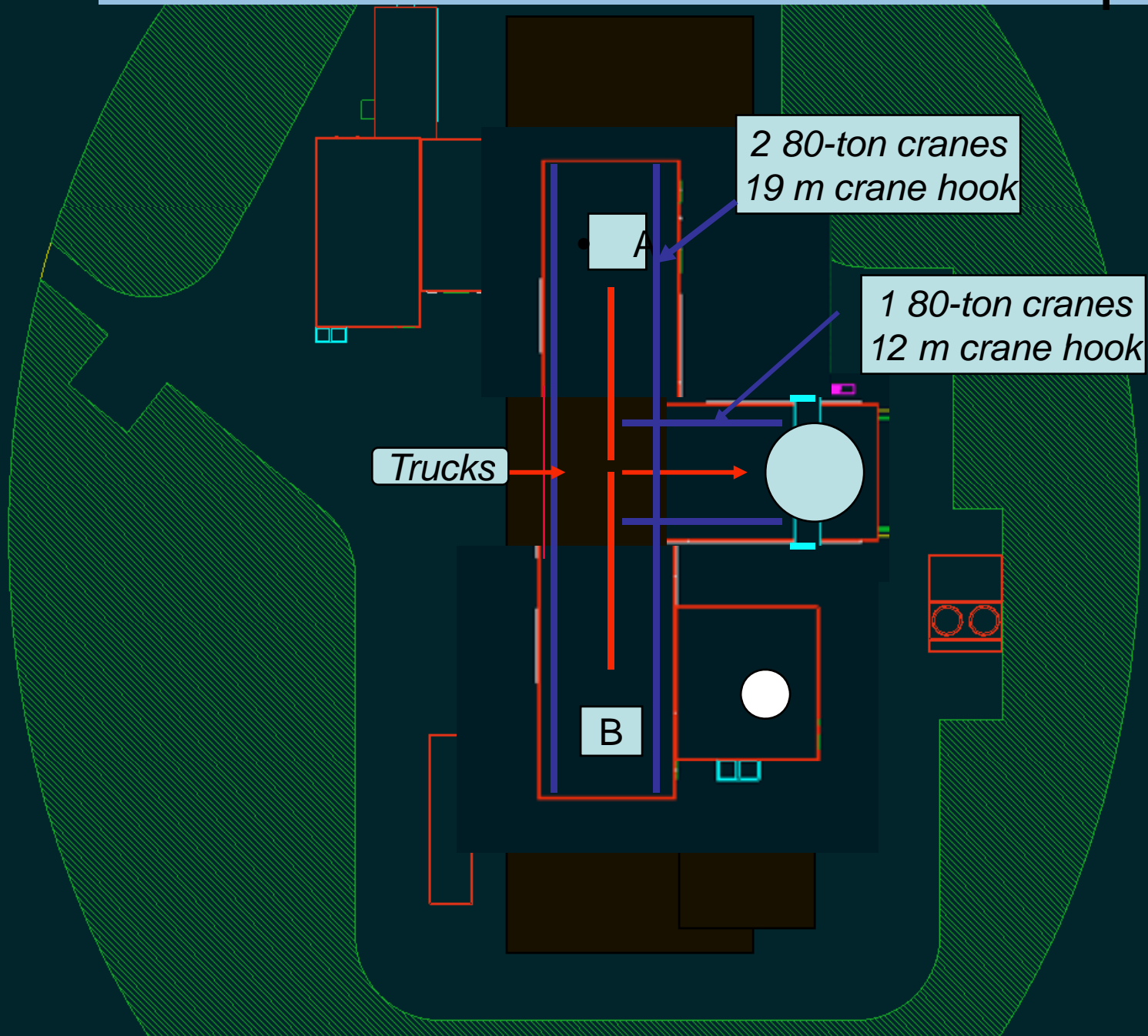


Movements of Experiment A

- 1: to main unloading zone
- 2: to garage position and leave space for experiment B in unloading zone
- 3: beam/garage position



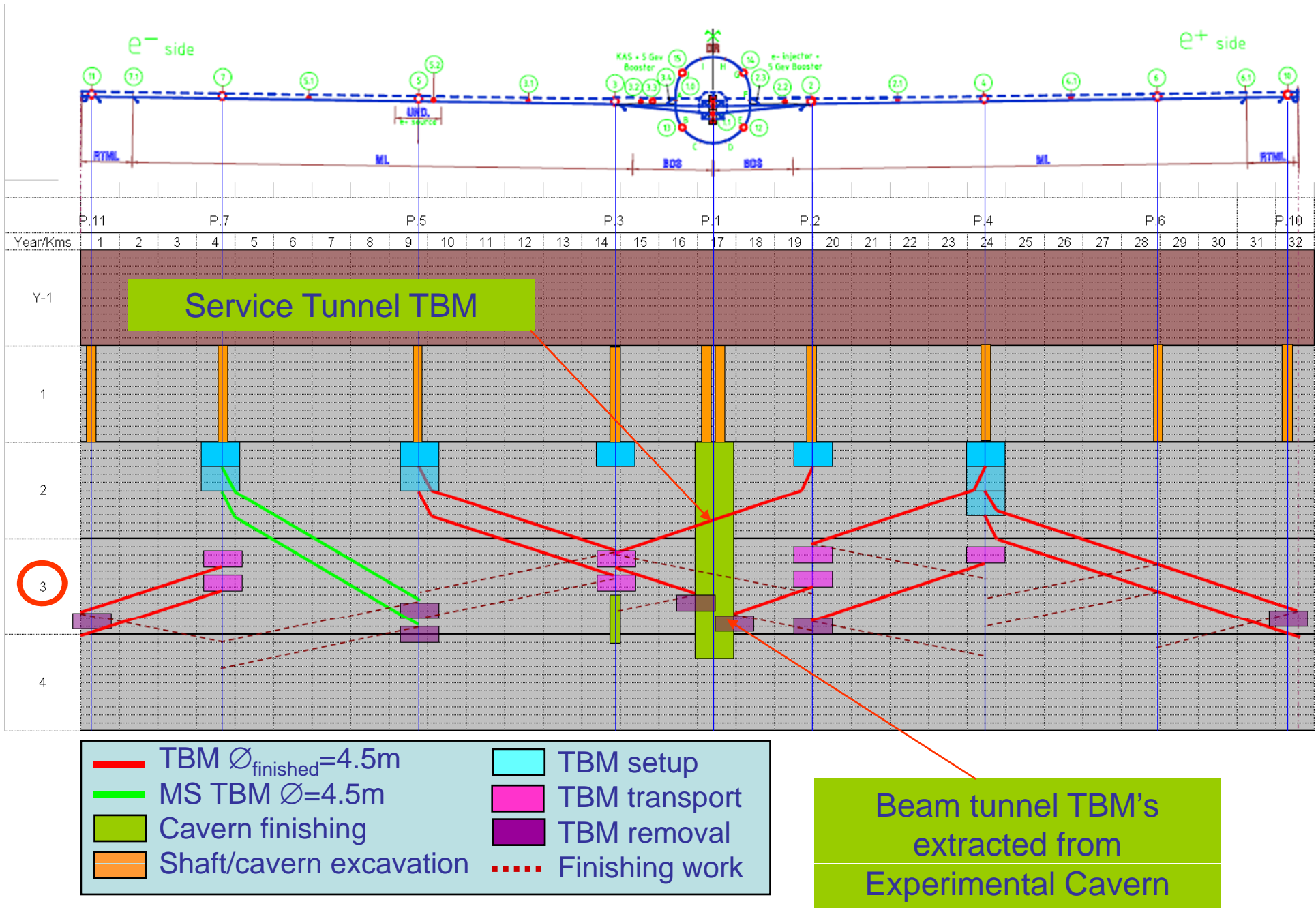
Surface Area for One Shaft Option

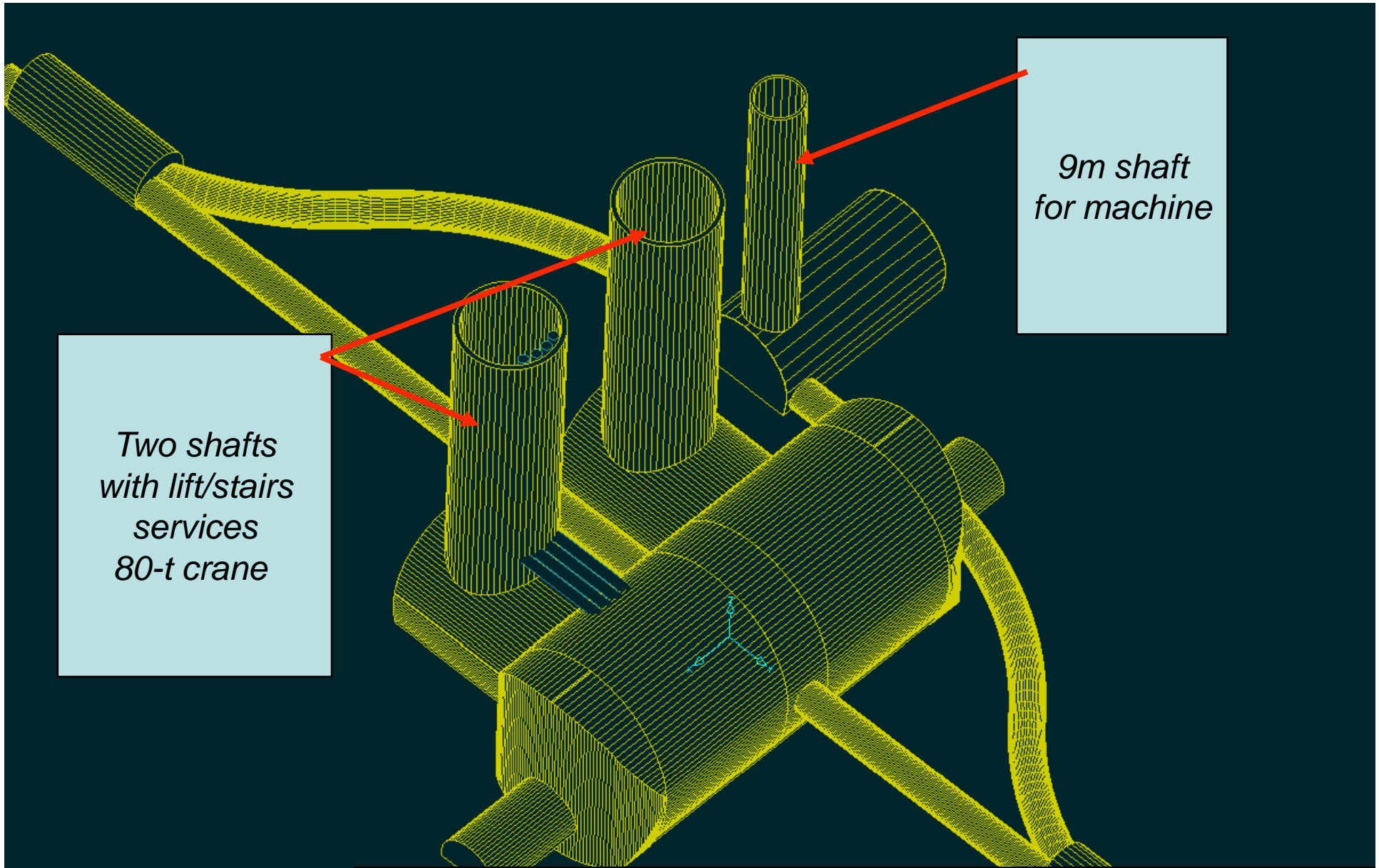




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- Disadvantages of single shaft Option :
 - Detector B is in a less favorable position
 - If Detector B needs ‘major’ repairs, neither detector could be on-line (eg magnet removal)
 - Lifts & staircase have to be included in experimental shaft
 - If delays incurred both TBM’s could arrive at experimental cavern at the same time, more flexibility with 2 shafts for finishing works/fitting out

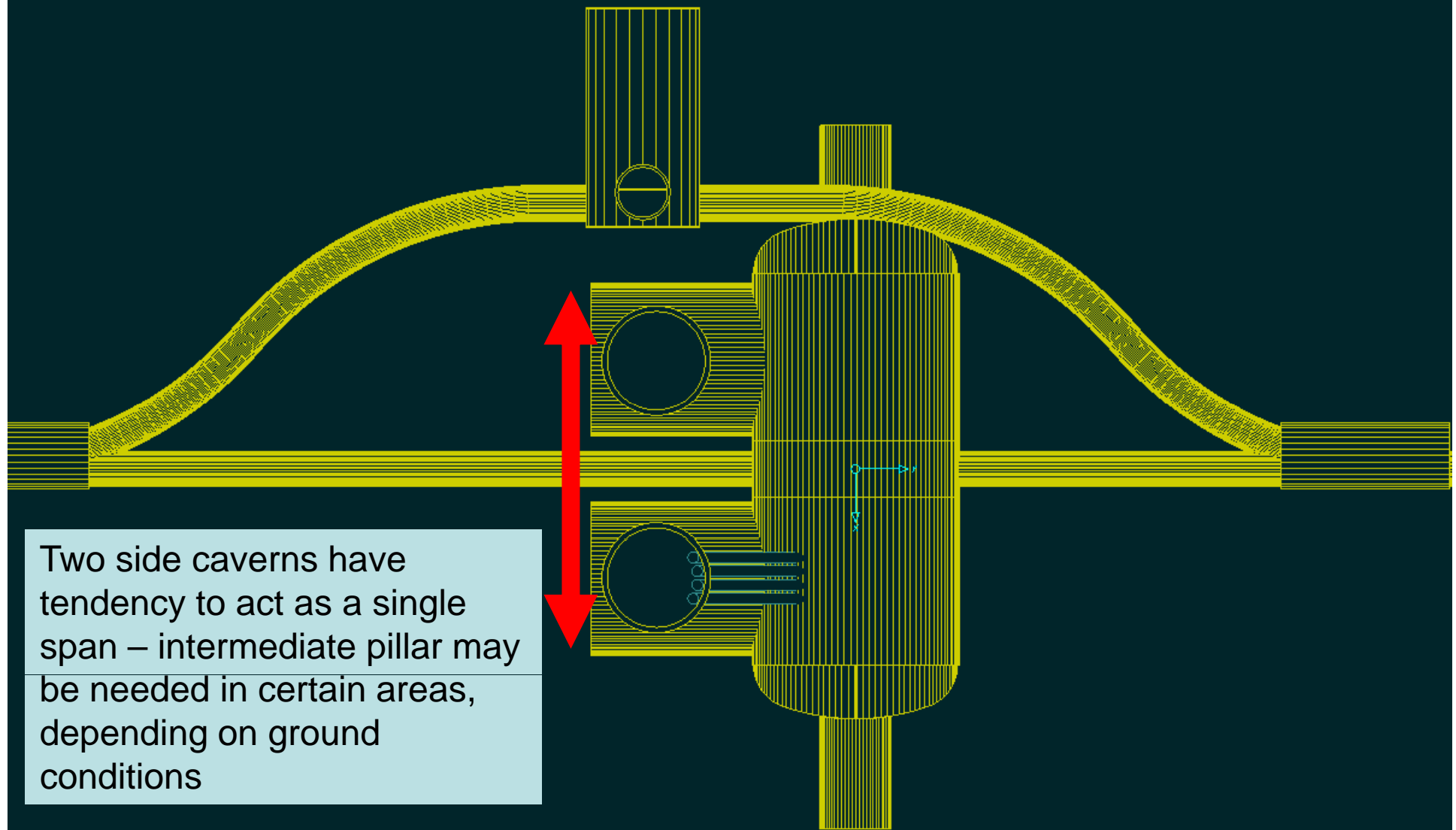




*9m shaft
for machine*

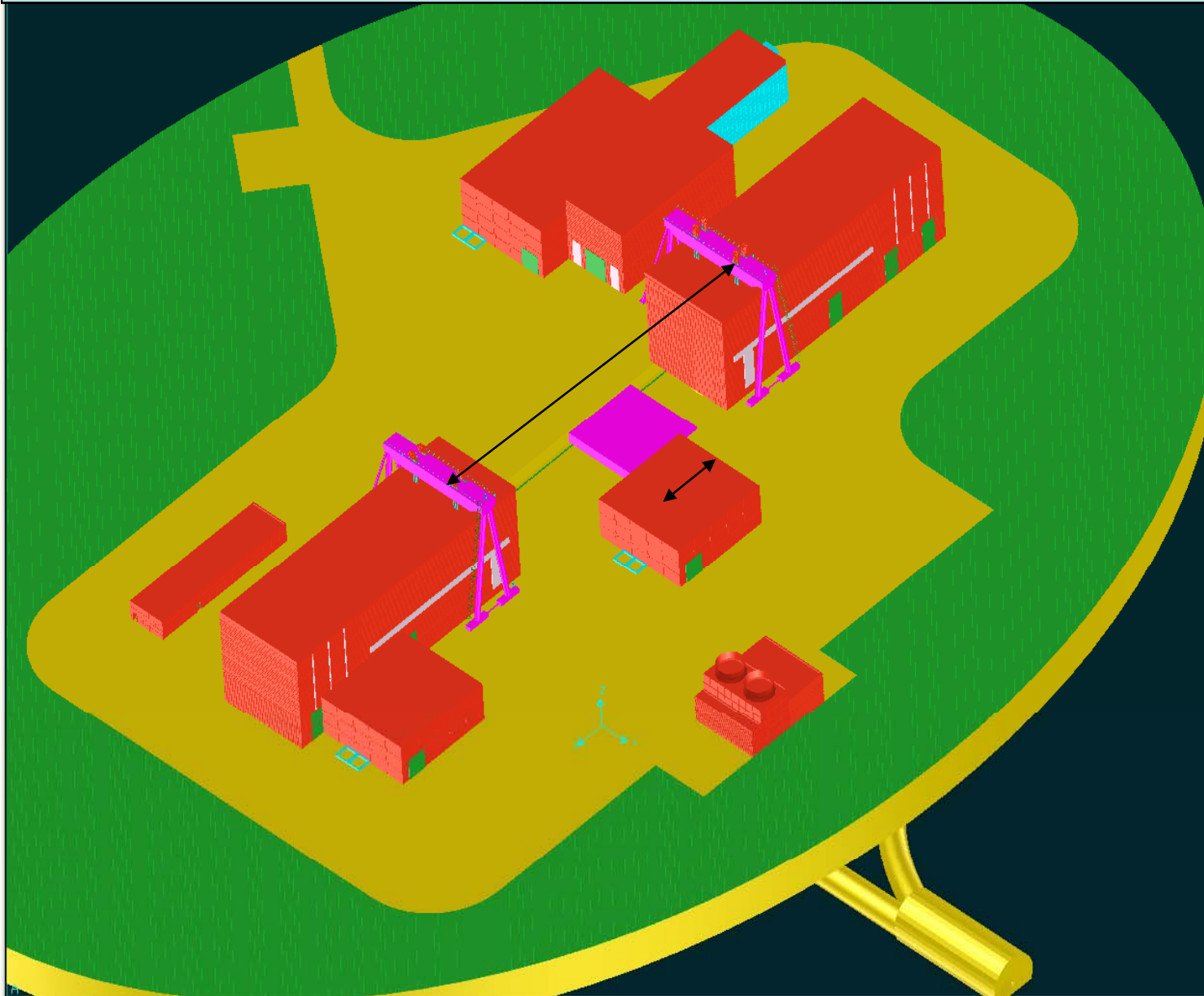
*Two shafts
with lift/stairs
services
80-t crane*

General view of Proposed Off-set Twin Shaft Option



Two side caverns have tendency to act as a single span – intermediate pillar may be needed in certain areas, depending on ground conditions

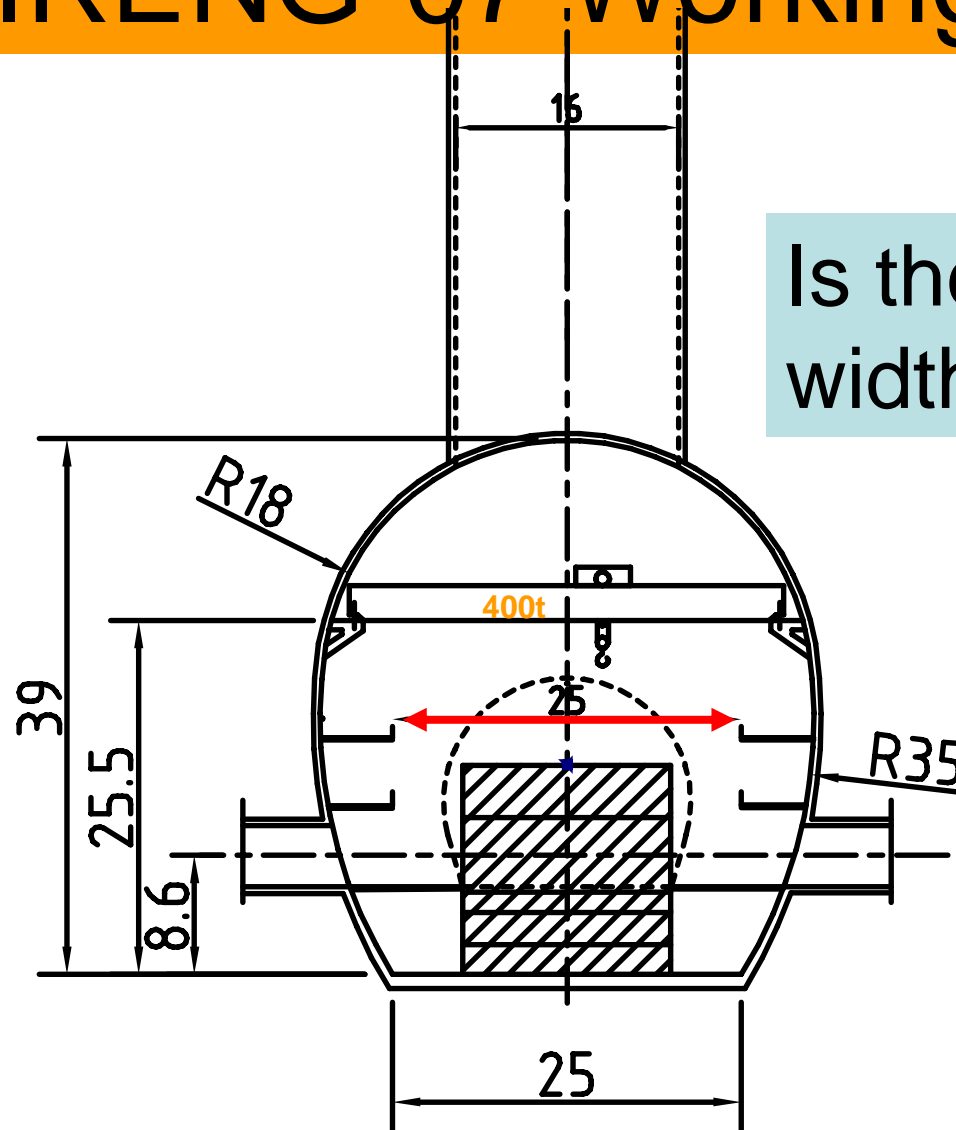
*Surface area would be a variation of what has been looked at
with less distance between the shafts*





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Is the RDR cavern width enough ?



GLDC in beam position v1

EXPERIENCE FERMEE
SUR FAISCEAU

10ton gantry crane

