

# Civil Engineering, Infrastructure & Siting (CEIS) Working Group Introduction



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# PiP Status Update



- Figures for the CLIC PiP
  - Civil Engineering

# Civil Engineering figures

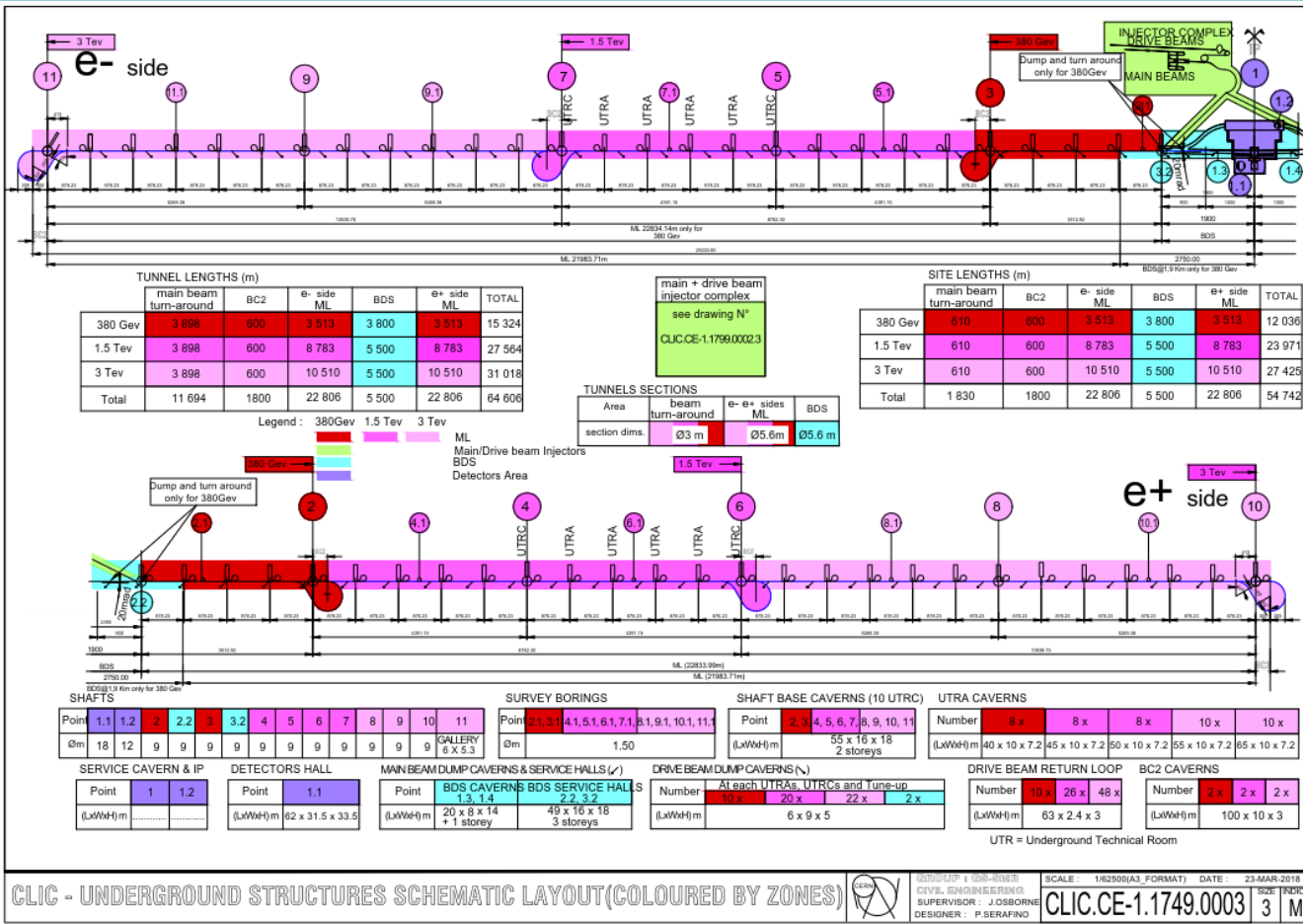


Figure 6.1

- Lengths of all tunnels correct?
- Cross-checked with beam lines as the lengths have changed multiple times.
- Difficult to read everything in the PiP, potential to reference EDMS document for a full scale Drawing



# Civil Engineering figures

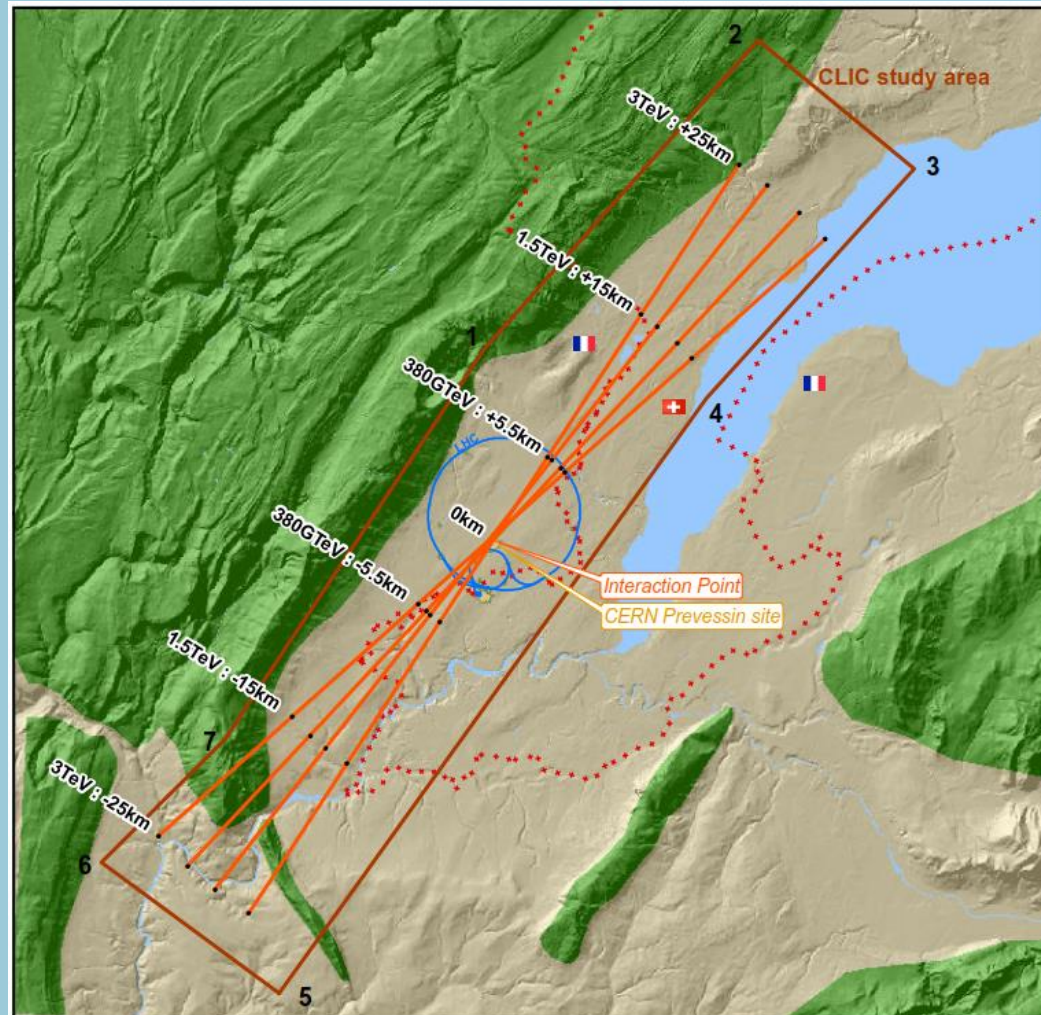
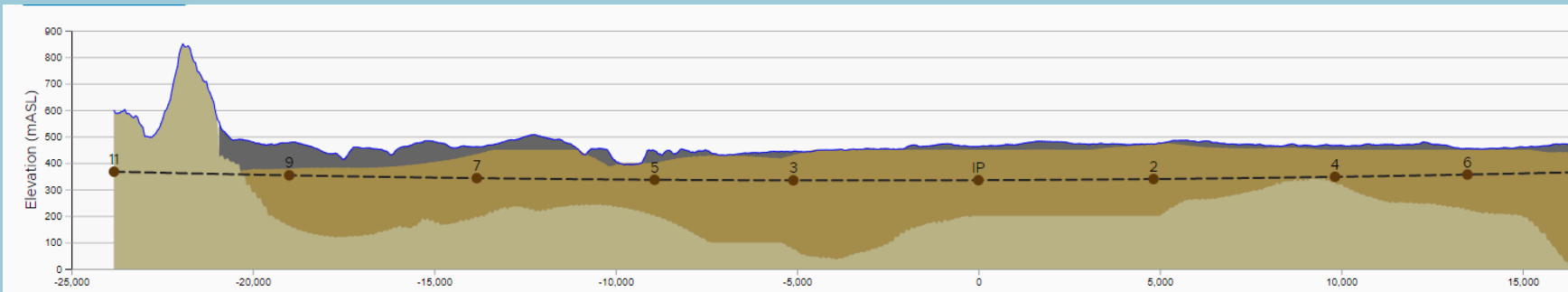


Figure 6.2

- Boundary Conditions: any comments?
- No changes needed.

# Civil Engineering figures



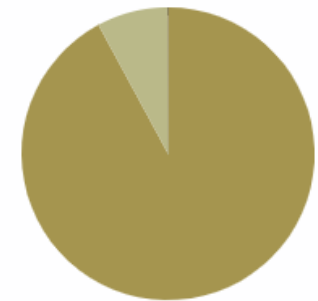
## Tunnel

Energy stage: 3 TeV

Gradient: 0.03°

Created by: matthew.stuart

Last edit date: 24/04/2018



Total tunnel geology

Figure 6.3

- Geological profile
- Important profile for the PiP - very difficult to see in the PiP due to length of the figure. Could potentially use a table to show the percentage of the different geology's?



# Civil Engineering figures

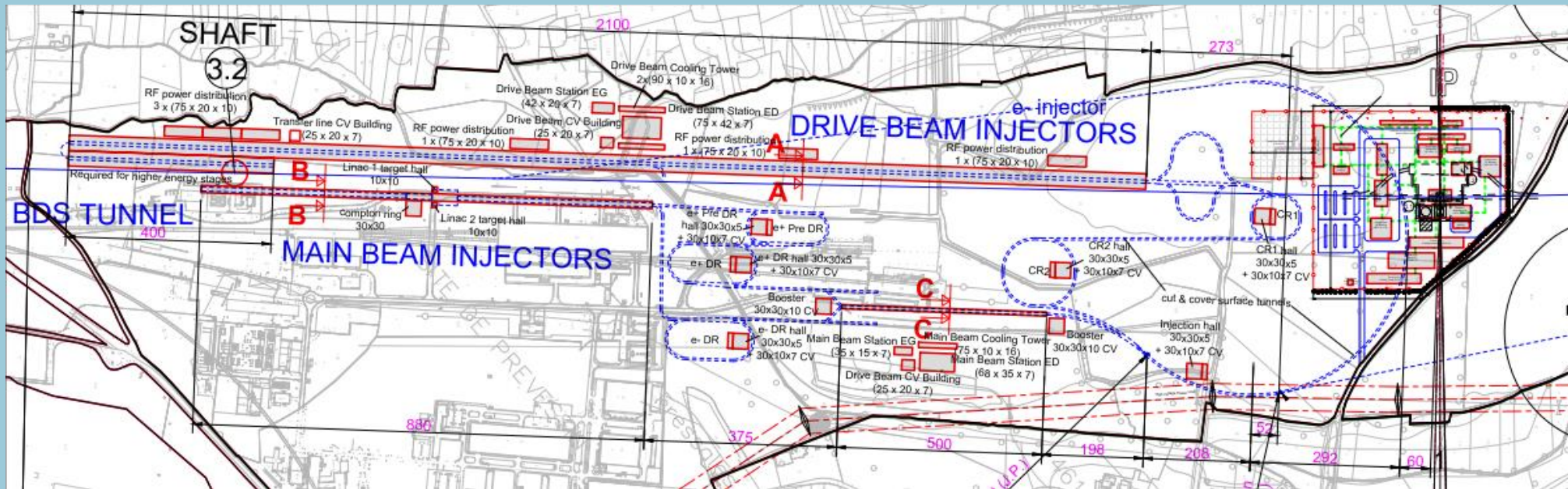


Figure 6.4

- Injection complex (DB injector length to be reduced).
- Suggested changes: decrease the visibility of the background to make the injection complex more obvious
- Check lengths of the tunnels to ensure they match up with other chapters: Andrea?

# Civil Engineering figures

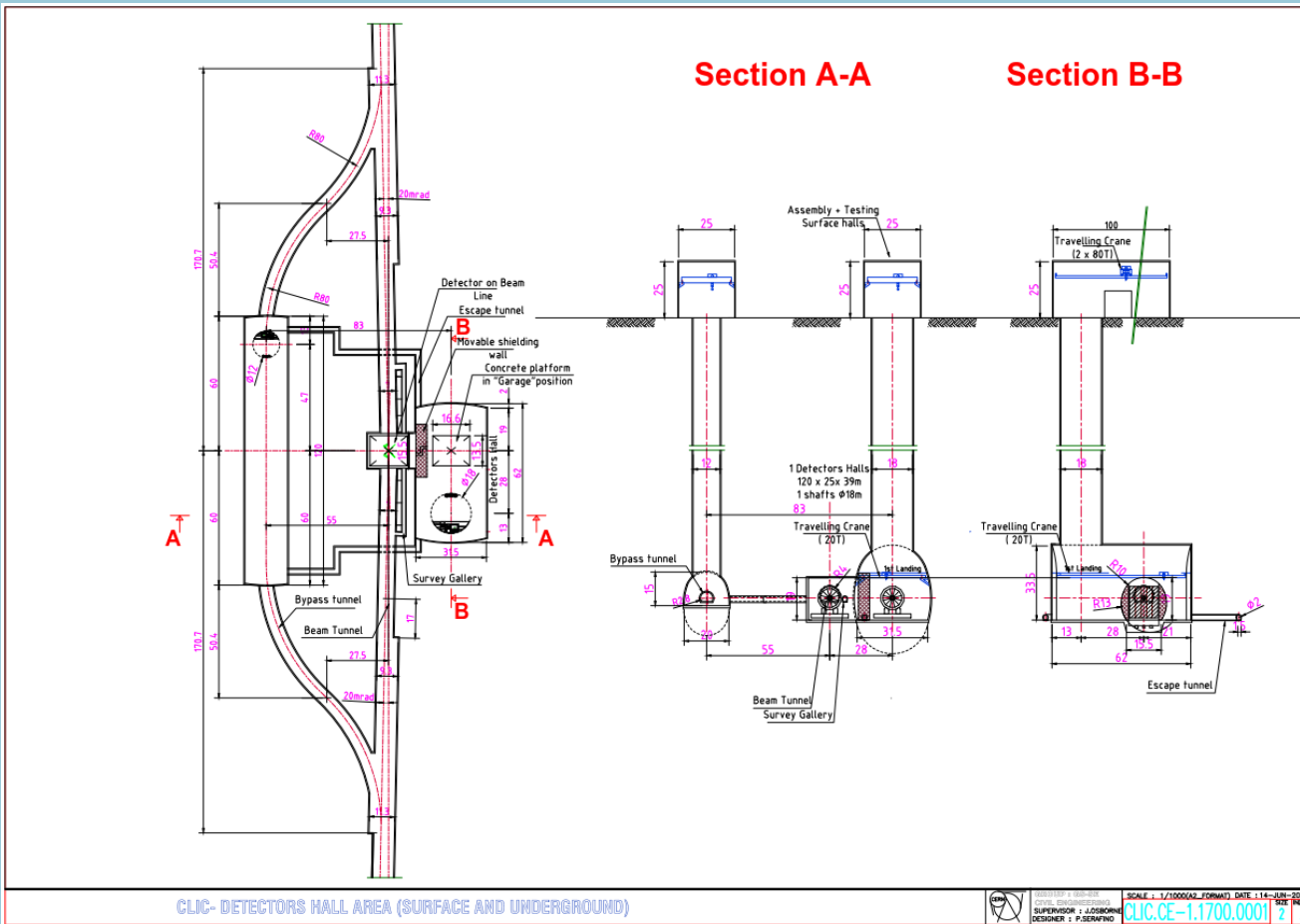


Figure 6.5

- Interaction region: No changes needed to the actual drawing.
- Make the text larger to improve the figure.
- Any other changes foreseen to the interaction region?



# Civil Engineering figures

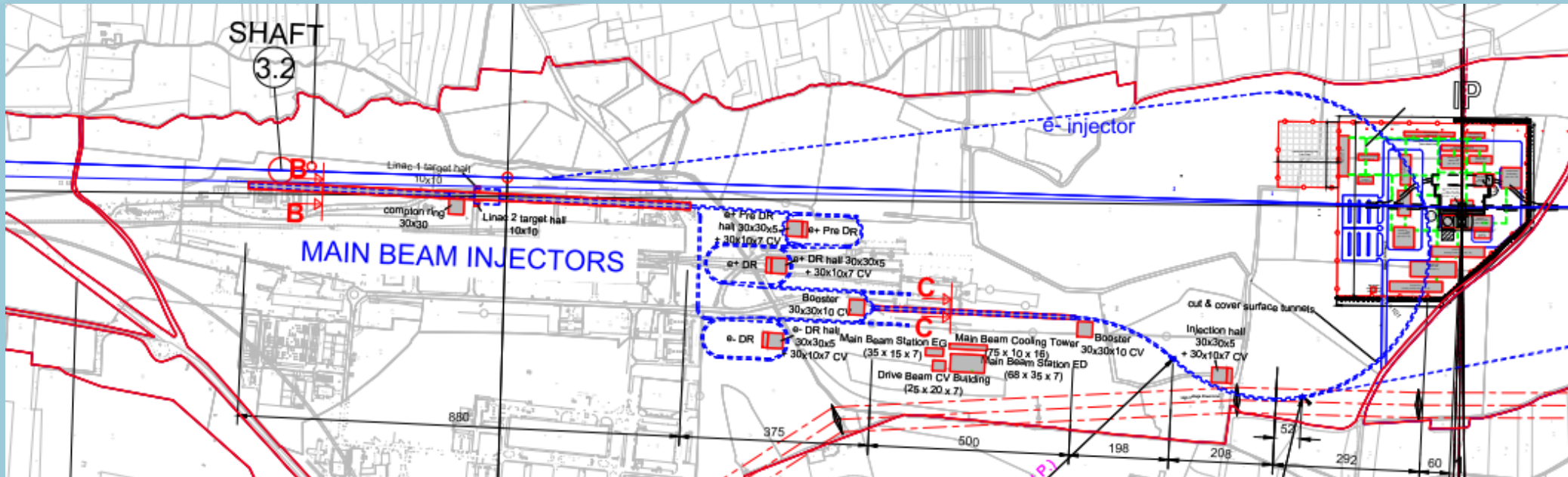


Figure 6.6

- Klystron Injection complex
- Again make the injection complex clearer by reducing the visibility of the background



# Civil Engineering figures

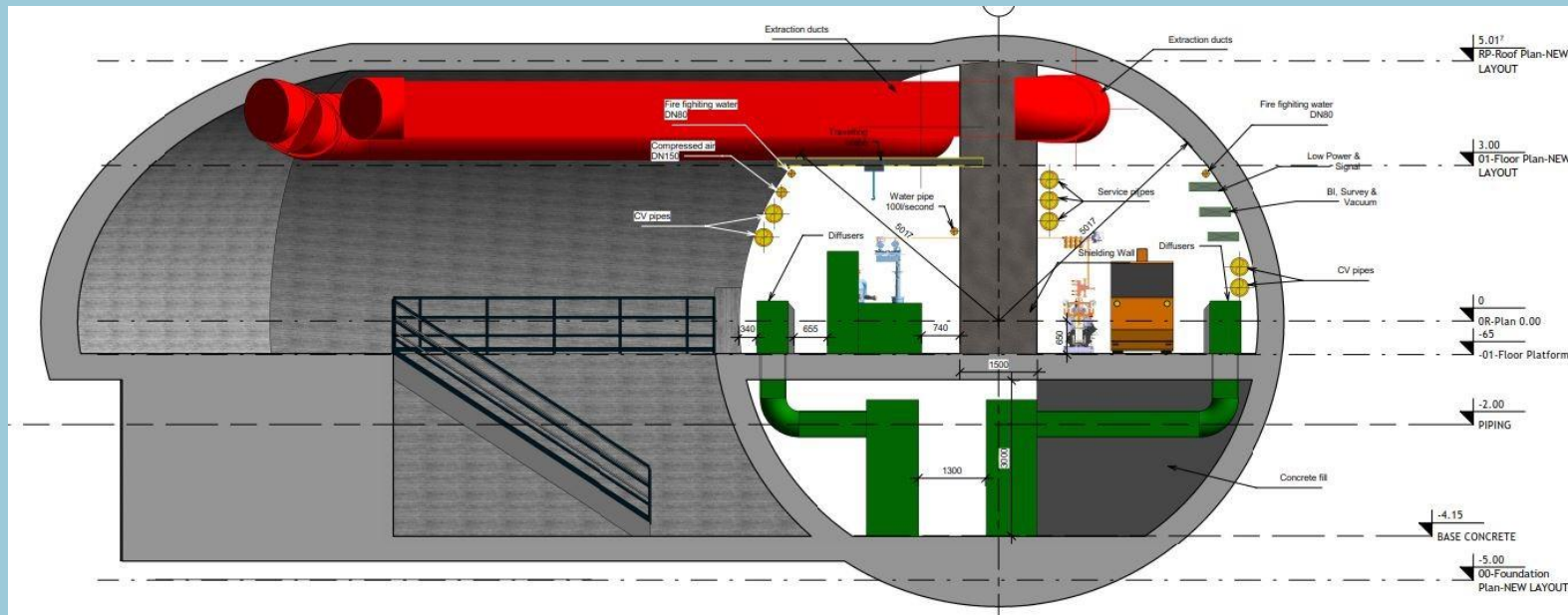


Figure 6.7

- Klystron Tunnel cross-section
- Integration of the smoke extraction required.
- Any other changes - increase text size to ensure it is legible in the document.



# Project Implementation Plan Summary

Chapter	Discipline	Pages	Comments	Responsible person	PiP Status	Cost Status
<b>CEIS</b>						
	Civ. Eng	5/5	Pages increased to 5 for CE	John Osborne/Matt Stuart	First draft completed 😊😊	First Estimate 😊
	Electricity supply	5/3		Davide Bozzini	First draft completed 😊😊	First Estimate 😊
	CV	4/3		Mauro Nonis	First draft completed 😊😊	Not Received ☹️
	Transport and Installation	4/3		Ingo Ruehl/Michael Czech	First draft completed 😊😊	First Estimate 😊
	Safety systems	4/3	incl. enviroment and access	Simon Marsh	First draft completed 😊😊	First Estimate 😊
	Radiation studies	3/3		Markus Widorski	First draft completed 😊😊	N/A
	Cryo	0/3	in case of SC solenoid, check	Dimitri Delikaris	NA	N/A

### Project Implementation Plan (PiP) Produced for ESU.

- 25 page document compiled and reviewed.
- Final edit of the document text completed by the end of September.
- Final figures need to be added into the PiP as soon as possible
- Cost Estimates for most disciplines completed.
  - Still waiting for CV.
- First draft of PBS completed



# Project Implementation Plan Summary



## Future Study:

- Still some Work on integration of the CV ducts required.
- Smoke extraction Integration started - still needs completing.
- Figures and tables for the PiP to be completed
- References required for the PiP - please send through

## Summary:

- PiP First draft completed, reviewed and changes made.
- Final PiP to be completed with all figures up to date by the 1<sup>st</sup> of November
- Next PBS review will be in October (exact date TBC) - Official reviewers to be present
- Still require costs from some disciplines.
- Next CEIS Meeting on the 16<sup>th</sup> of November 2018