



LCWS 2010

CONVENTIONAL FACILITIES AND SITING GROUP

Parallel Session Overview

A. Enomoto, V. Kuchler, J. Osborne

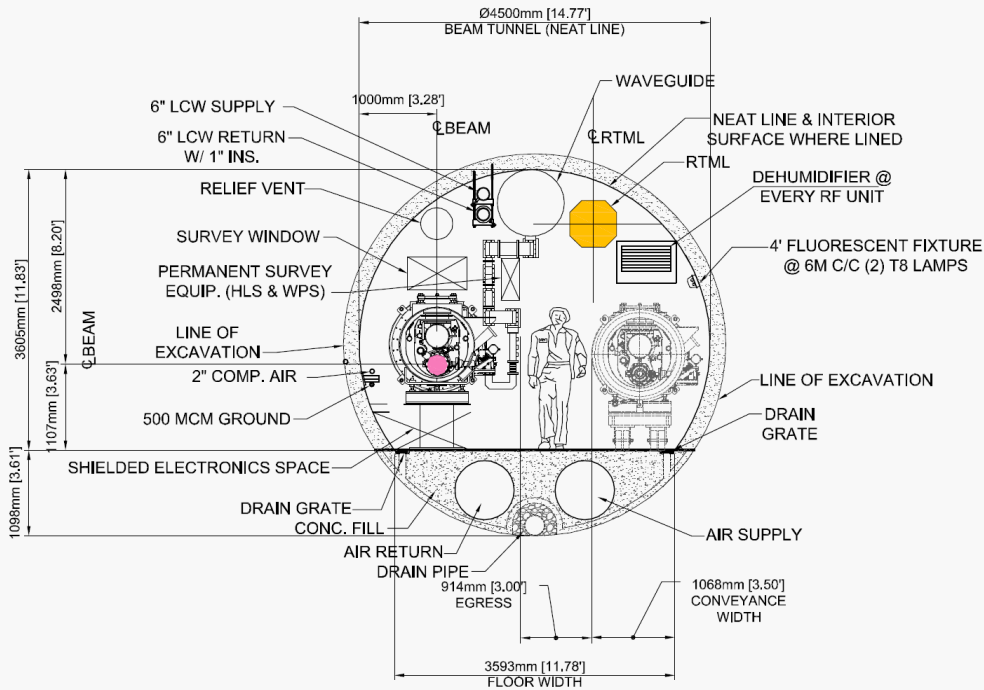


Primary CFS Goals for LCWS10

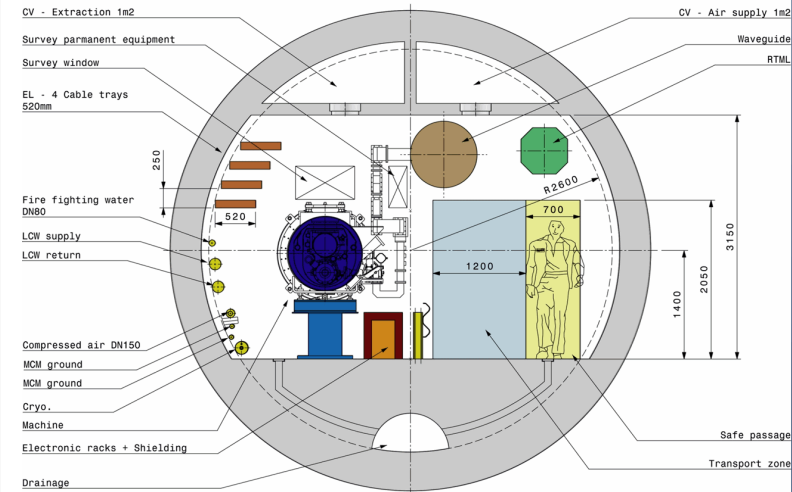
- **Single Tunnel Solution for Main Linac**
 - **Joint Parallel Sessions with Main Linac and HLRF Working Groups**
 - **Klystron Cluster System (KCS)**
 - **Distributed RF System (DRFS)**
 - **Update Criteria for Physical Equipment Size and Spacing**
 - **Cyromodule and RF Support Equipment**
 - **Waveguide Configuration**
 - **Installation and Maintenance Access**
 - **Electrical Support, Cable Trays**
 - **Electronics Racks Location, Spacing and Shielding**
 - **Update Criteria for Cooling and Electrical Requirements**
 - **Cooling Water Temperature and ΔT**
 - **Electrical Loading and Access to Connections**



Current ML KCS Tunnel Cross Sections



Americas Region 4.5 m Dia.



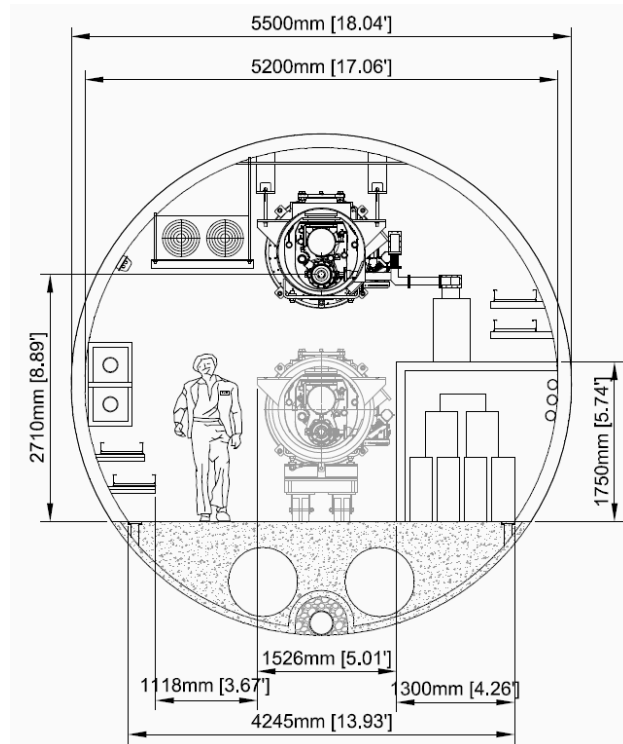
ILC - Typical Cross Section - Diameter 5200mm - Scale 1:25 (A3)
KLY CLUSTER EUROPE - J.Osborne / A.Kosmicki - November 6th 2009

Cross section for Europe (CERN) 5.2m diameter for Kly Cluster

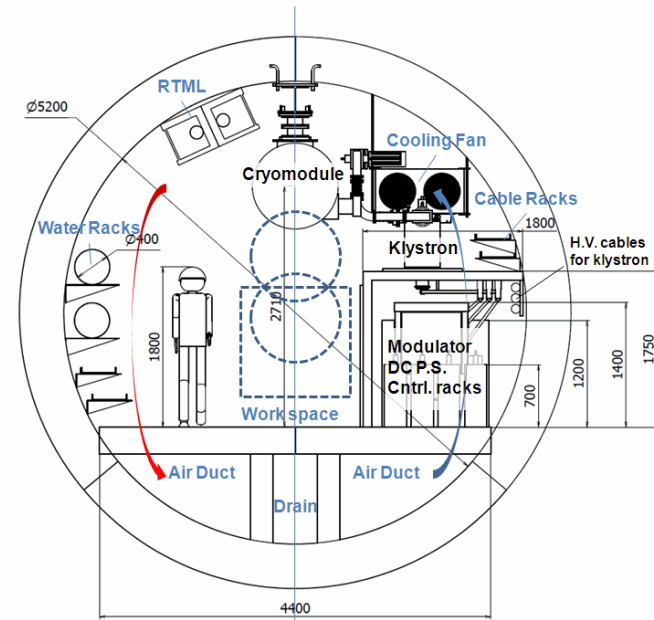
European Region 5.2 m Dia.



Current ML DRFS Tunnel Cross Sections



Americas Region 5.2 m Dia.



Asian Region 5.2 m Dia.

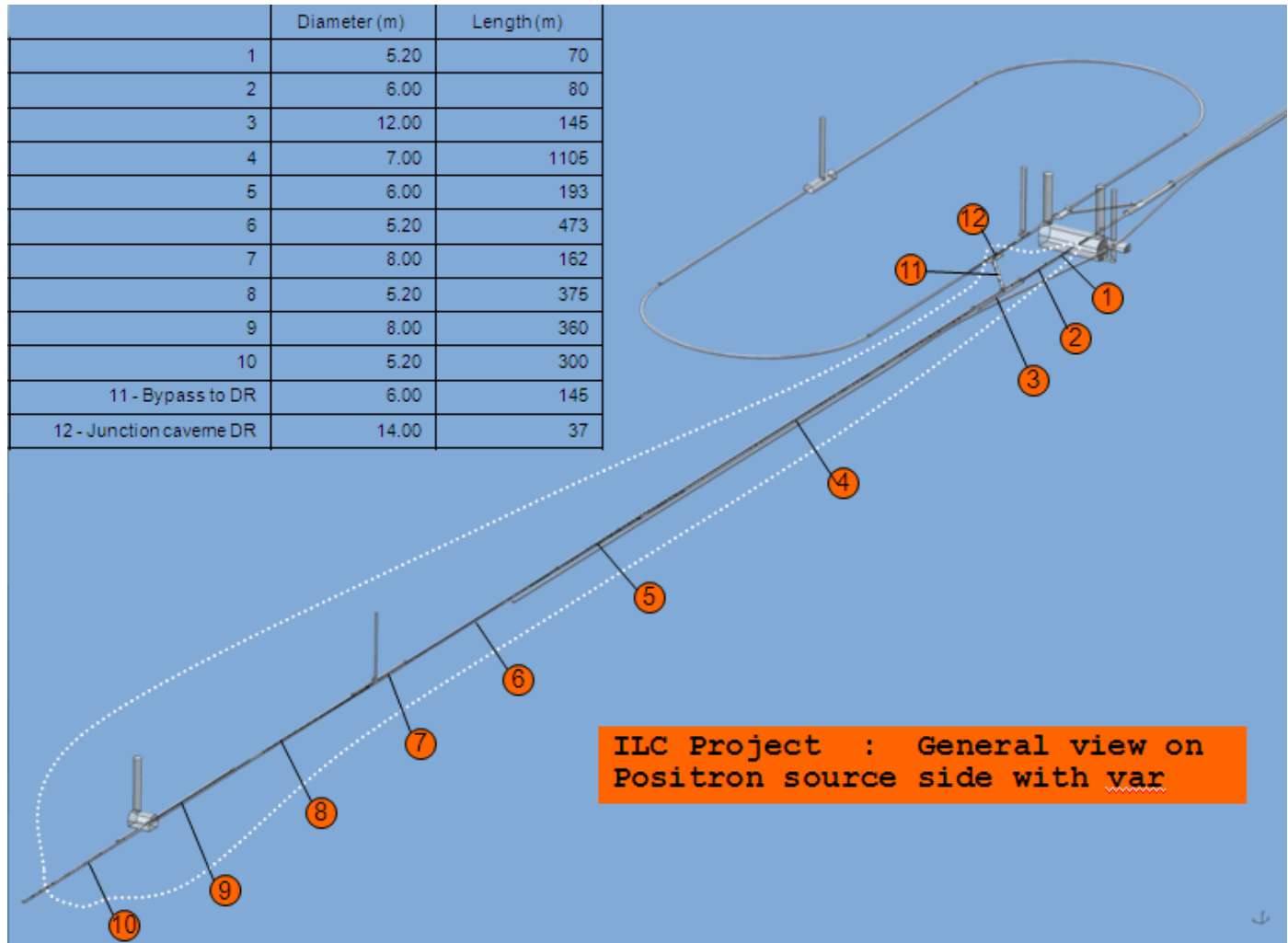


Primary CFS Goals for LCWS10

- **Central Region SB 2009 Layout**
 - **Joint Parallel Sessions with Sources, RTML, Damping Ring and BDS Working Groups**
 - **Update Criteria for Physical Equipment Size and Spacing**
 - **Area System Beam Lattices and Equipment Layout**
 - **Aisle Spacing and Required Clearances**
 - **Installation and Maintenance Access**
 - **Electrical Support, Cable Trays**
 - **Electronics Racks Location and Spacing in Support Tunnel**
 - **Absorber and Dump Locations and Requirements**
 - **Update Criteria for Cooling and Electrical Requirements**
 - **Cooling Water Temperature and ΔT**
 - **Temperature Stability Requirements in Common Areas**
 - **Electrical Loading and Access to Connections**

3D Examples Of Central Region Layout

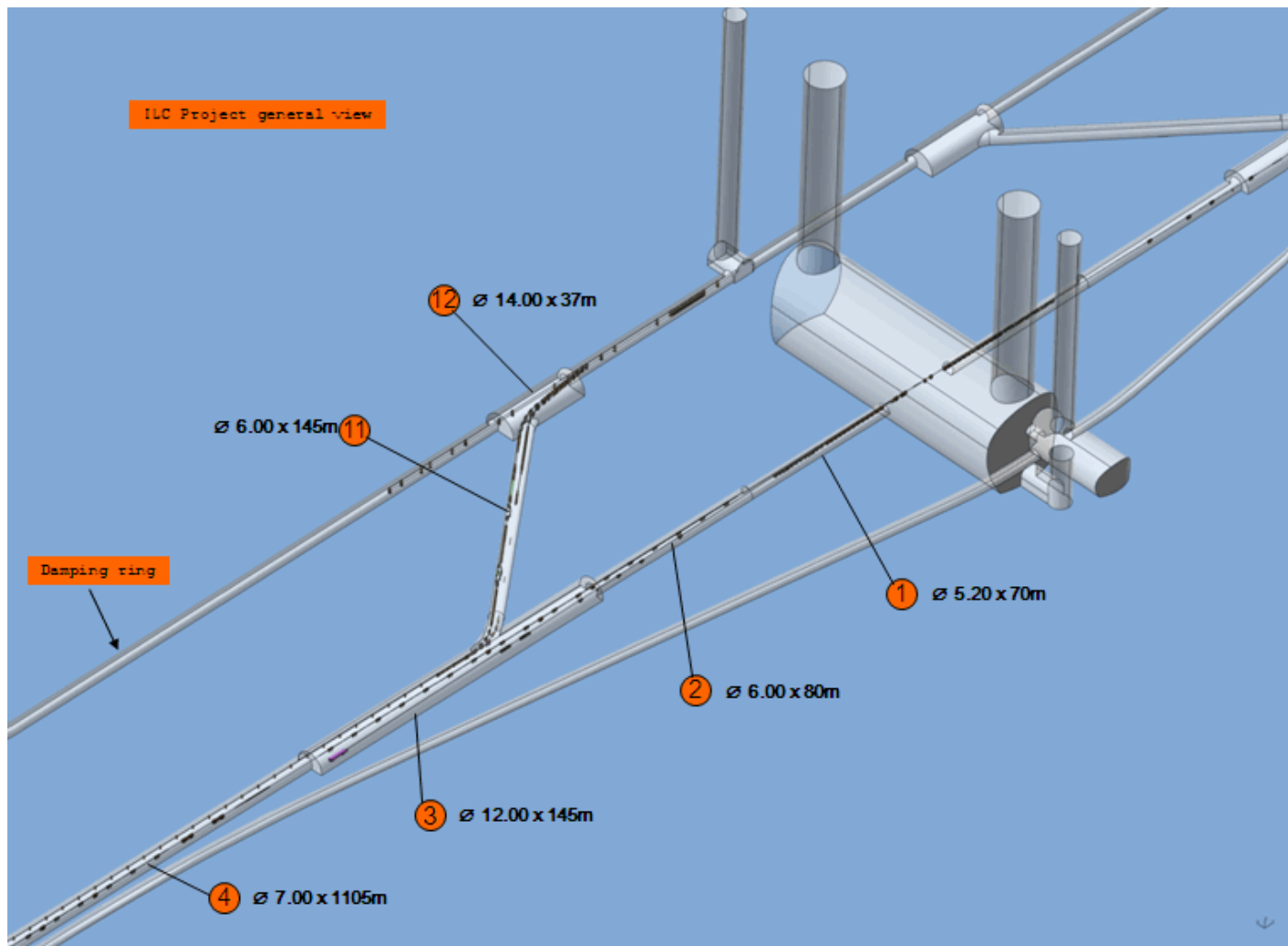
	Diameter (m)	Length (m)
1	5.20	70
2	6.00	80
3	12.00	145
4	7.00	1105
5	6.00	193
6	5.20	473
7	8.00	162
8	5.20	375
9	8.00	360
10	5.20	300
11 - Bypass to DR	6.00	145
12 - Junction caveme DR	14.00	37



ILC Project : General view on Positron source side with var

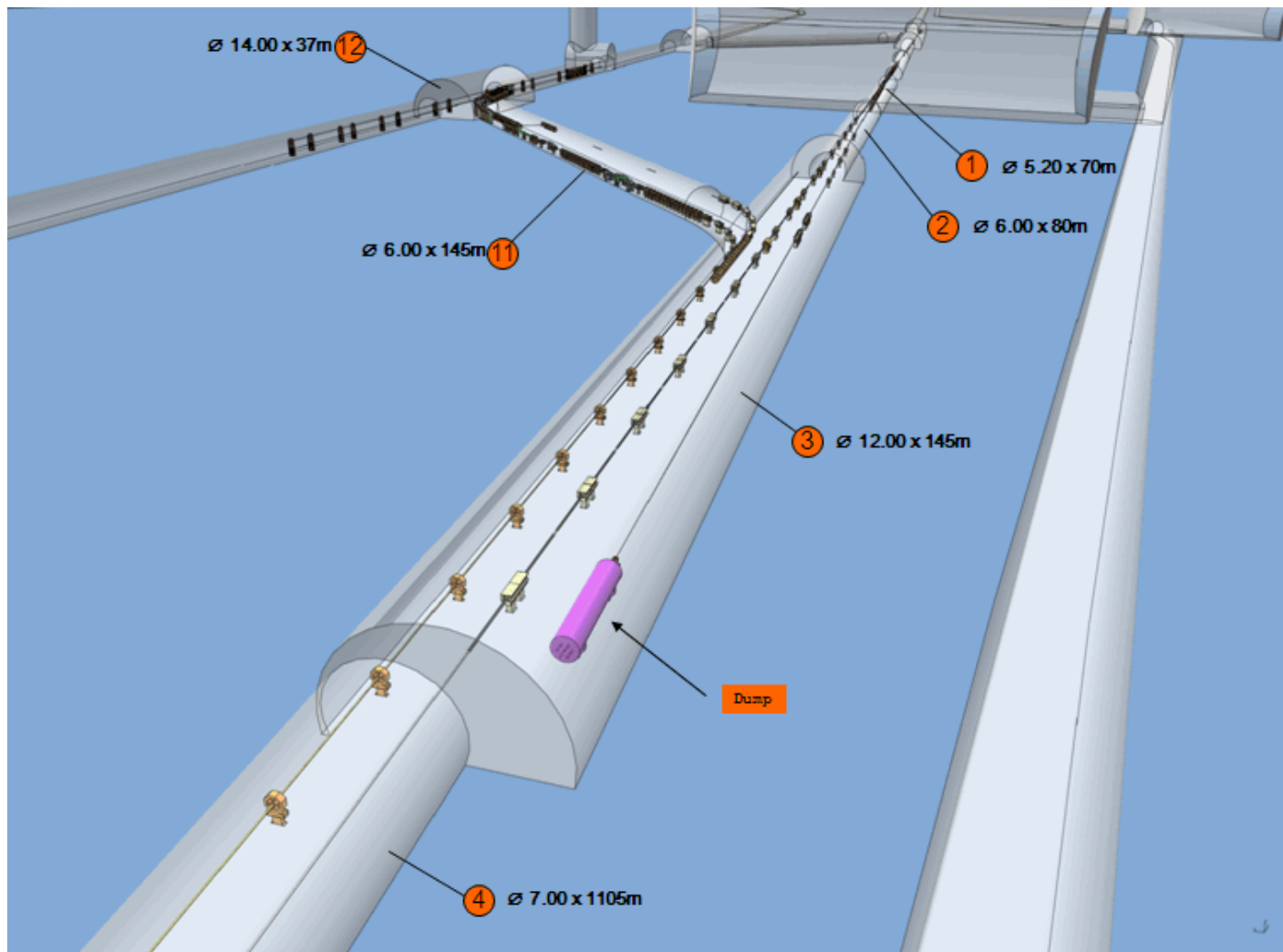


3D Examples Of Central Region Layout





3D Examples Of Central Region Layout





Specific Goals for CFS Working Group

- **General CFS Topics**

- **Re-establish Area System Contact Network**
 - **Joint Session with MDI**
 - **Distributed CFS Attendance at Area System Parallel Sessions**
- **Planning for CFS Regionally Specific Utility Design**
- **Finalize Dubna Site Investigation Report**
- **Discussion and Assignment of 2D and 3D Regional Drawing Efforts**
- **Review of Regional Single Tunnel Life Safety and Egress Solutions and Future Work**
- **CFS TDP II Planning Including Resource Availability and Allocation**



Specific Goals for CFS Working Group cont.

- **CFS Focused Workshops – Summer 2010**
 - **CFS w/Area Systems at SLAC**
 - **CFS w/Area Systems at Daresbury (?)**
 - **CFS w/ MDI and Detector – TBD**
- **At LCWS 2010**
 - **Verify Locations**
 - **Verify Dates**
 - **Re-establish Participation and POC's**