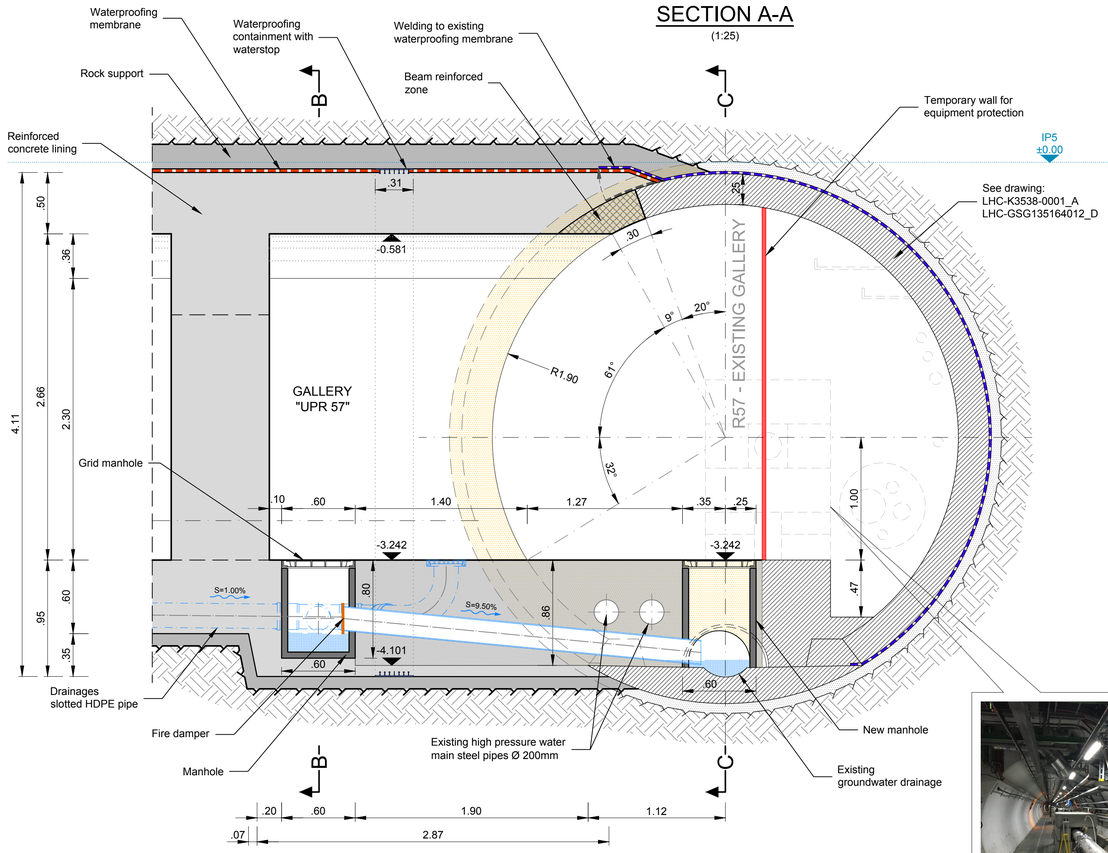
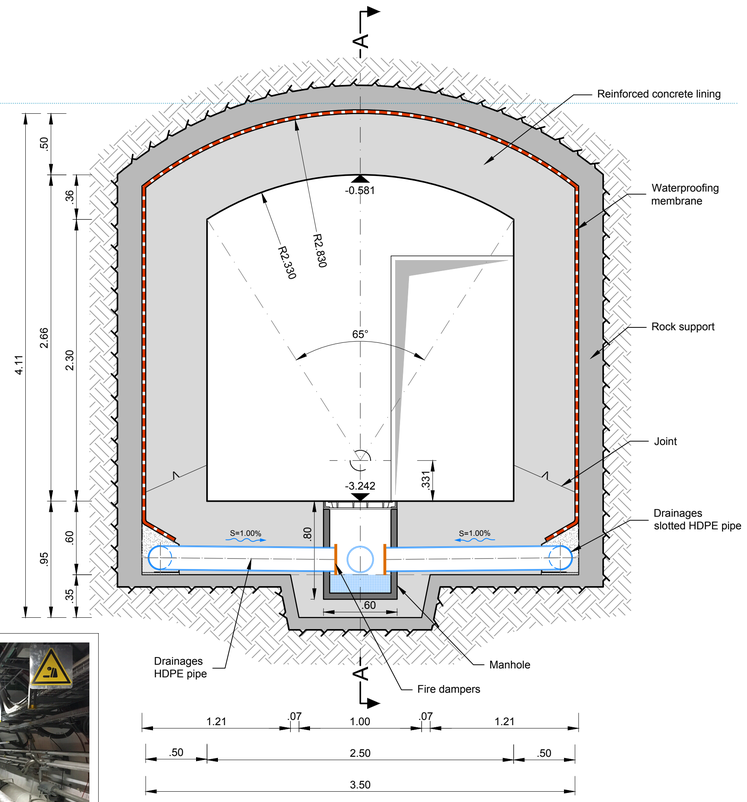
SECTION A-A
(1:25)



SECTION B-B
(1:25)

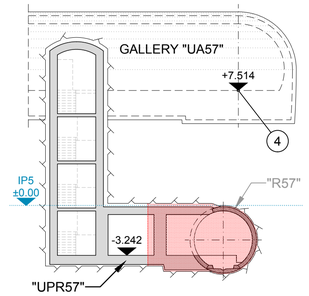


DEMOLITION

POINTS	CCS CERN coordinates szstem		
	X	Y	Z
IP5	-1047.711	10466.532	2413.923
CENTER OF EXPERIMENTAL AREA OF POINT 5 (CMS)			

COORDINATES FOR REFERENCE POINTS			
POINTS	Local coordinates szstem: CMS 1503 axis (m)		
	X	Y	Z
IP5	0	0	0
1	52.000	172.000	88.024
2	52.000	172.000	7.514
3	52.000	174.000	7.514
* 4	-0.850	174.000	7.514
* 5	-0.850	150.000	7.514
6	53.000	141.500	7.514
7	53.000	90.250	8.138
8	53.000	0.000	9.251
9	53.000	-88.250	10.340
10	53.000	-147.935	11.077
11	53.000	-158.475	11.207
* 12	-0.850	-147.935	11.077
* 13	-0.850	-171.935	11.077
14	-2.500	-88.254	10.340
15	-2.500	90.249	8.138
16	0.000	-89.250	10.340
17	-0.930	-87.250	10.340
18	1.500	-87.550	10.340
19	0.000	89.250	8.138
20	-0.930	91.250	8.138
21	1.500	90.950	8.138
22	-0.834	-169.820	11.077
23	-0.834	-166.820	11.077
24	-0.834	-162.390	11.077
25	-0.834	-159.381	11.077
26	-0.834	-154.950	11.077
27	-0.834	152.001	7.514
28	-0.834	155.001	7.514
29	-0.834	159.431	7.514
30	-0.834	162.440	7.514
31	-0.834	166.871	7.514

P.L. INFORMATION
(1:200)



NOTE:

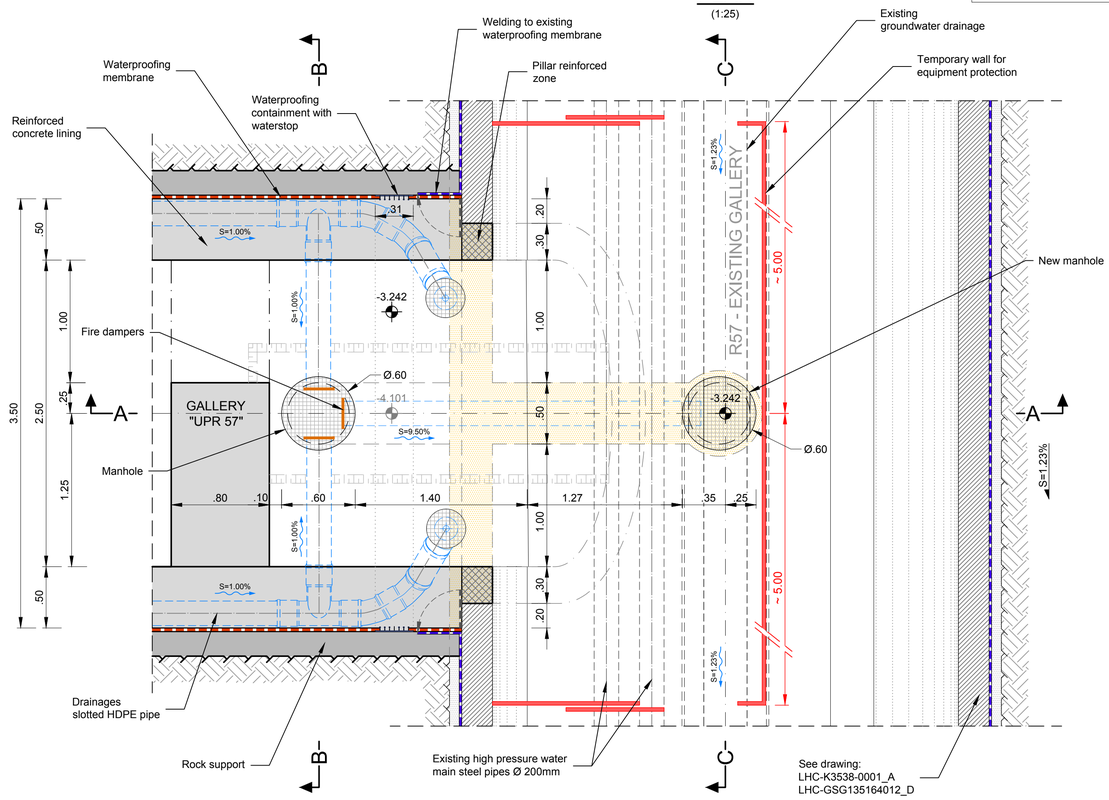
* AS PER CERN'S REQUEST, THE INCONSISTENCY BETWEEN THE X COORDINATES OF POINT 4, 5, 12, 13 INDICATED IN THE COORDINATES TABLE OF DRAWING N. LHCK35000092_E AND THE DRAWINGS/3D MODEL WILL BE SOLVED IN PHASE 2.

- THE THICKNESS OF THE REINFORCED CONCRETE LINING TAKE INTO ACCOUN THE MINIMUM THICKNESS NECESSARY FOR STRUCTURAL RESISTANCE (PRE-DIMENSIONING) AND THE SPACE FOR TOLERANCES (TO BE DEFINIED IN THE TENDER DESIGN).
- THEREFORE THE REINFORCED CONCRETE LINING WILL BE OPTIMIZED IN THE TENDER DESIGN BY THE DETAILED ANALYSIS.
- THE DIMENSIONS, THE LEVEL, DRAINAGES AND PIPES OF THE EXISTING STRUCTURES MUST BE VERIFIED ON SITE BEFORE THE EXECUTIVE OF THE NEW GALLERIES
- THE DIMENSIONS AND POSITION OF THE EXISTING EQUIPMENT MUST BE VERIFIED ON SITE BEFORE THE EXECUTION OF THE WORKS.
- THE FEASIBILITY OF THE PROPOSED SOLUTION SHALL BE CHECKED IN THE NEXT PROJECT PHASE ON THE BASIS OF A PRECISE VERIFICATION OF THE EQUIPMENT OF THE EXISTING TUNNELS.

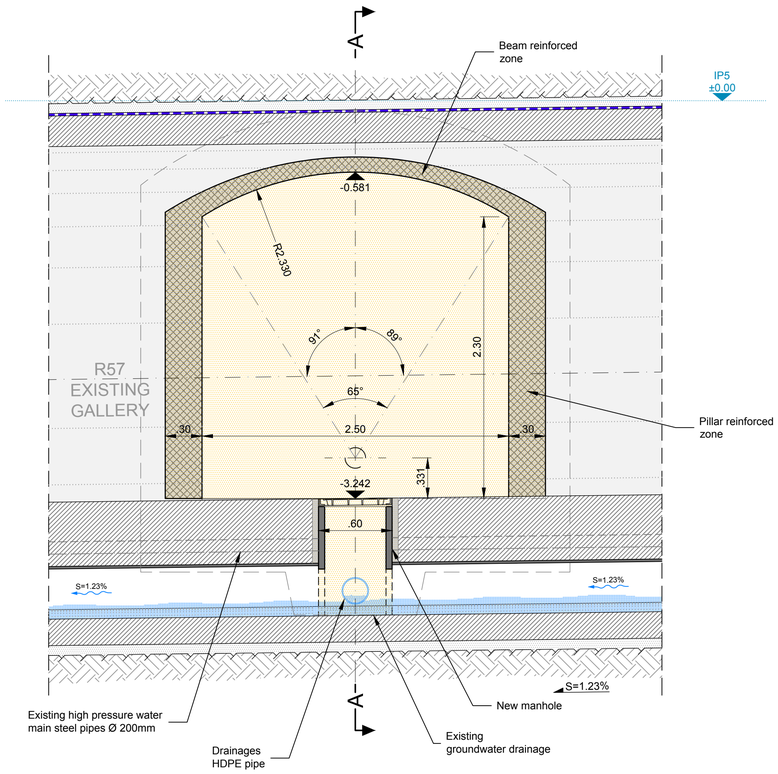
0 1 2 2.5

Scale 1:25

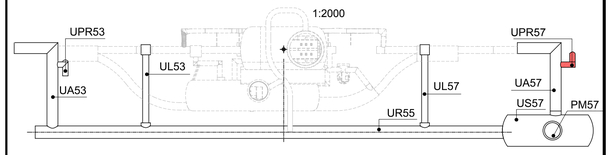
PLAN
(1:25)



SECTION C-C
(1:25)



Key-plan
1:2000



Rev.	Date	Drawn by	Checked by	Approved By	Notes
F					
E					
D					
C					
B					
A	16/11/11	PALERMO	GIANELLI	MERLINI	REVISION FOLLOWING COMMENTS RECEIVED FROM CERN/IE
–	16/11/09	PALERMO	GIANELLI	MERLINI	FIRST DRAFT

CERN

EUROPEAN ORGANIZATION FOR NUCLEAR RESEARCH
European Laboratory for Particle Physics

HiLumi HL-LHC PROJECT

HL-LHC - POINT 5 - UNDERGROUND

K3538 / UPR57 - RF Gallery side 57

Structure and drainage connection to existing LHC tunnel

PRELIMINARY DESIGN

Lombardi ARTELIA pini swiss engineers

Scale : 1/25 - 200

Drg : 859.304_LHC-PSW1353800051A.dwg

File name : LHC-PSW1353800051A.DWG

OFFICIAL DRAWING

L H C - P S W 1 3 5 3 8 0 0 0 5 1 A