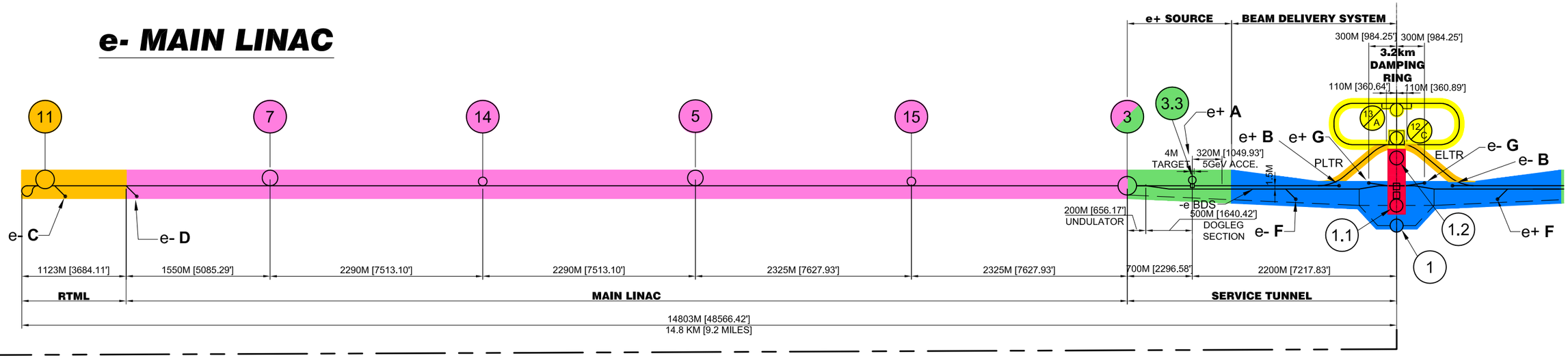
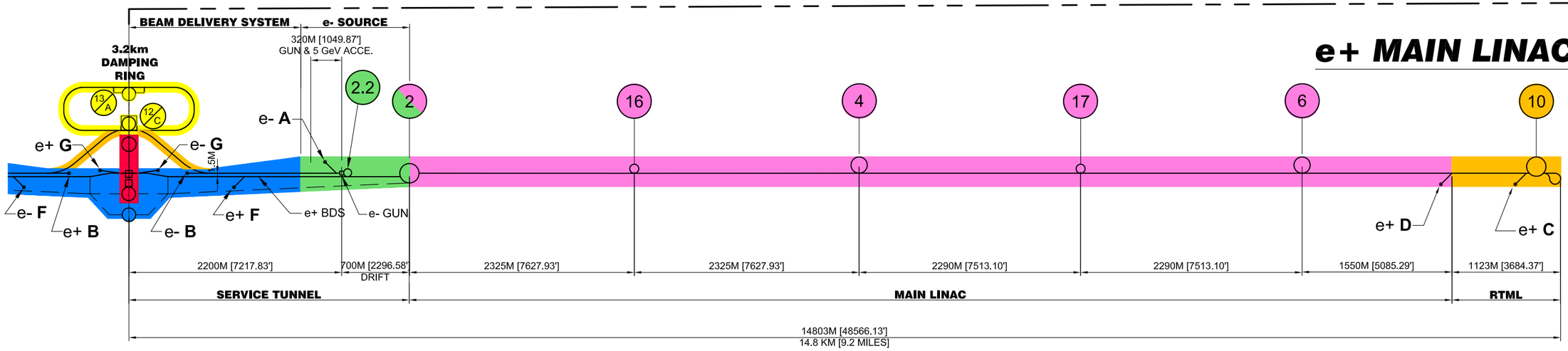
e- MAIN LINAC



e+ MAIN LINAC



SITE / TUNNEL LENGTHS (M)

e- SIDE ML + RTML	e+ SIDE ML + RTML	B.D.S./SOURCES SERVICE/FTRL/PTRL	DAMPING RING	TOTAL
13233	13233	5800 + 5800 + 600	3238	41904

TUNNELS

AREA / SYSTEM	e- INJECT. BDS & SERVICE	D.R.	R.T.M.L. BEAM	MAIN LINAC BEAM	e+ INJECT. BDS & SERVICE
width M	8.9 + 5.2	4.5	5.2	5.2	8.9 + 5.2

SHAFT BASE CAVERNS

POINT	2, 3,	4, 5, 6, 7,	10, 11	14, 15, 16, 17
(L x W x H)m	52 x 10 x 5.3			3 x 3 x SHAFT

SHAFTS

POINT	1.0	1.1	1.2	2	2.2	3	3.3	4	5	6	7	10	11	12/C	13/A	14	15	16	17
Ø M	9	16	16	14	4	14	4	14	14	9	9	14	14	9	9	3	3	3	3

DETECTORS HALL

POINT	1.1, 1.2	1.0
(L x W x H)m	120 x 25 x 39	40 x 15 x 15

MUON WALL WIDENINGS

POINT	BDS e-G & e+G
(L x W x H)m	25 x 7 x 6 +15 x 7 x 6

LEGEND

- RTML
- ML
- SOURCES
- DR
- BDS
- DETECTOR AREA

SOURCES CAVERNS

POINT	e+ SOURCE
(L x W x H)m	40 x 40 x 8

DAMPING RING

POINT	12/C	13/A
(L x W x H)m	10 x 10 x 5	74 x 10 x 5

BEAM ABORT CAVERNS (↗)

POINT	SOURCES e-A & e+A	RTML e-C, e-D, e+C & e+D	BDS e-B, e-F, e-G,e+B, e+F & e+G
(L x W x H)m	5 x 4 x 4		20 x 9 x 15 +1 STORY

BEAM ABORT SERVICE HALLS (↗)

POINT	BDS e-B, e-G,e+B & e+G
(L x W x H)m	30 x 20 x 10

SHEET - 1

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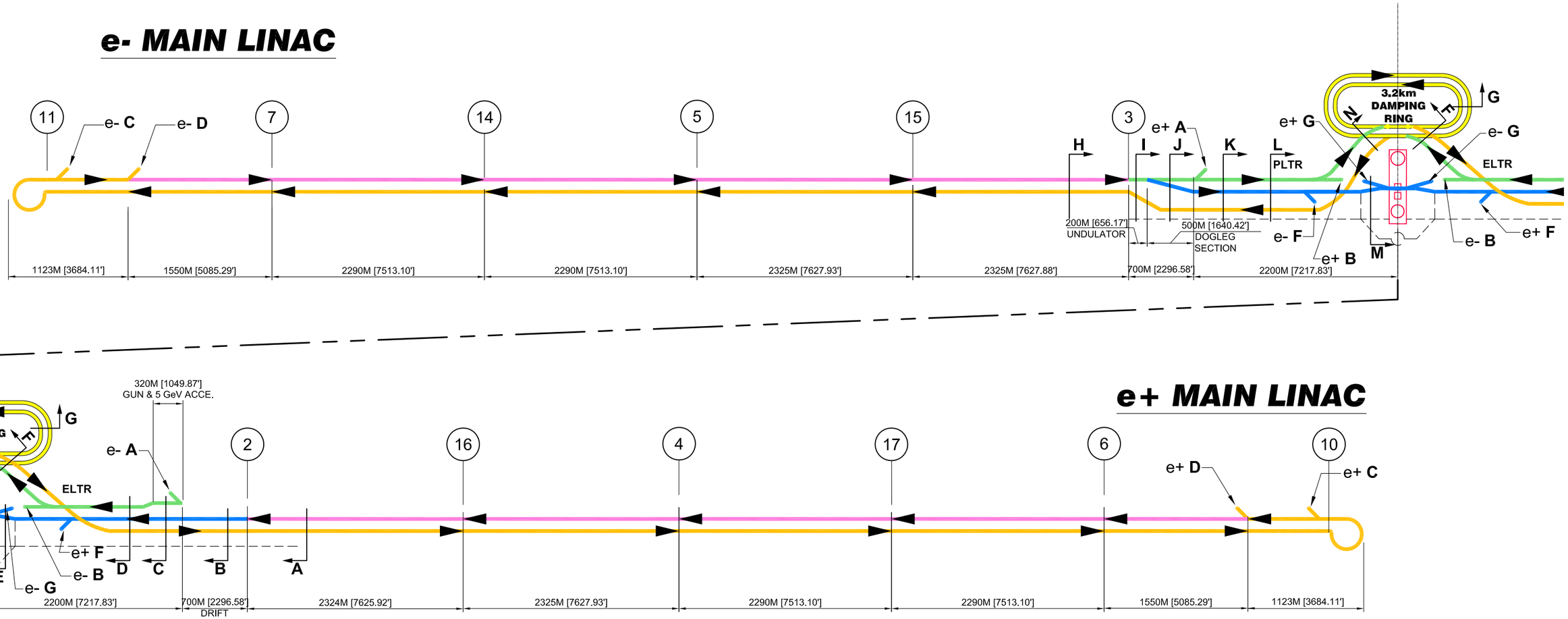
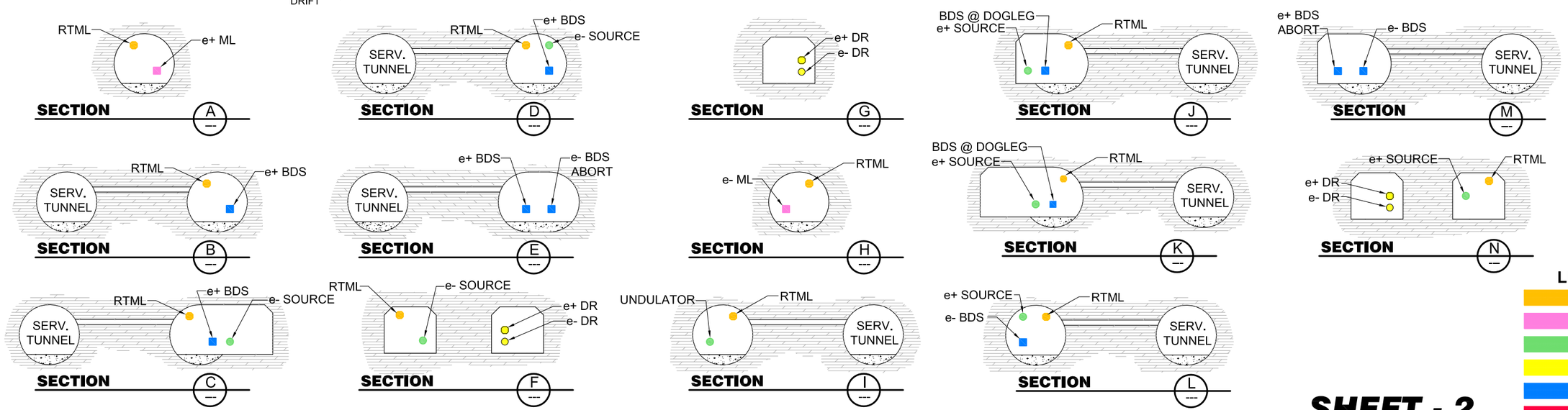
e- MAIN LINAC



e+ MAIN LINAC



LEGEND

- RTML
- ML
- SOURCES
- DR
- BDS
- DETECTOR AREA
- SERVICE TUNNEL
- BEAM DIRECTION

SHEET - 2

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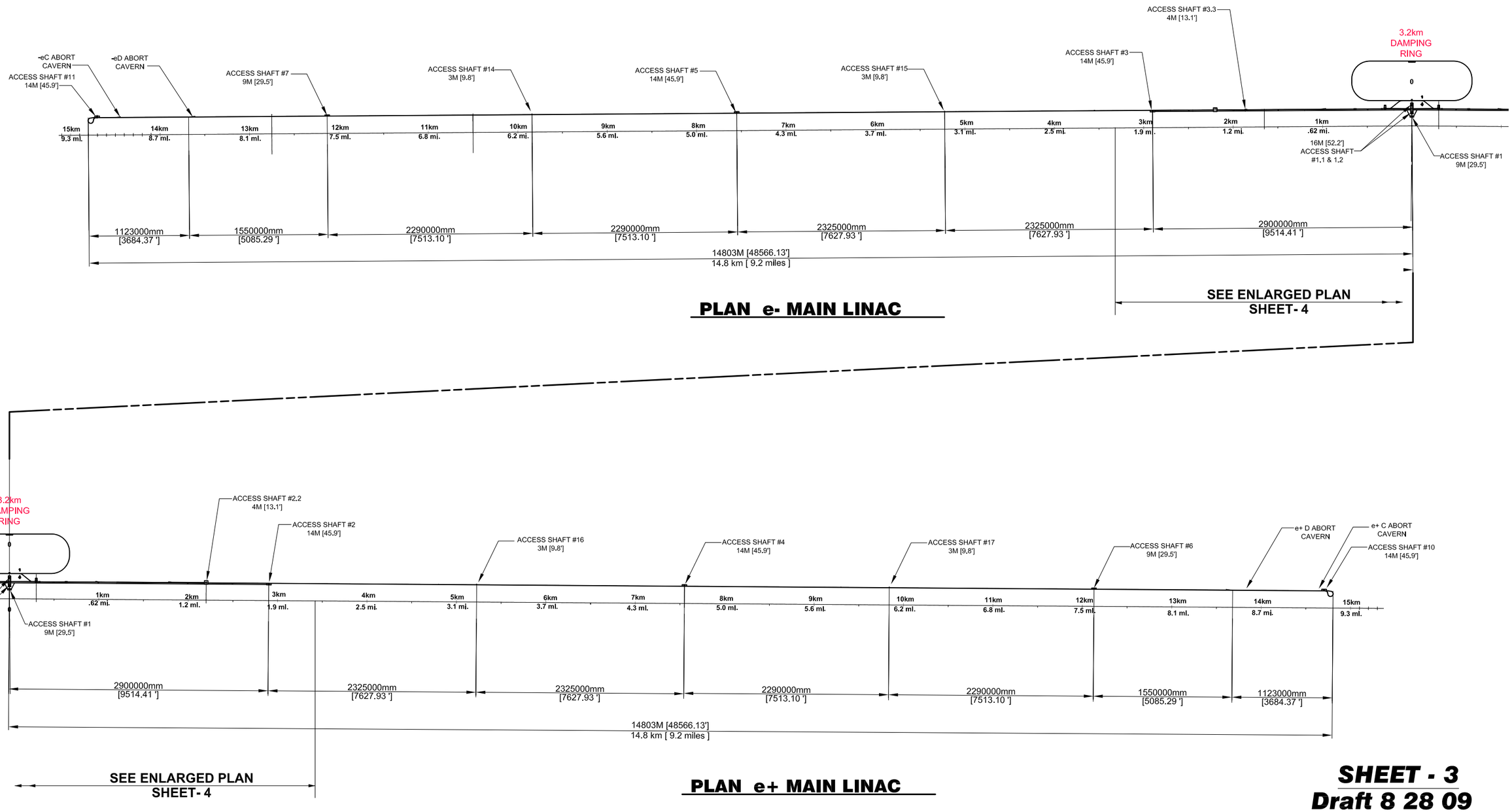

SHEET - 3
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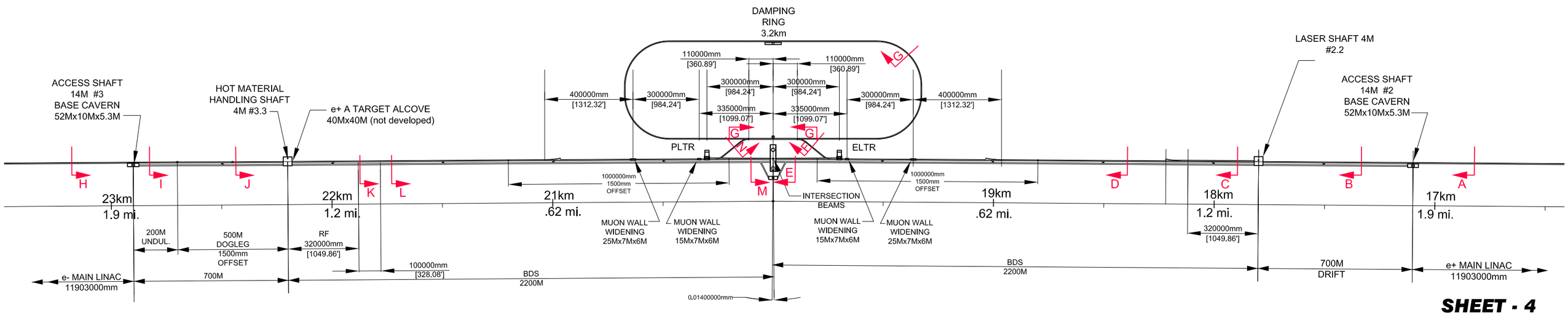

SHEET - 4

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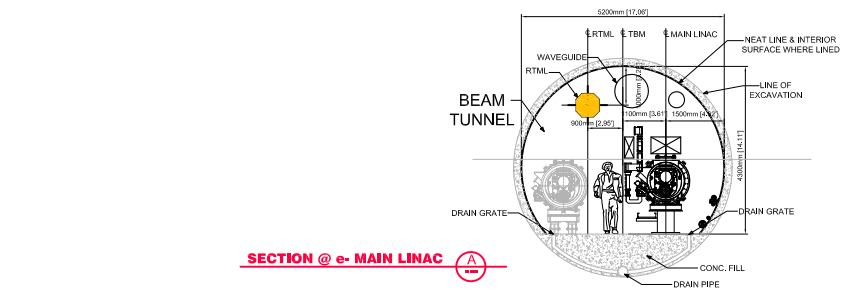
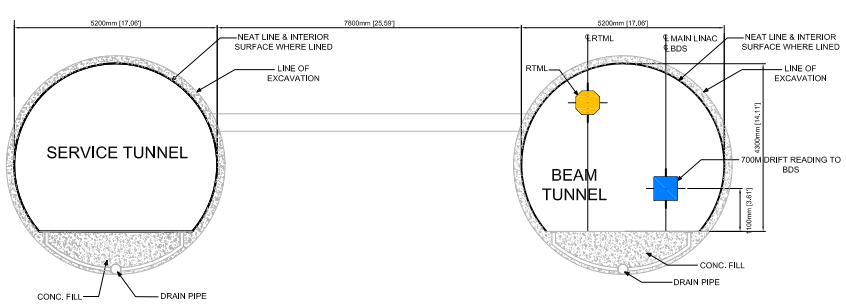
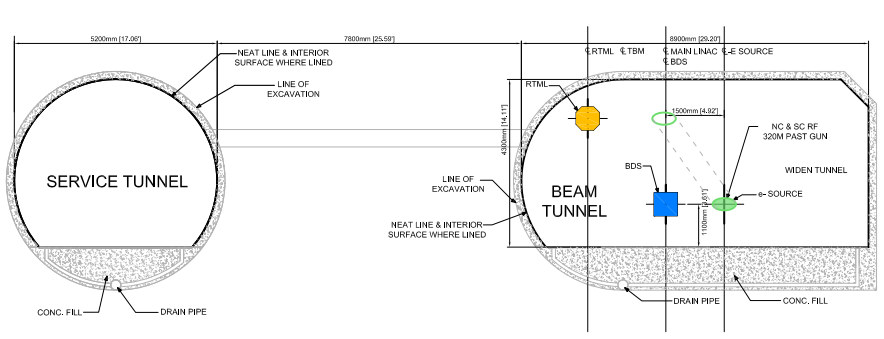


SECTION @ e- MAIN LINAC (A)

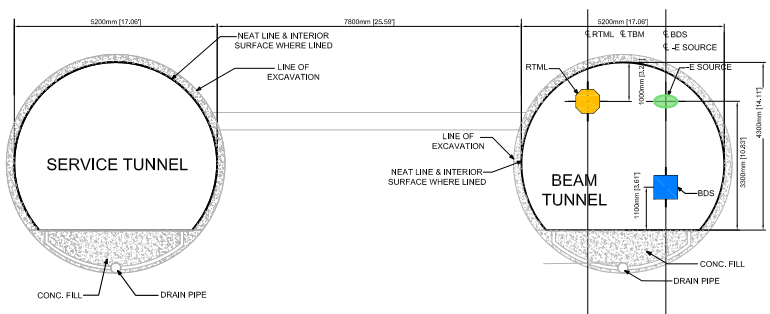


e- MAIN LINAC : SECTION FROM MAIN LINAC TO e- GUN (B)

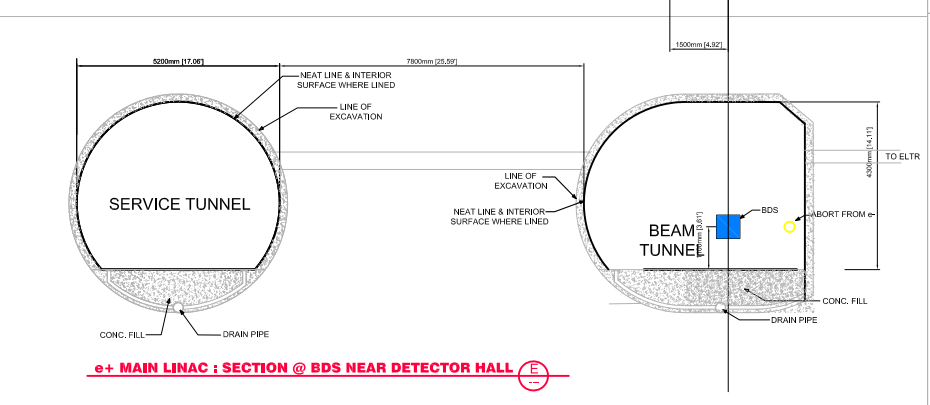
NOTES:
THE BEAM AND SERVICE TUNNELS ARE DRAWN WITH 5.2 METER TBM DIAMETER TO MATCH MAIN LINAC. THE REQUIRED DIAMETER NEEDS TO BE EVALUATED.
WILL THE KLYSTONS FOR THE 5 GeV LINAC BE IN THE SERVICE TUNNEL OR AT THE SURFACE USING A KLYCLUSTER APPROACH?
AISLES HAVE BEEN PROVIDED WHERE IT IS UNDERSTOOD THAT THERE ARE BEAMLINE ELEMENTS. DESIGN SOLUTION FOR ACCESSING THESE AISLE FOR INSTALLATION AND MAINTENANCE HAVE NOT BEEN DEVELOPED.
BEAMLINE ARE SHOWN SCHEMATICALLY, ACTUAL SIZE OF COMPONENTS MAY AFFECT BEAMLINE SEPARATION.



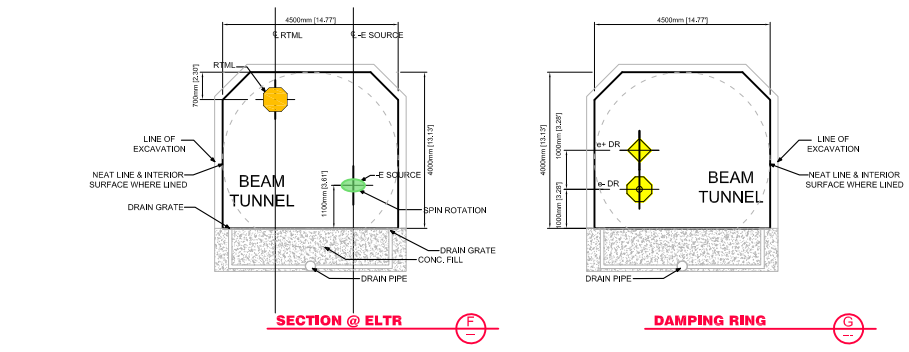
e+ MAIN LINAC : SECTION FROM e- GUN TO 100M PAST 5 GeV LINAC (C)



e+ MAIN LINAC : AFTER TRANSITION OF e- SOURCE TO CEILING (D)

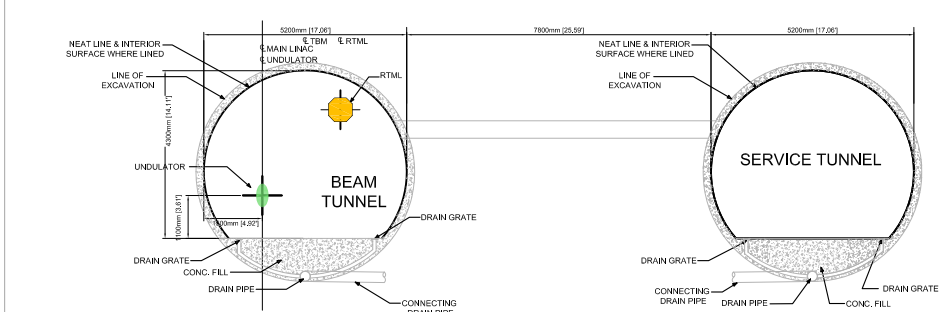


e+ MAIN LINAC : SECTION @ BDS NEAR DETECTOR HALL (E)

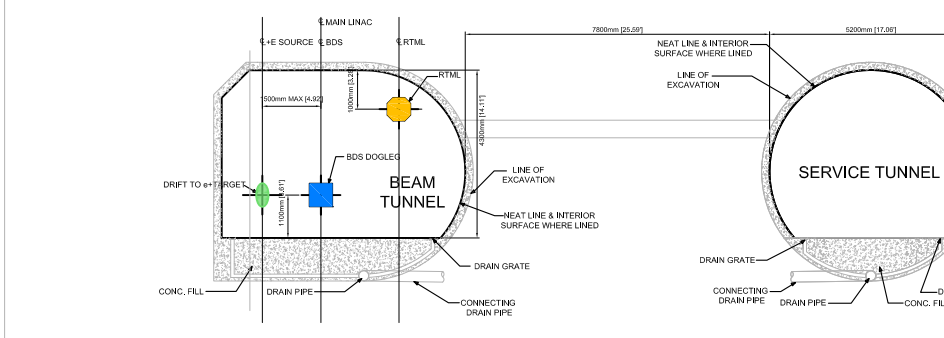


SECTION @ ELTR (F)

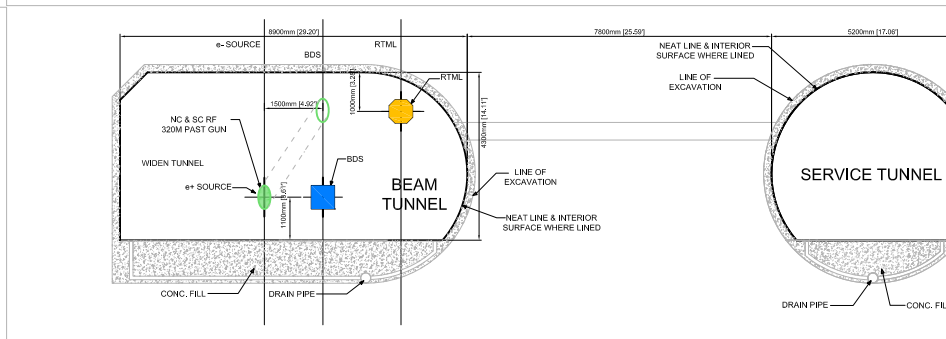
DAMPING RING (G)



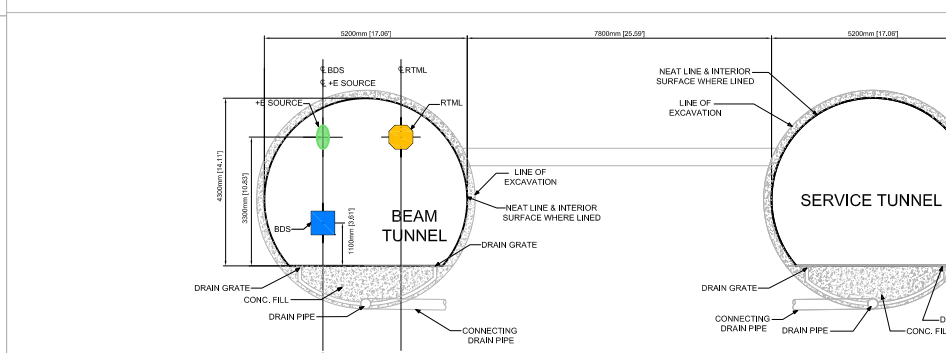
e- MAIN LINAC : SECTION @ UNDULATOR (I)



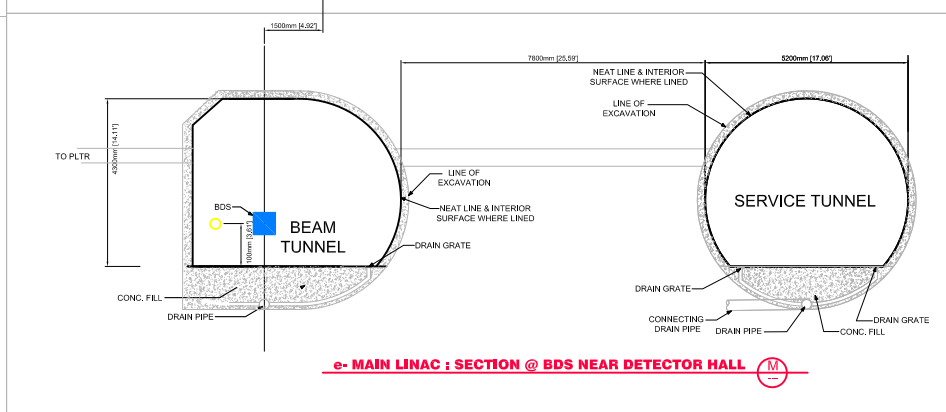
e- MAIN LINAC : SECTION @ BDS DOGLEG (J)



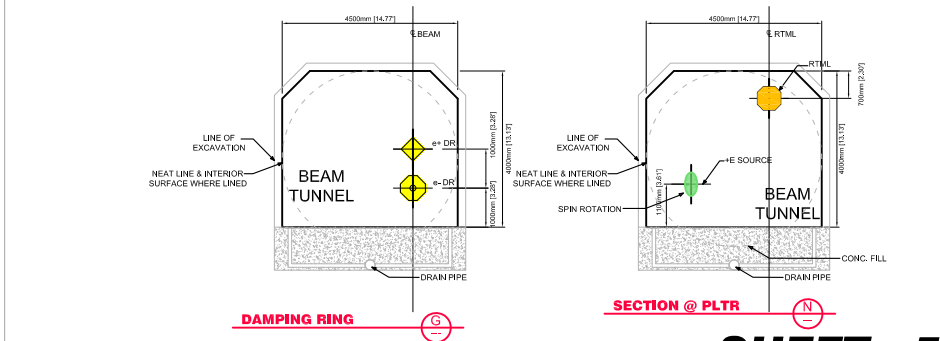
e- MAIN LINAC : SECTION FROM e- GUN TO 100M PAST 5 GeV LINAC (K)



e- MAIN LINAC : SECTION AFTER TRANSITION OF SOURCE TO CEILING (L)



e- MAIN LINAC : SECTION @ BDS NEAR DETECTOR HALL (M)



DAMPING RING (G)

SECTION @ PLTR (N)

SHEET - 5

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