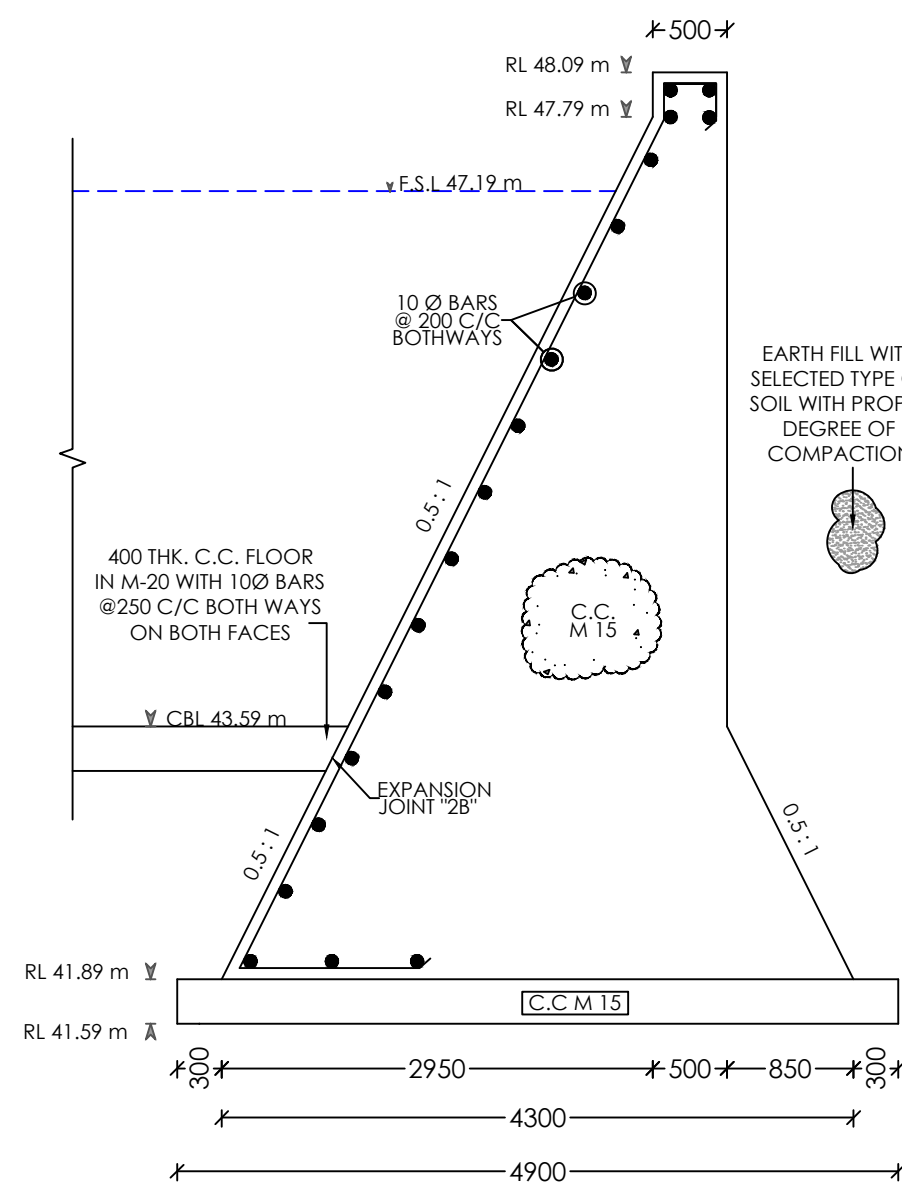
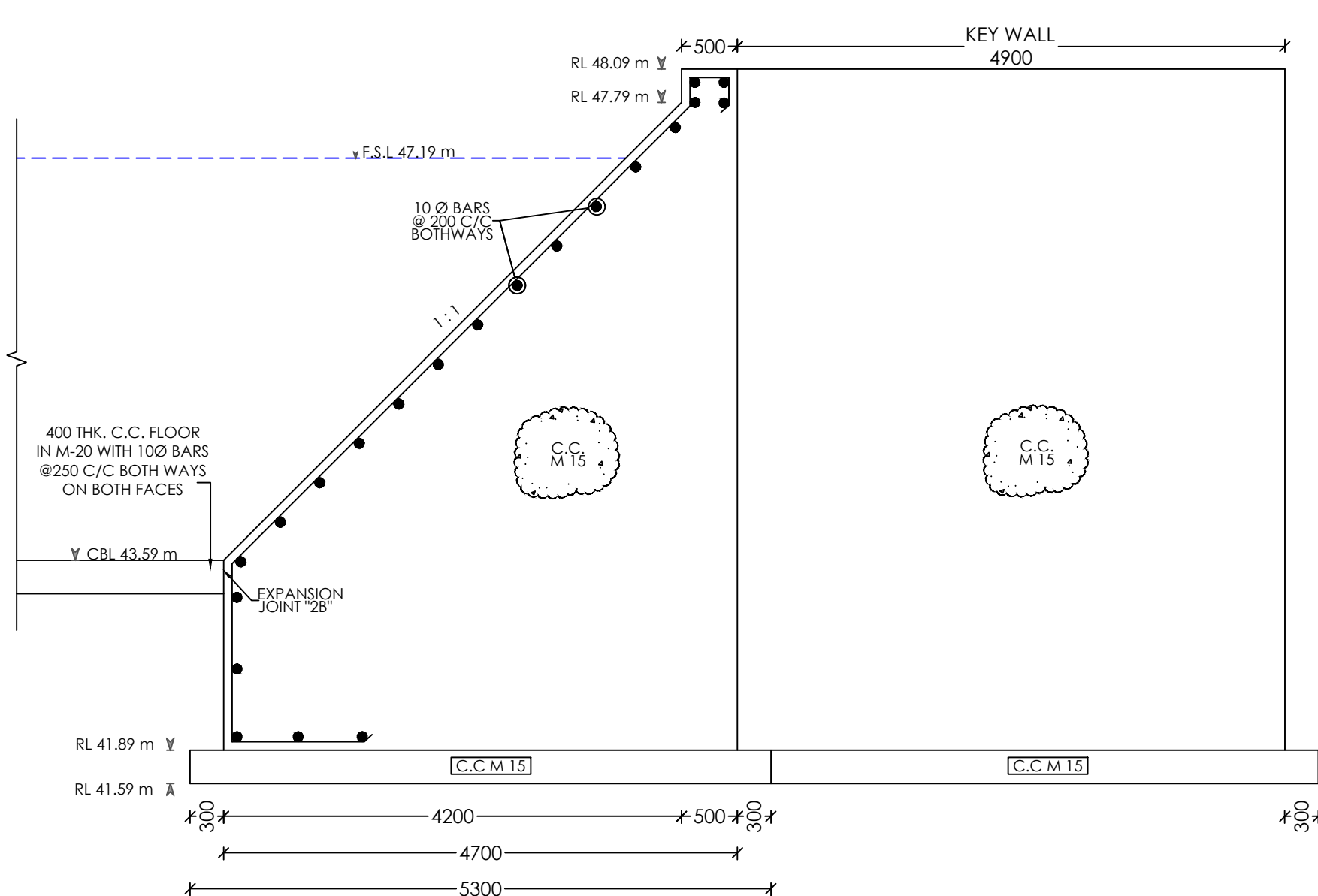


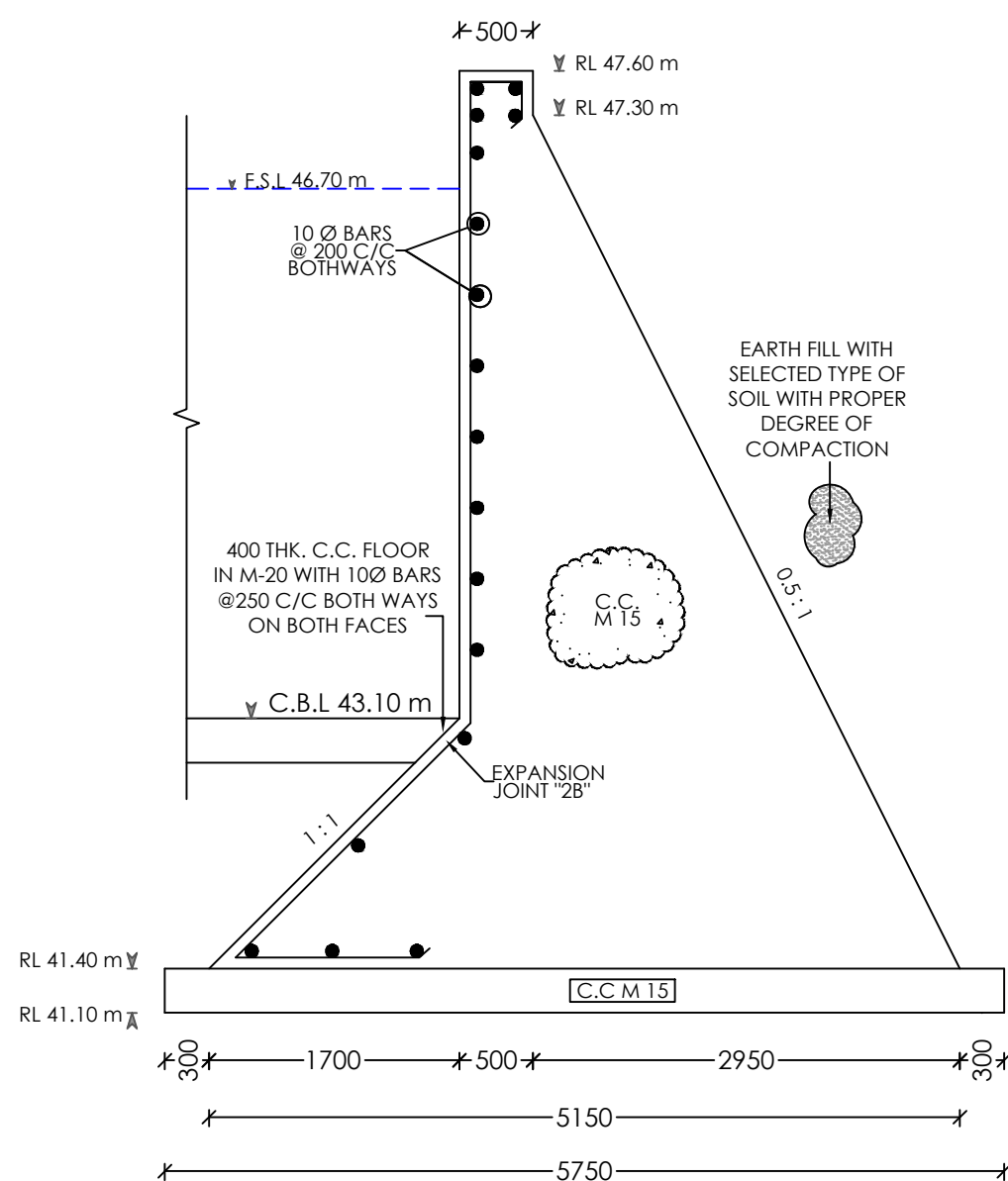
SECTION OF U/S & D/S
TRANSITION WALL 1'-1'



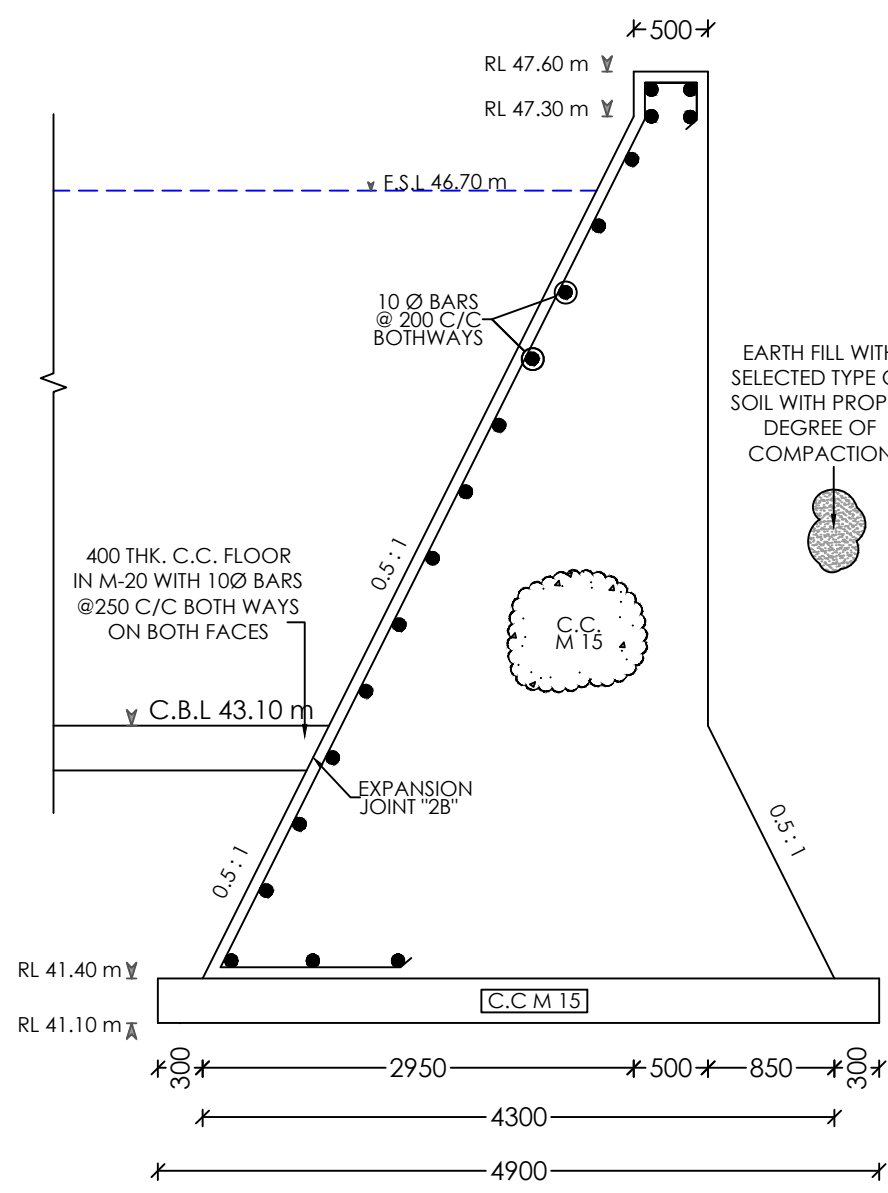
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TRANSITION WALL 2'-2'



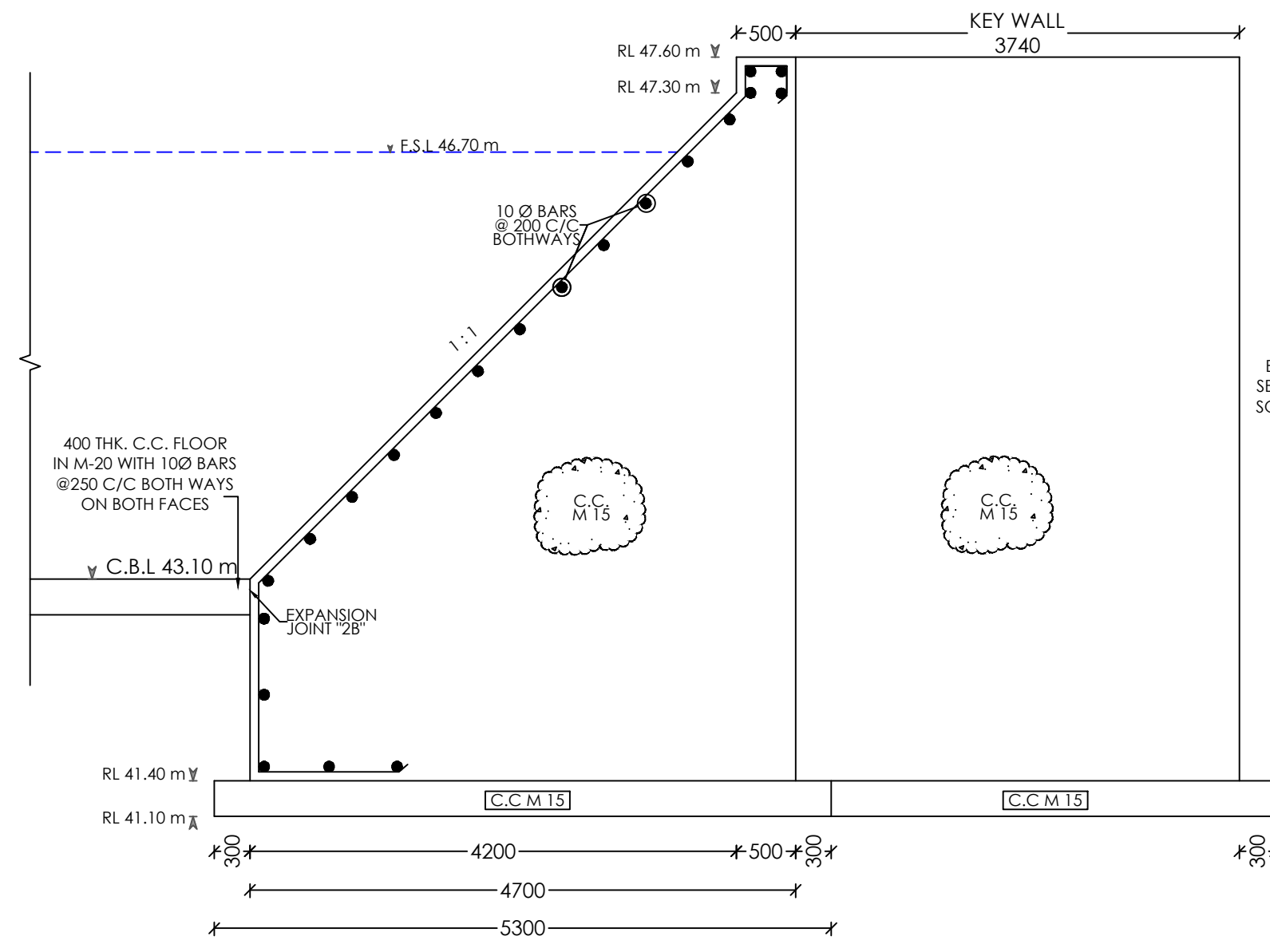
SECTION OF U/S & D/S
TRANSITION WALL 3'-3'



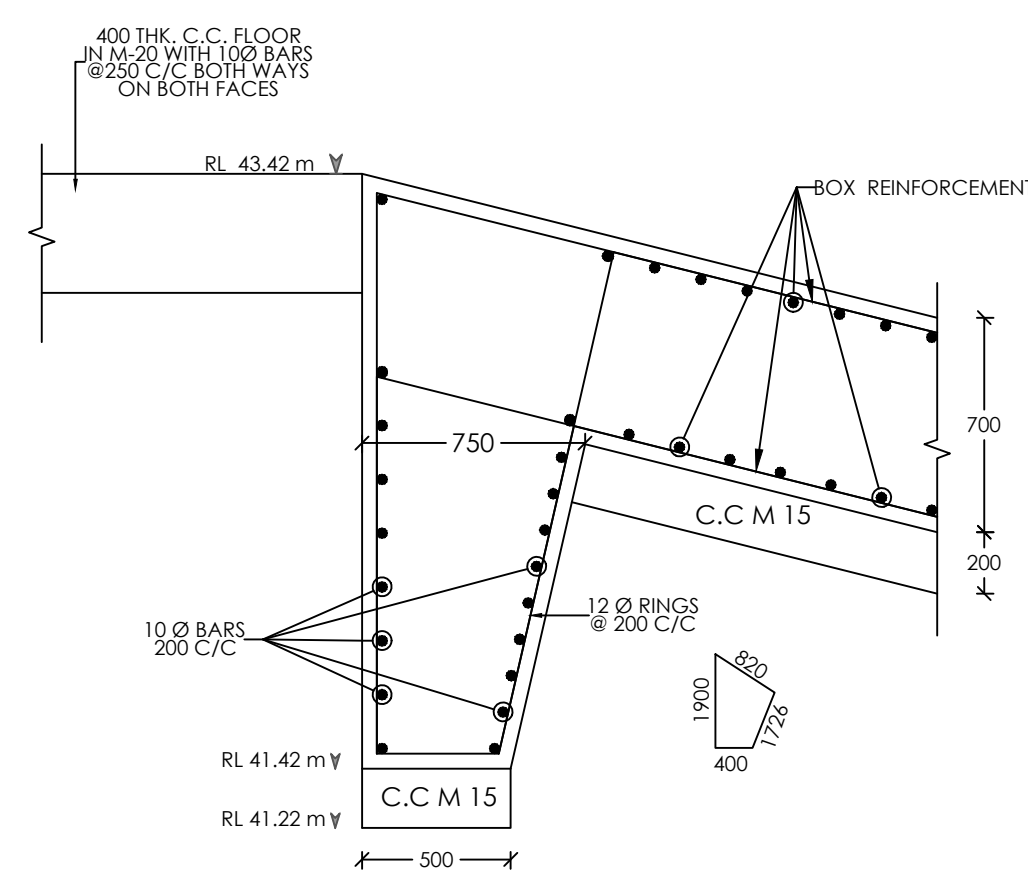
SECTION OF U/S & D/S
TRANSITION WALL 4'-4'



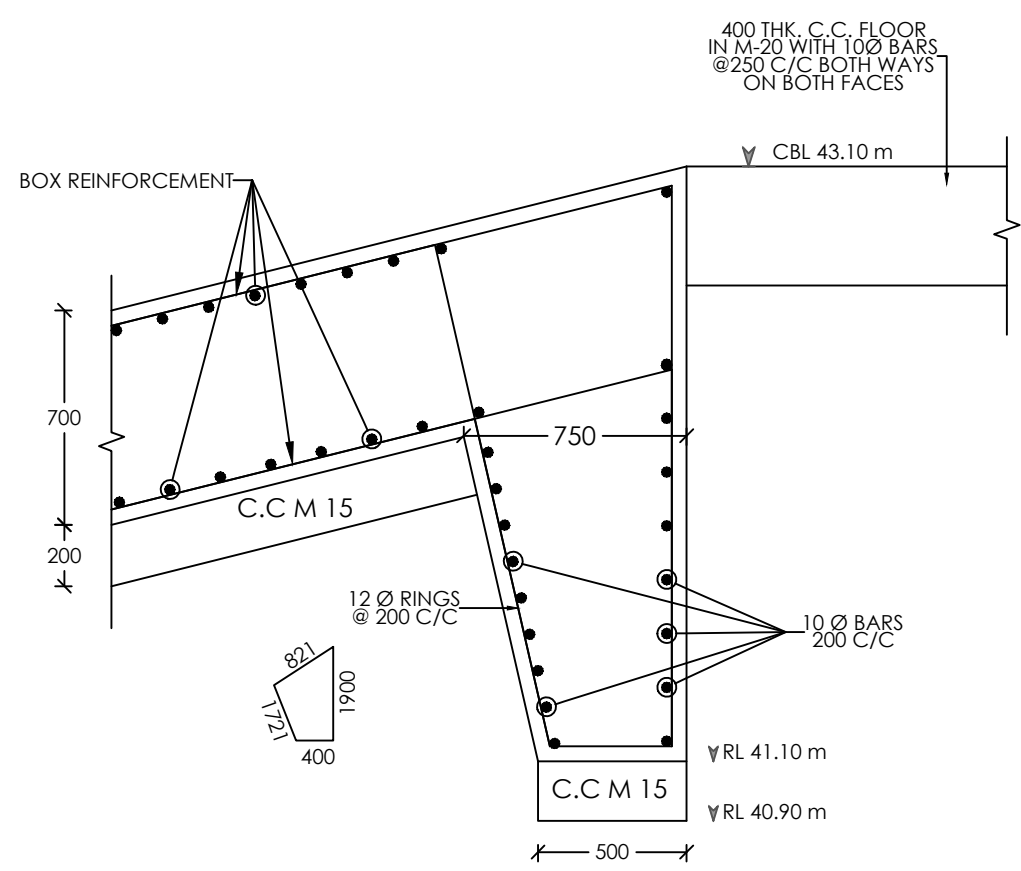
SECTION OF U/S & D/S
TRANSITION WALL 5'-5'



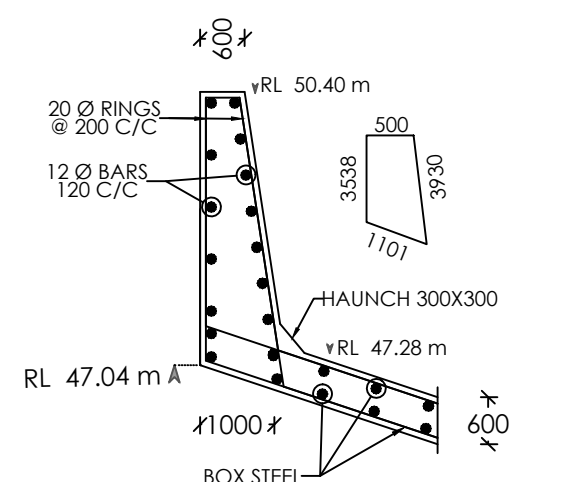
SECTION OF U/S & D/S
TRANSITION WALL 6'-6'



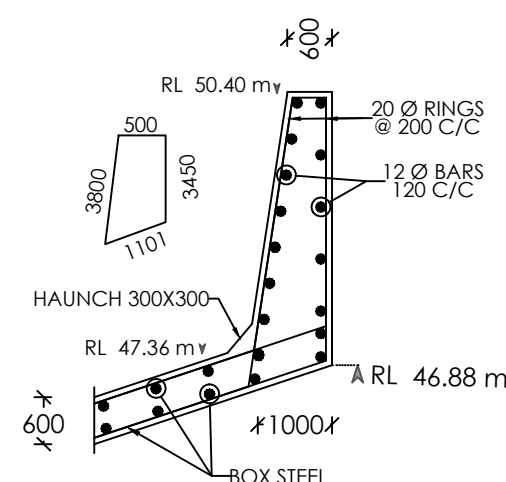
DETAILS OF BOX
CUT-OFF U/S



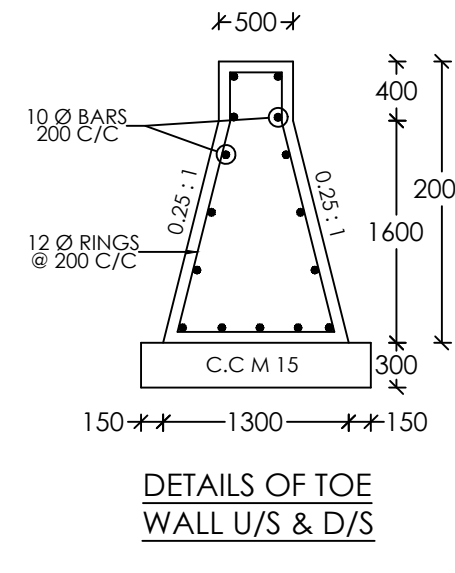
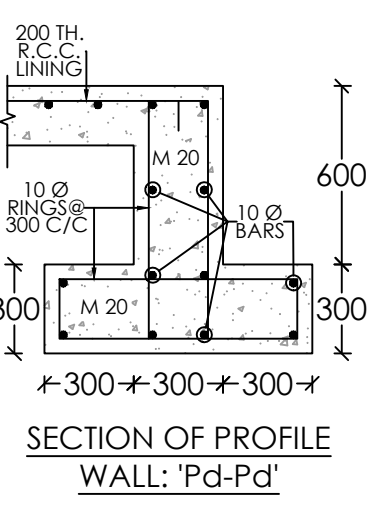
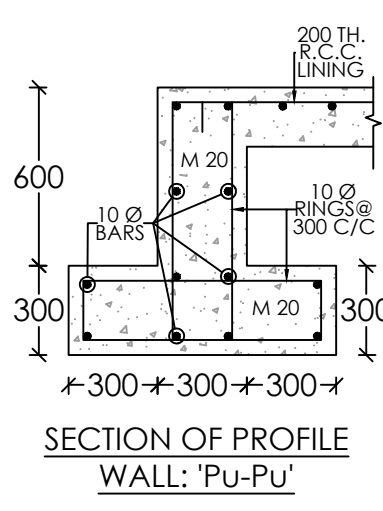
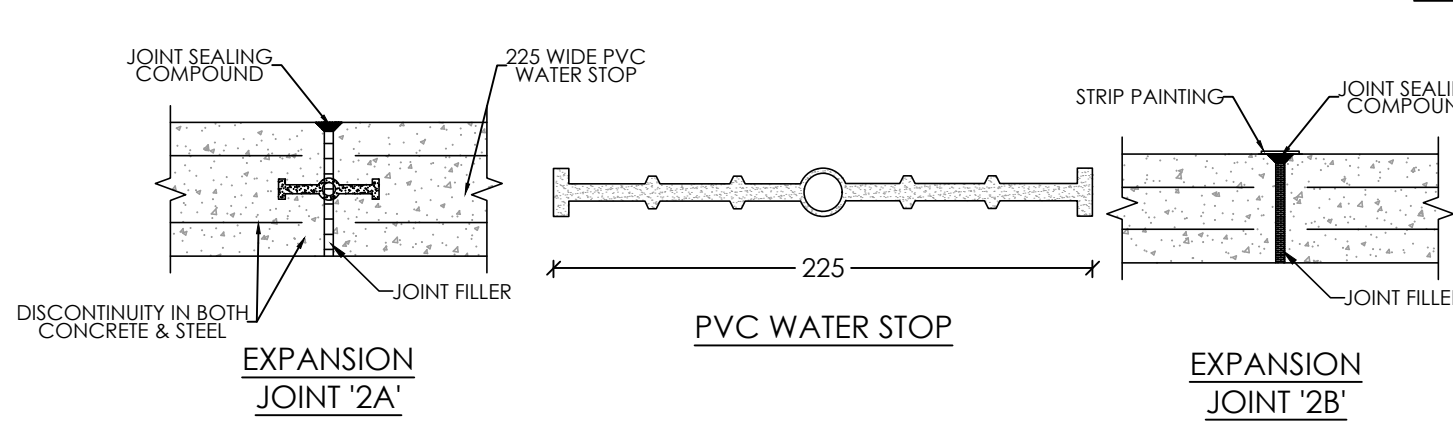
DETAILS OF BOX
CUT-OFF D/S



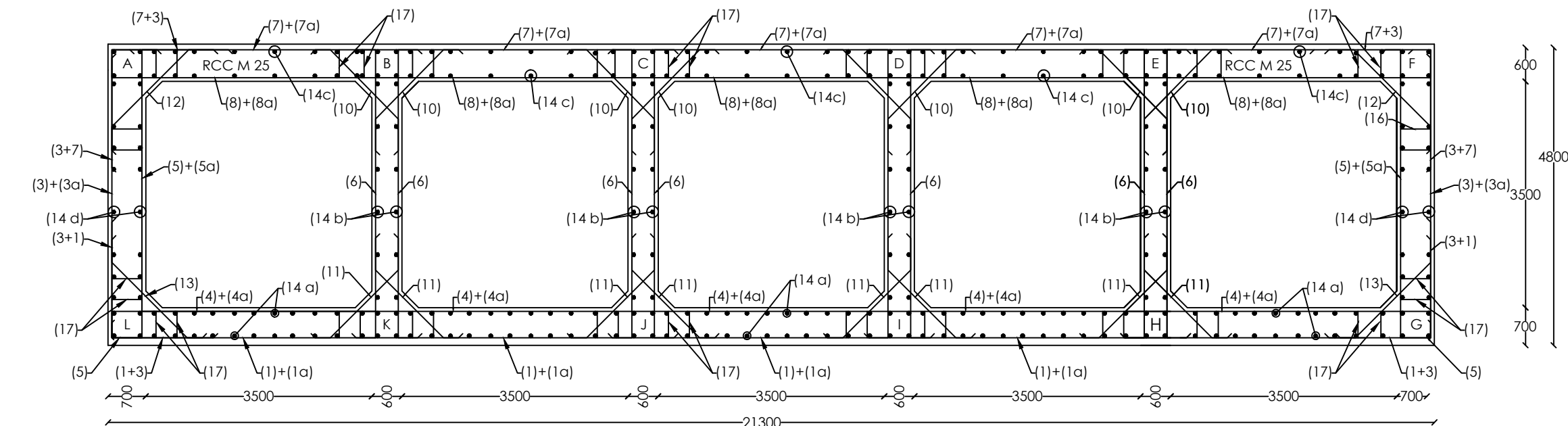
DETAILS OF U/S
BREAST WALL



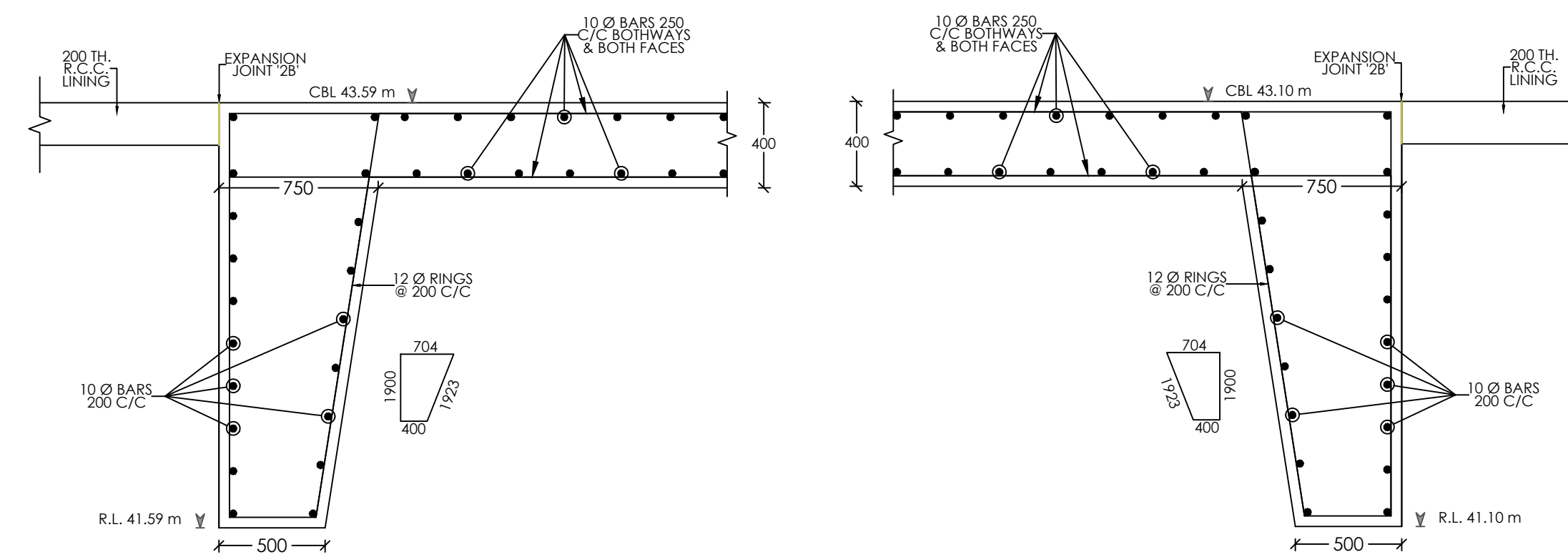
DETAILS OF D/S
BREAST WALL



DETAILS OF TOE
WALL U/S & D/S



REINFORCEMENT DETAIL FOR R.C.C. BARREL



DETAILS OF U/s C.C.
CUT-OFF: "Uc-Uc"

DETAILS OF D/s C.C.
CUT-OFF: "Dc-Dc"

SCHEDULE OF REINFORCEMENT FOR R.C.C. BARREL				
NOM	DIA IN mm	SPAC./ No	SHAPE OF BAR	REMARKS
1	20	200		AT OUTER FACE OF BOTTOM SLAB
1a	12	200		AT OUTER FACE OF BOTTOM SLAB ALTERNATE WITH BAR 1
2				BAR NOT USED
3	20	200		AT OUTER FACE OF OUTER VERTICAL WALLS 'AL' & 'FG'
3a	20	200		AT OUTER FACE OF OUTER VERTICAL WALLS 'AL' & 'FG' ALTERNATE WITH BAR 3
4	20	200		AT INNER FACE OF BOTTOM SLAB
4a	12	200		AT INNER FACE OF BOTTOM SLAB ALTERNATE WITH BAR 4
5	20	200		AT INNER FACE OF OUTER VERTICAL WALLS 'AL' & 'FG'.
5a	12	200		AT INNER FACE OF OUTER VERTICAL WALLS 'AL' & 'FG'. ALTERNATE WITH BAR 5
6	16	200		AT BOTH FACES OF INTERMEDIATE VERTICAL WALLS 'BK', 'CJ', 'DI' & 'EH'
7	20	200		AT OUTER FACE OF TOP SLAB
7a	20	200		AT OUTER FACE OF TOP SLAB ALTERNATE WITH BAR 7
8	20	200		AT INNER FACE OF TOP SLAB
8a	16	200		AT INNER FACE OF TOP SLAB ALTERNATE WITH BAR 8
9				BAR NOT IN USE
10	12	200		HAUNCH BARS AT JOINT 'B', 'C', 'D' & 'E'.
11	12	200		HAUNCH BARS AT JOINT 'H', 'I', 'J' & 'K'.
12	12	200		HAUNCH BARS AT JOINT 'A' & 'F'
13	12	200		HAUNCH BARS AT JOINT 'G' & 'L'
14a	12	150		DISTRIBUTION BARS AT ALL FACES OF BOTTOM SLAB
14b	12	150		DISTRIBUTION BARS AT ALL FACES OF CENTRAL WALL
14c	12	130		DISTRIBUTION BARS AT ALL FACES OF TOP SLAB
14d	12	130		DISTRIBUTION BARS AT ALL FACES OF OUTER WALL
15				BAR NOT IN USE
16				BAR NOT IN USED
17	12	300		4- LEGGED SHEAR REINFORCEMENT PROVIDED ONLY FOR HORIZONTAL BARREL

CONSTRUCTING A CANAL SYPHON @ CH. 1860 M (6.10 RD) OF KAKRAPAR RIGHT BANK MAIN CANAL AT THE CROSSING OF BHANDARI KHADI

CAPITAL CONSULTANCY

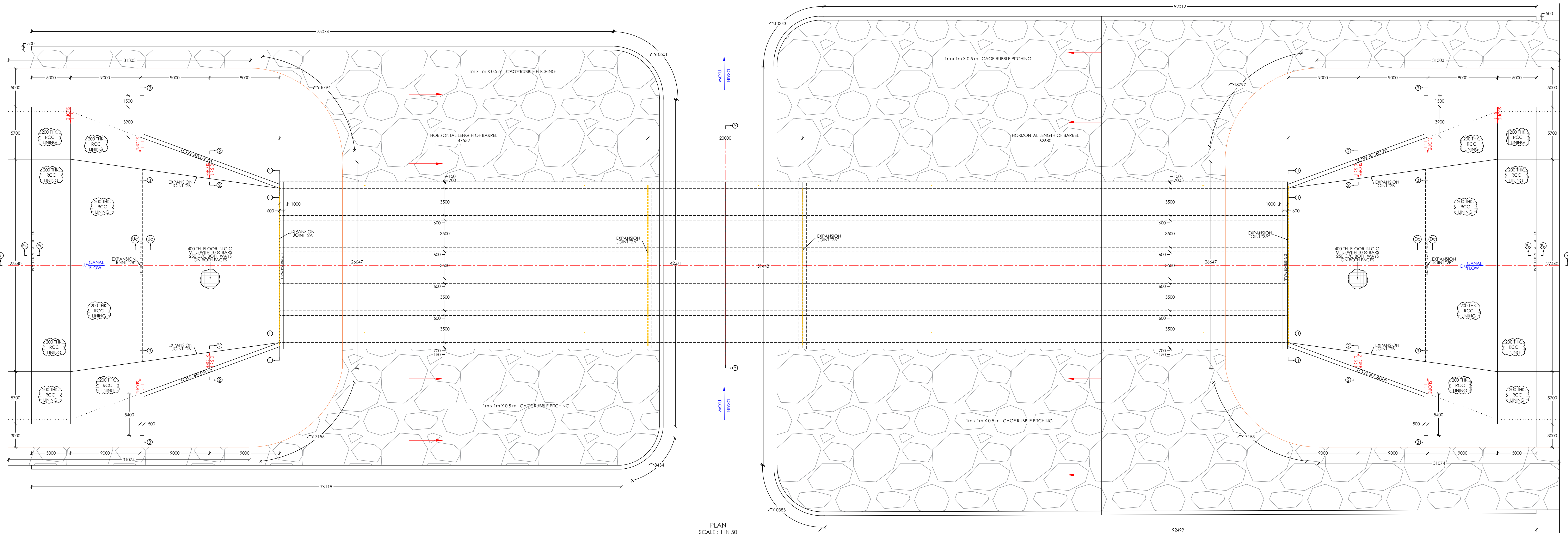
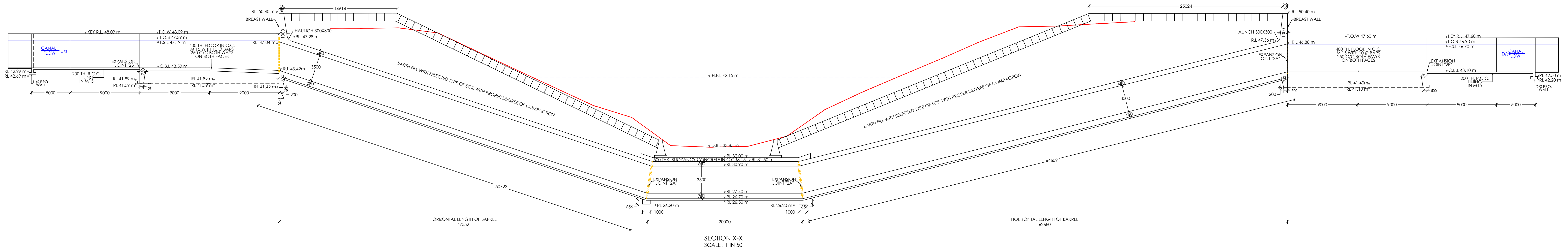
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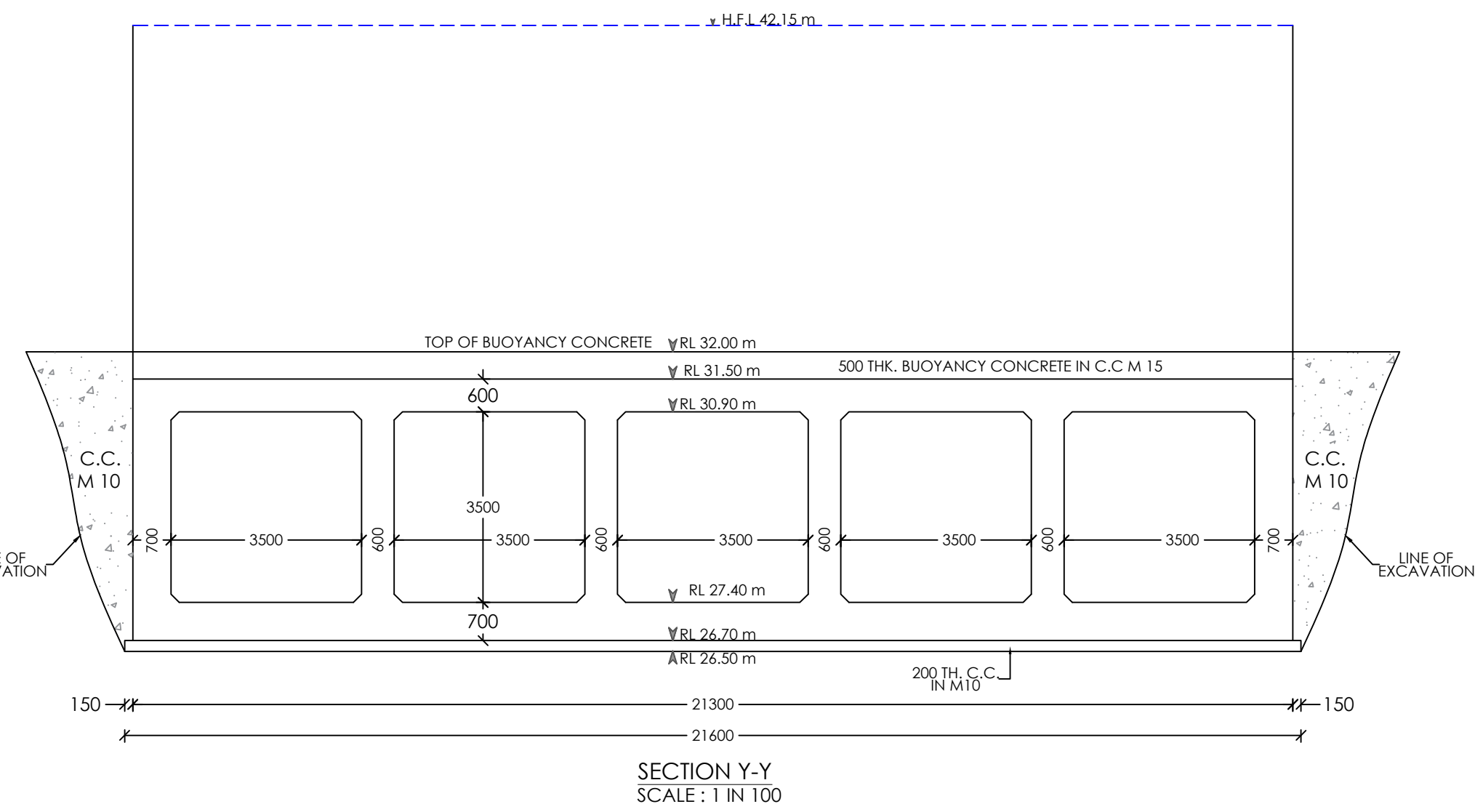
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TADKESHWAR.

EXECUTIVE ENGINEER
K.R.B.M.C. DIVISION,
SURAT.

SUPERINTENDING ENGINEER



CANAL DATA			
Sr. Nos.	PARENT CANAL DATA	DATA VALUE	UNIT
1	GROUND LEVEL LEFT / RIGHT	-	m
2	FULL SUPPLY DISCHARGE U/S & D/S	118.95	CUME/C
3	CANAL BED WIDTH(U/S & D/S)	27.44 / 27.44	m
4	FULL SUPPLY DEPTH(U/S & D/S)	3.6 / 3.40	m
5	CANAL BED LEVEL	43.390	m (D/S)
6	BED GRADIENT U/S	1:1000	
7	FULL SUPPLY LEVEL	47.190	m (U/S)
8	VELOCITY	-	m/sec
9	TOP OF BANK LEVEL	47.390	m (U/S)
10	CROSS SECTION OF CANAL (U/S & D/S)	27.56 X 3.60 + 0.90	
11	WIDTH OF SERVICE ROAD (LEFT)	5.00	m
12	WIDTH OF INSPECTION PATH (RIGHT) (U/S & D/S)	3.00	m
13	SIDE SLOPE (INNER)	1.5 : 1	
14	ALLOWABLE HEAD LOSS	0.54	m
15	WHETHER UNLINED OR UNLINED	UNLINED	
16	FREE BOARD (L = 0.90m + E = 0)m	0.90	m
17	SOIL BEARING CAPACITY	N.A.	1/m ²



- NOTE:**
- CANAL SYPHON IS PROPOSED AT RIGHT ANGLE CROSSING AS REPORTED.
 - THE REQUIRED NET S.S.C. AT FOUNDATION LEVEL OF (1) P.C.C. BARREL IS 10.1m² AND (2) TRANSITION WALLS IS 11.51m², WHICH SHOULD BE ASCERTAINED W.R.T. AVAILABLE S.B.C./A.B.P. AT FOUNDATION LEVEL OF EACH STRUCTURE.
 - ANY PART OF THE STRUCTURE /ENTIRE STRUCTURE SHALL NOT REST ON MADE UP SOIL / BLACK COTTON SOIL OR SWELLING TYPE SOIL. IF IT IS SO, THEN NECESSARY TREATMENT SHALL BE CARRIED OUT IN CONSULTATION WITH COMPETENT AUTHORITY IF REQUIRED AT FIELD LEVEL BEFORE EXECUTION.
 - THE GRADE OF CONCRETE SHALL BE AS UNDER.
 - RCC BARREL M 25
 - PROFILE WALLS OF CANAL, 200 THK. R.C.C. LINING M 20
 - TRANSITION WALLS M 15
 - C.C. CUT-OFF U/S & D/S M 15
 - 400 THK. C.C. FLOOR M 15
 - BED CONCRETE FOR ALL THE COMPONENTS M 15
 - BREAST WALL M 25
 - TIDE WALL M 15
 - THE REINFORCEMENT (HYSD BARS) CONFORMING TO IS : 1786 - 2008 AND ONLY TESTED STEEL SHALL BE USED.
 - LAPS OF REINFORCEMENT IF REQUIRED SHALL BE STAGGERED AND SHALL BE PROVIDED AS PER CL. 26.2.3.1 OF IS : 456-2000, AND IN LAPS SHOULD NOT BE MORE THAN 40 % AT ANY POINT.
 - THE EXPANSION JOINTS SHALL BE PROVIDED AS PER IS-3370 (PART-II)-2009, AS SHOWN IN DRAWING.
 - EXCAVATED TRENCH FILLING & BACK FILL SHALL BE CARRIED OUT WITH SELECTED TYPE OF SOIL WITH PROPER DEGREE OF COMPACTION.
 - ALL DIMENSIONS SHOWN ARE IN MILLIMETER EXCEPT OTHERWISE SPECIFIED.
 - 50 mm CLEAR COVER TO REINFORCEMENT SHALL INVARIABLY BE PROVIDED WITH SUITABLE ARRANGEMENT AND THE SAME SHALL BE CONFIRMED BY THE CONCERNED FIELD OFFICER BEFORE LAYING CONCRETE.
 - THE DIMENSIONS ARE TO BE READ AND NOT TO BE MEASURED.
 - THE DRAWINGS ARE BASED ON DATA / DETAILS FURNISHED BY FIELD OFFICE. ANY CHANGE IN DATA / DETAILS, DRAWING MAY ALSO REQUIRE CHANGES.
 - DISCREPANCY IF ANY SHOULD BE GOT RECTIFIED BEFORE EXECUTION.
 - EARTH PROFILE SHOWN IN THE DRAWING IS PURELY TENTATIVE. HENCE, WORK SHALL BE CARRIED OUT AS PER ACTUAL SITE CONDITIONS.
 - IT IS ASSUMED THAT THE QUALITY OF CONCRETE, STEEL AND OTHER MATERIAL AND OF THE WORKMANSHIP, AS VERIFIED BY INSPECTIONS IS ADEQUATE FOR SAFETY & DURABILITY OF THE STRUCTURE.
 - THE NUMBER OF THE DISTRIBUTION BARS SHOWN IN REINFORCEMENT DETAILS DRAWING ARE PURELY INDICATIVE. IT SHOULD BE PROVIDED AS PER SPACING MENTIONED IN SCHEDULE OF REINFORCEMENT.
 - U/S & D/S PROFILE WALLS OF CANAL SHOULD BE CONSTRUCTED MONOLITHICALLY WITH U/S & D/S LINING FOR THE STABILITY OF LINING.
 - BACKFILLING BEHIND THE END WALLS OF THE RCC BOX SHOULD BE DONE WITH SELECTED TYPE OF SOIL WITH PROPER DEGREE OF COMPACTION. HOWEVER, IF IT IS NOT FEASIBLE AS PER SITE CONDITION, THEN THE BACKFILLING MAY BE DONE USING C.C. M-10/ WITH THE DUE APPROVAL FROM COMPETENT AUTHORITY.



CAPITAL CONSULTANCY Engineering Research Laboratory (A ISO 9001:2015 Approved Laboratory) F-103, Electronic Estate, G.I.D.C., Sector No. 26, Gandhinagar-382028 (Gujarat) Website : www.capitalnabi@gmail.com E-mail : capital.nabi@gmail.com		SECTION OFFICER MANOVI SECTION, MANOVI.	DY. EX. ENGINEER REMO. SUB. DIVISION, TADKESHWAR.	EXECUTIVE ENGINEER K.R.M.C. DIVISION, SURAT.	SUPERINTENDING ENGINEER
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CONSTRUCTING A CANAL SYPHON @ CH. 1860 M (6.10 RD) OF KAKRAPAR RIGHT BANK MAIN CANAL AT THE CROSSING OF BHANDARI KHADI