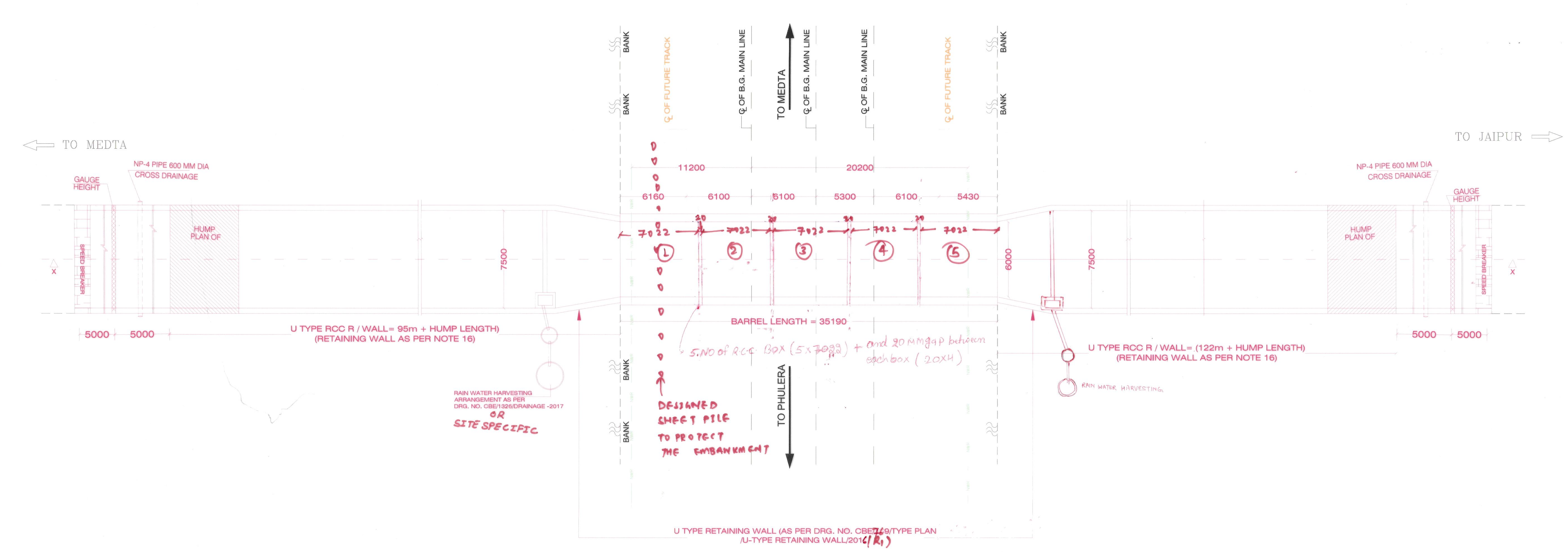
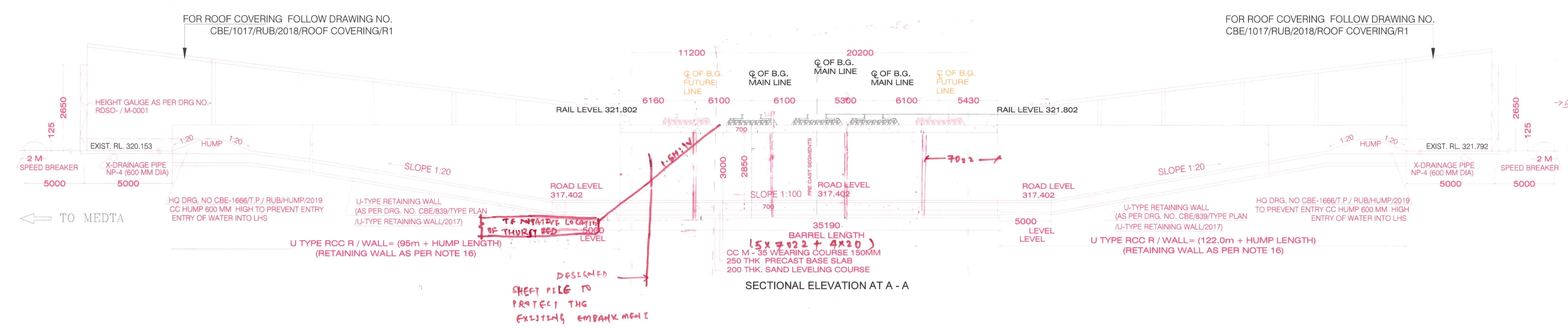
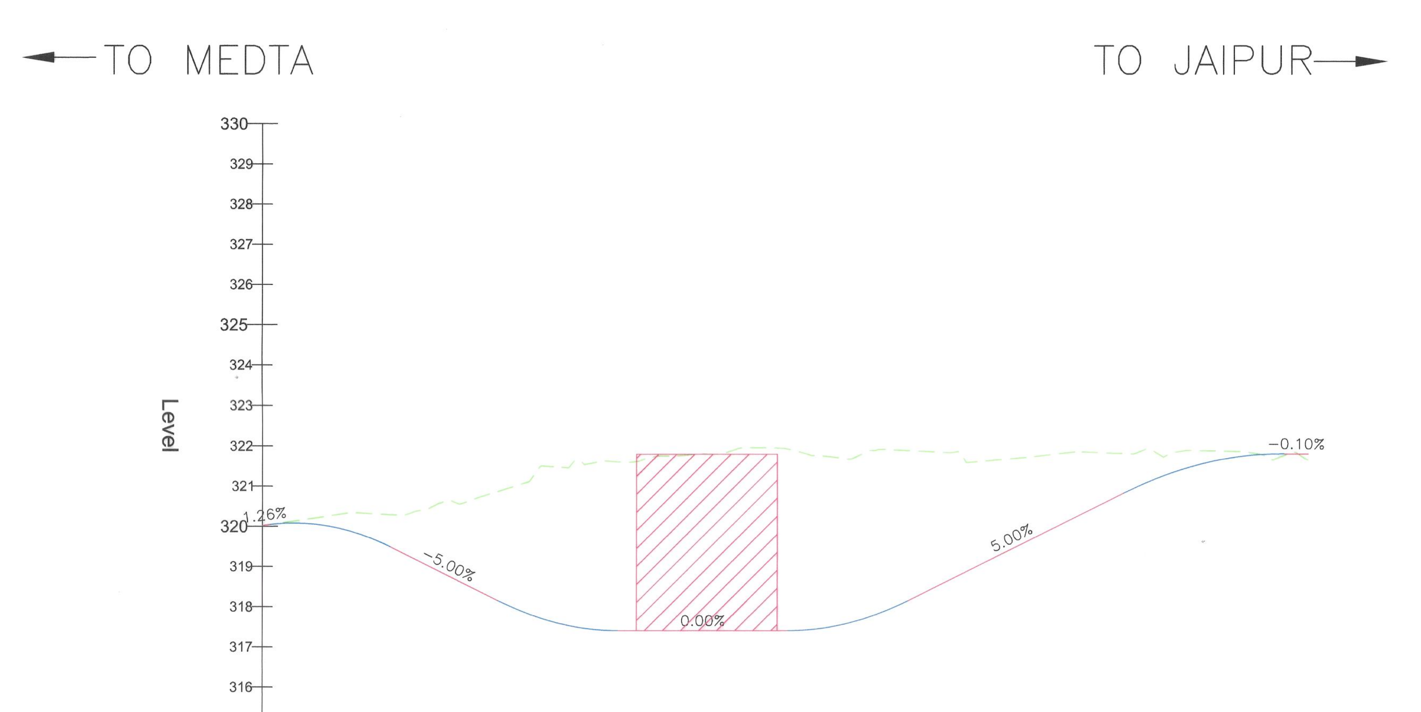
EXECUTIVE AGENCY	SUPERVISING AGENCY
PUBLIC WORKS DEPARTMENT RAJASTHAN	DIVISON-JODHPUR





SECTIONAL ELEVATION AT A - A

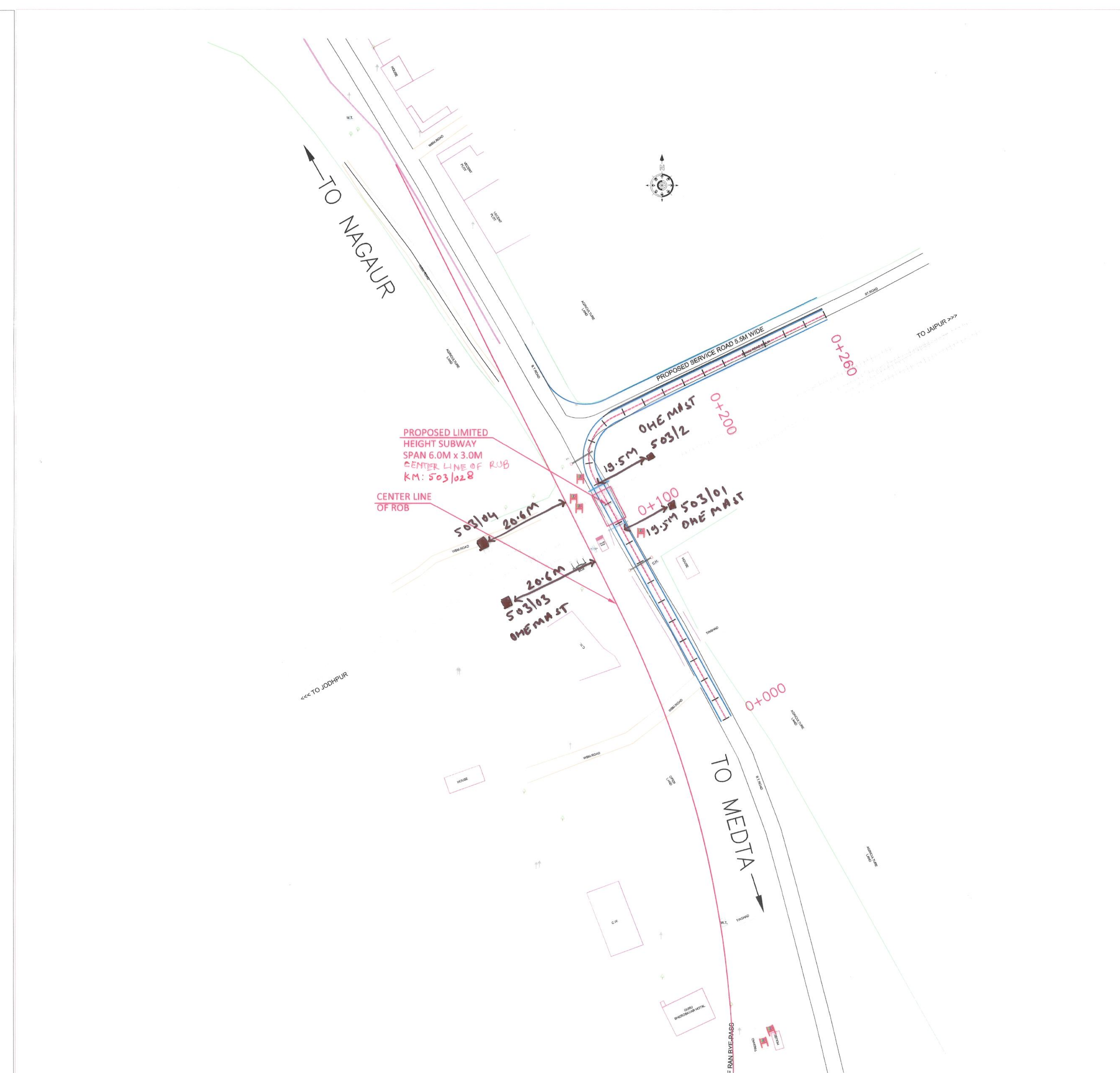


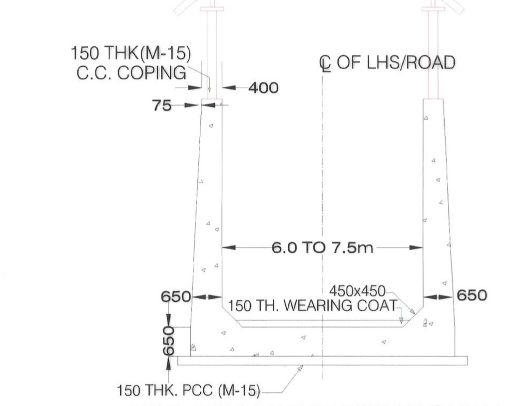
	0+000	0+010	0+020	0+030	0+040	0+050	0+060	0+070	0+080	0+090	0+100	0+110	0+120	0+130	0+140	0+150	0+160	0+170	0+180	0+190	0+200	0+210	0+220	0+230	0+240	0+250	0+260
PROPOSED LEVELS	320.023	320.079	319.930	319.572	319.075	318.574	318.076	317.685	317.461	317.402	317.402	317.402	317.402	317.402	317.476	317.717	318.124	318.624	319.124	319.624	320.124	320.624	321.101	321.462	321.696	321.802	321.802
EXISTING LEVELS BELOW PCL	320.023	320.165	320.316	320.302	320.405	320.587	320.918	321.503	321.541	321.597	321.754	321.804	321.955	321.939	321.748	321.853	321.890	321.841	321.631	321.720	321.833	321.830	321.924	321.895	321.874	321.714	321.656

HORIZONTAL GEOMETRY: L =122.792; R: 20.000 L: 32.484; L =104.724

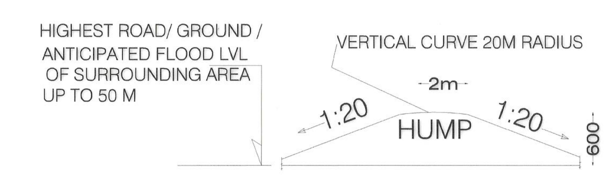
VERTICAL ALIGNMENT: G=1.26% L=1.829; K=4.792 L=30.000; G=-5.00% L=26.605; K=5.993 L=30.000; G=0.00% L=42.143; K=6.001 L=30.000; G=5.00% L=53.506; K=7.846 L=40.000; G=-0.10% L=5.917

CHAINAGE

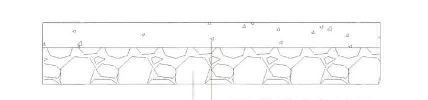




SECT. OF RCC U-TYPE RETAINING WALL (AS PER DRG. NO. CBE/839/TYPE PLAN /U-TYPE RETAINING WALL/2017)



WATER STOPPER / HUMP
HQ DRG. NO CBE-1666/T.P./ RUB/HUMP/2019

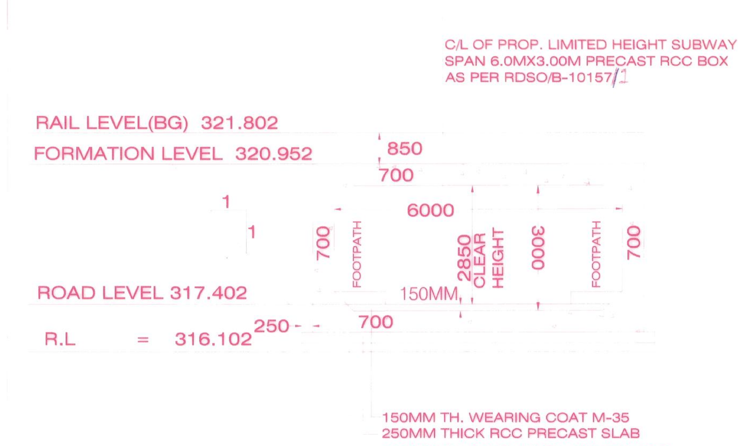


SECTION OF CC ROAD

53- Suitable S.R.08 traffic blocks are to be ensured by executing agency before dismantling of any existing work or excavation near the running track
54- Soil slope stability must be ensured by executing agency during execution of work. However, sheet pilling arrangement to protect the embankment to be provided (if required).
TO JAIPUR
55- Details shown in the GAD shall be verified at site before starting of the work.

G.L.	G.L.
1.50 m, N = 14 SBC = 12.50 t/m2 3.00 m, N = 20 SBC = 15.00 t/m2	GRAVELY CLAY
5.00 m, N = 32 SBC = 17.50 t/m2 7.00 m, N = 35 SBC = 20.00 t/m2 8.00 m, N = 35 SBC = 23.00 t/m2	POORLY GRADED SAND SILT MIX (GM)

SOIL STRATA



TYPICAL SECTION OF RUB
SUITABLE FOR 32T LOADING

NOTES :-

1. EXISTING WORKS ARE SHOWN IN BLACK , PROPOSED WORKS ARE SHOWN IN RED, DISMANTLING IS SHOWN IN DOTTED GREEN COLOR AND FUTURE WORK IS SHOWN IN YELLOW COLOR .
2. ALL DIMENSIONS ARE IN MILLIMETERS , LEVELS IN METERS AND CHAINAGES IN KILOMETER , UNLESS OTHERWISE STATED. NO DIMENSION SHALL BE SCALED.
3. ALL DIMENSIONS , LEVELS AND DETAILS SHOWN IN THE GAD SHALL BE VERIFIED AT SITE BEFORE COMMENCEMENT OF WORK . DISCREPANCY IF ANY SHOULD BE BROUGHT INTO THE NOTICE OF NWR HQ ALONG WITH PROPOSED REVISION / ALTERATION IN THE GAD.
4. EXECUTION OF WORK IN THE VICINITY OF EXISTING TRACK SHALL BE CARRIED OUT UNDER THE SUPERVISION AND DIRECTION OF AUTHORIZED DIVISIONAL OFFICIAL AND AFTER TAKING PROPER PROTECTION AND SAFETY MEASURES.
5. THE WORK OF DISMANTLING AND EXCAVATION OF EXISTING STRUCTURE IN THE VICINITY OF RUNNING TRACK SHALL BE CARRIED OUT UNDER SUITABLE TRAFFIC BLOCK AND IN PRESENCE OF AUTHORIZED DIVISIONAL OFFICIALS.
6. FEASIBILITY OF PROVIDING LHS AS WELL AS EFFECTIVE DRAINAGE SHALL BE EXAMINED AND CONFIRMED BY THE SECTIONAL SR.DEN/DEN/CONCERN DYCE/C BEFORE TAKING UP THE WORK.
7. HEIGHT GAUGE TO BE PROVIDED AS PER RDSO DRG. NO. M-0001 , AT SUITABLE LOCATION / POINT, WITH PROPER ARRANGEMENT TO PREVENT POSSIBILITY OF ANY VEHICLE ENTERING THE RUB WITHOUT PASSING THROUGH THE HEIGHT GAUGE.
8. UNDERGROUND CABLES SHALL BE DETECTED BY CABLE ROUTE TRACER BEFORE START OF THE WORK. THE CABLE SHALL BE CAREFULLY HANDLED UNDER THE SUPERVISION OF AUTHORIZED RAILWAY OFFICIAL.
9. RLY. BOARD'S GUIDE LINES CONVEYED VIDE LETTER NO. 2006/CEI/2/RUB DT. 24.03.2012& 03/07/18 AND NWR'S GUIDE LINES CONVEYED VIDE LETTER NO. HQ/W/420/0 DT.31.10.2013 SHOULD BE FOLLOWED STRICTLY.
10. MINIMUM SAFE BEARING CAPACITY SHALL BE MORE THAN FOUNDATION PRESSURE UNDER BOX I.E.22.0 T/M2
11. IF SBC AT FOUNDATION IS LESS THAN MAXIMUM FOUNDATION PRESSURE , THE SBC SHALL BE IMPROVED BY SUITABLE TECHNIQUE . THE MATTER SHALL BE REFERRED TO HQ FOR REVISION IN DESIGN ,IF IMPROVED SBC AT FOUNDATION LEVEL IS LESS THAN MAXIMUM FOUNDATION PRESSURE.
12. REFER RDSO DRAWING FOR STRUCTURAL DETAILS OF RCC BOX NO.- RDSO/B-10157/1 ZERO M FILL DEPTH
13. HYSD BAR OF GRADE FE415/FE500D CONFIRMING TO ISI 786-2008 SHALL BE USED FOR REINFORCEMENT.
14. R.C.C WORK SHALL BE CARRIED OUT AS PER IRS CONCRETE BRIDGE CODE WITH LATEST CORRECTION SLIP. GRADE OF CONCRETE : AS PER RDSO, M25 FOR WING AND RETAINING WALL. ONLY ,MACHINE MIXED CONCRETE SHALL BE USED .MINIMUM CLEAR COVER FOR ALL THE MAIN REINFORCEMENT SHALL BE 50MM. (AS PER RDSO)
15. 150 MM THICK WEARING COAT IN M-35 CEMENT CONCRETE WITH NOMINAL REINFORCEMENT SHOULD BE PROVIDED ON TOP OF BOTTOM SLAB. VERY GENTLE SLOPE TO BE PROVIDED IN WEARING COAT INSIDE BOX TO AVOID STAGNATION OF WATER.
16. REFER PLAN NO. CBE 839/ TYPE PLAN / U - TYPE RETAINING WALL/ 2017 SHEET 1 &2.
17. THE BACKFILL IS TO BE PROVIDED CONFORMING TO CLAUSE 7.5 OF IRS SUB STRUCTURE CODE.
18. STANDARD OF LOADING: 32T LOADING STANDARD.
19. AS PER RLY. BOARD'S LETTER NO.2006/CE-IV/ MISC /2 (RUB) PT.2 DATED 24/11 /15 MAINTENANCE OF ROADS ,LIGHTING ,DRAINAGE SYSTEM, DIVERSION ROAD AND ANY OTHER ALLIED WORK WILL BE RESPONSIBILITY OF STATE GOVT.
20. RETAINING WALL SHOULD BE PROVIDED 900MM ABOVE FROM HIGHEST GROUND LEVEL / HIGHEST ANTICIPATED FLOOD LEVEL.
21. GEO TEXTILE OR ANY OTHER SUITABLE MATERIAL SHALL BE PROVIDED OUTSIDE THE BOX TO COVER THE JOINTS OF THE BOX SEGMENTS FOR PREVENTION OF FLOW OF EARTH WITH WATER THROUGH JOINTS.
22. DRAINAGE ARRANGEMENT TO BE PROVIDED AS PER HQ TYPE PLAN NO. CBE-1326/TP/RUB-DRAINAGE /2017.
23. MARK REVERSE HEIGHT GAUGE IN FEET/DANGER LINE ON BOTH FACES OF EACH SUBWAY, WHICH SHOULD CLEARLY BE VISIBLE TO ROAD USERS.
24. WORK SHOULD NOT BE CARRIED OUT IN RAINY SEASON.
25. HUMP/WATER STOPPER SHOULD BE PROVIDED AS PER HQ TYPE PLAN NO. CBE-1666/T.P/RUB/HUMP/2019.
26. ALLOW CONTROLLED SETTLEMENT OF THE APPROACHES OF RUB BY FLOODING WITH WATER TANKERS UNDER BLOCK.
27. EMBANKMENT NEAR THE RUB SHALL BE PROTECTED AGAINST SLIPPAGE BY SLOPE PITCHING WITH FLEXIBLE PROOF SHEETS , SHEET PILING ETC.
28. WARNING BOARD ON BOTH SIDE OF RUB AT SUITABLE LOCATION SHOULD BE PROVIDED AS PER HQ LETTER NO. HQ/W/420/1/2/1 DT. 26/ 07 /2019 AS BELOW .

चेतावनी
सावधान . पानी भरने की स्थिति में —पया पुलिया में प्रवेश न करे
पानी भरने पर सुचित करें . EXECUTIVE ENGINEER PWD/NH/AJMER MOBILE NO.)

29. RCC BOX SHALL BE LAUNCHED BY PUSHING AND PULLING METHOD. SEPARATE TAD SHALL BE SUBMITTED FOR APPROVAL OF COMPETENT AUTHORITIES.
30. THE ROB IS ALREADY BEING CONSTRUCTED AT THIS LOCATION. DURING CONSTRUCTION OF LHS, THE EXISTING ROB WILL BE USED AS DIVERSION. HENCE SEPARATE DIVERSION PLAN IS NOT REQUIRED.
30. EXTRA ROAD WIDTH MINIMUM 1M SHOULD BE PROVIDED ON CURVE OF APPROACH ROAD.
31. ROAD SIGN BOARD / WARNING BOARD SHOULD BE PLACED BEFORE HEIGHT GAUGE.
32. THE GAP BETWEEN PRECAST SUBWAY UNITS SHALL BE SEALED BY EPOXY MORTAR OR OTHER APPROVED COMPOUND TO PREVENT THE SEEPAGE OF WATER THROUGH JOINTS.
33. ~~WORK OF INSERTION OF RUB WILL BE DONE BY CUT COVER METHOD IN TRAFFIC BLOCK.~~
34. PCE SANCTION TO BE TAKEN BEFORE STARTING OF WORK.
35. WORK TO BE CARRIED OUT BY AIR PUSHING METHOD WITH. RELIEVING GIRDER - ~~METHOD~~.
36. RAILWAY BOARD'S GUIDELINES CONVEYED VIDE LETTER NO 2017/CE-1V/LHS/88/DT. 24/09/2019 SHOULD BE FOLLOWED STRICTLY.
37. BACK FILL MATERIAL SHOULD BE AS PAR CLAUSE 7.5 OF IRC BRIDGE SUBSTRUCTURE & FOUNDATION CODE IN LIEU OF GRADED FILTER ON THE VERTICAL WALLS OF LHS GEO-COMPOSITE DRAIN MAY BE USE FOR TRAIL PURPOSE AS PER GEO-TECH ENGINEERING DIRECTORATE RDSO LETTER NO. GE/GEN/COMMENTS/GCD 185/VERTICAL (PART-1) DATED 13/09/2019 IN REFERENCE TO EDCE/BRS/RB EMAIL DATED 05/09/2019.
38. AFTER COMPLETION OF THE WORK SAFETY CERTIFICATE SHALL BE ISSUED BY COMPETENT AUTHORITY.
39. AFTER COMPLETION OF WORK, COMPLETION PLAN SHALL BE DRAWN & SAME TO BE UPLOADED ON BMS THROUGH JODHPUR DIVISION.
40. JOINTS OF RETAINING WALL SHOULD BE SEALED WITH METAL / RUBBER WATER STOP SEAL.
41. LC SHOULD BE CLOSED AS PER NOC ISSUED BY STATE GOVT. LETTER NO.- ~~अजमेर~~ / लेखा/2023/2834 DATED: 29.05-2023
42. RAILWAY BOARD'S GUIDELINES CONVEYED VIDE LETTER NO. 2017/CE-IV/RUB/SS/DT: 24.09.2019 SHOULD BE FOLLOWED STRICTLY.
43. THE RESPONSIBILITIES OF REGULAR MAINTENANCE AND CLEANING OF DRAIN AND SUMP SHALL BE DONE BY THE PWD/NH/AJMER AND IN CASE OF WATER LOGGING AT RUB, NECESSARY ARRANGEMENTS SHALL BE DONE BY PWD/NH/AJMER.
44. LOAD FROM RUB TO BE CONSIDERED IN FOUNDATION DESIGN OF ROB, IF APPLICABLE.
45. BEFORE EXECUTION OF WORK, AGREEMENT SHALL BE EXECUTED BY DIVISION WITH STATE GOVERNMENT.
46. WORK TO BE EXECUTED AS PER APPROVED T.W.O. OF JU DIVISION.
47. BEFORE STARTING THE WORK DEPOSITION OF REQUISITE CHARGES AS PER EXTANT POLICY CIRCULARS/GUIDELINES SHALL BE ENSURED BY BKN DIVISION.
48. ANY WORK REQUIRED TO BE CARRIED OUT IN CONNECTION WITH ADDITIONAL/ALTERATION/MODIFICATION/SHIFTING FUTURE SHALL BE CARRIED OUT BY THE PARTY AT THEIR OWN EXPENSES IRRESPECTIVE OF THE FACT WHETHER SUCH WORK IS RAILWAY OR PARTY. PRIOR PERMISSION OF THE RAILWAY SHALL BE NECESSARY IN CASE OF THE PARTY DESIRE TO CARRY OUT SUCH WORK.
49. RDSO'S GUIDELINES CONVEYED VIDE LETTER NO. CBS/LUSW DATED 06.08.2024 FOR GUIDELINE FOR INSPECTION, MAINTENANCE & CONSTRUCTION OF RUB/SUBWAYS (BS-138) SHALL BE COMPLIED.
50. LAND AVAILABILITY MUST BE ENSURED BEFORE STARTING OF THE WORK.
51. RCC BOX CASTING WORK TO BE CARRIED OUT ONLY AFTER APPROVAL OF LAUNCHING SCHEME, DRAWING AND DESIGN OF THRUST BED FROM COMPETENT AUTHORITY.
52. ADDITIONAL NOTES :
A. LAUNCHING SCHEME (TAD) WILL BE PREPARED AND SUBMITTED SEPARATELY
B. LHS SHALL BE CONSTRUCTED DULY COMPLYING INSTRUCTIONS/GUIDELINES ISSUED VIDE RAILWAY BOARD'S LETTER NO 2017/CE-IV/RUB/88 DATED 03.07.2017, 22.04.2020 AND 09.09.2022 IN TOTALITY.
C. ALL RCC SURFACES COMING IN CONTACT WITH SOIL SHOULD BE PAINTED WITH BITUMEN OR COALTAR OF APPROVED QUALITY @ 1.464 KG/SQM

RUB IS UNDER STRAIGHT ALIGNMENT OF TRACK CLEAR HEIGHT OF RCC BOX : 2850 mm.
STANDARD OF LOADING 32-T (2008)

उत्तर पश्चिम रेलवे — NORTH WESTERN RAILWAY
मंडल – DIVISION :- JODHPUR

PROJECT: CONSTRUCTION OF LOW HEIGHT SUBWAY/RUB NEAR PROPOSED ROB AT RAILWAY KM. 503/0-1 (LC NO-85) ON NH-89 IN THE STATE OF RAJASTHAN. (AIR PUSHING METHOD)

TITLE: PROP. LIMITED HEIGHT SUBWAY SPAN 6.0MX3.0M PRECAST RCC BOXES IN LIEU OF LC NO- 85 503/0-1 BETWEEN JAC - REN STATIONS

सामान्य व्यवस्था नक्शा — GENERAL ARRANGEMENT DRAWING

SR.DEN (Co.)....21/10/24	DRM.....JU	CBE.......12.11.24
SR.DEE (Gen).......	SR. DOM.........JU	DY.CE (BD)...........
SR.DEE (Trd)....31/10/24	SR.DSTE.........JU	XEN (BD)....1.11.24
SR.DEN (E)....30/10/2024		

DETAILS & FEASIBILITY VERIFIED BY ME AT SITE

ADEN / DNA 28/10/24

SSE/DRG /JU 11.11.24 — SSE/W/DNA — SSE/P-WAY/DNA

Consultant:-

CLIENT :
DRG. NO- JSV /RUB/LC-85/GAD/2023
अधिशाषी अभियन्ता सा. नि. वि. रा. उ. मार्ग खण्ड अजमेर

HQ PLAN NO- CBE - 2203/RUB/JU/2024
DIVISIONAL PLAN NO-

TECHNOVA EMF 2305303000