

Bangladesh Water Development Board

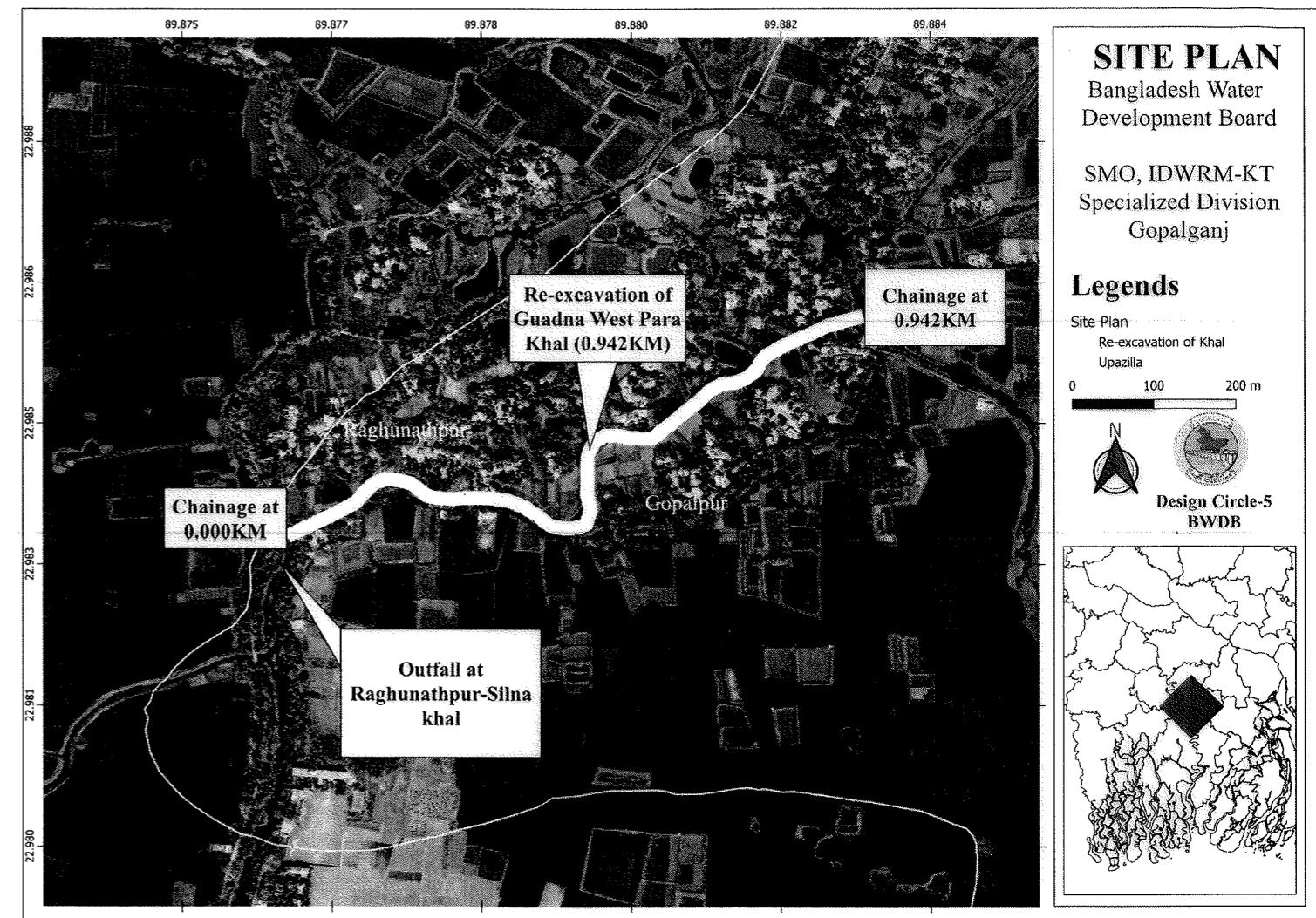
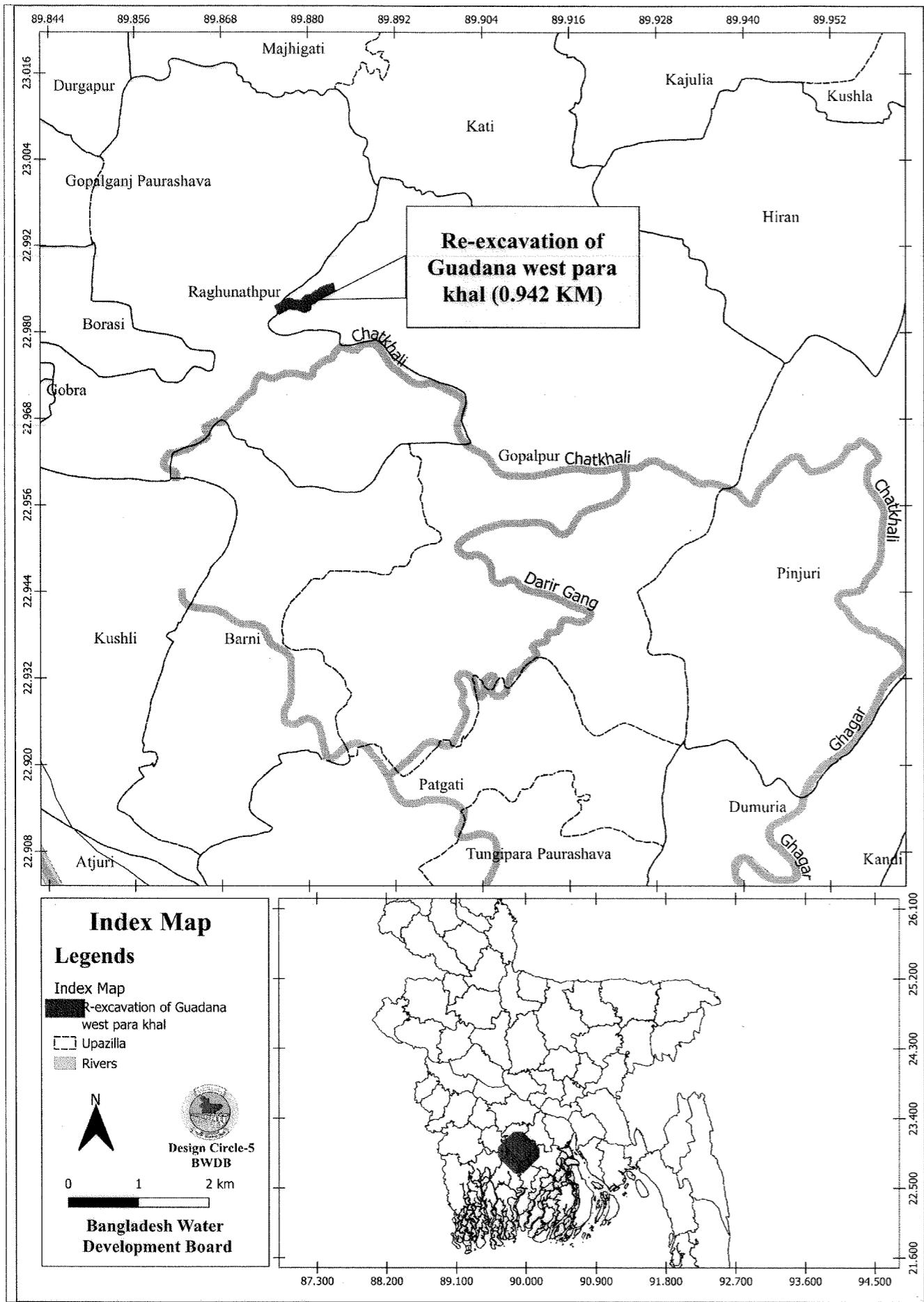
CRISP-WRM

Re-excavation of Guadana west para khal from km. 0.000 to km. 0.942 in polder -2 in c/w Tarail-Pachuria Sub-Project under CRISPWRM under Specialized Division. BWDB, Gopalganj during the year 2024-2025.

SMO, IDWRM-KT

Designed by:Design Circle-5,BWDB,Dhaka

February,2025



Bangladesh Water Development Board

Office of The Superintending Engineer, Design Circle-5

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INDEX MAP & SITE MAP FOR GUADANA WEST PARA KHAL

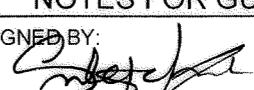
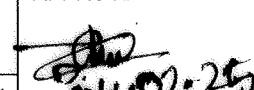
DESIGNED BY: 09.02.25 (MD. MOSTAFA KAMAL), AE	APPROVED BY: 09.02.25 (JAKARIA PERVEZ), SE
CHECKED AND RECOMMENDED BY: (MD. KAMRUL HASAN), EE	
Date: 04/02/2025	Drawing No: DC5-5788-01/08

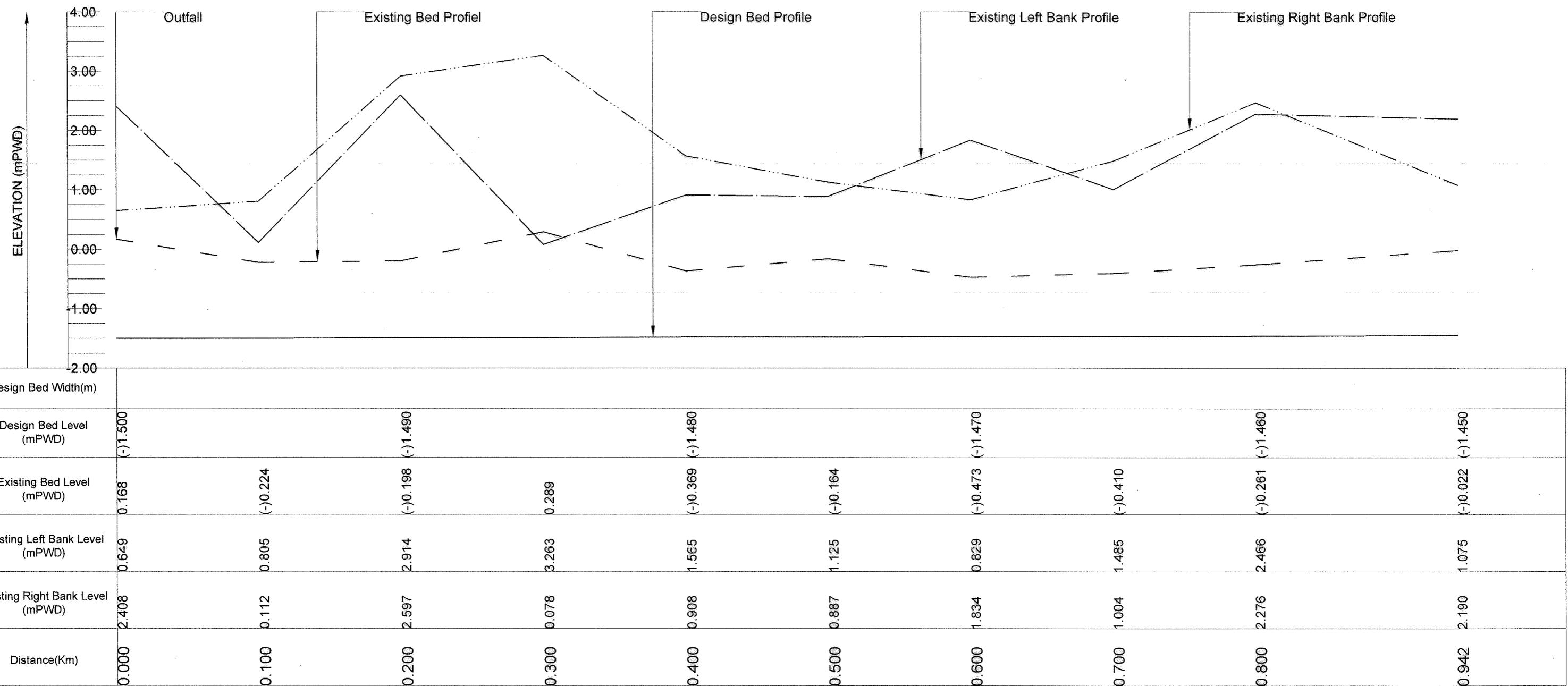
Administrative Notes :

1. FOR ANY ERROR, OMISSION OR CONFUSION PLEASE REFER TO THIS OFFICE AS QUICK AS POSSIBLE FOR FURTHER NECESSARY ACTION
2. WORK SHALL BE EXECUTED AFTER ADMINISTRATIVE AND FINANCIAL APPROVAL AND TECHNICAL SANCTION FROM THE COMPETENT AUTHORITY AND WITHIN THE DPP / BUDGET PROVISION.
3. ALL DIMENSIONS AND ELEVATIONS ARE IN MILLIMETER AND METER(PWD) RESPECTIVELY UNLESS OTHERWISE MENTIONED IN THE DRAWING.
4. ALL MATERIALS AND WORK MUST CONFIRM WITH BWDB TECHNICAL SPECIFICATION.
5. NECESSARY LAND (IF REQUIRED) SHALL BE ARRANGED BY THE FIELD OFFICE FOR RE-EXCAVATION & CONSTRUCTION OF DYKE (IF REQUIRED).
6. THE RE-EXCAVATION OF THE KHAL SHALL START FROM DOWNSTREAM SIDE.
7. A SMOOTH TRANSITION SHALL BE PROVIDED BETWEEN THE EXCAVATED SECTION OF THE KHAL AND THE EXISTING SECTION.
8. A SMOOTH TRANSITION 1:100 SHALL BE PROVIDED AT THE POINT WHERE DESIGN BED WIDTH OR BED LEVEL CHANGES.
9. A SMOOTH TRANSITION AT A SLOPE OF 1:100 SHALL BE KEPT BETWEEN APRON LEVEL OF CONNECTING STRUCTURE (IF ANY) TO DESIGN BED LEVEL OF KHAL.
10. THE RE-EXCAVATION WORK SHALL BE DONE IN THE DRY SEASON WHEN WATER LEVEL IS AT OR NEAR LOW WATER LEVEL
11. NO FILLING SHALL BE DONE WHERE THE EXISTING BED LEVEL OF THE KHAL IS LOWER THAN THE DESIGN BED LEVEL AND EXISTING SIDE SLOPE IS FLATTER THAN DESIGN SECTION.
12. ANY OUTFALL/OFFTAKE RIVER/KHAL WHICH IS CONNECTED WITH THE PROPOSED KHAL SHALL BE KEPT OPEN.
13. TYPICAL DESIGN SECTIONS ARE PROVIDED IN THIS DESIGN FOR RE-EXCAVATION. CROSS SECTIONS AT AN INTERVAL NOT MORE THAN 150.00M TO BE TAKEN BY THE FIELD OFFICE FOR THE ESTIMATION OF ACTUAL VOLUME OF EARTH CUTTING.
14. EXCAVATED EARTH TO BE COLLECTED FROM RIVER CAREFULLY CONSIDERING NO ADVERSE EFFECT ON CHANNEL FLOW AND BANK EROSION.
15. ANY PROPOSED BOX CULVERT /BRIDGE OVER THIS KHAL WILL BE DESIGNED CONSIDERING DESIGN SECTIONS OF THIS KHAL

SPECIAL NOTES :

1. THIS REVISED DRAWING HAS BEEN PREPARED AS PER PROPOSAL AND DESIGN DATA SUBMITTED BY PD,CRISP-WRM HIS OFFICE MEMO NO-PMO/190; DATE: 11/11/2024
2. THIS RE-REEXCAVATION WORK HAS ALSO BEEN DESIGNED CONSIDERING THE WATER RESERVOIR AS WELL AS FOR IRRIGATION PURPOSE.
3. IF THE EXISTING BED LEVEL OF THE OUTFALL (RIVER / KHAL) IS HIGHER THAN DESIGN BED LEVEL OF THIS KHAL, RE-EXCAVATION OF THIS KHAL MUST BE DONE IN PARALLEL/ AFTER THE RE-EXCAVATION OF ITS OUTFALL RIVER / KHAL AS PER APPROVED DESIGN.
4. IF THERE EXISTS ANY STRUCTURE (REGULATOR, BOX CULVERT ETC.) OTHER THAN BRIDGE WITHIN THE PROPOSED LENGTH OF THE KHAL, RE-EXCAVATION WORK IS PROHIBITED THROGHOUT THE LENGTH OF THAT STRUCTURE.
5. DESIGN BED LEVEL OF THE KHAL SHALL NOT BE BELOW THE FOUNDATION TOP LEVEL OF THE EXISTING STRUCTURES (IF ANY) IN THE KHAL. IF THE DESIGN BED LEVEL IS BELOW THE FOUNDATION TOP LEVEL THEN THE DIFFERENCE BETWEEN THESE LEVELS SHALL BE MATCHED IN A SLOPE 1:100, OR A DISTANCE OF 100 M, WHICHEVER IS HEIGHER (U/S AND D/S OF THE STRUCTURE), (OR AS SHOWN IN THE DRAWING).
6. DESIGN BED LEVEL & BED WIDTH OF THIS KHAL HAVE BEEN FIXED CONSIDERING THE BED LEVEL & BED WIDTH OF EXISTING KHAL/ FLOOR LEVEL OF EXISTING HYDRAULIC STRUCTURE.
7. ALL SAFETY PRECAUTION MUST BE TAKEN DURING EXECUTION OF WORK.

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Office of The Superintending Engineer,Design Circle-5	
CRISP-WRM	
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NOTES FOR GUADANA WEST PARA KHAL	
DESIGNED BY:  (MD. MOSTAFA KAMAL),AE	APPROVED BY:  (JAKARIA PERVEZ),SE
CHECKED AND RECOMMENDED BY:  (MD. KAMRUL HASAN),EE	
Date:04/02/2025	Drawing No:DC5-5788-02/08



LONG SECTION OF GUADANA WEST PARA KHAL APPLICABLE FROM KM 0.000 TO KM 0.942

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LONG SECTION OF GUADANA WEST PARA KHAL

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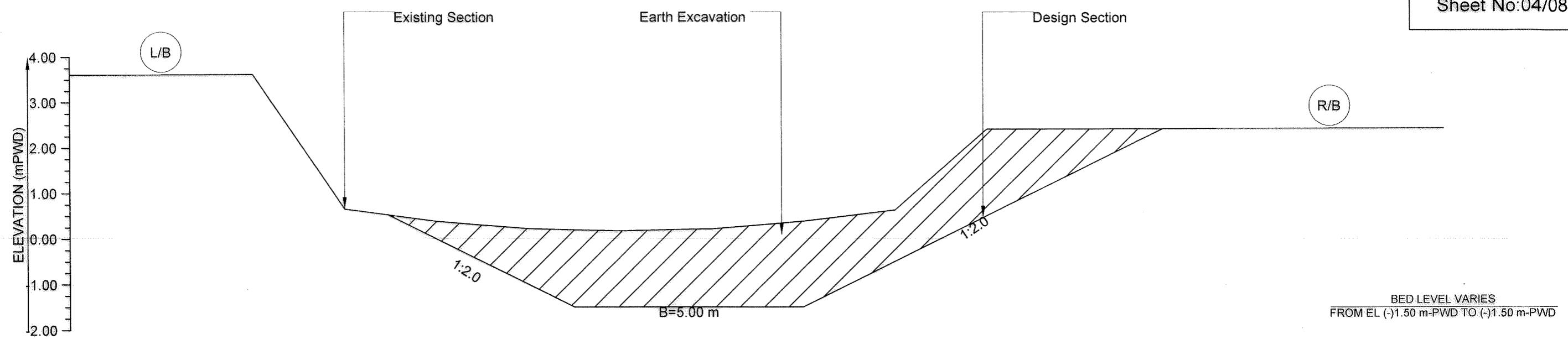
09.02.25
(MD. MOSTAFA KAMAL),AE

APPROVED BY:

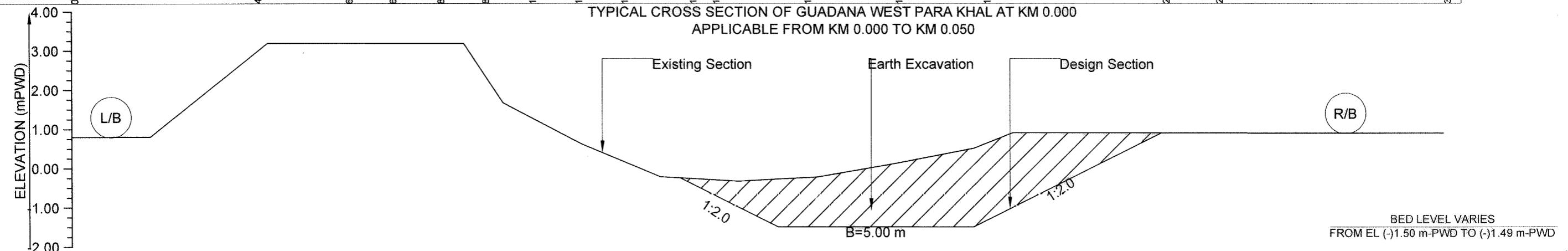
04.02.25
(JAKARIA PERVEZ),SE

CHECKED AND RECOMMENDED BY:

04.02.25
(MD. KAMRUL HASAN),EE



Design Bed Level in (mPWD)	3.649	3.616	0.521	0.382	0.391	0.217	0.193	(-)1.500	0.168	0.201	0.212	0.381	0.628	0.236	2.423	0.891
Existing Bed Level in (mPWD)	3.649	3.616	0.521	0.382	0.391	0.217	0.193	(-)1.500	0.168	0.201	0.212	0.381	0.628	0.236	2.423	0.891
Distance(m)	0.000	4.000	8.000	12.000	16.000	18.000	19.920	23.839	25.000	26.399	27.797	28.000	29.000	30.000	30.000	30.000



Design Bed Level in (mPWD)	3.192	3.183	0.612	0.284	0.233	0.112	0.050	(-)1.500	0.903	0.901	0.899	0.896	0.891	0.891	0.891	
Existing Bed Level in (mPWD)	3.192	3.183	0.612	0.284	0.233	0.112	0.050	(-)1.500	0.903	0.901	0.899	0.896	0.891	0.891	0.891	
Distance(m)	0.000	2.000	5.000	10.000	11.000	13.000	15.000	15.503	16.752	18.000	20.500	21.000	23.000	24.000	27.797	30.000

**TYPICAL CROSS SECTION OF GUADANA WEST PARA KHAL AT KM 0.000
APPLICABLE FROM KM 0.000 TO KM 0.050**

**TYPICAL CROSS SECTION OF GUADANA WEST PARA KHAL AT KM 0.100
APPLICABLE FROM KM 0.050 TO KM 0.150**

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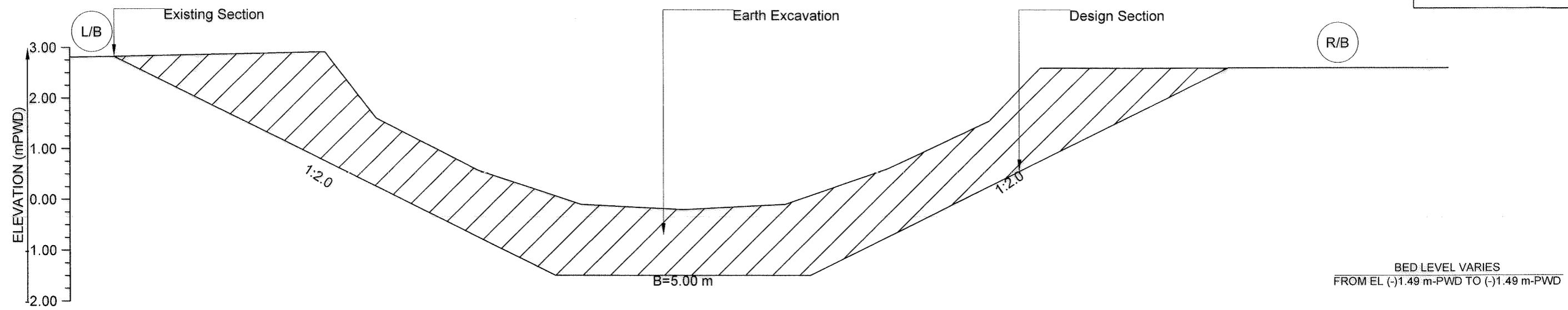
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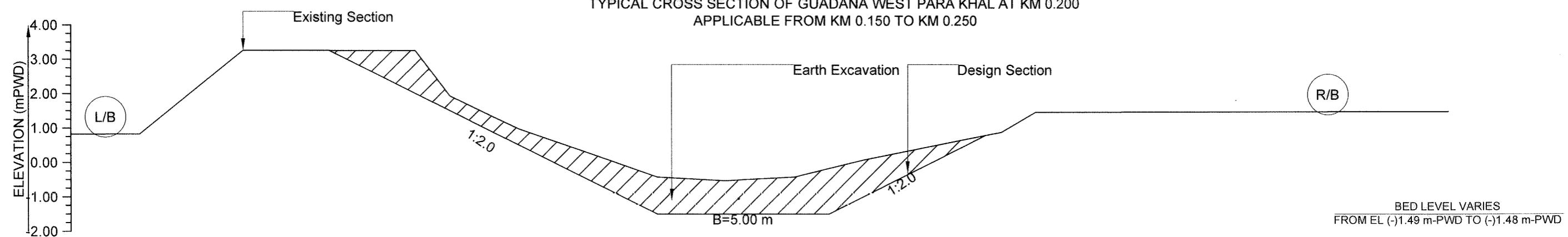
(JAKARIA PERVEZ), SE

Date: 04/02/2025

Drawing No: DC5-5788-04/08



Distance(m)	Design Bed Level in (mPWD)	Existing Bed Level in (mPWD)
0.000	2.807	2.826
0.869		
5.000	2.914	2.672
6.000		1.602
8.000	0.576	
9.500	0.074 (-1.490)	0.084
10.000		
12.000	0.082 (-1.490)	
14.000	0.082 (-1.093)	
14.500		
16.000	0.607	
18.000	1.551	
18.500	1.590	2.168
19.000	1.590	2.597
22.680		2.600
27.000	2.604	



Distance(m)	Design Bed Level in (mPWD)	Existing Bed Level in (mPWD)
0.000	0.817	0.828
2.000		
5.000	3.263	
7.502	3.259	
10.000	3.255	
11.000	1.937	
12.251	1.337	
13.000	0.977	
15.000	0.289	
17.000	-0.415 (-1.490)	
19.000	-0.523	
19.500	-0.437 (-1.490)	
21.000	-0.448	
22.000	-0.1170 (-1.490)	
23.000	0.078	
24.279	0.334	
25.000	0.479	
26.558	0.789	
27.000	0.877	
28.000	1.464	
33.000		1.477
40.000		1.487

TYPICAL CROSS SECTION OF GUADANA WEST PARA KHAL AT KM 0.200
APPLICABLE FROM KM 0.150 TO KM 0.250

TYPICAL CROSS SECTION OF GUADANA WEST PARA KHAL AT KM 0.300
APPLICABLE FROM KM 0.250 TO KM 0.350

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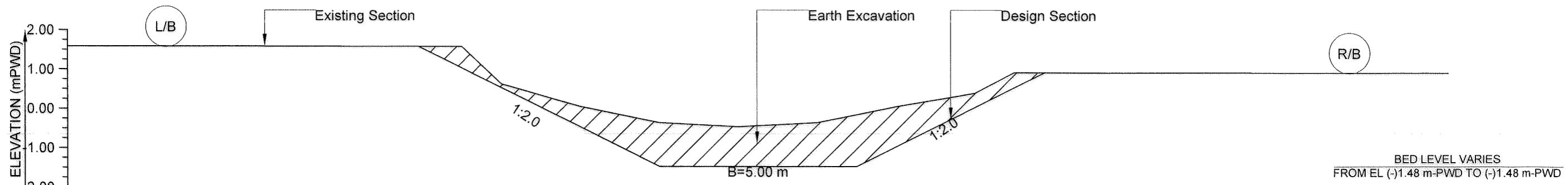
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CRISP-WRM

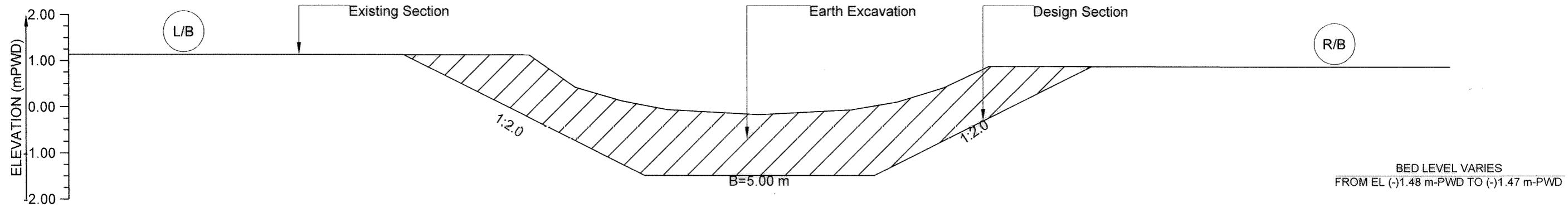
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Date:04/02/2025	Drawing No:DC5-5788-05/08



TYPICAL CROSS SECTION OF GUADANA WEST PARA KHAL AT KM 0.400
APPLICABLE FROM KM 0.350 TO KM 0.450



TYPICAL CROSS SECTION OF GUADANA WEST PARA KHAL AT KM 0.500
APPLICABLE FROM KM 0.450 TO KM 0.550

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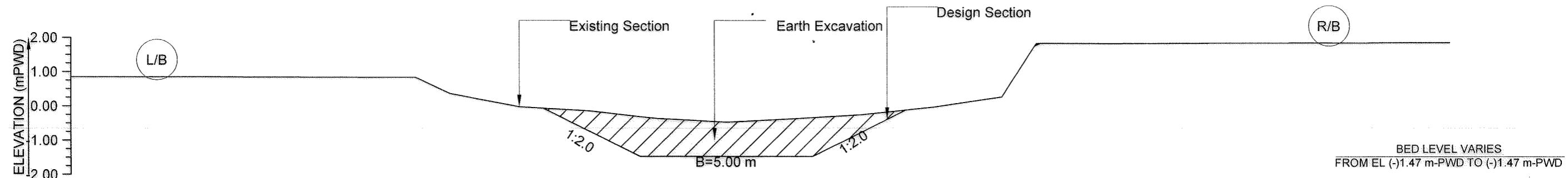
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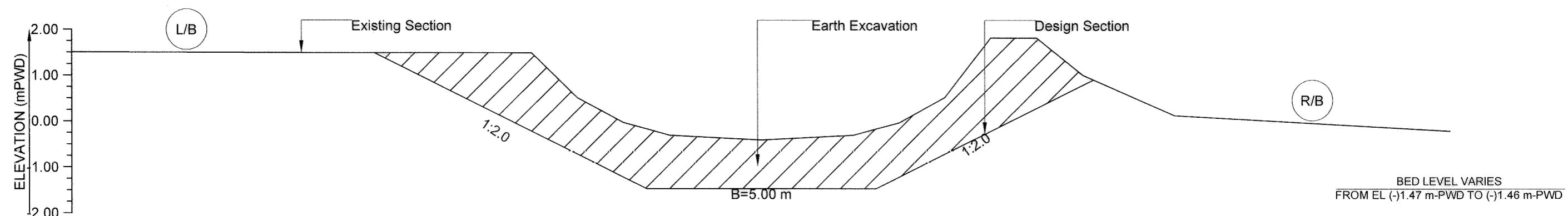
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(MD. KAMRUL HASAN), EE



Design Bed Level in (mPWD)	
Existing Bed Level in (mPWD)	
Distance(m)	
0.000	0.849
5.000	0.844
10.000	0.829
11.000	0.354
13.000	(-0.030)
13.697	(-0.069)
15.000	(-0.141)
16.500	(-0.311)
17.000	(-0.367)
19.000	(-0.473)
21.000	(-0.370)
21.500	(-0.339)
22.853	(-0.254)
24.206	(-0.117)
25.000	(-0.033)
27.000	0.270
28.000	1.834
33.000	1.845
40.000	1.857

TYPICAL CROSS SECTION OF GUADANA WEST PARA KHAL AT KM 0.600
APPLICABLE FROM KM 0.550 TO KM 0.650



Design Bed Level in (mPWD)	
Existing Bed Level in (mPWD)	
Distance(m)	

**TYPICAL CROSS SECTION OF GUADANA WEST PARA KHAL AT KM 0.700
APPLICABLE FROM KM 0.650 TO KM 0.750**

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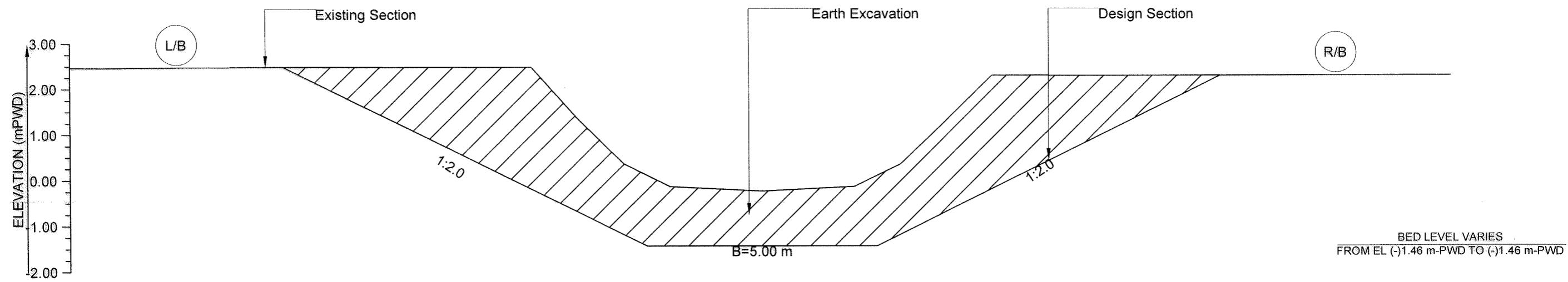
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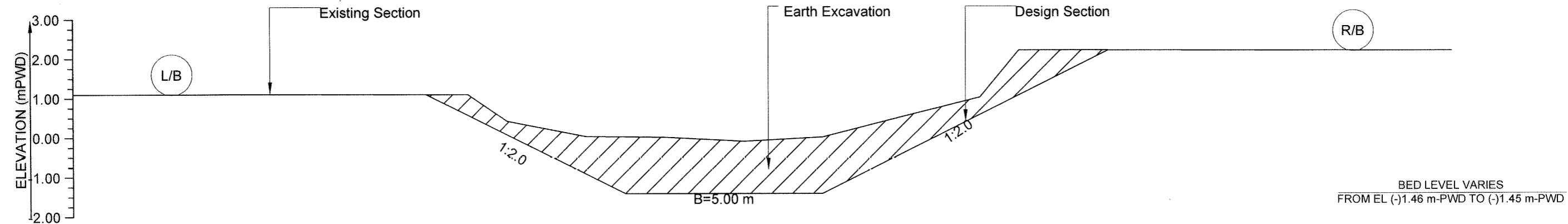
Date:04/02/2025

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Design Bed Level in (mPWD)	
Existing Bed Level in (mPWD)	2.459
Distance(m)	0.000
4.632	2.474
5.000	2.475
8.566	2.469
10.000	2.466
11.000	1.334
12.000	0.340
12.500	0.090
13.000	(-1.460)
15.000	(-0.261)(-1.460)
17.000	(-0.159)
17.500	0.086
18.000	0.331
19.000	1.291
20.000	2.276
21.230	2.275
24.960	2.270
30.000	

TYPICAL CROSS SECTION OF GUADANA WEST PARA KHAL AT KM 0.800
APPLICABLE FROM KM 0.750 TO KM 0.871



Design Bed Level in (mPWD)	
Existing Bed Level in (mPWD)	1.096
Distance(m)	0.000
5.000	1.089
8.944	1.078
10.000	1.075
11.000	0.395
11.472	0.302
13.000	0.000
14.000	(-0.011)(-1.450)
15.000	(-0.022)
16.500	(-0.099)(-1.450)
17.000	(-0.125)
19.000	(-0.020)(-1.450)
21.000	0.490
22.635	0.899
23.000	0.991
24.000	2.190
26.269	2.185
30.000	2.176
35.000	2.167

TYPICAL CROSS SECTION OF GUADANA WEST PARA KHAL AT KM 0.942
APPLICABLE FROM KM 0.871 TO KM 0.942

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