

# Bangladesh Water Development Board

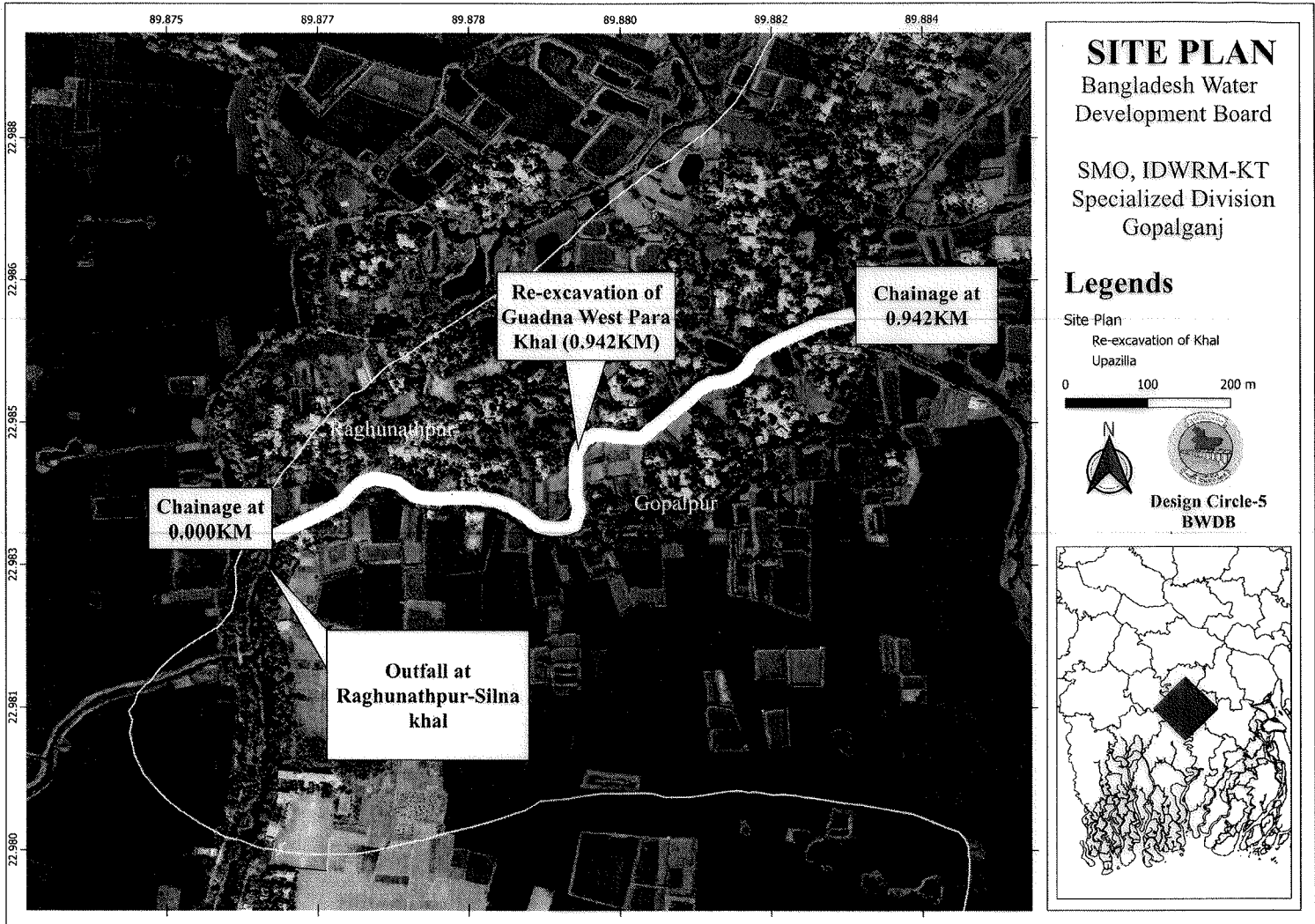
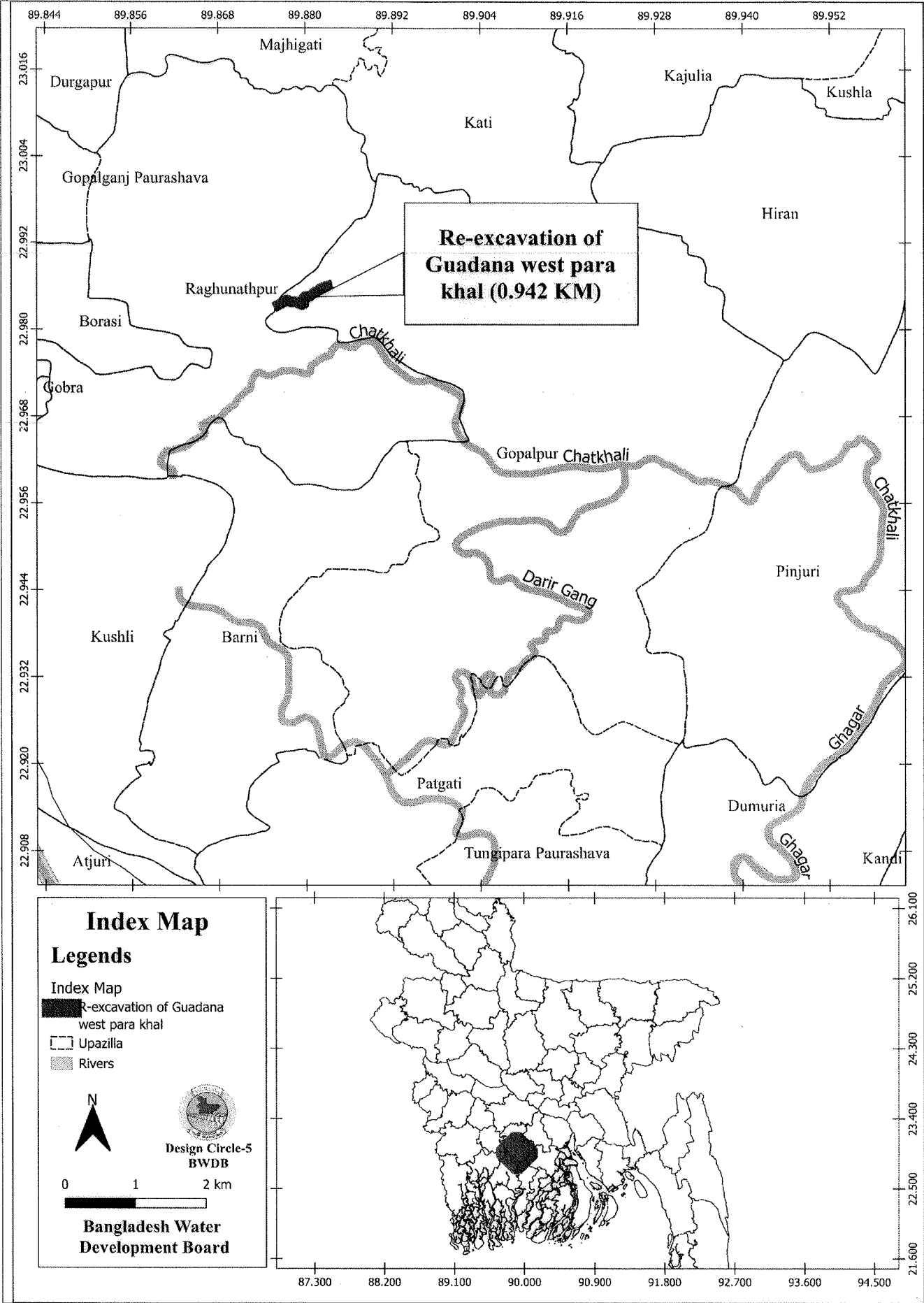
## CRISP-WRM

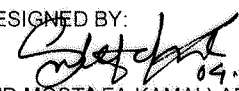


Re-excavation of Guadana west para khal from km. 0.000 to km. 0.942 in polder -2 in c/w Tarail-Pachuria Sub-Project under CRISPWRM under Specialized Division. BWDB, Gopalganj during the year 2024-2025.

SMO, IDWRM-KT

Designed by: Design Circle-5, BWDB, Dhaka

February, 2025



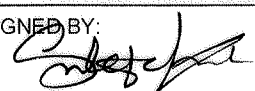


Bangladesh Water Development Board	
Office of The Superintending Engineer,Design Circle-5	
CRISP-WRM	
Re-excitation of Guadana west para khal from km. 0.000 to km. 0.942 in polder -2 in c/w Tarail-Pachuria Sub-Project under CRISPWRM under Specialized Division. BWDB, Gopalganj during the year 2024-2025.	
INDEX MAP & SITE MAP FOR GUADANA WEST PARA KHAI	
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:DC5-5788-01/08

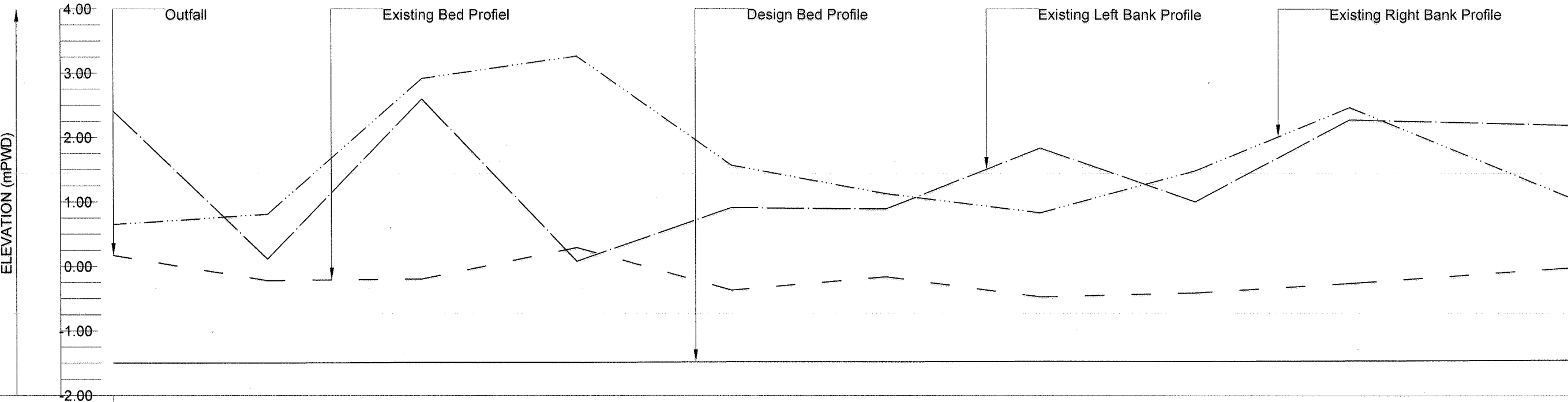
Administrative Notes :

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 ERROSION.
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 THROUGHTOUT 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.

Bangladesh Water Development Board	
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



Design Bed Width(m)										
Design Bed Level (mPWD)	(-)1.500		(-)1.490		(-)1.480		(-)1.470		(-)1.460	(-)1.450
Existing Bed Level (mPWD)	0.168	(-)0.224	(-)0.198	0.289	(-)0.369	(-)0.164	(-)0.473	(-)0.410	(-)0.261	(-)0.022
Existing Left Bank Level (mPWD)	0.649	0.805	2.914	3.263	1.565	1.125	0.829	1.485	2.466	1.075
Existing Right Bank Level (mPWD)	2.408	0.112	2.597	0.078	0.908	0.887	1.834	1.004	2.276	2.190
Distance(Km)	0.000	0.100	0.200	0.300	0.400	0.500	0.600	0.700	0.800	0.942

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

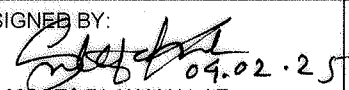
Bangladesh Water Development Board


Office of The Superintending Engineer,Design Circle-5


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.

LONG SECTION OF GUADANA WEST PARA KHAL

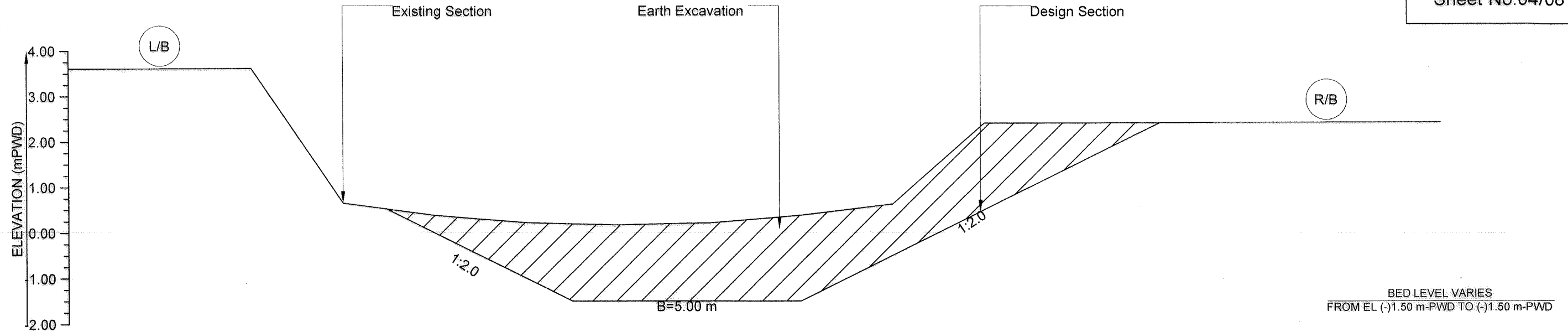
DESIGNED BY:  
  
(MD.MOSTAFA KAMAL),AE

APPROVED BY:  
  
(JAKARIA PERVEZ),SE

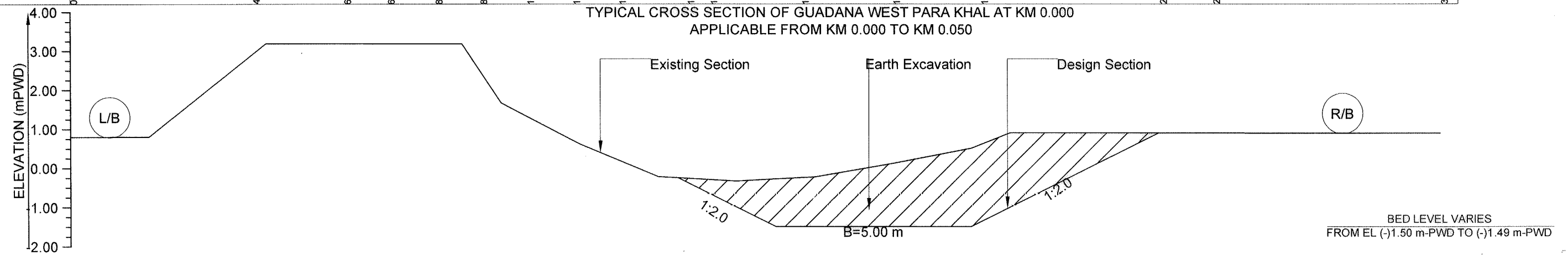
CHECKED AND RECOMMENDED BY:  
  
(MD. KAMRUL HASAN),EE

Date:04/02/2025

Drawing No:DC5-5788-03/08




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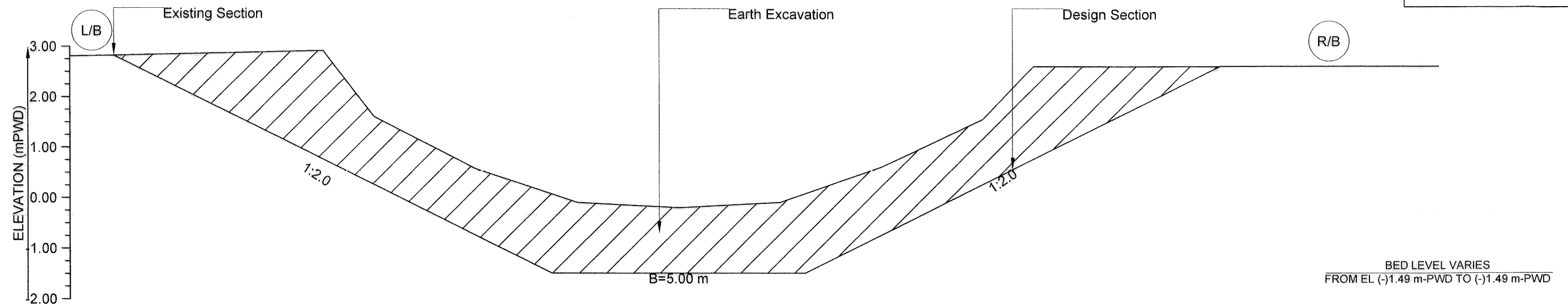
TYPICAL CROSS SECTION OF GUADANA WEST PARA KHAL AT KM 0.000  
APPLICABLE FROM KM 0.000 TO KM 0.050



Design Bed Level in (mPWD)	
Existing Bed Level in (mPWD)	0.793
Distance(m)	0.000
	0.805
	3.192
	3.183
	1.865
	0.612
	-10.224
	-10.252
	-10.320
	-10.334
	-11.500
	-10.284
	-10.233
	-1.500
	0.026
	0.112
	0.502
	-1.500
	0.903
	0.901
	0.899
	0.896
	0.891

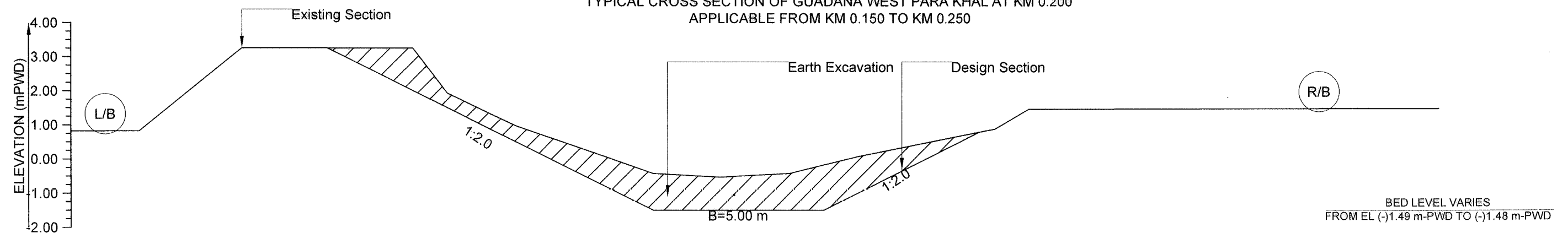
TYPICAL CROSS SECTION OF GUADANA WEST PARA KHAL AT KM 0.100  
APPLICABLE FROM KM 0.050 TO KM 0.150

<p align="center"><b>Bangladesh Water Development Board</b></p>	
<p align="center"><b>Office of The Superintending Engineer, Design Circle-5</b></p>	
<p align="center"><b>CRISP-WRM</b></p>	
<p>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.</p>	
<p align="center"><b>TYPICAL CROSS SECTION OF GUADANA WEST PARA KHAL</b></p>	
<p>DESIGNED BY:</p>  <p align="right">04.02.25</p> <p>(MD. MOSTAFA KAMAL), AE</p>	<p>APPROVED BY:</p>  <p align="right">04.02.25</p> <p>(JAKARIA PERVEZ), SE</p>
<p>CHECKED AND RECOMMENDED BY:</p>  <p>(MD. KAMRUL HASAN), EE</p>	
<p>Date: 04/02/2025</p>	<p>Drawing No: DC5-5788-04/08</p>






Design Bed Level in (mPWD)	Existing Bed Level in (mPWD)	Distance(m)
	2.807	0.000
	2.826	0.869
		1.514
	2.914	0.000
	2.672	0.000
	1.602	0.000
		0.576
		0.500
	0.074	0.500
	-1.490	0.000
	-10.094	0.000
		2.000
	-1.198	0.000
	-1.490	0.000
		0.093
	0.082	0.000
	-1.490	0.000
		0.607
		0.000
	1.551	0.000
	2.168	0.590
	2.597	0.000
		22.680
	2.604	27.000

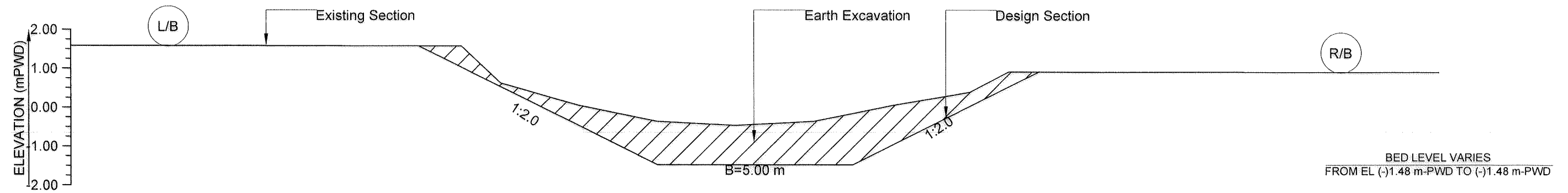
TYPICAL CROSS SECTION OF GUADANA WEST PARA KHAL AT KM 0.200  
APPLICABLE FROM KM 0.150 TO KM 0.250



Design Bed Level in (mPWD)	Existing Bed Level in (mPWD)	Distance(m)
	0.817	0.000
	0.828	2.000
	0.263	5.000
	0.259	7.502
	0.255	10.000
	0.937	11.000
	0.337	12.251
	0.977	13.000
	0.289	15.000
	-0.415(-)1.490	17.000
	-0.523	19.000
	-0.497(-)1.490	19.500
	-0.418	21.000
	-0.170(-)1.490	22.000
	0.078	23.000
	0.334	24.279
	0.479	25.000
	0.789	26.558
	0.877	27.000
	1.464	28.000
	1.477	33.000
	1.487	40.000

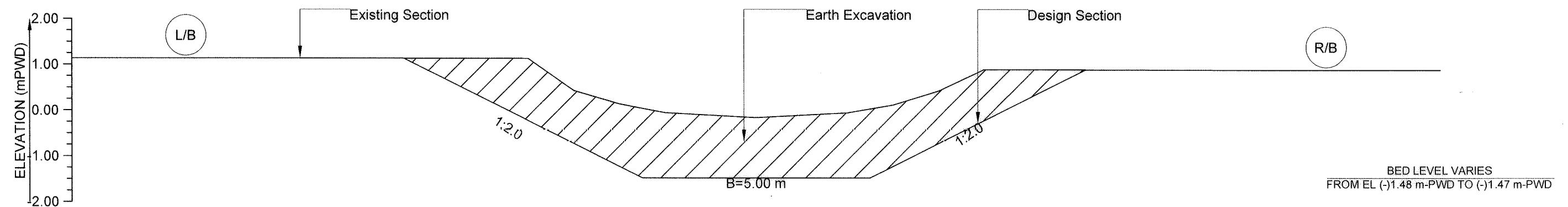
TYPICAL CROSS SECTION OF GUADANA WEST PARA KHAL AT KM 0.300  
APPLICABLE FROM KM 0.250 TO KM 0.350

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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: DC 5-5788-05/08



Design Bed Level in (mPWD)	Existing Bed Level in (mPWD)	Distance(m)
	1.587	0.000
	1.578	0.000
	1.568	0.904
	1.565	10.000
	0.614	11.000
	0.340	11.952
	0.039	13.000
	-1.480	15.000
	-0.473	17.000
	-1.480	17.500
	-0.368	19.000
	-1.480	20.000
	0.038	21.000
	0.277	22.387
	0.382	23.000
	0.908	24.000
	0.907	24.775
	0.904	30.000
	0.897	35.000

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



Design Bed Level in (mPWD)	Existing Bed Level in (mPWD)	Distance(m)
	1.138	0.000
	1.133	5.000
	1.129	7.281
	1.125	8.891
	0.427	11.000
	0.132	12.000
	0.037 (-)1.480	12.500
	-0.058	13.000
	-0.164 (-)1.480	15.000
	-0.062	17.000
	0.025 (-)1.480	17.500
	0.112	18.000
	0.418	19.000
	0.823	19.863
	0.883	22.226
	0.878	25.000
	0.872	30.000

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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CRISP-WRM

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TYPICAL CROSS SECTION OF GUADANA WEST PARA KHAL

DESIGNED BY:  04.02.25  
(MD.MOSTAFA KAMAL),AE

APPROVED BY:

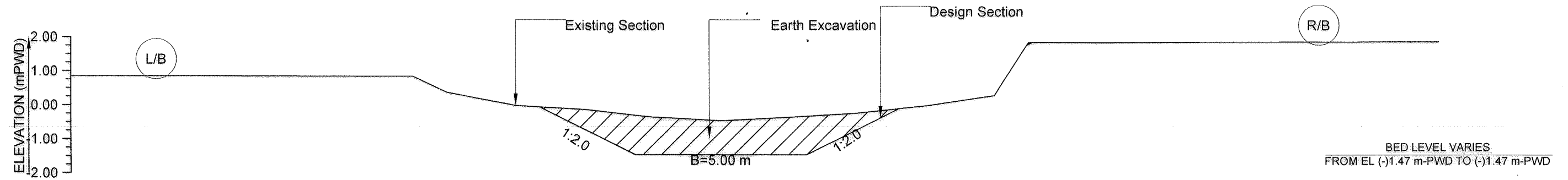


(JAKARIA PERVEZ), SE

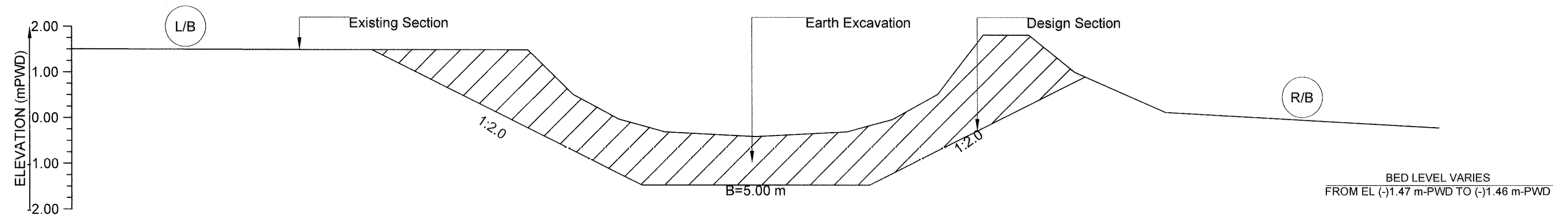
CHECKED AND RECOMMENDED BY:  
  
 (MD. KAMRUL HASAN).EE

Date:04/02/2025

Drawing No: DC**5**-5788-06/08




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

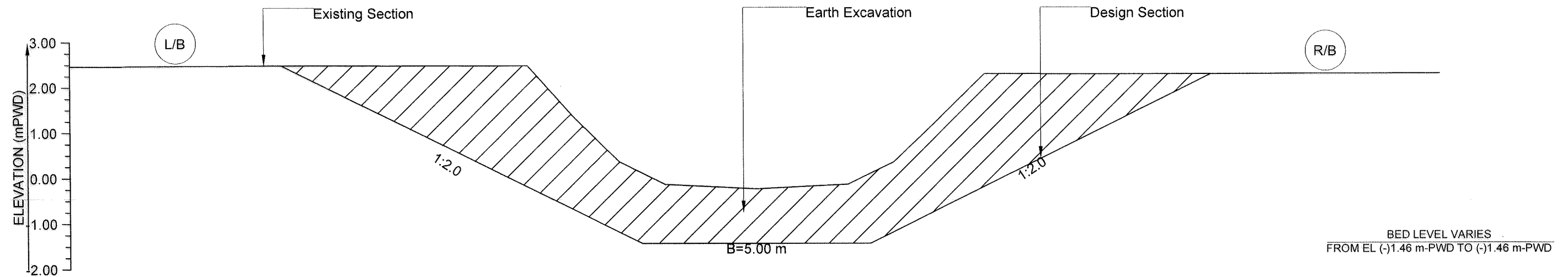


Design Bed Level in (mPWD)	Existing Bed Level in (mPWD)	Distance(m)
	1.506	0.000
	1.491	0.000
	1.489	0.582
	1.486	1.541
	1.485	0.000
	0.506	1.000
	-0.029	2.000
	-0.169	2.500
	-0.308	3.000
	-0.410	5.000
	-0.305	7.000
	-0.173	7.500
	-0.040	8.000
	0.514	9.000
	1.645	9.869
	1.810	11.000
	1.004	12.000
	0.899	12.239
	0.126	14.000
	-0.212	14.000

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

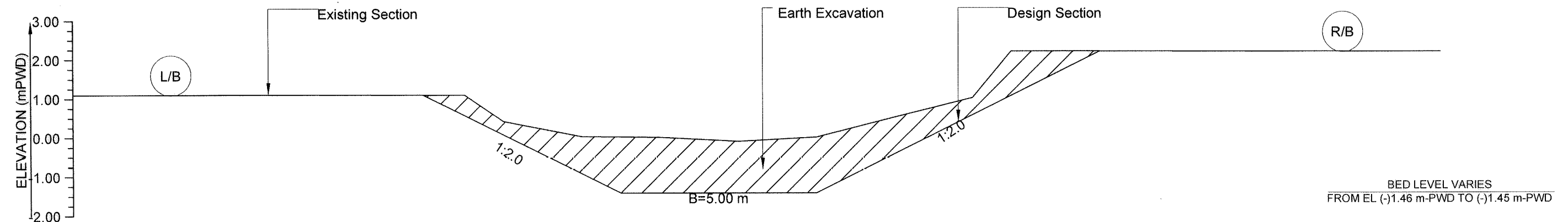
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<p align="center"><b>TYPICAL CROSS SECTION OF GUADANA WEST PARA KHAL</b></p>	
<p>DESIGNED BY:</p>  <p align="right">09.02.25</p> <p>(MD. MOSTAFA KAMAL), AE</p>	<p>APPROVED BY:</p>  <p align="right">09.02.25</p> <p>(JAKARIA PERVEZ), SE</p>
<p>CHECKED AND RECOMMENDED BY:</p>  <p>(MD. KAMRUL HASAN), EE</p>	
<p>Date: 04/02/2025</p>	<p>Drawing No: DC 5-5788-07/08</p>





Design Bed Level in (mPWD)	
Existing Bed Level in (mPWD)	2.459
Distance(m)	0.000
	4.632
	5.000
	8.566
	10.000
	11.000
	12.000
	12.500
	13.000
	15.000
	17.000
	17.500
	18.000
	19.000
	20.000
	21.230
	24.960
	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)	Distance(m)
	1.096	
	1.089	
	1.078	
	1.075	
	0.395	
	0.302	
	0.000	
	(-)0.011(-)1.450	
	(-)0.022	
	(-)0.099(-)1.450	
	(-)0.125	
	(-)0.020(-)1.450	
	0.490	
	0.899	
	0.991	
	2.190	
	2.185	
	2.176	
	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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TYPICAL CROSS SECTION OF GUADANA WEST PARA KHAL

DESIGNED BY:  09.02.25  
(MD. MOSTAFA KAMAL).AE

APPROVED BY:

CHECKED AND RECOMMENDED BY:  
  
 (MD. KAMRUL HASAN),EE

(JAKARIA PERVEZ), SE

Date:04/02/2025

Drawing No: DC5-5788-08/08