

Bangladesh Water Development Board

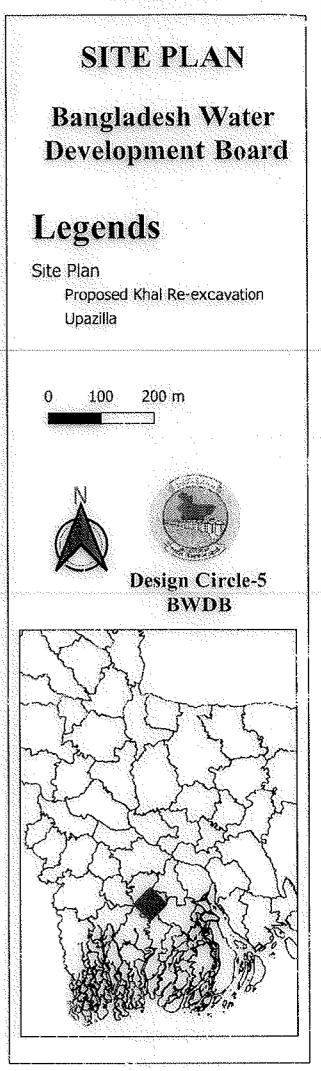
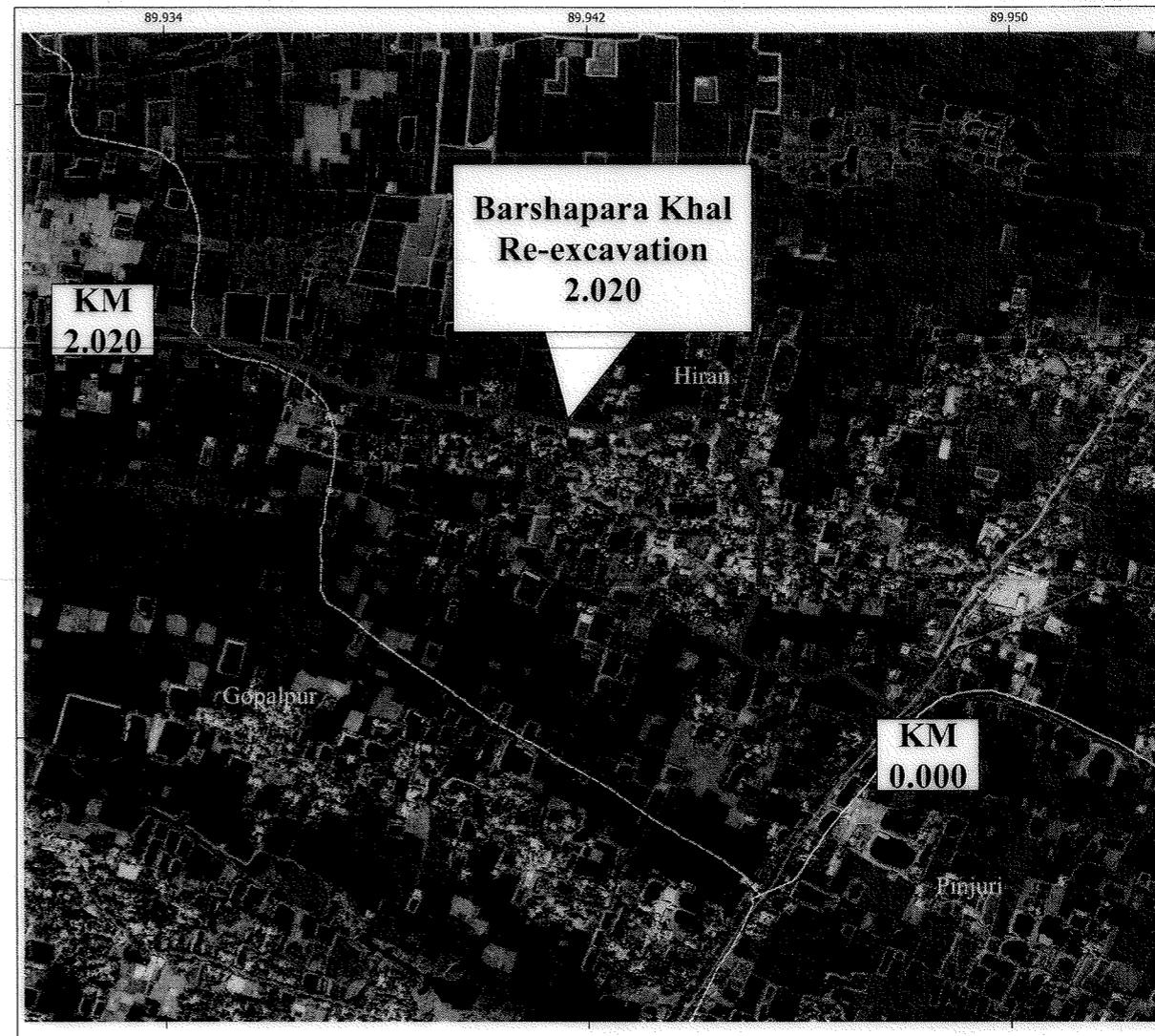
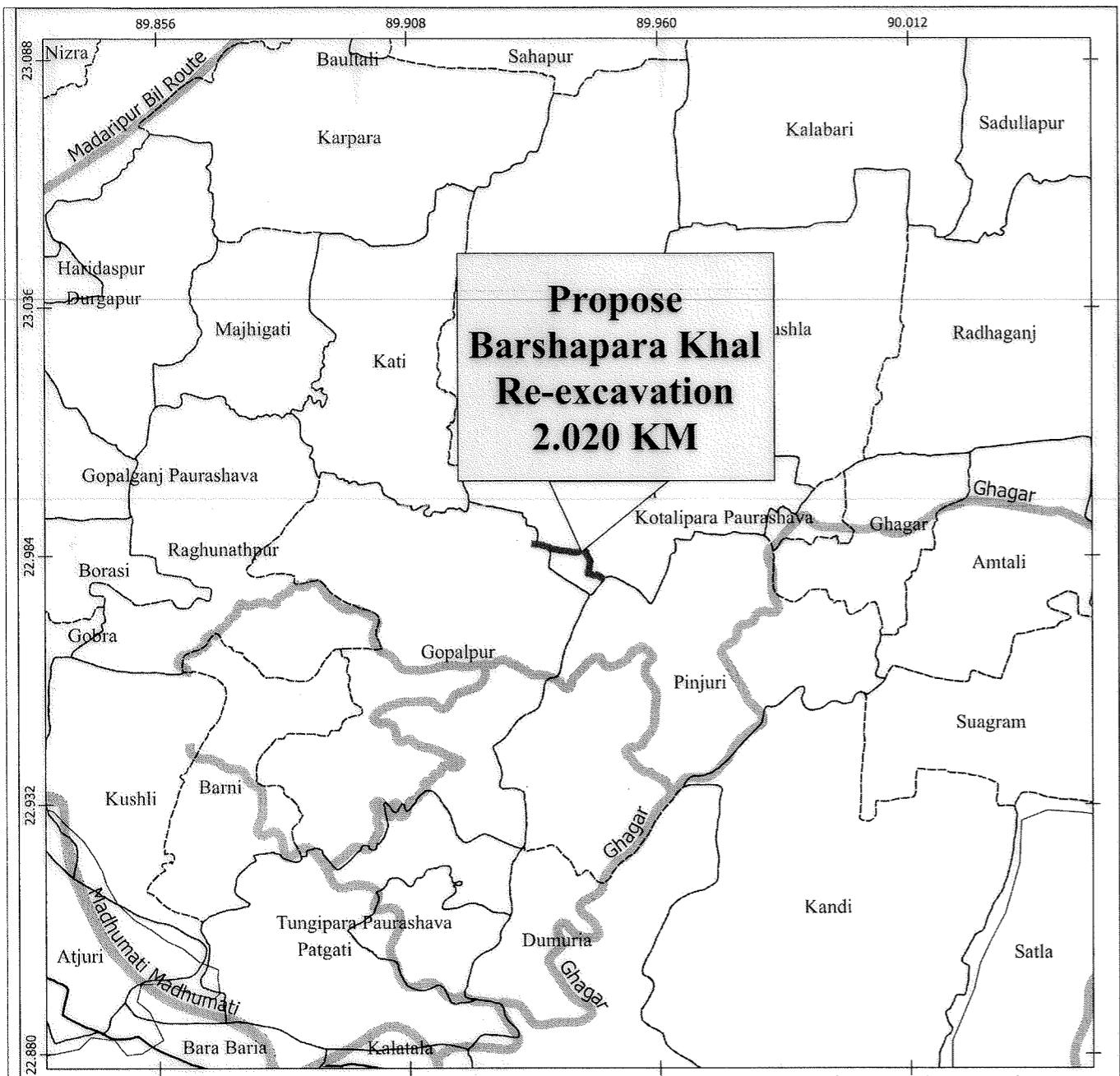
CRISP-WRM

Re-excavation of Barshapara Khal from km. 0.000 to km. 2.020 in polder -2 in c/w Tarail-Pachuria
Sub-Project under CRISP-WRM under Specialized Division. BWDB, Gopalganj during the year 2024-2025

SMO, IDWRM-KT

Designed by:Design Circle-5,BWDB,Dhaka

February,2025

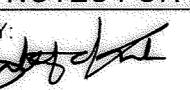
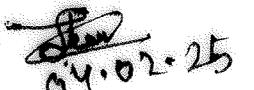
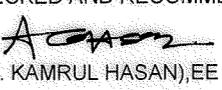


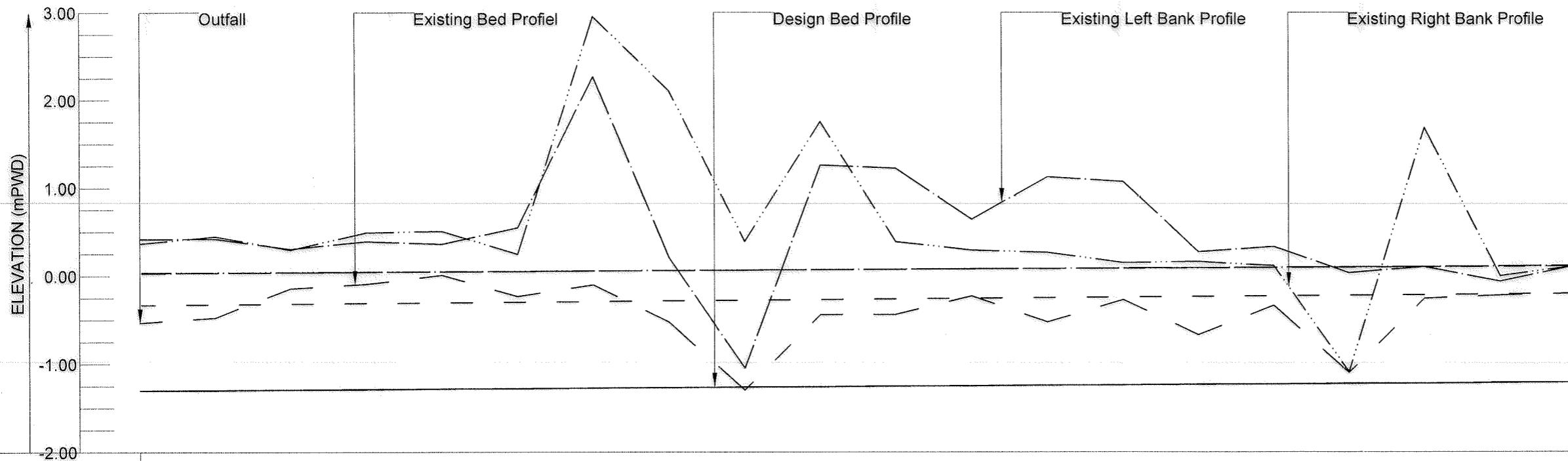
Administrative Notes :

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.

Bangladesh Water Development Board	
Office of The Superintending Engineer,Design Circle-5	
CRISP-WRM	
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NOTES FOR BARSHA PARA KHAL	
DESIGNED BY:  (MD.MOSTAFA KAMAL),AE	APPROVED BY:  04.02.25 (JAKARIA PERVEZ),SE
CHECKED AND RECOMMENDED BY:  (MD. KAMRUL HASAN),EE	Date:04/02/2025 Drawing No:DC5-5771-02/14



Design Bed Width(m)		
Design Bed Level (mPWD)	(-)0.330 (-)1.300	
Existing Bed Level (mPWD)	0.447	(-)0.474
Existing Left Bank Level (mPWD)	0.296	(-)0.144 (-)1.290
Existing Right Bank Level (mPWD)	0.491	(-)0.094
Distance(Km)	0.000	0.030
0.100	0.422	0.447
0.200	0.306	0.296
0.300	0.391	0.491
0.400	0.363	0.508
0.500	0.548	0.248
0.600	2.268	2.954
0.700	0.207	2.107
0.800	(-)1.048	0.391
0.900	1.259	1.754
1.000	1.221	(-)0.441
1.100	0.641	0.386
1.200	1.123	0.291
1.300	1.067	0.264
1.400	0.271	(-)0.229
1.500	0.332	0.264
1.600	0.034	(-)0.250
1.700	0.102	0.147
1.800	(-)0.066	0.161
1.900	0.113	(-)0.273

LONG SECTION OF BARSHA PARA KHAL APPLICABLE FROM KM 0.000 TO KM 1.900

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LONG SECTION OF BARSHA PARA KHAL

DESIGNED BY:

(MD. MOSTAFA KAMAL), AE
09.02.25

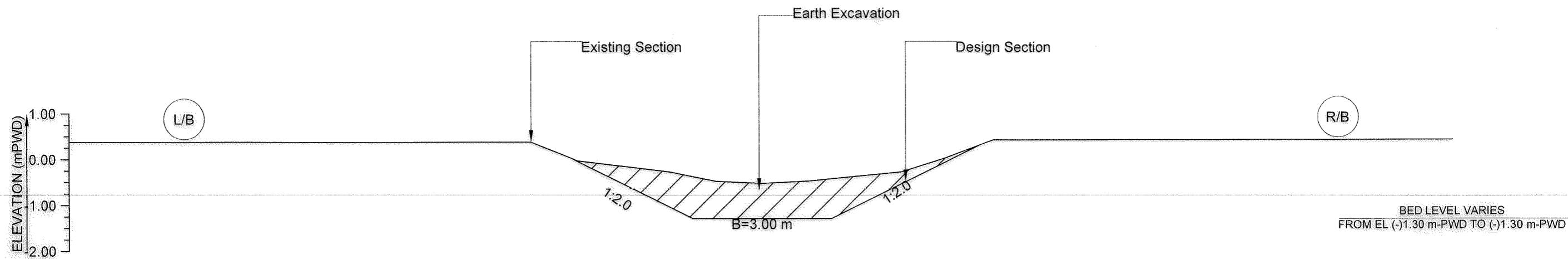
APPROVED BY:

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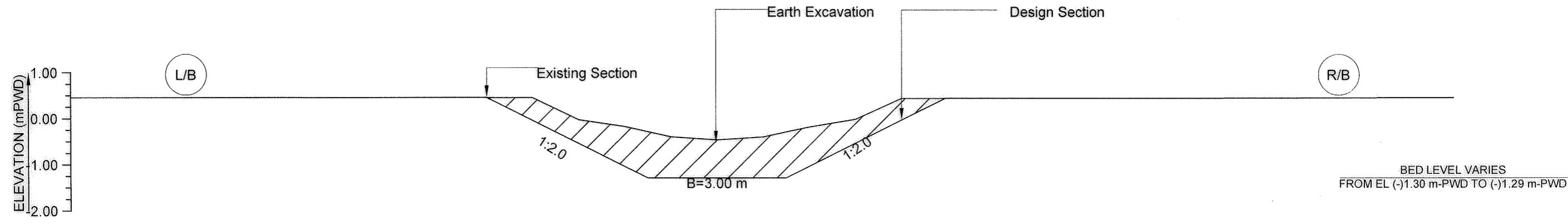
CHECKED AND RECOMMENDED BY:

(MD. KAMRUL HASAN), EE

(JAKARIA PERVEZ), SE



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



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

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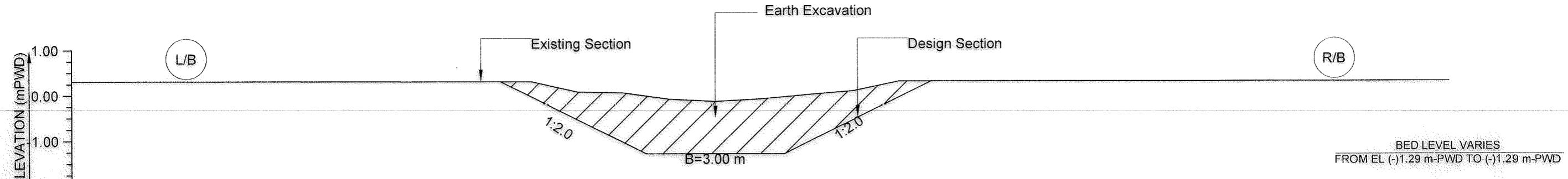
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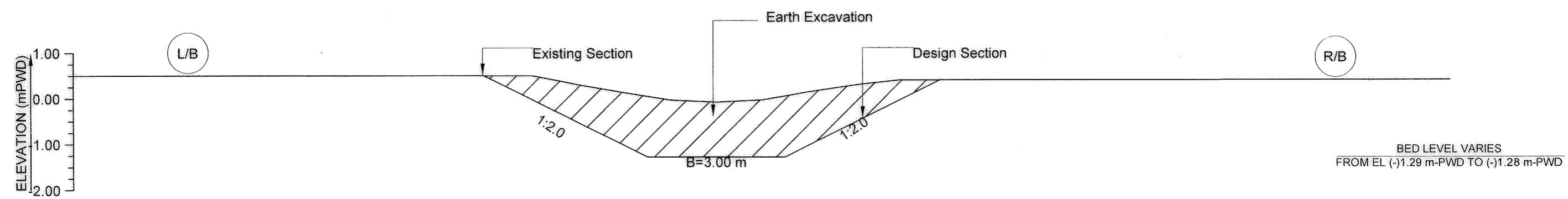
(MD. KAMRUL HASAN), EE

(JAKARIA PERVEZ), SE



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

**TYPICAL CROSS SECTION OF BARSHA 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)	

**TYPICAL CROSS SECTION OF BARSHA PARA KHAL AT KM 0.300
APPLICABLE FROM KM 0.250 TO KM 0.350**

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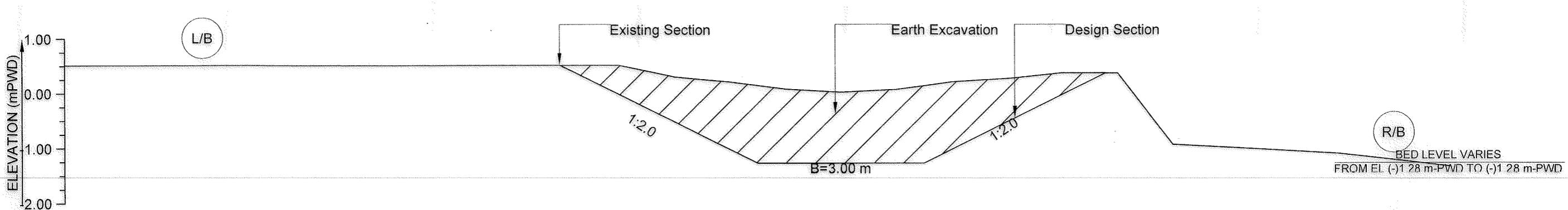
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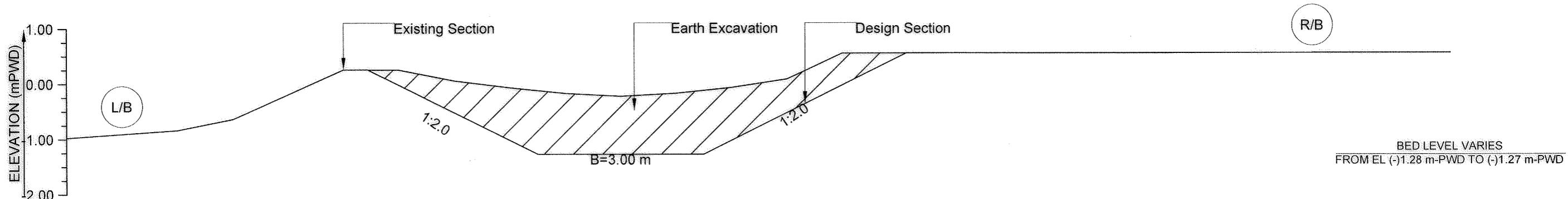
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Date: 04/02/2025 | Drawing No: DC5-5771-05/14



Design Bed Level in (mPWD)	0.000 0.353
Existing Bed Level in (mPWD)	5.000 0.508
Distance(m)	8.932 0.504

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



Design Bed Level in (mPWD)	0.000 (-0.977)
Existing Bed Level in (mPWD)	2.000 (-0.842)
Distance(m)	3.000 (-0.642)

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

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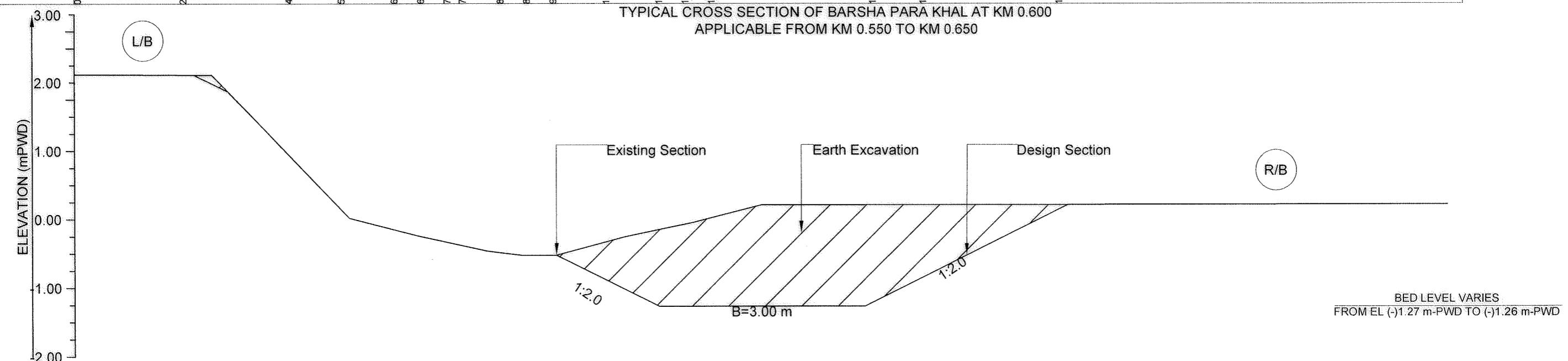
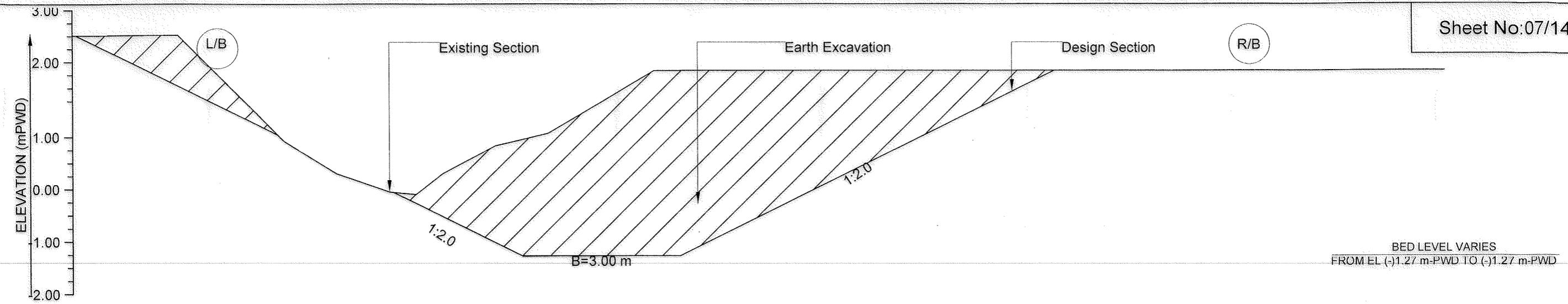
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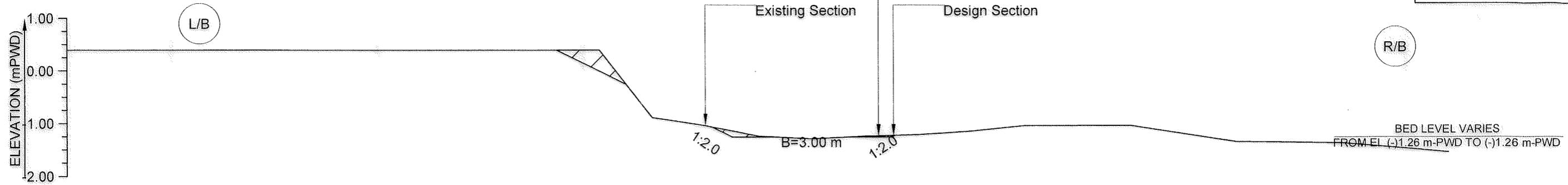
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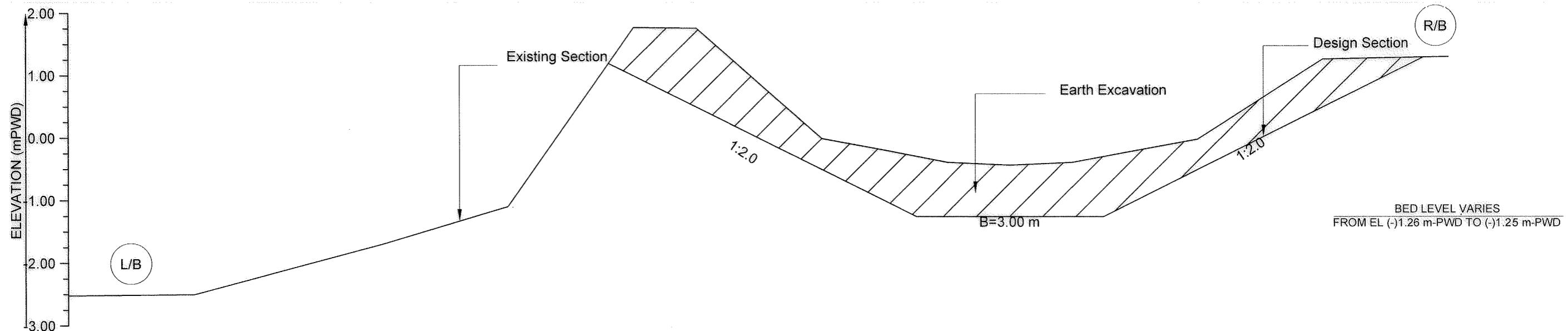
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TYPICAL CROSS SECTION OF BARSHA PARA KHAL AT KM 0.800
APPLICABLE FROM KM 0.750 TO KM 0.850



TYPICAL CROSS SECTION OF BARSHA PARA KHAL AT KM 0.900
APPLICABLE FROM KM 0.850 TO KM 0.950

Bangladesh Water Development Board

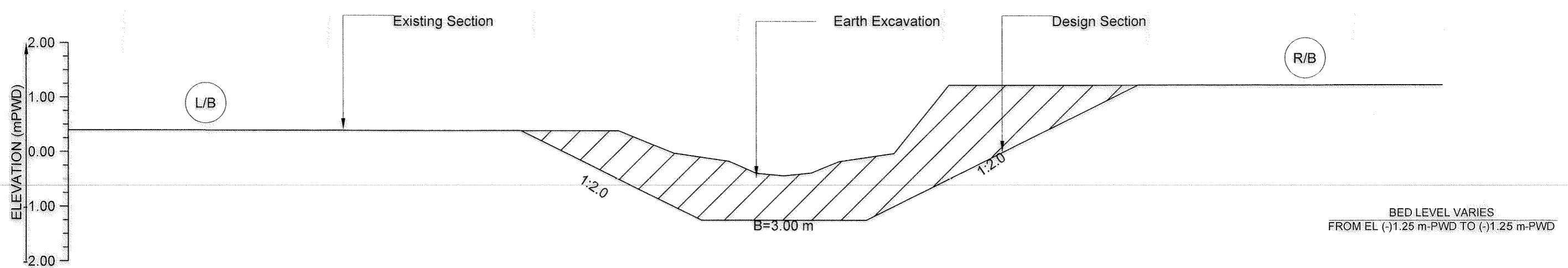
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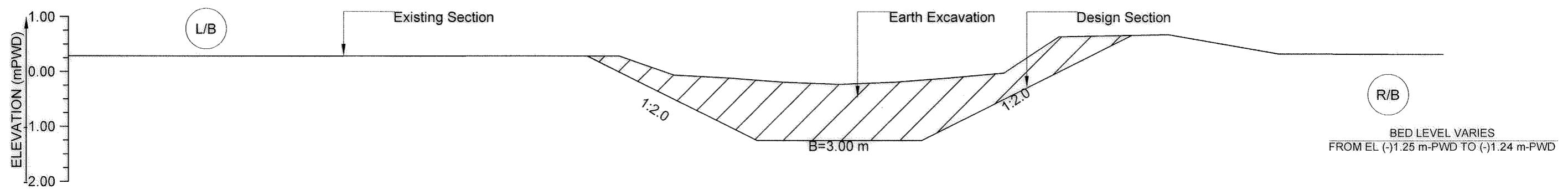
TYPICAL CROSS SECTION OF BARSHA PARA KHAL

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



Design Bed Level in (mPWD)	
Existing Bed Level in (mPWD)	0.396
Distance(m)	0.000
5.000	0.391
8.224	0.388
9.862	0.386
10.000	0.386
11.000	(-)0.024
11.500	(-)0.100(-)1.250
12.000	(-)0.175
12.500	(-)0.354
13.000	(-)0.439(-)1.250
13.500	(-)0.389
14.000	(-)0.180
14.500	(-)0.106(-)1.250
15.000	(-)0.031
16.000	1.221
16.975	1.222
19.451	1.225
20.000	1.226
25.000	1.231

TYPICAL CROSS SECTION OF BARSHA PARA KHAL AT KM 1.000
APPLICABLE FROM KM 0.950 TO KM 1.050



Design Bed Level in (mPWD)	
Existing Bed Level in (mPWD)	0.281
Distance(m)	0.000
5.000	0.286
9.419	0.290
10.000	0.291
10.960	(-)0.045
12.000	(-)0.114
12.500	(-)0.152(-)1.250
13.000	(-)0.190
14.000	(-)0.229(-)1.250
15.000	(-)0.189
15.500	(-)0.150(-)1.250
16.000	(-)0.111
17.000	(-)0.020
17.417	0.256
18.000	0.641
19.334	0.667
20.000	0.680
22.000	0.331
23.000	0.326
25.000	0.321

TYPICAL CROSS SECTION OF BARSHA PARA KHAL AT KM 1.100
APPLICABLE FROM KM 1.050 TO KM 1.150

Bangladesh Water Development Board

Office of The Superintending Engineer, Design Circle-5

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TYPICAL CROSS SECTION OF BARSHA PARA KHAL

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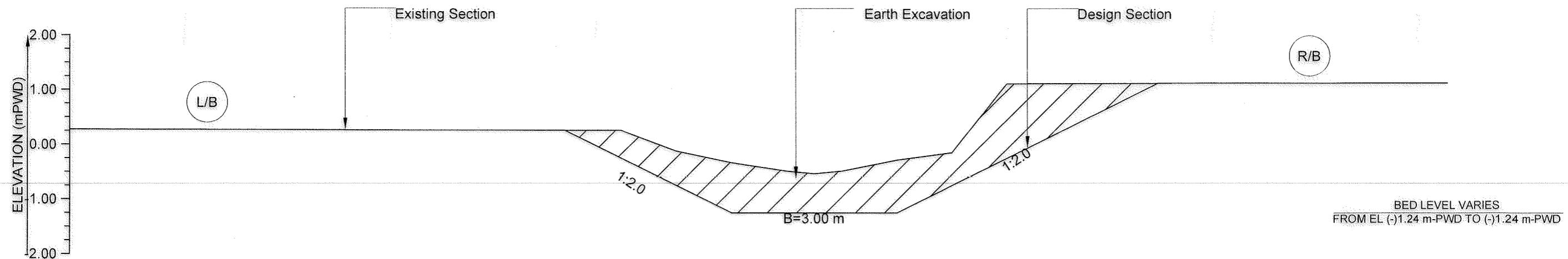
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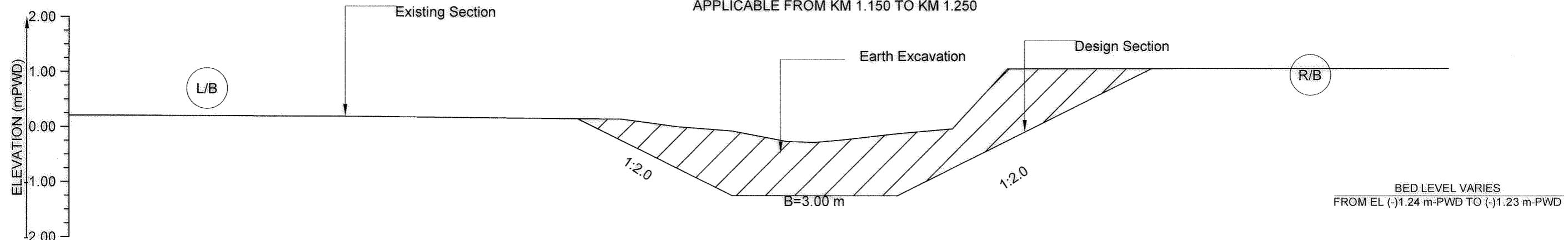
CHECKED AND RECOMMENDED BY:

(MD. KAMRUL HASAN), EE



Design Bed Level in (mPWD)	
Existing Bed Level in (mPWD)	0.274
Distance(m)	0.000 0.269
8.990 0.265	10.000 0.264
10.495 0.076	11.000 (-)0.116
12.000 (-)0.326(-)1.240	13.000 (-)0.478
13.500 (-)0.526(-)1.240	14.000 (-)0.477
15.000 (-)0.277(-)1.240	16.000 (-)0.141
17.000 1.123	17.368 1.124
19.737 1.128	20.000 1.129
25.000 1.134	

TYPICAL CROSS SECTION OF BARSHA PARA KHAL AT KM 1.200
APPLICABLE FROM KM 1.150 TO KM 1.250



Design Bed Level in (mPWD)	
Existing Bed Level in (mPWD)	0.207
Distance(m)	0.000 0.197
9.210 0.155	10.000 0.147
10.605 0.066	11.000 0.013
12.000 (-)0.064(-)1.240	13.000 (-)0.258
13.500 (-)0.273(-)1.240	14.000 (-)0.228
15.000 (-)0.113(-)1.240	16.000 (-)0.028
17.000 1.067	17.311 1.068
19.623 1.071	20.000 1.072
25.000 1.077	

TYPICAL CROSS SECTION OF BARSHA PARA KHAL AT KM 1.300
APPLICABLE FROM KM 1.250 TO KM 1.350

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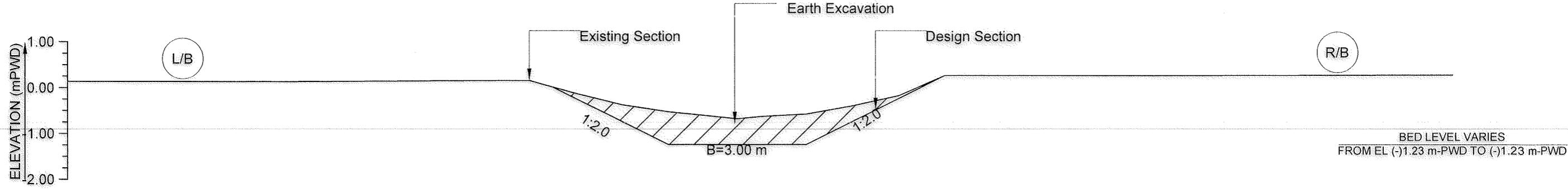
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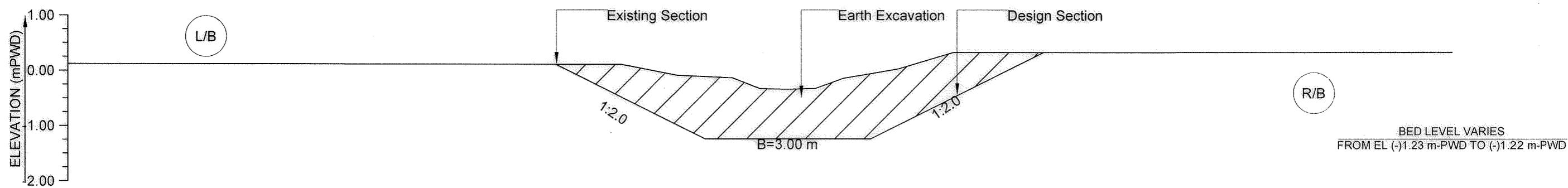
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TYPICAL CROSS SECTION OF BARSHA PARA KHAL AT KM 1.400
APPLICABLE FROM KM 1.350 TO KM 1.450



TYPICAL CROSS SECTION OF BARSHA PARA KHAL AT KM 1.500
APPLICABLE FROM KM 1.450 TO KM 1.550

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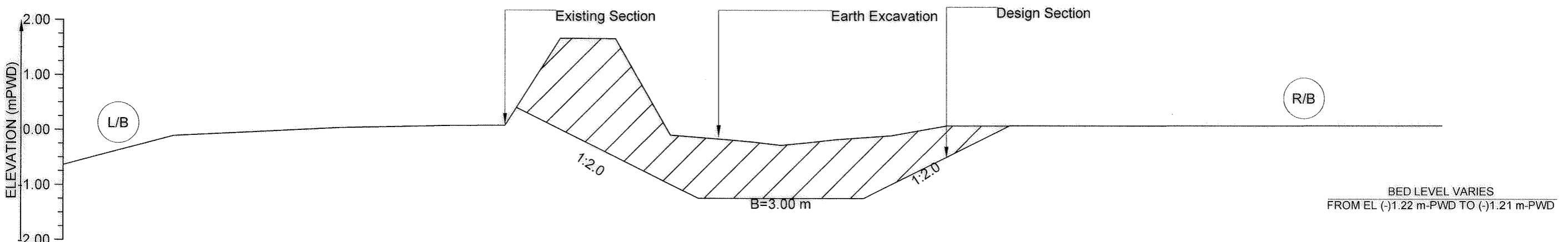
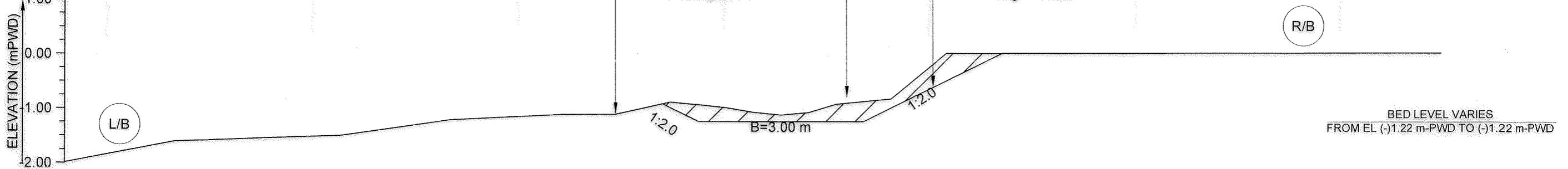
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04.02.25
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TYPICAL CROSS SECTION OF BARSHA PARA KHAL AT KM 1.700
APPLICABLE FROM KM 1.650 TO KM 1.750

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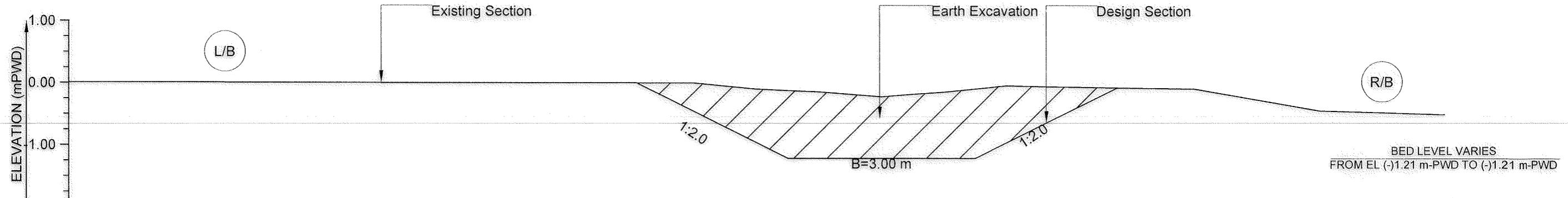
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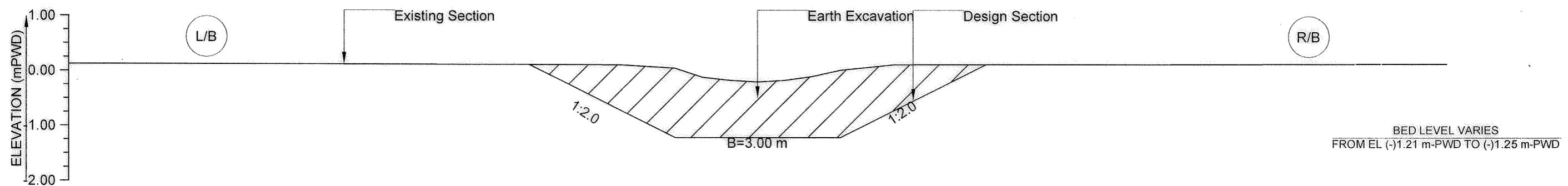
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Design Bed Level in (mPWD)	
Existing Bed Level in (mPWD)	0.008
Distance(m)	0.000 5.000 10.000 15.000 20.000

TYPICAL CROSS SECTION OF BARSHA PARA KHAL AT KM 1.800
APPLICABLE FROM KM 1.750 TO KM 1.850



Design Bed Level in (mPWD)	
Existing Bed Level in (mPWD)	0.123
Distance(m)	0.000 5.000 10.000 15.000 20.000

TYPICAL CROSS SECTION OF BARSHA PARA KHAL AT KM 1.900
APPLICABLE FROM KM 1.850 TO KM 1.951

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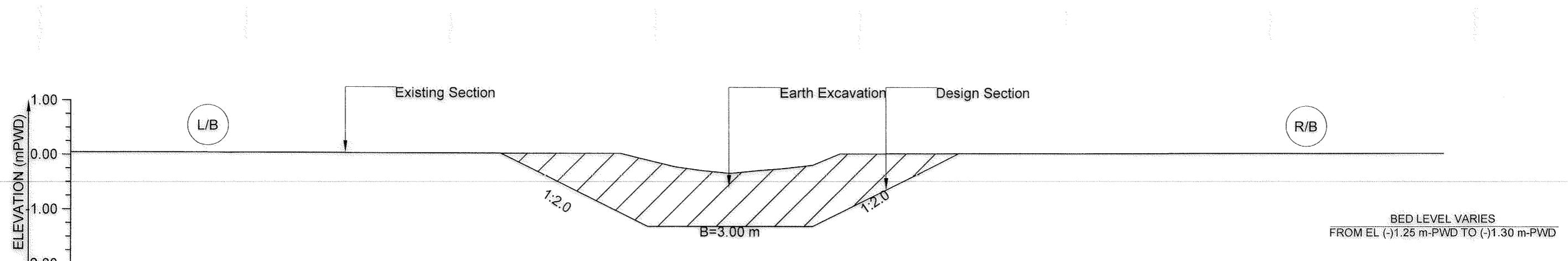
(MD. MOSTAFA KAMAL), AE
04.02.25

APPROVED BY:

(JAKARIA PERVEZ), SE
04.02.25

CHECKED AND RECOMMENDED BY:

(MD. KAMRUL HASAN), EE



Design Bed Level in (mPWD)	
Existing Bed Level in (mPWD)	0.040
Distance(m)	0.000 5.000 7.826 9.163 10.000 10.500 11.000 11.500 12.000 12.500 13.000 13.500 14.000 14.832 16.164 20.000 25.000

TYPICAL CROSS SECTION OF BARSHA PARA KHAL AT KM 2.020
APPLICABLE FROM KM 1.951 TO KM 2.020

Bangladesh Water Development Board

Office of The Superintending Engineer, Design Circle-5

CRISP-WRM

Re-excavation of Barshapara Khal from km. 0.000 to km. 2.020 in polder -2 in c/w Tarail-Pachuria Sub-Project under CRISP-WRM under Specialized Division, BWDB, Gopalganj during the year 2024-2025

TYPICAL CROSS SECTION OF BARSHA PARA KHAL

DESIGNED BY:

09.02.25
(MD. MOSTAFA KAMAL), AE

APPROVED BY:

04.02.25
(JAKARIA PERVEZ), SE

CHECKED AND RECOMMENDED BY:

(MD. KAMRUL HASAN), EE