

Bangladesh Water Development Board

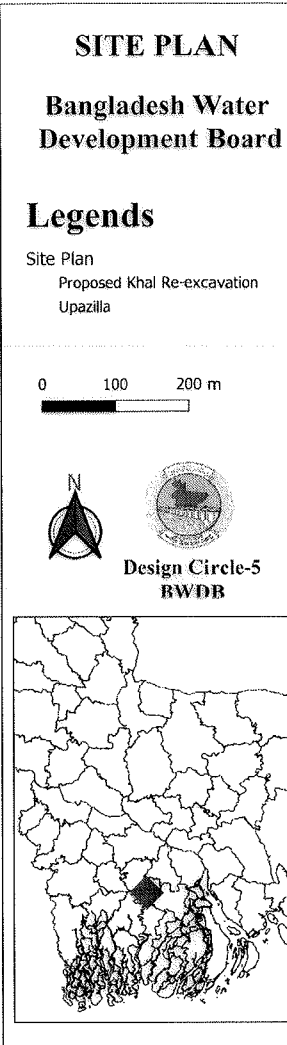
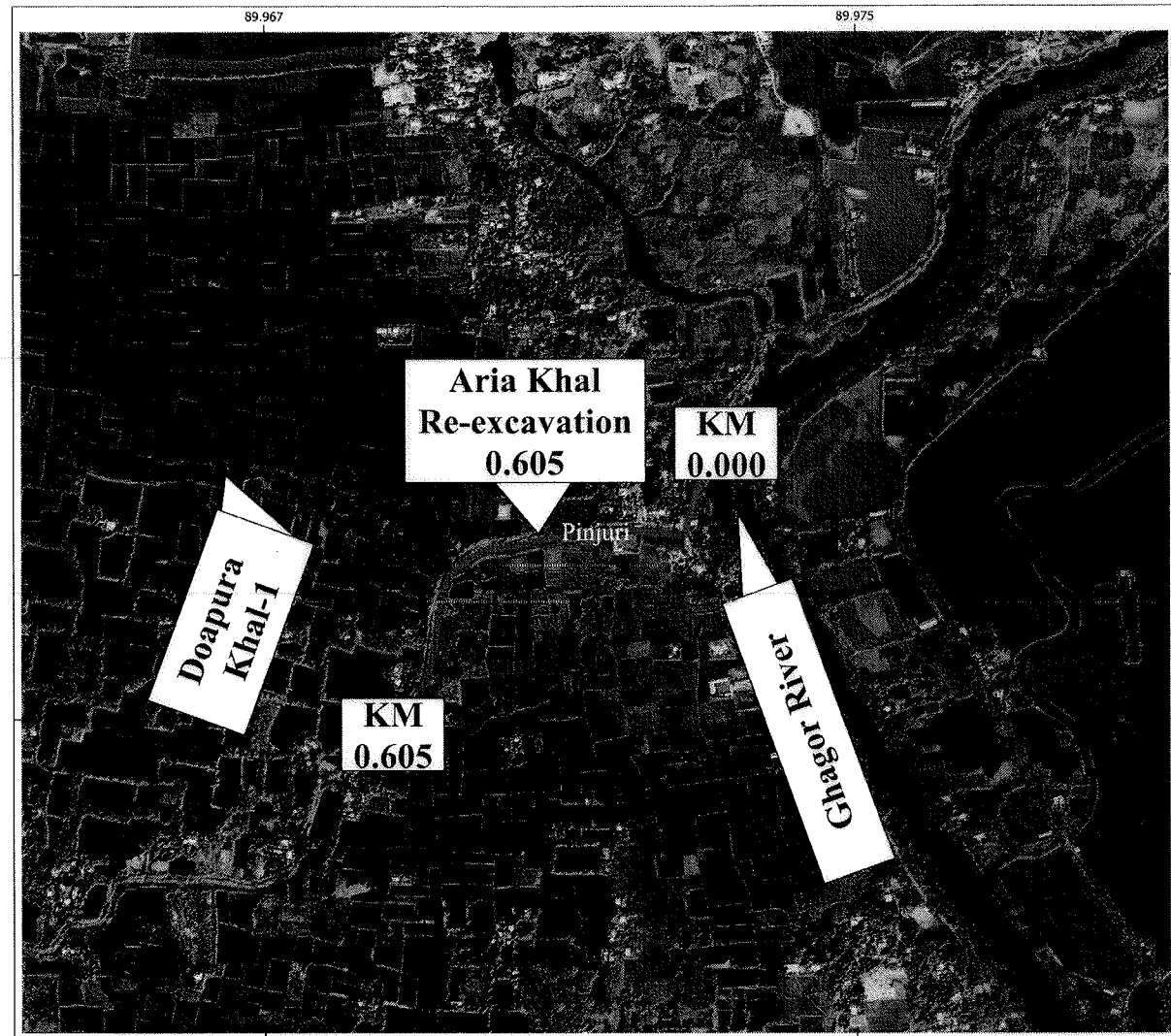
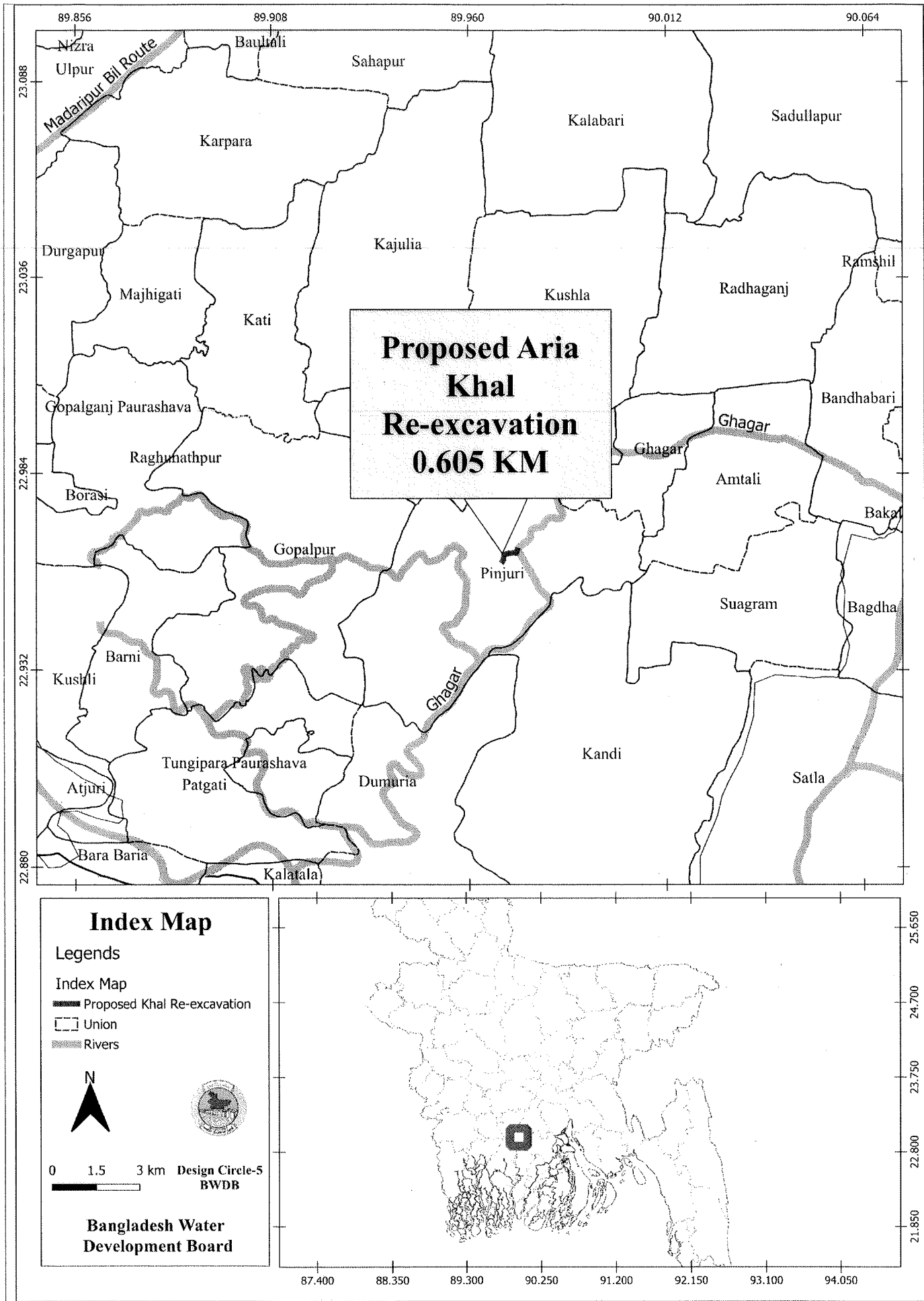
CRISP-WRM


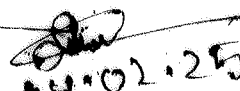

Re-excavation of Aria Khal from km. 0.000 to km. 0.605 in polder -2 in c/w Tarail-Pachuria Sub-Project under CRISP-WRM under Specialized Division. BWDB, Gopalganj during the year 2024-2025

SMO, IDWRM-KT

Designed by: Design Circle-5, BWDB, Dhaka

February, 2025





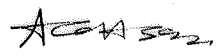
Bangladesh Water Development Board	
Office of The Superintending Engineer, Design Circle-5	
CRISP-WRM	
Re-excavation of Aria Khal from km. 0.000 to km. 0.605 in polder -2 in c/w Tarail-Pachuria Sub-Project under CRISP-WRM under Specialized Division. BWDB, Gopalganj during the year 2024-2025	
INDEX MAP & SITE MAP FOR ARIA 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: DC5-5772-01/08

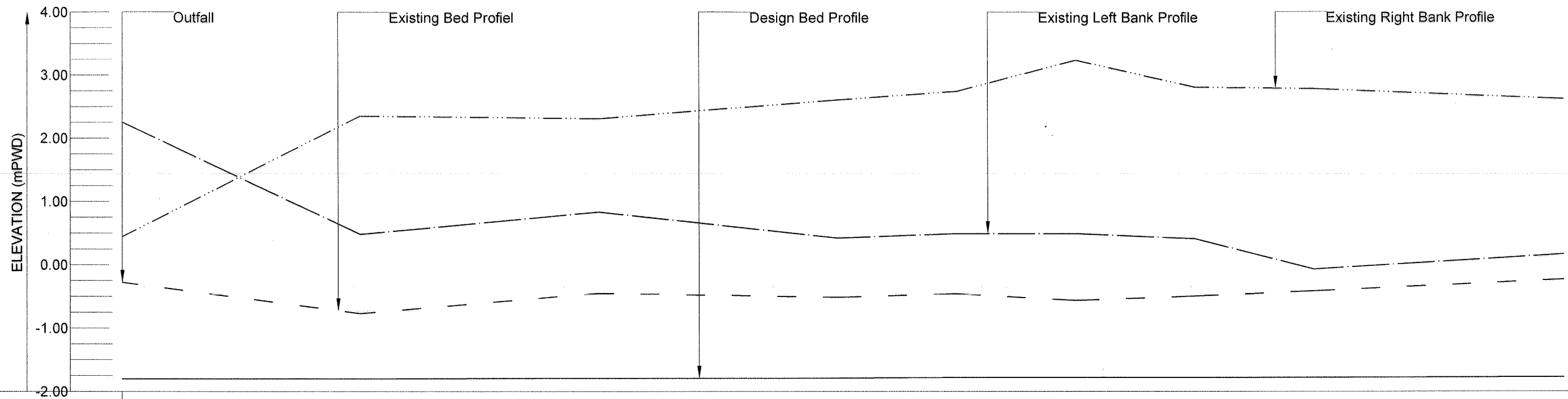
Administrative Notes :

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 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.

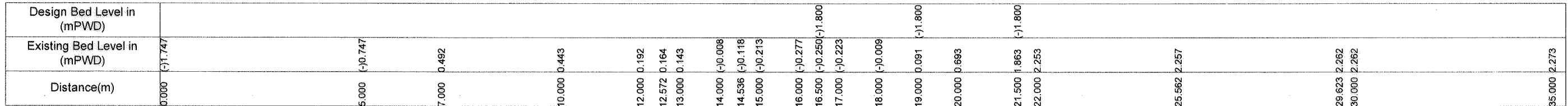
Bangladesh Water Development Board	
Office of The Superintending Engineer,Design Circle-5	
CRISP-WRM	
Re-excavation of Aria Khal from km. 0.000 to km. 0.605 in polder -2 in c/w Tarail-Pachuria Sub-Project under CRISP-WRM under Specialized Division. BWDB, Gopalganj during the year 2024-2025	
NOTES FOR ARIA 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:DC5-5772-02/08



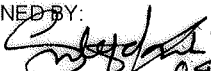


Design Bed Width(m)											
Design Bed Level (mPWD)	(-)1.800				(-)1.790			(-)1.780			(-)1.770
Existing Bed Level (mPWD)	(-)0.277		(-)0.770		(-)0.449		(-)0.515	(-)0.460	(-)0.566	(-)0.497	(-)0.415
Existing Left Bank Level (mPWD)	0.443		2.350		2.310		2.605	2.740	3.234	2.804	2.780
Existing Right Bank Level (mPWD)	2.253		0.480		0.834		0.420	0.490	0.489	0.409	(-)0.071
Distance(Km)	0.000		0.100		0.200		0.300	0.350	0.400	0.450	0.500
											0.605

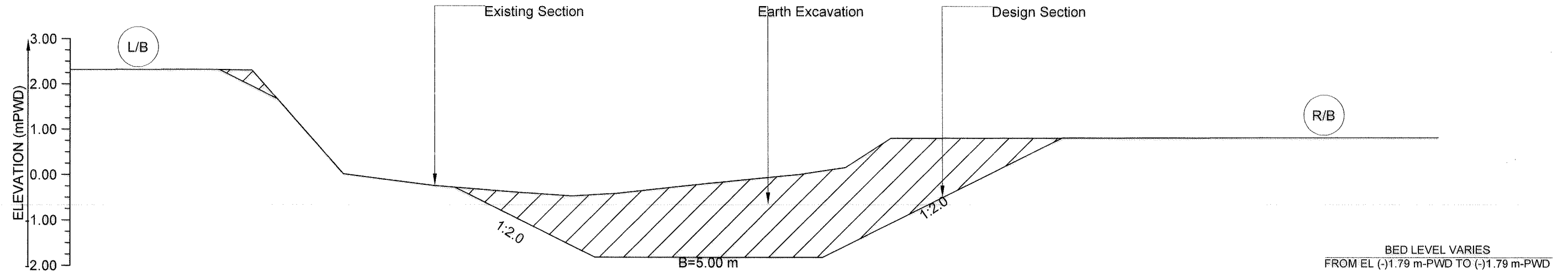
LONG SECTION OF ARIA KHAL APPLICABLE FROM KM 0.000 TO KM 0.605

Bangladesh Water Development Board	
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LONG SECTION OF ARIA 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:DC5-5772-03/08



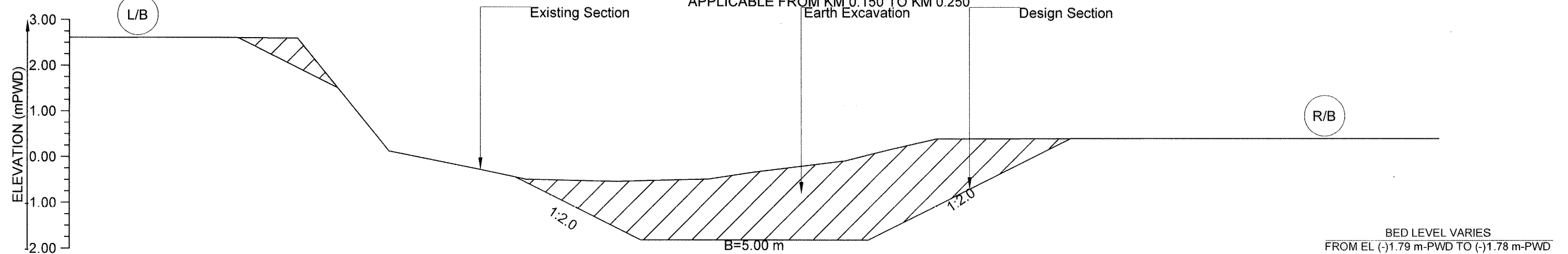
Design Bed Level in (mPWD)	
Existing Bed Level in (mPWD)	2.355
Distance(m)	0.000
	3.000
	2.360
	7.000
	2.360
	9.000
	0.079
	10.000
	(-0.221)
	11.000
	(-0.570)
	12.000
	(-0.718)
	12.278
	(-0.732)
	13.000
	(-0.770)
	13.500
	(-0.746)(-1.800)
	14.000
	(-0.721)
	15.000
	(-0.585)
	16.000
	(-0.270)(-1.800)
	17.000
	0.179
	18.500
	0.405 (-1.800)
	19.000
	0.480
	21.785
	0.947
	25.000
	1.485
	30.000
	1.495

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TYPICAL CROSS SECTION OF ARIA 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: DC5-5772-04/08



Design Bed Level in (mPWD)																				
Existing Bed Level in (mPWD)	2.315	2.325	2.310	0.034	-10.225	-10.259	-10.378	-10.449	-10.418	-10.386	-10.166	-10.033	-0.109	-0.185	-0.834	-0.835	-0.837	-0.840	-0.845	
Distance(m)	0.000	3.000	4.000	6.000	8.000	8.438	9.969	11.000	11.500	12.000	14.000	16.000	16.500	17.000	18.000	19.127	21.754	25.000	30.000	

TYPICAL CROSS SECTION OF ARIA KHAL AT KM 0.200
APPLICABLE FROM KM 0.150 TO KM 0.250



Design Bed Level in (mPWD)																				
Existing Bed Level in (mPWD)	2.610	2.615	2.605	0.139	-10.261	-10.420	-10.470	-10.495	-10.515	-10.502	-10.461	-10.310	-10.061	-0.065	-0.190	-0.420	-0.422	-0.427	-0.435	-0.430
Distance(m)	0.000	3.000	5.000	7.000	9.000	9.759	10.000	11.130	12.000	12.500	14.000	15.000	17.000	17.500	18.000	19.000	19.717	21.935	25.000	30.000

TYPICAL CROSS SECTION OF ARIA KHAL AT KM 0.300
APPLICABLE FROM KM 0.250 TO KM 0.325

Bangladesh Water Development Board

Office of The Superintending Engineer, Design Circle-5

CRISP-WRM

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c/w Tarail-Pachuria Sub-Project under CRISP-WRM under Specialized
Division. BWDB, Gopalganj during the year 2024-2025

TYPICAL CROSS SECTION OF ARIA KHAL

DESIGNED BY:
[Signature]
(MD. MOSTAFA KAMAL), AE

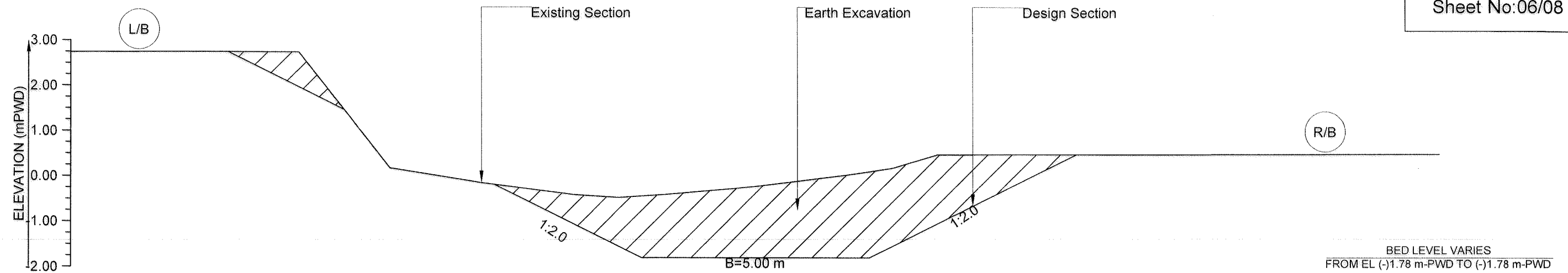
APPROVED BY:

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

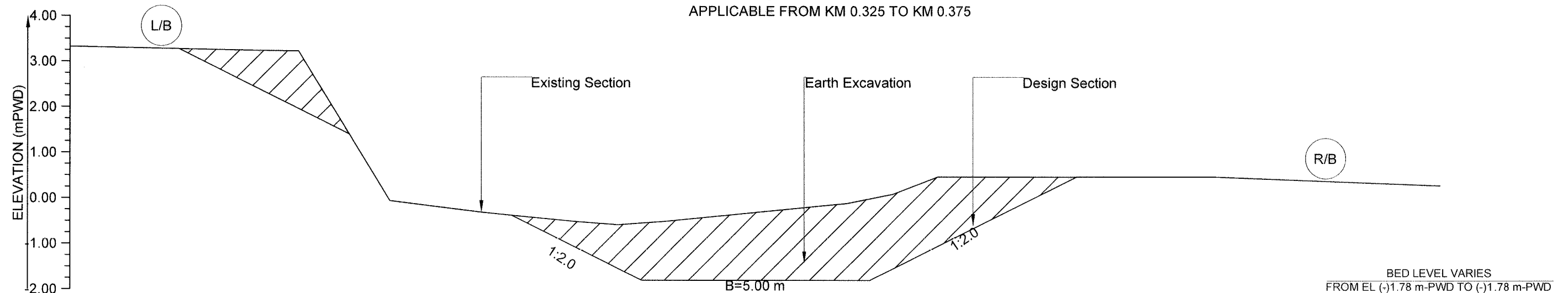
(JAKARIA PERVEZ), SE

Date: 04/02/2025

Drawing No: DC5-5772-05/08




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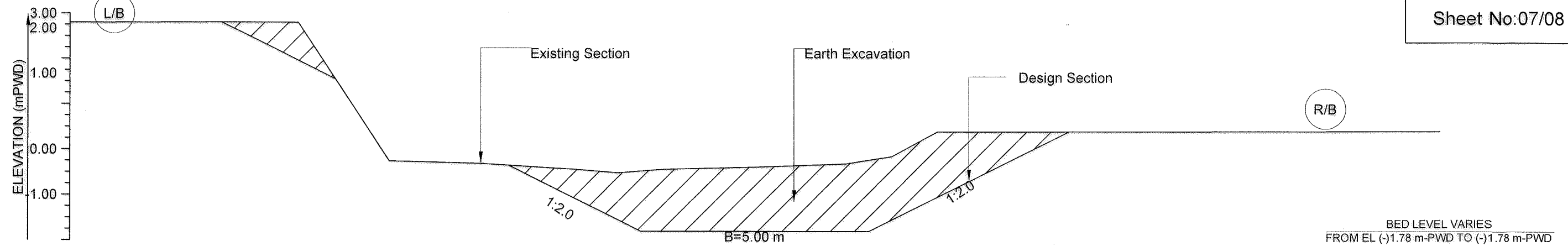
TYPICAL CROSS SECTION OF ARIA KHAL AT KM 0.350
APPLICABLE FROM KM 0.325 TO KM 0.375



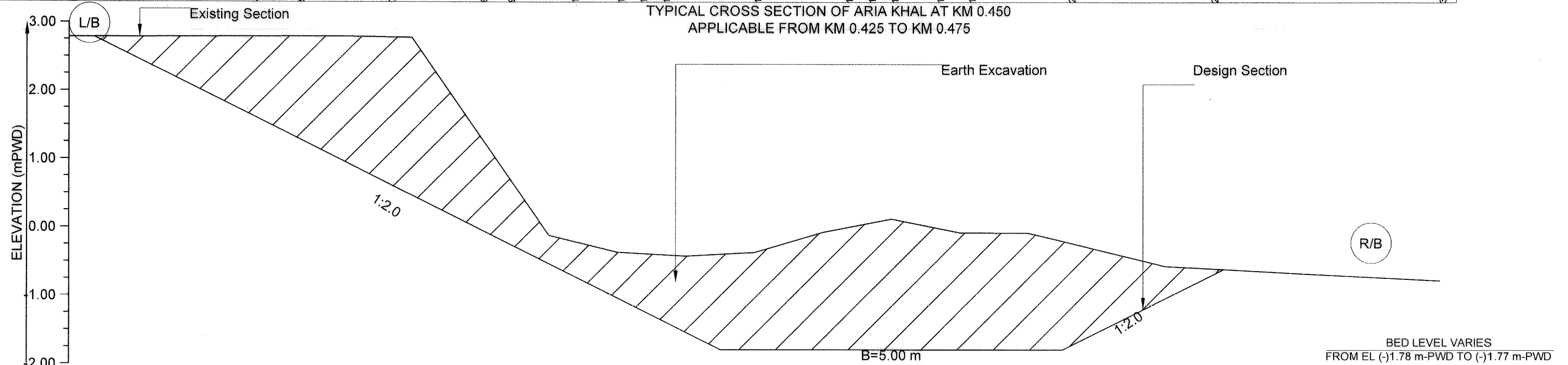
Design Bed Level in (mPWD)	
Existing Bed Level in (mPWD)	3.324
Distance(m)	0.000
	1.000
	2.000
	3.000
	4.000
	5.000
	6.000
	7.000
	8.000
	9.000
	10.000
	11.000
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	82.000
	83.000
	84.000
	85.000
	86.000
	87.000
	88.000
	89.000
	90.000
	91.000
	92.000
	93.000
	94.000
	95.000
	96.000
	97.000
	98.000
	99.000
	100.000

TYPICAL CROSS SECTION OF ARIA KHAL AT KM 0.400
APPLICABLE FROM KM 0.375 TO KM 0.425

<p align="center">Bangladesh Water Development Board</p>	
<p align="center">Office of The Superintending Engineer, Design Circle-5</p>	
<p align="center">CRISP-WRM</p>	
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<p align="center">TYPICAL CROSS SECTION OF ARIA KHAL</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: DC5-5772-06/08</p>



Design Bed Level in (mPWD)	
Existing Bed Level in (mPWD)	2.794
Distance(m)-2.00	0.000
	2.809
	2.804
	-0.246
	-0.297
	-0.333
	-0.416
	-0.497
	-0.459(-1.780
	-0.421
	-0.371(-1.780
	-0.217(-1.780
	-0.136
	0.409
	0.410
	0.411
	0.414
	0.424

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TYPICAL CROSS SECTION OF ARIA KHAL AT KM 0.500
APPLICABLE FROM KM 0.475 TO KM 0.553

Bangladesh Water Development Board

Office of The Superintending Engineer, Design Circle-5


CRISP-WRM

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TYPICAL CROSS SECTION OF ARIA KHAL

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

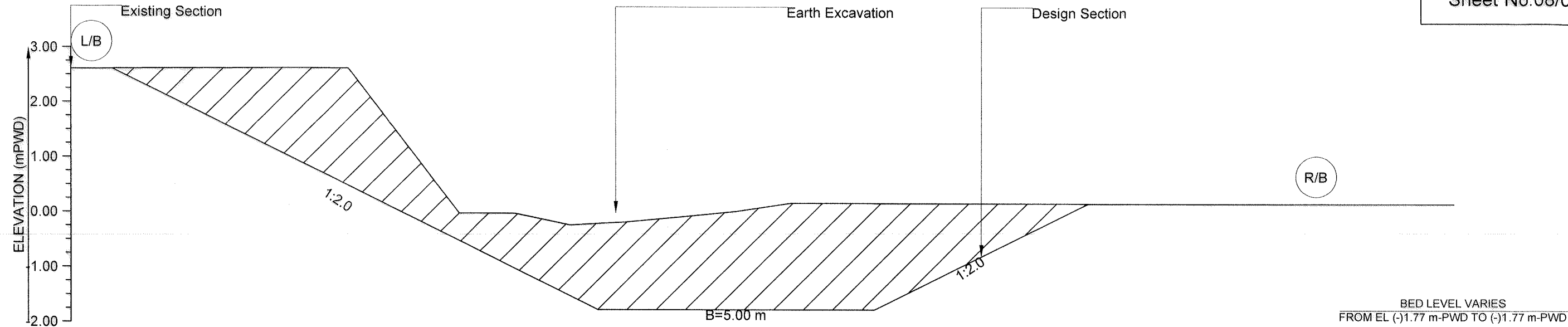
APPROVED BY:

CHECKED AND RECOMMENDED BY:

 (MD. KAMRUL HASAN), EE

(JAKARIA PERVEZ),SE




Date: 04/02/2025

Drawing No:DC5-5772-07/08



Design Bed Level in (mPWD)																		
Existing Bed Level in (mPWD)	2.602	2.606	2.626	2.617	-0.023	-0.018	-0.233	-0.206	-0.178	-0.084	0.015	0.167	0.166	0.165	0.163	0.162	0.159	
Distance(m)	0.000	0.747	4.000	5.000	7.000	8.000	9.000	9.500	10.000	11.000	12.000	13.000	14.500	16.433	18.366	20.000	25.000	

TYPICAL CROSS SECTION OF ARIA KHAL AT KM 0.605
APPLICABLE FROM KM 0.553 TO KM 0.605

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