

BANGLADESH WATER DEVELOPMENT BOARD

Consultancy Services for Management, Design, Supervision and other Related Services
of Haor Flood Management and Livelihood Improvement Project (BWD Part)

NOAPARA HAOR SUB-PROJECT

DETAIL DRAWINGS

OF

NALUAR REGULATOR (3V-1.5m x 1.8m) AT KM 4.77

OF NOAPARA HAOR SUB-PROJECT

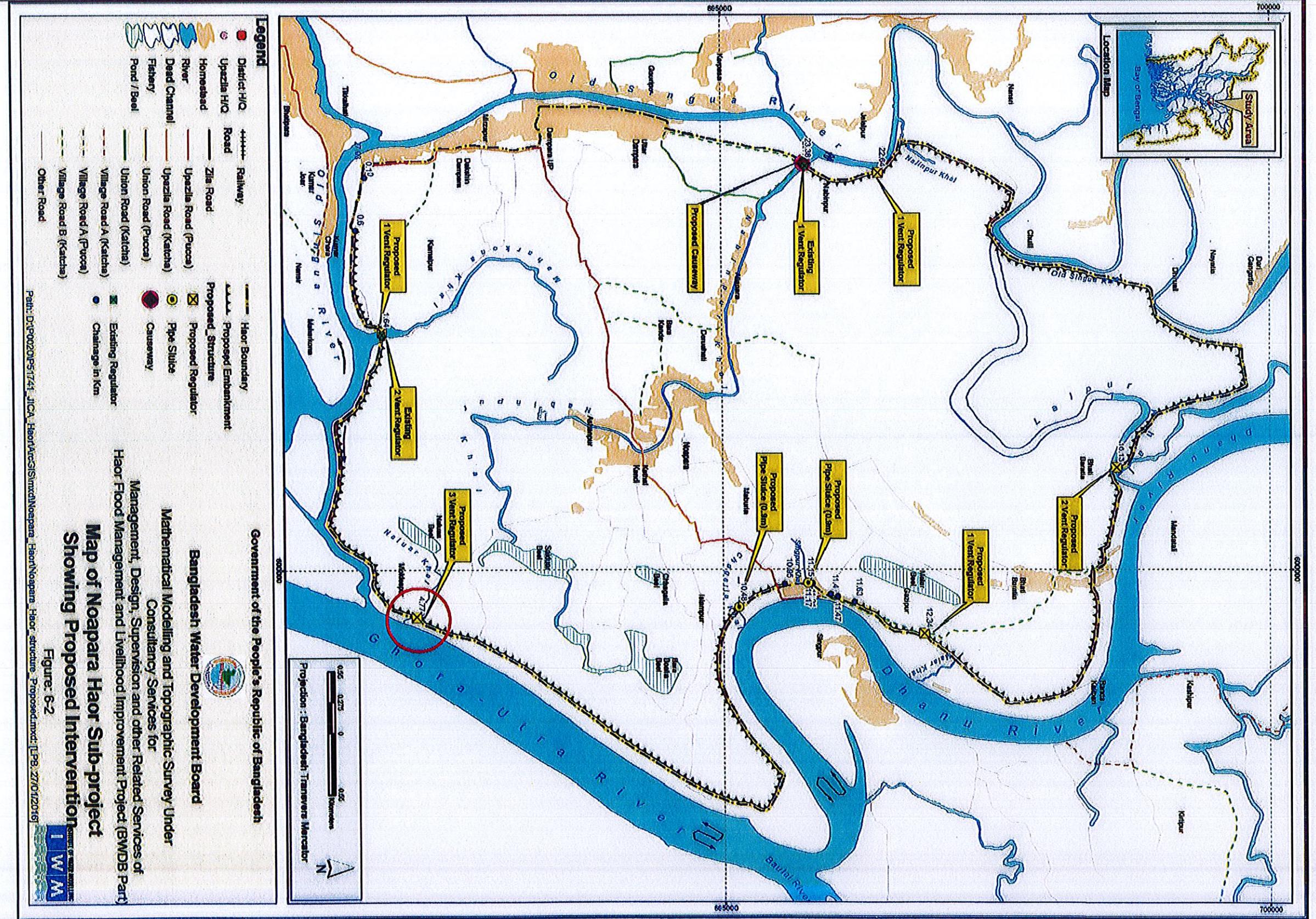
UNDER KISHOREGANJ WD DIVISION, BWD, KISHOREGANJ

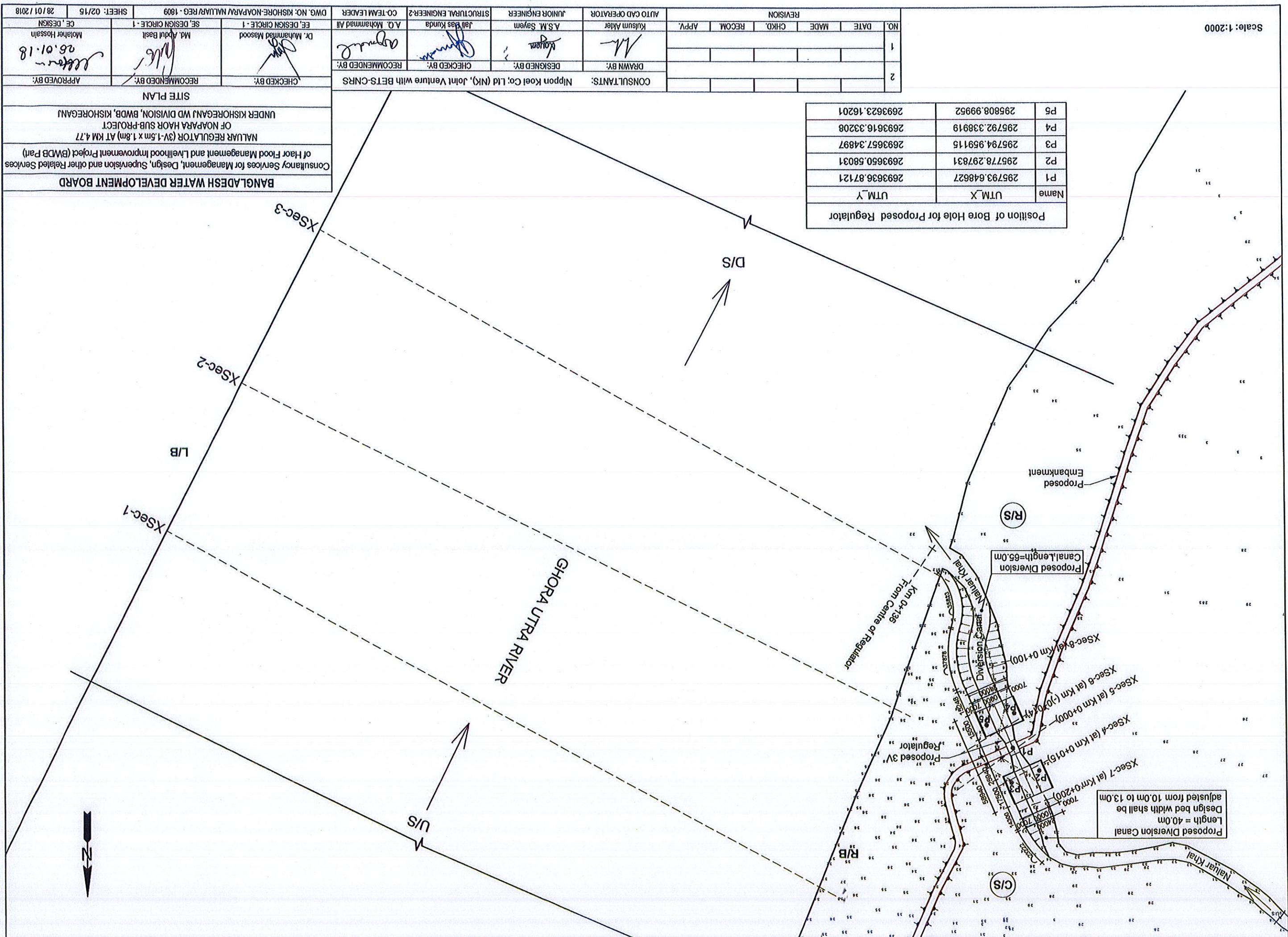
Approved
12-12-18
(Md. Fakrul Islam Choudhury)
Project Director/Haor Flood Management & Livelihood Improvement Project
Haor Flood Management & Livelihood Improvement Project
BWD, Dhaka
Livelihood Improvement Project
(Md. Fakrul Islam Choudhury)

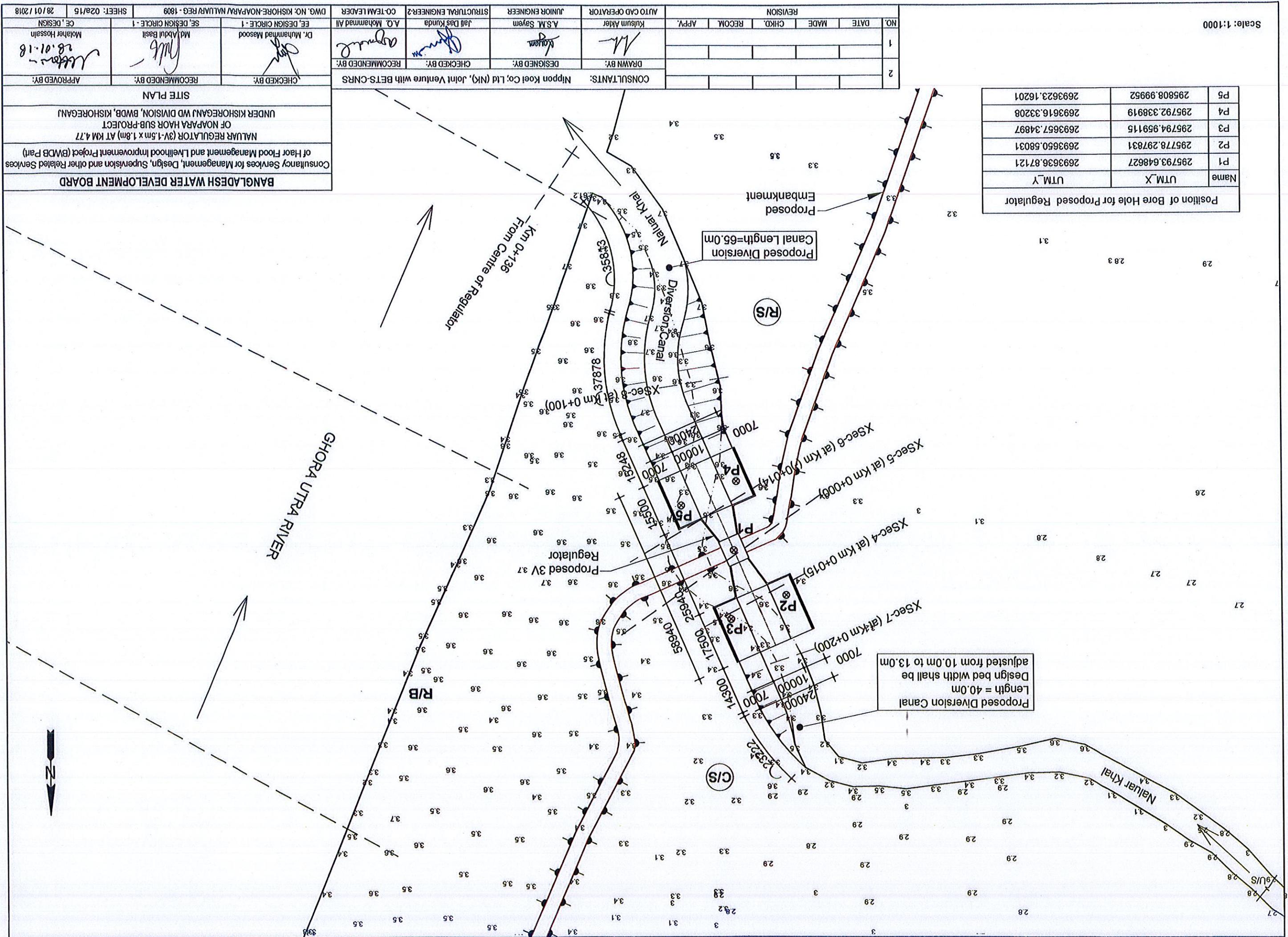
JANUARY, 2018

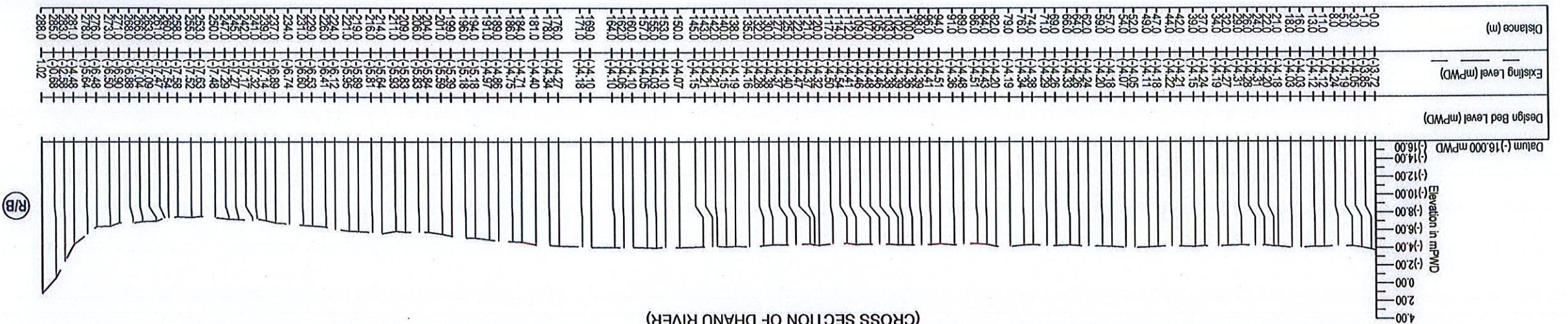
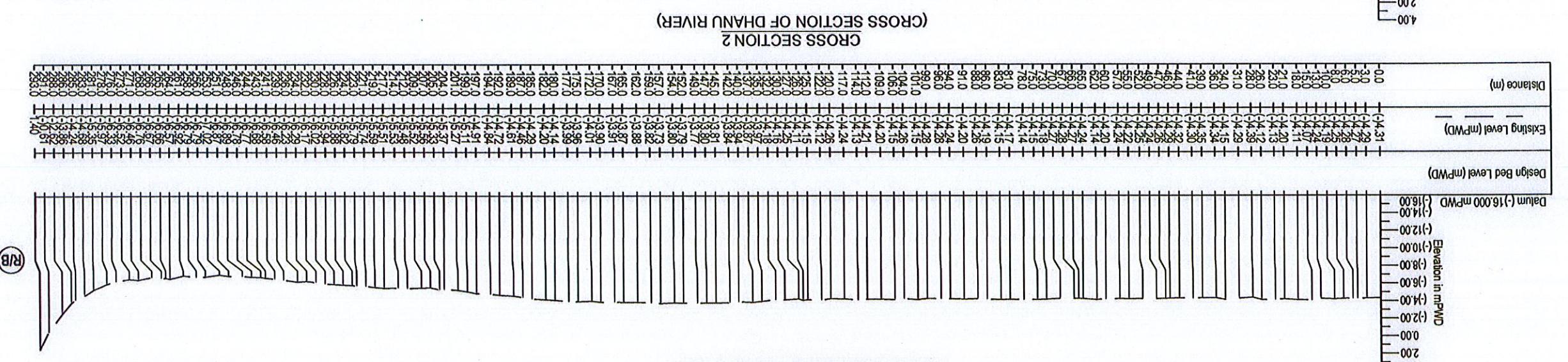
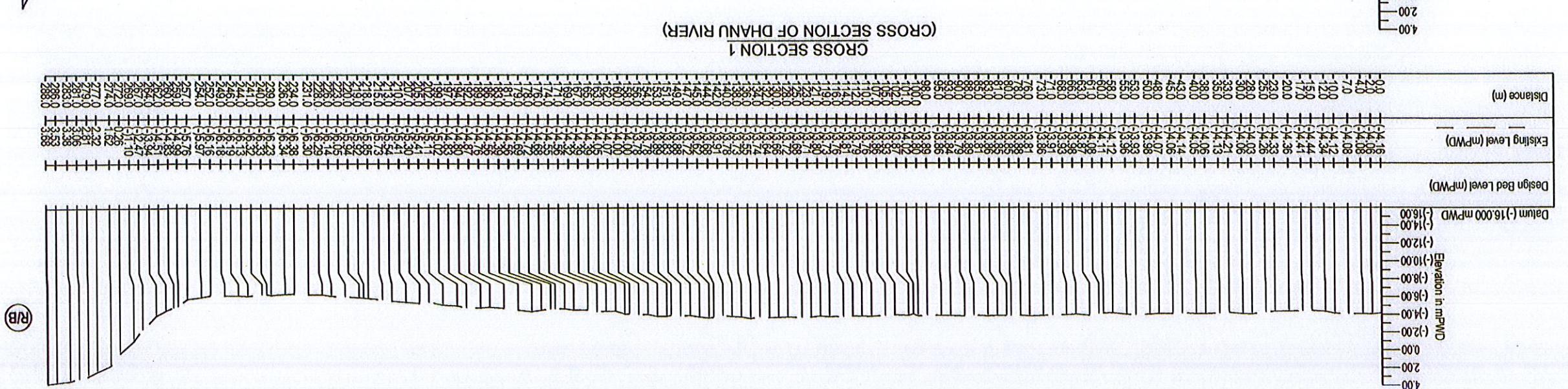
LIST OF DRAWING

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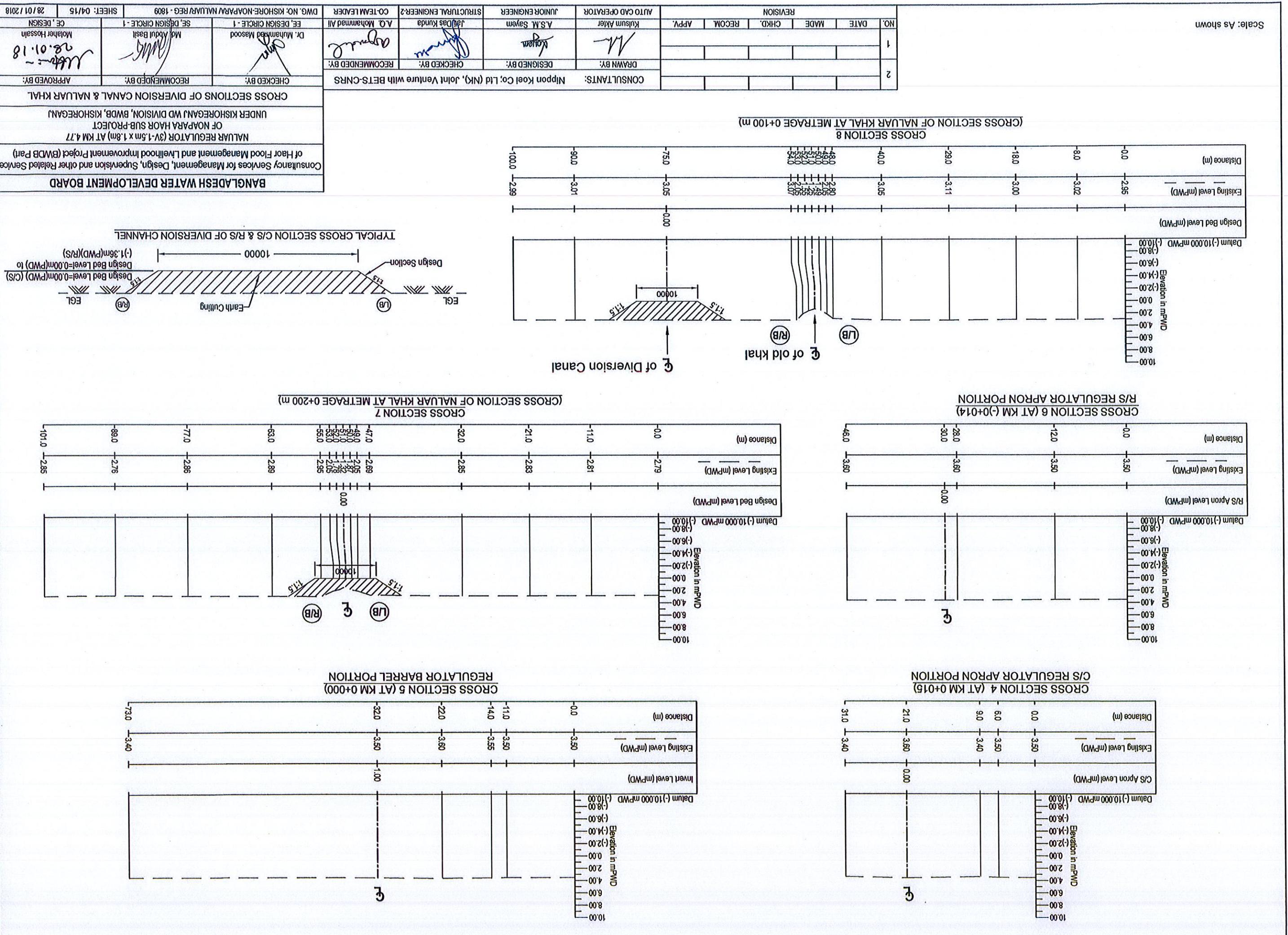






CROSS SECTION 3 (CROSS SECTION OF DHANU RIVER)

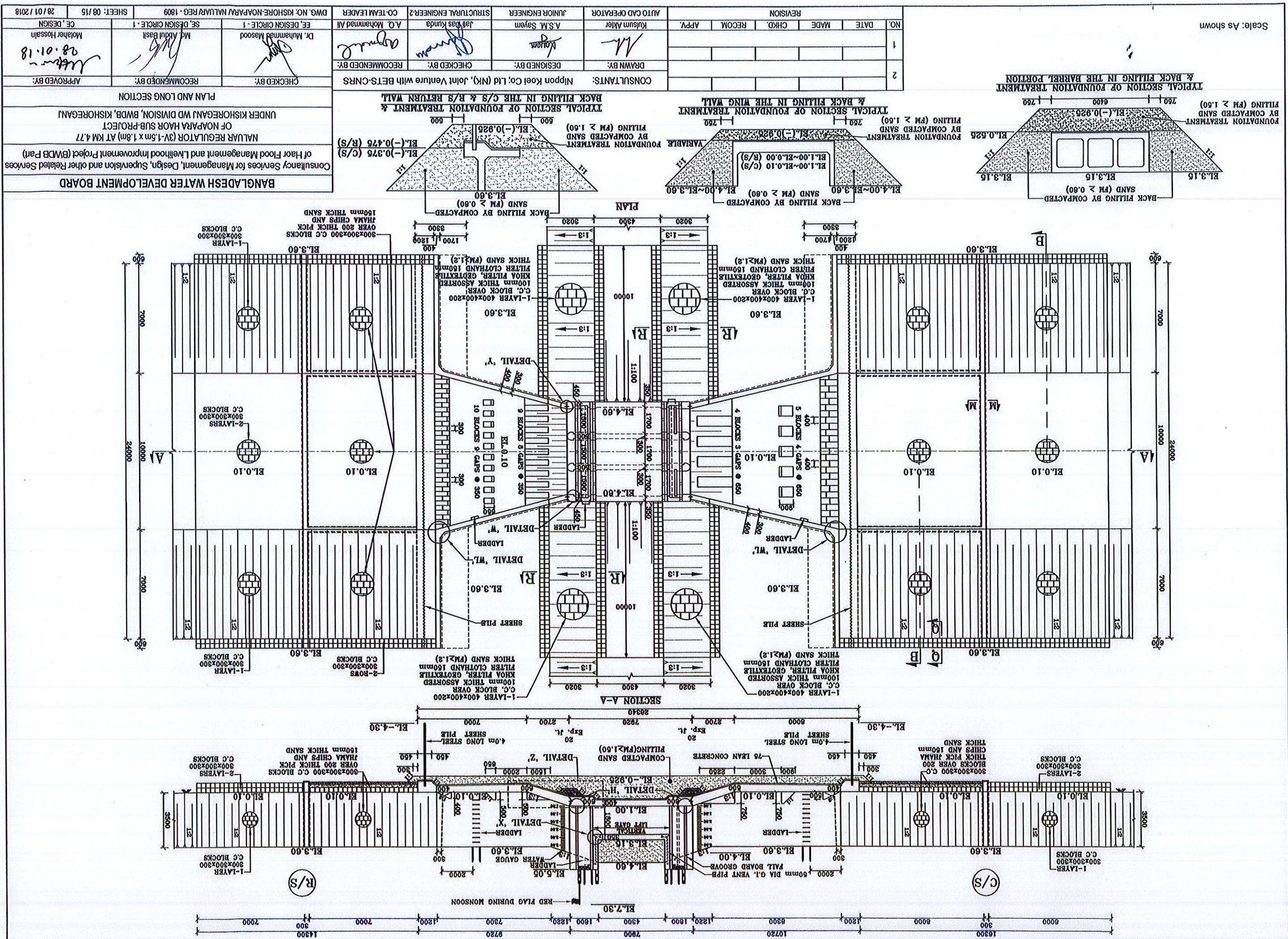
CROSS SECTION 3 (CROSS SECTION OF DHANU RIVER)					
BANGLADESH WATER DEVELOPMENT BOARD					
Consultancy Services for Management, Design, Supervision and other Related Services of Har-Flood Management Project (3V-1.5m x 1.8m) At KM 4.77 OF NAPARA HABAR SUB-PROJECT UNDER KISHOREGANJ WD DIVISION, BWD, KISHOREGANJ					
CROSS SECTIONS OF DHANU RIVER AT OUTFALL OF STRUCTURE					
CONSULTANTS: Nippon Keel Co., Ltd (NKL), Joint Venture with BETS-CNRs					
CHECKED BY: RECOMMENDED BY: APPROVED BY:					
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1					
NO.	DATE	MADE	OKHD.	RECOM.	REVISIION
					AUTO CAD OPERATOR
					JUNIOR ENGINEER
					STRUCTURAL ENGINEER-2
					CO-TEAM LEADER
					EE, DESIGN CIRCLE - 1
					SE, DESIGN CIRCLE - 1
					CE, DESIGN
					DWG. NO: KISHORE-NAPARA/NALUAR/REG - 1809
					SHEET: 03/15
					28/01/2018
Scale: As shown					

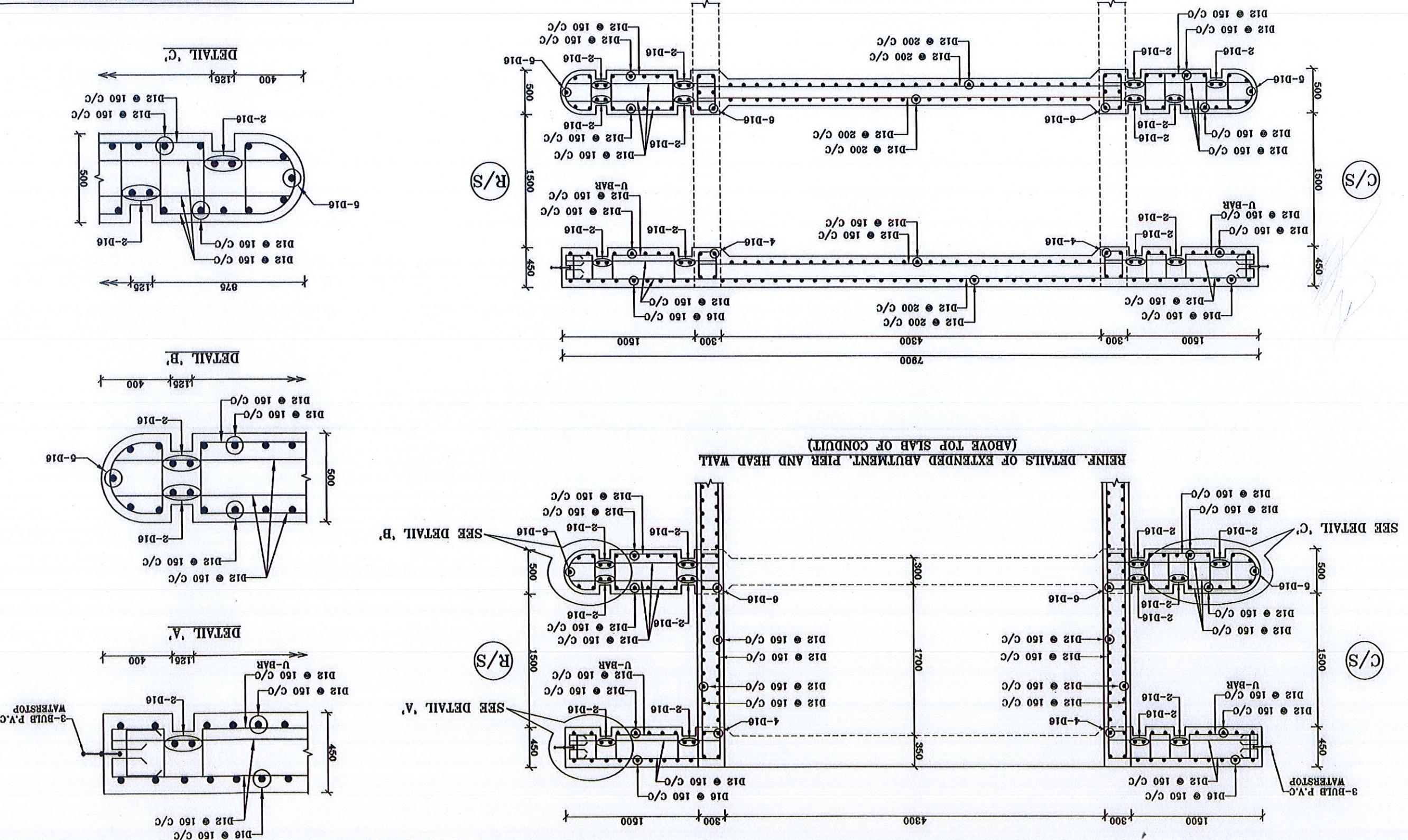


GENERAL NOTES:

- THIS DESIGN HAS BEEN PREPARED AS PER FINAL PLANNING REVIEW REPORT DATED APRIL, 2016 SUBMITTED BY IWM.
- ALL DIMENSIONS ARE IN MILLIMETER BUT ELEVATIONS ARE IN METER (PWD) UNLESS OTHERWISE MENTIONED IN THE DRAWINGS.
- CONCRETE SHALL DEVELOP A CRUSHING STRENGTH (CYLINDER STRENGTH) AS NOTED BELOW AT 28 DAYS AND SHALL BE CHECKED BY COLLECTING SAMPLES AND TESTING DURING CONSTRUCTION (ITEM CODE NO. AS PER BWD STANDART SCHEDULE OF RATES MANUAL).
- CONCRETE SHALL BE POURED IN DRY BED CONDITION.
- CONCRETE MIXTURE SHALL BE CONTINUED FOR MINIMUM 21 DAYS AFTER CASTING.
- CURING OF CONCRETE SHALL BE POSSIBLE BUT NOT LATER THAN 45 MINUTES AFTER MIXING.
- THE SURFACE OF CONSTRUCTION JOINTS SHALL BE WASHED THOROUGHLY WITH WATER JET AND SHALL BE CLEANED ENOUGH AND SURFACE DRY PRIOR TO PLACEMENT OF ADJACENT CONCRETE.
- THE LEAN CONCRETE AT FOUNDATION OF THE PROPOSED SLUICE SHALL BE PLACED AFTER PROPERLY COMPACTING EXCAVATED BASE.
- REFINEMENT SHALL BE DEFORMED BARS WITH MILD STEEL ROUND, HOT ROLLED BARS FREE FROM RUST, MILL SCALE, GREASE AND OLD MATERIALS AND SHALL HAVE A MINIMUM YIELD STRENGTH OF 414 N/mm^2 .
- MINIMUM 150mm SAND SHALL BE PLACED ON COMPACTED EXCAVATED EARTH FOR BASE PREPARATION.
- ALL EXPANSION JOINTS SHALL HAVE A GAP OF 20mm AND SHALL BE SEALED AS PER DRAWINGS.
- LAP / DEVELOPMENT LENGTH (ld) SHALL BE 40 BAR DIAMETER OR AS SHOWN IN DRAWING.
- CLEAR COVER:
- (A) OPERATING DECK: 25mm (BOTH FACE)
- (B) CONCRETE ADJACENT TO EARTH: 60mm
- (C) CONCRETE ADJACENT TO WATER / EXPOSED OR OTHERS: 50mm
- THE EMBEDDED PARTS OF GATE SYSTEM WILL BE INSTALLED DURING CONSULTANT & SHALL BE VETTED BY DESIGN CIRCLE III, BWD, DHAKA DRAWING.
- DESIGN OF GATE AND HOSTING SYSTEM WILL BE PREPARED BY CONSULTANT & SHALL BE VETTED BY DESIGN CIRCLE III, BWD, DHAKA DRAWING.
- THE EMBODIED PARTS OF GATE SHALL BE INSTALLED DURING CONSULTANT OF BOX IN ACCORDANCE WITH APPROVED MECHANICAL COAT, INTERLOCKING AND ANCHORAGE OF SHEET PILE MUST BEENSURED.
- U-TYPE SHEET PILE (HOT ROLLED) OF 10.5 mm THICKNESS SHALL BE USED. SHEET PILE SHALL BE CLEANED BY SAND BLASTING, ZINC PHOSPHATE SHALL BE USED AS PRIMARY COAT AND THEN 2 (TWO) COAT OF COAL TAR EPOXY COAT SHALL BE PROVIDED OVER PRIMARY COAT. INTERLOCKING AND ANCHORAGE OF SHEET PILE MUST BEENSURED.
- C/S DESIGN BED LEVEL OF DIVERISION CANAL SHALL BE ADJUSTED FROM 10.0 TO 13.0M FOR A LENGTH OF 40.0M.
- R/S DIVERISION CANAL SHALL BE EXCAVATED FROM 10.0 TO 13.0M FOR A LENGTH OF 40.0M.
- THE WORK SHALL BE EXECUTED AFTER ADMINISTRATIVE AND FINANCIAL APPRAISAL FROM THE COMMISSIONER AUTHORITY.
- FOR ANY ERROR / OMISSION DESIGN CIRCLE - I, BWD MAY BE REFERRED TO THROUGH CONSULTANT.
- ALL BORE HOLES SHALL BE SEALED BEFORE CONNECTION OF REGULATOR.
- VERTICAL LIFT GATE SHALL BE PROVIDED BOTH C/S & R/S FOR RETENTION AND FLOOD CONTROL.
- 400mm x 400mm x 200mm C.C. BLOCK SHALL BE PLACED ON THE GEOTEXTILE FILTER CLOTH (ITEM NO. 40-600-20) & 100MM THICK KHAO FILTER AS SHOWN IN THE DRAWING ON THE U/S AND D/S SLOPE OF THE EMBANKMENT AS SHOWN IN THE DRAWING.
- IF ANY PIT OR ORGANIC SOIL IS ENCOUNTERED AT FOUNDATION LEVEL SHALL BE REPORTED TO DESIGN CIRCLE-I BWD THROUGH CONSULTANTS FOR SOLUTION.
- BM SET BY IWM SHALL BE FOLLOWED DURING EXECUTION OF WORK
- IF ANY PIT OR ORGANIC SOIL IS ENCOUNTERED AT FOUNDATION LEVEL SHALL BE REPORTED TO DESIGN CIRCLE-I BWD THROUGH CONSULTANTS FOR SOLUTION.
- GENERAL NOTES:

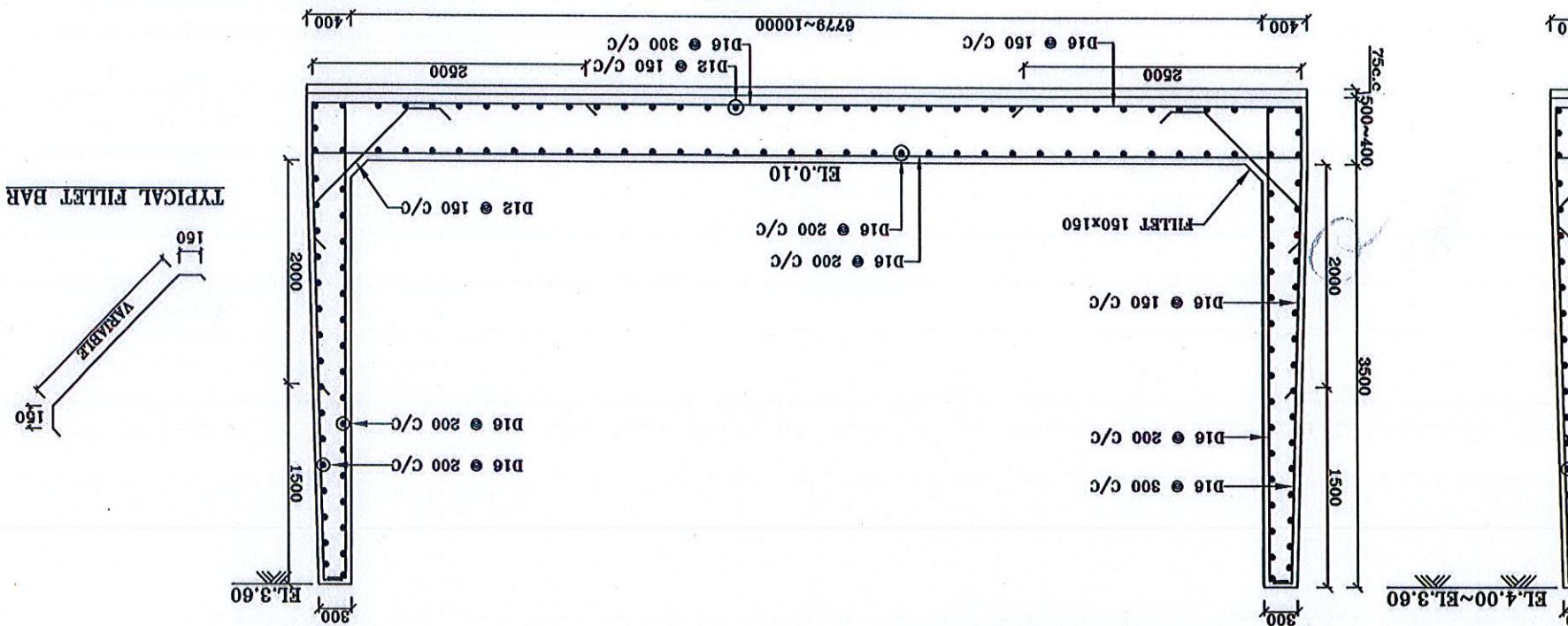
CONSULTANTS: Nippon Keoi Co., Ltd (Nk), Joint Venture with BETS-CNRs					
DRAWN BY:	DESIGNED BY:	CHECKED BY:	RECOMMENDED BY:	APPROVED BY:	GENERAL NOTES
Dr. Muhammad Masood	Md. Abdur Basit	Abdur	Dr. Muhammad Masood	EE, Design Circle - I	EE, Design Circle - I Muhammed Hassan
DATE MADE CHK'D REC'D APP'D					
1	AS.M. Sajem	Jafar Das Kundu	A.Q. Mohammad Ali	STRUCTURAL ENGINEER-2	CO-TEAMLEADER
NO. DATE MADE CHK'D REC'D APP'D					
REVISION					
Scale: As shown					



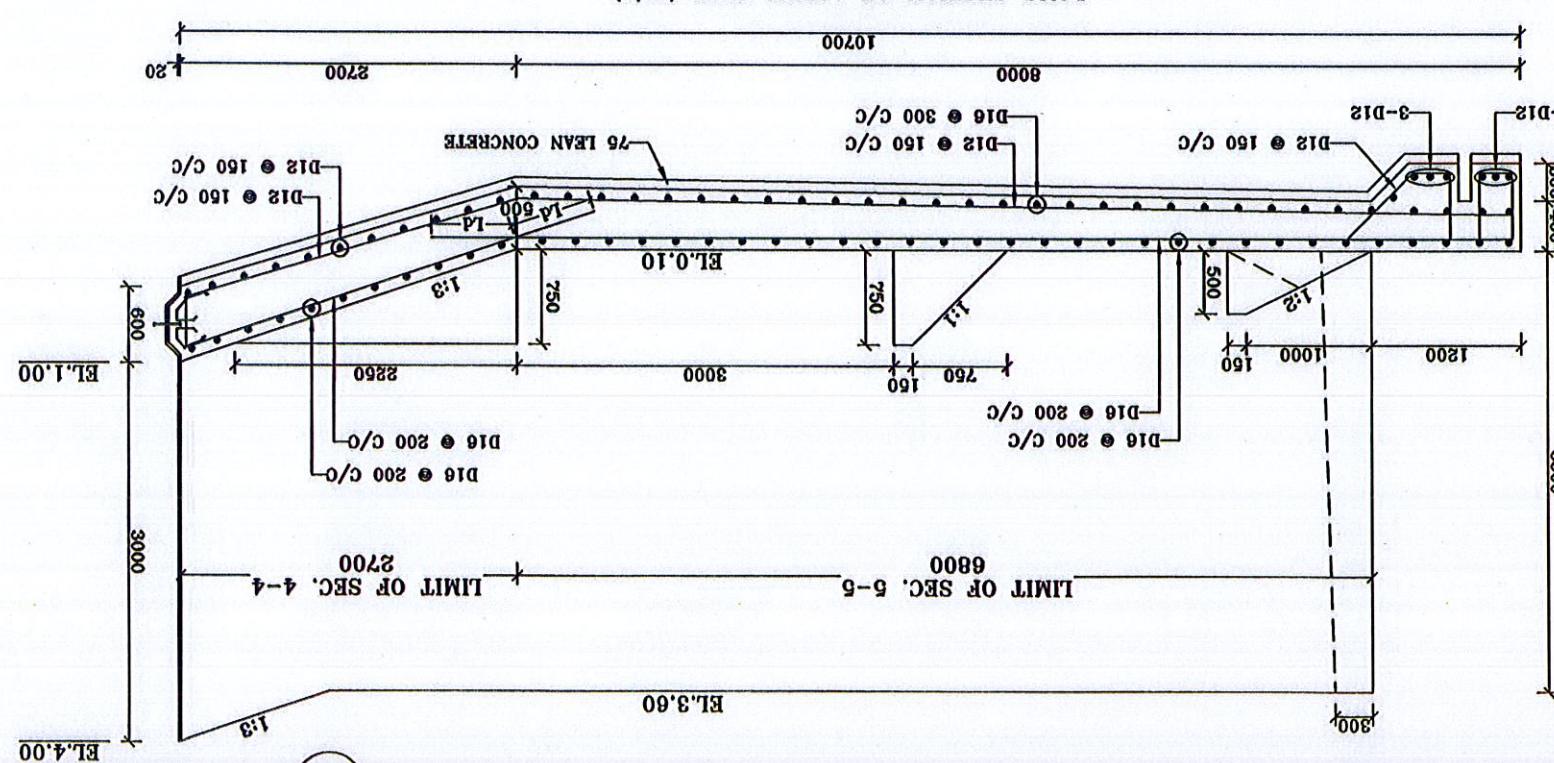


BANGLADESH WATER DEVELOPMENT BOARD					
Consultancy Services for Management, Design, Supervision and other Related Services of Haro Food Management, Dhaka, Supervision and other Related Services					
NULBAR REGULATOR (3V-1.5m x 1.8m) AT KM 4.77 OF NOAPARA HARO SB-PROJECT UNDER KISHOREGANJ WD DIVISION, BWDB, KISHOREGANJ REINFORCEMENT DETAILS OF APRON SLAB (THROUGH SECTION A-A). WING & RETURN WALL (C/S) WING & RETURN WALL (C/S)					
CONSULTANTS: Nippon Keoi Co., Ltd (NKL), Joint Venture with BETS-CNRs					
CHECKED BY: RECOMMENDED BY: APPROVED BY:					
DRAWN BY: DESIGNED BY: CHECKED BY: RECOMMENDED BY:					
1					
NO.	DATE	MADE	CKD	RECOM.	APPR.
REVISION Kuksun Akter A.S.M. Sayem Jalil Das Kundu A.Q. Mohammad Ali EE, DESIGN CIRCLE - 1 SE DESIGN CIRCLE - 1 CE, DESIGN Molam Hossain Md. Abdur Basit 28.01.18					
Scale: As shown					

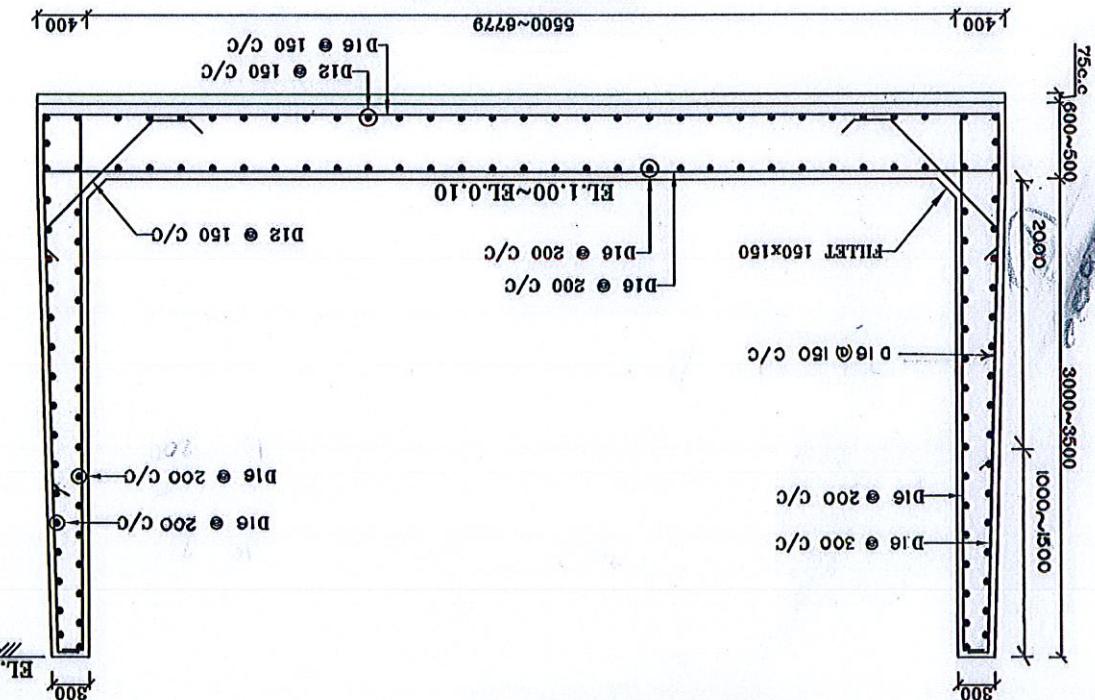
SECTION 5-5 (C/S)



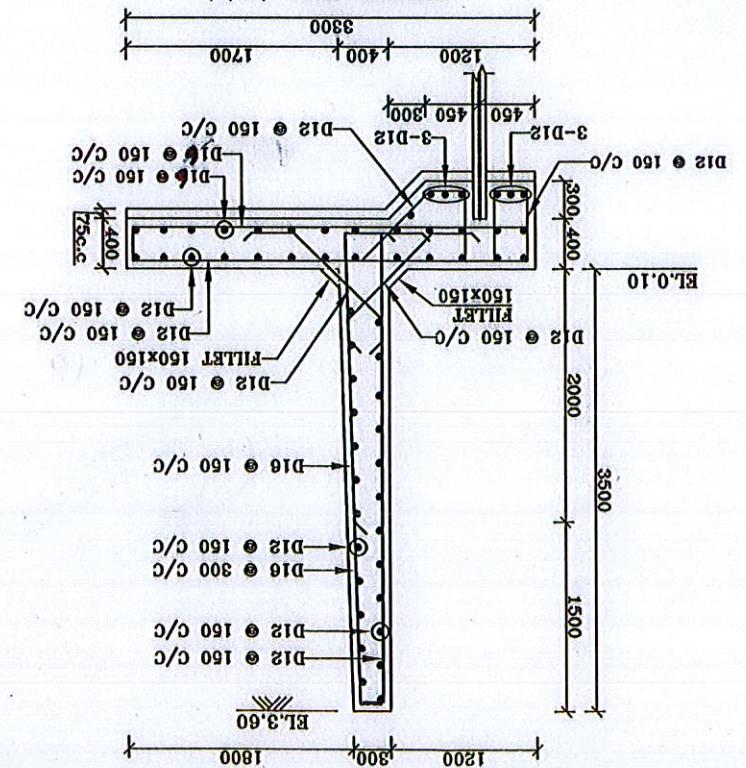
LONG SECTION OF APRON SLAB (C/S) (THROUGH A-A)



SECTION 4-4 (C)



RETURN WALL (C/S)



CONSULTANTS: Nippon Koei Co., Ltd (NKK), Joint Venture with BETS-CNRs									
DRAWN BY:	DESIGNED BY:	CHECKED BY:	RECOMMENDED BY:	STRUCTURAL ENGINEER:	JUNIOR ENGINEER:	AUTO CAD OPERATOR:	REVISON	DATE MADE CHKD. RECOM.	NO. DESGN CRDCE-1 SE. DESGN CRDCE-1 CO-TEAM LEADER
1	Kulsum Akter	A.S.M. Syiem	Asif Das Kundu	A.Q. Mohammad Ali	Md. Mdul Basit	EE. Desimul Masood	1	28/01/18	28/01/2018 SHEET: 12/16
2									Scale: As shown

BANGLADESH WATER DEVELOPMENT BOARD

Consultancy Services for Management and Levee/Soil Improvement Project (BWMB Part)

NALUAR REGULATOR (3V-1.5m x 1.8m) AT KM 4.77

OF NOAPRA HAWAR SUB-PROJECT

UNDER KISHOREGANJ WD DIVISION, BWB, KISHOREGANJ

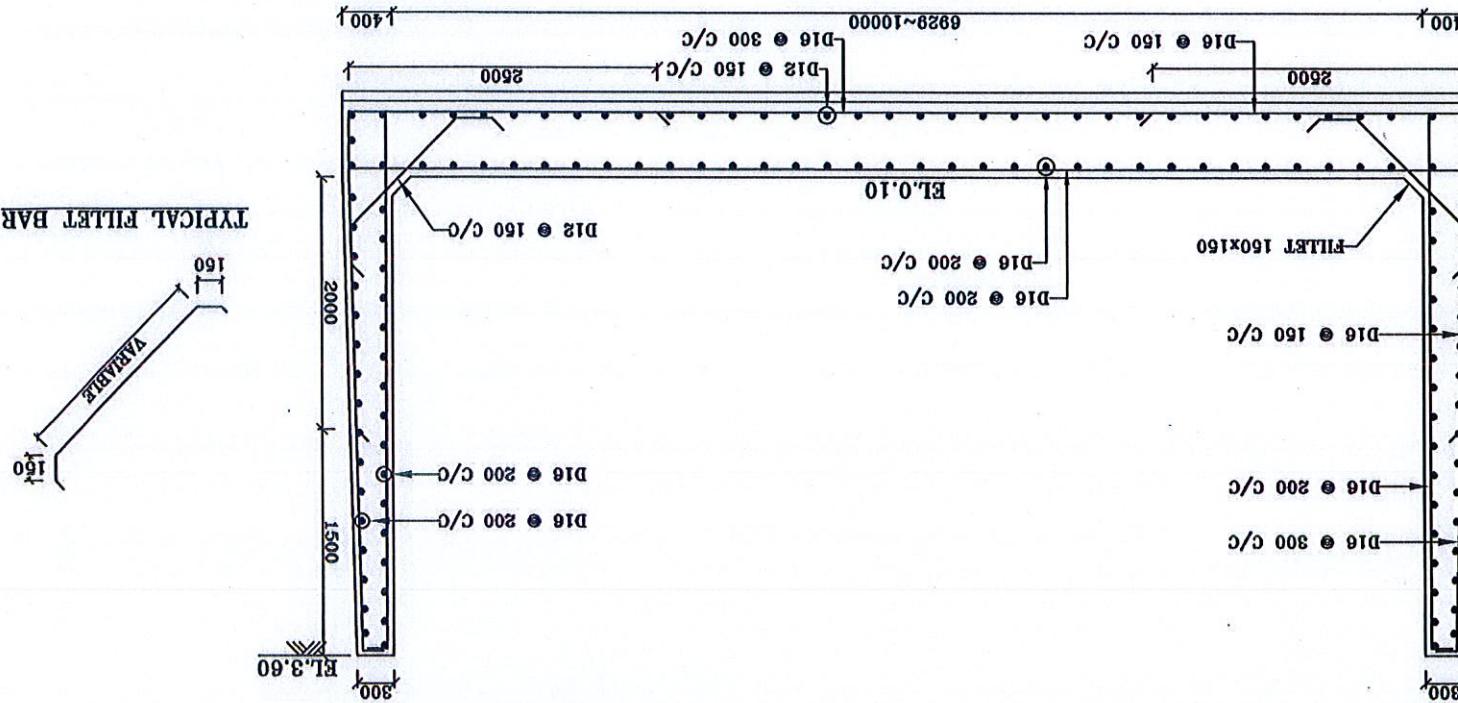
REINFORCEMENT DETAILS OF APRON SLAB (THROUGH SECTION A-A).

WING & RETURN WALL (RS)

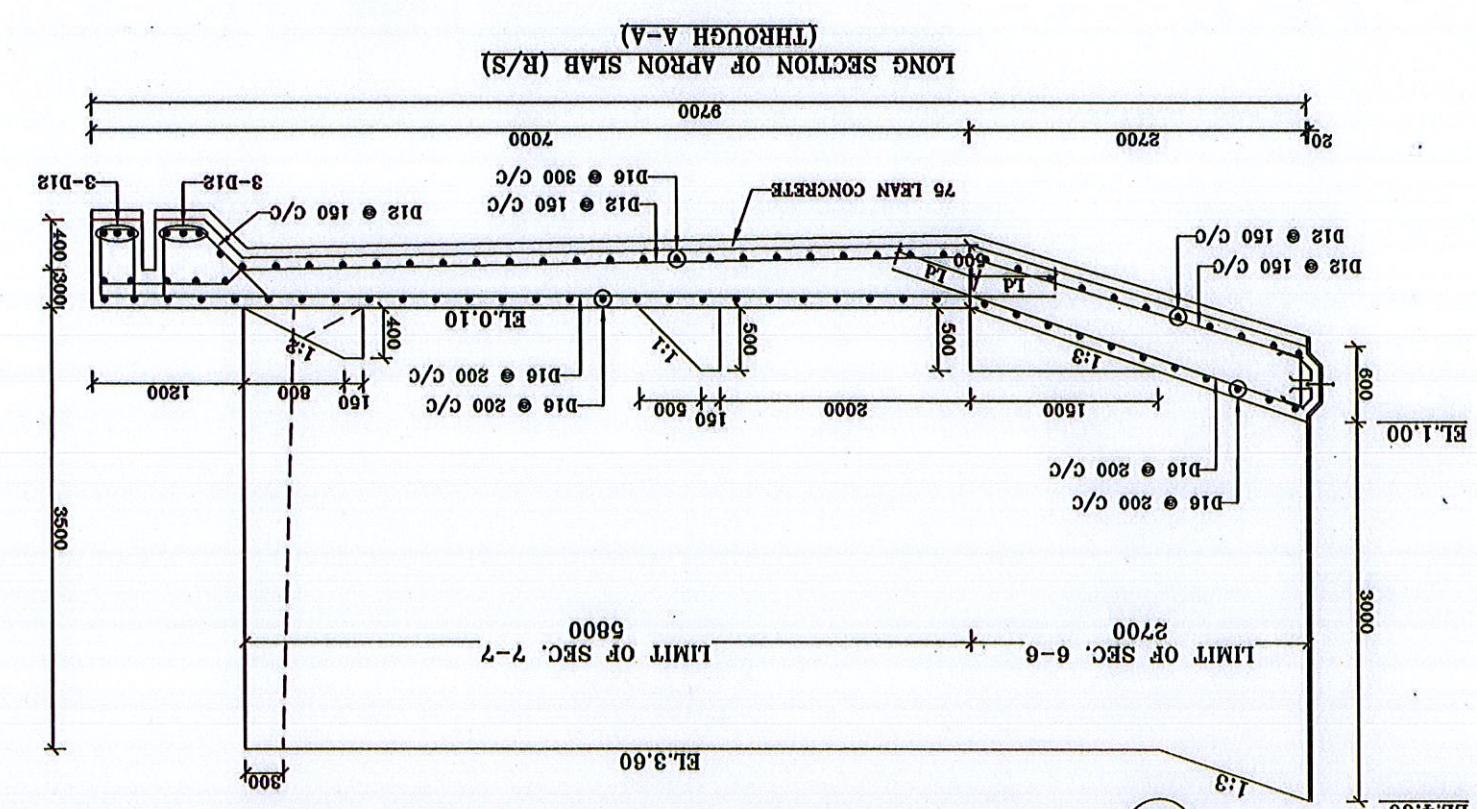
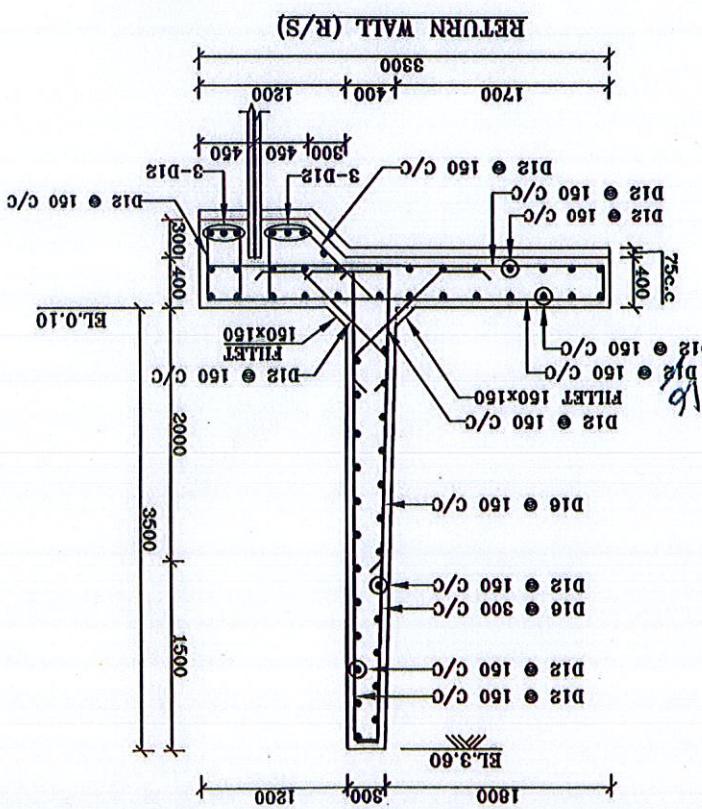
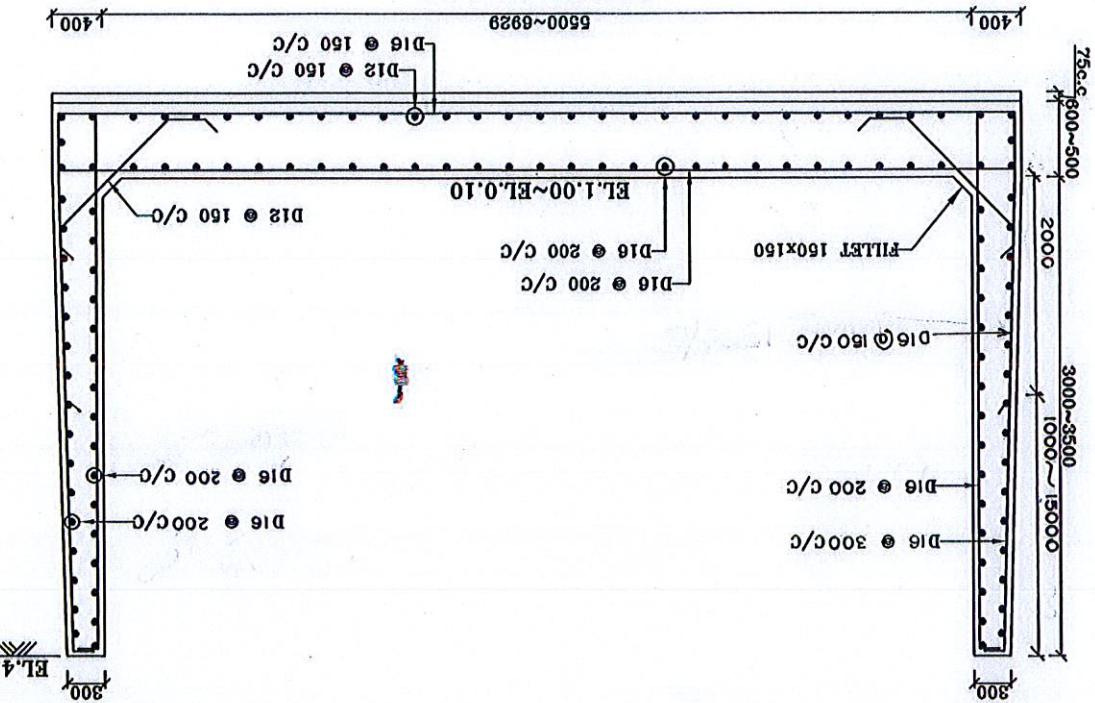
Dr. Muzammel Masood

Mr. Mdul Basit

SECTION 7-7 (R/S)



SECTION 6-6 (R/S)



R/S

