BANGLADESH WATER DEVELOPMENT BOARD

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

Approved
12-02-18
(Md. Fakhrul Abedin)
Project Director/Add. Chief Engineer
Haor Flood Management &
Livelihood Improvement Project
BWDB, Dhaka.

NOAPARA HAOR SUB-PROJECT

DETAIL DRAWINGS
OF
LALPUR REGULATOR (2V-1.5m x 1.8m) AT KM 16.13
OF NOAPARA HAOR SUB-PROJECT
UNDER KISHOREGANJ WD DIVISION, BWDB, KISHOREGANJ

JANUARY, 2018

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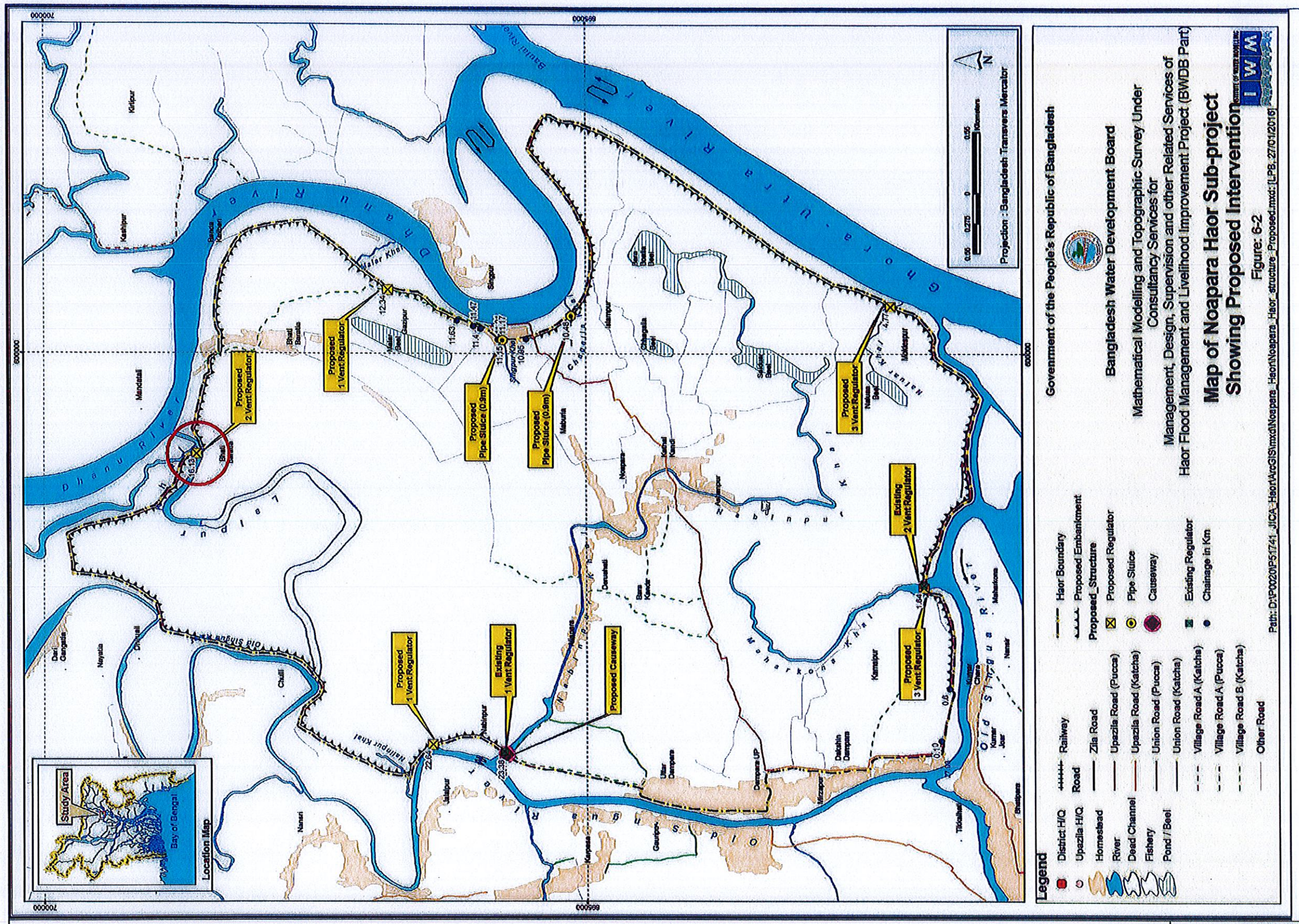

Scale: As shown

NO.	DATE	MADE	CHKD.	RECOM.	APPV.
2					
1					

REVISION

CONSULTANTS: Nippon Koei Co; Ltd (NK), Joint Venture with BETS-CNRS

DRAWN BY:	DESIGNED BY:	CHECKED BY:	RECOMMENDED BY:
Kulsum Akter	A.S.M. Sayem	Jati Das Kunda	A.Q. Mohammad Ali
AUTO CAD OPERATOR	JUNIOR ENGINEER	STRUCTURAL ENGINEER-2	CO-TEAM LEADER

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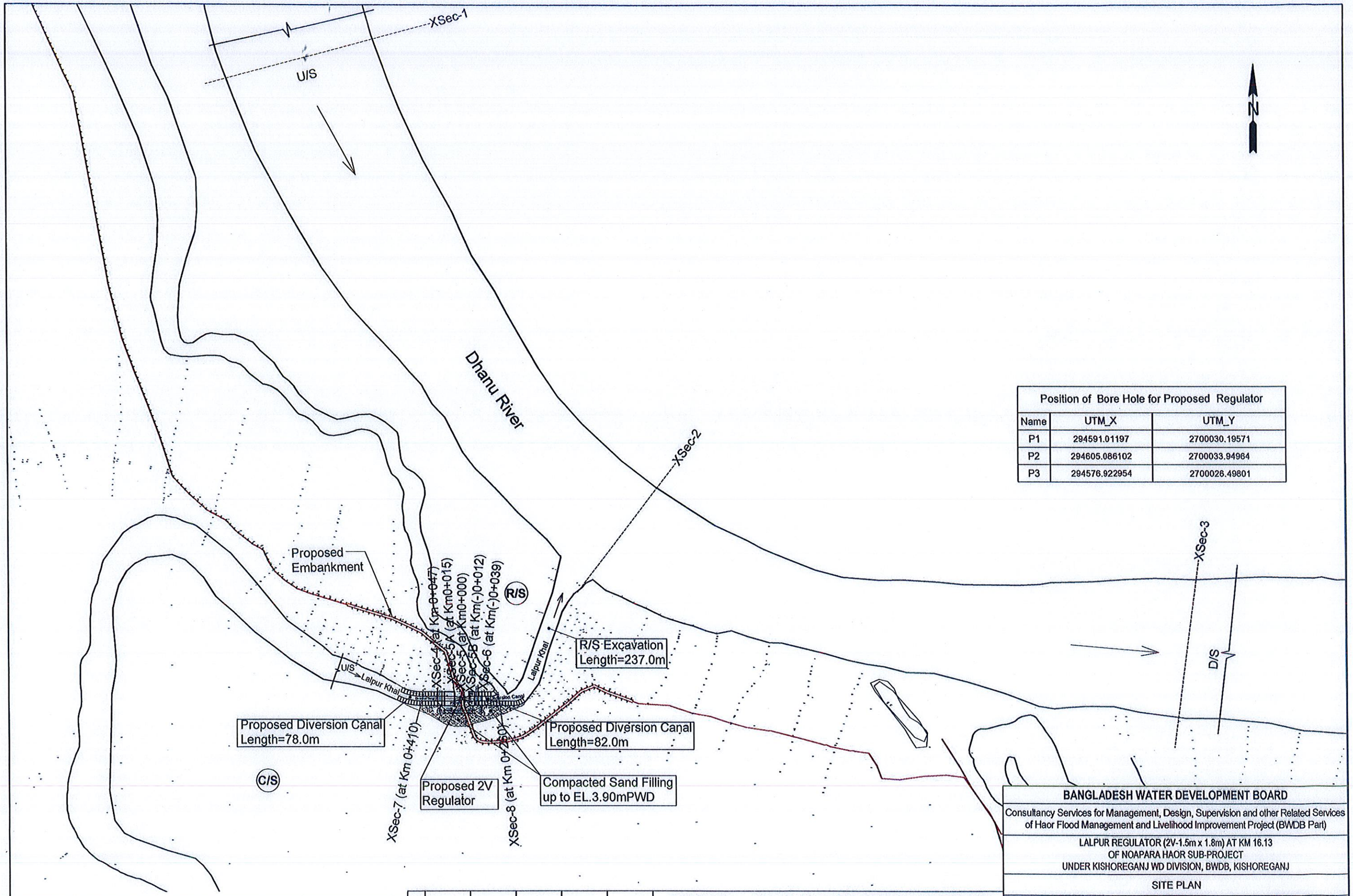
LALPUR REGULATOR (2V-1.5m x 1.8m) AT KM 16.13
OF NOAPARA HAOR SUB-PROJECT
UNDER KISHOREGANJ WD DIVISION, BWDB, KISHOREGANJ

INDEX MAP

CHECKED BY:	RECOMMENDED BY:	APPROVED BY:
Dr. Muhammad Masood	Md. Abdul Basit	28.01.18 Motaher Hossain
EE, DESIGN CIRCLE - 1	SE, DESIGN CIRCLE - 1	CE , DESIGN

DWG. NO: KISHORE-NOAPARA/ LALPUR/ REG - 1811 | SHEET: 01 /14 | 28 / 01 / 2018



Position of Bore Hole for Proposed Regulator		
Name	UTM_X	UTM_Y
P1	294591.01197	2700030.19571
P2	294605.086102	2700033.94964
P3	294576.922954	2700026.49801

Scale: 1:6000

NO.	DATE	MADE	CHKD.	RECOM.	APPV.
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SITE PLAN

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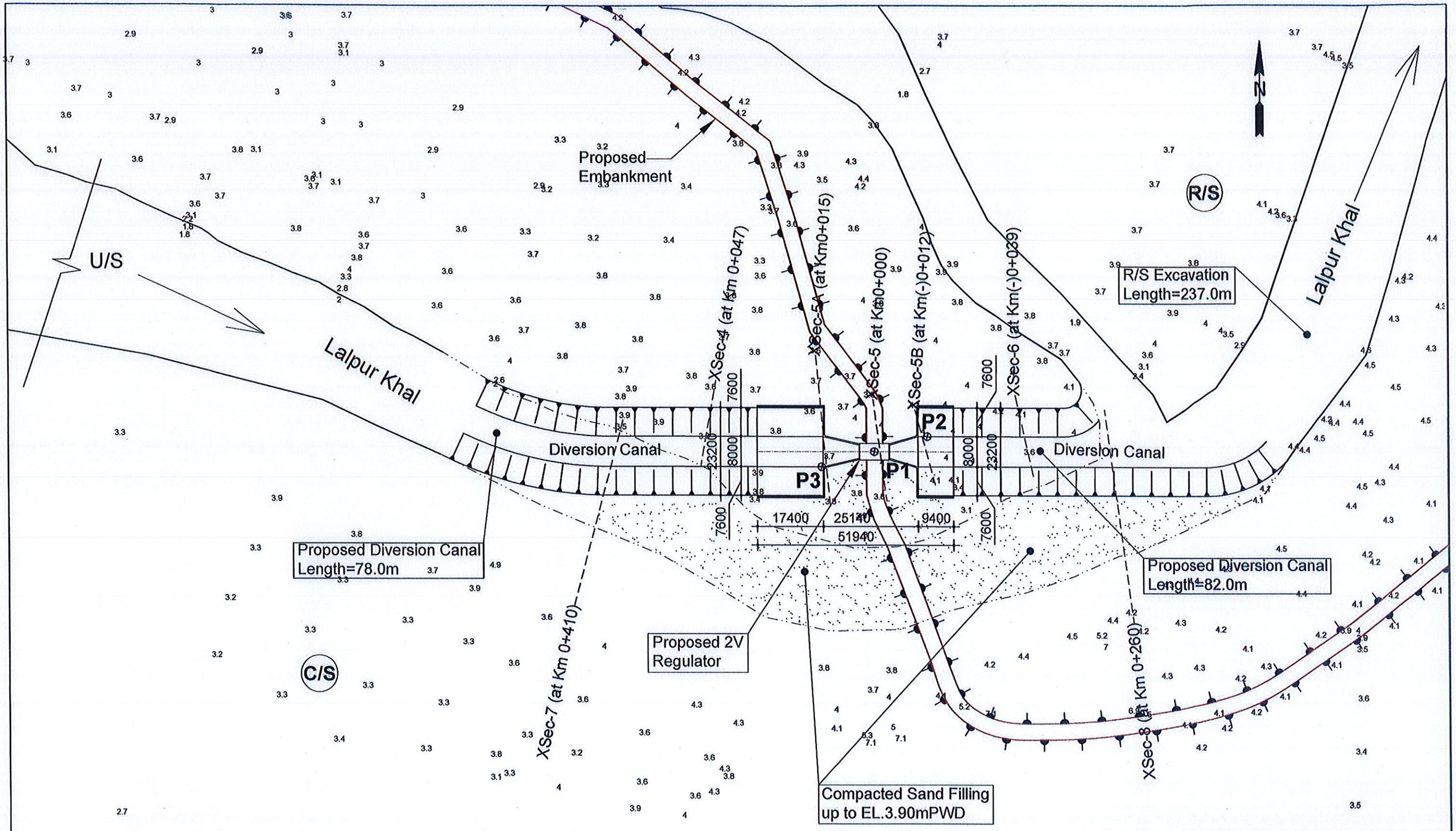

Position of Bore Hole for Proposed Regulator		
Name	UTM_X	UTM_Y
P1	294591.01197	2700030.19571
P2	294605.086102	2700033.94964
P3	294576.922954	2700026.49801

Scale: 1:1000

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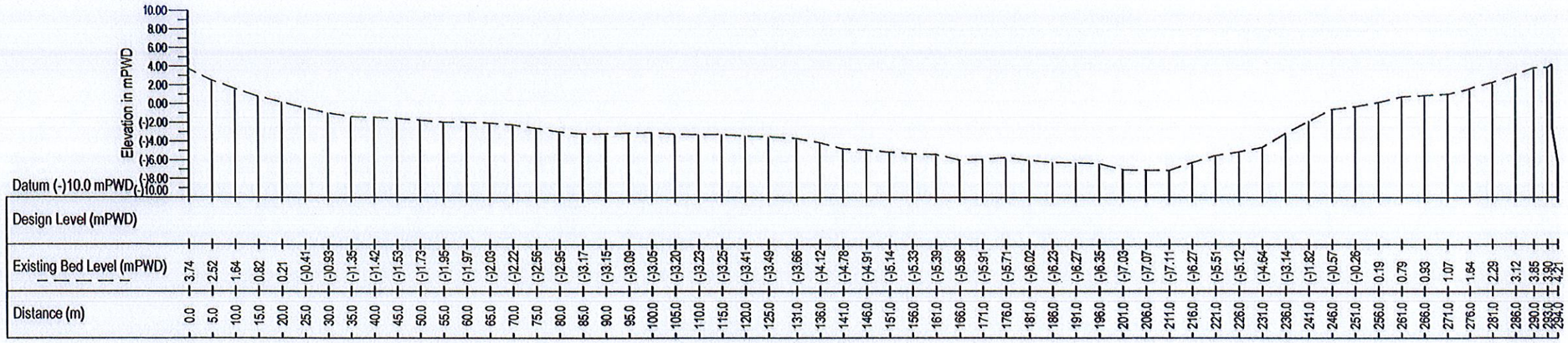
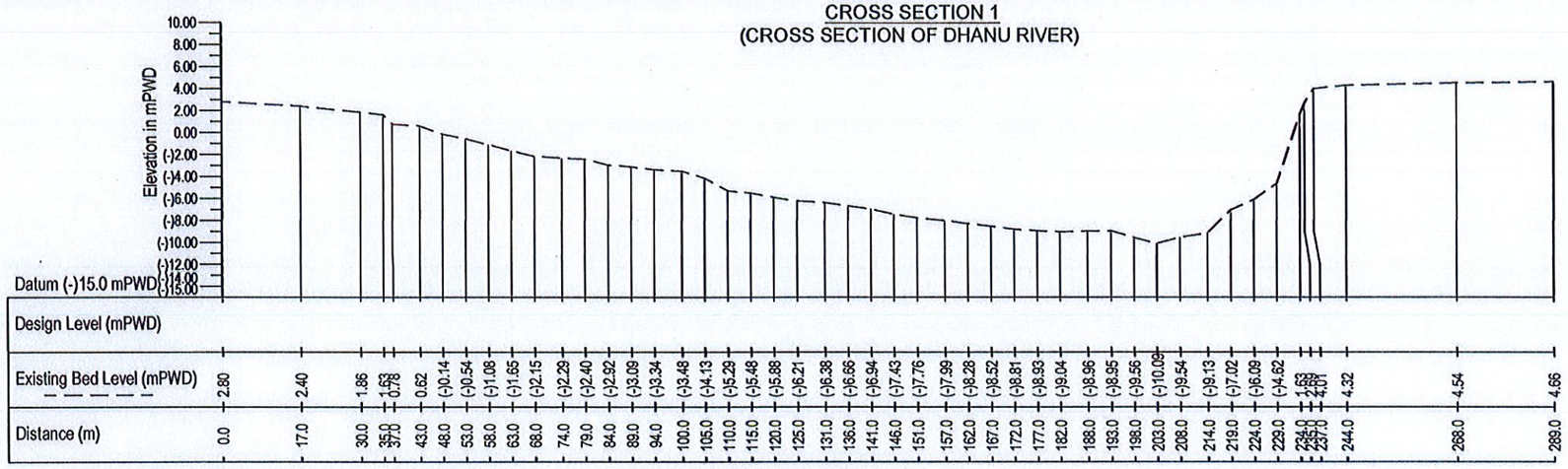
DWG. NO: KISHORE-NOAPARA/ LALPUR/ REG - 1811 | SHEET: 02a /14 | 28 / 01 / 2018



CROSS SECTION 1
(CROSS SECTION OF DHANU RIVER)



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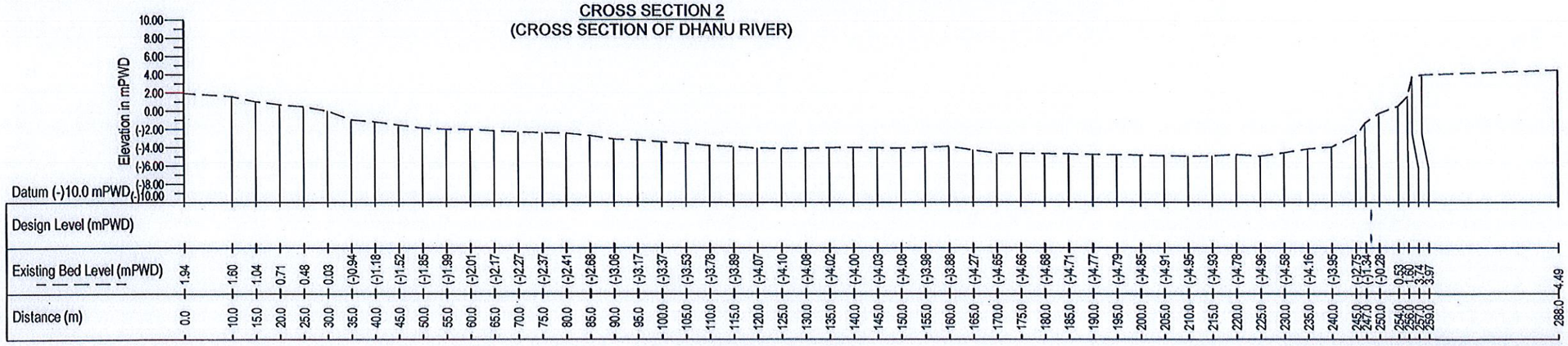

CROSS SECTION 3
(CROSS SECTION OF DHANU RIVER)

Scale: As shown

NO.	DATE	MADE	CHKD.	RECOM.	APPV.
2					
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LALPUR REGULATOR (2V-1.5m x 1.8m) AT KM 16.13
OF NOAPARA HAOR SUB-PROJECT
UNDER KISHOREGANJ WD DIVISION, BWDB, KISHOREGANJ

CROSS SECTIONS OF DHANU RIVER AT OUTFALL OF STRUCTURE

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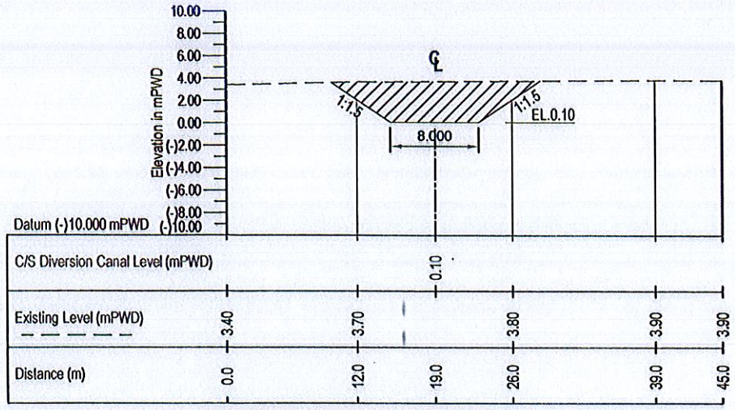
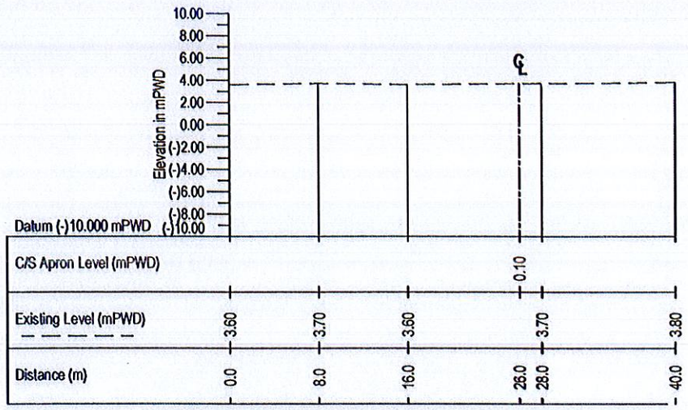
EE, DESIGN CIRCLE - 1	SE, DESIGN CIRCLE - 1	CE , DESIGN

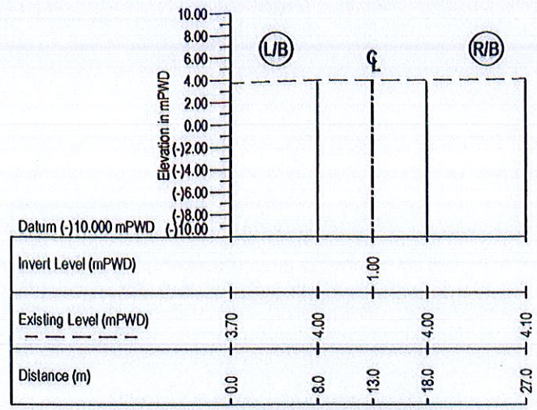
DWG. NO: KISHORE-NOAPARA/ LALPUR/ REG - 1811 | SHEET: 03 /14 | 28 / 01 / 2018



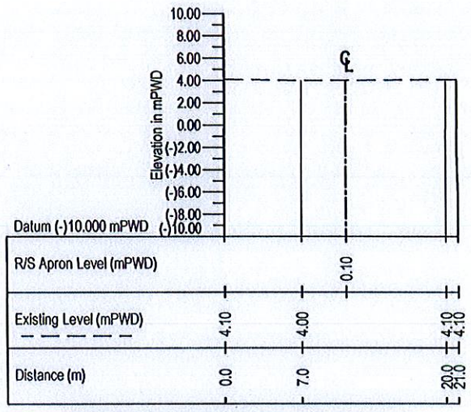
CROSS SECTION 4 (AT KM 0+047)
C/S DIVERSION CANAL



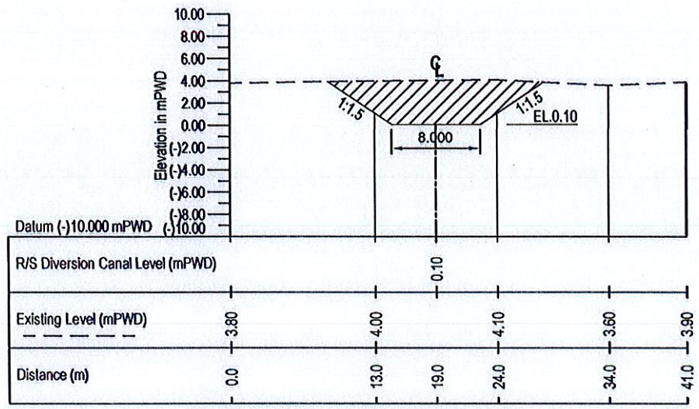
CROSS SECTION 5A (AT KM 0+015)
REGULATOR C/S APRON PORTION



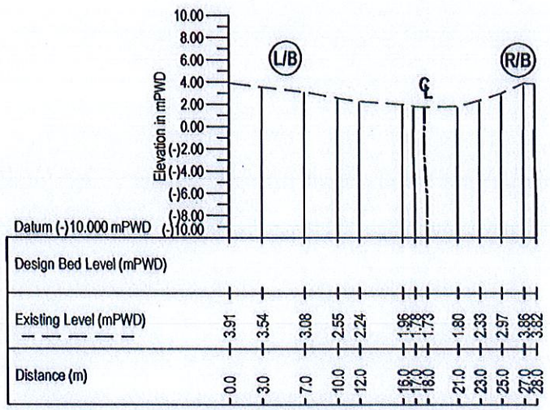
CROSS SECTION 5 (AT KM 0+000)
REGULATOR BARREL PORTION



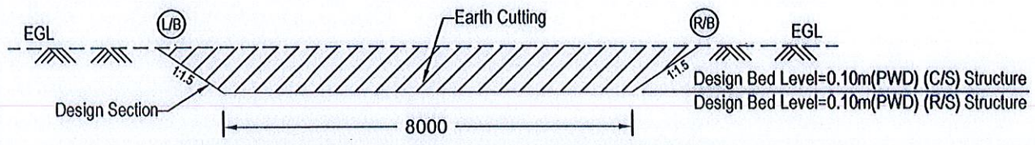
CROSS SECTION 5B (AT KM (-)0+012)
REGULATOR R/S APRON PORTION



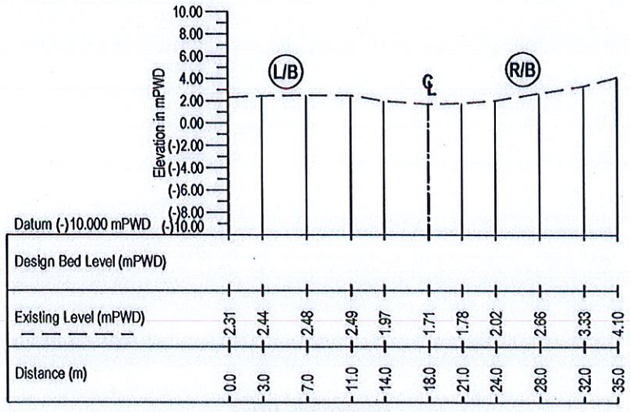
CROSS SECTION 6 (AT KM (-)0+039)
R/S DIVERSION CANAL



CROSS SECTION 7
(CROSS SECTION OF LALPUR KHAL AT METRAGE 0+410 m)



TYPICAL CROSS SECTION C/S & R/S OF DIVERSION CANAL



CROSS SECTION 8
(CROSS SECTION OF LALPUR KHAL AT METRAGE 0+260 m)

NO.	DATE	MADE	CHKD.	RECOM.	APPV.
2					
1					

REVISION

Scale: As shown

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LALPUR REGULATOR (2V-1.5m x 1.8m) AT KM 16.13
OF NOAPARA HAOR SUB-PROJECT
UNDER KISHOREGANJ WD DIVISION, BWDB, KISHOREGANJ

CROSS SECTIONS OF DIVERSION CANAL & LALPUR KHAL

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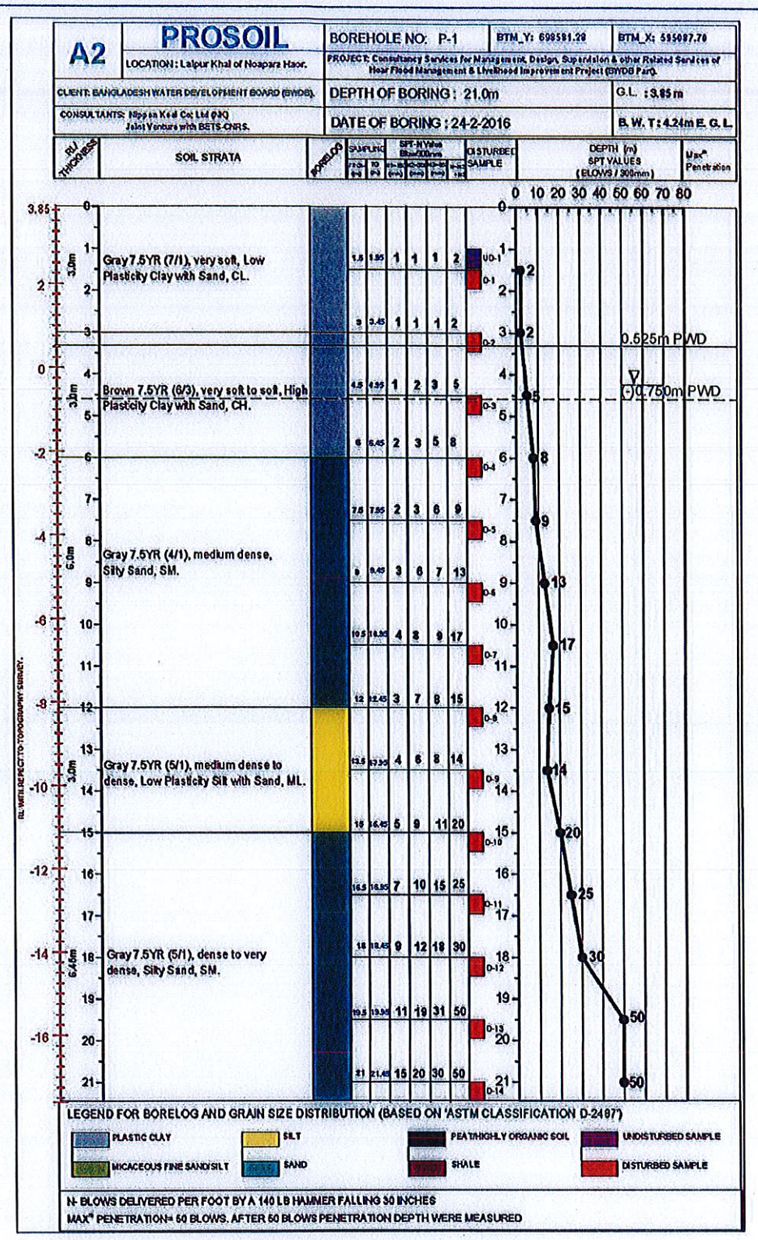
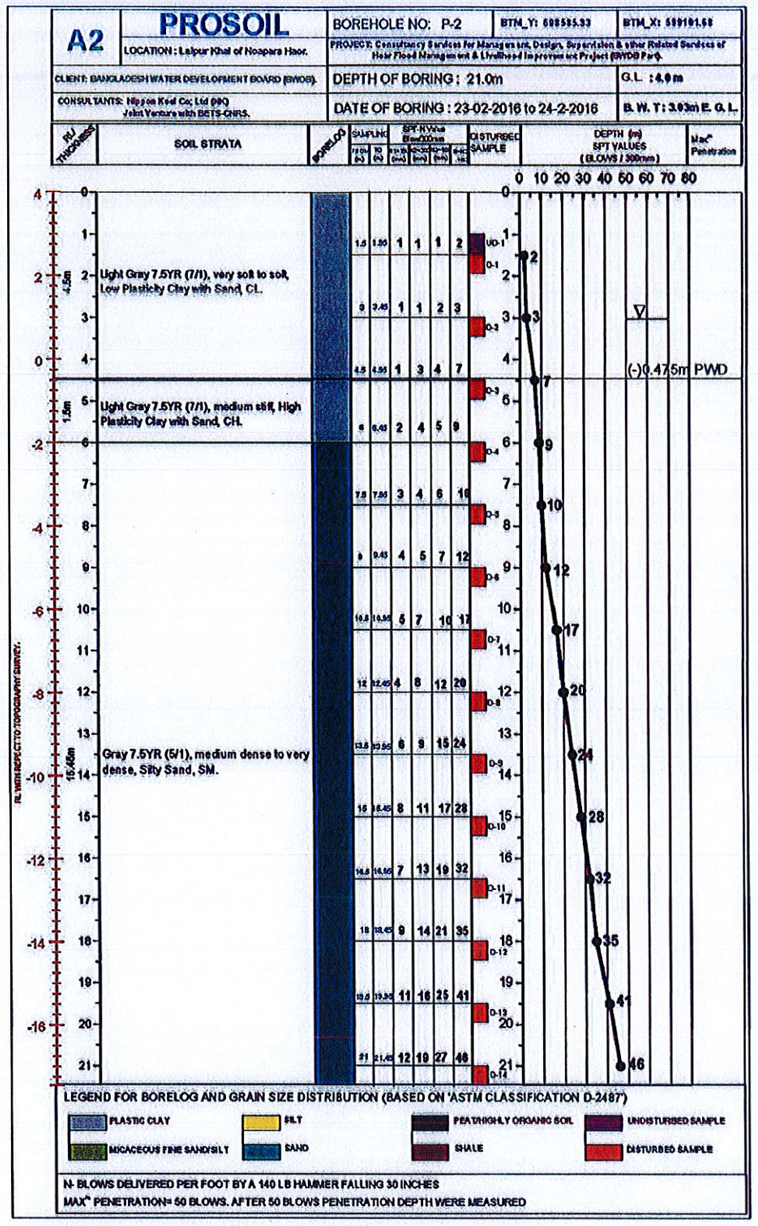
EE, DESIGN CIRCLE - 1	SE, DESIGN CIRCLE - 1	CE , DESIGN

DWG. NO: KISHORE-NOAPARA/ LALPUR/ REG - 1811 | SHEET: 04 /14 | 28 / 01 / 2018



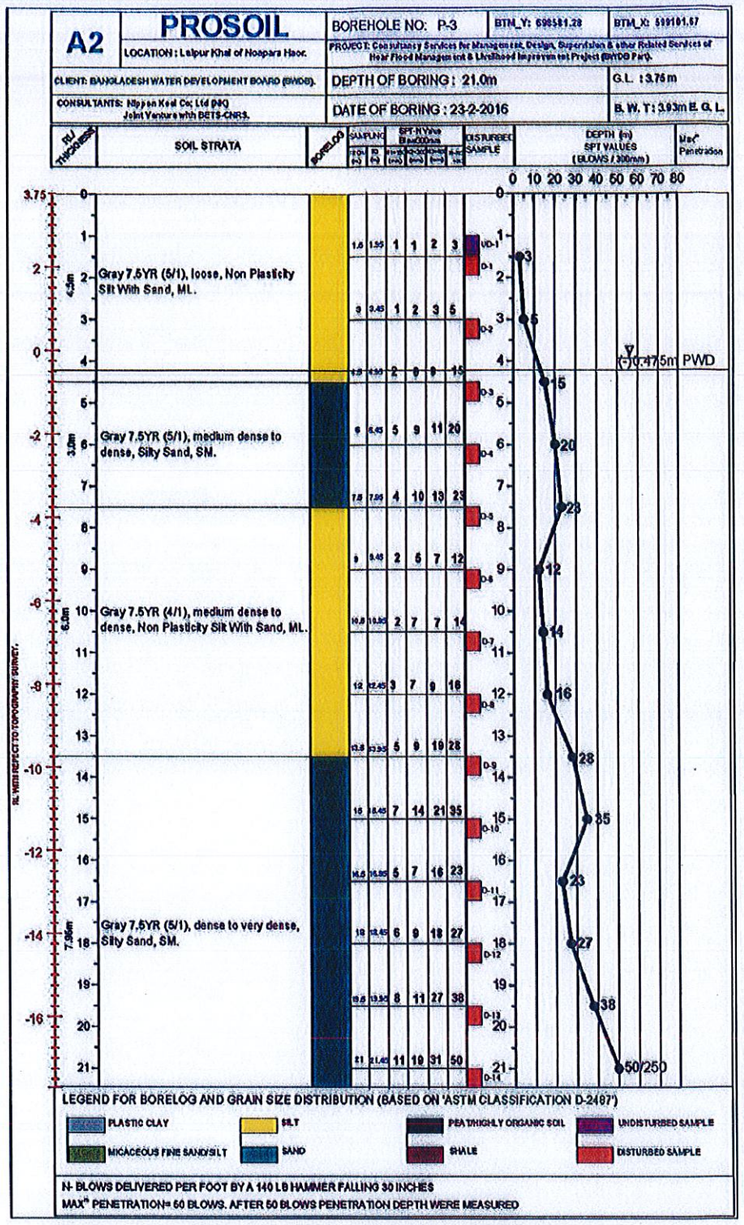
BOTTOM LEVEL OF FOUNDATION AT CENTRAL PART= ———— 0.525m PWD

BOTTOM LEVEL OF SAND FILLING AT CENTRAL PART= – – – – (-)0.750m PWD



BOTTOM LEVEL OF FOUNDATION AT R/S BASIN PART= ———— (-)0.475m PWD

BOTTOM LEVEL OF FOUNDATION AT R/S RETURN WALL= (-)0.675m PWD



BOTTOM LEVEL OF FOUNDATION AT C/S BASIN PART= ———— (-)0.475m PWD

BOTTOM LEVEL OF FOUNDATION AT C/S RETURN WALL= (-)0.675m PWD

SPECIAL NOTE:

1. SAND FILLING SHALL BE DONE IN DRY BED CONDITION.
2. AFTER COMPACTION SAND FILLING FOR FOUNDATION TREATMENT SPT VALUE SHALL HAVE TO BE DETERMINED.
3. THE SPT VALUE AT THE CENTRE OF BARREL PORTION AT FOUNDATION LEVEL SHALL BE MINIMUM 6. WHICH MUST BE ENSURED BEFORE CONSTRUCTION.

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LALPUR REGULATOR (2V-1.5m x 1.8m) AT KM 16.13
OF NOAPARA HAOR SUB-PROJECT
UNDER KISHOREGANJ WD DIVISION, BWDB, KISHOREGANJ

BORE LOG

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EE, DESIGN CIRCLE - 1	SE, DESIGN CIRCLE - 1	CE , DESIGN

DWG. NO: KISHORE-NOAPARA/ LALPUR/ REG - 1811 | SHEET: 05 /14 | 28 / 01 / 2018

GENERAL NOTES:

1. THIS DESIGN HAS BEEN PREPARED AS PER FINAL PLANNING REVIEW REPORT DATED APRIL, 2016 SUBMITTED BY IWM.
2. ALL DIMENSIONS ARE IN MILLIMETER BUT ELEVATIONS ARE IN METER (PWD) UNLESS OTHERWISE MENTIONED IN THE DRAWINGS.
3. 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 BWDB STANDARD SCHEDULE OF RATES MANUAL):
   A) ALL R.C.C WORK: 22.0 N/mm2
   B) C.C BLOCKS: 9.0 N/mm2
4. CONCRETE SHALL BE POURED IN DRY BED CONDITION.
5. CONCRETE MIXTURE SHALL BE POURED AS QUICK AS POSSIBLE BUT NOT LATER THAN 45 MINUTES AFTER MIXING.
6. CURING OF CONCRETE SHALL BE CONTINUED FOR MINIMUM 21 DAYS AFTER CASTING.
7. THE SURFACE OF CONSTRUCTION JOINTS SHALL BE WASHED THOROUGHLY WITH WATER JET AND SHALL BE CLEANED ENOUGH AND SURFACE DRY PRIOR TO PLACEMENT OF ADJOINING CONCRETE.
8. THE 75 mm LEAN CONCRETE AT BASE SHALL BE 1:3:6
9. THE LEAN CONCRETE AT FOUNDATION OF THE PROPOSED SLUICE SHALL BE PLACED AFTER PROPERLY COMPACTING EXCAVATED BASE.
10. REINFORCEMENT 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/mm2.
11. UNLESS OTHERWISE SPECIFIED, DURING CONSTRUCTION, BACK FILLING OF WALLS SHALL BE DONE SIMULTANEOUSLY WITH SAND (FM>=0.80) FREE FROM VEGETABLE ROOTS AND ORGANIC MATTER.
12. MINIMUM 150mm SAND SHALL BE PLACED ON COMPACTED EXCAVATED EARTH FOR BASE PREPARATION.
13. ALL EXPANSION JOINTS SHALL HAVE A GAP OF 20mm AND SHALL BE SEALED AS PER DRAWINGS.
14. LAP / DEVELOPMENT LENGTH (Ld) SHALL BE 40 BAR DIAMETER OR AS SHOWN IN DRAWING.
15. CLEAR COVER:
    A) OPERATING DECK: 25mm (BOTH FACE)
    B) CONCRETE ADJACENT TO EARTH: 60mm
    C) CONCRETE ADJACENT TO WATER / EXPOSED OR OTHERS: 50mm
16. DESIGN OF GATE AND HOSTING SYSTEM WILL BE PREPARED BY CONSULTANT & SHALL BE VETTED BY DESIGN CIRCLE III, BWDB, DHAKA
17. THE EMBEDDED PARTS OF GATE SHALL BE INSTALLED DURING CONSTRUCTION OF BOX IN ACCORDANCE WITH APPROVED MECHANICAL DRAWING.
18. 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 BE ENSURED.
19. THE GATE SHALL BE INSTALLED BEFORE THE OPERATION OF THE STRUCTURE
20. DESIGN BED LEVEL OF DIVERSION CANAL SHALL BE EXCAVATED FROM C/S LOOSE APRON OF REGULATOR AT 0.10M (PWD) TO 0.10M (PWD) OF LALPUR KHAL FOR A LENGTH OF 78.0M. DESIGN BED WIDTH SHALL BE ADJUSTED FROM 8.0M TO 11.0M OF LALPUR KHAL.
21. R/S DIVERSION CANAL AND LALPUR KHAL SHALL BE EXCAVATED FROM D/S LOOSE APRON AT 0.10M (PWD) TO DHANU RIVER WITH A GRADUAL SLOPE 1:50. R/S DIVERSION CANAL LENGTH 82.0M & R/S EXCAVATED LENGTH 237.0M. DESIGN BED WIDTH 8.0M.
22. '/ ' OR ' \' IN THE DRAWINGS INDICATE TERMINATION OF REINFORCEMENT AND ℄ MEANS THE CENTRE LINE OF KHAL.
23. THE WORK SHALL BE EXECUTED AFTER ADMINISTRATIVE AND FINANCIAL APPROVAL FROM THE COMPETENT AUTHORITY.
24. FOR ANY ERROR / OMISSION DESIGN CIRCLE- I, BWDB MAY BE REFERRED TO THROUGH CONSULTANT.
25. ALL BORE HOLES SHALL BE SEALED BEFORE CONSTRUCTION OF REGULATOR
26. VERTICAL LIFT GATE SHALL BE PROVIDED BOTH C/S & R/S FOR RETENTION AND FLOOD CONTROL.
27. 400mm x 400mm x 200mm C.C. BLOCK SHALL BE PLACED ON THE GEOTEXTILE FILTER CLOTH (ITEM NO. 40-600-20) & 100MM THICK KHOA FILTER AS SHOWN IN THE DRAWING ON THE U/S AND D/S SLOPE OF THE EMBANKMENT AS SHOWN IN THE DRAWING

SPECIAL NOTE:

1. BM SET BY IWM SHALL BE FOLLOWED DURING EXECUTION OF WORK
2. IF ANY PIT OR ORGANIC SOIL IS ENCOUNTERED AT FOUNDATION LEVEL SHALL BE REPORTED TO DESIGN CIRCLE-1 BWDB THROUGH CONSULTANTS FOR SOLUTION.

Scale: As shown

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LALPUR REGULATOR (2V-1.5m x 1.8m) AT KM 16.13
OF NOAPARA HAOR SUB-PROJECT
UNDER KISHOREGANJ WD DIVISION, BWDB, KISHOREGANJ

GENERAL NOTES

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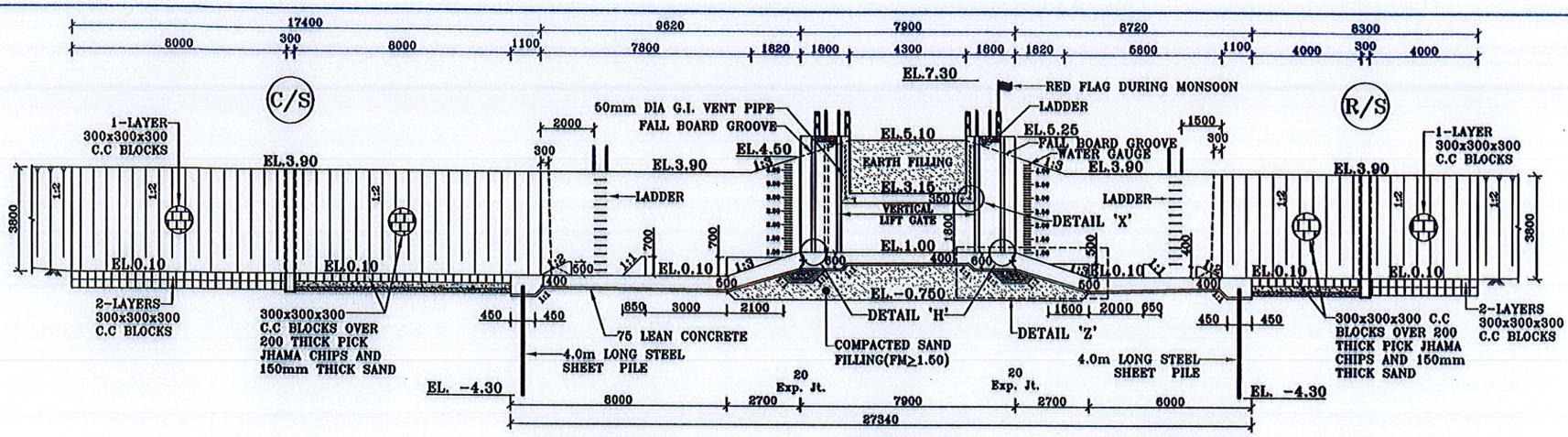
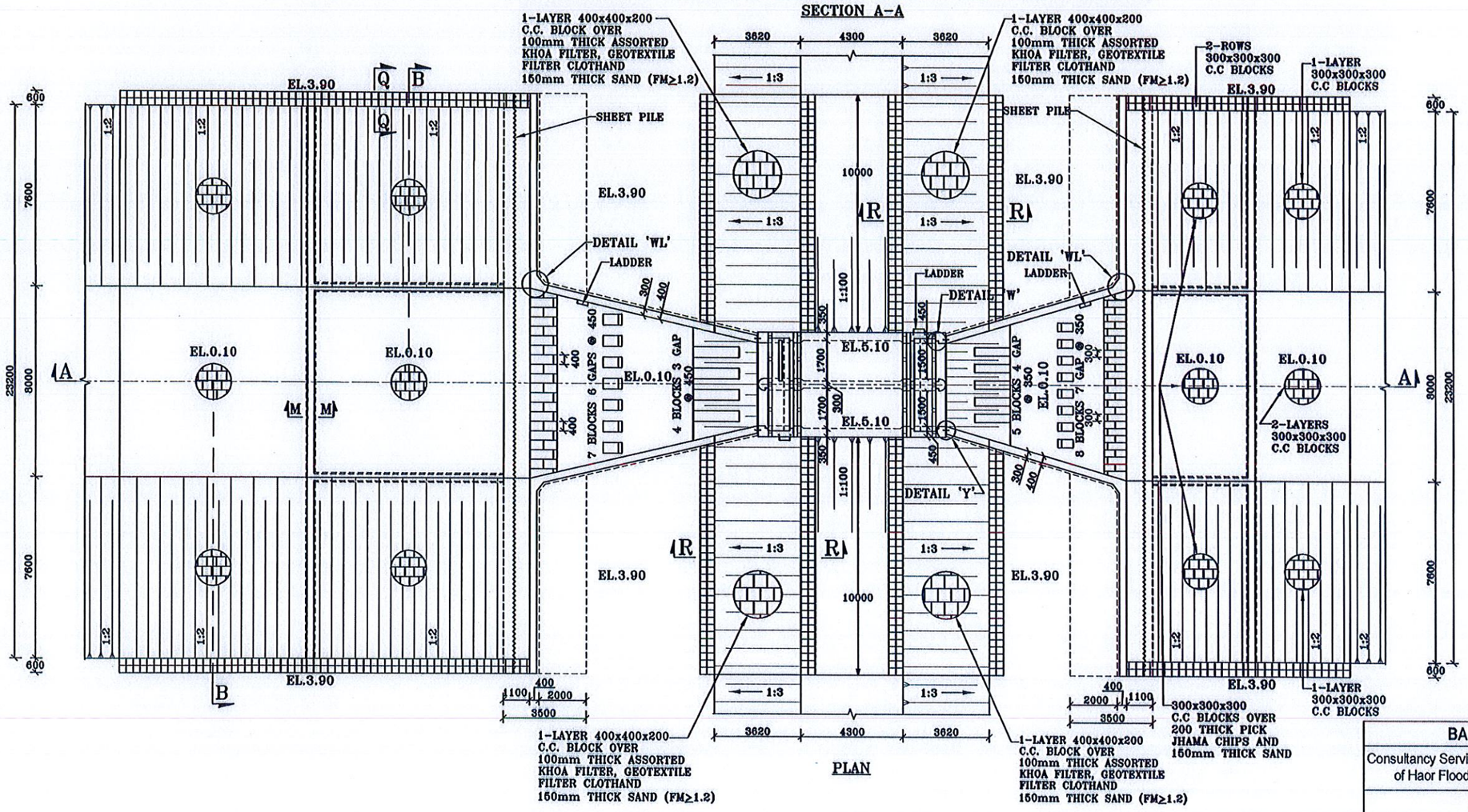
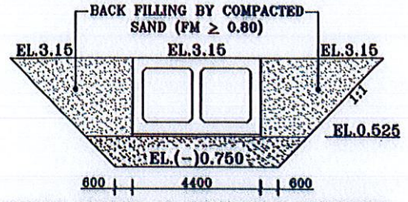
DWG. NO: KISHORE-NOAPARA/ LALPUR/ REG - 1811 | SHEET: 06 /14 | 28 / 01 / 2018



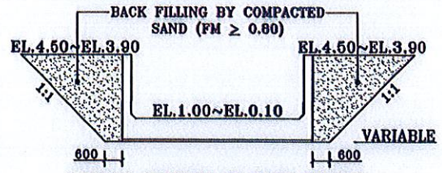
SECTION A-A



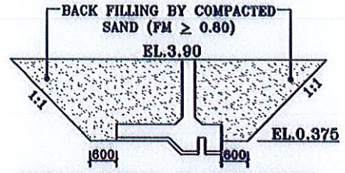
PLAN



TYPICAL SECTION OF FOUNDATION TREATMENT & BACK FILLING IN THE BARREL PORTION



TYPICAL SECTION OF BACK FILLING IN THE WING WALL



TYPICAL SECTION OF BACK FILLING IN THE C/S & R/S RETURN WALL

Scale: As shown

NO.	DATE	MADE	CHKD.	RECOM.	APPV.
2					
1					

REVISION

BANGLADESH WATER DEVELOPMENT BOARD

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

LALPUR REGULATOR (2V-1.5m x 1.8m) AT KM 16.13
OF NOAPARA HAOR SUB-PROJECT
UNDER KISHOREGANJ WD DIVISION, BWDB, KISHOREGANJ

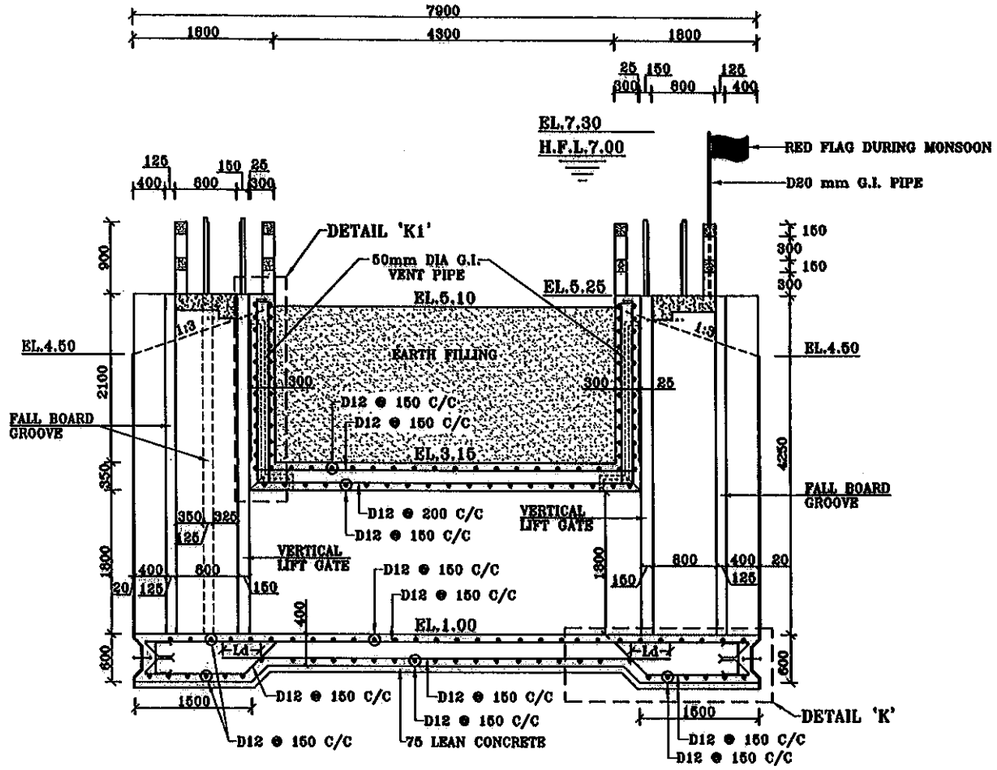
PLAN AND LONG SECTION

CONSULTANTS: Nippon Koei Co; Ltd (NK), Joint Venture with BETS-CNRS

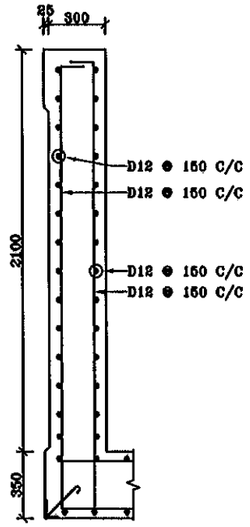
DRAWN BY:	DESIGNED BY:	CHECKED BY:	RECOMMENDED BY:
Kulsum Akter	A.S.M. Sayem	Jati Das Kunda	A.Q. Mohammad Ali
AUTO CAD OPERATOR	JUNIOR ENGINEER	STRUCTURAL ENGINEER-2	CO-TEAM LEADER

CHECKED BY:	RECOMMENDED BY:	APPROVED BY:
Dr. Muhammad Masood	Md. Abdul Basit	Motaher Hossain 28.01.18
EE, DESIGN CIRCLE - 1	SE, DESIGN CIRCLE - 1	CE , DESIGN

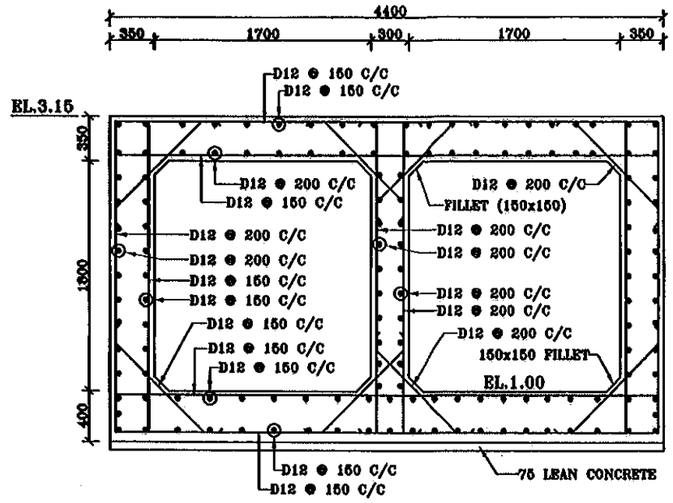
DWG. NO: KISHORE-NOAPARA/ LALPUR/ REG - 1811 | SHEET: 07 /14 | 28 / 01 / 2018



SECTION 1-1



DETAIL 'K1'



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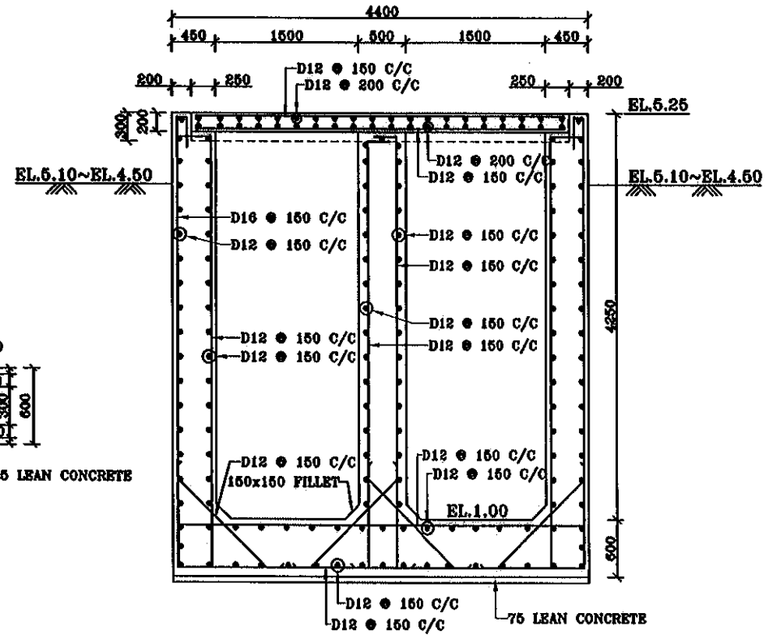

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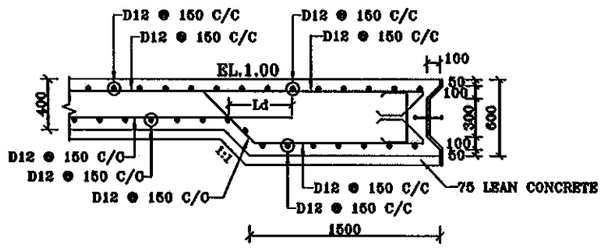
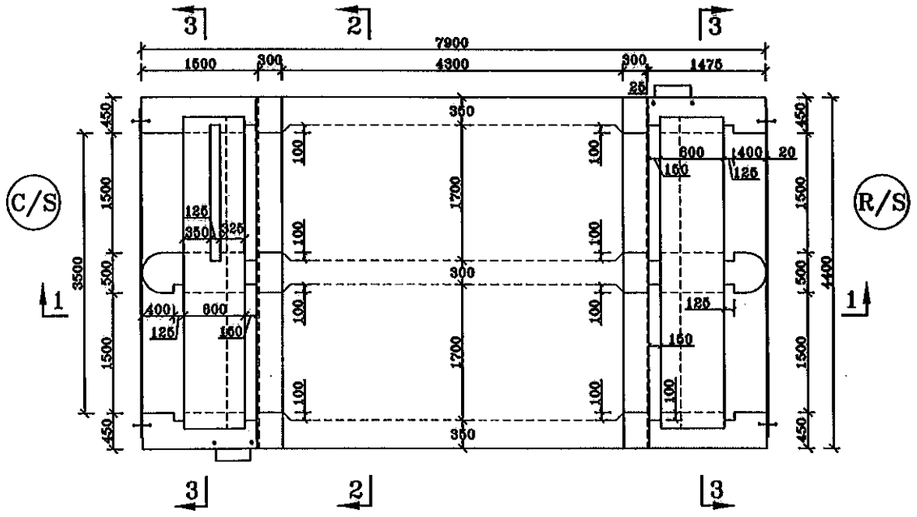


DETAIL 'K'



PLAN OF ABUTMENT AND PIER

Scale: As shown

NO.	DATE	MADE	CHKD.	RECOM.	APPV.
2					
1					

REVISION

CONSULTANTS: Nippon Koei Co; Ltd (NK), Joint Venture with BETS-CNRS

DRAWN BY:	DESIGNED BY:	CHECKED BY:	RECOMMENDED BY:
Kulsum Akter	A.S.M. Sayem	Jail Das Kunda	A.Q. Mohammad Ali
AUTO CAD OPERATOR	JUNIOR ENGINEER	STRUCTURAL ENGINEER-2	CO-TEAM LEADER

BANGLADESH WATER DEVELOPMENT BOARD

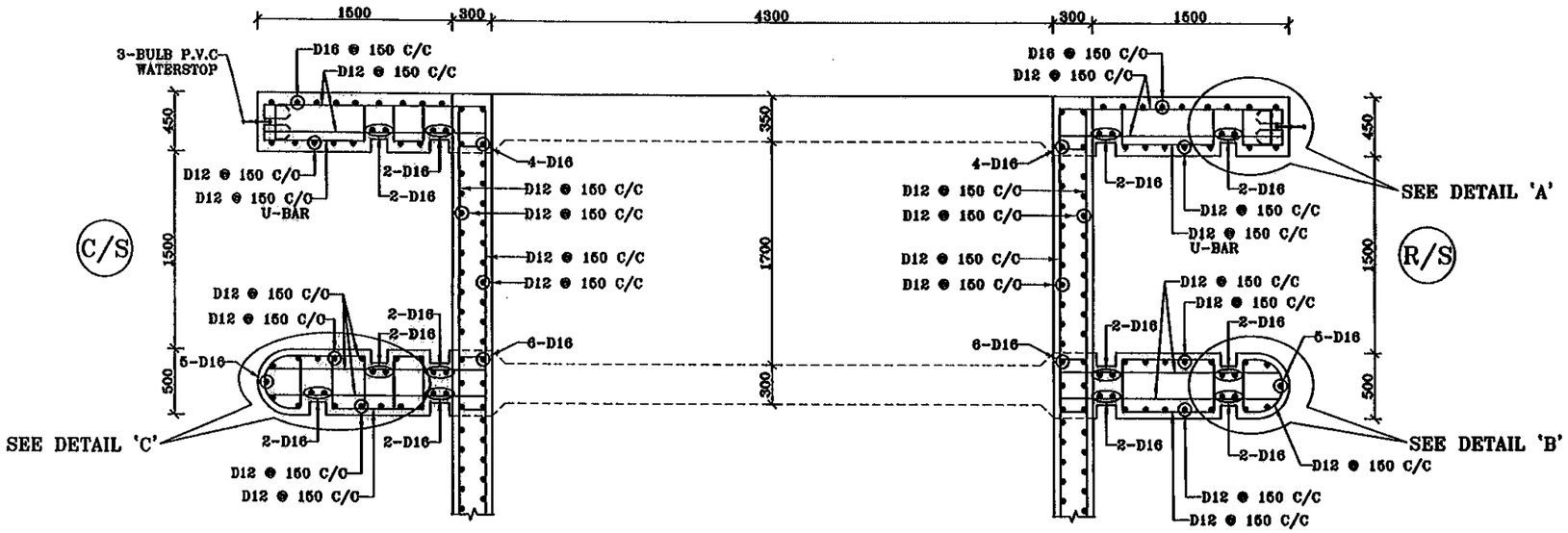
Consultancy Services for Management, Design, Supervision and other Related Services of Haor Flood Management and Livelihood Improvement Project (BWDB Part)

LALPUR REGULATOR (2V-1.5m x 1.8m) AT KM 16.13
OF NOAPARA HAOR SUB-PROJECT
UNDER KISHOREGANJ WD DIVISION, BWDB, KISHOREGANJ

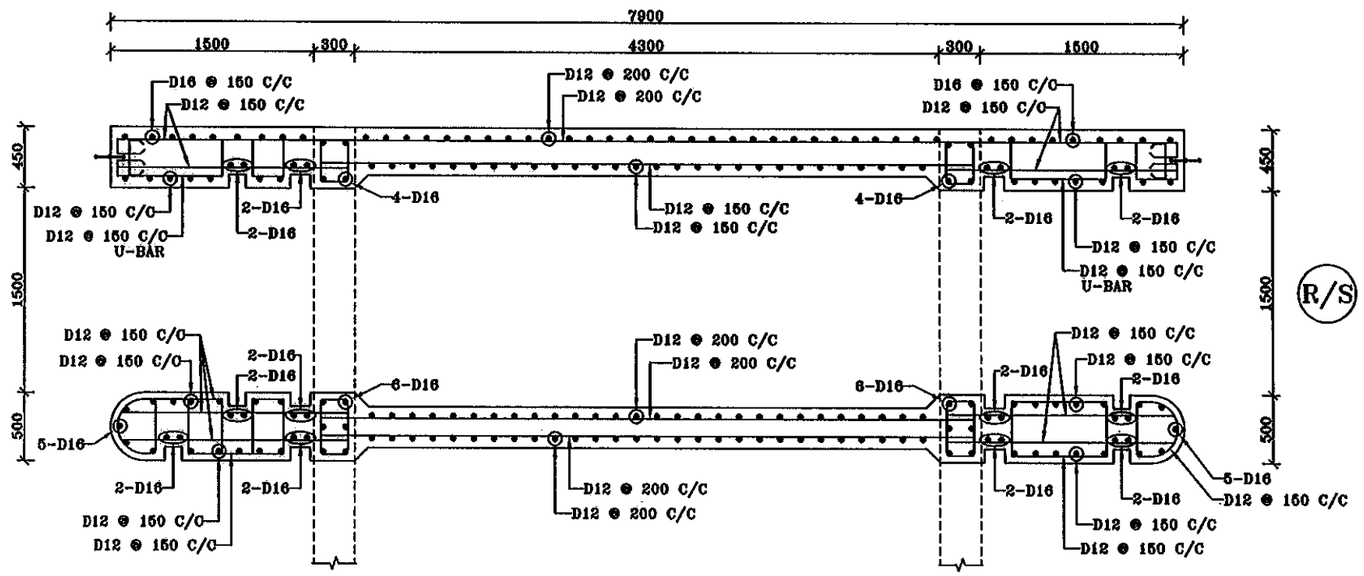
REINFORCEMENT DETAILS OF CENTRAL PART

CHECKED BY:	RECOMMENDED BY:	APPROVED BY:
Dr. Muhammad Masood	Md. Abdul Basit	28.01.18 Mohaher Hossain
EE, DESIGN CIRCLE - 1	SE, DESIGN CIRCLE - 1	CE, DESIGN

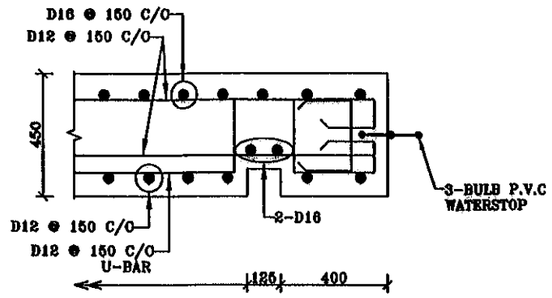
DWG. NO: KISHORE-NOAPARA/ LALPUR/ REG - 1811 | SHEET: 08 /14 | 28 / 01 / 2018



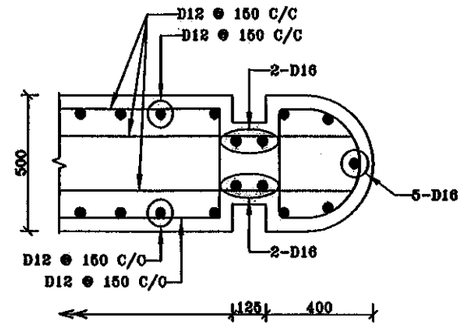
REINF. DETAILS OF EXTENDED ABUTMENT, PIER AND HEAD WALL
(ABOVE TOP SLAB OF CONDUIT)



REINF. DETAILS OF PIER AND ABUTMENT
(BELOW TOP SLAB OF CONDUIT)



DETAIL 'A'



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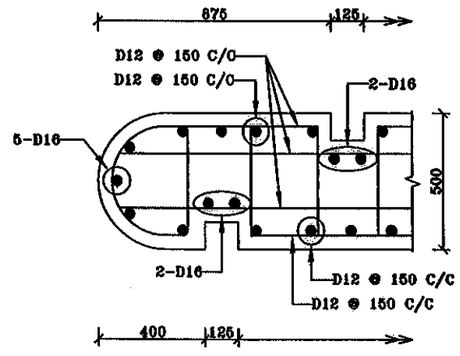


DETAIL 'C'

Scale: As shown

NO.	DATE	MADE	CHKD.	RECOM.	APPV.
2					
1					

REVISION

CONSULTANTS: Nippon Koei Co; Ltd (NK), Joint Venture with BETS-CNRS

DRAWN BY:	DESIGNED BY:	CHECKED BY:	RECOMMENDED BY:
Kulsum Akter	A.S.M. Sayem	Jail Das Kunda	A.Q. Mohammad Ali
AUTO CAD OPERATOR	JUNIOR ENGINEER	STRUCTURAL ENGINEER-2	CO-TEAM LEADER

BANGLADESH WATER DEVELOPMENT BOARD

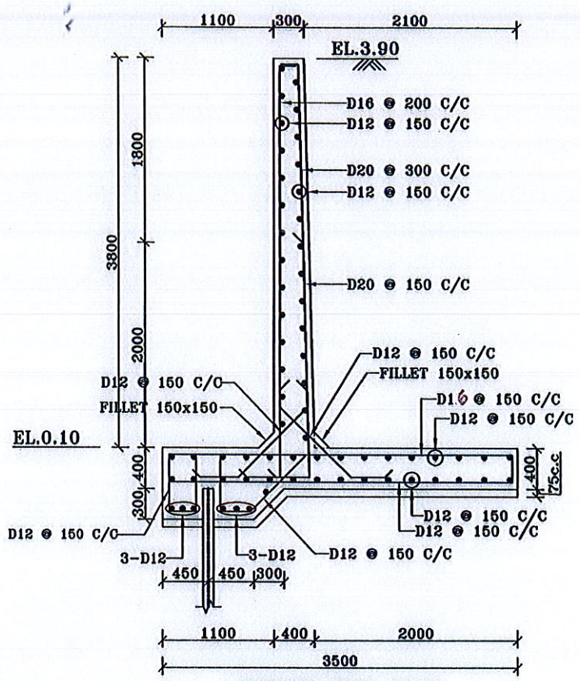
Consultancy Services for Management, Design, Supervision and other Related Services of Haor Flood Management and Livelihood Improvement Project (BWDB Part)

LALPUR REGULATOR (2V-1.5m x 1.8m) AT KM 16.13
OF NOAPARA HAOR SUB-PROJECT
UNDER KISHOREGANJ WD DIVISION, BWDB, KISHOREGANJ

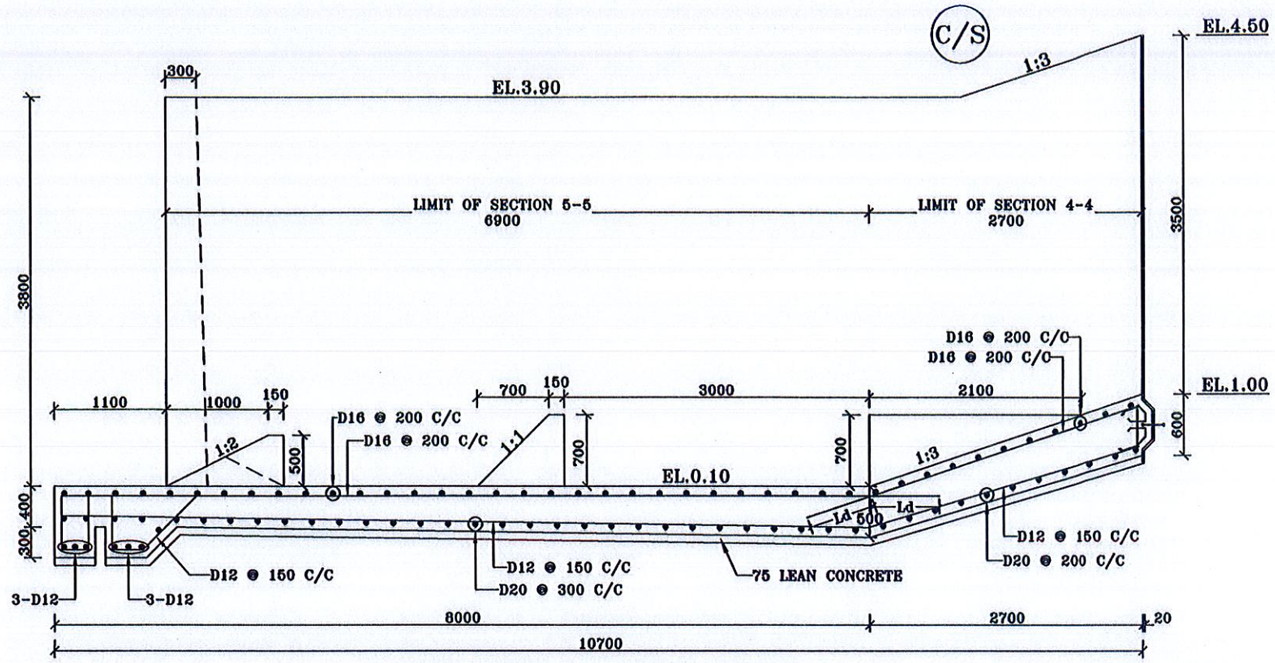
REINFORCEMENT DETAILS OF ABUTMENT & HEAD WALL IN PLAN

CHECKED BY:	RECOMMENDED BY:	APPROVED BY:
Dr. Muhammad Masood	Md. Abdul Basit	28.01.18 Mohaner Hossain
EE, DESIGN CIRCLE - 1	SE, DESIGN CIRCLE - 1	CE, DESIGN

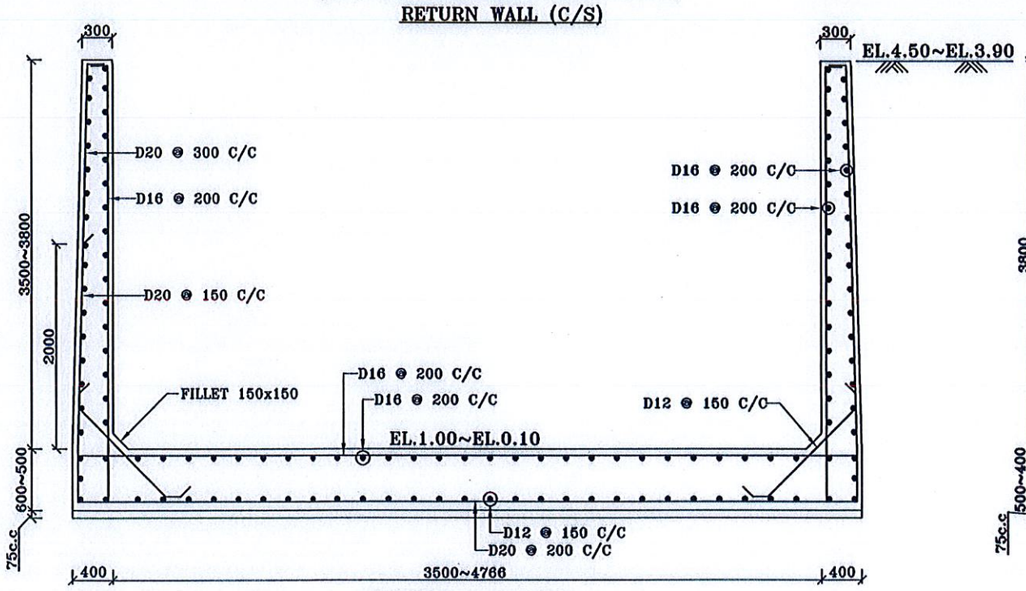
DWG. NO: KISHORE-NOAPARA/ LALPUR/ REG - 1811 | SHEET: 09 /14 | 28 / 01 / 2018



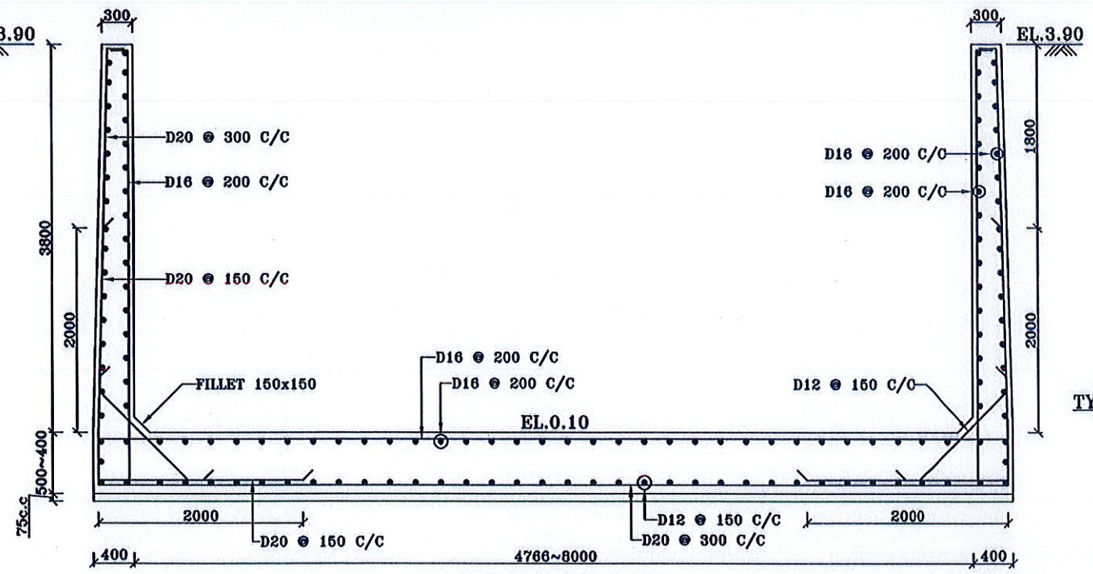
RETURN WALL (C/S)



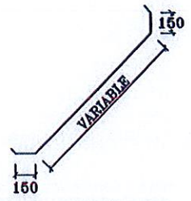
LONG SECTION OF APRON SLAB (C/S)
(THROUGH A-A)



SECTION 4-4 (C/S)



SECTION 5-5 (C/S)



TYPICAL FILLET BAR

Scale: As shown

NO.	DATE	MADE	CHKD.	RECOM.	APPV.
2					
1					

REVISION

CONSULTANTS: Nippon Koei Co; Ltd (NK), Joint Venture with BETS-CNRS

DRAWN BY:	DESIGNED BY:	CHECKED BY:	RECOMMENDED BY:
Kulsum Akter	A.S.M. Sayem	Jati Das Kunda	A.Q. Mohammad Ali
AUTO CAD OPERATOR	JUNIOR ENGINEER	STRUCTURAL ENGINEER-2	CO-TEAM LEADER

BANGLADESH WATER DEVELOPMENT BOARD

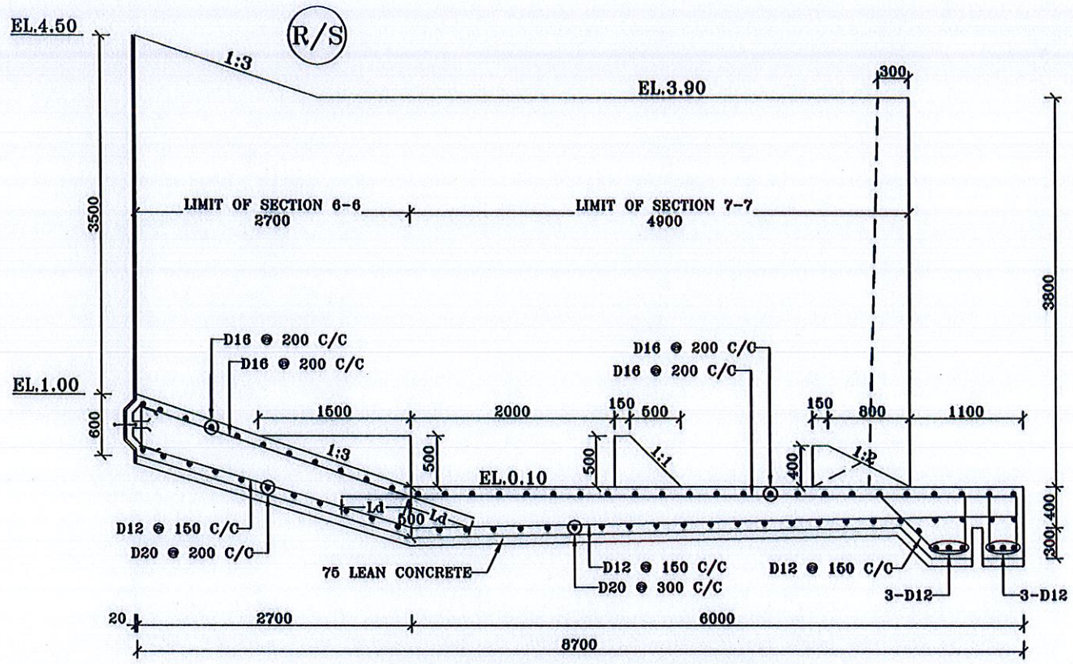
Consultancy Services for Management, Design, Supervision and other Related Services of Haor Flood Management and Livelihood Improvement Project (BWDB Part)

LALPUR REGULATOR (2V-1.5m x 1.8m) AT KM 16.13
OF NOAPARA HAOR SUB-PROJECT
UNDER KISHOREGANJ WD DIVISION, BWDB, KISHOREGANJ

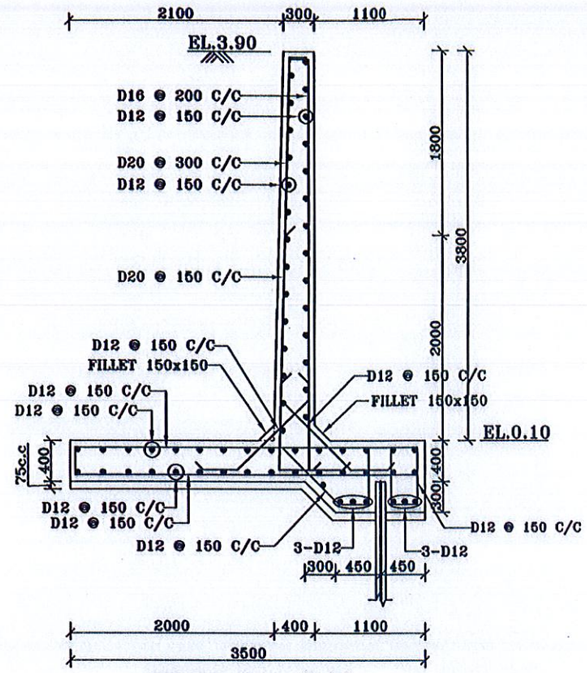
REINFORCEMENT DETAILS OF APRON SLAB (THROUGH SECTION A-A), WING & RETURN WALL (C/S)

CHECKED BY:	RECOMMENDED BY:	APPROVED BY:
Dr. Muhammad Masood	Md. Abdul Basit	28.01.18 Molaher Hossain
EE, DESIGN CIRCLE - 1	SE, DESIGN CIRCLE - 1	CE , DESIGN

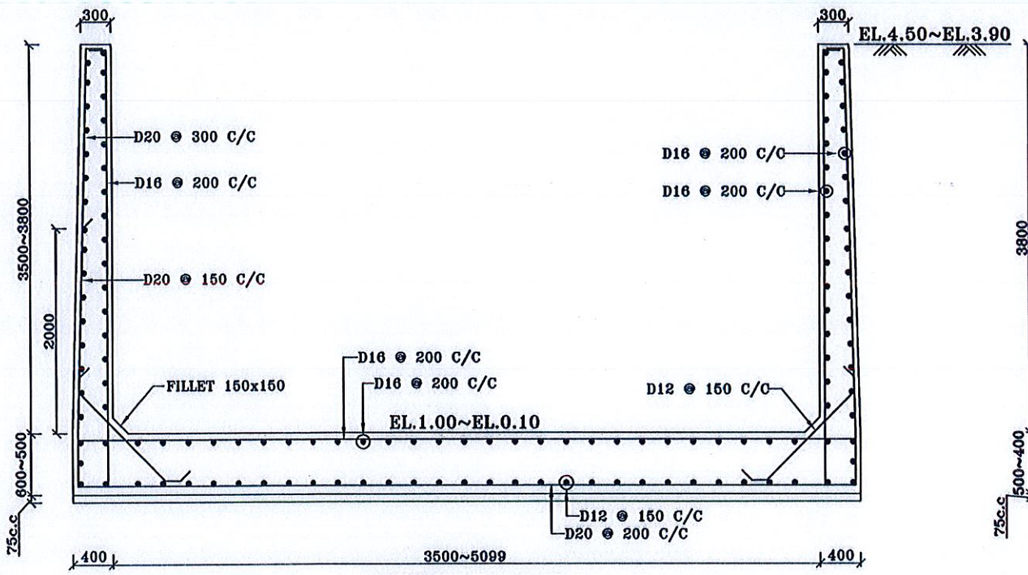
DWG. NO: KISHORE-NOAPARA/ LALPUR/REG - 1811 | SHEET: 10 /14 | 28 / 01 / 2018



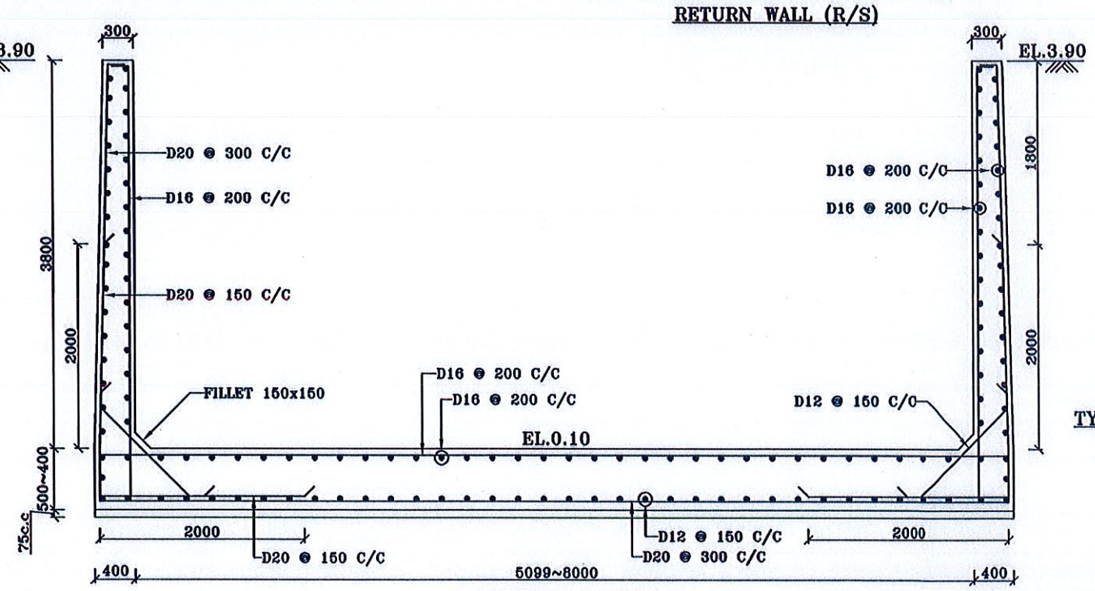
LONG SECTION OF APRON SLAB (R/S)
(THROUGH A-A)



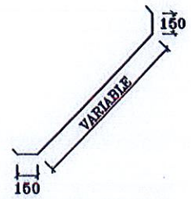
RETURN WALL (R/S)



SECTION 6-6 (R/S)



SECTION 7-7 (R/S)



TYPICAL FILLET BAR

Scale: As shown

NO.	DATE	MADE	CHKD.	RECOM.	APPV.
2					
1					

REVISION

CONSULTANTS: Nippon Koei Co; Ltd (NK), Joint Venture with BETS-CNRS

DRAWN BY:	DESIGNED BY:	CHECKED BY:	RECOMMENDED BY:
Kulsum Akter	A.S.M. Sayem	Jati Das Kunda	A.Q. Mohammad Ali
AUTO CAD OPERATOR	JUNIOR ENGINEER	STRUCTURAL ENGINEER-2	CO-TEAM LEADER

BANGLADESH WATER DEVELOPMENT BOARD

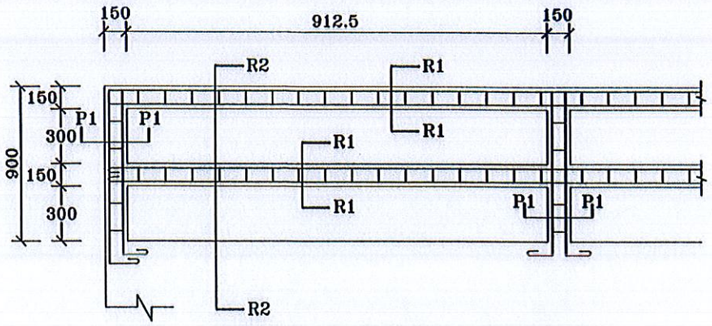
Consultancy Services for Management, Design, Supervision and other Related Services of Haor Flood Management and Livelihood Improvement Project (BWDB Part)

LALPUR REGULATOR (2V-1.5m x 1.8m) AT KM 16.13
OF NOAPARA HAOR SUB-PROJECT
UNDER KISHOREGANJ WD DIVISION, BWDB, KISHOREGANJ

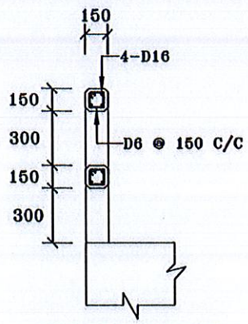
REINFORCEMENT DETAILS OF APRON SLAB (THROUGH SECTION A-A), WING & RETURN WALL (R/S)

CHECKED BY:	RECOMMENDED BY:	APPROVED BY:
Dr. Muhammad Masood	Md. Abdul Basit	Molaher Hossain
EE, DESIGN CIRCLE - 1	SE, DESIGN CIRCLE - 1	CE , DESIGN

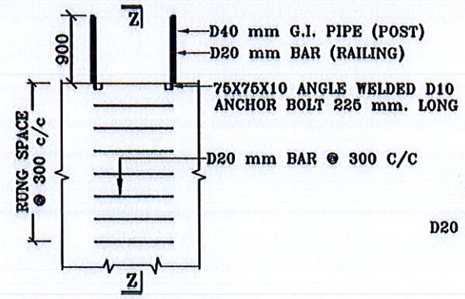
DWG. NO: KISHORE-NOAPARA/ LALPUR/ REG - 1811 | SHEET: 11 /14 | 28 / 01 / 2018



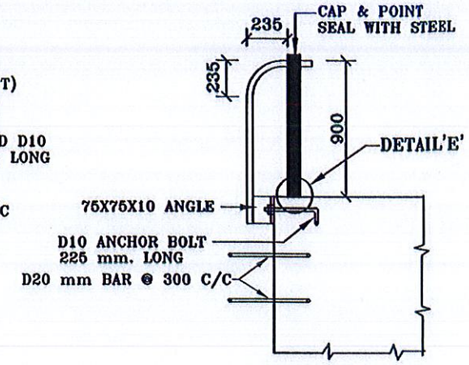
RAILING OF BARREL TOP SLAB



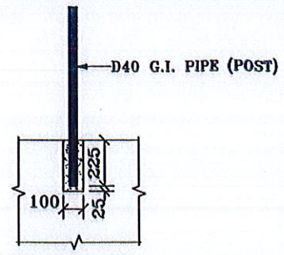
SECTION R2-R2



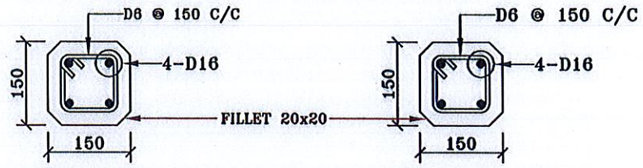
ELEVATION OF RUNG



SECTION Z-Z

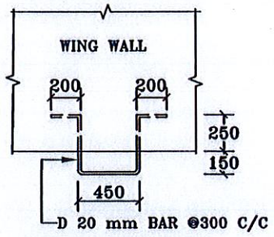


DETAIL 'E'

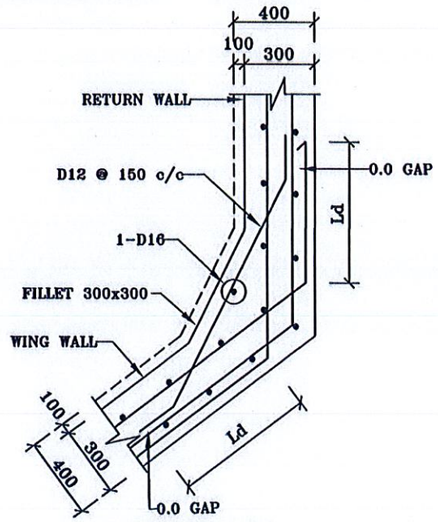


SECTION P1-P1

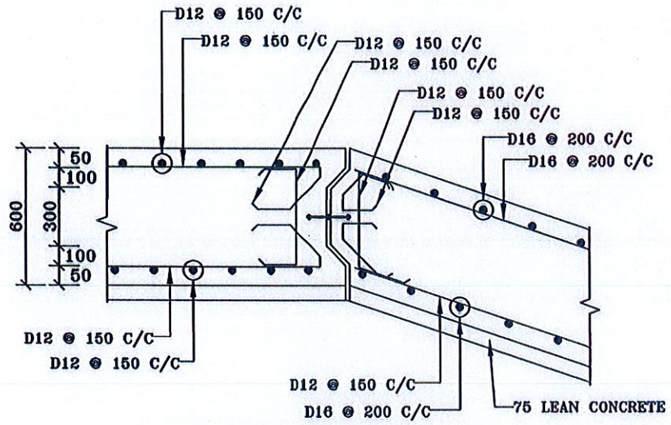
SECTION R1-R1



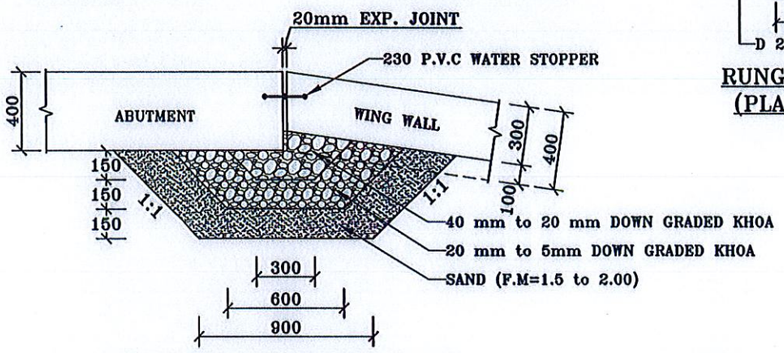
RUNG DETAILS
(PLAN VIEW)



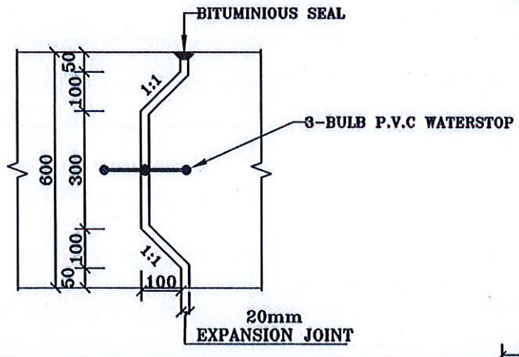
DETAIL 'WL'



RE-INFORCEMENT DETAIL
OF EXPANSION JOINT



EXPANSION JOINT DETAIL 'Y'
(SEE PLAN)



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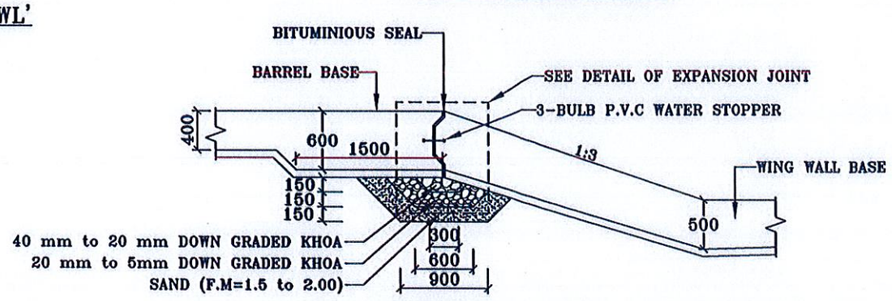
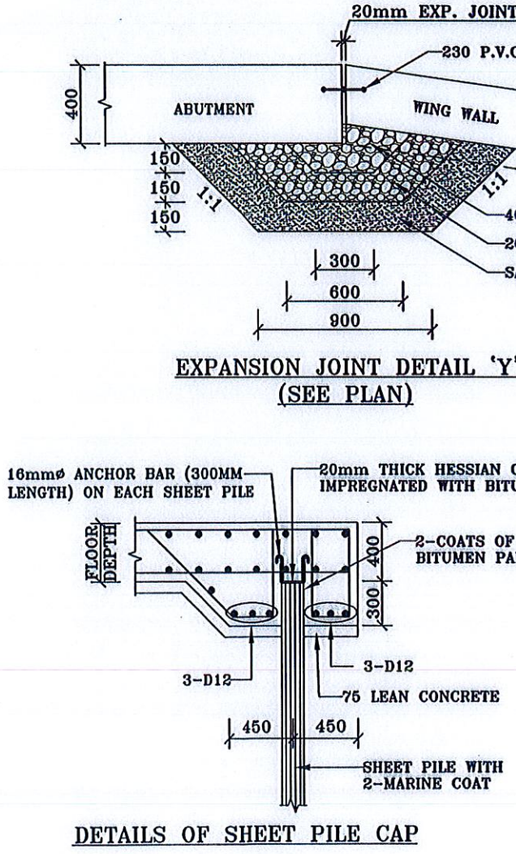
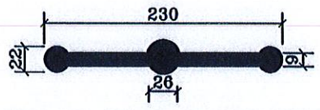


DETAIL 'Z'
(SEALED EXPANSION JOINT)



DETAILS OF SHEET PILE CAP



DETAILS OF P.V.C. WATER STOPPER

Scale: As shown

NO.	DATE	MADE	CHKD.	RECOM.	APPV.
2					
1					
REVISION					

CONSULTANTS: Nippon Koei Co; Ltd (NK), Joint Venture with BETS-CNRS

DRAWN BY:	DESIGNED BY:	CHECKED BY:	RECOMMENDED BY:
Kulsum Akter	A.S.M. Sayem	Jati Das Kunda	A.Q. Mohammad Ali
AUTO CAD OPERATOR	JUNIOR ENGINEER	STRUCTURAL ENGINEER-2	CO-TEAM LEADER

BANGLADESH WATER DEVELOPMENT BOARD

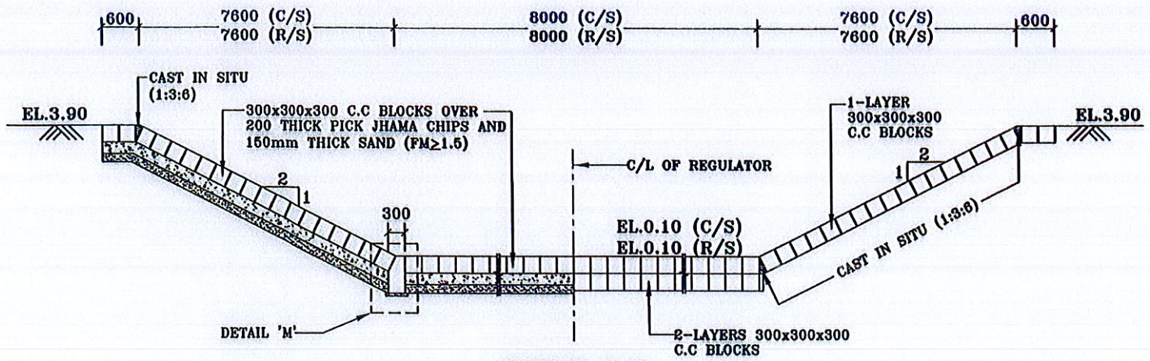
Consultancy Services for Management, Design, Supervision and other Related Services of Haor Flood Management and Livelihood Improvement Project (BWDB Part)

LALPUR REGULATOR (2V-1.5m x 1.8m) AT KM 16.13
OF NOAPARA HAOR SUB-PROJECT
UNDER KISHOREGANJ WD DIVISION, BWDB, KISHOREGANJ

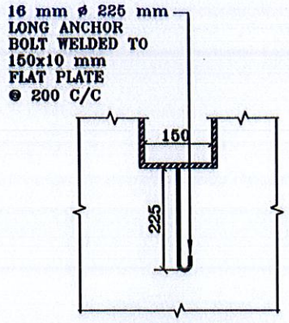
MISCELLANEOUS DETAILS-1

CHECKED BY:	RECOMMENDED BY:	APPROVED BY:
Dr. Muhammad Masood	Md. Abdul Basit	28.01.18 Motaher Hossain
EE, DESIGN CIRCLE - 1	SE, DESIGN CIRCLE - 1	CE , DESIGN

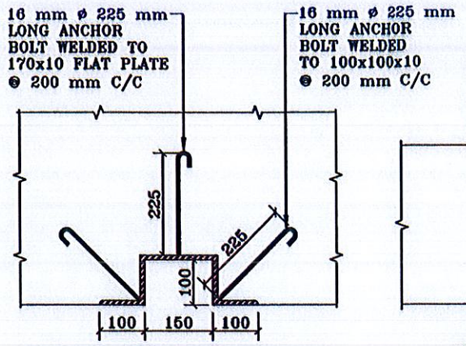
DWG. NO: KISHORE-NOAPARA/ LALPUR/ REG - 1811 | SHEET: 12 /14 | 28 / 01 / 2018



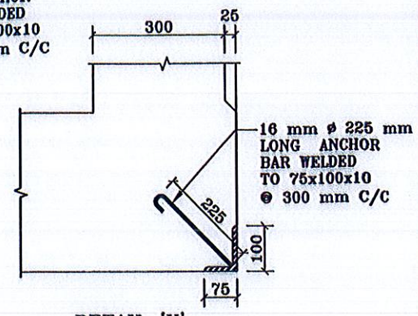
SECTION B-B
(SEE PLAN)



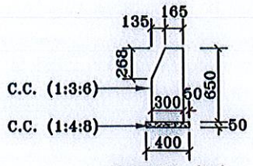
DETAIL 'H'
SEE SEC. A-A)



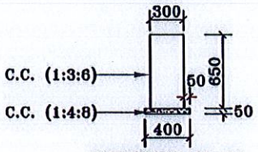
DETAILS 'W' (GATE GROOVE)
(SEE PLAN)



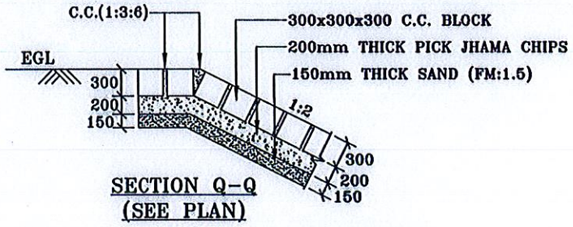
DETAIL 'X'
SEE SEC. A-A)



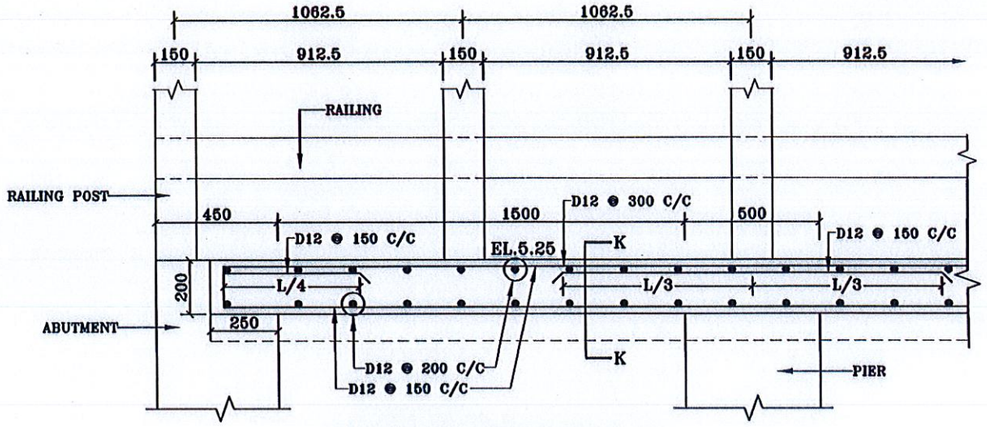
DETAIL 'M'



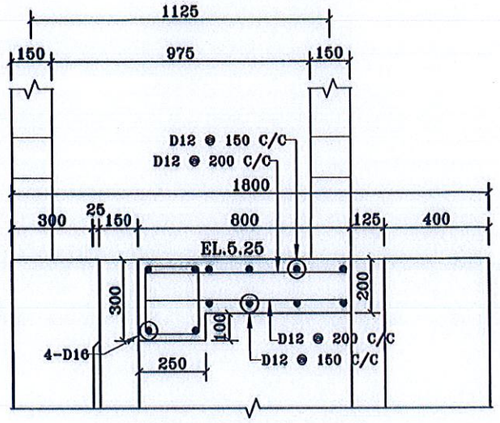
SECTION M-M
(SEE PLAN)



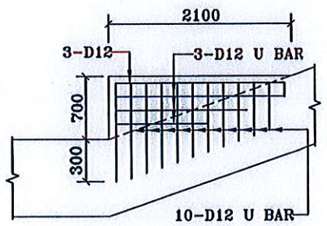
SECTION Q-Q
(SEE PLAN)



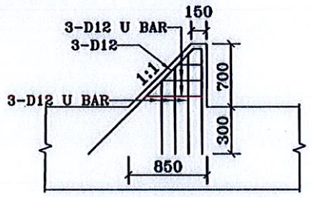
DETAILS OF OPERATING SLAB
FOR VERTICAL LIFT GATE



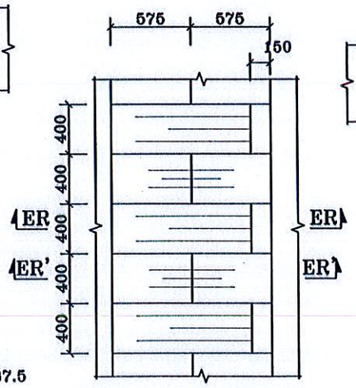
SECTION K-K



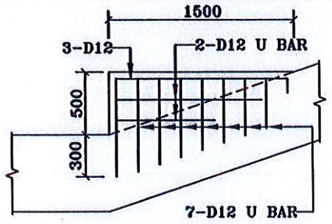
REINF. DETAILS OF
CHUTE BLOCK (C/S)



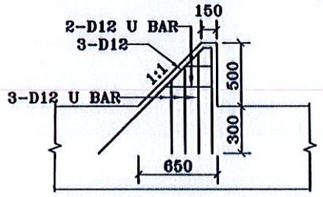
REINF. DETAILS OF
BAFFLE BLOCK (C/S)



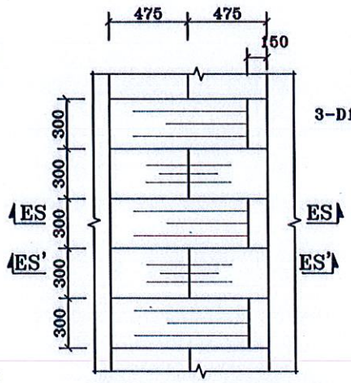
PART PLAN OF END SILLS
(C/S)



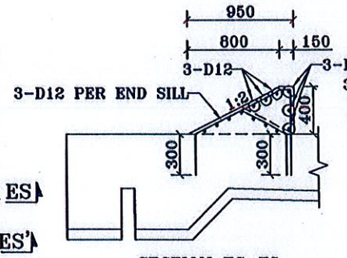
REINF. DETAILS OF
CHUTE BLOCK (R/S)



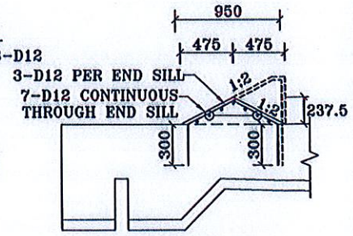
REINF. DETAILS OF
BAFFLE BLOCK (R/S)



PART PLAN OF END SILLS
(R/S)

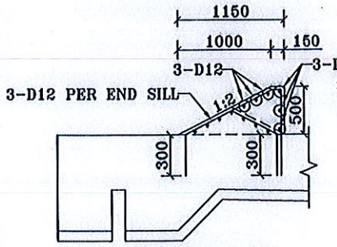


SECTION ES-ES

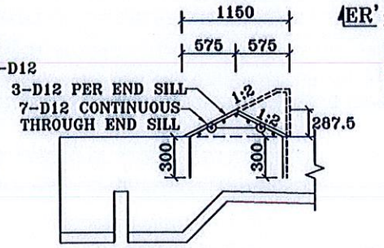


SECTION ES'-ES'

REINF. DETAILS OF END SILL (R/S)



SECTION ER-ER



SECTION ER'-ER'

REINF. DETAILS OF END SILL (C/S)

Scale: As shown

NO.	DATE	MADE	CHKD.	RECOM.	APPV.
2					
1					

REVISION

CONSULTANTS: Nippon Koei Co; Ltd (NK), Joint Venture with BETS-CNRS

DRAWN BY:	DESIGNED BY:	CHECKED BY:	RECOMMENDED BY:
Kulsum Akter	A.S.M. Sayem	Jati Das Kunda	A.Q. Mohammad Ali
AUTO CAD OPERATOR	JUNIOR ENGINEER	STRUCTURAL ENGINEER-2	CO-TEAM LEADER

BANGLADESH WATER DEVELOPMENT BOARD

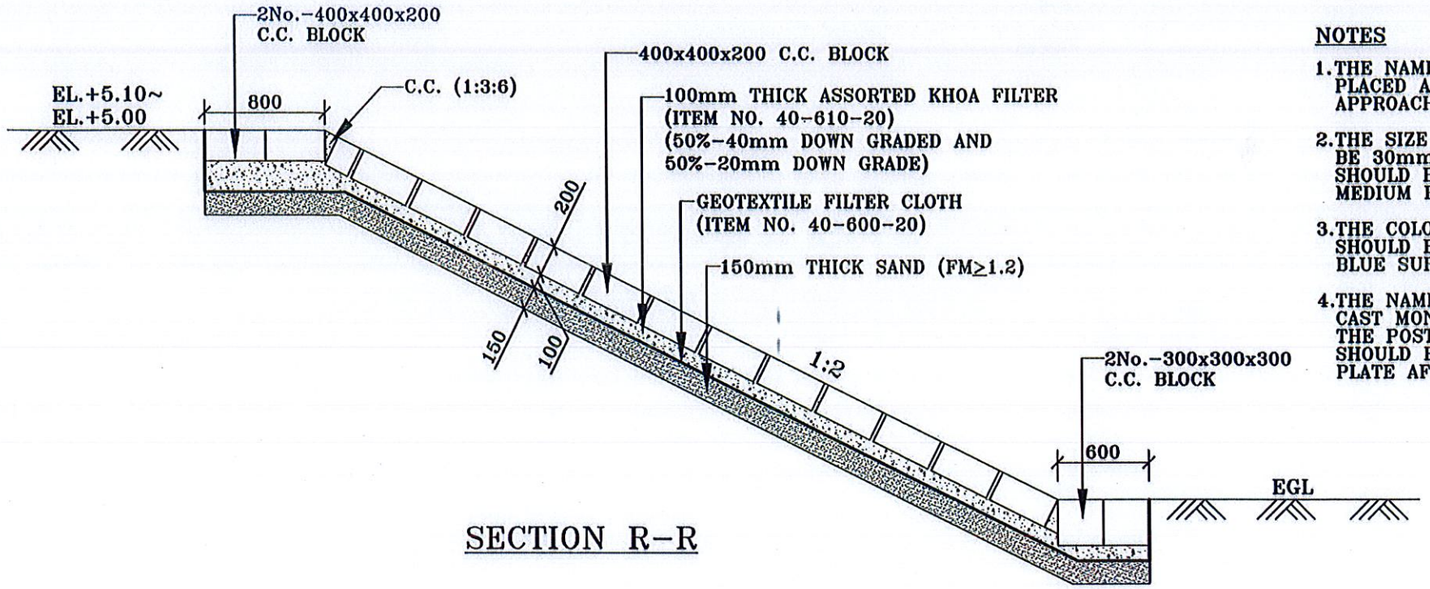
Consultancy Services for Management, Design, Supervision and other Related Services of Haor Flood Management and Livelihood Improvement Project (BWDB Part)

LALPUR REGULATOR (2V-1.5m x 1.8m) AT KM 16.13
OF NOAPARA HAOR SUB-PROJECT
UNDER KISHOREGANJ WD DIVISION, BWDB, KISHOREGANJ

MISCELLANEOUS DETAILS-2

CHECKED BY:	RECOMMENDED BY:	APPROVED BY:
Dr. Muhammad Masood	Md. Abdul Basit	28.01.18 Motaher Hossain
EE, DESIGN CIRCLE - 1	SE, DESIGN CIRCLE - 1	CE , DESIGN

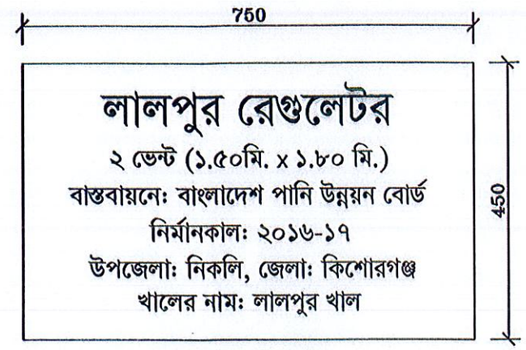
DWG. NO: KISHORE-NOAPARA/ LALPUR/ REG - 1811 | SHEET: 13 /14 | 28 / 01 / 2018



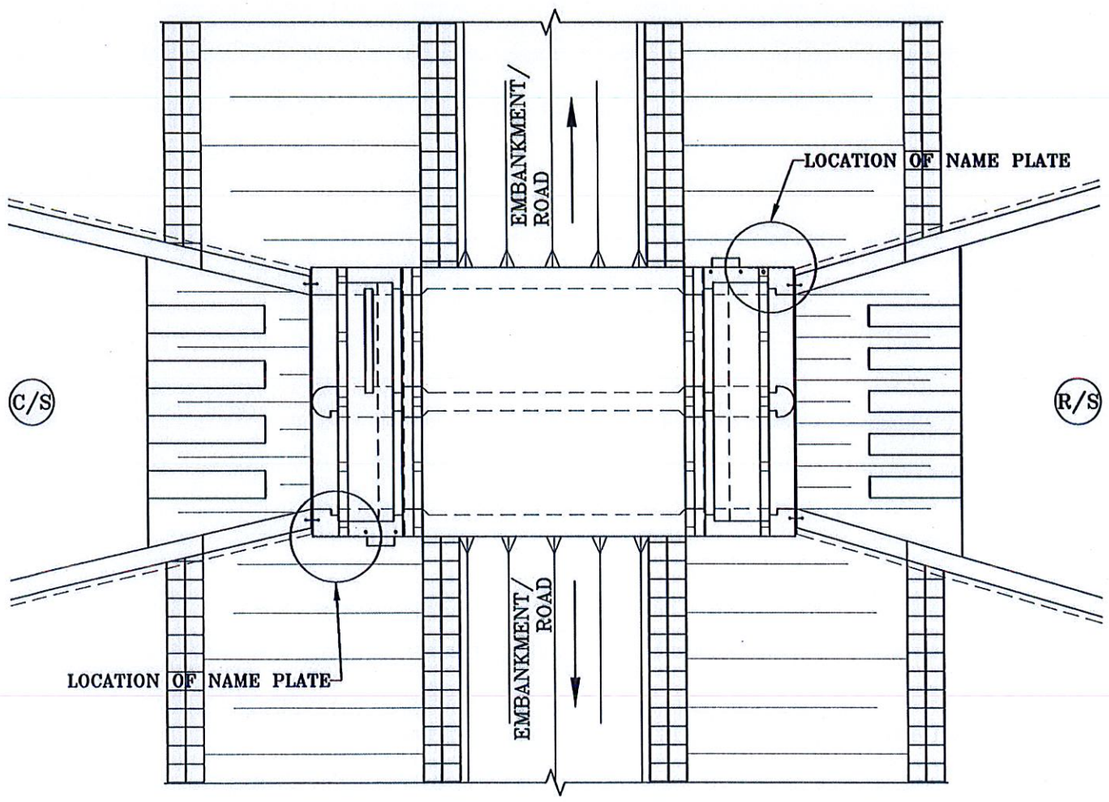
SECTION R-R

NOTES

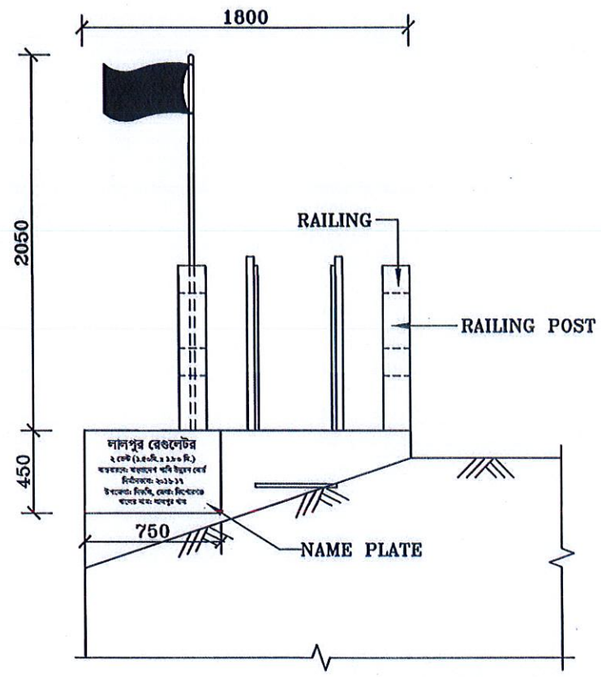
1. THE NAME PLATE SHALL BE PLACED AT THE SIDE OF BOTH APPROACHES.
2. THE SIZE OF LETTER SHOULD BE 30mm TO 40mm & IT SHOULD BE ENGRAVED IN THE MEDIUM BLUE SURFACE.
3. THE COLOR OF THE LETTER SHOULD BE WHITE MEDIUM BLUE SURFACE.
4. THE NAME PLATE SHOULD BE CAST MONOLITHICALLY WITH THE POST AND THE WRITINGS SHOULD BE WRITTEN ON THE PLATE AFTER PLASTERING.



NAME PLATE



PLAN SHOWING NAME PLATE LOCATION ON REGULATOR



ELEVATION (C/S) & (R/S)

Scale: As shown

NO.	DATE	MADE	CHKD.	RECOM.	APPV.
2					
1					

REVISION

CONSULTANTS: Nippon Koei Co; Ltd (NK), Joint Venture with BETS-CNRS

DRAWN BY:	DESIGNED BY:	CHECKED BY:	RECOMMENDED BY:
Kulsum Akter	A.S.M. Sayem	Jati Das Kunda	A.Q. Mohammad Ali
AUTO CAD OPERATOR	JUNIOR ENGINEER	STRUCTURAL ENGINEER-2	CO-TEAM LEADER

BANGLADESH WATER DEVELOPMENT BOARD

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OF NOAPARA HAOR SUB-PROJECT
UNDER KISHOREGANJ WD DIVISION, BWDB, KISHOREGANJ

DETAILS OF NAME PLATE

CHECKED BY:	RECOMMENDED BY:	APPROVED BY:
Dr. Muhammad Masood	Md. Abdul Basit	28.01.18 Motaher Hossain
EE, DESIGN CIRCLE - 1	SE, DESIGN CIRCLE - 1	CE , DESIGN

DWG. NO: KISHORE-NOAPARA/ LALPUR/ REG - 1811 | SHEET: 14 /14 | 28 / 01 / 2018