

BANGLADESH WATER DEVELOPMENT BOARD



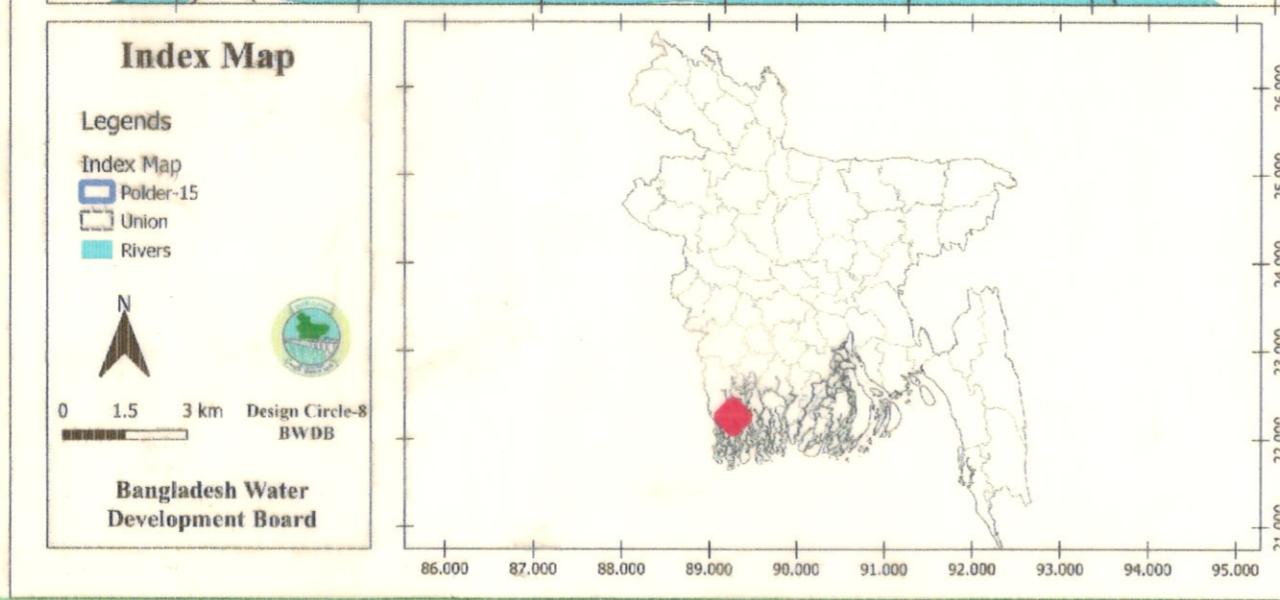
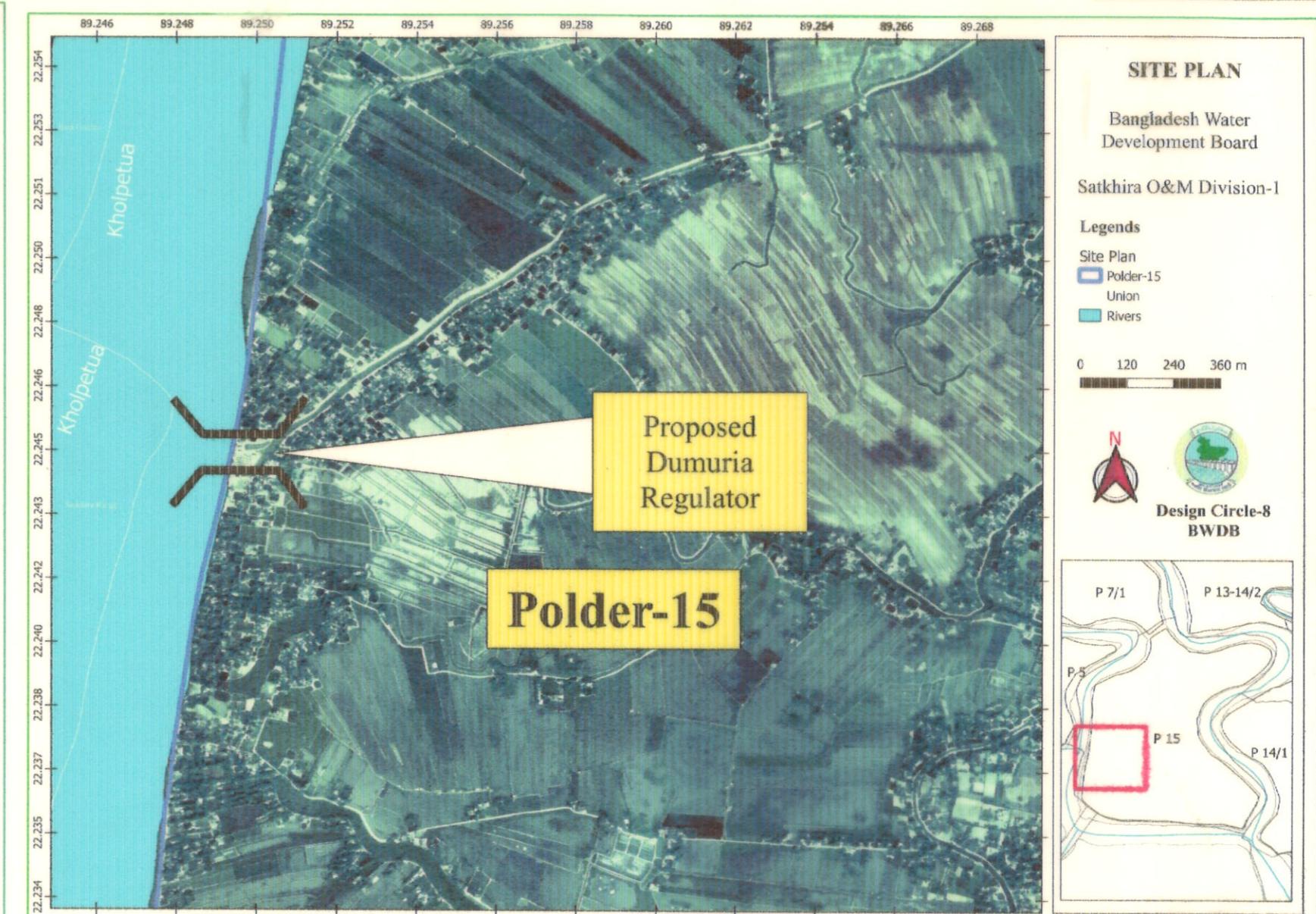
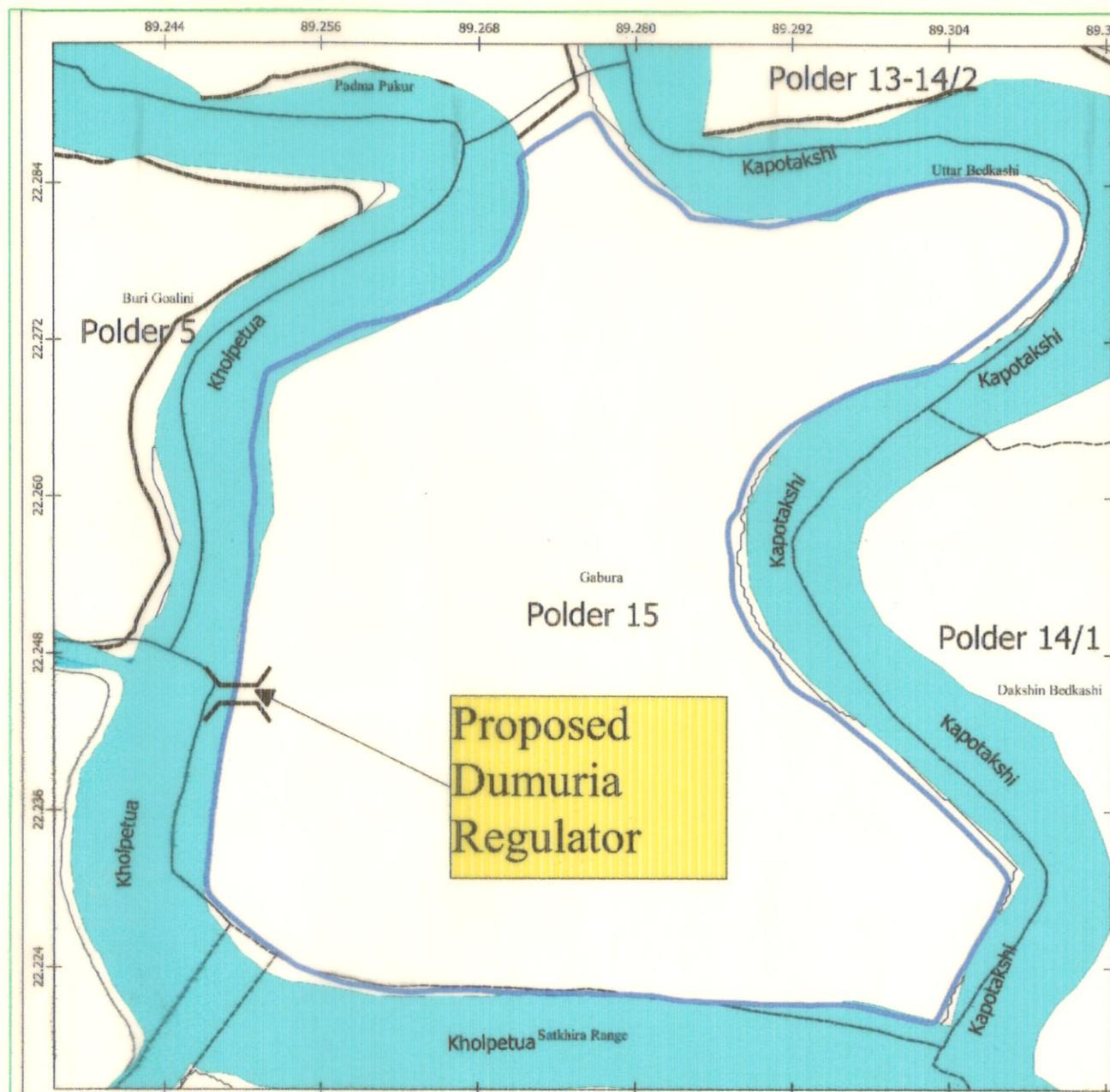
"REHABILITATION OF POLDER 15 AT SATKHIRA DISTRICT"

DESIGN OF REGULATOR 1-VENT AT DUMURIA KHAL KM 28.550 IN POLDER NO-15 UNDER "
REHABILITATION OF POLDER 15 AT SATKHIRA DISTRICT" PROJECT UNDER SATKHIRA O&M
DIVISION-1, BWDB, SATKHIRA.

Satkhira O&M Division-1, BWDB, Satkhira.

Designed by: Design Circle-8, BWDB, Dhaka.

August, 2023



INDEX MAP
(Not to Scale)

SITE MAP
(Not to Scale)

Bangladesh Water Development Board

Office of the Superintending Engineer
Design Circle-8

"REHABILITATION OF POLDER 15 AT SATKHIRA DISTRICT"

DESIGN OF REGULATOR 1-VENT AT DUMURIA KHAL KM 28.550 IN
POLDER NO-15 UNDER "REHABILITATION OF POLDER 15 AT SATKHIRA
DISTRICT" PROJECT UNDER SATKHIRA O&M DIVISION-1, BWDB,
SATKHIRA.

INDEX MAP & SITE MAP

DESIGNED BY :

CHECKED & RECOMMENDED BY :

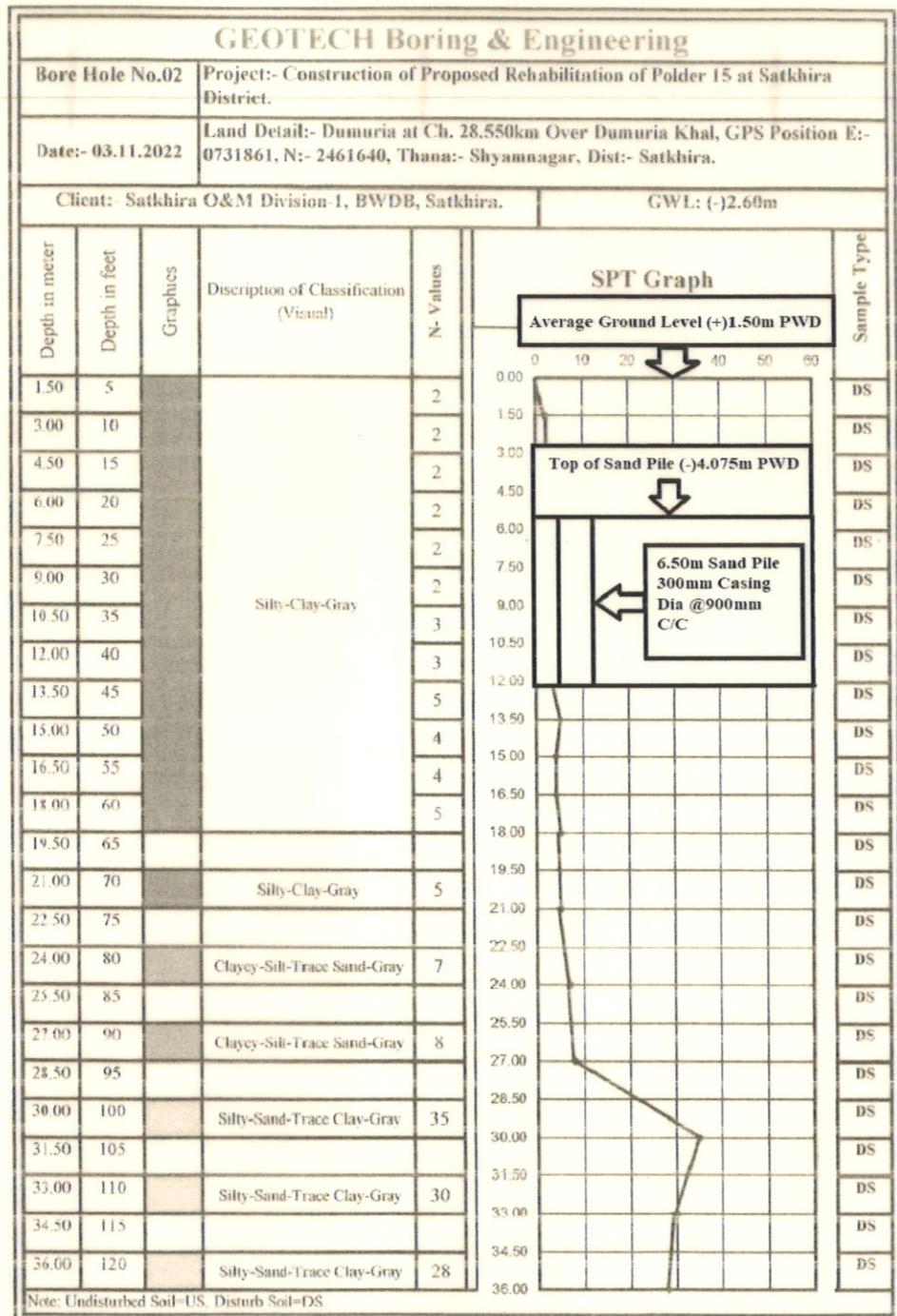
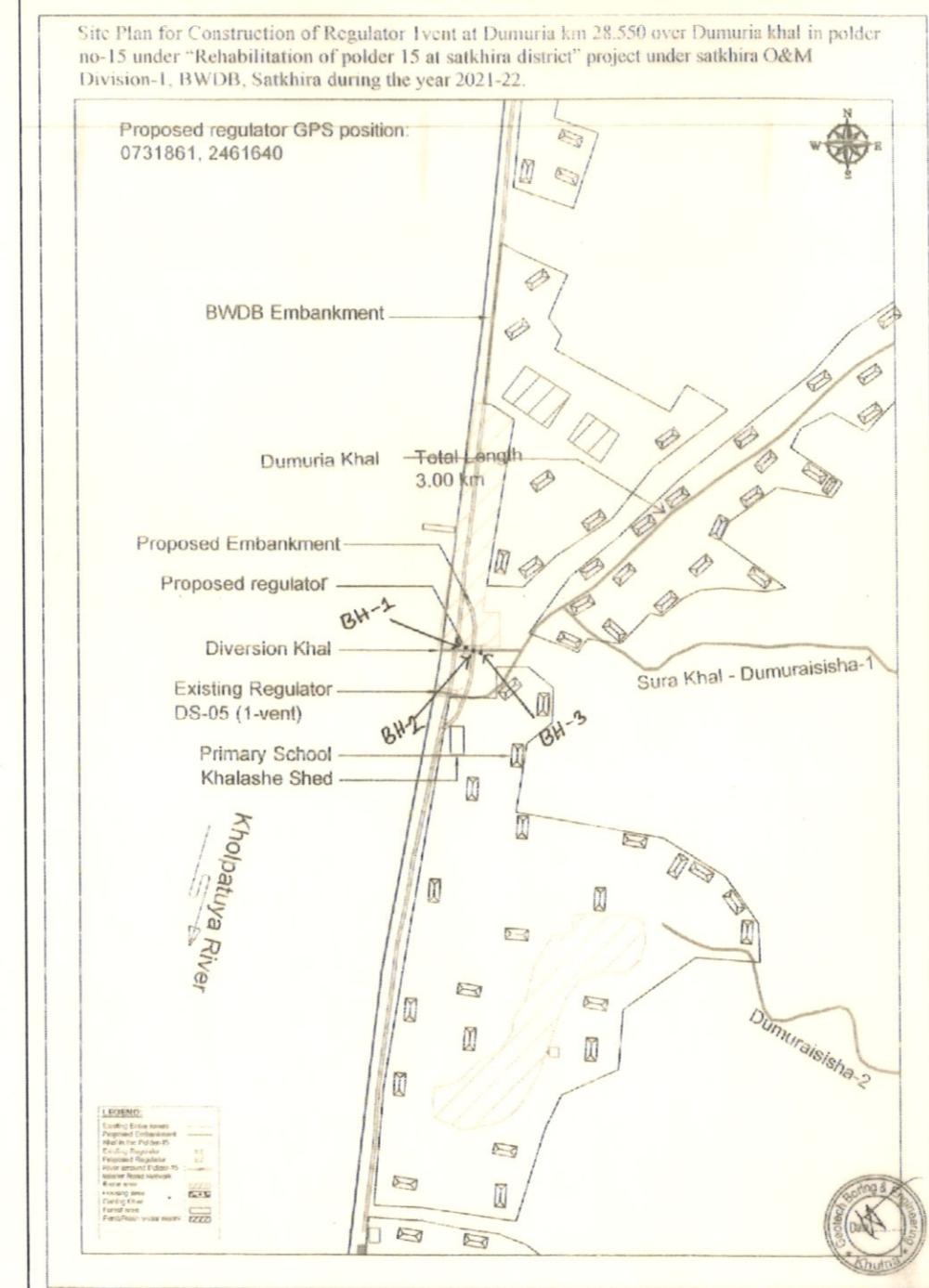
(JAKARIA PERVEZ), EE

APPROVED BY :

9/8/2023

(MOHAMMAD SAIF UDDIN), SE

DATE:09-08-2023 DWG. NO.:DC-8-0396-01/22

BORE LOGBORE HOLE LOCATION**Bangladesh Water Development Board**Office of the Superintending Engineer
Design Circle-8**"REHABILITATION OF POLDER 15 AT SATKHIRA DISTRICT"**DESIGN OF REGULATOR 1-VENT AT DUMURIA KHAL KM 28.550 IN
POLDER NO-15 UNDER " REHABILITATION OF POLDER 15 AT
SATKHIRA DISTRICT" PROJECT UNDER SATKHIRA O&M DIVISION-1,
BWDB, SATKHIRA.BORE LOG

DESIGNED BY:

[Signature]
(SAKIB BIN RAFI), AE

CHECKED & RECOMMENDED BY:

[Signature]
(JAKARIA PERVEZ), EE

APPROVED BY:

[Signature]
9/8/23
(MOHAMMAD SAIF UDDIN), SE

DATE:09-08-2023 DWG. NO.:DC-8-0396-02/22

GEOTECHNICAL NOTES:

- BEFORE THE EXECUTION OF THE WORK, CONTRACTOR SHALL UNDERGO A SOIL INVESTIGATION. IF ANY DISCREPANCY IS OBSERVED (SPECIALLY WITH THE BORELOG DATA MENTIONED IN THE DESIGN, PAGE-02/22), THE CONTRACTOR SHALL IMMEDIATELY INFORM THE CONCERNED FIELD OFFICE. THEN, THE FIELD OFFICE WILL INFORM THE DESIGN OFFICE FOR FURTHER NECESSARY ACTION.

GENERAL NOTES

- THE SPECIFICATION OF MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE STANDARD TECHNICAL SPECIFICATION OF BWDB, IN GENERAL.
- ALL DIMENSIONS ARE IN MILLIMETERS AND ALL ELEVATIONS ARE IN mPWD UNLESS OTHERWISE MENTIONED IN THE DRAWINGS.
- COMPRESSIVE STRENGTH OF REINFORCED CEMENT CONCRETE SHALL HAVE MINIMUM 28 DAYS CYLINDER STRENGTH, $f_c \geq 25.00 \text{ N/mm}^2$ (ITEM CODE: 28-230-10) AND SHALL BE CHECKED BY COLLECTING SAMPLES AND TESTING DURING CONSTRUCTION.
- REINFORCING BAR SHALL BE DEFORMED MILD STEEL HAVING YIELD STRENGTH, $f_y \geq 400.00 \text{ N/mm}^2$. (ITEM CODE-76-120-10), (MADE FROM BILLET) IN R.C.C. WORK.
- CONCRETE FOR CC BLOCKS SHALL HAVE MINIMUM STRENGTH, $f_c \geq 12.0 \text{ N/mm}^2$ AT 28 DAYS.
- CURING OF CONCRETE SHALL BE CONTINUED FOR MINIMUM 21 DAYS AFTER CASTING.
- CONCRETE SHALL BE POURED IN DRY BED CONDITION.
- CONCRETE MIXTURE SHALL BE POURED AS QUICK AS POSSIBLE BUT NOT LATER THAN 45 MINUTES AFTER MIXING.
- 75 mm LEAN CONCRETE AT BASE SHALL BE IN 1:3:6.
- THE LEAN CONCRETE AT FOUNDATION OF THE PROPOSED REGULATOR SHALL BE PLACED AFTER PROPERLY PREPARING & COMPACTING EXCAVATED BASE.
- CLEAR COVER FOR REINFORCEMENT SHALL BE AS FOLLOWS:
 - Operating deck & Railing : 25mm
 - Concrete adjacent to earth at foundation: 75mm
 - Concrete adjacent to earth: 75mm
 - Concrete exposed to weather and water or others: 75mm
 - Beam: 40mm
- MINIMUM LAP LENGTH SHALL BE 40 TIMES THE BAR DIAMETER.
- LAP SHALL BE STAGGERED SO THAT NOT MORE THAN 50% OF BARS ARE LAPPED IN ANY ONE CROSS SECTION. WHERE BARS MUST LAPPED IN ONE CROSS SECTION, THEN LAP LENGTH SHALL NOT BE LESS THEN 1.30 TIMES MINIMUM LAP LENGTH.
- REINFORCING BAR MUST BE SUPPORTED IN ITS PROPER POSITION BY USE OF MORTAR BLOCK, SUPPORTS OR BY OTHERS APPROVED MEANS.
- SAND FILLING IN FOUNDATION SHOULD BE DONE WITH SAND OF $F.M \geq 1.50$ IN LAYERS OF 150 mm THICK LAYER BY LAYER AND COMPACTED TO ATTAIN MINIMUM 50% RELATIVE DENSITY.
- UNLESS OTHERWISE SPECIFIED, BACK FILLING SHALL BE DONE WITH SAND ($F.M \geq 0.80$) FREE FROM VEGETABLE ROOTS AND ORGANIC MATTER, BACK FILLING FOR U-SHAPED WALL SHALL BE DONE SIMULTANEOUSLY ON BOTH WALLS.
- DESIGN OF GATE AND HOISTING SYSTEM WILL BE PREPARED BY DESIGN CIRCLE-III, BWDB, DHAKA.
- GATE TO BE OPERATED IN CONTROLLED WAY TO AVOID ANY SCOUR WHEN HEAD DIFFERENCE IS BEYOND 0.60m.
- THE EMBEDDED PARTS OF GATE TO BE INSTALLED DURING CONSTRUCTION OF BARREL PART AND IT SHALL BE DONE IN ACCORDANCE WITH APPROVED MECHANICAL DRAWING .
- THE GATE SHALL BE INSTALLED BEFORE THE OPERATION OF THE STRUCTURE.
- ANY ERROR/OMISSION IF DETECTED SHALL BE REFERRED TO THE CONCERNED DESIGN OFFICE TAKING NECESSARY ACTION.
- ALL BORE HOLES SHALL BE SEALED BEFORE CONSTRUCTION OF REGULATOR.

SPECIAL NOTES:

- THIS DRAWING IS PREPARED AS PER PROPOSAL AND DESIGN DATA SUBMITTED BY SE, KHULNA O&M CIRCLE, BWDB, KHULNA VIDE HIS OFFICE MEMO NO: 1/d-3-644, DATE: 01-12-2021 AND 120FT BORELOG DATA WAS RECEIVED ON 29-11-2022, MEMO NO: 11/B/1458.
- THE WORK SHALL BE EXECUTED WITH PRIOR ADMINISTRATIVE AND FINANCIAL APPROVAL FROM THE COMPETENT AUTHORITY & WITHIN THE DPP / BUDGET PROVISION .
- EXISTING KHAL/LINK KHAL AT THE U/S & D/S OF THIS PROPOSED REGULATOR TO BE RE-EXCAVATED UPTO THE REQUIRED LENGTH AND LEVEL IF NECESSARY.

NOTES FOR SHEET PILES:

- HOT ROLLED U-SHAPE STEEL SHEET PILE SHALL BE USED. COLD ROLLED SHEET PILE SHALL NEVER BE USED.
- COATING SHALL BE PROVIDED OVER SHEET PILE IN THE FOLLOWING WAY :-
 - CLEAN THE SHEET PILE SURFACE PREFERABLY WITH SAND BLASTING.
 - PROVIDE 1 (ONE) COAT OF ZINK PHOSPHATE AS PRIMARY COAT,
 - PROVIDE 2 (TWO) COAT OF COALTAR EPOXY COAT OVER PRIMARY COAT.
- THICKNESS OF SHEET PILE SHALL BE 10.50mm ($\pm 0.50\text{mm}$) (ITEMCODE: 44-240-10).
- CONCERNED EXECUTIVE ENGINEER MUST ENSURE SHEET PILE INTERLOCKING, LENGTH, & DRIVING.
- TOP LEVEL OF EVERY CONNECTED SHEET PILES MUST HAVE SAME LEVEL.

NOTES FOR EMBEDDED PARTS, GROOVE AND GATE:

- ALL EMBEDDED PARTS OF GROOVE AND OTHERS WILL BE STAINLESS STEEL (SUS-304)
- ALL PARTS OF MECHANICAL GATE WILL BE STAINLESS STEEL (SUS-304).

Bangladesh Water Development Board

Office of the Superintending Engineer
Design Circle-8

REHABILITATION OF POLDER-15 AT SATKHIRA DISTRICT

DESIGN OF REGULATOR 1-VENT AT DUMURIA KHAL KM 28.550 IN POLDER NO-15 UNDER " REHABILITATION OF POLDER 15 AT SATKHIRA DISTRICT" PROJECT UNDER SATKHIRA O&M DIVISION-1, BWDB, SATKHIRA.

NOTES

DESIGNED BY :

(SAKIB BIN RAFI), AE

CHECKED & RECOMMENDED BY :

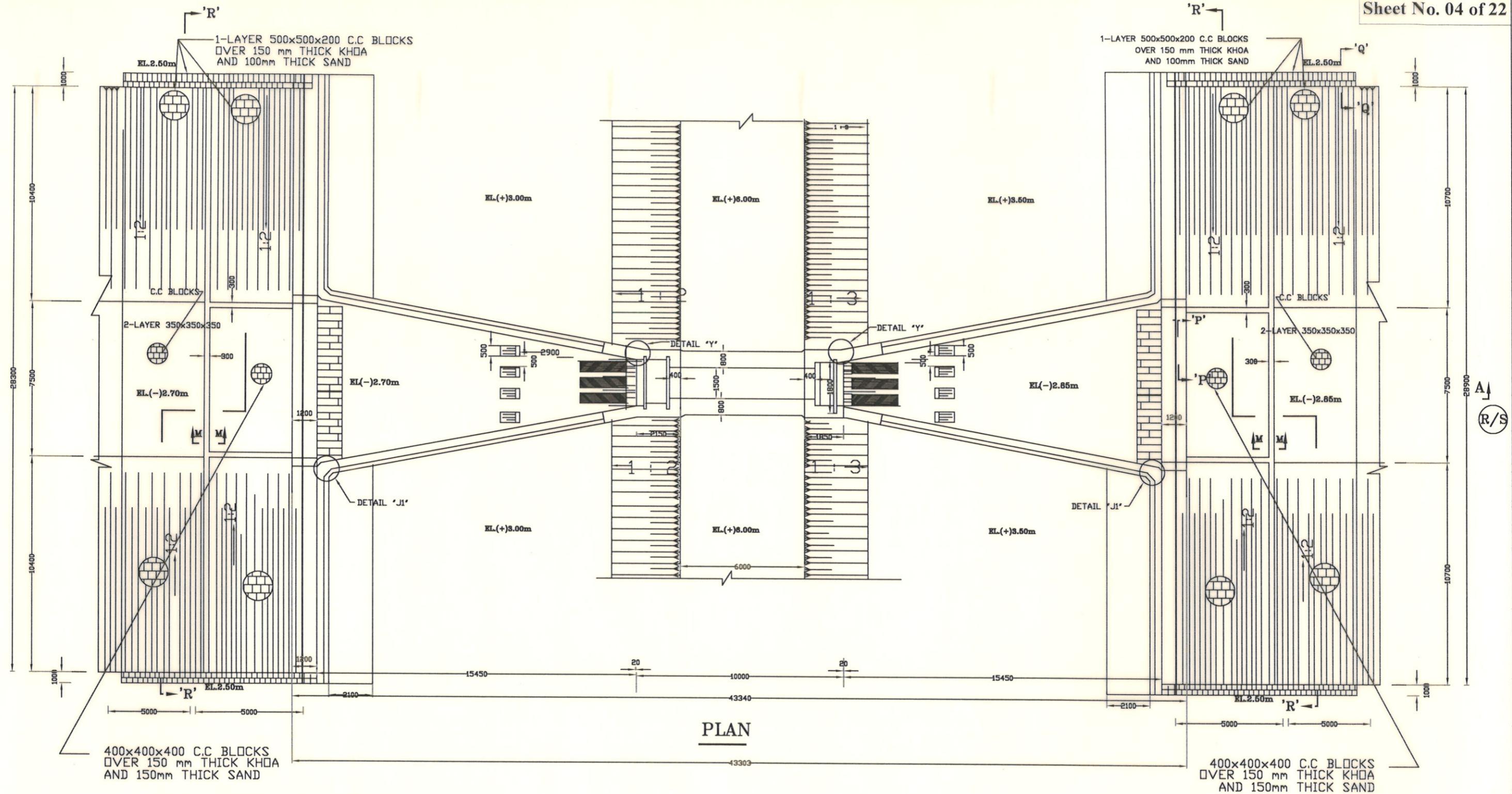
(JAKARIA PERVEZ), EE

APPROVED BY :

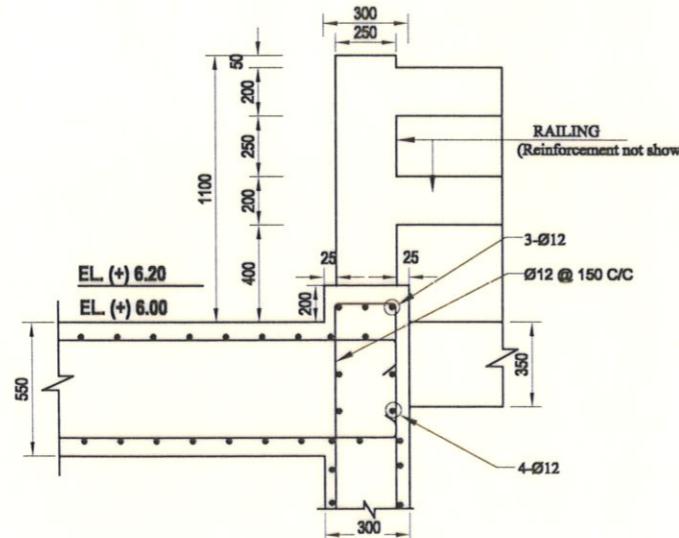
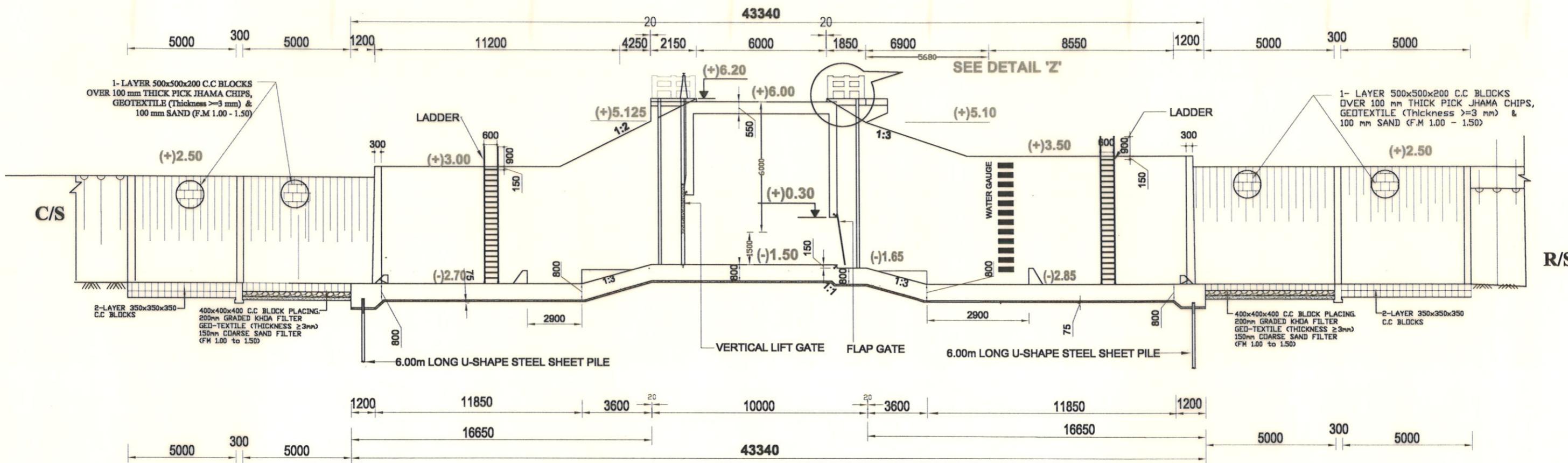
(MOHAMMAD SAIF UDDIN), SE

DATE:09-08-2023

DWG. NO.:DC-8-0396-03/22

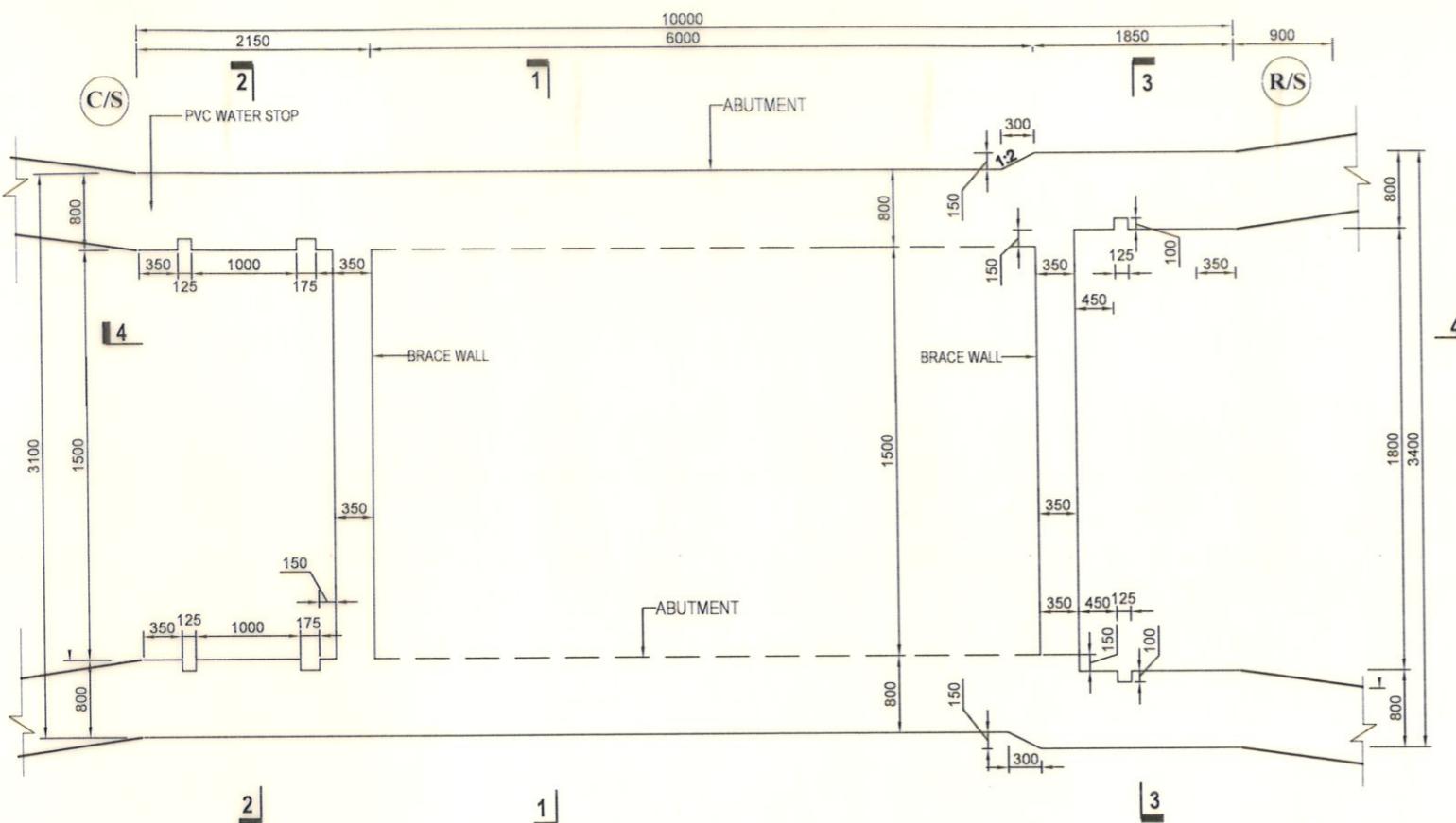


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Q-Q	21/22
R-R	21/22
M-M	21/22

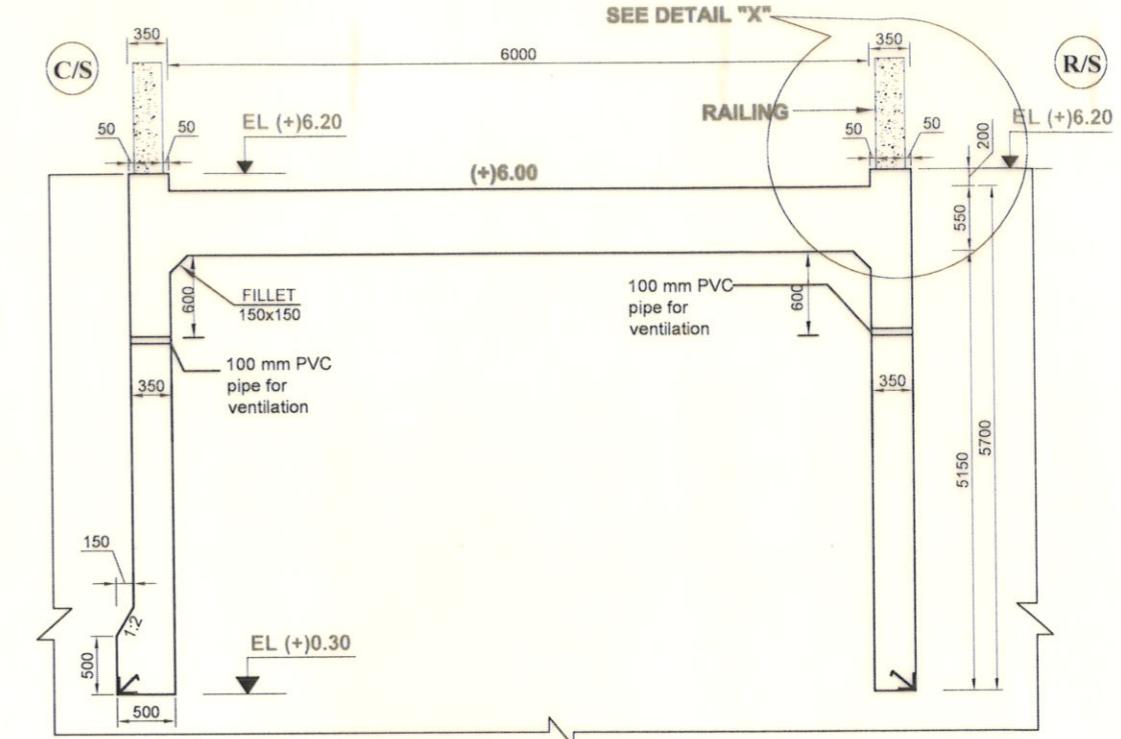


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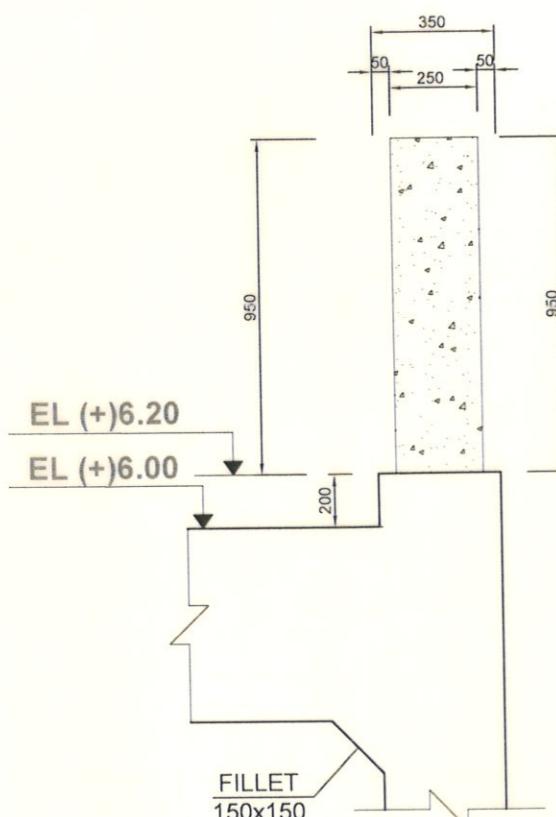
Bangladesh Water Development Board Office of the Superintending Engineer Design Circle-8	
REHABILITATION OF POLDER-15 AT SATKHIRA DISTRICT	
DESIGN OF REGULATOR 1-VENT AT DUMURIA KHAL KM 28.550 IN POLDER NO-15 UNDER " REHABILITATION OF POLDER 15 AT SATKHIRA DISTRICT" PROJECT UNDER SATKHIRA O&M DIVISION-1, BWDB, SATKHIRA.	
SECTIONAL ELEVATION & DETAIL	
DESIGNED BY : (SAKIB BIN RAFI), AE	APPROVED BY : (MOHAMMAD SAIF UDDIN), SE
CHECKED & RECOMMENDED BY : (JAKARIA PERVEZ), EE	
DATE:09-08-2023 DWG. NO.:DC-8-0396-05/22	



CONCRETE OUTLINE OF SIDEWALL & BRACE WALL



CONCRETE OUTLINE OF BRACE WALL & BOX TOP SLAB



DETAIL "X"

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Bangladesh Water Development Board

Office of the Superintending Engineer
Design Circle-8

REHABILITATION OF POLDER-15 AT SATKHIRA DISTRICT

**DESIGN OF REGULATOR 1-VENT AT DUMURIA KHAL KM 28.550 IN
POLDER NO-15 UNDER " REHABILITATION OF POLDER 15 AT
SATKHIRA DISTRICT" PROJECT UNDER SATKHIRA O&M DIVISION-1,
BWDB, SATKHIRA.**

CONCRETE OUTLINE OF PIER SIDEWALL, HEADWALL & BOX

DESIGNED BY :

APPROVED BY :

216

2023

(SAKIB BIN RAED), AE

CHECKED & RECOMMENDED BY :

CHECKED & RECOMMENDED

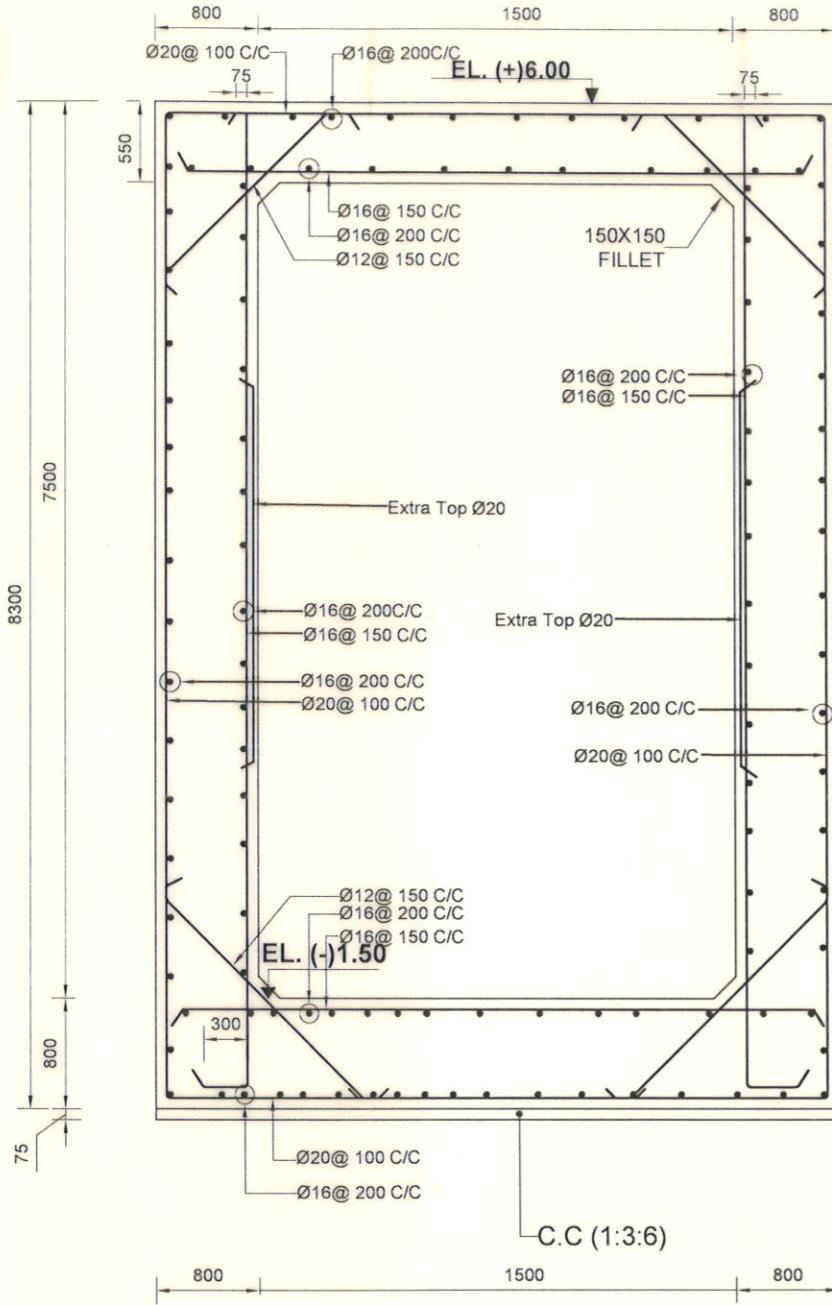
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(JAKARIA PERVEZ), F

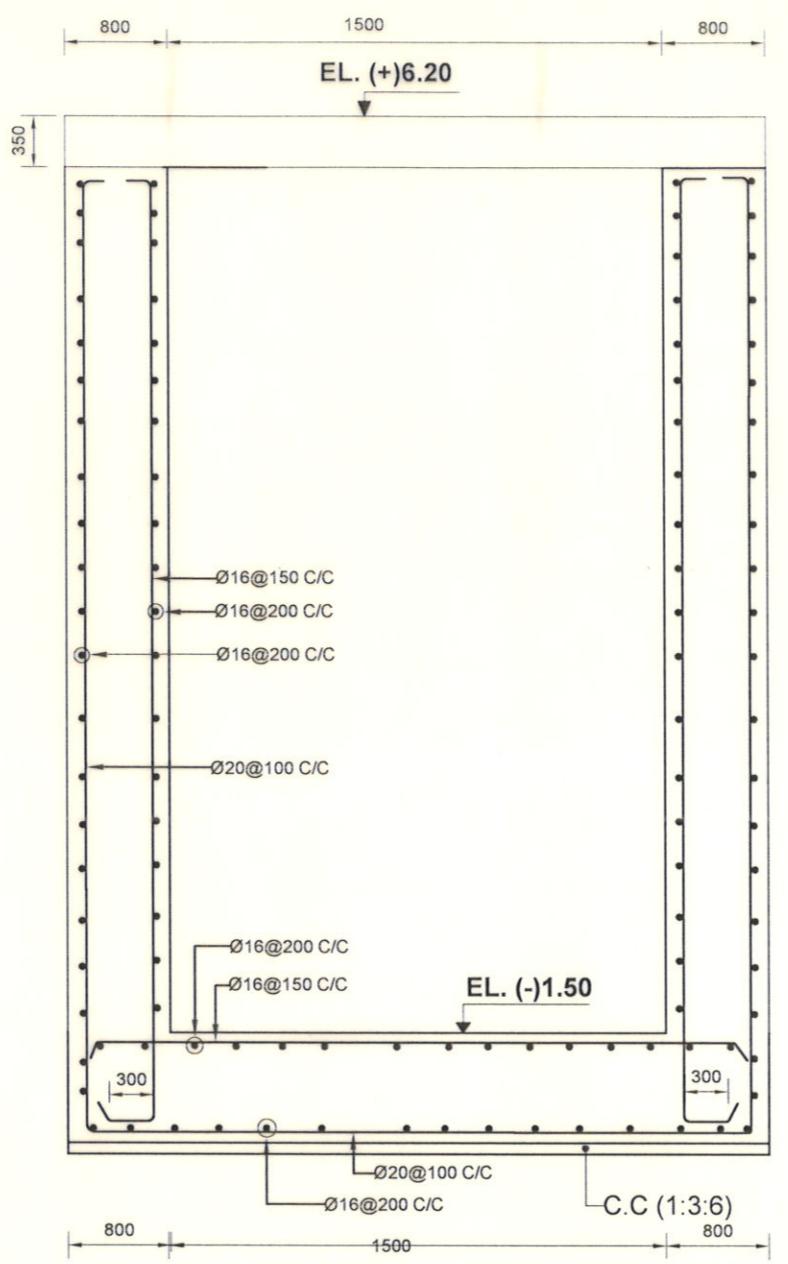
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918123

(MOHAMMAD SAJF UPPIN), SE

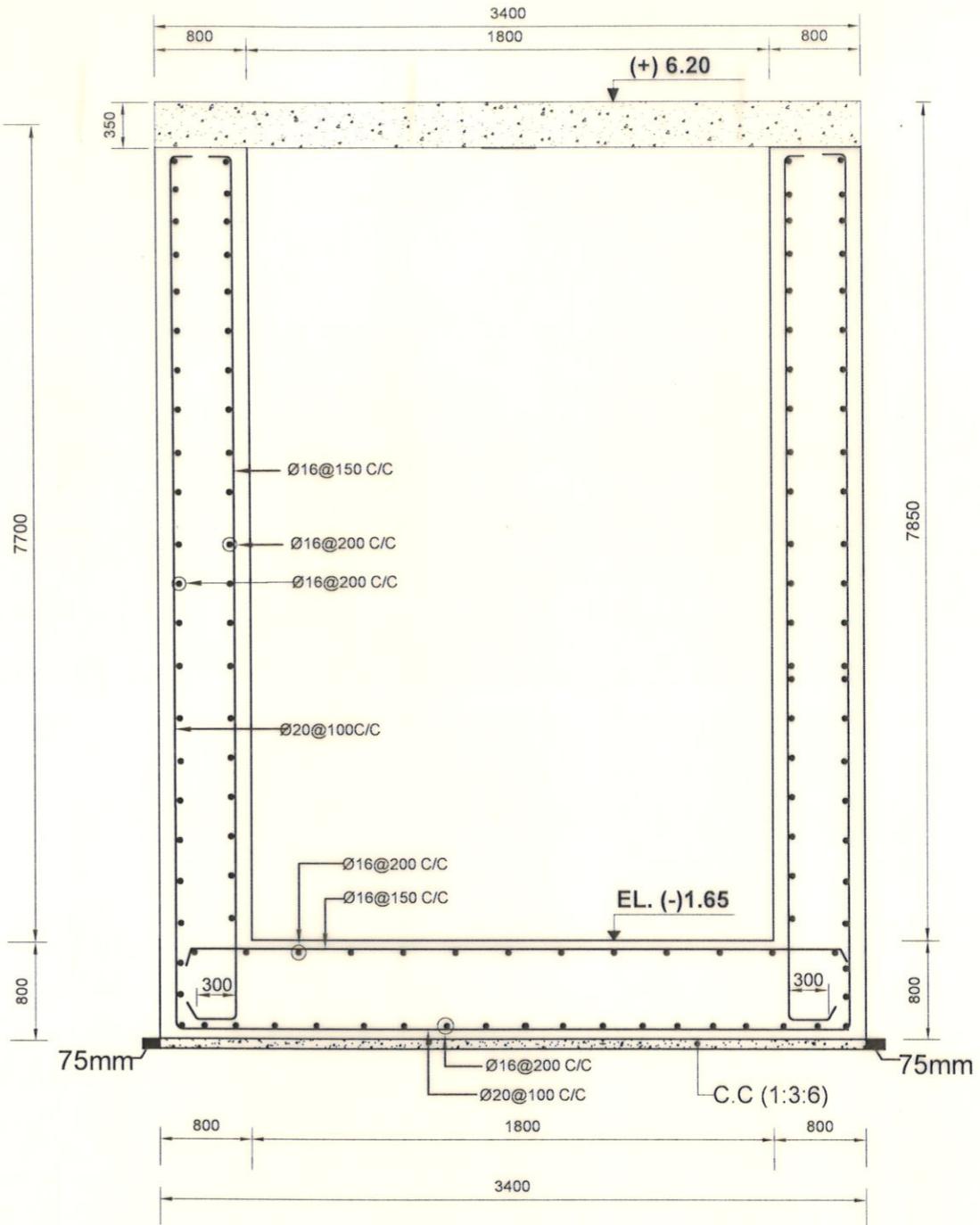
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REINFORCEMENT DETAILS OF BARREL (SECTION 1-1)

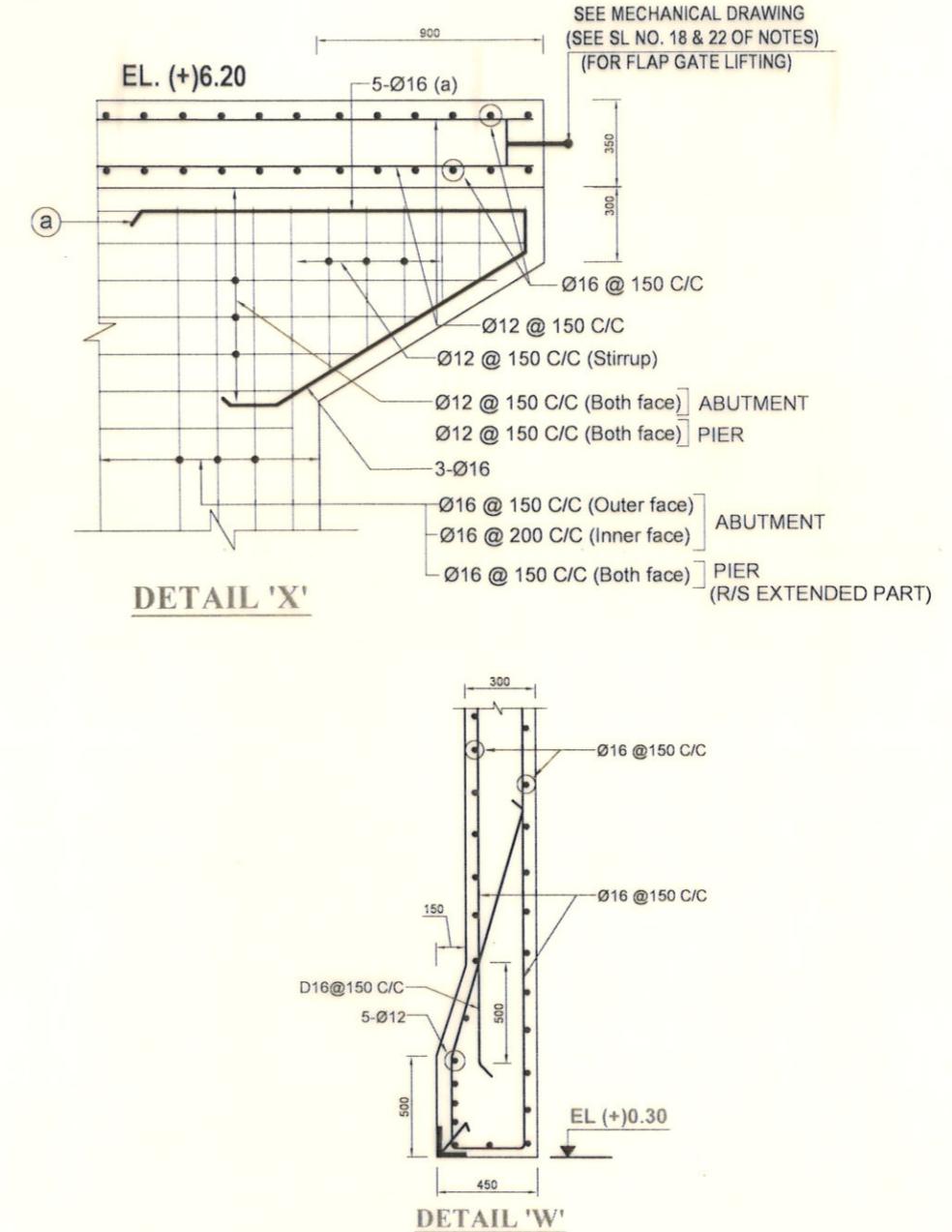
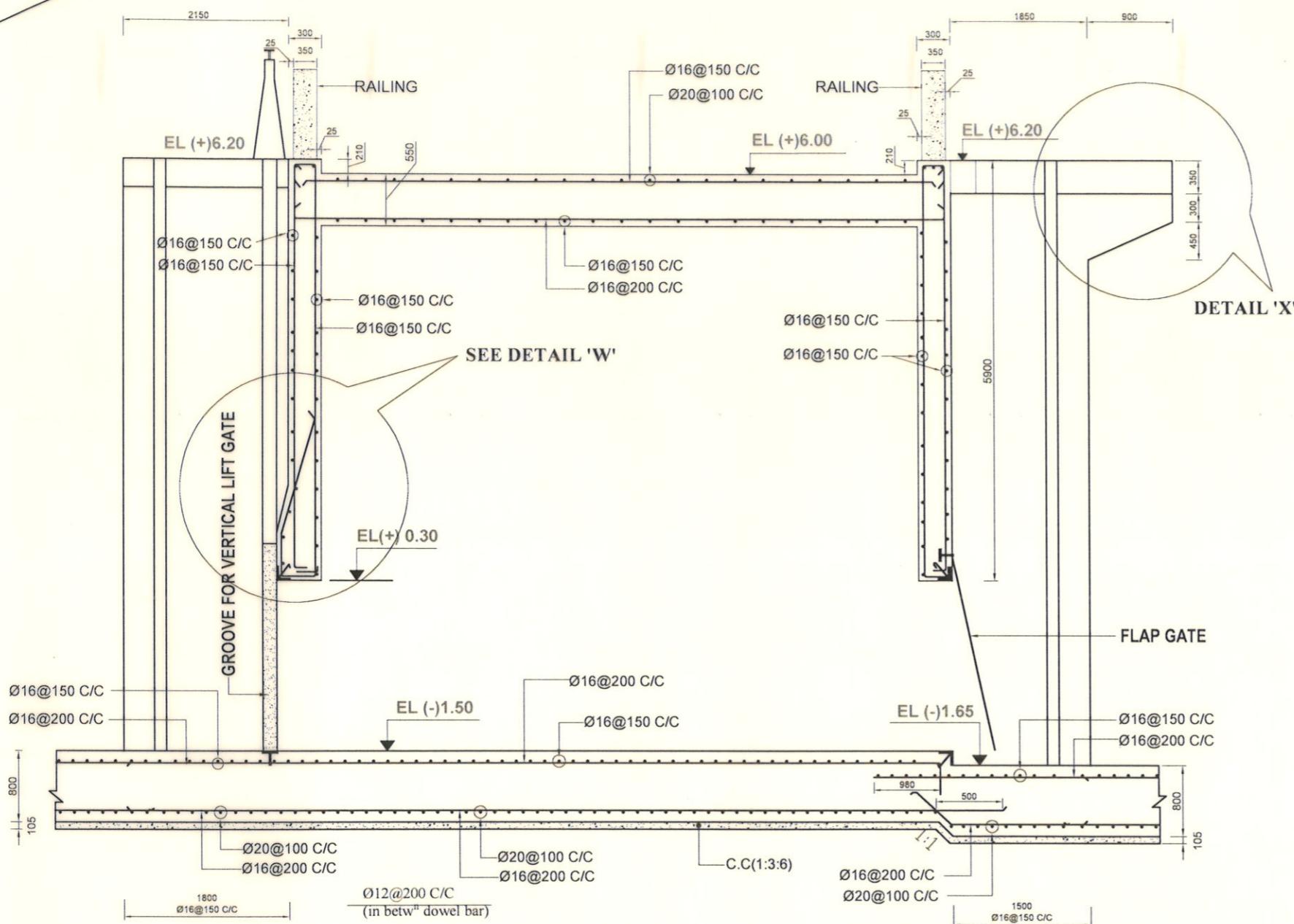


EXTENDED PART (C/S) (SECTION 2-2)

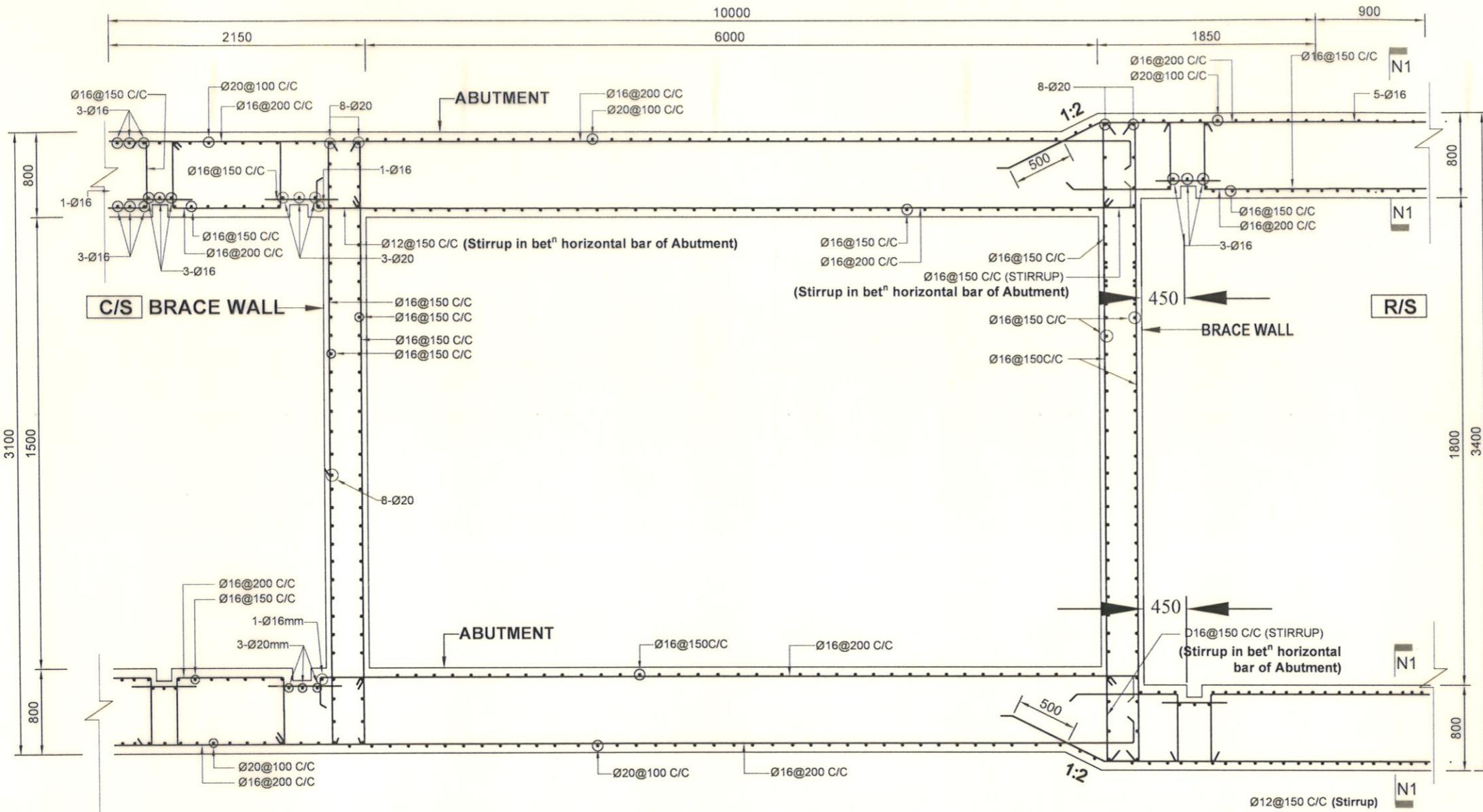


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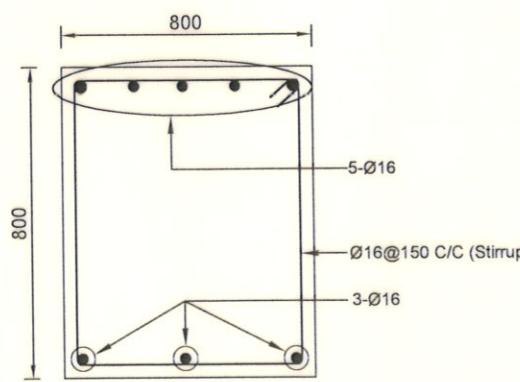
Bangladesh Water Development Board	
Office of the Superintending Engineer Design Circle-8	
REHABILITATION OF POLDER-15 AT SATKHIRA DISTRICT	
DESIGN OF REGULATOR 1-VENT AT DUMURIA KHAL KM 28.550 IN POLDER NO-15 UNDER " REHABILITATION OF POLDER 15 AT SATKHIRA DISTRICT" PROJECT UNDER SATKHIRA O&M DIVISION-1, BWDB, SATKHIRA.	
REINFORCEMENT DETAILS OF ABUTMENT & BARREL	
DESIGNED BY :	APPROVED BY :
 (SAKIB BIN RAFI), AE	 (MOHAMMAD SAIF UDDIN), SE
CHECKED & RECOMMENDED BY :	
 (JAKARIA PERVEZ), EE	
DATE:09-08-2023 DWG. NO.:DC-8-0396-07/22	



Bangladesh Water Development Board Office of the Superintending Engineer Design Circle-8	
REHABILITATION OF POLDER-15 AT SATKHIRA DISTRICT	
DESIGN OF REGULATOR 1-VENT AT DUMURIA KHAL KM 28.550 IN POLDER NO-15 UNDER " REHABILITATION OF POLDER 15 AT SATKHIRA DISTRICT" PROJECT UNDER SATKHIRA O&M DIVISION-1, BWDB, SATKHIRA.	
SECTIONAL ELEVATION & DETAIL	
DESIGNED BY : (SAKIB BIN RAFI), AE	APPROVED BY : (MOHAMMAD SAIF UDDIN), SE
CHECKED & RECOMMENDED BY : (JAKARIA PERVEZ), EE	
DATE:09-08-2023 DWG. NO.:DC-8-0396-08/22	



REINFORCEMENT DETAILS OF ABUTMENT & BRACE WALL ABOVE VENT OPENING



SECTION N1-N1

Bangladesh Water Development Board

Office of the Superintending Engineer
Design Circle-8

REHABILITATION OF POLDER-15 AT SATKHIRA DISTRICT

**DESIGN OF REGULATOR 1-VENT AT DUMURIA KHAL KM 28.550 IN
POLDER NO-15 UNDER " REHABILITATION OF POLDER 15 AT SATKHIRA
DISTRICT" PROJECT UNDER SATKHIRA O&M DIVISION-1, BWDB,
SATKHIRA.**

REINFORCEMENT DETAILS OF ABUTMENT, PIER & BRACE WALL ABOVE VENT OPENING

DESIGNED BY :

[Signature]

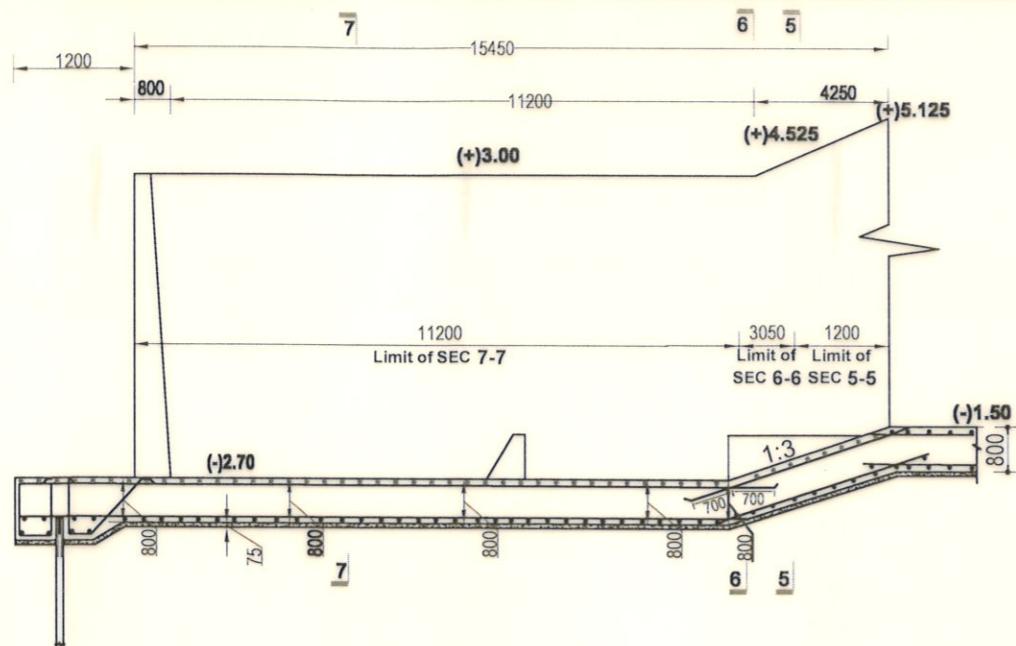
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CHECKED & RECOMMENDED

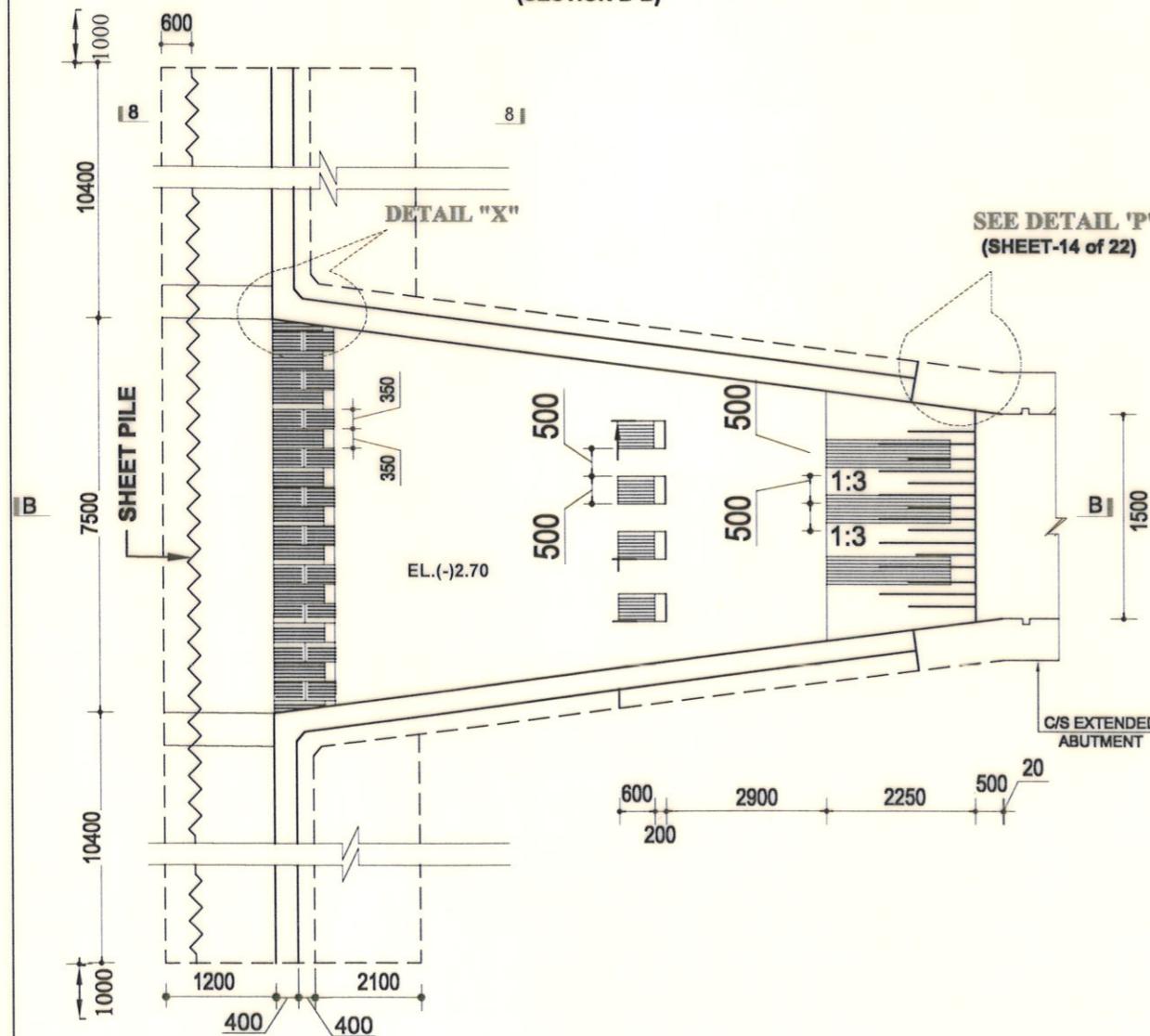
(JAKARIA BERVEZ) E

APPROVED BY :

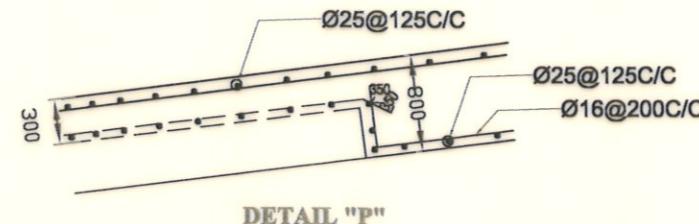
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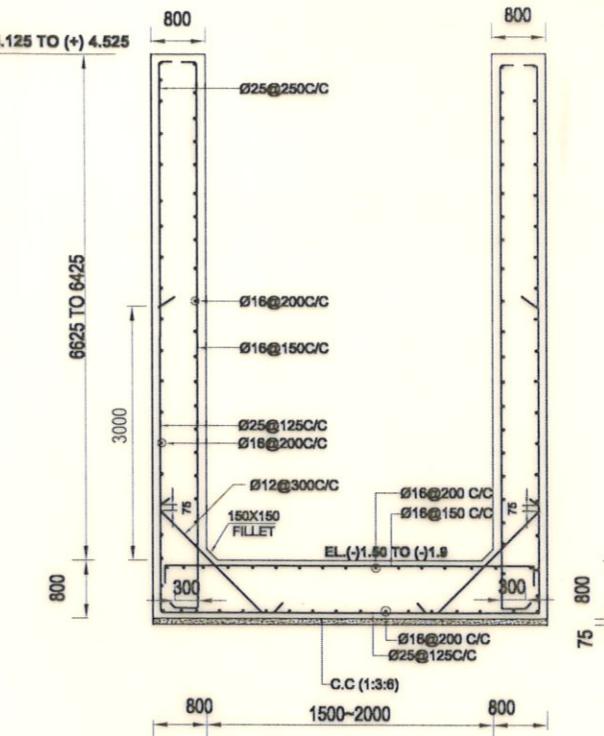
**SECTIONAL ELEVATION OF C/S APRON AND WING WALL
(SECTION B-B)**



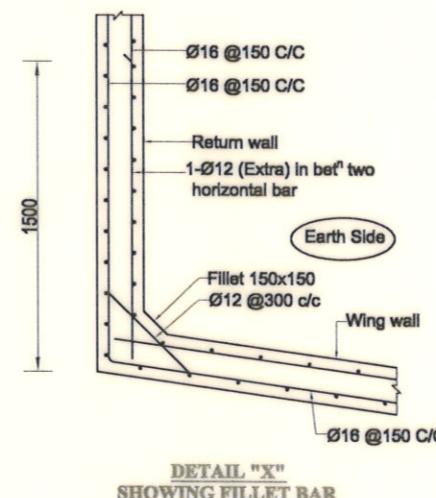
**PLAN OF C/S APRON & RETURN WALL
(CUT-OFF WALL NOT SHOWN)**



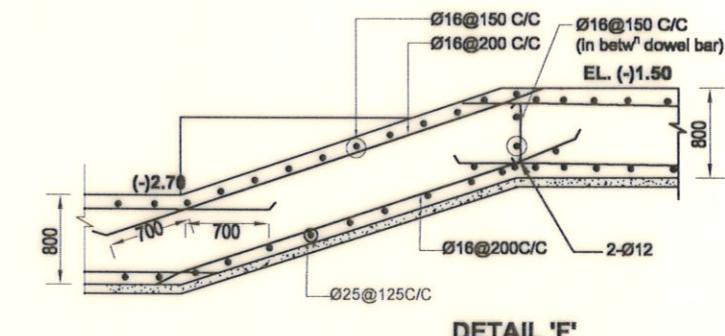
ДЕТАЛЬ "Р"



SECTION 5-5 (VALID FOR 1200 LENGTH IN WING WALL PORTION)



DETAIL "X"
SHOWING FILLET BAR



DETAIL 'F'

Bangladesh Water Development Board

Office of the Superintending Engineer
Design Circle-8

REHABILITATION OF POLDER-15 AT SATKHIRA DISTRICT

DESIGN OF REGULATOR 1-VENT AT DUMURIA KHAL KM 28.550 IN POLDER NO-15 UNDER " REHABILITATION OF POLDER 15 AT SATKHIRA DISTRICT" PROJECT UNDER SATKHIRA O&M DIVISION-1, BWDB, SATKHIRA.

REINFORCEMENT DETAILS OF C/S APRON AND WING WALL

DESIGNED BY :

APPROVED BY :

631

1

GRANGER BOUNDARIES

[Handwritten signature] 123

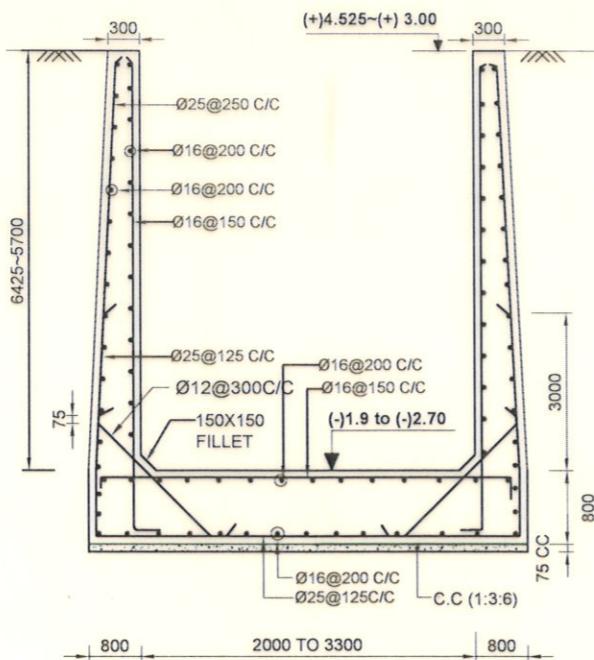
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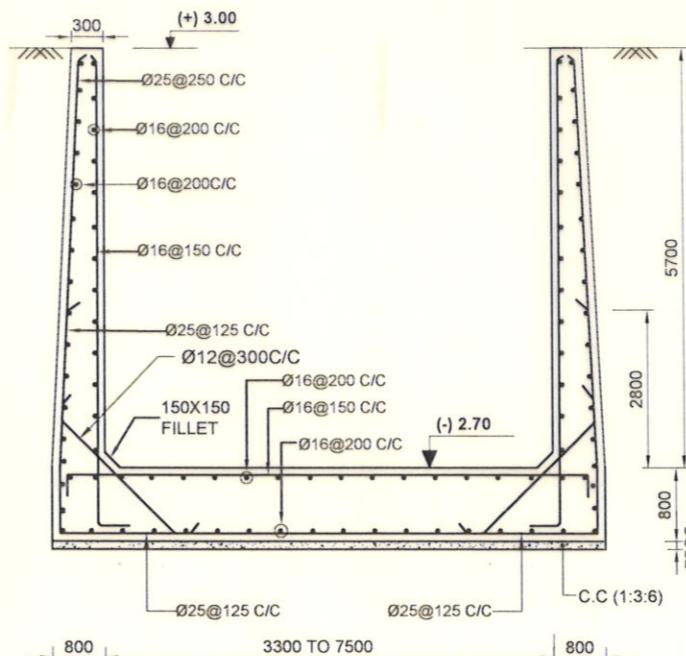
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(MOHAMMAD SAIF UDDIN), S

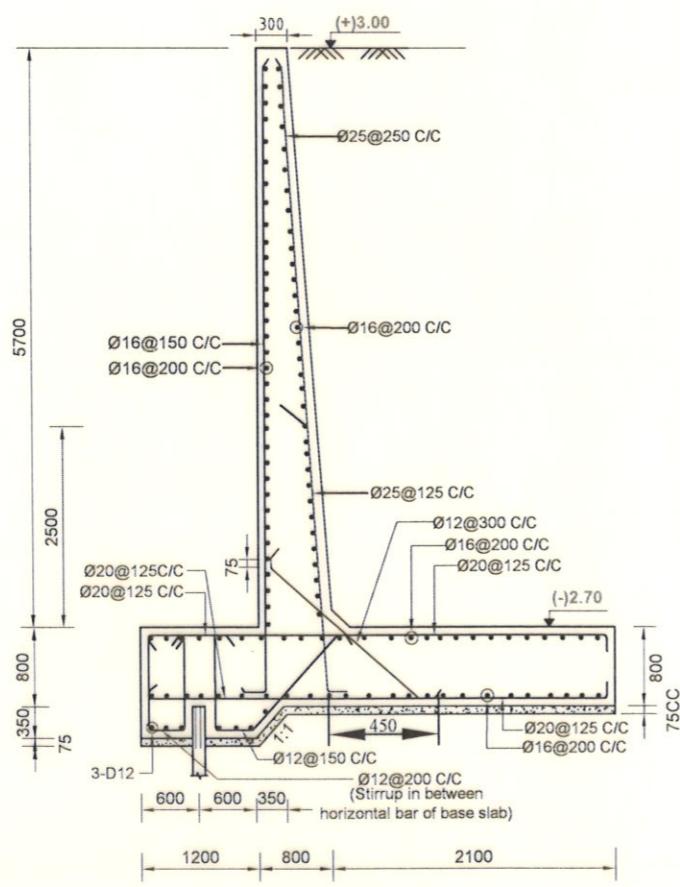
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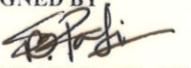
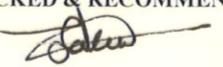
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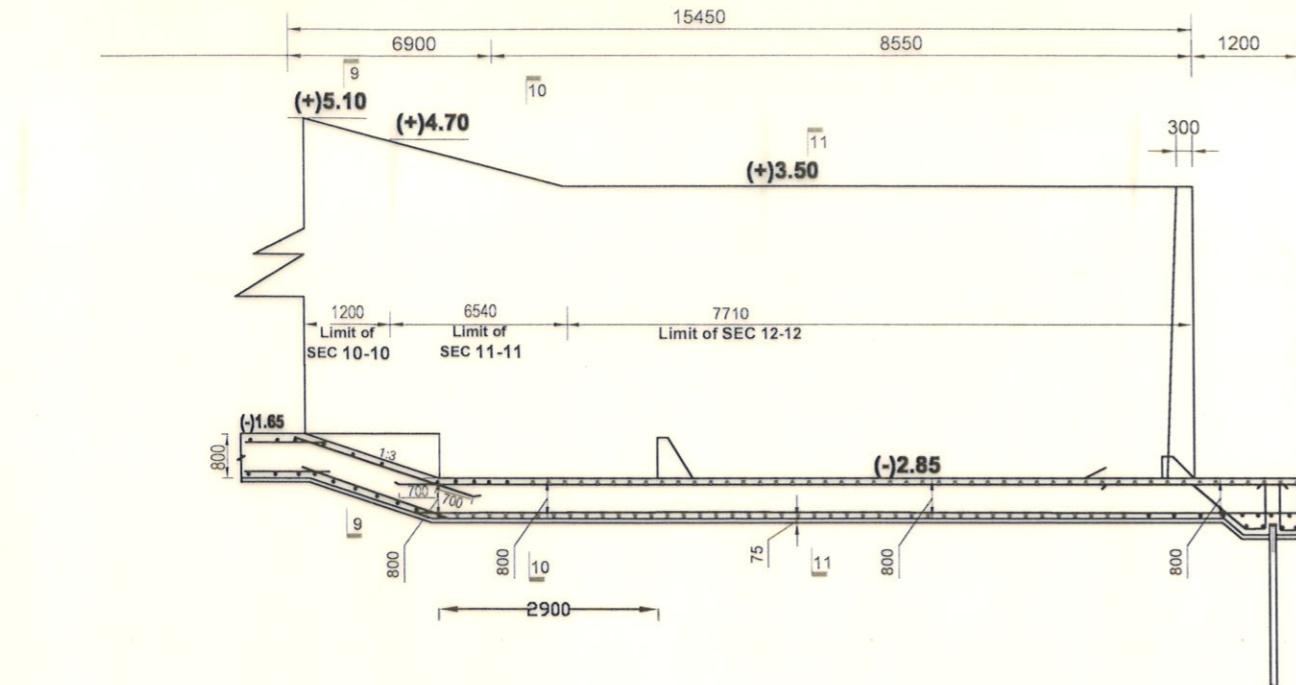


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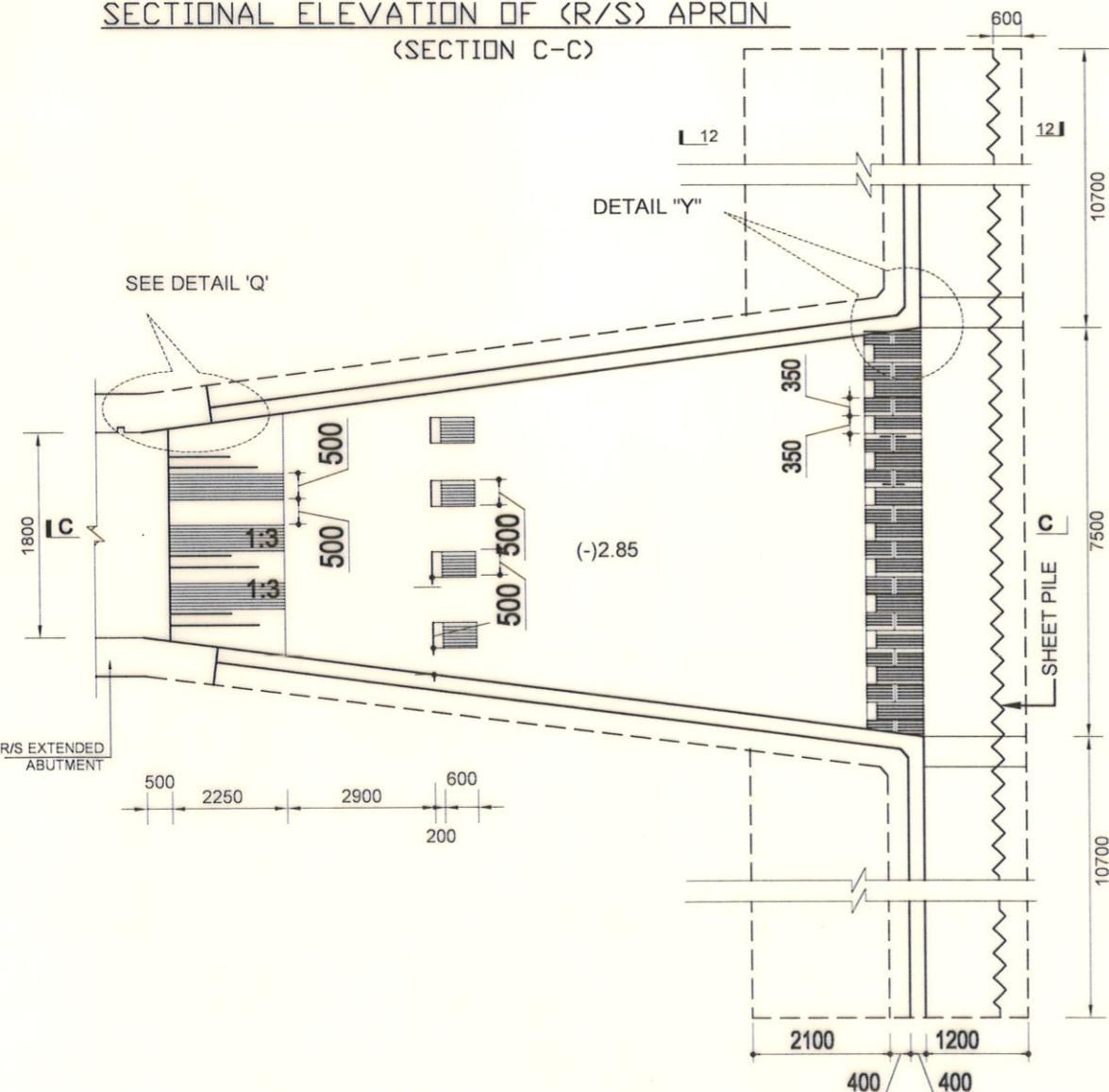


SECTION 8-8

Bangladesh Water Development Board Office of the Superintending Engineer Design Circle-8	
REHABILITATION OF POLDER-15 AT SATKHIRA DISTRICT	
DESIGN OF REGULATOR 1-VENT AT DUMURIA KHAL KM 28.550 IN POLDER NO-15 UNDER " REHABILITATION OF POLDER 15 AT SATKHIRA DISTRICT" PROJECT UNDER SATKHIRA O&M DIVISION-1, BWDB, SATKHIRA.	
REINFORCEMENT DETAILS OF C/S APRON, WING WALL & RETURN WALL	
DESIGNED BY:  (SAKIB BIN RAFI), AE	APPROVED BY:  (MOHAMMÁD SAIF UDDIN), SE
CHECKED & RECOMMENDED BY:  (JAKARIA PERVEZ), EE	
DATE:09-08-2023 DWG. NO.:DC-8-0396-11/22	

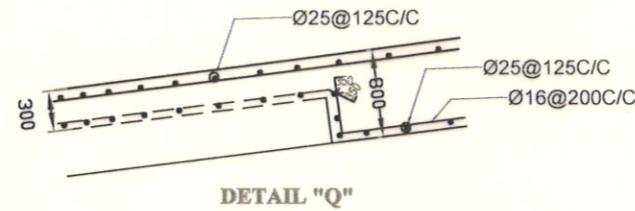


SECTIONAL ELEVATION OF (R/S) APRON
(SECTION C-C)

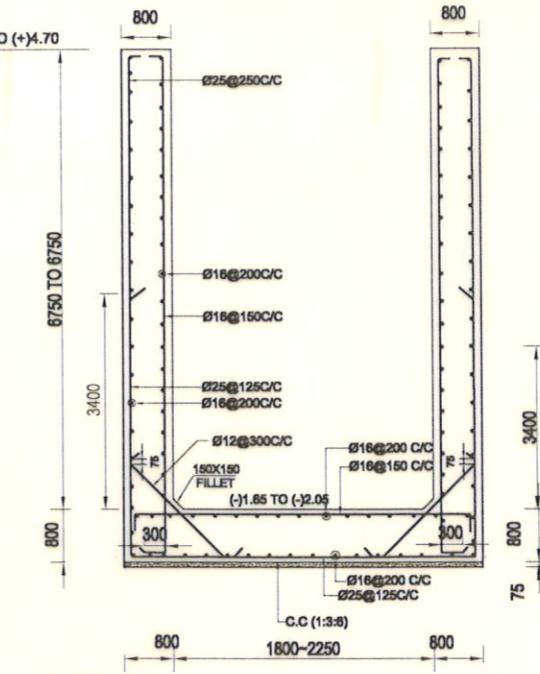


PLAN OF R/S APRON & RETURN WALL

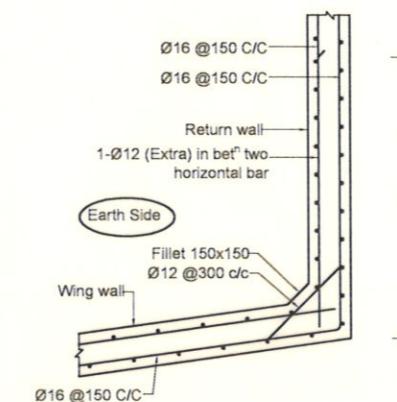
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DETAIL "Q"



SECTION 9-9 (VALID FOR 1200 LENGTH IN WING WALL PORTION)



DETAIL "Y"
SHOWING FILLET BAF

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Bangladesh Water Development Board

Office of the Superintending Engineer
Design Circle-8

REHABILITATION OF POLDER-15 AT SATKHIRA DISTRICT

**DESIGN OF REGULATOR 1-VENT AT DUMURIA KHAL KM 28.550 IN POLDER
NO-15 UNDER " REHABILITATION OF POLDER 15 AT SATKHIRA DISTRICT"
PROJECT UNDER SATKHIRA O&M DIVISION-1, BWDB, SATKHIRA.**

REINFORCEMENT DETAILS OF R/S APRON AND WING WALL

DESIGNED BY :

APPROVED BY :

— 1 —

[Signature]

(SAKIB BIN RAFI), AE

CHECKED & RECOMMENDED

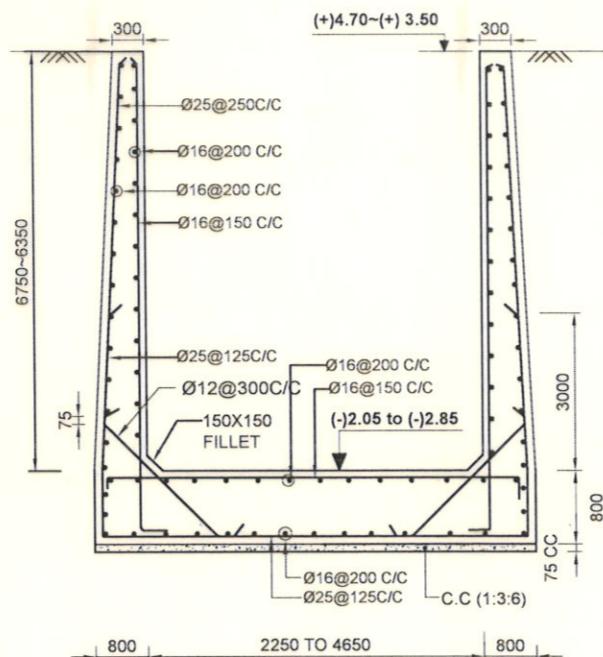
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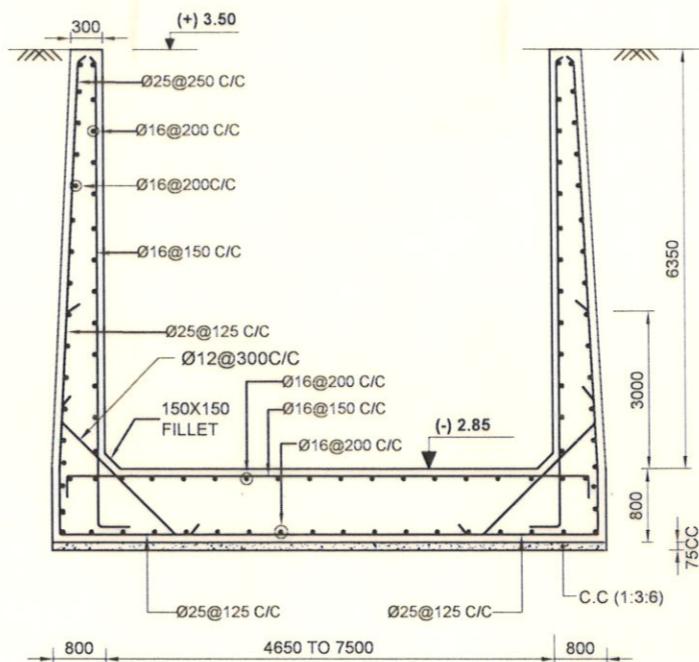
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9/8/23

(MOHAMMAD SAIF UDDIN), SE

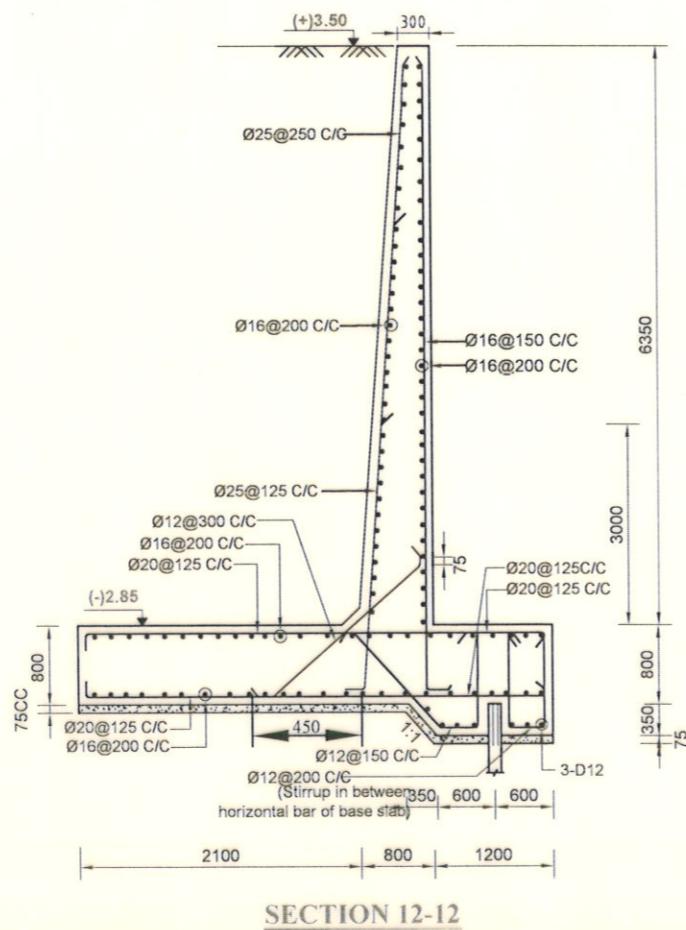
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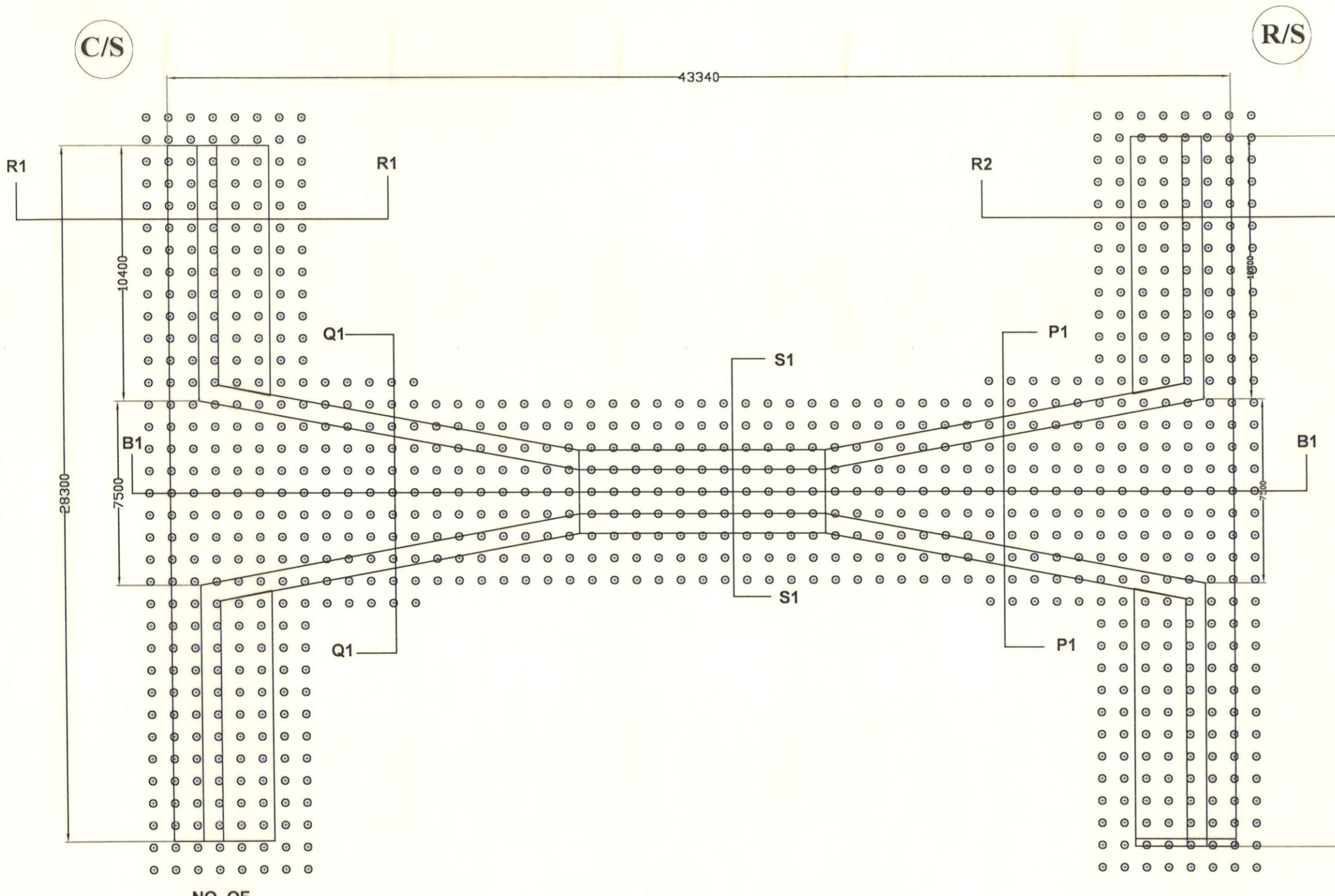


SECTION 11-11 (VALID FOR 7710 LENGTH)



SECTION 12-12

Bangladesh Water Development Board	
Office of the Superintending Engineer Design Circle-8	
REHABILITATION OF POLDER-15 AT SATKHIRA DISTRICT	
DESIGN OF REGULATOR I-VENT AT DUMURIA KHAL KM 28.550 IN POLDER NO-15 UNDER " REHABILITATION OF POLDER 15 AT SATKHIRA DISTRICT" PROJECT UNDER SATKHIRA O&M DIVISION-1, BWDB, SATKHIRA.	
REINFORCEMENT DETAILS OF R/S APRON, WING WALL & RETURN WALL	
DESIGNED BY : (SAKIB BIN RAFI), AE	APPROVED BY : (MOHAMMAD SAIF UDDIN), SE
CHECKED & RECOMMENDED BY : (JAKARIA PERVEZ), EE	
DATE:09-08-2023 DWG. NO.:DC-8-0396-13/22	



NO. OF
SAND PILE
 $35 \times 8 = 280$

SECTION	PAGE
B1-B1	15/22
S1-S1	15/22
R1-R1	16/22
R2-R2	16/22
P1-P1	16/22
Q1-Q1	16/22

NO. OF
SAND PILE
 $11 \times 5 \times 2 + 25 \times 9 = 335$

TOTAL NO. OF
CAST IN SITU PILE
 $280 + 335 + 280 = 895$

NO. OF
SAND PILE
 $35 \times 8 = 280$

Bangladesh Water Development Board

Office of the Superintending Engineer
Design Circle-8

REHABILITATION OF POLDER-15 AT SATKHIRA DISTRICT

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POLDER NO-15 UNDER " REHABILITATION OF POLDER 15 AT
SATKHIRA DISTRICT" PROJECT UNDER SATKHIRA O&M DIVISION-1,
BWDB, SATKHIRA.

PLAN OF PILE

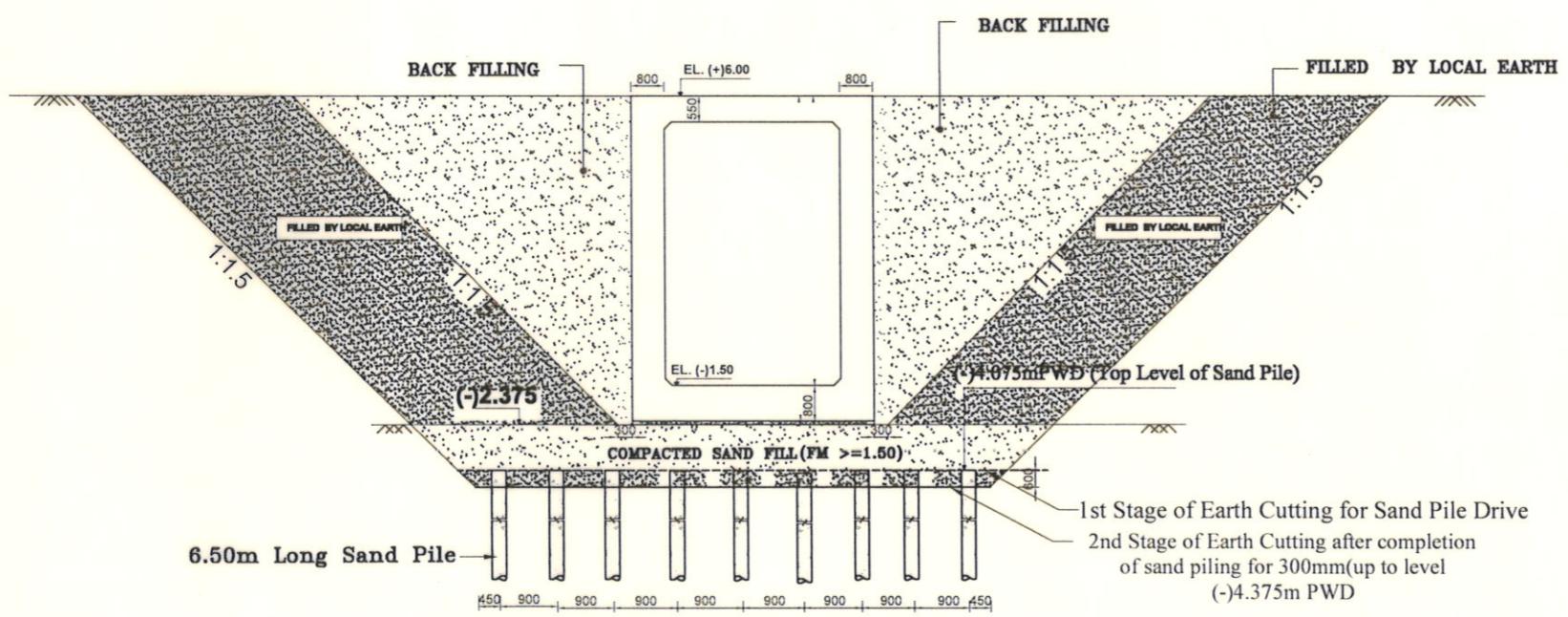
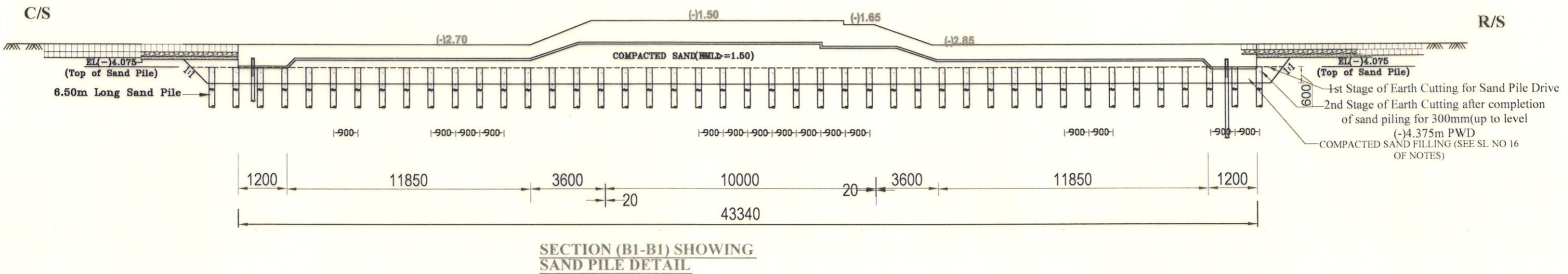
DESIGNED BY :

(SAKIB BIN RAFI), AE

APPROVED BY :

(MOHAMMAD SAIF UDDIN), SE

DATE:09-08-2023 DWG. NO.:DC-8-0396-14/22



SECTION S1-S1

Scale : Not To Scale

Bangladesh Water Development Board
 Office of the Superintending Engineer
 Design Circle-8

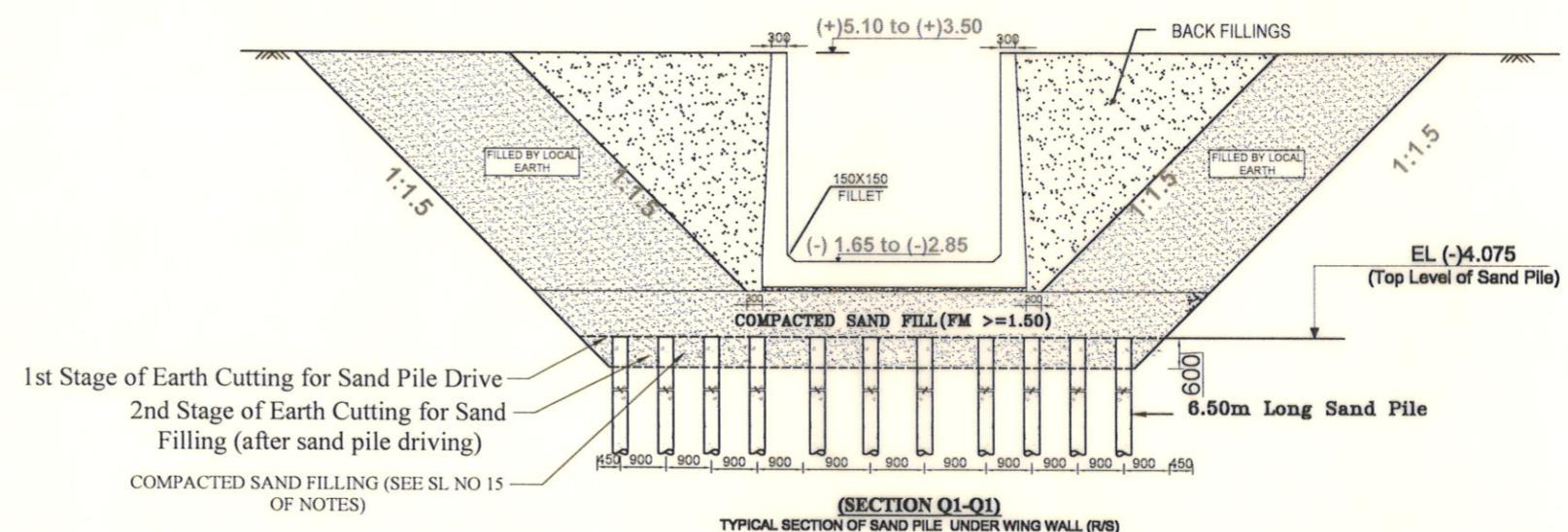
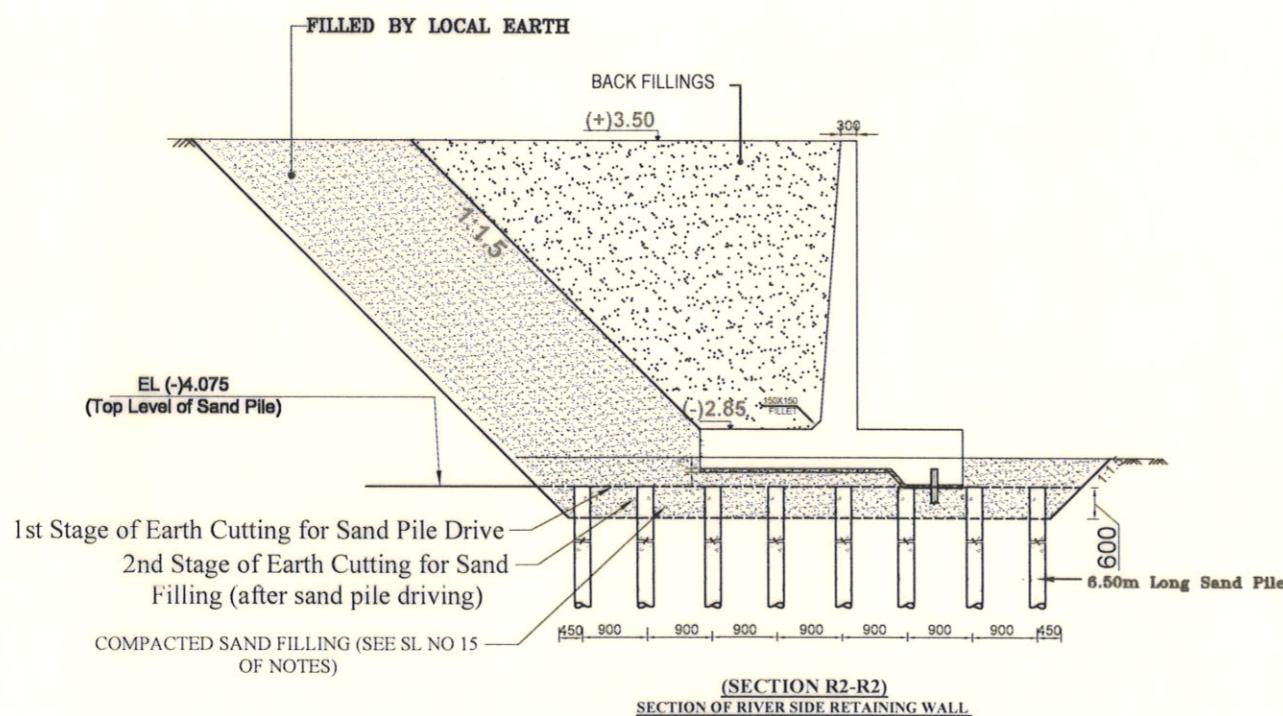
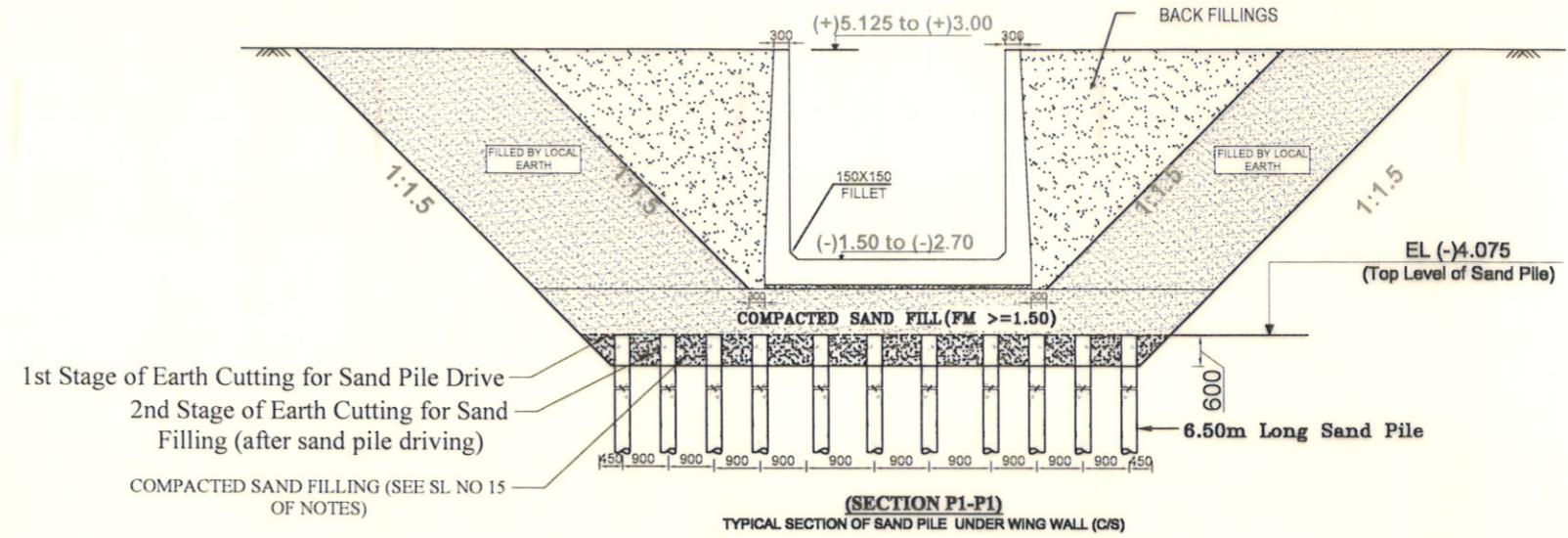
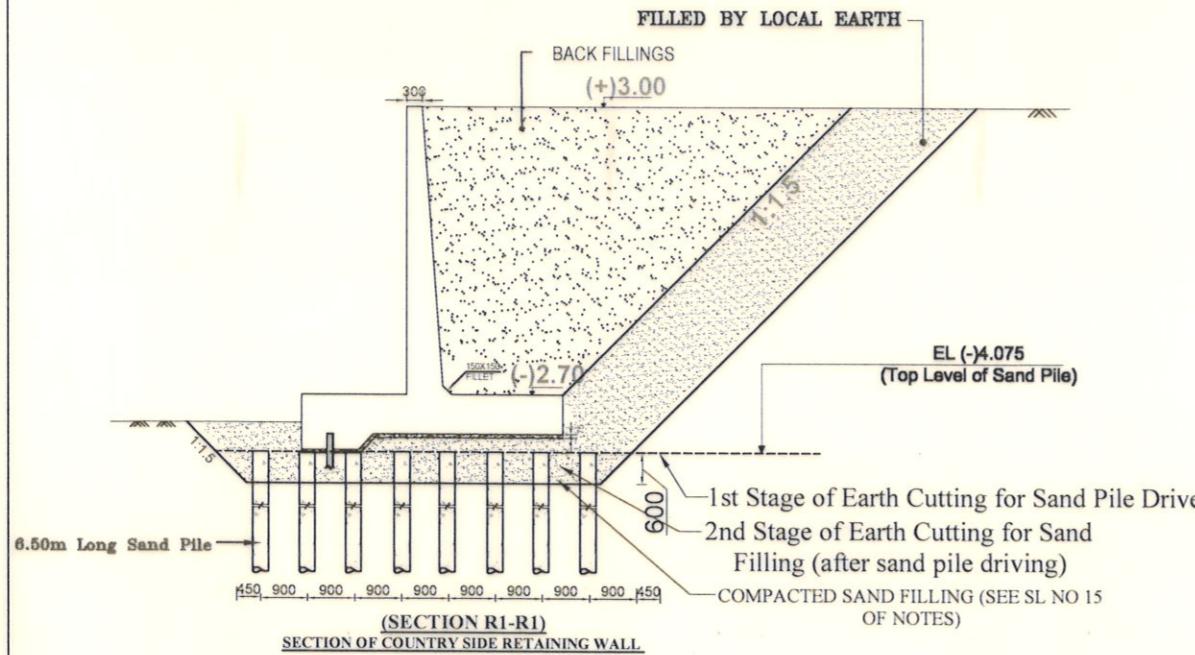
REHABILITATION OF POLDER-15 AT SATKHIRA DISTRICT

DESIGN OF REGULATOR 1-VENT AT DUMURIA KHAL KM 28.550 IN POLDER NO-15 UNDER " REHABILITATION OF POLDER 15 AT SATKHIRA DISTRICT" PROJECT UNDER SATKHIRA O&M DIVISION-1, BWDB, SATKHIRA.

SAND PILE DETAILS

DESIGNED BY :	APPROVED BY :
(SAKIB BIN RAFI), AE 	(MOHAMMAD SAIF UDDIN), SE  9/8/23
CHECKED & RECOMMENDED BY : 	(JAKARIA PERVEZ), EE

DATE:09-08-2023 DWG. NO.:DC-8-0396-15/22



Scale : Not To Scale

Bangladesh Water Development Board
Office of the Superintending Engineer
Design Circle-8

REHABILITATION OF POLDER-15 AT SATKHIRA DISTRICT

DESIGN OF REGULATOR 1-VENT AT DUMURIA KHAL KM 28.550 IN POLDER NO-15 UNDER " REHABILITATION OF POLDER 15 AT SATKHIRA DISTRICT" PROJECT UNDER SATKHIRA O&M DIVISION-1, BWDB, SATKHIRA.

SAND PILE DETAILS

DESIGNED BY :

(SAKIB BIN RAFI), AE

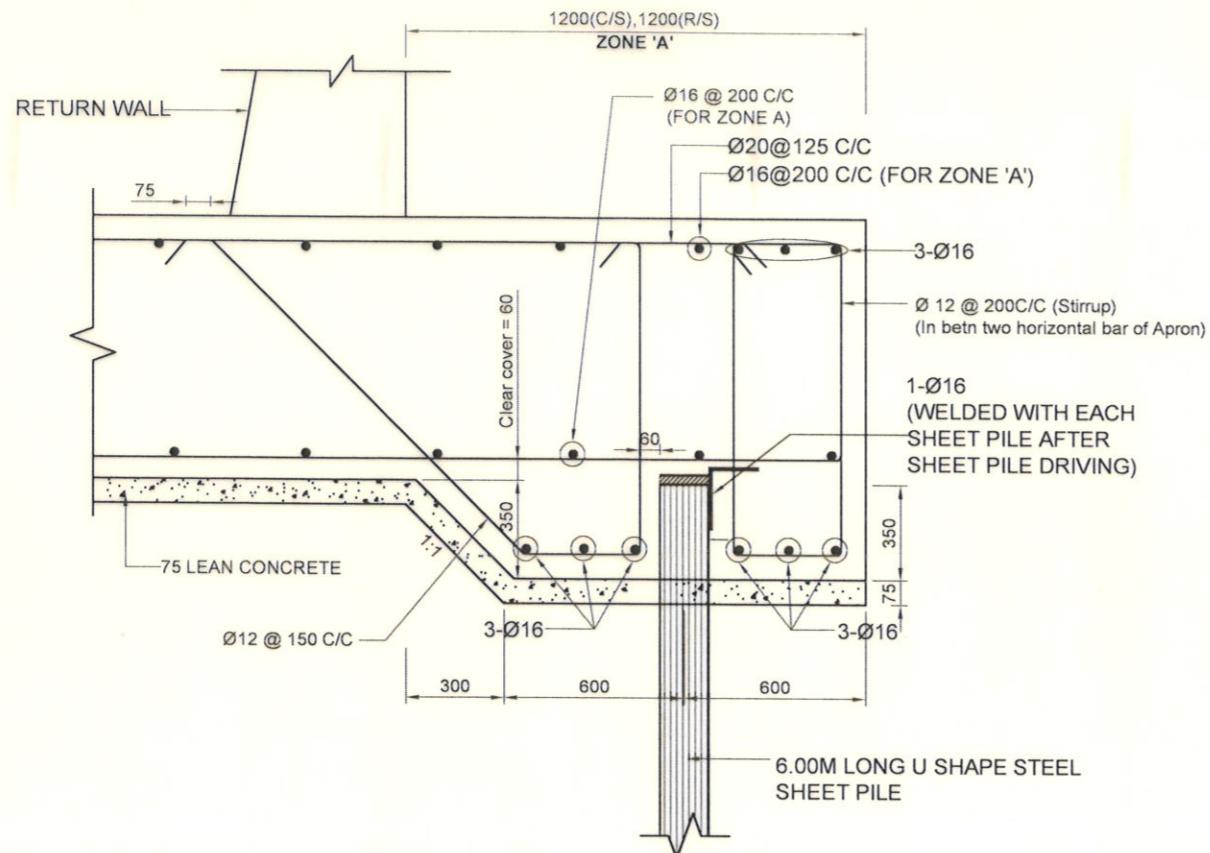
APPROVED BY :

(MOHAMMAD SAIF UDDIN), SE

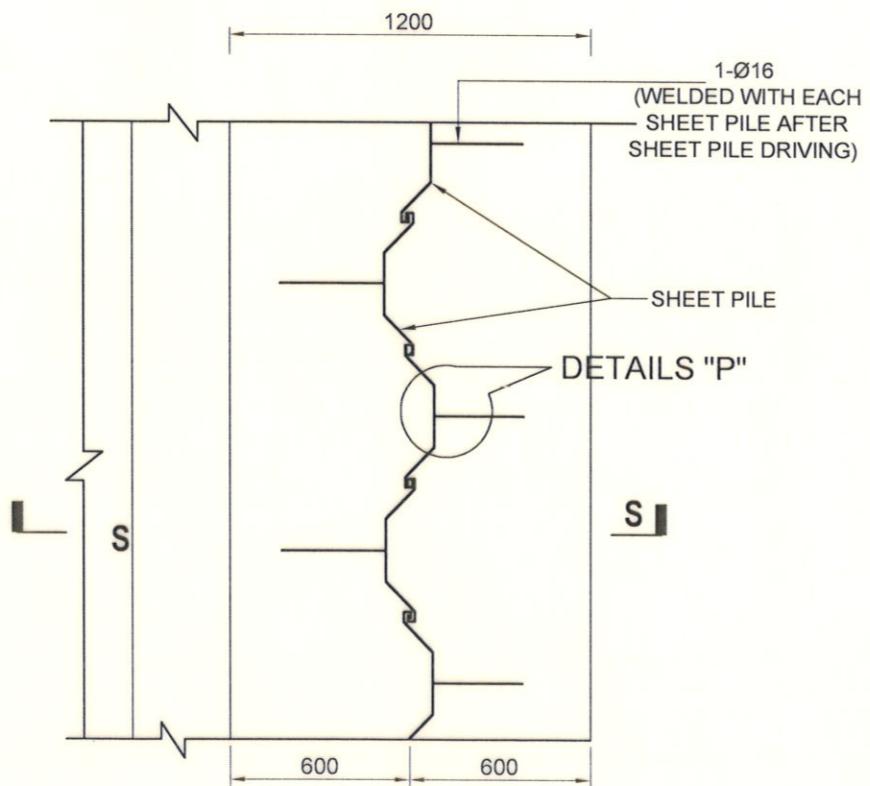
CHECKED & RECOMMENDED BY :

(JAKARIA PERVEZ), EE

DATE:09-08-2023 DWG. NO.:DC-8-0396-16/22

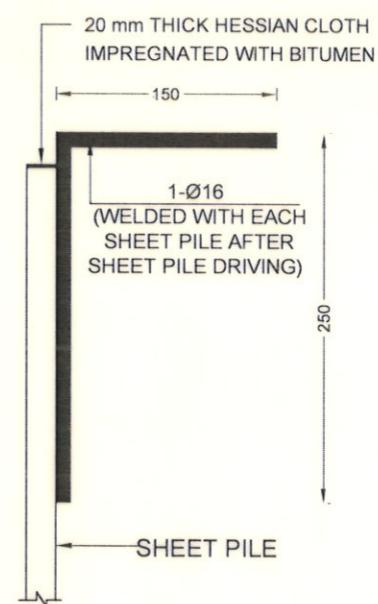


**DETAILS OF SHEET PILE CAP
(UNDER APRON)
(SECTION S-S)**



LAYOUT PLAN OF SHEET PILE

Scale : Not To Scale



DETAILS 'P'

Bangladesh Water Development Board

Office of the Superintending Engineer
Design Circle-8

REHABILITATION OF POLDER-15 AT SATKHIRA DISTRICT

DESIGN OF REGULATOR 1-VENT AT DUMURIA KHAL KM 28.550 IN POLDER NO-15 UNDER "REHABILITATION OF POLDER 15 AT SATKHIRA DISTRICT" PROJECT UNDER SATKHIRA O&M DIVISION-1, BWDB, SATKHIRA.

DETAIL OF SHEET PILE & OTHERS

DESIGNED BY :

(SAKIB BIN RAFI), AE

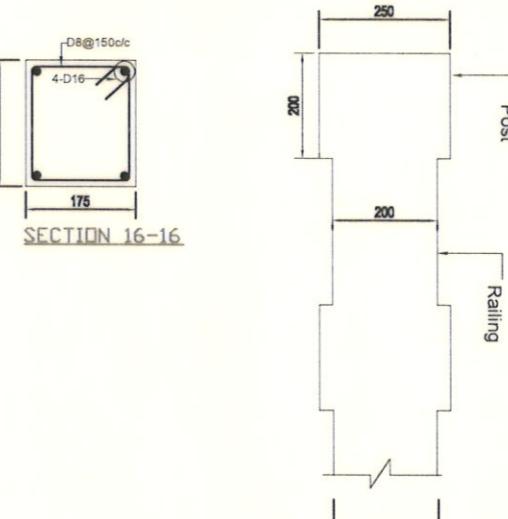
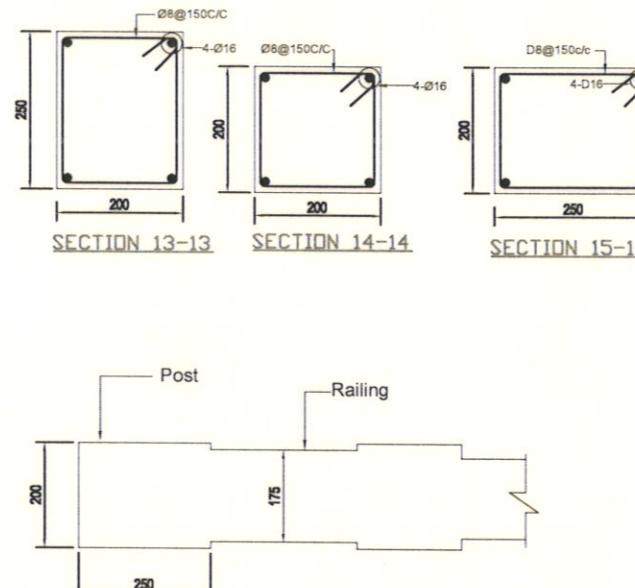
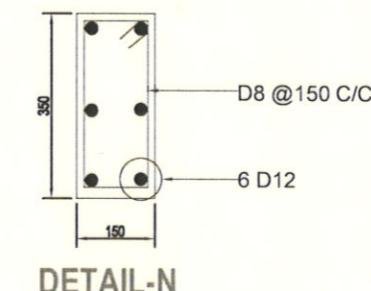
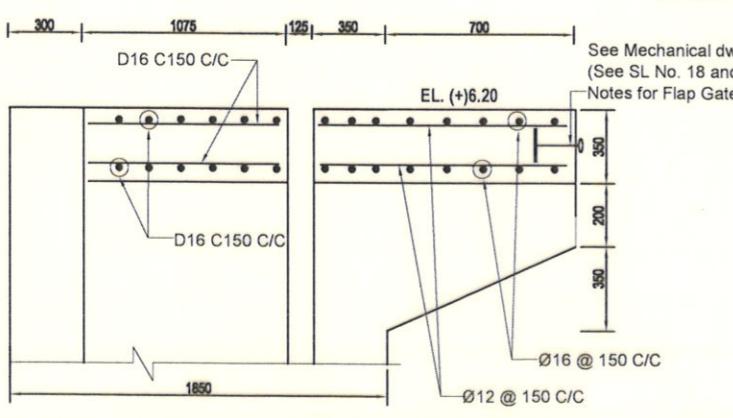
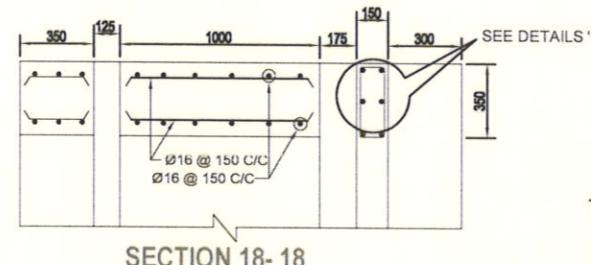
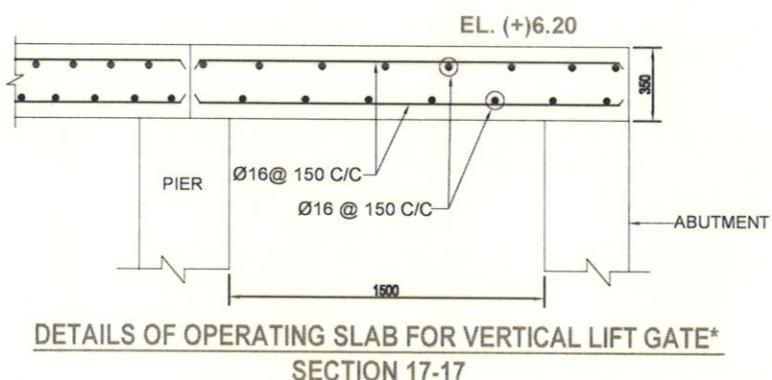
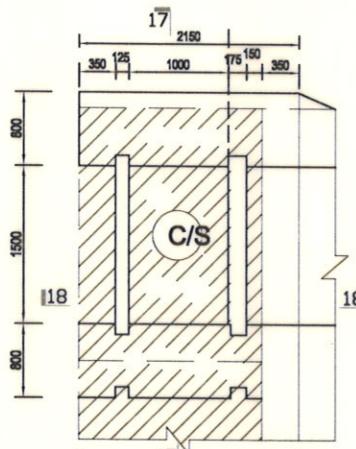
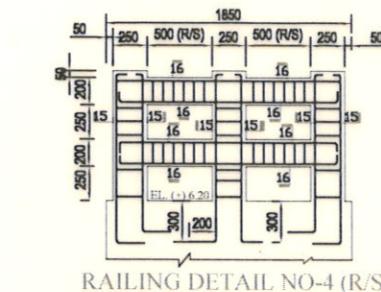
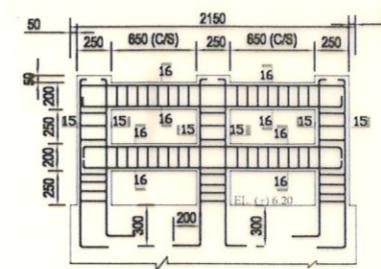
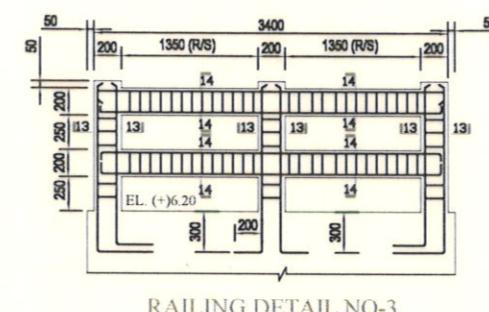
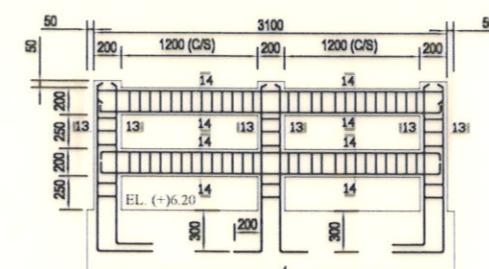
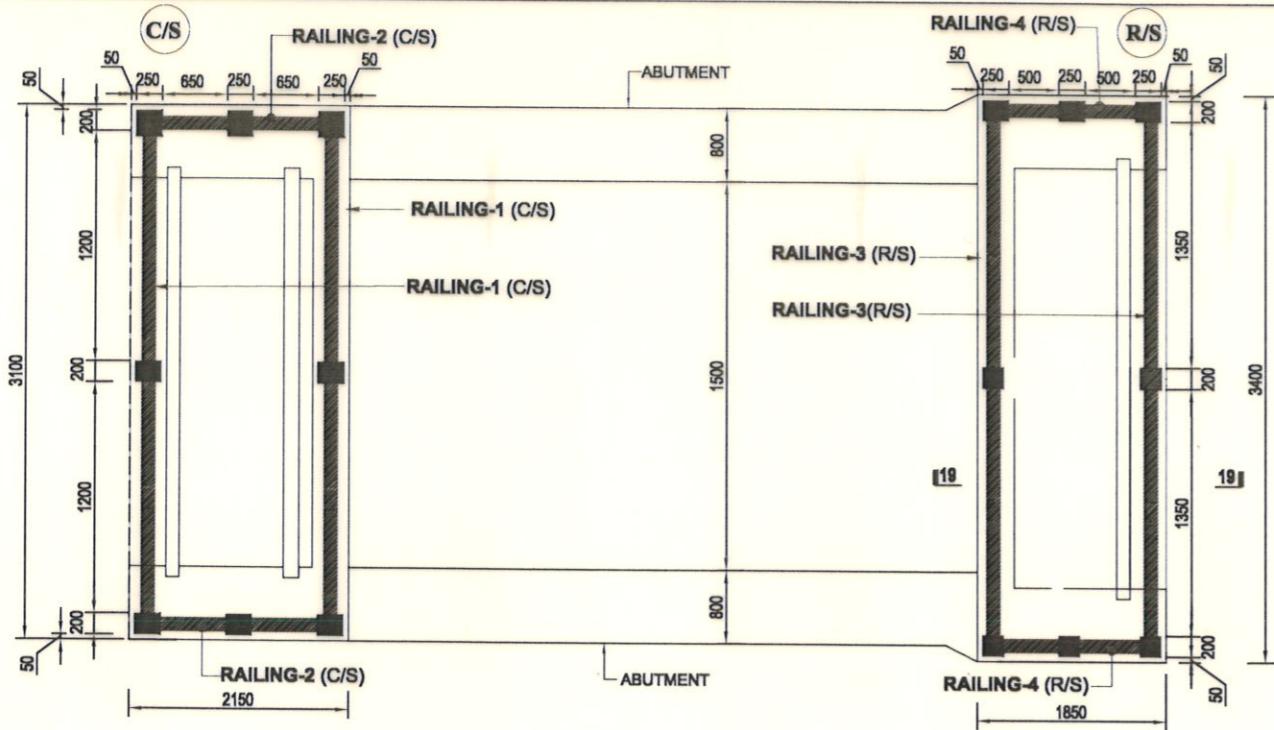
APPROVED BY :

(MOHAMMAD SAIF UDDIN), SE

CHECKED & APPROVED BY :

(JAKARIA PERVEZ), EE

DATE:09-08-2023 DWG. NO.:DC-8-0396-17/22



**RAILING LAYOUT
(FOR RAILING 1&3)**

Bangladesh Water Development Board

Office of the Superintending Engineer
Design Circle-8

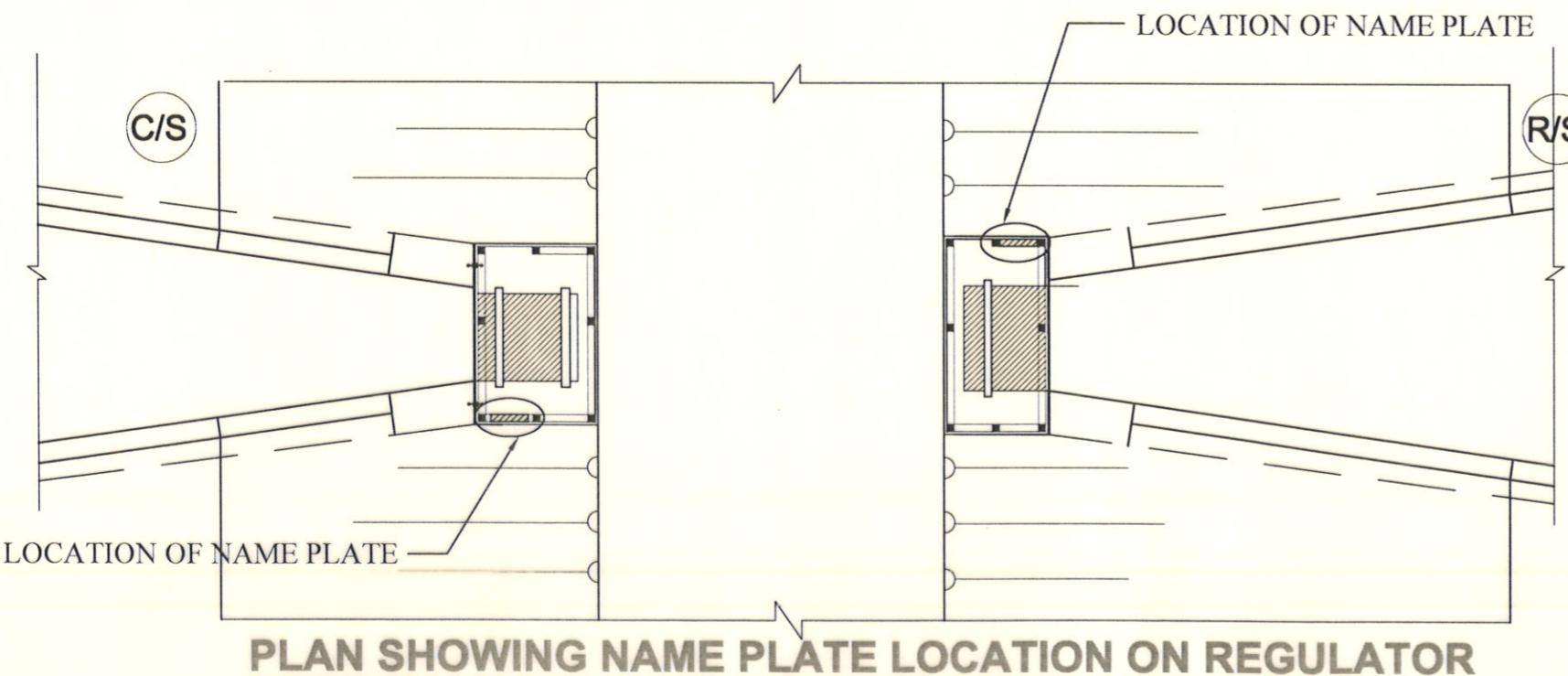
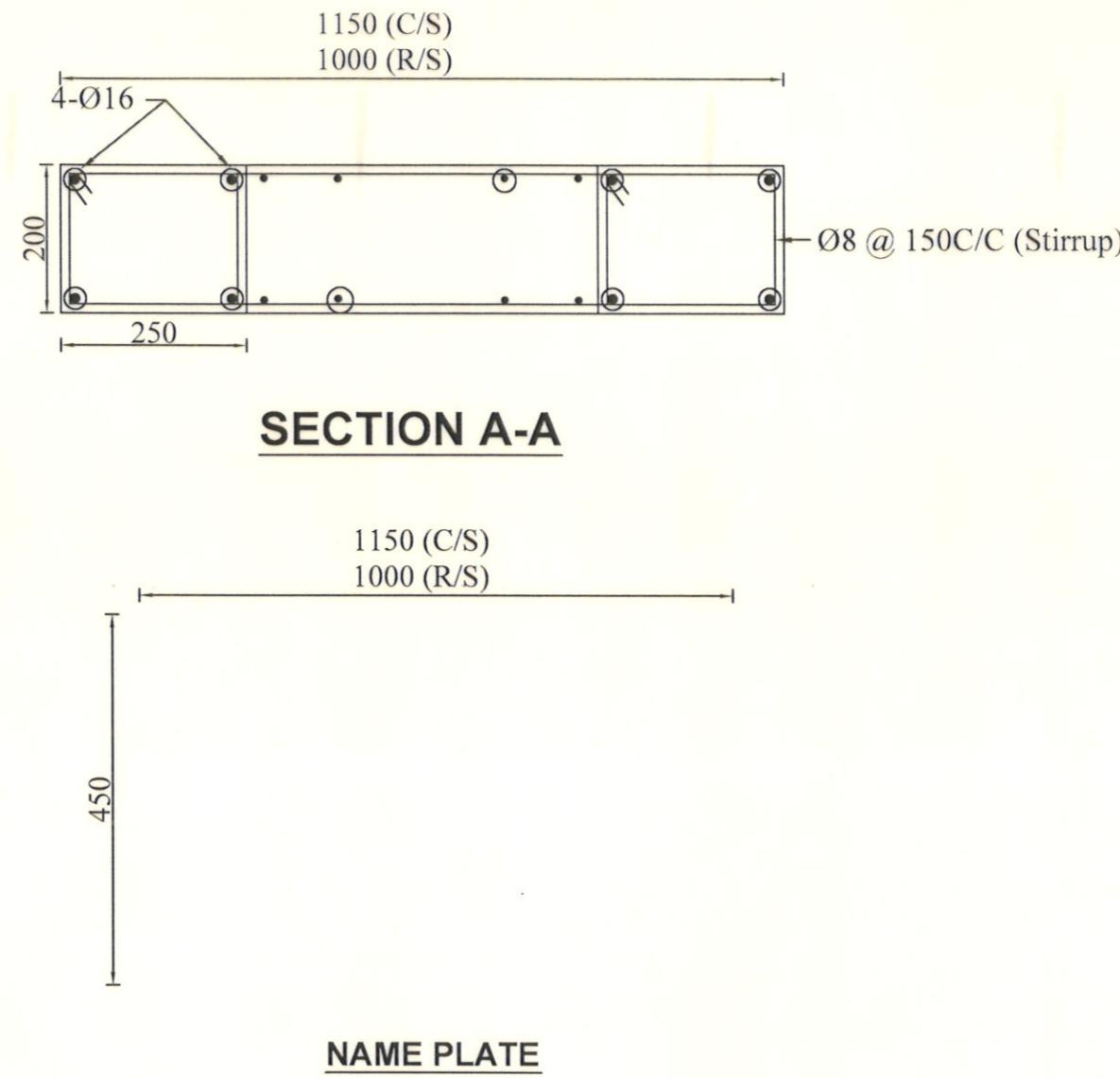
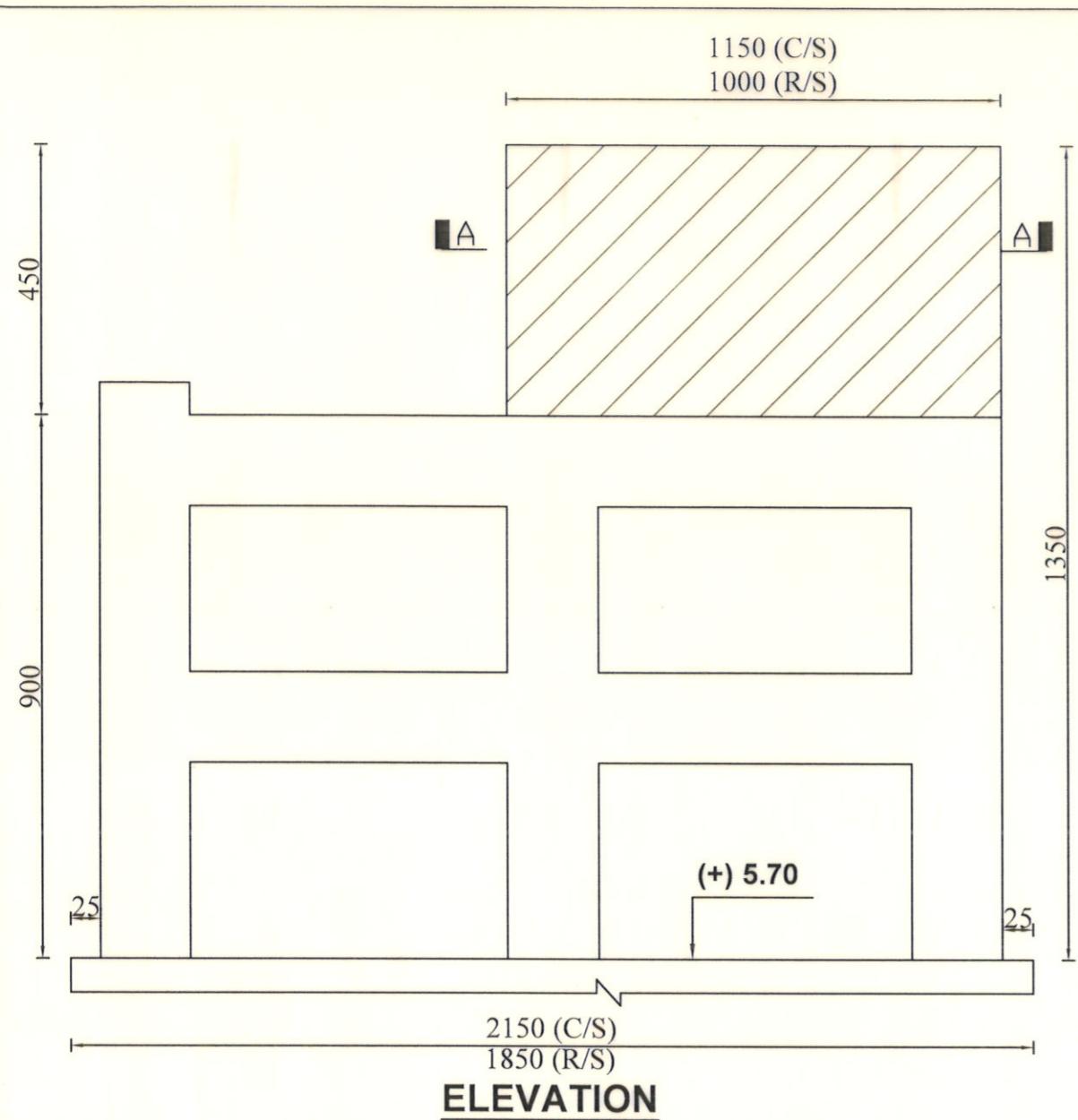
REHABILITATION OF POLDER-15 AT SATKHIRA DISTRICT

DESIGN OF REGULATOR 1-VENT AT DUMURIA KHAL KM 28.550 IN
POLDER NO-15 UNDER "REHABILITATION OF POLDER 15 AT
SATKHIRA DISTRICT" PROJECT UNDER SATKHIRA O&M
DIVISION-1, BWDB, SATKHIRA.

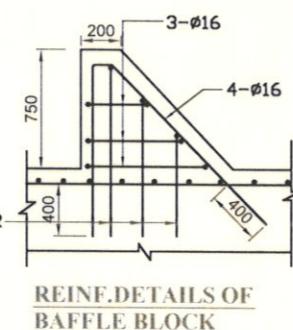
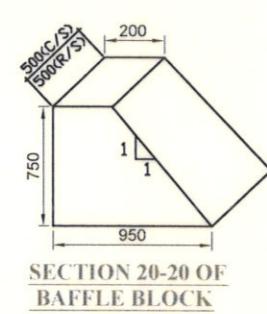
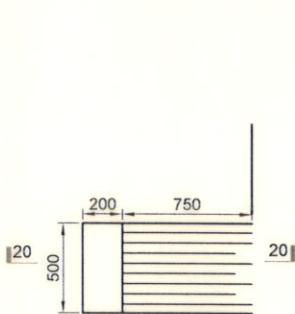
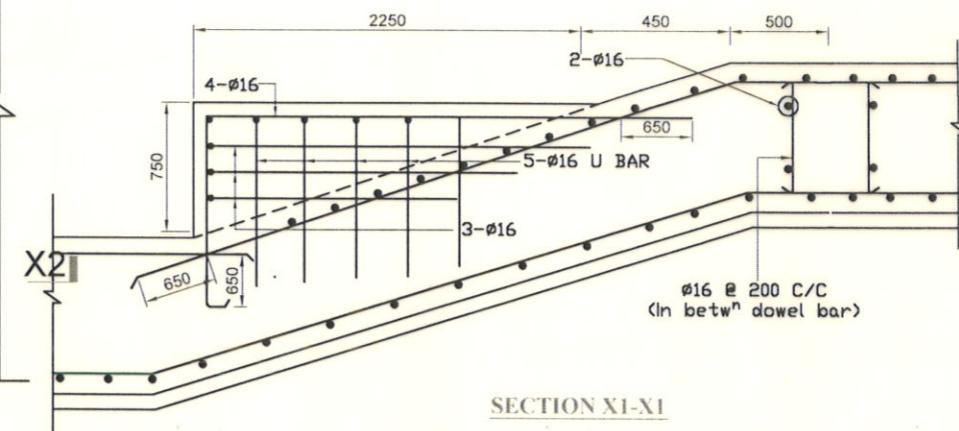
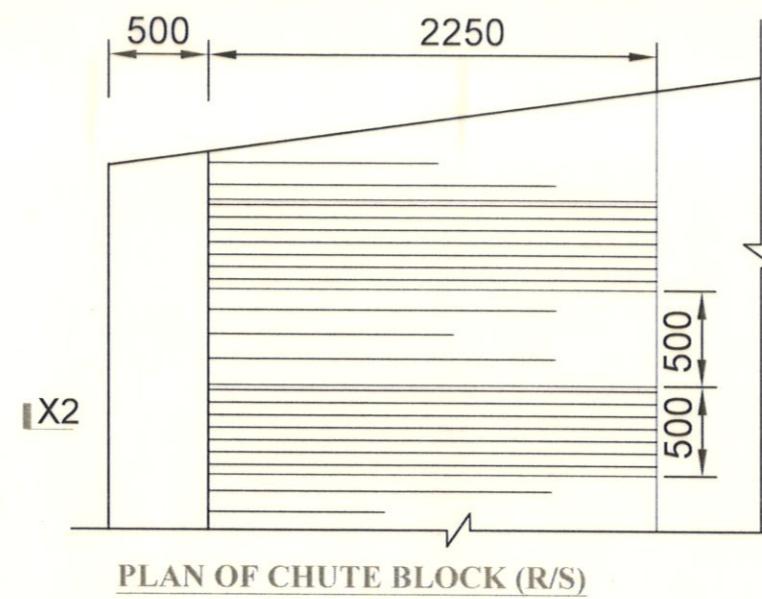
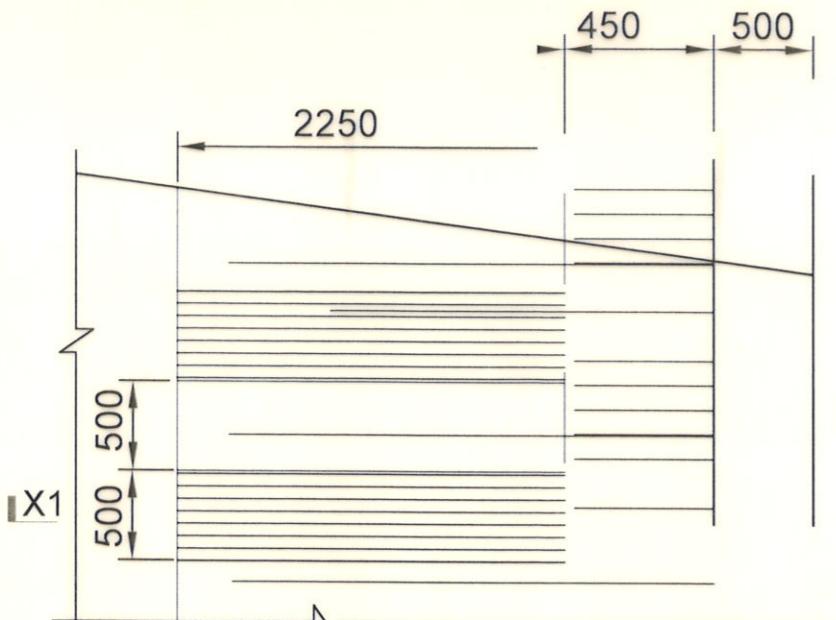
RAILING REINFORCEMENT DETAIL

DESIGNED BY:
[Signature]
(SAKIB BIN RAFI), AE
CHECKED & RECOMMENDED BY:
[Signature]
(JAKARIA PERVEZ), EE

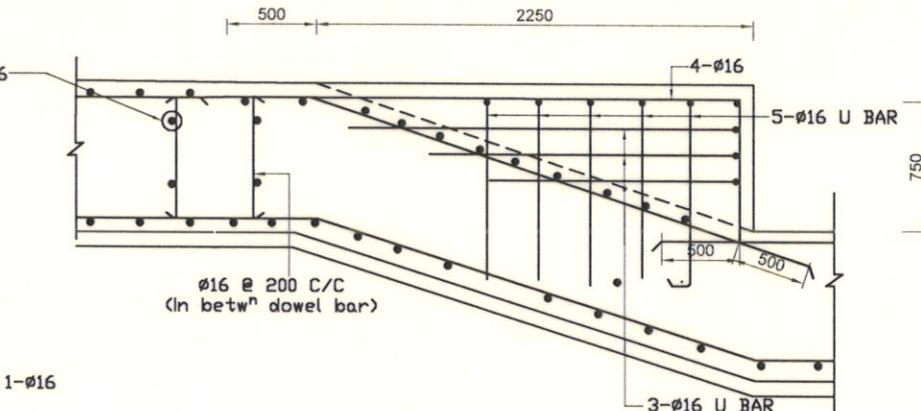
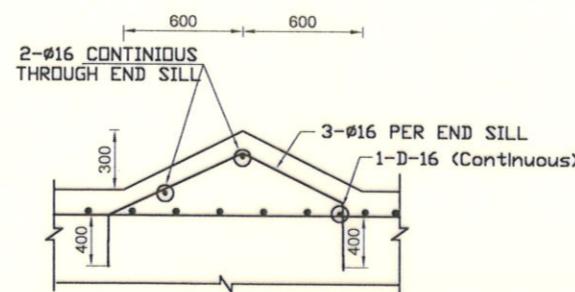
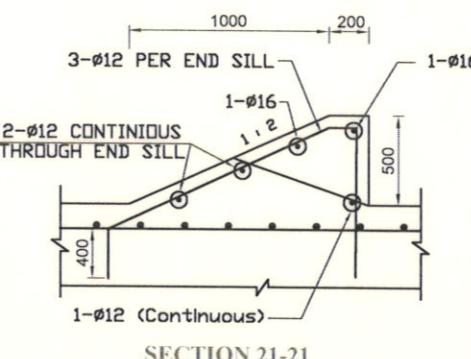
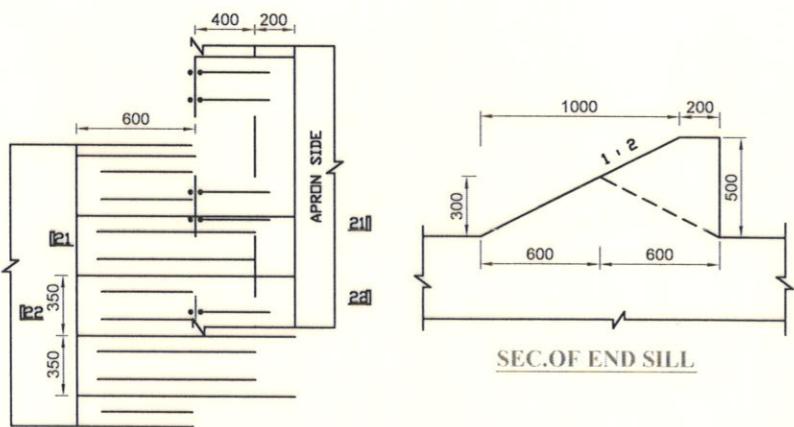
APPROVED BY:
[Signature]
(MOHAMMAD SAIF UDDIN), SE
DATE:09-08-2023 DWG. NO.:DC-8-0396-18/22

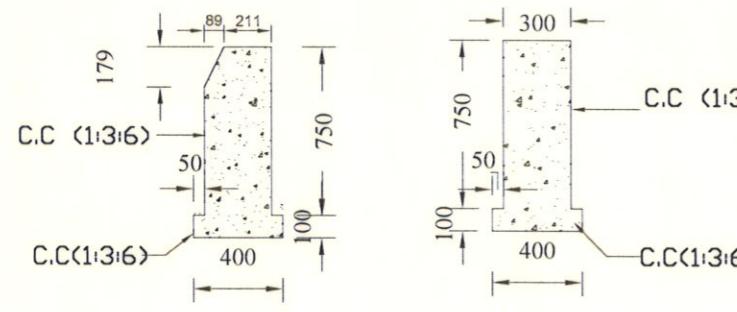
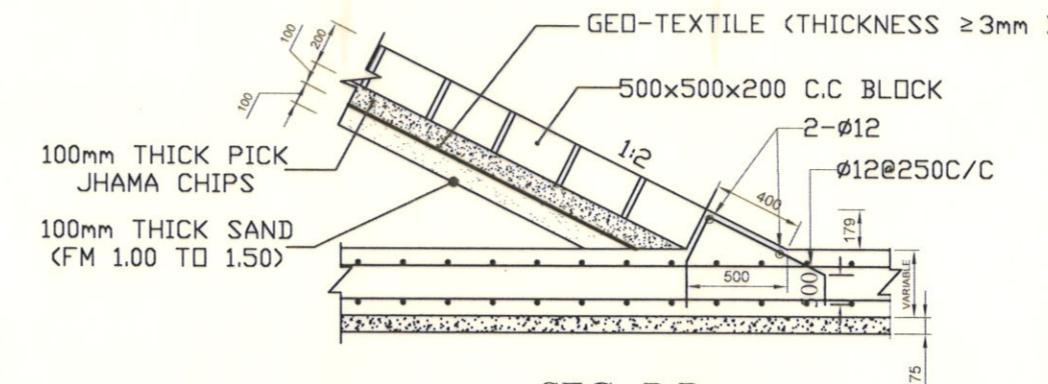
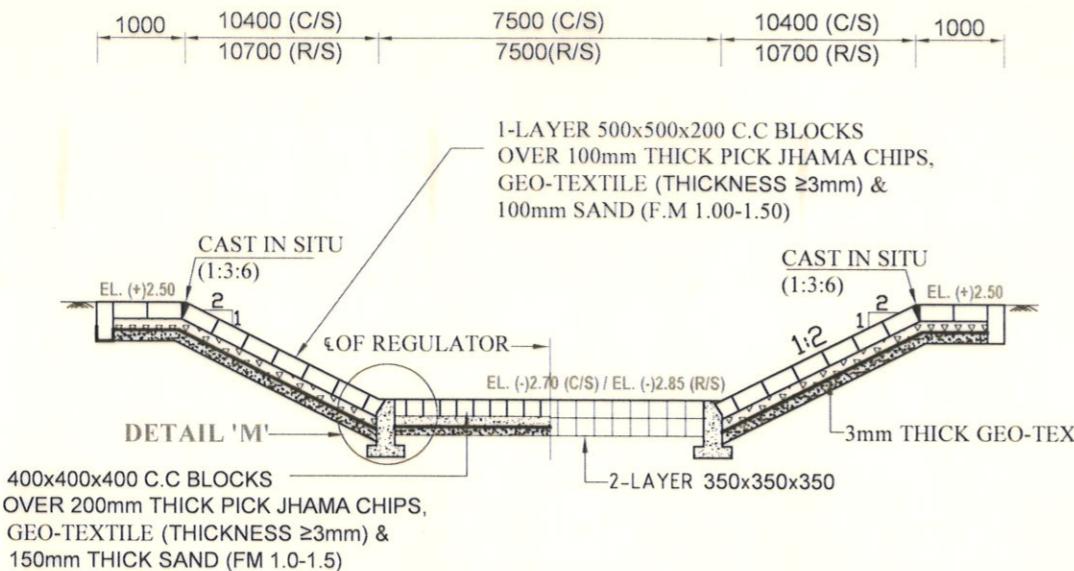


Bangladesh Water Development Board	
Office of the Superintending Engineer Design Circle-8	
REHABILITATION OF POLDER-15 AT SATKHIRA DISTRICT	
DESIGN OF REGULATOR 1-VENT AT DUMURIA KHAL KM 28.550 IN POLDER NO-15 UNDER " REHABILITATION OF POLDER 15 AT SATKHIRA DISTRICT" PROJECT UNDER SATKHIRA O&M DIVISION-1, BWDB, SATKHIRA.	
PLAN, ELEVATION & DETAILS OF NAME PLATE	
DESIGNED BY: 	APPROVED BY:
(SAKIB BIN RAFI), AE	
CHECKED & RECOMMENDED BY: 	
(JAKARIA PERVEZ), EE	(MOHAMMAD SAIF UDDIN), SE
DATE:09-08-2023 DWG. NO.:DC-8-0396-19/22	

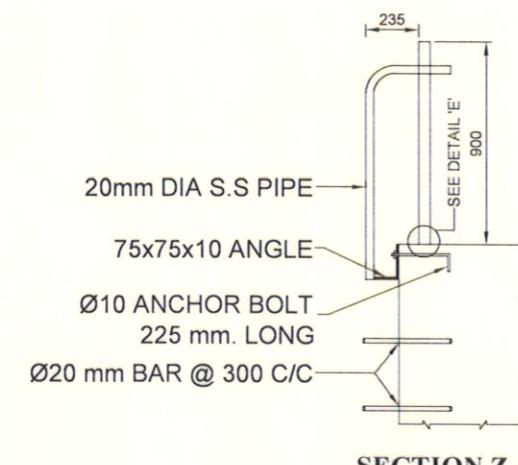
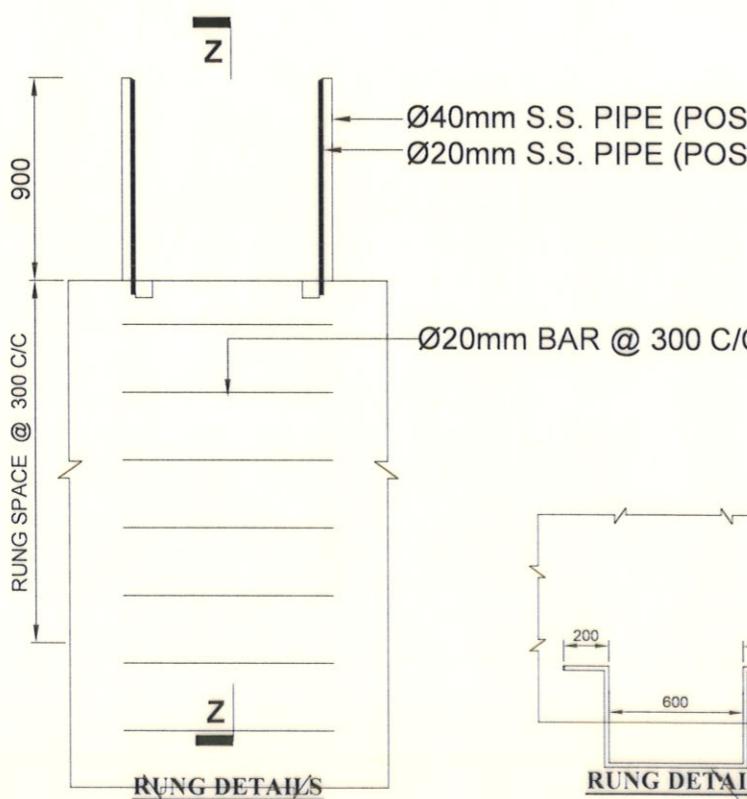
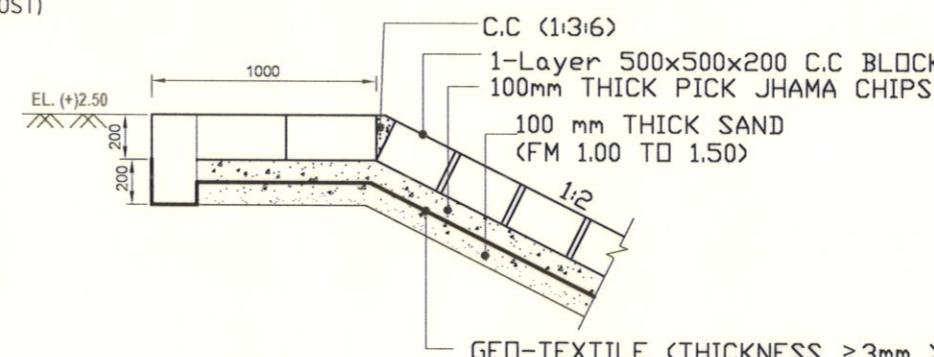
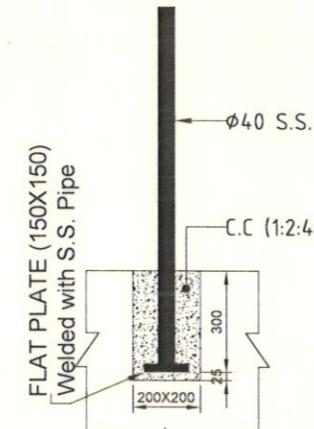


BAFFLE BLOCK DETAILS
(Concrete Outline & Reinforcement)



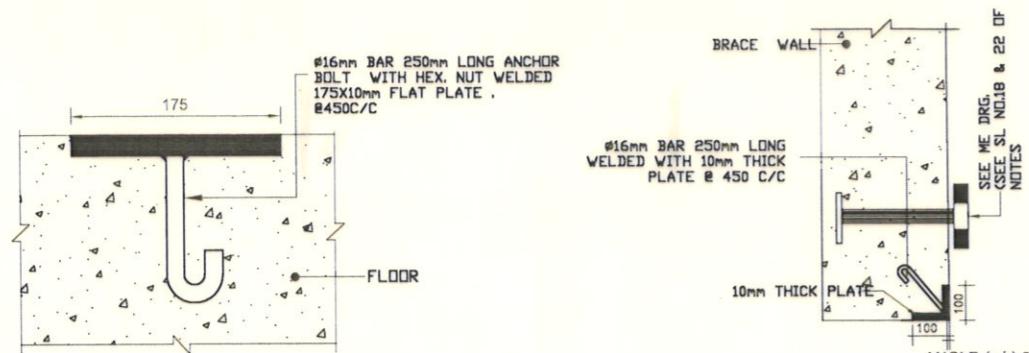


SECTION M-M
(SEE PLAN)

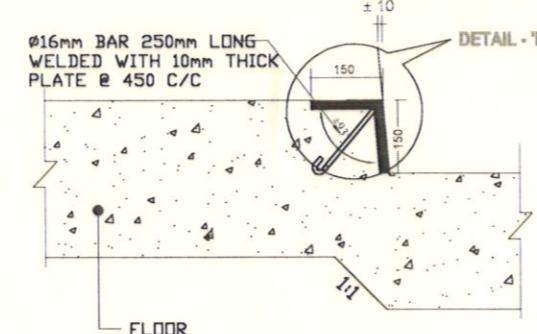


Scale : Not To Scale

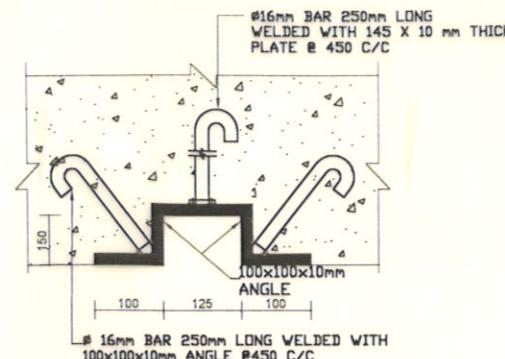
Bangladesh Water Development Board	
Office of the Superintending Engineer Design Circle-8	
REHABILITATION OF POLDER-15 AT SATKHIRA DISTRICT	
DESIGN OF REGULATOR 1-VENT AT DUMURIA KHAL KM 28.550 IN POLDER NO-15 UNDER " REHABILITATION OF POLDER 15 AT SATKHIRA DISTRICT" PROJECT UNDER SATKHIRA O&M DIVISION-1, BWDB, SATKHIRA.	
DETAIL OF PROTECTIVE WORKS & OTHERS	
DESIGNED BY :	APPROVED BY :
(SAKIB BIN RAFI), AE	(MOHAMMAD SAIF UDDIN), SE
CHECKED & RECOMMENDED BY :	
(JAKARIA PERVEZ), EE	
DATE:09-08-2023 DWG. NO.:DC-8-0396-21/22	



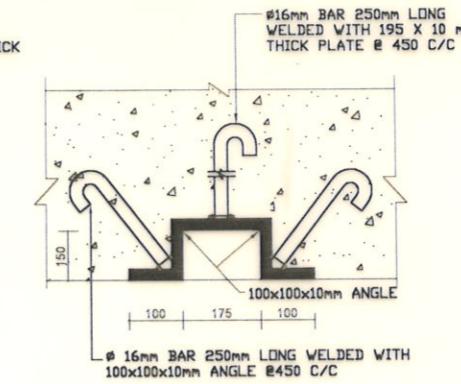
SEC.OF DETAIL -B



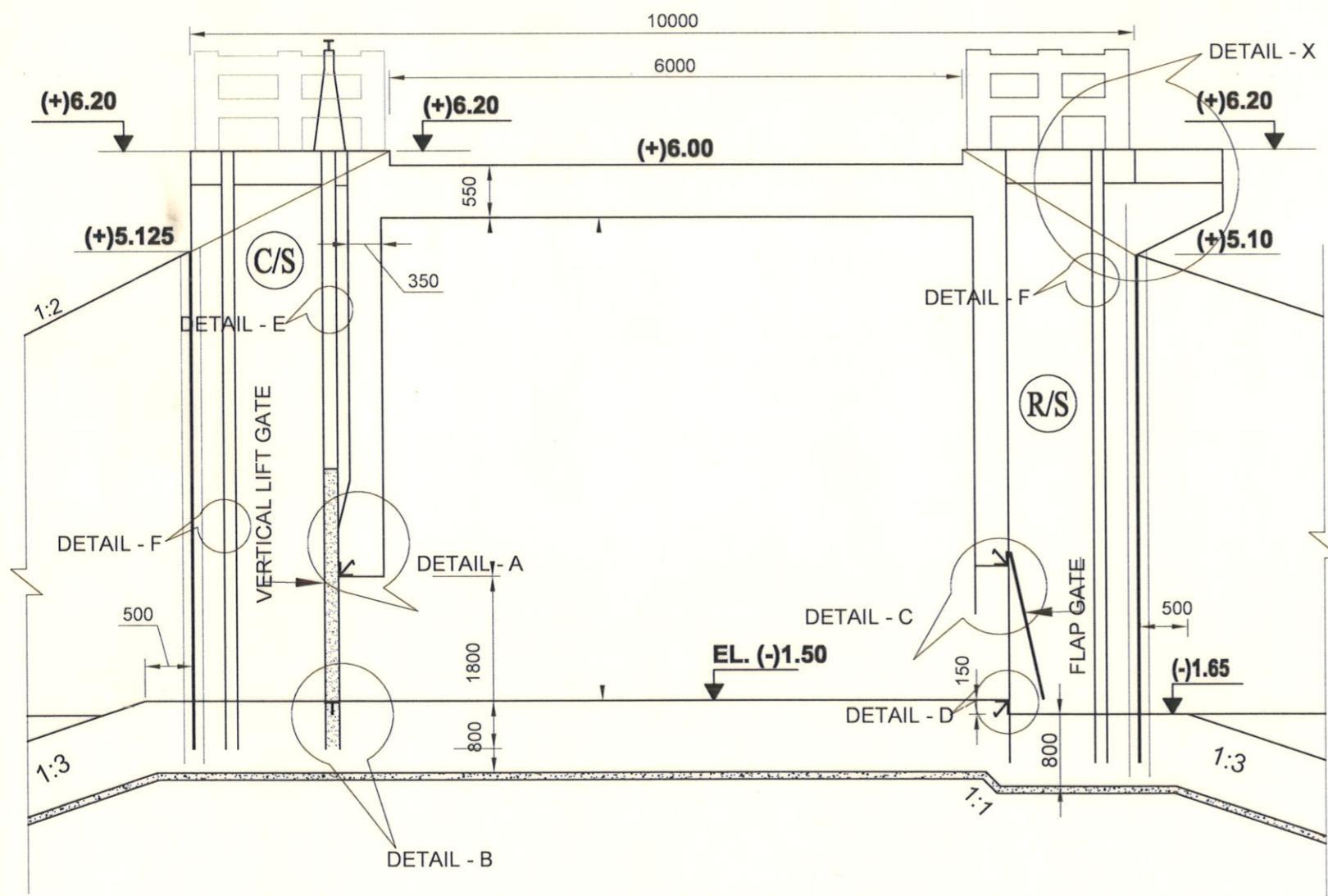
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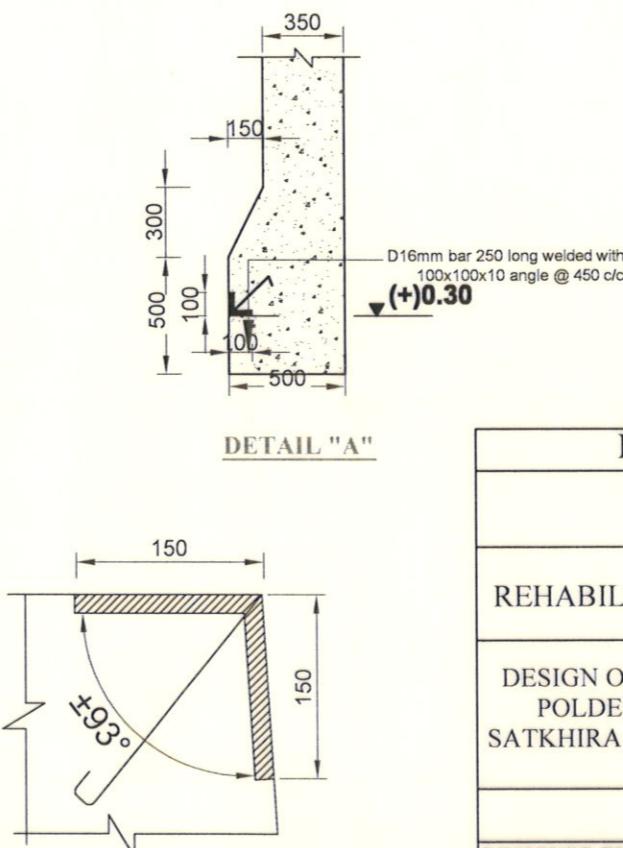
SEC.OF DETAIL -F



SEC.OF DETAIL -E



SECTION OF CENTRAL PART SHOWING EMBEDDED PARTS



SEC.OF DETAIL -P
(Showing only Flat plate)

Scale : Not To Scale

Bangladesh Water Development Board
Office of the Superintending Engineer
Design Circle-8

REHABILITATION OF POLDER-15 AT SATKHIRA DISTRICT

**DESIGN OF REGULATOR 1-VENT AT DUMURIA KHAL KM 28.550 IN
POLDER NO-15 UNDER " REHABILITATION OF POLDER 15 AT
SATKHIRA DISTRICT" PROJECT UNDER SATKHIRA O&M DIVISION-1,
BWDB, SATKHIRA.**

MISCELLANEOUS METAL DETAIL

DESIGNED BY :

(SAKIB BIN RAED)

(SAKIB BIN RAFI), AE

APPROVED BY :

J. Bell
9/18/23

(JAKARIA PERVEZ),EE

(MOHAMMAR SAIE URBIN), SE

DATE:09-08-2023 DWG. NO.:DC-8-0396-22/22