

GENERAL NOTES

1. TECHNICAL SPECIFICATION PREPARED BY CEIP-1 AND APPROVED BY BWDB SHOULD BE FOLLOWED.
2. ALL DIMENSIONS ARE IN MILLIMETERS AND ALL ELEVATIONS ARE IN CORRECTED m PWD UNLESS OTHERWISE MENTIONED IN THE DRAWINGS.
3. COMPRESSIVE STRENGTH OF REINFORCED CEMENT CONCRETE SHALL HAVE MINIMUM 37 DAYS CYLINDER STRENGTH, $f_c \geq 22.00 \text{ N/mm}^2$ AND SHALL BE CHECKED BY COLLECTING SAMPLES AND TESTING DURING CONSTRUCTION.
4. REINFORCING BAR SHALL BE DEFORMED MILD STEEL HAVING YIELD STRENGTH, $f_y \geq 414.00 \text{ N/mm}^2$. (MADE FROM BILLET) IN R.C.C. WORK.
5. CONCRETE FOR CC BLOCKS SHALL HAVE MINIMUM STRENGTH, $f_c \geq 18.00 \text{ N/mm}^2$ AT 37 DAYS.
6. CURING OF CONCRETE SHALL BE CONTINUED FOR MINIMUM 21 DAYS AFTER CASTING.
7. CONCRETE SHALL BE POURED IN DRY BED CONDITION.
8. THE SURFACE OF CONSTRUCTION JOINTS SHALL BE WASHED THOROUGHLY WITH WATER JET & SHALL BE CLEAN ENOUGH AFTER THAT, SURFACE SHALL BE DRY PRIOR TO PLACEMENT OF ADJOINING CONCRETE.
9. CONCRETE MIXTURE SHALL BE POURED AS QUICK AS POSSIBLE BUT NOT LATER THAN 45 MINUTES AFTER MIXING.
10. 75 mm LEAN CONCRETE AT BASE SHALL BE IN 1:3:6.
11. THE LEAN CONCRETE AT FOUNDATION OF THE PROPOSED REGULATOR SHALL BE PLACED AFTER PROPERLY PREPARING & COMPACTING EXCAVATED BASE.
12. CLEAR COVER FOR REINFORCEMENT SHALL BE AS FOLLOWS:

a) Operating deck & Railing : 25mm

b) Concrete adjacent to earth at foundation: 75mm

c) Concrete adjacent to earth: 75mm

d) Concrete exposed to weather and water or others: 75mm

e) Beam: 40mm
13. MINIMUM LAP LENGTH SHALL BE 40 TIMES THE BAR DIAMETER.
14. 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.
15. REINFORCING BAR MUST BE SUPPORTED IN ITS PROPER POSITION BY USE OF MORTAR BLOCK, SUPPORTS OR BY OTHERS APPROVED MEANS.
16. SAND FILLING IF ANY REQUIRED IN FOUNDATION SHOULD BE DONE WITH SAND OF F.M \geq 1.50 IN LAYERS OF 150 mm AND COMPACTED TO ATTAIN MINIMUM 50% RELATIVE DENSITY.
17. 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.
18. DESIGN OF GATE AND HOISTING SYSTEM WILL BE PREPARED BY CONSULTANT & SHALL BE VETTED BY DESIGN CIRCLE-III, BWDB, DHAKA.
19. GATE TO BE OPERATED IN CONTROLLED WAY TO AVOID ANY SCOUR WHEN HEAD DIFFERENCE IS BEYOND 0.60m.
20. THE WORK SHALL BE EXECUTED AFTER ADMINISTRATIVE AND FINANCIAL APPROVAL FROM THE COMPETENT AUTHORITY AND WITHIN THE DPP/BUDGET PROVISION.
21. BM ESTABLISHED BY IWM (APRIL, 2015) SHOULD BE USED AS REFERENCE FOR SURVEY DURING EXECUTION OF WORK.
22. THE EMBEDDED PARTS OF GATE TO BE INSTALLED DURING CONSTRUCTION OF BARREL PART AND IT SHALL BE DONE IN ACCORDANCE WITH APPROVED MECHANICAL DRAWING .

23. THE GATE SHALL BE INSTALLED BEFORE THE OPERATION OF THE STRUCTURE.
24. ANY ERROR/OMISSION IF DETECTED SHALL BE REFERRED TO THE CONCERNED DESIGN OFFICE THROUGH CEIP-1 CONSULTANTS FOR TAKING NECESSARY ACTION.
25. DIVERSION CHANNEL MUST BE EXCAVATED AS PER DRAWING ENCLOSED.
26. ALL BORE HOLES SHALL BE SEALED BEFORE CONSTRUCTION OF REGULATOR.
27. VENT SIZE & NUMBER AND INVERT LEVEL OF THIS REGULATOR HAVE BEEN FIXED AS PER MODEL STUDY BY IWM..

NOTES FOR SHEET PILES:

1. HOT ROLLED SHEET PILE SHALL BE USED. COLD ROLLED SHEET PILE SHALL NEVER BE USED.
2. COATING SHALL BE PROVIDED OVER SHEET PILE IN THE FOLLOWING WAY:-

i) CLEAN THE SHEET PILE SURFACE PREFERABLY WITH SAND BLASTING.

ii) PROVIDE 1 (ONE) COAT OF ZINK PHOSPHATE AS PRIMARY COAT,

iii) PROVIDE 2 (TWO) COAT OF COALTAR EPOXY COAT OVER PRIMARY COAT.
3. THICKNESS OF SHEET PILE SHALL BE 10.50mm ($\pm 0.50 \text{ mm}$)
4. CONCERNED CONSULTANT & EXECUTIVE ENGINEER MUST ENSURE SHEET PILE LOCKING & LENGTH.
5. TOP LEVEL OF EVERY CONNECTED SHEET PILES MUST HAVE SAME LEVEL.

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH

MINISTRY OF WATER RESOURCES

BANGLADESH WATER DEVELOPMENT BOARD

COASTAL EMBANKMENT IMPROVEMENT PROJECT, PHASE-1 (CEIP-1)

DETAILED DESIGN OF DRAINAGE REGULATOR DR-5, AT Km 18.950 (1V-1.50m X 1.80m) UNDER POLDER -16, PACKAGE - 3, CEIP - 1, BWDB, UPAZILA - PAIKGACHA, DISTRICT - KHULNA.

NOTES

CONSULTANT : Royal HaskoningDHV Sub Consultants DEVCON, DPM, IWM & DHI

DESIGNED & CHECKED BY

REVIEWED BY

RECOMMENDED BY

MD. MAHBUBUR RAHMAN

MD. HABIBUR RAHMAN

JEAN HENRY LABOYRIE

DESIGN ENGINEER

DEPUTY TEAM LEADER

TEAM LEADER

DRAWN BY- CAD OPERATOR - MST. MOUSUMI KHATUN

BANGLADESH WATER DEVELOPMENT BOARD

DESIGN CIRCLE -8

APPROVED BY

CHECKED BY

REVIEWED BY

RECOMMENDED BY

ZAYED BIN SAIF
ASSISTANT ENGINEER

ZAKARIA PERVEZ
EXECUTIVE ENGINEER

MOHAMMAD SAIF UDDIN
SUPERINTENDING ENGINEER

MD. ENAYET ULLAH
CHIEF ENGINEER, DESIGN

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NOT TO SCALE