

NOTES FOR PROTECTION WORK

GENERAL NOTES :

- FOR ANY ERROR, OMISSION OR CONFUSION PLEASE REFER TO THIS OFFICE AS QUICK AS POSSIBLE FOR NECESSARY ACTION.
- THE WORK SHALL BE EXECUTED WITH PRIOR FINANCIAL & ADMINISTRATIVE APPROVAL AND TECHNICAL SANCTION FROM THE COMPETENT AUTHORITY.
- ALL DIMENSIONS ARE IN MILLIMETRE (mm) AND ALL ELEVATIONS ARE IN METRE (PWD) UNLESS OTHERWISE MENTIONED IN THE DRAWING.
- THE MATERIAL & WORKMANSHIP SHALL CONFORM TO THE STANDARD SPECIFICATIONS OF BWDB MANUAL.
- NECESSARY LAND SHALL BE ARRANGED BEFORE EXECUTION OF WORK.
- THE GEO-TEXTILE FILTER HAVE THICKNESS OF MINIMUM 3.00 mm AND MASS PER UNIT AREA OF MINIMUM 400gm/m².
- GEO-TEXTILE FILTER SHALL BE EXTENDED UPTO 1000 mm BELOW THE W.W.L./TOE & SHALL HAVE TO BE ANCHORED CAREFULLY AT THE TOP OF THE SLOPE AS SHOWN IN THE DRAWING.
- GEO-TEXTILE MATERIALS SHALL BE PRESERVED AGAINST UV RAY AND FROM ANY OTHER DAMAGES.
- GEO-TEXTILE MATERIALS AFTER PLACING SHALL NEVER BE EXPOSED TO SUNLIGHT. GEO-TEXTILE FILTER SHALL BE COVERED IMMEDIATELY AFTER PLACEMENT. BUT GEOBAG PROVIDED FOR PRELIMINARY PROTECTION, MAY KEPT EXPOSED.
- SAND LAYER BELOW GEO-TEXTILE SHALL BE MADE BY USING SAND OF F.M. 1.0 TO 1.50.
- FULL LENGTH OF PROPOSED PROTECTIVE WORK SHALL BE DONE AT A TIME IN ONE DRY SEASON FOR EFFECTIVENESS.
- IF THERE ARE ANY POND OR DITCH EXISTS WITHIN 100 m DISTANCE FROM THE RIVER BANK, IT MUST BE PROPERLY FILLED UPTO G.L WITH LOCAL EARTH AND SHALL BE COMPACTED AS PER SCHEDULE BEFORE STARTING THE PROTECTIVE WORK.
- SLOPE OF PITCHING WORK SHALL BE MAINTAINED AS PER EXISTING SLOPE OR AS PER DESIGN SECTION, BUT NOT STEEPER THAN 3H:1V. ALL BANK IRREGULARITIES ABOVE WORKING WATER LEVEL SHALL BE REMOVED. NECESSARY CUTTING & FILLING SHALL BE DONE IN THIS RESPECT AS PER FIELD REQUIREMENT.
- A SMOOTH TRANSITION TO BE PROVIDED BETWEEN HIGHER & LOWER LEVEL AND FLATTER & STEEPER SLOPE OF THE PROTECTIVE WORK. TOP LEVEL OF PITCHING WORK SHOULD BE MATCH WITH EXISTING BANK LEVEL.
- AT THE STARTING AND AT THE END OF THE PROTECTIVE WORK TRANSITION TO THE EXISTING UNPROTECTED BANK OR THE PREVIOUSLY COMPLETED WORK MUST BE GRADUAL AND TANGENTIAL.
- KM POST ACCORDING TO DRAWING SHALL BE CONSTRUCTED AT AN INTERVAL OF NOT MORE THAN 100 m FOR BANK PROTECTION WORK AND 1.00 km FOR EMBANKMENT AND ALSO AS PER ACTUAL NEED.
- BENCH MARK TO BE PROVIDED (WHERE REQUIRED) ACCORDING TO BWDB SPECIFICATION.
- FOR SUSTAINABILITY OF THE WORK IN THE PROPOSED LENGTH OF PROTECTION, ALL DUMPING AND PITCHING WORK SHALL BE COMPLETED IN THE DRY SEASON. UNDER NO CIRCUMSTANCES, DUMPING WORK SHALL BE DONE DURING MONSOON.

NOTES FOR C.C BLOCKS:

- CONCRETE FOR C.C BLOCK SHALL HAVE MINIMUM CYLINDER STRENGTH OF 12.00N/mm² FOR 500x 500 x 200 & 500x 500 x 300 SIZE CC BLOCKS AND 10.5 N/mm² FOR (350 x 350 x 350) SIZE CC BLOCKS AT 28 DAYS.
- CURING OF C.C BLOCKS SHALL BE CONTINUED FOR 21 DAYS.
- THE PITCHING WORK SHALL BE PLACED ON PROPERLY COMPACTED SLOPE.

MONITORING:

- AS BUILT DRAWING CONTAINING CROSS SECTIONS AT 50 m INTERVAL SHALL BE PREPARED IMMEDIATELY AFTER COMPLETION OF DUMPING.
- THE RIVER BEHAVIOUR WITH RESPECT TO SCOUR AND EROSION AND PERFORMANCE OF REVETMENT WORK DURING AND AFTER EXECUTION SHALL BE MONITORED CAREFULLY ON REGULAR BASIS TO TAKE TIMELY MITTIGATIVE AND STRENGTHENING MEASURES BY ADAPTIVE APPROACH. IF ANY DETRIMENTAL MORPHOLOGICAL CHANGES IS OBSERVED, THEN DESIGN OFFICE MUST BE INFORMED WITH ADEQUATE DATA SO THAT NECESSARY ACTION CAN BE TAKEN.
- REGULAR MONITORING OF THIS PROTECTIVE WORK MUST BE DONE THROUGH BATHYMETRIC SURVEY OVER AN AREA OF L X B (WHERE L= LENGTH OF AT LEAST 1.00 KM FROM U/S TO AT LEAST 1.00 KM FROM D/S INCLUDING THE LENGTH OF WORK; AND B= WIDTH OF THE RIVER).
- FROM JUNE TO OCTOBER BATHYMETRIC SURVEY SHOULD BE DONE ON 15 DAYS INTERVAL & SHALL BE KEPT AS RECORD FOR FURTHER USE.
- DREDGING ADJACENT (MINIMUM 1.00KM) OR IN FRONT OF PROTECTIVE WORK SHALL NOT BE ALLOWED.
- MANGROVE PLANTATION AT RIVER SIDE (AS SHOWN IN THE DRAWING) IS AN INTEGRAL PART OF PROTECTION WORK. SO, PLANTATION OF MANGROVE AND ITS CONSERVATION TO BE MONITORED STRONGLY.

SPECIAL NOTES :

- THIS DRAWING HAS BEEN PREPARED AS PER PROPOSAL OF SE, KHULNA O&M CIRCLE, BWDB, KHULNA VIDE HIS MEMO NO: 1D-3/721 DATED 11/12/2022 AND BASED ON ADDITIONAL SURVEY DATA SENT BY THE EE ENGINEER BAGERHAT O & M DIVISION, BWDB, BAGERHAT VIA EMAIL ON-12/09/2023.

BANGLADESH WATER DEVELOPMENT BOARD			
OFFICE OF THE SUPERINTENDING ENGINEER DESIGN CIRCLE-8			
DESIGN OF SLOPE PROTECTION WORK ALONG THE RIGHT BANK OF MONGLA-GHASIAKHALI CHANNEL FROM KM 3.600 TO KM 7.100 AT RAMPAL IN BAGERHAT UNDER BAGERHAT O&M DIVISION, BWDB BAGERHAT.			
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