

MATERIALS

CONCRETE BLOCKS: PRECAST OPEN-VOID CONCRETE BLOCKS.

AGGREGATE: 15 TO 25mm CRUSHED ROCK.

FILTER CLOTH: 'BIDIM' A44 (MIN) OR THE EQUIVALENT.

MESH: WIRE MESH WITH 6 TO 12mm OPEN GRID.

POSTS/STUDS: MINIMUM 1500mm² (MIN) HARDWOOD, 2500mm² (MIN) SOFTWOOD, OR 1.5kg/m (MIN) STEEL STAR PICKETS.

TIMBER CROSS-MEMBERS: TYPICALLY 25 X 75mm TIMBER LENGTHS.

INSTALLATION

1. REFER TO APPROVED PLANS FOR LOCATION AND DIMENSIONAL DETAILS. IF THERE ARE QUESTIONS OR PROBLEMS WITH THE LOCATION, DIMENSIONS OR METHOD OF INSTALLATION CONTACT THE ENGINEER OR RESPONSIBLE ON-SITE OFFICER FOR ASSISTANCE.

2. CHECK THAT THE PLAN IDENTIFIES THE TYPE OF STRUCTURE (TYPE A OR B). IF NOT IDENTIFIED, CONTACT THE ENGINEER OR RESPONSIBLE ON-SITE OFFICER.

3. PRIOR TO INSTALLATION, CHECK THAT THE INSTALLATION OF THE SEDIMENT TRAP WILL NOT CAUSE UNDESIRABLE SAFETY OR FLOODING ISSUES.

4. EXCAVATE A LEVEL FOUNDATION THE WIDTH OF THE BLOCKS AND AT LEAST 50mm BELOW THE CREST OF THE STORM DRAIN. PLACE THE BOTTOM ROW OF BLOCKS AGAINST THE EDGE OF THE STORM DRAIN FOR LATERAL SUPPORT AND TO AVOID WASH-OUTS WHEN OVERFLOWS OCCUR. ALL BLOCKS SHOULD BE PLACED WITHOUT MORTAR.

5. **FOR TYPE A STRUCTURES:** ON EACH SIDE OF THE STRUCTURE LAY ONE BLOCK IN THE BOTTOM ROW ON ITS SIDE TO ALLOW FLOW TO PASS THROUGH THE BLOCK WALL INTO THE DRAINAGE. ALL OTHER BLOCKS SHOULD BE LAID WITH THE CAVITY FACE-UP.

6. **FOR TYPE B STRUCTURES:** ALL BLOCKS ON THE BOTTOM ROW SHOULD BE LAID ON THEIR SIDE TO ALLOW FLOW TO PASS THROUGH THE BLOCKS. ALL OTHER BLOCKS SHOULD BE LAID WITH THE CAVITY FACE-UP.

7. INSTALL ADDITIONAL ROWS OF BLOCKS AS REQUIRED TO OBTAIN THE SPECIFIED STRUCTURE HEIGHT. THE TOP OF THE BLOCK WALL SHOULD OPERATE AS A SPILLWAY TO CONTROL THE MAXIMUM POND DEPTH.

8. ENSURE THE MAXIMUM POND DEPTH WILL NOT CAUSE A SAFETY HAZARD, INCLUDING UNDESIRABLE FLOODING OF AN ADJACENT PROPERTY OR ROADWAY.

9. **FOR TYPE A STRUCTURES:** IF NEEDED, ANCHOR THE BLOCKS WITH TIMBER STUDS OR METAL STAKES.

10. **FOR TYPE B STRUCTURES:** IF NEEDED, SECURE THE BLOCKS WITH AN INTERNAL TIMBER FRAME ANCHORED INTO THE CAVITY OF THE CORNER BLOCKS.

11. PLACE WIRE MESH OVER THE OUTSIDE FACE OF ALL BLOCK OPENINGS TO HOLD AGGREGATE IN PLACE.

12. IF SPECIFIED (MANDATORY FOR TYPE B STRUCTURES) PLACE HEAVY-DUTY FILTER CLOTH OVER THE WIRE MESH. TO MINIMISE THE RISK OF SEDIMENT BLOCKAGE OF THE FILTER CLOTH, PLACE A LAYER OF AGGREGATE AGAINST THE WIRE MESH BEFORE WRAPPING THE SIDEWALLS WITH THE FILTER CLOTH (THIS INCREASES THE EFFECTIVE SURFACE AREA OF THE FILTER CLOTH).

13. PLACE AGGREGATE AROUND THE STRUCTURE AT A STABLE SLOPE, TYPICALLY 2:1(H:V).

14. WHERE NECESSARY, ESTABLISH A FLOW CONTROL BUND TO CONTROL THE EXTENT AND DEPTH OF THE SETTLING POND.

15. TAKE ALL NECESSARY MEASURE TO MINIMISE THE SAFETY RISK CAUSED BY THE STRUCTURE AND TO PREVENT UNSAFE ENTRY INTO THE STORMWATER INLET.

MAINTENANCE

1. INSPECT THE SEDIMENT TRAP AFTER EACH RUNOFF-PRODUCING RAINFALL EVENT AND MAKE REPAIRS AS NEEDED TO THE SEDIMENT TRAP AND ASSOCIATED FLOW CONTROL BUNDS.

2. REMOVE COLLECTED SEDIMENT AND DISPOSE OF IN A SUITABLE MANNER THAT WILL NOT CAUSE AN EROSION OR POLLUTION HAZARD.

3. SEDIMENT DEPOSITS SHOULD BE REMOVED IMMEDIATELY IF THEY REPRESENT A SAFETY RISK.

REMOVAL

1. WHEN THE UP-SLOPE DRAINAGE AREA HAS BEEN STABILISED, REMOVE ALL MATERIALS INCLUDED DEPOSITED SEDIMENT AND DISPOSE OF IN A SUITABLE MANNER THAT WILL NOT CAUSE AN EROSION OR POLLUTION HAZARD.

2. BRING THE DISTURBED AREA TO A PROPER GRADE, THEN SMOOTH, COMPACT AND STABILISE AND/OR REVEGETATE AS REQUIRED.

Drawn:

GMW

Date:

Apr-10

Block and Aggregate Drop
Inlet Protection

BA-02