

**MATERIALS**

EARTH FILL: NON-DISPERSIVE EARTH FREE OF ORGANIC DEBRIS. EMERSON'S AGGREGATE CLASS 6, 7 OR 8.

GEOTEXTILE FABRIC: HEAVY-DUTY, NEEDLE-PUNCHED, NON-WOVEN FILTER CLOTH (MINIMUM 'BIDIM' A34 OR EQUIVALENT).

**INSTALLATION**

1. PRIOR TO COMMENCING ANY WORKS, OBTAIN ALL NECESSARY APPROVALS AND PERMITS REQUIRED TO CONDUCT THE NECESSARY WORKS INCLUDING PERMITS FOR THE DISTURBANCE OF RIPARIAN AND AQUATIC VEGETATION, AND THE CONSTRUCTION OF ALL PERMANENT OR TEMPORARY INSTREAM BARRIERS AND INSTREAM SEDIMENT CONTROL MEASURES.

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

3. IF THERE IS FLOW WITHIN THE WATERCOURSE OR DRAINAGE CHANNEL AT THE TIME OF INSTALLATION OF THE COFFERDAM, THEN INSTALL APPROPRIATE DOWNSTREAM SEDIMENT CONTROL DEVICES AND/OR FLOW DIVERSION SYSTEMS PRIOR TO INSTALLATION OF THE DAM. SUCH MEASURES SHOULD ONLY BE INSTALLED IF CONSIDERED APPROPRIATE FOR THE LOCAL CONDITIONS, AND ONLY IF THEIR INSTALLATION IS JUDGED TO PROVIDE A NET OVERALL ENVIRONMENTAL BENEFIT.

4. TO THE MAXIMUM DEGREE PRACTICAL, CONSTRUCTION ACTIVITIES AND EQUIPMENT MUST NOT OPERATE WITHIN OPEN FLOWING WATERS.

5. ENSURE CLEARING AND EXCAVATION OF ACCESS PATHS AND THE BANKS AND BED OF THE WATERCOURSE ARE LIMITED TO THE MINIMUM PRACTICABLE.

6. IF DISPERSIVE, HIGHLY UNSTABLE, OR HIGHLY EROSION SOILS ARE EXPOSED, THEN PRIORITY MUST BE GIVEN TO THE PROMPT STABILISATION OF ALL SUCH AREAS.

7. REMOVE ANY CLEARED ORGANIC MATTER OR DEBRIS FROM THE CHANNEL AND DISPOSE OF IT PROPERLY. DO NOT USE ORGANIC MATTER OR DEBRIS TO BUILD THE COFFERDAM.

8. TO ASSIST IN THE EVENTUAL REMOVAL OF ALL MATERIALS USED IN THE CONSTRUCTION OF A TEMPORARY COFFERDAM, A PROTECTIVE LAYER OF GEOTEXTILE FILTER CLOTH (PREFERABLY IN THE FORM OF A SINGLE SHEET) SHOULD BE PLACED OVER THE CHANNEL PRIOR TO INSTALLATION OF THE COFFERDAM. IF MORE THAN ONE SHEET OF FABRIC IS REQUIRED, OVERLAP THE FABRIC BY AT LEAST 600mm.

9. IF THE COFFERDAM IS TO BE CONSTRUCTED OF FREE-STANDING COMPACTED FILL, THE SIDES OF THE COFFERDAM MUST BE NO STEEPER THAN 2:1 (H:V).

10. STABILISE ALL DISTURBED AREAS SUBJECT TO FLOWING WATER, INCLUDING FLOW BYPASS AND OVERFLOW AREAS, WITH ROCK OR OTHER SUITABLE MATERIALS IF

EXPECTED FLOW VELOCITIES EXCEEDS THAT ALLOWABLE FOR THE IN-SITU MATERIAL. THE MINIMUM ROCK SIZE PLACED WITHIN THE MAIN CHANNEL SHALL BE 200mm.

**MAINTENANCE**

1. WHILE CONSTRUCTION WORKS CONTINUE ON THE SITE, INSPECT THE COFFERDAM PRIOR TO FORECAST RAINFALL, DAILY DURING EXTENDED PERIODS OF RAINFALL, AFTER RUNOFF PRODUCING RAINFALL, OR OTHERWISE ON A WEEKLY BASIS.

2. ENSURE THAT COFFERDAM IS STABLE AND UNDAMAGED.

3. DISPOSE OF EXCESSIVE ACCUMULATIONS OF SEDIMENT OR DEBRIS IN A MANNER THAT WILL NOT CREATE AN EROSION OR POLLUTION HAZARD.

4. REPAIR ANY PLACES IN THE COFFERDAM THAT HAVE WEAKENED OR THAT HAVE BEEN SUBJECTED TO DAMAGE FROM STREAM FLOWS OR OVERTOPPING WATER.

5. IF A BYPASS FLOODWAY EXISTS, CHECK THAT THE FLOODWAY IS STABLE AND CAPABLE OF OPERATING AT ITS DESIGN CAPACITY.

**REMOVAL**

1. COFFERDAMS SHOULD BE REMOVED AS SOON AS POSSIBLE AFTER THEY ARE NO LONGER NEEDED.

2. IF EXCESSIVE SEDIMENT OR DEBRIS HAS COLLECTED UPSTREAM OF THE COFFERDAM, REMOVE SUCH MATERIAL BEFORE THE DAM IS REMOVED AND DISPOSE OF SUCH MATERIAL PROPERLY.

3. IF THERE IS FLOW WITHIN THE WATERCOURSE OR DRAINAGE CHANNEL AT THE TIME OF REMOVAL OF THE COFFERDAM, THEN INSTALL APPROPRIATE DOWNSTREAM SEDIMENT CONTROL DEVICES AND/OR FLOW DIVERSION SYSTEMS PRIOR TO REMOVAL OF THE DAM. SUCH MEASURES SHOULD ONLY BE INSTALLED IF CONSIDERED APPROPRIATE FOR THE LOCAL CONDITIONS, AND ONLY IF THEIR INSTALLATION IS JUDGED TO PROVIDE A NET OVERALL ENVIRONMENTAL BENEFIT.

4. ENSURE ANY CHANNEL WATER CONTAINED WITHIN THE ENCLOSED CHANNEL AREA IS SUITABLY TREATED BEFORE EITHER THE WATER IS DISCHARGED FROM THE ENCLOSURE OR THE COFFERDAMS ARE REMOVED.

5. ENSURE THE RELEASE OF SEDIMENT AND THE DAMAGE TO THE CHANNEL'S BED AND BANKS IS MINIMISED DURING REMOVAL OF THE COFFERDAMS.

6. REMOVE ALL CONSTRUCTION MATERIALS, SEDIMENT DEPOSITS AND DEBRIS AND DISPOSE OF IN A SUITABLE MANNER THAT WILL NOT CAUSE AN EROSION OR POLLUTION HAZARD.

7. RESTORE THE WATERCOURSE CHANNEL TO ITS ORIGINAL CROSS-SECTION, AND SMOOTH AND APPROPRIATELY STABILISE AND/OR REVEGETATE ALL DISTURBED AREAS.

Drawn: <b>GMW</b>	Date: <b>Apr-10</b>	<b>Cofferdams (General)</b>	<b>Dam-01</b>
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