

MATERIALS

FABRIC: POLYPROPYLENE, POLYAMIDE, NYLON, POLYESTER, OR POLYETHYLENE WOVEN OR NON-WOVEN FABRIC, AT LEAST 700mm IN WIDTH AND A MINIMUM UNIT WEIGHT OF 140GSM. ALL FABRICS TO CONTAIN ULTRAVIOLET INHIBITORS AND STABILISERS TO PROVIDE A MINIMUM OF 6 MONTHS OF USEABLE CONSTRUCTION LIFE (ULTRAVIOLET STABILITY EXCEEDING 70%).

FABRIC REINFORCEMENT: WIRE OR STEEL MESH MINIMUM 14-GAUGE WITH A MAXIMUM MESH SPACING OF 200mm.

SUPPORT POSTS/STAKES: 1500mm² (MIN) HARDWOOD, 2500mm² (MIN) SOFTWOOD, OR 1.5kg/m (MIN) STEEL STAR PICKETS SUITABLE FOR ATTACHING FABRIC.

BALLAST (OUTER BARRIER): MINIMUM 8mm CHAIN OR EQUIVALENT, OR MINIMUM 50mm AGGREGATE.

STAPLES: HEAVY DUTY WIRE STAPLES AT LEAST 25mm LONG, OR WIRE TIES.

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 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.

3. CONFIRM IF A SINGLE OR DOUBLE FENCE IS REQUIRED.

4. IF THERE IS FLOW WITHIN THE WATERCOURSE OR DRAINAGE CHANNEL AT THE TIME OF INSTALLATION OF THE ISOLATION BARRIER, THEN TAKE APPROPRIATE MEASURES TO MINIMISE THE RELEASE OF SEDIMENT DURING ITS INSTALLATION. 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.

5. TO THE MAXIMUM DEGREE PRACTICABLE, CONSTRUCTION ACTIVITIES AND EQUIPMENT SHOULD NOT OPERATE WITHIN OPEN FLOWING WATERS.

6. IDENTIFY THE APPROPRIATE LOCATION OF THE OUTER ISOLATION BARRIER. FOR REASONS OF SAFETY, THE OUTER BARRIER SHOULD NOT BE PLACED IN WATER DEPTHS EXCEEDING 1.2m.

7. IF PLACED IN LARGE OPEN WATERS, INSTALL THE ISOLATION BARRIERS SUCH THAT THE TOP OF EACH FENCE IS AT LEAST 300mm ABOVE THE WATERLINE TO PREVENT OVER-TOPPING BY WAVES OR FLUCTUATIONS IN WATER LEVEL.

8. PLACE THE SUPPORT POSTS (OUTER BARRIER) AT A MAXIMUM SPACING OF 2m WITH WIRE MESH BACKING, OR 1.5m WITHOUT WIRE MESH BACKING. DRIVE THE POSTS 600mm INTO THE CHANNEL BED OR UNTIL THE POST ARE SECURE. IF THE SUPPORT POST CANNOT BE DRIVEN 600mm INTO THE BED, THEN ADDITIONAL BRACING MAYBE REQUIRED.

9. ATTACH ANY FENCE REINFORCEMENT (WIRE MESH) AS SPECIFIED IN THE APPROVED PLANS OR AS DIRECTED.

10. PRIOR TO INSTALLING THE FABRIC, SECURE (SEW) A BALLAST CHAIN INTO THE BOTTOM OF THE FABRIC.

11. ATTACH THE SPECIFIED FABRIC TO THE CHANNEL SIDE OF THE POSTS. WHERE POSSIBLE, USED A CONTINUOUS ROLL OF FABRIC. IF THIS IS NOT POSSIBLE, CONSTRUCT SUITABLE LEAK-PROOF JOINTS IN THE FABRIC.

12. FASTEN THE FABRIC SECURELY USING HEAVY-DUTY STAPLES OR NAILS (WITH A WASHER) AT A MAXIMUM SPACING OF 50mm. USE WIRE TIES TO SECURELY ATTACH THE FABRIC TO THE WIRE MESH (IF USED).

13. IF IT IS NOT PRACTICABLE TO ATTACH A BALLAST TO THE BOTTOM OF THE FABRIC, THEN SECURE THE BOTTOM 300mm OF FABRIC TO THE CHANNEL BED USING A CONTINUOUS PLACEMENT (MINIMUM 50mm) OF LARGE AGGREGATE OR CLEAN ROCK FILL.

14. AFTER INSTALLING THE OUTER ISOLATION BARRIER, INSTALL THE SECOND LANDWARD BARRIER (IF REQUIRED). THE LANDWARD BARRIER IS USUALLY LOCATED JUST ABOVE THE NORMAL WATER LINE, BUT SHOULD BE LOCATED SO AS NOT TO INTERFERE WITH ADJACENT CONSTRUCTION ACTIVITIES.

15. ENSURE THE TOP OF THE FABRIC OF THE OUTER BARRIER IS AT LEAST 200mm ABOVE THE MAXIMUM EXPECTED, DRY WEATHER (I.E. NON-FLOOD FLOW) WATER LEVEL.

16. INSTALL THE LANDWARD SEDIMENT FENCE IN ACCORDANCE WITH THE NORMAL INSTALLATION PROCEDURES FOR A SEDIMENT FENCE, EXCEPT THE MAXIMUM SPACING OF SUPPORT POSTS IS 2m WITH OR WITHOUT A WIRE MESH BACKING. ENSURE THE FABRIC IS ATTACHED TO THE LANDWARD SIDE OF THE POSTS.

MAINTENANCE

1. INSPECT THE ISOLATION BARRIER DAILY AND AFTER ANY SIGNIFICANT CHANGE IN STREAM FLOW. MAKE NECESSARY REPAIRS IMMEDIATELY.

2. INSPECT THE BARRIER FOR TURBIDITY LEAKS THAT MIGHT BE CAUSED BY HOLES IN THE BARRIER OR DAMAGE TO THE FABRIC-STREAMBED CONTACT.

3. REPAIR ANY TORN SECTIONS WITH A CONTINUOUS PIECE OF FABRIC FROM POST TO POST.

4. WHEN MAKING REPAIRS, ALWAYS RESTORE THE SYSTEM TO ITS ORIGINAL CONFIGURATION UNLESS AN AMENDED LAYOUT IS REQUIRED OR SPECIFIED.

REMOVAL

1. ALL COMPONENTS OF THE SEDIMENT FENCE ISOLATION BARRIER SHOULD BE REMOVED AS SOON AS POSSIBLE AFTER IT IS NO LONGER NEEDED.

2. IF EXCESSIVE SEDIMENT OR DEBRIS HAS COLLECTED AROUND THE BARRIER, THEN REMOVE SUCH MATERIAL BEFORE THE BARRIER IS REMOVED AND DISPOSE OF SUCH MATERIAL PROPERLY.

3. ENSURE ANY CHANNEL WATER CONTAINED WITHIN THE ENCLOSED CHANNEL AREA IS SUITABLY TREATED BEFORE EITHER THE WATER IS DISCHARGED FROM THE ENCLOSURE OR THE ISOLATION BARRIER IS REMOVED.

4. IF IT IS NOT FEASIBLE TO WAIT FOR ADEQUATE SETTLEMENT OF SUSPENDED SEDIMENTS, THEN WHERE PRACTICABLE, PUMP THE SEDIMENT-LADEN WATER TO AN OFF-STREAM DE-WATERING SEDIMENT CONTROL SYSTEM FOR TREATMENT. THIS TREATMENT AREA SHOULD IDEALLY BE LOCATED AT LEAST 50m FROM THE CHANNEL.

5. STARTING FROM THE UPSTREAM END, REMOVE ALL MATERIALS USED TO FORM THE ISOLATION BARRIER AND DISPOSE OF IN A SUITABLE MANNER THAT WILL NOT CAUSE AN EROSION OR POLLUTION HAZARD.

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

Drawn:	Date:		
GMW	May-10	Sediment Fence Isolation Barrier	SFB-02