

SEDIMENT CONTROL MEASURES		STANDARD DRAWING REFERENCE
14.13.2	SEDIMENT WEIR (SW) - SEDIMENT WEIRS CAN ALSO BE USED AS TEMPORARY INSTREAM SEDIMENT TRAPS DURING THE CONSTRUCTION PHASE OF INSTREAM WORKS WITHIN DRAINAGE CHANNELS AND MINOR WATERWAYS THAT ARE LIKELY TO EXPERIENCE ONLY MINOR DRY WEATHER FLOWS. - FILTER TUBES CAN BE INCORPORATED INTO THE SEDIMENT WEIR TO INCREASE THE TREATABLE FLOW RATE. - THE CRITICAL DESIGN PARAMETER IS THE 'SURFACE AREA' OF THE SETTLING POND, WHICH MUST BE MAXIMISED.	A3-006788 to A3-006789, A3-006830 to A3-006831
14.13.3	MODULAR SEDIMENT TRAP - A TYPE 2 OR 3 SEDIMENT TRAP. - MODULAR SYSTEMS CAN BE USED TO FORM A SEDIMENT WEIR; HOWEVER, A SUITABLE AGGREGATE FILTER IS USUALLY STILL REQUIRED ON THE UP-SLOPE FACE IN ORDER TO ACHIEVE THE REQUIRED FLOW RATE AND SETTLING POND SURFACE AREA. - SPECIAL POLLUTANT ABSORBENT BAGS CAN BE PLACED INSIDE THE MODULAR UNITS. - FILTER TUBES CAN BE INCORPORATED INTO THE PLASTIC BLOCKS TO INCREASE THE ALLOWABLE TREATMENT FLOW RATE.	A3-006788 to A3-006789, A3-006830 to A3-006831
SEDIMENT BASINS (SB) - TYPE C (DRY) BASINS		
14.14.1	A TYPE 1 SEDIMENT TRAP.	A3-006822 to A3-006829
14.14.2	TYPE C BASINS ARE BEST SUITED TO COARSE-GRAINED SOILS.	A3-006822 to A3-006829
14.14.3	USED WHEN A MAJOR (TYPE 1) SEDIMENT TRAP IS REQUIRED WHEN WORKING IN AREAS CONTAINING COARSE-GRAINED, GOOD SETTLING SOILS.	A3-006822 to A3-006829
14.14.4	SEDIMENT BASINS ARE GENERALLY REQUIRED IF THE SOIL DISTURBANCE EXCEEDS 0.25ha.	A3-006822 to A3-006829
14.14.5	INTERNAL BAFFLES HELP TO CONTROL WATER FLOW AND IMPROVE SETTLEMENT CHARACTERISTICS.	A3-006822 to A3-006829
14.14.6	ANTI-VORTEX PLATES REDUCE THE RISK OF FLOATING DEBRIS BEING DRAWN INTO THE OUTLET.	A3-006822 to A3-006829
SEDIMENT BASINS (SB) - TYPE F & D (WET) BASINS		
14.15.1	A TYPE 1 SEDIMENT TRAP.	A3-006822 to A3-006829
14.15.2	TYPE F (FINE SOILS) AND TYPE D (DISPERSIVE SOILS) BASINS ARE BEST SUITED TO FINE-GRAINED AND/OR DISPERSIVE SOILS.	A3-006822 to A3-006829
14.15.3	USED WHEN A MAJOR (TYPE 1) SEDIMENT TRAP IS REQUIRED WHEN WORKING IN AREAS CONTAINING FINE-GRAINED, DISPERSIVE OR POOR SETTLING SOILS.	A3-006822 to A3-006829
14.15.4	THESE BASINS CAN ALSO BE USED WHEN REGULAR DE-WATERING OPERATIONS ARE REQUIRED.	A3-006822 to A3-006829
14.15.5	SEDIMENT BASINS ARE GENERALLY REQUIRED IF THE SOIL DISTURBANCE EXCEEDS 0.25ha.	A3-006822 to A3-006829
14.15.6	TYPE F AND TYPE D BASINS ARE OPERATED IN A 'WET' MODE, AND THUS ARE OFTEN REFERRED TO AS WET BASINS.	A3-006822 to A3-006829
14.15.7	WATER MUST BE RETAINED WITHIN THE BASIN AND TREATED (FLOCCULATED) UNTIL THE REQUIRED WATER QUALITY (USUALLY 50 mg/L TSS) IS ACHIEVED.	A3-006822 to A3-006829
14.15.8	THE BASINS MUST BE DE-WATERED AS SOON AS PRACTICAL SUCH THAT THE BASINS ARE (IDEALLY) EMPTY PRIOR TO THE NEXT STORM EVENT.	A3-006822 to A3-006829
14.15.9	BASIN DE-WATERING IS NORMALLY ACHIEVED THROUGH THE USE OF PUMPS.	A3-006822 to A3-006829
14.15.10	IT IS IMPORTANT TO ENSURE THAT THE PUMP'S INTAKE PIPE DOES NOT REST OR COME INTO CLOSE CONTACT WITH THE SETTLED SEDIMENT.	A3-006822 to A3-006829
SEDIMENT BASIN SPILLWAYS		
14.16.1	ALL SEDIMENT BASINS, NOT FULLY RECESSED BELOW NATURAL GROUND LEVEL, WILL REQUIRE THE CONSTRUCTION OF A FORMALLY DESIGNED EMERGENCY SPILLWAY.	A3-006755
14.16.2	THE SPILLWAY MUST HAVE A WELL-DEFINED CHANNEL PROFILE THAT FULLY CONTAINS THE NOMINATED DESIGN STORM PEAK DISCHARGE.	A3-006755
14.16.3	A SUITABLE ENERGY DISSIPATER WILL BE REQUIRED AT THE BASE OF THE SPILLWAY.	A3-006755
14.16.4	SPILLWAYS ARE CRITICAL ENGINEERING STRUCTURES THAT NEED TO BE DESIGNED BY SUITABLY QUALIFIED PERSONS. IF IT IS DEEMED THAT A SEDIMENT BASIN AND SPILLWAY IS REQUIRED, REFER TO PROJECT SUPERINTENDENT.	A3-006755
14.16.5	IDEALLY, THE EMERGENCY SPILLWAY SHOULD BE CONSTRUCTED IN VIRGIN SOIL (IE. AROUND THE FILL EMBANKMENT).	A3-006755
14.16.6	FOR ROCK AND ROCK MATTRESS LINED SPILLWAYS, IT IS IMPORTANT TO CONTROL SEEPAGE FLOWS THROUGH THE ROCKS LOCATED ACROSS THE CREST OF THE SPILLWAY. SEEPAGE CONTROL IS REQUIRED TO THAT THE SETTLING POND CAN ACHIEVE ITS REQUIRED MAXIMUM WATER LEVEL PRIOR TO DISCHARGING DOWN THE SPILLWAY.	A3-006755
14.16.7	CONCRETE CAPPING OF THE SPILLWAY CREST CAN BE USED TO CONTROL EXCESS SEEPAGE FLOWS.	A3-006755
14.16.8	ENSURE THAT THE SPILLWAY CREST HAS SUFFICIENT DEPTH AND WIDTH TO FULLY CONTAIN THE NOMINATED DESIGN STORM PEAK DISCHARGE.	A3-006755
14.16.9	THE SPILLWAY CREST NORMALLY REQUIRES A GREATER DEPTH, BUT EQUAL WIDTH, TO THAT OF THE DOWNSTREAM FACE OF THE SPILLWAY.	A3-006755

DEWATERING SEDIMENT CONTROL MEASURES		STANDARD DRAWING REFERENCE
15.1.1	REFER STANDARD DRAWING FOR THE RECOMMENDED STANDARD IDENTIFICATION CODES AND DRAWING SYMBOLS FOR VARIOUS DE-WATERING SEDIMENT CONTROL TECHNIQUES.	A4-00339
15.1.2	REFER STANDARD DRAWING FOR THE BEST PRACTICE SEDIMENT CONTROL MEASURES FOR THE DE-WATERING STOCKPILES OF EXCAVATED MATERIALS.	A4-00339
DE-WATERING SEDIMENT CONTROL - FILTER BAG (FG)		
15.2.1	COMMERCIAL FILTER BAGS ARE SUITABLE FOR THE TREATMENT OF LOW FLOW RATES.	A3-006832
15.2.2	THE BAGS COLLECT ONLY COARSE-GRAINED SEDIMENTS, WITH MINIMAL CONTROL OF TURBIDITY.	A3-006832
15.2.3	IT IS IMPORTANT TO ENSURE THAT THERE ARE SUITABLE MEANS OF COLLECTING AND REMOVING THE BAGS ONCE THEY ARE FULL OF SEDIMENT.	A3-006832
15.2.4	PLACING THE FILTER BAGS WITHIN A MINI SKIP (DRAIN PLUG REMOVED) CAN REDUCE THE COMPLICATIONS OF REMOVING THE USED BAGS.	A3-006832
DE-WATERING SEDIMENT CONTROL - FILTER FENCE (FF)		
15.3.1	SUITABLE FOR THE COARSE AND FINE-GRAINED SOILS, BUT NOT FOR TURBIDITY CONTROL.	A3-006833
15.3.2	NON-WOVEN FABRICS MUST BE USED.	A3-006833
DE-WATERING SEDIMENT CONTROL - COMPOST BERMS		
15.4.1	CAN PROVIDE GOOD FILTRATION AND LIMITED TURBIDITY CONTROL.	A3-006797, A3-006800 & A3-006837
15.4.2	COMPOST FILLED SOCKS (FILTER SOCKS) CAN ALSO BE USED.	A3-006797, A3-006800 & A3-006837
15.4.3	PERFORMANCE OF BOTH SYSTEMS CAN BE IMPROVED IF INCORPORATED WITH A SUBSTANTIAL GRASS FILTER BED (BUFFER ZONE).	A3-006797, A3-006800 & A3-006837
DE-WATERING SEDIMENT CONTROL - FILTER POND (FP)		
15.5.1	FILTER PONDS CAN BE USED ON FLAT OR NEAR-FLAT GROUND.	A3-006834 to A3-006835
15.5.2	MOST EFFECTIVE FOR THE TREATMENT OF WATER CONTAINING COARSE-GRAINED SEDIMENT.	A3-006834 to A3-006835
15.5.3	LIMITED CONTROL OVER TURBIDITY, UNLESS USED ON HIGHLY POROUS SOIL.	A3-006834 to A3-006835
15.5.4	DIAMETER OF THE POND AND COMPOSITION OF THE FILTER WALL DEPEND ON THE SOIL TYPE AND DESIGN FLOW RATE.	A3-006834 to A3-006835
15.5.5	PERFORMANCE CAN BE IMPROVED IF INCORPORATED INTO A SUBSTANTIAL GRASS FILTER BED (BUFFER ZONE).	A3-006834 to A3-006835
DE-WATERING SEDIMENT CONTROL - FILTER TUBE (FT)		
15.6.1	COMMERCIAL FILTER TUBES ARE SUITABLE FOR THE TREATMENT OF LOW TO MEDIUM FLOW RATES.	A3-006832 to A3-006836
15.6.2	THE FILTER TUBES COLLECT ONLY COARSE-GRAINED SEDIMENTS, WITH MINIMAL CONTROL OF TURBIDITY.	A3-006832 to A3-006836
15.6.3	IT IS IMPORTANT TO ENSURE THAT THERE ARE SUITABLE MEANS OF COLLECTING AND REMOVING THE FILTER TUBES ONCE FULL OF SEDIMENT.	A3-006832 to A3-006836
15.6.4	PLACING THE FILTER BAG UP-SLOPE OF A SUBSTANTIAL GRASS FILTER BED (BUFFER ZONE) CAN IMPROVE THE COLLECTION OF FINE SEDIMENTS AND TURBIDITY CONTROL.	A3-006832 to A3-006836
DE-WATERING SEDIMENT CONTROL - PORTABLE SETTLING TANK (PST)		
15.7.1	A WIDE VARIETY OF DIFFERENT SYSTEMS CAN BE EMPLOYED.	A3-006839
15.7.2	SOME SYSTEMS HAVE GOOD CONTROL OVER TURBIDITY, WHILE OTHER SYSTEMS HAVE LITTLE OR NO CONTROL OVER TURBIDITY.	A3-006839
15.7.3	HIGH INITIAL PURCHASE COST, BUT OPERATION COSTS CAN BE LOW.	A3-006839
DE-WATER SEDIMENT CONTROL - SETTLING POND (SEP)		
15.8.1	SETTLING PONDS CONTAIN A FREE-DRAINING OUTLET SYSTEM, USUALLY CONSISTING OF A ROCK FILTER DAM, OR A SERIES OF FILTER TUBES.	A3-006840 to A3-006842
15.8.2	ONLY SUITABLE FOR WATER CONTAINING FAST SETTLING SEDIMENTS.	A3-006840 to A3-006842
DE-WATERING SEDIMENT CONTROL - STILLING POND		
15.9.1	STILLING PONDS DO NOT INCORPORATE A FREE-DRAINING OUTLET SYSTEM.	A3-006843 to A3-006844
15.9.2	THE PONDS ARE OPERATED SIMILAR TO 'WET' SEDIMENT BASINS, AND TURBIDITY CONTROL CAN BE ACHIEVED.	A3-006843 to A3-006844
DE-WATERING SEDIMENT CONTROL - SUMP PIT		
15.10.1	SUMP PITS CAN BE USED AS A PRE-TREATMENT SYSTEM IN ASSOCIATION WITH AN OUTLET-TYPE TREATMENT SYSTEM (IE ANY OF THE ABOVE SYSTEMS).	A3-006836
15.10.2	FILTRATION OCCURS AT THE PUMP INLET RATHER THAN AT THE OUTLET OF THE PIPE.	A3-006836
15.10.3	COMMONLY USED AS A PRE-TREATMENT SYSTEM IN INSTREAM WORKS.	A3-006836
DE-WATERING SEDIMENT CONTROL - TRUCK-MOUNTED UNITS		
15.11.1	WIDE VARIETY OF COMMERCIAL WATER TREATMENT UNITS.	
15.11.2	TREATMENT SYSTEMS INCLUDE VACUUM DRUM FILTERS, FILTER-PRESSES, BELT-PRESSES, CENTRIFUGES AND BANKS OF HYDROCYCLONES.	
15.11.3	SEDIMENT-LADEN WATER CAN ALSO BE COLLECTED AND TRANSPORTED TO ANOTHER LOCATION FOR SPECIALIST TREATMENT.	

GLOSSARY		STANDARD DRAWING REFERENCE
16.1.1	REFER STANDARD DRAWINGS FOR GLOSSARY OF TERMS	

				SURVEY		SCALES (A1)		DRAWN		SIGNED		DATE		DIRECTOR ENGINEERING AND COMMERCIAL INFRASTRUCTURE		STANDARD		SHEET 6 OF 6	
				SURVEY FILE No				DESIGNED		SIGNED		DATE				WORKS JOB No.			
				LEVEL DATUM				CHECKED		SIGNED		DATE				DRAWING No.		AMEND.	
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AMENDMENTS AND REVISIONS																			



EROSION & SEDIMENT CONTROL NOTES
SHEET 6 OF 6