

ASTH 5141

75% (HINIHAN) EXTRA STRENGTH 50 LBS. /LINEAR IN (MINIMEND

STANDARD STRENGTH-30 LBS. /LINEAR INC (HINIMUR)

STD & SPEC 3.05

STD & SPEC 3.13 TEMPORARY SEDIMENT TRAP

SID & SPEC 3'05 TEMPORARY STONE CONSTRUCTION ENTRANCE (CE)

A TEMPORARY PONDING AREA FORMED BY CONSTRUCTING AN EARTHEN EMBANKMENT WITH A STONE OUTLET. DETAIN SEDIMENT-LADEN RUNOFF FROM SMALL DISTURBED AREAS LONG ENOUGH ALLOW THE MAJORITY OF THE SEDIMENT TO SETTLE OUT.

THE FILTER CLOTH UTILIZED SAHLL BA A WOVEN OR NONWOVEN FABRIC CONSISTING ONLY OF CONTINUOUS CHAIN POLYMERIC FLAMENTS OR YARNS OF POLYESTER. THE FABRIC SHALL BE INERT TO COMMONLY ENCOUNTERED CHEMICALS AND HYDROCARBONS BE MILDEW AND ROT RESISTANT, AND CONFORM TO THE PHYSICAL PROPERTIES NOTED IN TABLE 3.02-A. 2. FILL MATERIAL FOR THE EMBANKMENT SHALL BE FREE OF ROOTS OR OTHER WOODY VEGETATION, ORGANIC MATERIAL, LARGE STONES, AND OTHER OBJECTIONABLE MATERIAL. THE EMBANKMENT SHOULD BE COMPACTED IN 6-INCH LAYERS BY TRAVERSING WITH CONSTRUCTION EQUIPMENT.

THE EARTHERN EMBANKMENT SHALL BE SEEDED WITH TEMPORARY OR PERMANENT VEGETATION (SEE STD.& SPEC.'S 3.31 AND 3.32) IMMEDIATELY AFTER INSTALLATION.

THE STRUCTURE SHALL BE REMOVED AND THE AREA STABILIZED WHEN THE UPSLOPE DRAINAGE AREA HAS BEEN STABILIZED.

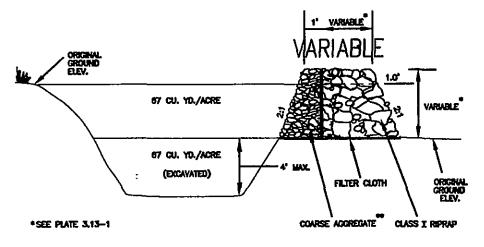
ALL CUT AND FILL SLOPES SHALL BE 2:1 OR FLATTER (EXCEPT FOR EXCAVATED, WET STORAGE AREA WHICH MAY BE AT A MINIMUM 1:1 GRADE).

SEDIMENT SHALL BE REMOVED AND THE TRAP RESTORED TO ITS ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS ACCUMULATED TO ONE HALF THE DESIGN VOLUME OF THE WET STORAGE. SEDIMENT REMOVAL FROM THE BASIN SHALL BE DEPOSITED IN A SUITABLE AREA AND IN SUCH A MANNER THAT IT WILL NOT ERODE AND CAUSE SEDIMENTATION PROBLEMS.

FILTER STONE SHALL BE REGULARLY CHECKED TO ENSURE THAT FILTRATION PERFORMANCE IS MAINTAINED. STONE CHOKED WITH SEDIMENT SHALL BE REMOVED AND CLEANED OR REPLACED.

THE STRUCTURE SHOULD BE CHECKED REGULARY TO ENSURE THAT IT IS STRUCTURALLY SOUND AND HAS NOT BEEN DAMAGED BY EROSION OR CONSTRUCTION EQUIPMENT. THE HEIGHT OF THE STONE OUTLET SHOULD BE CHECKED TO ENSURE THAT ITS CENTER IS AT LEAST 1 FOOT BELOW THE TOP OF THE EMBANKMENT.

TEMPORARY SEDIMENT TRAP



CROSS SECTION OF OUTLET

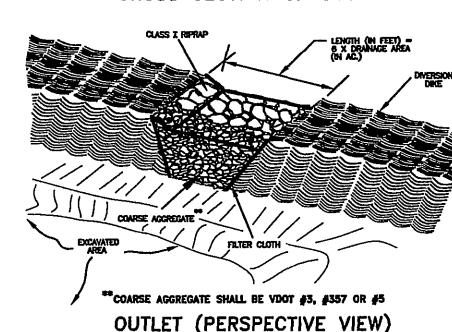
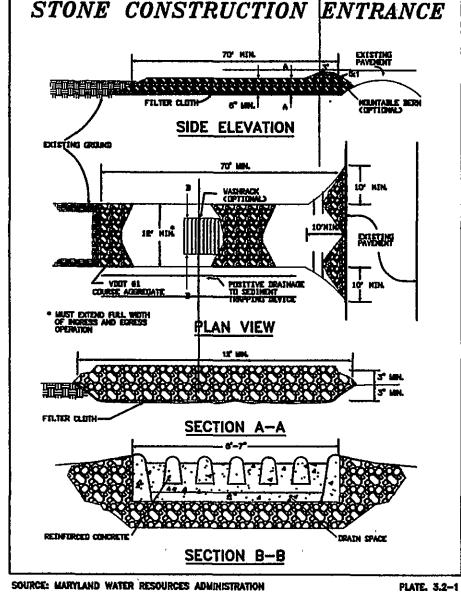


PLATE. 3.13-2





DESIGN CRITERIA

DIVERSION LOCATION SHALL BE DETERMINED BY CONSIDERING OUTLET CONDITIONS, TOPOGRAPHY, LAND USE, SOIL TYPE, LENGTH OF SLOPE, SEEPAGE PLANES (WHERE SEEPAGE IS A PROBLEM) AND THE DEVELOPMENT LAYOUT.

1. THE DIVERSION CHANNEL MUST HAVE A MINIMUM CAPACITY TO CARRY THE RUNDIFF EXPECTED FROM A 10-YEAR FREQUENCY STORM WITH A FREEDOARD OF A LEAST 0.3 FOOT (SEE PLATE 3. 12-1). 2. DIVERSIONS DESIGNED TO PROTECT HOMES, SCHOOLS, INDUSTRIAL BUILDINGS, ROADS, PARKING LOTS, AND COMPARABLE HIGH-RISK AREAS, AND THOSE DESIGNED TO FUNCTION IN CONNECTION WITH OTHER STRUCTURES, SHALL HAVE SUFFICIENT CAPACITY TO CARRY PEAK RUNOFF EXPECTED FROM A STORM FREQUENCY CONSISTENT WITH THE HAZARD INVOLVED.

THE DIVERSION CHANNEL MAY BE PARABULIC, TRAPEZUIDAL OR VEE-SHAPED AND SHALL BE DESIGNED AND CONSTRUCTED ACCORDING TO STD. & SPEC. 3. 17, STORMWATER CONVEYANCE CHANNELS.

RIDGE DESIGN
THE SUPPORTING RIDGE CROSS-SECTION SHALL MEET THE FOLLOWING CRITERIA (SEE PLATE 3. 12-1):
1. THE SIDE SLOPES SHALL BE NO STEEPER THAN 2: 1

2. THE WIDTH AT THE DESIGN WATER ELEVATION SHALL BE A MINIMUM OF 4 FEET 4. THE DESIGN SHALL INCLUDE A 10 PERCENT SETTLEHENT FACTOR.

DIVERSIONS SHALL HAVE ADEQUATE DUTLETS WHICH WILL CONVEY CONCENTRATED RUNDER WITHOUT EROSION. ACCEPTABLE DUTLETS INCLUDE STORMWATER CONVEYANCE CHANNEL (STD. & SPEC. 3. 17), LEVEL SPREADER (STD. & SPEC. 3. 21), DUTLET PROTECTION (STD. & SPEC. 3. 18), AND PAVED FLUME (STD. & SPEC. 3. 16).

STABILIZATION

1. UNLESS OTHERWISE STABILIZED, THE RIBGE AND CHANNEL SHALL BE SEEDED AND MULCHED IMMEDIATELY FOLLOWING THEIR CONSTRUCTION IN ACCORDANCE WITH STD. & SPEC. 3.32, PERMANENT SEEDING.

2. DISTURBED AREAS DRAINING INTO THE DIVERSION SHOULD NORMALLY BE SEEDED AND MULCHED PRIOR TO THE TIME THE DIVERSION IS CONSTRUCTED. SEDIMENT TRAPPING MEASURES MUST REMAIN IN PLACE TO PREVENT SOIL MOVEMENT INTO THE DIVERSION IF UPSLOPE AREA IS NOT STABILIZED. CONSTRUCTION SPECIFICATIONS

ALL TREES, BRUSH, STUMPS, OBSTRUCTIONS, AND OTHER OBJECTIONABLE MATERIAL SHALL BE REMOVED AND DISPOSED OF SO AS NOT TO INTERFERE WITH THE PROPER FUNCTIONING OF THE DIVERSION. 2. THE DIVERSION SHALL BE EXCAVATED OR SHAPED TO LINE, GRADE, AND CROSS-SECTION AS REQUIRED TO MEET THE CRITERIA SPECIFIED HEREIN, FREE OF IRREGULARITIES WHICH WILL IMPEDE FLOW.

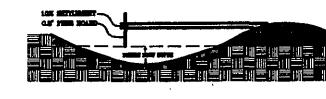
FILLS SHALL BE COMPACTED AS NEEDED TO PREVENT UNEQUAL SETTLEMENT THAT WOULD CAUSE DAMAGE IN THE COMPLETED DIVERSION. FILL SHALL BE COMPOSED OF SOIL WHICH IS FREE FROM EXCESSIVE ORGANIC DEBRIS, ROCKS OR OTHER

1. ALL EARTH REMOVED AND NOT NEEDED IN CONSTRUCTION SHALL BE SPREAD OR DISPOSED OF SO THAT IT WILL NOT INTERFERE WITH THE FUNCTIONING OF THE DIVERSION.

PERMANENT STABILIZATION OF DISTURBED AREAS SHALL BE DONE IN ACCORDANCE WITH THE APPLICABLE STANDARD AND SPECIFICATION CONTAINED IN THIS HAND-BOOK, PERMANENT STABILIZATION TECHNIQUES INCLUDE PERMANENT SEEDING (STD. & SPEC. 3.32).

BEFORE FINAL STABILIZATION, THE DIVERSION SHOULD BE INSPECTED AFTER EVERY RAINFALL AND AT LEAST ONCE EVERY TWO WEEKS. SEDIMENT SHALL BE REMOVED FROM THE CHANNEL AND REPAIRS MADE AS NECESSARY. SEEDED AREAS WHICH FAIL TO ESTABLISH A VEGETATIVE COVER SHALL BE RESEEDED AS NECESSARY.

DIVERSIONS



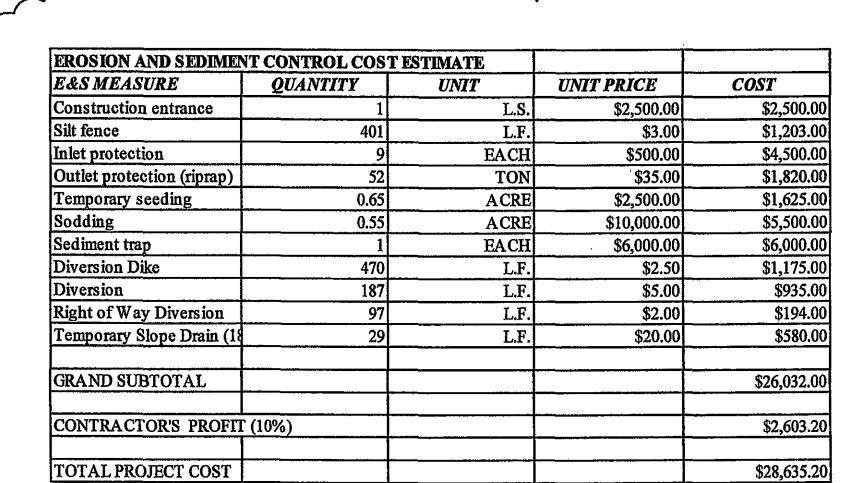
TYPICAL PARABOLIC DIVERSION



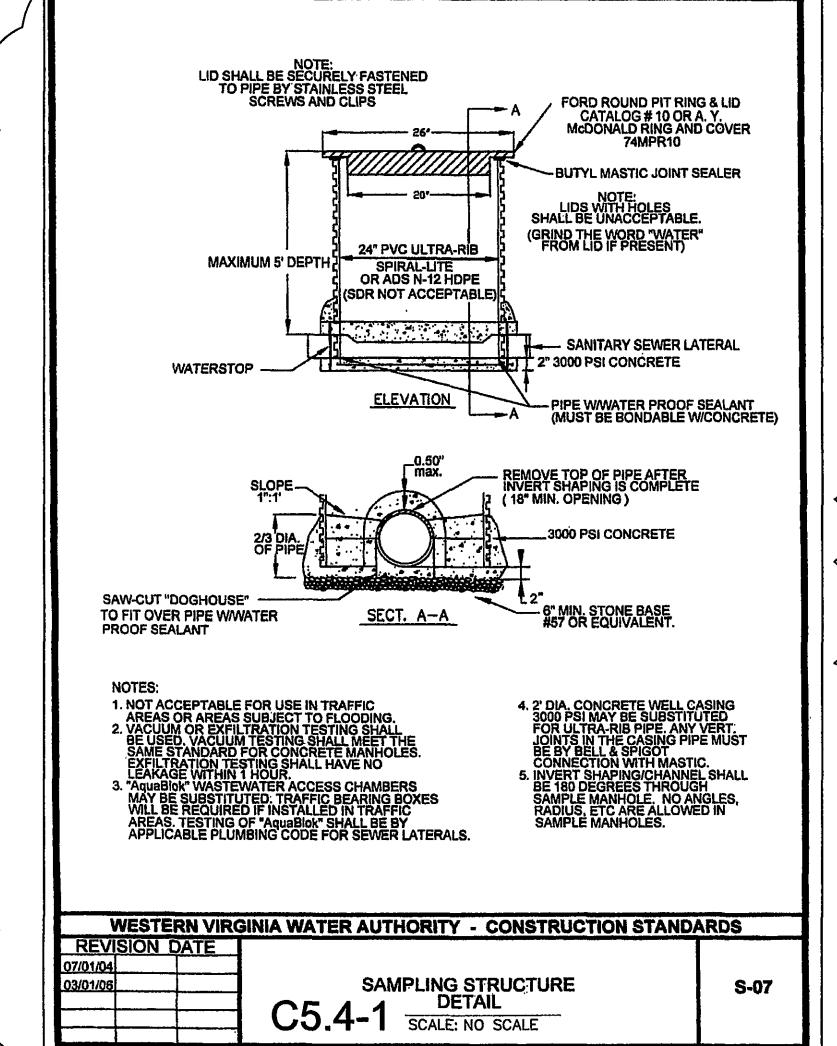
TYPICAL TRAPEZOIDAL DIVERSION

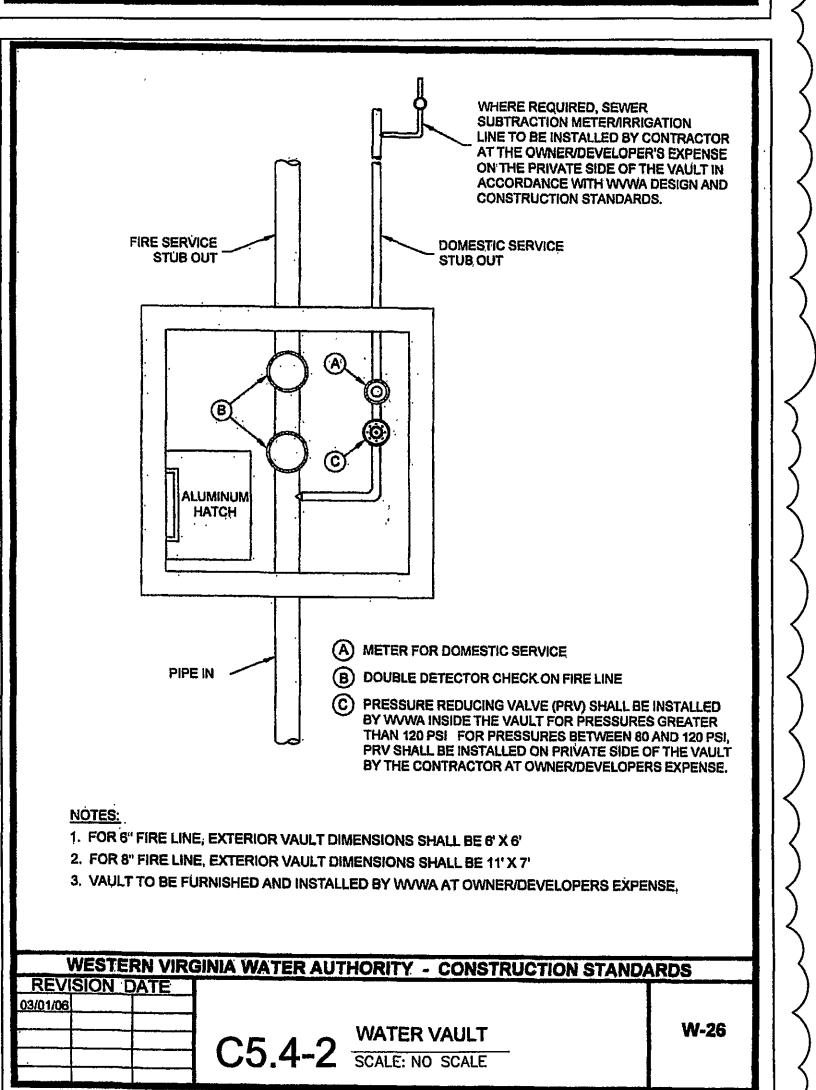


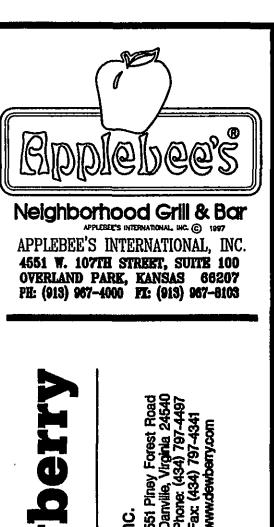
TYPICAL VEE-SHAPED DIVERSION



	DIMENT TRAP	1		,			
TRUCTURE	DRAINAGE	STORAGE	STORAGE	WEIR	WEIR	WEIR	BERM
	AREA (AC)	REQUIRED (CY)	DESIGN (CY)	LENGTH (FT)	HEIGHT (FT)	WIDTH (FI)	HEIGHT (FT)
1	0.36	3818	5265	3	2	2.5	3









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IO. DESCRIPTION: $1\$ PER CO. COMMENTS 4/26/06 2 PER CO. COMMENTS 6/13/06

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