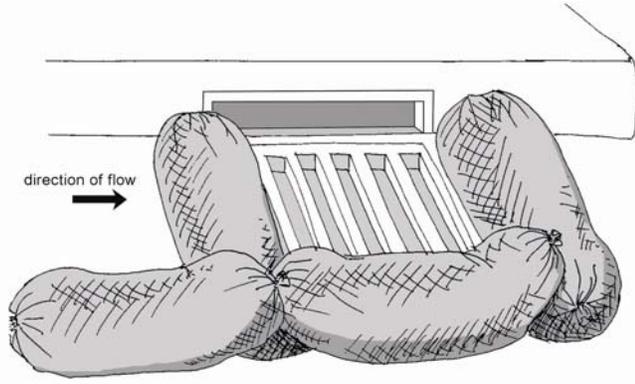


## BMP C220 – Storm Drain Inlet Protection

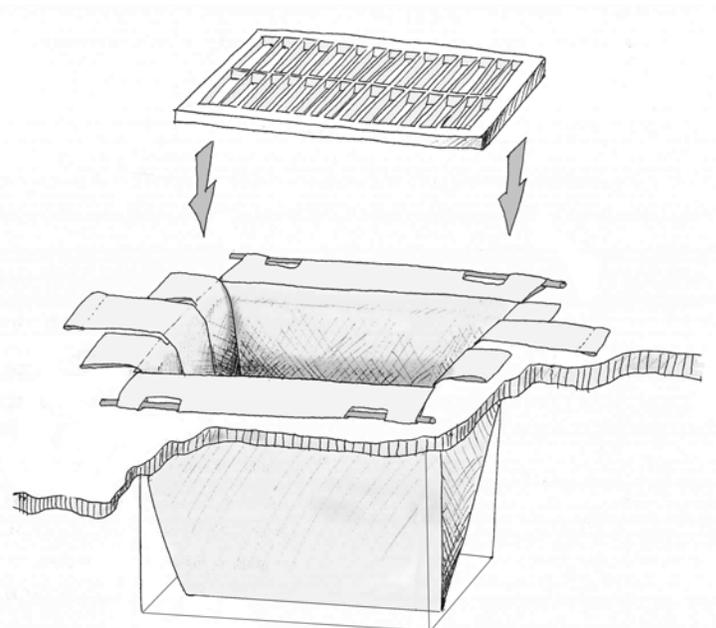
Inlet protection prevents mud from washing into the storm sewer. Mud and debris can cause maintenance issues for the storm sewer system and degradation of stream water quality and salmon habitat.



Wood chip bags



Catch basin inserts



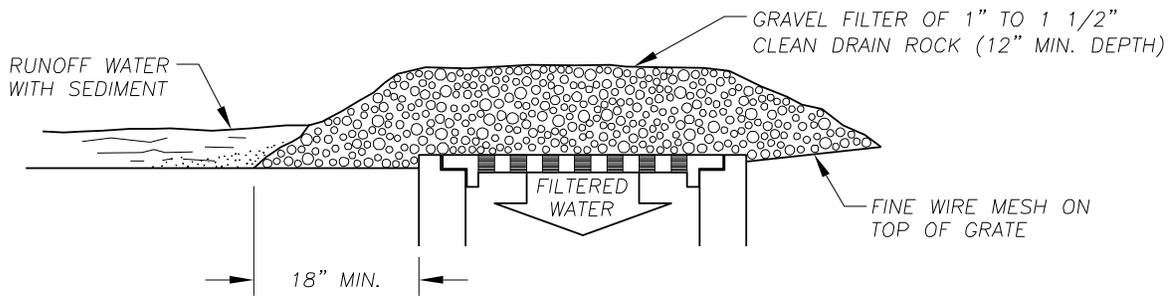
Revised 3/30/12



Community Development  
 1300 Franklin Street, Vancouver, Washington  
 Phone: (360) 397-2375 Fax: (360) 397-2011  
[www.clark.wa.gov/development](http://www.clark.wa.gov/development)



For an alternate format,  
 contact the Clark County  
 ADA Compliance Office.  
 Phone: (360) 397-2322  
 Relay: 711 or (800) 833-6384  
 E-mail: [ADA@clark.wa.gov](mailto:ADA@clark.wa.gov)



GRAVEL & WIRE MESH

NOT TO BE USED IN TRAVELED WAY IF IT MAY RESULT IN A TRAFFIC HAZARD

INLET PROTECTION NOTES:

1. INLET PROTECTION IS INTENDED TO PREVENT COARSE SEDIMENT FROM ENTERING STORM DRAINAGE SYSTEMS BY FILTERING RUNOFF AND RETAINING SEDIMENT BEFORE IT REACHES A DRAINAGE OR STORM SEWER SYSTEM.
2. PLACE INLET PROTECTION IN AREAS WHERE WATER CAN POND, AND WHERE PONDING WILL NOT HAVE ADVERSE IMPACTS.
3. INLET PROTECTION MUST ALLOW FOR OVERFLOW IN A SEVERE STORM EVENT.
4. INLET PROTECTION TYPES INCLUDE:
  - TYPE 1 – GRAVEL AND WIRE MESH
  - TYPE 2 – MASONRY AND ROCK
  - TYPE 3 – SILT FENCE
  - TYPE 4 – BIO-FILTER BAGS
  - TYPE 5 – SILT SACK INSERT
5. INSPECT ONCE PER WEEK ON ACTIVE SITES, ONCE EVERY TWO WEEKS ON INACTIVE SITES, AND WITHIN 24 HOURS FOLLOWING A 0.5 INCH RAIN EVENT.
6. CLEAN INLET PROTECTION DURING AND AFTER EACH SIGNIFICANT STORM AND REMOVE SEDIMENT FROM BEHIND STRUCTURE AFTER EVERY STORM.
7. IF ROCK BECOMES CLOGGED WITH SEDIMENT, IT MUST BE CAREFULLY REMOVED FROM THE INLET AND EITHER CLEANED OR REPLACED.
8. ASSESS THE IMPACT OF ALLOWING WATER TO POND AT THE INLET AND PROVIDE AN OVERFLOW WEIR OR SOME OTHER TYPE OF RELIEF AS NEEDED.
9. CONSIDER THE EFFECT PLACING OBSTRUCTIONS AT INLETS ON GRADE MAY HAVE ON THEIR EFFICIENCY.
10. USE MECHANICAL MEANS TO REMOVE SEDIMENT DEPOSITS (SHOVEL, BROOM, SWEEPER/VACTOR UNIT).
11. REMOVE SEDIMENT ACCUMULATED ON OR AROUND THE PROTECTION AS NEEDED TO MAINTAIN INTENDED FUNCTION.
12. REPAIR OR REPLACE MATERIALS AS NEEDED TO ENSURE PROPER FUNCTION.

NO.	REVISIONS	DATE	BY

DWG: E3.DWG



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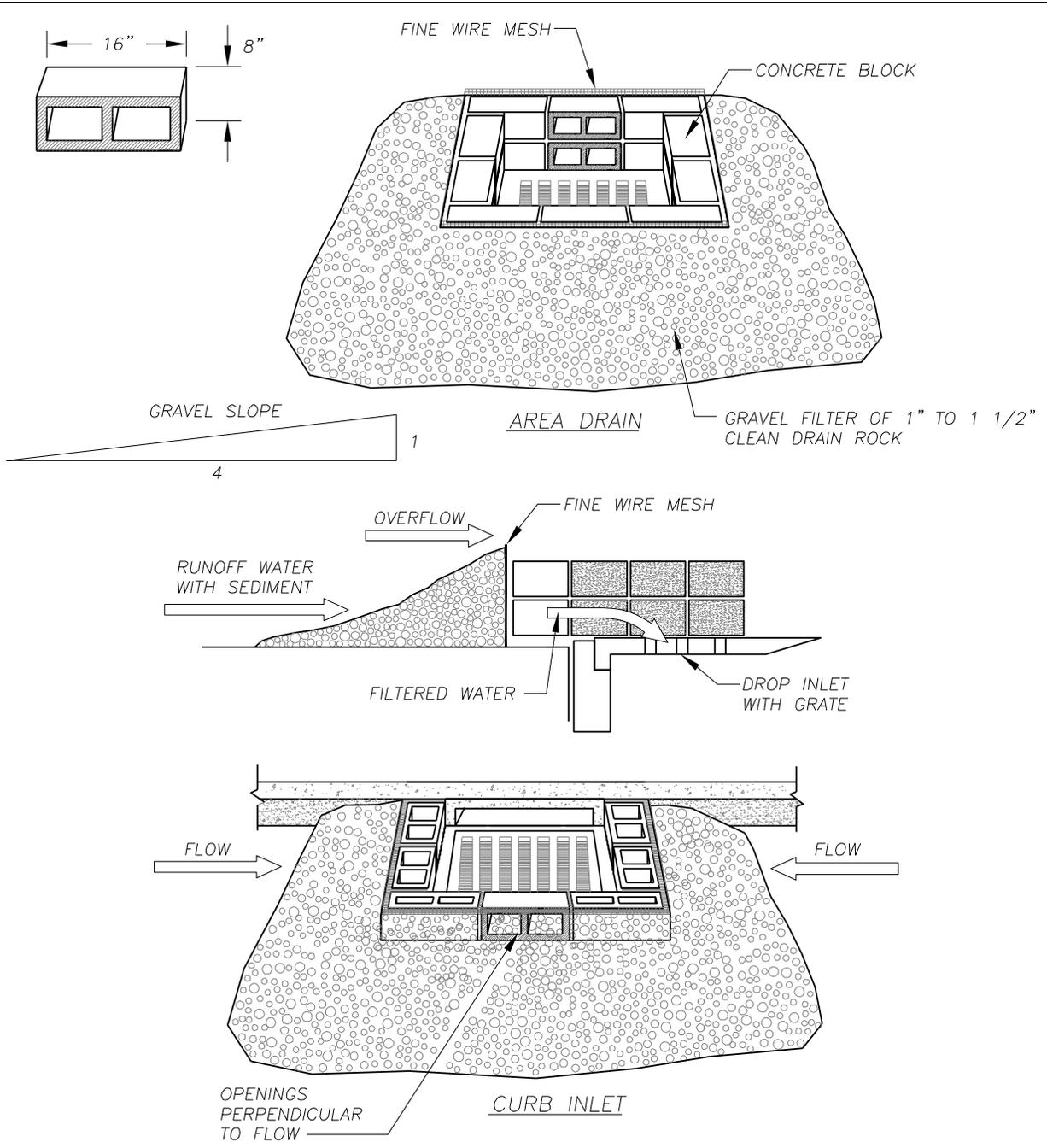
INLET PROTECTION TYPE 1  
 GRAVEL AND WIRE MESH

APPROVED

*Peter Capen*  
 COUNTY ENGINEER

5/23/08  
 DATE

STANDARD  
**E3**  
 DETAIL  
 DESIGNED  
 DRAWN  
 DATE 05/23/08



**BLOCK AND GRAVEL INLET BARRIERS**  
 NOT TO BE USED IN TRAVELED WAY IF IT  
 MAY RESULT IN A TRAFFIC HAZARD

NOTES:

1. BLOCKS SHALL BE STACKED WITH THE OPENINGS ON THE TOP AND BOTTOM EXCEPT FOR THE CENTER BLOCKS. CENTER BLOCKS WILL HAVE OPENINGS PERPENDICULAR TO FLOW.
2. SEE INLET PROTECTION NOTES STD. DETAIL E3.

NO.	REVISIONS	DATE	BY

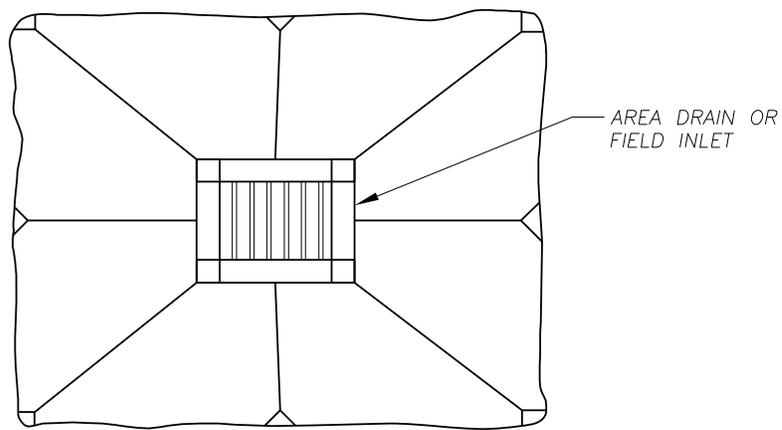
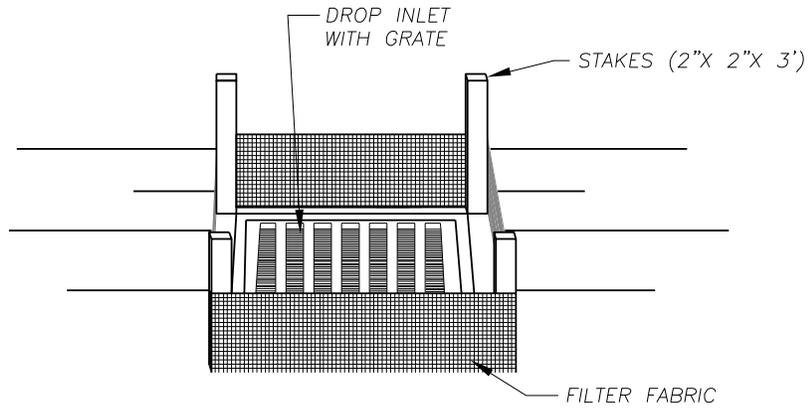
DWG: E3a.DWG



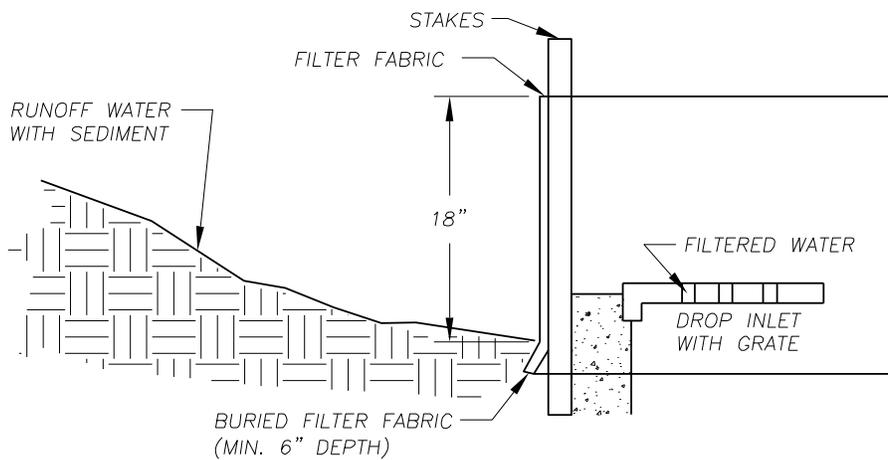
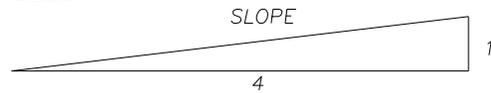
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INLET PROTECTION TYPE 2  
 MASONRY AND ROCK  
 APPROVED  
*Peter Capen*  
 COUNTY ENGINEER  
 5/23/08  
 DATE

STANDARD  
**E3a**  
 DETAIL  
 DESIGNED  
 DRAWN  
 DATE 05/23/08



PLAN VIEW  
SLOPE 4:1



PROFILE

NOTE:

1. SEE INLET PROTECTION NOTES STD. DETAIL E3.

NO.	REVISIONS	DATE	BY

DWG: E3b.DWG



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INLET PROTECTION TYPE 3  
SILT FENCE

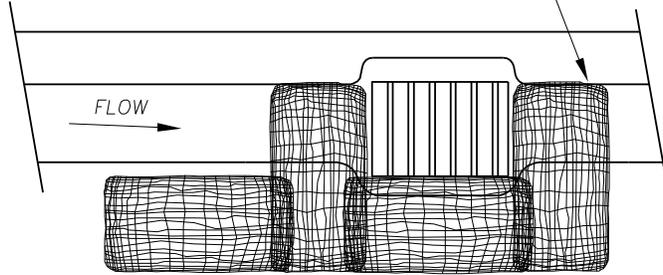
*Peter Capen*  
COUNTY ENGINEER

APPROVED

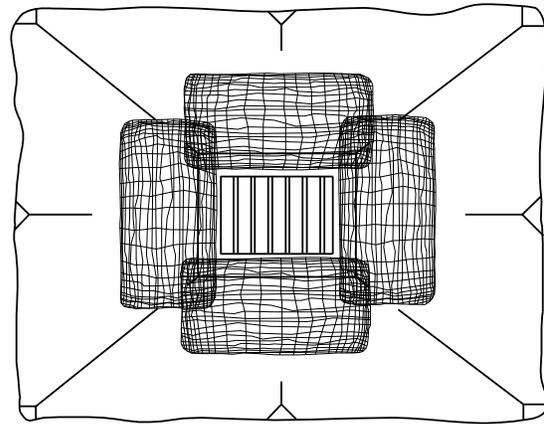
5/23/08  
DATE

STANDARD  
**E3b**  
DETAIL  
DESIGNED  
DRAWN  
DATE 05/23/08

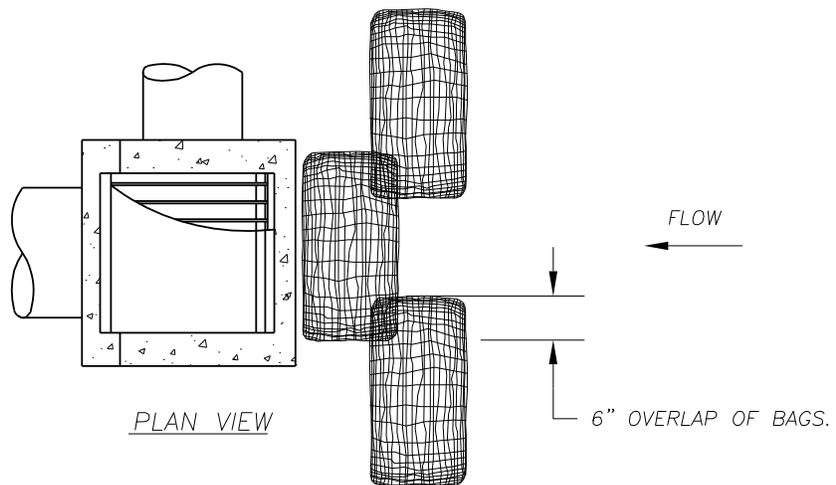
BIO-FILTER BAGS OR STRAW WATTLES MAY BE USED SHORT TERM W/ UTILITY WORK AND W/ PHASING OF DEVELOPMENT



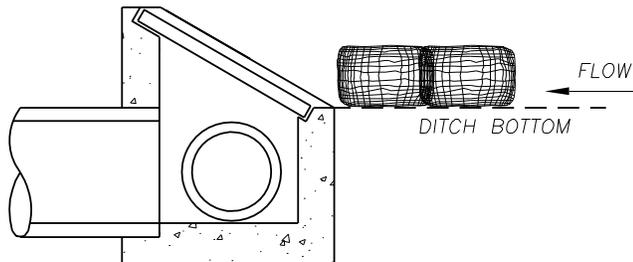
CATCH BASIN



AREA DRAIN



PLAN VIEW



DITCH INLET

NOTES:

1. ADDITIONAL MEASURES MUST BE CONSIDERED DEPENDING ON SOIL TYPE.
2. BIO-FILTER BAGS SHOULD BE STAKED WHERE APPLICABLE USING (2) 1"x2" WOODEN STAKES OR APPROVED EQUAL PER BAG.
3. STRAW WATTLES MUST BE STABILIZED BY ATTACHING WIRE CLIPS TO THE CATCH BASIN PER MANUFACTURERS SPECIFICATIONS.
4. INLET PROTECTION MUST BE REGULARLY INSPECTED BY THE EROSION CONTROL INDIVIDUAL TO INSURE PROPER PLACEMENT/FUNCTION AND MAINTENANCE.
5. SEE INLET PROTECTION NOTES STD. DETAIL E3.

NO.	REVISIONS	DATE	BY

DWG: E3c.DWG

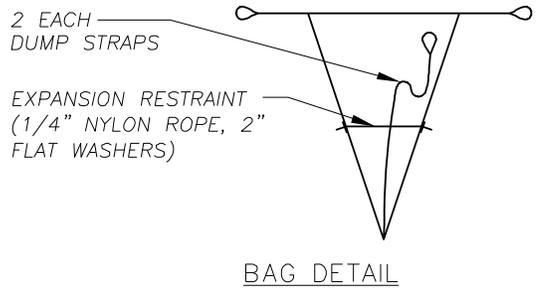
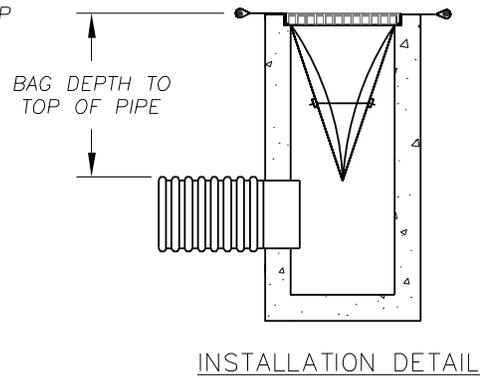
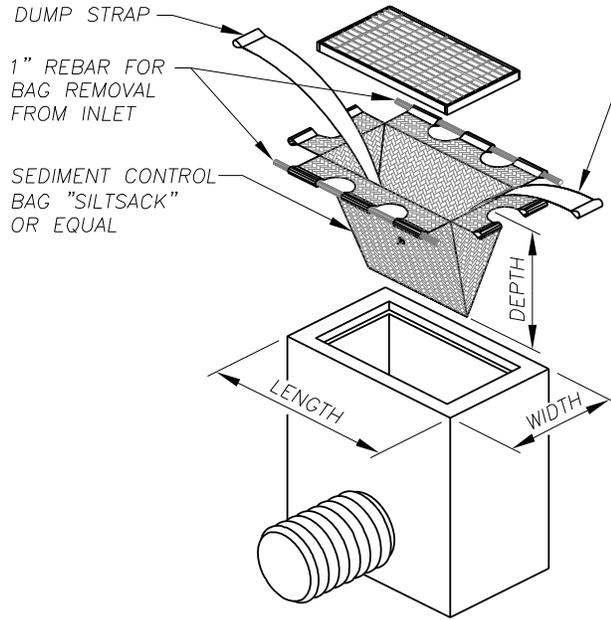


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INLET PROTECTION TYPE 4  
 BIO-FILTER BAGS  
 APPROVED  
*Peter Capen*  
 COUNTY ENGINEER

5/23/08  
 DATE

STANDARD  
**E3c**  
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CB STYLE	LENGTH	WIDTH	DEPTH
TYPE 1 CB	24"	20"	VARIES
TYPE 1 CCI	29.5"	24"	VARIES
USA G2	32.5"	27.5"	VARIES

INLET SEDIMENT CONTROL DEVICE – SILT SACK

NOTES:

1. THE DIMENSION CHART ABOVE IS FOR STANDARD CATCH BASINS AND INLETS ONLY. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING THE CORRECT SIZE DEVICE FOR EACH INLET.
2. FOR NON-STANDARD CATCH BASINS AND INLETS, THE CONTRACTOR SHALL MEASURE DIMENSIONS IN THE FIELD AND ORDER THE APPROPRIATE SIZE(S).
3. THE INLET SEDIMENT CONTROL DEVICE SHALL BE OF HIGH FLOW DESIGN (200 GAL/MIN/FT), AS PER THE MANUFACTURER'S SPECS.
4. THE SEDIMENT CONTROL DEVICE SHALL BE INSPECTED DAILY BY THE CONTRACTOR AND MAINTAINED A MINIMUM ONCE PER MONTH OR WITHIN THE 48 HOURS FOLLOWING A STORM EVENT. FILTER SHALL BE CLEANED IN A MANNER WHICH ENSURES THAT ALL SEDIMENT REMAINS ON SITE.
5. SUBSTITUTION OF A SHEET OF FILTER FABRIC PLACED OVER THE OPENING OF THE INLET IS NOT APPROVED.
6. RECESSED CURB INLET CATCH BASINS MUST BE BLOCKED WHEN USING FILTER FABRIC INLET SACKS, SIZE OF FILTER INLET SACK TO BE DETERMINED BY MANUFACTURER.
7. THE FILTER SHALL BE REPLACED OR CLEANED WHEN THE BAG BECOMES HALF FULL.
8. SEE INLET PROTECTION NOTES STD. DETAIL E3.

NO.	REVISIONS	DATE	BY

DWG: E3d.DWG



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*Peter Capen*  
 COUNTY ENGINEER

INLET PROTECTION TYPE 5  
 SILT SACK

APPROVED

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 DATE 05/23/08