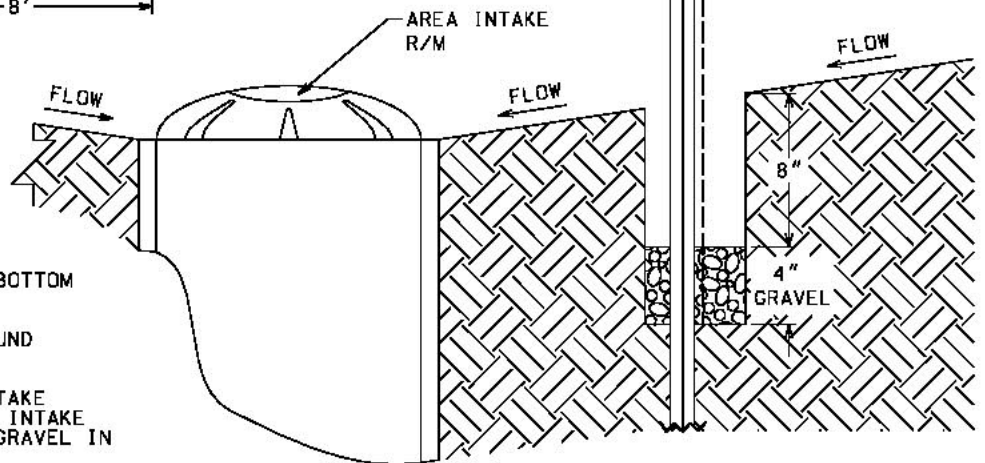
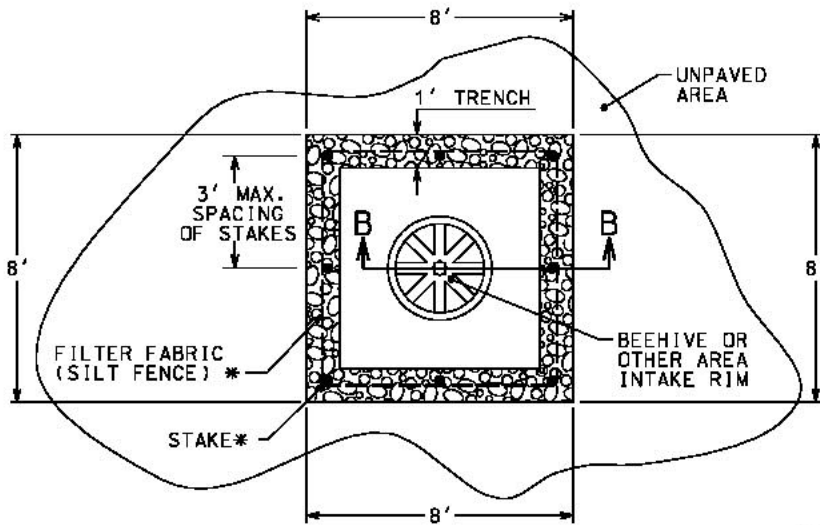


SECTION A-A



SECTION B-B

NOTES:

1. SILT FENCE SHOULD EXTEND TO BOTTOM OF PERIMETER TRENCH.
2. STAKES TO BE DRIVEN INTO GROUND UNTIL FIRM.
3. 1' WIDE TRENCH DUG AROUND INTAKE PERIMETER AT 12" DEPTH BELOW INTAKE TOP OF WALL. PLACE 4" DEPTH GRAVEL IN TRENCH BOTTOM.

* REFER TO SILT FENCE DETAIL.

ISU NPDES DETAILS

STORM SEWER INTAKE PROTECTION UNPAVED AREAS

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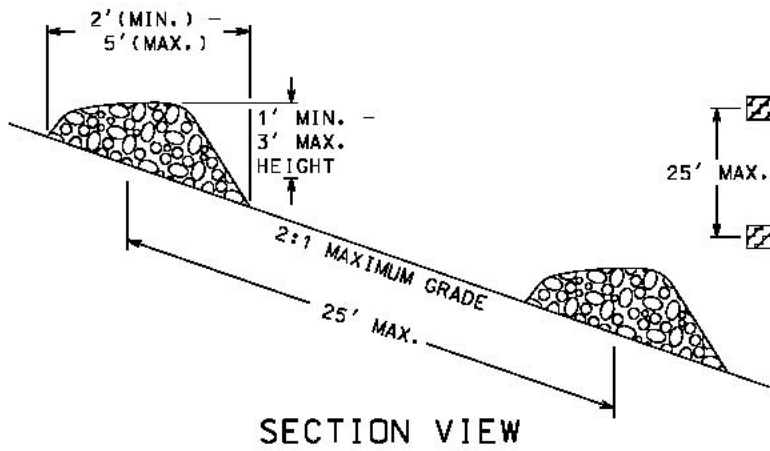
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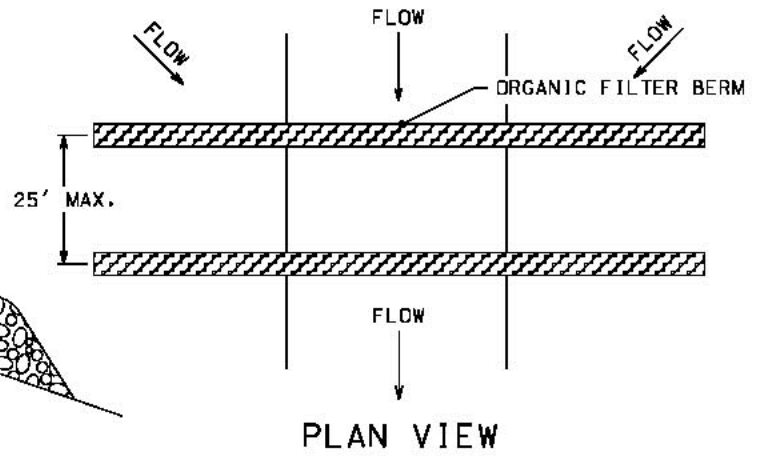
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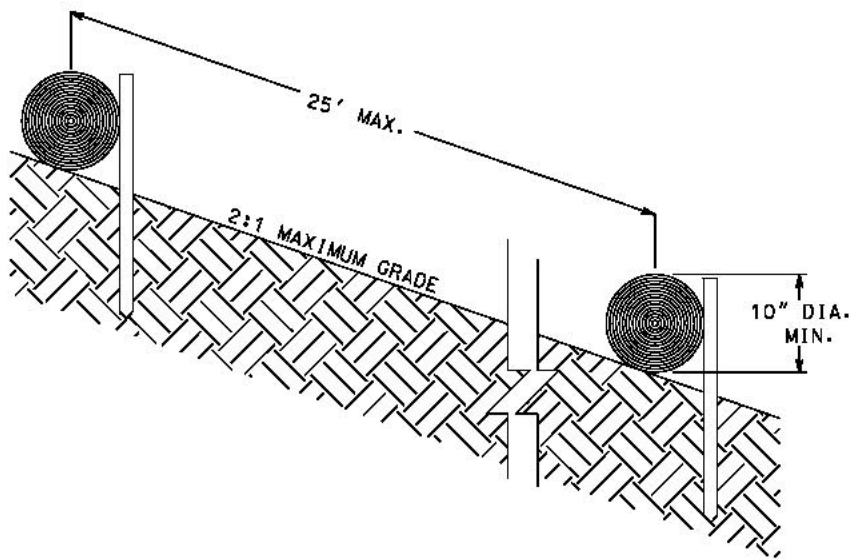


SECTION VIEW

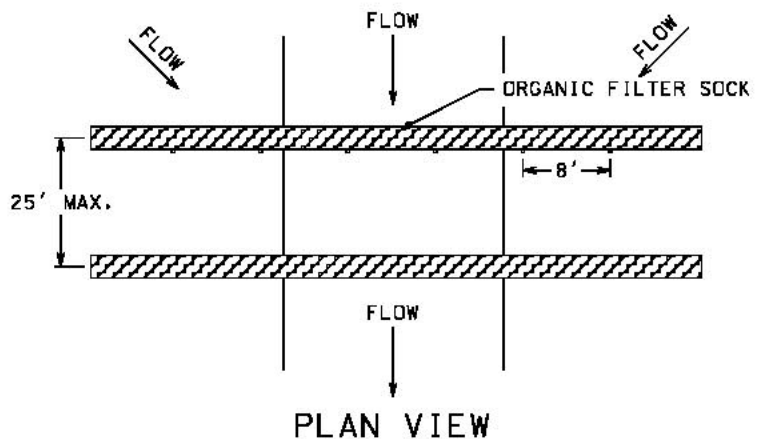


PLAN VIEW

BERM



NOTE:
STAKE FILTER SOCK ON DOWNHILL
SIDE AS NECESSARY.



PLAN VIEW

SOCKS

ISU NPDES DETAILS

ORGANIC FILTER BERM FOR SLOPES



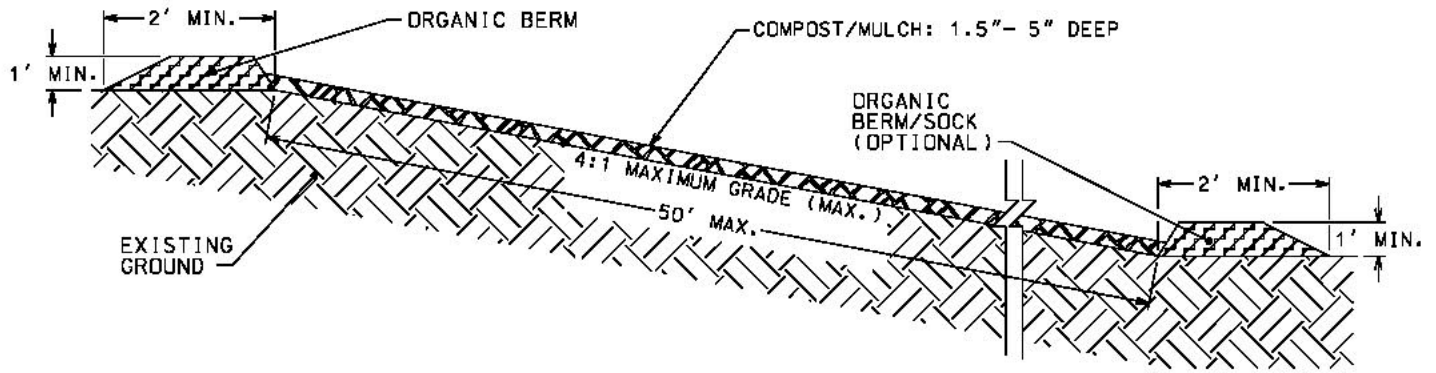
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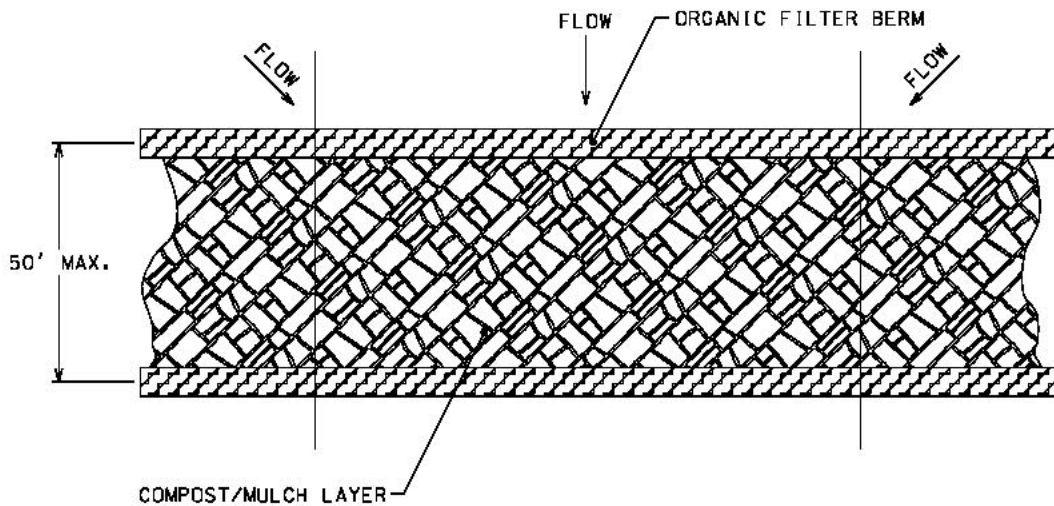
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TECH: DSS



SECTION VIEW



PLAN VIEW

NOTE:

12" DIAMETER SILT SOCK MAY BE SUBSTITUTED FOR THE ORGANIC BERMS LOCATED AT THE TOP AND BOTTOM OF THE SLOPE. SOCK IS STAKED ON DOWN HILL SIDE AS NECESSARY

ISU NPDES DETAILS

EROSION CONTROL (ERC) BLANKET FOR SLOPES

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SHEET 3 OF 13

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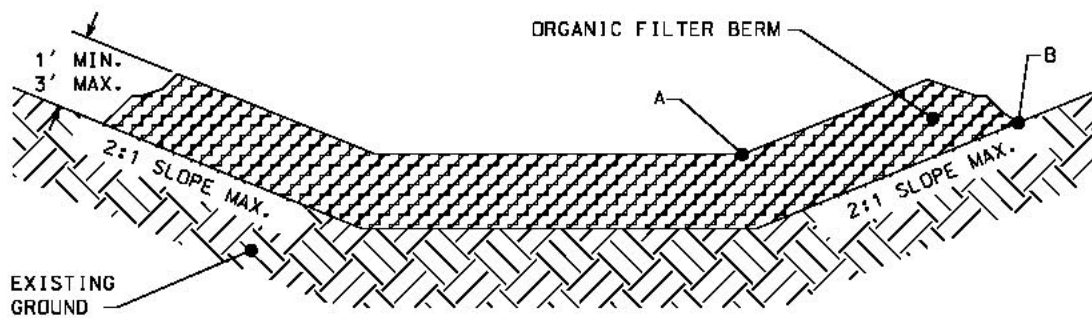
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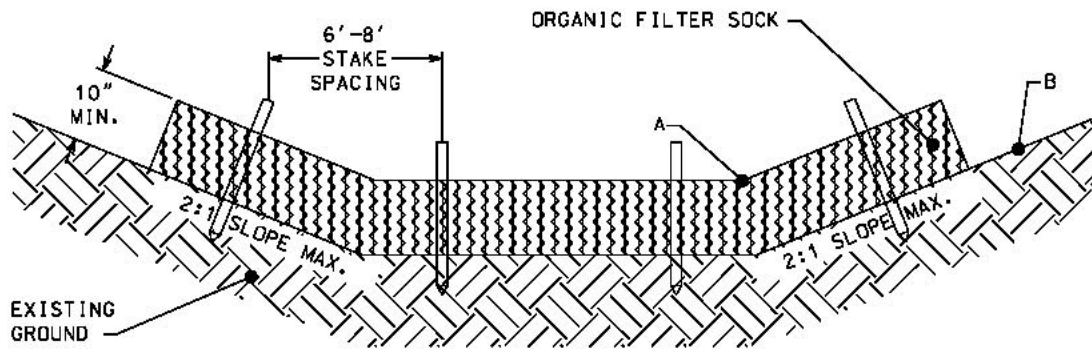
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NOTE:

POINT "B" MUST BE HIGHER THAN POINT "A".
 STAKE CHECK DAM ON DOWNHILL SIDE AS NECESSARY.
 "A" IS THE TOP OF THE BERM AT ITS LOWEST POINT.
 "B" IS THE MATCH POINT OF EXISTING GRADE WITH THE BOTTOM OF THE BERM.

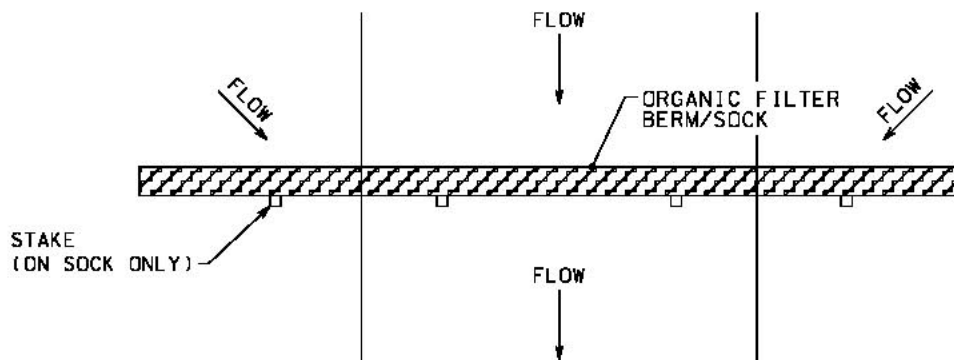
SECTION VIEW



NOTE:

POINT "B" MUST BE HIGHER THAN POINT "A".
 STAKE CHECK DAM ON DOWNHILL SIDE AS NECESSARY.
 "A" IS THE TOP OF THE BERM AT ITS LOWEST POINT.
 "B" IS THE MATCH POINT OF EXISTING GRADE WITH THE BOTTOM OF THE BERM.

SECTION VIEW



PLAN VIEW

ISU NPDES DETAILS

ORGANIC CHECK DAMS FOR SWALES, DITCHES, CHANNELS

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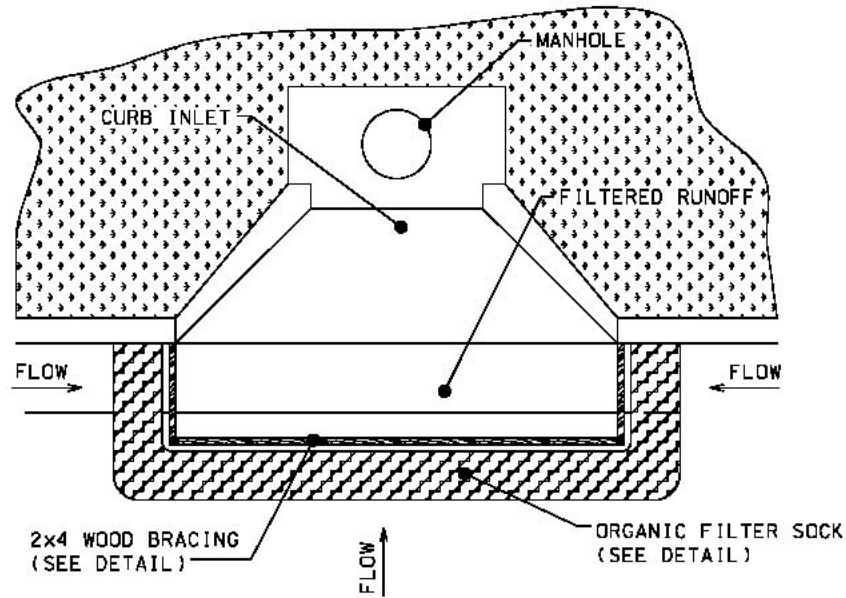
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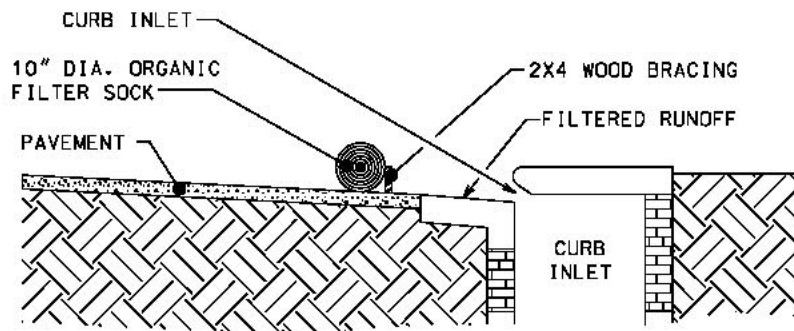
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PLAN VIEW



ISU NPDES DETAILS

INTAKE SEDIMENT TRAPS

SHEET 5 OF 13

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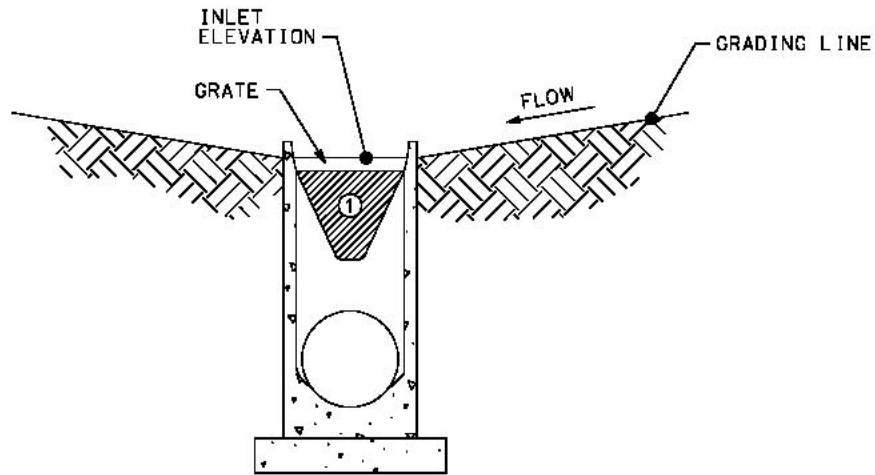


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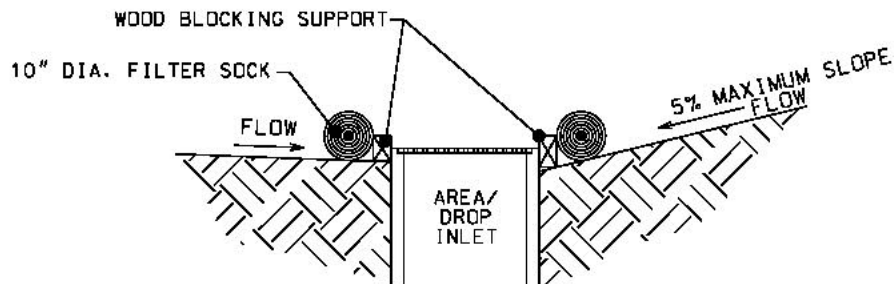
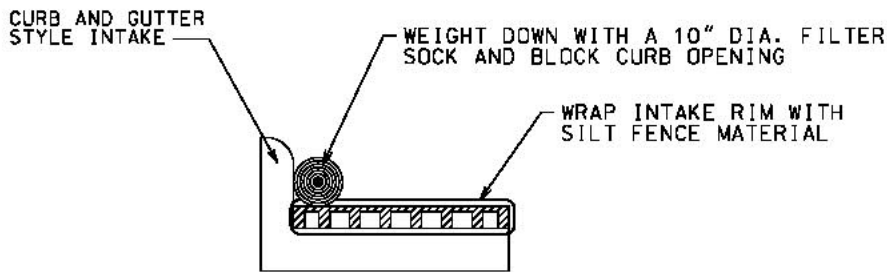
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NOTE:

1. INSTALL INTERSTATE PRODUCTS, INC. ULTRA DRAIN GUARD, SEDIMENT MODEL PART #9226. INSTALL AND MAINTAIN PER MANUFACTURERS INSTRUCTIONS.
2. THE TRAP MAY BE USED IN COMBINATION WITH A PERIMETER FILTER SOCK, SEE DETAIL XX.



ISU NPDES DETAILS

INTAKE SEDIMENT TRAPS

SHEET 6 OF 13

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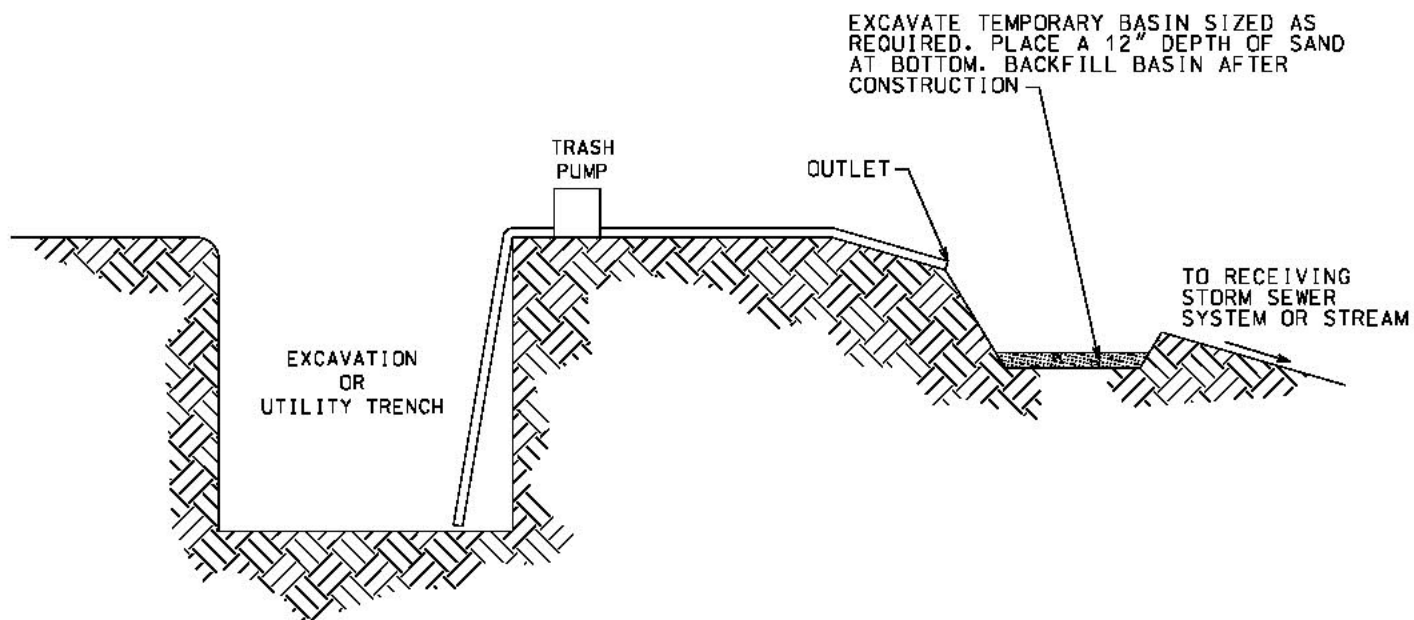


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NOTES

1. UNDER NO CIRCUMSTANCES WILL SILT-LADEN WATER BE PUMPED FROM AN EXCAVATION DIRECTLY INTO A STORM SEWER SYSTEM OR STREAM.
2. AN ADEQUATE SILT REMOVAL SYSTEM WILL BE INSTALLED BY THE CONTRACTOR PRIOR TO DISCHARGING.
3. IF A TEMPORARY BASIN IS NOT PRACTICAL, PROTECT THE RECEIVING STORM SEWER SYSTEM OR STREAM BY USING SEDIMENT TRAPS OR OTHER INLET PROTECTION MEASURES.
4. SEE DETAIL XX FOR SEDIMENT TRAPS. SEE DETAIL XX FOR INLET PROTECTION.

ISU NPDES DETAILS

SHEET 7 OF 13

DE-WATERING DETAIL FOR REMOTE SITES

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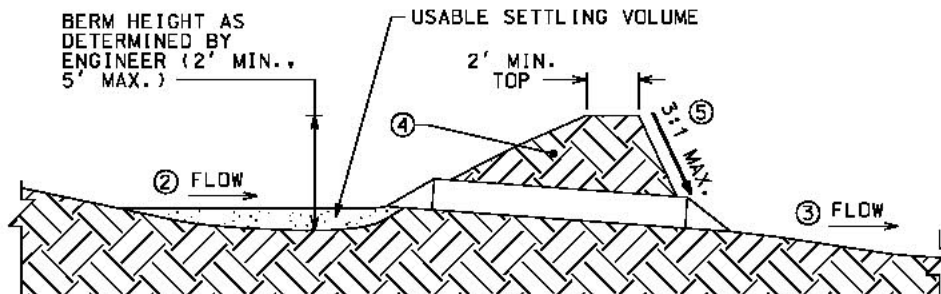
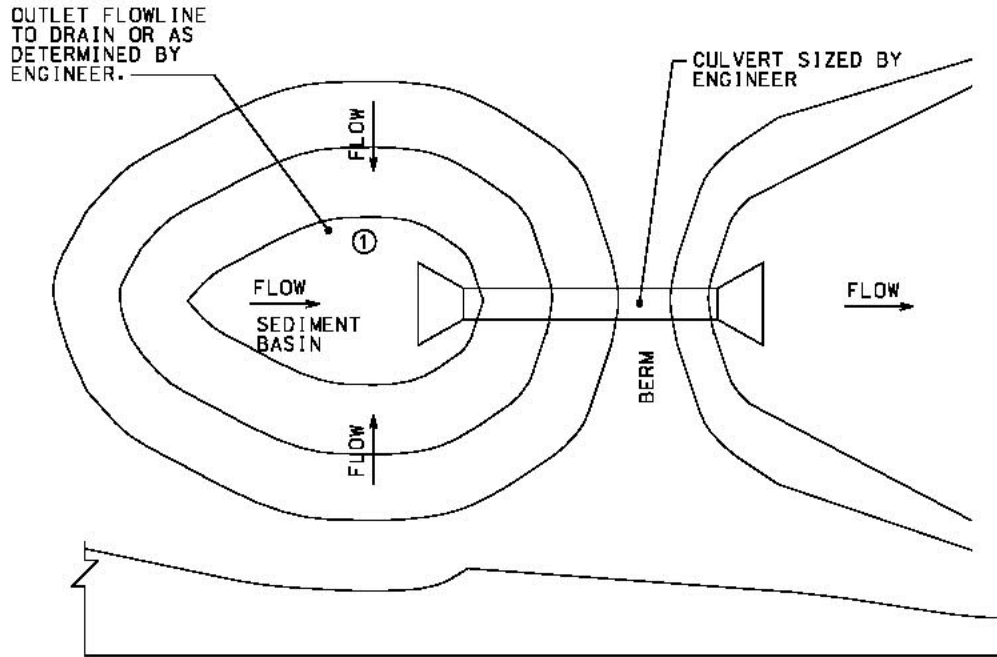
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NOTES:

1. INDUSTRY STANDARD SUGGEST 3600 CUBIC FEET OF STORAGE AREA PER ACRE OF GROUND IN THE DRAINAGE WAY ABOVE THE BASIN.
2. INLET FLOWLINE ELEVATION AS DETERMINED BY ENGINEER FOR USABLE SETTLING VOLUME OR AT EXISTING LOW POINT.
3. OUTLET FLOWLINE TO DRAIN OR AS DETERMINED BY ENGINEER.
4. CONSTRUCT BERM IN 6" LIFTS AND COMPACT. BERM SHALL BE FREE OF ROOTS, VEGETATION AND LARGE STONES.
5. SEED OR MULCH BERM TO CONTROL EROSION.
6. CLEAN SEDIMENT BASIN WHEN IT HAS REACHED 50% CAPACITY.

ISU NPDES DETAILS

SEDIMENT BASIN FOR LARGE SITES

SHEET 8 OF 13

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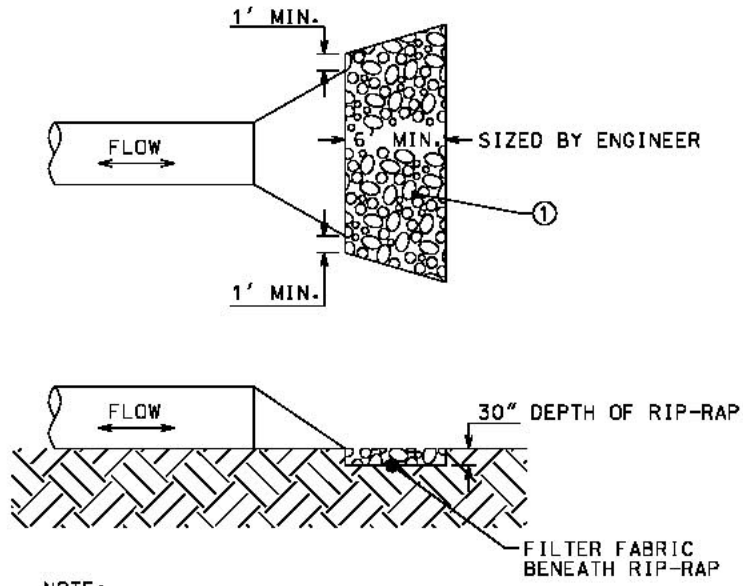


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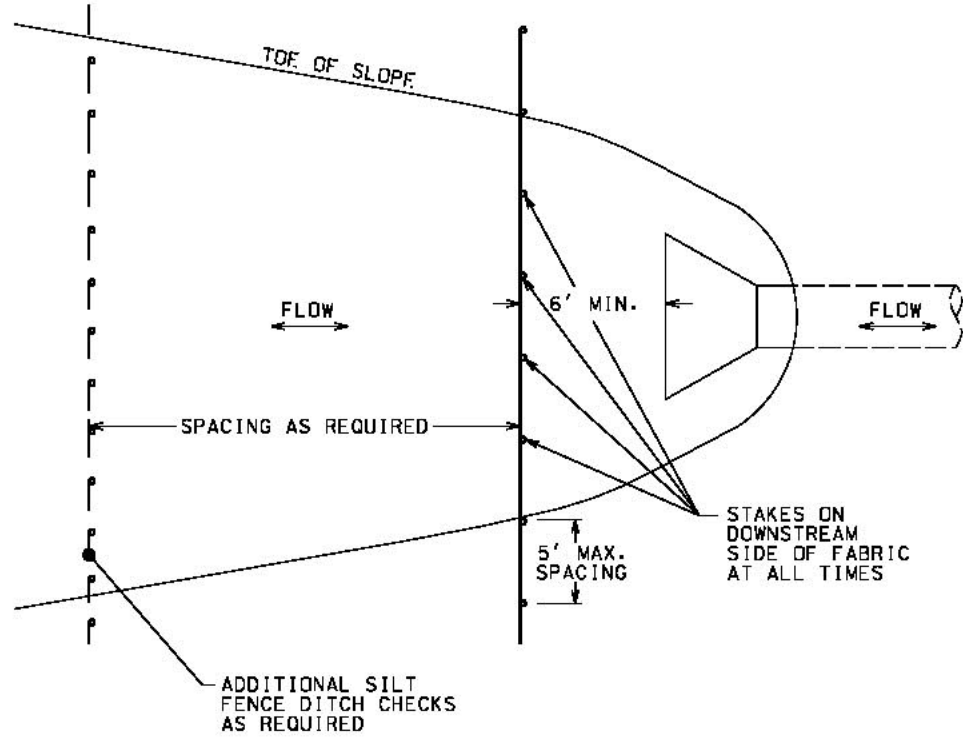
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NOTE:
 1. AREA TO APPLY FILTER FABRIC (SILT FENCE MATERIAL) AND RIP-RAP. USE CLASS "E" RIP-RAP OR SIMILAR LARGE 12" MATERIAL.



ISU NPDES DETAILS

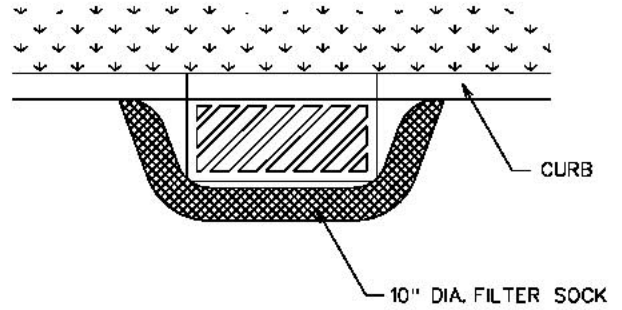
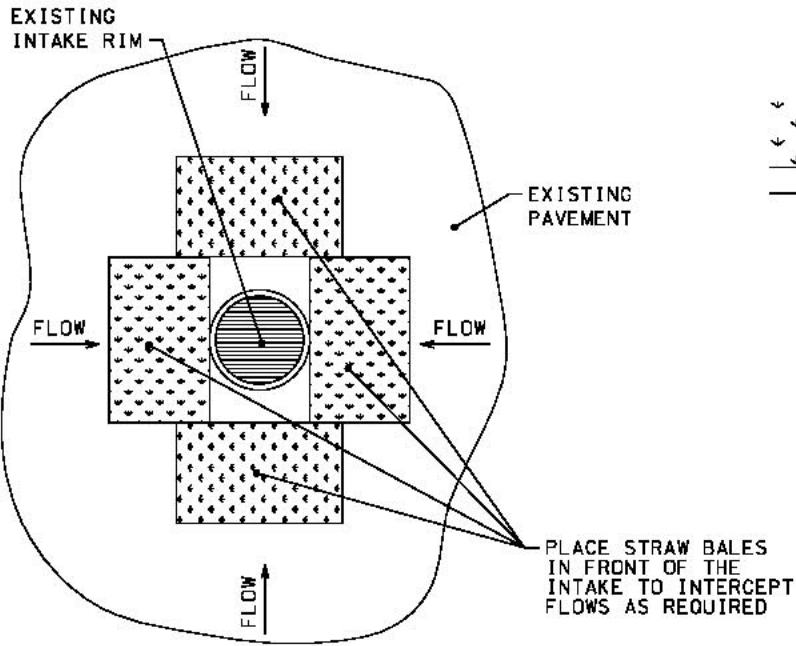
CULVERT INLET /OUTLET PROTECTION

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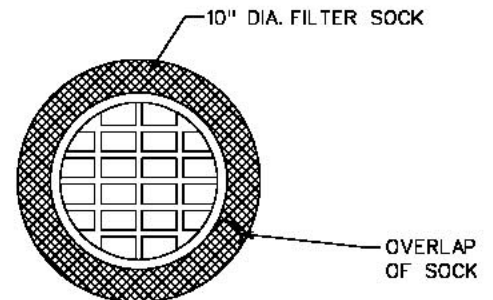
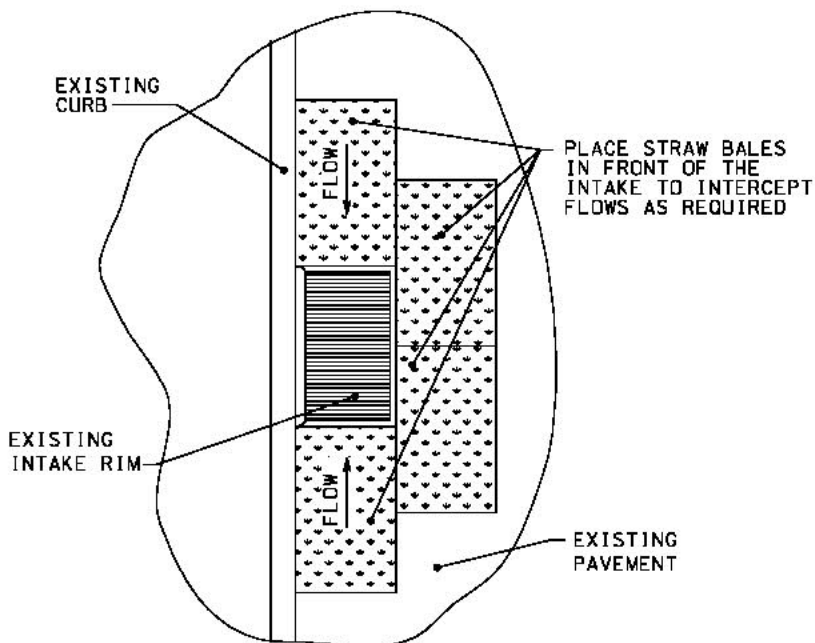


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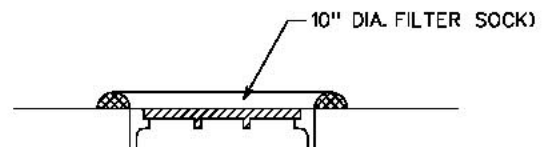


NOTE:
CONTRACTOR TO PROTECT SOCK FROM TRAFFIC DAMAGE.



NOTE:
CONTRACTOR TO PROTECT SOCK FROM TRAFFIC DAMAGE.

PLAN



SECTION

ISU NPDES DETAILS

STORM SEWER INTAKE PROTECTION PAVED AREAS

SHEET 10 OF 13

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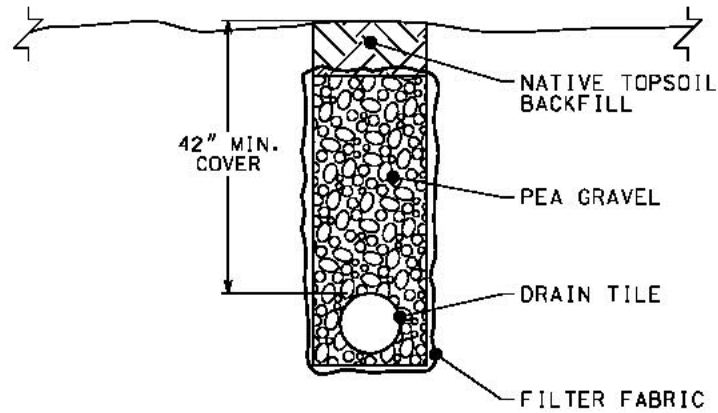


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NOTE:

1. DRAIN TILE IS SLOTTED OR PERFORATED POLYETHYLENE 4" DIAMETER MINIMUM. LOCATE AS REQUIRED BY ENGINEER.
2. THE DAYLIGHT LOCATION OF THE TILE OR THE CONNECTION OF THE TILE TO AN EXISTING STORM SEWER SYSTEM SHALL BE APPROVED BY ENGINEER.
3. WRAP PEA GRAVEL IN FILTER FABRIC ONLY IF REQUIRED BY ENGINEER.

ISU NPDES DETAILS

SHEET 11 OF 13

SUBDRAIN TO ARTIFICIALLY LOWER WATER TABLE

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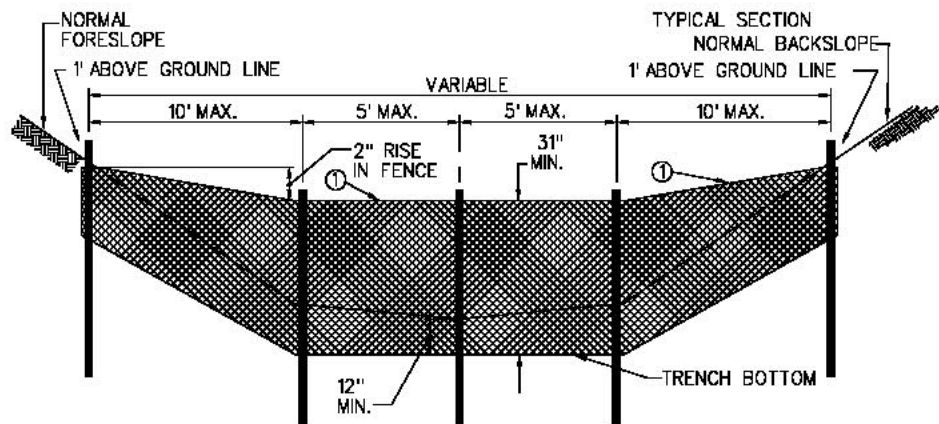
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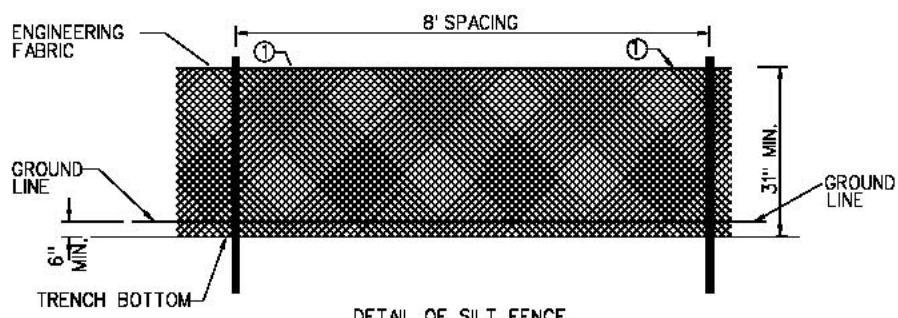
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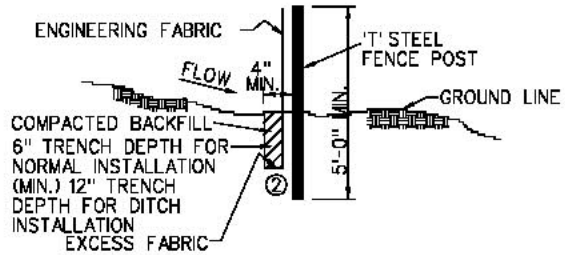
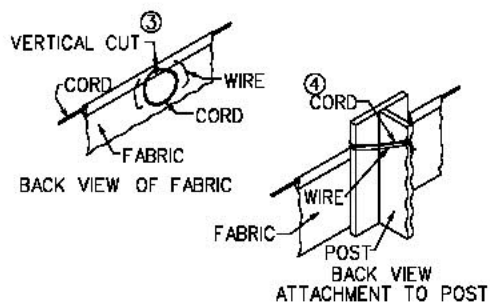
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DETAIL OF SILT FENCE AT DITCH OR SWALE



DETAIL OF SILT FENCE



- NOTES :
- ① SECURE TOP OF ENGINEERING FABRIC TO TOP OF STEEL POST. SEE DETAIL OF ATTACHMENT TO POST.
 - ② ENGINEERING FABRIC TO BE PLACED TO BOTTOM OF TRENCH.
 - ③ MAKE VERTICAL CUT IN TOP OF FABRIC. PULL OUT AND TWIST CORD.
 - ④ LOOP CORD AROUND POST FORMING A LOOP. PULL WIRE THROUGH FOLD AREA OF FABRIC AND SECURE AROUND POST.

ISU NPDES DETAILS

SILT FENCE

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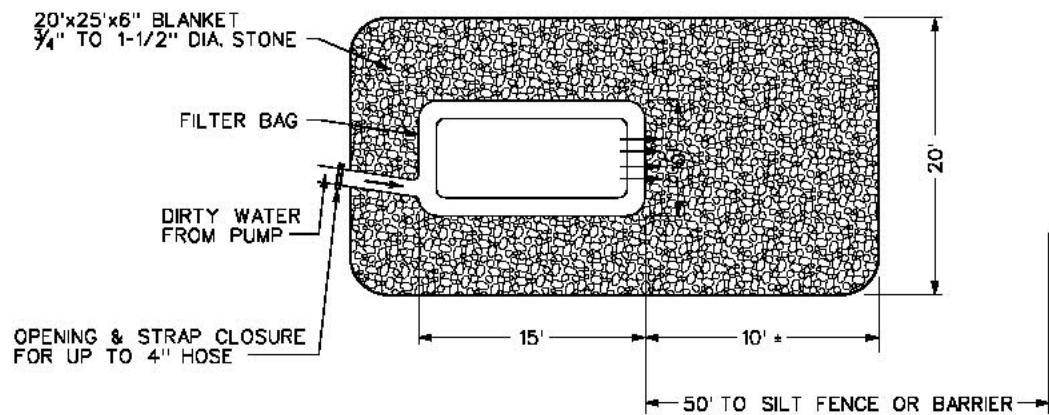


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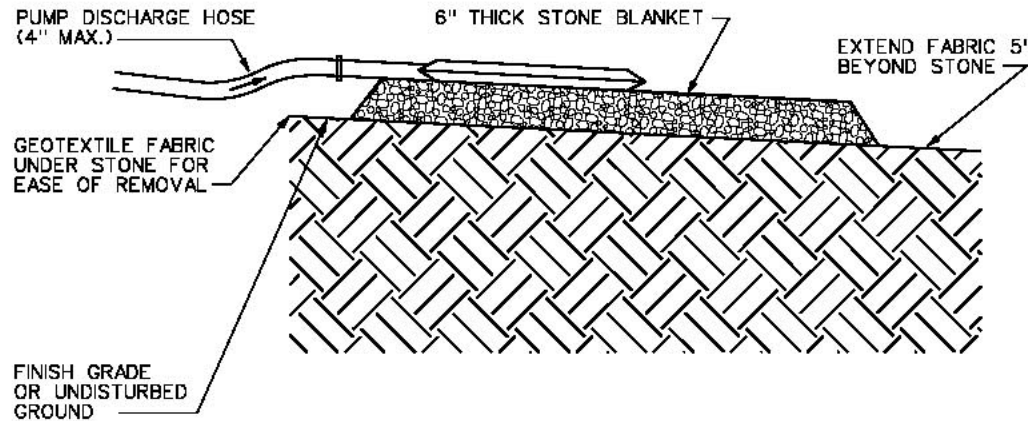
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TOP VIEW



SIDE VIEW

GENERAL NOTES

1. UNDER NO CIRCUMSTANCES WILL SILT - LADEN WATER BE PUMPED FROM AN EXCAVATION DIRECTLY INTO A STORM SEWER SYSTEM OR STREAM.
2. AN ADEQUATE SILT REMOVAL SYSTEM WILL BE INSTALLED BY THE CONTRACTOR PRIOR TO DISCHARGING.
3. IF A FILTER BAG IS NOT PRACTICAL, PROTECT THE RECEIVING STORM SEWER SYSTEM BY USING SEDIMENT TRAPS OR OTHER INLET PROTECTION MEASURES.
4. SEE DETAIL XX FOR SEDIMENT TRAPS.
5. SEE DETAIL XX FOR INLET PROTECTION.

FILTER BAG NOTES

1. FILTER BAG IS NON-WOVEN MATERIAL, MINIMUM 10'x15' SIZE OR AS SPECIFIED BY ENGINEER.
2. DO NOT OVER PRESSURIZE FILTER BAG OR USE BEYOND CAPACITY.
3. LOCATE DISCHARGE SITE 25' MINIMUM FROM STREAMS, WETLANDS, OR OTHER CONCENTRATED FLOW AREAS.
4. DOWN GRADIENT RECEIVING AREA FROM THE FILTER BAG MUST BE VEGETATED OR MULCHED, OR OTHERWISE MADE STABLE FROM EROSION.
5. STRAW MATTING IS AN ACCEPTABLE SUBSTITUTE FOR THE STONE BLANKET.
6. USE "DIRTBAG" PRODUCT AVAILABLE FROM ACF ENVIRONMENTAL OR EQUAL.
7. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO PROPERLY DISPOSE OF THE CONTENTS OF THE FILTER BAG AND THE FILTER BAG ITSELF AFTER USE.

ISU NPDES DETAILS

SHEET 13 OF 13

DE-WATERING DETAIL FOR URBAN SITES

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