EROSION AND POLLUTION CONTROL GENERAL NOTES:

1. CLEARING LIMITS AND WORK AREA LIMITS SHALL BE DELINEATED AND MARKED PRIOR TO ANY CLEARING OR GRADING. DO NOT DISTURB MORE AREA THAN NEEDED FOR CONSTRUCTION REQUIREMENTS.
2. ALL SENSITIVE OR CRITICAL AREAS (WETLANDS, STEEP SLOPES, NATURAL WATERWAYS, ETC.) AND BUFFERS SHALL BE CLEARLY DELINEATED, MARKED, AND PROTECTED FROM CONSTRUCTION ACTIVITIES.
3. ALL EROSION, POLLUTION, AND SEDIMENT CONTROL MEASURES ARE TO BE PLACED PRIOR TO ANY DISTURBANCE CAUSED BY CLEARING OR GRADING AND SHALL CONFORM TO THE REQUIREMENTS OF THE STORMWATER MANAGEMENT MANUAL OF WESTERN WASHINGTON, VOLUME II – CONSTRUCTION STORMWATER POLLUTION PREVENTION, THE ERSOSION CONTROL PLAN, AND THE STANDARD DETAILS CONTAINED WITHIN THIS SET OF PLANS. NEWLY CONSTRUCTED OR MODIFIED INLETS AND CATCH BASINS ARE TO BE PROTECTED IMMEDIATELY UPON INSTALLATION. TEMPORARY SEEDING AND MULCHING OF EXPOSED SLOPES SHALL BE COMPLETED WITHIN ONE WEEK AFTER ROUGH GRADING. ALL EXPOSED AND UNWORKED SOILS SHALL BE STABILIZED BY THE APPROPRIATE BMP.
4. IN THE EVENT OF ANY EROSION CONTROLS MEASURE FAILURE, IMMEDIATE ACTION SHALL BE TAKEN TO REPAIR, REPLACE, OR CONSTRUCT ADDITIONAL MEASURES AS REQUIRED TO ENSURE ADEQUATE EROSION CONTROL PROTECTION.
5. ALL EROSION AND POLLUTION CONTROL MEASURES SHALL BE INSPECTED AFTER EACH RAINFALL EVENT THAT PRODUCES RUNOFF AND AT LEAST ONE TIME PER MONTH, TO ASSURE ADEQUATE PERFORMANCE. SEE THE STANDARD EROSION CONTROL DETAILS FOR ADDITIONAL MAINTENACE REQUIREMENTS. A MAINTENANCE LOG SHALL BE KEPT AND SHALL BE MADE AVAILABLE TO THE CITY OF WASHOUGAL. SHOULD SPECIFIED EROSION AND POLLUTION CONTROL BMP'S FAIL OR PROVE TO BE INADEQUATE, THE CITY MAY REQUIRE ADDITIONAL BMP'S TO BE INSTALLED.
6. MAINTAIN AND REMOVE ALL EROSION CONTROLS AS SPECIFIED ON THE STANDARD EROSION CONTROL DETAIL SHEET AND PLAN. THE CONTRACTOR SHALL REMOVE ALL ACCUMULATED SEDIMENT FROM THE CATCH BASINS, DRYWELLS, AND STORM PIPES PRIOR TO ACCEPTANCE BY THE OWNER. EROSION CONTROLS SHALL BE REMOVED WITHIN 30 DAYS FOLLOWING FINAL STABILIZATION.
7. WHERE POSSIBLE MAINTAIN NATURAL VEGETATION FOR EROSION AND SILTATION CONTROL.
8. AS CONSTRUCTION PROGRESSES AND SEASONAL CONDITIONS DICTATE, MORE SILTATION CONTROL FACILITIES MAY BE REQUIRED TO ENSURE COMPLETE SILTATION CONTROL. THEREFORE DURING THE COURSE OF CONSTRUCTION IT SHALL BE THE OBLIGATION AND RESPONSIBILITY OF THE DEVELOPER TO ADDRESS ANY NEW CONDITIONS THAT MAY BE CREATED BY THE ACTIVITIES AND TO PROVIDE ADDITIONAL FACILITIES OVER AND ABOVE THE MINIMUM REQUIREMENTS AS MAY BE NEEDED TO ACHIEVE THE PERFORMANCE STANDARDS REQUIRED BY THE PERMIT.
9. PRIOR TO ANY SITE EXCAVATION, ALL CATCH BASINS IN THE VICINITY OF THE SITE SHALL BE PROTECTED FROM SILT INTRUSION BY COVERING THE OPEN AREA OF THE OUTLET TRAP WITH FILTER FABRIC SECURELY FASTENED TO TRAP. CLEAN THE FILTER FABRIC AS NECESSARY TO MAINTAIN DRAINAGE. REMOVE FILTER FABRIC AND CLEAN THE CATCH BASINS FOLLOWING COMPLETION OF SITEWORK.

EROSION AND POLLUTION CONTROL GENERAL NOTES (CONT):

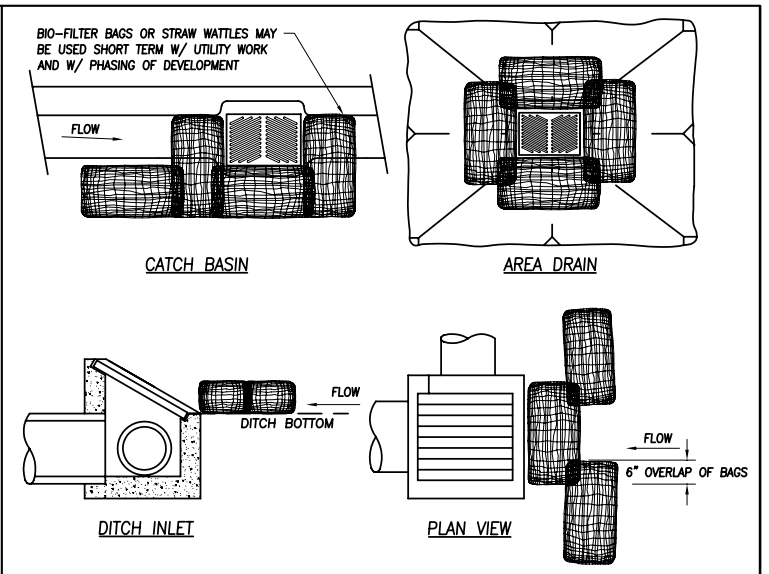
10. PROTECTION OF SURFACES:
    - A. INSTALL HAY BALES AT LOCAL DRAINAGEWAYS AS SHOWN TO PREVENT SILT INTRUSION UPON ADJACENT DRAINAGE COURSES. REMOVE HAY BALES FOLLOWING ESTABLISHMENT OF GRASS COVER AND UTILIZE AS MULCH AT SWALES OR ON STEEP SLOPES.
    - B. AT ALL ACCESS POINTS ONTO THE SITE THAT ARE UTILIZED BY CONSTRUCTION EQUIPMENT AND TRUCKS, PROVIDE A 12 INCH DEEP PAD OF CRUSHED ROCK FOR A DISTANCE OF 100 FEET INTO THE SITE. WIDTH OF PAD SHALL BE AS SHOWN ON THE EROSION CONTROL PLAN, BUT IN NO CASE LESS THAN THE FULL WIDTH OF THE INGRESS/EGRESS AREA, OR 20 FEET, WHICHEVER IS GREATER. ALL TRUCKS LEAVING THE SITE SHALL EGRESS ACROSS THE PAD. ACCUMULATED SOIL FROM THE PAD SHALL BE PERIODICALLY REMOVED, OR ADDITIONAL ROCK SHALL BE PLACED UPON THE PAD SURFACE. ROCK SHALL BE 4" – 8" QUARRY SPALLS. ALL MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLES ONTO ROADWAYS OR INTO STORM DRAINS MUST BE REMOVED IMMEDIATELY.
    - C. INSTALL STORM DRAIN INLET PROTECTION AS SHOWN ON THE EROSION CONTROL PLAN AND STANDARD DETAILS TO PREVENT EROSION AND POLLUTION FROM ENTERING THE STORM DRAINAGE SYSTEM. CLEAN THE FILTER AS NECESSARY TO MAINTAIN DRAINAGE AND PROVIDE APPROVED TRAFFIC CONTROL DEVICES AS NECESSARY FOR THE PROTECTION DEVICES. REMOVE FILTER AND CLEAN CATCH BASINS FOLLOWING COMPLETION OF SITEWORK.
    - D. INSTALL SILT FENCE PRIOR TO EXCAVATION AS SHOWN ON THE EROSION CONTROL STANDARD DETAIL TO PREVENT SILT INTRUSION UPON ADJACENT LAND. FOR MAINTENANCE AND REMOVAL OF SILT FENCE, SEE THE SILT FENCE GENERAL NOTES.
    - E. AT SITES WITH LESS THAN 1 ACRE OF EXPOSED SOIL, PAD LENGTH MAY BE REDUCED TO 50 FEET. SINGLE FAMILY LOT ENTRANCES MAY REDUCE THE PAD LENGTH TO 20 FEET.
11. IN AREAS SUBJECT TO SURFACE AND AIR MOVEMENT OF DUST, WHERE ON-SITE OR OFF-SITE DAMAGE IS LIKELY TO OCCUR, ONE OR MORE OF THE FOLLOWING PREVENTIVE MEASURES SHALL BE TAKEN FOR DUST CONTROL:
    - A. MINIMIZE THE PERIOD OF SOIL EXPOSURE THROUGH THE USE OF TEMPORARY GROUND COVER AND OTHER TEMPORARY STABILIZATION PRACTICES.
    - B. THE SITE IS SPRINKLED WITH WATER UNTIL SURFACE IS WET. REPEAT AS NEEDED. TO PREVENT CARRY OUT OF MUD ONTO STREET, REFER TO PROTECTION OF SURFACES.
    - C. SPRAY EXPOSED SOIL AREAS WITH DUST PALLIATIVE.

    NOTE: USED OIL IS PROHIBITED FOR USE AS A PALLIATIVE.
12. TEMPORARY SEEDING SHALL BE PLACED ON EXPOSED SURFACES THAT WILL NOT BE BROUGHT TO FINAL GRADING OR PERMANENT COVER TREATMENT OR VEGETATION WITHIN 7 DAYS OF THE EXPOSURE TO REDUCE EROSION AND SEDIMENTATION BY STABILIZING EXPOSED SOILS. DURING THE TIME PERIOD OCTOBER 1 THROUGH APRIL 30, NO SOILS SHALL BE EXPOSED FOR MORE THAN 2 DAYS. SEEDED AREAS SHALL BE CHECKED REGULARLY TO ASSURE A GOOD STANDARD OF GRASS IS BEING MAINTAINED. AREAS THAT FAIL TO ESTABLISH VEGETATION COVER ADEQUATE TO PREVENT SLOPE EROSION WILL BE RESEEDED AS SOON AS SUCH AREAS ARE IDENTIFIED.

EROSION AND POLLUTION CONTROL GENERAL NOTES (CONT):

13. APPLY THE FOLLOWING TEMPORARY SEEDING MIXTURE (GIVEN IN PROPORTIONS BY WEIGHT) TO THE PREPARED SEED BED AT A RATE OF 120 LBS/ACRE:
    - –10% REDTOP AT 92% PURITY AND 90% GERMINATION
    - –40% ANNUAL RYE AT 98% PURITY AND 90% GERMINATION
    - –40% CHEWINGS FESCUE AT 97% PURITY AND 80% GERMINATION
    - –10% WHITE DUTCH CLOVER AT 90% PURITY AND 90% GERMINATION

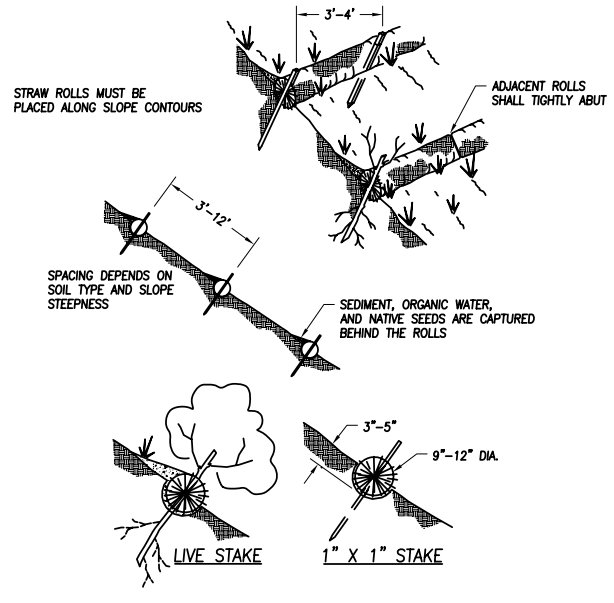
    NOTE: "HYDROSEEDING" APPLICATIONS WITH APPROVED SEED–MULCH–FERTILIZER MIXTURES MAY ALSO BE USED.
14. EROSION CONTROL NETS AND BLANKETS SHALL BE INSTALLED ON EXPOSED SLOPES 2H:1V OR GREATER AND/OR ON EXPOSED SLOPES WITH MORE THAN 10 FEET OF VERTICAL RELIEF.
15. ALL TEMPORARY, PERMANENT, WET AREA, BIOFILTRATION, AND HYDROSEEDING SHALL BE IN ACCORDANCE WITH BMP C120: TEMPORARY AND PERMANENT SEEDING AS NOTED IN THE STORMWATER MANAGEMENT MANUAL FOR WESTERN WASHINGTON, VOLUME II – CONSTRUCTION STORMWATER POLLUTION PREVENTION. SEEDING SHALL BE APPLIED AT A RATE OF 120 LBS/ACRE.
16. ALL INCOMPLETE MANHOLES AND OTHER DROP INLETS SHALL BE PROTECTED WITH A SILT–SAVER FRAME AND FILTER ASSEMBLY AS AVAILABLE FROM CSI GEOSYNTHETICS 1–800–426–7976 OR AN APPROVED EQUAL.
17. DEWATERING DEVICES MUST DISCHARGE INTO A SEDIMENT TRAP OR POND. THERE SHALL BE NO DISCHARGE TO A PAVED STREET OR STORMWATER COLLECTION SYSTEM WITHOUT FIRST REMOVING SEDIMENT.
18. ALL PESTICIDES, PETROLEUM PRODUCTS, CHEMICALS OR OTHER POTENTIAL POLLUTANTS SHALL BE ADMINISTERED RESPONSIBLY WITH DISPOSAL AND SPILLS HANDLED IN ACCORDANCE WITH ALL LOCAL, STATE AND FEDERAL REQUIREMENTS.
19. THE CONTRACTOR SHALL PROVIDE A SEPARATE AREA, A MINIMUM OF 200 SQUARE FEET IN SIZE FOR WASHING OF CONRETE TRUCKS. THIS AREA SHALL ALSO BE ISOLATED SO THAT NO WATER ENTERS THE STORM DRAINAGE SYSTEM.
20. FAILURE TO COMPLY WITH THESE EROSION CONTROL REQUIREMENTS MAY RESULT IN A STOP WORK ORDER AND REJECTION OF ALL MATERIALS AND WORK COMPLETE FOLLOWING THE ISSUANCE OF THE STOP WORK ORDER.



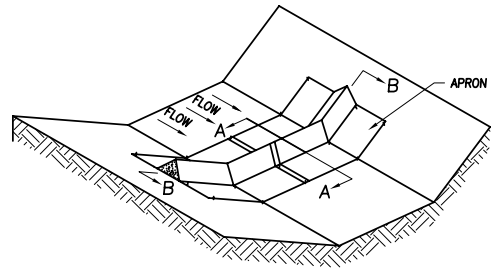
NOTES:

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 MANUFACTURES SPECIFICATIONS.
4. INLET PROTECTION MUST BE REGULARLY INSPECTED BY THE EROSION CONTROL INDIVIDUAL TO INSURE PROPER PLACEMENT/FUNCTION AND MAINTENANCE.
5. BIO–FILTER BAGS SHALL BE CSI GEOSYNTHETICS (800)426–7976 JUNIPER PILLOWS OR AN APPROVED EQUAL. STANDARD SIZES: 16"x26" ~ 30"x36 ~ 48"x48"
6. STRAW WATTLES USED FOR INLET PROTECTION SHALL BE HELD IN PLACE BY SAND BAGS.

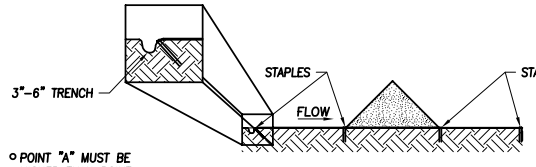
INLET PROTECTION – BIOFILTER BAGS
NTS



STRAW WATTLE SEDIMENT BARRIER
NTS

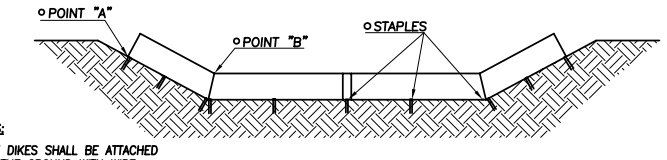


SILT DIKE UNIT – CUT SECTION



DETAIL A–A

- POINT "A" MUST BE HIGHER THAN POINT "B" TO ENSURE THAT WATER FLOWS OVER THE DIKE AND NOT AROUNT THE ENDS.
- STAPLES SHALL BE PLACED WHERE THE UNITS OVERLAP AND IN THE CENTER OF THE 7' UNIT AS SHOWN ON HE DIAGRAMS

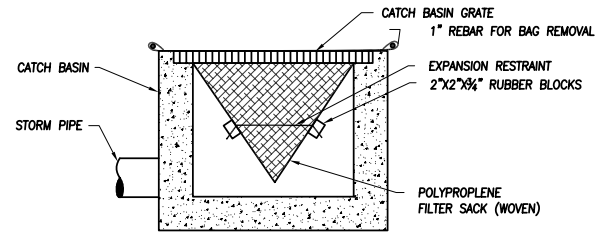


DIKE SECTION DETAIL B–B

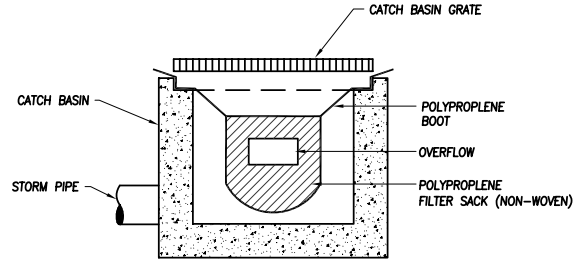
NOTES:

1. THE DIKES SHALL BE ATTACHED TO THE GROUND WITH WIRE STAPLES. THE STAPLES SHALL BE NO. 11 GAUGE WIRE AND BE ATLEAST 6" TO 8" LONG.
2. STAPLES SHALL BE PLACED AS INDICATED ON THE INSTALLATION DETAIL.
3. CAN BE USED FOR DITCH CHECK DAMS, DIVERSION DIKES, DROP INLET PROTECTION, TEMPORARY DITCH LINER OR SILT FENCE (IN SOME APPLICATIONS).

TRIANGULAR SILT CHECK DAM
NTS



WOVEN POLYPROPLENE SACK



NON–WOVEN POLYPROPLENE SACK

NOTES:

1. RECESSED CURB INLET CATCH BASINS MUST BE BLOCKED WHEN USING FILTER FABRIC INLET SACKS, SIZE OF FILTER INLET SACK TO BE DETERMINED BY MANUFACTURER.
2. THE CONTRACTOR SHALL INSPECT THE FILTER WEEKLY AND DAILY DURING PERIODS OF FREQUENT RAIN.
3. FILTER SHALL BE CLEANED IN A MANNER WHICH ENSURES THAT ALL SEDIMENT REMAINS ON SITE.
4. THE FILTER SHALL BE REPLACED OR CLEANED WHEN THE BAG BECOMES HALF FULL.
5. FILTER SHALL BE FOSS ENVIRONMENTAL SERVICES "STREAMGUARD TYPE II–S CBF" OR EQUIVALENT.

INLET PROTECTION CATCH BASIN INSERT
NTS

STRAW WATTLE NOTES:

1. PREPARE THE SLOPE BEFORE THE WATTLING PROCEDURE IS STARTED.
2. SHALLOW GULLIES SHOULD BE SMOOTHED AS WORK PROGRESSES.
3. DIG SMALL TRENCHES ACROSS THE SLOPE ON CONTOUR, TO PLACE ROLLS IN. THE TRENCH SHOULD BE DEEP ENOUGH TO ACCOMMODATE HALF THE THICKNESS OF THE ROLL. WHEN THE SOIL IS LOOSE AND UNCOMPACTED, THE TRENCH SHOULD BE DEEP ENOUGH TO BURY THE ROLL 2/3 OF ITS THICKNESS BECAUSE THE GROUND WILL SETTLE.
4. IT IS CRITICAL THAT ROLLS ARE INSTALLED PERPENDICULAR TO WATER MOVEMENT, PARALLEL TO THE SLOPE CONTOUR.
5. START BUILDING TRENCHES AND INSTALL ROLLS FROM THE BOTTOM OF THE SLOPE AND WORK UP.
6. CONSTRUCT TRENCHES AT CONTOUR INTERVALS OF 3–12 FEET APART DEPENDING ON STEEPNESS OF SLOPE. THE STEEPER THE SLOPE, THE CLOSER TOGETHER THE TRENCHES.
7. LAY THE ROLL ALONG THE TRENCHES FITTING IT SNUGLY AGAINST THE SOIL. MAKE SURE NO GAPS EXIST BETWEEN THE SOIL AND THE STRAW WATTLE.
8. USE A STRAIGHT BAR TO DRIVE HOLES THROUGH THE WATTLE AND INTO THE SOIL FOR THE WILLOW OR WOODEN STAKES.
9. DRIVE THE STAKE THROUGH PREPARED HOLE INTO SOIL. LEAVE ONLY 1 OR 2 INCHES OF STAKE EXPOSED ABOVE ROLL.
10. INSTALL STAKES AT LEAST EVERY 4 FEET APART THROUGH THE WATTLE. ADDITIONAL STAKES MAY BE DRIVEN ON THE DOWNSLOPE SIDE OF THE TRENCHES ON HIGHLY EROSIVE OR VERY STEEP SLOPES.
    INSPECTION AND MAINTENANCE:
11. INSPECT THE STRAW ROLLS AND THE SLOPES AFTER SIGNIFICANT STORMS. MAKE SURE THE ROLLS ARE IN CONTACT WITH THE SOIL. REPAIR ANY RILLS OR GULLYS PROMPTLY.
12. RESEED OR REPLANT VEGETATION IF NECESSARY UNTIL THE SLOPE IS STABILIZED.
13. WATTLES STAKED ALONG THE CONTOUR OF NEWLY CONSTRUCTED OR DISTURBED SLOPES. CAN OFTEN BE USED TO REPLACE SEDIMENT FENCES ON STEEP SLOPES.

STRAW WATTLE NOTES

By	APPR.	DATE	No.	REVISIONS
MBC		8/03		APPROVED (CD VERSION 1.1)
MBC		10/03		APPROVED (CD VERSION 1.2)

DESIGNED	EB/LF
DRAWN	BS
CHECKED	JG
APPROVED	MBC

SCALE: HOR. NTS; VERT. NTS; FIELD BOOK N/A

JOB NUMBER

DATE

CITY OF WASHOUGAL

STANDARD EROSION & POLLUTION CONTROL DETAILS – SHEET 1

DRAWING NUMBER

SHEET of