Tollway Standard Drawing Revisions

Section K	Temporary Erosion & Sediment Control	
	Standard	**Modification Summary** **Effective: 03/11/15**
	All	Revised detail descriptions to match Tollway Coded Pay Items
		Updated drawings to follow IDOT highway standard levels
	Sheet 1	**General Notes**
		Note 18. Changed "construction section engineer" to "engineer"
		Note 19. Corrected: Contractor's "Certification" Statement
		Note 21. Referenced "Tollway" ESC Manual
		Note 22. Changed "hazard" to "obstacle" per Traffic Barrier Guidelines
	Sheet 2	**Standard Symbols**
		New symbol for "Filter Fabric Inlet protection, Cover Type"
		New symbol for "Filter Fabric Inlet protection, Basket Type"
	Sheet 3	**Embankment Phasing Plan-Fill Section-Detail**
		Deleted note 2B, changed 2A to 2.
	Sheet 4	**Temporary Rock Check Dam-Detail**
		Added note 5
	Sheet 6	**Synthetic Porous Runoff Control Structure-Detail**
		Added dimension "C" for panel height to detail
		Creek Buffer Strip and Silt Fence-Detail
		Note 1. Deleted second sentence
	Sheet 7	**Silt Fence-Detail**
		Deleted note 5; Renumbered note 6 to 5
	Sheet 8	**Super Silt Fence-Detail**
		Deleted note 6; Renumbered note 7 to 6
	Sheet 9	**Culvert Inlet Protection Fence-Detail**
		Note 1. Revised maximum post spacing from 6' to 3'
	Sheet 10	**Flotation Boom Detail**
		Revised drawing to show boom reaching bottom of waterway
	Sheet 11	**Filter Fabric Inlet Protection-Detail**
		Added new symbol for "Filter Fabric Inlet protection, Cover Type
		Added new symbol for "Filter Fabric Inlet protection, Basket Type

New Sheet Retired Standard

GENERAL NOTES - EROSION AND SEDIMENT CONTROLS

1. THE WORK DESCRIBED ON THESE DRAWINGS IS AN INTEGRAL PART OF THE STORM WATER POLLUTION PREVENTION PLAN USED TO OBTAIN A NPDES PERMIT FROM IEPA FOR THE CONSTRUCTION OF THIS PROJECT.

2. THE PURPOSE OF THE EROSION AND SEDIMENT CONTROL MEASURES INCLUDED FOR THIS PROJECT IS TO LIMIT THE SEDIMENT POLLUTION IMPACT OF ANY STORM WATER DISCHARGES THAT ORIGINATE ON THIS SITE OR OFF-SITE FLOWS THAT FLOW OVER THE DISTURBED AREAS.

3. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO ENSURE THAT SEDIMENT TRANSPORT OFF THE SITE IS REDUCED BY A COMBINATION OF MINIMIZATION OF EROSION AT THE SOURCE AND INSTALLATION OF SPECIFIC MEASURES TO CONTROL OR REDUCE THE TRANSPORT OF SEDIMENT. A COPY OF THE EROSION AND SEDIMENT CONTROL PLAN, NOI, SWPPP, AND INSPECTION LOG BEING IMPLEMENTED BY THE CONTRACTOR SHALL BE ON THE CONSTRUCTION SITE AT ALL TIMES.

4. TO THE MAXIMUM EXTENT POSSIBLE EROSION SHALL BE MINIMIZED AT THE SOURCE. ALL FLOWS ORIGINATING OFF THE CONSTRUCTION SITE SHALL BE DIVERTED AROUND DISTURBED AREAS OR SHALL BE CONVEYED THROUGH THE SITE IN A MANNER THAT UNTREATED ON-SITE RUNOFF, SHALL BE MINIMIZED AND DOES NOT MIX WITH THE OFF-SITE RUNOFF.

5. ALL RUNOFF ORIGINATING ON DISTURBED AREAS ASSOCIATED WITH THIS PROJECT WILL PASS THROUGH ONE OR MORE MEASURES THAT WILL MINIMIZE THE OFF-SITE SEDIMENT IMPACTS OF THE CONSTRUCTION ACTIVITY.

6. ALL PERMANENT SEDIMENT BASINS, PERMANENT STORM WATER CONTROL MEASURES, AND RUNOFF CONTROL MEASURES REQUIRED TO KEEP OFF-SITE RUNOFF FROM FLOWING OVER THE CONSTRUCTION AREA WILL BE INSTALLED BEFORE CLEARING AND STRIPPING OF THE SITE PROCEEDS. PRIOR TO PROCEEDING WITH EARTHWORK ON A PROJECT THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER A PROPOSED EARTHWORK AND STABILIZATION SCHEDULE FOR REVIEW AND APPROVAL.

7. A MAXIMUM OF 10 ACRES IS ALLOWED TO BE IN SOME STAGE OF GRADING AT A SINGLE TIME. ADDITIONAL AREAS (UP TO 10 ACRES) MAY BE CLEARED BUT SHALL NOT BE STRIPPED OF VEGETATION UNTIL THE GRADED AREAS HAVE BEEN PROTECTED FROM EROSION THROUGH INSTALLATION OF EITHER TEMPORARY OR PERMANENT MEASURES. WHENEVER POSSIBLE, THE GRADING SHALL BE COMPLETED TO THE DESIGN GRADE AND THE PERMANENT VEGETATION PLAN IMPLEMENTED PRIOR TO STARTING GRADING ACTIVITIES ON THE NEXT SITE.

   A. WHEN BALANCING EARTHWORK (BORROW FROM A CUT USED AS FILL AT A LOCATION DISTANT FROM THE CUT) THE CHIEF ENGINEER WILL CONSIDER ALLOWING MORE THAN 10 ACRES OF CONSTRUCTION WORK AREAS AND STORAGE AREAS.

   B. WHERE NEW INTERCHANGES ARE BEING CONSTRUCTED THE ALLOWABLE AREA BEING GRADED MAY BE LARGER THAN 10 ACRES WHEN THE CONTRACT DRAWINGS AND SWPPP DEFINE SUCH INCREASES.

   C. VARIATIONS TO THE ABOVE MAY BE CONSIDERED BY THE CHIEF ENGINEER UNDER ALL THE FOLLOWING CONDITIONS:

      - IF THE CONTRACTOR FALLS BEHIND SCHEDULE THROUGH NO FAULT OF HIS OWN.
      - THE CONTRACTOR MUST PRESENT A SCHEDULE DEMONSTRATING THE NEED FOR SUCH VARIATION IN ORDER TO COMPLETE THE WORK ON TIME.
      - THE CONTRACTOR MUST COMPLY WITH ALL OTHER CONTRACT AND PERMIT REQUIREMENTS.

8. DISTURBED AREAS ARE TO BE PROTECTED FROM EROSION IN A TIMELY MANNER. UPON COMPLETION OF GRADING OR CONSTRUCTION, THE AREA SHALL BE STABILIZED (USING PERMANENT MEASURES WHEN POSSIBLE) WITHIN 7 CALENDAR DAYS. TEMPORARY STABILIZATION THROUGH USE OF GROUND COVER, MULCHING, OR OTHER APPROVED MEASURES WILL BE INSTALLED WHENEVER SITE DEVELOPMENT WORK, GRADING OR OTHER EARTH DISTURBING ACTIVITIES CEASE TO BE CONTINUOUS FOR A PERIOD EXCEEDING 14 CALENDAR DAYS. THE 7/14 DAY REQUIREMENT IS TAKEN TO MEAN THAT THE STABILIZATION OPERATION IS COMPLETE OR NEARING COMPLETION IN THE DEFINED TIME.

9. STABILIZATION OF CUT OR FILL SLOPES WITH TEMPORARY OR PERMANENT EROSION CONTROL MEASURES IS REQUIRED WHENEVER THE CUT OR FILL ACTIVITY REACHES 15 FEET VERTICALLY OR THE FINISHED SLOPE EQUALS 50 FEET, WHICHEVER IS MORE RESTRICTIVE. ONCE THE STABILIZATION MEASURES ARE INSTALLED, THE PLACEMENT OF FILL OR EXCAVATION ACTIVITIES ARE ALLOWED TO PROCEED.

10. THE CONTRACTOR SHALL DESIGNATE ONE OF HIS EMPLOYEES AS EROSION AND SEDIMENT CONTROL MANAGER. THIS PERSON WILL BE RESPONSIBLE FOR IMPLEMENTATION OF THE EROSION AND SEDIMENT CONTROL PLAN ON ALL DISTURBED AREAS. THIS PERSON SHALL POSSESS THE NECESSARY TRAINING AND CERTIFICATION ON EROSION AND SEDIMENT CONTROL MEASURES FOR ACCEPTANCE BY THE TOLLWAY. THIS EMPLOYEE IS TO HAVE THE AUTHORITY TO CARRY OUT THE IMPLEMENTATION OF ANY INSTRUCTIONS CONCERNING THE EROSION AND SEDIMENT CONTROL PLAN GIVEN BY THE ENGINEER. ALL MEASURES WILL BE INSPECTED BY THIS INDIVIDUAL AND THE ENGINEER ON A REGULAR BASIS (AT LEAST ONCE EVERY 7 DAYS) AND AFTER ANY RAINFALL EVENT GREATER THAN 0.5 INCHES, OR EQUIVALENT SNOWFALL (I.E. + 5").

11. SEDIMENT TRAPS, SEDIMENT BASINS, DITCHES, SILT FENCES, FENCES, STONE OUTLET STRUCTURES, EARTH BERMS, ETC. SHALL BE MAINTAINED DURING THE CONSTRUCTION SEASON AS WELL AS THE WINTER MONTHS AND OTHER TIMES WHEN THE PROJECT IS CLOSED DOWN. TRAPS WILL BE CLEANED WHEN THEY ARE 50% FILLED. SILT FENCE AND STONE OUTLET STRUCTURES SHALL HAVE SEDIMENT REMOVED WHEN IT REACHES 50% THE HEIGHT OF THE CONTROL DEVICE. THESE SPOILS WILL BE REMOVED TO AN APPROVED SITE.

12. SALVAGED TOPSOIL SHALL BE PLACED ON WELL DRAINED LAND AWAY FROM INTERMITTENT AND LIVE STREAMS OR WETLANDS WITH THE APPROPRIATE RUNOFF CONTROL AND SEDIMENT CONTROL MEASURES INSTALLED AROUND THE STORAGE SITE. SALVAGED TOPSOIL SHALL BE STABILIZED WITH STRAW MULCH IMMEDIATELY AFTER SHAPING OF THE PILE IN ACCORDANCE WITH THE TOLLWAY SUPPLEMENTAL SPECIFICATIONS. SILT FENCE SHALL BE PROVIDED AT THE PERIMETER OF THE STOCKPILE.

13. MATERIALS EXCAVATED FOR THE CONSTRUCTION OR CLEAN OUT OF SEDIMENT TRAPS SHALL NOT BE STOCKPILED IN THE VICINITY OF THE TRAP. IT SHALL BE PLACED IN AN EMBANKMENT OR WASTED AS DIRECTED BY THE ENGINEER.

14. EXCAVATION TO BE USED FOR EMBANKMENTS SHALL NOT BE STOCKPILED UNLESS PERIMETER CONTROLS ARE UTILIZED. WHEN THIS MATERIAL IS STOCKPILED FOR THE CONVENIENCE OF THE CONTRACTOR THE COST OF PROVIDING THE CONTROLS ARE THE RESPONSIBILITY OF THE CONTRACTOR. IF THE MATERIAL IS STOCKPILED AT THE DIRECTION OF THE ENGINEER THE TOLLWAY WILL ASSUME THE COSTS OF THE CONTROLS.

15. SEDIMENT LADEN DEWATERING DISCHARGE MUST BE DIRECTED TO AN APPROVED SEDIMENT TRAPPING MEASURE PRIOR TO RELEASE FROM THE SITE.

16. ALL EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE CONSIDERED TEMPORARY. THESE MEASURES WILL BE REMOVED BY THE CONTRACTOR AS DESIGNATED ON THE PLANS OR AS DIRECTED BY THE ENGINEER. DISTURBED AREAS ARE TO BE RESTORED UPON REMOVAL.

17. WHEN THE CONTRACTOR REQUESTS A CHANGE TO POSTPONE COMPLETION OF THE EXCAVATION OF A SPECIFIC AREA AS A CONTINUOUS OPERATION AND PLACING THE TOPSOIL AS DEFINED IN THE STANDARD SPECIFICATIONS, THE ENGINEER MAY ALLOW THE CONTRACTOR TO STABILIZE THE AREA USING TEMPORARY STABILIZATION WITH STRAW MULCH PROVIDING THE FOLLOWING CONDITIONS ARE MET:

   A. ALL AREAS BEING STABILIZED ARE 1:3 (V:H) SLOPES OR FLATTER.

   B. THE COST OF PREPARING THE SEED BED AND STABILIZING THE AREA WITH TEMPORARY STABILIZATION WITH STRAW MULCH IS THE RESPONSIBILITY OF THE CONTRACTOR.

   C. ALL REQUIRED SEDIMENT CONTROL MEASURES FOR THE SECTION OF ROAD IN QUESTION HAVE BEEN INSTALLED AND ARE BEING MAINTAINED.

18. THE CONTRACTOR SHALL PREPARE A SKETCH SHOWING DIMENSIONS FROM TWO ADJACENT OBJECTS TO ALL DRAINAGE STRUCTURES THAT HAVE BEEN PROTECTED. THIS IS TO LOCATE THE STRUCTURE IN CASE OF HEAVY RAINFALL AND THE STRUCTURE IS BLOCKED OR FLOODED. THE ENGINEER SHALL BE PROVIDED WITH A COPY OF THE SKETCH.

19. THE CONTRACTOR SHALL CONDUCT HIS OPERATIONS IN ACCORDANCE WITH THE STANDARD DRAWINGS AND SPECIAL PROVISION (S.P.) 111, STORM WATER POLLUTION PREVENTION PLAN INCLUDING CONTROLS AND SPILL PREVENTION-MATERIAL MANAGEMENT PRACTICES. THE CONTRACTOR AND ALL SUBCONTRACTORS SHALL SIGN THE CONTRACTOR'S CERTIFICATION STATEMENT. LIST THE MATERIALS OR SUBSTANCES EXPECTED TO BE PRESENT ON-SITE IN THE INVENTORY FOR POLLUTION PREVENTION PLAN AND SHALL NAME TWO ADDITIONAL INDIVIDUALS TO ASSIST IN SPILL PREVENTION AND CLEAN UP AT THE PRECONSTRUCTION CONFERENCE. SEE S.P. 111.

20. AT THE TIME OF THE PRECONSTRUCTION CONFERENCE, THE CONTRACTOR SHALL SUBMIT FOR APPROVAL THE PROPOSED CONCRETE TRUCK WASHOUT LOCATIONS AS REQUIRED IN SPECIAL PROVISION 111. RUNOFF FROM WASH AREAS SHALL BE CONTAINED IN DESIGNATED AREAS SO THAT RUNOFF DOES NOT REACH THE STORM SEWER OR DITCH SYSTEMS. WASHOUT WATER SHALL BE TAKEN TO AN APPROVAED DISCHARGE LOCATION.

21. IF AN ALTERNATIVE SIZE DITCH CHECK IS PROPOSED BY THE CONTRACTOR FOR USE ON THE PROJECT, A CONTRACT DITCH CHECK SPACING WILL NEED TO BE RECALCULATED BY THE CONTRACTOR IN ACCORDANCE WITH THE TOLLWAY EROSION AND SEDIMENT CONTROL, LANDSCAPE DESIGN CRITERIA MANUAL. ANY RESULTING QUANTITY CHANGES MUST BE APPROVED BY THE ENGINEER PRIOR TO START OF WORK.

22. ALL RUNOFF, EROSION AND SEDIMENT CONTROL MEASURES SHALL BE LOCATED OUTSIDE THE CLEAR ZONE. THE CONTRACTOR SHALL REVIEW THE LOCATIONS OF ALL MEASURES AND PERFORM A BARRIER WARRANT ANALYSIS IF NECESSARY TO ENSURE ROADSIDE OBSTACLES ARE NOT CREATED.

23. ALL SLOPES ARE EXPRESSED AS UNITS OF VERTICAL DISPLACEMENT TO UNITS OF HORIZONTAL DISPLACEMENT (V:H).

Paul Kovacs
APPROVED ..... DATE 2-7-2012
CHIEF ENGINEER

Illinois Tollway

DATE	REVISIONS
11-01-2012	REVISED GENERAL NOTES
	REVISED SYNTHETIC POROUS RUNOFF CONTROL STRUCTURE, REVISED SILT FENCE DETAIL, REVISED TREE PROTECTION
3-31-2014	REVISED GENERAL NOTES.
3-11-2015	REVISED NOTES.

TEMPORARY EROSION AND SEDIMENT CONTROLS

STANDARD K1-05

STANDARD SYMBOLS

CLEARING & GRADING LIMITS
(LIMITS OF CONSTRUCTION)

CULVERT INLET
PROTECTION-FENCE

CIP

CULVERT INLET
PROTECTION-STONE

DB

DEWATERING BASINS

DIVERSION DIKE

DRAINAGE DIVIDE

EXISTING DRAINAGE PATH

FIPC

FILTER FABRIC
INLET PROTECTION, COVER TYPE

FIPB

FILTER FABRIC
INLET PROTECTION, BASKET TYPE

FB FB

FLOTATION BOOM

IC

INITIAL CONSTRUCTION ITEM

PROPOSED DRAINAGE PATH

RIP

RECTANGULAR INLET
PROTECTION

SEDIMENT BASIN
AGGREGATE BERM

SEDIMENT BASIN

SILT FENCE

STABILIZED
CONSTRUCTION
ENTRANCE

STONE OUTLET STRUCTURE
SEDIMENT TRAP

STREAM DIVERSION

SSF

SUPER SILT FENCE

(SPRCS)

SYNTHETIC POROUS RUNOFF CONTROL STRUCTURE

(REDC)

TEMPORARY DITCH CHECK
ROLLED EXCELSIOR LOG

(UFDC)

TEMPORARY DITCH CHECK
URETHANE FOAM GEOTEXTILE

TEMPORARY PIPE SLOPE DRAIN

TEMPORARY RIPRAP

TEMPORARY ROCK CHECK DAM

TEMPORARY STREAM CROSSING

TS

TEMPORARY SWALE

TP

TREE PROTECTION

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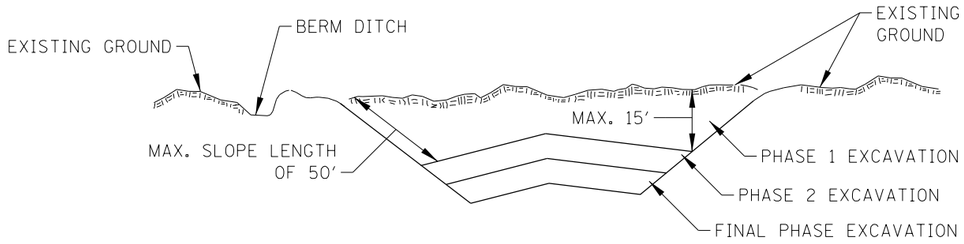
TEMPORARY EROSION
AND SEDIMENT CONTROLS

STANDARD K1-05



NOTES:

1. ALL CUT SLOPES SHALL BE EXCAVATED AND STABILIZED (PLACE TOPSOIL PREPARE SEEDBED, APPLY SEED, PROTECT SLOPE WITH MULCH OR EROSION BLANKET) AS THE WORK PROGRESSES.

2. CONSTRUCTION SEQUENCE:

   A) EXCAVATE AND STABILIZE BERM, SIDE AND OUTLET DITCHES, PROVIDE SEDIMENT TRAPS FOR DITCHES.

   B) PERFORM PHASE 1 EXCAVATION AND STABILIZE SLOPES WITH PERMANENT SEEDING.

   C) PERFORM PHASE 2 EXCAVATION AND STABILIZE SLOPES WITH PERMANENT SEEDING. OVER SEED PHASE 1 SLOPES, IF REQUIRED.

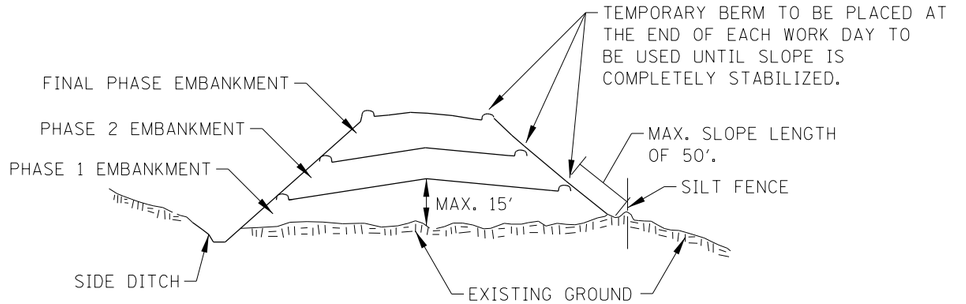
   D) PERFORM FINAL PHASE EXCAVATION, DRESS, SEED AND MULCH SLOPES WITH PERMANENT SEEDING. STABILIZE SURFACE DRAIN DITCHES. OVER SEED PHASE 1 & 2 SLOPES, IF REQUIRED, AS DETERMINED BY THE ENGINEER.

3. IF PERMANENT SEEDING CANNOT BE PLACED DUE TO CONTRACT REQUIREMENTS REGARDING PLANTING SEASONS, THE CUT SLOPE IS TO HAVE TOPSOIL PLACED AND SEEDING PREPARED PRIOR TO USING TEMPORARY STABILIZATION WITH STRAW MULCH OR TEMPORARY SEEDING WITH EROSION BLANKET.

4. THE CONTRACTOR HAS THE OPTION OF DELAYING TOPSOIL SEEDING BEYOND THE 15 FOOT LIMITATION. IF THIS OPTION IS CHOOSEN, THE CUT SLOPE MUST BE "TEMPORARY STABILIZED" AT NO COST TO THE TOLLWAY.

5. ONCE THE EXCAVATION WITHIN A SPECIFIC AREA HAS BEGUN, THE OPERATION SHALL BE CONTINUOUS FROM STRIPPING THROUGH THE COMPLETION OF THE GRADING AND PLACEMENT OF SLOPE STABILIZATION MEASURES. ANY INTERRUPTIONS IN THE OPERATION OF 14 DAYS OR MORE MUST BE APPROVED BY THE ENGINEER. ANY VIOLATION OF THIS REQUIREMENT WILL RESULT IN THE CONTRACTOR ASSUMING THE RESPONSIBILITY OF PLACING TEMPORARY STABILIZATION AT HIS OWN COST AND EXPENSE.

EXCAVATION PHASING PLAN - CUT SECTION



NOTES:

1. THE EMBANKMENT WILL BE MADE IN STAGES NOT TO EXCEED 15' IN HEIGHT OR 50' IN SLOPE LENGTH. THE EMBANKMENT SLOPES WILL BE STABILIZED USING TEMPORARY MEASURES BEFORE BEGINNING NEXT STAGE.

2. AT THE END OF EACH WORK DAY TEMPORARY BERMS (EARTH) AND TEMPORARY PIPE SLOPE DRAINS WILL BE CONSTRUCTED ALONG THE TOP EDGE(S) OF THE EMBANKMENT TO INTERCEPT SURFACE RUNOFF.

3. CONSTRUCTION SEQUENCE:

   A) EXCAVATE AND STABILIZE SIDE DITCH AND/OR INSTALL PROPOSED PERIMETER CONTROLS AT THE TOE OF SLOPE.

   B) PLACE PHASE 1 EMBANKMENT AND STABILIZE WITH TEMPORARY SEEDING AND MULCH.

   C) PLACE PHASE 2 EMBANKMENT AND STABILIZE WITH TEMPORARY SEEDING AND MULCH.

   D) PLACE FINAL PHASE EMBANKMENT AND STABILIZE WITH PERMANENT VEGETATIVE PLAN ON THE ENTIRE SLOPE.

4. ONCE THE PLACEMENT OF FILL WITHIN A SPECIFIC AREA HAS BEGUN, THE OPERATION SHALL BE CONTINUOUS FROM STRIPPING THROUGH THE COMPLETION OF THE GRADING AND PLACEMENT OF PERMANENT VEGETATIVE PLAN. ANY INTERRUPTIONS IN THE OPERATION OF 14 DAYS OR MORE MUST BE APPROVED BY THE ENGINEER. ANY VIOLATION OF THIS REQUIREMENT WILL RESULT IN THE CONTRACTOR ASSUMING THE RESPONSIBILITY OF PLACING TEMPORARY STABILIZATION AT HIS OWN COST AND EXPENSE.

EMBANKMENT PHASING PLAN - FILL SECTION

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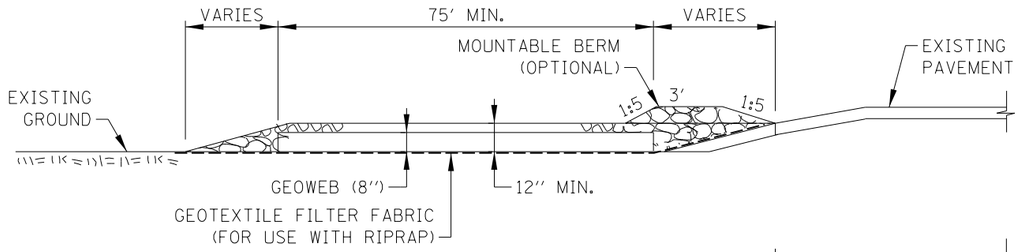
APPROVED ..... DATE 2-7-2012
CHIEF ENGINEER

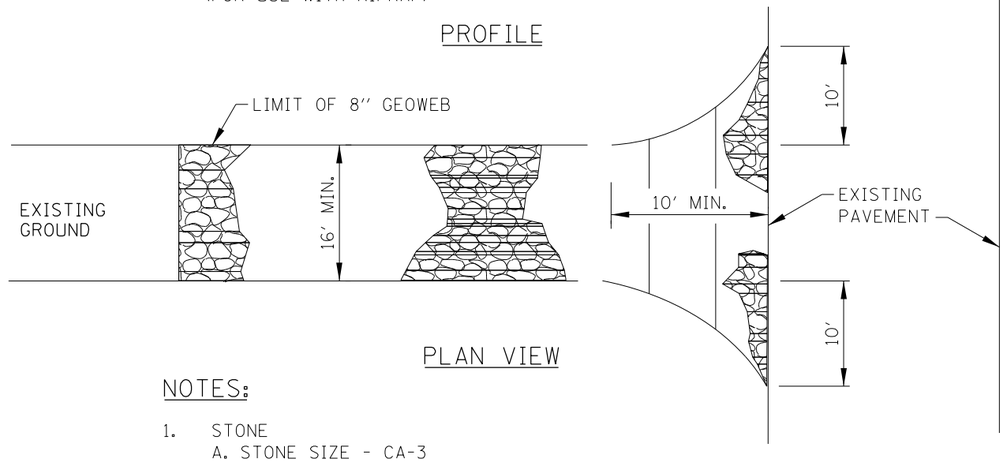
Illinois Tollway

TEMPORARY EROSION AND SEDIMENT CONTROLS

STANDARD K1-05



PROFILE



PLAN VIEW

NOTES:

1. STONE
   A. STONE SIZE - CA-3
   B. LENGTH - AS REQUIRED, BUT NOT LESS THAN 75'.
   C. THICKNESS - NOT LESS THAN 4" ABOVE TOP OF GEOWEB.

2. WIDTH - 16' MINIMUM FOR ONE WAY TRAFFIC; 24' MINIMUM FOR TWO-WAY TRAFFIC; BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS.

3. GEOWEB NOT LESS THAN 8" IN DEPTH WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE.

4. SURFACE WATER - ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 1:5 SLOPES WILL BE PERMITTED.

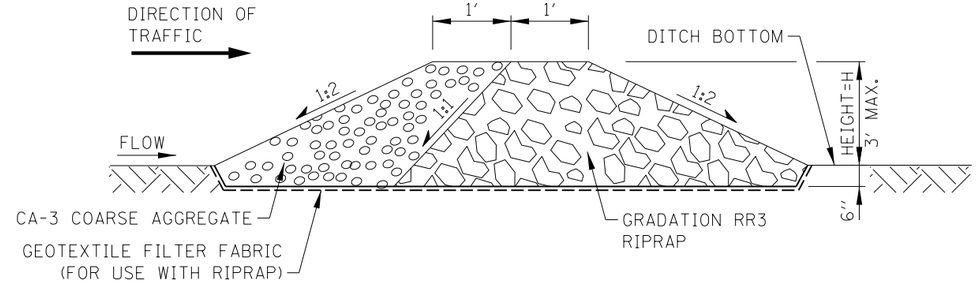
5. MAINTENANCE - THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH SHALL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEAN OUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY SHALL BE REMOVED IMMEDIATELY.

6. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER HEAVY USE AND EACH RAINFALL EVENT.

7. TO BE USED TO REDUCE OR ELIMINATE TRACKING OF SEDIMENT ONTO PUBLIC STREETS. PLACE AT ALL POINTS OF CONSTRUCTION INGRESS AND EGRESS. DISTURBED AREAS TO BE RESTORED UPON REMOVAL.

STABILIZED CONSTRUCTION ENTRANCE

STANDARD SYMBOL



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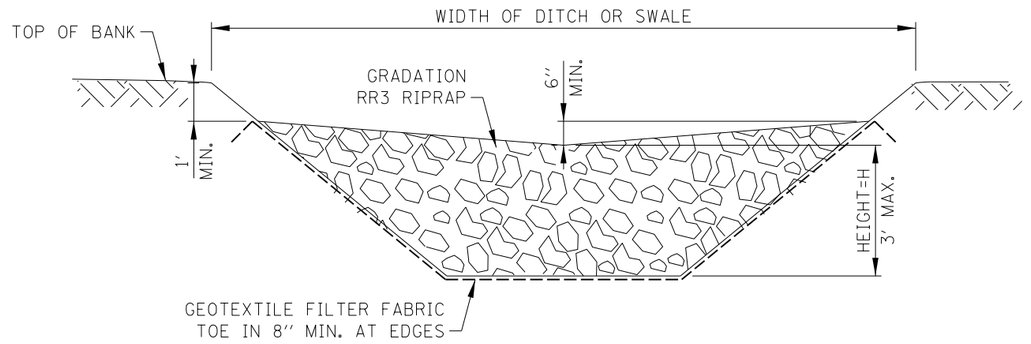


CROSS SECTION
CENTERLINE LOOKING DOWNSTREAM

NOTES:

1. FOR LOCATIONS AND HEIGHTS OF ROCK CHECK DAMS REFER TO CONSTRUCTION DRAWINGS.

2. TEMPORARY ROCK CHECK DAMS SHALL BE REPLACED WHEN THEY CEASE TO FUNCTION AS INTENDED DUE TO WASHOUT OR CONSTRUCTION TRAFFIC DAMAGE.

3. SEDIMENT SHALL BE REMOVED WHEN IT REACHES 50% OF DAM HEIGHT. THIS PRACTICE IS NOT A SUBSTITUTE FOR MAJOR PERIMETER TRAPPING SUCH AS A TEMPORARY SEDIMENT TRAP OR BASIN.

4. SPACING BETWEEN DAMS SHALL BE SUCH THAT THE TOE OF THE UPSTREAM DAM IS AT THE SAME ELEVATION AS TOP OF RIPRAP AT THE CENTER OF THE DOWNSTREAM DAM.

5. WHEN A TEMPORARY ROCK CHECK DAM IS IN THE CLEAR ZONE, IT MUST BE MADE TRAVERSABLE TO AN ERRANT VEHICLE. THE MAXIMUM UNSHIELDED TRANSVERSE SLOPE ALLOWED TO FACE TRAFFIC SHALL BE 1:10 (V:H) AND THE MAXIMUM TRANSVERSE FACING AWAY FROM TRAFFIC SHALL BE 1:4 (V:H). AN UNSHIELDED TEMPORARY ROCK CHECK DAM SHALL HAVE AN ADDITIONAL LAYER OF CA-3 COURSE AGGREGATE (6" MIN.) PLACED ON THE DOWNSTREAM SIDE OF THE ROCK CHECK DAM. THE GEOTEXTILE FILTER FABRIC SHALL BE PLACED ALONG THE ENTIRE BASE OF THE TEMPORARY ROCK CHECK DAM.

TEMPORARY ROCK CHECK DAM

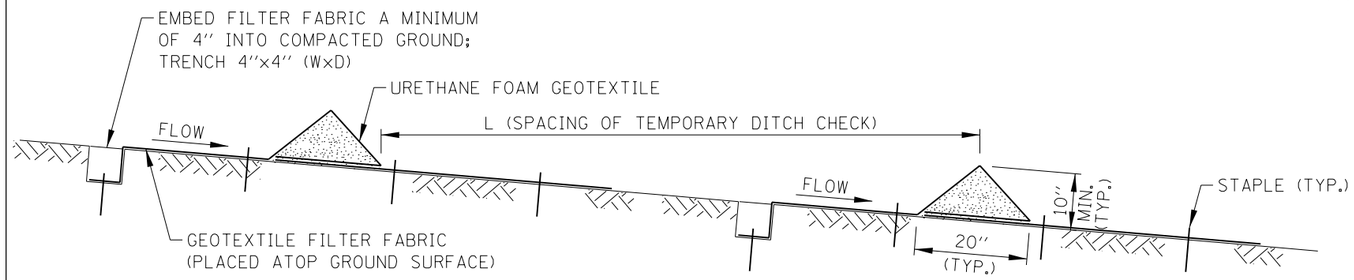
STANDARD SYMBOL

Paul Kovacs
APPROVED ..... CHIEF ENGINEER
DATE 2-7-2012

Illinois Tollway

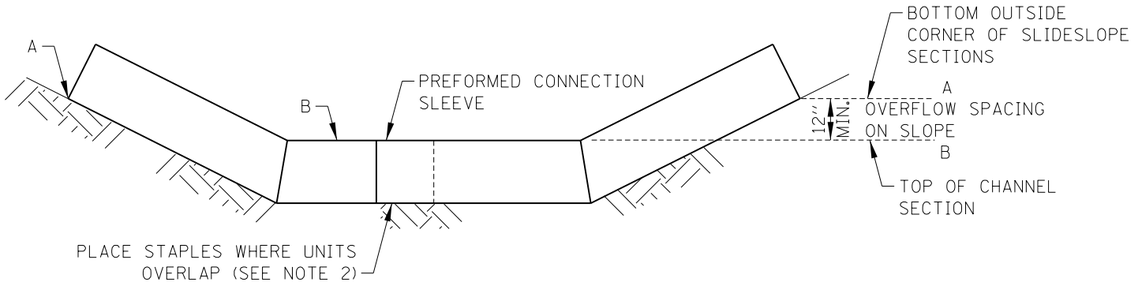
TEMPORARY EROSION
AND SEDIMENT CONTROLS

STANDARD K1-05



L= MINIMUM HEIGHT (FT.)/DITCH GRADIENT (%) x 100.

SECTION



ELEVATION

NOTES:

1. UPSTREAM EDGE OF DITCH CHECK APRON TO BE PLACED IN A 4''x4'' TRENCH AND ANCHORED WITH A ROW OF WIRE STAPLES ON 18'' CENTERS TO ENSURE THAT STORM WATER IS FORCED THROUGH THE DITCH CHECK RATHER THAN UNDER IT.

2. BUTT ENDS OF DITCH CHECKS TOGETHER BY OVERLAP FABRIC AND STAPLE SEAM AT BASE.

3. PLACE WIRE STAPLES IN PATTERN AS SPECIFIED BY THE MANUFACTURER WITH A MINIMUM OF 8 STAPLES PER SQUARE YARD OF APRON. WIRE STAPLES TO BE A MINIMUM OF NO. 11 GAUGE, 8'' LONG.

4. URETHANE FOAM/GEOTEXTILE DITCH CHECKS ARE SUPPLIED IN STANDARD 7 FOOT LENGTHS AND SHOULD NOT BE CUT.

5. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND SILT SHALL BE REMOVED WHEN IT REACHES 50% OF DITCH CHECK HEIGHT.

6. FOR ALTERNATE SIZE DITCH CHECK SEE GENERAL NOTE 21 ON SHEET 1 IN THIS SERIES.

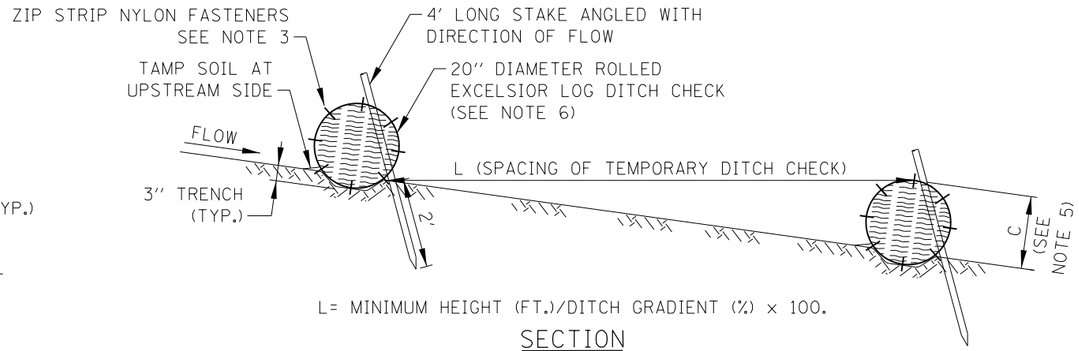
7. TEMPORARY DITCH CHECK TO BE USED TO CONTROL FLOW IN DITCHES. THE DITCH CHECK IS NOT A SUBSTITUTE FOR SEDIMENT TRAPS OR BASINS. PLACE UPSTREAM OF TRAPS OR BASINS AND MAINTAIN IN PLACE UNTIL SEEDING IS ESTABLISHED.

TEMPORARY DITCH CHECK

URETHANE FOAM/GEOTEXTILE

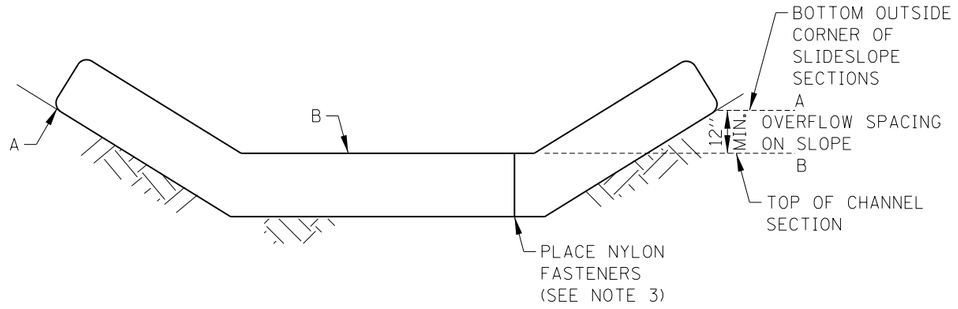
STANDARD SYMBOL

(UFDC)



L= MINIMUM HEIGHT (FT.)/DITCH GRADIENT (%) x 100.

SECTION



ELEVATION

NOTES:

1. ROLLED EXCELSIOR LOG SHALL BE EMBEDDED IN THE SOIL A MINIMUM OF 3'' AND SOIL SHALL BE TAMPED AGAINST THE UPSTREAM SIDE TO ENSURE STORM WATER IS FORCED THROUGH THE LOG, RATHER THAN UNDER IT.

2. STAKES SHALL BE 4' LONG, DRIVEN AT A SPACING OF 2' ON CENTER, 2' INTO THE GROUND. STAKES SHALL BE ENTWINED WITH THE MESH COVERING OF THE ROLL ON THE DOWNSTREAM SIDE AND ANGLED WITH THE DIRECTION OF FLOW. WOOD STAKES TO BE A MINIMUM OF 1'' SQUARE. METAL STAKES SHALL BE A MINIMUM OF 1'' DIAMETER.

3. WHEN MORE THAN ONE LOG IS REQUIRED TO SPAN THE DITCH, BUTT LOGS TIGHTLY TOGETHER END TO END AND FASTEN TOGETHER WITH A MINIMUM OF EIGHT EQUALLY SPACED ZIP STRIP NYLON FASTENERS.

4. ROLLED EXCELSIOR LOG DITCH CHECKS ARE SUPPLIED IN STANDARD 10 FOOT LENGTHS AND SHOULD NOT BE CUT.

5. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND SILT SHALL BE REMOVED WHEN IT REACHES 50% OF ROLL HEIGHT. WHEN EXCELSIOR LOG HEIGHT BECOMES LESS THAN 10'', IT SHALL BE REPLACED.

6. FOR ALTERNATE SIZE DITCH CHECK SEE GENERAL NOTE 21 ON SHEET 1 IN THIS SERIES.

7. TEMPORARY DITCH CHECK TO BE USED TO CONTROL FLOW IN DITCHES. THE DITCH CHECK IS NOT A SUBSTITUTE FOR SEDIMENT TRAPS OR BASINS. PLACE UPSTREAM OF TRAPS OR BASINS AND MAINTAIN IN PLACE UNTIL SEEDING IS ESTABLISHED.

8. SPACING OF TEMPORARY DITCH CHECK TO BE BASED ON 10'' MIMIMUM HEIGHT DIMENSION.

TEMPORARY DITCH CHECK

ROLLED EXCELSIOR LOG

STANDARD SYMBOL

(REDC)

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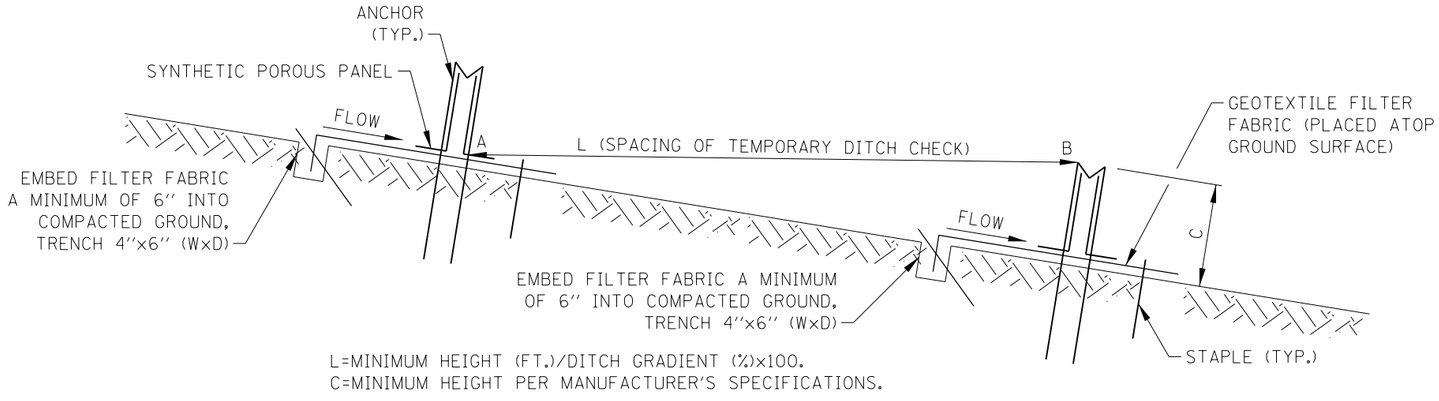
CHIEF ENGINEER

Illinois Tollway

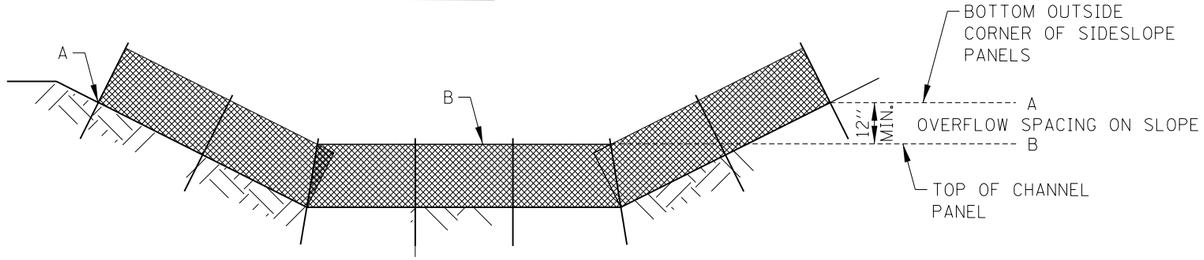
TEMPORARY EROSION AND SEDIMENT CONTROLS

STANDARD K1-05



L=MINIMUM HEIGHT (FT.)/DITCH GRADIENT (%)x100.
C=MINIMUM HEIGHT PER MANUFACTURER'S SPECIFICATIONS.

SECTION



ELEVATION

NOTES:

1. UPSTREAM EDGE OF THE POROUS RUNOFF CONTROL SYSTEM STRUCTURE FILTER FABRIC TO BE PLACED IN A 4"x6" TRENCH AND ANCHORED WITH A ROW OF STAPLES TO ASSURE THAT THE STORM WATER IS FORCED THROUGH THE POROUS PANELS RATHER UNDER IT.

2. THE RUNOFF CONTROL STRUCTURE SHALL BE PLACED PERPENDICULAR TO THE DIRECTION OF WATER FLOW. THE STRUCTURE SHALL BE COMPRISED OF A CENTRAL SECTION FORMING A HORIZONTAL POROUS WEIR AND TWO INCLINED SECTIONS EXTENDING UP THE SIDESLOPE AND BACKSLOPE.

3. THE POROUS RUNOFF CONTROL STRUCTURE SHALL BE INSTALLED IN ACCORDANCE TO THE MANUFACTURER'S REQUIREMENTS.

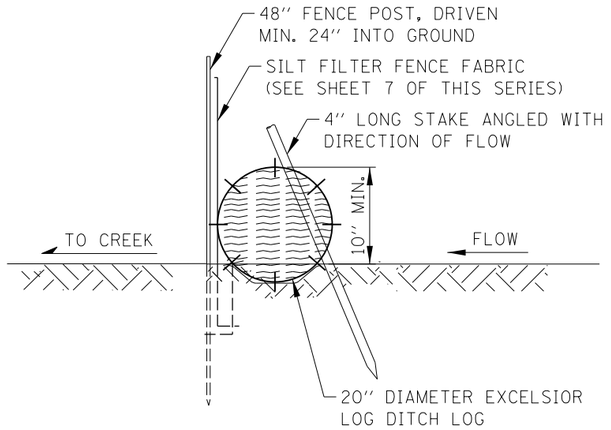
4. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND SILT SHALL BE REMOVED WHEN IT REACHES 50% OF THE HEIGHT OF THE STRUCTURE.

5. THE SYNTHETIC POROUS RUNOFF CONTROL STRUCTURES TO BE USED TO CONTROL FLOW IN DITCHES. IT IS NOT A SUBSTITUTE FOR SEDIMENT TRAPS OR BASINS. PLACE UPSTREAM OF TRAPS OR BASINS AND MAINTAIN IN PLACE UNTIL SEEDING IS ESTABLISHED.

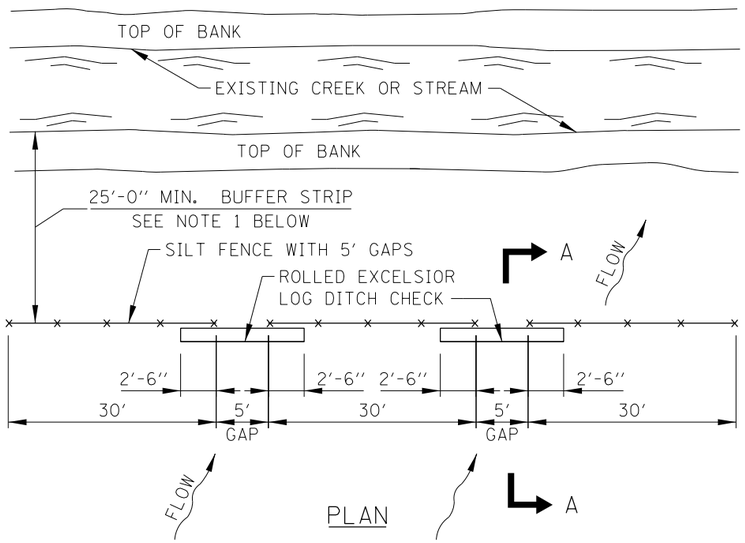
SYNTHETIC POROUS RUNOFF CONTROL STRUCTURE

STANDARD SYMBOL

(SPRCS)



SECTION A-A



PLAN

NOTES:

1. A MINIMUM 25' WIDE VEGETATED BUFFER STRIP SHALL BE PRESERVED AND/OR RE-ESTABLISHED WHERE POSSIBLE ALONG EXISTING CHANNELS.

2. THE 5' GAPS IN THE SILT FENCE AND THE 20" DIAMETER TEMPORARY DITCH CHECKS ARE TO ALLOW FLOODWATER FLOW INTO THE CREEK FROM THE SITE WITHOUT DAMAGE TO THE SILT FENCE.

3. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND SILT SHALL BE REMOVED WHEN IT REACHES 50% OF ROLL HEIGHT. WHEN ROLLED EXCELSIOR LOG BECOMES LESS THAN 10" IT SHALL BE REPLACED.

CREEK BUFFER STRIP AND SILT FENCE

Illinois Tollway

TEMPORARY EROSION
AND SEDIMENT CONTROLS

STANDARD K1-05

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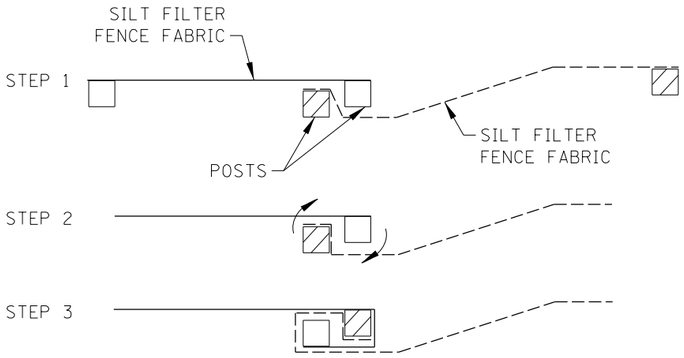
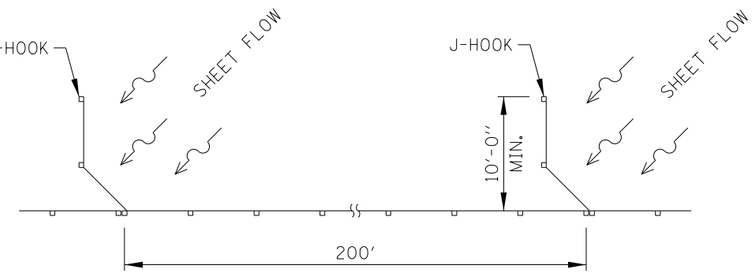


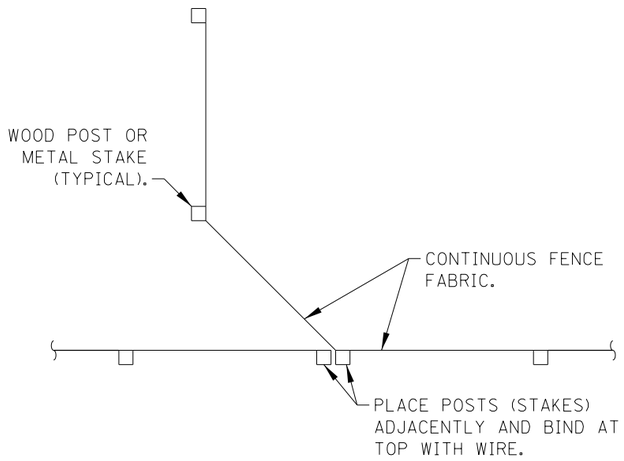
NOTES:

1. PLACE THE END POST OF THE SECOND FENCE INSIDE THE END POST OF THE FIRST FENCE.
2. ROTATE BOTH POSTS AT LEAST 180 DEGREES IN A CLOCKWISE DIRECTION TO CREATE A TIGHT SEAL WITH THE FABRIC MATERIAL.
3. DRIVE BOTH POSTS A MINIMUM OF 24" INTO THE GROUND.

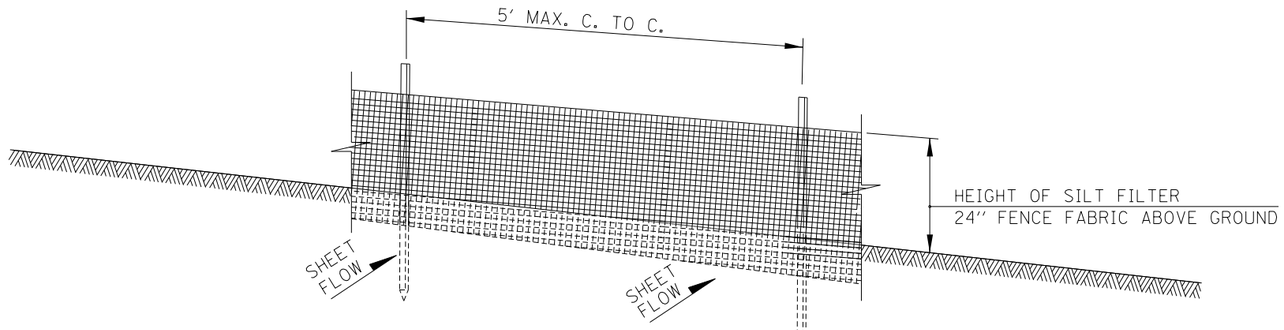
ATTACHING TWO SILT FENCES



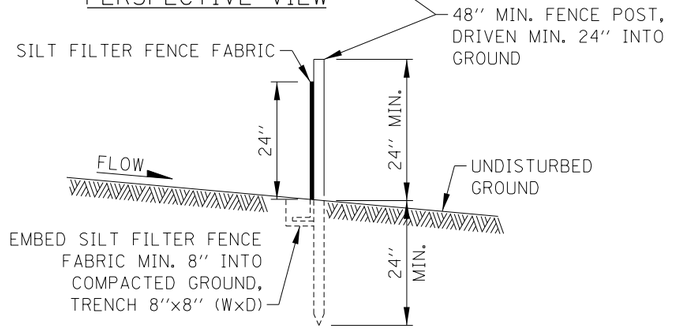
SILT FILTER J-HOOK PLACEMENT



J-HOOK



PERSPECTIVE VIEW



SECTION

NOTES:

1. SILT FILTER FENCE FABRIC TO BE FASTENED SECURELY TO FENCE POSTS.
2. WHEN TWO SECTIONS OF SILT FILTER FENCE FABRIC ADJOIN EACH OTHER THEY SHALL BE SECURELY FASTENED PER THE DETAIL ATTACHING TWO SILT FENCES.
3. MAINTENANCE SHALL BE PERFORMED AS NEEDED. SILT BUILD UP AGAINST FENCE SHALL BE INSPECTED AFTER EVERY STORM EVENT AND REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE, OR WHEN SILT REACHES 50% OF FENCE HEIGHT.
4. FENCE POSTS: 2"x2" (NOMINAL) HARDWOOD OR SCHEDULE 40 METAL PIPE OR 1.33 LB/FT MIN. STANDARD T OR U SECTION STEEL POSTS.
5. THIS DEVICE IS TO CONTROL SHEET FLOW ONLY. DO NOT USE FOR CONCENTRATED FLOWS, DRAINAGE CHANNELS, ABOVE OR BELOW DRAINAGE PIPES.

SILT FENCE (SF)

STANDARD SYMBOL

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TEMPORARY EROSION
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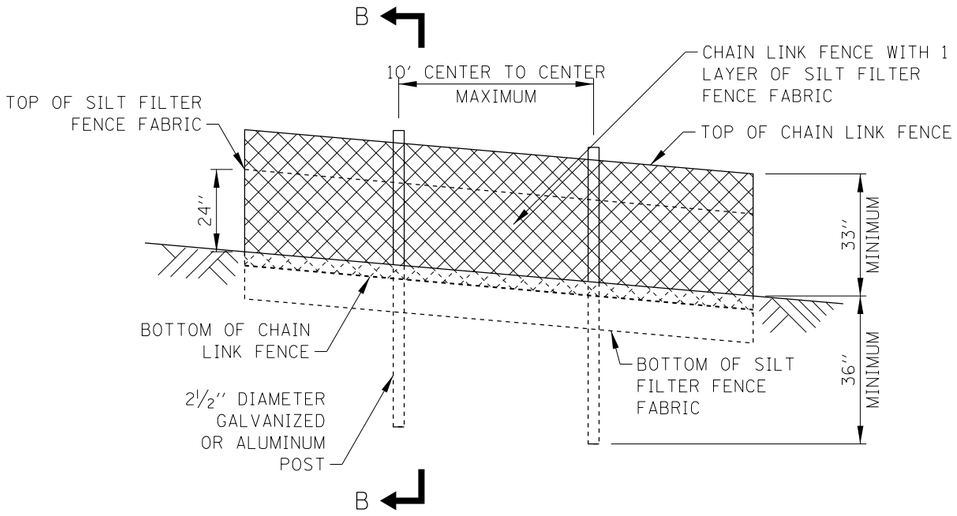
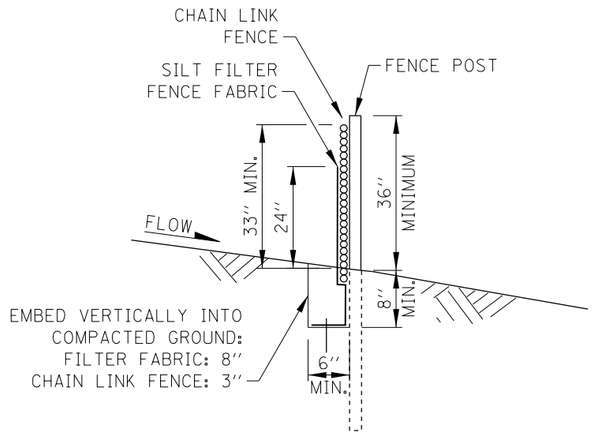


ELEVATION



SECTION B-B

NOTES:

1. FENCING SHALL BE 36'' IN HEIGHT AND CONSTRUCTED IN ACCORDANCE WITH TOLLWAY STANDARD D1, RIGHT-OF-WAY FENCE, TYPE 1. THE SPECIFICATION FOR A 6' FENCE SHALL BE USED, SUBSTITUTING 36'' FABRIC AND 6' LENGTH POSTS.

2. CHAIN LINK FENCE SHALL BE FASTENED SECURELY TO THE FENCE POSTS WITH WIRE TIES. THE LOWER TENSION WIRE, BRACE AND TRUSS RODS, DRIVE ANCHORS AND POST CAPS ARE NOT REQUIRED. PULL POSTS, CORNER POSTS, HORIZONTAL BRACING AND TIE RODS ARE NOT REQUIRED.

3. SILT FILTER FENCE FABRIC SHALL BE FASTENED SECURELY TO THE CHAIN LINK FENCE WITH TIES SPACED EVERY 24'' AT THE TOP AND MID SECTION.

4. WHEN TWO SECTIONS OF SILT FILTER FENCE FABRIC ADJOIN EACH OTHER, THEY SHALL BE OVERLAPPED 2' HORIZONTALLY.

5. MAINTENANCE SHALL BE PERFORMED AS NEEDED. SILT BUILD-UP AGAINST FENCE SHALL BE INSPECTED AFTER EVERY STORM EVENT AND REMOVED WHEN SILT REACHES 50% OF FENCE HEIGHT.

6. SUPER SILT FENCE IS TO BE USED TO PROTECT ENVIRONMENTALLY SENSITIVE AREAS AND CONTROL SEDIMENT RUNOFF FROM CONSTRUCTION SITES WHEN ADDITIONAL REINFORCEMENT IS REQUIRED DUE TO SLOPE OF SITE OR VOLUME OF STORM WATER RUNOFF.

SUPER SILT FENCE (SSF)

STANDARD SYMBOL

SSF

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TEMPORARY EROSION
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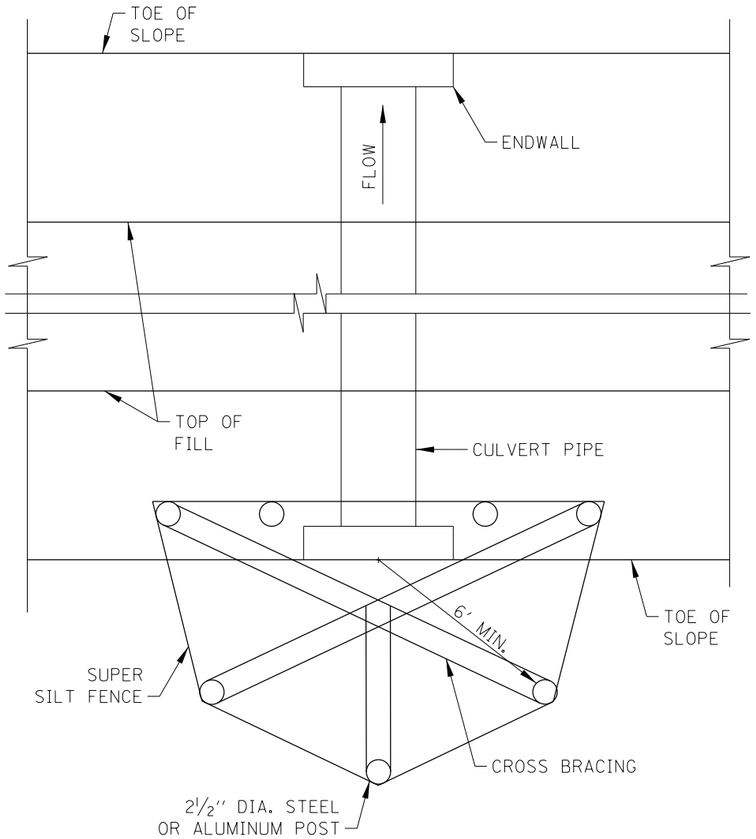
STANDARD K1-05



PLAN VIEW

NOTES:

1. CONSTRUCT SUPER SILT FENCE PER SHEET 8 IN THIS SERIES, EXCEPT THE MAXIMUM POST SPACING SHALL BE 3 FEET AND THE TOPS OF POSTS SHALL BE CROSSED BRACED.

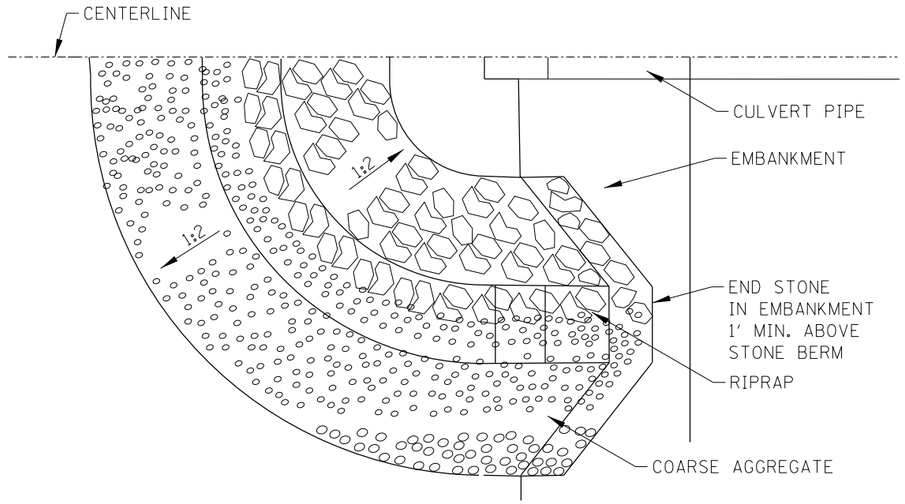
2. MAINTENANCE SHALL BE PERFORMED AS NEEDED. SEDIMENT SHALL BE REMOVED WHEN IT REACHES 50% OF THE FENCE HEIGHT.

3. THE CULVERT INLET PROTECTION AND SEDIMENT SHALL BE REMOVED WHEN CONSTRUCTION IS COMPLETE.

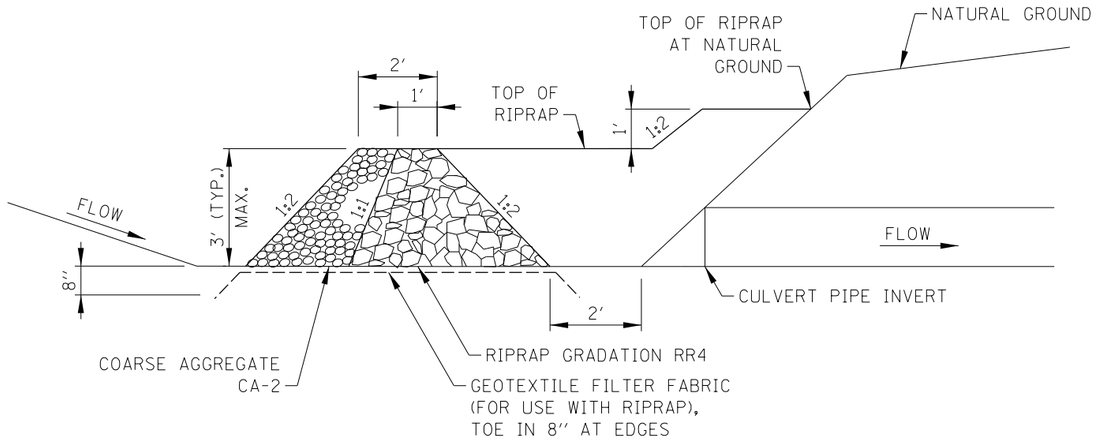
4. THE CULVERT INLET PROTECTION - FENCE TO BE MEASURED AND PAID FOR AS SUPER SILT FENCE.

CULVERT INLET PROTECTION - FENCE

STANDARD SYMBOL



HALF PLAN VIEW



CENTERLINE CROSS SECTION

NOTES:

1. MAINTENANCE SHALL BE PERFORMED AS NEEDED. SEDIMENT SHALL BE REMOVED WHEN IT REACHES 50% OF THE STONE HEIGHT.

2. THE CULVERT INLET PROTECTION AND SEDIMENT SHALL BE REMOVED WHEN CONSTRUCTION IS COMPLETE.

3. THE CULVERT INLET PROTECTION - STONE TO BE MEASURED AND PAID FOR AS TEMPORARY RIPRAP.

CULVERT INLET PROTECTION - STONE

STANDARD SYMBOL

CIP

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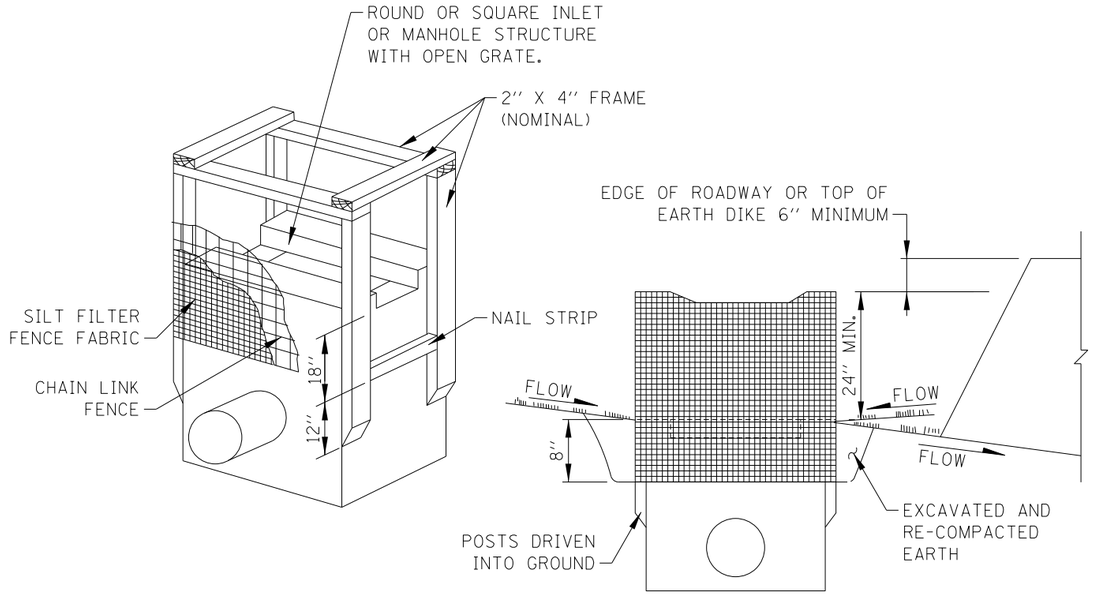
TEMPORARY EROSION AND SEDIMENT CONTROLS

STANDARD K1-05



NOTES:

1. WOODEN FRAME IS TO BE CONSTRUCTED OF 2''x4'' CONSTRUCTION GRADE LUMBER. IF CONTRACTOR PREFERS, SUPER SILT FENCE CAN BE CONSTRUCTED AROUND THE INLET PER SHEET 8 IN THIS SERIES.

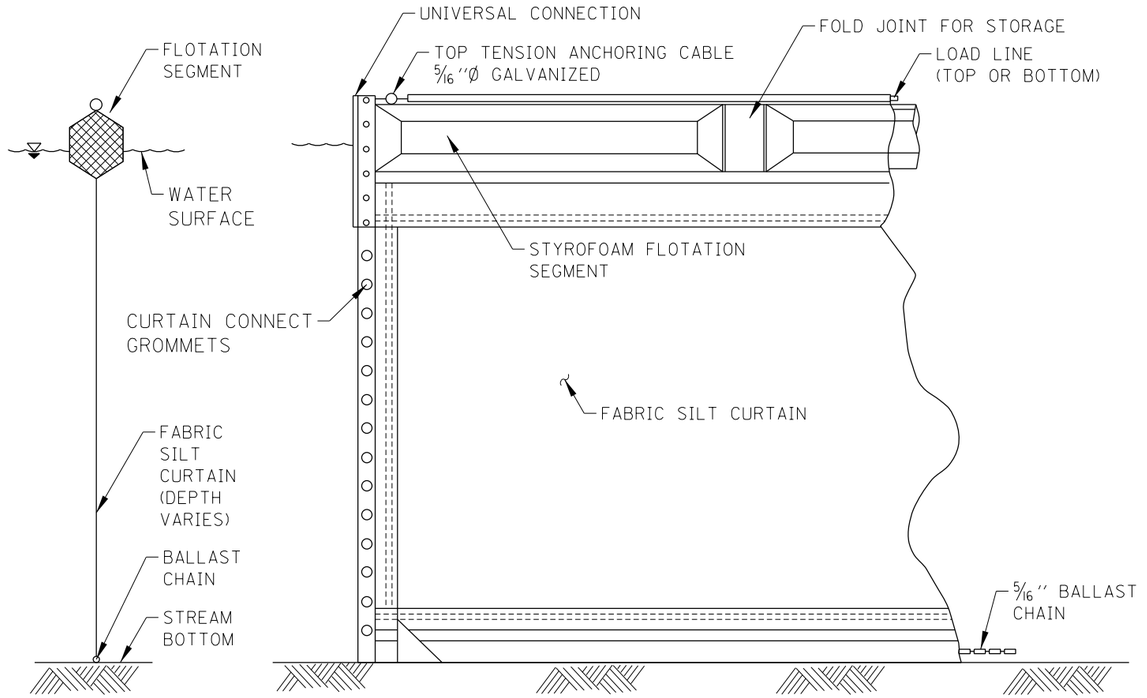
2. MAINTENANCE SHALL BE PERFORMED AS NEEDED AND SILT REMOVED WHEN IT REACHES 50% OF FENCE HEIGHT.

3. TO BE USED TO PROTECT EXISTING AND NEW INLETS, CATCH BASINS AND MANHOLES WITH OPEN LIDS IN NON PAVED AREAS.

RECTANGULAR INLET PROTECTION

STANDARD SYMBOL

RIP



SECTION ELEVATION

NOTES:

1. FLOTATION BOOM FOR USE IN MOVING WATER SHALL BE ANCHORED TO PREVENT DRIFT SHOREWARD OR DOWNSTREAM. ANCHORAGES SHALL BE INSTALLED ON BOTH SHORE AND STREAM SIDE. BOOMS ARE NOT TO BE INSTALLED ACROSS FLOWING BODY OF WATER.

2. SHORE ANCHORS SHALL CONSIST OF A POST WITH DEADMAN OR APPROVED EQUAL. STREAM ANCHORS SHALL BE OF SUFFICIENT SIZE TO STABILIZE THE BARRIER WITH NUMBER AND SPACING DEPENDENT ON WATERWAY VELOCITIES.

3. FABRIC SECTIONS SHALL BE CONNECTED END TO END WITH MINIMUM 5/8'' DIAMETER POLYPROPYLENE ROPE.

4. DESIGN OF BOOM AND ANCHORAGE SHALL BE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. BOTTOM OF BOOM SHALL REACH BOTTOM OF WATERWAY USING ONE VERTICAL SECTION AS REQUIRED.

5. MAINTENANCE SHALL BE PERFORMED AS NEEDED. CONTRACTOR SHALL REMOVE THE BOOM AT COMPLETION OF WORK IN A MANNER THAT WILL PREVENT SILTATION OF THE WATERWAY.

6. CONSTRUCTION DEBRIS/MATERIALS SHALL BE REMOVED IMMEDIATELY TO PREVENT DAMAGE TO THE CURTAIN AND ENTRY INTO THE WATERWAY.

7. FLOTATION BOOMS TO BE USED TO CONTROL TURBIDITY AND DEBRIS WHEN WORKING IN WATERWAYS.

FLOTATION BOOM

STANDARD SYMBOL

—FB——FB—

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TEMPORARY EROSION
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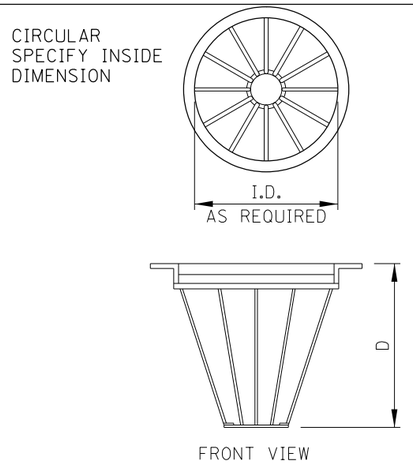
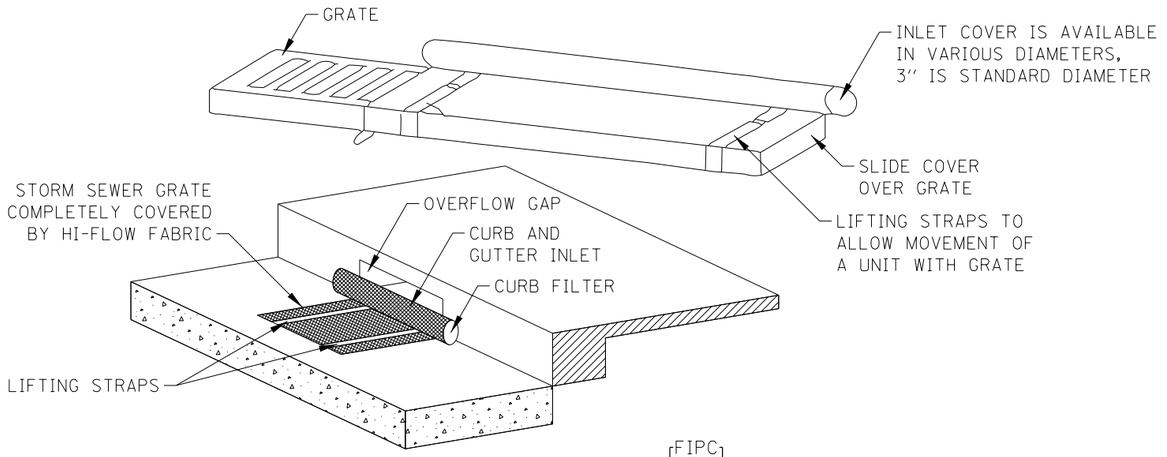
STANDARD K1-05



INLET BASKET
(SEE NOTE 3 BELOW)

FIPB ■ STANDARD SYMBOL



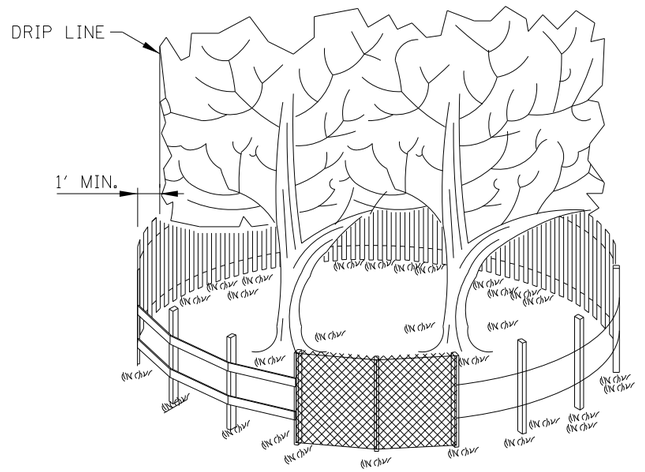
INLET COVER

FIPC ■ STANDARD SYMBOL

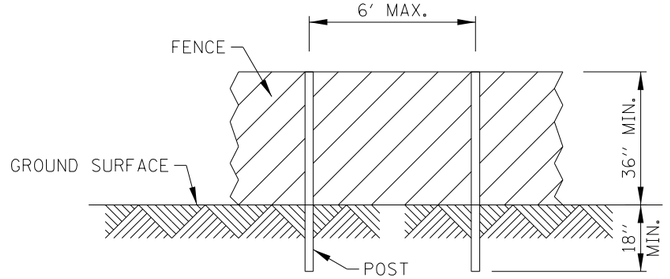
NOTES:

1. FILTER FABRIC INLET PROTECTION SHALL CONSIST OF INLET BASKET AND FABRIC INSERT, FABRIC INSERT, OR INLET COVER PLACED IN FRONT OF CURB INLET.
2. DEVICE SHALL BE EQUIPPED WITH AN OVERFLOW FEATURE SO DRAINAGE TO INLET IS NOT COMPLETELY BLOCKED IF DEVICE IS FULL OF SILT.
3. INLET BASKET IS AVAILABLE TO FIT ROUND, RECTANGULAR, BEEHIVE OR CURB INLET CASTINGS.
4. MAINTENANCE SHALL BE PERFORMED AS NEEDED. REMOVE SILT FROM FABRIC INSERT WHEN 50% OF CAPACITY IS REACHED. REMOVE SILT FROM INTERIOR AND EXTERIOR OF INLET COVER WHEN 50% OF COVER HEIGHT IS REACHED.
5. TO BE USED TO ONLY WITHIN PAVED AREAS WHEN DISTURBED TURF AREAS DRAIN TO PAVED AREAS. USE IN CONJUNCTION WITH ADDITIONAL UPSTREAM PROTECTIVE MEASURES SUCH AS SILT FENCE. INLET COVER NOT TO BE USED AT PAVEMENT SAGS.

FILTER FABRIC INLET PROTECTION



SIDE VIEW



POST AND FENCE DETAIL

NOTES:

1. THE FENCE SHALL BE LOCATED 1 FOOT MINIMUM OUTSIDE THE DRIP LINE OF THE TREE TO BE SAVED AND IN NO CASE CLOSER THAN 5 FEET TO THE TRUNK OF ANY TREE.
2. CONTRACTOR SHALL USE SILT FENCE, PLASTIC FENCE, OR WOOD LATH SNOW FENCE TO PROTECT THE AREA.
3. TO BE USED TO PROTECT TREES FROM DISTURBANCE AND FROM EQUIPMENT TRAVELING OVER THE ROOT ZONE.

TREE PROTECTION
STANDARD SYMBOL

TP

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