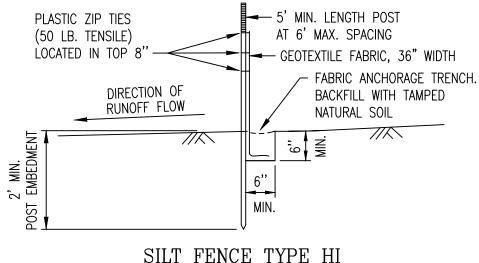
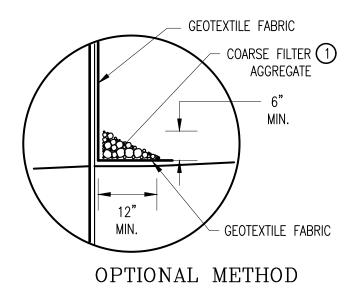


REFERENCE: MN/DOT SPEC. 2573 & 3886



SILT FENCE TYPE HI (HAND INSTALLED)

DESIGN GUIDELINES:
TO PROTECT AREAS
FROM SHEET FLOW.
MAXIMUM CONTRIBUTING
AREA: 1 ACRE



Ocoarse filter aggregate (MN/DOT SPEC. 3149) SHALL BE INCIDENTAL.

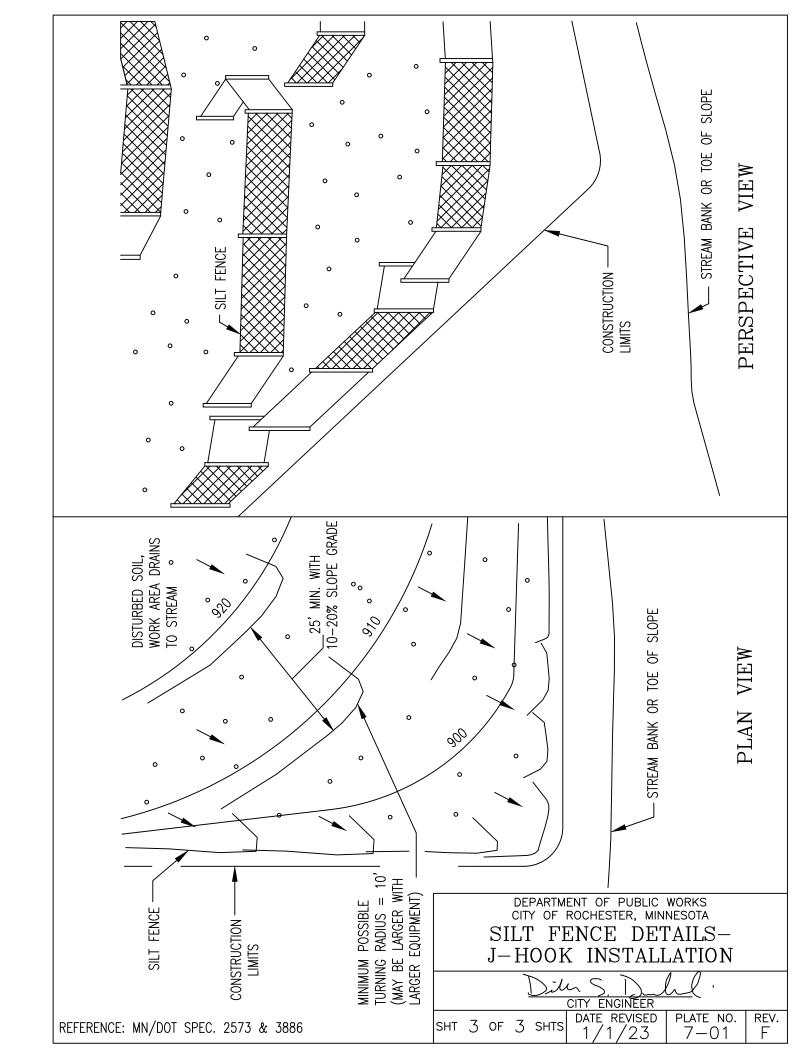
DEPARTMENT OF PUBLIC WORKS
CITY OF ROCHESTER, MINNESOTA

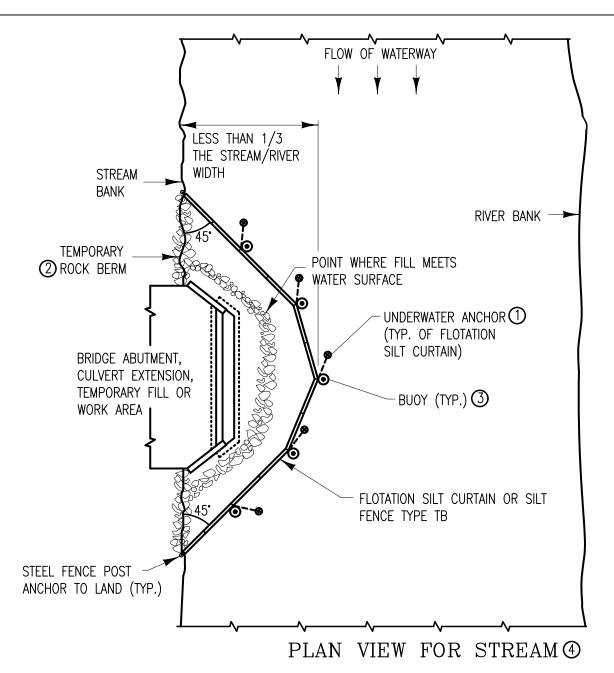
SILT FENCE DETAILS

CITY ENGINEER

SHT 2 OF 3 SHTS DATE REVISED PLATE NO. REV. 1/1/23 7-01 F

REFERENCE: MN/DOT SPEC. 2573 & 3886

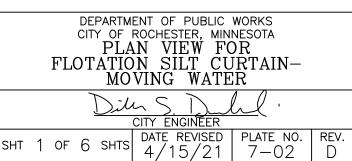


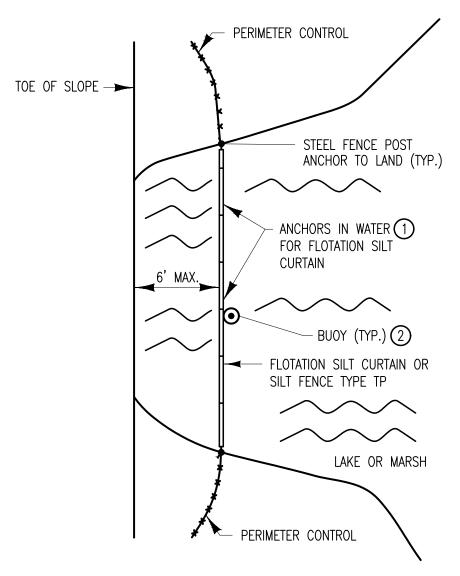


NOTES:

SEE MN/DOT SPECS. 2573, 3886, 3887 & 3893.

- 1) FOR ANCHOR SPACING AND WEIGHT REQUIREMENTS, SEE MN/DOT SPEC. 2573.
- IN AREAS WHERE THE PLAN CALLS FOR RIPRAP AT A BRIDGE, CULVERT, OR SLOPE, A TEMPORARY ROCK BERM CONSTRUCTED FROM THE RIPRAP CAN BE USED TO PROVIDE ADDITIONAL PROTECTION. WHEN THE WORK IS COMPLETE THE RIPRAP CAN THEN BE MOVED TO THE PERMANENT LOCATION INDICATED IN THE PLANS. THE TEMPORARY ROCK BERM IS INCIDENTAL.
- ON U.S. COAST GUARD OR OTHER MOTORIZED WATERWAYS, BUOYS ARE REQUIRED TO MARK THE ENDS AND SPECIAL AREAS FOR VISIBILITY. PLACE BUOYS AS REQUIRED FOR NAVIGATIONAL PURPOSES.
- 4 SILT CURTAIN SHALL BE REMOVED WHEN THE AREA CONTRIBUTING DIRECT RUNOFF HAS BEEN TEMPORARILY OR PERMANENTLY STABILIZED. SILT CURTAIN SHALL ALSO BE REMOVED BEFORE WINTER IF ICE UP OR ICE FLOW IS ANTICIPATED.



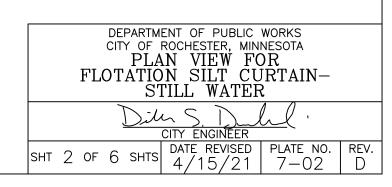


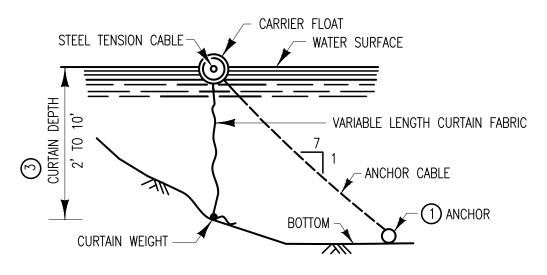
PLAN VIEW FOR LAKE OR MARSH 3

NOTES:

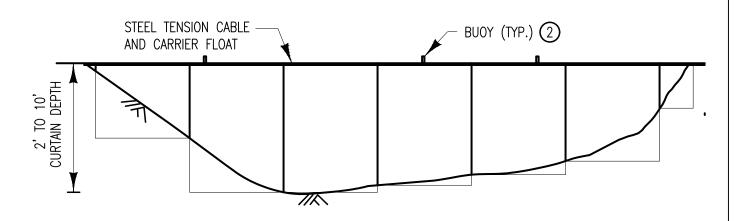
SEE MN/DOT SPECS. 2573, 3886, 3887 & 3893.

- 1) FOR ANCHOR SPACING AND WEIGHT REQUIREMENTS, SEE MN/DOT SPEC. 2573.
- ② ON U.S. COAST GUARD OR OTHER MOTORIZED WATERWAYS, BUOYS ARE REQUIRED TO MARK THE ENDS AND SPECIAL AREAS FOR VISIBILITY. PLACE BUOYS AS REQUIRED FOR NAVIGATIONAL PURPOSES.
- (3) SILT CURTAIN SHALL BE REMOVED WHEN THE AREA CONTRIBUTING DIRECT RUNOFF HAS BEEN TEMPORARILY OR PERMANENTLY STABILIZED. SILT CURTAIN SHALL ALSO BE REMOVED BEFORE WINTER IF ICE UP OR ICE FLOW IS ANTICIPATED.





FLOTATION SILT CURTAIN

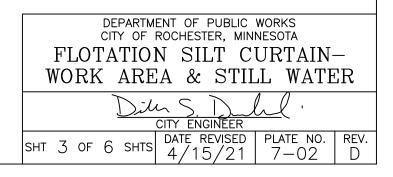


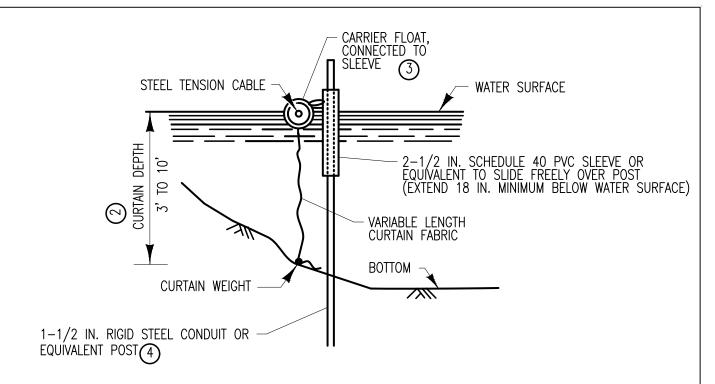
FRONT VIEW FOR FLOTATION SILT CURTAIN

NOTES:

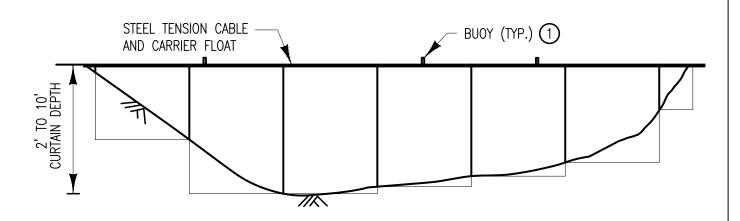
SEE MN/DOT SPECS. 2573, 3886, 3887 & 3893.

- 1 FOR ANCHOR SPACING AND WEIGHT REQUIREMENTS, SEE SPEC. 2573.
- ② ON U.S. COAST GUARD OR OTHER MOTORIZED WATERWAYS, BUOYS ARE REQUIRED TO MARK THE ENDS AND SPECIAL AREAS FOR VISIBILITY. PLACE BUOYS AS REQUIRED FOR NAVIGATIONAL PURPOSES.
- 3 MINIMUM WATER DEPTH APPLIES TO THE DEEPEST POINT ALONG THE FLOTATION SILT CURTAIN OR SILT FENCE TYPE TB.





ALTERNATE FLOTATION SILT CURTAIN



FRONT VIEW FOR FLOTATION SILT CURTAIN

NOTES:

SEE MN/DOT SPECS. 2573, 3886, 3887 & 3893.

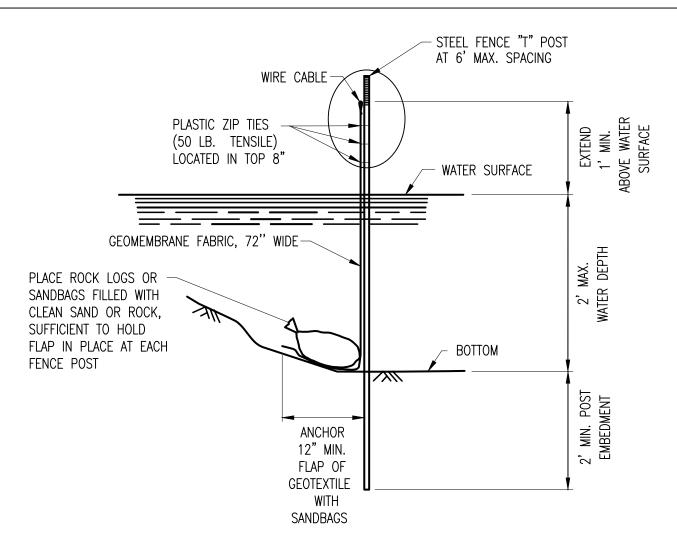
- 1 ON U.S. COAST GUARD OR OTHER MOTORIZED WATERWAYS, BUOYS ARE REQUIRED TO MARK THE ENDS AND SPECIAL AREAS FOR VISIBILITY. PLACE BUOYS AS REQUIRED FOR NAVIGATIONAL PURPOSES.
- 2) MINIMUM WATER DEPTH APPLIES TO THE DEEPEST POINT ALONG THE FLOTATION SILT CURTAIN OR SILT FENCE TYPE TB FOR DETERMINING APPLICABILITY OF FLOTATION SILT CURTAIN OR SILT FENCE TYPE TB.
- 3 ANCHOR FLOAT MUST BE CONNECTED SECURELY TO SLEEVE WITH A MINIMUM TENSILE STRENGTH OF 100 LBS. CONNECTION METHOD MUST ALLOW FOR SLEEVE TO MOVE FREELY ON POST.
- 4 PROVIDE SUFFICIENT NUMBER OF POST ANCHORS TO MAINTAIN SILT CURTAIN POSITION.

DEPARTMENT OF PUBLIC WORKS
CITY OF ROCHESTER, MINNESOTA

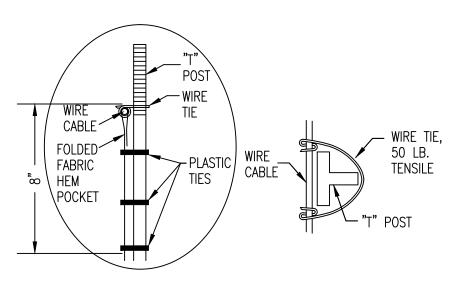
ALT. SECTIONAL VIEW
FLOTATION SILT CURTAIN

CITY ENGINEER

SHT 4 OF 6 SHTS DATE REVISED PLATE NO. REV.
4/15/21 7-02 D



SILT FENCE TYPE TB ①



FABRIC/CABLE POST CONNECTION

NOTES:

SEE MN/DOT SPECS. 2573, 3886, 3887 & 3893.

1 EMBED POST INTO BOTTOM A MINIMUM OF 40% OF THE WATER DEPTH (INCLUDING WAVE HEIGHT), BUT IN NO CASE SHALL EMBEDMENT BE LESS THAN 2 FEET.

DEPARTMENT OF PUBLIC WORKS CITY OF ROCHESTER, MINNESOTA

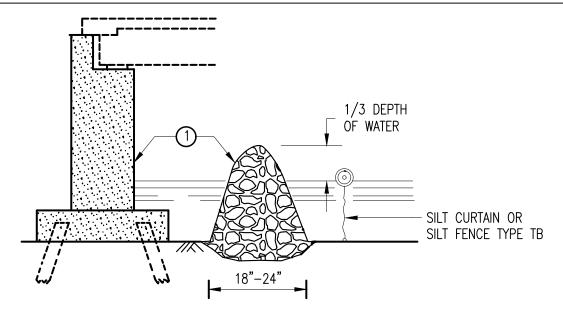
SILT FENCE TYPE TB

CITY ENGINEER

E OF 6 SUITS DATE REVISED PLATE I

SHT 5 OF 6 SHTS DATE REVISED PLATE NO. 4/15/21 7-02

REV.



TEMPORARY ROCK BERM

FOR SEDIMENT CONTROL

INSTALLATION GUIDELINES SILT FENCE TYPE TB

MINIMUM WATER DEPTH: 1 FOOT MAXIMUM WATER DEPTH: 3 FEET

(2)

MAXIMUM WATER VELOCITY: 5 FEET/SECOND

INSTALLATION GUIDELINES FLOTATION SILT CURTAIN TYPE: STILL WATER

MINIMUM WATER DEPTH: 3 FEET MAXIMUM WATER DEPTH: 10 FEET

MAXIMUM WATER VELOCITY: 2 FEET/SECOND

MAXIMUM WAVE HEIGHT: 1 FOOT

INSTALLATION GUIDELINES FLOTATION SILT CURTAIN TYPE: MOVING WATER

(2)

MINIMUM WATER DEPTH: 3 FEET MAXIMUM WATER DEPTH: 10 FEET

MAXIMUM WATER VELOCITY: 5 FEET/SECOND

MAXIMUM WAVE HEIGHT: 2 FEET

NOTES:

SEE MN/DOT SPECS. 2573, 3886, 3887 & 3893.

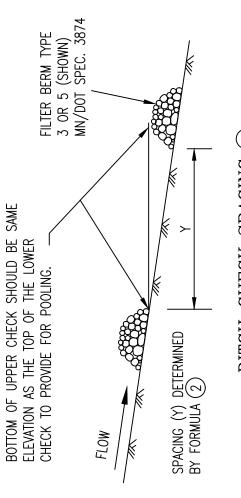
- IN AREAS WHERE THE PLAN CALLS FOR RIPRAP AT A BRIDGE, CULVERT, OR SLOPE, A TEMPORARY ROCK BERM CONSTRUCTED FROM THE RIPRAP CAN BE USED TO PROVIDE ADDITIONAL PROTECTION. WHEN THE WORK IS COMPLETE THE RIPRAP CAN THEN BE MOVED TO THE PERMANENT LOCATION INDICATED IN THE PLANS. THE TEMPORARY ROCK BERM IS INCIDENTAL.
- 2 MINIMUM WATER DEPTH APPLIES TO THE DEEPEST POINT ALONG THE FLOTATION SILT CURTAIN OR SILT FENCE TYPE TB FOR DETERMINING APPLICABILITY OF FLOTATION SILT CURTAIN OR SILT FENCE TYPE TB.

department of public works city of rochester, minnesota FLOTATION SILT CURTAIN

FLOTATION SILT CURTAIN— DESIGN GUIDELINES

CITY ENGINEER

SHT 6 OF 6 SHTS DATE REVISED PLATE NO. REV. 4/15/21 7-02 D



DITCH CHECK SPACING (1)

NOTES

SEE MN/DOT SPECS. 2573, 3601, 3733 & 3874

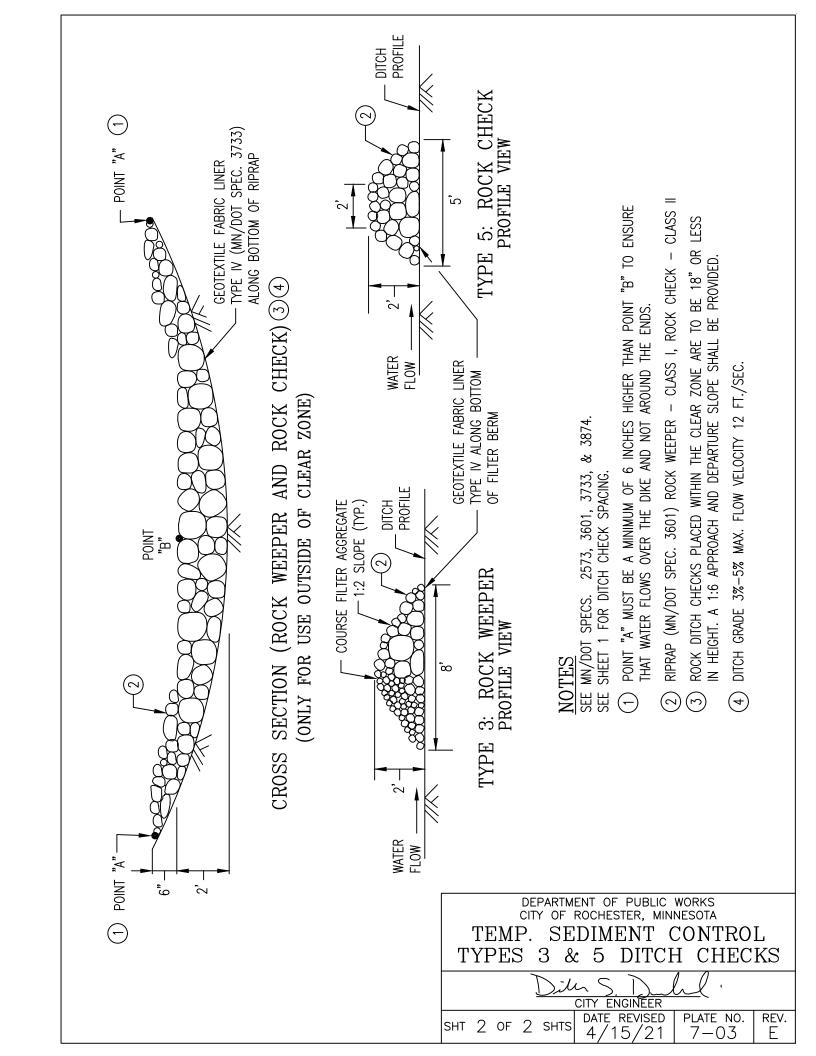
(1) ROCK DITCH CHECKS PLACED WITHIN THE CLEAR ZONE ARE TO BE 18" OR LESS IN HEIGHT. A 1:6 APPROACH AND DEPARTURE SLOPE SHALL BE PROVIDED.

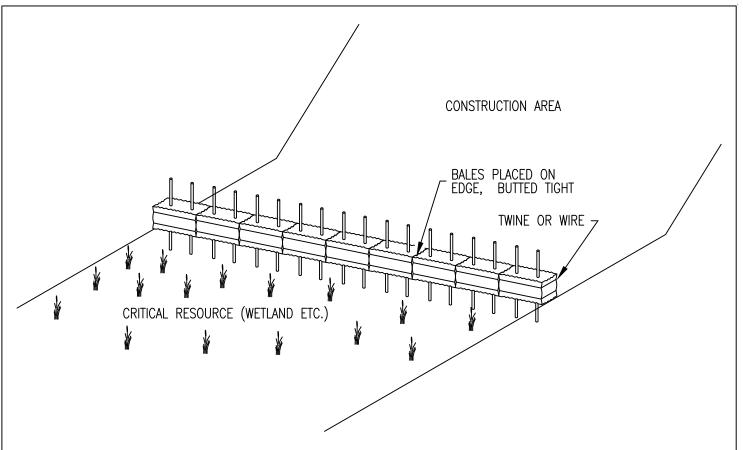
APPROXIMATE SPACING BETWEEN EACH DITCH CHECK SHOULD BE DETERMINED FROM SPACING FORMULA:

(FT.) = $Y = \frac{DITCH}{x}$ CHANNEL SLOPE X 100

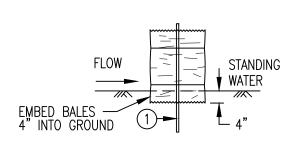
GENERAL	SENERAL DESIGN GUIDELINES	VES.
DITCH CHECK TYPE	ROCK WEEPER	ROCK CHECK
STORM FREQUENCY: MAX. FLOW VELOCITY: MAX. DITCH GRADE: MAX. DRAINAGE AREA:	5 YR. – 24 HR. 12 FT./SEC 3% – 5% 4+ ACRE	5 YR. – 24 HR. 12 FT./SEC 3% – 5% 4+ ACRE

DEPARTMENT OF PUBLIC WORKS CITY OF ROCHESTER, MINNESOTA TEMP. SEDIMENT CONTROL FILTER BERMS								
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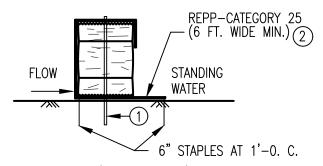




BALE BARRIERS
TO BE USED FOR CRITICAL PERIMETER CONTROL AREAS



EMBEDMENT METHOD



REPP (BLANKET) METHOD (ALTERNATE)

BALE BARRIER DETAIL ③

APPROX. BALE SIZE: 14" X 18" X 36" LONG

NOTES

SEE MN/DOT SPEC. 2573

- 1 TWO 2" X 2" WOOD STAKES OR REINFORCING BARS IN EACH BALE EMBEDDED 10" MINIMUM IN THE GROUND.
- (2) INSTEAD OF TRENCHING, PLACE BALE ON THE REPP (BLANKET) AND WRAP BLANKET AROUND THE BALE. PLACE STAKE THROUGH BALE AND BLANKET.
- (3) TO BE USED FOR CRITICAL PERIMETER CONTROL AREAS WHERE STANDING WATER OCCURS (6" MAXIMUM DEPTH). BALES SHALL CONSIST OF TYPE 1 MULCH OF APPROX. 14" X 18" X 36" LONG. BALES SHALL BE PLACED ON EDGE AND BUTTED TIGHT TO ADJACENT BALES.

REPP=ROLLED EROSION PREVENTION PRODUCT

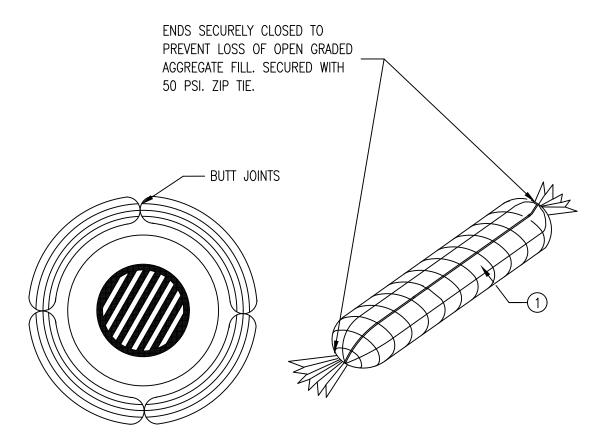
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DEPARTMENT OF PUBLIC WORKS CITY OF ROCHESTER, MINNESOTA

BALE BARRIERS

CITY ENGINEER

SHT 1 OF 1 SHTS DATE REVISED PLATE NO. 4/15/21 7-04



NOTES

SEE MN/DOT SPEC. 2573

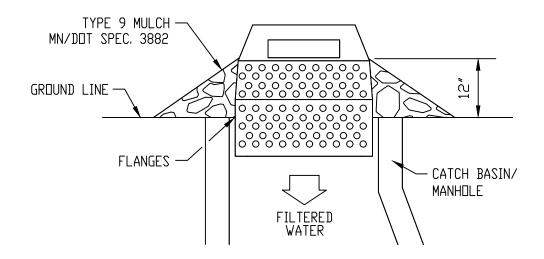
MANUFACTURED ALTERNATIVES LISTED ON MN/DOT'S APPROVED PRODUCTS LIST MAY BE SUBSTITUTED.

(1) GEOTEXTILE SOCK BETWEEN 4-10 FEET LONG AND 4-6 INCH DIAMETER. THE SEAM IS TO BE JOINED BY TWO ROWS OF STITCHING WITH A PLASTIC MESH BACKING OR PROVIDE A HEAT BONDED SEAM (OR APPROVED EQUIVALENT). FILL ROCK LOG WITH OPEN GRADED AGGREGATE CONSISTING OF SOUND DURABLE PARTICLES OF COARSE AGGREGATE CONFORMING TO MN/DOT SPEC. 3137 TABLE 3137-1; CA-3 GRADATION.

DEPARTMENT OF PUBLIC WORKS
CITY OF ROCHESTER, MINNESOTA
INLET PROTECTION—
ROCK LOG/COMPOST LOG

CITY ENGINEER

SHT 1 OF 5 SHTS DATE REVISED PLATE NO. REV. 4/15/21 7-05 E



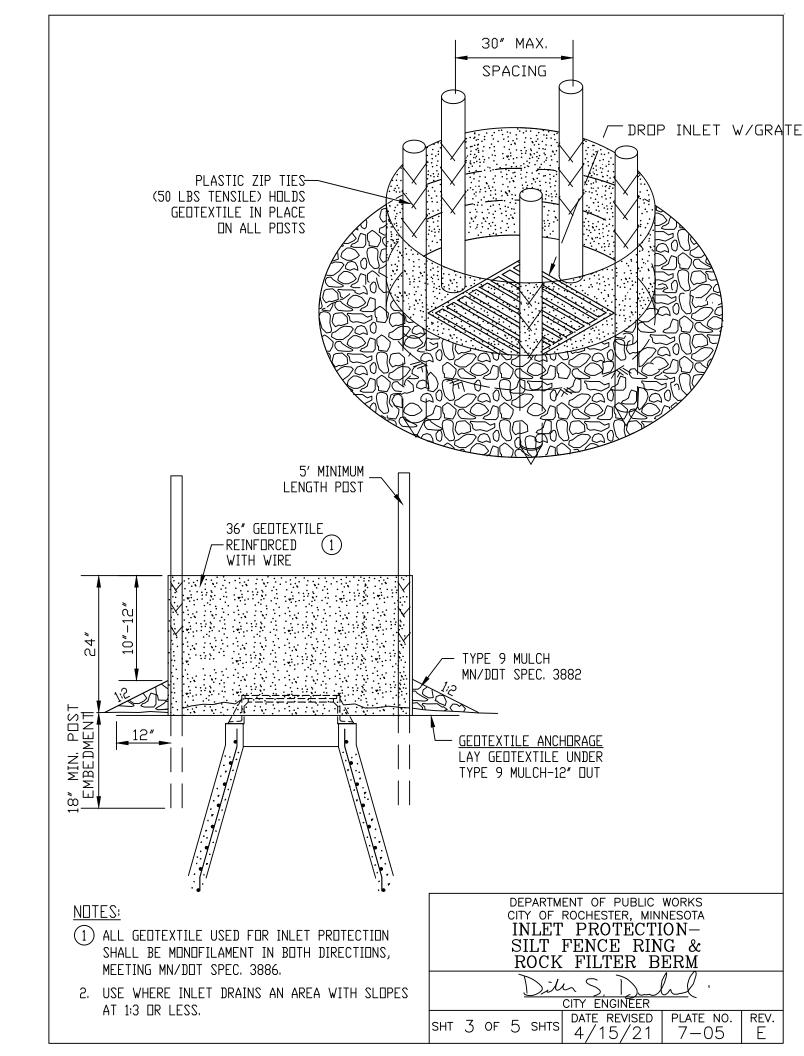
SEDIMENT CONTROL INLET HAT

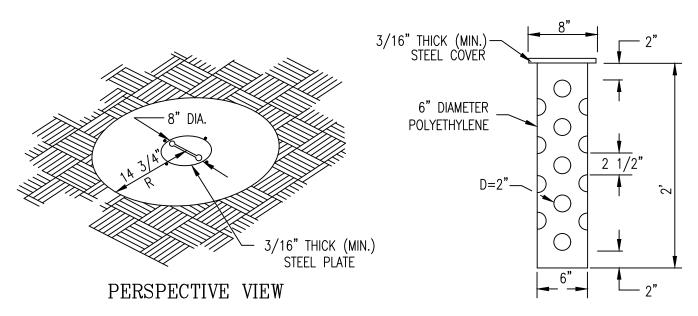
NOTE:

THE SEDIMENT CONTROL BARRIER SHALL BE A METAL OR PLASTIC/POLYETHYLENE RISER SIZED TO FIT INSIDE THE CATCH BASIN/MANHOLE; HAVE PERFORATIONS TO ALLOW FOR WATER INFILTRATION; HAVE AN OVERFLOW OPENING, FLANGES AND A LID/COVER.

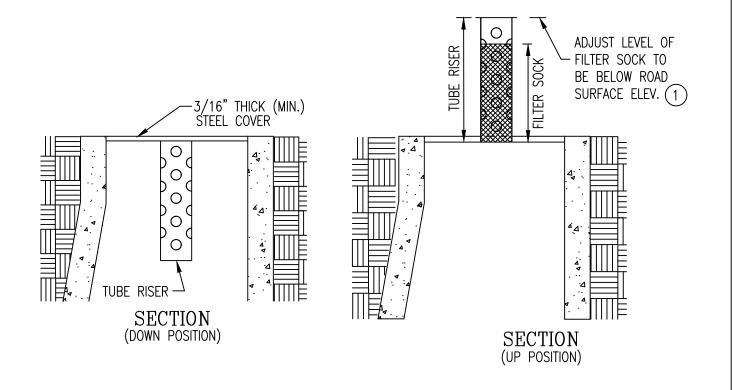
DEPARTMENT OF PUBLIC WORKS
CITY OF ROCHESTER, MINNESOTA
INLET PROTECTION—
SEDIMENT CONTROL INLET HAT

SHT 2 OF 5 SHTS DATE REVISED PLATE NO. REV. 4/15/21 7-05 E





TUBE RISER



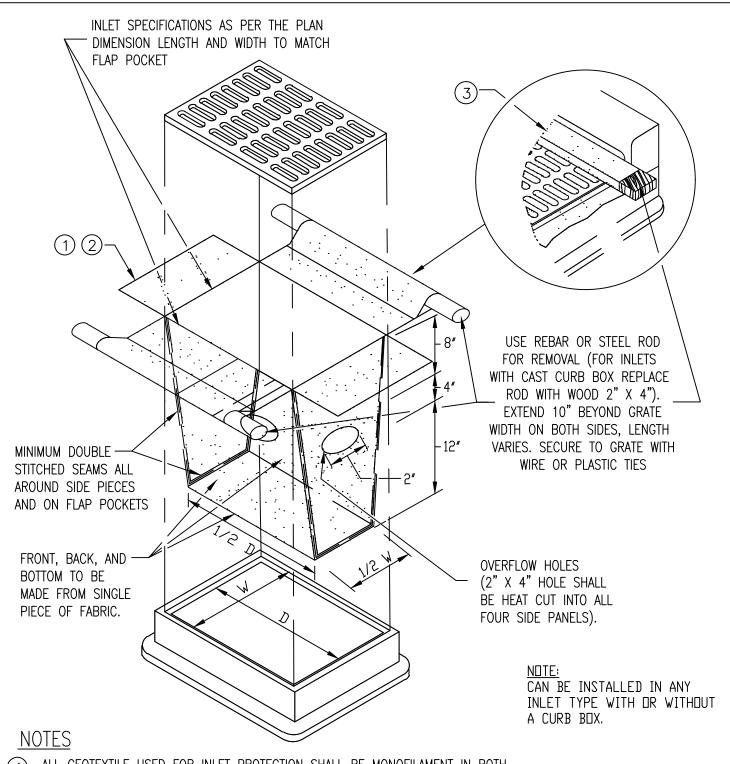
NOTES

SEE MN/DOT SPEC. 2573

1) SOCK HEIGHT MUST NOT BE SO HIGH AS TO SLOW DOWN WATER FILTRATION TO CAUSE FLOODING OF THE ROADWAY. DEPARTMENT OF PUBLIC WORKS CITY OF ROCHESTER, MINNESOTA INLET PROTECTION—POP—UP HEAD

CITY ENGINEER

SHT 4 OF 5 SHTS DATE REVISED PLATE NO. REV. 4/15/21 7-05 E



- ALL GEOTEXTILE USED FOR INLET PROTECTION SHALL BE MONOFILAMENT IN BOTH DIRECTIONS, MEETING MN/DOT SPEC. 3886.
- (2) FINISHED SIZE, INCLUDING POCKETS WHERE REQUIRED SHALL EXTEND A MINIMUM OF 10 INCHES AROUND THE PERIMETER TO FACILITATE MAINTENANCE OR REMOVAL.
- (3) FLAP POCKETS SHALL BE LARGE ENOUGH TO ACCEPT WOOD 2 IN. X 4 IN. OR USE A ROCK SOCK OR SAND BAGS IN PLACE OF THE FLAP POCKETS.
 - 4 INSTALLATION NOTES: DO NOT INSTALL FILTER BAG INSERT IN INLETS SHALLOWER THAN 30 IN., MEASURED FROM THE BOTTOM OF THE INLET TO THE TOP OF THE GRATE. THE PLACED BAG SHALL HAVE A MINIMUM SIDE CLEARANCE OF 3" BETWEEN THE INLET WALLS AND THE BAG MEASURED AT THE BOTTOM OF THE OVERFLOW HOLES. WHERE NECESSARY THE CONTRACTOR SHALL CLINCH THE BAG, USING PLASTIC ZIP TIES, TO ACHIEVE THE 3" SIDE CLEARANCE.

DEPARTMENT OF PUBLIC WORKS CITY OF ROCHESTER, MINNESOTA

INLET PROTECTION—
FILTER BAG INSERT

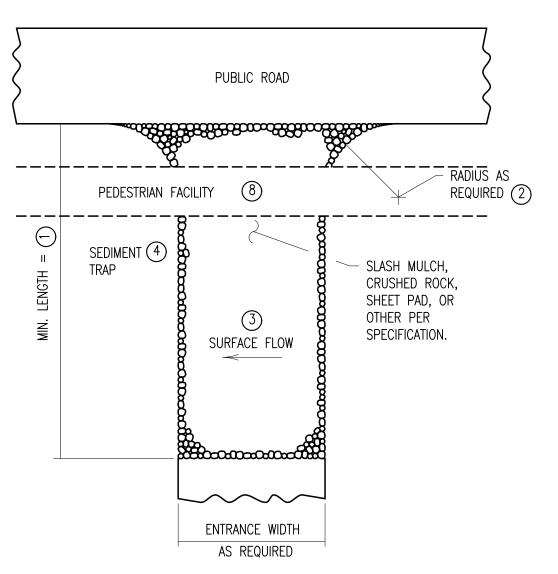
CITY ENGINEER

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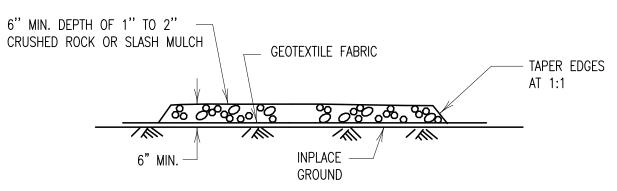
SHT 5 OF 5 SHTS 4/15/21

7-05

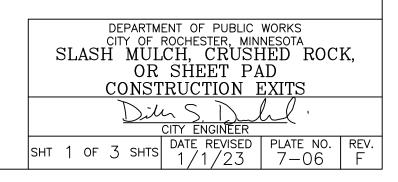
REV.



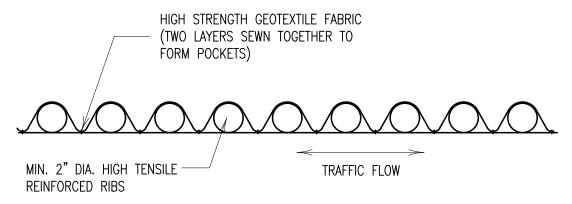
SLASH MULCH, CRUSHED ROCK, OR SHEET PAD CONSTRUCTION EXIT (5)(7)



SLASH MULCH OR CRUSHED ROCK



SEE SHEET 2 OF 3 FOR DETAIL NOTES



SHEET PAD

NOTES:

SEE MN/DOT SPECS. 2573 & 3882.

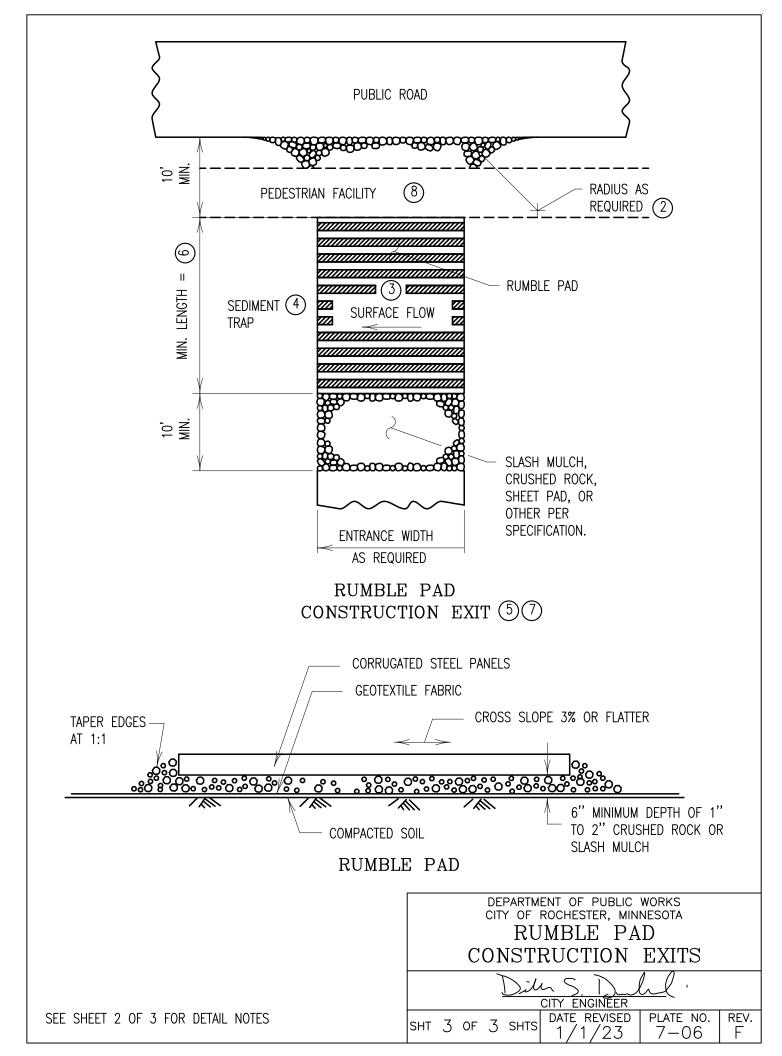
- 1 MINIMUM LENGTH SHALL BE THE GREATER OF 50 FEET OR A LENGTH SUFFICIENT TO ALLOW A MINIMUM OF 5 TIRE ROTATIONS ON THE PROVIDED PAD. MINIMUM LENGTH SHALL BE CALCULATED USING THE LARGEST TIRE WHICH WILL BE USED IN TYPICAL OPERATIONS.
- PROVIDE RADIUS OR WIDEN PAD SUFFICIENTLY TO PREVENT VEHICLE TIRES FROM TRACKING OFF OF PAD WHEN LEAVING SITE.
- IF RUNOFF FROM DISTURBED AREAS FLOWS TOWARD CONSTRUCTION EXITS, PREVENT RUNOFF FROM DRAINING DIRECTLY TO PUBLIC ROAD OVER CONSTRUCTION EXIT BY CROWNING THE EXIT OR SLOPING TO ONE SIDE. IF SURFACE GRADING IS INSUFFICIENT, PROVIDE OTHER MEANS OF INTERCEPTING RUNOFF.
- (4) IF RUNOFF FROM CONSTRUCTION EXITS WILL DRAIN OFF OF PROJECT SITE, PROVIDE SEDIMENT TRAP WITH STABILIZED OVERFLOW.
- (5) IF A TIRE WASH OFF IS REQUIRED THE CONSTRUCTION EXITS SHALL BE GRADED TO DRAIN THE WASH WATER TO A SEDIMENT TRAP.
- 6 MINIMUM LENGTH OF RUMBLE PAD SHALL BE 20 FEET, OR AS REQUIRED TO REMOVE SEDIMENT FROM TIRES. IF SIGNIFICANT SEDIMENT IS TRACKED FROM THE SITE, THE RUMBLE PAD SHALL BE LENGTHENED OR THE DESIGN MODIFIED TO PROVIDE ADDITIONAL VIBRATION. WASH-OFF LENGTH SHALL BE AS REQUIRED TO EFFECTIVELY REMOVE CONSTRUCTION SEDIMENT FROM VEHICLE TIRES.
- MAINTENANCE OF CONSTRUCTION EXITS SHALL OCCUR WHEN THE EFFECTIVENESS OF SEDIMENT REMOVAL HAS BEEN REDUCED. MAINTENANCE SHALL CONSIST OF REMOVING SEDIMENT AND CLEANING THE MATERIALS OR PLACING ADDITIONAL MATERIAL (SLASH MULCH OR CRUSHED ROCK) OVER SEDIMENT FILLED MATERIAL TO RESTORE EFFECTIVENESS.
- (8) EXISTING PEDESTRIAN FACILITY SHALL BE MAINTAINED TO PROVIDE A PASSABLE SURFACE FOR PEDESTRIANS.
- 9. CLEAN PAVED STREETS AND PEDESTRIAN FACILITIES AT THE END OF EACH WORKING DAY, OR MORE FREQUENTLY AS NECESSARY TO PROVIDE SAFETY TO THE TRAVELING PUBLIC.

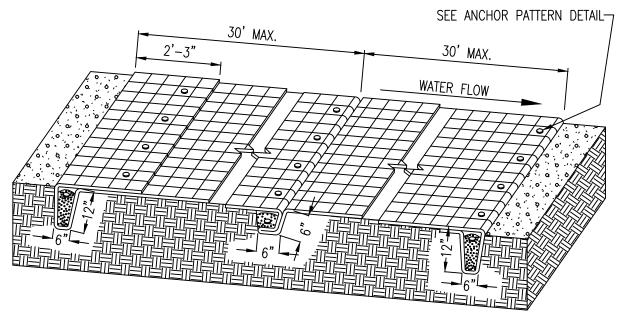
DEPARTMENT OF PUBLIC WORKS
CITY OF ROCHESTER, MINNESOTA

TEMP. SEDIMENT CONTROL
CONSTRUCTION EXITS

CITY ENGINEER

SHT 2 OF 3 SHTS DATE REVISED PLATE NO. REV.
1/1/23 7-06 F

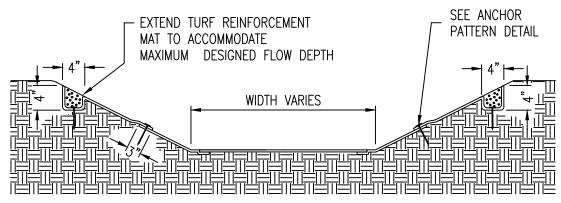




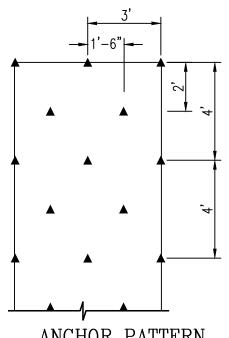
TERMINAL CHANNEL ANCHOR TRENCH

INTERMITTENT CHECK SLOT

INITIAL CHANNEL ANCHOR TRENCH

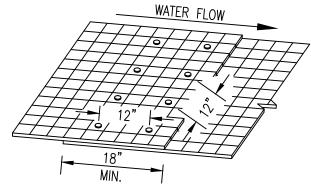


TYPICAL CHANNEL LAYOUT



ANCHOR PATTERN
PATTERN AS SHOWN OR PER MANUFACTI

PATTERN AS SHOWN OR PER MANUFACTURER REQUIREMENTS, WHICHEVER IS MORE STRINGENT.



ANCHOR PATTERN AT LAP JOINTS

DEPARTMENT OF PUBLIC WORKS CITY OF ROCHESTER, MINNESOTA

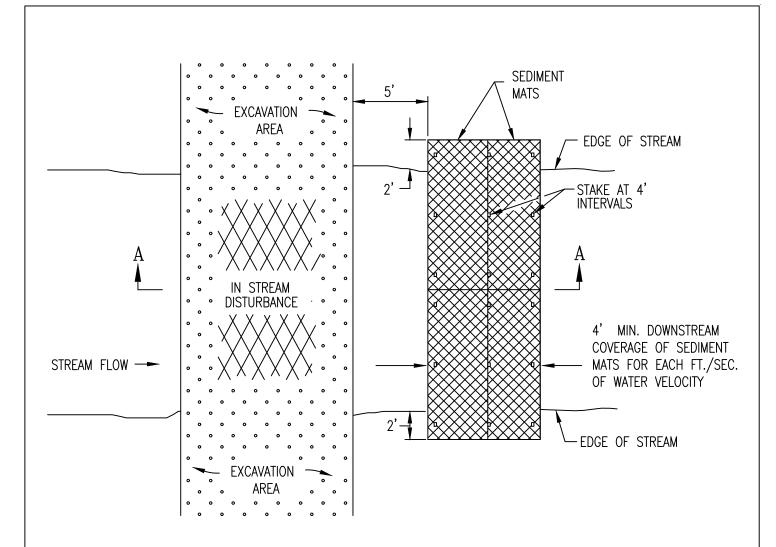
TURF REINFORCEMENT MAT FOR CHANNELS

Monglole Melson ASST. CITY ENGINEER Rull W. Free

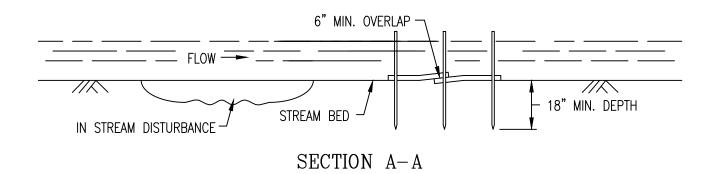
SHT 1 OF 1 SHTS

DATE REVISED | PLATE NO. 4/16/01 | 7-07

0. REV. ' A



PLAN VIEW



DESIGN GUIDELINES:

MAXIMUM FLOW VELOCITY: 5 FEET/SECOND

MAXIMUM FLOW DEPTH: 2 FEET

NOTES

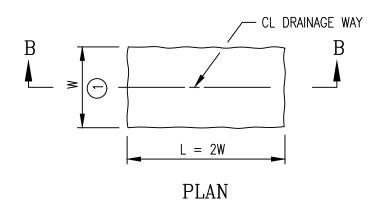
SEE MN/DOT SPEC. 2573

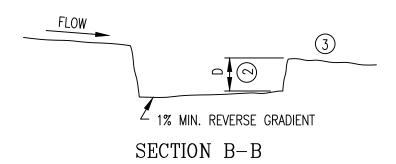
1) THIS DETAIL MAY NOT BE ACCEPTABLE FOR WORK ON PUBLIC WATERS, SEE GENERAL PUBLIC WATERS PERMIT (GP) 2004-0001.

DEPARTMENT OF PUBLIC WORKS CITY OF ROCHESTER, MINNESOTA SEDIMENT MAT

lough Nelson Reil

SHT 1 OF 1 SHTS DATE REVISED PLATE NO. REV. 1/20/17 7-08 B





NOTES

SEE SPECS. 2573

- 1) W=10 FEET MINIMUM, 20 FEET MAXIMUM
- ② D=2 FEET
- (3) LOCATION OF DOWNSTREAM TEMPORARY SEDIMENT CONTROL DEVICE.

DEPARTMENT OF PUBLIC WORKS CITY OF ROCHESTER, MINNESOTA

SEDIMENT TRAP DETAIL

ASST. CITY ENGINEER

SHT 1 OF 1 SHTS 6/15/07 7-09 A