CITY OF DELAWARE OHIO EST 1808

Public Works Department

STANDARD DETAIL

FABRIC DITCH CHECK DETAILS

EROSION

ERSD-5.0

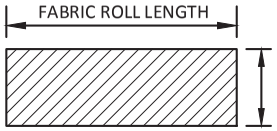
Rev. 12/31/2018

MATERIALS GUIDE:

1. 2" X 2" PINE STAKES, SHARPENED
   (2" x 4" & 4" x 4" STAKES FOR HIGH FLOW)
   (2" x 6" AND 6" x 6" STAKES FOR HEAVY DUTY HIGH FLOW)
2. WOVEN MONOFILAMENT GEOTEXTILE FABRIC
   (100-250 GPM/SQ FT FLOW RATE)
   OR HIGH FLOW FABRIC
   (HIGH SPUN TYPAR FOR ADDITIONAL PONDING)
3. 9/16" WIRE STAPLES AND 6" SOD STAPLES
4. STRAW/COCONUT FIBER BLANKET
5. ODOT #57 STONE

INSTALLATION GUIDE:

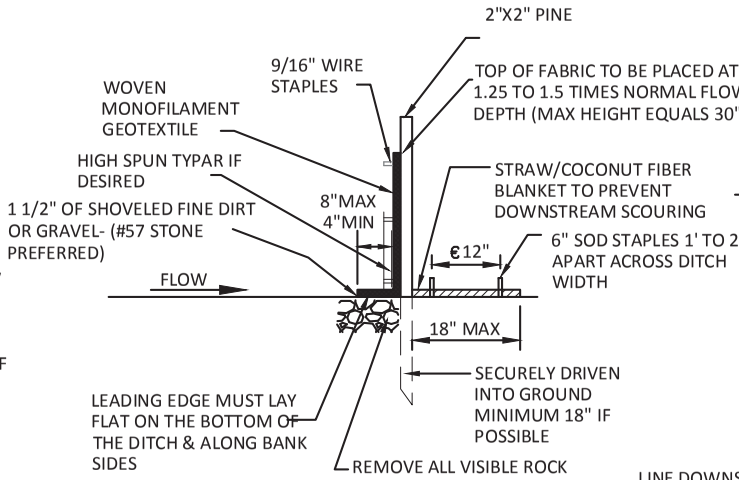
1. DETERMINE REQUIRED HEIGHT OF FABRIC - IN GENERAL REQUIRED HEIGHT EQUALS 1.25 TO 1.5 TIMES NORMAL FLOW DEPTH OF DITCH
2. INSTALL STAKES PER DIAGRAMS
3. USE 4' CARPENTER LEVEL TO MARK STAKES AT TOP OF FABRIC LOCATION (TOP OF FABRIC TO BE LEVEL ALONG THE WIDTH OF DITCH)
4. STAPLE TOP EDGE OF FABRIC TO STAKES AT LEVEL MARKS
5. TRIM EXCESS FABRIC TO PROVIDE A LEADING EDGE THAT LIES FLAT AND FLUSH WITH DITCH BOTTOM
6. HIGH SPUN TYPAR FABRIC TO STAKES AT LEVEL MARKS END IF ADDITIONAL PONDING IS DESIRED OR IF SUPER FINES ARE OF CONCERN
7. STAPLE BOTTOM OF FABRIC AT DITCH BOTTOM; CHECK TO ENSURE A TIGHT FIT
8. SHOVEL DIRT OR GRAVEL TO COMPLETELY COVER LEADING EDGE
9. PLACE STRAW/COCONUT FIBER AT DOWNSTREAM END; SECURE WITH SOD STAPLES; TRIM EXCESS MATERIAL SO THAT IT LIES FLAT AND FLUSH WITH DITCH BOTTOM
10. FABRIC ROLL DIMENSIONS TO BE BASED ON INSTALLATION REQUIREMENTS - ALL EXCESS TO BE TRIMMED WITH SHARP UTILITY KNIFE OR SCISSORS
11. ANY INSTALLATION FOLDS MUST BE CAREFULLY TRIMMED AND OVERLAPPED TO AVOID WRINKLES OR UNDESIRABLE IRREGULARITIES



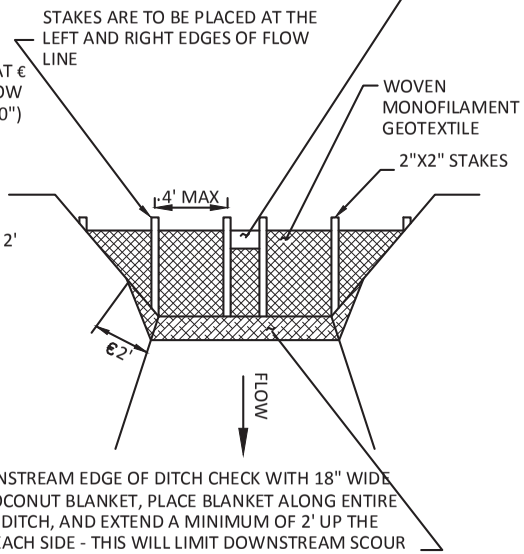
FABRIC ROLL WIDTH EQUALS DESIRED HEIGHT OF FABRIC TO BE INSTALLED IN DITCH PLUS LENGTH OF LEADING EDGE

MAINTENANCE GUIDE:

1. AFTER FIRST RAIN, REPLACE ANY MISSING ROCK AND DIRT AT LEADING EDGE
2. INSPECT FABRIC DITCH CHECK AFTER HEAVY RAINS
3. REMOVE SEDIMENT DEPOSITS FROM FABRIC DITCH CHECK WHEN THE TOP OF SEDIMENT REACHES 75% OF FABRIC HEIGHT



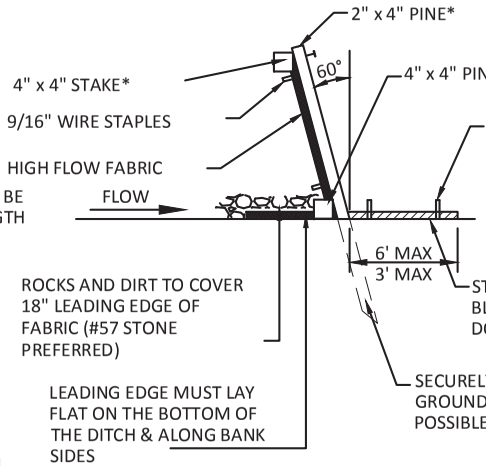
WHERE PONDING AVAILABILITY AND DITCH HEIGHT IS LIMITED, A NOTCH OVER FLOW LINE MAY BE CUT INTO FABRIC BETWEEN 2 CLOSELY SPACED STAKES TO PREVENT END AROUND SCOURING



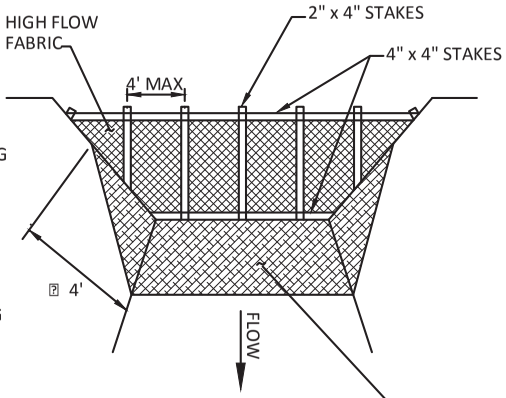
LINE DOWNSTREAM EDGE OF DITCH CHECK WITH 18" WIDE STRAW/COCONUT BLANKET, PLACE BLANKET ALONG ENTIRE WIDTH OF DITCH, AND EXTEND A MINIMUM OF 2' UP THE BANK ON EACH SIDE - THIS WILL LIMIT DOWNSTREAM SCOUR

ALPINE MODERATE FLOW FABRIC DITCH CHECK

WHERE DESIRED HEIGHT EXCEEDS FABRIC ROLL WIDTH FABRIC TO BE OVERLAPPED BY A MINIMUM OF 12". PLACE 2"X6" OR 4"X4" BOARD BEHIND OVERLAP.



*IF HEIGHT OF THE BARRIER EXCEEDS 7 FEET, USE 6"X6" AND 2"X6" STAKES



LINE DOWNSTREAM EDGE OF DITCH CHECK WITH 18" WIDE STRAW/COCONUT BLANKET, PLACE BLANKET ALONG ENTIRE WIDTH OF DITCH, AND EXTEND A MINIMUM OF 4' UP THE BANK ON EACH SIDE - THIS WILL LIMIT DOWNSTREAM SCOUR

ALPINE HIGH FLOW FABRIC DITCH CHECK