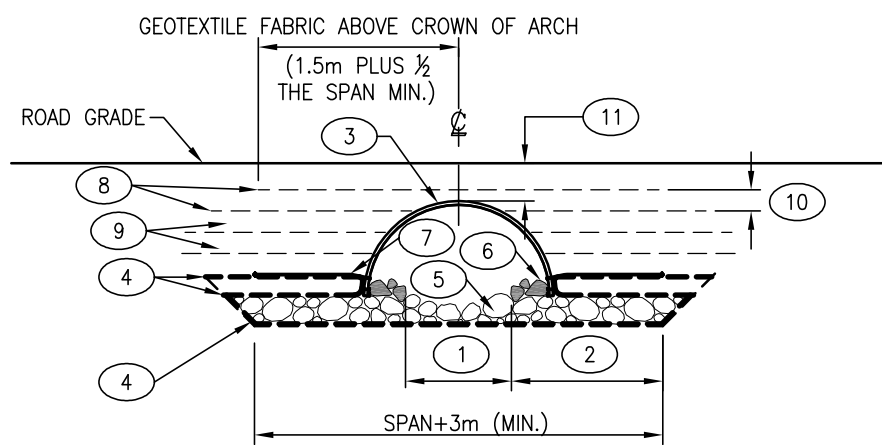


RECONSTRUCTED STREAM CHANNEL INSTALLATIONS (TO REPLACE EXISTING CULVERT)



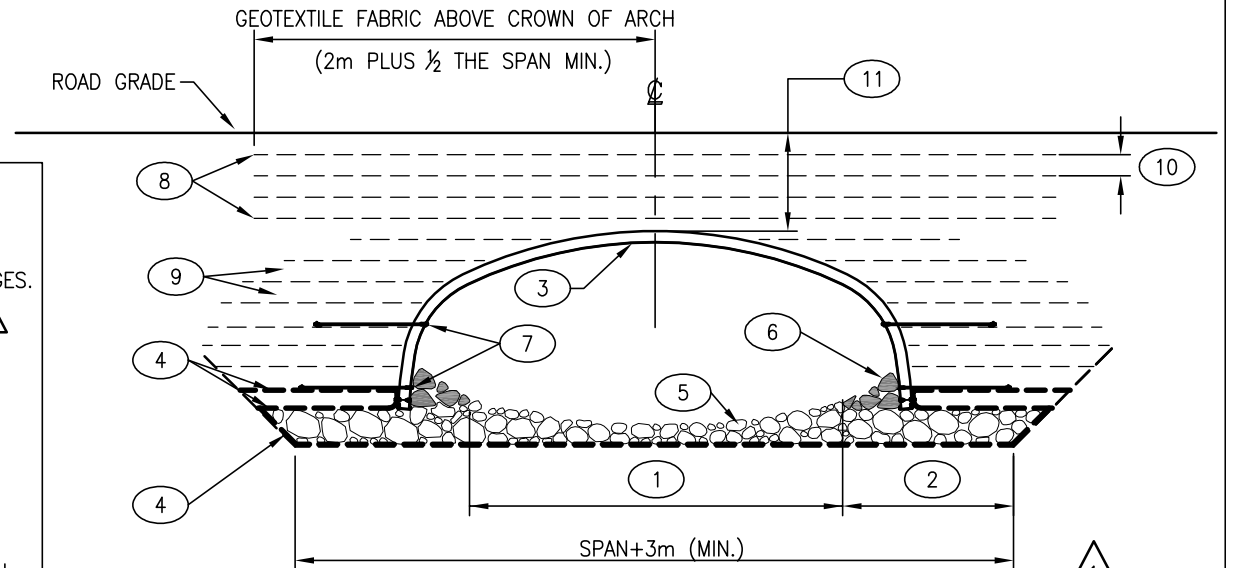
CSP ARCH FORM – MAX. 3.0m SPAN

CORRUGATION PROFILE 125mmx25mm, 2.8mm WALL THICKNESS. SEAMS WELDED FOR 75mm FROM BOTH CUT EDGES AND FOR 150mm AT THE TOP OF THE ARCH. TREAT (PAINT) WELDED AREA WITH COLD ZINC.

STREAM CHANNELS TYP. <1.5m WIDE
DESIGN DISCHARGE TYP. <3.0m³/sec
DESIGN WATER DEPTH TYP. <0.75m

LEGEND

- ① – RECONSTRUCTED OR UNDISTURBED STREAM CHANNEL WIDTH
- ② – PREPARED FOUNDATION, TYPICALLY ROCKFILL (MIN. 1.5m WIDTH)
- ③ – METAL ARCH FORM WITH CHANNEL OR ANGLE ALONG BOTTOM EDGES. SPAN TO BE A MINIMUM OF 20% MORE THAN THE NATURAL, REPRESENTATIVE STREAM CHANNEL WIDTH AS DETERMINED BY A SITE ASSESSMENT
- ④ – NON-WOVEN GEOTEXTILE AS REQUIRED 890N MIN. GRAB TENSILE STRENGTH (ASTM D4632), 580N MIN. PUNCTURE STRENGTH (ASTM D4833)
- ⑤ – DESIGNED SUBSTRATE
- ⑥ – RIPRAP SCOUR PROTECTION (INTERIOR OF METAL ARCH FORM)
- ⑦ – DEADMAN ANCHORS
- ⑧ – WOVEN GEOTEXTILE FABRIC 30kN/m (MIN.) WIDWIDTH TENSILE STRENGTH (ASTM D4595), LENGTH OF FABRIC 2.2m MIN. BETWEEN BOTTOM OF FIRST ROW OF ANCHORS AND CROWN OF ARCH FORM
- ⑨ – COMPACTED GRANULAR FILL
- ⑩ – TYPICAL FABRIC SPACING 0.28m
- ⑪ – MINIMUM GRS FILL COVER DEPTH IS 20% OF THE SPAN (NO LESS THAN 0.4m). MAXIMUM FILL DEPTH TO BE DETERMINED BY DESIGN ENGINEER CONSIDERING AXIAL COMPRESSION, LOADING, FOUNDATION CONDITIONS AND METAL WALL THICKNESS.

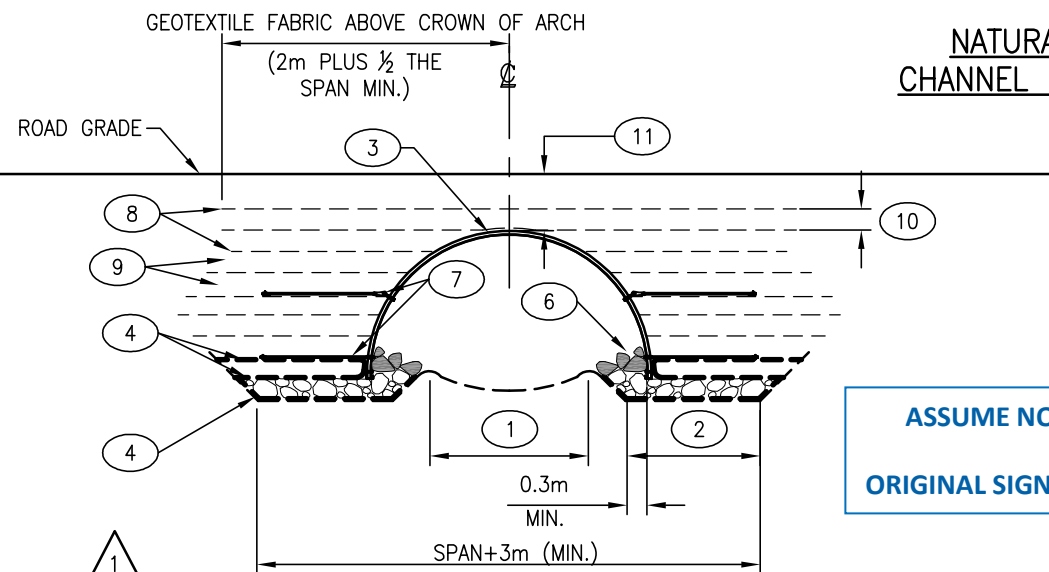


LOW PROFILE DEEP CORRUGATED PLATE ARCH FORM – 4.0m TO 6.6m SPAN

MINIMUM 4.1mm WALL THICKNESS

STREAM CHANNELS TYP. <5.0m WIDE
DESIGN DISCHARGE TYP. <12.0m³/sec
DESIGN WATER DEPTH TYP. <1.0m

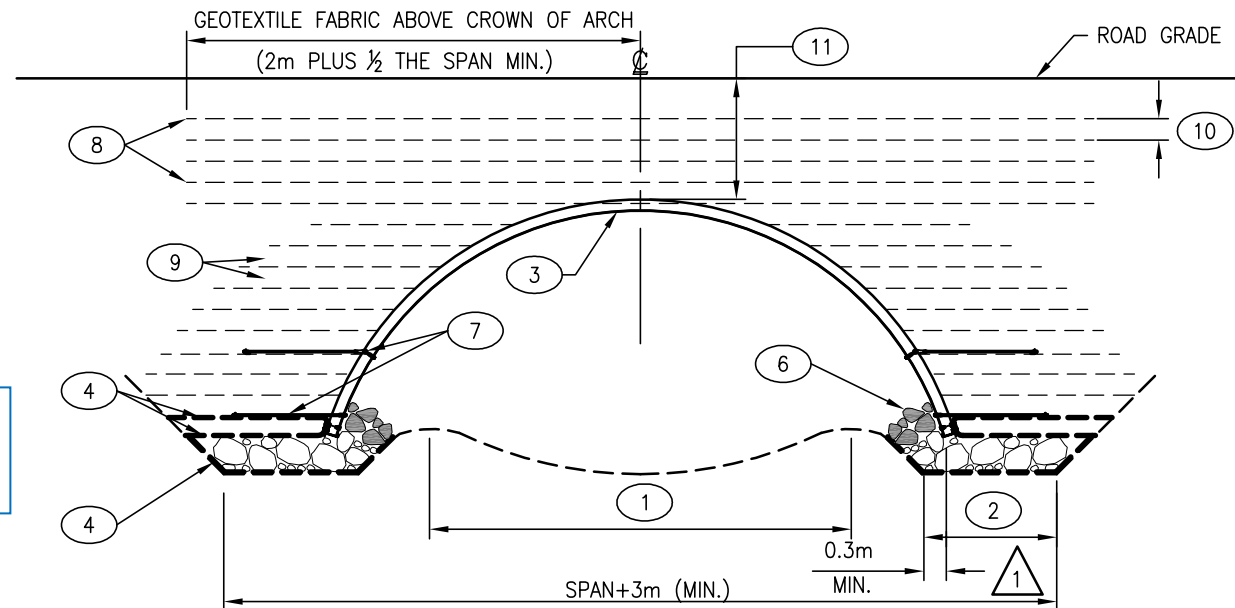
NATURAL STREAM CHANNEL INSTALLATIONS



STRUCTURAL PLATE ARCH FORM – 3.0m TO 6.0m SPAN

3mm WALL THICKNESS, CORRUGATION PROFILE 152mmX51mm

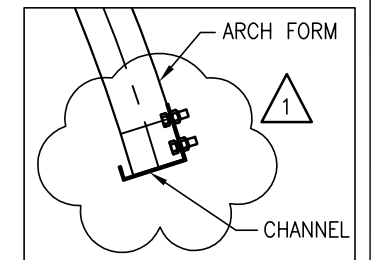
STREAM CHANNELS TYP. <5m WIDE
DESIGN DISCHARGE TYP. <10m³/sec
DESIGN WATER DEPTH TYP. <0.75m



SINGLE RADIUS DEEP CORRUGATED PLATE ARCH FORM – 8.3m OR LESS SPAN

MINIMUM 4.1mm WALL THICKNESS

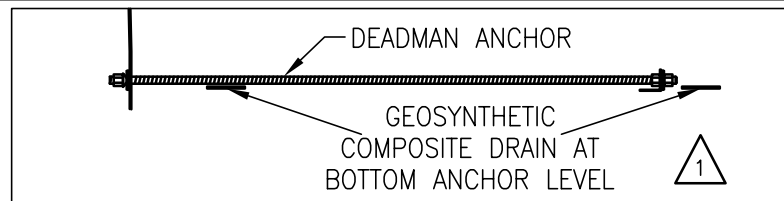
STREAM CHANNELS TYP. <6.0m WIDE
DESIGN DISCHARGE TYP. <16.0m³/sec
DESIGN WATER DEPTH TYP. <1.0m



CHANNEL DETAIL

ASSUME NOT TO SCALE
ORIGINAL SIGNED AND SEALED

BOTTOM ANCHOR DRAIN DETAIL – SEE STD-C-050-03



CONCEPT DRAWINGS ONLY -
NOT FOR CONSTRUCTION

CANADA AND US PATENT

Rev	Date	DESCRIPTION	Init
1	June 2015	Miscellaneous updates	HM
REVISIONS			

Province of British Columbia
MINISTRY OF FOREST, LANDS AND NATURAL
RESOURCE OPERATIONS
ENGINEERING BRANCH

STANDARD BRIDGE DRAWING	
Terraspan® GRS Arch™ Structure—Conceptual Only Typical Cross-sections for Reconstructed and Natural Stream Channel Type Installations	
ORIGINAL SIGNED and SEALED BY: Calvin VanBuskirk, P.Eng., P.Geo.	APPROVED BY:
DESIGN ENGINEER Calvin VanBuskirk, P.Eng., P.Geo.	FLNR ENGINEER
DATE June 2015	DATE
FILE No.	DRAWING No.
	STD-C-050-04

CANCEL PRINTS BEARING PREVIOUS NUMBER