

PLAN

R
(15' MIN.)

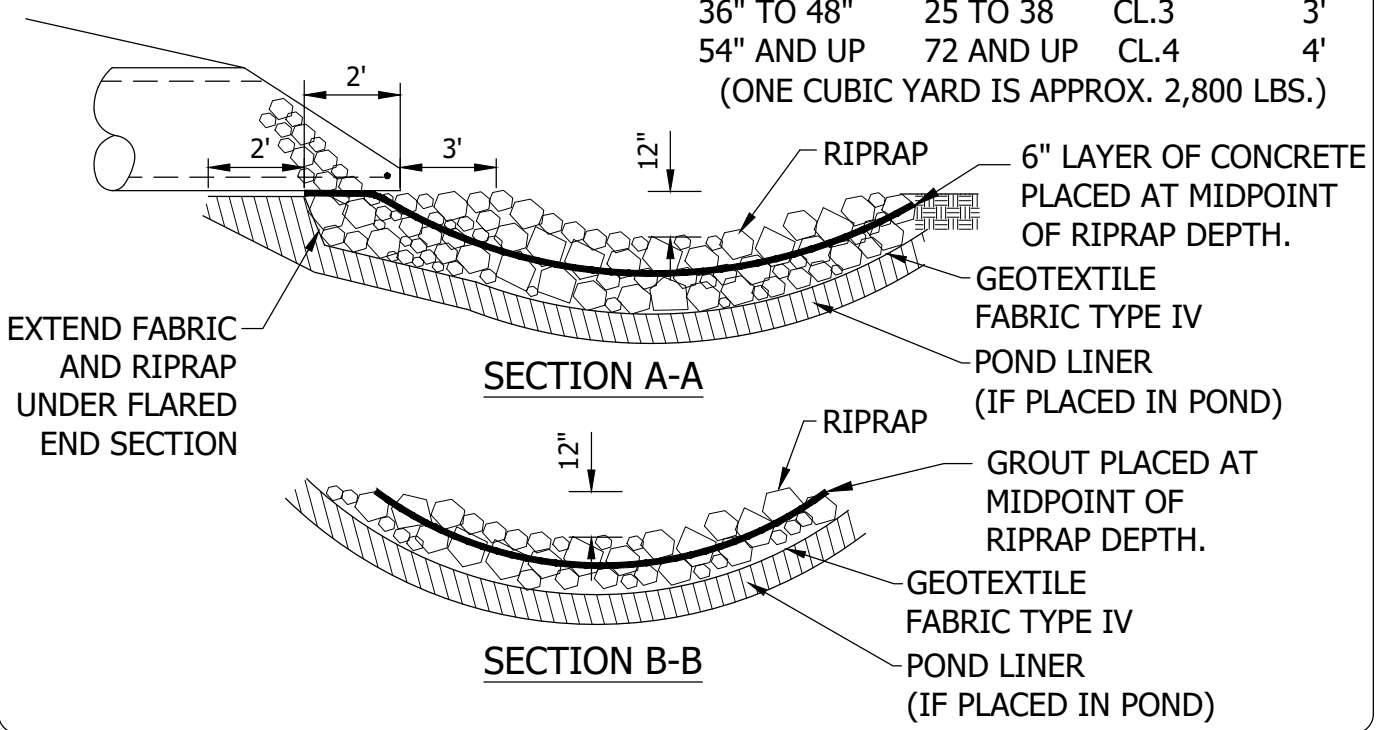
RIPRAP AREA SIZES

D	Q	R	S
12"	11'	15'	7'
24"	15'	15'	9'
36"	19'	15'	11'
48"	20'	16'	12'
54"	25'	22'	13'

RIPRAP REQUIREMENTS

D	CY	CLASS	DEPTH
12" TO 24"	15 TO 20	CL.3	3'
27" TO 33"	20 TO 25	CL.3	3'
36" TO 48"	25 TO 38	CL.3	3'
54" AND UP	72 AND UP	CL.4	4'

(ONE CUBIC YARD IS APPROX. 2,800 LBS.)



SECTION A-A

SECTION B-B



STANDARD DETAILS
GROUTED RIPRAP AT FLARED END SECTION
COTTAGE GROVE, MINNESOTA

JANUARY 2022
PLATE NO.
STO-13