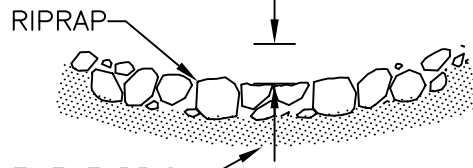


1' (12"-27" DIA. PIPE)  
1.5' (30" AND LARGER PIPE)

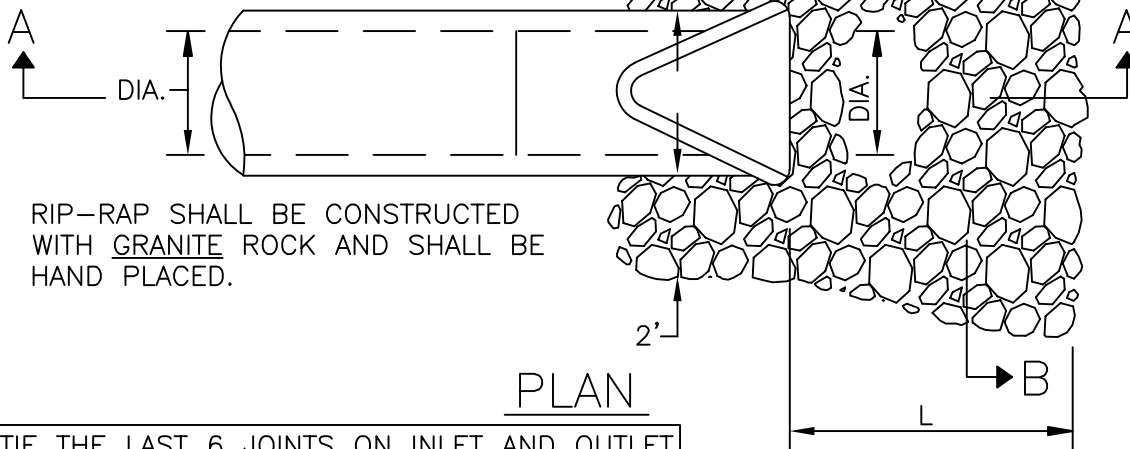


NONWOVEN GEOTEXTILE FABRIC

SECTION B-B

MINIMUM RIPRAP REQUIRED			
DIA. OF PIPE (IN.)	L (FT.)	QUANTITY (C.Y.)	CLASS
12	8	5	III
15	8	5	III
18	10	6	III
24	12	8	III
30	14	12	III
36	16	14	III
42	18	22	IV
48	20	26	IV
>48	22-28	30-40	IV

NOTE:  
ONE CUBIC YARD IS  
APPROXIMATELY 1.4 TONS.

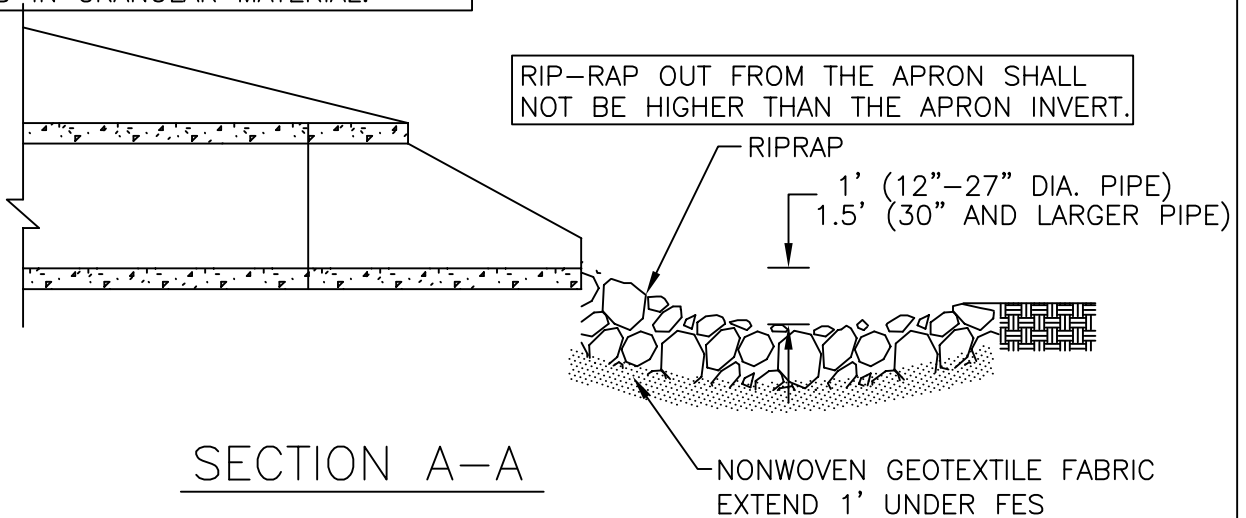


RIP-RAP SHALL BE CONSTRUCTED  
WITH GRANITE ROCK AND SHALL BE  
HAND PLACED.

PLAN

TIE THE LAST 6 JOINTS ON INLET AND OUTLET  
PIPES AND BED IN GRANULAR MATERIAL.

RIP-RAP OUT FROM THE APRON SHALL  
NOT BE HIGHER THAN THE APRON INVERT.



SECTION A-A

RIP-RAP REQUIRED AT  
ALL APRONS



STANDARD DETAILS  
RIPRAP DETAIL FOR FLARED END SECTIONS  
CITY OF PLYMOUTH

PUBLISHED  
1-20

CITY PL. NO.  
ST-4  
REVISED 1-17