



- NOTES:
1. RIP-RAP SHALL BE HAND PLACED.
 2. SEE SPECIFICATIONS FOR MATERIALS.
 3. FILTER LAYER AND FABRIC ARE INCIDENTAL TO RIP-RAP.
 4. ADD RIP-RAP OVER TOP OF PIPE EXCEPT IN RESIDENTIAL REAR YARDS.
 5. PIPE SHALL BE RCP TO FIRST STRUCTURE.

RIP-RAP QUANTITIES (C.Y.)

PIPE DIA.	RIP-RAP	PIPE DIA.	RIP-RAP	PIPE DIA.	RIP-RAP
12"	4	24"	10	42"	23
15"	5	27"	12	48"	29
18"	6	30"	14	54"	34
21"	8	36"	19	60"	39

HEAVY DUTY TRASH GUARD REQUIRED ON:
 - UPSTREAM APRONS
 - DOWNSTREAM APRONS 27" OR LARGER IN MAINTAINED RESIDENTIAL AREAS
 - NO TRASH GUARD ON DITCH CROSSINGS UNLESS OTHERWISE DIRECTED

RIP-RAP FOR OUTLET TO DRY DITCH OR BASIN

Plate No SD-4



2019 STANDARD DETAIL PLATE

City of Blaine - Engineering Department

City of Blaine

10801 Town Square Drive NE, Blaine, Minnesota 55449 (763)785-6172 Fax(763)785-6139