



*SEE NOTE No. 8

SIZE OF ROCK AND THICKNESS OF PROTECTION BLANKET THAT WILL RESIST DISPLACEMENT FOR VARIOUS VELOCITIES AND BANKSIDE SLOPES.

Notes:

1. Adapted from report of Sub-committee on slope protection, Am. Soc. Civil Engineers Proc. June 1948.
2. Density of stone assumed at $2,640 \text{ kg/m}^3$.
3. Enter graph at known velocity to intersection with desired slope curve. Move horizontally to required riprap class and thickness.
4. V_M = mean stream velocity.
5. For parallel flow along tangent bank; $V_s = 2/3 V_M$
6. For impinging flow against curved bank; $V_s = 4/3 V_M$
7. For direct impingement on the bank; $V_s = 2 V_M$
- *8. The riprap class No. is the mass (kg) of the 50% rock size (i.e., at least half of the riprap must be heavier than its class mass). For details regarding the rock gradation see General Specifications - Section 205.2
9. Do not interpolate between riprap classes. Use the next highest class.



**City of
Revelstoke**

Title:

RIPRAP DESIGN CHART

STANDARD DETAIL DRAWINGS

JUNE 2007

DWG No. COR-S22