Concrete curb (at ends of riprap) 
(1 ft equivalent to 0.09 yd³ of riprap)

Top of riprap elev.

11.6 units req'd per yd²

8" conc. toe wall to be constructed 
at ends of riprap (1 ft of toe wall 
equivalent to 0.37 yd³ of riprap)

SECTION THROUGH PRECAST RIPRAPP

NOTES:
1. See Standard Drawing E 616-SWRR-01 for Section F-F.
2. If riprap is specified, 1'-0" hand-laid riprap or precast concrete riprap type A may be used.
3. Precast concrete riprap:
   Type A: H = 7 5/8" (8" nom.)
   Type B: H = 3 5/8" (4" nom.)

INDIANA DEPARTMENT OF TRANSPORTATION
RIPRAPP SLOPEWALL DETAILS
SEPTEMBER 2011
STANDARD DRAWING NO. E 616-SWRR-02

/s/ Richard L. VanCleave 09/01/11
DESIGN STANDARDS ENGINEER DATE
/s/ Mark A. Miller 09/01/11
CHIEF HIGHWAY ENGINEER DATE