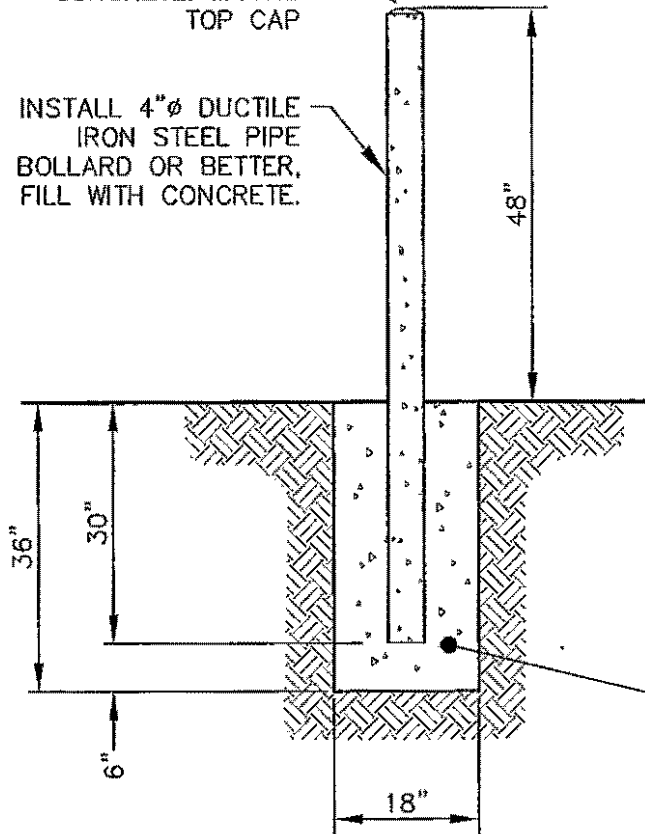


FILL PIPE SOLID WITH CONCRETE. MOUND TOP CAP

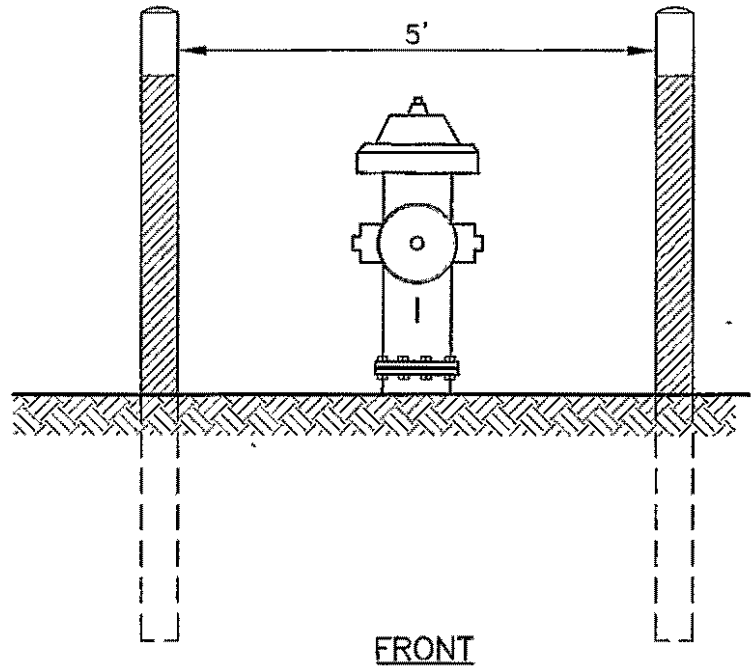
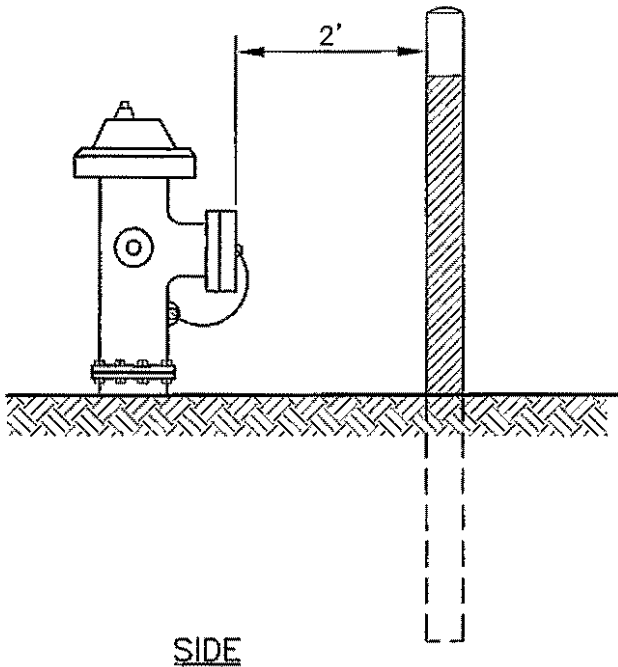
INSTALL 4"Ø DUCTILE IRON STEEL PIPE BOLLARD OR BETTER, FILL WITH CONCRETE.



**NOTES:**

1. BOLLARDS SHALL BE 4" DIAMETER DUCTILE IRON POSTS SET IN 36" OF CONCRETE AT LEAST 18" IN DIAMETER. THE INSIDE OF POSTS SHALL ALSO BE FILLED WITH CONCRETE WITH SMOOTH MOUND AS TOP CAP.
2. BOLLARDS SHALL BE LOCATED AT LEAST 2' IN FRONT OF HYDRANT, 5' APART.
3. BOLLARDS SHALL EXTEND ABOVE GROUND TO A MINIMUM OF 4'.
4. BOLLARDS SHALL BE OF SUFFICIENT NUMBER TO PROTECT THE HYDRANT, MINIMUM OF 2.
5. PAINT BOLLARDS RED WITH TOP 8" PAINTED WHITE.

EMBED D.I. PIPE 30" INTO 18"Ø CONCRETE BASE WITH 6" PUNCH PAD



APPROVED

*Royal Routh*  
City Engineer

*12-28-04*  
Date

CITY OF BELLINGHAM  
FIRE HYDRANT PROTECTION  
BOLLARD DETAIL

DRAWING  
WA-804