

# Staff Report

for the Board of Directors Meeting of March 8, 2017

**TO:** Board of Directors  
**FROM:** Gary D. King, Engineering Manager  
**DATE:** March 1, 2017  
**SUBJECT:** Standard Detail – Canal Storm Water Crossing (Consent)

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***ENGINEERING***

**RECOMMENDATION:**

Accept a new detail to transfer stormwater flows over District canals as recommended by the Engineering Committee on February 21, 2017.

**BACKGROUND:**

The purpose of this item is to create a new detail that pipes the Districts canal and allows the storm to go unabated over the top of the canal. This detail is a significant modification of the overshot detail. The overshot detail has limited uses, requires regular maintenance, and only conveys a limited range of stormwater flows over the canal.

This new detail will allow large stormwater flows over the top of the canal. These volumes would not interfere with the canal flows and would allow the water to remain in their historical drainage areas. This new detail will keep debris or contamination in the watershed and not convey these items by the use of District canals to other drainage areas.

This detail was not developed to encase a complete section of a canal but it was designed to encase the canal at the intersection of drainage courses such ravines, streams, or where human structures such as drainage culverts are discharging storm water into the Districts canal.

Engineering Committee recommends acceptance by the Board of Directors.

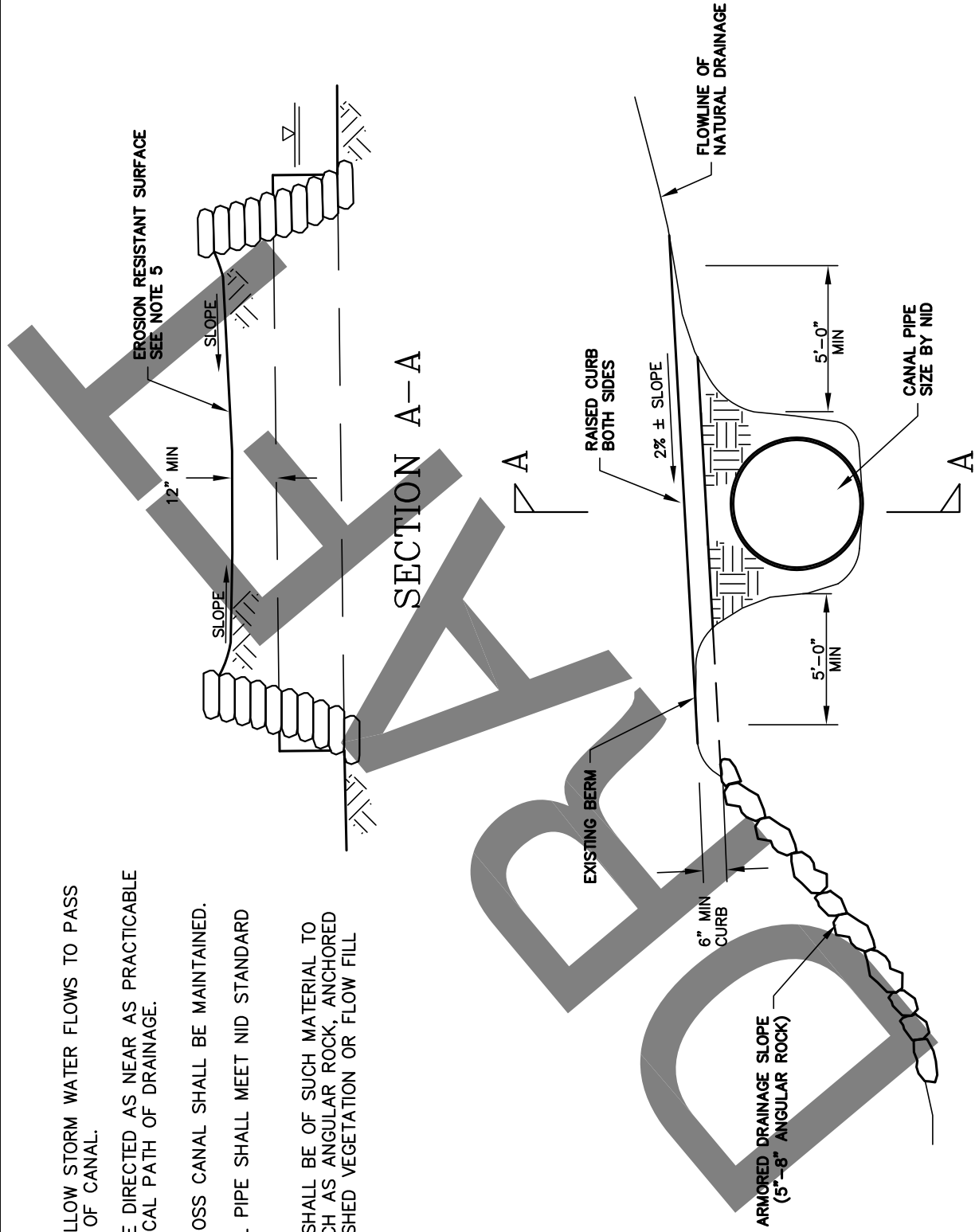
**BUDGETARY IMPACT:**

No budget impact

GDK

**NOTES:**

1. THE CROSSING SHALL ALLOW STORM WATER FLOWS TO PASS OVER A PIPED SECTION OF CANAL.
2. STORM WATER SHALL BE DIRECTED AS NEAR AS PRACTICABLE TO FLOW IN ITS HISTORICAL PATH OF DRAINAGE.
3. POSITIVE DRAINAGE ACROSS CANAL SHALL BE MAINTAINED.
4. INSTALLATION OF CANAL PIPE SHALL MEET NID STANDARD DETAIL SD25 A/B.
5. SURFACE OVER CANAL SHALL BE OF SUCH MATERIAL TO ELIMINATE EROSION. SUCH AS ANGULAR ROCK, ANCHORED FILTER FABRIC, ESTABLISHED VEGETATION OR FLOW FILL (CONCRETE)



BOARD REVIEW: XX/XX/XXXX