



CITY OF HOMER
PUBLIC WORKS
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MEMORANDUM 08-106

To: Walt Wrede, City Manager *W. Wrede*
From: Carey Meyer, Public Works Director *CSM*
Date: July 20, 2008
Subject: **Approval to TV, Design and Construct Slip-lining of Sewer and Storm Drains Ocean Drive, Heath Street and Recently Constructed Sewer LID's**

Several sewer and storm drains require improvement to eliminate infiltration and ex-filtration problems:

Heath Street Storm Drain: Water is bubbling up through the pavement at the bottom of Heath Street. The pavement is beginning to deteriorate. Public Works has tested this water and no chlorine can be detected (assumed not a water main leak). The storm drain in Heath Street flows continuously; we suspect this pipe is leaking water into the road subgrade and causing the water problem. Several years ago this pipe was leaking water into the subgrade causing heaving of the paving. Replacement of pipe/manhole grouting seems to have alleviated the problem. Public Works has inspected the pipe/manhole grouting at additional locations and made repairs to them. Water continues to bubble up through the pavement. Corrosion of the pipe invert is suspected along much of this drain. The pipe was installed in 1988. Visual inspection (TVing) of the storm drain from Pioneer Avenue to the Sterling Highway is recommended. Expected solution is to slip-line the drain to keep storm water in the pipe. Slip-lining can be accomplished without expensive pavement removal. **Estimated Design Cost = \$65,000**

Ocean Drive Sanitary Sewer: The sewer main in Ocean Drive delivers wastewater from the base of the Spit to the Beluga Lake Lift Station (constructed in the 70's). The wastewater coming off the Spit is highly corrosive. Public Works has received complaints about odor. Public Works has replaced the initial manhole (at the eastern end of Ocean Drive) due to corrosion. We suspect the sewer main in Ocean Drive is also deteriorating. Visual inspection (TVing) of the sewer main along Ocean Drive is recommended. Expected solution is to slip-line the sewer main to protect the main from corrosion. Slip-lining can be accomplished without expensive pavement removal. **Estimated Design Cost = \$90,000**

Various Sewer LID Main: As a condition to receiving low interest loans from ADEC to construct sewer mains, the City is expected to inspect the improvements after construction is complete. Hillside Acres, Ocean Drive Loop and Kachemak Drive (Phase II) need to be inspected. TVing them is the most cost effective way to accomplish this required inspection. Other problem areas to be evaluated-East Truck and other old asbestos cement lines. **Estimated Design Cost = \$40,000**

Recommendation: Approve use of HAWSP funds to inspect and design improvements to Heath Street storm drain to eliminate ex-filtration and various sewer mains to eliminate infiltration and maintain structural integrity. Funds required \$195,000. Once construction costs have been determined, additional Council authorization required.