



STAFF REPORT

Date: Tuesday, August 12, 2014
To: Bryan H. Montgomery, City Manager
From: Kevin Rohani, Public Works Director/City Engineer
SUBJECT: **Approve authorization of payment to Duran & Venables Inc. for emergency storm drain repairs under the existing on-call maintenance contract**

Approved and Forwarded to City Council:


Bryan H. Montgomery, City Manager

Introduction

The City of Oakley as part of FY 2014/15 budget has allocated funding for on-call public works maintenance services that are needed from time to time on tasks that are too large for City maintenance staff to undertake and perform. This approach gives staff the flexibility to accomplish a wider range of public works maintenance services for the community.

Background and Analysis

On Sunday June 1st City public works staff was contacted by residents in the Vintage Parkway Neighborhood about sink holes in the street that had happened overnight. Staff inspected two (2) locations in this neighborhood the same day, and observed sections of the roadway that had collapsed, along with curb, gutter, and sidewalk. These areas were located at Walnut Meadows Court and at Jordon Lane near Forbes Court. Each site was barricaded and caution taped to ensure the safety of the public was maintained.

Summary

On Monday June 2nd, staff requested a crew from Duran & Venables Inc. (City's on-call public works maintenance contractor) to be on site and excavate the sinkhole area to determine the cause of the roadway collapse. Upon excavation of each area, it was observed that the concrete storm drain pipes under the street on these areas had joints that were separated, and the pipes were full of water and had washed away the street sub-base and undermined the street infrastructure. Since the street collapsed and sections were saturated with water, it required dewatering of the sinkhole zone. The contractor excavated each end of the storm drain pipes to get to the sections that were stable and with solid joints. The trenches were then dewatered by pumping out the water and shoring the site. Remedial work to repair the street was then started by removing the mud and sludge, placing sand and aggregate for the base of the storm drain pipes, and installing of the storm drain pipes.

The new pipe joints were grouted with concrete collar as an added measure in addition to the pipe gaskets. This was followed by backfilling the excavation zone,

and preparing a new base for the street, and finally paving the excavated areas, along with the replacement of damaged curb, gutter and sidewalk with new concrete curb, gutter and sidewalk.

Staff had investigated the reasons and developed a theory as to why the storm drain pipes at these locations separated and caused the street collapse. The storm drain outfalls for Vintage Parkway Subdivision flow into Delta tributaries and it was evident that with the low and high tides, back water from these tributaries would come into these storm drain pipes and to the area of pipe separation as evident by water marks inside the pipes. This daily exposure of the concrete storm drain pipe joints over the years had slowly damaged the joint sealant and eventually separated and caused the exposure of street sub-base with water which further eroded the area under the street. By putting higher grade gaskets at the pipe joints and grouting the areas around the joints with concrete, it will provide a higher level of protection for the pipe joints over time. Staff reviewed this theory with local contractors who are familiar with the water flows in the Delta tributaries and the plausibility of this concept was confirmed.

Fiscal Impact

The construction cost for this emergency storm drain and road repair project will be paid for from City's Storm Drain Fund that is designated for Storm Drain related projects. Since the City Manager has authorization for paying emergency expenditures up to \$25,000, this item is presented to City Council for authorization of payment. The cost for repair and reconstruction work on Walnut Meadows Court was \$30,760.01 and at Jordan Lane was \$14,789.99.

Recommendation

Staff recommends that the City Council approve the payment of invoices from Duran & Venables Inc. in a total amount of \$45,550.00, for storm drain and road repair services in the Vintage Parkway Subdivision.