



DATE: November 5, 2014

TO: Honorable Mayor and City Councilmembers

FROM: Water Utilities Department

SUBJECT: **PLANS AND SPECIFICATIONS FOR THE CCTV SEWER INSPECTION PROGRAM**

SYNOPSIS

Staff recommends that the City Council approve the plans and specifications for the Closed Circuit Television (CCTV) Sewer Inspection Program; and authorize the City Engineer to call for bids.

BACKGROUND

The City of Oceanside has over 450 miles of vitrified clay sewer pipe located throughout the sewer collection system ranging in diameters from 6 inches up to 42 inches. The City manages a cleaning and inspection program whose goal is to clean the entire system once every two years and to inspect pipelines, via camera, as problems in the collection system arise. The methodology for pipeline camera work is slow and methodical whereby staff makes a video recording of the pipeline as well as notes deficiencies in the pipeline while in the field. While this provides a detailed picture of approximately 19-20 miles of pipeline a year, a majority of the pipelines have not gone through an intensive condition assessment or structural evaluation since they were installed.

One of the City's top priorities for this fiscal year is to implement a systematic approach to cleaning and inspecting the sewer pipes to reveal repair or replacement needs for the majority of the existing system. It is necessary to establish a current benchmark condition of the existing pipes in order to anticipate and plan for the future improvement and replacement needs.

ANALYSIS

Staff has reviewed various methods to perform accurate scanning of all of the vitrified clay pipe (VCP) sewer lines. Staff has determined that the Digital 360 pipeline inspection technology which scans the pipelines in a continuous, non-stop run between designated start and end points to be the best option for our current needs. The scanner utilizes two (2) high definition cameras with a minimum of 185-degree field of view for each camera with one camera located at the forward position of the

scanner and one camera at the aft position of the scanner. Digital 360 scanning systems are designed to travel at a rate of 70 feet per minute. This will allow for accurate scanning of the entire VCP sewer system within a condensed time frame. Each section of pipe will be evaluated utilizing the National Association of Sewer System Companies (NASSCO) standards which are the recognized guidelines for analysis of sewer systems. Multiple consultants will then evaluate the video in an office setting. Staff anticipates commencement of work in spring of 2015, and estimates that the project will take approximately nine months. It is anticipated, based on the regulatory environment, that the City will be required by the Regional Water Quality Control Board, to video the entire system once every seven years.

The project is exempt from the California Environmental Quality Act. The plans and specifications for the project are available for review in the offices of the City Manager and the City Engineer.

FISCAL IMPACT

The contract price is estimated to be \$1,750,000. The project will be funded by the FY 2014/15 CIP budget which includes \$2,000,000 in new project funds in the CCTV VCP Sewer Pipe project, account 909136300722. Funding for this project comes from the Sewer Fixed Asset Replacement Fund, 722, which is primarily funded by sewer service and flow fees. Although this action does not award the project and does not result in expenditures at this time, sufficient funds are available.

INSURANCE REQUIREMENTS

The City's standard insurance requirements will be met.

COMMISSION OR COMMITTEE REPORT

The Utilities Commission approved staff's recommendation at its regularly scheduled meeting on October 21, 2014.

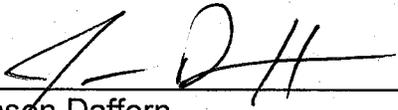
CITY ATTORNEY'S ANALYSIS

The referenced documents have been reviewed by the City Attorney and approved as to form.

RECOMMENDATION

Staff recommends that the City Council approve the plans and specifications for the Closed Circuit Television (CCTV) Sewer Inspection Program; and authorize the City Engineer to call for bids.

PREPARED BY:



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SUBMITTED BY:



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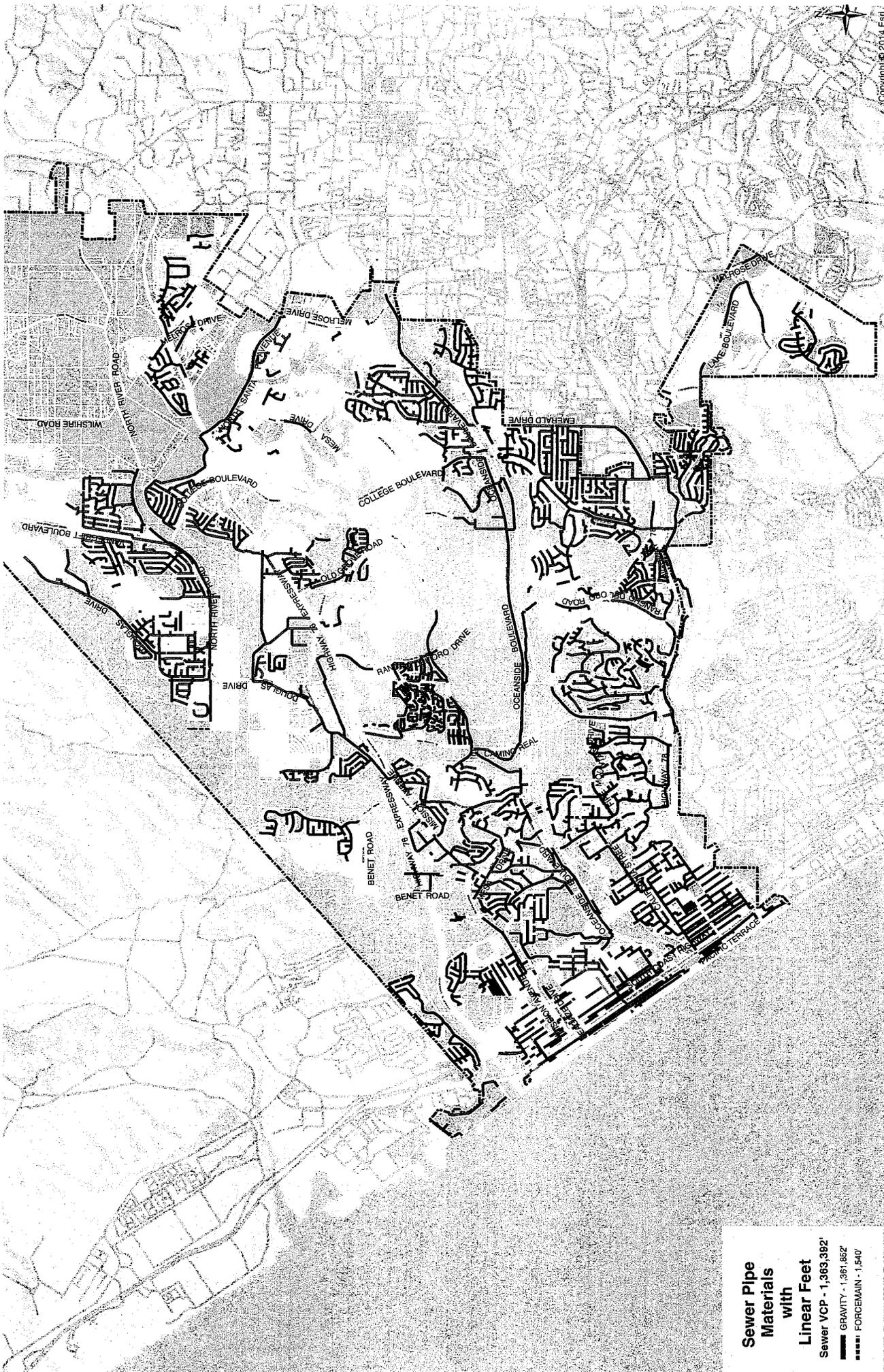








Exhibit A: Project Site Map



Sewer Pipe Materials with Linear Feet
 Sewer VCP - 1,363,392'
 GRAVITY - 1,361,852'
 FORCEMAIN - 1,540'