

DATE ISSUED: January 16, 2002

REPORT NO. 02-015

ATTENTION: Honorable Mayor and City Council
Docket of January 22, 2002

SUBJECT: Adoption of the "Management of Sewer Facilities Located in Canyons and other Environmentally Sensitive Lands" and "Redirection of Sewage Discharge away from Canyons and other Environmentally Sensitive Lands" Policies, and Approval of Amendment No.2 to the Agreement with Earth Tech Inc., Sewer System Canyon Access Project, Phase I

REFERENCE: City Wide Canyon Sewer Maintenance Task Force's Final Report dated March 2001 and Manager's Report No. 01-146 to the Natural Resources and Culture Committee of July 12, 2001.

SUMMARY

Issues - 1) Should the City adopt the proposed "Management of Sewer Facilities Located in Canyons and other Environmentally Sensitive Lands" Policy and the "Redirection of Sewage Discharge away from Canyons and other Environmentally Sensitive Lands" Policy, 2) Should the City approve Amendment No.2 to the Agreement with Earth Tech Inc., Sewer System Canyon Access Project, Phase I?

Manager's Recommendations - 1) Adopt the proposed "Management of Sewer Facilities Located in Canyons and other Environmentally Sensitive Lands" Policy and the "Redirection of Sewage Discharge away from Canyons and other Environmentally Sensitive Lands" Policy. 2) Approve Amendment No.2 to the Agreement with Earth Tech Inc., Sewer System Canyon Access Project, Phase I.

Other Recommendations - None.

Fiscal Impact -

Financial Costs of Proposed Policies:

“Redirection of Sewage Discharge away from Canyons and other Environmentally Sensitive Lands” Policy:

Implementation of this policy will require the services of a Public Information Officer to facilitate the required public outreach services, potentially cause a cost increase to the sewer pipeline replacement program for sewer projects that affect canyons, to comply with Natural Resources and Culture Committee’s direction regarding the 35 percent advantage to be applied in the economic analysis, and potentially cause additional cost to implement the pump policies and procedures.

The cost for the services of a Public Information Officer is estimated to be \$69,263/yr.

Implementation of the pump policy and procedure will require the City to pay for the design of the pumping system, the installation of the pumping system, a five year manufacturer's warranty on the pump, and operation and maintenance of the pump over the pump's expected life time (20 years). The costs are estimated to be:

Designing the pumping system	\$2,500
	/pump
Pump system installation	\$4,000/pump
Five year manufacturer's warranty	\$1,000/pump
Present value for operating & maintaining pump for 20 yrs	\$4,500/pump
TOTAL:	\$12,000/pump

“Management of Sewer Facilities Located in Canyons and other Environmentally Sensitive Lands” Policy:

Implementation of this policy will require funding for the development of emergency and routine maintenance access maps, development and testing of environmentally sensitive access route materials, possible additional staff and staff training to implement low environmental impact practices for sewer maintenance in canyons, and the acquisition of low impact canyon proficient vehicles and cleaning equipment.

The cost to develop the emergency and routine maintenance access maps is estimated to be on average \$12,000/mile of pipe in the canyons. That includes biological and cultural data collection, utility research, design, and mapping services.

The cost for the development and testing of environmentally sensitive access route materials is estimated to be \$75,000. This includes the design, analysis, and selection of access route materials and field testing of those materials.

The cost for the additional staff and staff training to implement low environmental impact practices for sewer maintenance in canyons is unknown. The amount of reduction in sewer inspection and cleaning efficiencies that may result from the use of the new low impact canyon proficient vehicles and the implementation of low environmental impact practices is undetermined.

The cost for the acquisition of low impact canyon proficient vehicles and cleaning equipment is estimated to be \$1,500,000. This funding is for equipment research, analysis and equipment acquisition.

Financial Benefits of Proposed Policies:

It is anticipated that implementation of the proposed policies would provide benefits that would offset the following financial costs.

Improved training of City Sewer Maintenance Crews in the area of sensitive habitat protection and erosion control could lead to a reduction of mitigation costs.

In some situations, relocation of sewer facilities from inaccessible canyon environments to accessible locations would make it easier to provide effective maintenance services leading to a reduction in the cost to maintain those facilities.

Acquisition of low impact canyon proficient vehicles and cleaning equipment will lead to more effective inspection and cleaning service to sewer facilities located in canyons, minimizing sewer spills and their associated fines. Also, acquisition of low impact canyon proficient vehicles and cleaning equipment reduces the need, and in some situations eliminates the need, for canyon access roads and their associated costs.

Amendment No.2 to the Agreement with Earth Tech Inc.:

The total project cost estimate for the Sewer Canyon Access Project is estimated to be \$26,534,100. The total funding to date for engineering services is \$477,175, which includes the original contract amount of \$230,000 authorized by City Manager Action in July 1998 and the first amendment to this contract in the amount of \$247,175 authorized by Council Action in February 2000. Funding of \$798,336 is needed to execute Amendment No. 2. Funding of \$798,336 is available from Sewer Fund 41506, CIP 45-936.0, Sewer System Canyon Access, for this purpose.

BACKGROUND

The City of San Diego has approximately 320 miles of sewer mains existing in canyons, most of which are inaccessible to city crews. Currently, routine maintenance, emergency repair, and inspection services can not be provided effectively as required to minimize sewer spills and their impacts. Approximately, three years ago the Metropolitan Wastewater Department with the assistance of the Engineering and Capital Projects Department proposed the construction of new access roads into many of the canyons that contain sewer infrastructure for the purpose of providing greater access for maintaining those sewer facilities. On September 9, 1998, the City Manager authorized (Document No. C-08946) the Engineering & Capital Projects Department to enter into an agreement with Earth Tech, Inc. to provide engineering services for the Sewer System Canyon Access Project - Phase I for a total cost of \$230,000. The purpose of this contract was to determine the feasibility of constructing the proposed access roads into 18 canyons that contained sewer facilities.

The access road proposal was confronted with much opposition from local community planning groups and environmental organizations. It became apparent that it was necessary to develop an alternative to the access road proposal.

During a presentation to the Natural Resource and Cultural Committee (NR&C), on May 26, 1999, the City Manager was directed to return with recommendations about alternative equipment for regular maintenance and emergency services, habitat restoration procedures, and barriers to deter illegal canyon access. During a presentation to the NR&C on February 9, 2000, the City Manager was directed to assist in the organization and facilitation of the City Wide Canyon Sewer Maintenance Task Force. The mission of the City Wide Canyon Sewer Maintenance Task Force was to assist the City in evaluating alternatives and developing a citywide policy for operating, maintaining, and accessing sewer facilities where environmental health and public safety are protected and impacts to canyons are minimized. Also, during the same period of time the Metropolitan Wastewater Department added three additional canyons/sewers to the Sewer System Canyon Access Project. As a result of NR&C directions and additional canyon/sewers, additional funding was required and on February 22, 2000. The City Council authorized (Document No. RR-292787) the first amendment to this agreement for a total cost of \$247,175.

On March 28, 2001, the City Wide Canyon Sewer Maintenance Task Force gave their final presentation expressing their proposed policies and other related recommendations (listed below) to the NR&C Committee.

Proposed Policies:

- Redirection of Flow
- Installation of Individual Sewer Pumps
- Access, Repair and Maintenance in Canyon and other Environmentally Sensitive Lands

Related Recommendations:

- Entity Responsible for Canyon Oversight
- New hiring procedures for construction work that impacts canyons

On July 18, 2001 the Manager's Office presented the proposed policies developed by the City Wide Canyon Sewer Maintenance Task Force and City Staff. The NR&C approved the proposed policies with minor modifications, including the 35 percent advantage to be applied in the economic analysis. The next step to implement these policies is for them to be formally adopted by City Council.

Also, to assist in the execution of these policies it is necessary to amend phase one of Earth Tech's contract for the Sewer System Canyon Access Project. The amendment of the contract is necessary so that the research of equipment and access path materials can be completed and specific routine maintenance and emergency access solutions for each of the 21 canyons can be developed. The specific activities that will occur as part of these additional services are: Prepare Maintenance and Emergency Access Concepts/Maps, Collect Canyon Baseline Data, Compile a Canyon Baseline GIS Database, Research Stabilization Materials, Coordinate Permitting, Perform Transport Vehicle and Equipment Fleet Analysis, and Continue the Public Outreach Program. The stabilization materials research and the transport vehicle and equipment fleet analysis will not only benefit the Sewer System Canyon Access Project (21 canyons) but also will benefit Wastewater Collection Division Staff in the area of sewer maintenance and will aide the design of current/future sewer projects involving canyons.

There are approximately 22 additional canyons and open space areas that contain sewer that are not included in the scope of work of the Sewer System Canyon Access Project. It is anticipated that this fall the Metropolitan Wastewater Department will develop plans to incorporate Phase 2 of the Canyon Access Project into the FY2003 budget to include evaluation of access into these additional canyons and open space areas.

ALTERNATIVES

Do not adopt the proposed policies, and return the previous proposal to construct canyon access roads. Considering the past opposition to this proposal, this is not recommended.

Respectfully submitted,

Frank Belock, Jr.
Director
Engineering & Capital Projects Department

Approved: George I. Loveland
Senior Deputy City Manager

Scott Tulloch
Director
Metropolitan Wastewater Department

Note: The attachments are not available in electronic format. A copy is available for review in the Office of the City Clerk.

Attachments:

1. Redirection of Sewage Discharge away from Canyons and other Environmentally Sensitive Lands Draft Council Policy
2. Management of Sewer Facilities Located in Canyons and other Environmentally Sensitive Lands Draft Council Policy
3. City Wide Canyon Sewer Maintenance Task Force Final Report dated March 2001
4. Natural Resources and Culture Committee Minutes of July 18, 2001
5. City Wide Map of Sewer Infrastructure and Canyons
6. Sewer System Canyon Access Project Map