

**TO: James L. App, City Manager**  
**FROM: Doug Monn, Public Works Director**  
**SUBJECT: Root Control for Sewer Collection System**  
**DATE: January 15, 2008**

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**NEEDS:** For the City Council to consider approving the purchase of root control equipment and chemicals for on-going maintenance of sewer collection system.

**FACTS:**

1. The City operates approximately 115 miles of collection sewers within the City limits. Parts of the sewer pipelines system are over 70 years old with mature trees growing in the vicinity of many of these sewers.
2. The City is required to perform and document on-going maintenance as a condition of our State-permitted and mandated Sewer System Management Plan (SSMP).
3. A critical SSMP element is control of root intrusion into the collection pipes. Root intrusion typically occurs in joints or cracks within aging pipes. If roots intrude into the pipes, the potential for sewer backups and spills increase, as well as associated penalties and fines. The City has identified approximately 25 High Maintenance Areas, nearly 20,000 feet of pipelines, with ongoing root intrusion problems.
4. The City has traditionally contracted annually to perform root control services, via the application of chemicals within the sewer collection pipes. Based on lowest cost during the most recent bidding, the annual cost for root control service is \$1.59 per foot, or nearly \$32,000 per year.
5. The City has researched the cost to purchase the necessary equipment and chemicals for root control. The costs are as follows:

VapoRooter unit plus trailer	\$27,364.25
Root Control Chemicals (per year)	\$5,800.00
Total first year cost	\$33,164.25

6. Annual cost during subsequent years will be for chemicals only, resulting in significant savings.

**ANALYSIS &  
CONCLUSIONS:**

In order to prevent sewer system overflows, the City must perform regular maintenance for lines prone to root intrusion. By performing the work in-house, the City will save costs of outside contractors. Additionally, by performing the work in-house the collection crews may be more apt to identify and correct deficiencies which outside contractors would ignore. The VapoRooter unit is trailer mounted and is pulled behind

the City's existing jetter truck. The VapoRooter uses the jetter for chemical application, and can therefore be scheduled to coincide with regular jetting maintenance to save staff time.

**POLICY**

**REFERENCE:**

Integrated Water Resource Management Plan and Sewer System Management Plan

**FISCAL**

**IMPACT:**

The first year cost for purchasing the equipment will be \$1,164.25 more than using an outside contractor based on the bids received. However, on-going annual savings of nearly \$26,000 are expected after the first year's operation. The equipment for this application is specialized, therefore not a typical competitive bid process. VapoRooter was the only company to submit a quote for equipment. The approved Wastewater Collection system budget for FY 07/08 has \$36,000 for facilities and maintenance (acct. 601-310-5221-163).

**OPTIONS:**

- a) Approve Resolution 08-XX for \$33,165 for the purchase of root control equipment and chemicals to perform sewer collection system maintenance; or
- b) Approve Resolution 08-XX for a single-year purchase order not-to-exceed \$32,000 for Duke's Root Control; or
- c) Amend, reject, or modify these options.

Prepared by: Katie DiSimone, Utilities Manager

Attachments:

1. Resolution 09-XX for VapoRooter
2. Resolution 07-XXX for Duke's Root Control.
3. Quote from Duke's Root Control
4. Quote from VapoRooter and trailer



1020 Hiawatha Blvd., West  
 Syracuse, NY 13204-1131  
 1-800-44-ROOTS  
 (315) 472-4781  
 Fax (315) 475-4203

June 7, 2007

Richard Almenvarez  
 Maintenance Worker III  
 Paso Robles  
 3200 Sulphur Springs Road  
 Paso Robles, CA 93446

Dear Mr. Almenvarez:

As per your request for quotation for foaming root control service, we submit the following:

Duke's Root Control, Inc. will treat any sewers requested for the unit prices listed below.

Pipe Size		Price per Foot
6 inch	-	\$1.59/foot
8 inch	-	\$1.59/foot
10 inch	-	\$1.76/foot
12 inch	-	\$1.92/foot
15 inch	-	\$2.73/foot

Prices are computed per linear foot, manhole to manhole, and a \$2,000.00 minimum is required. Duke's standard guarantee applies to all sanitary sewers treated.

Prices for pipes larger than 15" are determined on a case by case basis.

If you require any further information, please call 1-800-447-6687. Thank you for your interest in our service.

Sincerely,

  
 Tom Edwards

SYRACUSE • DALLAS • ATLANTA • COLUMBUS • CHICAGO  
 OAKLAND • PORTLAND • DENVER

**THE NELSON AGENCY**

511 Creekside Court Oswego, IL 60543 630-258-4430 (fax) 630-554-0156

FAX

**Date :** June 11, 2007

**Pages :** 1 of 1

**To:** Richard Almenvarez, Maintenance Worker III  
City of Paso Robles, CA

**Fax Number :** 805-237-3886

**From :** The Nelson Agency, Contracting Services Division  
John E. Nelson, Owner

**Subject :** Foaming root control quotation

**Dear Mr. Almenvarez:**

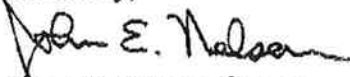
**Per request, following is a quotation for foaming root control.**

<b>PIPE SIZE</b>	<b>COST PER FOOT</b>
6"	\$1.65
8"	1.99
10"	1.99
12"	2.12
15"	3.25
18"	4.25

**Minumum job size 5,000 lineal feet. Mobilization charge \$ 3,000, waived on jobs exceeding \$50,000. Pricing applies to Sanitary Sewer application only.**

**Thank you for the opportunity to quote.**

Sincerely,



John E. Nelson, Owner



RESOLUTION NO. 08-XX

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF PASO ROBLES  
APPROVING THE PURCHASE OF EQUIPMENT AND CHEMICALS FOR ROOT  
CONTROL WITHIN THE SEWER COLLECTION SYSTEM

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WHEREAS, the State Water Resources Control Board (State) adopted General Waste Discharge Requirements (WDRs) for all publicly-owned sanitary sewer collection systems in California with more than one mile of sewer pipe; and

WHEREAS, the City is required to develop a Sewer System Management Plan (SSMP) to reduce the occurrence of Sanitary System Overflows, including a program for root control within the sewer collection system; and

WHEREAS, the City has previously contracted annually for root control services of high maintenance areas; and

WHEREAS, the City has obtained a bid to purchase equipment and chemicals to perform the root control with City staff on a cost-competitive basis.

THEREFORE, BE IT RESOLVED AS FOLLOWS:

SECTION 1. The City Council of the City of El Paso de Robles does hereby approve the purchase of a VapoRooter system and chemicals for a cost of \$33,165 for FY 07/08 from Wastewater Collections Account No. 601-310-5221-163.

PASSED AND ADOPTED by the City Council of the City of Paso Robles this 15th day of January 2008 by the following vote:

AYES:

NOES:

ABSTAIN:

ABSENT:

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Frank R. Mecham, Mayor

ATTEST:

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Deborah D. Robinson, Deputy City Clerk

RESOLUTION NO. 08-XX

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF PASO ROBLES  
APPROVING A PURCHASE ORDER TO DUKE'S ROOT CONTROL SERVICE FOR  
ANNUAL HIGH MAINTENANCE AREAS OF THE SEWER COLLECTION SYSTEM

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WHEREAS, the State Water Resources Control Board (State) adopted General Waste Discharge Requirements (WDRs) for all publicly-owned sanitary sewer collection systems in California with more than one mile of sewer pipe; and

WHEREAS, the City is required to develop a Sewer System Management Plan (SSMP) to reduce the occurrence of Sanitary System Overflows, including a program for root control within the sewer collection system; and

WHEREAS, the City has previously contracted annually for root control services of high maintenance areas; and

WHEREAS, the City has obtained a bid to purchase equipment and chemicals to perform the root control with City staff on a cost-competitive basis.

THEREFORE, BE IT RESOLVED AS FOLLOWS:

SECTION 1. The City Council of the City of El Paso de Robles does hereby approve the purchase order for an amount not-to-exceed \$32,000 to Duke's Root Control Service for FY 07/08 from Wastewater Collections Account No. 601-310-5221-163.

PASSED AND ADOPTED by the City Council of the City of Paso Robles this 15th day of January 2008 by the following vote:

AYES:

NOES:

ABSTAIN:

ABSENT:

---

Frank R. Mecham, Mayor

ATTEST:

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Deborah D. Robinson, Deputy City Clerk