

Agenda Item: 9.

## MEMORANDUM

**TO:** Programs, Projects and Operations Subcommittee

**FROM:** Martin P. Cleveland

**SUBJECT:** Big Papio Creek Levee (Q Street to Harrison Street) – Ralston Creek Outlet Drainage Structure Request for Additional Professional Services

**DATE:** October 25, 2012

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The Big Papio Creek right bank levee (west side of creek) between Q Street and Harrison Street in Omaha, NE includes the Ralston Creek outlet drainage structure. This twin 72 inch diameter corrugated metal pipe structure conveys Ralston Creek thru the right bank Big Papio Creek Levee. The corrugated metal pipe (CMP) was installed as part of the levee project over 35 years ago and is in very poor condition due to extreme deflection and corrosion. Ralston Creek drains much of Ralston, NE area east of 84<sup>th</sup> Street. See enclosed location maps.

At the June 14, 2012 Board meeting, a professional services contract with E & A Consulting Group for the Ralston Creek Outlet Drainage Structure Project with the maximum not to exceed amount of \$43,500 was approved.

During the site investigation and survey, E&A Consulting Group staff discovered that a sewer force main(pumped sewage) was located within 1 ft. or so above the existing twin 72 inch diameter corrugated metal pipe structure. Enclosed is a plan and profile of this sewer. The sewer is owned by the City of Omaha and runs in downstream (south) direction from Q Street and serves commercial businesses in the area, such as Funplex. This force main is very vulnerable to damage during any excavation for the new replacement box culvert or removal of the existing 72 inch metal pipes. It has been concluded that the safest construction option would be to relocate the force main via directional boring under (e.g. 3 to 5 ft.) the existing and proposed drainage structures, prior to any work on the drainage structures. The drainage structure construction will then not be complicated or compromised and lessen the accidental discharge of sewage into the Big Papio Creek.

The E& A Consulting Group professional services contract did not include any services for the unknown sewer force relocation design. The City of Omaha has indicated that they prefer that the District handle the relocation design and relocation construction, so

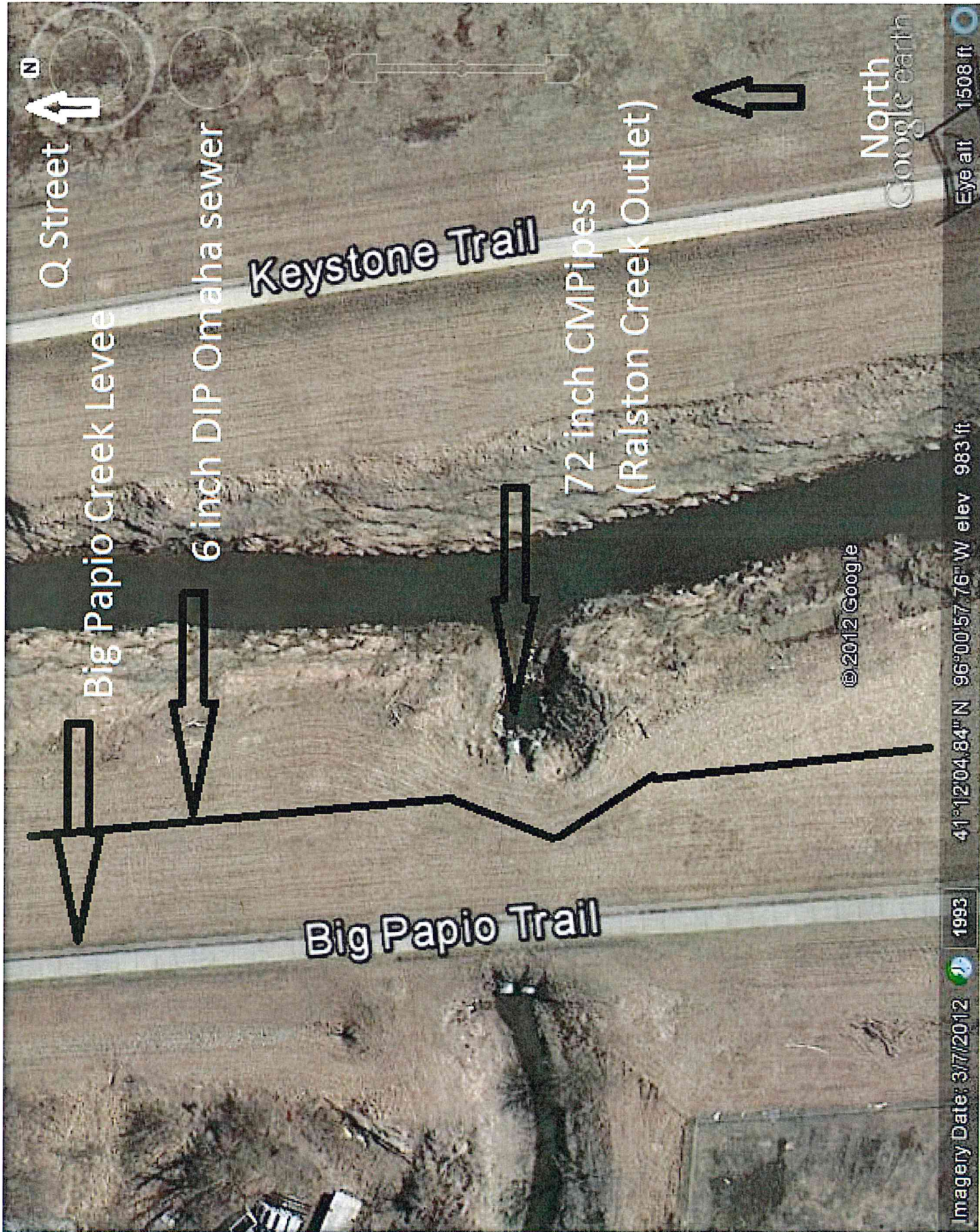
this requires sewer design work by E&A and construction administration (inspection, etc.). The relocation construction would be included in the box culvert construction contract. Attached is a proposal for additional services from E&A for the before mentioned design work, estimated to cost \$4,666.

**Management recommends that the Programs, Projects and Operation Subcommittee recommend to the Board of Directors that the General Manager be authorized to execute the proposed Professional Services Additional Services Contract Agreement with E & A Consulting Group for the Ralston Creek Outlet Drainage Structure Project with the total contract maximum not to exceed amount of \$ 4,666 and the overall revised engineering services contract total of \$48,166, subject to changes deemed necessary by the General Manager and approval as to form by District Legal Counsel.**









Q Street

Big Papio Creek Levee

6 inch DIP Omaha sewer

Keystone Trail

72 inch CMP Pipes  
(Ralston Creek Outlet)

Big Papio Trail

North  
Google earth

Imagery Date: 3/7/2012 1993 Eye alt 1508 ft

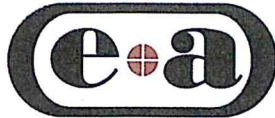
41°12'04.84"N 96°00'57.76"W elev 983 ft

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*Engineering Answers*

**E & A CONSULTING GROUP, INC.**

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October 24th, 2012

Mr. Martin Cleveland, P.E.  
Construction Engineer  
Papio-Missouri River Natural Resources District  
8901 S. 154<sup>th</sup> Street  
Omaha, NE 68138

RE: Additional Professional Engineering & Surveying Services Proposal/Agreement  
Sanitary Sewer Force Main Realignment  
Ralston Creek Outlet Drainage Structure Replacement  
Ralston, NE  
E&A Project No. P2012.285.001

Dear Mr. Cleveland,

E&A Consulting Group, Inc. is pleased to present this proposal for additional professional services to design, prepare construction plans and to provide construction staking relative to the realignment of an existing 6-inch City of Omaha sanitary sewer force main. The force main was found to be in conflict with the proposed box culvert currently under design by E&A for this project and consequently needs to be relocated.

The additional services that we will provide are as follows:

1. Coordination with the City of Omaha in determining their design and construction requirements so that our modifications to the sanitary sewer force main are consistent with City requirements. This will include establishing the duration the City will allow the force main may to be taken out of service during construction. Our design will be sensitive to this requirement and this lapse in service; however, this proposal does not include, nor will our plans include, bypasses or other temporary pumping measures that may be needed to maintain sewer flows during construction.
2. Preparation of a plan and profile sheet showing the horizontal and vertical realignment of the force main beneath the proposed box culvert.
3. Preparation of additional notes, details, bid items and quantities, and special provisions for incorporation of this work into a single plan set with the outlet drainage structure replacement drawings and special provisions.
4. Provide additional construction staking for the realigned force main.

E&A proposes to provide these services at an hourly basis, not-to-exceed limit of \$4,666.00 absent approval from the PMR NRD for an extension beyond this limit. The hourly breakdown is as follows:

- Engineer VIII – 20 hours @ \$123/hr
- Engineering Technician – 24 hours @ \$78/hr
- Survey Technician – 1 hour @ 78/hr

- Survey Crew – 2 hours @ \$128/hr

The terms and conditions included in Appendix "A" of the original Agreement between the PMR NRD and E & A Consulting Group, Inc. dated June 15, 2012 will remain in full force and effect for services provided under this proposal and this amendment to the original agreement. This proposal, once it has been properly signed by your office, will serve as our amended agreement to provide additional services as previously outlined and defined herein. Our receipt of this signed original will also serve as your authorization for us to proceed with these services.

The maximum not-to-exceed amount of the original agreement was \$43,500.00. Including this amendment for additional sanitary force main services in the amount of \$4,666.00, the overall not-to-exceed limit for the Agreement between PMR NRD and E & A Consulting Group, Inc. becomes \$48,166.00.

We look forward to providing you and your staff with these services and are prepared to begin work immediately after receiving your authorization.

Sincerely,

E & A CONSULTING GROUP



Joseph A. Ficenec, PE  
Manager of Structural Engineering

I have received and read Appendix "A" of the original agreement and agree to all terms and conditions as outlined in that appendix and in this proposal. By signing this proposal for services, our agreement is executed.

Date: \_\_\_\_\_

Signature: \_\_\_\_\_

Name: \_\_\_\_\_

Client: \_\_\_\_\_

Address: \_\_\_\_\_

City, State, ZIP: \_\_\_\_\_

Phone: \_\_\_\_\_