

REQUEST FOR PURCHASE IN EXCESS OF \$20,000/CHANGE ORDER



To: MAYOR AND CITY COUNCIL

From: Chad A. Millner, PE, Director of Engineering

Date: December 2, 2014

Subject: Request for Purchase – Authorize Non-Invasive Watermain Pipe Condition Assessment Services

Agenda Item #: IV. H.

The Recommended Bid is

Within Budget

Not Within Budget

Date Bid Opened or Quote Received:
November 24, 2014

Bid or Expiration Date:
NA

Company:

Short Elliot Hendrickson (SEH), Inc.

Amount of Quote or Bid:

\$109,125.00

Recommended Quote or Bid:

Short Elliot Hendrickson, Inc.

\$109,125.00

General Information:

We continue to improve our decision making process for infrastructure improvements in-order to make better decisions with our limited financial resources. An example of this occurred as part of the Arden Park D Neighborhood Street Reconstruction Project the Council will consider on December 9 at the public improvement hearing.

Based on the watermain break data, this neighborhood was scheduled for a complete watermain replacement, both trunk and service pipes. The estimated cost was approximately \$1.5 - \$2 million.

During the preliminary engineering phase, we completed a non-invasive watermain pipe condition assessment. This assessment was completed by Echologics, a division of Mueller Company. They are the only company with this type of testing technology. The data showed that approximately 50% of the trunk pipe had little to no pipe deterioration. Meaning we would have replaced pipe with considerable service life remaining. This decision saved our utility fund approximately \$500,000.

We believe non-invasive watermain testing should become part of our normal data collection practice prior to a street reconstruction project. This would be similar to the closed circuit televising we complete in the sanitary sewer trunk pipes. It would provide us with more data about the condition of our watermain system. And as the example above shows, it should pay for itself.

The proposal includes assessment of approximately 26,000 linear feet of watermain in our anticipated 2016 street reconstruction neighborhoods. They are Golf Terrace B, Strachauer Park A, Morningside A, and White Oaks C. SEH is coordinating Echologics workload between multiple municipalities in the area. This provides a savings to the City in mobilization costs. They will also coordinate data setup and analysis, GIS base mapping, traffic control, and on-site coordination during testing.

These services will be funded by the utility fund and are tentatively scheduled for Dec. 2014. Staff recommends hiring SEH in conjunction with Echologics to complete the non-invasive watermain pipe condition assessment in the anticipated 2016 Neighborhood Street Reconstruction Projects.

Attachments:

- Engineering Proposal



Building a Better World
for All of Us®

SUPPLEMENTAL LETTER AGREEMENT

November 24, 2014

RE: City of Edina
Non-invasive Pipe Condition Assessment
for Trunk Water Main Pipe
SEH No. EDINA P-130295

Mr. Chad Millner, PE
Director of Engineering
City of Edina
Engineering and Public Works Facility
7450 Metro Boulevard
Edina, MN 55439

Dear Chad:

Short Elliott Hendrickson Inc. (SEH®) thanks you for the opportunity to assist the City of Edina (City) with non-invasive pipe condition assessment (PCA). SEH is pleased to partner with Echologics, a division of Mueller Company, to provide you with this opportunity. We will provide these services in accordance with our Agreement for Professional Engineering Services dated June 4, 2013, herein called the Agreement.

SUMMARY

It is our understanding that you wish to consider an assessment project prior to the preparation of bid documents for the proposed 2016 street and utility reconstruction project for an approximate total of 26,300 linear feet of water main. Our 2014 program has received interest from several Cities at this time which should aid in the reduction of mobilization for your project. Spreading these costs amongst the Cities allows us to offer an even better price per linear foot of pipe to complete the work.

BENEFITS

As you already know from the previous project, choosing to apply this exciting application of leak detection technology to these pipes can provide the following immediate benefits.

1. Allow the City to better coordinate pipe rehabilitation with capital improvement plans for other infrastructure occupying the right-of-way or easement.
2. Allow the City to better understand how much of its pipe network may need rehabilitation.
3. Reduce the amount of money the City spends to create potable water.

DELIVERABLES

Below is a list of deliverables we will provide to the City at the conclusion of the assessment.

1. An update to the City GIS shape file or geodatabase (geodatabase) for each reach of pipe. We define a reach of pipe as between fire hydrants or main line valves. The update will add the following attributes to the shape file or geodatabase.

Engineers | Architects | Planners | Scientists

Short Elliott Hendrickson Inc., 10901 Red Circle Drive, Suite 300, Minnetonka, MN 55343-9302
SEH is 100% employee-owned | sehinc.com | 952.912.2600 | 800.734.6757 | 888.908.8166 fax

- a. An estimate how much pipe wall has been lost to date.
 - b. An estimate of the pipe's corrosion rate.
 - c. An estimate of the pipe's remaining wall thickness.
2. A written report summarizing the results of the condition assessment and leak detection containing the following information.
- a. Introduction.
 - b. A discussion of the purpose of leak detection and condition assessment.
 - c. A discussion of the background of leak detection and condition assessment.
 - d. A discussion of the methodology of leak detection and condition assessment.
 - e. A description of the instrumentation used to complete the work.
 - f. Tabulation of condition assessment results.
 - g. Description of deficiencies the crew found in the field along the pipe network.
 - h. An appendix showing the measured results for each reach of pipe.

We will submit a draft report to the City within 4 weeks of completing field work. Field work is anticipated to occur in December depending on schedules of all cities participating.

These services will be provided for an hourly not to exceed fee of \$109,125.00. Please note the following may apply as additional fees:

1. If Echologics' staff is unable to work due to any reason other than their own (weather excluded), we will invoice the City a standby rate of \$3,000 per day. Under such circumstances, we will of course try to work in another City. However, sometimes this may not be possible because the other Cities will not be ready for our staff.
2. Echologics Technical Requirements, Specifications, and Constraints outlines the work we assume will be undertaken by City forces at their own expense. Asking us to accomplish some of this work is an additional expense.

We understand that a request to City Council will determine if you are able to proceed with the project at their regularly scheduled December 2, 2014 meeting. Upon approval, we will provide the necessary agreements for City execution.

This Supplemental Letter Agreement, THB and the Agreement represent the entire understanding between the City of Edina and SEH in respect to the project and may only be modified in writing if signed by both parties.

Chad Millner
November 24, 2014
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As always, we look forward to serving the City of Edina and applying our expertise in assessing the condition of the City's water main pipes. Please contact me with questions and comments at 612.255.8747 or cwimpee@sehinc.com.

Sincerely,

SHORT ELLIOTT HENDRICKSON INC.



Curt M. Wimpée, PE
Project Manager

ka
Attachments

- c: Paul J. Pasko III, SEH (SEH Proposal Letter Only w/o Attachments)
- Toby Muse, SEH (SEH Proposal Letter Only w/o Attachments)
- Al Turner, Echologics (SEH Proposal Letter Only w/o Attachments)

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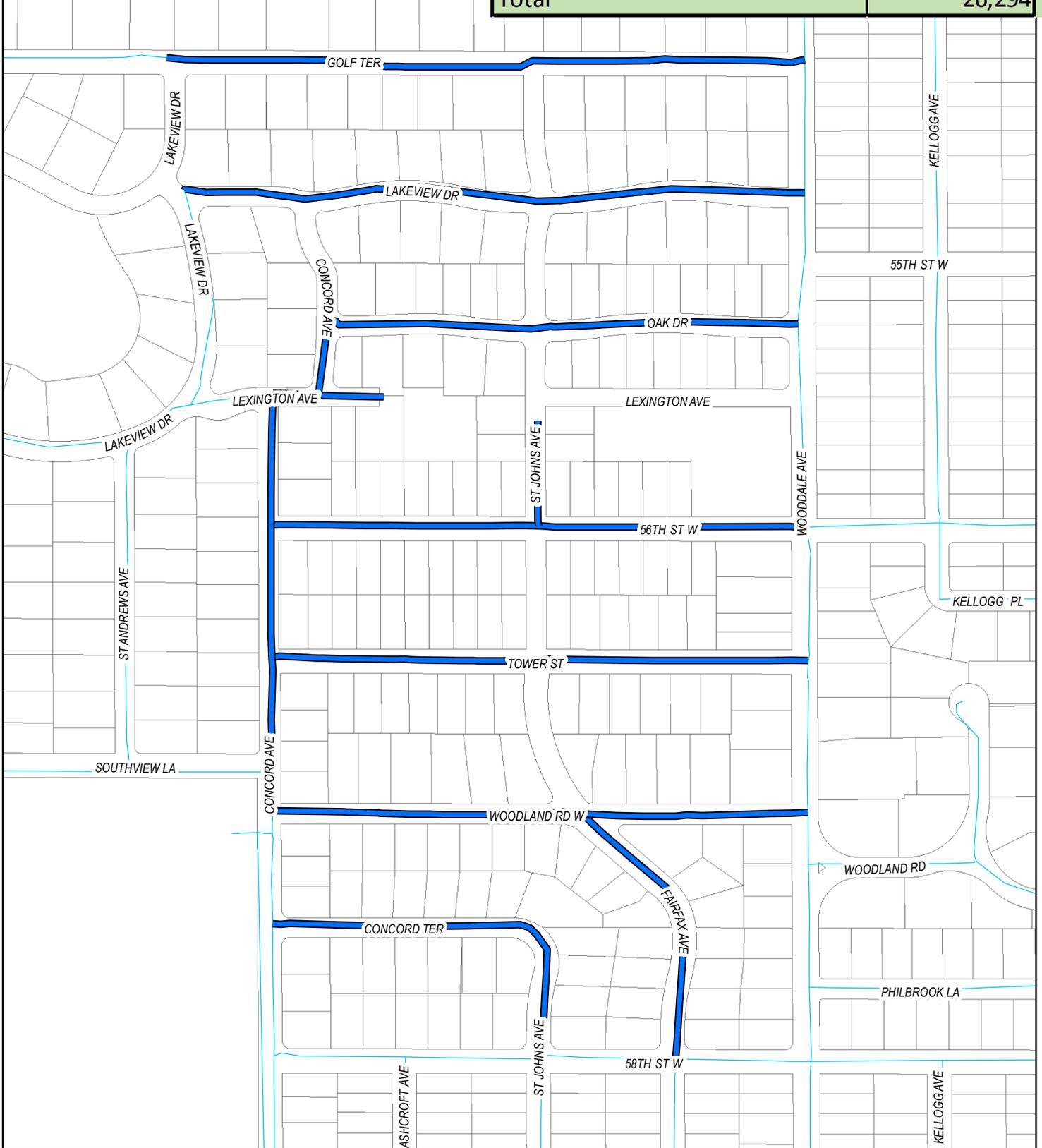
Accepted on this ____ day of _____, 2014

City of Edina, Minnesota

By: _____
Name

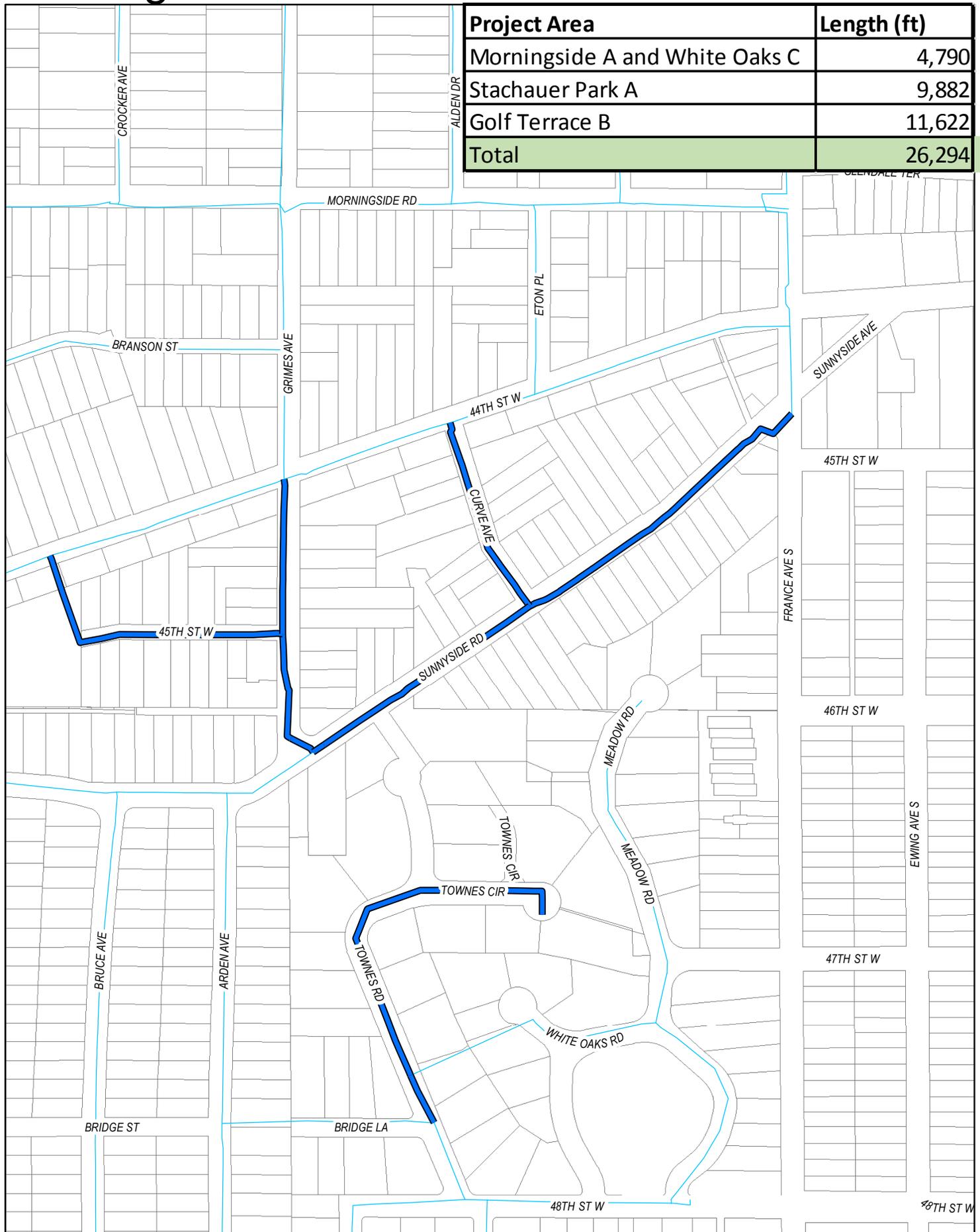
Golf Terrace B

Project Area	Length (ft)
Morningside A and White Oaks C	4,790
Stachauer Park A	9,882
Golf Terrace B	11,622
Total	26,294



Morningside A & White Oaks C

Project Area	Length (ft)
Morningside A and White Oaks C	4,790
Stachauer Park A	9,882
Golf Terrace B	11,622
Total	26,294



Stachauer Park A

Project Area	Length (ft)
Morningside A and White Oaks C	4,790
Stachauer Park A	9,882
Golf Terrace B	11,622
Total	26,294

