



May 3, 2023

Attn: Jeffrey Almeter  
9506 13<sup>th</sup> Ave NW  
Seattle, WA 98117  
Via: Email

RE: **2207-019** Third-Party Review Request Approval; 6950 SE Maker St, Mercer Island, WA 98040

Dear Jeffrey Almeter,

The City of Mercer Island Community Planning and Development Department has requested the services of third-party reviewer Bush, Roed, & Hitchings to determine existing grade based on the definitions of "existing grade" and "alteration" in MICC 19.16.010 and Administrative Interpretation DCI12-004. The City requested third-party services following the applicant's failure to produce sufficient information to satisfy the City's request on March 29, 2023.

Bush, Roed, & Hitchings has prepared a cost estimate and timeline for review (attached) based on the scope of work provided below.

Requested Scope of Work:

1. Review of Attachments A through E
  - a. Attachment A - Terrane Survey dated 2021
  - b. Attachment B - Terrane Memorandum dated April 11, 2023
  - c. Attachment C - DR Strong Consulting Engineers, Inc. Survey dated May 1989
  - d. Attachment D - M.W. Marshall Survey dated May 2004
  - e. Attachment E - Public comments from Dan Grove & Jim Mattison including interpolated survey and corrections
  - f. Attachment F - Administrative Interpretation for Existing Grade, Conclusion 3 for when a current survey is available to establish existing grade by interpolating elevations within the proposed footprint from existing elevations outside of the proposed footprint
2. Determination of Existing Grade of the subject property as defined by Mercer Island City Code (MICC) 19.16.010

The City requests that the applicant provide written approval of the attached cost

estimate, timeline, and scope of work from Bush, Roed, & Hitchings.

Sincerely,

*Molly McGuire*

Molly McGuire, Planner  
City of Mercer Island Community Planning and Development  
[molly.mcguire@mercerisland.gov](mailto:molly.mcguire@mercerisland.gov)  
(206) 275-7712



VIA EMAIL

April 26, 2023  
Rev. May 2, 2023

Molly McGuire  
Planner  
City of Mercer Island - Community Planning & Development  
9611 Southeast 36th Street  
Mercer Island, Washington 98040

## Proposed Land Survey Services - Third Party Review

Parcel Number 935090-0620  
6950 Southeast Maker Street  
Mercer Island, King County, Washington  
S.W. 1/4, Sec. 12, Twp. 24 N., Rge. 04 E., W.M.

Dear Molly,

We propose to provide land survey services at the above referenced site (**Exhibit "A"**). A preliminary site visit was performed on April 25, 2023, and all materials underlying your request have been reviewed. Ground survey measurements will be performed to develop an independent topographic survey study as outlined below, with ties necessary to relate that work to the following three surveys of record:

### 2021 Terrane Survey (Exhibit "A")

This contemporary survey was performed on NAVD '88 vertical datum, with controlling ties acquired by conventional GPS measurements. This survey, and the datum and elevations expressed thereon, will be considered as *target datum* for the purposes of comparing the results of other survey efforts. BRH survey will utilize manhole elevations and inverts expressed on the face of this survey to develop vertical equations for comparing other survey data. BRH work will adopt those horizontal survey controls expressed on this survey, by direct tie in the field.

### 1989 D.R. Strong Survey (Exhibit "B")

This aged survey has been presented to BRH as pre-dating those rockery improvements along the margin of right-of-way of Southeast Maker Street, adjacent to the subject parcel. This survey was performed on a vertical datum controlled by City of Mercer Island Public Works Department, with the source benchmark cited as a spike in a power pole at the intersection of 71<sup>st</sup> Avenue Southeast and Southeast 32<sup>nd</sup> Street. A power pole at that location was observed during a preliminary field inspection by BRH. Discrete trimming of superficial and low-lying landscaping and climbing-ivy around the base of the pole will be performed, with the hopes of revealing the original spike for direct field tie and vertical equation calculation. Those found property corner pins cited on the face of this survey will be utilized for horizontal tie to the *target datum*, either by calculation of local property lines, or scaling, as possible.

### 2004 M.W. Marshall Survey (Exhibit "C")

This survey was performed on a datum identified as "Sea Level", with the source benchmark being a local sanitary sewer manhole illustrated on the face of this survey. An existing manhole at that location was observed during a preliminary field inspection by BRH. That manhole rim elevation will be tied to determine a vertical equation. The manhole will be opened with invert measurements performed and compared to this survey, to verify no new rings, lifts, or other improvements have altered that manhole since 2004, which would affect the record rim elevation. BRH work to adopt those horizontal survey controls expressed on the Terrane survey will also provide the necessary horizontal ties for this survey.

### **Topographic Measurements**

BRH will perform independent topographic survey measurements to capture current grades of Southeast Maker Street, and adjacent grades to the toe of existing rockery (**Exhibit "A"**). NAVD '88 vertical datum will be verified with conventional GPS equipment and receivers.

Spot elevations will be taken at 25-foot intervals and all major vertical breaks. All pavement types will be identified, and all hard-surface transitions defined. One-foot contour intervals will be shown.

### **Deliverables & Schedule**

A single survey sheet-set will be generated. The data of all three surveys will be illustrated with common horizontal placement on the map. Elevations will be labelled based on the *target datum*. A survey letter of opinion will be composed and will highlight relevant findings. Observed departures, if any, from current BRH observations and those expressed on the Terrane survey (target datum), will be highlighted with an equation provided.

BRH will deliver the finalized survey report within **25 business** days of authorization to proceed.

### **Fees**

Our estimated fee to provide this service will be charged on a rates basis, not to exceed **\$9,926** without additional authorizations (**Exhibit "D"**).

Reimbursable items, such as vehicle expenses, tolls, parking, printing, and delivery fees, if any, will be billed at our cost plus 15% in addition to the above fee, and in the aggregate shall not exceed **\$163** without additional authorizations (**Exhibit "D"**).

The terms of this proposal are valid for 60 days.

The activities of Bush, Roed & Hitchings, Inc. are insured for both commercial general liability and professional liability. Commercial general liability limit is \$1,000,000 per occurrence and \$2,000,000 in the aggregate. Professional liability limit of coverage is \$2,000,000. Certificates of Insurance will be furnished upon request. Unless accepted, the terms of this proposal will expire within 60 days of the above date.

Molly McGuire

April 26, 2023; Rev. May 2, 2023

Page 3

We appreciate the opportunity to submit this proposal and are looking forward to working with you on this project. If the above meets with your approval, please provide a signature on the line below and return, retaining a copy for your files.

Very truly yours,

BUSH, ROED & HITCHINGS, INC.

James M. Harper, P.L.S.  
Project Manager

JMH/jeh

Enclosure

ACCEPTED BY:

CITY OF MERCER ISLAND

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

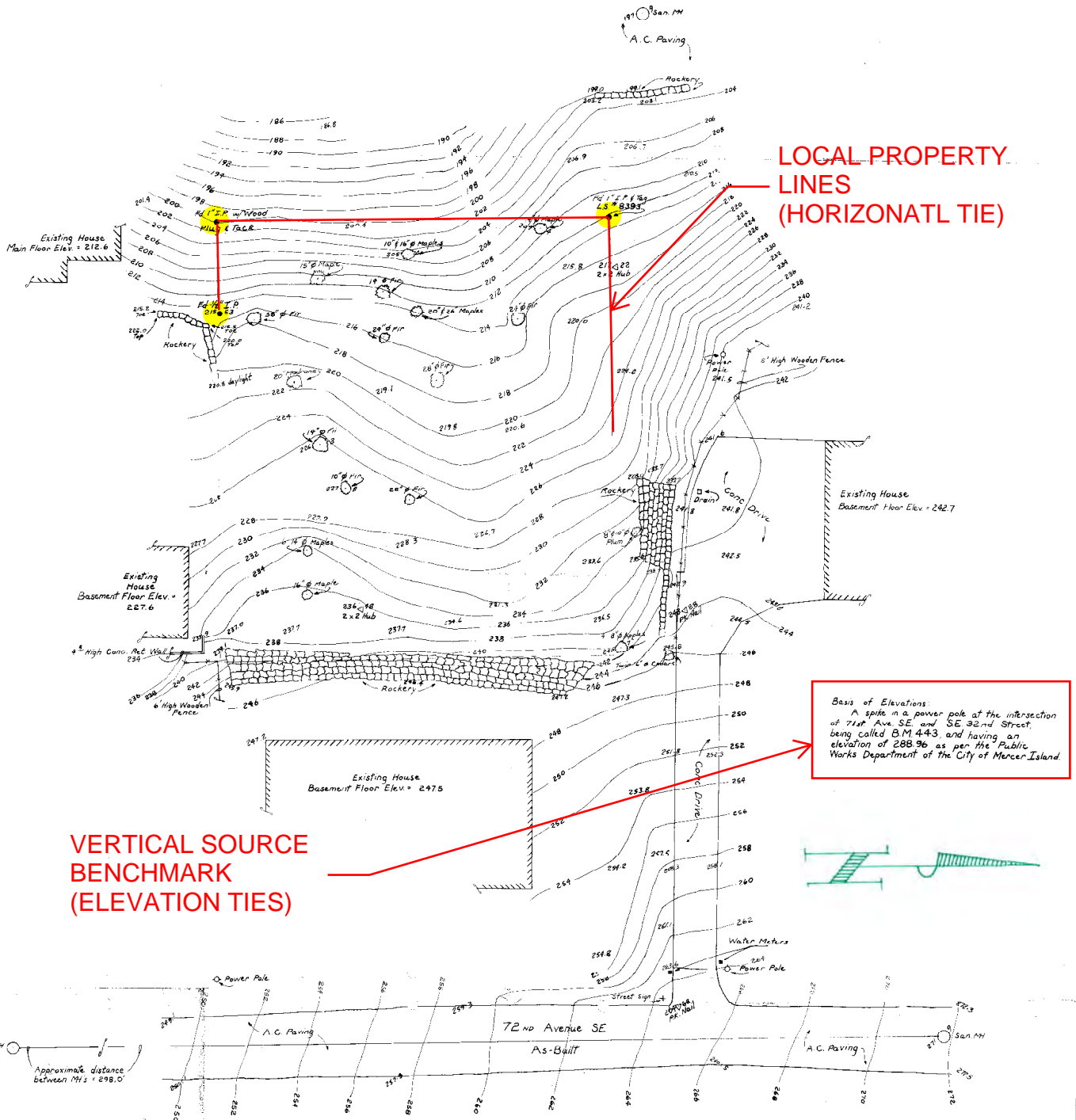
Signature: \_\_\_\_\_

Title: \_\_\_\_\_

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



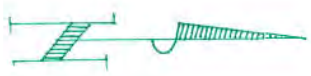
# EXHIBIT "B" (D.R. STRONG SURVEY)




**VERTICAL SOURCE  
BENCHMARK  
(ELEVATION TIES)**

**LOCAL PROPERTY  
LINES  
(HORIZONTAL TIE)**

Basis of Elevations:  
A spike in a power pole at the intersection  
of 71st Ave. SE. and SE. 92nd Street,  
being called B.M. 443, and having an  
elevation of 288.96 as per the Public  
Works Department of the City of Mercer Island.



Topographic Survey	CLIENT Myrvang Architects	PROJECT Pederson Residence	
DRAWN JMR			DATE May 1989
CHECKED GJS			DRAWING NO. 89-848
SCALE 1" = 10'			SHEET



# EXHIBIT "C"

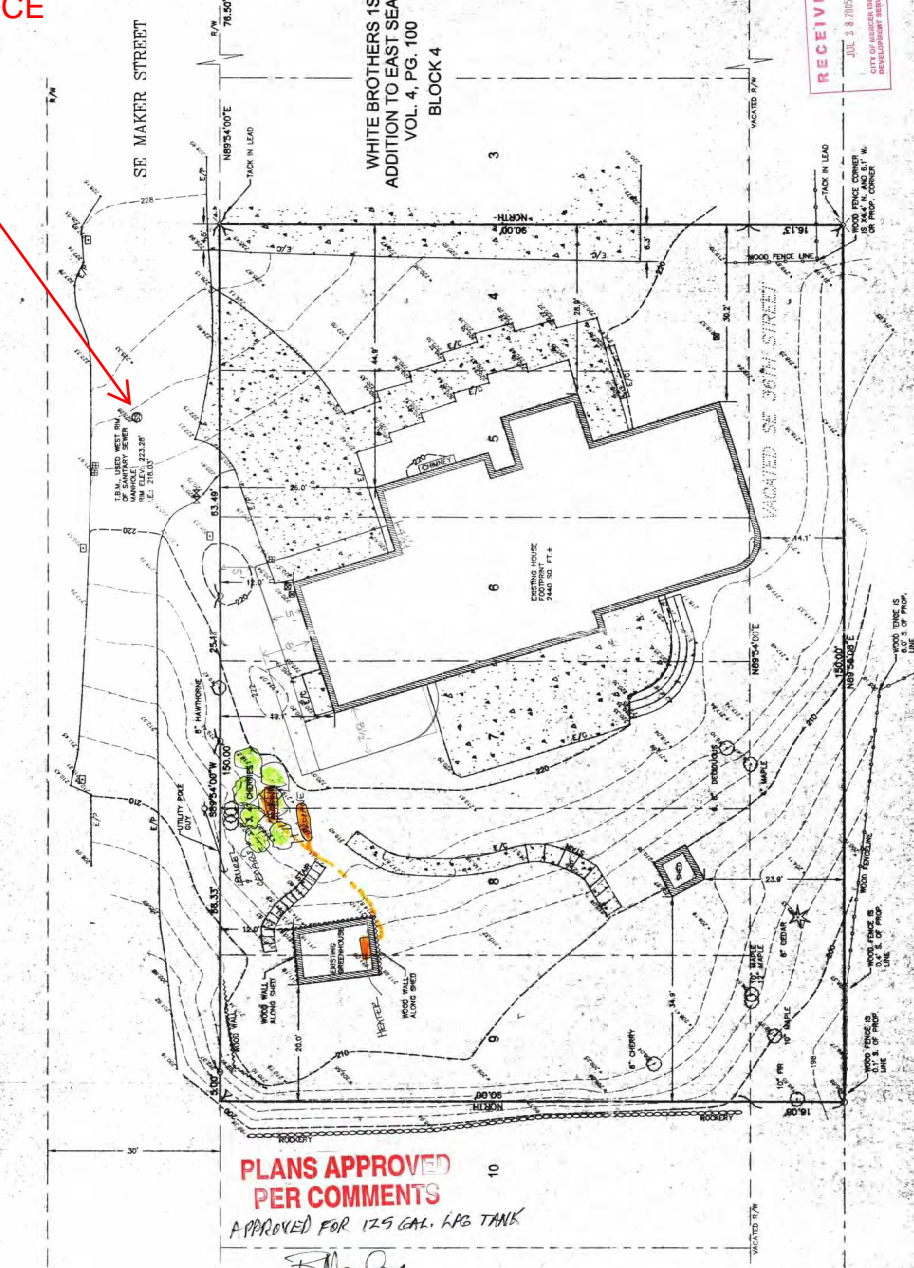
SE 32ND STREET  
 1322.50' PLAT

**VERTICAL SOURCE  
 (MANHOLE RIM)**

- LEGEND:**
- CONCRETE MONUMENT, AS NOTED
  - 3/4" PIPE & CAP, SET PREVIOUSLY
  - TACK IN LEAD, SET PREVIOUSLY
  - DEODOROUS TREE
  - CONIFEROUS TREE
  - E/P EDGE OF ASPHALT PAVING
  - E/C EDGE OF CONCRETE
  - T.B.M. TEMPORARY BENCHMARK
  - WATER VALVE
  - IRRIGATION CONTROL VALVE
  - WATER METER
  - STORM DRAIN CATCH BASIN
  - SANITARY SEWER MANHOLE
  - STORM DRAIN CATCH BASIN
  - UTILITY POLE
  - GY ANCHOR
  - INDICATES SPOT ELEVATION
  - R/W RIGHT-OF-WAY
  - I.E. INVERT ELEVATION

**NOTES:**

- ELEVATIONS, TREE LOCATIONS AND OTHER TOPOGRAPHIC INFORMATION SHOWN HEREON HAVE BEEN OBTAINED FROM A TOPOGRAPHIC SURVEY CONDUCTED BY THE SURVEYOR IN HIS FIELD WORK, OFFICE WORK, OR RESEARCH. THE BOUNDARY CORNERS AND LINES DERIVED ON THIS MAP ARE PER RECORD TITLE. INFORMATION AND REPRESENTED LINES ONLY. THEY DO NOT PURPORT TO SHOW OWNERSHIP LINES OR RIGHTS THEREIN. THIS SURVEY HAS BEEN CONDUCTED IN ACCORDANCE WITH THE TOPOGRAPHIC SURVEY ACT, RCW 9A.04.010, AND THE TOPOGRAPHIC SURVEY RULES, WAC 173-010. THEREFORE DOES NOT SHOW ALL EASEMENTS OR RESTRICTIONS OF RECORD, IF ANY.
- THE DRAWING SHOWN HEREON DOES NOT NECESSARILY CONTAIN ALL OF THE INFORMATION OBTAINED AND/OR DEVELOPED BY THE SURVEYOR IN HIS FIELD WORK, OFFICE WORK, OR RESEARCH.
- THE BOUNDARY CORNERS AND LINES DERIVED ON THIS MAP ARE PER RECORD TITLE. INFORMATION AND REPRESENTED LINES ONLY. THEY DO NOT PURPORT TO SHOW OWNERSHIP LINES OR RIGHTS THEREIN. THIS SURVEY HAS BEEN CONDUCTED IN ACCORDANCE WITH THE TOPOGRAPHIC SURVEY ACT, RCW 9A.04.010, AND THE TOPOGRAPHIC SURVEY RULES, WAC 173-010. THEREFORE DOES NOT SHOW ALL EASEMENTS OR RESTRICTIONS OF RECORD, IF ANY.



**PLANS APPROVED  
 PER COMMENTS**

APPROVED FOR 125 GAL. LPG TANK

*[Signature]*  
 FIRE MARSHAL

7075 SE Makerr St.  
 6555-612

**LEGAL DESCRIPTION:**  
 THE SE 1/4 OF SECTION 12, TOWNSHIP 24 NORTH, RANGE 4 EAST, W. 1/2 OF LOT 1, BLOCK 4, PLAT 1322.50, MERCEY ISLAND, WASHINGTON.

**REFERENCE:**  
 RECORDS OF THE COUNTY OF KING, WASHINGTON, FILE NO. 148,000, 148,001, 148,002, 148,003, 148,004, 148,005, 148,006, 148,007, 148,008, 148,009, 148,010, 148,011, 148,012, 148,013, 148,014, 148,015, 148,016, 148,017, 148,018, 148,019, 148,020, 148,021, 148,022, 148,023, 148,024, 148,025, 148,026, 148,027, 148,028, 148,029, 148,030, 148,031, 148,032, 148,033, 148,034, 148,035, 148,036, 148,037, 148,038, 148,039, 148,040, 148,041, 148,042, 148,043, 148,044, 148,045, 148,046, 148,047, 148,048, 148,049, 148,050, 148,051, 148,052, 148,053, 148,054, 148,055, 148,056, 148,057, 148,058, 148,059, 148,060, 148,061, 148,062, 148,063, 148,064, 148,065, 148,066, 148,067, 148,068, 148,069, 148,070, 148,071, 148,072, 148,073, 148,074, 148,075, 148,076, 148,077, 148,078, 148,079, 148,080, 148,081, 148,082, 148,083, 148,084, 148,085, 148,086, 148,087, 148,088, 148,089, 148,090, 148,091, 148,092, 148,093, 148,094, 148,095, 148,096, 148,097, 148,098, 148,099, 148,100.

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RECEIVED JUL 2 8 2004 CITY OF MERCER ISLAND DEVELOPMENT SERVICES	
M. W. MARSHALL PROFESSIONAL LAND SURVEYOR 7634 S.E. 38th St. Mercer Island, Washington, TEL: (206) 233-5182	SUSAN MATTISON 7075 S.E. MAKERR STREET MERCER ISLAND, WASHINGTON, 98040
M.L.S. 5/2004 Drawn by M.W.M. 5/2004 Checked by	M.W.M. 5/2004 Approved by J.L.M. 5/10/04 Date
APPR.	SHEET NUMBER 10
TOPOGRAPHIC SURVEY OF LOTS 1 THROUGH 9, BLOCK 4, PLAT OF WHITE BROTHERS 1ST ADDITION TO MERCER ISLAND, WASHINGTON	SHEET 10



# EXHIBIT "D"

**BRH**

**Cost Estimate for Survey**

Job No. TBD

Project: 3rd Party Review - 6950 Southeast Maker Street  
 Client: C.O. Mercer Island Phone: \_\_\_\_\_ Fax: \_\_\_\_\_  
 Location: Mercer Island Email \_\_\_\_\_  
 Scope of Work: \_\_\_\_\_ By: \_\_\_\_\_ Date: \_\_\_\_\_  
 Boundaries: X Topography X Utility Locations \_\_\_\_\_ Contours X  
 Short Plat: \_\_\_\_\_ Const. L.O. \_\_\_\_\_ Legal Desc. \_\_\_\_\_ R.O.S. \_\_\_\_\_  
 Other: Datum ties & Exhibit(s) + Topographic Survey

Fees	Hours	Rate	Cost
<b>Research &amp; Layout</b>		\$120	\$0
<b>Preliminary Computing</b>			
Principal Project Manager Contract	1	\$221	\$221
Sr. Project Manager Site Recon Scope	7	\$182	\$1,274
Sr. Project Manager Crew Layout Dispatch	2	\$175	\$350
<b>Field Work</b>			
Sr. Project Manager Site Supervision	6	\$182	\$1,092
2-Man Mapping Crew ROW Control/Datums	12	\$208	\$2,496
2-Man Mapping Topo Survey	4	\$208	\$832
1-Man (Downloads)	1	\$121	\$121
3-Man		\$286	\$0
<b>Final Computing</b>			
Sr. Project Manager Datum Equations	4	\$182	\$728
Sr. Project Manager CAD Exhibit(s)	10	\$182	\$1,820
Sr. Project Manager		\$182	\$0
<b>Drafting / Topographic</b> Contours DTM	8	\$124	\$992
<b>Drafting ROS</b>		\$124	\$0
<b>Utility Locator</b>		\$108	\$0
<b>Checking &amp; Supervision</b>			
Principal Project Manager		\$221	\$0
Sr. Project Manager QA/QC		\$182	\$0
Project Manager		\$175	\$0
Survey Coordinator		\$132	\$0
<b>15% Contingency</b> Field Work waived			\$0
<b>Utility Locator - Sub Consultant</b>			\$0
<b>Sub-Total Fees</b>			<b>\$9,926</b>
<b>Expenses</b>	<b>Costs</b>		
<b>Transportation</b>			
Days (\$33/day) 4	4	\$33	\$132
Miles (\$0.655/mile) 4 @ 12 Mil. RT	48	\$0.655	\$31
Parking waived			
Tolls waived			
<b>Sub-Total Expenses</b>			<b>\$163</b>
<b>Total</b>			<b>\$10,089</b>