



**PURCHASING ITEM  
FOR  
COUNCIL AGENDA  
Memo No. CA13-033**

**1. Agenda Item Number:**  
**28**  
**2. Council Meeting Date:**  
August 16, 2012

**TO: MAYOR & COUNCIL**  
**THROUGH: CITY MANAGER**

**3. Date Prepared:** July 30, 2012  
**4. Requesting Department:** Transportation & Development

**5. SUBJECT:** Award Contract Amendment No. 2 to Dibble Engineering for Ocotillo Road Improvements, Project No. ST0808-201, in an amount not to exceed \$136,501.45 for a revised total contract amount not to exceed \$986,172.45.

**6. RECOMMENDATION:** Staff recommends that Council award Contract Amendment No. 2 to Dibble Engineering for Ocotillo Road Improvements, Project No. ST0808-201, in an amount not to exceed \$136,501.45 for a revised total contract amount not to exceed \$986,172.45.

**7. BACKGROUND/DISCUSSION:** This project will improve Ocotillo Road from Arizona Avenue to McQueen Road. Per the transportation master plan, Ocotillo Road will be a phased 4-lane arterial with bike lanes, sidewalks, curb and gutters, street lighting, storm drainage, landscaping, right-of-way acquisition and private utility relocation. In addition, existing sewer lines within the project limits will be rehabilitated, new potable and reclaimed water mains will be constructed, and laterals for sewer and water will be provided to all undeveloped parcels. Construction is slated to begin in fiscal year 2013.

Additional work under this amendment includes coordination and redesign to accommodate the 36" wastewater forcemain and 24" water transmission main being installed as part of a separate project. In addition, the City has received a federal grant for construction of the road, which resulted in modification of design and specifications in accordance with federal standards.

**8. EVALUATION:** On March 27, 2008, Council approved a design contract to Dibble Engineering for the Ocotillo Road Improvements project. The consultant was selected in accordance with State Law for design services. Staff reviewed the scope of work, billing rates, and total fee for this project, compared them to historical costs, and determined they are reasonable.

**9. FINANCIAL IMPLICATIONS:**

Cost:	\$ 821,761.00	Original Contract
	\$ 27,910.00 3.4%	Amendment No. 1
	<u>\$ 136,501.45 16.6%</u>	Amendment No. 2
	\$ 986,172.45	

Total Savings: N/A  
Long Term Costs:

**Fund Source:**

<u>Acct. No.:</u>	<u>Fund Name:</u>	<u>Program Name:</u>	<u>CIP Funded:</u>	<u>Amount:</u>
415.3310.6517.6ST307	Arterial Street Impact Fee	Ocotillo Rd – Arizona to McQueen	Yes	\$136,501.45

**10. PROPOSED MOTION:** Move that Council award Contract Amendment No. 2 to Dibble Engineering for Ocotillo Road Improvements, Project No. ST0808-201, in an amount not to exceed \$136,501.45 for a revised total contract amount not to exceed \$986,172.45, and authorize the Mayor to sign the contract documents.

**ATTACHMENTS:** Contract Amendment, Map

**APPROVALS**

**11. Requesting Department**

*MW*

Daniel W. Cook, Transportation Manager

**13. Department Head**

*[Signature]*

R.J. Zeder, Transportation & Development Director

**12. Transportation and Development**

Bob Fortier, Capital Projects Manager

*[Signature]*

Sheina Hughes, City Engineer

**14. City Manager**

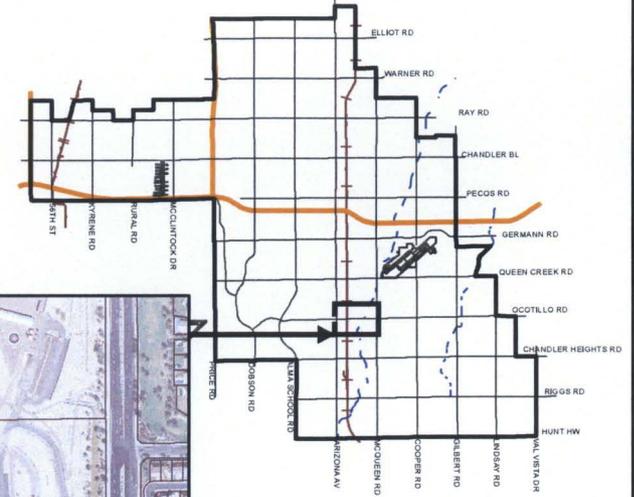
*[Signature]*

Rich Dlugas

for



# OCOTILLO ROAD IMPROVEMENTS (ARIZONA AVE TO McQUEEN ROAD) PROJECT NO. ST0808-201



**MEMO NO. CA13-033**

**PROJECT LIMITS**





Chandler Arizona

AMENDMENT NUMBER 2

Project Name: Ocotillo Road Improvements  
Project No.: ST0808-201

This Amendment No. 2 to that certain Agreement between the City Of Chandler (CITY) and Dibble & Associates Consulting Engineers, Inc. dated for April 4, 2008 is entered into this \_\_\_\_ day of \_\_\_\_\_, 2012.

WHEREAS the parties have determined that it is necessary and desirable for CONSULTANT to perform additional services for CITY;

NOW THEREFORE, the parties agree as follows:

1. Section 2, of the above referenced Agreement, is hereby amended by adding additional scope of work described in more detail in Exhibit A attached hereto and incorporated herein by reference.
2. Section 3, of the above referenced Agreement, is hereby amended by increasing the total contract price by an amount not to exceed the sum of One Hundred Thirty Six Thousand Five Hundred One and 45/100 Dollars, (\$136,501.45) for a total Contract Price not to exceed the sum of Nine Hundred Eighty Six Thousand One Hundred Seventy Two and 45/100 Dollars (\$986,172.45) of all payable in accordance with Exhibit B, attached hereto and incorporated herein by reference.
3. Section 4, of the above referenced Agreement is hereby amended by increasing the Contract Time by Nine Hundred Twelve (912) days for a total Contract Time of Two Thousand Two Hundred Seventy Eight (2278) days from the original Notice to Proceed.
4. All other terms and conditions of the above referenced Agreement shall remain unchanged and in full force and effect.

IN WITNESS WHEREOF, the parties have hereunto subscribed their names this \_\_\_\_ day of \_\_\_\_\_, 2012.

CITY OF CHANDLER:

By: \_\_\_\_\_  
MAYOR Date

APPROVED AS TO FORM:

City Attorney by: *[Signature]*

ATTEST:

City Clerk

CONSULTANT:

By: *[Signature]*  
Title: *President*

ATTEST: (If corporation)

*[Signature]*  
Secretary

WITNESS: (If Individual or Partnership)

SEAL

Amendment No. 2 cont.

Project No. ST0808-201

**THESE CHANGES RESULT IN THE FOLLOWING ADJUSTMENTS OF CONTRACT PRICE AND TIME**

<b>ORIGINAL CONTRACT AMOUNT</b>		<b>\$ 821,761.00</b>
<b>CURRENT CONTRACT PRICE PRIOR TO THIS AMENDMENT</b> (Including previous amendments)		<b>\$ 849,671.00</b>
<b>NET INCREASE / DECREASE</b> (Resulting from this amendment)		<b>\$ 136,501.45</b>
<b>REVISED CONTRACT PRICE</b> (Including this amendment)		<b>\$ 986,172.45</b>
<b>AMENDMENT PERCENTAGE</b> (Of original contract price)		<b><u>16.6%</u></b>
<b>CONTRACT TIME PRIOR TO THIS AMENDMENT</b> (Including previous amendments).		<b>12/31/2011</b> (Days or Date)
<b>NET INCREASE/DECREASE</b> (Resulting from this amendment)		<b>547</b> (Days or Date)
<b>REVISED CONTRACT TIME</b> (Including this amendment)		<b>6/30/2014</b> (Days or Date)
<b>THIS AMENDMENT No.</b> _____	<b>Does not Require Council Approval:</b>	
	Less than \$30,000*	_____
	More than \$30,000 but less than 10% of Contract*	_____
<b>THIS AMENDMENT No.</b> <u>2</u>	<b>Requires Council Approval</b>	
	Greater than \$30,000*	<b>X</b>
	Greater than 10% of Contract *	<b>X</b>
*Including City Manager approved Amendments		
<b>ORIGINAL CONTRACT COUNCIL DATE:</b> March 27, 2008 <b>ITEM NO.:</b> 21, if applicable		
<b>COUNCIL APPROVAL:</b> _____ <b>ITEM NO.:</b> _____, if applicable		
<b>CITY OF CHANDLER (Date &amp; Name of Owner Dept. verbal approval):</b> <u>Paul Young 7/31/2012</u>		

CC: City Clerk    User Dept    Project Mgr    Consultant    Project Analyst    File

## EXHIBIT A SCOPE OF WORK

CONSULTANT shall provide the additional services outlined below:

- Prepare and distribute 98% plans; add comment resolution meeting; incorporate comments
- Coordinate plans with Intel Utilities including revising Reclaimed Waterline location and private irrigation location
- Revise legal descriptions and prepare additional legal descriptions for the City and SRP
- Update plans per new City details, MUTCD 2009, and PROWAG ADA requirements
- Provide Irrigation survey for relocation of existing concrete lined ditches.
- Revise plans and specification to meet ADOT/FHWA requirements for CMAQ funding
- Add Noise Analysis to CE per ADOT.
- Add PISA to CE to cover full costs. Partial costs were covered in previous modification
- Provide SRP details for horizontal and vertical clearances for traffic signal and light poles
- Attend additional project meetings with CITY
- Revise traffic signal, traffic signal interconnect, and roadway lighting design plans within the project limits
- Incorporate new Americans with Disabilities Act (ADA) pedestrian ramps
- Provide a report, sealed by a Arizona Professional Engineer, including figures and calculations for SRP detailing the horizontal and vertical clearances for traffic signal poles and roadway lights within the project limits
- Provide 98%, traffic signal, traffic signal interconnect, and roadway lighting engineering design

### BACKGROUND:

The City of Chandler was in the design process to widen Ocotillo Road between Arizona Avenue and McQueen Road to a four lane section. CONSULTANT has completed the original traffic signal, traffic signal interconnect and roadway/landscape lighting plans for the Ocotillo Road, Arizona Avenue to McQueen Road roadway improvement project to a 95% level. The design of the project was taken to the 95% design level and shelved in July 2009.

In mid 2011, federal funding was applied for and the project design was restarted. However, during the project interruption, new ADA standards were approved. In addition, a Target store was constructed on the northeast corner of the Ocotillo Road/Arizona Avenue which impacted the roadway lighting and traffic signal interconnect. Furthermore, direction was given to remove the landscape lighting from the plans.

During the same period, the CITY entered into contract for the design of a new wastewater forcemain and water transmission main along Ocotillo Road. Progress on those plans necessitates coordination with the design consultant, and revision to the Ocotillo Road plans.

Salt River Project (SRP) has recently been requesting horizontal and vertical clearance calculations for facilities that are adjacent to their network. These calculations will be required for the Chandler Paseo Trail Crossing new pedestrian crossing poles and roadway lights on the north side of Ocotillo Road between the Chandler Paseo Trail and McQueen Road.

CONSULTANT shall perform the following tasks:

### TASKS:

Prepare 98% revised roadway design set.

#### **Task 1: Site Reconnaissance/Data Collection**

Visit the project limits in order to obtain an understanding of the proposed traffic design modifications and to verify if any changes, such as the addition of new utility facilities, have occurred.

#### **Task 2: Traffic Engineering Re-Design**

Based on the revised roadway plans, prepare 98% modified roadway lighting and traffic signal interconnect plans along the project limits.

The revised roadway lighting and traffic signal interconnect shall be at a scale of 1:40.

As part of the 98% submittal, CONSULTANT shall resubmit the traffic signal and pedestrian signal plans.

**Special Provisions/Opinion of Probable Cost:**

Provide revised Opinions of Probable Cost and Special Provisions for 98% updated design.

**Task 3: Overhead Utility Clearance Report**

Using survey data detailing the SRP overhead power pole locations and line elevations, calculate the projected horizontal and vertical clearances between the existing power lines and each pedestrian signal pole and roadway lighting pole within the project limits on the north side of Ocotillo Road between Chandler Paseo Trail and McQueen Road.

Prepare a written report, complete with tables and graphics, which summarize the methodology, findings and conclusions of the study.

Provide five (5) electronic copies of the Initial Overhead Utility Clearance Report for submittal to CITY and SRP prior to the Final (sealed) plan submittal.

Based on CITY and SRP review of the Initial Overhead Utility Clearance Report, prepare a Final Overhead Utility Clearance Report, complete with tables and graphics that summarize the methodology, findings and conclusions of the Analysis.

Provide five (5) electronic copies of the Final Overhead Utility Clearance Report for submittal to CITY and SRP with the Final (sealed) plan submittal.

**Task 4: Project Meetings**

CONSULTANT shall attend additional project meetings with representatives of Chandler and Dibble, to discuss the traffic engineering design.

**Task 5: Environmental Documentation**

CONSULTANT shall coordinate the completion of a PISA, and quantitative noise analysis for the proposed Ocotillo Road Improvements Project.

CONSULTANT shall perform the following tasks for the project area and the results will be documented in the CE checklist:

- Noise
  - A quantitative noise analysis, completed to ADOT standards (by subconsultant to EPG)
- Hazardous materials
  - Preliminary Initial Site Assessment (by subconsultant to EPG)
- Project Coordination
  - EPG will coordinate the expedited completion and technical review of the noise analysis and PISA, as requested by Dibble Engineering and the City of Chandler on December 9, 2011.

**Task 6: Landscape and Irrigation**

CONSULTANT shall provide additional tasks for the landscape design. The tasks for the additional work are listed below.

- Revise the irrigation system to arrange the distribution lines so they do not occur in the roadway shoulders; arrange separate irrigation connections for the Paseo Vista Park and include separate booster pumps at all points of connection for the reclaimed irrigation system.

- Identify the medians west of the rail road crossing that are currently being irrigated by the Target store system and provide a connection to the reclaimed line and convert this specific segment of median irrigation to operate as a part of the City's median system.
- There have been several plan review submittals beyond the number of submittals originally anticipated and there is another one yet to occur. It is expected that there will be some additional review comments requiring plan adjustments leading to another plan submittal for final review. CONSULTANT shall provide bidding assistance during the bidding period and respond to clarifications from bidders.

**Task 7: Owl Survey and Report**

**SCOPE OF WORK**

CONSULTANT will complete two (2) separate burrowing owl surveys within an approximate 1-mile section of Ocotillo Road between Arizona Avenue and McQueen Road in Chandler, Arizona. The first survey is expected to occur approximately one month prior to project construction start, and the second is expected to occur within 96 hours of project construction start.

These surveys are intended to evaluate the presence or absence of burrowing owls within the project area, and will be completed by an EPG biologist possessing a Burrowing Owl survey protocol training certificate issued by the Arizona Game and Fish Department (AGFD), following the AGFD Burrowing Owl Project Clearance Protocol.

Following each survey CONSULTANT shall produce a letter report which outlines the methodology and findings, and provides specific project recommendations. CONSULTANT shall also assist the City of Chandler in contacting the Arizona Department of Transportation (ADOT) Environmental Planning Group to provide required documentation of surveys and results.

If burrowing owls are encountered within the project area during either survey, the City of Chandler will be required by ADOT to relocate affected owls. CONSULTANT has an established working relationship with Arizona's premiere burrowing owl relocation specialists, Wild at Heart, and can coordinate the relocation efforts with Wild at Heart and document the process, if required. These efforts, however, will only be required if burrowing owls are encountered and are thus not included in this scope of work.

**DELIVERABLES:**

*98% Plans*

- 98% Plan submittal to City
- 98% Plan submittal to private utilities for conflict review
- 1 electronic copy of the revised Opinion of Probable Cost in Microsoft (MS) Excel format and hard copy
- 1 electronic copy of the revised Special Provisions in MS Word format and hard copy

**Overhead Utility Clearance Report**

- 5 copies of the Initial Overhead Utility Clearance Report in Electronic Format
- 5 copies of the Final Overhead Utility Clearance Report in Electronic Format

CONSULTANT shall coordinate the expedited preparation and submittal of draft copies of the required technical reports, as indicated in December 8, 2011, communications from ADOT EPG. These required technical reports include biological and cultural resources, noise, and hazardous materials; and as requested by Dibble Engineering and the City of Chandler on December 9, 2011, will be provided to ADOT as soon as possible – on or about December 23, 2011.

Upon receipt and execution of comments on the draft technical reports, final technical reports will be prepared and submitted. This is anticipated to occur early 2012.

**General assumptions and basis for cost estimate:**

1. CONSULTANT will provide all project design information required, including:
  - a. Mapping Data – Geo-referenced aerial files showing first row of homes adjacent to the project limits. Microstation and/or AutoCAD compatible files, supplemented with GIS mapping, if necessary.
  - b. CADD Files – Roadway design files for the existing and build conditions (4-lanes). Microstation and/or AutoCAD compatible, depicting striping, edge of pavement, right-of-way, walls, retaining walls, combination walls, etc., stationing and mileposts.
  - c. As-Built Plans or Base Files – Ocotillo Road and major cross-streets. PDF or Microstation and/or AutoCAD compatible (if available). Note: As-built plans (designs, road geometries) and terrain data should include at least 1,000 feet beyond the project limits.
  - d. Roadway Geometry Files – Horizontal and vertical roadway alignment files. Inroads or AutoCAD equivalent alignment files for the design of Ocotillo Road.
  - e. Terrain Data – Digital Terrain Model (DTM). Microstation/Inroads compatible and/or AutoCAD equivalent – depicting drainage features, cut/fill lines, and other features including walls and berms.
  - f. Traffic Volume Data – Level of Service (LOS) C and/or projected am/pm peak hour traffic volumes. Existing, No-Build, and Build scenarios for the design of Ocotillo Road.
2. Assumes analysis of one (1) design alternative for this project.
3. The following tasks are not included in CONSULTANT's scope of work and are subject to a contract modification:
  - conducting quantitative air analysis or follow-up/additional hazardous materials site investigations, if necessary
  - Additional tasks including public meetings, analyses of additional design alternatives, undefined planned area (areas without issued construction permit), or analysis due to design modifications

**EXHIBIT B  
FEE**

**DIRECT LABOR BREAKDOWN:**

<b>Classification</b>	<b>Hours</b>	<b>Direct Rate</b>	<b>Cost</b>
Project Principal	6	\$ 150.00	\$ 900.00
Project Manager	56	\$ 135.00	\$ 7,560.00
Project Engineer	144	\$ 120.00	\$ 17,280.00
Engineer/Designer	134	\$ 105.00	\$ 14,070.00
Cadd Technician	206	\$ 80.00	\$ 16,480.00
Survey RLS	66	\$ 135.00	\$ 8,910.00
Survey Crew	30	\$ 130.00	\$ 5,200.00
Clerical	4	\$ 45.00	\$ 180.00
<b>Total Hours</b>	<b>656</b>		
<b>Total Direct Labor</b>			<b>\$ 70,580.00</b>

**DIRECT EXPENSES BREAKDOWN:**

UPRR Fees	\$ 5,500.00
Reproduction	\$ 710.00
Mileage	\$ 120.00
<b>Total Direct Expenses</b>	<b>\$ 6,330.00</b>

**SUBCONSULTANTS:**

Environmental Planning Group (EPG) (Environmental)	\$ 11,880.00
Environmental Planning Group (EPG) (Burrowing Owl Survey)	\$ 2,300.00
Environmental Planning Group (EPG) (Landscaping)	\$ 6,035.00
Premier Engineering Corp. (Structural)	\$ 6,900.00
Southwest Traffic (Signals, ITS, Lighting)	\$ 20,276.45
RT Underground	\$ 1,900.00
<b>SUBTOTAL, SUBCONSULTANTS:</b>	<b>\$ 49,291.45</b>

**TOTAL COST TO CONSULTANT:**

**\$ 126,201.45**

<b>TOTAL LUMP SUM DESIGN FEE (BASE CONTRACT):</b>	<b>\$ 126,201.45</b>
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**ALLOWANCES:**

Revise Legals due to changes in ownership, etc.	\$ 5,500.00
Additional Potholes due to requirements of railroad	\$ 4,800.00

<b>TOTAL FEE:</b>	<b>\$ 136,501.45</b>
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**EXHIBIT B-1  
FEE BREAKDOWN**

**STAFF HOURS BY TASK:**

Design Phase Service	Project	Project	Project	Engineer/	Cadd		Survey	Survey	Total Manhours
	Principal	Manager	Engineer	Designer	Technician	Clerical	RLS	Crew	
98% Design Submittal	1	8	28	18	22				77
Coordination with Intel Utility		8	26	8	4				46
Legal Description Revisions		4	2		84		56		146
Profile Changes		4	8	8	4				24
MUTCD/PROWAG Changes	1	2	16	20	8				47
Private Irrigation Survey			4		4		4	30	42
ADOT Specification/Plan		6	12	16		4			38
Final Plan Requirements	4	24	48	64	80		6	10	
<b>TOTAL MANHOURS</b>	<b>6</b>	<b>56</b>	<b>144</b>	<b>134</b>	<b>206</b>	<b>4</b>	<b>66</b>	<b>40</b>	<b>656</b>

**LABOR FEE BY TASK:**

Design Phase Service	\$ 150.00	\$135.00	\$ 120.00	\$ 105.00	\$ 80.00	\$ 45.00	\$135.00	\$130.00	Total Cost
	Project Principal	Project Manager	Project Engineer	Engineer/ Designer	Cadd Tech	Clerical	Survey RLS	Survey Crew	
98% Design Submittal	\$150	\$1,080	\$3,360	\$1,890	\$1,760	\$0	\$0	\$0	\$8,240
Coordination with Intel Utility	\$0	\$1,080	\$3,120	\$840	\$320	\$0	\$0	\$0	\$5,360
Legal Description Revisions	\$0	\$540	\$240	\$0	\$6,720	\$0	\$7,560	\$0	\$15,060
Profile Changes	\$0	\$540	\$960	\$840	\$320	\$0	\$0	\$0	\$2,660
MUTCD/PROWAG Changes	\$150	\$270	\$1,920	\$2,100	\$640	\$0	\$0	\$0	\$5,080
Private Irrigation Survey	\$0	\$0	\$480	\$0	\$320	\$0	\$540	\$3,900	\$5,240
ADOT Specification/Plan	\$0	\$810	\$1,440	\$1,680	\$0	\$180	\$0	\$0	\$4,110
Final Plan Requirements	\$600	\$3,240	\$5,760	\$6,720	\$6,400	\$0	\$810	\$1,300	24,830
<b>TOTAL COST</b>	<b>\$800</b>	<b>\$7,560</b>	<b>\$17,280</b>	<b>\$14,070</b>	<b>\$16,480</b>	<b>\$180</b>	<b>\$8,100</b>	<b>\$3,900</b>	<b>\$70,580</b>

**Environmental Planning Group**

<b>Classification</b>	<b>Hours</b>	<b>Direct Rate</b>	<b>Cost</b>
Project NEPA Planner	24	\$ 90.00	\$ 2,160.00
Project Manager	12	\$ 165.00	\$ 1,980.00
Landscape Architect	18	\$ 85.00	\$ 1,530.00
Landscape Tech	30	\$ 75.00	\$ 2,250.00
Admin	3	\$ 75.00	\$ 225.00
Total Hours	87		
Total Direct Labor			\$ 8,145.00
Burrowing Owl Surveys and Reports			\$ 2,300.00
<b>SUBCONSULTANTS:</b>			
Ninyo and Moore			\$ 2,800.00
DME Consultants			\$ 6,920.00
Expenses			\$ 50.00
<b>TOTAL FEE (Environmental Planning Group)</b>			<b>\$ 20,215.00</b>

**Premier Engineering Corp**

<b>Classification</b>	<b>Hours</b>	<b>Direct Rate</b>	<b>Cost</b>
Project Manager	6	\$ 170.00	\$ 1,020.00
Senior Project Engineer	16	\$ 160.00	\$ 2,560.00
Project Engineer	24	\$ 110.00	\$ 2,640.00
CADD Tech/ Designer	8	\$ 70.00	\$ 560.00
Admin/ Clerical	2	\$ 60.00	\$ 120.00
Total Hours	56		
Total Direct Labor			\$ 6,900.00
<b>TOTAL FEE (Premier Engineering Corp.)</b>			<b>\$ 6,900.00</b>

**Southwest Traffic Engineering**

<b>Classification</b>	<b>Hours</b>	<b>Direct Rate</b>	<b>Cost</b>
Senior Traffic Engineer	9	\$ 175.00	\$ 1,575.00
Traffic Engineer	67	\$ 130.00	\$ 8,710.00
Traffic Designer	90	\$ 105.00	\$ 9,450.00
Project Assistant	5	\$ 65.00	\$ 325.00
Total Hours	171		
Total Direct Labor			\$ 20,060.00
Total Expenses			\$ 216.45
<b>TOTAL FEE (Southwest Traffic Engineering)</b>			<b>\$ 20,276.45</b>

**RT Underground, LLC**

<b>Classification</b>	<b>Quantity</b>	<b>Unit Price</b>	<b>Cost</b>
Utility Potholing	2	\$ 950.00	\$ 1,900.00
<b>TOTAL FEE (RT Underground)</b>			<b>\$ 1,900.00</b>