

AMENDMENT III ENGINEERING SERVICES AGREEMENT

THIS AMENDMENT is made and entered into this _____ day of _____, 20____, by and between the **City of Orlando, Florida**, a municipal corporation existing under the laws of the State of Florida (CITY), and **Arcadis U.S., Inc.**, doing business locally at 2301 Maitland Center Parkway, Suite 140, Maitland, Florida 32751 (ENGINEER).

WHEREAS, the CITY and the ENGINEER have previously entered into an agreement for the ENGINEER's professional services (SERVICES AGREEMENT) on January 11, 2001, concerning the Conserv I Flow Diversion Plan Force Main Project (PROJECT); and

WHEREAS, the SERVICES AGREEMENT was approved and authorized by the City Council and signed by the Mayor Pro Tem and City Clerk, as Documentary#33385; and

WHEREAS, the CITY and ENGINEER wish to amend the SERVICES AGREEMENT as set forth herein; and

WHEREAS, AMENDMENT I of the SERVICES AGREEMENT was approved and authorized by the City Council and signed by the Mayor Pro Tem and City Clerk on August 21, 2001, and

WHEREAS, AMENDMENT II of the SERVICES AGREEMENT was approved and authorized by the City Council and signed by the Mayor Pro Tem and City Clerk on March 29, 2006, and

WHEREAS, the CITY and the ENGINEER now wish to memorialize their understanding for the ENGINEER's additional professional services for the PROJECT.

NOW, THEREFORE, in consideration of the mutual promises and covenants contained herein and given one to the other, the sufficiency of which is hereby acknowledged, the parties agree as follows:

I. **SCOPE OF SERVICES**

The scope of services has been agreed to by the parties, and is attached hereto and incorporated herein, by reference, as EXHIBIT I.

II. **FEE**

The not-to-exceed fee of \$947,997.23 has been agreed to by the parties as set forth on EXHIBIT I.

III. TERM

The term of this AMENDMENT shall be completed by the end of business (5:00 p.m.) on January 31, 2016, as set forth in EXHIBIT I, attached hereto and incorporated by reference herein. It is also agreed that the CITY shall have an option for extension of this AMENDMENT, as necessary to complete the present scope of Services (Exhibit I) or to provide additional services.

IV. ENTIRE AGREEMENT

This AMENDMENT supersedes all previous amendments, agreements, or representations, either verbal or written, heretofore in effect between the CITY and the ENGINEER that may have concerned the matters covered herein, except that this AMENDMENT shall in no way supersede or amend the SERVICES AGREEMENT or other amendments except as specifically provided herein. No additions, alterations, or variations to the terms of this AMENDMENT shall be valid, nor can the provisions of this AMENDMENT be waived by either party, unless such additions, alterations, or waivers are expressly set forth in writing in a document duly executed by both parties. CONSULTANT acknowledges and agrees that any proposals or proposed agreements from subconsultants attached to this SERVICES AUTHORIZATION are attached solely to reflect the scopes of work to be performed and the fees to be charged by such subconsultants. By executing this SERVICES AUTHORIZATION, the CITY does not become a party thereto or bound by the terms thereof.

IN WITNESS WHEREOF, the parties hereto have executed this AMENDMENT on the day and year first written above.

City of Orlando, Florida

By: _____
Mayor Pro Tem

ATTEST:

Alana C. Brenner, City Clerk

(SEAL)

APPROVED AS TO FORM AND LEGALITY
for the use and reliance of the
City of Orlando, Florida, only.

_____, 20____.

Assistant City Attorney
Orlando, Florida

Arcadis U.S., Inc.

By: _____

(Print Name)

(Title)

STATE OF FLORIDA }

COUNTY OF _____ }

PERSONALLY APPEARED before me, the undersigned authority, _____
[] well known to me or [] who has produced _____ as identification, and
known by me to be the _____ of the corporation named above, and acknowledged before
me that he/she executed the foregoing instrument on behalf of said corporation as its true act and
deed, and that he/she was duly authorized to do so.

WITNESS my hand and official seal this _____ day of _____, 20_____.

NOTARY PUBLIC

Print Name: _____

My Commission Expires: _____



May 23, 2014

Hector Sanchez
Project Manager
City of Orlando
Public Works Department
400 South Orange Avenue
Orlando, Florida 32801

Re: City of Orlando
CONSERV I Flow Diversion Force Main - Phase 2
Realignment Engineering Services
Project No. 2122

Dear Mr. Sanchez:

Based on the July 19th, 2012 meeting, the City requested engineering services of the new alignment for the 36-inch diameter force main as shown in the attach map (Attachment B). Malcolm Pirnie, the Water Division of ARCADIS will provide these services for final design, permitting, bidding and construction administration. In addition, the services will include transportation safety, geotechnical investigations, environmental investigations, and public relation activities to assist in completing the engineering services of the project through the construction activities.

The scope of services includes full design services for the revised route approximately 13,200 linear feet of a 36-inch diameter force main. The original route of approximately 21,050 linear feet was designed under Project No. 2122 dated January 11, 2001. The original route at the request of the City is to be re-evaluated for utilities and modified, if necessary, at the following areas:

- Intersection of Grant St. and SR 436
- Intersection of Curry Ford Rd and Raper Dairy Rd
- Chickasaw Elementary School between Adler Ave and Fathom Ave
- Lake Underhill Rd/SR 408 at OUC/City of Orlando ROW
- Cocos Dr at OUC/City of Orlando ROW
- Yucatan Dr at OUC/City of Orlando ROW

The permitting, bidding and construction phase services will include the full 34,250 linear feet of 36-inch diameter force main. The detailed scope of services is as follows:

Task 1– Kickoff Meeting

The Engineer will prepare for, attend and conduct the project Kickoff Meeting with the City representatives and project members to review project requirements, goals, deliverables and milestone dates. Engineer will provide meeting minutes to the project team members and attendees of the Kickoff Meeting.

Task No. 2- Survey and Utility Locate Services

The Engineer will perform land survey and utility locate services. The survey and utility locate services will be provided by use of a subconsultant. The survey services will include confirming/providing horizontal and vertical project control for the full route. The survey services will include re-survey of utilities along the original route. The affected utility areas to be updated are as follows:

- Intersection of Grant St. and SR 436
- Intersection of Curry Ford Rd and Raper Dairy Rd
- Chickasaw Elementary School between Adler Ave and Fathom Ave
- Lake Underhill Rd/SR 408 at OUC/City of Orlando ROW
- Cocos Dr at OUC/City of Orlando ROW
- Yucatan Dr at OUC/City of Orlando ROW

The survey services will also include the additional topographic survey of the revised force main route as shown in Attachment B as well as Chicksaw Elementary School. The survey services will include Right-of-Way and easement determination of the corridor to the extent that the records can be retrieved from the Orange County Property Appraisers. The survey services will include underground utility locates and geotechnical coordination along the revised force main route.

The survey subconsultant (L&S Diversified) scope of work is provided in Attachment C.

Task No. 3- Geotechnical and Materials Testing Services

The Engineer will provide subsurface geotechnical investigation services as part of a subconsultant. The geotechnical services will provide test borings along the revised route shown in Attachment B. It is assumed that 20 borings at 15-feet will be required along the open cut installation of the route and 13 borings at 30-feet will be required along the horizontal directional drill. The results will be analyzed, reviewed and compiled within a signed and sealed geotechnical engineering report. This report will include recommendations for earthwork excavation safety, groundwater control and other items pertaining to force main construction.

The original subsurface geotechnical investigation and report performed for the design of the force main route will be re-used for the original route re-design effort.

As part of the construction activities (Task 15), the Engineer will provide construction phase testing services for the force main route as part of a subconsultant. The construction phase testing services will perform construction quality assurance testing of soils and concrete along the full force main alignment as shown in Attachment B. It is assumed that a total of 30 modified Proctor compaction tests, 1,200 field density tests and 30 sets of concrete cylinder creation and testing.

The geotechnical subconsultant (Antillian) scope of work is provided in Attachment C.

Task No. 4- Public Involvement Services

The Engineer will provide public involvement services for the full force main route as part of a subconsultant. The public involvement services will include up to four (4) community meetings with the residents and commercial establishments impacted by the pipeline construction. The services will also include two (2) meetings with community leaders to discuss any matters related to the project prior to construction. The Engineer will support efforts to provide flyers for residential and commercial information to be distributed by the contractor.

The public involvement subconsultant (Wyche) scope of work is provided in Attachment C.

Task No. 5-Traffic Safety Maintenance

The Engineer will provide maintenance of traffic plans for various segments of pipeline route along roadways as part of a subconsultant. The scope of services will include updating all of the maintenance of traffic drawings and specifications for the full force main route as shown in Attachment B. The updated drawings and specifications will be provided within the overall contract documents. Services also include bidding and construction phase efforts to assist in completing the force main installation.

The traffic safety maintenance subconsultant (GMB) scope of work is provided in Attachment C.

Task No. 6- Ecological Services

The Engineer will provide ecological services along the full force main route as part of a subconsultant. The scope of services will include delineation of wetlands, site investigation of threaten and endangered species. It is assumed that wetland mitigation with subsequent permitting activities will be required as part of this effort.

Based on prior environmental site investigations, it is anticipated that gopher tortoise relocation will be necessary. It is assumed that a total of 16 gopher tortoises will be relocated as part of this project. Due to the location of the gopher tortoises within the Orlando/OUC right-of-way, removal by excavation of the gopher tortoises cannot be performed. It is assumed that bucket trapping will be provided and the current costs reflect a 28 day removal period. If additional gopher tortoises above the amount identified or additional trapping time is encountered as part of this project, then the additional permitting, fees and efforts will be adjusted as an amendment to this project after written acceptance by the City.

The ecological services are provided through a subconsultant. The ecological (Grove) subconsultant scope of services is provided in Attachment C. The estimated permit application fees for the wetlands mitigation is identified as well. The permit application fees are included within the direct costs shown in Attachment A. Wetland mitigation fees are not included as part of this scope of services

Task No. 7- Agency Coordination

The Engineer will provide coordination services and prepare for, attend and conduct the meetings with the following agencies:

- 7.1 OUC – the Engineer will coordinate proposed route with OUC and submit the design documents at each stage of design process for review and comment. This task will include data collection requests, responses to design review comments, and correspondence. It is assumed a minimum of three (3) meetings at the OUC office will be required as part of the project. The Engineer will invite this agency as part of each design review meeting, as well as, distribute to them the design review meeting minutes.
- 7.2 Orange County Public Works – the Engineer will coordinate the proposed route with Orange County Public Works and submit the alignment at each stage of the design process for review and comment. This task will include data collection requests, responses to design review comments, and correspondence. It is assumed a minimum five (5) separate meetings at the Orange County Public Works office will be required as part of the project. The Engineer will invite this agency as part of each design review meetings, as well as, distribute to them the design review meeting minutes.
- 7.3 Orange County Utilities - the Engineer will coordinate the proposed route with Orange County Utilities and submit the alignment at each stage of the design process for review and comment. This task will include data collection requests, responses to design review comments, and correspondence. It is assumed a minimum of two (2) meetings will be required at their office as part of the project. The Engineer will invite this agency as part of each design review meeting, as well as, distribute to them the design review meeting minutes.
- 7.4 Orange County Environmental – the Engineer will coordinate the proposed route with Orange County Environmental. This task will include data collection requests, responses to design review comments, and correspondence. It is assumed the Engineer will meet with Orange County Environmental in two (2) meetings at their office to discuss environmental concerns associated with the route. One (1) on-site meeting (for the route) is expected to provide our investigation information of the environmental conditions for permitting purposes. The Engineer will invite this agency as part of each design review meeting, as well as, distribute to them the design review meeting minutes.
- 7.5 Orange County School Board – the Engineer will coordinate the proposed route with Orange County School Board. This task will include data collection requests, responses to design review comments, and correspondence. It is assumed that the Engineer will

meet with Orange County School Board in two (2) meetings at their office to discuss the proposed route and address any potential concerns. The Engineer will invite this agency as part of each design review meeting, as well as, distribute to them the design review meeting minutes.

- 7.6 FDEP Environmental – the Engineer will coordinate the proposed route with FDEP Environmental section. This task will include data collection requests, and correspondence. It is assumed that the Engineer will meet with FDEP Environmental in two (2) meetings at their office to discuss environmental concerns associated with the route. One (1) on-site meeting (for the route) is expected to provide our investigation information of the environmental conditions for permitting purposes. The Engineer will invite this agency as part of each design review meeting, as well as, distribute to them the design review meeting minutes.
- 7.7 FDOT – the Engineer will coordinate the proposed route with FDOT. This task will include data collection requests, responses to design review comments, and correspondence. It is assumed that the Engineer will meet with FDOT in two (2) meetings at their office to discuss the proposed alignment. The Engineer will invite this agency as part of each design review meeting, as well as, distribute to them the design review meeting minutes.
- 7.8 Orlando Environmental – the Engineer will coordinate the proposed route with the City of Orlando's Environmental Section to coordinate the erosion and sediment control plan for approval. This task will include data collection requests, responses to design review comments, and correspondence. It is assumed that the Engineer will meet with the City's Environmental Department in two (2) separate meetings at their office to discuss the proposed erosion and sediment control to comply with City Standards. The erosion and sediment control plan will be updated and distributed to them the minutes from each of the above meetings.
- 7.9 St. John's River Water Management District (SJRWMD)/Army Core of Engineers (ACOE) – the Engineer will coordinate the proposed route with SJRWMD/ACOE. This task will include data collection requests, and correspondence.

Task No. 8- 60% Design and Review Meeting

The Engineer will prepare 60 percent construction documents (drawings and technical specifications) and an opinion of probable construction costs. Drawings will be developed as plan on top half and profile on the bottom half. The scale of 1" = 40' will be used for the horizontal scale and 1"=5' for the vertical scale. It is assumed that a total of 38 general and civil sheets will be developed broken down as follows: twelve (12) new sheets for the revised route; eight (8) of the original sheets will be reviewed and adjusted from the new survey and utility locate data provided from Task 2; seven (7) of the original sheets will remain unchanged; four (4) general sheets; and, seven (7) general detail sheets. A total of 27 plan and profile drawing sheets are anticipated to be developed for the full 34,250 linear feet of 36-inch diameter force main. The Engineer will review, comment and incorporate the City's front end documents for

incorporation into the project manual. The Engineer will coordinate, prepare for and attend one (1) review meeting with the City representatives, project team and agencies. The Engineer will provide and distribute the meeting minutes to the attendees and additional distribution members.

Task No. 9- 90% Design and Review Meeting

The Engineer will prepare 90 percent construction documents (drawings and technical specifications) and an opinion of probable construction costs. The 60% drawings and project manual will be updated from the City's comments and other applicable agency comments. The Engineer will coordinate, prepare for and attend one (1) review meeting with the City representatives, project team and agencies. The Engineer will provide and distribute the meeting minutes to the necessary distribution members.

Task No. 10- 100% Design and Review Meeting

The Engineer will prepare 100 percent construction documents (drawings and technical specifications) and an opinion of probable construction costs. The 90% drawings and project manual will be updated from the City's and other applicable agency comments. The Engineer will coordinate, prepare for and attend one (1) review meeting with the City representatives, project team and agencies. The Engineer will provide and distribute the meeting minutes to the necessary distribution members.

Task No. 11- Permit Application Coordination and Submittal

The Engineer will provide engineering assistance to prepare and submit permit application packages for the following agencies:

- 11.1 FDEP Wastewater – The Engineer will revise and resubmit the completed permit application package for construction of the realigned wastewater force main. The Engineer will revise the application package and submit a draft package for the City's review. The Engineer will receive the City's comments and update the package in one (1) meeting. The final application package will be forwarded to the City for signature and submittal to FDEP's central district. The Engineer will assist with providing responses to one (1) request for additional information developed by FDEP. The permit fee of \$500 is included within this effort.
- 11.2 FDOT - The Engineer will submit a new permit application for Right-of-Way utilization of the force main along SR 50. As part of the original efforts (Task No. 3), the Engineer will assist the City in obtaining the final permit for the SR 408 crossing as part of the permitting services effort. No permit fee is anticipated.
- 11.3 Orlando/FDEP – The Engineer will revise and resubmit the completed SWPPP to the City for re-approval of the new force main route and submittal of this information to FDEP as the NOI after completion of the 100% construction documents. The permit fee of \$400 is included within this effort.

- 11.4 FWC – The Engineer will assist the City in permitting and relocation efforts associated with gopher tortoise findings along the route. Based on the original route, gopher tortoises were identified along the OUC/Orlando Right-of-Way (ROW). The intent was to relocate these gopher tortoises through the trapping technique. The Engineer will re-survey the new route, identify the number of gopher tortoises, develop and submit the permit application with FWC and perform the relocation services. The City will provide for a mitigation site or bank to deposit the displaced tortoises on this project. The permit fee for the permitting and relocation recipient fee for 16 tortoises is included as part of the fee within Task 6.
- 11.5 SJRWMD/Orange County Environmental/FDEP/ACOE – The Engineer will assist the City in developing an environmental resource permit (ERP) to mitigate the affected wetlands based on the new force main route. The original route affected wetlands along the OUC/City of Orlando ROW. It is expected that the same amount or possibly more wetlands will be affected as part of the new force main route. The Engineer will prepare the permit application package from the coordination of the above agencies. The Engineer will assist with one (1) request for additional information in efforts to obtain the wetland mitigation permit. The permit application fees are included as part of the fee within Task 6. Full wetland mitigation fees have not been assessed and not included as part of the overall fee for this scope of services.
- 11.6 Orange County Public Works – The Engineer will develop a draft version of the ROW utilization package for the revised force main route. This information will be submitted to Orange County Public Works for documentation of the intended alignment for the force main at the 30% design level. This permit application will be updated and resubmitted for final approval by Orange County after the successful bidding contractor has been awarded the project. The Engineer will assist the City and the awarded contractor with submittal of this package to Orange County. The Engineer will assist with one (1) request for additional information from Orange County Public Works as part of the final permit application package. Permit fees are to be paid for by the Contractor upon award of the project.

Task No. 12- Coordination Meetings

The Engineer will prepare for and attend three (3) additional coordination meetings with the City during the course of the project design phase. The Engineer will provide meeting minutes and distribute the copies to the meeting attendees and other project team as indicated by the City.

Task No. 13- Bidding Assistance

It is assumed that the City will copy and distribute all bidding documentation to the potential bidders. The Engineer will provide the following items during the course of the bidding phase:

- 13.1 Pre-bid meeting – The Engineer will prepare for and attend the pre-bid meeting. The Engineer will take notes and develop meeting minutes which will be incorporated in an addendum for distribution to the potential bidders.

- 13.2 Addenda – The Engineer will assist the City in responding to potential bidder questions and organizing them into an addendum. It is assumed that the Engineer will develop two (2) addendums for this project during the course of the bidding phase service. The City will distribute all of the final addendums to the plan holders.
- 13.3 Bid Recommendation – The Engineer will assist the City in reviewing the apparent low bidder bid package for completeness. The Engineer will contact the references provided for the apparent low bidder and determine if the contractor is responsive. The Engineer will prepare and submit to the City a letter of recommendation for the apparent low and responsive bidder.
- 13.4 Conform Documents – The Engineer will develop the conformed documents for the project corrected as part of the submitted addenda (Task 13.2). The final conformed documents will be submitted to the City. One (1) signed and sealed conformed record set will be sent to the City for their files.

Task No. 14- Miscellaneous Services

The Engineer will provide miscellaneous engineering services, on as needed basis, through written authorization by the City staff. The upset amount for this task is \$40,000.00.

Task No. 15 - Construction Services

The Engineer will provide construction services for a full 18-month period for the project. The services are as follows:

- 15.1 Prepare for and attend the pre-construction meeting.
- 15.2 Coordinate, log, review and distribute 50 shop drawing and operational and maintenance submittals for the project. Maintain and provide status of the shop drawing log during the course of the construction project.
- 15.3 Prepare for and attend one (1) monthly construction progress meeting during the construction period. Develop and distribute summary of progress meetings to the attendees and project team as designated by the City.
- 15.4 Make periodic site visits to the site to observe the work in progress consisting of one 4-hour visit per week for a total of 72 weeks.
- 15.5 Coordinate, log, review and prepare written responses and issue correspondence in response to 80 requests for information (RFIs). Maintain and provide status of the RFI log during the course of the construction project.
- 15.6 Assist the City in development of one (1) change order for the project.

- 15.7 Participate in one (1) substantial completion and one (1) final completion site visits. The Engineer will develop a deficiency list and assist in development of the substantial and final completion forms.
- 15.8 Develop the record drawings from the contractor's As-Built information. The final product will provide the City with one (1) signed and sealed record set for their files.

Deliverables

The following are the anticipated deliverables for the re-alignment services:

- The Engineer will provide at the 60 and 90% review design stages:
 - Four (4) full size and three (3) half size copies of the drawing sets,
 - Three (3) copies of the technical specifications, and
 - One (1) DVD or CD-ROM of the electronic files (drawings and specifications) in Adobe (pdf) format
- The Engineer will provide at the 100% design review stage:
 - Four (4) copies of the full size drawings and three (3) copies of the half size drawing sets.
 - Three (3) hardcopies of the technical specifications, and
 - One (1) DVD or CD-ROM of the electronic files (drawings and specifications) in Adobe (pdf) format as well as the original MS Word (specifications) and AutoCAD files (drawings).
- The Engineer will provide to the City one (1) executed copy of permit application packages for the subject project. The Engineer will provide one (1) copy of the final permits for the City's files.
- The Engineer will provide to the City one (1) electronic copy of the draft addendums in Adobe (pdf) and MSWord 2010 format as requested by the City. It is assumed that the City will distribute all addenda for this project.
- The Engineer will provide electronic copies of responded RFIs and developed change orders as part of the construction phase for this project. It is assumed that the documents will be in Adobe (pdf) format.

Schedule

Engineer will commence with this scope of work for the re-alignment services upon issuance of the City's written Notice-to-Proceed (NTP).

The survey services will be provided by the City and anticipated to be completed by within 120 days from the Engineer's NTP.

Hector Sanchez
City of Orlando

5/23/2014
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60% Design re-alignment documents will be complete 90 days after completion of the survey.

Completion of the new re-alignment geotechnical subsurface investigation will be complete 120 days after review of the 60% design documents.

90% Design re-alignment documents will be complete 165 days after receipt of the City's comments.

100% Design re-alignment documents will be complete 20 days after receipt of the City's comments.

Permitting activities are expected to occur after the 100% design and prior to bidding in order to secure the construction permits. It is assumed that this will be completed within 90 days after the 100% Design documents are completed.

Bidding is anticipated to be completed within 90 days after City's advertisement of the project. Construction is anticipated to be complete 18 months after the City issues the contractor's notice-to-proceed. The schedule allows for 14 days for the City to review each design submittal. A draft project schedule is provided within Attachment D.

Compensation

The compensation for the re-alignment services is based on a time and materials amount not-to-exceed amount of:

Realignment Design Services	\$743,092.35
Realignment Additional Eng Services	\$40,000.00
Realignment Construction Services	\$164,904.88
<hr/>	
Total Eng Services	\$947,997.23

A breakdown of the above costs is provided in Attachment A with the subconsultant proposals provided in Attachment C.

Very truly yours,

ARCADIS U.S., INC.



Scott C. Shannon, P.E.
Vice President

ATTACHMENT A

Realignment Engineering Services - Attachment A

		\$847,997.23
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City of Orlando
CONSERV I Flow Diversion Force Main - Phase 2

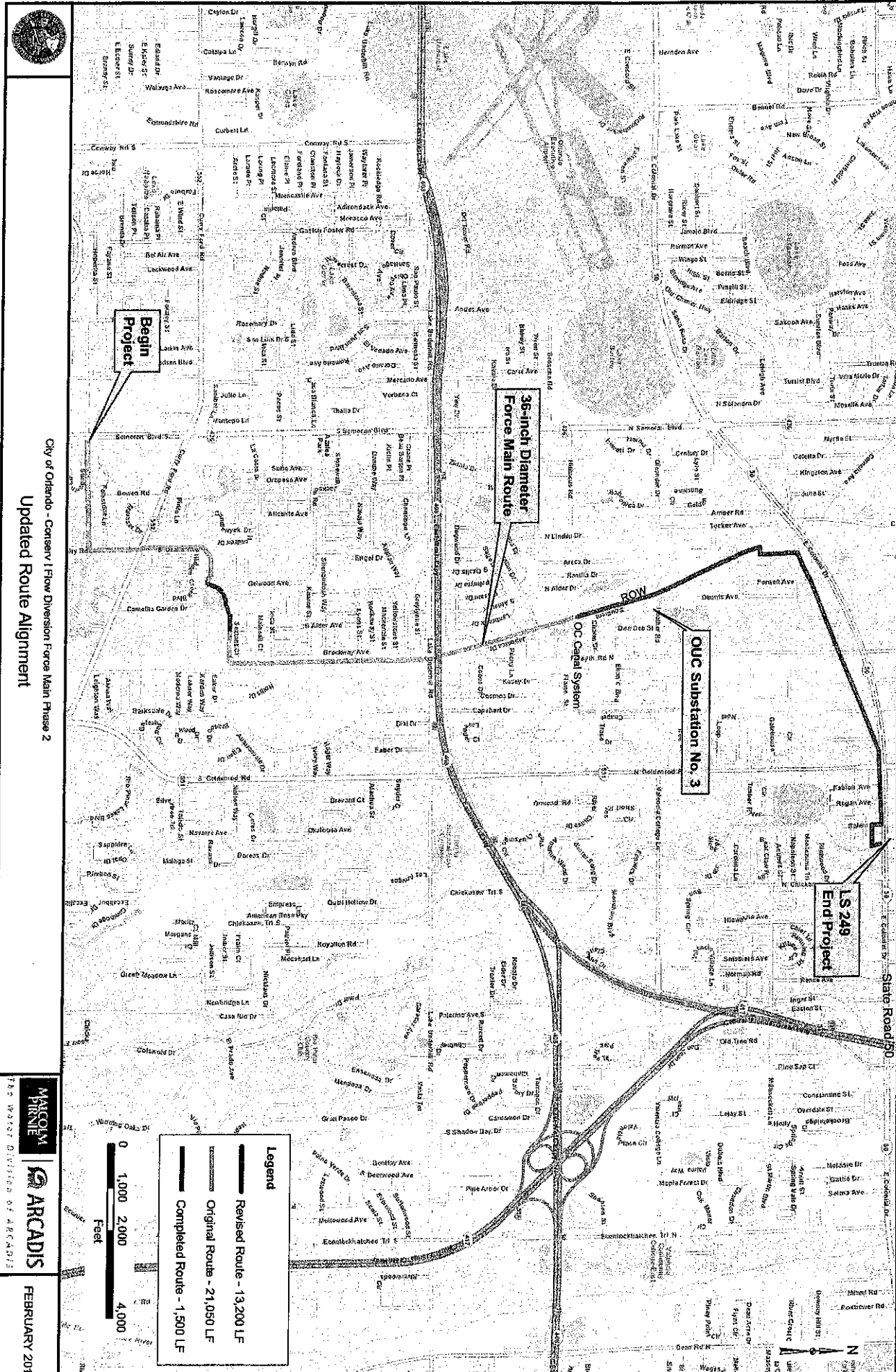
Subconsultant Breakdown - Attachment A

Subconsultant	Service	Type	Percentage of Total
<i>L&S Diversified</i>	<i>Survey</i>	<i>WBE</i>	<i>23%</i>
Total WBE			23%
<i>Antillian (1)</i>	<i>Geotechnical</i>	<i>MBE</i>	<i>7%</i>
<i>Wyche (1)</i>	<i>Public Involvement</i>	<i>MBE</i>	<i>4%</i>
<i>GMB (1)</i>	<i>Transportation Safety</i>	<i>MBE</i>	<i>4%</i>
<i>Grove (1)</i>	<i>Environmental</i>	<i>MBE</i>	<i>8%</i>
Total MBE			23%
Total MBE/WBE			46%

Notes:

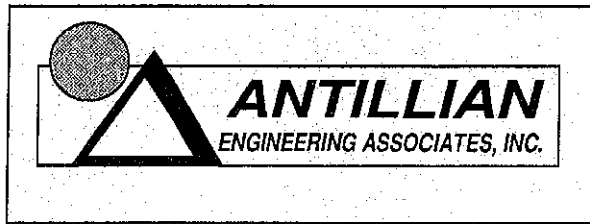
(1) The original subconsultants for this project are either no longer in business or no longer identified by the City as an M/WBE firm. The above MBE companies have been selected to replace the services lost.

ATTACHMENT B



City of Orlando - Consen / Flow Diversion Force Main Phase 2
 Updated Route Alignment

ATTACHMENT C



July 18, 2013

Arcadis U.S., Inc.
2301 Maitland Center Parkway, Suite 244
Maitland, Florida 32751

Attention: Dwayne Kreidler, P.E.

Reference: Proposal for Geotechnical Engineering Investigation
Conserv I Force Main Redesign
Orlando, Florida

Dear Mr. Kreidler:

Antillian Engineering Associates, Inc. is pleased to submit this proposal to provide geotechnical engineering services for the above-referenced project. It was prepared in response to your request as discussed earlier today.

SCOPE OF SERVICES

The City of Orlando is planning to install a new section of sanitary sewer force main from the intersection of Semoran Boulevard (SR 436) and East Grant Street to a point just west of the East Colonial Drive (SR 50) crossing over the Little Econlockhatchee River. A portion of the proposed alignment near its northern end was relocated farther to the west into an area that was not previously explored, so a geotechnical engineering investigation of the revised route is needed. The estimated length of the realigned segment is about 12,400 feet but when the route was plotted, the total length appeared to be closer to 14,000 feet.

It is our understanding that the major portion of the pipeline will be installed within ten feet of the existing ground surface using conventional cut-and-cover construction methods. However, we have been advised that there is some doubt as to the accuracy of the original construction drawings, so deeper exploration was requested. In addition, to reduce the inconvenience of open-cut crossings at major streets, jack-and-bore crossings are anticipated at Forsythe Road, Old Cheney Highway and SR 50 (to connect to an existing main). A section of 42-inch HDPE/36-inch PVC line about 2,700 feet long will also be installed by horizontal directional drilling (HDD) along the southern side of Colonial Drive. The HDD section will extend east from a point near the intersection of Flowerdale Avenue and Old Cheney Highway, beneath Goldenrod Road to Salem Drive, south along Salem Drive to an unpaved driveway, east along the driveway to the west bank of the Little Econlockhatchee River and north along the bank of the river to Colonial Drive.

We propose to provide geotechnical engineering services to support the design of the realigned segment. The overall scope of services would be separated into tasks as follows:

Task 1 - Site Reconnaissance/Field Investigation - Before commencing the field investigation, we would request marking of existing underground service facilities that may be affected by the subsurface exploration program, in accordance with Florida statutes. That activity will be supplemented by field meetings with representatives as needed to confirm utility locations.

Test borings would be drilled to a depth of 15 feet each along the cut-and-cover pipeline route as discussed with Arcadis. Based on a maximum spacing of 500 feet between borings and exploration at each location where the alignment changes direction, we anticipate that 20 borings would be needed. Based on the anticipated number of jack-and-bore crossings and the estimated length of the HDD installation, we estimated 13 borings to 30 feet.

The Standard Penetration Test (SPT) with split-spoon soil sampling would be conducted in accordance with ASTM D 1586. Tests would be conducted continuously from one foot below the existing ground surface to ten feet and then at five-foot intervals the indicated completion depths.

Soils penetrated during the drilling operations would be logged in the field. Representative samples would be sealed in clean, airtight containers for transportation to our Orlando office. The groundwater level encountered at each boring location would be measured and recorded on the field logs. At the completion of the drilling program, the borings would be backfilled with soil.

Task 2 - Laboratory Testing - The recovered soil samples would be examined in our office by a geotechnical engineer to confirm the descriptions on the field logs and classify the soils visually. Laboratory testing would consist of 80 single-sieve gradation analyses, 8 Atterberg limits tests, 12 organic content tests and 20 natural moisture content tests.

Task 3 - Engineering Services - We would perform the following services:

- review available information to develop a general understanding of the proposed construction
- compile field and laboratory test data with the available information to characterize subsurface conditions
- evaluate the suitability of the subsurface conditions for the proposed construction
- prepare final boring logs, maps and plans
- prepare a geotechnical engineering report

The report would contain a summary of available information pertaining to the proposed force mains, appropriate surface and subsurface characterization, a summary of the laboratory test data and recommendations for earthwork (including jack-and-bore or HDD operations) excavation safety, groundwater control and other concerns as appropriate. The report would be sealed by a Professional Engineer registered in Florida.

Task 4 - Construction-Phase Testing Services - We would perform construction quality assurance (CQA) testing of soils and concrete along the entire pipeline. The fee for CQA services was estimated using a total project length of 35,050 LF, i.e., 21,050 LF on the original pipeline route shown on the plan dated February 2013 and 14,000 LF on the realigned route as discussed above. The section of completed route (1,500 LF) shown on the plan was not included.

We would conduct in-place density testing of the compacted backfill. For purposes of this proposal, we estimated 30 modified Proctor compaction tests and 1,200 field density tests. A minimum charge of four (4) tests will be applied for each field visit. Standby time is not anticipated but will be billed if incurred. Density tests of material not meeting the specifications will be billed, as will any retests that may be needed because of failing density tests. The technician would conduct slump and temperature testing of fluid concrete and mold 4 x 8 concrete cylinders in the field as needed. The cylinders would be taken to the laboratory the following day for curing. Compressions strength testing would be conducted at 7 days and 28 days. For purposes of this estimate we have assumed 30 sets of cylinders.

We require 24 hours advance notice to ensure that a technician can be dispatched to the site when needed. At the end of each site visit, a handwritten field report would be left on site with the City representative. Final test reports would be typed for review by a professional engineer registered in Florida before being signed and sealed. Test reports would be submitted to you for distribution to the City and for your files.

COMPENSATION FOR SERVICES

We propose to provide the described services for a not-to-exceed (time and materials) fee of \$67,055.28 (Sixty-Seven Thousand Fifty-five Dollars and Twenty-eight Cents). An itemized breakdown of the fee is attached as Appendix A. The fee represents our best estimate of the scope of services needed to satisfy the requirements of the project. If additional engineering services are needed, they would be provided at the unit rates shown in the estimate. We would not exceed the estimated fee without receiving your authorization to do so.

SCHEDULE

We can begin work on this project within one week of receiving your notification to proceed. The field investigations should take about three weeks, including the time needed to locate underground utilities. A report would be submitted within five weeks after completion of the field investigation.

LIMITATIONS

The work on this project will be performed in general accordance with accepted procedures for the practice of geotechnical engineering. Please call if you have any questions or if you need additional information.

Respectfully submitted,

ANTILLIAN ENGINEERING ASSOCIATES, INC.

Peter G. Suah, P.E.
Principal Engineer/President

Attachments: Appendix A - Fee Estimate

ANTILLIAN ENGINEERING ASSOCIATES, INC.

**APPENDIX A
FEE ESTIMATE
CONSERV I FORCE MAIN REDESIGN**

DESCRIPTION	UNIT	QTY	RATE	TOTAL
Field Investigation				\$ -
Crew & Equipment Mobilization, ATV Rig	per site	1	\$550.00	\$ 550.00
SPT Borings, Force Main, 20 to 15 ft	LF	300	\$12.00	\$ 3,600.00
SPT Borings, Jack and Bore, Forsythe Rd, 2 to 30 ft	LF	60	\$12.00	\$ 720.00
SPT Borings, Jack and Bore, Old Cheney Hwy, 2 to 30 ft	LF	60	\$12.00	\$ 720.00
SPT Borings, Jack and Bore SR 50 Crossing, 2 to 30 ft	LF	60	\$12.00	\$ 720.00
SPT Borings, HDD St. 361+00 to 379+00, 4 to 30 ft	LF	120	\$12.00	\$ 1,440.00
SPT Borings, HDD around Discount Auto, 3 to 30 ft	LF	90	\$12.00	\$ 1,080.00
Drill Rig and Crew (relocation/standby/traffic, etc.)	hours	8	\$180.00	\$ 1,440.00
Signs/Barricades for MOT	days	4	\$300.00	\$ 1,200.00
Engineer Intern (utility location, field coord./supervision)	hours	24	\$71.76	\$ 1,722.24
Laboratory Testing				
Visual Exam/Stratification/sample prep	each	100	\$10.00	\$ 1,000.00
Grain Size Analysis - Single Sieve	each	80	\$30.00	\$ 2,400.00
Organic Content	each	12	\$30.00	\$ 360.00
Moisture Content	each	20	\$10.00	\$ 200.00
Atterberg Limits	each	8	\$90.00	\$ 720.00
Engineering Services				
Project Manager	hours	28	\$129.38	\$ 3,622.64
Engineer Intern	hours	80	\$71.76	\$ 5,740.80
CADD Operator/Draftsperson	hours	40	\$80.49	\$ 3,219.60
Construction QA Services				
Modified Proctor Tests	each	30	\$110.00	\$ 3,300.00
In-place Density Tests (minimum four tests per trip)	each	1200	\$25.00	\$ 30,000.00
Concrete Cylinders (set of four)	each	30	\$110.00	\$ 3,300.00
Concrete Cylinders (additional cylinders)	each	0	\$30.00	\$ -
Sr. Engineering Technician	hours	0	\$55.00	\$ -
				<u>\$ 67,055.28</u>



L & S Diversified

Professional Surveyors and Mappers

March 8, 2014

L & S Proposal No. 14.182

Arcadis

Dwayne Kreidler, PE

Senior Environmental Engineer

2301 Maitland Center Parkway, Suite 244

Maitland, FL 32751

USA

Subject: City of Orlando - Conserv I Flow Diversion Phase 2

Dear Mr. Kreidler,

We appreciate your consideration of L&S Diversified, LLC to provide professional surveying services for the above referenced project. Below we have outlined a proposed schedule of services and the associated fees for this project.

SCOPE OF SERVICES

L & S will provide surveying services for the engineering design of Conserv I Flow Diversion Force Main Phase 2 Project. The scope of services covered in this proposal was provided by the Design Engineer in a meeting at the offices of Arcadis on Tuesday, March 4, 2014 and subsequent email correspondence.

The scope is summarized below, and provided in attachments Exhibit "C" – Dwayne Kreidler Email and Exhibit "D" – Updated Route Alignment.

Part 1

Topographic and Utility Survey – 30' swath along the "Original Route".

- a. *Beginning at the SE intersection of Semoran and Grant to existing force main at approx. Sta 61+50.*
- b. *No survey required at existing force main from approx. Sta 61+50 to 75+50.*
- c. *Continue from 75+50 to 165+00.*

Description is east side of SR 436 at Grant St., Grant St from SR 436 to Raper Dairy Rd, Raper Dairy from Grant to Curry Ford, Oxalis from Curry Ford to LS Site, No survey within park (FM already completed), survey Chickasaw (see attached map), OUC easement from Chickasaw Elementary to OC Canal location.

- d. *Locate all improvements on the Chicksaw Elementary Parcel adjacent to route. (See attached area on elementary school sight), provide location of building and new pavement front area.*

Part 2

Topographic and Utility Survey – full width of right of way along the "Revised Route".

- a. *Beginning at the OC Canal to State Road 50.*

Description is OUC easement from OC Canal to south end of Meadow Ln, new easement from OUC ROW to Meadow Ln, Meadow Ln to Old Cheney Hwy, SR 50 cross to north side for J&B, East on south side of SR 50 to Salem Dr., South on Salem Dr to OC easement, OC easement from Salem to Canal R/W, Canal R/W from OC lift

L & S Diversified, LLC

Principal
Sherry Lee Manor, PSM

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Winter Park, FL 32792
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station site to existing casing under SR 50. (See map of SR 50 crossing for area to be included).

**All topographic data will be based on NAVD 88 datum and any coordinate values (N, E) will be in Florida State Plane East. Include apparent R/W and easements along the full route, control points at 1000 foot intervals and at all changes in direction, control drawing showing pertinent x,y,z data., need a DTM with one-foot contour line.*

Part 3

*Utility Designations including GPR for the "Revised Route" and 100 soft digs for full route. (Assumed 135,000' of buried utilities and 100 soft dig locations.) **This portion of the Scope will be performed by a sub-consultant.***

Part 4

Locate wetland flags provided by Arcadis. Prepare exhibits and legal description as needed for wetland mitigation.

Part 5

Locate Geotechnical Borings (approximately 35 borings) for "Revised Route" area only.

Part 6

Control Survey for entire route. Coordinate with the Design Engineer and prepare survey control sheets (construction line and ties to project control points) for Construction drawings.

Part 7

- a. Easement mapping and legal description between the OUC ROW and Meadow Lane.*
- b. Additional Sketches for temporary construction easements and other uses as required.*

Cost:

L & S's estimated fee includes the cost to provide labor, materials and equipment to complete the scope of services covered in this proposal. Invoices shall be submitted monthly, in sufficient detail and with supporting documentation to show the associated cost for time and materials.

Part	Description	Amount
1,2	Topographic and Utility Survey	\$116,731
3	Utility Designation and Test Holes (by others)	\$81,850
4	Wetland Survey and Sketches	\$3,280
5	Geotech Boring Survey	\$2,400
6	Survey Control Drawings	\$11,550
7a	Easement Sketch and Legal Description – OUC ROW / Meadow Lane	\$300
7b	Additional Sketches and Legal Descriptions - As Required	\$3,540
Total Estimated Cost (Time and Materials)		\$219,651



Performance:

All surveying services and work performed will be in accordance with the State of Florida Minimum Technical Standards, as set forth by the Board of Professional Surveyors and Mappers, Chapter 5J-17, Florida Administrative Code and per Section 472.027, Florida Statutes or the City of Orlando Engineering and Surveying Standards, whichever is more stringent.

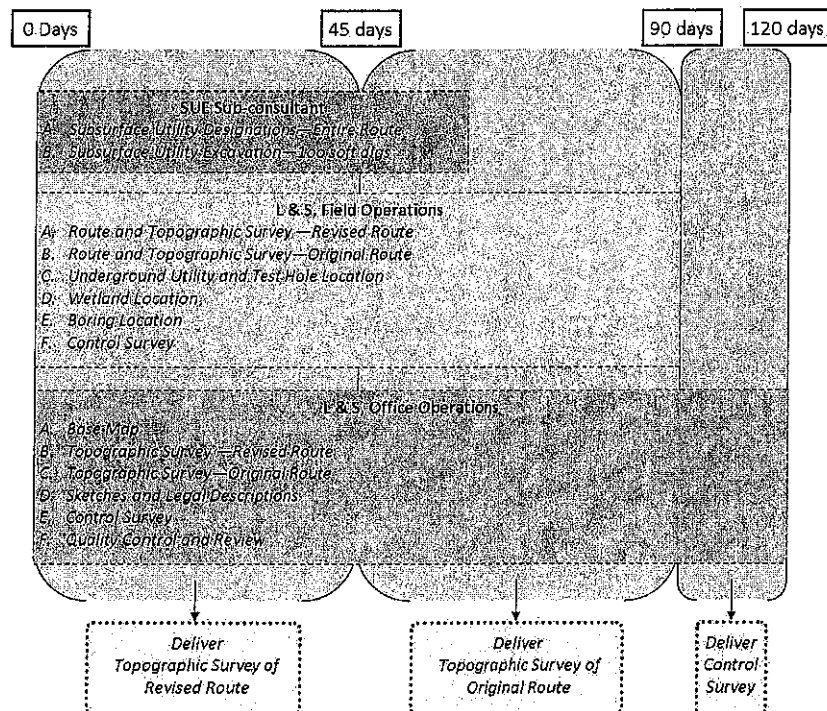
Schedule:

L & S will begin the Survey on the subject property within 5 working days after receipt of your executed Notice to Proceed (NTP). L & S will coordinate and schedule with the Design Engineer and the City of Orlando to maximize the work performance and expedite the delivery of the field data, surveys, sketches and legal description, etc. to aid in the design development and production of construction plans.

The anticipated time required to complete the scope of services is 120 days.

Below is a summary of our performance schedule:

City of Orlando Conserv I Flow Diversion Phase 2, Surveying Performance Schedule





Deliverables:

Base Map (.dwg format)

- The base map will show the geometry and recording information for all right-of-ways, platted lots and tracts, parcels, and easements along the routing described in Parts 1 and 2 of the scope.
- All recovered monuments and control points will be displayed and referenced to the construction line by station offset and/or coordinate values.
- All coordinates will be in Florida State Plane East and elevations referenced to the NAVD 88 datum.
- All topographic survey data will be presented in an adequate scale to show detail and be legible on the final construction plans.
- All survey data will be layered according to L & S layer naming protocols, which will be provided to the Design Engineer.
- All topographic survey data including, data collected points (x,y,z) and DTM files.

Topographic Survey

- Signed and Sealed copies as required by the Design Engineer or the City of Orlando.
- Topographic data will included but not limited to 100' cross sections along right-of-ways, all improvements such as roadways with described surface, structures, utilities, fence lines, and landscaped areas.
- Topography will be displayed at one foot contours
- The topographic survey will include a cover sheet with all surveyor's notes, datum and horizontal control references, legend, sheet index and key. The subsequent sheets will present the topographic data at an adequate scale to show detail and be legible on the final construction plans.

Control Survey

- Signed and Sealed copies as required by the Design Engineer or the City of Orlando.
- The survey control sheets will include the overall construction line geometry for the entire designed route, station offsets and geometric ties to control points and reference monumentation.
- The control sheets will include a cover sheet with all surveyor's notes, datum and horizontal control references, legend and sheet key. The subsequent sheets will present the control data at an adequate scale to show detail and be legible on the final construction plans.

Sketches and Legal Descriptions

- The sketches and legal descriptions for temporary construction easements, wetland mitigation, and other uses as required by the Design Engineer or the City of Orlando will be presented in the format as required by the governing jurisdiction.
- All sketches will include ties to a well-documented reference monument and a metes and bounds description.



Additional Services:

If **Arcadis or the City of Orlando** desires to change or expand upon these proposed services, an additional fee shall be negotiated. This renegotiation shall be accomplished prior to commencing the additional work, and may be necessary for any of the following services which are not a part of this contract:

Locating and/or flagging Flood Zone Line or Normal High Water Line (NHWL), tidal records, or locating 'O' or specific elevations, Research and ordering additional Maps, Records or Materials necessary for completing these specified tasks; client-imposed requirements not covered herein; Additional Certifications or Affidavits not specified herein; Elevation Certifications; Wetland Delineation or Location; sub-surface Excavation or Underground Utility Location; Extensive Title Review and Plotting of Easements; Offsite Surveys or Sketches; Vertical Topographic information unless outlined in this proposal; Requests by Third Parties (Buyer's Attorney, Seller's Attorney, Lender or Lender's Counsel, Real Estate Agents, Title Company Personnel, etc.) for additions, deletions or revisions to be made to the survey drawings or maps before or after initial submittal to client; Additional Meetings and Errands not covered herein which are necessary to complete these specified tasks; Client-Authorized on-site instruction given to field crew for extra field work not covered herein; Client-approved overtime; Additional ALTA Table A Items.

Reimbursables such as overnight mailings, sending electronic files, copying charges, blueprinting costs, plotting of extra drawings not covered herein, delivery, shipping, or rush charges, etc. will be billed as an Extra cost on a Time, Materials and Expense basis.

It may be necessary for the Project Manager to call the client to receive verification and authorization for Extra Costs stated above in the preceding paragraph, and may further require the client to sign an Additional Work Authorization Form for any out-of-scope requests.

All public entity or jurisdictional agency fees are to be paid directly by the client prior to obtaining approvals or permits. These fees include, but are not limited to, platting, impact, re-zoning, permitting, review and application fees. L & S Diversified has no control over the procedures of public entities or jurisdictional agencies, and therefore, cannot guarantee timing and outcome of permits and entitlements related to this site/project.



Please see attached Exhibit "A" - Standard Provisions of Agreement for Professional Services and Exhibit "B" - Hourly Rates in addition to this Agreement.

The following additional provisions are included in this contract:

1. The terms of this agreement shall be valid for client acceptance for a period of sixty (60) days from the date of execution by L&S Diversified, LLC after which time this contract offer becomes null and void if not accepted formally (evidenced by receipt of an executed copy of this document).
2. This agreement may be terminated by either party within fifteen (15) days written notice. In the event of termination, L&S Diversified, LLC shall be compensated to the date of termination, including direct expenses then due.
3. All rates and fees quoted in this document shall be effective for a period of twelve (12) months, after which time they may be renegotiated with the client.
4. The client will pay invoices upon receipt and understands interest charges of 1.5% per month will be applied to any unpaid balance. L&S Diversified, LLC may elect to stop work until payment is received. If work is stopped for thirty (30) days or more, L&S Diversified, LLC may be compensated for start-up costs when work resumes.
5. Upon client request, we will contract and/or coordinate with applicable transportation, environmental, geotechnical, and engineering consultants, and will rely upon their work; however, L&S Diversified, LLC assumes no liability for the accuracy of their work.

Thank you for this opportunity and we look forward to working with you on this exciting new project. Should you have any questions, please do not hesitate to call.

Sincerely,
L & S Diversified, LLC

Sherry Lee Manor, P.S.M.
President

March 8, 2014

Attachments:

~~Exhibit "A" - L & S Standard Provisions of Agreement for Professional Services~~ Omitted
Exhibit "B" - L & S 2014 Fee Schedule
~~Exhibit "C" - Dwayne Kreidler Email~~ Omitted
Exhibit "D" - Updated Route Alignment



L & S Diversified

Professional Surveyors and Mappers

When it is not
in our power to
follow what is true,
we ought to follow
what is most
probable.
~Rene Descartes

2014 L & S DIVERSIFIED FEE SCHEDULE

The following is a schedule of hourly rates and charges for professional surveying services offered
by L & S Diversified, LLC.

Drafting

Drafting Technician \$95.00 per hour

Field Operations

Two-Person Crew \$120.00 per hour

Three-Four Person Crew \$150.00 per hour

General Administration

Administrative Assistant \$75.00 per hour

Management

Senior Professional Surveyor and Mapper (PSM) \$175.00 per hour

Project Manager (PSM) \$160.00 per hour

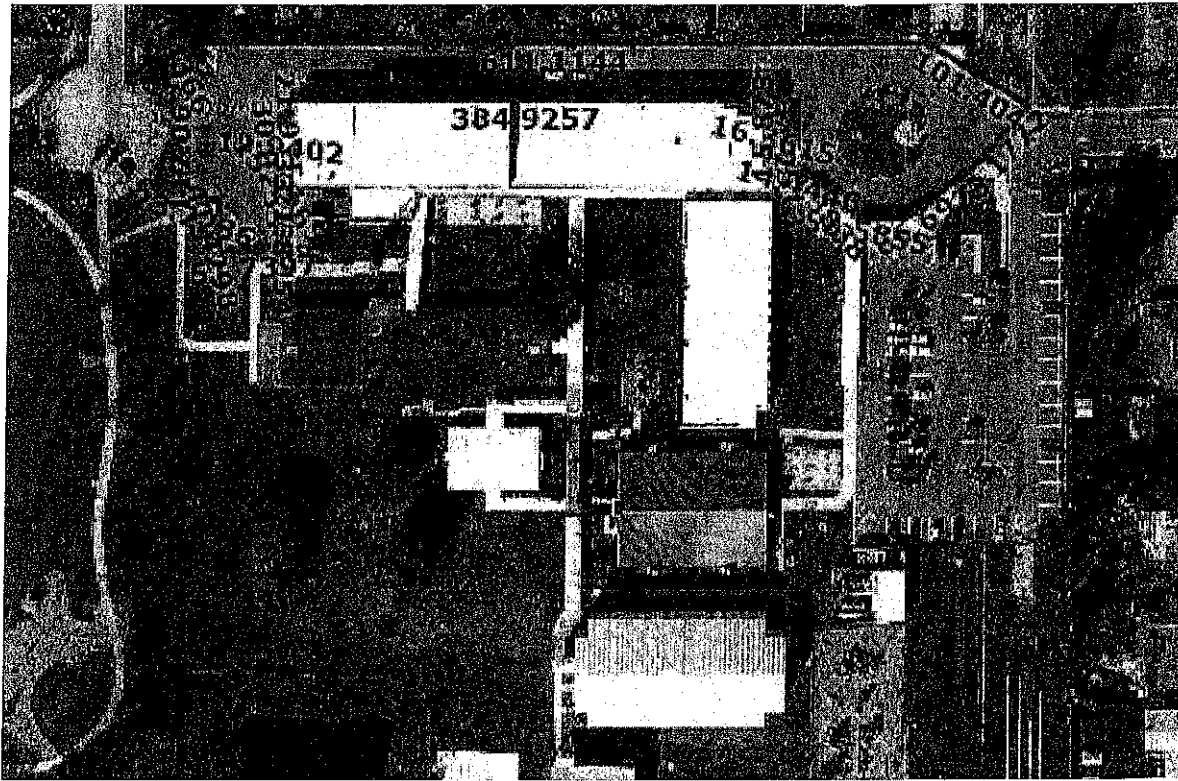
Expert Witness (PSM) \$175.00 per hour

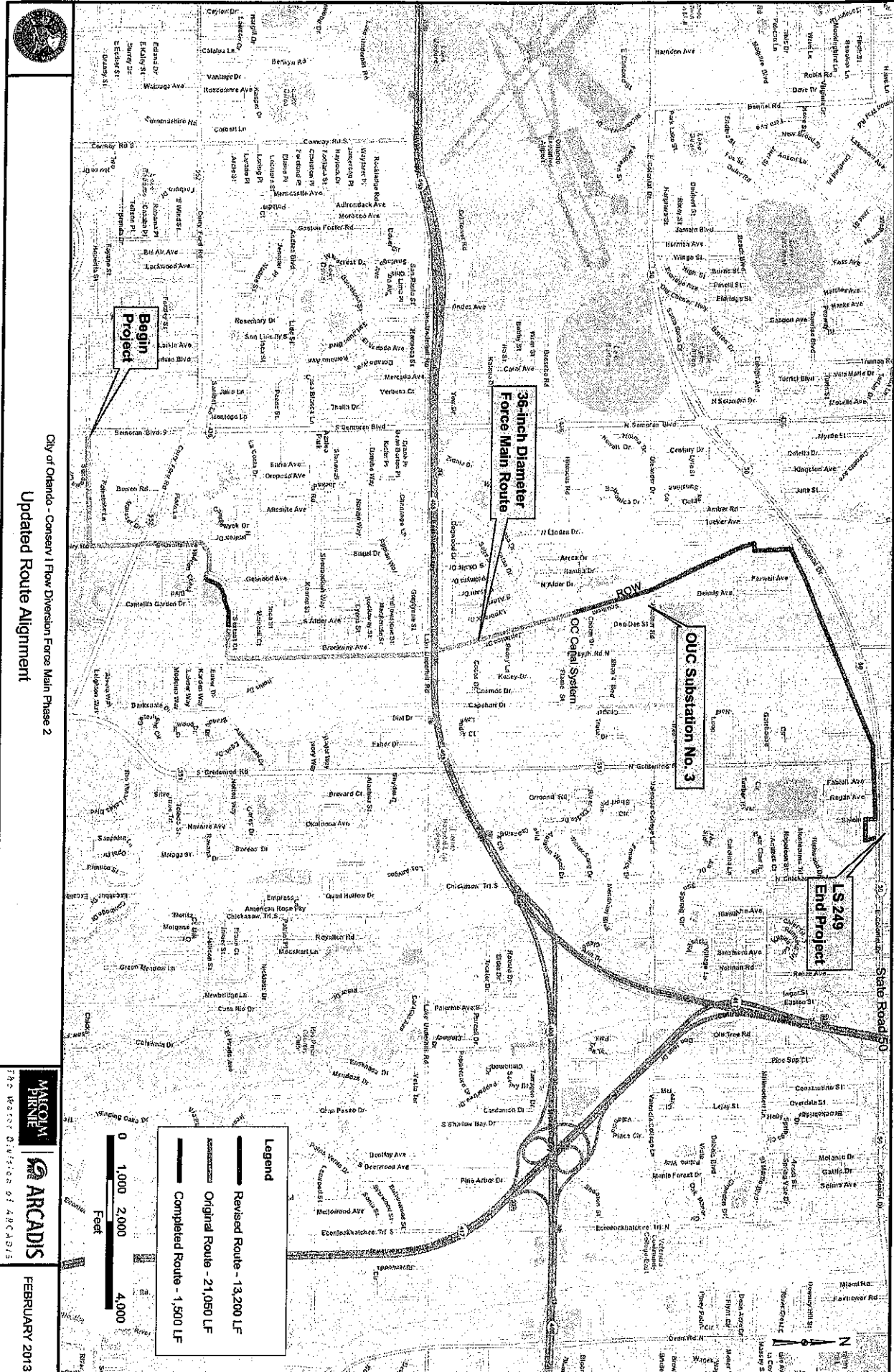
L & S Diversified, LLC

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GMB ENGINEERS & PLANNERS, INC. August 8, 2012

Mr. Dwayne R. Kreidler, P.E.
Project Environmental Engineer
Malcolm Pirnie Arcadis
2301 Maitland Center Parkway, Suite 244
Maitland, FL 32751

RE: Traffic Control Plan Services for the City of Orlando Conserv 1 Flow
Diversion Force Main – Phase 2
Project Mo. 2122-C
(GMB Project No. 12-096.01)

Dear Mr. Kreidler:

We at GMB Engineers & Planners, Inc. are pleased to submit this scope of services and fee proposal to provide traffic engineering services associated with the City of Orlando Conserv 1 Flow Diversion Force Main Phase 2 project. Specifically, this proposal is intended to provide a Traffic Control Plan associated with this project. The Traffic Control Plan will be prepared to conform with the City of Orlando Public Works, Orange County and FDOT requirements.

For purposes of discussion, Malcolm Pirnie Arcadis will be referred to as the Client or Client-representative, GMB will be referred to as the Consultant, and the Traffic Detour Plan will be referred to as the project.

SCOPE OF SERVICES

Task 1: Traffic Control Plan and Permitting

The Consultant will modify the traffic control plan previously developed for this project. The previous TCP was developed for eight phases; the first five phases to the south of the project between Grant Street and north of Yucatan (Sta 165+00) will remain the same. Since we will take over as engineer of record, we will perform the necessary review, field checks and calculations to make sure the information shown on the first five phases of the TCP are brought up to current field conditions and design standards. From Sta. 165+00 thru the project's end including a crossing to the north of SR 50 (Colonial Drive), new TCP plan sheets and/or details will be developed. The new TCP plan sheets will show how the affected traffic and pedestrian flow movements will be re-routed along the surrounding street network due to the

GMB Orlando
2602 E. Livingston St.
Orlando, FL 32803
Office: 407.898.5424
Fax: 407.898.5425

*Mr. Dwayne Kreidler, P.E.
Traffic Engineering Services for City of Orlando Conserv I Force Main Phase 2 TCP
August 8, 2012*

proposed construction. The TCP plan sheets will use directional arrows to indicate the traffic and pedestrian routes including complementary construction signs and devices. We will conduct drive-by field inspections to ensure that the affected routes have the appropriate existing traffic control devices and capacity to accommodate affected vehicular traffic and pedestrian flows.

The Consultant will prepare the traffic control plan in accordance with the City of Orlando Public Works approval requirements. The TCP will also be submitted to Orange County and the FDOT as proposed construction will impact their respective infrastructure. The traffic control plan will include a general notes sheet, phasing notes, and plan sheets or typical details.

The plans will be prepared on 11-in. x 17-in. half-size plan sheets and will be submitted to the City of Orlando Public Works, Orange County and FDOT for permitting. Review comments received from these agencies will be incorporated to prepare the final signed and sealed traffic control plan set.

Task 2: Post Design Services

Task 2.1—Project Meetings

GMB staff shall attend the Pre-Construction Conference and respond to questions related to the plans, quantities and specifications. We will also participate and attend a field meeting with affected utility owners and the maintaining agency to inform them about the project prior to the start of construction. This field meeting will allow the affected utility companies to express their concerns, if any, about the project and discuss how we can adjust the plans if necessary.

Task 2.2 – Requests for additional information

GMB staff shall answer questions relative to the intent of its plans, quantities and specifications that are submitted prior to or during construction of the project. Formal written responses will be prepared for each Request for Additional Information within two weeks of receipt.

Task 2.3 – Minor Plans Revisions



Mr. Dwayne Kreidler, P.E.

Traffic Engineering Services for City of Orlando Conserv I Force Main Phase 2 TCP

August 8, 2012

GMB staff shall revise our TCP plans as necessary to clarify the intent of the design during construction. Revisions also may be required as a result of questions from the Pre-Construction Conference or changes in field conditions since the design was completed. Plan revisions will be completed within two weeks of receipt of request.

SCHEDULE

The Consultant will work as expeditiously as possible to meet the Client's schedule for phase submittal.

FEES

We will complete the services described in Task 1 and 2 for a not-to-exceed fee shown in the attached worksheets. Task 1 is estimated at \$28,582.10 and Task 2 is estimated at \$4,817.61 for a total not-to-exceed fee estimate of \$33,399.71. Services provided beyond these tasks will be billed on an hourly basis and will not be performed without receiving authorization from the Client. Permitting fees required by the City of Orlando, if any, are not covered in this fee proposal.

If you are in agreement with this proposal, you may execute the agreement by signing below and returning one copy for our files. We look forward to working with you.

Sincerely,

GMB ENGINEERS & PLANNERS, INC.



Dante A. Gabriel, P.E.

MALCOLM PIRNIE ARCADIS

BY: DWAYNE KREIDLER, P.E.
DULY AUTHORIZED TO BIND SAME





GMB ENGINEERS & PLANNERS, INC.

Fee Quotation Proposal
CITY OF ORLANDO
Conserv I Flow Diversion Force Main – Phase II
Project No. 2122-C

As requested, the following is our information regarding overhead multipliers and personnel hourly rates for projects with the City of Orlando. These rates will be used throughout the duration of the contract:

Base Rate	100.00%
Overhead & Fringe Benefits	<u>164.07%</u>
Subtotal	264.07%
Profit (13.23%)	<u>34.93%</u>
Overall Multiplier	299.00%

Individual classification for personnel hourly rates are as follows:

<u>Staff Classification</u>	<u>Raw Hourly Rate</u>	<u>Overall Multiplier</u>	<u>Billable Rate</u>
Chief Engineer	\$69.71	2.99	\$208.43
Project Engineer	\$38.44	2.99	\$114.94
Engineer	\$28.97	2.99	\$86.62
Engineering Intern	\$26.23	2.99	\$78.43

Under penalty of perjury, I declare that I have read the foregoing and the facts stated in it are true. False statements may result in criminal prosecution for a felony of the third degree as provided for in Section 92.525(3), Florida Statutes.

Aug. 8, 2012

Dante Gabriel, P.E.

President

Date

GMB Orlando
2602 E. Livingston St.
Orlando, FL 32803
Office: 407.898.5424
Fax: 407.898.5425

ESTIMATE OF WORK EFFORT AND COST - SUBCONSULTANT

Name of Project: City of Orlando CONSERV I Force Main Phase 2
 County: ORLANDO
 FPN: 2122 - C

Consultant Name: GMB Engineers & Planners, Inc.
 Consultant No.: 12-096.01
 Date: 8/8/2012

FAP No.:

Estimator: Dante A. Gabrel, P.E.

Staff Classification	Total Staff Hours From SH Summary	Chief Engineer	Project Engineer	Engineer	Engineer Intern	Staff Classification 5	Staff Classification 6	Staff Classification 7	Staff Classification 8	Staff Classification 9	Staff Classification 10	Staff Classification 11	Staff Classification 12	SH By Activity	Salary Cost By Activity	Average Rate Per Task
3. Project General and Project Common Tasks	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
4. Roadway Analysis	105	18	28	56	63	0	0	0	0	0	0	0	0	105	\$8,121	\$33.09
5. Roadway Plans	104	10	16	31	47	0	0	0	0	0	0	0	0	104	\$3,498	\$33.08
6. Drainage Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
7. Utilities	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
8. Environmental Permits, Compliance & Clearances	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
9. Structures - Misc. Tasks, Digs, Non-Tech.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
10. Structures - Bridge Development Report.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
11. Structures - Temporary Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
12. Structures - Short Span Concrete Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
13. Structures - Medium Span Concrete Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
14. Structures - Structural Steel Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
15. Structures - Segmental Concrete Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
16. Structures - Movable Span	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
17. Structures - Retaining Walls	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
18. Structures - Miscellaneous	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
19. Signing & Pavement Marking Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
20. Signing & Pavement Marking Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
21. Signalization Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
22. Signalization Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
23. Lighting Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
24. Lighting Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
25. Landscape Architecture Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
26. Landscape Architecture Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
27. Survey (Field & Office Support)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
28. Photogrammetry	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
29. Mapping	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
30. Geotechnical	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
31. Architecture Development	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
32. Noise Barriers Impact Design Assessment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
33. Intelligent Transportation Systems Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
34. Intelligent Transportation Systems Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
Total Staff Hours	289	28	44	87	130	0	0	0	0	0	0	0	0	289	\$9,688.23	\$33.08
Total Staff Cost		\$1,951.88	\$1,691.36	\$2,620.39	\$3,395.60	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		\$9,688.23	

Notes:
 1. This sheet to be used by Subconsultant to calculate its fee.

SALARY RELATED COSTS:	
OVERHEAD:	198.00%
OPERATING MARGIN:	0%
FCOM (Facilities Capital Cost Money):	0.000%
EXPENSES:	0.00%
SUBTOTAL ESTIMATED FEE:	\$28,582.10
Survey (Field)	0
Geotechnical Field and Lab Testing	\$0.00
SUBTOTAL ESTIMATED FEE:	\$28,582.10
Optional Services	\$0.00
GRAND TOTAL ESTIMATED FEE:	\$28,582.10

Project Activity 4: Roadway Analysis

Estimator: Dante Gabriel, P.E.

City of Orlando CONSERV I Force Main Phase 2
2122 - C

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
4.1	Typical Section Package	LS	1	0	0	
4.2	Pavement Design Package	LS	1	0	0	
4.3	Access Management	LS	0	0	0	
4.4	Horizontal/Vertical Master Design Files	LS	1	0	0	
4.5	Cross Section Design Files	LS	1	0	0	
4.6	Traffic Control Analysis	LS	1	40	40	40 hrs for analysis/revisions to existing TCP
4.7	Master TCP Design Files	LS	1	94	94	12400 LF/5280 = 2.35 mi x 40 hrs/mi = 94 hrs
4.8	Design Variations and Exceptions	LS	1	0	0	
4.9	Design Report	LS	0	0	0	
4.10	Computation Book & Quantities	LS	1	0	0	
4.11	Cost Estimate	LS	1	0	0	

Project Activity 4: Roadway Analysis

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
4.12	Technical Special Provisions	LS	0	0	0	
4.13	Other Roadway Analysis	LS	0	0	0	
Roadway Analysis Technical Subtotal						
4.14	Field Reviews	LS	1	32	32	2 visits x 8 hrs x 2 people = 32 hrs
4.15	Technical Meetings	LS	1	0	0	
4.16	Quality Assurance/Quality Control	LS	%	5%	7	
4.17	Independent Peer Review	LS	%	0%	0	
4.18	Supervision	LS	%	5%	7	
Roadway Analysis Nontechnical Subtotal						
4.19	Coordination	LS	%	3%	5	
4. Roadway Analysis Total						
					185	

Technical Meetings

Typical Section	EA	0	0	0	0
Pavement	EA	0	0	0	0
Access Management	EA	0	0	0	0
15% Line and Grade	EA	0	0	0	0
Driveways	EA	0	0	0	0
Local Governments (cities, counties, MPO)	EA	0	0	0	0
Work Zone Traffic Control	EA	0	0	0	0
30/60/90/100% Comment Review Meeting	EA	0	0	0	0
Other Meetings	EA	0	0	0	0
Subtotal Technical Meetings					0
Progress Meetings (if required by FDOT)	EA	0	0	0	0
Phase Review Meetings	EA	0	0	0	0
Total Meetings					0

Carries to 4.15

Note: Project Manager attendance at progress, phase and field review meetings are manually entered on General Task 3

Estimator: Dante Gabriel, P.E.

Project Activity 5: Roadway Plans

City of Orlando CONSERV I Force Main Phase 2

2122 - C

Task No.	Task	Scale	Units	No. of Units	Hours/ Unit	No. of Sheets	Total Hours	Comments
5.1	Key Sheet		Sheet	0	0	0	0	N/A
5.2	Summary of Pay Items Including Quantity Input		Sheet	0	0	0	0	N/A
5.3	Drainage Map		Sheet	0	0	0	0	N/A
5.4	Interchange Drainage Map		Sheet	0	0	0	0	N/A
5.5	Typical Section Sheets		Sheet	0	0	0	0	N/A
5.6	General Notes/Pay Item Notes		Sheet	1	4	1	4	N/A
5.7	Summary of Quantities		Sheet	0	0	0	0	N/A
5.8	Box Culvert Data Sheet		Sheet	0	0	0	0	N/A
5.9	Bridge Hydraulics Recommendation Sheets		Sheet	0	0	0	0	N/A
5.10	Summary of Drainage Structures		Sheet	0	0	0	0	N/A
5.11	Optional Pipe/Culvert Material		Sheet	0	0	0	0	N/A
5.12	Project Layout		Sheet	0	0	0	0	N/A
5.13	Plan/Profile Sheet		Sheet	0	0	0	0	N/A
5.14	Profile Sheet		Sheet	0	0	0	0	N/A
5.15	Plan Sheet		Sheet	0	0	0	0	N/A
5.16	Special Profile		Sheet	0	0	0	0	N/A
5.17	Back of Sidewalk Profile Sheet		Sheet	0	0	0	0	N/A
5.18	Interchange Layout Sheet		Sheet	0	0	0	0	N/A
5.19	Ramp Terminal Details (Plan View)		Sheet	0	0	0	0	N/A
5.20	Intersection Layout Details		Sheet	0	0	0	0	N/A
5.21	Miscellaneous Detail Sheets		Sheet	0	0	0	0	N/A
5.22	Drainage Structure Sheet (Per Structure)		EA	0	0	0	0	N/A

Project Activity 5: Roadway Plans

Task No.	Task	Scale	Units	No. of Units	Hours/ Unit	No. of Sheets	Total Hours	Comments
5.23	Miscellaneous Drainage Detail Sheets		Sheet	0	0	0	0	
5.24	Lateral Ditch Plan/Profile		Sheet	0	0	0	0	N/A
5.25	Lateral Ditch Cross Sections		EA	0	0		0	N/A
5.26	Retention/Detention Ponds Detail Sheet		Sheet	0	0	0	0	N/A
5.27	Retention Pond Cross Sections		EA	0	0		0	N/A
5.28	Cross-Section Pattern Sheet		Sheet	0	0	0	0	N/A
5.29	Roadway Soil Survey Sheet		Sheet	0	0	0	0	N/A
5.30	Cross Sections		EA	0	0		0	N/A
5.31	Traffic Control Plan Sheets		Sheet	11	6	11	66	6 hrs/ sheet x (12400LF/1200LF per sheet) = 66 hrs
5.32	Traffic Control Cross Section Sheets		EA	0	0		0	N/A
5.33	Traffic Control Detail Sheets		Sheet	3	8	3	24	Detailed crossings at Forsythe, SR 551 and SR 50
5.34	Utility Adjustment Sheets		Sheet	0	0	0	0	N/A
5.35	Selective Clearing and Grubbing		Sheet	0	0	0	0	N/A
5.36	Erosion Control Plan		Sheet	0	0	0	0	N/A
5.37	SWPPP		Sheet	0	0	0	0	N/A
5.38	Project Control Network Sheet		Sheet	0	0	0	0	N/A
5.39	Environmental Detail Sheets		LS	0	0		0	N/A
5.40	Utility Verification Sheet (SUE Data)		Sheet	0	0	0	0	N/A
Roadway Plans Technical Subtotal							94	
5.41	Quality Assurance/Quality Control		LS	%	5%		5	
5.42	Supervision		LS	%	5%		5	
5. Roadway Plans Total							104	

CITY OF ORLANDO

Contract No. 2122-C

DESCRIPTION: Conserv I Flow Diversion Force Main Phase II TCP POST DESIGN SERVICES

SUMMARY FEE SHEET

GMB ENGINEERS & PLANNERS, INC.

ACTIVITY MANHOURS	Chief Engineer	Project Engineer	Engineer	Engineering Intern	Designer					Manhours by Activity	Salary Cost by Activity	Average Hourly Rate by Activity
	\$69.71	\$38.44	\$28.97	\$26.12	\$0.00							
A Project Meetings	4	4	0	0	0	0	0	0	0	8	\$432.60	\$54.08
B RFI Support	6	6	0	0	0	0	0	0	0	12	\$648.90	\$54.08
C Shop Drawings	0	0	0	0	0	0	0	0	0	0	\$0.00	#DIV/0!
D Plan Revisions	2	2	0	12	0	0	0	0	0	16	\$529.74	\$33.11
TOTAL MANHOURS	12	12	0	12	0	0	0	0	0	36	\$ 1,611.24	\$44.76

SALARY RELATED COSTS:

OVERHEAD:

OPERATING MARGIN:

FCCM (Facilities Capital Cost Money):

EXPENSES:

Survey (Field - if by Prime)

Subtotal GMB Estimated Fee:

Subconsultant:

Subconsultant:

Subtotal Subconsultant Estimated Fee:

GRAND TOTAL ESTIMATED FEE:

189.00%

0%

0.000%

0.00%

@ 4-man crew days

\$4,817.61

\$0.00

\$4,817.61

CITY OF ORLANDO
Contract No. 2122-C

GMB ENGINEERS & PLANNERS, INC.

DESCRIPTION: Conserve I Flow Diversion Force Main Phase II TCP POST DESIGN SERVICES

A. Project Meetings						
Task	Basis of Estimate	Number of Units	Hours per Unit	Number of Sheets	Total Hours	CADD Hours %
1. Pre-bid Meeting	EA	0	0	N/A	0	
2. Preconstruction Meeting	EA	1	4	N/A	4	
3. Utilities/Maintaining Agency Coordination Meetings	EA	1	4	N/A	4	
ACTIVITY TOTAL					8	0

B. RFI Support						
Task	Basis of Estimate	Number of Units	Hours per Unit	Number of Sheets	Total Hours	CADD Hours %
1. Roadway/MOT	EA	3	4	N/A	12	
2. Drainage	EA	0	0	N/A	0	
3. Lighting	EA	0	0	N/A	0	
4. Signalization	EA	0	0	N/A	0	
5. Landscaping	EA	0	0	N/A	0	
6. Structures	EA	0	0	N/A	0	
7. Utilities	EA	0	0	N/A	0	
8. SPM	EA	0	0	N/A	0	
ACTIVITY TOTAL					12	0

C. Shop Drawings						
Task	Basis of Estimate	Number of Units	Hours per Unit	Number of Sheets	Total Hours	CADD Hours %
1. Roadway	LS	0	0	N/A	0	
2. Drainage	EA	0	0	N/A	0	
3. Signalization	EA	0	0	N/A	0	
4. SPM	LS	0	0	N/A	0	
5. Lighting	EA	0	0	N/A	0	
6. Utilities	LS	0	0	N/A	0	
7. Landscaping	LS	0	0	N/A	0	
8. Structures						
ACTIVITY TOTAL					0	0

D. Plan Revisions						
Task	Basis of Estimate	Number of Units	Hours per Unit	Number of Sheets	Total Hours	CADD Hours %
Minor TCP Plan Revisions		2	8	2	16	
ACTIVITY TOTAL					16	0

March 29, 2013



Mr. Dwayne Kreidler Project Engineer
Malcolm Pirnie/ARCADIS U.S., Inc.
2301 Maitland Center Parkway, Suite 244
Maitland, FL, 32751

Sent via e-mail: dwayne.kreidler@arcadis-us.com

Proj: City of Orlando - Conserv I Flow Diversion Force Main
Orange County, Florida
Re: Proposal for Environmental Services; Environmental Permitting- Rev. 032913

Dear Mr. Kreidler:

Grove Scientific and Engineering is pleased to provide this proposal for the necessary environmental services in association with the permitting of the City of Orlando - Conserv I Flow Diversion Force Main Project Site. Should you have any questions or require any additional information, please do not hesitate to contact our office at (407) 298-2282. Thank you.

Sincerely,
GROVE SCIENTIFIC & ENGINEERING COMPANY

A handwritten signature in black ink, appearing to be "Dart Morales".

Dart Morales
Senior Scientist, CEO

DM/dm

Attachment

Attachment One

Proposal

**PROPOSAL FOR ENVIRONMENTAL SERVICES
CITY OF ORLANDO - CONSERV I FLOW DIVERSION FORCE MAIN
ENVIRONMENTAL PERMITTING**

Environmental Permitting

1. Conduct a detailed on-site vegetative analysis. At this time, any on-site wetland lines will be flagged according to methods approved by the OCEPD, SJRWMD and the USACOE. Global Positioning System (GPS) units will be used during the wetland delineation. The GPS coordinates of the wetland flags will be used to calculate a preliminary acreage of onsite wetlands. A wildlife survey will also be conducted across the site and adjacent to the site, as well as a Bald Eagle search for the surrounding area to assemble necessary information for submittal to the pertinent agencies (City of Orlando, SJRWMD, USACOE, FFWCC, USFWS). Additional time has been added for closer wildlife inspection due to the property's location within the USFWS's Sand Skink (*Neoseps reynoldsi*) Consultation Area. The existence of sand skink on the property could greatly affect the site's utilization and development costs. Once all field work has been completed, an environmental assessment report detailing the results of our initial work will be prepared. This report will address wetland and wildlife regulations pertaining to the property and will also provide a synopsis of the development constraints, mitigation costs and required permitting which should be expected with the property development. This report will satisfy the Level C Environmental Assessment for the City of Orlando and will also include a Q-WET rating system form and discussion of this rating.

TASK COST: \$3,840.00

2. Coordinate with the project surveyor regarding the location of the wetland limits. This will include calls, exhibits, correspondence and meetings.

TASK COST: \$480.00

3. Attend any pre-application meetings with the City of Orlando, OCEPD, SJRWMD, USACOE, etc... to discuss the project, the wetland impacts and mitigation requirements. We anticipate one (1) meeting per agency.

TASK COST: \$360.00/meeting

4. Submit a Conservation Area Determination application to the OCEPD to have the flagged wetland lines verified and approved. A variety of information needs to be supplied to the agencies for this request, including aeriels, soils maps, quad maps, data sheets for each system, location maps, etc... **Additionally, a check made payable to OCBCC in the amount of \$875.00 for the OCEPD application fee is required on top of the task cost.**

TASK COST: \$1,200.00

5. Meet on-site with staff from OCEPD to verify the location of the wetland flags. This is likely to take two (2) meetings due to the length of the route.

TASK COST: \$1,920.00

6. Coordinate with the project surveyor and finalize the Conservation Area Determination (CAD) with OCEPD by providing the project boundary surveys. Includes the creation of OCEPD required ESRI Shapefiles.

TASK COST: \$960.00

7. Conduct a detailed UMAM evaluation of the on-site wetlands. This evaluation will be needed for the wetland impact/mitigation negotiations during the permitting process with the agencies.

TASK COST: \$960.00

8. Submit a Conservation Area Impact Permit (CAIP) application to the OCEPD. This permit would be required in order to impact the on-site wetlands. Mitigation would need to be researched and acquired.

A check made payable to OCBCC in the amount of \$1,236.00 for the OCEPD application fee is required on top of the task cost. *(Dependent upon the total acreage of wetland and/or surface water impact proposed, this fee may be increased.)*

TASK COST: \$1,920.00

9. Respond to any requests for additional information sent by OCEPD regarding the CAIP. Generally speaking, there may be a few issues that the agencies will require clarification on; however, most of the issues will be resolved during the initial submittal. Please understand, since we do not know what issues will arise we generally handle this task on a Time and Materials basis.

TASK COST: \$3,600.00

10. Prepare and coordinate the environmental section, Section E, of the Environmental Resource Permit Application for the SJRWMD. This would include wetland impacts, mitigation, site descriptions, UMAM evaluation, etc.. **A check made payable to SJRWMD in the amount of \$5,380.00 for the ERP application fee is required on top of the task cost. *(Dependent upon the total acreage of wetland and/or surface water impact proposed, this fee may be increased.)*** This fee is to be verified by the project engineer prior to ERP Application submittal.

TASK COST: \$1,920.00

11. Meet on-site with staff from SJRWMD to verify the location of the wetland flags. This is likely to take two (2) meetings due to the length of the route.

TASK COST: \$1,920.00

12. Respond to any Requests for Additional Information (RAIs) sent out by the SJRWMD.

TASK COST: \$3,600.00

13. Coordinate with the USACOE to determine federal jurisdiction over the on-site wetlands and provide the wetland impacts, mitigation, site descriptions, UMAM evaluation, etc..

TASK COST: \$1,440.00

14. Meet on-site with staff from USACOE to verify the location of the wetland flags. This is likely to take two (2) meetings due to the length of the route.

TASK COST: \$1,920.00

15. Respond to any Requests for Additional Information (RAIs) sent out by the United States Army Corps of Engineers (USACOE).

TASK COST: \$3,600.00

16. Local government (e.g., City of Orlando) coordination. This task will include phone calls, correspondence, meetings, etc., regarding the respective local government's environmental regulations.

TASK COST: \$1,920.00

17. Coordinate with USFWS regarding the additional areas detailed above with specific respect to sand skink and any permitting or coordination requirements. Provide any exhibits or additional survey information as required by USFWS in order to obtain authorization to commence construction activities within the subject areas. Although the project's entire proposed route is located within USFWS's Consultation Area, only a few portions of the property are located above the 82' elevation AND contain the Service's listed excessively drained, well-drained, and moderately well-drained sandy soils. However, in almost all of these areas residential and/or commercial development has already occurred. Therefore, it is our opinion that the likelihood of sand skinks occupying any habitat within the proposed route is minimal. *If, however, sand skinks are observed utilizing habitat within the project area, an addendum will be provided outlining permitting costs through USFWS and costs associated with a formal sand skink cover board survey.*

TASK COST: \$960.00

18. General project coordination. This task will include numerous phone calls, correspondence, meetings, and other project management tasks to perform the work. Assume 8 hours of a project manager per month for 6 months.

TASK COST: \$5,520.00

The following Tasks are estimated from the original wildlife survey, as conducted by others. It is assumed for this project that a total of 16 gopher tortoises will need to be permitted and relocated. The cost below represent this quantity for permitting and relocation. Costs have been requested and provided at this time for budget purposes. If necessary, an addendum to this proposal will be provided once the final results of the survey are finalized.

19. Pursuant to Gopher Tortoise Permitting Guidelines (revised September 2012), FFWCC requires that a 100% formal gopher tortoise survey within and immediately adjacent (within 25-feet) to the subject project site be performed within 90 days of relocation efforts. If this is not possible due to development delays, weather conditions or permitting delays, FFWCC will require another survey to be submitted 30 days prior to excavation and relocation activities.

TASK COST: \$1,400.00 (Contingent on relocation being completed within 90 days of gopher tortoise survey and permitting)

20. Submit an application to FFWCC and obtain a Gopher Tortoise Conservation Permit. This task has been taking approximately 30-45 days for FFWCC to issue relocation permits. Once issued, this permit will be valid for 12 months.

TASK COST: \$1,200.00

21. Coordination with the FFWCC: This consists of responding to any requests for additional information (RAI) FFWCC sends out, as well as on-site meetings with FWC staff that will need to occur to verify current population.

TASK COST: \$720.00

22. Submit an "After-action Report" to FFWCC within 30 days of the excavation efforts. This report will detail weight, size and sex of the gopher tortoise as well as the overall success of the relocation efforts.

TASK COST: \$480.00

23. Upon issuance of the GT Conservation Permit, all documented tortoises will be relocated to a FFWCC approved recipient site. Due to the proximity of the burrows to high voltage lines and power poles this relocation effort will need to be performed by bucket trapping. Per FFWCC Guidelines, the traps must be checked twice per day for 28 consecutive days or until all tortoise are captured /relocated.

TASK COST A: \$2,000.00 (Setting of 16 bucket traps for sixteen gopher tortoise burrows)

TASK COST B: \$600.00/day (twice daily checking of bucket traps and relocation to the approved recipient site) *FFWCC requires that each tortoise be relocated to the approved recipient site within 24-72 hours of capture.

TASK COST C: \$1170.00/gopher tortoise Off-Site Recipient Site Fee

24. Per the Gopher Tortoise Permitting Guidelines, FFWCC has implemented a per tortoise mitigation fee for all tortoises that will be impacted as a result of development activities. FFWCC will be assessing a \$200.00 fee for the first five (5) gopher tortoises and a \$300.00 per tortoise fee for all remaining on-site tortoises. The one-time mitigation fee must be paid to FFWCC prior to permit issuance. The estimate is based on sixteen total gopher tortoises (100%) as identified by others.

MITIGATION FEE = \$3,500.00

Attachment Two

Rate Schedule



RATE SCHEDULE

LABOR

RATES/HOUR

Senior Scientist/Principal	\$160.00
Senior Engineer/Professional Engineer	\$180.00
Certified Industrial Hygienist	\$250.00
Professional Geologist	\$135.00
Chemical/Environmental Engineer	\$135.00
Mechanical Design Engineer	\$150.00
Environmental Scientist	\$135.00
Industrial Hygienist/Microbiologist	\$95.00
Environmental Specialist	\$70.00
Paraprofessional	\$60.00
Expert Testimony	\$250.00
Senior Consultant	\$250.00

DIRECT COSTS

Engineer of Record Fee	\$400.00
Sampling Disposables	\$50.00 per day (includes disposable gloves, decon solutions, bailer line, calibrating solutions, etc.) Note: when actual charges exceed \$25.00, they may be itemized as direct expenses.
Vehicle mileage	0.56/mile
Tow vehicle mileage (for 21ft boat)	1.25/mile
Meal per diem	\$40.00 per day per person
Lodging per diem	\$95.00 per day (lodging expenses greater than \$95.00 billed as a direct charge).
Equipment fee	Provided upon request
Other direct costs	Cost plus 10% (Includes - analytical chemistry, hotels, supplies, rented equipment, reproductions, airfare, specialty tools, etc.)

* RATES ARE SUBJECT TO CHANGE WITHOUT NOTICE

totr std rate/0514/FORMS/

Wyche & Associates

Public Relations | Marketing | Management Services

May 28, 2013

Mr. Dwayne R. Kreidler, PE
Project Environmental Engineer
Malcolm Pirnie/ Arcadis
2301 Maitland Center Parkway, Suite 244
Maitland, FL 32751

Dear Dwayne:

We have updated our overview of the community relations work proposed for your upcoming City of Orlando Force Main project. We have also attached a detail of the budget we have proposed for the project. In summary, we have proposed four (4) community meetings and two (2) community leaders meetings as part of the project.

As we indicated previously, we believe it is imperative that there be informative and consistent communications with the neighborhood- both residential and commercial. This is also a very diverse area and the Agency prides itself on a demonstrated ability to successfully communicate in all communities, regardless of ethnicity or language.

We have made some assumptions in our detail: Wyche & Associates will be designing the flyers/ letters for the meetings but will not physically deliver them door-to-door to the area residents.

We believe our responsibilities will focus on the following areas:

- Identify community/ public buildings available for meetings
- Development and design of all communications pieces
- Identify neighborhood associations and local businesses in the target area
- Identify community groups/ clubs in the vicinity
- Identify business and community leadership

- Coordinate meetings with leadership/ community groups and the project contractors
- Facilitate connection with City/ County staff at Parks & Recreation (if needed)
- Translation of press releases, flyers, Q&A booklets and other informational pieces
- Development and translation of presentation pieces (if needed)
- Attend meetings and assist in responding to questions/ concerns in two languages, where needed

We believe that the cost of providing this level of community relations support during the term of the contract will be approximately \$36,500.00. We have already established a rate of services with the City of Orlando on the Community Venues project, so we would propose the same hourly rates. Labor rates are the bare actual rates x 2.45 multiplier, with maximum rates of \$167.07/ hour for firm principal and \$136.59/ hour for staff PR personnel and \$40.00 for administrative support. Reimbursable expenses such as printing charges would be billed at cost. Any expenses over \$200 would be approved by you. We have also added some expenses for refreshments for the six proposed meetings to the budget.

We look forward to the opportunity to work closely with you on this important project. We have maintained a good working relationship with the City of Orlando and believe that our knowledge of the City, its elected officials and people will play a key role in ensuring community-relationship building success.

Please let me know if you have any questions and we would be delighted to answer them.

/signed/
 Paul H. Wyche
 President
 Wyche & Associates, Inc.

Attachment (1)

Attachment A

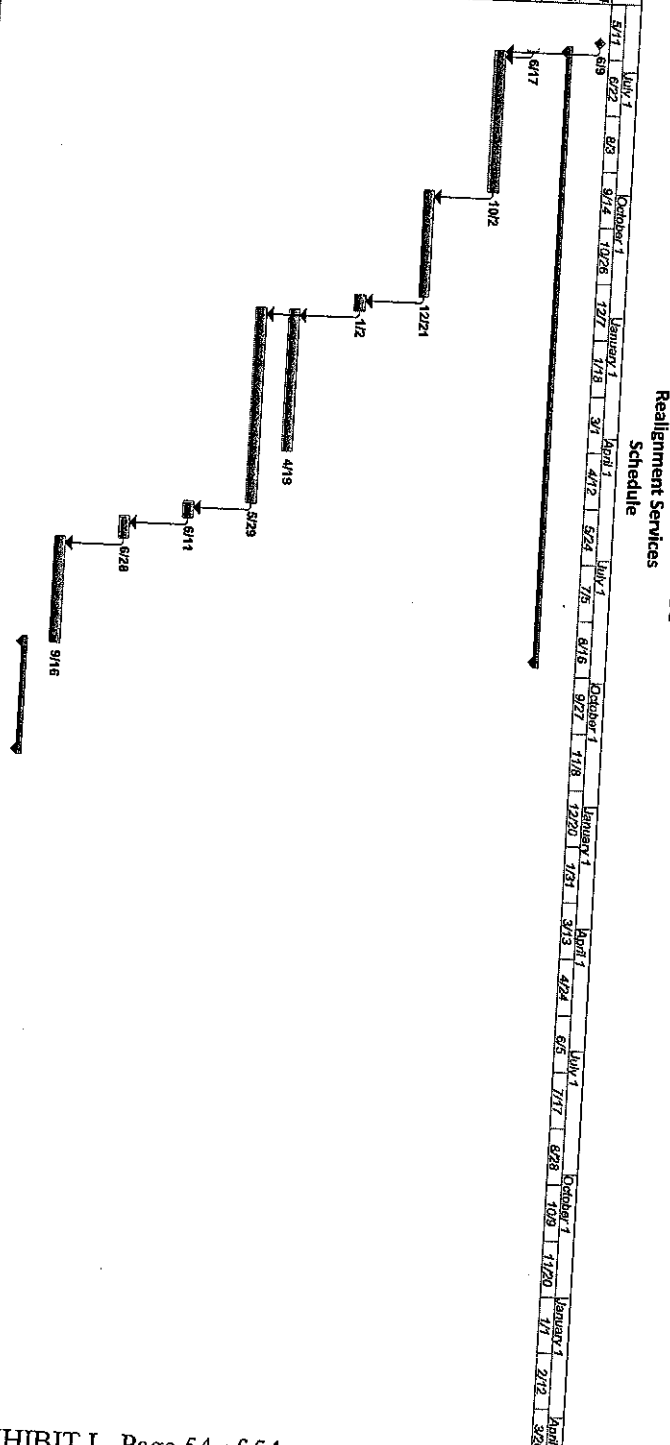
Services Fee Estimate (Communications/ Community Relations)

Task No.	Task Description	Total Labor Plus Expenses	Expenses	Total Labor	Total hrs	Principal		Staff PR		Administrative Support	
						Rate		Rate		Rate	
1	Community Meetings - 4	\$27,449.22	\$2,878.00	\$24,571.22	186		36		130		20
2	Develop Flyers/ Other Material	\$2,983.48	\$600.49	\$2,382.99	17		2		15		0
3	Community Leader Meetings - 2	\$6,067.30	\$1,200.00	\$4,867.30	34		20		10		4
	SUBTOTAL (Labor and Expenses)	\$36,500.00	\$4,678.49	\$31,821.51	237		58		155		24

ATTACHMENT D

**CITY OF ORLANDO
CONSERV I - FORCE MAIN PHASE 2
Realignment Services
Schedule**

ID	Task Name	Duration	Start	Finish
1	Notice-to-Proceed	1 day	Mon 6/24/14	Mon 6/24/14
2	Final Design Phase	514 days	Tue 6/17/14	Wed 9/16/15
3	Kickoff Meeting	1 day	Tue 6/17/14	Tue 6/17/14
4	Survey/Utility Locate Services	120 days	Tue 6/17/14	Thu 10/23/14
5	60% Design Realignment Documents	90 days	Thu 10/23/14	Sun 12/21/14
6	Review and Meeting with City	14 days	Sun 12/21/14	Fri 1/2/15
7	Geotechnical Services	120 days	Sat 1/24/15	Sun 4/19/15
8	90% Design Realignment Documents	165 days	Sat 1/24/15	Fri 5/29/15
9	Review and Meeting with City	14 days	Fri 5/29/15	Thu 6/11/15
10	100% Design Realignment Documents	20 days	Thu 6/11/15	Sun 6/28/15
11	Permitting Activities	90 days	Sun 6/28/15	Wed 9/16/15
12	Bidding Phase	90 days	Wed 9/16/15	Sat 12/5/15
16	Construction Phase	524 days	Sat 12/5/15	Wed 9/15/17



Project Conserv I-M-02-14.mpp
Date Mon 4/14/14

Task Split Milestone

Summary Project Summary External Tasks

External Milestone Inactive Task Inactive Milestone

Inactive Summary Manual Task Duration-only

Manual Summary Rollup Manual Summary Start-only

Finish-only Progress Deadline

Page 1