#### SERVICES AUTHORIZATION #17958(1) ENGINEERING SERVICES AGREEMENT

THIS SERVICES AUTHORIZATION is made and entered into this	_day of
, 2016, by and between the City of Orlando, Florida, a m	unicipal
corporation existing under the laws of the State of Florida (CITY), and and Woolpert,	Inc., an
Ohio corporation, doing business locally at One Purleiu Place, Suite 122, Winter Park,	Florida
32792 (ENGINEER).	

WHEREAS, the CITY and the ENGINEER have previously entered into an agreement for the ENGINEER's professional services (Agreement) on April 14, 2015, concerning the Dean Road Interceptor Sewer Rehabilitation Project (Project); and

WHEREAS, the CITY and the ENGINEER wish to amend the Agreement as set forth herein; 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 \$595,981.75 has been agreed to by the parties, as is more fully set forth on EXHIBIT I.

#### III. TERM

ENGINEER shall complete all work in accordance with the timeframes set forth on EXHIBIT I, if any, provided, however, that all work and the term of the Services Authorization shall be completed by the end of business (5:00 p.m.) on July 11, 2018. It is also agreed that the CITY shall have an option for extension of this Services Authorization as necessary to complete the present scope of Services (EXHIBIT I) or to provide additional services.

#### IV. ENTIRE AGREEMENT

This Services Authorization supersedes all previous services authorizations, 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 Services Authorization shall in no way supersede or amend the Agreement or other services authorizations or amendments except as specifically provided herein. No additions, alterations, or variations to the terms of this Services Authorization shall be valid, nor can the provisions of this Services Authorization 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. ENGINEER 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 Services Authorization on the day and year first written above.

#### City of Orlando, Florida

By:_	
	David Billingsley, CPSM, C.P.M.
	Chief Procurement Officer
Dotas	, 20 .
Date:	
	OVED AS TO FORM AND LEGALITY
for th	ne use and reliance of the
City	of Orlando, Florida, only.
	., 20
	Michael S. O'Dowd
	Assistant City Attorney
	1 ADDIDUCTION TO THE PROPERTY OF THE PROPERTY

Orlando, Florida

#### Woolpert, Inc.

	By:
	(Print Name)
	Title:
STATE OF ELODIDA	
STATE OF FLORIDA }	
COUNTY OF}	
authority,	APPEARED before me, the undersigned as identification, and known by me to be the of the corporation named above, and acknowledged to form in the product of the corporation on behalf of said corporation as its true.
act and deed, and that he/she was	he foregoing instrument on behalf of said corporation as its true duly authorized to do so.
WITNESS my han	d and official seal this day of, 20
	NOTARY PUBLIC
	Print Name:
	My Commission Expires:

#### **EXHIBIT I**

#### SCOPE OF SERVICES

#### PROFESSIONAL ENGINEERING SERVICES FOR DEAN ROAD INTERCEPTOR SEWER REHABILITATION PROJECT

#### **PROJECT DESCRIPTION**

The City of Orlando Wastewater Division (City) has requested Woolpert to provide professional engineering services including geotechnical, surveying, final design, permitting, bidding and construction phase services for the rehabilitation of the Dean Road Interceptor sewer. The project includes the rehabilitation of approximately 9,900 linear feet of 72 and 78 inch gravity sewer trunk lines, and approximately 24 manholes, which transports wastewater flows from the eastern sections of the City and future flows from Conserve 1 to the Iron Bridge Wastewater Treatment Plant. The professional engineering services for this project are anticipated to be completed in three primary phases:

- 1. Geotechnical Investigation and Surveying
- 2. Design, Permitting and Bidding
- 3. Construction Administration

Preliminary Engineering services have been conducted under a separate contract. The Preliminary Design Report (PDR) that was prepared under that contract is the basis of design for the following scope of services.

Woolpert's fee for the services provided are based on the following sheet breakdown to be included in the plans:

Cover	1	Sheet
General Notes	4	Sheets
SWPPP Plans	2	Sheets
MOT Plans	7	Sheets
Survey Control	4	Sheets
Plans and Profile	15	Sheets
Details	2	Sheets

Total 31 Sheets

#### SCOPE OF SERVICES

#### 1.0 GEOTECHNICAL INVESTIGATION

1.1.1 Perform a geotechnical investigation, including compiling existing information, drill 8 – 35 ft. borings, laboratory testing and engineering services to facilitate design of the proposed gravity sewer main, manholes, insertion pits and construction of the project. The results of the geotechnical investigation shall be summarized in a report that includes the following:

Soil boring logs and classifications near each insertion pit;

Existing groundwater levels and estimated seasonal high levels;

Insertion pit preparation and backfill recommendations; and,

Compile dewatering information and file for SJRWMD Temporary Dewatering Permit.

The report shall be submitted to the City and an unbound copy shall be included with the unbound technical specifications submitted for bidding purposes. See Antillian submittal for a more detailed geotechnical investigation scope.

#### 2.0 SURVEY SERVICES

#### TASK 2.1 - PROJECT SURVEY CONTROL

- 2.1.1. Organize, prepare for and conduct a project setup meeting. This meeting will include working with Orange County Public Works Department on the existing and proposed Right-of-Way along Dean Road. Obtain available instruments of record and create a horizontal and vertical control network for the project for use as a basis of surveying and design of the project.
- 2.1.2. Establish horizontal and vertical network controls. Plot data and adjust control networks. Revisit the project site after plotting data for quality control.
  - 2.1.2.1 Establish horizontal GPS control network. Survey shall be on State Plane Coordinates, NAD 83 Florida East Zone and comply with the City's standards.
  - 2.1.2.2 Establish vertical control network. Vertical control shall be established based on a closed vertical loop meeting or exceeding NGS specifications. (See L&S Diversified for detailed survey scope)

#### TASK 2.2 – TOPOGRAPHIC SURVEY

- 2.2.1 Perform initial surveying to locate existing structures and obtain rough ground profiles in support of preliminary design efforts. Coverage will include center line of pavement shots, tops and inverts of all manholes and stormwater structures (including those upstream and downstream at intersecting streets) within the limits of topographic coverage. (See L&S Diversified for detailed survey scope)
- Perform topographic surveying over the project limits in support of final design efforts. The limits of the topographic coverage will be the length of the subject alignments, including full coverage from right of way to right of way and extending approximately 20' outside the right of way at intersecting streets. Topographic coverage will include break line topography and spot shots at approximate 50' intervals, and the location of all above ground fixed improvements within the limits of topographic coverage. (See L&S Diversified for detailed survey scope)

#### TASK 2.3 – SUBSURFACE UTILITY ENGINEERING (SUE)

- 2.3.1 Woolpert will provide Subsurface Utility Engineering services in accordance with ASCE 38-02 Ouality levels C and D. Specifically, Woolpert will:
  - a. Contact all the utility stakeholders and request copies of all plats, plans and GIS information for the project area.
  - b. Pre-mark the project limits with white paint and contact Florida Sunshine One Call center.
  - c. Coordinate with the various utility owners, including one on-site meeting to facilitate than marking of the buried facilities.
  - d. Locate all the surface utility structures. (see L&S Diversified for detailed survey scope)
  - e. Compile all the utility data obtained from the various utility stake holders and label all utility lines with the utility type, size, owner and ASCE quality level.
  - f. Locate the paint and flagging from the various utility owners. (see L&S Diversified for detailed survey scope)
  - g. Review the compiled utility data with the results of the Sunshine mark-outs and note any apparent deviations or discrepancies.
  - h. Contact various utility owners in an attempt to facilitate resolution of discrepancies noted in the QA and QC reviews.
  - i. Furnish a Compiled Utility Plan in accordance with ASCE 38-02 Quality Levels C and D.
- 2.3.2 Once preliminary design is complete, Woolpert will perform an extensive Ground Penetrating Radar (GPR) Investigation at the locations of the proposed sliplining insertion pits. Woolpert will then provide up to 20 non-destructive vacuum excavation exploration holes to verify any anomalies found with the GPR (ASCE 38-02, Quality Level A).

All utility locating and mapping services will be in accordance with American Society of Civil Engineers Standard CI/ASCE 38-02. All work on the above described survey tasks will be performed in accordance with Chapter 5J-17 of the Florida Administrative code (Standards of Practice for Florida surveyors and Mappers), pursuant to Florida Statutes, Chapter 472.

### TASK 2.4 - PREPARATION OF SKETCH OF DESCRIPTIONS FOR TEMPORARY CONSTRUCTION EASEMENTS

- 2.4.1 Woolpert will prepare and submit a total of four (4) original signed and sealed Sketch of Description's for each of two (2) anticipated required easements to the City of Orlando Project Manager for use in acquiring Temporary Construction Easements along the portion of Dean Road north of University Boulevard. The City Project Manager will distribute the Sketch of Descriptions as necessary.
- 2.4.2 Woolpert will prepare for and attend two (2) public meetings, one for each Sketch of Descriptions, to address questions and comments by the public of whose property may be affected by the proposed Temporary Construction Easements. A professional witness will be available to explain the needs of the Temporary Construction Easements if required.

#### **DELIVERABLES**

- Woolpert will provide four (4) signed and sealed copies of a brief Survey Map Report (provided by L & S Diversified).
- Woolpert will provide four (4) signed and sealed copies of a brief Subsurface Utility Engineering Report outlining the utilities designated/located during the survey and utilities found during the SUE investigation.
- Woolpert will provide four (4) signed and sealed Sketch of Descriptions for Temporary Construction Easements.
- A CD containing the electronic files will be submitted with each deliverable.

#### **CITY RESPONSIBILITIES**

 Provide review and comments of the submitted survey documentation during the 75% design review meeting.

#### 3.0 Final Design

#### TASK 3.1 – PREPARATION OF CONSTRUCTION DOCUMENTS

- 3.1.1. Prepare project construction drawings to include required plan and profile views and necessary Construction Details and Notes. Prepare the technical specifications for the Project Manual. The construction documents shall be complete and meet the requirements for construction contract competitive bid formulation and subsequent construction of the project. All documents shall comply with current requirements of the City Standards and Engineering Standards Manual (ESM). Provide a quality assurance and "constructability" review prior to all submittals to the City.
- 3.1.2. Prepare Maintenance of Traffic Plans to include the necessary detail to obtain authorization from The City of Orlando Transportation Engineering, Orange County Public Work, and Seminole County Traffic Engineering departments. Plans shall be designed to meet FDOT standards referencing the 2016 Design Standards.
- 3.1.3. Prepare construction technical specifications for the Project Manual.
- 3.1.4. Finalize design calculations and prepare design manual for submittal. Design manual shall include the calculations that are made to ensure a safe and successful project through construction.
- 3.1.5. Continue coordination with the contractors and manufactures who have provided technical information during the preliminary phase. This coordination will ensure competitive bid prices and alternative materials that meet industry standards to keep sole sourcing of materials out of the contract.
- 3.1.6. Plan and coordinate a constructability walk through with city personnel. The walk through shall be done prior to the 75% submittal to confirm the locations of the proposed insertion pits within the right-of-way will not pose any major constructability concerns.

#### TASK 3.2 – 75% COMPLETION SUBMITTAL

3.2.1. Submit six (6) sets of full sized and one (1) half sized construction drawings and technical specifications at a 75% level of completion to the City. Provide one (1) CD of the drawings in AutoCAD<sup>TM</sup> Civil 3D 2016 and pdf formats, and specifications in WORD and pdf formats. The minimum requirements of a 75% level of completion are defined as a complete set of plan and profile drawings, at 1"20' horizontal scale and 1"=4' vertical scale and indicating:

- a. Survey and topographic information;
- b. Existing utility locations;
- c. Gravity sewer main, lateral and manhole replacements/improvements shown;
- d. Applicable construction details;
- e. Preliminary draft of Maintenance of Traffic plan;
- f. A preliminary draft of all sections of the technical specifications, and a draft of the bid schedules and other required bid documents.
- 3.2.2. Meet with the City of Orlando, Orange County and Seminole County to discuss the 75% submittal, prepare detailed meeting minutes, and submit the minutes to the City for verification/documentation of meetings held with other municipalities.
- 3.2.3. Revise the construction plans and details per the City's comments.
- 3.2.4. Revise maintenance of traffic plans per the comments provided by the City of Orlando Transportation Engineering, Orange County Public Works and Seminole County Traffic Engineering departments.
- 3.2.5. Revise construction specifications per the City's comments. The 90% Project Specifications submittals is to include a draft bid for and all City standard frontend documents. Consultant will be responsible for reviewing Division 1 Specifications and, at a minimum editing/adding text to the following Division 1 Specifications:
  - 01000 Index of Drawings
  - 01010 Summary of Work
  - 01014 Construction Sequence
  - 01021 Soils Report and Other Information
  - 01070 Abbreviations and Symbols
  - 01150 Measurement and Payment
  - 01420 Drawings and Submittals
  - 01568 Temporary Erosion and Sedimentation Control
  - 01570 Maintenance of Traffic

#### TASK 3.3 – 90% COMPLETION SUBMITTAL

- 3.3.1. Submit six (6) full sized sets and one (1) half sized set of construction drawings and technical specifications at a 90% level of completion to the City. A CD will be provided that includes drawing files in AutoCAD™ Civil 3D 2016 and PDF format, and specifications in WORD and pdf formats. A draft of the Engineer's Opinion of Probable Construction Costs will be submitted in spreadsheet form. The minimum requirements of a 90% level of completion are defined as the incorporation of all City comments received and verified after the City review of the 75% submittal. At the 90% level of completion, the construction drawings and technical specifications shall be at a level of completion that will allow the project to be bid.
- 3.3.2. Meet with the City to discuss the 90% submittal, prepare detailed meeting minutes, and submit the minutes to the City for verification.
- 3.3.3. Prepare and submit an Official Bid Form. The Official Bid Form shall appear as a separate itemization to be included in the Invitation for Bids. Coordinate with City departments for the latest requirements for the Official Bid Form.

- 3.3.4. Prepare and provide signed and sealed Engineer's Estimate of Probable Construction Costs. Submit six (6) copies for review by the City.
- 3.3.5. Revise the construction plans and details per the City's comments.
- 3.3.6. Revise and finalize the maintenance of traffic plans per the comments provided by the City of Orlando Transportation Engineering, Orange County Public Works and Seminole County Traffic Engineering Departments.
- 3.3.7. Revise construction specifications per the City's comments.

#### TASK 3.4 - 100% COMPLETION SUBMITTAL

3.4.1. Submit six (6) sets of construction drawings and technical specifications at a 100% level of completion to the City for final acceptance and use during bidding phase. Submit all drawings and specifications in electronic format. Drawings shall be submitted in AutoCAD<sup>TM</sup> Civil 3D 2016 format and pdf format. Specifications will be in Microsoft Word <sup>TM</sup>format.

#### TASK 3.5 – PUBLIC INFORMATION AND PARTICIPATION

- 3.5.1 Organize, prepare for and conduct a meeting with the appropriate Orange County Commissioner to provide a briefing on the project, who will be affected and why it's needed.
- 3.5.2 Develop a mailing list of residents adjacent to the project limits. (Assume 1400 residents south of University and 700 residents north of University)
- 3.5.3 Design, produce and distribute public meeting announcement fliers (four color process on glossy white 8 ½"x11" recycled paper). All fliers must meet the requirements set by the City of Orlando, Orange County and the United States Post Office (USPS) Every Door Direct Mail (EDDM) formatting. (Two flyers anticipated)
- 3.5.4 Prepare color display boards/meeting exhibits delineating construction alignments, construction phasing and scheduling. (Assume two (2) 24"x36" project display boards)
- 3.5.5 Organize, prepare for and conduct the Community Meeting. (Two meetings anticipated)
- 3.5.6 Prepare and distribute meeting minutes to City attendees.

#### **DELIVERABLES**

- Woolpert will provide four (4) copies of the 75% design level construction documents (plans and specifications) for review by the City of Orlando.
- After attending a review meeting at the City, Woolpert will revise the construction documents and will submit six (6) copies of the 90% design level construction documents including plans and specifications, bid form and cost estimate.
- After attending a review meeting at the City, Woolpert revise the construction documents and will submit six (6) copies of the 100% construction documents, ready for bidding.
- A digital copy of the community meeting flyer and project presentation board in PDF format.

#### **CITY RESPONSIBILITIES**

- Schedule staff members for the constructability walk-thru, if so desired
- Schedule staff members for review of the 75%, 90%, and 100% submittals.
- Schedule location and staff members for attendance to each of the review meetings.

#### 4.0 PERMITTING SERVICES

Permitting services will be provided by Woolpert including the payment of fees which will be reimbursed by the City. Based on this project's scope of work, the following services are anticipated:

#### TASK 4.1 – COORDINATE WITH CITY OF ORLANDO ENGINEERING DEPARTMENT

4.1.1. Meet with City of Orlando Engineering Division to discuss permitting for potential road closures, maintenance of traffic requirements and permit application submittals.

#### TASK 4.2 – COORDINATE WITH ORANGE COUNTY PUBLIC WORKS (OCPW)

- 4.2.1. Meet with OCPW, regarding the Orange County right-of-way of Dean Road and University Boulevard, to discuss permitting for R/W Utilization, roadway restoration requirements and permit application submittals.
- 4.2.2. Prepare and submit for an OCPW R/W Utilization Permit including permit application and required attachments. Respond to requests for additional information as needed.

#### TASK 4.3 – COORDINATE WITH ORANGE COUNTY TRAFFIC ENGINEERING

- 4.3.1. Meet with Orange County Traffic Engineering Division to discuss permitting for potential road closures, maintenance of traffic requirements and permit application submittals.
- 4.3.2. Prepare and submit for an Orange County Traffic Engineering maintenance of traffic permit. Respond to requests for additional information as needed.

#### TASK 4.4 - COORDINATE WITH SEMINOLE COUNTY TRAFFICE ENGINEERING

- 4.4.1 Meet with Seminole County Traffic Engineering regarding proposed maintenance of traffic plans and notification for potential road closures within the Orange County Right-of-Way that is adjacent to Seminole County. Coordinate advanced warning signs that will need to be placed within Seminole County's R/W along Dean Road and Aloma Boulevard.
- 4.4.2 Prepare and submit for a Seminole County R/W Utilizations Permit including permit application and required attachments. Respond to requests for additional information as needed.

#### TASK 4.5 – COORDINATE WITH FLORIDA DEPT. OF ENVIRONMENTAL PROTECTION

- 4.5.1 Meet with FDEP to discuss permitting requirements and permit application submittals.
- 4.5.2 Prepare and submit Florida Department of Environmental Protection (FDEP) Notification/Application for Constructing a Domestic Wastewater Collection/Transmission System and required attachments. Respond to requests for additional information as needed.

#### TASK 4.6 – COORDINATE WITH CENTRAL FLORIDA EXPRESSWAY AUTHORITY (CFX)

4.6.1 Meet with CFX to notify of the work being done that could potentially affect the intersections of State Road 417 and University Boulevard, to discuss potential road closures and maintenance of traffic plans.

#### TASK 4.7 – COORDINATE WITH FLORIDA DEPARTMENT OF TRANSPORTATION (FDOT)

4.7.1 Meet with FDOT to notify of the work being done that could potentially affect the intersection of Dean Road and State Road 426 (Aloma Boulevard); to discuss potential road maintenance of traffic plans and signage.

#### **DELIVERABLES**

- Woolpert will provide draft permit applications for review by the City of Orlando.
- After approval by the City, Woolpert will submit the required number of copies for City signature.
- Woolpert will submit required permit applications with the respective attachments to each of the regulatory agencies.

#### **CITY RESPONSIBILITIES**

- Schedule staff members for review of the permit applications.
- Return signed permit applications to Woolpert for submittal to the respective regulatory agency.

#### 5.0 BIDDING ASSISTANCE

#### TASK 5.1 – PRE-BID SERVICES

- 5.1.1. Submit Bid Documents in accordance with the City's requirements for use during the bidding phase of the project.
- 5.1.2. Attend the pre-bid conference as scheduled by the City Purchasing Department, prepare minutes, and submit to City.
- 5.1.3. Respond to written questions from bidders related to the project and prepare all addenda as required to interpret, clarify or expand the Bidding Documents. Submit addenda to the City in a timely manner that allows reception of addenda by all bidders at least three (3) days prior to bid opening date.

#### TASK 5.2 - BID REVIEW AND RECOMMENDATION OF AWARD

- 5.2.1. Review and evaluate the bidder's unit prices, prepare a tabulation of bids, review the bidders' submittal documents.
- 5.2.2. Coordinate with City staff on bids.
- 5.2.3. Verify the three (3) low bidders' experience and references, and make recommendations to the City for an award of the construction contract. Woolpert will prepare a written recommendation letter evaluating the three (3) low bidders' and submit draft of letter to City. Final Recommendation for Award Letter will be signed, sealed and dated.

#### **DELIVERABLES**

- Woolpert will provide four (4) copies of the draft Recommendation of Award letter for review by the City of Orlando.
- After the City review, Woolpert revise the Recommendation of Award letter will submit four (4) copies of letter to the City.

#### **CITY RESPONSIBILITIES**

- Schedule staff members for review of the draft Recommendation of Award letter.
- Provide City comments.

#### 6.0. CONSTRUCTION ADMINISTRATION SERVICES

#### TASK 6.1 – PRE-CONSTRUCTION SERVICES

- 6.1.1. Modify bidding documents, if required, and obtain City required and contractor executed documents; provide the City with the "Conformed" construction drawings consisting of two (2) sets of bound full-size drawings, two (2) sets of bound half-size drawings, one (1) set of each of unbound full-size and half-size drawings and a CD of electronic files in AutoCAD<sup>TM</sup> Civil 3D 2016 and PDF formats; the City will complete and print the Project Manuals.
- 6.1.2. Woolpert will attend and participate in the pre-construction conference. Woolpert will coordinate with the City's Construction Manager prior, during and after the pre-construction conference.
- 6.1.3. Review shop drawings and product submittals for conformance with the Contract Documents and return within 15 days of submittal receipt. Forward the City copies of all notes and conclusions for these reviews.

#### TASK 6.2 - CONSTRUCTION ENGINEERING AND OBSERVATION

- 6.2.1. Weekly Communication/Coordination with City Construction Manager and/or Inspector
- 6.2.2. Attend biweekly construction progress meetings, take meeting minutes and distribute minutes to all attendees within 7 days after meetings.
- 6.2.3. Make periodic fields visits to observe the construction of the project, discuss concerns with the City inspector, and furnish the City a written summary of the visit.
- 6.2.4. Provide clarification and interpretation of the Contract Documents when requested. If requested by the City, evaluate any requests for changes in contract price and time made by the Contractor, and provide assistance with the preparation of change orders if required.

#### TASK 6.3 - POST-CONSTRUCTION SERVICES

- 6.3.1. Conduct substantial and final completion inspections of the project and prepare appropriate "punch lists".
- 6.3.2. Review post construction CCTV inspection provided by the contractor. Woolpert will review the video for construction completeness. To finalize the review process, Woolpert will submit a written letter report listing any deficiencies or anomalies found during the review process. This list shall act as a "punch list" for the contractor to resolve any deficiencies or anomalies.
- 6.3.3. Prepare record drawings incorporating changes made during construction based on as-built information furnished by the Contractor; provide to the City three (3) set of prints of the record drawings and two (2) CD's containing the electronic files of the record drawings in AutoCAD<sup>TM</sup> Civil 3D 2016 and PDF format.
- 6.3.4. Prepare necessary documents and submit the project certification of completion and necessary partial certifications to the FDEP to obtain approvals for release for use. Prepare and submit other required certifications from regulatory agencies exercising control over any part of the project.

#### **DELIVERABLES**

- Woolpert will review shop drawings and provide the City with two (2) copies of all approved sets.
- Substantial completion and final completion inspection "punch lists".

- Woolpert will prepare record drawings and submit three (3) sets to the City for review and two (2) CD's containing the electronic files of the record drawings in AutoCAD™ Civil 3D 2016 and PDF format.
- Regulatory clearance documentation and submittals.

#### **CITY RESPONSIBILITIES**

- Schedule staff members for review of the draft Pre-construction Conference Agenda.
- Schedule location and staff members for attendance to the Pre-construction Conference.
- Schedule staff members for the substantial and final completion inspections.
- Schedule staff members for review of the record drawings.

#### ATTACHMENT B

#### **COMPENSATION SUMMARY**

#### **ENGINEERING SERVICES FOR** DEAN ROAD INTERCEPTOR SEWER REHABILITATION PROJECT

#### **Hourly Engineering Services:**

Task 1 – Geotechnical Investigation:

Basis: Total not to exceed.

Amount:

\$36,202.64

Task 2 - Survey Services:

Basis: Total not to exceed.

Amount:

\$154,415.76

Task 3 - Final Design:

Basis: Total not to exceed.

Amount:

\$199,774.46

Task 4 – Permitting Services:

Basis: Total not to exceed.

Amount:

\$15,396.16

Task 5 - Bidding Assistance:

Basis: Total not to exceed.

Amount:

\$15,957.96

Task 6 - Construction Administration:

Basis: Total not to exceed.

Amount:

\$102,486.12

10% Sub consultant Contract Administration Fees: \$17,568.49

10% Owner Controlled Contingency: \$54,180.16

(to be used only with written authorization by the City of Orlando)

Total Not to Exceed Cost: \$595,981.75

"Labor categories and rates used herein are for the sole purpose of estimating time and calculating the overall not to exceed amount. Invoicing will be based on the actual hourly wage/salary rates of the personnel utilized to accomplish the work of the scope of services and the agreed upon multiplier."

#### M/WBE PARTICIPATION

FIRM	AMOUNT	PERCENT (%)
Antillian Engineering	\$32,549.00	5.46%
Epic Engineering & Consulting Group, LLC.	\$8,749.00	1.47%
L & S Diversified, LLC - Survey	\$128,787.00	21.61%
ASG Reprographics, Inc.	\$5,599.90	0.94%
TOTAL PARTICIPATION	\$175,684.90	29.48%

## EXHIBIT II MANHOUR AND COST ESTIMATE

EXHIBIT II TABLE 1

Summary of Fees

**Engineering Services for** 

Dean Road Interceptor Sewer Rehabilitation Project

Item Description	Project Manager	Project Engineer	Design Engineer	CAD Designer	2 Man Field Crew	Technical Assistant/ Clerical	TOTAL
Total Manhours (See Tables 2a - 2f)	115	655	1041	802	09	196	2,869
Raw Labor Wage Rate (\$/hr)	\$59.28	\$60.62	\$36.06	\$30.64	\$47.85	\$22.16	
Total Raw Labor Cost	\$6,817.20	\$39,706.10	\$37,538.46	\$24,573.28	\$2,871.00	\$4,343.36	\$115,849.40
Total Labor Cost	(Effective Contract Multiplier =	act Multiplier =	11	3.00			\$347,548.20
Reimbursable Expenses (See Table 3)			-				\$1,000.00
Subconsultant Fees (See Table 4)							\$175,684.90
10% Subconsultant Contract Administration Fee							\$17,568.49
SUBTOTAL - NOT TO EXCEED COST FOR ENG	<b>NGINEERING SERVICES</b>	VICES					\$541,801.59
City Controlled 10.00% Contingency							\$54,180.16
TOTAL - NOT TO EXCEED COST FOR ENGINEE	<b>EERING SERVICES</b>	S	:				\$595,981.75

TOTAL NOT TO EXCEED COST

Total MWBE Participation as a percentage of the Total Contract Amount is (City Goal of 24%):

29.48%

EXHIBIT II TABLE 2a

Task 1 - Geotechnical Investigation MANHOUR & COST ESTIMATES

**Engineering Services for** 

Dean Road Interceptor Sewer Rehabilitation Project

						Comment of the Commen	Tooladoot	
Task		Project	Project	Design	14	2 Man Field	Assistant/	TOTALS
Number	lask Description	Manager	Engineer	Engineer	Designer	Crew	Clerical	
1	Project Initiation							
111	1.1 Kick-off Meeting with Antillian	1	1	1				3
112	1.1.2 Data Collection and Review. Previous Geotech Reports		2	4				9
113	Coordination with Antillian		4	8				12
1.14	Review Final Geotech Report and Submittal to City		2	4				9
								0
								0
Total Ma	otal Manhours - Task 1 - Goetechnical Investigation	1	6	17	0	0	0	27
Rawlab	Raw Labor Wade Rate (\$/hr)	\$59.28	\$60.62	\$36.06	\$30.64	\$47.85	\$22.16	
Total Ra	Total Raw Labor Cost	\$59.28	\$545.58	\$613.02	00.0\$	\$0.00	\$0.00	\$1,217.88
Total Lal	Fotal Labor Cost	(Effective Cont	Effective Contract Multiplier =	,,	3.00			\$3,653.64
Reimhur	Reimhursable Expenses (See Table 3)							\$0.00
Subcons	Subconsultant Fees (See Table 4)							\$32,549.00
TOTAL	TOTAL NOT TO EXCEED COST - TASK 1 - Geotechnical Investigation	ation						\$36,202.64

MANHOUR & COST ESTIMATES TABLE 2b

Task 2 - Survey Services **Engineering Services for**  TOTALS

Assistant/ **Fechnica** 

Clerical

2 Man Field Crew 24 Dean Road Interceptor Sewer Rehabilitation Project Designer CAD 16 Design Engineer Project Engineer Project Manager Coordinate topographic survey (see L&S Diversified) Subsurface Utility Engineering (SUE) Preperation of Sketch of Descriptions for Temporary SUE/Vacuum excav. to ASCE 38-02 Quality level A Coordinate exist SS survey (see L&S Diversified) Establish network control (see L&S Diversified) SUE to ASCE 38-02 Quality level C and D Project set-up meeting. Obtain records.

Project Survey Control

Task Description

Number

Topographic Survey

2.2.2

2.3

2.3.1 2.3.2

Raw Labor Wage Rate (\$/hr)	\$59.28	\$60.62	\$36.06	\$30.64	\$47.85	\$2
Total Raw Labor Cost	\$829.92	\$0.00	\$2,452.08	\$2,389.92	\$2,871.00	97
Total Labor Cost	(Effective Contract Multiplier =	Multiplier =		3.00		
Reimbursable Expenses (See Table 3)						
Subconsultant Fees (See Table 4)						
TOTAL NOT TO EXCEED COST - TASK 2 - SURVEY SERVICES	S					

\$8,542.92 \$25,628.76

\$0.00 \$22.16

Preperation of Sketch of Descriptions

2.4.1

2.4

Construciton Easements

Total Manhours - Task 2 - Survey Services Raw Labor Wage Rate (\$/hr)

Public Meeting

88

90

**\$**0.00 \$128,787.00 \$154,415.76

## MANHOUR & COST ESTIMATES Task 3 - Final Design TABLE 2c

Engineering Services for

TOTALS

Project	CAD 2 Man Field Assis Designer Crew Cler		288	48				4		80		144	24			80				48	16			8		4	8	16	8					\$19,364,48 \$0.00 \$3,1	3.00			
rvices for r Rehabilitation	ct Design ser Engineer		92 144	8 24	16 32		20 24	4 4			2 4	64 72		8 16		4 8	2 4	4 6	6 12	20 24		6 12		6 12		2 4	2 4		4	4 8	2 4	308 482	\$60.62 \$36.06	\$18,670.96 \$17,380.92	tiplier =			
Dean Road Interceptor Sewer Rehabilitation Project	Project Project Manager Engineer		16	2	2					2	2	80	2	2		2	2	2	2	4	2	2		. 2								54	\$59.28	\$3,201.12 \$18,6	Effective Contract Multiplier			
Dean Road Ir	Task Task Description	3.1 Preparation of Construction Documents	Ţ_		ا ا	⇈	ΤĒ	Т	Ħ		T	†	1		Т		3.3.2 90% review meeting with meeting minutes	1-	Г		3.3.6 Revise/Finalize MOT Plans	ヤ▔	3.4 100% Completion Submittal	3.4.1 Submit 100% level of completion documents	3.5 Public Information and Participation	Ĺ		3.5.3 Design, produce and distribute meeting flyers	3,5.4 Prepare display boards	3.5.5 Organize and prepare for community meeting		Total Manhours - Task 3 - Final Design	Labor Rate (\$/hr)	Labor Cost	Cost	Reimbursable Expenses (See Table 3)	Subconsultant Fees (See Table 4)	TATAL MATTA PAAPITA AAAT TAGA SINAI BEGIEN

\$61,808.52 \$185,425.56

# TABLE 2d MANHOUR & COST ESTIMATES Task 4 - Permitting Services

Engineering Services for

	Dean Road	Intercepto	an Road Interceptor Sewer Rehabilitation Project	habilitatio	n Project			
Task	Task Description	Project	Project Engineer	Design Fngineer	CAD	2 Man Field Crew	Technical Assistant/	TOTALS
Number		Ivialiayo	Liguical		Codiginal		Clerical	The state of the s
4.1	City of Orlando Engineering Department					10 Sept. 17.		
4.1.1	Meeting to discuss permitting requirements	1	2	4				7
4.2	Orange County Public Works (OCPW)							
4.2.1	Meetings to discuss permitting requirements	1	2	4				7
4.2.2	Prepare and submit R/W Utilization Permit app.	1	4	8			2	15
4.3	Orange County Public Works Traffic Engineering							
4.3.1	Meetings to discuss permitting requirem	2	4	9				12
4.3.2	Prepare and submit MOT Permit Application	1	4	8			2	15
4.4	Seminole County Traffic Engineering							
4.4.1	Meetings to discuss permitting requirements	1	2	4				7
4.4.2	Prepare and submit R/W Utilization Permit app.		7	6			2	11
4.5	FL Department of Environmental Protection (FDEP)							
4.5.1		1	7	2				5
4.5.2		1	7	8			2	15
4.6								
4.6.1	Meet and Coordinate with CFX on MOT Impact	1	2	4				2
4.7	FL Department of Transportation (FDOT)							
4.7.1	_	1	2	4				Z
Total Ma	Total Manhours - Task 4 - Permitting Services	12	30	58	0	0 0	8	108
Rawlat	Raw Labor Wade Rate (\$/hr)	\$59.28	\$60.62	\$36.06	\$30.64	\$47.85	\$22.16	
Total Ra	Total Raw Labor Cost	\$711.36	\$1,818.60	\$2,091.48	00'0\$	\$0.00	\$177.28	\$4,798.72
Total La	Total Labor Cost	(Effective Con	Effective Contract Multiplier		3.00			\$14,396.16
Reimbur	Reimbursable Expenses (See Table 3)							\$1,000.00
Subcons	Subconsultant Fees (See Table 4)							\$0.00
TOTAL	TOTAL NOT TO EXCEED COST - TASK 4 - PERMITTING SERVICES	RVICES						\$15,396.16

TABLE 2e MANHOUR & COST ESTIMATES Task 5 - Bidding Assistance

Engineering Services for	Dean Road Interceptor Sewer Rehabilitation Project
	Road
	Dean

Task Description		Project Manager	Project Engineer	Design Engineer	CAD Designer	2 Man Field Crew	Technical Assistant/ Clerical	TOTALS
5,1 Pre-Bid Services								
5.1.1 Submit Bid Documents to Purchasing Dept.	f.	2	4	8	8		2	24
5.1.2 Attend Pre-Bid Conference. Prepare minute	ites.	2	2	4			2	10
5.1.3 Respond to written questions, prepare add	idenda	7	8	16	8		4	40
5.2 Bid Review and Recommendation of Award	p.		Same and the second					80.48.44.
5.2.1 Review, evaluate & tabulate bids		2	9	12			4	24
5.2.2   Coordinate with City Staff on Bids		2	4	9			2	14
5.2.3 Verify references and make award recomm	mendation	2	4	8			2	16
Fotal Manhours - Task 5 - Bidding Assistance		14	28	54	16	0	16	128
_abor Rate (\$/hr)		\$59.28	\$60.62	\$36.06	\$30.64	\$47.85	\$22.16	
abor Cost		\$829.92	\$1,697.36	\$1,947.24	\$490.24	\$0.00	\$354.56	\$5,319.32
Total Labor Cost		(Effective Cont	Effective Contract Multiplier =	_	3.00			\$15,957.96
Reimbursable Expenses (See Table 3)								\$0.00
Subconsultant Fees (See Table 4)								\$0.00
TOTAL NOT TO EXCEED COST - TASK 5 - BIDDIN	ING ASSISTANCE	TANCE						\$15,957.96

TABLE 2f
MANHOUR & COST ESTIMATES

Task 6 - Construction Administration

Engineering Services for

	Dean Road	Intercepto	ean Road Interceptor Sewer Rehabilitation Project	habilitatio	n Project			
Task Number	Task Task Description	Project Manager	Project Engineer	Design Engineer	CAD Designer	2 Man Field Crew	Technical Assistant/ Clerical	TOTALS
6.1	Pre-Construction Services							
6.1.1	Conform and furnish construction documents	2	4	8	4		2	20
6.1.2	Pre-Construction conference w/agenda & minutes	2	4	9			2	4
6.1.3	_		40	09				100
6.2	Construction Engineering & Observation					the second		
6.2.1			80	80				160
6.2.2	Bi-Weekly progress meetings	2	32	32			8	74
6.2.3	Periodic field visits	2	40	40				82
6.2.4	Provide clarification of documents. CO review	2	40	9			8	110
6.3	Post-Constrction Services			Production of the control of the con				
6.3.1	Conduct substantial and final inspections	2	4	4				10
6.2.2	Review Post Construction CCTV		16	32				48
6.3.3	Prepare and furnish record drawings	4	12	24	48			88
6.3.4	Prepare certifications of completion to agencies	4	8	16	24		8	09
				•				0
Total Ma	Total Manhours - Task 6 - Construction Administration	20		362	92	0	28	992
Labor Ra	abor Rate (\$/hr)	\$59.28	\$60.62	\$36.06	\$30.64	\$47.85	\$22.16	
Labor Cost	ost · · · ·	\$1,185.60	\$16,973.60	\$13,053.72	\$2,328.64	\$0.00	\$620.48	\$34,162.04
Total Lat	Total Labor Cost	(Effective Contract Multiplier	tract Multiplier =	11	3.00			\$102,486.12
Reimbur	Reimbursable Expenses (See Table 3)							\$0.00
Supcons	Subconsultant Fees (See Table 4)							\$0.00
TOTAL !	TOTAL NOT TO EXCEED COST - TASK 6 - CONSTRUCTION	NSTRUCTION ADMINISTRATION	VTION					\$102,486.12

Exhibit II
TABLE 3a
SUMMARY OF OTHER DIRECT COSTS
Engineering Services for
Dean Road Interceptor Sewer Rehabilitation Project

Reimbursable Expenses		Tas	Task 1	Task 2	2	Task 3	(3	Tas	Task 4	Tas	Task 5	Tas	Task 6	Ĭ	Totals
Unit Description	Unit Cost   Unit   Quar	Quantity	Cost	Quantity	Cost Qu	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost	Quantity	Cost
Reproduction															
Full-size Bond Plots	FA  00:0\$		\$0.00		\$0.00	-	\$0.00		\$0.00		\$0.00		\$0.00	0	\$0.00
1/2 size Bond/Color Plots	\$3.00 EA		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00	0	\$0.00
Full-size Blackline Printing	\$1.50 EA		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00	0	\$0.00
1/2 size Blackline Printing	\$1.00 EA		\$0.00	<b></b>	\$0.00		\$0.00		\$0.00		\$0.00		\$0.00	0	\$0.00
Photocopies	\$0.05 EA		\$0.00	_	\$0.00		\$0.00	]	\$0.00		\$0.00		\$0.00	0	\$0.00
Subtotal Reproduction			\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00	_	\$0.00
Postage, Courier, Deliveries				-	_		1								
US Mail	S1  -		\$0.00		\$0.00	L	\$0.00		\$0.00		\$0.00		\$0.00	0	\$0.00
Express Courier	\$14.00 EA		\$0.00		\$0.00	-	\$0.00		\$0.00		\$0.00		\$0.00	0	\$0.00
Package Deliveries	\$18.00 EA		\$0.00		\$0.00	_	\$0.00		\$0.00		\$0.00		\$0.00	0	\$0.00
Subtotal Postage, Courier, Deliveries			\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.0
Miscellaneous				-											
Reimbursable Permit Fees	\$1,000.00 EA		\$0.00		\$0.00		\$0.00	1	\$1,000.00		\$0.00		\$0.00	1	\$1,000.00
CD's	\$4.00 EA		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00	0	\$0.00
Flow Monitoring Equipment	\$2,000.00 EA		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00		\$0.00	0	\$0.00
Subtotal Miscellaneous Items			\$0.00		\$0.00		\$0.00		\$1,000.00]		\$0.00		\$0.00		\$1,000.00
Subtotal Cost per Task			\$0.00		\$0.00		\$0.00		\$1,000.00		\$0.00		\$0.00		\$1,000.00
Total Reimbursable Expenses															\$1,000.00

Subconsultant Direct Cost Breakdown per Task	Task 1	Fask 2	Task 3	Task 4	Task 5	Task 6	Totals
Antillian Engineering Associates	\$32,549.00						\$32,549.00
Epic Engineering & Consulting Group, LLC			\$8,749.00				\$8,749.00
L & S Diversified		\$128,787.00					\$128,787.00
ASG Reprographics			\$5,599.90				\$5,599.90
							00.0\$
							00.0\$
Subtotal Subconsultant Direct Cost	\$32,549.00	\$128,787.00	\$14,348.90	00.0\$	\$0.00	\$0.00	\$175,684.90
Total Subconsultant Direct Cost Breakdown					4		\$175,684.90

Exhibit II TABLE 4 SUBCONSULTANT FEES

Engineering Services for Dean Road Interceptor Sewer Rehabilitation Project

Deall Road Illerceptol Sewer Nellabilitation Floject	1	
M/WBE Subconsultants	Task	Proposed Fee
Antillian Engineering Associates (MBE)	1	\$32,549.00
Epic Engineering & Consulting Group, LLC (MBE)	3	\$8,749.00
L & S Diversified (Minority and Women Owned Business Enterprise)	2	\$128,787.00
ASG Reprographics (MBE)	3	\$5,599.90
Total M/WBE Subconsultants Fees		\$175,684.90
Majority Subconsultants	Task	Proposed Fee
Total Majority Subconsultants Fees		\$0.00
Total Subconsultants Fees		\$175,684.90

29.48% M/WBE Participation as a percentage of the Total Contract Amount is (City Goal of 24%):

#### ATTACHMENT C

#### **SCHEDULE**

## ENGINEERING SERVICES FOR DEAN ROAD INTERCEPTOR SEWER REHABILITATION PROJECT

The following schedule is based on a Notice to Proceed date of August 1, 2016. After approval of the scope of services and an actual Notice to Proceed is given, the schedule will be revised and presented during the kick off meeting.

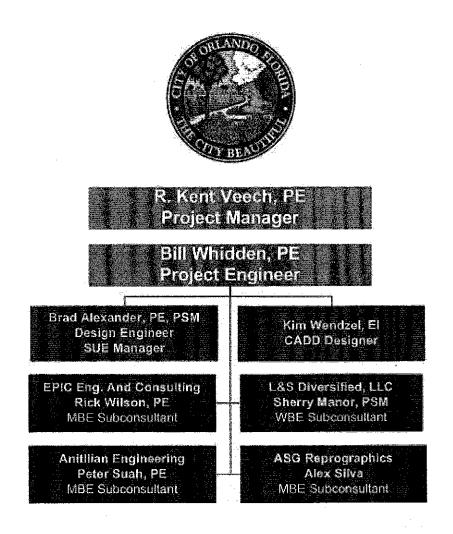
Exhibit I - Page 23 of 45

## Exhibit III Project Schedule Dean Road Interceptor Sewer Rehabilitation

1 2 3 4 5 6			· · · · · · · · · · · · · · · · · · ·	1 day	Mon 8/1/16	
3 4 5 6			1	_ uuy	101011 0/ 1/ 10	Mon 8/1/16
4 5 6	<b>1</b>		Kickoff Meeting	1 day	Mon 8/1/16	Mon 8/1/16
5 6	<b>#</b>	4	Geotechnical Investigation	30 days	Tue 8/2/16	Mon 9/12/16
6		Š	Geotechnical Investigation	30 days	Tue 8/2/16	Mon 9/12/16
				140 days	Tue 8/2/16	Mon 2/13/17
7		nd nd nd nd nd nd nd nd	Survey Control	15 days	Tue 8/2/16	Mon 8/22/16
•			Topographic Survey	65 days	Tue 8/23/16	Mon 11/21/16
8			Existing SS MH Survey	5 days	Tue 8/23/16	Mon 8/29/16
9			Topographic Survey	45 days	Tue 8/23/16	Mon 10/24/16
10	1		Provide Final Base Drawings	20 days	Tue 10/25/16	Mon 11/21/16
11	1		Subsurface Util. Eng.	60 days	Tue 8/23/16	Mon 11/14/16
12			Sunshine One Call	5 days	Tue 8/23/16	Mon 8/29/16
13			GPR/ Vacuum Excavation	15 days	Tue 10/25/16	Mon 11/14/16
14		3	Prep. Temp Const. Easements	5 days	Tue 2/7/17	Mon 2/13/17
15	124IIII I.I.III.A.I.	- F	Final Design	165 days	Tue 10/25/16	Mon 6/12/17
16		Ė		60 days	Tue 10/25/16	Mon 1/16/17
17			75% Submittal	0 days	Mon 1/16/17	Mon 1/16/17
18				15 days	Tue 1/17/17	Mon 2/6/17
19		Ŕ	Prepare 90% Drawings & Specs	30 days	Tue 2/7/17	Mon 3/20/17
20		nd nd nd nd nd nd	90% Submittal	0 days	Mon 3/20/17	Mon 3/20/17
21		4	90% Review Meeting	15 days	Tue 3/21/17	Mon 4/10/17
22		Ř	Prepare 100% Drawings & Specs	30 days	Tue 4/11/17	Mon 5/22/17
23			100% Submittal	0 days	Mon 5/22/17	Mon 5/22/17
24		Ţ.	100% Review	10 days	Tue 5/23/17	Mon 6/5/17
25	l	or or or or	Public Information and Participation	90 days	Tue 2/7/17	Mon 6/12/17
26		ď.	Meeting 1	5 days	Tue 2/7/17	Mon 2/13/17
27			Meeting 2	5 days	Tue 6/6/17	Mon 6/12/17
28			Permitting Services	35 days	Tue 2/7/17	Mon 3/27/17
29			City of Orlando Engineering	5 days	Tue 2/7/17	Mon 2/13/17
30		3	Orange County Public Works	5 days	Tue 2/7/17	Mon 2/13/17
31		Š	Orange County Traffic Engineering	5 days	Tue 2/7/17	Mon 2/13/17
32	•		Seminole County Traffic Engineering	5 days	Tue 2/7/17	Mon 2/13/17
33	1		Florida Dept. of Env. Protection	5 days	Tue 2/7/17	Mon 2/13/17
34	1		Central Florida Expressway Authority	5 days	Tue 2/7/17	Mon 2/13/17
35			Florida Dept. of Transportation	5 days	Tue 2/7/17	Mon 2/13/17
36	1		Permitting Agency Reviews	30 days	Tue 2/14/17	Mon 3/27/17
37		<u></u>	Bidding Assistance	45 days	Mon 6/5/17	Mon 8/7/17
38		od or or or	Submit Bid Documents/Attend Prebid Meeting	0 days	Mon 6/5/17	Mon 6/5/17
39			Bidding Period	30 days	Tue 6/6/17	Mon 7/17/17
40			Review/Evaluate Bids	10 days	Tue 7/18/17	Mon 7/31/17
41			Recommendation of Award	5 days	Tue 8/1/17	Mon 8/7/17
42			Construction Administration Services	242 days	Tue 8/8/17	Wed 7/11/18
43	<del> </del>		Notice of Award	1 day	Tue 8/8/17	Tue 8/8/17
44			Notice to Proceed	1 day	Wed 9/20/17	Wed 9/20/17
			, d - pr	30 days	Thu 9/21/17	Wed 3/23/17 Wed 11/1/17
45			Pre-Construction Services	160 days	Thu 10/19/17	Wed 5/30/18
46			Construction Engineering and Observation  Post Construction Services/Final Completion		Thu 5/31/18	Wed 7/11/18

#### **PROJECT TEAM**

## ENGINEERING SERVICES FOR DEAN ROAD INTERCEPTOR SEWER REHABILITATION PROJECT



#### **EXHIBIT 1**

#### SUBCONSULTANT PROPOSALS

**Antillian Engineering** 

Epic Engineering & Consulting Group, LLC

L & S Diversified, LLC

ASG Computer & Reprographics, Inc.

**Antillian Engineering** 



April 8, 2016

Woolpert One Purlieu Place, Suite 122 Winter Park, Florida 32792

Attention:

Bill Whidden, P.E.

Reference:

Proposal for Geotechnical Engineering Services

Dean Road Sanitary Sewer Improvements

Orlando, Florida

Dear Mr. Whidden:

Antillian Engineering Associates, Inc. is pleased to submit this proposal to provide geotechnical engineering services on the above-referenced project. It was prepared in response to your request during our telephone conversations on April 6, 2016 and subsequent discussions.

#### SCOPE OF SERVICES

The City of Orlando is planning to slip-line the section of sanitary sewer interceptor line beneath Dean Road, from south of Arbor Ridge Trail to McCulloch Road. This work will require the installation eight insertion pits along the pipeline route to provide access into the pipeline. It is our understanding that these insertion pits will be require temporary excavation support systems and temporary dewatering systems so that below-grade construction activity can proceed safely and in the dry.

We propose to conduct a geotechnical investigation to support the anticipated design effort, ad the application of the temporary excavation dewatering permit, if the City of Orlando chooses to apply for that permit in the interest of time. The overall scope of services would be separated into tasks as follows:

Site Reconnaissance/Field Investigation - Before commencing the drilling program, we would stake the boring locations for underground utility location and marking in accordance with Florida Statutes. If necessary, we would meet in the field with representatives of the City of Orlando and the appropriate utility companies to confirm the locations of any existing underground service facilities. Wherever possible, test borings would be drilled in the median of the roadway, which will require Right-of-Way permits and Maintenance of Traffic Permits from Orange County. We propose to drill one boring to 35 feet at each of the eight proposed insertion pit locations. A small, all-terrain (ATV) rig would be mobilized. The Standard Penetration Test (SPT) with split-spoon soil sampling would be performed in accordance with ASTM D 1586 in each boring. Tests would be conducted continuously from one foot below ground surface to a depth of ten feet and then five-foot intervals to the indicated completion depths. Soils penetrated during drilling 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 in each borehole would be measured and recorded on the field logs. At the completion of the drilling program, the boreholes would be grouted. The stakes will be left in place for subsequent location and survey by the project surveyor.

<u>Laboratory Testing</u> - 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 24 percent fines tests, four Atterberg Limits tests and four natural moisture content tests.

#### **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
- develop estimated soil properties for temporary excavation support system design
- · identify possible difficulties with below-grade construction operations
- 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 temporary excavation support systems, appropriate surface and subsurface characterization, a summary of the laboratory test data and recommendations for temporary excavation support, excavation safety, groundwater control and other concerns as appropriate. The report would be sealed by a Professional Engineer registered in Florida.

#### **Temporary Dewatering Permit Application**

Task 1 - Preliminary Meeting - We would compile preliminary dewatering activity information and meet with SJRWMD staff to define the scope of the permit and identify any special constraints that may apply.

Task 2 - Permit Application/Meetings - We would prepare the permit application in accordance with SJRWMD guidelines, including supporting documentation such as dewatering calculations and plans. We would meet meetings with SJRWMD staff and brief Woolpert and City of Orlando staff as needed. The application package would be sealed by a Professional Engineer registered in Florida. We would pay the permit application fee of \$500.00. Three (3) hard copies of the application would be submitted.

#### COMPENSATION FOR SERVICES

We propose to provide the described services for an hourly not-to-exceed fee of \$32,549.22. 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 this project. If additional engineering services are requested or required, these would be provided at the unit rates shown in the itemized estimate. We would not exceed the estimated price without notifying you and receiving your written authorization to do so.

#### SCHEDULE

We can begin work on this project within one week of receiving your notification to proceed. The field and laboratory investigations should take about four weeks, including the time needed to obtain Orange County ROW and MOT permits. A report would be submitted within four weeks after completion of the laboratory investigations.

#### **LIMITATIONS**

The work on this project will be performed in general accordance with accepted procedures for the practice of geotechnical engineering. The general conditions under which services will be provided for this project are attached as Appendix B. I will accept signed copies of the Work Authorization Form (attached as Appendix C) as your acceptance of the terms of service and your authorization to proceed. We will execute both copies and return one copy to you. 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

#### APPENDIX A FEE ESTIMATE PROJECT NAME

DESCRIPTION GEOTECHNICAL ENGINEERING INVESTIGATION	UNIT	QTY	RATE	٠	<u>TOTAL</u>
Field Investigation		4	#4E0 00	4	450.00
Crew/Equipment Mobilization	each	1 280	\$450.00 #12.00	\$	3,360.00
SPT Borings, 8 to 35 ft each	LF		\$12.00	\$	1,120.00
Grout Boreholes to Surface	LF	280	\$4.00	\$	800.00
Signs and Barricades	day	4	\$200.00	\$	1,440.00
Drill Rig and Crew (other than listed above)	hour	8	\$180.00	\$ *	•
Project Engineer (recon./utility location/ROW permits/ field coord.)	hour	32	\$136.55	\$	4,369.60
Laboratory Testing					
Visual classification/sample preparation	each	28	\$10.00	\$	280.00
Grain Size Analysis, Single Sieve	each	24	\$30.00	\$	720.00
Atterberg Limits	each	4	\$90.00	\$	360.00
Moisture Content	each	4	\$10.00	\$	40.00
Engineering Services					
Senior Enginer	hour	12	\$137.99	\$	1,655.88
Project Engineer	hour	48	\$136.55	\$	6,554.40
Draftsperson	hour	16	\$84.53	\$	1,352.48
SUBTOTAL Geotechnic	al Invest	igation	`	\$	22,502.36
TEMPORARY REWATERING PERMIT APPLICATION  Task 1 - Prepare/Attend Initial Kickoff Meeting with WMD  Project Manager	hours	2	\$137.99	\$	275.98
Task 2 - Permit Application/Meetings			•		
Project Manager	hours	8	\$137.99	\$	1,103.92
Senior Project Engineer	hours	40	\$136.55	\$	5,462.00
CADD Operator/Draftsperson	hours	32	\$8 <b>4.</b> 53	\$	2,704.96
Dewatering Permit Expenses					
Permit Application Fee	LS	1	\$500.00	\$	500.00
SUBTOTAL Temporary Dewatering Pe	rmit App	lication		\$	10,046.86
TOTAL FEE NOT TO	EXCEED:			\$	32,549.22

**EPIC Engineering & Consulting Group, LLC** 



May 16, 2016

Bill Whidden P.E. Project Manager Woolpert, Inc One Purlieu Place, Suite 122 Winter Park, FL 32792

Re: City of Orlando Public Works - Wastewater Division Dean Road Interceptor Sewer Rehabilitation Project Scope of Services - Final Design QA/QC (R1)

Dear Mr. Whidden:

In accordance with your request, EPIC Engineering & Consulting Group, LLC (EPIC) has prepared a proposal for the referenced project. The overall project includes the rehabilitation/replacement of approximately 9,900 linear feet of 72 and 78 inch gravity sewer trunk lines and over 24 manholes. This system currently transports wastewater from the eastern sections of the City to the Iron Bridge Regional WRF (IBRWRF), and in the futures may also transport wastewater from the Conserv 1 Water Reclamation Facility (WRF).

The Preliminary Engineering phase services are complete; consequently, EPIC's services involve quality assurance and quality control (QA/QC), and "constructability" reviews during the final design phase of the project. Our scope of services, schedule and compensation are provided in the following sections.

#### **SCOPE OF SERVICES**

EPIC will assist Woolpert by providing quality assurance and quality control (QA/QC), and "constructability" reviews for submittals at the 75%, 90%, and 100% levels of completion. The reviews will include the following:

- plan and profile drawings
- applicable construction details (including MOT)
- technical specifications
- opinion of the probable construction cost.

Review comments will be documented - either as a comment list or directly on the documents being reviewed.

May 16, 2016 Page 2

Services will also include preparation for and attendance of three (3) review meetings with Woolpert and (3) three meetings with the City, as well as "back-checking" to ensure that the previous review comments were addressed.

#### PROJECT SCHEDULE

EPIC will provide the above-listed services over the duration of the project to meet the schedule established by the City and Woolpert.

#### COMPENSATION

EPIC will be compensated for the services described herein on a not to exceed, hourly basis in the amount of **\$8,748.53**. The not-to-exceed fee estimate for the scope of services is enclosed as Attachment A.

We sincerely appreciate the opportunity to assist Woolpert in providing professional engineering services to the City of Orlando. If you have any questions or require additional information, please call me at 407-721-6954.

Sincerely,

Richard Wilson, P.E.

Project Manager

EPIC Engineering & Consulting Group, LLC

cc: Prasad Chittaluru, Ph.D., P.E., EPIC

# ATTACHMENT A

EPIC Engineering & Consulting Group, LLC
City of Orlando Public Works - Wastewater Division
Dean Road Interceptor Sewer Rehabilitation Project - Final Design QA/QC
EPIC NOT TO EXCEED LABOR BUDGET

		DETC INC	EFICACEED ERDON DODGE	EMBON DODG	1				
L			Senior Project	Sr				Total Raw	Total Raw   Total Billing
			Manager	Professional I Tech III Admin II Total Labor Cost Labor Cost	Tech III	Admin II	Total	Labor Cost	Labor Cost
Task		Task Name	P8	2	Т3	A2	Hours	(S)	(S)
		Hourly Rate	Hourly Rate \$61.20	\$43.40	\$25.00	\$22.30	-		1
-	Final Design OA/OC	•	35	0	0	3	38	\$2,208.90	\$6,516.26
7	Meetings		12	0	0	<b>~</b>	13	\$756.70	\$2,232.27
		Total Not to Exceed Fee	47	0	0	4	51	51 \$ 2,965.60 \$8,748.53	\$8,748.53
		Labor Multiplier 2.95	2.95	,					

L & S Diversified, LLC



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

# L&S Diversified Professional Surveyors and Mappers

March 17, 2016

L & S Proposal No. 1726\_Rev4

Woolpert **Brad Alexander** One Purlieu Place, Suite 122 Winter Park, FL 32792

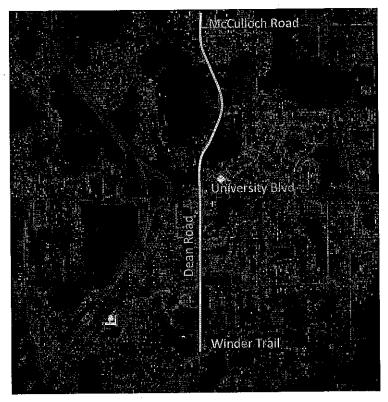
Subject: Dean Road Topographic Survey and Utility Designation

Dear Brad,

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

Topographic survey of full right of way of approximately 2 miles of Dean Road from the intersection of McCulloch Road to Winder Trail as shown below.



Page 1 of 6

### Certifications

M/WBE City of Orlando **Orange County** Osceola County State of Florida G.O.A.A. F.D.O.T.

> DBE F.D.O.T.

LDB G.O.A.A.

SSRF **Expressway Authority** 

L & S Diversified, LLC

Principal Sherry Lee Manor, PSM

405 Lake Howell Rd. Suite 1001 Maitland, FL 32751 Phone (407) 681-3836 Fax (407) 681-6541



#### PART 1 Specific Purpose Right of Way Survey

Survey Tasks for part 1 shall consist of: the position and description of all recovered monuments; right-of-way and adjacent parcels with recording information; survey control set at 600 foot intervals to facilitate project engineering.

Survey control will consist of the following:

Recover closest two (2) NGS, Orange County or City of Orlando geodetic control monuments; Monument and reference each end of baseline near project site. Utilize GPS static or redundant RTK control survey methods to establish control pairs at each end of project relative to North American Datum of 1983 adjustment of 2011 (NAD83/2011), state plane coordinates, Florida East zone. L&S will use GEOID 12A; Recover closest City of Orlando benchmarks; Measure closed differential level loop between control to establish elevations relative to North American Vertical Datum of 1988 (NAVD88) for each survey baseline monument.

The Survey will be performed and prepared in accordance with the State of Florida Standards of Practice, as set forth by the Board of Professional Surveyors and Mappers, Chapter 5J-17, Florida Administrative Code and per Section 472.027, Florida Statutes

#### PART 2 Topographic Survey

Survey Tasks for part 2 shall consist of: cross sections at 50 foot intervals (within the right of way and 20 feet outside north of University Blvd, 5 feet outside of right of way south of University Blvd); location of existing improvements and visible above ground utilities; subsurface utilities; and setting at least three (3) site bench marks in order to facilitate engineering for the project site.

The topographic survey will be displayed at one foot contours and will be based on the North American Vertical Datum (NAVD) of 1988.

The Topographic Survey will be prepared in accordance with the State of Florida Standards of Practice Chapter 5J-17, Florida Administrative Code, as set forth by the Board of Professional Surveyors and Mappers, pursuant to Section 472.027, Florida Statutes.

### PART 3 Subsurface Utility Designation – Quality Level "B"

A Sunshine 811 "LOCATE" ticket will be requested for the areas described to determine the utility providers within the project limits and to notify them of the request for coordination with the L & S utility locator. These areas will be scanned for underground utilities using electronic detection devices and Ground Penetrating Radar (GPR). Any utilities detected and found within the project limits will be surface painted and flagged with the appropriate color as recognized by the National Utility Locating Contractors Association (NULCA), or if marked by others, will be verified by the L & S utility locator.



Underground utilities that are detectable by the above methods, where surface evidence exists or where plans are provided to L & S showing the locations thereof can be designated. However, some underground utilities may not be made of a conductive material or may not return a GPR echo and therefore cannot be designated with electronic prospecting equipment or GPR. Without surface evidence or existing plans, as provided to L & S, identification and designation of any utilities that might exist would then require soft excavation and would need to be determined by the client as additional services.

#### Deliverables

A Sunshine State 811 locate ticket will be requested and documentation of this and any information obtained from the utility companies or their representatives will be shown in a utility contact log. A copy of the utility contact log will be provided along with a sketch of the designated utilities and the above mentioned Subsurface Utility Reports. If L & S performs the survey location of the designated utilities and test holes, an AutoCAD digital file will be provided containing the surveyed designates, surface features and test hole locations. The digital file will contain a Surveyor's Report containing pertinent information regarding the survey. A certified hardcopy Specific Purpose Survey with Surveyors Report will also be mailed to your office.

L & S would expect that any available information from previous surveys of the project site, research or plans obtained by the design engineer or other drawings that depict historic utility information and any other pertinent information that has been obtained by the Engineering Design team regarding utilities at the project site will be provided to L & S to help facilitate the location and accounting for the subsurface utilities for this site.

L & S utilizes the above mentioned resources in addition to the knowledge of our experienced technicians to accomplish the goal of providing as much information regarding the subsurface utilities at this location as possible in the limited locations and by the methods described above. However, the information provided by L & S is also dependent upon the information provided by the Design team as mentioned above, Sunshine 811 request for utility owners and/or their representatives to also provide information and/or to meet with our crew at the time of these activities to verify their facilities and to confirm the details of the subsurface utilities at this location.

It is understood and expected that the Design Engineer will perform sufficient Utility Coordination with the Utility Agency Owners, (UAO's) in this location to ascertain and affirm the information from these efforts and to help confirm that no other subsurface utilities are possibly undetected by these efforts. It is also understood that the Contractor is responsible to abide by Sunshine State One Call, Florida State Statutes # 556.106.

L&S will provide MOT design, set up and take down for the opening of manholes where needed.



All Survey Deliverables will be in accordance with the City of Orlando's surveying standards.

The table below summarizes the costs associated with this proposal. Please review this information and let us know if you have any questions.

Part	Description	Qty	Rate	Amount
1.1	Two-Person Field Crew	170	\$112.50	\$19,125.00
	Data Collection – Right of Way and Survey Con	trol		
1.2	Drafting Technician	186	\$72.00	\$13,392.00
	Drafting - Right of Way and Survey Control			
2.1	Two-Person Survey Field Crew	380	\$112.50	\$42,750.00
	Data Collection - Topographic			
2.2	Drafting Technician	420	\$72.00	\$30,240.00
	Drafting - Topographic			
3.1	Two Person SUE Crew	170	\$120.00	\$20,400.00
	Utility Designation			
	Project Manager (PSM)	24	\$120.00	\$2,880.00
	QA/QC			
	Ţ	otal Cost No	t to Exceed	\$128,787.00

#### Schedule

L & S Diversified will begin the Survey on the subject property within 5 working days after receipt of your executed Notice to Proceed (NTP). This does not apply if extensive title work is involved, extensive certification requirements are needed, or if an ALTA/ACSM Survey is required. Proposed fee and schedule shown hereon is valid for up to 45 days from the date of receipt. We prefer at least 48 hours of notice for scheduling of a field crew.

The total estimated timeframe to complete all tasks described in Parts 1 to 3 is 4 months (16 weeks).

#### **Additional Services**

If **Woolpert** 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 '0' 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:

- 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. For projects lasting over 30 days, L & S Diversified, LLC will bill on 25<sup>th</sup> of the month. The invoiced amount will include all work (time and materials) performed for the calendar month, up to the 20<sup>th</sup>.
- 5. The client will pay invoices to L & S Diversified within 15 days of receipt of invoices paid by the City of Orlando 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.



- 6. 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.
- 7. All payments are to be in US Dollars. Payment/wiring instructions will be provided to client with final invoice.

Thank you for this opportunity and we look forward to working with you on this exciting new project. Please sign, date and return a copy of this agreement as your authorization to proceed with these professional services. Should you have any questions, please do not hesitate to call.

Sincerely, L & S Diversified, LLC		
Tremple leener		
Sherry Lee Manor, PSM President	May 23, 2016	
The undersigned agrees to the all completion.	pove terms and costs ass	sociated with project
Accepted By:		
Company		
Signature	Date	
Title		

ASG Computer & Reprographics, Inc.

## ASC No omeral pric

### ASG COMPUTER & REPROGRAPHIC, INC.

P.O. Box 5601 Winter Park, FL 32793 Tel: 407·895·5670 Fax: 407·895·5669

## **ESTIMATE**

Date	Estimate #
4/8/2016	1247

Name / Address

4073812192
Woolpert, Inc.
1 Perleiu Place
Suite 122
Winter Park, FL 32792

Terms	Rep	Project/Job
Net 30	AS	Dn Road Interceptor Sewer

ltem	Description	Qty	Cost	Total
<del>.</del>	Phase 3 - Final Design Services			
	Printing for 60% City Submittal			
207	24" x 36" Digital Laser Bond Copies	125	0.90	112.50T
207	24" x 36" Digital Laser Bond Copies	15	0.54	8.10T
PDF	Process Charge for PDF	3	5.00	15.00T
10-1	8½" x 11" Digital Copies	1,500	0.04	60.00T
10-2	8½" x 11" 110# Printed	5	0.25	1.25T
10-3	8½" x 11" 110# Non-Printed	5	0.25	1.25T
Hole Punching	Hole Punching - GBC/Plastic Comb, Spiral, 2-Hole,	760	0.008	6.08
	3-Hole, Wire, Etc			
GBC-Large	GBC Binding - 11/4" to 2" (230-450 Sheets)	5	2.25	11.25T
Delivery	Delivery Fee	1	12.50	12.50
	Printing for 90% City Submittal			
207	24" x 36" Digital Laser Bond Copies	125	0.90	112.50T
207	24" x 36" Digital Laser Bond Copies	99	0.54	53.46T
PDF	Process Charge for PDF	3	5.00	15.00T
10-1	8½" x 11" Digital Copies	2,400	0.04	96.00T
10-2	8½" x 11" 110# Printed	8	0.25	2.00T
10-2	8½" x 11" 110# Non-Printed	8	0.25	2.00T
Hole Punching	Hole Punching - GBC/Plastic Comb, Spiral, 2-Hole, 3-Hole, Wire, Etc	1,216	0.008	9.73

Subtotal	
Sales Tax (6.5%)	
Total	

Signature & Print		
Olymoral C & Final	 	

## ASC Neomoraphic

### ASG COMPUTER & REPROGRAPHIC, INC.

P.O. Box 5601 Winter Park, FL 32793 Tel: 407·895·5670 Fax: 407·895·5669

## **ESTIMATE**

Date	Estimate #
4/8/2016	1247

Name / Address

4073812192
Woolpert, Inc.
1 Perleiu Place
Suite 122
Winter Park, FL 32792

	İ	Terms	Rep	Projec	t/Job
		Net 30	AS	Dn Road Interd	ceptor Sewer
Item	Description	Qty		Cost	Total
GBC-Large	GBC Binding - 11/4" to 2" (230-450 Sheets)		8	2.25	18.00T
Delivery	Delivery Fee		1	12.50	12.50
	Printing for 100% City Submittal				
207	24" x 36" Digital Laser Bond Copies		125	0.90	112.50T
207	24" x 36" Digital Laser Bond Copies		99	0.54	53.46T
PDF	Process Charge for PDF		3	5.00	15.00T 96.00T
10-1	81/2" x 11" Digital Copies		2,400	0.04	
10-2	8½" x 11" 110# Printed		8	0.25	2.00T
10-3	8½" x 11" 110# Non-Printed		8	0.25	2.00T
Hole Punching	Hole Punching - GBC/Plastic Comb, Spiral, 2-Hole, 3-Hole, Wire, Etc		1,216	0.008	9.73
GBC-Large	GBC Binding - 11/4" to 2" (230-450 Sheets)		8	2.25	18.00T
Delivery	Delivery Fee		1	12.50	12,50
	Phase 4 - Permitting Services				
207	24" x 36" Digital Laser Bond Copies		125	0.90	112.50T
207	24" x 36" Digital Laser Bond Copies		99	0.54	53.46T
PDF	Process Charge for PDF		3	5.00	15.00T
Delivery	Delivery Fee		1	12.50	12.50
	Phase 5 - Bidding Assistance				
			Subtota	1	
		·	Sales T	ax (6.5%)	
			Total		

Signature & Print

## ASC No prographic

## ASG Computer & Reprographic, Inc.

P.O. Box 5601 Winter Park, FL 32793 Tel: 407-895-5670 Fax: 407-895-5669

## **ESTIMATE**

Date	Estimate #
4/8/2016	1247

Name / Address

4073812192

Woolpert, Inc.
1 Perleiu Place
Suite 122

Winter Park, FL 32792

Terms	Rep	Pro	ject/Job	
Net 30	AS	Dn Road In	erceptor Sewer	
Qty		Cost	Total	
	125 15	0.90 0.54	112,50T 8,10T	

ltem	Description	Qty	Cost	Total
207	24" x 36" Digital Laser Bond Copies	125	0.90	112,50T
207	24" x 36" Digital Laser Bond Copies	15	0.54	8.10T
PDF	Process Charge for PDF	3	5.00	15.00T
10-1	8½" x 11" Digital Copies	2,000	0.04	80.00T
10-2	8½" x 11" 110# Printed	5	0.25	1.25T
10-3	8½" x 11" 110# Non-Printed	5	0.25	1.25T
Hole Punching	Hole Punching - GBC/Plastic Comb, Spiral, 2-Hole, 3-Hole, Wire, Etc	1,010	0.008	8.08
GBC-Large	GBC Binding - 11/4" to 2" (230-450 Sheets)	5	2.25	11.25T
Delivery	Delivery Fee	1	12.50	12.50
	Phase 6 - Construction Administration Services			
207	24" x 36" Digital Laser Bond Copies	125	0.90	112.50T
207	24" x 36" Digital Laser Bond Copies	125	0.54	67.50T
207	24" x 36" Digital Laser Bond Copies	170	0.36	61.20T
PDF	Process Charge for PDF	3	5.00	15.00T
10-1	81/2" x 11" Digital Copies	6,000	0.04	240.00T
10-2	8½" x 11" 110# Printed	15	0.25	3.75⊤
10-3	81/2" x 11" 110# Non-Printed	15	0.25	3.75T
Hole Punching	Hole Punching - GBC/Plastic Comb, Spiral, 2-Hole, 3-Hole, Wire, Etc	3,030	800.0	24,24
GBC-Large	GBC Binding - 11/4" to 2" (230-450 Sheets)	15	2.25	33.75T
				I

Subtotal
Sales Tax (6.5%)
Total

Signature & Print	 	 

## A5G Papporaphic

## ASG COMPUTER & REPROGRAPHIC, INC.

P.O. Box 5601 Winter Park, FL 32793 Tel: 407-895-5670 Fax: 407-895-5669

## **ESTIMATE**

Date	Estimate #		
4/8/2016	1247		

Name / Address	
4073812192 Woolpert, Inc. 1 Perleiu Place Suite 122 Winter Park, FL 32792	

		Terms	Rep	Project/Job	
		Net 30 AS		Dn Road Interceptor Sewer	
ltem	Description	Qty		Cost	Total
Delivery	Delivery Fee		1	12.50	12.50
207 PDF Delivery	Printing Record Drawings 24" x 36" Digital Laser Bond Copies Process Charge for PDF Delivery Fee		84 3 1	0.90 5.00 12.50	75,60T 15.00T 12.50
Photo Gloss	Public Involvement Presentation Boards 24" x 36" Color Copying/Printing; Render or Photo Presentation - Photo Gloss Paper (minimum 3 sq/ft)		2	39.00	<b>78.00</b> T
FoamBoard 3/16"	FoamBoard 3/16" - Black; Minimum 3 sq/ft		2	24.00	48.00T
80-8½x11	Mail-Out EDDM  8½" x 11" - 100# ColorCopy/Printing Cover Stock;  Double Sided for EDDM Mailing		4,500	0.70	3,150.00T
		Subtotal Sales Tax (6.5%)		al	\$5,266.99
				\$332.91	
			Total		\$5,599.90

Signature & Print