



Advanced Engineering & Design, Inc.

WORK ORDER INITIATION FORM for the CITY OF CLEARWATER

Date: November 23, 2020

Consultant Project Number: 20.CL-36

City Project Number: 19-0032-EN

City Plan Set Number: 2018026

1. **PROJECT TITLE:**

Nash Street and Old Clearwater Bay Improvements

2. **SCOPE OF SERVICES:**

The City has identified the need for neighborhood-wide improvements within the Gulf to Bay Estates and Old Clearwater Bay neighborhoods. Improvements will include but not be limited to stormwater level of service improvements, roadway reconstruction, expansion and/or replacement of sidewalk infrastructure, sanitary sewer gravity main reconstruction, potable water main reconstruction, reclaimed water main reconstruction and right-of-way restoration.

Advanced Engineering & Design, Inc. (AED) will provide, design, permitting, bidding and construction administration services for both neighborhood improvement projects. While performed under the same design contract, the City will be receiving an independent construction package for each improvement area. It is believed that the City will solicit bids for this project using two (2) separate construction contracts.

Please reference below for a detailed outline of the proposed design, permitting, bidding and construction administration (CA) services. Please note that the Gulf to Bay Estates neighborhood improvement will herein be referenced as Project A while the Old Clearwater Bay improvements will be identified as Project B.

All deliverables shall be compiled using the City of Clearwater CAD standards, as attached.

Project A – Gulf to Bay Estates Neighborhood Improvements

I. PRE-DESIGN PHASE (30%)

1.1 The City-provided topographic survey(s) will be field verified based upon surficial observation. Prior to performing this visit, AED will submit a Health & Safety Plan. AED will submit a formal data request outlining the specific records that are being requested for design. Information provided by the City in response to the data request will be reviewed and findings will be incorporated into the proposed improvements. Platted easements will be identified on the topographic survey. Locations where accessibility standards are not met will be documented and reported to the City.

1.2 Insitu soils will be assessed in a preliminary manner. Proposed boring locations will be mapped and provided to the City for review. Once approved, formal soil assessment activities will commence. This assessment will assist AED in determining:

- Normal and seasonally adjusted groundwater elevations
- The existing roadway's base / asphalt thickness. Base material condition will also be evaluated.
- The relative density of insitu materials.
- The ability of the insitu material to be used as suitable backfill associated with drainage and utility improvements
- The presence of unsuitable or undesirable material that will need to be removed to facilitate the proposed improvements.

With stormwater management facility (i.e. pond) design not proposed for this project, porosity and conductivity are subsurface characteristics that will not be assessed. Furthermore, soil sampling for the purposes of detecting metals, VOC's, SVOC's or any other contaminant is not proposed.

Please note that, in the event unsuitable material is found to be present and removal is required, the limits of unsuitable material will be identified in the construction plans. Mapping of these limits will be done using the boring information and any other observations that may suggest the presence of unsuitable material. Obtaining secondary borings to further map the limits of unsuitable material (if found) is not proposed within this task.

Findings from this field investigation will be reviewed and incorporated into the construction plans.

- 1.3 AED shall prepare a basesheet utilizing the topographic survey and available utility information. Preliminary utility coordination will be performed by AED. Basesheet modification will be performed, as needed, in order to document the findings of this task.
- 1.4 A preliminary assessment of the existing stormwater infrastructure's level of service will be performed. The watershed model for Alligator Creek (the watershed in which Gulf to Bay Estates resides) will be reviewed to determine hydraulic connectivity throughout the project area. Modifications will be made to the model to better document the performance of the neighborhood's local infrastructure. Preliminary stormwater recommendations will be delineated for this project location.
- 1.5 With roadway's being reconstructed throughout, alignments and typical sections will need to be prepared. AED will provide alignment recommendations for all roadways within the project areas. Typical section development will be performed for the subject roadways.
- 1.6 On a neighborhood-wide basis, existing and available utility corridors will be assessed. Locations where significant utility congestion is present will be documented for future use.
- 1.7 Land use requirements will be evaluated for the roadway, stormwater, sidewalk and utility improvements. Right-of-way acquisition needs associated with transportation elements will be identified. Easement size and location recommendations (both temporary and permanent) will be identified on the preliminary plans.
- 1.8 A preliminary opinion of probable cost will be prepared. Construction elements will be itemized and proposed pay items will be developed.
- 1.9 In an effort to document design assumptions, AED will prepare a Technical Memorandum. This memorandum will focus on the roadway and stormwater design factors considered when developing the preliminary plans.
- 1.10 AED will attend a meeting with City personnel to discuss comments to the Technical Memorandum/30% submittal. Meeting minutes will be prepared by AED and distributed to the City for review and commentary.

II. INTERMEDIATE DESIGN PHASE (60%)

- 2.01 AED staff will attend a Pre-Application Meeting with the Southwest Florida Water Management District (SWFWMD). Records of these meetings will be distributed to City personnel.
- 2.02 Private utility coordination will continue throughout the development of the 60% plans. Subsurface Utility Engineering (SUE) will be performed to obtain quality level "A" locates. Revisions to the construction plan basesheets (in both the plan and profile views) will be performed based upon the findings of these field activities. The proposed scope of works assumes between 18-25 "soft digs" to verify vertical and horizontal utility location.
- 2.03 A Control Plan will be prepared identifying construction baseline geometrics. Vertical control throughout the project location will also be documented on this plan.
- 2.04 AED will prepare a Demolition / Erosion & Sediment Control Plan detailing sediment control measures to be implemented during the construction phase. The scope of demolition will be outlined in this plan. Applicable detailing will be performed where the need to supplement City standard details is identified.
- 2.05 Stormwater modeling will be advanced to reflect a 60% level of completion. Adverse impacts which may be present upstream and/or downstream will be mitigated. Level of Service (LOS) improvements will be defined. The performance of secondary pipe systems will also be evaluated as part of this effort.
- 2.06 Written responses will be prepared for City commentary issued during the prior design phase. Specific means of addressing each comment will be outlined within the response document. The design plans will be advanced to reflect a 60% completion level.
- 2.07 Plan detailing will be performed. Location-specific restoration requirements as well as other project elements will also be addressed. Supplemental plan sheets, focusing on elements such as signage/striping and construction phasing, will be prepared and incorporated into the construction plans.

- 2.08 Previously developed opinions of probable cost will be further developed to incorporate the 60% design level elements. Scope itemization will be performed to the extent desired by the City.
- 2.09 Technical specifications will be prepared. City-standard specifications will be reviewed in detail and project-specific deviations, modifications and clarifications will be included within Section IVa. Section IVa will also include a Measurement and Payment section which will identify the specific subtasks required for each pay item. The preparation of “front end” documents, using the City’s standard format, will also be done at this time.
- 2.10 A letter narrative discussing design assumptions will be prepared by AED. This document will identify where clarification and / or input is needed from the City. Anticipated upcoming design tasks will be outlined for the City’s consideration. A design review meeting will be attended if desired by the City.

III. INTERMEDIATE DESIGN PHASE (90%)

- 3.01 Hydrologic and hydraulic modeling will be finalized at this stage of the design. Executable models will be packaged and transmitted to the City for future use. This transmittal will be accompanied by a Stormwater Modeling Narrative which will explain the modeling assumptions and techniques used for the project location. A summary of design storm results will be included within this document to streamline the review process.
- 3.02 A permit application will be prepared and submitted to the Southwest Florida Water Management District. Permitting through the Florida Department of Transportation is not anticipated.
- 3.03 Modifications to the plans and Stormwater Modeling Narrative will be made based upon commentary received by the permitting entity. Written responses will also be prepared and provided to the City for review prior to resubmission.
- 3.04 AED will assist the City in community outreach efforts. This may include the preparation of figures and maps, attendance at public meetings and individual property owner coordination. AED will log commentary received throughout the outreach process and coordinate the extent of plan / approach modifications with the City. Outreach pertaining to the construction of a new sidewalk on roads where no such facility is present is a component of this task. AED recognizes that the City may prefer to perform segmental outreach

throughout the duration of the project and/or begin outreach efforts during earlier phases of design.

- 3.05 Written responses will be prepared for City commentary issued during the prior design phase. Specific means of addressing each comment will be outlined within the response document. The design plans will be advanced to reflect a 90% completion level. A Construction Phasing plan will be prepared at this time.
- 3.06 Section IVa of the Contract Documents will be further developed to represent a 90% completion level. Modifications requested by the City at the time of 60% plan review will be incorporated at this time. Alternations mandated by project-specific permit conditions will be made.
- 3.07 Previously developed opinions of probable cost will be further developed to incorporate the 90% design level elements. Scope itemization will be performed to the extent desired by the City.
- 3.08 A letter narrative discussing design assumptions will be prepared by AED. This document will identify where clarification and / or input is needed from the City. Anticipated upcoming design tasks will be outlined for the City's consideration. A design review meeting will be attended if desired by the City.

IV. FINAL DESIGN PHASE

- 4.01 Written responses will be prepared for City commentary issued during the prior design phase. Specific means of addressing each comment will be outlined within the response document. The design plans will be advanced to reflect a final completion level.
- 4.02 Section IVa of the Contract Documents will be finalized. Construction-specific requirements resulting from public outreach efforts will be incorporated into this document to the extent desired by the City.
- 4.03 Previously developed opinions of probable cost will be advanced and finalized.
- 4.04 A letter narrative discussing design assumptions will be prepared by AED. This document will identify where clarification and / or input is needed from the City. Anticipated upcoming design tasks will be outlined for the City's consideration. A design review meeting will be attended if desired by the City.

V. BIDDING PHASE

- 5.01 AED will attend a Pre-Bid Meeting at the City of Clearwater. Commentary / questions submitted by prospective contractors will be recorded and incorporated into future addenda.
- 5.02 AED will respond to Requests for Information (RFIs) placed by prospective bidders. Responses may require plan, specification and / or quantity revisions. If needed, modified documents will be transmitted to the City. Addenda will be issued on an as-needed basis.
- 5.03 AED will review the received bids and the Bid Tabulation provided by the City. A Recommendation of Award letter will be issued. Commentary on submitted pricing will also be provided.

VI. CONSTRUCTION PHASE

- 6.01 AED will attend a Pre-Construction Meeting at the City of Clearwater.
- 6.02 Shop drawings will be reviewed by AED. Processing of shop drawings will include any supplemental information required for approvals. City commentary will be solicited and incorporated into the review.
- 6.03 AED personnel will perform site visits / progress meetings throughout construction to observe the progress of the work. Progress meetings will be led by the AED team and will entail agenda preparation, meeting administration and the preparation of meeting minutes. It is assumed that the project meetings will be held twice a month and the project will be 12 months long (24 progress meetings). A site visit will be performed prior to or after each progress meeting.
- 6.04 AED will respond to Requests for Information (RFIs) placed by the Contractor. Plan revisions will be performed on an as-needed basis. Contractor coordination will be performed throughout the duration of construction.
- 6.05 AED will attend a final walk through at the completion of the work. Punchlist items will be identified and formally documented at this time. AED will assist in the resolution of the Punchlist.
- 6.06 AED will prepare signed/sealed record drawings based on contractor-submitted as-builts that are signed/sealed by a professional land surveyor. Permit closeout will be performed as needed.

VII. SANITARY SEWER DESIGN, PERMITTING, BIDDING AND CONSTRUCTION SERVICES

- 7.01 Proposed corridors for sanitary sewer facilities will be identified utilizing corridor information developed in other project subtasks. A preliminary alignment will be selected and delineated within the 30% plans.
- 7.02 A preliminary opinion of probable cost will be prepared itemizing only sanitary sewer elements of the project. Proposed pay items will be developed for sanitary sewer work tasks.
- 7.03 In an effort to document design assumptions, AED will prepare a Technical Memorandum. This memorandum will focus on the sanitary sewer design factors considered when developing the preliminary plans.
- 7.04 Written responses will be prepared for City commentary focusing on the sanitary sewer elements of the project. Specific means of addressing each comment will be outlined within the response document. The design plans will be advanced to reflect a 60% completion level.
- 7.05 Plan detailing will be performed. This effort will include general recommendations for sewage bypass. Supplemental plan sheets will be prepared and incorporated into the construction plans.
- 7.06 Previously developed opinions of probable cost will be further developed to incorporate the 60% design level elements. Scope itemization will be performed to the extent desired by the City.
- 7.07 The technical specifications will be expanded to include the proposed sanitary sewer scope of work. City-standard specifications will be reviewed in detail and project-specific deviations, modifications and clarifications will be included within Section IVa. Section IVa will also include a Measurement and Payment section which will identify the specific subtasks required for each sanitary sewer pay item.
- 7.08 The letter narrative, which discusses design assumptions, will be expanded by AED to incorporate the sanitary sewer scope of work. This document will identify where clarification and / or input is needed from the City. Anticipated upcoming design tasks will be outlined for the City's consideration.

- 7.09 A permit application will be prepared and submitted to the Florida Department of Environmental Protection. Permitting through the Florida Department of Transportation is not anticipated.
- 7.10 Modifications to the plans (and specifications if needed) will be made based upon commentary received by the permitting entity. Written responses will also be prepared and provided to the City for review prior to resubmission if needed.
- 7.11 Written responses will be prepared for City commentary focusing on the sanitary sewer elements of the project. Specific means of addressing each comment will be outlined within the response document. The design plans will be advanced to reflect a 90% completion level.
- 7.12 Section IVa of the Contract Documents will be further developed to represent a 90% completion level. Modifications requested by the City at the time of 60% plan review will be incorporated at this time. Alternations mandated by project-specific permit conditions will be made.
- 7.13 Previously developed opinions of probable cost will be further developed to incorporate the 90% design level elements. Scope itemization will be performed to the extent desired by the City.
- 7.14 The letter narrative, which discusses design assumptions, will be expanded by AED to incorporate the sanitary sewer scope of work. This document will identify where clarification and / or input is needed from the City. Anticipated upcoming design tasks will be outlined for the City's consideration.
- 7.15 Written responses will be prepared for City commentary focusing on the sanitary sewer elements of the project. Specific means of addressing each comment will be outlined within the response document. The design plans will be advanced to reflect a final completion level.
- 7.16 Section IVa of the Contract Documents will be finalized. Construction-specific requirements resulting from public outreach efforts will be incorporated into this document to the extent desired by the City.
- 7.17 Previously developed opinions of probable cost will be advanced and finalized.
- 7.18 AED will respond to sanitary sewer-related Requests for Information (RFIs) placed by prospective bidders. Responses may require plan, specification and / or quantity revisions. If needed, modified documents will be transmitted to the

City. Addenda, if issued, will be expanded to cover sanitary sewer elements.

- 7.19 AED will review the received bids and the Bid Tabulation provided by the City. The Recommendation of Award letter will be expanded to discuss sanitary sewer work elements. Commentary on submitted pricing (for sanitary sewer work) will also be provided.
- 7.20 Sanitary sewer shop drawings will be reviewed by AED. Processing of shop drawings will include any supplemental information required for approvals. City commentary will be solicited and incorporated into the review.
- 7.21 AED personnel will perform site visits / progress meetings throughout construction to observe the progress of sanitary sewer work.
- 7.22 AED will respond to Requests for Information (RFIs) placed by the Contractor which pertain to the sanitary sewer scope of work. Plan revisions will be performed on an as-needed basis. Contractor coordination, pertaining to the sanitary sewer work, will be performed throughout the duration of construction.
- 7.23 AED will attend a final walk through at the completion of the work. Punchlist items for sanitary sewer work will be identified and formally documented at this time. AED will assist in the resolution of the Punchlist.
- 7.24 AED will prepare signed/sealed record drawings based on contractor-submitted as-builts that are signed/sealed by a professional land surveyor. Permit closeout will be performed as needed.

VIII. POTABLE WATER DESIGN, PERMITTING, BIDDING AND CONSTRUCTION SERVICES

- 8.01 Upon layout of the proposed improvements, possible potable water conflicts will be identified. A preliminary resolution approach will be developed and delineated within the 30% plans.
- 8.02 A preliminary opinion of probable cost will be prepared itemizing only potable water elements of the project. Proposed pay items will be developed for potable water work tasks.
- 8.03 In an effort to document design assumptions, AED will prepare a Technical Memorandum. This memorandum will focus on the potable water design

factors considered when developing the preliminary plans.

- 8.04 Written responses will be prepared for City commentary focusing on the potable water elements of the project. Specific means of addressing each comment will be outlined within the response document. The design plans will be advanced to reflect a 60% completion level.
- 8.05 Plan detailing, focusing on potable water, will be performed. Supplemental plan sheets will be prepared and incorporated into the construction plans.
- 8.06 Previously developed opinions of probable cost will be further developed to incorporate the 60% design level elements. Scope itemization will be performed to the extent desired by the City.
- 8.07 The technical specifications will be expanded to include the proposed potable water scope of work. City-standard specifications will be reviewed in detail and project-specific deviations, modifications and clarifications will be included within Section IVa. Section IVa will also include a Measurement and Payment section which will identify the specific subtasks required for each potable water pay item.
- 8.08 The letter narrative, which discusses design assumptions, will be expanded by AED to incorporate the potable water scope of work. This document will identify where clarification and / or input is needed from the City. Anticipated upcoming design tasks will be outlined for the City's consideration.
- 8.09 A permit application will be prepared and submitted to the Florida Department of Environmental Protection. Permitting through the Florida Department of Transportation is not anticipated.
- 8.10 Modifications to the plans (and specifications if needed) will be made based upon commentary received by the permitting entity. Written responses will also be prepared and provided to the City for review prior to resubmission if needed.
- 8.11 Written responses will be prepared for City commentary focusing on the potable water elements of the project. Specific means of addressing each comment will be outlined within the response document. The design plans will be advanced to reflect a 90% completion level.
- 8.12 Section IVa of the Contract Documents will be further developed to represent a 90% completion level. Modifications requested by the City at the time of 60%

plan review will be incorporated at this time. Alternations mandated by project-specific permit conditions will be made.

- 8.13 Previously developed opinions of probable cost will be further developed to incorporate the 90% design level elements. Scope itemization will be performed to the extent desired by the City.
- 8.14 The letter narrative, which discusses design assumptions, will be expanded by AED to incorporate the potable water scope of work. This document will identify where clarification and / or input is needed from the City. Anticipated upcoming design tasks will be outlined for the City's consideration.
- 8.15 Written responses will be prepared for City commentary focusing on the potable water elements of the project. Specific means of addressing each comment will be outlined within the response document. The design plans will be advanced to reflect a final completion level.
- 8.16 Section IVa of the Contract Documents will be finalized. Construction-specific requirements resulting from public outreach efforts will be incorporated into this document to the extent desired by the City.
- 8.17 Previously developed opinions of probable cost will be advanced and finalized.
- 8.18 AED will respond to potable water-related Requests for Information (RFIs) placed by prospective bidders. Responses may require plan, specification and / or quantity revisions. If needed, modified documents will be transmitted to the City. Addenda, if issued, will be expanded to cover potable water elements.
- 8.19 AED will review the received bids and the Bid Tabulation provided by the City. The Recommendation of Award letter will be expanded to discuss potable water work elements. Commentary on submitted pricing (for potable water work) will also be provided.
- 8.20 Potable water shop drawings will be reviewed by AED. Processing of shop drawings will include any supplemental information required for approvals. City commentary will be solicited and incorporated into the review.
- 8.21 AED personnel will perform site visits / progress meetings throughout construction to observe the progress of potable water work.
- 8.22 AED will respond to Requests for Information (RFIs) placed by the Contractor which pertain to the potable water scope of work. Plan revisions will be

performed on an as-needed basis. Contractor coordination, pertaining to the potable water work, will be performed throughout the duration of construction.

- 8.23 AED will attend a final walk through at the completion of the work. Punchlist items for potable water work will be identified and formally documented at this time. AED will assist in the resolution of the Punchlist.
- 8.24 AED will prepare signed/sealed record drawings based on contractor-submitted as-builts that are signed/sealed by a professional land surveyor. Permit closeout will be performed as needed. Where applicable, pressure pipeline depth will be documented.

Project contingencies have been allocated for additional services. These project contingencies shall not be used unless written approval is provided by the City Project Manager.

Additionally, permit fee allowances have been established for the project.

Project B – Old Clearwater Bay Neighborhood Improvements

IX. PRE-DESIGN PHASE (30%)

- 9.1 The City-provided topographic survey(s) will be field verified based upon surficial observation. Prior to performing this visit, AED will submit a Health & Safety Plan. AED will submit a formal data request outlining the specific records that are being requested for design. Information provided by the City in response to the data request will be reviewed and findings will be incorporated into the proposed improvements. Platted easements will be identified on the topographic survey. Locations where accessibility standards are not met will be documented and reported to the City.
- 9.2 Insitu soils will be assessed in a preliminary manner. Proposed boring locations will be mapped and provided to the City for review. Once approved, formal soil assessment activities will commence. This assessment will assist AED in determining:
- Normal and seasonally adjusted groundwater elevations
 - The existing roadway's base / asphalt thickness. Base material condition will also be evaluated.
 - The relative density of insitu materials.
 - The ability to the insitu material to be used as suitable backfill associated with drainage and utility improvements

- The presence of unsuitable or undesirable material that will need to be removed to facilitate the proposed improvements.

With stormwater management facility (i.e. pond) design not proposed for this project, porosity and conductivity are subsurface characteristics that will not be assessed. Furthermore, soil sampling for the purposes of detecting metals, VOC's, SVOC's or any other contaminant is not proposed.

Please note that, in the event unsuitable material is found to be present and removal is required, the limits of unsuitable material will be identified in the construction plans. Mapping of these limits will be done using the boring information and any other observations that may suggest the presence of unsuitable material. Obtaining secondary borings to further map the limits of unsuitable material (if found) is not proposed within this task.

Findings from this field investigation will be reviewed and incorporated into the construction plans.

- 9.3 AED shall prepare a basesheet utilizing the topographic survey and available utility information. Preliminary utility coordination will be performed by AED. Basesheet modification will be performed, as needed, in order to document the findings of this task.
- 9.4 A preliminary assessment of the existing stormwater infrastructure's level of service will be performed. A hydrologic and hydraulic (H&H) model will be prepared for Old Clearwater Bay's pre-improvement condition. Existing models available will be revised and expanded as necessary. Preliminary stormwater recommendations will be delineated for this project location.
- 9.5 With roadway's being reconstructed throughout, alignments and typical sections will need to be prepared. AED will provide alignment recommendations for all roadways within the project areas. Typical section development will be performed for the subject roadways.
- 9.6 On a neighborhood-wide basis, existing and available utility corridors will be assessed. Locations where significant utility congestion is present will be documented for future use.
- 9.7 Land use requirements will be evaluated for the roadway, stormwater, sidewalk and utility improvements. Right-of-way acquisition needs associated with transportation elements will be identified. Easement size and location

recommendations (both temporary and permanent) will be identified on the preliminary plans.

- 9.8 A preliminary opinion of probable cost will be prepared. Construction elements will be itemized and proposed pay items will be developed.
- 9.9 In an effort to document design assumptions, AED will prepare a Technical Memorandum. This memorandum will focus on the roadway and stormwater design factors considered when developing the preliminary plans.
- 9.10 AED will attend a meeting with City personnel to discuss comments to the Technical Memorandum / 30% submittal. Meeting minutes will be prepared by AED and distributed to the City for review and commentary.

X. INTERMEDIATE DESIGN PHASE (60%)

- 10.01 AED staff will attend a Pre-Application Meeting with the Southwest Florida Water Management District (SWFWMD). AED staff will also attend a Pre-Application meeting with the U.S. Army Corps of Engineers (USACOE) to confirm the applicability of Nationwide Permit for impacts to Water of the State. Records of these meetings will be distributed to City personnel.
- 10.02 Private utility coordination will continue throughout the development of the 60% plans. Subsurface Utility Engineering (SUE) will be performed to obtain quality level "A" locates. Revisions to the construction plan basesheets (in both the plan and profile views) will be performed based upon the findings of these field activities. The proposed scope of works assumes between 12-17 "soft digs" to verify vertical and horizontal utility location.
- 10.03 Coordination with AED's environmental subconsultant will be performed to assess surface water impacts associated with the improvements. The assessment will focus on FLUCCS land use designation, environmentally sensitive features, existing vegetation and existing habitat. This narrative will accompany future permit submissions.
- 10.04 A Control Plan will be prepared identifying construction baseline geometrics. Vertical control throughout the project location will also be documented on this plan.
- 10.05 AED will prepare a Demolition / Erosion & Sediment Control Plan detailing sediment control measures to be implemented during the construction phase.

The scope of demolition will be outlined in this plan. Applicable detailing will be performed where the need to supplement City standard details is identified.

- 10.06 Stormwater modeling will be advanced to reflect a 60% level of completion. Adverse impacts which may be present upstream and/or downstream will be mitigated. Level of Service (LOS) improvements will be defined. The performance of secondary pipe systems will also be evaluated as part of this effort.
- 10.07 Written responses will be prepared for City commentary issued during the prior design phase. Specific means of addressing each comment will be outlined within the response document. The design plans will be advanced to reflect a 60% completion level.
- 10.08 Plan detailing will be performed. This effort will address structural detailing required for the restoration / construction of seawalls and/or retaining walls. Location-specific restoration requirements as well as other project elements will also be addressed. Supplemental plan sheets, focusing on elements such as signage/striping and construction phasing, will be prepared and incorporated into the construction plans.
- 10.09 Previously developed opinions of probable cost will be further developed to incorporate the 60% design level elements. Scope itemization will be performed to the extent desired by the City.
- 10.10 Technical specifications will be prepared. City-standard specifications will be reviewed in detail and project-specific deviations, modifications and clarifications will be included within Section IVa. Section IVa will also include a Measurement and Payment section which will identify the specific subtasks required for each pay item. The preparation of "front end" documents, using the City's standard format, will also be done at this time.
- 10.11 A letter narrative discussing design assumptions will be prepared by AED. This document will identify where clarification and / or input is needed from the City. Anticipated upcoming design tasks will be outlined for the City's consideration. A design review meeting will be attended if desired by the City.

XI. INTERMEDIATE DESIGN PHASE (90%)

- 11.01 Hydrologic and hydraulic modeling will be finalized at this stage of the design. Executable models will be packaged and transmitted to the City for future use.

This transmittal will be accompanied by a Stormwater Modeling Narrative which will explain the modeling assumptions and techniques used for the project location. A summary of design storm results will be included within this document to streamline the review process.

- 11.02 A permit application will be prepared and submitted to the Southwest Florida Water Management District (environmental and stormwater) and the Pinellas County Water & Navigational Authority (Dredge & Fill) (if needed). A Pre-Construction Notice will also be prepared and submitted to the Army Corps of Engineers. Permitting through the Florida Department of Transportation is not anticipated.
- 11.03 Modifications to the plans and Stormwater Modeling Narrative will be made based upon commentary received by the permitting entity. Written responses will also be prepared and provided to the City for review prior to resubmission.
- 11.04 AED will assist the City in community outreach efforts. This may include the preparation of figures and maps, attendance at public meetings and individual property owner coordination. AED will log commentary received throughout the outreach process and coordinate the extent of plan / approach modifications with the City. Outreach pertaining to the construction of a new sidewalk on roads where no such facility is present is a component of this task. AED recognizes that the City may prefer to perform segmental outreach throughout the duration of the project and/or begin outreach efforts during earlier phases of design.
- 11.05 Written responses will be prepared for City commentary issued during the prior design phase. Specific means of addressing each comment will be outlined within the response document. The design plans will be advanced to reflect a 90% completion level. A Construction Phasing plan will be prepared at this time.
- 11.06 Section IVa of the Contract Documents will be further developed to represent a 90% completion level. Modifications requested by the City at the time of 60% plan review will be incorporated at this time. Alternations mandated by project-specific permit conditions will be made.
- 11.07 Previously developed opinions of probable cost will be further developed to incorporate the 90% design level elements. Scope itemization will be performed to the extent desired by the City.

- 11.08 A letter narrative discussing design assumptions will be prepared by AED. This document will identify where clarification and / or input is needed from the City. Anticipated upcoming design tasks will be outlined for the City's consideration. A design review meeting will be attended if desired by the City.

XII. FINAL DESIGN PHASE

- 12.01 Written responses will be prepared for City commentary issued during the prior design phase. Specific means of addressing each comment will be outlined within the response document. The design plans will be advanced to reflect a final completion level.
- 12.02 Section IVa of the Contract Documents will be finalized. Construction-specific requirements resulting from public outreach efforts will be incorporated into this document to the extent desired by the City.
- 12.03 Previously developed opinions of probable cost will be advanced and finalized.
- 12.04 A letter narrative discussing design assumptions will be prepared by AED. This document will identify where clarification and / or input is needed from the City. Anticipated upcoming design tasks will be outlined for the City's consideration. A design review meeting will be attended if desired by the City.

XIII. BIDDING PHASE

- 13.01 AED will attend a Pre-Bid Meeting at the City of Clearwater. Commentary / questions submitted by prospective contractors will be recorded and incorporated into future addenda.
- 13.02 AED will respond to Requests for Information (RFIs) placed by prospective bidders. Responses may require plan, specification and / or quantity revisions. If needed, modified documents will be transmitted to the City. Addenda will be issued on an as-needed basis.
- 13.03 AED will review the received bids and the Bid Tabulation provided by the City. A Recommendation of Award letter will be issued. Commentary on submitted pricing will also be provided.

XIV. CONSTRUCTION PHASE

- 14.01 AED will attend a Pre-Construction Meeting at the City of Clearwater.

- 14.02 Shop drawings will be reviewed by AED. Processing of shop drawings will include any supplemental information required for approvals. City commentary will be solicited and incorporated into the review.
- 14.03 AED personnel will perform site visits / progress meetings throughout construction to observe the progress of the work. Progress meetings will be led by the AED team and will entail agenda preparation, meeting administration and the preparation of meeting minutes. It is assumed that the project meetings will be held twice a month and the project will be 12 months long (24 progress meetings). A site visit will be performed prior to or after each progress meeting.
- 14.04 AED will respond to Requests for Information (RFIs) placed by the Contractor. Plan revisions will be performed on an as-needed basis. Contractor coordination will be performed throughout the duration of construction.
- 14.05 AED will attend a final walk through at the completion of the work. Punchlist items will be identified and formally documented at this time. AED will assist in the resolution of the Punchlist.
- 14.06 AED will prepare signed/sealed record drawings based on contractor-submitted as-builts that are signed/sealed by a professional land surveyor. Permit closeout will be performed as needed.

XV. SANITARY SEWER DESIGN, PERMITTING, BIDDING AND CONSTRUCTION SERVICES

- 15.01 Proposed corridors for sanitary sewer facilities will be identified utilizing corridor information developed in other project subtasks. A preliminary alignment will be selected and delineated within the 30% plans.
- 15.02 A preliminary opinion of probable cost will be prepared itemizing only sanitary sewer elements of the project. Proposed pay items will be developed for sanitary sewer work tasks.
- 15.03 In an effort to document design assumptions, AED will prepare a Technical Memorandum. This memorandum will focus on the sanitary sewer design factors considered when developing the preliminary plans.
- 15.04 Written responses will be prepared for City commentary focusing on the sanitary sewer elements of the project. Specific means of addressing each comment will be outlined within the response document. The design plans will

be advanced to reflect a 60% completion level.

- 15.05 Plan detailing will be performed. This effort will include general recommendations for sewage bypass. Supplemental plan sheets will be prepared and incorporated into the construction plans.
- 15.06 Previously developed opinions of probable cost will be further developed to incorporate the 60% design level elements. Scope itemization will be performed to the extent desired by the City.
- 15.07 The technical specifications will be expanded to include the proposed sanitary sewer scope of work. City-standard specifications will be reviewed in detail and project-specific deviations, modifications and clarifications will be included within Section IVa. Section IVa will also include a Measurement and Payment section which will identify the specific subtasks required for each sanitary sewer pay item.
- 15.08 The letter narrative, which discusses design assumptions, will be expanded by AED to incorporate the sanitary sewer scope of work. This document will identify where clarification and / or input is needed from the City. Anticipated upcoming design tasks will be outlined for the City's consideration.
- 15.09 A permit application will be prepared and submitted to the Florida Department of Environmental Protection. Permitting through the Florida Department of Transportation is not anticipated.
- 15.10 Modifications to the plans (and specifications if needed) will be made based upon commentary received by the permitting entity. Written responses will also be prepared and provided to the City for review prior to resubmission if needed.
- 15.11 Written responses will be prepared for City commentary focusing on the sanitary sewer elements of the project. Specific means of addressing each comment will be outlined within the response document. The design plans will be advanced to reflect a 90% completion level.
- 15.12 Section IVa of the Contract Documents will be further developed to represent a 90% completion level. Modifications requested by the City at the time of 60% plan review will be incorporated at this time. Alternations mandated by project-specific permit conditions will be made.

- 15.13 Previously developed opinions of probable cost will be further developed to incorporate the 90% design level elements. Scope itemization will be performed to the extent desired by the City.
- 15.14 The letter narrative, which discusses design assumptions, will be expanded by AED to incorporate the sanitary sewer scope of work. This document will identify where clarification and / or input is needed from the City. Anticipated upcoming design tasks will be outlined for the City's consideration.
- 15.15 Written responses will be prepared for City commentary focusing on the sanitary sewer elements of the project. Specific means of addressing each comment will be outlined within the response document. The design plans will be advanced to reflect a final completion level.
- 15.16 Section IVa of the Contract Documents will be finalized. Construction-specific requirements resulting from public outreach efforts will be incorporated into this document to the extent desired by the City.
- 15.17 Previously developed opinions of probable cost will be advanced and finalized.
- 15.18 AED will respond to sanitary sewer-related Requests for Information (RFIs) placed by prospective bidders. Responses may require plan, specification and / or quantity revisions. If needed, modified documents will be transmitted to the City. Addenda, if issued, will be expanded to cover sanitary sewer elements.
- 15.19 AED will review the received bids and the Bid Tabulation provided by the City. The Recommendation of Award letter will be expanded to discuss sanitary sewer work elements. Commentary on submitted pricing (for sanitary sewer work) will also be provided.
- 15.20 Sanitary sewer shop drawings will be reviewed by AED. Processing of shop drawings will include any supplemental information required for approvals. City commentary will be solicited and incorporated into the review.
- 15.21 AED personnel will perform site visits / progress meetings throughout construction to observe the progress of sanitary sewer work.
- 15.22 AED will respond to Requests for Information (RFIs) placed by the Contractor which pertain to the sanitary sewer scope of work. Plan revisions will be performed on an as-needed basis. Contractor coordination, pertaining to the sanitary sewer work, will be performed throughout the duration of

construction.

- 15.23 AED will attend a final walk through at the completion of the work. Punchlist items for sanitary sewer work will be identified and formally documented at this time. AED will assist in the resolution of the Punchlist.
- 15.24 AED will prepare signed/sealed record drawings based on contractor-submitted as-builts that are signed/sealed by a professional land surveyor. Permit closeout will be performed as needed. Where applicable, pressure pipeline depth will be documented.

XVI. POTABLE WATER DESIGN, PERMITTING, BIDDING AND CONSTRUCTION SERVICES

- 16.01 Upon layout of the proposed improvements, possible potable water conflicts will be identified. A preliminary resolution approach will be developed and delineated within the 30% plans. Limits of potable water main replacement, due to material or existing size, will also be identified and depicted on the 30% plans.
- 16.02 A preliminary opinion of probable cost will be prepared itemizing only potable water elements of the project. Proposed pay items will be developed for potable water work tasks.
- 16.03 In an effort to document design assumptions, AED will prepare a Technical Memorandum. This memorandum will focus on the potable water design factors considered when developing the preliminary plans.
- 16.04 Written responses will be prepared for City commentary focusing on the potable water elements of the project. Specific means of addressing each comment will be outlined within the response document. The design plans will be advanced to reflect a 60% completion level.
- 16.05 Plan detailing, focusing on potable water, will be performed. Supplemental plan sheets will be prepared and incorporated into the construction plans.
- 16.06 Previously developed opinions of probable cost will be further developed to incorporate the 60% design level elements. Scope itemization will be performed to the extent desired by the City.

- 16.07 The technical specifications will be expanded to include the proposed potable water scope of work. City-standard specifications will be reviewed in detail and project-specific deviations, modifications and clarifications will be included within Section IVa. Section IVa will also include a Measurement and Payment section which will identify the specific subtasks required for each potable water pay item.
- 16.08 The letter narrative, which discusses design assumptions, will be expanded by AED to incorporate the potable water scope of work. This document will identify where clarification and / or input is needed from the City. Anticipated upcoming design tasks will be outlined for the City's consideration.
- 16.09 A permit application will be prepared and submitted to the Florida Department of Environmental Protection.
- 16.10 Modifications to the plans (and specifications if needed) will be made based upon commentary received by the permitting entity. Written responses will also be prepared and provided to the City for review prior to resubmission if needed.
- 16.11 Written responses will be prepared for City commentary focusing on the potable water elements of the project. Specific means of addressing each comment will be outlined within the response document. The design plans will be advanced to reflect a 90% completion level.
- 16.12 Section IVa of the Contract Documents will be further developed to represent a 90% completion level. Modifications requested by the City at the time of 60% plan review will be incorporated at this time. Alternations mandated by project-specific permit conditions will be made.
- 16.13 Previously developed opinions of probable cost will be further developed to incorporate the 90% design level elements. Scope itemization will be performed to the extent desired by the City.
- 16.14 The letter narrative, which discusses design assumptions, will be expanded by AED to incorporate the potable water scope of work. This document will identify where clarification and / or input is needed from the City. Anticipated upcoming design tasks will be outlined for the City's consideration.
- 16.15 Written responses will be prepared for City commentary focusing on the potable water elements of the project. Specific means of addressing each comment will be outlined within the response document. The design plans will

be advanced to reflect a final completion level.

- 16.16 Section IVa of the Contract Documents will be finalized. Construction-specific requirements resulting from public outreach efforts will be incorporated into this document to the extent desired by the City.
- 16.17 Previously developed opinions of probable cost will be advanced and finalized.
- 16.18 AED will respond to potable water-related Requests for Information (RFIs) placed by prospective bidders. Responses may require plan, specification and / or quantity revisions. If needed, modified documents will be transmitted to the City. Addenda, if issued, will be expanded to cover potable water elements.
- 16.19 AED will review the received bids and the Bid Tabulation provided by the City. The Recommendation of Award letter will be expanded to discuss potable water work elements. Commentary on submitted pricing (for potable water work) will also be provided.
- 16.20 Potable water shop drawings will be reviewed by AED. Processing of shop drawings will include any supplemental information required for approvals. City commentary will be solicited and incorporated into the review.
- 16.21 AED personnel will perform site visits / progress meetings throughout construction to observe the progress of potable water work.
- 16.22 AED will respond to Requests for Information (RFIs) placed by the Contractor which pertain to the potable water scope of work . Plan revisions will be performed on an as-needed basis. Contractor coordination, pertaining to the potable water work, will be performed throughout the duration of construction.
- 16.23 AED will attend a final walk through at the completion of the work. Punchlist items for potable water work will be identified and formally documented at this time. AED will assist in the resolution of the Punchlist.
- 16.24 AED will prepare signed/sealed record drawings based on contractor-submitted as-builts that are signed/sealed by a professional land surveyor. Permit closeout will be performed as needed. Where applicable, pressure pipeline depth will be documented.

XVII. RECLAIMED WATER DESIGN, PERMITTING, BIDDING AND CONSTRUCTION SERVICES

- 17.01 Upon layout of the proposed improvements, possible reclaimed water conflicts will be identified. A preliminary resolution approach will be developed and delineated within the 30% plans.
- 17.02 A preliminary opinion of probable cost will be prepared itemizing only reclaimed water elements of the project. Proposed pay items will be developed for reclaimed water work tasks.
- 17.03 In an effort to document design assumptions, AED will prepare a Technical Memorandum. This memorandum will focus on the reclaimed water design factors considered when developing the preliminary plans.
- 17.04 Written responses will be prepared for City commentary focusing on the reclaimed water elements of the project. Specific means of addressing each comment will be outlined within the response document. The design plans will be advanced to reflect a 60% completion level.
- 17.05 Plan detailing, focusing on reclaimed water, will be performed. Supplemental plan sheets will be prepared and incorporated into the construction plans.
- 17.06 Previously developed opinions of probable cost will be further developed to incorporate the 60% design level elements. Scope itemization will be performed to the extent desired by the City.
- 17.07 The technical specifications will be expanded to include the proposed reclaimed water scope of work. City-standard specifications will be reviewed in detail and project-specific deviations, modifications and clarifications will be included within Section IVa. Section IVa will also include a Measurement and Payment section which will identify the specific subtasks required for each reclaimed water pay item.
- 17.08 The letter narrative, which discusses design assumptions, will be expanded by AED to incorporate the reclaimed water scope of work. This document will identify where clarification and / or input is needed from the City. Anticipated upcoming design tasks will be outlined for the City's consideration.
- 17.09 Written responses will be prepared for City commentary focusing on the reclaimed water elements of the project. Specific means of addressing each

comment will be outlined within the response document. The design plans will be advanced to reflect a 90% completion level.

- 17.10 Section IVa of the Contract Documents will be further developed to represent a 90% completion level. Modifications requested by the City at the time of 60% plan review will be incorporated at this time.
- 17.11 Previously developed opinions of probable cost will be further developed to incorporate the 90% design level elements. Scope itemization will be performed to the extent desired by the City.
- 17.12 The letter narrative, which discusses design assumptions, will be expanded by AED to incorporate the reclaimed water scope of work. This document will identify where clarification and / or input is needed from the City. Anticipated upcoming design tasks will be outlined for the City's consideration.
- 17.13 Written responses will be prepared for City commentary focusing on the reclaimed water elements of the project. Specific means of addressing each comment will be outlined within the response document. The design plans will be advanced to reflect a final completion level.
- 17.14 Section IVa of the Contract Documents will be finalized. Construction-specific requirements resulting from public outreach efforts will be incorporated into this document to the extent desired by the City.
- 17.15 Previously developed opinions of probable cost will be advanced and finalized.
- 17.16 AED will respond to reclaimed water-related Requests for Information (RFIs) placed by prospective bidders. Responses may require plan, specification and / or quantity revisions. If needed, modified documents will be transmitted to the City. Addenda, if issued, will be expanded to cover reclaimed water elements.
- 17.17 AED will review the received bids and the Bid Tabulation provided by the City. The Recommendation of Award letter will be expanded to discuss reclaimed water work elements. Commentary on submitted pricing (for reclaimed water work) will also be provided.
- 17.18 Reclaimed water shop drawings will be reviewed by AED. Processing of shop drawings will include any supplemental information required for approvals. City commentary will be solicited and incorporated into the review.

- 17.19 AED personnel will perform site visits / progress meetings throughout construction to observe the progress of reclaimed water work.
- 17.20 AED will respond to Requests for Information (RFIs) placed by the Contractor which pertain to the reclaimed water scope of work . Plan revisions will be performed on an as-needed basis. Contractor coordination, pertaining to the reclaimed water work, will be performed throughout the duration of construction.
- 17.21 AED will attend a final walk through at the completion of the work. Punchlist items for reclaimed water work will be identified and formally documented at this time. AED will assist in the resolution of the Punchlist.
- 17.22 AED will prepare signed/sealed record drawings based on contractor-submitted as-builts that are signed/sealed by a professional land surveyor. Where applicable, pressure pipeline depth will be documented.

Project contingencies have been allocated for additional services. These project contingencies shall not be used unless written approval is provided by the City Project Manager.

Additionally, permit fee allowances have been established for the project.

3. PROJECT GOALS:

This project will entail the preparation of two (2) independent construction packages for neighborhood-wide improvements within the Old Clearwater Bay and Gulf to Bay Estates neighborhoods. AED will provide the City with an electronic version of all reports, estimates, specification packages and plans at each design phase as stated above. If requested, AED will provide the City four (4) printed copies of pertinent documents for review purposes. Signed and sealed plans, specifications and Stormwater Modeling Narrative shall be provided prior to bidding. These can be provided in an electronic or printed format.

A project catalogue will also be provided. This catalogue will include all design, permitting, bidding and construction documents.

Plan sheets will be sized at 24" x 36" (Arch D). All City, County and State stormwater requirements will be implemented.

4. BUDGET:

See Attachment "B".

This price includes all labor and expenses anticipated to be incurred by Advanced Engineering & Design, Inc. (AED) for the completion of these tasks in accordance with Professional Services Method “B” – Lump Sum – Percentage of Completion by Task, **for a fee not to exceed five hundred forty five thousand seven hundred eighty nine dollars and one cent (\$545,789.01).**

Permit application fees are anticipated for this project and projected at \$6,800.00.

5. SCHEDULE:

The project is to be completed **430 days** from issuance of notice-to-proceed. The project deliverables are to be phased as follows:

Task	12/20	01/21	02/21	03/21	04/21	05/21	06/21	07/21	08/21	09/21	10/21	11/21	12/21	01/22	02/22	03/22	04/22	05/22	06/22
PROJECT A – GULF TO BAY NEIGHBORHOOD IMPROVEMENTS																			
Pre-Design Phase (30%)																			
City Review Period																			
Int. Design Phase (60%)																			
City Review Period																			
Int. Design Phase (90%)																			
City Review Period																			
Final Design Phase																			
PROJECT B– OLD CLEARWATER BAY NEIGHBORHOOD IMPROVEMENTS																			
Pre-Design Phase (30%)																			
City Review Period																			
Int. Design Phase (60%)																			
City Review Period																			
Int. Design Phase (90%)																			
City Review Period																			
Final Design Phase																			

1. The above schedule assumes a Notice to Proceed no later than 12/07/2020.
2. The above schedule assumes a 15-day City review period.

6. STAFF ASSIGNMENT:

William G. Reidy, P.E., Principal Engineer; Justin V. Keller, P.E., Project Manager; Dan Stowers, P.E., Sr. Staff Engineer; John Parks, P.E., Sr. Staff Engineer; Rafal Kadaj, P.E., Staff Engineer; Steven Torres, CAD Manager

7. CORRESPONDENCE/REPORTING PROCEDURES:

ENGINEER's project correspondence shall be directed to:

William G. Reidy, P.E., Principal Engineer

Cc: Justin V. Keller, P.E, CFM ENV SP, Project Manager

All City project correspondence shall be directed to:

Ivan Dimitrov, with copies to others as may be appropriate.

ENGINEER acknowledges that all City directives shall be provided by the City Project Manager.

In addition to the original copies delivered as stated in the scope of work, all project deliverables will be submitted in electronic format on CD or other City approved device prior to approval of final invoice.

8. INVOICING/FUNDING PROCEDURES:

For work performed, invoices shall be submitted monthly to the:

**City of Clearwater,
Engineering Department
Attn. Veronica Josef, Senior Staff Assistant
PO Box 4748
Clearwater, Florida 33758-4748.**

Contingency services will be billed as incurred only after written authorization provided by the City to proceed with those services.

City Invoicing Code:

**ENST180006-DSGN-PROSVC \$246,172.28
ENST180005-DSGN-PROSVC \$164,738.73
Sewer 3277321-530100-96212 \$86,275.25
Water 3217321-530100-96783 \$41,194.25
Reclaimed 3217321-530100-96739 \$7,408.50**

9. INVOICING PROCEDURES

At a minimum, in addition to the invoice amount(s) the following information shall be provided on all invoices submitted on the Work Order:

- A. Project, Purchase Order and Invoice Numbers and Contract Amount.
- B. The time period (begin and end date) covered by the invoice.
- C. A short narrative summary of activities completed in the time period
- D. Contract billing method – Lump Sum or Cost Times Multiplier
- E. If Lump Sum, the percent completion, amount due, previous amount earned and total earned to date for all tasks (direct costs, if any, shall be included in lump sum amount).
- F. If Cost Times Multiplier, hours, hourly rates, names of individuals being billed, amount due, previous amount earned, total earned to date for each task and other direct costs (receipts will be required for any single item with a cost of \$50 or greater or cumulative monthly expenses greater than \$100).
- G. If the Work Order is funded by multiple funding codes, an itemization of tasks and invoice amounts by funding code.

10. SPECIAL CONSIDERATIONS:

The consultant named above is required to comply with Section 119.0701, Florida Statutes (2013) where applicable.

1. Legal Descriptions & Sketches for temporary and permanent easements shall be provided by others.
2. It is assumed that hazardous materials and/or contaminated groundwater is not present within the limits of the proposed improvements.
3. A full assessment of tree impacts is not proposed. It is assumed that trees impacted by construction will be removed.
4. The construction of a dock or marine structure is not proposed.
5. The design of a lift station rehabilitation is not proposed.
6. Modifications to the Alligator Creek GWIS geodatabase are not proposed.
7. Channel improvements to Allen Creek are not proposed.
8. The preparation of project renderings are not believed to be needed.
9. Sheeting design shall be performed by the Contractor.
10. UMAM Preparation is not proposed.
11. Stormwater bypass plan is to be developed by the Contractor. AED will stipulate bypass parameters on the plans.
12. The City shall televise existing piping if warranted.
13. The City shall review pay applications during construction.
14. The preparation of property assessment for project infrastructure is not proposed.

15. The preparation of Temporary Traffic Control (TTC) Plans are not proposed.
16. Permitting activities through the Army Corps of Engineers assumes that a General Permit, Letter of Permission or Nationwide Permit will be the appropriate permitting vehicle. The acquisition of a Standard Permit is not proposed.
17. Permitting through the FDEP for reclaimed water improvements is not proposed.

PREPARED BY:

APPROVED BY:

William G. Reidy, P.E.
Principal Engineer
Advanced Engineering & Design, Inc.

Tara Kivett, PE
City Engineer
City of Clearwater

Date

Date

ATTACHMENT "A"

City of Clearwater
Engineering Department

WORK ORDER INITIATION FORM CITY DELIVERABLES

1. FORMAT:

The design plans shall be compiled utilizing the following methods:

1. City of Clearwater CAD standards.
2. Datum: Horizontal and Vertical datum shall be referenced to North American Vertical Datum of 1988 (vertical) and North American Datum of 1983/90 (horizontal). The unit of measurement shall be the United States Foot. Any deviation from this datum will not be accepted unless reviewed by City of Clearwater Engineering/Geographic Technology Division.

2. DELIVERABLES:

The design plans shall be produced on bond material, 24" x 36" at a scale of 1" = 20' unless approved otherwise. Upon completion the consultant shall deliver all drawing files in digital format with all project data in Autodesk Civil 3D file format.

NOTE: If approved deviation from Clearwater CAD standards are used the Consultant shall include all necessary information to aid in manipulating the drawings including either PCP, CTB file or pen schedule for plotting. The drawing file shall include only authorized fonts, shapes, line types or other attributes contained in the standard release of Autodesk, Inc. software. All block references and references contained within the drawing file shall be included. Please address any questions regarding format to Mr. Tom Mahony, at (727) 562-4762 or email address Tom.Mahony@myClearwater.com.

All electronic files (including CAD and Specification files) must be delivered upon completion of project or with 100% plan submittal to City of Clearwater.

ATTACHMENT "B"

Nash Street and Old Clearwater Bay Improvements
Advanced Engineering & Design, Inc.

WORK ORDER INITIATION FORM
PROJECT A – GULF TO BAY ESTATES
NEIGHBORHOOD IMPROVEMENTS
PROJECT BUDGET

Task	Description	Subconsultant Services	Labor	Total
1.0	Pre-Design Phase (30%)			
1.01	Review City-Provided Survey / Perform Field Visit to "Truth" Survey / ADA Compliance Assessment	\$0.00	\$530.00	\$530.00
1.02	Preliminary Soils Assessment / Coordination with Geotechnical Subconsultant / Incorporation of Findings	\$7,500.00	\$2,020.00	\$9,520.00
1.03	Basesheet Preparation / Preliminary Private Utility Coordination	\$0.00	\$4,614.75	\$4,614.75
1.04	Alligator Creek Watershed Model Revisions / Preliminary Stormwater System Alignment & Sizing	\$0.00	\$9,470.00	\$9,470.00
1.05	Typical Section Development / Roadway Layout	\$0.00	\$5,850.00	\$5,850.00
1.06	Identify Utility Corridors & Preliminary Alignments	\$0.00	\$670.00	\$670.00

1.07	Evaluate Land Use Requirements (Right-of-Way / Temporary & Permanent Easements)	\$0.00	\$995.00	\$995.00
1.08	Prepare Preliminary Opinion of Probable Cost	\$0.00	\$1,887.50	\$1,887.50
1.09	Prepare Technical Memorandum Discussing Design Assumptions	\$0.00	\$780.25	\$780.25
1.10	Attend Meeting with City Personnel	\$0.00	\$530.00	\$530.00
Pre-Design Phase (30%) Total:				\$34,847.50
2.0	Intermediate Design Phase (60%)			
2.01	Attend Pre-Application Meeting (SWFWMD)	\$0.00	\$530.00	\$530.00
2.02	Coordination with SUE Subconsultant / Basesheet Revisions Per SUE Data (Plan & Profile) / Private Utility Coordination	\$9,000.00	\$5,370.00	\$14,370.00
2.03	Preparation of Control Plan	\$0.00	\$1,367.50	\$1,367.50
2.04	Preparation of Demolition, Erosion & Sediment Control Plan	\$0.00	\$3,605.00	\$3,605.00
2.05	Stormwater Modeling Advancement (60%)	\$0.00	\$17,425.00	\$17,425.00
2.06	Incorporation of City Commentary / Prepare 60% Plans, Profile & Sections	\$0.00	\$29,520.00	\$29,520.00
2.07	Plan Detailing (60%) / Prepare	\$0.00	\$4,620.00	\$4,620.00

	Supplemental Plan Sheets			
2.08	Summarize Quantities / Prepare 60% Opinion of Probable Cost	\$0.00	\$2,377.50	\$2,377.50
2.09	Prepare "Front Ends" & Technical Specifications (including Measurement & Payment Section)	\$0.00	\$2,730.00	\$2,730.00
2.10	Prepare Letter Narrative Discussing Design Assumptions	\$0.00	\$1,525.00	\$1,525.00
Intermediate Design Phase (60%) Total:				\$78,070.00
3.0	Intermediate Design Phase (90%)			
3.01	Finalize Stormwater Modeling / Prepare Stormwater Narrative	\$0.00	\$8,835.00	\$8,835.00
3.02	Prepare & Submit Permit Application (SWFWMD)	\$0.00	\$2,712.50	\$2,712.50
3.03	Prepare Formal Responses to Permit Commentary / Perform Plan Revisions as Needed	\$0.00	\$6,582.75	\$6,582.75
3.04	Community Outreach / Individual Property Owner Coordination	\$0.00	\$3,810.00	\$3,810.00
3.05	Incorporation of City Commentary / Design Plan Advancement (90%)	\$0.00	\$16,460.00	\$16,460.00
3.06	Specification Advancement (90%)	\$0.00	\$1,635.00	\$1,635.00

3.07	Prepare 90% Opinion of Probable Cost	\$0.00	\$1,720.00	\$1,720.00
3.08	Prepare Letter Narrative Discussing Design Assumptions	\$0.00	\$912.50	\$912.50
Intermediate Design Phase (90%) Total:				\$42,667.75
4.0	Final Design Phase			
4.01	Prepare Responses to City Commentary / Design Plan Advancement	\$0.00	\$15,610.00	\$15,610.00
4.02	Finalize Technical Specifications	\$0.00	\$1,365.00	\$1,365.00
4.03	Prepare Final Opinion of Probable Cost	\$0.00	\$1,620.00	\$1,620.00
4.04	Prepare Letter Narrative Discussing Design Assumptions	\$0.00	\$1,022.50	\$1,022.50
Final Design Phase Total:				\$19,617.50
5.0	Bidding Phase			
5.01	Attend Pre-Bid Meeting	\$0.00	\$345.00	\$345.00
5.02	Respond to Bidder-Placed RFIs / Perform Plan Revisions as Needed / Issue Addenda	\$0.00	\$7,615.00	\$7,615.00
5.03	Review Submitted Bids & Prepare Recommendation of Award / Conformed Package Preparation	\$0.00	\$947.50	\$947.50
Bidding Phase Total:				\$8,907.50
6.0	Construction Phase			
6.01	Attend Pre-Construction Meeting	\$0.00	\$665.00	\$665.00
6.02	Review Shop Drawings	\$0.00	\$3,120.00	\$3,120.00

6.03	Lead Progress Meetings / Construction Site Visits	\$0.00	\$14,380.00	\$14,380.00
6.04	Respond to Contractor-Placed Requests for Information / Contractor Coordination / Assistance in Dispute Resolution	\$0.00	\$16,555.00	\$16,555.00
6.05	Attend Final Walk Through / Punchlist Preparation & Resolution	\$0.00	\$900.00	\$900.00
6.06	Review Contractor-Submitted Record Drawings / Permit Closeout	\$0.00	\$1,790.00	\$1,790.00
Construction Phase Total:				\$37,410.00
Subtotal, Labor and Subcontractors (Tasks 1 – 6)				\$221,520.25
6.07	Contingency (10%)			\$22,152.03
6.08	Permit Review Fees			\$2,500.00
Total (Tasks 1 – 6)				\$246,172.28
7.0	Sanitary Sewer Design, Permitting, Bidding and Construction Services			
7.01	Identify Sanitary Sewer Corridors / Preliminary Alignment	\$0.00	\$5,435.00	\$5,435.00
7.02	Prepare Preliminary Opinion of Probable Cost	\$0.00	\$465.00	\$465.00
7.03	Prepare Technical Memorandum Discussing Design Assumptions (Sanitary Sewer Specific)	\$0.00	\$345.00	\$345.00
7.04	Incorporation of City Commentary pertaining to Sanitary Sewer / Prepare 60% Plan & Profile	\$0.00	\$7,150.00	\$7,150.00

7.05	Sanitary Sewer Plan Detailing (60%) / Prepare Supplemental Plan Sheets	\$0.00	\$2,370.00	\$2,370.00
7.06	Summarize Sanitary Sewer Quantities / Prepare 60% Opinion of Probable Cost	\$0.00	\$1,155.00	\$1,155.00
7.07	Expansion of Technical Specifications (including Measurement & Payment Section) (Sanitary Sewer)	\$0.00	\$1,995.00	\$1,995.00
7.08	Prepare Letter Narrative Discussing Sanitary Sewer Design Assumptions	\$0.00	\$345.00	\$345.00
7.09	Prepare & Submit Permit Application (FDEP)	\$0.00	\$560.00	\$560.00
7.10	Prepare Formal Responses to Permit Commentary / Perform Plan Revisions as Needed	\$0.00	\$710.00	\$710.00
7.11	Incorporation of City Sanitary Sewer Commentary / Design Plan Advancement (90%)	\$0.00	\$4,785.00	\$4,785.00
7.12	Specification Advancement (90%) (Sanitary Sewer)	\$0.00	\$1,365.00	\$1,365.00
7.13	Prepare 90% Opinion of Probable Cost (Sanitary Sewer)	\$0.00	\$662.50	\$662.50

7.14	Prepare Letter Narrative Discussing Design Assumptions	\$0.00	\$345.00	\$345.00
7.15	Prepare Responses to City Sanitary Sewer Commentary / Finalize Sanitary Sewer Design	\$0.00	\$3,345.00	\$3,345.00
7.16	Finalize Sanitary Sewer Technical Specifications	\$0.00	\$940.00	\$940.00
7.17	Prepare Final Opinion of Probable Cost (Sanitary Sewer)	\$0.00	\$375.00	\$375.00
7.18	Respond to Bidder-Placed RFIs pertaining to Sanitary Sewer / Perform Plan Revisions as Needed / Incorporation of Sanitary Sewer Elements into Addenda	\$0.00	\$2,260.00	\$2,260.00
7.19	Review Submitted Bids & Incorporate Sanitary Sewer Elements into Recommendation of Award / Conformed Package Preparation	\$0.00	\$440.00	\$440.00
7.20	Review Sanitary Sewer Shop Drawings	\$0.00	\$2,115.00	\$2,115.00
7.21	Progress Meeting Attendance / Construction Site Visits (Pertaining to Sanitary Sewer)	\$0.00	\$3,020.00	\$3,020.00
7.22	Respond to Contractor-Placed Requests for	\$0.00	\$5,380.00	\$5,380.00

	Information Pertaining to Sanitary Sewer / Contractor Coordination / Assistance in Dispute Resolution			
7.23	Attend Final Walk Through / Punchlist Preparation & Resolution (Sanitary Sewer)	\$0.00	\$580.00	\$580.00
7.24	Review Contractor-Submitted Record Drawings / Permit Closeout (Sanitary Sewer)	\$0.00	\$1,027.50	\$1,027.50
Sanitary Sewer Total:				\$47,170.00
Subtotal, Labor and Subcontractors (Task 7)				\$47,170.00
7.25	Contingency (10%)			\$4,717.00
7.26	Permit Review Fees			\$250.00
Total (Task 7)				\$52,137.00
8.0	Potable Water Design, Permitting, Bidding and Construction Services			
8.01	Identify Potable Water Conflicts / Preliminary Conflict Resolution	\$0.00	\$605.00	\$605.00
8.02	Prepare Preliminary Opinion of Probable Cost	\$0.00	\$232.50	\$232.50
8.03	Prepare Technical Memorandum Discussing Design Assumptions (Potable Water Specific)	\$0.00	\$280.00	\$280.00
8.04	Incorporation of City Commentary Pertaining to Potable Water / Prepare 60% Plan & Profile	\$0.00	\$1,540.00	\$1,540.00
8.05	Potable Water Plan Detailing (60%) / Prepare	\$0.00	\$755.00	\$755.00

	Supplemental Plan Sheets			
8.06	Summarize Potable Water Quantities / Prepare 60% Opinion of Probable Cost	\$0.00	\$465.00	\$465.00
8.07	Expansion of Technical Specifications (including Measurement & Payment Section) (Potable Water)	\$0.00	\$935.00	\$935.00
8.08	Prepare Letter Narrative Discussing Potable Water Design Assumptions	\$0.00	\$305.00	\$305.00
8.09	Prepare & Submit Permit Application (FDEP)	\$0.00	\$375.00	\$375.00
8.10	Prepare Formal Responses to Permit Commentary / Perform Plan Revisions as Needed	\$0.00	\$375.00	\$375.00
8.11	Incorporation of City Potable Water Commentary / Design Plan Advancement (90%)	\$0.00	\$1,167.50	\$1,167.50
8.12	Specification Advancement (90%) (Potable Water)	\$0.00	\$735.00	\$735.00
8.13	Prepare 90% Opinion of Probable Cost (Potable Water)	\$0.00	\$290.00	\$290.00
8.14	Prepare Letter Narrative Discussing Design Assumptions	\$0.00	\$305.00	\$305.00

8.15	Prepare Responses to City Potable Water Commentary / Finalize Potable Water Design	\$0.00	\$615.00	\$615.00
8.16	Finalize Potable Water Technical Specifications	\$0.00	\$370.00	\$370.00
8.17	Prepare Final Opinion of Probable Cost (Potable Water)	\$0.00	\$290.00	\$290.00
8.18	Respond to Bidder-Placed RFIs pertaining to Potable Water / Perform Plan Revisions as Needed / Incorporation of Potable Water Elements into Addenda	\$0.00	\$1,355.00	\$1,355.00
8.19	Review Submitted Bids & Incorporate Potable Water Elements into Recommendation of Award / Conformed Package Preparation	\$0.00	\$385.00	\$385.00
8.20	Review Potable Water Shop Drawings	\$0.00	\$1,552.50	\$1,552.50
8.21	Progress Meeting Attendance / Construction Site Visits (Pertaining to Potable Water)	\$0.00	\$1,020.00	\$1,020.00
8.22	Respond to Contractor-Placed Requests for Information Pertaining to Potable Water / Contractor	\$0.00	\$985.00	\$985.00

	Coordination / Assistance in Dispute Resolution			
8.23	Attend Final Walk Through / Punchlist Preparation & Resolution (Potable Water)	\$0.00	\$475.00	\$475.00
8.24	Review Contractor-Submitted Record Drawings / Permit Closeout (Potable Water)	\$0.00	\$612.50	\$612.50
Potable Water Total:				\$16,025.00
Subtotal, Labor and Subcontractors (Task 8)				\$16,025.00
8.25	Contingency (10%)			\$1,602.50
8.26	Permit Review Fees			\$650.00
Total (Task 8)				\$18,277.50
Grand Total (Tasks 1-8)				\$316,586.78

PROJECT B – OLD CLEARWATER BAY NEIGHBORHOOD
IMPROVEMENTS
PROJECT BUDGET

Task	Description	Subconsultant Services	Labor	Total
9.0	Pre-Design Phase (30%)			
9.01	Review City-Provided Survey / Perform Field Visit to "Truth" Survey / ADA Compliance Assessment	\$0.00	\$530.00	\$530.00
9.02	Preliminary Soils Assessment / Coordination with Geotechnical Subconsultant /	\$5,000.00	\$1,845.00	\$6,845.00

	Incorporation of Findings			
9.03	Basesheet Preparation / Preliminary Private Utility Coordination	\$0.00	\$910.00	\$910.00
9.04	Stormwater Model Development / Preliminary Stormwater System Alignment & Sizing	\$0.00	\$1,160.00	\$1,160.00
9.05	Typical Section Development / Roadway Layout	\$0.00	\$2,200.00	\$2,200.00
9.06	Identify Utility Corridors & Preliminary Alignments	\$0.00	\$510.25	\$510.25
9.07	Evaluate Land Use Requirements (Right-of-Way / Temporary & Permanent Easements)	\$0.00	\$625.00	\$625.00
9.08	Prepare Preliminary Opinion of Probable Cost	\$0.00	\$820.00	\$820.00
9.09	Prepare Technical Memorandum Discussing Design Assumptions	\$0.00	\$780.25	\$780.25
9.10	Attend Meeting with City Personnel	\$0.00	\$530.00	\$530.00
Pre-Design Phase (30%) Total:				\$14,910.50
10.0	Intermediate Design Phase (60%)			
10.01	Attend Pre-Application Meeting (SWFWMD & USACOE)	\$0.00	\$530.00	\$530.00

10.02	Coordination with SUE Subconsultant / Basesheet Revisions Per SUE Data (Plan & Profile) / Private Utility Coordination	\$6,000.00	\$3,522.50	\$9,522.50
10.03	Coordination with Environmental Subconsultant / Assessment of Surface Water Impacts	\$2,500.00	\$1,165.00	\$3,665.00
10.04	Preparation of Control Plan	\$0.00	\$565.00	\$565.00
10.05	Preparation of Demolition, Erosion & Sediment Control Plan	\$0.00	\$1,980.00	\$1,980.00
10.06	Stormwater Modeling Advancement (60%)	\$0.00	\$9,110.00	\$9,110.00
10.07	Incorporation of City Commentary / Prepare 60% Plans, Profile & Sections	\$0.00	\$15,110.00	\$15,110.00
10.08	Plan Detailing (60%) / Prepare Supplemental Plan Sheets	\$0.00	\$2,540.00	\$2,540.00
10.09	Summarize Quantities / Prepare 60% Opinion of Probable Cost	\$0.00	\$1,695.00	\$1,695.00
10.10	Prepare "Front Ends" & Technical Specifications (including Measurement & Payment Section)	\$0.00	\$1,730.00	\$1,730.00

10.11	Prepare Letter Narrative Discussing Design Assumptions	\$0.00	\$890.00	\$890.00
Intermediate Design Phase (60%) Total:			\$47,337.50	
11.0	Intermediate Design Phase (90%)			
11.01	Finalize Stormwater Modeling / Prepare Stormwater Narrative	\$0.00	\$5,615.00	\$5,615.00
11.02	Prepare & Submit Permit Application (SWFWMD) / Prepare & Submit Pre-Construction Notification to Army Corp of Engineers for Nationwide Permit / Prepare & Submit Dredge & Fill Permit Application to Pinellas County	\$0.00	\$2,712.50	\$2,712.50
11.03	Prepare Formal Responses to Permit Commentary / Perform Plan Revisions as Needed	\$0.00	\$9,405.00	\$9,405.00
11.04	Community Outreach / Individual Property Owner Coordination	\$0.00	\$2,880.00	\$2,880.00
11.05	Incorporation of City Commentary / Design Plan Advancement (90%)	\$0.00	\$8,800.00	\$8,800.00
11.06	Specification Advancement (90%)	\$0.00	\$1,260.00	\$1,260.00

11.07	Prepare 90% Opinion of Probable Cost	\$0.00	\$1,227.50	\$1,227.50
11.08	Prepare Letter Narrative Discussing Design Assumptions	\$0.00	\$762.50	\$762.50
Intermediate Design Phase (90%) Total:				\$32,662.50
12.0	Final Design Phase			
12.01	Prepare Responses to City Commentary / Design Plan Advancement	\$0.00	\$11,141.75	\$11,141.75
12.02	Finalize Technical Specifications	\$0.00	\$887.50	\$887.50
12.03	Prepare Final Opinion of Probable Cost	\$0.00	\$835.00	\$835.00
12.04	Prepare Letter Narrative Discussing Design Assumptions	\$0.00	\$837.50	\$837.50
Final Design Phase Total:				\$13,701.75
13.0	Bidding Phase			
13.01	Attend Pre-Bid Meeting	\$0.00	\$345.00	\$345.00
13.02	Respond to Bidder-Placed RFIs / Perform Plan Revisions as Needed / Issue Addenda	\$0.00	\$4,895.00	\$4,895.00
13.03	Review Submitted Bids & Prepare Recommendation of Award / Conformed Package Preparation	\$0.00	\$947.50	\$947.50
Bidding Phase Total:				\$6,187.50
14.0	Construction Phase			
14.01	Attend Pre-Construction Meeting	\$0.00	\$665.00	\$665.00
14.02	Review Shop Drawings	\$0.00	\$2,635.00	\$2,635.00

14.03	Progress Meeting Attendance / Construction Site Visits	\$0.00	\$14,380.00	\$14,380.00
14.04	Respond to Contractor-Placed Requests for Information / Contractor Coordination / Assistance in Dispute Resolution	\$0.00	\$12,320.00	\$12,320.00
14.05	Attend Final Walk Through / Punchlist Preparation & Resolution	\$0.00	\$900.00	\$900.00
14.06	Review Contractor-Submitted Record Drawings / Permit Closeout	\$0.00	\$1,790.00	\$1,790.00
Construction Phase Total:				\$32,690.00
Subtotal, Labor and Subcontractors (Tasks 9 – 14)				\$147,489.75
14.07	Contingency (10%)			\$14,748.98
14.08	Permit Review Fees			\$2,500.00
Total (Tasks 9 – 14)				\$164,738.73
15.0	Sanitary Sewer Design, Permitting, Bidding and Construction Services			
15.01	Identify Sanitary Sewer Corridors / Preliminary Alignment	\$0.00	\$2,935.00	\$2,935.00
15.02	Prepare Preliminary Opinion of Probable Cost	\$0.00	\$392.50	\$392.50
15.03	Prepare Technical Memorandum Discussing Design Assumptions (Sanitary Sewer Specific)	\$0.00	\$345.00	\$345.00
15.04	Incorporation of City Commentary pertaining to Sanitary Sewer /	\$0.00	\$4,200.00	\$4,200.00

	Prepare 60% Plan & Profile			
15.05	Sanitary Sewer Plan Detailing (60%) / Prepare Supplemental Plan Sheets	\$0.00	\$1,690.00	\$1,690.00
15.06	Summarize Sanitary Sewer Quantities / Prepare 60% Opinion of Probable Cost	\$0.00	\$1,155.00	\$1,155.00
15.07	Expansion of Technical Specifications (including Measurement & Payment Section) (Sanitary Sewer)	\$0.00	\$1,145.00	\$1,145.00
15.08	Prepare Letter Narrative Discussing Sanitary Sewer Design Assumptions	\$0.00	\$345.00	\$345.00
15.09	Prepare & Submit Permit Application (FDEP)	\$0.00	\$560.00	\$560.00
15.10	Prepare Formal Responses to Permit Commentary / Perform Plan Revisions as Needed	\$0.00	\$710.00	\$710.00
15.11	Incorporation of City Sanitary Sewer Commentary / Design Plan Advancement (90%)	\$0.00	\$2,495.00	\$2,495.00
15.12	Specification Advancement (90%) (Sanitary Sewer)	\$0.00	\$890.00	\$890.00

15.13	Prepare 90% Opinion of Probable Cost (Sanitary Sewer)	\$0.00	\$487.50	\$487.50
15.14	Prepare Letter Narrative Discussing Design Assumptions	\$0.00	\$345.00	\$345.00
15.15	Prepare Responses to City Sanitary Sewer Commentary / Finalize Sanitary Sewer Design	\$0.00	\$1,295.00	\$1,295.00
15.16	Finalize Sanitary Sewer Technical Specifications	\$0.00	\$465.00	\$465.00
15.17	Prepare Final Opinion of Probable Cost (Sanitary Sewer)	\$0.00	\$345.00	\$345.00
15.18	Respond to Bidder-Placed RFIs pertaining to Sanitary Sewer / Perform Plan Revisions as Needed / Incorporation of Sanitary Sewer Elements into Addenda	\$0.00	\$1,645.00	\$1,645.00
15.19	Review Submitted Bids & Incorporate Sanitary Sewer Elements into Recommendation of Award / Conformed Package Preparation	\$0.00	\$440.00	\$440.00
15.20	Review Sanitary Sewer Shop Drawings	\$0.00	\$1,905.00	\$1,905.00
15.21	Progress Meeting Attendance / Construction Site	\$0.00	\$2,190.00	\$2,190.00

	Visits (Pertaining to Sanitary Sewer)			
15.22	Respond to Contractor-Placed Requests for Information Pertaining to Sanitary Sewer / Contractor Coordination / Assistance in Dispute Resolution	\$0.00	\$3,220.00	\$3,220.00
15.23	Attend Final Walk Through / Punchlist Preparation & Resolution (Sanitary Sewer)	\$0.00	\$580.00	\$580.00
15.24	Review Contractor-Submitted Record Drawings / Permit Closeout (Sanitary Sewer)	\$0.00	\$1,027.50	\$1,027.50
Sanitary Sewer Total:				\$30,807.50
Subtotal, Labor and Subcontractors (Task 15)				\$30,807.50
15.25	Contingency (10%)			\$3,080.75
15.26	Permit Review Fees			\$250.00
Total (Task 15)				\$34,138.25
16.0	Potable Water Design, Permitting, Bidding and Construction Services			
16.01	Identify Potable Water Conflicts / Preliminary Conflict Resolution	\$0.00	\$925.00	\$925.00
16.02	Prepare Preliminary Opinion of Probable Cost	\$0.00	\$417.50	\$417.50
16.03	Prepare Technical Memorandum Discussing Design Assumptions (Potable Water Specific)	\$0.00	\$465.00	\$465.00

16.04	Incorporation of City Commentary Pertaining to Potable Water / Prepare 60% Plan & Profile	\$0.00	\$2,145.00	\$2,145.00
16.05	Potable Water Plan Detailing (60%) / Prepare Supplemental Plan Sheets	\$0.00	\$585.00	\$585.00
16.06	Summarize Potable Water Quantities / Prepare 60% Opinion of Probable Cost	\$0.00	\$465.00	\$465.00
16.07	Expansion of Technical Specifications (including Measurement & Payment Section) (Potable Water)	\$0.00	\$760.00	\$760.00
16.08	Prepare Letter Narrative Discussing Potable Water Design Assumptions	\$0.00	\$305.00	\$305.00
16.09	Prepare & Submit Permit Application (FDEP)	\$0.00	\$375.00	\$375.00
16.10	Prepare Formal Responses to Permit Commentary / Perform Plan Revisions as Needed	\$0.00	\$375.00	\$375.00
16.11	Incorporation of City Potable Water Commentary / Design Plan Advancement (90%)	\$0.00	\$1,540.00	\$1,540.00

16.12	Specification Advancement (90%) (Potable Water)	\$0.00	\$735.00	\$735.00
16.13	Prepare 90% Opinion of Probable Cost (Potable Water)	\$0.00	\$290.00	\$290.00
16.14	Prepare Letter Narrative Discussing Design Assumptions	\$0.00	\$210.00	\$210.00
16.15	Prepare Responses to City Potable Water Commentary / Finalize Potable Water Design	\$0.00	\$1,540.00	\$1,540.00
16.16	Finalize Potable Water Technical Specifications	\$0.00	\$370.00	\$370.00
16.17	Prepare Final Opinion of Probable Cost (Potable Water)	\$0.00	\$290.00	\$290.00
16.18	Respond to Bidder-Placed RFIs pertaining to Potable Water / Perform Plan Revisions as Needed / Incorporation of Potable Water Elements into Addenda	\$0.00	\$1,355.00	\$1,355.00
16.19	Review Submitted Bids & Incorporate Potable Water Elements into Recommendation of Award / Conformed Package Preparation	\$0.00	\$385.00	\$385.00

16.20	Review Potable Water Shop Drawings	\$0.00	\$1,552.50	\$1,552.50
16.21	Progress Meeting Attendance / Construction Site Visits (Pertaining to Potable Water)	\$0.00	\$2,080.00	\$2,080.00
16.22	Respond to Contractor-Placed Requests for Information Pertaining to Potable Water / Contractor Coordination / Assistance in Dispute Resolution	\$0.00	\$1,990.00	\$1,990.00
16.23	Attend Final Walk Through / Punchlist Preparation & Resolution (Potable Water)	\$0.00	\$475.00	\$475.00
16.24	Review Contractor-Submitted Record Drawings / Permit Closeout (Potable Water)	\$0.00	\$612.50	\$612.50
Potable Water Total:				\$20,242.50
Subtotal, Labor and Subcontractors (Task 16)				\$20,242.50
16.25	Contingency (10%)			\$2,024.25
16.26	Permit Review Fees			\$650.00
Total (Task 16)				\$22,916.75
17.0	Reclaimed Water Design, Permitting, Bidding and Construction Services			
17.01	Identify Reclaimed Water Conflicts / Preliminary Conflict Resolution	\$0.00	\$207.50	\$207.50
17.02	Prepare Preliminary Opinion of Probable Cost	\$0.00	\$232.50	\$232.50

17.03	Prepare Technical Memorandum Discussing Design Assumptions (Reclaimed Water Specific)	\$0.00	\$280.00	\$280.00
17.04	Incorporation of City Commentary Pertaining to Reclaimed Water / Prepare 60% Plan & Profile	\$0.00	\$795.00	\$795.00
17.05	Reclaimed Water Plan Detailing (60%) / Prepare Supplemental Plan Sheets	\$0.00	\$175.00	\$175.00
17.06	Summarize Reclaimed Water Quantities / Prepare 60% Opinion of Probable Cost	\$0.00	\$257.50	\$257.50
17.07	Expansion of Technical Specifications (including Measurement & Payment Section) (Reclaimed Water)	\$0.00	\$440.00	\$440.00
17.08	Prepare Letter Narrative Discussing Reclaimed Water Design Assumptions	\$0.00	\$105.00	\$105.00
17.09	Incorporation of City Reclaimed Water Commentary / Design Plan Advancement (90%)	\$0.00	\$510.00	\$510.00
17.10	Specification Advancement	\$0.00	\$280.00	\$280.00

	(90%) (Reclaimed Water)			
17.11	Prepare 90% Opinion of Probable Cost (Reclaimed Water)	\$0.00	\$185.00	\$185.00
17.12	Prepare Letter Narrative Discussing Design Assumptions	\$0.00	\$185.00	\$185.00
17.13	Prepare Responses to City Reclaimed Water Commentary / Finalize Reclaimed Water Design	\$0.00	\$350.00	\$350.00
17.14	Finalize Reclaimed Water Technical Specifications	\$0.00	\$160.00	\$160.00
17.15	Prepare Final Opinion of Probable Cost (Reclaimed Water)	\$0.00	\$105.00	\$105.00
17.16	Respond to Bidder-Placed RFIs pertaining to Reclaimed Water / Perform Plan Revisions as Needed / Incorporation of Reclaimed Water Elements into Addenda	\$0.00	\$565.00	\$565.00
17.17	Review Submitted Bids & Incorporate Reclaimed Water Elements into Recommendation of Award / Conformed Package Preparation	\$0.00	\$210.00	\$210.00

17.18	Review Reclaimed Water Shop Drawings	\$0.00	\$762.50	\$762.50
17.19	Progress Meeting Attendance / Construction Site Visits (Pertaining to Reclaimed Water)	\$0.00	\$210.00	\$210.00
17.20	Respond to Contractor-Placed Requests for Information Pertaining to Reclaimed Water / Contractor Coordination / Assistance in Dispute Resolution	\$0.00	\$507.50	\$507.50
17.21	Attend Final Walk Through / Punchlist Preparation & Resolution (Reclaimed Water)	\$0.00	\$132.50	\$132.50
17.22	Review Contractor-Submitted Record Drawings	\$0.00	\$80.00	\$80.00
Reclaimed Water Total:				\$6,735.00
Subtotal, Labor and Subcontractors (Task 17)				\$6,735.00
17.23	Contingency (10%)			\$673.50
17.24	Permit Review Fees			\$0.00
Total (Task 17)				\$7,408.50
Grand Total (Tasks 9-17)				\$229,202.23
Subtotal Stormwater				\$410,911.01
Subtotal Sanitary Sewer				\$86,275.25
Subtotal Potable Water				\$41,194.25
Subtotal Reclaimed Water				\$7,408.50
Grand Total				\$545,789.01