

CONSULTANT WORK ORDER

Date:	11/17/2025
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1. PROJECT INFORMATION:

Project Title:	Joe DiMaggio Embankment, Site 2 (Damage #1514660)	
City Project Number:	<u>26-0006-EN</u>	
City Plan Set Number:	<u>2025049</u>	
Consultant Project Number:	<u>25.CL-52</u>	

2. SCOPE OF SERVICES:

The upstream reaches of the main channel of Alligator Creek begin west of Hercules Avenue and flows in an easterly direction throughout the City prior to discharging into Alligator Lake near Bayshore Boulevard. Post Hurricane Milton inspection of Alligator Creek revealed three (3) locations where the creek embankment failed within the Joe DiMaggio Sports Complex.

The three (3) locations are located near each other along the western edge of the property. The failure occurred where Alligator Creek transitions from a gabion-lined section to an earthen embankment section. All failure points are located along the eastern bank of the channel. Location 1 is approximately 132-feet in length, Location 2 is approximately 31-feet in length and Location 3 is approximately 42-feet in length.

The engineering services proposed for this project are to provide slope stabilization measures for Site 2. Advanced Engineering & Design, Inc. will provide design, permitting, bidding and construction administration services for this project. The design plans shall be compiled using the City of Clearwater CAD standards, as attached.

Procurement package preparation will be the initial task performed. The technical specification labor and quantity development budgets established herein will be utilized to develop a slope stabilization general services bid document.

I. DATA COLLECTION / PRELIMINARY PLAN PREPARATION:

- Task 1.01: Project records will be reviewed and AED will submit a formal data request outlining the specific records that are being requested for the project, where applicable.
- Task 1.02: AED will delineate locations where additional survey is needed to facilitate design. The supplemental survey will be imported into the base sheets, plans and profile and cross sections.
- Task 1.03: Preliminary utility coordination will be performed by AED. This task will focus on private utilities present within the project area. Information such as utility location, depth, type and condition will be requested from involved utility companies. These records will be reviewed and incorporated into the proposed improvements.
- Task 1.04: AED shall prepare a basesheet utilizing the topographic survey and available utility information. Plan and profile views will be developed. Profile views will be needed document sheet pile embedment depths and reveal heights. Conflicts with any subsurface utility crossings will be identified on the profile view to aid in vertical adjustments and coordination with private utility owners.
- Task 1.05: Sheet pile wall alignment will be identified. Consideration will be given to the pre-erosion and post-erosion conditions. Other plan elements, such as transitions around obstructions will be identified.
- Task 1.06: Geotechnical investigation coordination and scoping will be performed to determine the sheet pile embedment depth requirements. Borings will be obtained to a depth of +/- 50' below-grade to determine if a hardpan or rock layer is present that may restrict the ability to install sheets.
- Task 1.07: Utilizing the records obtained during utility coordination, Subsurface Utility Engineering (SUE) scoping will be performed and findings will be incorporated into the plans.
- Task 1.08: Environmental services coordination and scoping will be performed. will be performed to document the habitat and other environmental conditions present within the conveyance facility. Vegetation of significance will be identified and an environmental narrative will be prepared. This report will be used and referenced during the permitting phase with the Southwest Florida Water Management District (SWFWMD) and United States Army Corps of Engineers (USACOE).

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- Task 1.09: Pre-application permitting agency coordination will be performed. Specifically, this entails attendance at pre-application meetings with SWFWMD and USACOE.
- Task 1.10: AED will attend a meeting with City personnel to discuss comments to the preliminary plan submittal. Meeting minutes will be prepared by AED and distributed to the City for review and commentary.

II. 60% PLAN PREPARATION:

- Taks 2.01: Responses will be prepared to City-issued commentary and plan revisions will be made. The plans will be advanced to incorporate sheet pile and pond control structure design.
- Task 2.02: Utilizing the Alligator Creek Watershed Management Plan model, existing conditions will be reflected within the model and refinement will occur as needed to perform a design-level analysis. The facilities existing hydraulic performance will be documented. A modified channel cross section will be evaluated and a typical section will be developed that maximizes flow improvements while minimizing offsite impacts.
- Task 2.03: Structural analysis will be performed to select a sheet length and thickness. Steel sheet selection will consider adjacent loading and anticipated scour depth.
- Task 2.04: Plan sheets will be prepared identifying the proposed sheet alignment and embedment depths based on stormwater modeling and geotechnical investigation. Cross sections will also be developed to expand upon the proposed grading anticipated near the new sheets and pond bank repairs.
- Task 2.05: A Control Plan will be prepared identifying construction baseline geometrics.
- Task 2.06: A Demolition / Erosion & Sediment Control Plan will be developed. Proposed items to be removed or remain in service will be identified on this plan. Sediment control measures will also be identified as well as the location of erosion control measures. Tree impacts will be quantified.
- Task 2.07: Supplemental Plan sheets will be prepared including general details, general notes, control plan and specialty detail sheets. Detailing will be provided identifying the proposed approach for sheet termination when abutting facilities to remain.

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- Task. 2.08: Evaluation of land use requirements will be performed and property owner coordination efforts performed by the City will be supported by AED. This includes in-person and remote correspondence as well as the creation of easement figures as needed or as directed by the City.
- Task 2.09: Construction elements will be itemized and costs developed utilizing reference contracts applicable for this project. Pay items will be developed to suitably itemize the work.
- Task 2.10: Technical specifications will be developed for the proposed improvements. Supplemental specifications will be developed for work not covered by the City's standards.
- Task 2.11: In an effort to document design assumptions for the advancement of the plans, AED will prepare a Technical Memorandum. This memorandum will focus on the design factors considered when advancing the plans to 60%.
- Task 2.12: AED will attend a meeting with City personnel to discuss comments to the 60% submittal. Meeting minutes will be prepared by AED and distributed to the City for review and commentary.

III. 90% PLAN PREPARATION:

- Task 3.01: Stormwater modeling will be completed and results assembled for presentation to permitting entities. A stormwater modeling narrative will be prepared identifying assumptions and techniques used to develop the model and analyze the systems.
- Task 3.02: A permit application package will be prepared and submitted to the SWFWMD for an Individual Environmental Resource Permit (ERP). Permit fees will be paid by AED and a permit fee of \$2,184.00 is anticipated. Permitting efforts for Site 2 will be combined with hour allocations for the other sites. Sites 1, 2 and 3 will be submitted as a single permit.
- Task 3.03: A permit application package will be prepared and submitted to the USACOE for a General Permit.
- Task 3.04: Commentary issued by SWFWMD and USACOE will be responded to and plan revisions performed. Revisions to stormwater modeling will also be performed on an as-needed basis.
- Task 3.05: Responses will be prepared to City-issued commentary and plan revisions will be made. The plans will be advanced to prepare for permit submission.

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- Task 3.06: Construction elements itemization and costs will be advanced. Pay items will be advanced to suitably itemize the work.
- Task 3.07: Technical specifications will be advanced for the proposed improvements. Supplemental specifications will be advanced for work not covered by the City's standards.
- Task 3.08: AED will attend a meeting with City personnel to discuss comments to the 90% submittal. Meeting minutes will be prepared by AED and distributed to the City for review and commentary.

IV. FINAL PLAN PREPARATION:

- Task 4.01: Responses will be prepared to City-issued commentary and plan revisions will be made. The plans will be advanced to final design.
- Task 4.02: Utility coordination will be finalized. AED will coordinate the support and/or relocation of private utilities where needed to support the proposed improvements.
- Task 4.03: Structural analysis for the sheet length and thickness will be finalized.
- Task 4.04: Plan & Profile Sheets, as well as Cross Sections, will be finalized.
- Task 4.05: Final design plan detailing will be completed. Furthermore, supplemental plan sheets will be finalized.
- Task 4.06: The Bid Schedule will be finalized. A final quantity tabulation will be performed.
- Task 4.07: Technical specifications will be finalized.

V. BIDDING SERVICES:

- Task 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.
- Task 5.02: AED will respond to Requests for Information (RFIs) placed by the Contractor(s). Responses may require plan, specification and / or quantity revisions. If needed, modified documents will be transmitted to the City.
- Task 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 ADMINISTRATION (CA) SERVICES:

- Task 6.01: Pre-Construction coordination will be performed by AED. This will include the attendance of a Pre-Construction Meeting at the City of Clearwater.
- Task 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.
- Task 6.03 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. 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. A total of two (2) will be performed throughout the duration of the construction activities.
- Task 6.04 The review of monthly pay applications will be performed. The field-measurement of quantities, if needed, will be performed by others.
- Task 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.
- Task 6.06: Project closeout services will be performed. This will include review of Contractor-submitted record drawings and Project Catalog assembly. Permit closeout will be performed as needed.

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.

Permit fee allowances have been established for the project.

3. PROJECT GOALS:

The project will entail the preparation of a construction package for the restoration of storm related erosion for Site 2. AED will provide the City with an electronic version of all reports, estimates, formal correspondence documents and plans at each design

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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 shall be provided prior to bidding. These can be provided in an electronic or printed format.

A Project Catalog will also be provided. This compilation document 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. FEES:

See Attachment "A".

This price includes all labor and expenses anticipated to be incurred by Advanced Engineering & Design, Inc. 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 fifteen thousand four hundred and sixty seven dollars and twenty six cents (\$15,467.26).

Permit application fees are anticipated for this project and projected at \$338.52.

5. SCHEDULE:

The project is to be completed in **120** days from issuance of notice-to-proceed. The project deliverables are to be phased as follows:

30% Construction Plans:	45 calendar days
60% Construction Plans:	30 calendar days
90% Construction Plans:	30 calendar days
Final Construction Documents:	15 calendar days

***Bidding Services to be completed within 45-days of work authorization.**

6. STAFF ASSIGNMENT:

Justin Keller, P.E., President & Senior Project Manager, Rafal Kadaj, P.E., Sr. Project Engineer; Carlos Peralta, Project Engineer; William G. Reidy, P.E., Sr. Project Engineer; Dan Stowers, P.E., Sr. Staff Engineer; Steven Torres, Sr. Designer

7. CORRESPONDENCE/REPORTING PROCEDURES:

Consultant's project correspondence shall be directed to:
Justin V. Keller, P.E, CFM, ENV SP, President

All City project correspondence shall be directed to:
Nate Jozefik with Kelly Peterich, P.E. and others to be copied as appropriate

8. INVOICING/FUNDING PROCEDURES:

City Invoicing Code: ENST180001, Storm System Improvements, and ENST180006, Alligator

For work performed, invoices shall be submitted monthly to:

**ATTENTION: SHERRI BOGUE, DIVISION CONTROLLER
CITY OF CLEARWATER, PUBLIC WORKS DEPARTMENT/ENGINEERING
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.

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:

1. Purchase Order, Project and Invoice Numbers and Contract Amount.
2. The time period (begin and end date) covered by the invoice.
3. A short narrative summary of activities completed in the time period.
4. Contract billing method – Lump Sum or Hourly Rate.
5. 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).
6. If Hourly Rate, hours, hourly rates, names of individuals being billed, amount due, previous amount earned, the percent completion, 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).
7. If the Work Order is funded by multiple funding codes, an itemization of tasks and invoice amounts by funding code.

10. CONSIDERATIONS:

Consultant acknowledges the following:

1. The Consultant named above is required to comply with Section 119.0701, Florida Statutes, where applicable.
2. All City directives shall be provided by the City Project Manager.
3. "Alternate equals" shall not be approved until City Project Manager agrees.
4. All submittals must be accompanied by evidence each has been internally checked for QA/QC before providing to City.

5. Consultants/Contractors are not permitted to use City-owned equipment (i.e. sampling equipment, etc.).
6. Documents posted on City website must ADA accessible.

11. ADDITIONAL CONSIDERATIONS:

All work orders should include considerations for the following:

1. Sea Level Rise and Flood Resilience, as applicable.
2. Submittal of a Critical Path Method (CPM) Schedule(s).
3. Submittal of a Project Catalog with the following items, as appropriate:
 - a. Data requests, assumptions, critical correspondence, meeting agenda, sign-in sheets, meeting minutes, document comment-response log(s), technical memorandum/reports, addenda, progress reports, regulatory correspondence, and other project-related documents.
 - b. If construction project, also include design plans, conformed plans, change orders, field orders, RFIs, work change directives, addenda, progress reports, shop drawing and progress submittals, as-builts, record drawings, and other project-related documents such as O&M manuals and warranty information.
 - c. At the conclusion of the project, ENGINEER will combine this information into a Project Catalog and submit to the City for review and comment.
4. Arc Flash labeling requirements:
 - a. All electrical designs and construction shall adhere to NFPA 70 E "Standard for Electrical Safety in the Workplace".
 - b. Updated calculations of Fault and Arc Flash, and provisions for new or updated Arc Flash equipment labeling shall be included in the contract documents.

12. SPECIAL CONSIDERATIONS:

1. It is assumed that hazardous materials and/or contaminated groundwater is not present within the limits of the proposed improvements.
2. A full assessment of tree impacts is not proposed. It is assumed that trees impacted by construction will be removed.
3. The preparation of project renderings are not believed to be needed.
4. The City shall televise existing piping if warranted. The review of televised inspections is not assumed to be needed.
5. The preparation of Utility Adjustment Plans is not proposed. It is recognized that minor utility adjustments may be needed.

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6. Departmental and interdepartmental meetings will be attended as needed to support project advancement.
7. It is assumed that public outreach and holding community meetings would not be needed.
8. Public utility design will be limited to offsets / adjustments to provide clearance for slope stabilization.
9. Only one field services mobilization is proposed for work in surrounding areas.
10. Proposed improvements will be constructed with other Sites. Independent construction not proposed.

13. SIGNATURES:

PREPARED BY:



Justin V. Keller, P.E., CFM, ENV SP
President

Advanced Engineering & Design, Inc.

11/17/2025

Date

APPROVED BY:

Tara Kivett, P.E.
City Engineer

City of Clearwater

Date

ATTACHMENT "A"**CONSULTANT WORK ORDER – PROJECT FEES TABLE**

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CONSULTANT WORK ORDER

PROJECT FEES TABLE

Task	Description	Subconsultant Services	Labor	Total
1.0	Data Collection / Preliminary Plan Preparation			
1.01	Review Available Data / Project Reactivation		\$75.56	\$75.56
1.02	Survey Scoping & Incorporation of Findings		\$189.88	\$189.88
1.03	Preliminary Coordination with Utility Companies		\$91.45	\$91.45
1.04	Basesheet Preparation (Existing & New Survey / Utilities)		\$334.03	\$334.03
1.05	Preliminary Sheet Pile Wall Layout		\$391.38	\$391.38
1.06	Coordination with Geotechnical Subconsultant / Incorporation of Findings		\$159.65	\$159.65
1.07	Coordination with SUE Subconsultant / Incorporation of Findings		\$159.65	\$159.65
1.08	Coordination with Environmental Subconsultant & Scoping		\$114.70	\$114.70
1.09	Permitting Entity Pre-Application Coordination (SWFMWD / USACOE)		\$206.93	\$206.93
1.10	Attend Progress Review Meeting with City		\$63.55	\$63.55
Data Collection / Preliminary Plan Preparation Total:				\$1,786.76
2.0	60% Plan Preparation			
2.01	Incorporation of City Commentary / Design Plan Advancement		\$137.95	\$137.95
2.02	Stormwater Evaluation / Develop Post-Improvement Model using Alligator Creek WMP		\$337.13	\$337.13
2.03	Sheet Pile Structural Design (60%)		\$726.95	\$726.95
2.04	Plan / Cross Section Preparation		\$651.78	\$651.78
2.05	Control Plan Preparation		\$77.11	\$77.11
2.06	Demolition / Erosion and Sediment Control Plan for Sheet Pile Wall		\$77.11	\$77.11

ATTACHMENT "A"

CONSULTANT WORK ORDER – PROJECT FEES TABLE

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2.07	Supplemental Plan Sheet Preparation / General & Special Detailing / Public Utility Design (Limited)		\$261.56	\$261.56
2.08	Evaluation of Land Use Requirements and Coordination with Right-of-Way / Property Owners for Temporary & Permanent Easements for Wall Construction		\$103.46	\$103.46
2.09	Quantity Itemization / Develop Pay Items / Opinion of Probable Cost (60%)		\$303.41	\$303.41
2.10	Preparation of Technical Specifications Incl. Measurement & Payment (60%)		\$349.53	\$349.53
2.11	Preparation of Technical Memorandum Discussing Design Assumptions		\$103.46	\$103.46
2.12	Attend Progress Review Meeting with City		\$63.55	\$63.55
60% Plan Preparation Total:				\$3,193.00
3.0	90% Plan Preparation			
3.01	Finalize Stormwater Evaluation / Prepare Stormwater Narrative		\$514.60	\$514.60
3.02	Prepare & Submit SWFWMD Permit Application		\$727.73	\$727.73
3.03	Prepare & Submit USACOE Permit Application		\$941.63	\$941.63
3.04	Prepare Formal Responses to Permit Commentary / Perform Plan Revisions (As Needed)		\$483.60	\$483.60
3.05	Incorporation of City Commentary / Design Plan Advancement (90%)		\$596.75	\$596.75
3.06	Advancement of Quantity Itemization / Develop Pay Items / Opinion of Probable Cost (90%)		\$86.03	\$86.03
3.07	Advancement of Technical Specifications Incl. Measurement & Payment (90%)		\$139.11	\$139.11
3.08	Attend Progress Review Meeting with City		\$63.55	\$63.55

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CONSULTANT WORK ORDER – PROJECT FEES TABLE

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90% Plan Preparation Total:				\$3,552.99
4.0	Final Plan Preparation			
4.01	Incorporation of City Commentary / Design Plan Advancement (100%)		\$34.88	\$34.88
4.02	Finalize Private Utility Coordination		\$57.74	\$57.74
4.03	Finalize Sheet Pile Structural Design		\$337.13	\$337.13
4.04	Finalize Plan & Profile Sheets / Cross Sections		\$435.55	\$435.55
4.05	Finalize Supplemental Plan Sheets		\$108.89	\$108.89
4.06	Finalize Quantity Itemization / Develop Pay Items / Opinion of Probable Cost		\$51.73	\$51.73
4.07	Finalize Technical Specifications Incl. Measurement & Payment		\$69.56	\$69.56
Final Plan Preparation Total:				\$1,095.46
5.0	Bidding Services			
5.01	Attend Pre-Bid Meeting		\$74.79	\$74.79
5.02	Respond to Bidder-Placed RFIs / Perform Plan Revisions as Needed / Issue Addenda		\$349.53	\$349.53
5.03	Review Submitted Bids & Prepare Recommendation of Award / Conformed Package Preparation		\$172.44	\$172.44
Bidding Services Total:				\$596.75
6.0	Construction Administration (CA) Services			
6.01	Pre-Construction Activities		\$150.35	\$150.35
6.02	Review Shop Drawings		\$186.00	\$186.00
6.03	Respond to Contractor-Placed Requests for Information / Contractor Coordination / Perform Site Visits		\$590.55	\$590.55
6.04	Pay Application Review		\$192.98	\$192.98
6.05	Attend Final Walk-Through / Punchlist Preparation & Resolution		\$254.98	\$254.98
6.06	Project & Permit Closeout		\$75.18	\$75.18
Construction Administration (CA) Services Total:				\$1,450.03
SUBTOTAL LABOR:				\$11,674.99
7.01	Contingency (10%)			\$1,167.50
7.02	Permit Fees (SWFWMD Only)			\$338.52
7.03	Geotechnical Subconsultant			\$852.50
7.04	SUE Subconsultant			\$387.50

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7.05	Environmental Subconsultant	\$542.50
7.06	Topographic Survey	\$503.75
GRAND TOTAL:		\$15,467.26

ATTACHMENT "B"

CONSULTANT WORK ORDER – CITY DELIVERABLES

Joe DiMaggio Embankment, Site 2 (Damage #1514660)

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CONSULTANT WORK ORDER

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 is 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 software. All block references and other references contained within the drawing file shall be included. Please address any questions regarding format to Mr. Kyle Vaughan, PSM, at (727) 444-8232 or email address Kyle.Vaughan@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.