AtkinsRéalis EXHIBIT A

CLEARWATER
BRIGHT AND BEAUTIFUL · BAY TO BEACH

CONSULTANT WORK ORDER

| Date: | 2/7/2024 |
|---|---|

# 1. PROJECT INFORMATION:

| Project Title: | Fort Harrison Corridor Improvements – Phase II,III,IV |
|---|---|
| Clearwater Project Manager | David Lutz |
| Atkins Project Manager | Daniel Parsons |
| Clearwater Project Number: | 19-0036-EN |
| Clearwater Plan Set Number: | TBD |
| Consultant Project Number: | [Consultant Project Number] |

# 2. SCOPE OF SERVICES:

**Summary:**

AtkinsRealis has prepared this Consultant Work Order Initiation Form for the City of Clearwater (City) for the design of Phase II,III & IV of the Fort Harrison Avenue Corridor Improvements Project (See 2.1 for description of project limits). Specific details of each service are defined in their respective sections within this document. A general summary of services is listed below:

- Coordination, preparation, attendance, and presentations at project meetings, including public outreach
- Corridor Improvements that provides safe, accessible, and healthy travel for all users
- Design of proposed City utility systems: water, reclaimed water and sanitary.
- Preparation and submittal of construction permits
- Preparation of complete and comprehensive design drawings, specifications, construction documents and analysis, and cost estimates

## 2.1 Project Limits (see Figure 1):

Fort Harrison Avenue is a collector road that runs north and south from Belleair Road (south end), through downtown Clearwater, to Alternate US 19 (North Myrtle Avenue) (north end). The entire Corridor Improvements Project will ultimately encompass Fort Harrison Avenue as previously described, however, this scope is specific to Phase II,III & IV. The approximate limits for this project can be found in Figure 1 and is described as follows:

1. Beginning near the intersection of Fort Harrison Avenue and Georgia Street, approximately 10 feet south of the south curb return, traveling South to Belleair Road, approximately 2.2 miles.
2. The width of the project along Fort Harrison Avenue shall encompass the Fort Harrison Avenue right-of-way plus the distance required to adequately design for full depth roadway reconstruction, utility replacement, utility crossings, street crossings, complete streets installations and all other engineering and construction items defined within this document.

## 2.2 Major Surface Components:

The surface components aim to enhance the vehicular and pedestrian experience, simultaneously improving safety for users. Assessment, design, permitting and construction shall be coordinated with the necessary agencies and residents. The assessment and design of major surface components for this project include:

1. Stormwater surface drainage including roadway centerline relocation, surface elevation changes and grading.
2. Full depth roadway reconstruction, landscape buffers, bicycle lanes, sidewalks, striped medians, and pedestrian crosswalks.
3. Existing unsignalized intersection crossings will be upgraded to meet Americans with Disabilities Act (ADA) standards as required. All other street crossings within this project shall be analyzed and incorporated into the corridor improvements design.

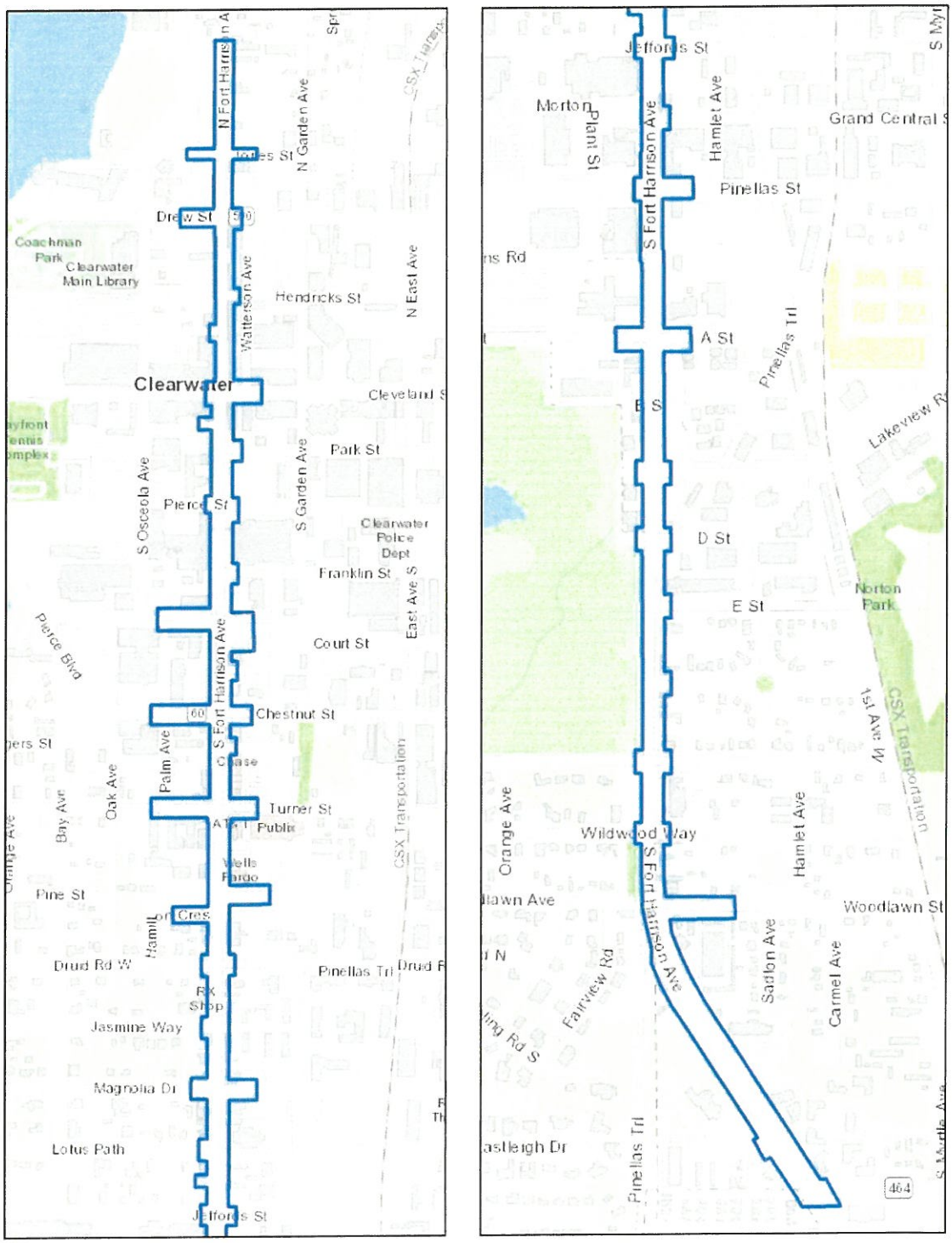


Figure 1 – Project Area

(Project area includes areas upstream and downstream of the designated project limits for design purposes)

## 2.3 Major Subsurface Components:

AtkinsRéalis shall provide assessment and design of major subsurface components for this project. The services will include the following:

1. Analysis of the existing City utilities, engineering recommendations for the proposed improvements, design of the subsurface improvements (as approved by the City), preparation of construction documents and utility permits.
2. Utility improvements for stormwater, potable water, sanitary sewer, and reclaimed water. AtkinsRéalis shall provide the necessary utility reports describing the condition of existing underground infrastructure that will be replaced as part of Phase I (including perpendicular crossings). Anticipated existing subsurface infrastructure to be replaced is described below:
   a. Potable Water: Approximately 14,250 linear feet ranging in size between 4" and 10". Service lines shall be replaced when replacing mains.
   b. Sanitary Sewer Gravity: Approximately 7750 linear feet of 8"-10" sewer, including laterals to the right-of-way.
   c. Sanitary Sewer Force Main: A 24" FM crossing the Fort Harrison corridor)
   d. Sanitary sewer structures/manholes: Approximately 60
   e. Stormwater structures: Approximately 131
   f. Stormwater pipe: Approximately 6000 linear feet of stormwater pipe ranging in size between 12" and 72""
   g. Reclaimed water: Existing reclaimed water crossings shall be tied into the new reclaimed water main running along Fort Harrison wherever possible. Shutoff valves for future reclaimed water distribution shall be provided at intersections where feasible. Connect reclaimed water to landscape features.
3. Subsurface utility crossings are included in this project. The limits of each crossing shall be defined as the perpendicular distance, on both sides of Fort Harrison Avenue, that provides enough data for adequate engineering design. The sanitary sewer crossing limits shall be the distance to the nearest manhole, upstream and downstream. More specific definitions of each crossing will be determined upon assessment.

## 2.4 Major Overhead Components:

The assessment and design of major overhead components for this project include:

1. Pedestrian and traffic signals, RRFB's, signs and poles will, at a minimum, be assessed. This shall include the condition, functionality, placement and necessity.
2. Intersections shall be upgraded to meet current Americans with Disabilities Act requirements (ADA) requirements.
3. A lighting analysis will be provided, and roadway lighting will be upgraded to meet corridor, roundabout, and signalized intersection lighting criteria. Lighting

analysis and design will be coordinated with the owning and maintaining agencies (Duke Energy, Pinellas County and City of Clearwater).

# I. PRE-DESIGN PHASE:

## Task 1.7 Project Management

This task involves internal and external daily management activities that are required prior to design. This will include progress reports, project meeting organization and summaries, project planning, field visits and regularly scheduled project updates with the Clearwater Project Manager.

## Task 1.8 Project Kick-off and Coordination Meetings

A project kick-off meeting with City staff will be conducted that will involve discussion of project scope, design, and surrounding impacts. This task also includes coordination with the other Agency staff, between disciplines and subconsultants, local governments, progress review meetings (phase review), and miscellaneous project coordination meetings. Meeting minutes for all meetings will be prepared and distributed to meeting members and City representatives.

## 1.9 Survey

I. AtkinsRealis will obtain the services of ELEMENT Engineering to perform the survey in the project area. The services for this project will include 2.2 miles of route survey along Fort Harrison Avenue and associated side streets from Georgia Street to Belleaire Road to facilitate the design. **Figure 1** provides a map of the anticipated survey limits. ELEMENT will use a combination of robotic total stations, RTK GPS, Mobile LiDAR and Fixed Scanning Technology to collect data. The following data shall be collected:

1. Establish horizontal and vertical control points along the survey route. These control points will be set at approximately 500-foot intervals along the roads within the routes. The control points will be tied to the NAD 83 (1990 adjustment) of the Florida State Plane Coordinate System and NAVD88 Elevations.
2. Establish a Baseline with benchmarks placed every 1000 feet labeled for future construction.
3. Survey 100 feet from the west and east Right-of-Way lines at each street intersection along the route. Additional survey along side streets shall be provided to collect information for the replacement of utilities.
4. Locate the upstream and downstream sanitary and storm drainage structures at each intersection.
5. Review the recorded plats and property appraiser's maps to determine the apparent limits of the public Rights-of-Way along the roadways within proposed

routes. Locate Section, Right-of-Way and Property Corners along the routes to help verify the Rights-of-Way.

6. Locate visible surface features, typically, edge of pavement, driveways, sidewalks, walls, fences, utility features, signs and mailboxes.
7. Trees and Palm (Include location, size (with DBH 4" and larger) and extent of canopy/dripline of existing trees in the limits of work.
8. Measure elevations sufficient to develop approximate 1-foot contours throughout the limits of the surveys.
9. Measure the invert elevations and pipe sizes of the accessible gravity storm and sanitary sewer structures along the design route.
10. Locate the rim or lids of the electrical manholes, pull boxes and concrete vaults.
11. Locate surface utility features such as: water meters, fire hydrants, valves, back flow preventers, poles, risers, transformers, manholes, and drainage structures.
12. Locate features and data for purposes of engineering the subsurface, surface and overhead components (as described in previous sections).

**Task 1.10 Geotechnical Investigation**

AtkinsRealis will obtain the services of Gulf Coast Geotechnical Engineering to perform geotechnical investigations. This effort will consist of the following components:

1. Performing at least one hand auger boring to 5 feet below the ground/roadway surface for each 100-foot interval of the roadway alignment. The borings will be staggered left and right of the existing centerline and performed within the existing roadway pavement. The work is anticipated to be performed at night.
2. Performing at least one Standard Penetration Test (SPT) boring to 20 feet below the ground/roadway surface for each 300-foot of the of the roadway alignment. In addition, corrosion series testing on the in-situ soils will be performed to establish corrosion parameters for the proposed utilities. The corrosion series testing will include pH, Minimum Resistivity, Chlorides and Sulfates testing.
3. Collecting three bulk samples for a composite Limerock Bearing Ratio (LBR) determination.
4. Performing permeability testing for areas where pervious pavement is anticipated (up to 5 tests). City PM to approve locations before performing.
5. Performing a limited laboratory testing program to establish soil index properties and generate a Roadway Soil Survey sheet. The laboratory tests will include but are not limited to grain size analysis, moisture content, organic determination and Atterberg Limit tests.
6. Within the limits of the site investigation, identifying the general location and description of potentially deleterious materials which may interfere with the construction progress or pavement performance including buried or surficial fill material, organics, construction debris, etc.

7. Recording the groundwater levels found in the borings and estimating the seasonal high groundwater table (SHGWT).
8. Providing Temporary Traffic Control Plans (TTCP) and an off-duty law enforcement officer with a vehicle as necessary in accordance with FDOT standard plan index 102.

AtkinsRealis geotechnical subconsultant will provide recommendations on the suitability of materials found onsite, which might be excavated or moved during site grading, for use as structural fill or general backfill.

**Task 1.11 Subsurface Utility Exploration**

AtkinsRealis will obtain the services of the Element Engineering to perform subsurface utility exploration (SUE) in the project area. This task will involve utilizing Electromagnetic and Ground Penetrating Radar to designate and mark the horizontal location of found utilities along the proposed project routes. The SUE subconsultant will provide up to 192 test holes using vacuum excavation to safely expose utilities by using a combination of compressed and vacuum air.

## II. DESIGN PHASE:

**Task 2.9 Green Infrastructure and Sustainability**

AtkinsRéalis will employ low impact development and green infrastructure practices along the corridor as practicable. This includes the strategies outlined in the Greenprint 2.0 to support the City's sustainability plan. A technical memorandum will be prepared documenting the review of the Greenprint 2.0, describing the opportunities that will be implemented and documenting why other opportunities will not be implemented.

**Deliverable**

- Low Impact Development and Green Infrastructure Technical Memorandum (Draft and Final)

**Task 2.10 Roadway Analysis & Documentation**

AtkinsRéalis will prepare design controls and criteria for developing project alternatives and designing roadway geometry and other roadway elements according to the City and FDOT standards with proper consideration given to the design traffic volumes, design speed, capacity and levels of service, functional classification, adjacent land use, design consistency and driver expectancy, aesthetics, existing vegetation to be preserved, pedestrian and bicycle concerns, ADA) requirements, Safe Mobility For Life Program, access management, concepts from previous studies and the scope of work.

AtkinsRéalis will design the project in accordance with the following publications and as agreed to by the City to meet the requirements of the project:

- Manual of Uniform Minimum Standards for Design, Construction, and Maintenance of Streets and Highways, Florida Department of Transportation (FDOT), 2018 (Florida Green Book).
- AASHTO Roadside design Guide, (edition at time of bid)
- FDOT Design Manual
- FDOT Drainage Manual
- FDOT Standard Plans for Road and Bridge Construction (edition at time of bid)
- FDOT Standard Specifications for Road and Bridge Construction (edition at time of bid)
- FHWA Manual on Uniform Traffic Control Devices (MUTCD) (edition at time of bid)
- 2010 Americans with Disabilities Act Accessibility Guidelines (ADAAG)
- SWFWMD ERP Basis of Review
- City of Clearwater Stormwater Manual

AtkinsRéalis will coordinate with Pinellas Suncoast Transit Authority to determine the transit route features to be included in the design along with other agencies within the County. Transit features will be designed per County standards.

**Temporary Traffic Control Plan**

During analysis of the TTCP, AtkinsRéalis will evaluate constructability issues and the ability to maintain traffic during construction according to the FDOT Standard Plans, 102 Series. The TTCP is used to describe the actions to be taken by the Contractor to minimize traffic impacts while conveying traffic through the work zone. AtkinsRéalis shall design a safe and effective TTCP to move vehicular and pedestrian traffic during all phases of construction. The design shall include construction phasing of roadways ingress and egress to existing property owners and businesses, transit features (e.g. bus stops), routing, signing and pavement markings, and detours as needed. Special consideration shall be given to the construction of the drainage and utility systems when developing the construction phases.

**Deliverable**

- Roadway Design Criteria Technical Memorandum (Draft and Final)
- Typical Section Package (Draft and Final)
- Pavement Design Technical Memorandum (Draft and Final)
- Access Management Technical Memorandum (Draft and Final)

## Task 2.11 Drainage Analysis & Documentation

AtkinsRéalis will analyze the existing stormwater infrastructure for the project area which lies within the Coastal Zone 1 subwatershed. A 1-dimensional hydrologic and hydraulic (H&H) model will be developed utilizing readily available data from the Southwest Florida Water Management District's geographic watershed information system database and the City. The model will be developed to represent the existing conditions for the contributing area to the project area. This is to evaluate the need to upsize any stormwater infrastructure that crosses the Fort Harrison corridor.

AtkinsRéalis will analyze and document Drainage Tasks in accordance with The City of Clearwater Stormwater Drainage Criteria Manual, and applicable guidelines, standards, handbooks, procedures, and current design memorandums. AtkinsRéalis will be responsible for designing the proposed drainage and stormwater management system. As part of the design AtkinsRéalis will coordinate fully with the appropriate permitting agencies and the City's staff and will look for opportunities to reduce runoff using green infrastructure along the corridor. To provide an improved engineering design, the grade at each intersection shall be analyzed for proper road pavement drainage, include "bird bath" ponding elimination.

AtkinsRéalis will prepare a drainage report documenting observations, design consideration, and drainage criteria that were used for the Coastal Zone 1 subwatershed stormwater model and design this project in a draft and final technical memorandum. AtkinsRéalis will incorporate comments from the City and update the final drainage report to address these comments.

### Deliverable

- Design Hydraulic Study (DHS) Technical Memorandum (Draft and Final)
  - ICPR Model Files (Draft and Final)
  - GIS Files associated with model setup

## Task 2.12 Private Utility Coordination

AtkinsRéalis shall coordinate with impacted utility agency owners (UAO) for the adjustment, relocation or removal of existing facilities that are in conflict with the proposed improvements. Any available record plan data provided to AtkinsRéalis by the City or the UAOs will be shown on the plans. AtkinsRéalis shall coordinate with private and City Utilities for Red-Green-Browns and Utility Work Schedule's and shall provide Utility Adjustment Plans. This includes submission of 30%, 60%, 90% and 100% plans to private utilities. AtkinsRéalis will coordinate and attend two (2) utility coordination meetings with the area utilities to discuss the proposed project parameters, scheduling, construction issues and obtain input for design and potential utility relocations.

## Task 2.13 City Utility Analysis & Documentation

AtkinsRéalis will replace the City's aging potable water, wastewater, and reclaimed water infrastructure within the project area based on the recommendations identified in the City's Water System Master Plan and Wastewater Collection System Master Plan. Any recommendations for new reclaimed water piping along Fort Harrison in the project area are based on recommendations identified in current reclaimed water system planning documentation. AtkinsRéalis is not performing any potable water, wastewater, or reclaimed water system modeling as part of this project, unless authorized as an addendum by the City.

In addition, the City will provide AtkinsRéalis the finding of the City's WWCS Master Plan. The current sanitary sewer pipelines along Fort Harrison Avenue within the limits of the project are gravity lines, primarily vitrified clay pipe (VCP), which will be replaced. There is one (1) force main (FM) pipeline crossings within N. Fort Harrison Avenue, aligned along Drew Street (24-inch diameter FM). This FM will be designed as part of this project within the limits of the project area.

The scope and fee developed herein are based on the assumption that the force mains will be installed using open cut construction.

AtkinsRéalis will develop the Florida Department of Environmental Protection (FDEP) permit application for the new force main construction, including the necessary contract documents, design calculations, plans and maps. AtkinsRéalis will provide responses to routine inquiries and requests for clarification related to the force main pipelines design.

### Reclaimed Water Transmission and Distribution Piping Design and Permitting

Reclaimed water (RCW) piping does not currently exist along Ft. Harrison Avenue within the limits of the project area (Georgia Street south to Belleair Road). The City's hydraulic modeling subconsultant (CHA) confirmed that the RCW transmission main along Ft. Harrison Avenue should be at least a single 6-inch diameter RCW main. Per this information, B&V will design the following:

- RCW transmission main (6-inch diameter C900 PVC pipeline)
- RCW service laterals (for each parcel fronting Ft. Harrison Avenue)

The scope and fee developed herein are based on the assumption that the RCW transmission main will be installed using open cut construction.

AtkinsRéalis will develop the Florida Department of Environmental Protection (FDEP) permit application for the new reclaimed water system (transmission and distribution) construction, including the necessary contract documents, design calculations, plans and maps. AtkinsRéalis will provide responses to routine inquiries and requests for clarification related to the reclaimed water pipelines design.

### Task 2.14 Lighting Analysis & Reports

AtkinsRéalis will prepare a set of Street Lighting Plans in accordance with applicable manuals, guidelines, standards, handbooks, procedures, and current design memorandums. The design shall include a Lighting Design Analysis Report and voltage drop calculations that will take inconsideration the strategies of Greenprint 2.0 identified in Task 2.1.

**Deliverable**

- Lighting Design Technical Memorandum (Draft and Final)

### Task 2.15 Landscape Analysis & Reports

AtkinsRéalis shall analyze and document Landscape Architecture Tasks in accordance with applicable manuals, guidelines, standards, handbooks, procedures, and current design memorandums. Data collection will be required to complete the initial design analysis, which includes identifying local ordinances and the collection of other project data including surveys, data from field truthing, and agreements with parcel owners. Analysis for the proposed landscape and hardscape includes identification of opportunities and constraints for the proposed project based on existing site conditions, safety criteria, utilities, functional uses, maintenance requirements, and project objectives. This will identify optimum streetscape configuration, composition, and landscaping. In addition, all plantings will prioritize native species in addition to the usual Florida-friendly exotics to provide a sustainable, thriving street landscape.

**Deliverable**

- Conceptual Plan and Technical Memorandum with suggested materials and illustrative details This will serve as the 30% submittal
- Full construction documents for hardscape, landscape and irrigation. These will include plans, details, notes and technical specifications. These will be a part of the 60%, 90% and final submittals

## Public Involvement

Public involvement includes communicating to interested persons, groups, and government organizations information regarding the development of the project.

### Task 2.16 Public Involvement Plan Development

AtkinsRéalis will prepare a Public Involvement Plan (PIP) for review and approval by the City. The PIP must include a public involvement schedule and identify potentially affected stakeholders and communities near the Project area and establish the appropriate outreach methods. The objective of the plan is to notify local governments, key stakeholders, affected property owners, tenants, and the public of the City's proposed construction and the anticipated impact of

that construction. The plan shall address timeframes for each review and shall include tentative design and construction schedules.

**Deliverable**

- Public Involvement Plan (Draft and Final)

**Task 2.17 Public Meetings and Communication**

The public meetings shall include one (1) Demonstration Projects Workshop, one (1) Corridor Design Charette (interactive, collaborative, brainstorming session to identify potential corridor enhancements), and three (3) Community Stakeholder Forums held during the concept design phase of the project. Public meetings will be scheduled as needed to accomplish majority public support of the project. AtkinsRéalis will prepare, coordinate, attend and present the presentations and provide required documentation as needed. Proper notification will be given and a summary of the meeting, including attendee list and comments made, will be completed. Any or all of these meetings can be conducted in a hybrid format (in person and on-line).

AtkinsRéalis will develop a virtual meeting room, with regularly updated project information and graphics. The virtual public meeting room will be available for the charrettes and workshop then will be updated at each of the 30%, 60%, and 90% milestone deliverables as the project progresses through final design as a living document of project. This site can be available 24/7, with the City determining the length of time the site is live.

AtkinsRéalis shall prepare materials to be used in the following communication aids and deliverables:

- Newsletters: prepare newsletters for distribution to elected officials, public officials, property owners along the corridor and other interested parties. The letters will be sent by AtkinsRealis via First Class US Mail after approval of the city project manager. Three (3) newsletters will be developed: following the kick off, prior to the charette, and prior to construction.
- Fly Through animation: prepare a fly-through for use in public meetings.
- Visualizations: visualizations for use in public meetings.
- Social Media: materials that will be uploaded by the City to social media to facilitate project communication per the City direction.
- Web Site: develop public involvement materials using a virtual meeting room format.

**Task 2.18 Presentations to Local MPOs and Associated Technical and Citizen Committees**

In addition to scheduled public meetings, AtkinsRéalis will participate in meetings with local governing authorities, key agencies, Metropolitan Planning Organization (MPO), Homeowner Associations, and Key Stakeholders including business and community leaders to inform them of the corridor modifications being considered. Atkin's participation will include presentations during the meeting, note taking, and summarizing the meeting in a memo to the file. It is estimated for this project there will be twelve (12) meetings with local governing authorities and/or MPOs during the design.

**Task 2.19 Intelligent Transportation Systems (ITS) Analysis**

The Fort Harrison corridor identified in Figure 1 contains 11 signalized intersections where ITS interconnect facilities will need to be installed due to the reconstruction of Fort Harrison. This effort analysis and review of existing ITS information and design of the proposed ITS devices, including but not limited to detection devices, advanced traffic controllers, conduit, cabinet-related pull boxes, service points, fiber optic sizing, and communications hubs. Existing ITS infrastructure shall be referenced to the new ITS plan sheets for relocation of the facility.

## III. FINAL DESIGN PHASE:

AtkinsRéalis will prepare Construction Plans including the following sheets necessary to convey the intent and scope of the project for the purposes of construction. The construction plans will be prepared at a scale of 1"=20' for full size plans (24"x36") conforming to the City of Clearwater Deliverable standards as described in Attachment "A". Each design deliverable to the City will include two (2) hardcopy sets and one (1) electronic copy. Final bid set of plans will be signed and sealed by the Engineer of Record.

**Task 3.6 30% Construction Documents**

1. Cover Sheet
2. Index of Sheets
3. General Notes
4. Key Sheet
5. Legend and Abbreviations per City standards
6. Drainage Map
7. Horizontal Control
8. Existing Conditions Plan / Survey (74 Sheets/37 double stacked) (with existing Tree information in the plans as specified by the survey)

9. Demolition Plans indicating existing improvements, utilities, and identification of trees to be removed (74 Sheets/37 double stacked)
10. Typical Section
11. Project Layout
12. Plan and Profile sheets with preliminary layout of the proposed stormwater, sanitary sewer, potable water, existing right-of-way and easements, subdivision, block, lot number, and plat book and page for adjacent parcels (74 Sheets)(this includes side streets)
13. Plan sheets specific to utilities (74 Sheets)
14. Intersection Layout (35 Sheets)
15. Cross Sections
16. Landscape, Hardscape, and Irrigation Plans

**Associated 30% Design Tasks/Activities**

1. Site visits to review survey information and impacts
2. Inventory and Evaluation Grades for existing trees by a certified ISA Arborist.
3. Project / Design Coordination
4. Plan and attend a SWFWMD pre-application meeting
5. 30% Submittal Design Package Preparation
6. QA/QC of 30% Submittal Design Package
7. Submittal of 30% Plan sheets to utility companies for their markup
8. Engineer's/Architect's preliminary opinion of (projected costs at anticipated time of construction) probable construction cost, based on the 30% submittal
9. Attendance at Public Information Meetings and preparation of draft and final versions of display boards for that meeting

**Task 3.7 60% Construction Documents**

1. Cover Sheet
2. Legend, Abbreviations, and Utility Information per City standards
3. General Notes
4. Key Sheet
5. Signature Sheet
6. Drainage Map
7. Typical Section
8. Optional Materials Tabulation
9. Project Layout
10. Roadway Plan and Profile with 60% layout of the proposed stormwater and sanitary improvements including utility relocation/adjustment details indicating utility conflicts, relocation design, and updated to indicate existing private utilities, as available, such as gas, electrical, telephone, fiber optic, and cable TV

11. Plan and Profile sheets specific to utilities
12. Intersection Layout
13. Drainage Structures
14. Cross Section Pattern
15. Roadway Soil Survey
16. Cross Sections
17. Stormwater Pollution Prevention Plan
18. Temporary Traffic Control Plans
19. Utility Adjustments
20. Signing and Pavement Marking Plans 60% layout will be designed in accordance with applicable FDOT manuals, guidelines, standards, handbooks, procedures, and current design memorandums. Tasks include items such as crosswalks, pavement markings, and wayfinding elements.
21. Signalization Plans 60% layout will be designed in accordance with applicable FDOT manuals, guidelines, standards, handbooks, procedures, and current design memorandums. The design shall include pedestrian crosswalk signal upgrade and Rapid Rectangular Flashing Beacon (RRFB's) incorporation.
22. Lighting Plans
23. Tree Preservation Plan based upon tree inventory/evaluations.
24. Landscape Plans
25. ITS Plan Sheets (11 plan sheets, 1 details sheet and 1 notes sheet)

**Associated 60% Design Tasks/Activities**

1. 60% Submittal Design Package Preparation
2. 60% Technical Specifications (AtkinsRéalis will review City's standard technical specifications and modify or supplement as necessary for the project).
3. Prominent Sign Structure Design - AtkinsRéalis will analyze and document the prominent Sign Structural Design in accordance with applicable manuals, guidelines, standards, handbooks, procedures, and current design memorandums. This is for the entrance into Fort Harrison at the northern end at the apex of Fort Harrison Avenue and Myrtle Avenue creating a gateway into the downtown area.
4. 60% Engineer's Opinion of Probable Construction Cost & Quantities (projected costs at anticipated time of construction)
5. QA/QC of 60% Submittal Design Package, Technical Specifications, & Draft
6. Submittal of 60% Plan sheets to utility companies for their markup
7. 60% Plan Review Meeting with City
8. Respond to 60% City Review Comments
9. Draft SWFWMD ERP Permit Application Packages Preparation
10. Draft FDEP Utility Permit Application(s) Preparation

11. Permit Applications
12. Submittal of Permit Applications to SWFWMD and FDEP
13. Respond to RAIs from SWFWMD and FDEP

**Task 3.8 90% Construction Documents**

The 90% construction plans shall include the design items required for the construction of the project, including the special provisions and technical specifications. In addition to the items in the 60% submittal, requirements for the 90% submittal shall include the following:

1. Detailed construction quantities based upon 90% design,
2. Engineer's/Architect's updated opinion of probable construction cost and duration based on the 90% design submittal, and
3. Technical specifications and Special Provisions.

**Associated 90% Design Tasks/Activities**

1. 90% Submittal Design Package Preparation
2. 90% Technical Specifications
3. 90% Engineer's Opinion of Probable Construction Cost & Quantities (projected costs at anticipated time of construction)
4. QA/QC of 90% Submittal Design Package & Technical Specifications
5. Submittal of 90% Plan sheets to utility companies for their markup
6. 90% Plan Review Meeting with City
7. Respond to 90% City Review Comments

**Task 3.9 Final 100% Construction Documents**

The 100% submittal shall address the City's final review comments.

**Associated 100% Design Tasks/Activities**

1. 100% Submittal Design Package Preparation
2. 100% Technical Specifications
3. 100% Engineer's Opinion of Probable Construction Cost & Quantities (projected costs at anticipated time of construction
4. QA/QC of 100% Submittal Design Package & Technical Specifications
5. 100% Plan Review Meeting with City
6. Respond to 100% City Review Comments
7. Final Bid Package Submittal Preparation
8. QA/QC of Final Bid Package

**Permitting Services**

1. Environmental Resource Permit (ERP) application
2. Florida Department of Environmental Protection (FDEP) sanitary and water main permits

3. FDOT Construction Permits
4. All other City, State, County or Government Permits related to this scope. Work shall be pre-authorized by the City prior to working on any other permits.

**Task 3.10 Environment Permits and Environmental Clearances**

This task includes preparation of SWFWMD ERP (Individual), including graphics, application forms, and Environmental Evaluation documents needed to complete applications. AtkinsRéalis will use current regulatory guidelines and policies for permits required for Environmental Permits and Environmental Clearances and will coordinate with the City Project Manager and other appropriate City personnel in advance of all scheduled meetings with the regulatory agencies to allow a City representative to attend. Includes responding to up to 2 requests for information from SWFWMD.

**Task 3.11 Utility Permits**

FDEP construction permits will be needed for new or relocated potable water, wastewater and reclaim water mains. AtkinsRéalis will prepare and submit these applications and respond to comments and questions from FDEP that pertain to the project's proposed improvements.

**Task 3.12 Archeological and Historic Resources**

The task consists of background research, preparing Research Design and Survey Methodology and coordinating with the City of Clearwater for approval if required during the permitting. The following is included: archaeological and historic resources field survey, regional pre-contact and historic context determination, Florida Master Site File (FMSF) forms, prepare Cultural Resource Assessment Survey (CRAS) report (draft and final), coordination with City of Clearwater and State Historic Preservation Office (SHPO).

## IV. BIDDING PHASE:

**Task 4.2 Bidding phase services:**

1. Attend Pre-Bid meeting
2. Respond to bidding inquiries
3. Prepare addenda
4. Review bids and provide recommendation
5. Provide a conformed plan set

## V. CONSTRUCTION PHASE:

Construction phase services are not included in this scope of service.

# 3. PROJECT GOALS:

Embracing the City's vision for this project, the AtkinsRéalis team will develop a cost-effective design to improve infrastructure, facilitate economic development, and enhance quality of life for Clearwater residents and visitors. The goal is to provide complete design and bidding services associated with the Fort Harrison Avenue Corridor Improvements Project – Phase II, III, & IV described here in.

# 4. FEES:

See **Attachment A.**

This price includes all labor and expenses anticipated to be incurred by the AtkinsRéalis 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 Million Eight Hundred Twenty Eight Thousand Five Hundred Nine Dollars ($5,828,509).**

Permit application fees will be paid by the consultant and invoiced to the City as a reimbursable.

# 5. SCHEDULE:

Development of bid documents and submitting project permits for the Fort Harrison Corridor Improvement project will require approximately **Seven Hundred Thirty (730)** calendar days to complete from issuance of notice-to-proceed and receipt of survey data from the City. The project deliverables are to be phased as follows:

| | |
|---|---|
| **30% Construction Plans:** | **210 calendar days** |
| **60% Construction Plans and Permit Applications:** | **420 calendar days** |
| **90% Construction Plans:** | **540 calendar days** |
| **Final Construction Documents:** | **730 calendar days** |

# 6. STAFF ASSIGNMENT:

**ENGINEER Staff:**

| | |
|---|---|
| Daniel Parsons, PE, CFM, ENV SP | Project Manager (AtkinsRéalis) |
| Amanda Serra, PE | Deputy Project Manager (AtkinsRéalis) |
| Phil Bertulfo | Roadway Lead (AtkinsRéalis) |
| Wiatt Bowers, AICP | Transportation Planning Lead (AtkinsRéalis) |
| Norman Robertson, PE, | Utilities Lead (AtkinsRéalis) |
| Michelle Schofner, PE | Signing and Pavement Marking Lead (AtkinsRéalis) |
| Harry Belton, RLA | Landscape Architect Lead (AtkinsRéalis) |

**City Staff:**

| | |
|---|---|
| David Lutz, PE | Project Manager, Engineering Manager, Utilities |
| Todd Kuhnel | Public Utilities Water Distribution Assistant Manager |
| Andrew Blauvelt | Public Utilities Wastewater Collections and Reclaimed Distribution Assistant Manager |
| Michael Vacca | City of Clearwater Public Utilities Water, Reclaimed, & Wastewater Collections Manager |
| Michael Flanigan | City of Clearwater Public Utilities Assistant Director |
| Richard Gardner | Public Utilities Director |
| Mike Gilliam | Public Utilities Infrastructure Maintenance Manager |

Changes to staff assignments require City approval.

# 7. CORRESPONDENCE/REPORTING PROCEDURES:

Correspondence shall be directed to:
Daniel Parsons, PE, CFM, ENV SP (Project Manager/Project Director) (813) 281-4856,
Daniel.parsons2@AtkinsRealis.com

Copies provided to Amanda Serra, PE (Deputy Project Manager) (813) 262-8527,
Amanda.serra@AtkinsRealis.com

All City project correspondence shall be directed to:
David Lutz, PE Traffic Engineering Manager (727)-444-8237,
David.Lutz@myclearwater.com

# 8. FUNDING PROCEDURES:

**City Invoicing Code: 3157541-530100-C2102 Roads $ 325,211.79**
**3197319-530100-C2102 Storm $1,259,219.74**
**3217321-530100-C2102 Water $1,974,494.75**
**3217321-530100-C2102 Sewer $1,428,130.19**
**3277327-530100-C2102 Sewer $ 546,364.56**
**3217321-530100-C2102 RCW $ 295,088.07**

For work performed, invoices shall be submitted monthly to:

**Attn: Jamie Gaubatz, Accountant II**
**City of Clearwater, Public Works Department/Engineering**
**PO Box 4748**
**Clearwater, Florida 33758-4748.**

Contingency services will be billed as incurred upon written authorization from the City of Clearwater Project Manager listed above.

# 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 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 be 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. SIGNATURES:

**PREPARED BY:**

**Charlotte Maddox, PE, D.WRE, PMP**
**Vice President**
**AtkinsRéalis**

3.26.24
**Date**

**APPROVED BY:**

**Tara Kivett, P.E.**
**City Engineer**
**City of Clearwater**

**Date**

# ATTACHMENT "A"

CONSULTANT WORK ORDER – PROJECT FEES TABLE

Fort Harrison Complete Streets

Atkins [19-0036-EN] City of Clearwater

## PROJECT FEES TABLE

| Task | Description | Subconsultant Services | Labor | Total |
|---|---|---|---|---|
| **I.** | **Pre-Design Phase** | | | |
| 1.1 | Project Management | $11,750 | $188,930 | **$200,680** |
| 1.2 | Project Kick-off and Coordination Meetings | $11,750 | $117,110 | **$128,860** |
| 1.3 | Survey | $346,384 | $0.00 | **$346,384** |
| 1.4 | Geotechnical Investigation | $153,141 | $0.00 | **$153,141** |
| 1.5 | Subsurface Utility Exploration | $256,396 | $0.00 | **$256,396** |
| | | | **Pre-Design Phase Total:** | **$1,085,461** |
| **II.** | **Design Phase** | | | |
| 2.1 | Green Infrastructure and Sustainability | $0.00 | $14,450 | **$14,450** |
| 2.2 | Roadway Analysis & Documentation | $0.00 | $24,280 | **$24,280** |
| 2.3 | Drainage Analysis & Documentation | $0.00 | $129,870 | **$129,870** |
| 2.4 | Private Utility Coordination | $0.00 | $100,175 | **$100,175** |
| 2.5 | City Utility Analysis & Documentation | $5,100 | $18,545 | **$23,645** |
| 2.6 | Lighting Analysis & Documentation | $0.00 | $20,790 | **$20,790** |
| 2.7 | Landscape Analysis & Documentation | $0.00 | $40,145 | **$40,145** |
| 2.8 | Public Involvement | | | |
| 2.8.1 | Public Involvement Plan Development | $0.00 | $17,682.92 | **$17,682.92** |
| 2.8.2 | Public Meetings | $0.00 | $116,351.68 | **$116,351.68** |
| 2.8.3 | Presentations to Local MPOs and Associated Technical and Citizen Committees | $0.00 | $27,920.40 | **$27,920.40** |
| 2.9 | Intelligent Transportation Systems (ITS) Analysis | $0.00 | $46,710 | $46,710 |
| | | | **Design Phase Total:** | **$562,110** |
| **III.** | **Final Design Phase** | | | |
| 3.1 | 30% Construction Documents | $58,325 | $817,584 | **$875,909** |
| 3.2 | 60% Construction Documents | $104,985 | $1,471,651 | **$1,576,636** |
| 3.3 | 90% Construction Documents | $46,660 | $654,067 | **$700,727** |
| 3.4 | Final 100% Construction Documents | $23,330 | $327,033.56 | **$350,363.56** |
| 3.5 | Permitting Services | | | |
| 3.5.1 | Environment Permits and Environmental Clearances | $0.00 | $17,009 | **$17,009** |
| 3.5.2 | Utility Permits | $0.00 | $32,199.44 | **$32,199.44** |
| 3.5.3 | Archeological and Historic Resources | $0.00 | $42,606 | **$42,606** |
| | | | **Design Phase Total:** | **$3,595,450** |
| **IV.** | **BIDDING PHASE:** | | | |
| 4.1 | Bidding Phase Services | $0.00 | $49,260 | **$49,260** |
| | | | **Bidding Phase Total:** | **$49,260** |
| | | | **SUBTOTAL (SUBCONSULTANTS AND LABOR):** | **$5,292,281** |
| **7** | **Permit Fee Expense Allocation** | | | **$7,000.00** |
| **8** | **Contingency (10%)** | | | **$529,228.10** |
| **9** | **Other Direct Costs (Not applicable to lump sum Work Orders)** | | | **$0.00** |
| | | | **GRAND TOTAL:** | **$5,828,509.10** |

# 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 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.