Appendix A

## LOCHNER

## WORK ORDER INITIATION FORM for the CITY OF CLEARWATER

Date:

November 27, 2017

## **Consultant Project Number:**

City Project Number: 04-0021-PR

## **1. PROJECT TITLE:**

Druid Trail Phase IV - FPN 432580-1-58-01

## 2. SCOPE OF SERVICES :

#### **PROJECT SUMMARY**

The Druid Trail phase IV is the final stage to construct a critical non-motorized pedestrian and biking trail for users traveling east-west within the City of Clearwater. Phase IV will traverse from South Evergreen Avenue to the Duke Energy Trail just west of Bypass Drive. The overall project will include but is not limited to site preparation work, conflict relocation, asphalt placement, drainage work, concrete flatwork, and MUTCD signing and pavement markings for approximately 15,500 linear feet of 8' wide asphalt trail.

**GENERAL REQUIREMENTS.** It shall be the responsibility of the Consultant to administer, monitor and inspect the work included in the Contract such that the project is constructed in reasonable conformity with the plans, specifications, and special provisions of the Project. The Consultant shall observe the Contractor's work to determine the progress and quality of work, identify discrepancies, report significant discrepancies to the City, and direct the Contractor to correct such observed discrepancies. The Consultant shall advise the City Project Manager of any significant omissions, substitutions, defects, and deficiencies noted in the work of the Contractor and the corrective action that has been directed to be performed by the Contractor. Work provided by the Consultant shall not relieve the Contractor of responsibility for the satisfactory performance of the Construction Contract.

In addition to the above, consultant will be responsible to ensure the requirements of chapter 23 of the Florida Department of Transportation LAP manual (01/2017 edition) are maintained.

#### I. PRE-CONSTRUCTION PHASE

## Task 1: Preliminary Project Establishment

• Complete and review all applicable construction documents, utility relocation agreements, and environmental permit requirements to identify any and all constructability or quantity errors in order to reduce the potential for future construction claims.

- Complete and file video surveillance, digital photos, and survey work of pre-construction activities to illustrate fully the as-is conditions.
- Participate in a Pre-Services Meeting with City of Clearwater and FDOT as required (Conference Call).
- LAP pre-services meeting with FDOT Contract Compliance Manager to be attended by Lochner and City of Clearwater representative.
- Plan and conduct a detailed Pre-Construction Meeting with the Prime Contractor, their subcontractors, all utility system representatives, local agencies, and all other project stakeholders to ensure a common understanding of project objectives, schedules, and contract administration issues. Invited attendees will also include those persons identified in Section 23.2 of the FDOT LAP Manual (1/2017 edition).
- LAP Requirement Review meeting with contractor
- Review contractor's Baseline Schedule and provide recommendation to the City of Clearwater for approval.

## II. CONSTRUCTION ADMINISTRATION and INSPECTION PHASE

Construction, Engineering and Inspection (CEI) and FDOT Resident Compliance support services after Construction contract NTP for the Druid Trail Phase IV, FDOT Project Identification Number 432580-1-58-01. Work includes installation of a shared use path and associated pavement markings and signage and intersection improvements. This project is funded by a FDOT LAP agreement.

## Task 1: Administration and Inspection

- Separate utility meetings are held as necessary to discuss concerns and integration of utility work schedules with the project baseline construction schedule.
- Advise the City of Clearwater of any omissions, substitutions, defects and deficiencies noted in the work of the Contractor or contract documents and any corrective action to be taken. On the basis of on-site observations, Lochner shall endeavor to guard the City of Clearwater against defects and deficiencies in the work. Lochner does not have control over nor charge of and should not be responsible for construction means, methods, techniques, sequences or procedures, or for safety precautions and programs in connection with the work, since these are solely the Contractor's responsibility under the contract for construction. Lochner shall not have control over or charge of acts of omissions of the Contractor, subcontractors, or their agents or employees, or any other persons performing portions of theconstruction.
- Hold monthly construction progress meetings to discuss all aspects of on-going construction including forecasts of construction activities for the coming month. Hold additional progress meetings as needed and agreed upon by the City Project Manager.
- During construction, review Contractor proposed field changes and recommendations and provide input to the City of Clearwater regarding the proposed recommendations for a particular field situations not covered by the plans and specifications.
- Assist the City of Clearwater with the analysis of proposed changes to the plans, specification and make recommendation including cost analysis of contractor's proposal, prior to any modifications to the plans or specification. Assistance will include the following:
- During construction, document, track and review change proposal requests submitted by

contractor in a timely manner to recommend if modifications are warranted and conform to LAP guidelines and governing contract documents.

- Determine "root causes" for proposal are valid such as changes in conditions, unforeseen conditions, conflicts, material delays or other items not anticipated and confirm contractor activities did not provide the basis for change.
- Analyze and prepare an entitlement analysis including detailed estimates of probable costs of contractor's proposal including possible items where costs seem excessive based on current market guidelines.
- Research and determine if change proposal is eligible for inclusion in LAP funding agreement then proceed with securing concurrence and authorizations prior to construction.
- Prepare an executive summary to the City of Clearwater project manager with details and recommendations including possible fiscal and time impacts to the project if executed.
- Analyze the Contractor's schedule (i.e. baselines, revised baselines, updates) for compliance with contract documents. The following elements will be reviewed as necessary through the duration of the Project: completeness, logic duration, activity, flow milestone, dates, concurrency, resource allotment and delays. Verify the schedule conforms to construction phasing and MOT sequencing including all contract modifications.
- Request, receive, review, reject, and/or approve shop drawings, product data and test
  results submitted by the Contractor for all pertinent items needed in construction. Review
  of all submittals will be to determine satisfactory compliance with the project plans and
  specifications, noting approval or stipulations. Determine the acceptability, subject to City
  of Clearwater approval, of substitute materials and equipment proposed by the Contractor.
- Review submittals and tests required by the contract documents.
- Provide coordination between and among the CITY, Contractor and the subject utilities, as required.
- Prepare and submit Consultant invoices on a monthly basis to the City of Clearwater Project Manager for review, approval and processing.
- Prepare and submit monthly a consultant budget and technical status report to the City of Clearwater with each pay request or invoice.
- Supplemental Agreements/Document changes/Work orders

## Construction Photographs

- The Consultant shall have a digital camera for photographic documentation with date and time stamp of noteworthy incidents or events to cover the following areas:
  - a) Pre-construction photographs
  - b) Normal and exceptional progress of work
  - c) Critical path activities
  - d) Accidents showing damage
  - e) Unsafe working conditions
  - f) Unusual construction techniques
  - g) Damaged equipment or materials
  - h) Any activity, which may result in claims

- Photographs will be filed and maintained on the Consultant's computer using a digital photo management system. Copies of photographs will be electronically transferred to the City's Project Manager at an interval determined by the City's Project Manager.
- The taking of the photographs shall begin the day prior to the start of construction and continue regularly throughout this project. Photographs shall be taken the days of Pre-Final and Final Acceptance Dates.

## **Documentation**

- Monitor and record daily activities of the construction contractor including activities, equipment, man-power, and issues.
- Provide quantity tracking and documentation for the purpose of verifying monthly pay applications. Supporting documentation will be maintained and submitted electronically to the City of Clearwater at project closeout for any necessary record retention.
- Review and submit monthly estimates that are prepared by the contractor.

## Construction Quality

- Consultant shall monitor the Contractor's construction activities and inspect materials used in the work in accordance with the plans, specifications, and special provisions for the Contract to determine that the project is constructed in reasonable conformity with such documents.
- Perform detailed daily inspections and documentation of contractor operations to verify work is being performed in accordance with all contract documents. These daily inspection reports will be summarized in a weekly report including verification that all earthwork, drainage system construction, concrete placement, landscape installation, and asphalt operations are in accordance with contract specifications.
- Review Contractor's Quality Control plan and provide recommendation for acceptance to the City of Clearwater.
- Conduct pre-activity meetings with CEI and contractor personnel on all major work activities to review scope, testing requirements, submittals, applicable specifications, quantity documentation, etc.

## <u>Safety</u>

- Monitor contractor safety program and notify contractor immediately of any observed safety issues. Lochner does not have control over nor charge of and should not be responsible for safety precautions and programs in connection with the work, since these are solely the Contractor's responsibility under the contract for construction.
- Review and Approve Professional Certified Maintenance of Traffic (MOT) plans if different from contract plans.
- Analyze the contractor MOT Plan to verify the contractor's placement and maintenance of MOT devices is in accordance with applicable document and safety requirements by video and digital camera documentation during both day and night hours.

## **Environmental**

• Assist the City of Clearwater with monitoring the project to the extent necessary to

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determine whether construction activities violate the requirements of the permits and if so determined, notify the Contractor of any violations or potential violations and require him to immediately resolve the problem. The City of Clearwater is to be notified of all violations, prior to Contractor being notified.

- Review the Storm Water Pollution Prevention Plan (SWPPP) in accordance with NPDES requirements for the Project. Review the necessary Notice of Intent (NOI) for the Project.
- Verify that the contractor is conducting inspections, preparing reports and monitoring all storm water pollution prevention measures associated with the project. Consultant shall provide at least one inspector who has successfully completed the "Florida Stormwater, Erosion, and Sedimentation Control Training and Certification Program for Inspector and Contractors."

## Public Communications

• As requested by the City, the Consultant will coordinate and maintain communications with impacted property owners for the project. This includes public meetings and day to day contact with City residents. The Consultant may also be required to coordinate notifications to property owners about the project scope, schedule and costs.

## Task 2: Resident Compliance Support Services

The Consultant shall provide trained staff to monitor the Contractor and the Subcontractor's performance for compliance with all the requirements of the Equal Employment Opportunity (EEO) and Affirmative Action (AA), Disadvantage Business Enterprise (DBE), On-the-Job Training (OJT), if applicable, and Federal Davis-Bacon Wage Rate Provisions as required by FHWA 1273 "Required Contract Provision for on Federal-Aid Construction Contracts" and the State of Florida Statutes. In accordance with the FDOT Contract Compliance Workbook. LAP Compliance to include:

- Attend and participate in a Pre-conference construction meeting.
- Administer compliance assistance through direct communication with the Contractor and the City.
- Perform the contract compliance and certification.
- Be responsible to monitor the Project Compliance documentation in conformity with the Contract Documents and Davis Bacon Act and any closeout documentation required by the FDOT.
- Keep the City's Project Manager informed of all significant deficiencies discovered and recommend appropriate actions as necessary.
- Review certified payrolls for Contractor and subcontractors to ensure the wage rates and classifications are correct.
- Perform monthly interviews based on 25% of the workforce.
- Assist the City in maintaining records for all Equal Employment Opportunity (EEO) Compliance as required by contract documents.
- Discuss compliance requirements per the contract.
- Be responsible for maintaining the required EEO documentation required on this project.
- Address FDOT compliance questions from the contractor

- Job Board Inspections to be performed by inspection staff
- Employee Interviews to be performed by inspection staff
- Upload LAP construction phase documents into LAPIT and EOC websites to include daily inspection reports

#### Task 3: Materials Testing

- Consultant shall perform sampling and testing of component materials and completed work in accordance with the Contract documents; minimum sampling frequencies set out in the FDOT's Materials Sampling, Testing and Reporting Guide shall be met.
- Daily surveillance of the Contractor's Quality Control activities
- Coordinate laboratory testing of construction materials as needed.
- Manage project materials acceptance program, review testing results and verify acceptance of materials.

## III. POST-CONSTRUCTION PHASE

## Task 1: Close-out

Construction, Engineering and Inspection (CEI) and FDOT Resident Compliance support services to close-out the project and contract after final acceptance of the Construction contract for the Druid Trail Phase IV project, FDOT Project Identification Number 432580-1-58-01. This project is funded by a FDOT LAP agreement.

- Review and verify all submitted record drawings (As-Builts) from the contractor.
- Submit an accurate, certified Final Estimate package within the established timeframe.
- Provide all necessary permitting support for close-out of the permits.
- Construction Materials Certification
- Summarize any outstanding issues and provide support
- Prepare and submit a compliance folder with all documentation to the City of Clearwater
- Final project record retention and submission to FDEP
- Conduct a meeting to evaluate lessons learned, how the city and the consultant could improve on future LAP and roadway projects, and to review city performance evaluations.

## 3. PROJECT GOALS:

LOCHNER shall maintain accurate records of activities and events relating to the project, utilize effective control procedures so that the construction of the project is performed in substantial conformity with the plans, specifications established standard procedures and practices of the City of Clearwater and contract provisions. LOCHNER shall also p e r f o r m contract management engineering s e r v i c e s and other duties services necessary to administer and coordinate EEO/LAP tasks and to adhere to current City of Clearwater, Florida Department of Transportation, and Federal requirements.

## 4. BUDGET

See Attachment "2": Project Budget

This price includes all labor and expenses anticipated to be incurred by LOCHNER for the completion of these tasks in accordance with Professional Services Method "A" – Cost Times Multiplier Basis for a fee not to exceed Two Hundred Eighty-Five Thousand Two Hundred Seventeen Dollars and Ninety-Five Cents (\$285,217.95).

## 5. SCHEDULE:

The project is to be completed within 12 months from issuance of notice-to-proceed. The project deliverables are to be phased as follows:

Description of Milestone	Calendar Days from PO to Milestone	
CEIContract Award	0	
Project Mobilization	0	
Initialization - Pre construction agenda, site video, project contact list, utility contacts/ coordination, IT setup for database	5	
LAP compliance meeting with FDOT District 7 including RCS staff	7	
Pre-construction meetings including construction, utility coordination, FHWA/EEO/LAP Requirements	14	
Review of Submittals - Schedule, Required bond documents, shop drawings, EEO documentation, sublets, materials, equipment, MOT	20	
Notice to Proceed - Based on criteria for approval	21	
Construction of Improvements (274 days)	295	
Substantial Completion / Punch List	295	
Record Drawings (14 days)	309	
Final Acceptance (30 Days)	325	
Completed Final Estimate and Documentation, Release of liens, consent of surety, final payment with retainage	340	
Lessons Learned/Project Closeout with files	365	

## 6. STAFF ASSIGNMENT (Consultant)

Steven Blount, PE Principal in Charge (Lochner) Gary S. Downing, PE, Senior Project Engineer (Lochner) Scott Franklin, Senior Inspector (Lochner) Lo Korb, Contract Support Specialist (Lochner) Larry Taylor, Resident Compliance Officer (LPAS) Kyonna Johnson Resident Compliance Specialist (LPAS) Daniel Simpson, PE, Project Manager (Clearwater)

## 7. CORRESPONDENCE/REPORTING PROCEDURES:

ENGINEER's project correspondence shall be directed to: Gary Downing, PE, Senior Project Engineer

All City project correspondence shall be directed to: Daniel Simpson, PE, Project Manager with copies to others as may be appropriate.

## 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.

City Invoicing Code: 0315-92146-561200-541-000-0000

## 9. INVOICING PROCEEDURES

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. Purchase Order Number 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 Cost Times Multiplier
- E. 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).
- F. 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.

#### **PREPARED BY:**

Date

APPROVED BY:

Gary Downing, PE Senior Project Engineer H.W. Lochner, Inc. D. Scott Rice, PE City Engineer City of Clearwater

Date

Attachment 1



## CITY OF CLEARWATER ENGINEERING DEPARTMENT

## WORK ORDER INITIATION FORM CITY DELIVERABLES

## I. PRE-CONSTRUCTION PHASE DELIVERABLES

Task 1: Preliminary Project Establishment

- Pre-Construction video and pictures
- Meeting minutes from Clearwater pre-services meeting
- Meeting minutes from FDOT LAP pre-services meeting
- Meeting minutes from pre-construction conference
- Baseline Schedule Acceptance letter (via email)

# II. CONSTRUCTION ADMINISTRATION and INSPECTION PHASE DELIVERABLES

## Task 1: Administration

- Monthly progress meeting minutes
- Utility Coordination meeting minutes if necessary
- Request for Information (RFI) Log
- Submittal Logs
- Daily Inspection reports
- Engineers Weekly Summary
- Monthly Progress Report
- Contractor Pay Application

## Task 2: Resident Compliance Support

- Conduct federally required number of employee interviews (FORM 700-010-63)
- Conduct initial, pre-audit job site bulletin board inspections and log reports (FORM 275-021-10)

## Attachment 1

- Match wage rates to submitted payrolls and daily reports, insure contractor document submittal within required timeframe and write non-compliance/violations as needed.
   Documentation of these reviews will be included in the monthly status report to the City.
- Review at least 20% of all sub-contracts for inclusion of FHWA Form 1273 and other federally required forms. **Documentation** of these reviews will be included in the monthly status report to the City.
- Insure accuracy and completeness of required data into EOC and LAPIT
- Provide **documented** guidance and recommendations to the City on EEO/Compliance matters including but not limited to those listed above.
- Provide **documented** responses to FDOT/FHWA compliance questions and clarification requests
- Provide monthly status reports to the City

## Task 3: Material Testing

- Verify acceptance of construction materials according to specifications
- Review and Accept contractor Quality Control plan
- Field and Laboratory Testing Reports
- Material acceptance monthly status report

## III. POST-CONSTRUCTION PHASE DELIVERABLES

## Task 1: Close-out

- Final estimate package within 30 days of notice of final completion
- Offer of final payment and submit final pay application within 30 days from notice of final acceptance
- Submit a signed and sealed set of as-built record drawings that reflects all field changes within 30 days from notice of final acceptance
- Provide electronically all project records and correspondence within 30 days from notice of final acceptance.

Attachment 2

# DRUID TRAIL PHASE IV

## LOCHNER

## WORK ORDER INITIATION FORM PROJECT BUDGET

Phase	Description	Subconsultant	Labor	Total		
		Services				
1.0	Pre-Construction Phase					
1.1	CEI Senior Project Engineer		\$8,360.96	\$8,360.96		
1.2	CEI Senior Inspector		\$7,231.13	\$7,231.13		
1.3	CEI Contract Support Specialist		\$3,613.83	\$3,613.83		
1.4	Resident Compliance Officer	\$1,677.06		\$1,677.06		
1.5	Resident Compliance Specialist	\$2,585.22		\$2,585.22		
				\$23,468.20		
2.0	Construction Administration and Inspection Phase					
2.1	CEI Senior Project Engineer		\$60,198.93	\$60,198.93		
2.2	CEI Senior Inspector		\$130,160.25	\$130,160.25		
2.3	CEI Contract Support Specialist		\$16,262.23	\$16,262.23		
2.4	Resident Compliance Officer	\$5,031.18		\$5,031.18		
2.5	Resident Compliance Specialist	\$11,633.49		\$11,633.49		
2.6	CEI Inspector		\$10,665.00	\$10,665.00		
2.7	Material Testing	\$7,430.00		\$7,430.00		
				\$241,381.08		
3.0	Post-Construction Phase					
3.1	CEI Senior Project Engineer		\$8,360.96	\$8,360.96		
3.2	CEI Senior Inspector		\$7,231.13	\$7,231.13		
3.3	CEI Contract Support Specialist		\$1,806.91	\$1,806.91		
3.4	Resident Compliance Officer	\$1,677.06		\$1,677.06		
3.5	Resident Compliance Specialist	\$1,292.61		\$1,292.61		
				\$20,368.67		
Subtot	al, Labor and Subcontractors					
				\$285,217.95		
Permit Review Fees				\$0		
Other Direct Costs (prints, photocopies, postage, etc.)			\$0			
(Not ap	oplicable to lump sum Work Orders)					
			Grand Total	\$285,217.95		