# City of Jacksonville, Florida

*Lenny Curry, Mayor*

Department of Public Works
Engineering & Construction Management Division
214 N. Hogan Street, 10th Floor
Jacksonville, FL 32202
(904) 255-8762
www.coj.net

ONE CITY. ONE JACKSONVILLE.

July 16, 2019

TO: Gregory W. Pease, Chairman
Professional Services Evaluation Committee

THRU: John P. Pappas, P.E.
Director

07/16/19 14:40:03
Procurement Division

FROM: Robin G. Smith, P.E.
Chief, Engineering and Construction Management

R. Duane Kent, P.E.
Public Works Project Manager

SUBJECT: P-11-18 Professional Design Services for Preparation of DCP & RFP for Hart Expressway Modifications
Contract 10425-01 Amendment 3
PWCP32ERD549-069505-PW0262-02

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The Hart Expressway project has been converted from a Design-Build to a Design-Bid-Build delivery. This amendment is to finalize the design and prepare construction details and plans required to bid the project. The Engineering Division has negotiated with the consultant to provide these services resulting in the attached Scope of Services, Exhibit G and Fee Summary, Exhibit H. JSEB firms to be utilized to meet the 15% Participation Percentage Plan for this contract are detailed on a separate attachment.

Accordingly, this is to recommend that Contract Number 10425-01, originally executed August 21, 2018 between the City and STV, Incorporated for Professional Design Services for Preparation of DCP & RFP for Hart Expressway Modifications, be amended to incorporate the attached Scope of Services, Exhibit G and Fee Summary, Exhibit H, to increase the lump sum amount for Design Services by $804,304.08 to a new lump sum amount of $2,619,645.49 and to increase the not to exceed limit for Survey by $105,745.89 to a new limit of $451,276.80, Geotechnical by $146,864.19 to a new limit of $330,843.01 and Utility Coordination by $20,310.04 to a new limit of $40,620.08, thereby increasing the maximum indebtedness by $1,077,224.20 to a new maximum of $3,442,385.38. All other terms and conditions are as provided in the RFP and the City's standard contract language.

RGS/lw

Attachment: Exhibits G & H
JSEB Participation

cc: Lori West, Contract Specialist

# AMENDMENT #3 SCOPE OF SERVICES
# PROFESSIONAL DESIGN SERVICES FOR PREPARATION OF DCP & RFP FOR HART EXPRESSWAY MODIFICATIONS

## 1.0 PURPOSE:

The Hart Expressway Modification DCP & RFP project has been converted from a Design-Build to a Design-Bid-Build delivery. As such, the City of Jacksonville (COJ) has tasked STV Incorporated (CONSULTANT) with finalizing the design and preparing the project for contractor bidding.

## 2.0 OBJECTIVE:

### 2.1 Summary:

- Prepare sign & sealed construction documents
- Modify existing SJRWMD permit
- Coordinate with the FDOT LAP Office and FHWA to adhere to federal guidelines

### 2.2 Submittals:

- Final: Including Plans, Specs, Calculations, Reports, LAP Documents
- Signed & Sealed: Including Plans, Specs, Calculations, Reports, LAP Documents

### 2.3 Schedule:

- September 3, 2019: Final Documents to COJ/FDOT LAP/FHWA
- September 20, 2019: COJ/FDOT LAP/FHWA Review Comments to STV
- October 29, 2019: Signed & Sealed Documents to COJ/FDOT LAP/FHWA

### 2.4 Provisions for Work:

All plans, reports, and designs are to be prepared with English values in accordance FDOT FDM Criteria, FDOT Standard Plans, FDOT Standard Specifications, and FDOT Materials Manual.

## 3.0 WORK TASKS, SERVICES, AND DELIVERABLES:

Services below are detailed further in Appendix A.

### 3.1. Field Work

**DESIGN SURVEY**

- Locate soil borings
- Select design survey of:
  - WJCT parking area
  - Parking Lot E
  - Parking Lot X
  - Drainage network not previously surveyed

**SUBSURFACE UTILITY ENGINEERING (SUE)**

- Slit-trench miscellaneous structure foundations
- Utility locates (Vvh)

### 3.2. Engineering/Design Services

**ROADWAY & DRAINAGE**

- Final design for project limits

**STRUCTURES ENGINEERING**

- Final design for west steel bridge (1)
- Final design for west concrete bridge (1)
- Final design for west ramp retaining walls (2)
- Final design for east ramp retaining walls (2)
- Final design for miscellaneous structures (signs and signals) (14 total)
- Final bridge load ratings for west and east steel bridges (2)
- Independent Peer Reviews for West Steel Bridge and East FDOT Bridge

**SIGNING & PAVEMENT MARKING**

- Final design within project limits

**LIGHTING ENGINEERING**

- Final design within project limits

**SIGNALIZATION/INTERCONNECT ENGINEERING**

- Final design within project limits

**GEOTECHNICAL ENGINEERING**

- Perform additional geotechnical investigations for:
  - Temporary critical walls
  - Modified east retaining wall
  - Miscellaneous foundation locations
- Produce geotechnical ground improvement recommendations for project limits

### 3.3. Deliverables

1. Signed & Sealed Plans with Calculations. Components include:
   a. Roadway & Drainage Plans with Calculations
   b. Bridge Plans with Calculations
   c. Retaining Wall Plans with Calculations
   d. Signing & Pavement Marking Plans with Calculations
   e. Lighting Plans with Calculations
   f. Signalization/Interconnect Plans with Calculations
2. Signed & Sealed Geotechnical Report with Recommendations
3. Signed & Sealed Modified COJ Division I, II, & III Specifications
4. Engineer's Estimate of Probable Cost of Construction
5. Utility Contact Forms and Utility Work Schedules as necessary
6. Special Technical Specifications including:
   a. Ground Improvements
   b. Signal/Interconnect Equipment
7. Signed LAP Construction Checklist
8. LAP Certifications including:
   a. R/W
   b. Railroad
   c. Permits
   d. Utilities

**3.4. Other Services**

1. SJRWMD permit modification
2. SJRWMD coordination meetings
3. SJRWMD RFI's responses
4. Utility Coordination

## 4.0 PROJECT REQUIREMENTS:

**4.1 Liaison Office**

Unchanged from Master Agreement.

**4.2 Progress Reporting**

Unchanged from Master Agreement.

**4.3 Quality Control**

Unchanged from Master Agreement.

**4.4 Professional Endorsement**

Unchanged from Master Agreement

**4.5 Computer Animation**

Unchanged from Master Agreement.

**4.6 Coordination with other Consultants**

Unchanged from Master Agreement.

**4.7 Optional Services**

Unchanged from Master Agreement.

**4.8 Services Not Included**

Unchanged from Master Agreement.

EXHIBIT H

# CONTRACT FEE SUMMARY FOR ENGINEERING DIVISION
# CITY OF JACKSONVILLE, FLORIDA

| PART I - GENERAL | |
|---|---|
| 1. Project<br>Hart Bridge Modification D-B DCP/RFP<br>Amendment #3 | 2. Proposal Number<br>P-11-18 |
| 3. Name of Consultant<br>STV Incorporated | 4. Date of Proposal<br>7/9/2019 |

| PART II - LABOR RELATED COSTS | | | | |
|---|---|---|---|---|
| 5. Direct Labor | Hourly Rate | Estimated Hours | Estimated Cost | TOTAL |
| Project Manager | $63.87 | 394 | $25,164.78 | |
| Principal | $98.04 | 37 | $3,627.48 | |
| Chief Engineer | $76.12 | 381 | $29,001.72 | |
| Senior engineer | $58.20 | 855 | $49,761.00 | |
| Design Engineer | $41.33 | 1086 | $44,884.38 | |
| Designer | $40.66 | 437 | $17,768.42 | |
| CADD/Computer Tech | $26.93 | 823 | $22,163.39 | |
| Engineering Intern | $29.49 | 878 | $25,892.22 | |
| Clerical | $20.45 | 15 | $306.75 | |
| TOTAL DIRECT LABOR | | 4,906 | Hours | $218,570.14 |
| 6. Overhead (Combined Fringe Benefit & Administrative) | | | 175.00% | $382,497.75 |
| 7. SUBTOTAL: Labor + Overhead (Items 5 & 6) | | | | $601,067.89 |
| 8. PROFIT: Labor Related Costs (Item 7) | | | x 10% | $60,106.79 |

| PART III - OTHER COSTS | | |
|---|---|---|
| 9. Miscellaneous Direct Costs | | |
| Deduct of Remaining STV Budget | | ($141,912.53) |
| MISCELLANEOUS DIRECT COSTS SUB-TOTAL | | ($141,912.53) |
| 10. SUBCONTRACTS (Lump Sum) | | |
| ERS (Environmental) | $ - | |
| Terrracon (Contamination) | $ - | |
| Peters & Yaffee (Signals/Signing/Marking) | $ 224,669.62 | |
| Pond (Landscape) | $ - | |
| SEARCH (Archaeology) | $ - | |
| CSI Geo (Geotechnical) | $ - | |
| Arcadis US (Traffic Analysis) | $ - | |
| DRMP (Survey/SUE/Mapping) | $ - | |
| Consor Engineers (Structures Peer Review) | $ 60,372.31 | |
| SUB-CONTRACT SUB-TOTAL | | $ 285,041.93 |
| TOTAL LUMP SUM AMOUNT (Items 5, 6, 8, 9 and 10) | | $804,304.08 |
| 11. REIMBURSABLE COSTS (Limiting Amount) | | |
| CSI Geo (Geotechnical) | $ - | |
| Terrracon (Geotech) | $ 146,864.19 | |
| DRMP (Survey/SUE) | $ 105,745.89 | |
| Cardno (Utility Coordination) | $ 20,310.04 | |
| SUB-TOTAL REIMBURSABLES | | $272,920.12 |

| PART IV - SUMMARY | |
|---|---|
| **TOTAL AMOUNT OF AMENDMENT #3** (Lump Sum Plus Reimbursables) (Items 5, 6, 8, 9, 10 and 11) | **$1,077,224.20** |
| 12. PRIOR CONTRACT AMOUNT (Through Amendment # 2) | $2,365,161.18 |
| **AMENDED AMOUNT OF CONTRACT** | **$3,442,385.38** |

**EBO FORM 1**
**SCHEDULE OF SUBCONTRACTOR/SUBCONSULTANT PARTICIPATION**

Name of Proposer: **STV Incorporated**

Project Title: **Hart Bridge Modification D-B DCP/RFP**

Proposal Number: **P-11-18** Total Base Proposal Amount (if applicable): **$1,077,220.41**

***Please list all JSEBs first**

| Full Company Name | JSEB Category (African-American, Women, Asian, Native American, Non-MBE or Hispanic) | Type of Work to be Performed | Total Contract Value or Percentage |
|---|---|---|---|
| CSI Geo. Inc. | African-American | Geotechnical Investigations | $0.00 |
| Environmental Resource Solutions Inc. | Woman | Environmental Investigations | $0.00 |
| Meskel & Associates Engineering | Woman | Contamination Screening | $0.00 |
| Peters & Yaffee | African-American | Signal/Signing/Marking | $224,669.62 |
| Cardno | Non-MBE | Utility Coordination | $20,310.04 |
| DRMP Inc. | Non-MBE | Topo Survey & SUE | $105,745.89 |
| POND Incorporated | Non-MBE | Landscape Architecture | $0.00 |
| SEARCH Inc. | Non-MBE | Cultural Resource Evaluation | $0.00 |
| ARCADIS US Inc. | Non-MBE | Traffic Analysis | $0.00 |
| Terracon Consulting Engineers & Scientists | Non-MBE | Contamination Screening/Geotechnical | $146,864.19 |
| Consor Engineers | Non-MBE | Independent Peer Review | $60,372.31 |

Attach additional list of subcontractors/sub-consultants as needed

| CONSULTANT/SUBCONTRACTOR/SUPPLIER TOTAL VALUES | |
|---|---|
| African-American Participation Total | $224,669.62 (21%) |
| Hispanic-American Participation Total | |
| Native-American Participation Total | |
| Asian-American Participation Total | |
| Woman Participation Total | $0.00 (0%) |
| Non-MBE Participation Total | $852,554.58 (79%) |

The undersigned will enter into a formal Agreement with the JSEB Suppliers/Consultants/Subcontractors identified herein for work listed in this schedule conditioned upon execution of a contract with the City of Jacksonville. Under penalties of perjury I declare that I have read the foregoing conditions and instructions and the facts are true to the best of my knowledge and beliefs.

Signature of Proposer: J. Keith Jackson Title: STV Project Manager Date: July 9, 2019

Print Name: J. Keith Jackson, P.E.

# Peters & Yaffee
# Scope of Services

**Signing and Pavement Marking**

- Production of the Signing and Pavement Markings Component Plan Set for the project limits along Gator Bowl Boulevard from west of Lafayette Street to Talleyrand Avenue, including the tie in with the Commodore Point Expressway Ramps.
- The design will include the replacement of Guide Sign Panels affected by the proposed roadway layout including signs on the Hart Bridge, Monroe Street and Forsyth Street (22 Guide Signs).

**Signalization**

- Production of the Signalization Component Plan Set for the project limits along Gator Bowl Boulevard from west of Lafayette Street to Talleyrand Avenue. The proposed new signal locations are as follows:
    - Gator Bowl at A. Philip Randolph
    - Gator Bowl at Commodore Point West Approach
    - Gator Bowl at Metro Park
    - Gator Bowl at WJTC TV Entrance
    - Gator Bowl at Gator Bowl South
    - Gator Bowl at Commodore Point East Approach
    - Gator Bowl South at Talleyrand (Signal Modification Only)

- The design will include CCTV Cameras and BlueTOAD Devices at each signalized intersection.
- The design will include Fiber Optic Interconnect from the signal at Gator Bowl at A. Philip Randolph to the signal at Gator Bowl South at Talleyrand
- The design will include the Removal of LUS equipment for the existing reversible lanes at the following eight locations
    - Bay St./Gator Bowl Blvd. at A. Philip Randolph Blvd.
    - Gator Bowl Blvd. at Georgia St./LUS 11
    - Gator Bowl Blvd. at Lot J – West Entrance/LUS 12
    - Gator Bowl Blvd. at LUS 13 east of Lot J – West Entrance
    - Gator Bowl Blvd. at Metropolitan Park/Lot J – East Entrance
    - Gator Bowl Blvd. at LUS 14 near Lot F – West Entrance
    - Gator Bowl Blvd. at LUS 15 west of Lot F – East Entrance
    - Gator Bowl Blvd. at LUS 16 west of Talleyrand Ave.

**Lighting**

- Production of the Lighting Component Plan Set for the project limits along Gator Bowl Boulevard from west of Lafayette Street to Talleyrand Avenue, including the tie in with the Commodore Point Expressway Ramps.
- The Design will include Bridge/Wall Mounted Lighting on the Commodore Point Expressway West Approach in accordance with JEA Plate L1601T*12, 115W LED Cobrahead Fixture on 27' Aluminum Poles with a 12' Arm.
- The Design will include Bridge/Wall Mounted Lighting on the Commodore Point Expressway in accordance with FDOT Standard Plans 715-001 & 715-002.
- The Design will include At-Grade Lighting along the project limits in accordance with JEA Plate LDDA01, 100W LED, Decorative Aluminum Poles, with Two Decorative Acorn Fixtures.

## CONTRACT FEE SUMMARY FOR ENGINEERING DIVISION
## CITY OF JACKSONVILLE, FLORIDA

| PART I - GENERAL | |
|---|---|
| 1. Project<br>Hart Bridge Modification (SAPM, Signals and Lighting) | 2. Proposal Number<br>P-11-18 |
| 3. Name of Consultant<br>Peters and Yaffee, Inc. | 4. Date of Proposal<br>6/26/2019 |

**PART II - LABOR RELATED COSTS**

| 5. Direct Labor | Hourly Rate | Estimated Hours | Estimated Cost | TOTAL |
|---|---|---|---|---|
| Principal | $83.86 | 88 | $7,379.68 | |
| Project Manager | $67.20 | 173 | $11,625.60 | |
| Senior Engineer | $66.11 | 261 | $17,254.71 | |
| Project Engineer | $42.40 | 347 | $14,712.80 | |
| Engineering Intern | $30.13 | 437 | $13,166.81 | |
| Designer | $26.20 | 261 | $6,838.20 | |
| Designer -Associate | $17.99 | 139 | $2,500.61 | |
| Secretary/Clerical | $23.31 | 34 | $792.54 | |
| TOTAL DIRECT LABOR | | 1,740 | Hours | $74,270.95 |
| 6. Overhead (Combined Fringe Benefit & Administrative) | | | 175% | $129,974.16 |
| 7. SUBTOTAL: Labor + Overhead (Items 5 & 6) | | | | $204,245.11 |
| 8. PROFIT: Labor Related Costs (Item 7) | | | x 10% | $20,424.51 |

**PART III - OTHER COSTS**

| | | |
|---|---|---|
| 9. Miscellaneous Direct Costs | | |
| | $ | |
| | $ | |
| | $ | |
| | $ | |
| MISCELLANEOUS DIRECT COSTS SUB-TOTAL | | $0.00 |
| 10. SUBCONTRACTS (Lump Sum) | | |
| | $ | |
| | $ | |
| SUB-CONTRACT SUB-TOTAL | | $0.00 |
| TOTAL LUMP SUM AMOUNT (Items 5, 6, 8, 9 and 10) | | $224,669.62 |
| 11. REIMBURSABLE COSTS (Limiting Amount) | | |
| | $ 0.00 | |
| | $ 0.00 | |
| | $ 0.00 | |
| | $ 0.00 | |
| SUB-TOTAL REIMBURSABLES | | $0.00 |

**PART IV - SUMMARY**

| | |
|---|---|
| **TOTAL AMOUNT OF CONTRACT** (Lump Sum Plus Reimbursables) (Items 5, 6, 8, 9, 10 and 11) | **$224,669.62** |

CONSOR

Mr. Terry Hall, Jr., PE
Associate/Engineering Director - Structures
STV Incorporated
5200 Belfort Road, Suite 400
Jacksonville, FL 32256-6054

July 9, 2019

Reference: Revitalization & Complete Streets
Hart Bridge Expressway & Talleyrand Connector
City of Jacksonville, Duval County, Florida
**Independent Peer Review Scope of Work**
CONSOR #D190359FL00

Dear Mr. Hall,

CONSOR Engineers, LLC is pleased to submit this man-hour and fee proposal for engineering services for independent peer review related to the above referenced project in accordance with the Florida Design Manual (FDM) Section 121.12 for Category 2 structures.

It is our understanding that the project includes the removal of the existing three-span steel structure (existing Spans 35 thru 37) and replacing it with a Category 2 single curved steel I-girder span (Bridge No. 72445, Span 35) between an existing hinge point and proposed Pier 36. The existing steel structure to the west of proposed Span 35 consists of several continuous steel spans connected by hinges within the spans and shall be evaluated to confirm the effects of the proposed modifications in new Span 35 on the existing structure to remain.

In addition, since this is a LAP project, FDOT is requiring that the independent peer review includes any bridge on or over the FDOT right of way regardless of the category classification. Therefore, the independent peer shall include the proposed Bridge No. 720114 modifications (Span 91 replacement).

SPECIFIC SERVICES:

For the 90% submittal:

1. Conduct independent peer review in accordance with FDM 121.12 for new Span 35 consisting of a curved plate girder superstructure inclusive of superstructure and substructure from the existing hinge to Pier 36.
2. Conduct structural analysis/modeling of the existing steel structure to the west of new Span 35 to confirm the effects of the proposed modifications in new Span 35 on the existing structure to remain.
3. Conduct peer review of the proposed Bridge No. 720114 modifications (Span 91 replacement).

CONSOR

4. Prepare tabulated list of all review comments from the independent review engineer and coordinate responses from the originator of the design.

5. Submit a standard peer review certification letter following the format presented in Form 121-B (see FDM 103) signed by the independent review engineer. All outstanding/unresolved comments and issues presented in this letter are required to be resolved and implemented prior to the 100% plans submittal.

For the 100% submittal:

6. Submit a certification letter following the format presented in Form 121-C (see FDM 103) signed and sealed by the independent review engineer stating that all review comments have been adequately addressed and that the design is in compliance with all FDOT and FHWA requirements.

STV RESPONSIBILITES

1. Transmit to CONSOR in a timely manner all final or substantially complete contract plans and calculations as it relates to the Scope of Services giving CONSOR adequately agreed time to complete the work.
2. Coordinate all information with CONSOR that affects the schedule or completion of the independent peer review as it relates to the Scope of Services.

COMPENSATION

Compensation for the above services shall be in the Lump Sum amount of $60,372.31 in accordance with the attached Man-hour & Cost worksheet.

If it is determined that additional services are necessary, they can be provided under an addendum to this agreement or as a separate agreement.

Sincerely,
CONSOR Engineers, LLC.

Christopher Howard, PE
Vice President - Structures

## CONTRACT FEE SUMMARY FOR ENGINEERING DIVISION
## CITY OF JACKSONVILLE, FLORIDA

| PART I - GENERAL | |
|---|---|
| 1. Project<br>Hart Bridge Modification | 2. Proposal Number<br>P-11-18 |
| 3. Name of Consultant<br>CONSOR Engineers, LLC | 4. Date of Proposal<br>7/9/2019 |

**PART II - LABOR RELATED COSTS**

| 5. Direct Labor | Hourly Rate | Estimated Hours | Estimated Cost | TOTAL |
|---|---|---|---|---|
| Project Manager | $94.71 | 31 | $2,936.01 | |
| Senior Engineer | $73.18 | 196 | $14,343.28 | |
| Project Engineer | $48.70 | 55 | $2,678.50 | |
| | | | $0.00 | |
| | | | $0.00 | |
| | | | $0.00 | |
| | | | $0.00 | |
| TOTAL DIRECT LABOR | | 282 | Hours | $19,957.79 |
| 6. Overhead (Combined Fringe Benefit & Administrative) | | | 175% | $34,926.13 |
| 7. SUBTOTAL: Labor + Overhead (Items 5 & 6) | | | | $54,883.92 |
| 8. PROFIT: Labor Related Costs (Item 7) | | | x 10% | $5,488.39 |

**PART III - OTHER COSTS**

| | | |
|---|---|---|
| 9. Miscellaneous Direct Costs | | |
| | $ | |
| | $ | |
| | $ | |
| | $ | |
| MISCELLANEOUS DIRECT COSTS SUB-TOTAL | | $0.00 |
| 10. SUBCONTRACTS (Lump Sum) | | |
| | $ | |
| | $ | |
| SUB-CONTRACT SUB-TOTAL | | $0.00 |
| TOTAL LUMP SUM AMOUNT (Items 5, 6, 8, 9 and 10) | | $60,372.31 |
| 11. REIMBURSABLE COSTS (Limiting Amount) | | |
| | $ 0.00 | |
| | $ 0.00 | |
| | $ 0.00 | |
| | $ 0.00 | |
| SUB-TOTAL REIMBURSABLES | | $0.00 |

**PART IV - SUMMARY**

| | |
|---|---|
| **TOTAL AMOUNT OF CONTRACT** (Lump Sum Plus Reimbursables) (Items 5, 6, 8, 9, 10 and 11) | **$60,372.31** |

**CONTRACT FEE SUMMARY FOR ENGINEERING DIVISION**
**CITY OF JACKSONVILLE, FLORIDA**

| PART I - GENERAL | |
|---|---|
| 1. Project<br>Hart Bridge Modification D-B DCP/RFP<br>Amendment #3 | 2. Proposal Number |
| 3. Name of Consultant<br>Terracon Consultants, Inc. | 4. Date of Proposal<br>6/27/2019 |

**PART II - LABOR RELATED COSTS**

| 5. Direct Labor | Hourly Rate | Estimated Hours | Estimated Cost | TOTAL |
|---|---|---|---|---|
| Senior Geotechnical Engineer | $56.60 | 154 | $8,716.40 | |
| Geotechnical Project Manager | $46.41 | 103 | $4,780.23 | |
| Geotechnical Engineer Intern | $31.50 | 309 | $9,733.50 | |
| Geotechnical Engineer Technici | $18.33 | 51 | $934.83 | |
| CADD/Computer Technician | $26.13 | 154 | $4,024.02 | |
| Chief Geotechnical Engineer | $78.19 | 51 | $3,987.69 | |
| Geotechnical Project Engineer | $34.05 | 154 | $5,243.70 | |
| Secretary/Clerical | $25.69 | 51 | $1,310.19 | |
| TOTAL DIRECT LABOR | | 1,027 | Hours | $38,730.56 |
| 6. Overhead (Combined Fringe Benefit & Administrative) | | | 175.00% | $67,778.48 |
| 7. SUBTOTAL: Labor + Overhead (Items 5 & 6) | | | | $106,509.04 |
| 8. PROFIT: Labor Related Costs (Item 7) | | | x 10% | $10,650.90 |

**PART III - OTHER COSTS**

| | | |
|---|---|---|
| 9. Miscellaneous Direct Costs<br>Laboratory, Drilling, MOT | $29,704.25 | |
| MISCELLANEOUS DIRECT COSTS SUB-TOTAL | | $29,704.25 |
| 10. SUBCONTRACTS (Lump Sum) | | |
| SUB-CONTRACT SUB-TOTAL | | |
| TOTAL LUMP SUM AMOUNT (Items 5, 6, 8, 9 and 10) | | |
| 11. REIMBURSABLE COSTS (Limiting Amount) | $ | |
| SUB-TOTAL REIMBURSABLES | | $146,864.19 |

**PART IV - SUMMARY**

| | |
|---|---|
| **TOTAL AMOUNT OF AMENDMENT #2** (Lump Sum Plus Reimbursables) (Items 5, 6, 8, 9, 10 and 11) | **$146,864.19** |

## CONTRACT FEE SUMMARY FOR ENGINEERING DIVISION
## CITY OF JACKSONVILLE, FLORIDA

**PART I - GENERAL**

| 1. Project | 2. Proposal Number |
|---|---|
| Hart Bridge Modification - Mast Arms - D-B DCP/RFP | P-11-18 |
| **3. Name of Consultant** | **4. Date of Proposal** |
| DRMP, Inc. | 6/27/2019 |

**PART II - LABOR RELATED COSTS**

| 5. Direct Labor Classifications | Hourly Rate | Estimated Hours | Estimated Cost | TOTAL |
|---|---|---|---|---|
| Senior (PSM) | $60.58 | 10 | $605.80 | |
| Project (PSM) | $48.08 | 59 | $2,836.72 | |
| Survey Tech | $36.06 | 123 | $4,435.38 | |
| Secretary/Clerical | $22.54 | 5 | $112.70 | |
| 3-man Survey Crew | $55.34 | 180 | $9,961.20 | |
| 2-Man Designate SUE Crew | $50.91 | 0 | $0.00 | |
| 3-Man Vacuum SUE Crew | $74.55 | 275 | $20,501.25 | |
| TOTAL DIRECT LABOR | | 652 | Hours | $38,453.05 |
| 6. Overhead (Combined Fringe Benefit & Administrative) | | | 150% | $57,679.58 |
| 7. SUBTOTAL: Labor + Overhead (Items 5 & 6) | | | | $96,132.63 |
| 8. PROFIT: Labor Related Costs (Item 7) | | | x 10% | $9,613.26 |

**PART III - OTHER COSTS**

| | | |
|---|---|---|
| 9. Miscellaneous Direct Costs | | |
| | $ | |
| | $ | |
| | $ | |
| | $ | |
| MISCELLANEOUS DIRECT COSTS SUB-TOTAL | | $0.00 |
| 10. SUBCONTRACTS (Lump Sum) | | |
| | $ | |
| | $ | |
| SUB-CONTRACT SUB-TOTAL | | $0.00 |
| TOTAL LUMP SUM AMOUNT (Items 5, 6, 8, 9 and 10) | | $0.00 |
| 11. REIMBURSABLE COSTS (Limiting Amount) | | |
| | $ 0.00 | |
| | $ 0.00 | |
| | $ 0.00 | |
| | $ 0.00 | |
| SUB-TOTAL REIMBURSABLES | | $105,745.89 |

**PART IV - SUMMARY**

| | |
|---|---|
| **TOTAL AMOUNT OF CONTRACT** (Lump Sum Plus Reimbursables) (Items 5, 6, 8, 9, 10 and 11) | **$105,745.89** |

## CONTRACT FEE SUMMARY FOR ENGINEERING DIVISION
## CITY OF JACKSONVILLE, FLORIDA

| PART I - GENERAL | |
|---|---|
| 1. Project<br>Hart Bridge Modification D-B DCP/RFP | 2. Proposal Number<br>P-11-18 |
| 3. Name of Consultant<br>Cardno, Inc. | 4. Date of Proposal<br>7/1/2019 |

**PART II - LABOR RELATED COSTS**

| 5. Direct Labor<br>Add/Delete Classifications as needed. | Hourly Rate | Estimated Hours | Estimated Cost | TOTAL |
|---|---|---|---|---|
| Chief Surveyor | $65.36 | 3 | $196.08 | |
| Clerical | $24.52 | 18 | $441.36 | |
| Project Mgr./Sr. Utility Coordin | $42.79 | 132 | $5,648.28 | |
| TOTAL DIRECT LABOR | | 153 | Hours | $6,285.72 |
| 6. Overhead (Combined Fringe Benefit & Administrative) | | | 193.74% | $12,177.95 |
| 7. SUBTOTAL: Labor + Overhead (Items 5 & 6) | | | | $18,463.67 |
| 8. PROFIT: Labor Related Costs (Item 7) | | | x 10% | $1,846.37 |

**PART III - OTHER COSTS**

| | | |
|---|---|---|
| 9. Miscellaneous Direct Costs | $<br>$<br>$<br>$ | |
| MISCELLANEOUS DIRECT COSTS SUB-TOTAL | | $0.00 |
| 10. SUBCONTRACTS (Lump Sum) | $<br>$ | |
| SUB-CONTRACT SUB-TOTAL | | $0.00 |
| TOTAL LUMP SUM AMOUNT (Items 5, 6, 8, 9 and 10) | | |
| 11. REIMBURSABLE COSTS (Limiting Amount) | $ 0.00<br>$ 0.00<br>$ 0.00<br>$ 0.00 | |
| SUB-TOTAL REIMBURSABLES | | $20,310.04 |

**PART IV - SUMMARY**

| | |
|---|---|
| **TOTAL AMOUNT OF CONTRACT** (Lump Sum Plus Reimbursables) (Items 5, 6, 8, 9, 10 and 11) | **$20,310.04** |

*Florida Department of Transportation*

RON DESANTIS
GOVERNOR

605 Suwannee Street
Tallahassee, FL 32399-0450

ERIK R. FENNIMAN
INTERIM SECRETARY

January 22, 2019

Lance Lairscey, President, Infrastructure Division
CARDNO, INC.
380 Park Place Boulevard, Suite 300
Clearwater, Florida 33759

Dear Mr. Lairscey:

The Florida Department of Transportation has reviewed your application for prequalification package and determined that the data submitted is adequate to technically prequalify your firm for the following types of work:

Group 2 - Project Development and Environmental (PD&E) Studies

Group 3 - Highway Design - Roadway

- 3.1 - Minor Highway Design
- 3.2 - Major Highway Design
- 3.3 - Controlled Access Highway Design

Group 4 - Highway Design - Bridges

- 4.1.1 - Miscellaneous Structures
- 4.1.2 - Minor Bridge Design
- 4.2.2 - Major Bridge Design - Steel

Group 5 - Bridge Inspection

- 5.4 - Bridge Load Rating

Group 6 - Traffic Engineering and Operations Studies

- 6.1 - Traffic Engineering Studies
- 6.2 - Traffic Signal Timing
- 6.3.1 - Intelligent Transportation Systems Analysis and Design
- 6.3.2 - Intelligent Transportation Systems Implementation
- 6.3.3 - Intelligent Transportation Traffic Engineering Systems Communications

Group 7 - Traffic Operations Design

- 7.1 - Signing, Pavement Marking and Channelization
- 7.2 - Lighting
- 7.3 - Signalization

Group 8 - Survey and Mapping

8.1 - Control Surveying
8.2 - Design, Right of Way & Construction Surveying
8.4 - Right of Way Mapping

Group 10 - Construction Engineering Inspection

10.1 - Roadway Construction Engineering Inspection
10.3 - Construction Materials Inspection
10.4 - Minor Bridge & Miscellaneous Structures CEI
10.5.1 - Major Bridge CEI - Concrete
10.5.2 - Major Bridge CEI - Steel
10.5.3 - Major Bridge CEI - Segmental

Group 13 - Planning

13.3 - Policy Planning
13.5 - Subarea/Corridor Planning
13.6 - Land Planning/Engineering

Group 15 - Landscape Architect

Your firm is now technically prequalified with the Department for Professional Services in the above referenced work types. The overhead audit has been accepted, and your firm may pursue in the referenced work types with fees of any dollar amount. This status shall be valid until December 31, 2019 for contracting purposes.

Approved Rates

| Home/ Branch Overhead | Field Overhead | Facilities Capital Cost of Money | Premium Overtime | Reimburse Actual Expenses | Home Direct Expense | Field Direct Expense | Published Fee Schedule |
|---|---|---|---|---|---|---|---|
| 179.49% | 137.83% | 0.405% | Reimbursed | No | 24.94% | 18.60%* | Yes |

*Rent and utilities excluded from field office rate. These costs will be directly reimbursed on contracts that require the consultant to provide field office.

Subsurface Utility Engineering Rates

| | |
|---|---|
| Vacuum Excavation Equipment | $79.00 per hour |
| Designating Equipment | $27.00 per hour |
| Survey Equipment | $37.00 per hour |

**Per Title 23, U.S. Code 112, there are restrictions on sharing indirect cost rates. Refer to Code for additional information.**

Should you have any questions, please feel free to contact me by email at carliayn.kell@dot.state.fl.us or by phone at 850-414-4597.

Sincerely,

Carliayn Kell

Carliayn Kell
Professional Services
Qualification Administrator

# ESTIMATE OF WORK EFFORT AND COST - PRIME CONSULTANT

Name of Project: Hart Bridge Mod D-B DCP & RFP
COJ RFP Number: P-11-18
STV Project Number: 40-19574

Consultant Name: STV Incorporated
Date: July 9, 2019
Estimator: JKJ/TTH

| Staff Classification | Total Staff Hours From "SH Summary" | Project Manager | Principal | Chief Engineer | Senior Engineer | Design Engineer | Designer | CADD Operator | Engineering Intern | Clerical | | | | SH By Activity | Salary Cost By Activity | Average Rate Per Task |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $83 67 | $96 04 | $76 12 | $58 20 | $41 33 | $40 66 | $26 93 | $29 49 | $20 45 | | | | | | |
| 3. Project General and Project Common Tasks | 60 | 45 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 15 | 0 | 0 | 0 | 60 | $3,181 | $53 02 |
| 4. Roadway Analysis | 443 | 44 | 9 | 35 | 44 | 89 | 89 | 66 | 66 | 0 | 0 | 0 | 0 | 442 | $19,938 | $45 11 |
| 5. Roadway Plans | 559 | 58 | 11 | 45 | 58 | 112 | 112 | 84 | 84 | 0 | 0 | 0 | 0 | 560 | $25,262 | $45.11 |
| 6a. Drainage Analysis | 274 | 27 | 5 | 22 | 27 | 55 | 55 | 41 | 41 | 0 | 0 | 0 | 0 | 273 | $12,283 | $44 99 |
| 6b Drainage Plans | 574 | 57 | 11 | 46 | 57 | 115 | 115 | 86 | 86 | 0 | 0 | 0 | 0 | 573 | $25,819 | $45.06 |
| 7 Utilities | 33 | 3 | 1 | 3 | 3 | 7 | 7 | 5 | 5 | 0 | 0 | 0 | 0 | 34 | $1,549 | $45.55 |
| 8. Environmental Permits, Compliance & Clearances | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0 | #DIV/0! |
| 9. Structures - Misc. Tasks, Dwgs, Non-Tech. | 347 | 17 | 0 | 52 | 174 | 69 | 0 | 17 | 17 | 0 | 0 | 0 | 0 | 346 | $18,982 | $54 86 |
| 10. Structures - Bridge Development Report | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0 | #DIV/0! |
| 11. Structures - Temporary Bridge | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0 | #DIV/0! |
| 12. Structures - Short Span Concrete Bridge | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0 | #DIV/0! |
| 13. Structures - Medium Span Concrete Bridge | 425 | 21 | 0 | 30 | 85 | 106 | 0 | 85 | 98 | 0 | 0 | 0 | 0 | 425 | $18,132 | $42 66 |
| 14. Structures - Structural Steel Bridge | 1,673 | 84 | 0 | 117 | 335 | 418 | 0 | 335 | 385 | 0 | 0 | 0 | 0 | 1,674 | $71,419 | $42 66 |
| 15. Structures - Segmental Concrete Bridge | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0 | #DIV/0! |
| 16. Structures - Movable Span | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0 | #DIV/0! |
| 17. Structures - Retaining Walls | 224 | 11 | 0 | 16 | 45 | 56 | 0 | 45 | 52 | 0 | 0 | 0 | 0 | 225 | $9,599 | $42 66 |
| 18. Structures - Miscellaneous | 294 | 29 | 0 | 15 | 29 | 59 | 59 | 59 | 44 | 0 | 0 | 0 | 0 | 294 | $12,406 | $42.20 |
| 19. Signing & Pavement Marking Analysis | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0 | #DIV/0! |
| 20. Signing & Pavement Marking Plans | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0 | #DIV/0! |
| 21. Signalization Analysis | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0 | #DIV/0! |
| 22. Signalization Plans | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0 | #DIV/0! |
| 23. Lighting Analysis | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0 | #DIV/0! |
| 24. Lighting Plans | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0 | #DIV/0! |
| 25. Landscape Architecture Analysis | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0 | #DIV/0! |
| 26. Landscape Architecture Plans | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0 | #DIV/0! |
| 27. Survey (Field & Office Support) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0 | #DIV/0! |
| 28. Photogrammetry | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0 | #DIV/0! |
| 29. Mapping | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0 | #DIV/0! |
| 30. Terrestrial Mobile LiDAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0 | #DIV/0! |
| 31. Architecture Development | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0 | #DIV/0! |
| 32. Noise Barriers Impact Design Assessment | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0 | #DIV/0! |
| 33. Intelligent Transportation Systems Analysis | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0 | #DIV/0! |
| 34. Intelligent Transportation Systems Plans | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0 | #DIV/0! |
| 35. Geotechnical | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0 | #DIV/0! |
| 36. 3D Modeling | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0 | #DIV/0! |
| **Total Staff Hours** | 4,906 | 394 | 37 | 381 | 855 | 1,086 | 437 | 823 | 878 | 15 | 0 | 0 | 0 | 4,906 | | |
| **Total Staff Cost** | | $25,164 78 | $3,627 48 | $29,001 72 | $49,761.00 | $44,884 38 | $17,768 42 | $22,163 39 | $25,892 22 | $306 75 | $0 00 | $0 00 | $0 00 | | $218,570.14 | $44.55 |

Check = $218,570.14

| | | | |
|---|---|---|---|
| SALARY RELATED COSTS: | | | $218,570 14 |
| OVERHEAD: | 175% | | $382,497 75 |
| PROFIT | 10% | | $60,106 79 |
| **SUBTOTAL ESTIMATED FEE:** | | | **$661,174.68** |
| **REMAINING STV BUDGET** | | | **$ 141,912.53** |
| | | | |
| **ADJUSTED ESTIMATED STV FEE:** | | | **$519,262.15** |
| Subconsultant: | ARCADIS | | $0 00 |
| **Subconsultant:** | **Cardno** | | **$20,310.04** |
| Subconsultant: | CEI Geo | | $0.00 |
| **Subconsultant:** | **DRMP** | | **$105,742.10** |
| Subconsultant: | FPN | | $0.00 |
| Subconsultant: | IMAE | | $0 00 |
| **Subconsultant:** | **Peters & Yaffee** | | **$224,669.62** |
| Subconsultant: | ROND | | $0.00 |
| Subconsultant: | SEARCH | | $0.00 |
| **Subconsultant:** | **Terracon** | | **$146,864.19** |
| **Subconsultant:** | **Consor** | | **$60,372.31** |
| **GRAND TOTAL ESTIMATED FEE:** | | | **$1,077,220.41** |

## Project Activity 3: General Tasks



| Representing | Print Name | Signature / Date |
|---|---|---|
| | | |
| | | |

| Task No. | Task | Units | No of Units | Hours/ Unit | Total Hours | Comments |
|---|---|---|---|---|---|---|
| 3.1 | Public Involvement | | | | | |
| 3.1.1 | Community Awareness Plan | LS | 1 | 0 | 0 | N/A |
| 3.1.2 | Notifications | LS | 1 | 0 | 0 | N/A |
| 3.1.3 | Prepare Mailing Lists | LS | 1 | 0 | 0 | N/A |
| 3.1.4 | Median Modification Letters | LS | 1 | 0 | 0 | N/A |
| 3.1.5 | Driveway Modification Letters | LS | 1 | 0 | 0 | N/A |
| 3.1.6 | Newsletters | LS | 1 | 0 | 0 | N/A |
| 3.1.7 | Renderings and Fly Throughs | LS | 1 | 0 | 0 | N/A |
| 3.1.8 | PowerPoint Presentation | LS | 1 | 0 | 0 | N/A |
| 3.1.9 | Public Meeting Preparations | LS | 1 | 0 | 0 | N/A |
| 3.1.10 | Public Meeting Attendance/Followup | LS | 1 | 0 | 0 | N/A |
| 3.1.11 | Other Agency Meetings | LS | 1 | 0 | 0 | N/A |
| 3.1.12 | Web Site | LS | 1 | 0 | 0 | N/A |
| | | | **3.1 Public Involvement Subtotal** | | **0** | |
| 3.2 | Joint Project Agreements | EA | 0 | 0 | 0 | N/A |
| 3.3 | Specifications Package Preparation | LS | 1 | 60 | 60 | Corodinate with LAP Office to federalize COJ Disions I, II, III |
| 3.4 | Contract Maintenance and EDMS | LS | 1 | 0 | 0 | |
| 3.5 | Value Engineering (Multi-Discipline Team) Review | LS | 1 | 0 | 0 | N/A |
| 3.6 | Prime Consultant Project Manager Meetings | LS | 1 | 0 | 0 | See listing below |
| 3.7 | Plans Update | LS | 1 | 0 | 0 | |

## Project Activity 3: General Tasks

| Task No. | Task | Units | No of Units | Hours/ Unit | Total Hours | Comments |
|---|---|---|---|---|---|---|
| 3.8 | Post Design Services | LS | 1 | 0 | 0 | |
| 3.9 | Digital Delivery | LS | 1 | 0 | 0 | N/A |
| 3.10 | Risk Assessment Workshop | LS | 1 | 0 | 0 | N/A |
| 3.11 | Railroad, Transit, and/or Airport Coordination | LS | 1 | 0 | 0 | N/A |
| 3.12 | Landscape and Existing Vegetation Coordination | LS | 1 | 0 | 0 | N/A |
| 3.13 | Other Project General Tasks | LS | 1 | 0 | 0 | N/A |
| | **3. Project Common and Project General Tasks Total** | | | | **60** | |

| 3.6 - List of Project Manager Meetings | Units | No of Units | Hours/ Unit | Total Hours | Comments |
|---|---|---|---|---|---|
| Roadway Analysis | EA | 0 | 0 | 0 | |
| Drainage | EA | 0 | 0 | 0 | |
| Utilities | EA | 0 | 0 | 0 | |
| Environmental | EA | 0 | 0 | 0 | |
| Structures | EA | 0 | 6 | 0 | |
| Signing & Pavement Marking | EA | 0 | 3 | 0 | |
| Signalization | EA | 0 | 0 | 0 | |
| Lighting | EA | 0 | 0 | 0 | |
| Landscape Architecture | EA | 0 | 0 | 0 | |
| Survey | EA | 0 | 0 | 0 | |
| Photogrammetry | EA | 0 | 0 | 0 | |
| ROW & Mapping | EA | 0 | 0 | 0 | |
| Terrestrial Mobile LiDAR | EA | 0 | 0 | 0 | |
| Architecture | EA | 0 | 0 | 0 | |
| Noise Barriers | EA | 0 | 0 | 0 | |
| ITS Analysis | EA | 0 | 0 | 0 | |
| Geotechnical | EA | 0 | 0 | 0 | |
| Progress Meetings | EA | 0 | 0 | 0 | |
| DRAFT & FINAL RFP/DCP Reviews & NEPA Document Reviews | EA | 0 | 0 | 0 | |
| Field Reviews | EA | 0 | 0 | 0 | |
| **Total Project Manager Meetings** | | 0 | | 0 | Total PM Meeting Hours carries to Task 3.6 above |

## Project Activity 4: Roadway Analysis

Estimator:

Hart Bridge Mod D-B DCP & RFP
P-11-18

| Representing | Print Name | Signature / Date |
|---|---|---|
| | | |
| | | |

| Task No. | Task | Units | No of Units | Hours/ Unit | Total Hours | Comments |
|---|---|---|---|---|---|---|
| 4.1 | Typical Section Package | LS | 1 | 0 | 0 | N/A |
| 4.2 | Pavement Type Selection Report | LS | 1 | 0 | 0 | N/A |
| 4.3 | Pavement Design Package | LS | 1 | 0 | 0 | N/A |
| 4.4 | Cross-Slope Correction | LS | 1 | 0 | 0 | N/A |
| 4.5 | Horizontal /Vertical Master Design Files | LS | 1 | 68 | 68 | Finalize Horizontal and Vertical Geometry for east intersection and west Bay Street alignment (32 hours) Modifications of WJCT parking lot, Lot E, and Lot K (12 hours/location). |
| 4.6 | Access Management | LS | 1 | 0 | 0 | N/A |
| 4.7 | Roundabout Evaluation | LS | 1 | 0 | 0 | N/A |
| 4.8 | Roundabout Final Design Analysis | LS | 1 | 0 | 0 | N/A |
| 4.9 | Cross Section Design Files | LS | 1 | 0 | 0 | N/A |
| 4.10 | Traffic Control Analysis | LS | 1 | 62 | 62 | Finalize detour routes (2 detours at 12 hours per), locate critical walls on Gator Bowl (8 hours), refine phasing concept (10 hours per phase) |
| 4.11 | Master TCP Design Files | LS | 1 | 72 | 72 | Finalize MOT alignment drawings. 24 hours per phase for 3 phases |
| 4.12 | Selective Clearing and Grubbing | LS | 1 | 0 | 0 | N/A |
| 4.13 | Tree Disposition Plan | LS | 1 | 0 | 0 | N/A |
| 4.14 | Design Variations and Exceptions | LS | 1 | 0 | 0 | N/A |
| 4.15 | Design Report | LS | 1 | 0 | 0 | N/A |
| 4.16 | Quantities | LS | 1 | 120 | 120 | Re-quantify project. 2 Staff for one week (initial). 2 staff 1/2 week after comments. |
| 4.17 | Cost Estimate | LS | 1 | 34 | 34 | Obtain unit costs and assemble estimate (24 hours initial; 10 hours after comments) |
| 4.18 | Technical Special Provisions and Modified Special Provisions | LS | 1 | 0 | 0 | |
| 4.19 | Other Roadway Analyses | LS | 1 | 24 | 24 | LAP Office Certs (RR, R/W, Permit, Utility); Proprietary Products Certs for Signal Equipment |
| | | | | **Roadway Analysis Technical Subtotal** | **380** | |

## Project Activity 4: Roadway Analysis

| Task No. | Task | Units | No of Units | Hours/ Unit | Total Hours | Comments |
|---|---|---|---|---|---|---|
| 4.20 | Field Reviews | LS | 1 | 0 | 0 | N/A |
| 4.21 | Monitor Existing Structures | LS | 1 | 0 | 0 | N/A |
| 4.22 | Technical Meetings | LS | 1 | 0 | 0 | Meetings are listed below |
| 4.23 | Quality Assurance/Quality Control | LS | % | 7% | 27 | |
| 4.24 | Independent Peer Review | LS | % | 0% | 0 | |
| 4.25 | Supervision | LS | % | 5% | 19 | |
| | | | | **Roadway Analysis Nontechnical Subtotal** | **46** | |
| 4.26 | Coordination | LS | % | 4% | 17 | |
| | | | | **4. Roadway Analysis Total** | **443** | |

| Technical Meetings | Units | No of Units | Hours/ Unit | Total Hours | PM Attendance at Meeting Required? | Number |
|---|---|---|---|---|---|---|
| Typical Section | EA | 0 | 0 | 0 | | |
| Pavement | EA | 0 | 0 | 0 | | |
| Access Management | EA | 0 | 0 | 0 | | |
| 15% Line and Grade | EA | 0 | 0 | 0 | | |
| Driveways | EA | 0 | 0 | 0 | | |
| Local Governments (cities, counties, MPO) - Site Visit with JSO - 2 staff from 9AM to 5PM to sketch out game day plan | EA | 0 | 0 | 0 | | |
| Work Zone Traffic Control | EA | 0 | 0 | 0 | | |
| Meeting with FDOT Permitting | EA | 0 | 0 | 0 | | |
| Additional Meetings (with Stakeholders) | EA | 0 | 0 | 0 | | |
| **Subtotal Technical Meetings** | | | | **0** | **Subtotal Project Manager Meetings** | **0** |
| Progress Meetings (if required by FDOT) | EA | 0 | 0 | 0 | *PM attendance at Progress Meetings is manually entered on General Task 3* | - - |
| Phase Review Meetings | EA | 0 | 0 | 0 | *Answer FDOT Permit Application Comments* | - - |
| **Total Meetings** | | | | **0** | **Total Project Manager Meetings (carries to Tab 3)** | **0** |

Carries to 4.17 Carries to Tab 3

## Project Activity 5: Roadway Plans

Estimator:

Hart Bridge Mod D-B DCP & RFP
P-11-18

| Representing | | Print Name | Signature / Date |
|---|---|---|---|
| | | | |
| | | | |

| Task No. | Task | Scale | Units | No. of Units or Sheet | Hours/ Unit or Sheet | Total Hours | Comments |
|---|---|---|---|---|---|---|---|
| 5.1 | Key Sheet | | Sheet | 1 | 1 | 1 | Update cover index |
| 5.2 | Summary of Pay Items Including Quantity Input | | Sheet | 0 | 0 | 0 | N/A |
| 5.3 | Typical Section Sheets | | | | | | |
| 5.3.1 | Typical Sections | | EA | 0 | 0 | 0 | N/A |
| 5.3.2 | Typical Section Details | | EA | 5 | 6 | 30 | M&R, Overbuild, Cross Slope Correction (2), Median Crossover |
| 5.4 | General Notes/Pay Item Notes | | Sheet | 1 | 8 | 8 | |
| 5.5 | Summary of Quantities Sheets | | Sheet | 0 | 0 | 0 | N/A |
| 5.6 | Project Layout | | Sheet | 0 | 0 | 0 | N/A |
| 5.7 | Plan/Profile Sheet | | Sheet | 0 | 0 | 0 | N/A |
| 5.8 | Profile Sheet | 40 | Sheet | 9 | 4 | 36 | |
| 5.9 | Plan Sheet | 40 | Sheet | 10 | 4 | 40 | |
| 5.10 | Special Profile | 40 | Sheet | 0 | 0 | 0 | N/A |
| 5.11 | Back-of-Sidewalk Profile Sheet | | Sheet | 0 | 0 | 0 | N/A |
| 5.12 | Interchange Layout Sheet | | Sheet | 0 | 0 | 0 | N/A |
| 5.13 | Ramp Terminal Details (Plan View) | | Sheet | 0 | 0 | 0 | N/A |
| 5.14 | Intersection Layout Details | | Sheet | 0 | 0 | 0 | N/A |
| 5.15 | Special Details | | EA | 0 | 0 | 0 | N/A |
| 5.16 | Cross-Section Pattern Sheet(s) | | Sheet | 0 | 0 | 0 | N/A |

## Project Activity 5: Roadway Plans

| Task No. | Task | Scale | Units | No. of Units or Sheet | Hours/ Unit or Sheet | Total Hours | Comments |
|---|---|---|---|---|---|---|---|
| 5.17 | Roadway Soil Survey Sheet(s) | | Sheet | 0 | 0 | 0 | N/A |
| 5.18 | Cross Sections | | EA | 113 | 0.25 | 28 | |
| 5.19 | Temporary Traffic Control Plan Sheets | | Sheet | 25 | 2 | 50 | |
| 5.20 | Temporary Traffic Control Cross Section Sheets | | EA | 113 | 2 | 226 | Cross Sections every 300-feet for 3 phases = 113 total |
| 5.21 | Temporary Traffic Control Detail Sheets | | Sheet | 5 | 4 | 20 | |
| 5.22 | Utility Adjustment Sheets | | Sheet | 12 | 5 | 60 | |
| 5.23 | Selective Clearing and Grubbing Sheet(s) | | | | | | |
| 5.23.1 | Selective Clearing and Grubbing | | Sheet | 0 | 0 | 0 | N/A |
| 5.23.2 | Selective Clearing and Grubbing Details | | Sheet | 0 | 0 | 0 | N/A |
| 5.24 | Tree Disposition Sheet(s) | | | | | | |
| 5.24.1 | Tree Disposition Plan Sheet(s) | | Sheet | 0 | 0 | 0 | N/A |
| 5.24.2 | Tree Disposition Plan Tables and Schedules | | Sheet | 0 | 0 | 0 | N/A |
| 5.25 | Project Network Control Sheet(s) | | Sheet | 0 | 0 | 0 | N/A |
| 5.26 | Preliminary Engineering Report for NEPA | | LS | 0 | 0 | 0 | N/A |
| 5.27 | Utility Verification Sheet(s) (SUE Data) | | Sheet | 0 | 0 | 0 | N/A |
| | | | | | Roadway Plans Technical Subtotal | 499 | |
| 5.28 | Quality Assurance/Quality Control | | LS | % | 7% | 35 | |
| 5.29 | Supervision | | LS | % | 5% | 25 | |
| | | | | | 5. Roadway Plans Total | 559 | |

## Project Activity 6a: Drainage Analysis

Estimator:

Hart Bridge Mod D-B DCP & RFP
P-11-18

| Representing | Print Name | Signature / Date |
|---|---|---|
| | | |
| | | |

| Task No. | Task | Units | No of Units | Hours/ Unit | Total Hours | Comments |
|---|---|---|---|---|---|---|
| 6a 1 | Drainage Map Hydrology | Per Map | 0 | 0 | 0 | N/A |
| 6a 2 | Base Clearance Calculations | Per Location | 0 | 0 | 0 | N/A |
| 6a 3 | Pond Siting Analysis and Report | Per Basin | 0 | 0 | 0 | N/A |
| 6a 4 | Design of Cross Drains | EA | 0 | 0 | 0 | N/A |
| 6a 5 | Design of Ditches | Per Ditch Mile | 0 | 0 | 0 | N/A |
| 6a 6 | Design of Stormwater Management Facility (Offsite or Infield Pond) | EA | 0 | 0 | 0 | N/A |
| 6a 7 | Design of Stormwater Management Facility (Roadside Treatment Swales and Linear Ponds) | Per Cell | 0 | 0 | 0 | N/A |
| 6a 8 | Design of Floodplain Compensation | Per Floodplain Basin | 0 | 0 | 0 | N/A |
| 6a 9 | Design of Storm Drains | EA | 0 | 0 | 0 | N/A |
| 6a 10 | Optional Culvert Material | EA | 0 | 0 | 0 | N/A |
| 6a 11 | French Drain Systems | Per Cell | 0 | 0 | 0 | N/A |
| 6a 11 a | Existing French Drain Systems | Per Cell | 0 | 0 | 0 | N/A |
| 6a 12 | Drainage Wells | EA | 0 | 0 | 0 | N/A |
| 6a 13 | Drainage Design | LS | 1 | 92 | 92 | Update storm tabs to reconfigure Gator Bowl Blvd and Commodore Point Expressway drainage structures due to intersection change (20 hours). Design of West end drainage to size pipes for JTA autonomous vehicle pavement (24 hours). Spread Calculations (32 hours). Pond volume spreadsheet (8 hours). Pre/Post drainage area spread sheet (8 hours). |
| 6a 14 | Bridge Hydraulic Report | EA | 0 | 0 | 0 | N/A |

## Project Activity 6a: Drainage Analysis

| Task No. | Task | Units | No of Units | Hours/ Unit | Total Hours | Comments |
|---|---|---|---|---|---|---|
| 6a 15 | Temporary Drainage Analysis | LS | 1 | 52 | 52 | Temp barrier wall spread calculations (16 hours) Temporary inlet placements and connections (12 hours per phase, 3 phases) |
| 6a.16 | Cost Estimate | LS | 1 | 64 | 64 | Quantity calculation One staff for 5 days (initial) One staff for 3 days (after comments) |
| 6a.17 | Technical Special Provisions and Modified Special Provisions | LS | 1 | 0 | 0 | N/A |
| 6a.18 | Hydroplaning Analysis | LS | 1 | 0 | 0 | N/A |
| 6a 19 | Existing Permit Analysis | LS | 1 | 24 | 24 | Updating existing SJRWMD Permit and submit letter modification |
| 6a 20 | Other Drainage Analysis | LS | 1 | 0 | 0 | N/A |
| | | | | **Drainage Analysis Technical Subtotal** | **232** | |
| 6a 21 | Field Reviews | LS | 1 | 0 | 0 | |
| 6a 22 | Technical Meetings | LS | 1 | 6 | 6 | Meetings are listed below |
| 6a 23 | Environmental Look-Around (ELA) Meeting | LS | 1 | 0 | 0 | |
| 6a 24 | Quality Assurance/Quality Control | LS | % | 7% | 16 | |
| 6a 25 | Independent Peer Review | LS | % | 0% | 0 | |
| 6a 26 | Supervision | LS | % | 5% | 12 | |
| | | | | **Drainage Analysis Nontechnical Subtotal** | **34** | |
| 6a 27 | Coordination | LS | % | 3% | 8 | |
| | | | | **6a. Drainage Analysis Total** | **274** | |

| Technical Meetings | Units | No of Units | Hours/ Unit | Total Hours | Comments | PM Attendance at Meeting Required? | Number |
|---|---|---|---|---|---|---|---|
| Base Clearance Water Elevation | EA | 0 | 0 | 0 | | | 0 |
| Pond Siting | EA | 0 | 0 | 0 | | | 0 |
| Agency - SJRWMD | EA | 1 | 6 | 6 | 2 hour prep, 2 hour meeting, 2 hours for meeting minutes | yes | 1 |
| Local Governments (cities, counties) | EA | 0 | 0 | 0 | | | 0 |
| FDOT Drainage | EA | 0 | 0 | 0 | | | 0 |
| Other Meetings | EA | 0 | 0 | 0 | | | 0 |
| **Subtotal Technical Meetings** | | | | **6** | | | **1** |
| Progress Meetings (if required by FDOT) | EA | 0 | 0 | 0 | *PM attendance at Progress Meetings is manually entered on General Task 3* | | - - |
| Phase Review Meetings | EA | 0 | 0 | 0 | *PM attendance at Phase Review Meetings is manually entered on General Task 3* | | - - |
| **Total Meetings** | | | | **6** | **Total Project Manager Meetings (carries to Tab 3)** | | **1** |

Carries to 6.19 Carries to Tab 3

# 6b. Drainage Plans

Estimator:

Hart Bridge Mod D-B DCP & RFP
P-11-18

| Representing | Print Name | Signature / Date |
|---|---|---|
| | | |
| | | |

| Task No. | Task | Scale | Units | No. of Units or Sheet | Hours/ Unit or Sheet | Total Hours | Comments |
|---|---|---|---|---|---|---|---|
| 6b.1 | Drainage Map (Including Interchanges) | | Sheet | 2 | 8 | 16 | Revise drainage areas |
| 6b.2 | Bridge Hydraulics Recommendation Sheets | | Sheet | 0 | 0 | 0 | N/A |
| 6b.3 | Summary of Drainage Structures | | Sheet | 3 | 16 | 48 | Additional 3 sheets using 32 structures per sheet |
| 6b.4 | Optional Pipe/Culvert Material | | Sheet | 0 | 0 | 0 | N/A |
| 6b.5 | Drainage Structure Sheet(s) (Per Structure) | | EA | 130 | 3 | 390 | 130 New Drainage Structures to draw with non-standard COJ drainage inlets (requires additional work to supplement automation) |
| 6b.6 | Miscellaneous Drainage Detail Sheets | | Sheet | 4 | 2 | 8 | City Standard Drainage Inlet Details incorporated into plans |
| 6b.7 | Lateral Ditch Plan/Profile | | Sheet | 0 | 0 | 0 | N/A |
| 6b.8 | Lateral Ditch Cross Sections | | EA | 0 | 0 | 0 | N/A |
| 6b.9 | Retention/Detention Ponds Detail Sheet(s) | | Sheet | 1 | 8 | 8 | Pond 400 modification |
| 6b.10 | Retention Pond Cross Sections | | EA | 0 | 0 | 0 | N/A |
| 6b.11 | Erosion Control Plan Sheet(s) | | Sheet | 10 | 3 | 30 | Labeling existing plan sheets |
| 6b.12 | SWPPP Sheet(s) | | Sheet | 2 | 6 | 12 | SWPPP required |
| | | | | | **Drainage Plans Technical Subtotal** | **512** | |
| 6b.13 | Quality Assurance/Quality Control | | LS | % | 7% | 36 | |
| 6b.14 | Supervision | | LS | % | 5% | 26 | |
| | | | | | **6. Drainage Plans Total** | **574** | |

## Project Activity 7: Utilities

Estimator:

Hart Bridge Mod D-B DCP & RFP
P-11-18

| Representing | Print Name | Signature / Date |
|---|---|---|
| | | |
| | | |

| Task No. | Task | Units | No of Units | Hours/ Unit | Total Hours | Comments |
|---|---|---|---|---|---|---|
| 7.1 | Utility Kickoff Meeting | LS | 1 | 0 | 0 | N/A |
| 7.2 | Identify Existing Utility Agency Owners (UAO(s)) | LS | 1 | 0 | 0 | N/A |
| 7.3 | Make Utility Contacts | LS | 1 | 0 | 0 | N/A |
| 7.4 | Exception Processing | LS | 1 | 0 | 0 | N/A |
| 7.5 | Preliminary Utility Meeting | LS | 1 | 0 | 0 | Meeting is listed below |
| 7.6 | Individual/Field Meetings | LS | 1 | 12 | 12 | Meetings are listed below |
| 7.7 | Collect and Review Plans and Data from UAO(s) | LS | 1 | 0 | 0 | N/A |
| 7.8 | Subordination of Easements Coordination | LS | 1 | 0 | 0 | N/A |
| 7.9 | Utility Design Meeting | LS | 1 | 0 | 0 | Meeting is listed below |
| 7.10 | Review Utility Markups & Work Schedules, and Processing of Schedules & Agreements | LS | 1 | 0 | 0 | N/A |
| 7.11 | Utility Coordination/Followup | LS | 1 | 0 | 0 | N/A |
| 7.12 | Utility Constructability Review | LS | 1 | 0 | 0 | N/A |
| 7.13 | Additional Utility Services | LS | 1 | 0 | 0 | N/A |
| 7.14 | Processing Utility Work by Highway Contractor (UWHC) | LS | 1 | 0 | 0 | N/A |
| 7.15 | Contract Plans to UAO(s) | LS | 1 | 0 | 0 | N/A |
| 7.16 | Certification/Close-Out | LS | 1 | 0 | 0 | N/A |
| 7.17 | Other Utilities | LS | 1 | 21 | 21 | Conflict Resolution/Accommodation design for UAOs to expedite certification at 1.5 hours per UAO. UAO's include: AT&T Corporation, AT&T Florida, AT&T TCG, CenturyLink (fka Level 3), Comcast, Crown Castle, Dark Fiber Systems, JEA Electric Dist., JEA Electric Trans., JEA Fiber, JEA W&S, Teco Peoples Gas, Uniti Fiber, Verizon |
| | | | | **7. Utilities Total** | **33** | |

## Project Activity 7: Utilities

| Technical Meetings | Units | No of Units | Hours/ Unit | Total Hours | PM Attendance at Meeting Required? | Number |
|---|---|---|---|---|---|---|
| Kickoff (see 7.1) | EA | 0 | 0 | 0 | | 0 |
| Preliminary Meeting (see 7.5) | EA | 0 | 0 | 0 | | 0 |
| Individual UAO Meetings (see 7.6) - DFS | EA | 6 | 2 | 12 | | 0 |
| Field Meetings (see 7.6) | EA | 0 | 0 | 0 | | 0 |
| Design Meeting (see 7.9) | EA | 0 | 0 | 0 | | 0 |
| Other Meetings *(this is automatically added into Utilities Total (cell F27))* | EA | 0 | 0 | 0 | | 0 |
| **Total Meetings** | | | | **12** | **Total Project Manager Meetings (carries to Tab 3)** | **0** |

Carries to Tab 3

## Project Activity 9: Structures Summary and Miscellaneous Tasks and Drawings

Estimator:

Hart Bridge Mod D-B DCP & RFP
P-11-18

| Representing | Print Name | Signature / Date |
|---|---|---|
| | | |
| | | |

| Task No. | Task | Units | Design and Production Staffhours | | | | Comments |
|---|---|---|---|---|---|---|---|
| | | | No. of Units | Hours per Unit | No. of Sheets | Total | |
| | **General Drawings** | | | | | | |
| 9.1 | Key Sheet and Index of Drawings | Sheet | 2 | 2 | 2 | 4 | West End - Prepare final plans for bridge modifications (one steel span and one concrete span) and associated walls.<br><br>East End - Add Structures quantities to plans and update MSE walls. Final bridge design included in previous work effort.<br><br>Update Key Sheet and Signature Sheet. |
| 9.2 | Project Layout | Sheet | 1 | 2 | 1 | 2 | Update bridge key map. |
| 9.3 | General Notes and Bid Item Notes | Sheet | 1 | 2 | 1 | 2 | Add bid item notes.<br>General Notes included in previous work effort. |
| 9.4 | Miscellaneous Common Details | Sheet | 0 | 0 | 0 | 0 | Existing bridge removal details included in previous work effort. |
| 9.5 | Incorporate Report of Core Borings | Sheet | 0 | 0 | 0 | 0 | Included in previous work effort. |
| 9.6 | Design Standards - Bridges | LS | 1 | 2 | | 2 | Update Standard Plans for West Bridge |
| 9.7 | Existing Bridge Plans | LS | 1 | 0 | | 0 | Included in previous work effort. |
| 9.8 | Assemble Plan Summary Boxes and Quantities | LS | 1 | 12 | | 12 | Add Summary of Quantities sheet for each bridge.<br>2 Sheets x 6 hrs. each = 12 hrs. |
| 9.9 | Cost Estimate | LS | 1 | 8 | | 8 | Additional final cost estimate for west bridge. |
| 9.1 | Technical Special Provisions and Modified Special Provisions | LS | 0 | 0 | | 0 | None anticipated. |
| | **Structures - Summary and Miscellaneous Tasks and Drawings** | | | | 4 | 30 | |

## Project Activity 9: Structures Summary and Miscellaneous Tasks and Drawings

| Task No. | Task | Total | Task 10 | Task 11 | Task 12 | Task 13 | Task 14 | Task 15 | Task 16 | Task 17 | Task 18 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 10-16 | West End - Bridge No. 724XXX | 2074 | 0 | 0 | 0 | 401 | 1673 | 0 | 0 | | |
| 10-16 | East End - Bridge No. 720114 | 24 | 0 | 0 | 0 | 24 | 0 | 0 | 0 | | |
| 10-16 | Bridge 3 | 0 | | | | | | | | | |
| 10-16 | Bridge 4 | 0 | | | | | | | | | |
| 10-16 | Bridge 5 | 0 | | | | | | | | | |
| 10-16 | Bridge 6 | 0 | | | | | | | | | |
| 10-16 | Bridge 7 | 0 | | | | | | | | | |
| 10-16 | Bridge 8 | 0 | | | | | | | | | |
| 10-16 | Bridge 9 | 0 | | | | | | | | | |
| 10-16 | Bridge 10 | 0 | | | | | | | | | |
| 17 | Retaining Walls | 224 | | | | | | | | 224 | |
| 18 | Miscellaneous Structures | 294 | | | | | | | | | 294 |
| | **Structures Technical Subtotal** | 2616 | 0 | 0 | 0 | 425 | 1673 | 0 | 0 | 224 | 294 |

## Project Activity 9: Structures Summary and Miscellaneous Tasks and Drawings

| Task No. | Task | Units | No. of Units | Hours per Unit | Total | Comments |
|---|---|---|---|---|---|---|
| 9.11 | Field Reviews | LS | 1 | 0 | 0 | |
| 9.12 | Technical Meetings | LS | 1 | 0 | 0 | Meetings are listed below |
| 9.13 | Quality Assurance/Quality Control | LS | % | 7% | 185 | |
| 9.14 | Independent Peer Review | LS | 1 | 0 | 0 | |
| 9.15 | Supervision | LS | % | 5% | 132 | |
| | **Structures Nontechnical Subtotal** | | | | 317 | |
| 9.16 | Coordination | LS | 1 | 0 | 0 | |
| | **9. Structures - Summary and Miscellaneous Tasks and Drawings** | | | | 347 | |

| Technical Meetings | Units | No of Units | Hours/ Unit | Total Hours | PM Attendance at Meeting Required? | Number |
|---|---|---|---|---|---|---|
| BDR Coordination/Review | EA | 0 | 0 | 0 | | 0 |
| 90/100% Comment Review | EA | 0 | 0 | 0 | no | 0 |
| Aesthetics Coordination | EA | 0 | 0 | 0 | | 0 |
| Regulatory Agency | EA | 0 | 0 | 0 | | 0 |
| Local Governments (cities, counties) | EA | 0 | 0 | 0 | | 0 |
| Utility Companies | EA | 0 | 0 | 0 | | 0 |
| Other Meetings | EA | 0 | 0 | 0 | | 0 |
| **Subtotal Technical Meetings** | | | | **0** | | **0** |
| Progress Meetings | EA | 0 | 0 | 0 | *PM attendance at Progress Meetings is manually entered on General Task 3* | - - |
| Phase Review Meetings | EA | 0 | 0 | 0 | *PM attendance at Phase Review Meetings is manually entered on General Task 3* | - - |
| **Total Meetings** | | | | **0** | **Total Project Manager Meetings (carries to Tab 3)** | **0** |

Carries to 9.12 Carries to Tab 3

## Project Activity 13: Structures- Medium Span Concrete

Estimator:
Bridge Identifier (Number or Name):

Hart Bridge Mod D-B DCP & RFP
P-11-18

| Representing | Print Name | Signature / Date |
|---|---|---|
| | | |
| | | |

For West Bridge

| Task No. | Task | Units | No. of Units | Hours/ Unit | No. of Sheets | Total Hours | Comments |
|---|---|---|---|---|---|---|---|
| | **General Layout Design and Plans** | | | | | | |
| 13.1 | Overall Bridge Final Geometry | LS | 0 | 0 | | 0 | N/A |
| 13.2 | Expansion/Contraction Analysis | EA Unit | 1 | 4 | | 4 | One concrete unit. |
| 13.3 | General Plan and Elevation | Sheet | 0 | 0 | 0 | 0 | See Task 14 |
| 13.4 | Construction Staging | Sheet | 0 | 0 | 0 | 0 | N/A |
| 13.5 | Approach Slab Plan and Details | Sheet | 1 | 8 | 1 | 8 | |
| 13.6 | Miscellaneous Details | Sheet | 2 | 6 | 2 | 12 | Load Rating Summary Sheet (Concrete), Temporary Bracing Data Table Sheet |
| | **End Bent Design and Plans** | | | | | | |
| 13.7 | End Bent Geometry | EA End Bent | 1 | 6 | | 6 | Final End Bent Geometry |
| 13.8 | Wingwall Design and Geometry | EA End Bent | 0 | 0 | | 0 | N/A |
| 13.9 | End Bent Structural Design | EA Design | 1 | 20 | | 20 | |
| 13.10 | End Bent Plan and Elevation | Sheet | 1 | 8 | 1 | 8 | Additional effort to prepare final Plan and Elevation. |
| 13.11 | End Bent Details | Sheet | 1 | 16 | 1 | 16 | End Bent Section, Pedestal Details, Pedestal Elevations, Backwall Joint Details |

## Project Activity 13: Structures- Medium Span Concrete

| Task No. | Task | Units | No. of Units | Hours/ Unit | No. of Sheets | Total Hours | Comments |
|---|---|---|---|---|---|---|---|
| | **Intermediate Bent Design and Plans** | | | | | | |
| 13.12 | Bent Geometry | EA Bent | 0 | 0 | | 0 | N/A |
| 13.13 | Bent Stability Analysis | EA Design | 0 | 0 | | 0 | N/A |
| 13.14 | Bent Structural Design | EA Design | 0 | 0 | | 0 | N/A |
| 13.15 | Bent Plan and Elevation | Sheet | 0 | 0 | 0 | 0 | N/A |
| 13.16 | Bent Details | Sheet | 0 | 0 | 0 | 0 | N/A |
| | **Pier Design and Plans** | | | | | | |
| 13.17 | Pier Geometry | EA Pier | 0 | 0 | | 0 | See Task 10 |
| 13.18 | Pier Stability Analysis | EA Design | 0 | 0 | | 0 | N/A |
| 13.19 | Pier Structural Design | EA Design | 0 | 0 | | 0 | See Task 10 |
| 13.20 | Pier Plan and Elevation | Sheet | 0 | 0 | 0 | 0 | See Task 14 |
| 13.21 | Pier Details | Sheet | 0 | 0 | 0 | 0 | N/A |
| | **Miscellaneous Substructure Design and Plans** | | | | | | |
| 13.22 | Foundation Layout | Sheet | 0 | 0 | 0 | 0 | See Task 14 |
| | **Superstructure Deck Design and Plans** | | | | | | |
| 13.23 | Finish Grade Elevation (FGE) Calculation | LS | 0 | 0 | | 0 | See Task 14 |
| 13.24 | Finish Grade Elevations | Sheet | 0 | 0 | 0 | 0 | See Task 14 |
| 13.25 | Bridge Deck Design | EA Section | 1 | 12 | | 12 | |
| 13.26 | Bridge Deck Reinforcing and Concrete Quantities | EA Unit | 1 | 16 | | 16 | |
| 13.27 | Diaphragm Design | EA Section | 1 | 12 | | 12 | Assume Florida-I Beams with diaphragms |

## Project Activity 13: Structures- Medium Span Concrete

| Task No. | Task | Units | No. of Units | Hours/ Unit | No. of Sheets | Total Hours | Comments |
|---|---|---|---|---|---|---|---|
| 13.28 | Superstructure Plan | Sheet | 1 | 28 | 1 | 28 | |
| 13.29 | Superstructure Section | Sheet | 1 | 20 | 1 | 20 | |
| 13.30 | Miscellaneous Superstructure Details | Sheet | 1 | 32 | 1 | 32 | Diaphragm Details, Expansion Joint Data Table, SIP Form Details |
| | **Reinforcing Bar Lists** | | | | | | |
| 13.31 | Preparation of Reinforcing Bar List | Sheet | 0 | 0 | 0 | 0 | N/A |
| | **Continuous Concrete Girder Design** | | | | | | |
| 13.32 | Section Properties | LS | 1 | 0 | | 0 | N/A |
| 13.33 | Material Properties | LS | 1 | 0 | | 0 | N/A |
| 13.34 | Construction Sequence | EA Unit | 0 | 0 | | 0 | N/A |
| 13.35 | Tendon Layouts | EA Unit | 0 | 0 | | 0 | N/A |
| 13.36 | Live Load Analysis | EA Unit | 0 | 0 | | 0 | N/A |
| 13.37 | Temperature Gradient | EA Unit | 0 | 0 | | 0 | N/A |
| 13.38 | Time Dependent Analysis | EA Unit | 0 | 0 | | 0 | N/A |
| 13.39 | Stress Summary | EA Unit | 0 | 0 | | 0 | N/A |
| 13.40 | Ultimate Moments | EA Unit | 0 | 0 | | 0 | N/A |
| 13.41 | Ultimate Shear | EA Unit | 0 | 0 | | 0 | N/A |
| 13.42 | Construction Loading | EA Unit | 0 | 0 | | 0 | N/A |
| 13.43 | Framing Plan | Sheet | 0 | 0 | 0 | 0 | N/A |

## Project Activity 13: Structures- Medium Span Concrete

| Task No. | Task | Units | No. of Units | Hours/ Unit | No. of Sheets | Total Hours | Comments |
|---|---|---|---|---|---|---|---|
| 13.44 | Girder Elevation, including Grouting Plan and Vent Locations | Sheet | 0 | 0 | 0 | 0 | N/A |
| 13.45 | Girder Details | Sheet | 0 | 0 | 0 | 0 | N/A |
| 13.46 | Erection Sequence | Sheet | 0 | 0 | 0 | 0 | N/A |
| 13.47 | Splice Details | Sheet | 0 | 0 | 0 | 0 | N/A |
| 13.48 | Girder Deflections and Camber | Sheet | 0 | 0 | 0 | 0 | N/A |
| | **Simple Span Concrete Design** | | | | | | |
| 13.49 | Prestressed Beam | EA Design | 2 | 8 | | 16 | 1 Interior + 1 Exterior |
| 13.50 | Prestressed Beam Schedules | Sheet | 1 | 32 | 1 | 32 | Individual beam lengths due to curvature. |
| 13.51 | Framing Plan | Sheet | 1 | 8 | 1 | 8 | Update preliminary. |
| | **Beam Stability** | | | | | | |
| 13.52 | Beam/girder stability | EA Unit | 1 | 12 | | 12 | N/A |
| | **Bearing** | | | | | | |
| 13.53 | Bearing pad and bearing plate design | Type/ Span | 1 | 4 | | 4 | N/A |
| 13.54 | Bearing pad and bearing plate details | Sheet | 0 | 0 | 0 | 0 | N/A |
| | **Load Rating** | | | | | | |
| 13.55 | Load Ratings | Per Beam | 9 | 15 | | 135 | Load rate proposed Florida-I beams in Span 36<br>1 Interior + 1 Exterior<br>2 Beams x 12 hrs = 24 hrs.<br><br>Load rate existing AASHTO beams in Spans 9F thru 20F and 21MF thru 23MF for inclusion in final load rating<br>Spans 9F, 10F, 12F, & 13F 1 Interior & 1 Exterior<br>Spans 14F thru 20F 1 Interior & 1 Exterior<br>Spans 21MF thru 23 MF 1 Interior & 1 Exterior<br>6 Beams x 12 hrs = 72 hrs<br><br>Load rate continuous voided slabs in Spans 6F thru 8F for inclusion in final load rating.<br>3-span Continuous Slab = 40 hrs.<br><br>Total = 24 hrs. + 72 hrs. + 40 hrs. = 136 hrs., Say 135 hrs. |
| | **13. Structures - Medium Span Concrete Bridge Total** | | | | **10** | **401** | |

## Project Activity 13: Structures- Medium Span Concrete

Estimator:
Bridge Identifier (Number or Name):

Hart Bridge Mod D-B DCP & RFP
P-11-18

| Representing | Print Name | Signature / Date |
|---|---|---|
| | | |
| | | |

For East Bridge

| Task No. | Task | Units | No. of Units | Hours/ Unit | No. of Sheets | Total Hours | Comments |
|---|---|---|---|---|---|---|---|
| | **General Layout Design and Plans** | | | | | | |
| 13 1 | Overall Bridge Final Geometry | LS | 1 | 0 | | 0 | |
| 13 2 | Expansion/Contraction Analysis | EA Unit | 0 | 0 | | 0 | |
| 13 3 | General Plan and Elevation | Sheet | 0 | 0 | 0 | 0 | |
| 13 4 | Construction Staging | Sheet | 0 | 0 | 0 | 0 | |
| 13 5 | Approach Slab Plan and Details | Sheet | 0 | 0 | 0 | 0 | |
| 13 6 | Miscellaneous Details | Sheet | 0 | 0 | 0 | 0 | |
| | **End Bent Design and Plans** | | | | | | |
| 13 7 | End Bent Geometry | EA End Bent | 0 | 0 | | 0 | |
| 13 8 | Wingwall Design and Geometry | EA End Bent | 0 | 0 | | 0 | |
| 13 9 | End Bent Structural Design | EA Design | 0 | 0 | | 0 | |
| 13 10 | End Bent Plan and Elevation | Sheet | 0 | 0 | 0 | 0 | |
| 13 11 | End Bent Details | Sheet | 0 | 0 | 0 | 0 | |

## Project Activity 13: Structures- Medium Span Concrete

| Task No. | Task | Units | No. of Units | Hours/ Unit | No. of Sheets | Total Hours | Comments |
|---|---|---|---|---|---|---|---|
| | **Intermediate Bent Design and Plans** | | | | | | |
| 13.12 | Bent Geometry | EA Bent | 0 | 0 | | 0 | |
| 13.13 | Bent Stability Analysis | EA Design | 0 | 0 | | 0 | |
| 13.14 | Bent Structural Design | EA Design | 0 | 0 | | 0 | |
| 13.15 | Bent Plan and Elevation | Sheet | 0 | 0 | 0 | 0 | |
| 13.16 | Bent Details | Sheet | 0 | 0 | 0 | 0 | |
| | **Pier Design and Plans** | | | | | | |
| 13.17 | Pier Geometry | EA Pier | 0 | 0 | | 0 | |
| 13.18 | Pier Stability Analysis | EA Design | 0 | 0 | | 0 | |
| 13.19 | Pier Structural Design | EA Design | 0 | 0 | | 0 | |
| 13.20 | Pier Plan and Elevation | Sheet | 0 | 0 | 0 | 0 | |
| 13.21 | Pier Details | Sheet | 0 | 0 | 0 | 0 | |
| | **Miscellaneous Substructure Design and Plans** | | | | | | |
| 13.22 | Foundation Layout | Sheet | 0 | 0 | 0 | 0 | |
| | **Superstructure Deck Design and Plans** | | | | | | |
| 13.23 | Finish Grade Elevation (FGE) Calculation | LS | 1 | 0 | | 0 | |
| 13.24 | Finish Grade Elevations | Sheet | 0 | 0 | 0 | 0 | |
| 13.25 | Bridge Deck Design | EA Section | 0 | 0 | | 0 | |
| 13.26 | Bridge Deck Reinforcing and Concrete Quantities | EA Unit | 0 | 0 | | 0 | |
| 13.27 | Diaphragm Design | EA Section | 0 | 0 | | 0 | |

## Project Activity 13: Structures- Medium Span Concrete

| Task No. | Task | Units | No. of Units | Hours/ Unit | No. of Sheets | Total Hours | Comments |
|---|---|---|---|---|---|---|---|
| 13.28 | Superstructure Plan | Sheet | 0 | 0 | 0 | 0 | |
| 13.29 | Superstructure Section | Sheet | 0 | 0 | 0 | 0 | |
| 13.30 | Miscellaneous Superstructure Details | Sheet | 0 | 0 | 0 | 0 | |
| | **Reinforcing Bar Lists** | | | | | | |
| 13.31 | Preparation of Reinforcing Bar List | Sheet | 0 | 0 | 0 | 0 | |
| | **Continuous Concrete Girder Design** | | | | | | |
| 13.32 | Section Properties | LS | 0 | 0 | | 0 | |
| 13.33 | Material Properties | LS | 0 | 0 | | 0 | |
| 13.34 | Construction Sequence | EA Unit | 0 | 0 | | 0 | |
| 13.35 | Tendon Layouts | EA Unit | 0 | 0 | | 0 | |
| 13.36 | Live Load Analysis | EA Unit | 0 | 0 | | 0 | |
| 13.37 | Temperature Gradient | EA Unit | 0 | 0 | | 0 | |
| 13.38 | Time Dependent Analysis | EA Unit | 0 | 0 | | 0 | |
| 13.39 | Stress Summary | EA Unit | 0 | 0 | | 0 | |
| 13.40 | Ultimate Moments | EA Unit | 0 | 0 | | 0 | |
| 13.41 | Ultimate Shear | EA Unit | 0 | 0 | | 0 | |
| 13.42 | Construction Loading | EA Unit | 0 | 0 | | 0 | |
| 13.43 | Framing Plan | Sheet | 0 | 0 | 0 | 0 | |

## Project Activity 13: Structures- Medium Span Concrete

| Task No. | Task | Units | No. of Units | Hours/ Unit | No. of Sheets | Total Hours | Comments |
|---|---|---|---|---|---|---|---|
| 13.44 | Girder Elevation, including Grouting Plan and Vent Locations | Sheet | 0 | 0 | 0 | 0 | |
| 13.45 | Girder Details | Sheet | 0 | 0 | 0 | 0 | |
| 13.46 | Erection Sequence | Sheet | 0 | 0 | 0 | 0 | |
| 13.47 | Splice Details | Sheet | 0 | 0 | 0 | 0 | |
| 13.48 | Girder Deflections and Camber | Sheet | 0 | 0 | 0 | 0 | |
| | **Simple Span Concrete Design** | | | | | | |
| 13.49 | Prestressed Beam | EA Design | 0 | 0 | | 0 | |
| 13.50 | Prestressed Beam Schedules | Sheet | 0 | 0 | 0 | 0 | |
| 13.51 | Framing Plan | Sheet | 0 | 0 | 0 | 0 | |
| | **Beam Stability** | | | | | | |
| 13.52 | Beam/girder stability | EA Unit | 0 | 0 | | 0 | |
| | **Bearing** | | | | | | |
| 13.53 | Bearing pad and bearing plate design | Type/ Span | 0 | 0 | | 0 | |
| 13.54 | Bearing pad and bearing plate details | Sheet | 0 | 0 | 0 | 0 | |
| | **Load Rating** | | | | | | |
| 13.55 | Load Ratings | Per Beam | 2 | 12 | | 24 | Load rate existing Type III AASHTO beams in Spans 92 & 93 for inclusion in final load rating<br>1 interior beam + 1 exterior beam |
| | **13. Structures - Medium Span Concrete Bridge Total** | | | | **0** | **24** | |

## Project Activity 14: Structures -Structural Steel

Estimator:
Bridge Identifier (Number or Name):

Hart Bridge Mod D-B DCP & RFP
P-11-18

| Representing | Print Name | Signature / Date |
|---|---|---|
| | | |
| | | |

For West Bridge & East Bridge

| Task No. | Task | Unit | No. of Units | Hours/ Unit | No. of Sheets | Total Hours | Comments |
|---|---|---|---|---|---|---|---|
| | **General Layout Design and Plans** | | | | | | |
| 14.1 | Overall Bridge Final Geometry | LS | 1 | 16 | | 16 | Replace one existing steel span.<br>Curved superstructure geometry.<br>Update preliminary. |
| 14.2 | Expansion/Contraction Analysis | EA Unit | 1 | 8 | | 8 | Curved superstructure. |
| 14.3 | General Plan and Elevation | Sheet | 1 | 24 | 1 | 24 | Additional effort to prepare final GP&E. |
| 14.4 | Construction Staging | Sheet | 0 | 0 | 0 | 0 | N/A |
| 14.5 | Approach Slab Plan and Details | Sheet | 0 | 0 | 0 | 0 | N/A - See Task 13 |
| 14.6 | Miscellaneous Details | Sheet | 1 | 6 | 1 | 6 | Load Rating Summary Sheet (Steel) |
| | **End Bent Design and Plans** | | | | | | |
| 14.7 | End Bent Geometry | EA Bent | 0 | 0 | | 0 | N/A - See Task 13 |
| 14.8 | Wingwall Design and Geometry | EA Bent | 0 | 0 | | 0 | N/A |
| 14.9 | End Bent Structural Design | EA Design | 0 | 0 | | 0 | N/A - See Task 13 |
| 14.10 | End Bent Plan and Elevation | Sheet | 0 | 0 | 0 | 0 | N/A - See Task 13 |
| 14.11 | End Bent Details | Sheet | 0 | 0 | 0 | 0 | N/A - See Task 13 |

## Project Activity 14: Structures -Structural Steel

| Task No. | Task | Unit | No. of Units | Hours/ Unit | No. of Sheets | Total Hours | Comments |
|---|---|---|---|---|---|---|---|
| | **Intermediate Bent Design and Plans** | | | | | | |
| 14.12 | Bent Geometry | EA bent | 0 | 0 | | 0 | N/A |
| 14.13 | Bent Stability Analysis | EA design | 0 | 0 | | 0 | N/A |
| 14.14 | Bent Structural Design | EA design | 0 | 0 | | 0 | N/A |
| 14.15 | Bent Plan and Elevation | Sheet | 0 | 0 | 0 | 0 | N/A |
| 14.16 | Bent Details | Sheet | 0 | 0 | 0 | 0 | N/A |
| | **Pier Design and Plans** | | | | | | |
| 14.17 | Pier Geometry | EA pier | 1 | 16 | | 16 | Final geometry. |
| 14.18 | Pier Stability Analysis | EA design | 0 | 0 | | 0 | N/A |
| 14.19 | Pier Structural Design | EA design | 1 | 80 | | 80 | |
| 14.20 | Pier Plan and Elevation | Sheet | 1 | 30 | 1 | 30 | Final Plan and Elevation |
| 14.21 | Pier Details | Sheet | 1 | 32 | 1 | 32 | Sections, Pedestal Details, Foundation Details |
| | **Miscellaneous Substructure Design and Plans** | | | | | | |
| 14.22 | Foundation Layout | Sheet | 1 | 12 | 1 | 12 | Update preliminary. |
| | **Superstructure Deck Design and Plans** | | | | | | |
| 14.23 | Finish Grade Elevation (FGE) Calculation | LS | 1 | 32 | | 32 | Curved superstructure, steel and concrete spans with different beam layout. |
| 14.24 | Finish Grade Elevations | Sheet | 2 | 16 | 2 | 32 | Plan, Section, & Tables; 1 sheet steel & 1 sheet concrete |
| 14.25 | Bridge Deck Design | EA section | 1 | 12 | | 12 | |
| 14.26 | Bridge Deck Reinforcing and Concrete Quantities | EA Unit | 1 | 16 | | 16 | |
| 14.27 | Superstructure Plan | Sheet | 1 | 28 | 1 | 28 | |
| 14.28 | Superstructure Section | Sheet | 1 | 20 | 1 | 20 | |
| 14.29 | Miscellaneous Bridge Deck Details | Sheet | 3 | 32 | 3 | 96 | Expansion joint details at existing bridge deck; Barrier Transition Details for shoulder and median barrier. |

## Project Activity 14: Structures -Structural Steel

| Task No. | Task | Unit | No. of Units | Hours/ Unit | No. of Sheets | Total Hours | Comments |
|---|---|---|---|---|---|---|---|
| | **Reinforcing Bar Lists** | | | | | | |
| 14.30 | Preparation of Reinforcing Bar List | Sheet | 2 | 12 | 2 | 24 | 1 App. Slab + 1 End Bent + 1 Pier + 2 Bridge Deck = 5 Tables |
| | **Structural Steel Plate Girder Design** | | | | | | |
| 14.31 | Unit Modeling | EA Unit | 0 | 0 | | 0 | Modelling for proposed modifications included in previous work effort. |
| 14.32 | Section Design | EA Unit | 3 | 30 | | 90 | Curved geometry.<br>Design Unit 8 Girders = 50 hrs.<br>Analyze existing Unit 6 & 7 Girders = 20 hrs. each |
| 14.33 | Stiffener Design and Locations | EA Unit | 1 | 20 | | 20 | |
| 14.34 | Cross-Frame Design | EA Unit | 1 | 12 | | 12 | |
| 14.35 | Connections | EA Unit | 1 | 32 | | 32 | |
| 14.36 | Bearing Assembly Design and Detailing (with Jacking Analysis) | EA Unit | 1 | 20 | | 20 | |
| 14.37 | Splice Design | EA Unit | 0 | 0 | | 0 | N/A for simple span |
| 14.38 | Shear Stud Connectors | EA Unit | 1 | 16 | | 16 | |
| 14.39 | Deflection Analysis | EA Unit | 1 | 48 | | 48 | |
| 14.40 | Framing Plan | Sheet | 1 | 12 | 1 | 12 | Update preliminary. |
| 14.41 | Girder Elevation | Sheet | 1 | 20 | 1 | 20 | Update preliminary |
| 14.42 | Structural Steel Details | Sheet | 4 | 32 | 4 | 128 | Stiffener Details, Crossframe Details, Hinge Details, Bearing Details |
| 14.43 | Splice Details | Sheet | 0 | 0 | 0 | 0 | N/A for simple span. |
| 14.44 | Girder Deflections and Camber | Sheet | 1 | 16 | 1 | 16 | |

## Project Activity 14: Structures -Structural Steel

| Task No. | Task | Unit | No. of Units | Hours/ Unit | No. of Sheets | Total Hours | Comments |
|---|---|---|---|---|---|---|---|
| | **Structural Steel Box Girder Design** | | | | | | |
| 14.45 | Unit Modeling | EA Unit | 0 | 0 | | 0 | N/A |
| 14.46 | Section Design | EA Unit | 0 | 0 | | 0 | N/A |
| 14.47 | Stiffener Design and Locations | EA Unit | 0 | 0 | | 0 | N/A |
| 14.48 | Interior Cross-Frame Design | EA Unit | 0 | 0 | | 0 | N/A |
| 14.49 | Exterior Cross-Frame Design | EA Unit | 0 | 0 | | 0 | N/A |
| 14.50 | Connections | EA Unit | 0 | 0 | | 0 | N/A |
| 14.51 | Bearing Assembly Design and Detailing (with Jacking Analysis) | EA Unit | 0 | 0 | | 0 | N/A |
| 14.52 | Splice Design | EA Unit | 0 | 0 | | 0 | N/A |
| 14.53 | Shear Stud Connectors | EA Unit | 0 | 0 | | 0 | N/A |
| 14.54 | Deflection Analysis | EA Unit | 0 | 0 | | 0 | N/A |
| 14.55 | Framing Plan | Sheet | 0 | 0 | 0 | 0 | N/A |
| 14.56 | Girder Elevation | Sheet | 0 | 0 | 0 | 0 | N/A |
| 14.57 | Structural Steel Details | Sheet | 0 | 0 | 0 | 0 | N/A |
| 14.58 | Splice Details | Sheet | 0 | 0 | 0 | 0 | N/A |
| 14.59 | Girder Deflections and Camber | Sheet | 0 | 0 | 0 | 0 | N/A |
| | **Erection Scheme** | | | | | | |
| 14.60 | Erection scheme analysis | EA Critical Stage | 1 | 25 | | 25 | |
| 14.61 | Erection scheme | Sheet | 1 | 30 | 1 | 30 | |
| | **Load Rating** | | | | | | |

## Project Activity 14: Structures -Structural Steel

| Task No. | Task | Unit | No. of Units | Hours/ Unit | No. of Sheets | Total Hours | Comments |
|---|---|---|---|---|---|---|---|
| 14.62 | Load Rating | EA Unit | 12 | 60 | | 720 | FOR WEST BRIDGE:<br>Load rate proposed curved steel girders in Span 35 (Unit 8).<br>Span 35 (Unit 8) = 40 hrs.<br><br>Load rate existing curved steel girders in Spans 11F, 24 MF thru 27MF, and 28 thru 34 for inclusion in final load rating.<br>Span 11F = 60 hrs.<br>Spans 24DA & 25DA (Unit 3) = 40 hrs. (Modelling only to determine hinge reactions for Unit 4)<br>Spans 24MF & 25MF (Unit 4) = 80 hrs.<br>Spans 26MF, 26DA, 27MF, & 28 (Unit 5) = 40 hrs. (Perform analysis based on previous modelling)<br>Spans 29 thru 33 (Unit 6) = 20 hrs. (Update previous)<br>Span 34 (Unit 7) = 80 hrs. (Update previous, including integral pier caps)<br><br>Total = 360 hrs., Say 364 hrs.<br><br>FOR EAST BRIDGE:<br>Load rate existing curved steel girders in Spans 94 thru 97 for inclusion in final load rating.<br>5 Units must be modelled due to midspan hinges.<br>Unit 1 - Span 94; Unit 2 - Span 31NH; Unit 3 - Spans 95 - 97; Unit 4 - Spans 33SH thru Span 37 SH; Unit 5 - Spans 98 thru 101<br>2 Units x 60 hrs. + 3 Units x 80 hrs. = 360 hrs. |
| | **14. Structures - Structural Steel Bridge Total** | | | | **22** | **1673** | |

## Project Activity 17: Retaining Walls

Estimator:

Hart Bridge Mod D-B DCP & RFP
P-11-18

| Representing | Print Name | Signature / Date |
|---|---|---|
| | | |
| | | |

| Task No. | Task | Unit | No. of Units | Hours/ Unit | No. of Sheets | Total Hours | Comments |
|---|---|---|---|---|---|---|---|
| | **General Requirements** | | | | | | |
| 17.1 | Key Sheet | Sheet | 1 | 2 | 1 | 2 | Update Key Sheet. |
| 17.2 | Horizontal Wall Geometry | Per Wall | 5 | 6 | | 30 | Update geometry for 3 MSE Walls and 1 Sheet Pile Wall at east end for revised roadway geometry.<br>One additional temporary critical wall for excavation at ground improvements. |
| | **Permanent Proprietary Walls** | | | | | | |
| 17.3 | Vertical Wall Geometry | Per Wall | 6 | 11 | | 66 | Update MSE walls at east end: 3 x 6 hrs. = 18 hrs.<br>MSE walls at west end: 3 x 16 hrs. = 48 hrs. |
| 17.4 | Semi-Standard Drawings | Sheet | 1 | 8 | 1 | 8 | Update MSE Wall Data Tables. |
| 17.5 | Wall Plan and Elevations (Control Drawings) | Sheet | 5 | 12 | 5 | 60 | Update MSE walls at east end: 3 x 8 hrs. = 24 hrs.<br>Update one sheet at west end: 1 x 12 hrs. = 14 hrs.<br>Add one new sheet at west end: 1 x 18 hrs. = 22 hrs. |
| 17.6 | Details | Sheet | 0 | 0 | 0 | 0 | Included in previous work effort. |
| | **Temporary Proprietary Walls** | | | | | | |
| 17.7 | Vertical Wall Geometry | Per Wall | 0 | 0 | | 0 | |
| 17.8 | Semi-Standard Drawings | Sheet | 0 | 0 | 0 | 0 | |
| 17.9 | Wall Plan and Elevations (Control Drawings) | Sheet | 0 | 0 | 0 | 0 | |
| 17.10 | Details | Sheet | 0 | 0 | 0 | 0 | |
| | **Cast-in-Place Retaining Walls** | | | | | | |
| 17.11 | Design | EA Design | 0 | 0 | | 0 | |
| 17.12 | Vertical Wall Geometry | EA Wall | 0 | 0 | | 0 | |
| 17.13 | General Notes | Sheet | 0 | 0 | 0 | 0 | |
| 17.14 | Wall Plan and Elevations (Control Drawings) | Sheet | 0 | 0 | 0 | 0 | |
| 17.15 | Sections and Details | Sheet | 0 | 0 | 0 | 0 | |
| 17.16 | Reinforcing Bar List | Sheet | 0 | 0 | 0 | 0 | |

## Project Activity 17: Retaining Walls

| Task No. | Task | Unit | No. of Units | Hours/ Unit | No. of Sheets | Total Hours | Comments |
|---|---|---|---|---|---|---|---|
| | **Other Retaining Walls and Bulkheads** | | | | | | |
| 17.17 | Design | EA Design | 1 | 16 | | 16 | One additional temporary critical sheet pile wall for excavation at ground improvements. Assume 700-ft. long. Assume cantilever wall. |
| 17.18 | Vertical Wall Geometry | EA Wall | 1 | 6 | | 6 | Temporary critical sheet pile wall. |
| 17.19 | General Notes, Tables and Misc. Details | Sheet | 1 | 12 | 1 | 12 | Temporary critical sheet pile wall. |
| 17.20 | Wall Plan and Elevations | Sheet | 2 | 12 | 2 | 24 | Temporary critical sheet pile wall. |
| 17.21 | Details | Sheet | 0 | 0 | 0 | 0 | |
| | **17. Structures - Retaining Walls Total** | | | | **10** | **224** | |

## Project Activity 18: Miscellaneous Structures

Estimator

Hart Bridge Mod D-B DCP & RFP
P-11-18

| Representing | Print Name | Signature / Date |
|---|---|---|
| | | |
| | | |

| Task No. | Task | Unit | No. of Units | Hours/ Unit | No. of Sheets | Total Hours | Comments |
|---|---|---|---|---|---|---|---|
| | **Concrete Box Culvert** | | | | | | |
| 18.1 | Concrete Box Culverts | EA | 0 | 0 | | 0 | |
| 18.2 | Concrete Box Culverts Extensions | EA Extension | 0 | 0 | | 0 | |
| 18.3 | Concrete Box Culvert Data Table Plan Sheets | Sheet | 0 | 0 | 0 | 0 | |
| 18.4 | Concrete Box Culvert Special Details Plan Sheets | Sheet | 0 | 0 | 0 | 0 | |
| | **Strain Poles** | | | | | | |
| 18.5 | Steel Strain Poles | Initial Config | 0 | 0 | | 0 | |
| | | EA Add'l Config | 0 | 0 | | 0 | |
| 18.6 | Concrete Strain Poles | Initial Config | 0 | 0 | | 0 | |
| | | EA Add'l Config | 0 | 0 | | 0 | |
| 18.7 | Strain Pole Data Table Plan Sheets | Sheet | 0 | 0 | 0 | 0 | |
| 18.8 | Strain Pole Special Details Plan Sheets | Sheet | 0 | 0 | 0 | 0 | |
| | **Mast Arms** | | | | | | |
| 18.9 | Mast Arms | EA Design | 7 | 12 | | 84 | 13 Mast Arms - 11 Single Arms, 13 Double Arms (6 included in previous work effort)<br>Assumes FDOT Standard Mast Arms designed using FDOT MathCAD program |
| 18.10 | Mast Arms Data Table Plan Sheets | Sheet | 2 | 6 | 2 | 12 | Assume 3 Plan Sheets (1 Sheet included in previous work effort) |
| 18.11 | Mast Arm Special Details Plan Sheets | Sheet | 1 | 16 | 1 | 16 | Special Pole Base Details |
| | **Overhead/Cantilever Sign Structures** | | | | | | |
| 18.12 | Cantilever Sign Structures | EA Design | 1 | 16 | | 16 | One cantilver sign structure. |
| 18.13 | Overhead Span Sign Structures | EA Design | | 0 | | 0 | One span sign structure. (Included in previous work effort.) |
| 18.14 | Special (Long Span) Overhead Span Sign Structures | EA Design | 0 | 0 | | 0 | |
| 18.15 | Monotube Overhead Sign Structure | EA Design | 0 | 0 | | 0 | |
| 18.16 | Bridge Mounted Signs (Attached to Superstr.) | EA Design | 0 | 0 | | 0 | |
| 18.17 | Overhead and Cantilever Sign Structures Data Table Plan Sheets | Sheet | 1 | 6 | 1 | 6 | Two sheets total (1 cantilver and 1 span)<br>One sheet included in previous work effort. |
| 18.18 | Overhead and Cantilever Sign Structures Special Details Plan Sheets | Sheet | 1 | 24 | 1 | -24 | Delete wall mounted cantilever sign support details from previous work effort. |
| | **High Mast Lighting** | | | | | | |
| 18.19 | Non-Standard High Mast Lighting Structures | EA Design | 0 | 0 | | 0 | |
| 18.20 | High Mast Lighting Special Details Plan Sheets | Sheet | 0 | 0 | 0 | 0 | |
| | **Noise Barrier Walls (Ground Mount)** | | | | | | |
| 18.21 | Horizontal Wall Geometry | EA Wall | 0 | 0 | | 0 | |
| 18.22 | Vertical Wall Geometry | EA Wall | 0 | 0 | | 0 | |
| 18.23 | Summary of Quantities - Aesthetic Requirements | Sheet | 0 | 0 | 0 | 0 | |
| 18.24 | Control Drawings | Sheet | 0 | 0 | 0 | 0 | |
| 18.25 | Design of Noise Barrier Walls Covered by Standards | EA Design | 0 | 0 | | 0 | |
| 18.26 | Design of Noise Barrier Walls Not Covered by Standards | EA Design | 0 | 0 | | 0 | |
| 18.27 | Aesthetic Details | LS | 1 | 0 | | 0 | |
| | **Special Structures** | | | | | | |

## Project Activity 18: Miscellaneous Structures

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 18.28 | Fender System | LS | 1 | 0 | | 0 | |
| 18.29 | Fender System Access | LS | 1 | 0 | | 0 | |
| 18.30 | Special Structures | LS | 1 | 0 | | 0 | |
| 18.31 | Other Structures | LS | 1 | 184 | | 184 | Load transfer slabs to eliminate additional load on existing bridge footings at east MSE wall.<br>Assume 2 slabs x 40 hrs. design each (slab design and pile loads) = 80 hrs.<br>Assume 2 sheets each slab (4 total) x 32 hrs. each = 128 hrs.<br>Delete 24 hrs. previous effort for design of wall mounted cantilever sign support details.<br>Total = 80 hrs. + 128 hrs. - 24 hrs. = 184 hrs |
| | **Ancillary Structures Report** | | | | | | |
| 18.32 | Condition Evaluation of Signal and Sign Structures, and High Mast Light Poles | EA structure | 0 | 0 | 0 | 0 | |
| 18.33 | Condition Evaluation of Signal and Sign Structures, and High Mast Light Poles (No As built or Design Plans Available) | EA structure | 0 | 0 | 0 | 0 | |
| 18.34 | Analytical Evaluation of Signal and Sign Structures, and High Mast Light Poles | EA structure | 0 | 0 | 0 | 0 | |
| 18.35 | Ancillary Structures Report | LS | 1 | 0 | | 0 | |
| | | **18. Structures - Miscellaneous Total** | | | **5** | **294** | |

## Project Activity 7: Utilities

Estimator: Terry Crews

Hart Expressway
City of Jacksonville

| Representing | Print Name | Signature / Date |
|---|---|---|
| FDOT District | | |
| Consultant Name | Cardno | |

***NOTE: Signature Block is optional, per District preference***

Estimate based on 12 utilities - Design Ticket 039804913

| Task No. | Task | Units | No of Units | Hours/ Unit | Total Hours | Comments |
|---|---|---|---|---|---|---|
| 7.1 | Utility Kickoff Meeting | LA | 0 | 0 | 0 | Not Applicable for this project. |
| 7.2 | Identify Existing Utility Agency Owners (UAO(s)) | LA | 12 | 0.5 | 6 | Pull Updated design ticket, secure GIS/as-builts and file accordingly, setup project folders (Cardno file and Cardno's Utility Status Database). |
| 7.3 | Make Utility Contacts | LA | 12 | 0.5 | 6 | Compile Combo Contact Package (Initial & Final Statute Contacts Combined) with associated plans, clearance forms etc. and send out to the UAO's for response. Contact Package to be sent Cardno File Share and/or email. |
| 7.4 | Exception Processing | LA | 0 | 0 | 0 | Not Applicable for this project. |
| 7.5 | Preliminary Utility Meeting | LA | 0 | 0 | 0 | Not Applicable for this project. |
| 7.6 | Individual/Field Meetings | LA | 2 | 8 | 16 | Estimated as holding two (2) individual meetings — 2 hr prep + 2 hrs travel + 2 hr mtg + 2 hr minutes |
| 7.7 | Collect and Review Plans and Data from UAO(s) | LA | 12 | 1 | 12 | Collect, review, update Cardno's project information database, and file on Cardno servers any UAO provided information/markups. Also, forward any markups and GIS information on to the EOR/Designer for review and consideration. |
| 7.8 | Subordination of Easements Coordination | LA | 0 | 0 | 0 | Not Applicable for this project. |
| 7.9 | Utility Design Meeting | LA | 1 | 9 | 9 | 90% Design Meeting with EOR and UAO's - Meeting Location TBD - 2 hr prep + 2 hrs travel + 2 hr mtg + 3 hr minutes |
| 7.10 | Review Utility Markups & Work Schedules, and Processing of Schedules & Agreements | LA | 12 | 3 | 36 | Acquire and review utility markups/RGB's, contact forms, and assist UAO's with any documentation needed to achieve preperation of the final Utility Certification package in timely manor. Assist with drafting UWS's |
| 7.11 | Utility Coordination/Followup | LA | 12 | 1.5 | 18 | Follow-up and finalize all RGB's and assocaited Utility Work Schedules and assocaited contact forms. |
| 7.12 | Utility Constructability Review | LA | 0 | 0 | 0 | Not Applicable for this project. |
| 7.13 | Additional Utility Services | LA | 0 | 0 | 0 | Not Applicable for this project. |

## Project Activity 7: Utilities

| | | | | | | |
|---|---|---|---|---|---|---|
| 7.14 | Processing Utility Work by Highway Contractor (UWHC) | LA | 1 | 8 | 8 | Manholes, Meters, and Valves will be impacted, as well as potential WM and FM conflicts requiring relocation. Great Potential for UAO's to enter in to UWHCA. Assist with UWHCAs between UAO and COJ |
| 7.15 | Contract Plans to UAO(s) | LA | 0 | 0 | 0 | Not Applicable for this project. |
| 7.16 | Certification/Close-Out | LA | 14 | 1 | 14 | Clean-up Server Files to ensure all information is accurately depicted, review the Utility Project Information Databse to ensure all UAO dispositions have been identified and all information received dates are listed correctly, compile the Ultiy Certification Letter for EOR and COJ, review and signature, send out Utility Certification to all parties. Prepare Notice letters for EOR and COJ review, signature, and subsequent send out UWS's/Notice Forms to all UAO's with a Utility Work Schedule involved. |
| 7.17 | Other Utilities | LA | 1 | 17 | 17 | Clerical/Admin for monthly financial closeout and invoicing - 1.5 Hr per month (12Hrs)<br>Branch Manager/Director, QA-QC Support - (5Hrs) |
| | | | | **7. Utilities Total** | **142** | |

| Technical Meetings | Units | No of Units | Hours/ Unit | Total Hours | Comments | PM Attendance at Meeting Required? | Number |
|---|---|---|---|---|---|---|---|
| Kickoff (see 7.1) | EA | 0 | 0 | 0 | | | 0 |
| Preliminary Meeting (see 7.5) | EA | 0 | 0 | 0 | | | 0 |
| Individual UAO Meetings (see 7.6) | EA | 0 | 0 | 0 | | | 0 |
| Field Meetings (see 7.6) | EA | 0 | 0 | 0 | | | 0 |
| Design Meeting (see 7.9) | EA | 0 | 0 | 0 | | | 0 |
| Other Meetings *(this is automatically added into Utilities Total (cell F27))* | EA | 0 | 0 | 0 | | | 0 |
| **Total Meetings** | | | | **0** | | **Total Project Manager Meetings (carries to Tab 3)** | **0** |

Carries to Tab 3

# ESTIMATE OF WORK EFFORT AND COST - PRIME CONSULTANT

Name of Project: COJ - Hart Expressway SA3 Final Design Revisions
County: Duval
FPN: N/A
FAP No.: N/A

Consultant Name: DRMP, Inc.
Consultant No.: enter consultants proj number
Date: 7/1/2019
Estimator: Glenn J. Lusink, PSM

| Staff Classification | Total Staff Hours From "SH Summary - Form" | Project Manager | Senior Surveyor & Mapper | Surveyor & Mapper | Survey Technician | Secretarial / Clerical | Staff Classification 6 | Staff Classification 7 | Staff Classification 8 | Staff Classification 9 | Staff Classification 10 | Staff Classification 11 | Staff Classification 12 | SH By Activity | Salary Cost By Activity | Average Rate Per Task |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $160.00 | $160.00 | $132.22 | $99.17 | $88.22 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | | | |
| 3 Project General and Project Common Tasks | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0 | #DIV/0! |
| 4 Roadway Analysis | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0 | #DIV/0! |
| 5 Roadway Plans | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0 | #DIV/0! |
| 6a Drainage Analysis | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0 | #DIV/0! |
| 6b Drainage Plans | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0 | #DIV/0! |
| 7 Utilities | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0 | #DIV/0! |
| 8 Environmental Permits, Compliance & Clearances | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0 | #DIV/0! |
| 9 Structures - Misc. Tasks, Dwgs, Non-Tech | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0 | #DIV/0! |
| 10 Structures - Bridge Development Report | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0 | #DIV/0! |
| 11 Structures - Temporary Bridge | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0 | #DIV/0! |
| 12 Structures - Short Span Concrete Bridge | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0 | #DIV/0! |
| 13 Structures - Medium Span Concrete Bridge | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0 | #DIV/0! |
| 14 Structures - Structural Steel Bridge | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0 | #DIV/0! |
| 15 Structures - Segmental Concrete Bridge | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0 | #DIV/0! |
| 16 Structures - Movable Span | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0 | #DIV/0! |
| 17 Structures - Retaining Walls | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0 | #DIV/0! |
| 18 Structures - Miscellaneous | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0 | #DIV/0! |
| 19 Signing & Pavement Marking Analysis | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0 | #DIV/0! |
| 20 Signing & Pavement Marking Plans | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0 | #DIV/0! |
| 21 Signalization Analysis | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0 | #DIV/0! |
| 22 Signalization Plans | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0 | #DIV/0! |
| 23 Lighting Analysis | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0 | #DIV/0! |
| 24 Lighting Plans | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0 | #DIV/0! |
| 25 Landscape Architecture Analysis | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0 | #DIV/0! |
| 26 Landscape Architecture Plans | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0 | #DIV/0! |
| 27 Survey (Field & Office Support) | 197 | 0 | 10 | 59 | 123 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 197 | $21,996 | $111.65 |
| 28 Photogrammetry | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0 | #DIV/0! |
| 29 Mapping | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0 | #DIV/0! |
| 30 Terrestrial Mobile LiDAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0 | #DIV/0! |
| 31 Architecture Development | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0 | #DIV/0! |
| 32 Noise Barriers Impact Design Assessment | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0 | #DIV/0! |
| 33 Intelligent Transportation Systems Analysis | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0 | #DIV/0! |
| 34 Intelligent Transportation Systems Plans | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0 | #DIV/0! |
| 35 Geotechnical | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0 | #DIV/0! |
| Total Staff Hours | 197 | 0 | 10 | 59 | 123 | 5 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 197 | | |
| Total Staff Cost | | $0.00 | $1,665.95 | $7,800.98 | $12,197.91 | $331.10 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | | $21,995.94 | $111.65 |

Check = $21,995.94

Survey Field Days by Subconsultant
3 - Person Crew

| | | | | |
|---|---|---|---|---|
| SALARY RELATED COSTS | | | | $21,995.94 |
| OVERHEAD | | 0% | | $0.00 |
| OPERATING MARGIN | | 0% | | $0.00 |
| FCCM (Facilities Capital Cost Money) | | 0.00% | | $0.00 |
| EXPENSES | | 0.00% | | $0.00 |
| Survey (Field - # by Prime) | 17.78 | 3-man crew days @ | $ 1,521.85 / day | $27,060.54 |
| SUE Services | 0 | 3-man crew days @ | $ 1,400.00 / day | $0.00 |
| SUE Services | 28 | 3-man crew days @ | $ 2,050.00 / day | $56,375.41 |
| SUBTOTAL ESTIMATED FEE: | | | | $105,431.89 |
| Subconsultant Enter Name Sub 1 | | | | $0.00 |
| Subconsultant Sub 2 | | | | $0.00 |
| Subconsultant Sub 3 | | | | $0.00 |
| Subconsultant Sub 4 | | | | $0.00 |
| Subconsultant Sub 5 | | | | $0.00 |
| Subconsultant Sub 6 | | | | $0.00 |
| Subconsultant Sub 7 | | | | $0.00 |
| Subconsultant Sub 8 | | | | $0.00 |
| Subconsultant Sub 9 | | | | $0.00 |
| Subconsultant Sub 10 | | | | $0.00 |
| Subconsultant Sub 11 | | | | $0.00 |
| Subconsultant Sub 12 | | | | $0.00 |
| SUBTOTAL ESTIMATED FEE: | | | | $105,431.89 |
| Geotechnical Field and Lab Testing | | | | $0.00 |
| SUBTOTAL ESTIMATED FEE: | | | | $105,431.89 |
| Optional Services | | | | $0.00 |
| GRAND TOTAL ESTIMATED FEE: | | | | $105,431.89 |

Notes
1 This sheet to be used by Prime Consultant to calculate the Grand Total fee

2 Manually enter fee from each subconsultant. Unused subconsultant rows may be hidden

| Representing | Print Name | Signature / Date |
|---|---|---|
| FDOT District | D2 - COJ | |
| Consultant Name | Glenn J. Lusink, PSM | |

***NOTE: Signature Block is optional, per District preference***

| Task No. | Task | Units | No of Units | Field Crew Days/Unit | Crew Days | Field Support Hours / Crew Days | Field Support Hours | Office Support Hours / Crew Days | Office Support Hours | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| 27 1 | Horizontal Project Control (HPC) | | | | | | | | | |
| | 2-Lane Roadway | Mile | 1 00 | 1.00 | 1.00 | 1 25 | 1.25 | 3 00 | 3 00 | Recover and or set additional control to survey additional areas as needed, match existing datum |
| | Multi-lane Roadway | Mile | | | 0.00 | | 0.00 | | 0.00 | |
| | Interstate | Mile | | | 0 00 | | 0.00 | | 0 00 | |
| | | | | | | | | | | |
| 27.2 | Vertical PC / Bench Line | | | | | | | | | |
| | 2-Lane Roadway | Mile | 1 00 | 1 00 | 1 00 | 1 25 | 1.25 | 3 00 | 3 00 | Recover and or set additional control to survey additional areas as needed, match existing datum |
| | Multi-lane Roadway | Mile | | | 0.00 | | 0.00 | | 0.00 | |
| | Interstate | Mile | | | 0 00 | | 0.00 | | 0.00 | |
| | | | | | | | | | | |
| 27 3 | Alignment and Existing R/W Lines | | | | | | | | | NA |
| | | Mile | | | 0 00 | | 0 00 | | 0 00 | |
| 27 4 | Aerial Targets | | | Units/Day | | | | | | |
| | 2-Lane Roadway | EA | | | 0 00 | | 0.00 | | 0 00 | N/A |
| | Multi-lane Roadway | EA | | | 0 00 | | 0 00 | | 0 00 | |
| | Interstate | EA | | | 0 00 | | 0.00 | | 0 00 | |
| | | | | | | | | | | |
| 27 5 | Reference Points | "A" | | Units/Day | | | | | | |
| | 2-Lane Roadway | EA | | | 0.00 | | 0 00 | | 0.00 | NA |
| | Multi-lane Roadway | EA | | | 0.00 | | 0.00 | | 0 00 | |
| | Interstate | EA | | | 0 00 | | 0 00 | | 0 00 | |
| | | | | | | | | | | |
| | Reference Points | "B" | | Units/Day | | | | | | N/A |
| | Non Alignment Points/Approximate | EA | | | 0 00 | | 0.00 | | 0 00 | |
| | | | | | | | | | | |

| Task No. | Task | Units | No of Units | Field Crew Days/Unit | Crew Days | Field Support Hours / Crew Days | Field Support Hours | Office Support Hours / Crew Days | Office Support Hours | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| 27.6 | Topography/DTM (3D) | | | | | | | | | Provide additional survey data along entrance road to Parking Lot H |
| | | Mile | 1 00 | 0 50 | 0 50 | 1 25 | 0 63 | 4 00 | 2 00 | |
| 27 7 | Planimetric (2D) | | | | | | | | | N/A |
| | | Mile | | | 0 00 | | 0 00 | | 0 00 | |
| 27.8 | Roadway Cross-Sections/Profiles | | | | | | | | | N/A |
| | | Mile | | | 0 00 | | 0 00 | | 0 00 | |
| 27.9 | Side Street Surveys | | | | | | | | | N/A |
| | | Mile | | | 0 00 | | 0 00 | | 0 00 | |
| 27 10 | Underground Utilities | | | | | | | | | Preform 50 additional vvh's at the direction of the design engineer to verify the horizontal and vertical location of underground utilities in areas of possible conflict (12 50 days budgeted) Provide clearance holes for 13 mast arms and 2 overhead sign foundations (15 days budgeted) |
| | Designates | Mile/Site | | | 0 00 | | 0 00 | | 0 00 | |
| | Locates | Point | 65 | 0.42308 | 27 50 | 1 50 | 41 25 | 3 00 | 82 50 | |
| | Survey | | 30% | 27.50 | 8 25 | 1.25 | 10 31 | 3 00 | 24 75 | |
| | | | | | | | | | | |
| 27 11 | Outfall Survey | | | | | | | | | N/A |
| | | Mile | | | 0 00 | | 0 00 | | 0 00 | |
| 27 12 | Drainage Survey | | | Units/Day | | | | | | Verify additional drainage systems and outfalls |
| | | EA | 1 00 | 2 00 | 0 50 | 1 25 | 0 63 | 3 00 | 1 50 | |
| 27 13 | Bridge Survey | | | | | | | | | N/A |
| | Minor / Major | EA | | | 0 00 | | 0 00 | | 0 00 | |
| | | | | | | | | | | |
| 27 14 | Channel Survey | | | | | | | | | N/A |
| | | EA | | | 0 00 | | 0 00 | | 0 00 | |

| Task No. | Task | Units | No of Units | Field Crew Days/Unit | Crew Days | Field Support Hours / Crew Days | Field Support Hours | Office Support Hours / Crew Days | Office Support Hours | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| 27 15 | Pond Site Survey | | | | | | | | | N/A |
| | | EA | | | 0 00 | | 0 00 | | 0 00 | |
| 27 16 | Mitigation Survey | | | | | | | | | N/A |
| | | Mile | | | 0.00 | | 0.00 | | 0 00 | |
| 27 17 | Jurisdiction Line Survey | | | | | | | | | N/A |
| | | Mile | | | 0 00 | | 0.00 | | 0 00 | |
| 27 18 | Geotechnical Support | | | Units/Day | | | | | | Locate additional borings (station, offset and elevation) as needed. |
| | | EA | 30 | 20 | 1 50 | 1 25 | 1.88 | 3 00 | 4 50 | |
| 27 19 | Sectional / Grant Survey | | | | | | | | | N/A |
| | | Corner | | | 0 00 | | 0.00 | | 0.00 | |
| | | Mile | | | 0 00 | | 0.00 | | 0 00 | |
| 27.20 | Subdivision Location | | | | | | | | | N/A |
| | | Block | | | 0 00 | | 0 00 | | 0.00 | |
| 27 21 | Maintained R/W | | | | | | | | | N/A |
| | | Mile | | | 0 00 | | 0 00 | | 0.00 | |
| 27 22 | Boundary Survey | | | | | | | | | N/A |
| | | EA | | | 0 00 | | 0 00 | | 0 00 | |
| 27 23 | Water Boundary Survey | | | | | | | | | N/A |
| | | EA | | | 0 00 | | 0 00 | | 0 00 | |
| 27.24 | R/W Staking / R/W Line | | | | | | | | | N/A |
| | | EA | | | 0 00 | | 0 00 | | 0.00 | |
| | | Mile | | | 0.00 | | 0.00 | | 0.00 | N/A |
| | | | | | | | | | | |
| 27.25 | R/W Monumentation | | | | | | | | | N/A |
| | | Point | | | 0.00 | | 0 00 | | 0 00 | |
| 27.26 | Line Cutting | | | | | | | | | N/A |
| | | Mile | | | 0 00 | | | | | |
| 27.27 | Work Zone Safety | | | | | | | | | MOT as required |
| | | | 0 125 | 40 25 | 5 03 | | | | | |
| 27.28 | Miscellaneous Surveys | | | | | | | | | |
| | | | | | 0 00 | | 0 00 | | 0 00 | |
| **Survey Subtotal** | | | | **Crew Days** | **45** | **Field Support Hours** | **57** | **Office Support Hours** | **121** | |

| Task No. | Task | Units | No of Units | Field Crew Days/Unit | Crew Days | Field Support Hours / Crew Days | Field Support Hours | Office Support Hours / Crew Days | Office Support Hours | Comments |
|---|---|---|---|---|---|---|---|---|---|---|
| 27.29 | Supplemental Surveys | | | | | | | | | THE % FOR SUPPLEMENTAL WILL BE DETERMINED AT NEGOTIATIONS. THIS ITEM CAN ONLY BE USED IF AUTHORIZED IN WRITING BY THE DISTRICT SURVEYOR |
| | | | | 45 | 0 | | 0 | | 0 | |
| 27.30 | Document Research | Units | | | | | | | | Research Plats and Deeds to establish R/W Lines as needed |
| | | | | | | | | | 0 | |
| 27.31 | Field Reviews | Units | | | | | | | | |
| | | | | | | | | | 0 | |
| 27.32 | Technical Meetings | LS | | | | | | | | |
| | | | | | | | | | 0 | |
| 27.33 | Quality Assurance / Quality Control | LS | | | | | | | | |
| | | | | | | | | 5% | 6 | |
| 27.34 | Supervision | LS | | | | | | | | |
| | | | | | | | | 5% | 9 | |
| 27.35 | Coordination | LS | | | | | | | | |
| | | | | | | | | 3% | 4 | |
| | | | 27. Survey Total | Crew Days | 45 | Field Support Hours | 57 | Office Support Hours | 140 | |

SPLS =

PLS =

Office Support =

Total Hours = 197

| Technical Meetings | Units | No of Units | Hours/ Unit | Total Hours | PM Attendance at Meeting Required? | Number |
|---|---|---|---|---|---|---|
| Kickoff Meeting with FDOT | EA | 0 | 0 | 0 | | 0 |
| Baseline Approval Review | EA | 0 | 0 | 0 | | 0 |
| Network Control Review | EA | 0 | 0 | 0 | | 0 |
| Vertical Control Review | EA | 0 | 0 | 0 | | 0 |
| Local Governments (cities, counties) | EA | 0 | 0 | 0 | | 0 |
| Final Submittal Review | EA | 0 | 0 | 0 | | 0 |
| Other Meetings | EA | 0 | 0 | 0 | | 0 |
| **Subtotal Technical Meetings** | | | | **0** | **Subtotal PM Meetings** | **0** |
| Progress Meetings (if required by FDOT) | EA | 0 | 0 | 0 | ** | -- |
| Phase Review Meetings | EA | 0 | 0 | 0 | ** | -- |
| **Total Meetings** | | | | **0** | **Total PM Mtgs (carries to Tab 3)** | **0** |

Carries to 27.12 Carries to Tab 3

Note:

Survey crew days are based on a 3 Man (10 hour day)

**** Project Manager attendance at progress, phase and field review meetings are manually entered on General Task 3**

# ESTIMATE OF WORK EFFORT AND COST - SUBCONSULTANT

Name of Project: Harts Bridge Modification D-B DCP/RFP
County: Duval
FPN: P-11-18
FAP No.: 1/0/1900

Consultant Name: Peters and Yaffee, Inc.
Consultant No.:
Date: 7/1/2019
Estimator: Russell Yaffee, PE, PTOE

| Staff Classification | Total Staff Hours From "SH Summary Form" | Principal | Project Manager | Senior Engineer | Project Engineer | Engineering Intern | Designer | Designer Associate | Secretary /Clerical | Staff Classification 9 | Staff Classification 10 | Staff Classification 11 | Staff Classification 12 | SH By Activity | Salary Cost By Activity | Average Rate Per Task |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $83.86 | $67.20 | $66.11 | $42.40 | $30.13 | $26.20 | $17.99 | $23.31 | $0.00 | $0.00 | $0.00 | $0.00 | | | |
| 3. Project General and Project Common Tasks | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0 | #DIV/0! |
| 4. Roadway Analysis | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0 | #DIV/0! |
| 5. Roadway Plans | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0 | #DIV/0! |
| 6a. Drainage Analysis | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0 | #DIV/0! |
| 6b. Drainage Plans | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0 | #DIV/0! |
| 7. Utilities | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0 | #DIV/0! |
| 8. Environmental Permits, Compliance & Clearances | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0 | #DIV/0! |
| 9. Structures - Misc. Tasks, Dwgs, Non-Tech. | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0 | #DIV/0! |
| 10. Structures - Bridge Development Report | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0 | #DIV/0! |
| 11. Structures - Temporary Bridge | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0 | #DIV/0! |
| 12. Structures - Short Span Concrete Bridge | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0 | #DIV/0! |
| 13. Structures - Medium Span Concrete Bridge | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0 | #DIV/0! |
| 14. Structures - Structural Steel Bridge | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0 | #DIV/0! |
| 15. Structures - Segmental Concrete Bridge | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0 | #DIV/0! |
| 16. Structures - Movable Span | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0 | #DIV/0! |
| 17. Structures - Retaining Walls | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0 | #DIV/0! |
| 18. Structures - Miscellaneous | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0 | #DIV/0! |
| 19. Signing & Pavement Marking Analysis | 210 | 11 | 21 | 32 | 42 | 53 | 32 | 17 | 4 | 0 | 0 | 0 | 0 | 212 | $9,064 | $42.76 |
| 20. Signing & Pavement Marking Plans | 74 | 4 | 7 | 11 | 15 | 19 | 11 | 6 | 1 | 0 | 0 | 0 | 0 | 74 | $3,161 | $42.72 |
| 21. Signalization Analysis | 527 | 26 | 53 | 79 | 105 | 132 | 79 | 42 | 11 | 0 | 0 | 0 | 0 | 527 | $22,476 | $42.65 |
| 22. Signalization Plans | 222 | 11 | 22 | 33 | 44 | 56 | 33 | 18 | 4 | 0 | 0 | 0 | 0 | 221 | $9,417 | $42.61 |
| 23. Lighting Analysis | 530 | 27 | 53 | 80 | 106 | 133 | 80 | 42 | 11 | 0 | 0 | 0 | 0 | 532 | $22,724 | $42.71 |
| 24. Lighting Plans | 174 | 9 | 17 | 26 | 35 | 44 | 26 | 14 | 3 | 0 | 0 | 0 | 0 | 174 | $7,429 | $42.69 |
| 25. Landscape Architecture Analysis | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0 | #DIV/0! |
| 26. Landscape Architecture Plans | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0 | #DIV/0! |
| 27. Survey (Field & Office Support) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0 | #DIV/0! |
| 28. Photogrammetry | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0 | #DIV/0! |
| 29. Mapping | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0 | #DIV/0! |
| 30. Terrestrial Mobile LiDAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0 | #DIV/0! |
| 31. Architecture Development | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0 | #DIV/0! |
| 32. Noise Barriers Impact Design Assessment | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0 | #DIV/0! |
| 33. Intelligent Transportation Systems Analysis | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0 | #DIV/0! |
| 34. Intelligent Transportation Systems Plans | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0 | #DIV/0! |
| 35. Geotechnical | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0 | #DIV/0! |
| 36. 3D Modeling | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0 | #DIV/0! |
| **Total Staff Hours** | 1,737 | 88 | 173 | 261 | 347 | 437 | 261 | 139 | 34 | 0 | 0 | 0 | 0 | 1,740 | | |
| **Total Staff Cost** | | $7,379.68 | $11,625.60 | $17,254.71 | $14,712.80 | $13,166.81 | $6,838.20 | $2,500.61 | $792.54 | $0.00 | $0.00 | $0.00 | $0.00 | | **$74,270.95** | **$42.68** |

Check = $74,270.95

| | | |
|---|---|---|
| TOTAL DIRECT LABOR: | | $74,270.95 |
| OVERHEAD: | 175% | $129,974.16 |
| SUBTOTAL: Labor + Overhead | | $204,245.11 |
| PROFIT: | 10% | $20,424.51 |
| MISCELLANEOUS DIRECT COSTS: | | $0.00 |
| **TOTAL LUMP SUM AMOUNT:** | | **$224,669.62** |

## Project Activity 19: Signing and Pavement Marking Analysis

Estimator:

Harts Bridge Modification D-B DCP/RFP

P-11--18

| Representing | Print Name | Signature / Date |
|---|---|---|
| FDOT District | | |
| Consultant Name | | |

***NOTE: Signature Block is optional, per District preference***

| Task No. | Task | Units | No. of Units | Hours/ Units | Total Hours | Comments |
|---|---|---|---|---|---|---|
| 19.1 | Traffic Data Analysis | LS | 1 | 0 | 0 | n/a (covered in original fee) |
| 19.2 | No Passing Zone Study | LS | 1 | 0 | 0 | n/a |
| 19.3 | Reference and Master Design File | LS | 1 | 100 | 100 | Original Contract and Amendment 1 had 225 hrs) The Striping design for the current layout was completed previously. The Signing design for the current layout along with all of the labeling for both the Striping and Signing will need to be completed for this submittal. Work required to complete this submittal = 30 hrs setup + plus 40 hrs per mile + 7 signals at 4 hrs per signal (30 + (1.04 x 40) + 28) = 100 hrs |
| 19.4 | Multi-Post Sign Support Calculations | EA | 4 | 4 | 16 | (Amendment 1 had 2 MP Signs for 4 hrs each ) - 4 Additional signs are required - 4 signs x 4 hrs = 16 hrs |
| 19.5 | Sign Panel Design Analysis | EA | 4 | 4 | 16 | (Original Contract had 18 signs at 4 hrs each) - 4 Additional signs are required - 4 signs x 4 hrs = 16 hrs |
| 19.6 | Sign Lighting/Electrical Calculations | EA | 2 | 2 | 4 | (Not included in Original Contract or Amendment 1) - 2 sign panel will require lighting calculations - 2 signs x 2 hrs = 4 hrs |
| 19.7 | Quantities | LS | 1 | 30 | 30 | (Amendment 1 Included 9 Plan Sheets at 4 hrs each) - 3 Additional Sheets are required and the original 9 sheets will require the addition of the small signs and modifications to the original striping - (3 sheets x 4 hrs + 9 Sheets x 2 hrs) = 30 hrs |
| 19.8 | Cost Estimate | LS | 1 | 12 | 12 | 2 Cost Estimate at 6 hrs each |
| 19.9 | Technical Special Provisions and Modified Special Provisions | LS | 1 | 0 | 0 | n/a |
| 19.10 | Other Signing and Pavement Marking | LS | 1 | 0 | 0 | n/a |
| | **Signing and Pavement Marking Analysis Technical Subtotal** | | | | **178** | |
| 19.11 | Field Reviews | LS | 1 | 8 | 8 | 1 Field Review x 2 people x 4 hrs (Review Exsiting Signage) |
| 19.12 | Technical Meetings | LS | 1 | 0 | 0 | Meetings are listed below |
| 19.13 | Quality Assurance/Quality Control | LS | % | 5% | 9 | |
| 19.14 | Independent Peer Review | LS | % | 0% | 0 | |
| 19.15 | Supervision | LS | % | 5% | 9 | |
| | **Signing and Pavement Marking Analysis Nontechnical Subtotal** | | | | **26** | |
| 19.16 | Coordination | LS | % | 3% | 6 | |
| | **19. Signing and Pavement Marking Analysis Total** | | | | **210** | |

## Project Activity 19: Signing and Pavement Marking Analysis

| Task No. | Task | Units | No. of Units | Hours/ Units | Total Hours | Comments | | |
|---|---|---|---|---|---|---|---|---|
| | **Technical Meetings** | **Units** | **No of Units** | **Hours/ Unit** | **Total Hours** | **Comments** | **PM Attendance at Meeting Required?** | **Number** |
| | Sign Panel Design | EA | 0 | 0 | 0 | | | 0 |
| | Queue Length Analysis | EA | 0 | 0 | 0 | | | 0 |
| | Local Governments (cities, counties) | EA | 0 | 0 | 0 | | | 0 |
| | Other Meetings | EA | 0 | 0 | 0 | | | 0 |
| | **Subtotal Technical Meetings** | | | | **0** | | **Subtotal Project Manager Meetings** | **0** |
| | Progress Meetings (if required by FDOT) | EA | 0 | 0 | 0 | PM attendance at Progress Meetings is manually entered on General Task 3 | | - - |
| | Phase Review Meetings | EA | 0 | 0 | 0 | PM attendance at Phase Review Meetings is manually entered on General Task 3 | | - - |
| | **Total Meetings** | | | | **0** | | **Total Project Manager Meetings (carries to Tab 3)** | **0** |

Carries to PY 12 Carries to Tab 3

## Project Activity 20: Signing and Pavement Marking Plans

Estimator:

Harts Bridge Modification D-B DCP/RFP
P-11--18

| Representing | Print Name | Signature / Date |
|---|---|---|
| FDOT District | | |
| Consultant Name | | |

***NOTE: Signature Block is optional, per District preference***

| Task No. | Task | Scale | Units | No of Units | Hours/ Unit | No. of Sheets | Total Hours | Comments |
|---|---|---|---|---|---|---|---|---|
| 20 1 | Key Sheet | | Sheet | 0 | 0 | 0 | 0 | n/a (Included in Amendment 1) |
| 20 2 | Summary of Pay Items Including TRNS+Port Input | | LS | 0 | 0 | | 0 | n/a |
| 20 3 | Tabulation of Quantities | | Sheet | 3 | 8 | 3 | 24 | 3 TOQ Sheets Required (12 hrs for first + 6 hrs for each additional) = 12 + 12 = 24 hrs |
| 20 4 | General Notes/Pay Item Notes | | Sheet | 0 | 0 | 0 | 0 | n/a (Included in Amendment 1) |
| 20 5 | Project Layout | | Sheet | 0 | 0 | 0 | 0 | n/a |
| 20 6 | Plan Sheet | | Sheet | 7 | 4 | 7 | 28 | (9 Plan Sheets included in Amendment 1) 7 new plans sheets are required - 7 sheets x 4 hrs = 28 hrs |
| 20 7 | Typical Details | | EA | 0 | 0 | | 0 | n/a |
| 20 8 | Guide Sign Worksheet(s) | | EA | 4 | 2 | 0 | 8 | (Original Contract had 18 signs at 2 hrs each) - 4 Additional signs are required - 4 signs x 2 hrs = 8 hrs |
| 20 9 | Traffic Monitoring Site | | EA | 0 | 0 | | 0 | n/a |
| 20 10 | Cross Sections | | EA | 0 | 0 | 0 | 0 | n/a (Included in Amendment 1) |
| 20 11 | Special Service Point Details | | EA | 1 | 8 | | 8 | 1 Detail needed for the 2 overhead sign panels that require lighting |
| 20 12 | Special Details | | LS | 1 | 0 | | 0 | n/a |
| 20 13 | Interim Standards | | LS | 1 | 0 | | 0 | n/a |
| | **Signing and Pavement Marking Plans Technical Subtotal** | | | | | **10** | **68** | |
| 20 14 | Quality Assurance/Quality Control | | LS | % | 5% | | 3 | |
| 20 15 | Supervision | | LS | % | 5% | | 3 | |
| | **20. Signing and Pavement Marking Plans Total** | | | | | **10** | **74** | |

## Project Activity 21: Signalization Analysis

Estimator:

Harts Bridge Modification D-B DCP/RFP

P-11-18

| Representing | Print Name | Signature / Date |
|---|---|---|
| FDOT District | | |
| Consultant Name | | |

***NOTE: Signature Block is optional, per District preference***

| Task No. | Task | Units | No. of Units | Hours/ Units | Total Hours | Comments |
|---|---|---|---|---|---|---|
| 21.1 | Traffic Data Collection | LS | 1 | 0 | 0 | n/a |
| 21.2 | Traffic Data Analysis | PI | 6 | 6 | 36 | (Amendment 1 Included 3 Signals - Bay Steet East at Gator Bowl, Bay Steet West at Gator Bowl and Metro Park at Gator Bowl) Only the signal at Metro Park at Gator Bowl is unchanged with the current layout and does not require redesign. 5 additional full signal design are required - Gator Bowl at APR, Gator Bowl at Commodore Point West Approach, Gator Bowl at WJTC TV Entrance, Gator Bowl at Gator Bowl South, Gator Bowl at Commodore Point East Approach. 1 signal modification required at Gator Bowl South at Talleyrand. This task includes determining signal operation plan, intersection geometry, local signal timings, pre-emption phasing and timings, forecasting traffic, intersection analysis run, etc. per intersection.( 6 intersections x 6 hrs = 36 hrs) |
| 21.3 | Signal Warrant Study | LS | 1 | 0 | 0 | n/a |
| 21.4 | System Timings | LS | 0 | 0 | 0 | n/a (Included in Amendment 1) |
| 21.5 | Reference and Master Signalization Design File | LS | 1 | 224 | 224 | (Amendment 1 Included 3 Signals - Bay Steet East at Gator Bowl, Bay Steet West at Gator Bowl and Metro Park at Gator Bowl) Only the signal at Metro Park at Gator Bowl is unchanged with the current layout and does not require redesign. 5 additional full signal design are required - Gator Bowl at APR, Gator Bowl at Commodore Point West Approach, Gator Bowl at WJTC TV Entrance, Gator Bowl at Gator Bowl South, Gator Bowl at Commodore Point East Approach. 1 signal modification required at Gator Bowl South at Talleyrand. This task includes all efforts required per intersection for establishing the signal master design file to include reference files of topo, r/w, roadway, pavement markings, utilities files, etc. Includes the design and layout of proposed signal poles, signal heads, loops, pedestrian signals, conduit, pull boxes, service points, etc. Also includes proposed call outs, pay item numbers, loop detector chart, controller timing chart, signal/ pedestrian head details, sign details, controller notes, signal operating plan, etc (5 full signal designs x 40 hrs each + 1 signal modification x 24 hrs each = 224 hrs |
| 21.6 | Reference and Master Interconnect Communication Design File | LS | 1 | 33 | 33 | (Not included in Original Contract or Amendment 1) This task includes all efforts required for establishing the signal interconnect master design file to include reference files of topo, r/w, roadway, utilities files etc. Includes design and layout of proposed signal interconnect conduit, signal cabinet, pull boxes, etc (8 hours for setup and up to 24 hours per mile) = 8 hrs + 24 x 1.04 = 33 hrs |
| 21.7 | Overhead Street Name Sign Design | EA | 10 | 2 | 20 | (Not included in Original Contract or Amendment 1) Includes effort to evaluate overhead street name sign, lettering, description, street block numbers, and information to develop the layout of the sign. (10 signs required x 2 hrs per sign = 20 hrs |
| 21.8 | Pole Elevation Analysis | LS | 1 | 3 | 3 | (Amendment 1 Included 4 hrs) Additional effort required Includes 3 additional hours |
| 21.9 | Traffic Signal Operation Report | LS | 1 | 0 | 0 | n/a |
| 21.10 | Quantities | LS | 1 | 12 | 12 | (Amendment 1 Included 16 hrs) 12 additional hours required |
| 21.11 | Cost Estimate | LS | 1 | 12 | 12 | 2 Cost Estimate at 6 hrs each |

## Project Activity 21: Signalization Analysis

| | | | | | | |
|---|---|---|---|---|---|---|
| 21.12 | Technical Special Provisions and Modified Special Provisions | LS | 1 | 48 | 48 | (6 Required - Controller/Cabinet, Ethernet Field Switch, CCTVs, Microwave Detection, BlueTOAD and UPS) 6 TSPs x 8 Hrs = 48 hrs |
| 21.13 | Other Signalization Analysis | LS | 1 | 48 | 48 | Removal of LUS equipment for the reversible lanes at 8 locations (Bay St./Gator Bowl Blvd. at A. Philip Randolph Blvd. , Gator Bowl Blvd. at Georgia St./LUS 11, Gator Bowl Blvd. at Lot J – West Entrance/LUS 12, Gator Bowl Blvd. at LUS 13 east of Lot J – West Entrance, Gator Bowl Blvd. at Metropolitan Park/Lot J – East Entrance, Gator Bowl Blvd. at LUS 14 near Lot F – West Entrance, Gator Bowl Blvd. at LUS 15 west of Lot F – East Entrance and Gator Bowl Blvd. at LUS 16 west of Talleyrand Ave.) 8 Locations x 6 hrs each = 48 hrs |
| | **Signalization Analysis Technical Subtotal** | | | | **436** | |
| 21.14 | Field Reviews | LS | 1 | 24 | 24 | 2 Field Review x 2 people x 6 hrs |
| 21.15 | Technical Meetings | LS | 1 | 8 | 8 | Meetings are listed below |
| 21.16 | Quality Assurance/Quality Control | LS | % | 5% | 22 | |
| 21.17 | Independent Peer Review | LS | % | 0% | 0 | |
| 21.18 | Supervision | LS | % | 5% | 22 | |
| | **Signalization Analysis Nontechnical Subtotal** | | | | **76** | |

## Project Activity 21: Signalization Analysis

| | | | | | | |
|---|---|---|---|---|---|---|
| 21.19 | Coordination | LS | % | 3% | 15 | |
| | | | | 21. Signalization Analysis Total | 527 | |

| Technical Meetings | Units | No of Units | Hours/ Unit | Total Hours | Comments | PM Attendance at Meeting Required? | Number |
|---|---|---|---|---|---|---|---|
| FDOT Traffic Operations | EA | 0 | 0 | 0 | | | 0 |
| FDOT Traffic Design | EA | 0 | 0 | 0 | | | 0 |
| Power Company (service point coordination) | EA | 0 | 0 | 0 | n/a ( Included in Amenment 1) | | 0 |
| Maintaining Agency (cities, counties) | EA | 2 | 4 | 8 | | | 0 |
| Railroads | EA | 0 | 0 | 0 | | | 0 |
| Other Meetings | EA | 0 | 0 | 0 | | | 0 |
| **Subtotal Technical Meetings** | | | | 8 | | **Subtotal Project Manager Meetings** | 0 |
| Progress Meetings (if required by FDOT) | EA | 0 | 0 | 0 | PM attendance at Progress Meetings is manually entered on General Task 3 | | - - |
| Phase Review Meetings | EA | 0 | 0 | 0 | PM attendance at Phase Review Meetings is manually entered on General Task 3 | | - - |
| **Total Meetings** | | | | 8 | | **Total Project Manager Meetings (carries to Tab 3)** | 0 |

Carries to 21.15 Carries to Tab 3

## Project Activity 22: Signalization Plans

Estimator:

Harts Bridge Modification D-B DCP/RFP
P-11--18

| Representing | Print Name | Signature / Date |
|---|---|---|
| FDOT District | | |
| Consultant Name | | |

***NOTE: Signature Block is optional, per District preference***

| Task No. | Task | Scale | Units | No of Units | Hours/ Unit | No. of Sheets | Total Hours | Comments |
|---|---|---|---|---|---|---|---|---|
| 22.1 | Key Sheet | | Sheet | 0 | 0 | 0 | 0 | n/a (Included in Amendment 1) |
| 22.2 | Summary of Pay Items Including Designer Interface (TRNS•Port) Input | | Sheet | 0 | 0 | 0 | 0 | n/a |
| 22.3 | Tabulation of Quantities | | Sheet | 1 | 6 | 1 | 6 | (Amendment 1 Included 8 hrs) 6 additional hours needed for the addition of Interconnect plans and LUS Removal |
| 22.4 | General Notes/Pay Item Notes | | Sheet | 0 | 0 | 0 | 0 | n/a (Included in Amendment 1) |
| 22.5 | Plan Sheet | | Sheet | 6 | 4 | 6 | 24 | 6 new plan sheets required (5 New Signals and 1 Signal Modification) |
| 22.6 | Interconnect Plans | | Sheet | 4 | 0 | 4 | 0 | (Not included in Original Contract or Amendment 1) 4 Interconnect Plan Sheets Required |
| 22.7 | Traffic Monitoring Site | | EA | 0 | 0 | | 0 | n/a |
| 22.8 | Guide Sign Worksheet | | EA | 10 | 1 | | 10 | (Not included in Original Contract or Amendment 1) 10 Street Name Signs Required |
| 22.9 | Special Details | | Sheet | 15 | 8 | 15 | 120 | (Not included in Original Contract or Amendment 1) 15 Special Detail Sheets required (1 Misc. Detail Sheet, 3 Pedestrian Detail Sheets, 3 LUS Removal Sheets, 1 CCTV/BlueTOAD Connection Detail Sheets and 7 Fiber Optic Splicing Detail Sheets) |
| 22.10 | Special Service Point Details | | EA | 0 | 0 | | 0 | n/a |
| 22.11 | Mast Arm/Monotube Tabulation Sheet | | PI | 5 | 2 | | 10 | 5 additional Intersections (5 intersections x 2 hrs = 10 hrs) |
| 22.12 | Strain Pole Schedule | | PI | 0 | 0 | | 0 | n/a |
| 22.13 | TCP Signal (Temporary) | | EA | 0 | 0 | | 0 | n/a |
| 22.14 | Temporary Detection Sheet | | PI | 0 | 0 | | 0 | n/a |
| 22.15 | Utility Conflict Sheet | | Sheet | 4 | 8 | 4 | 32 | 4 UC Sheets needed |
| 22.16 | Interim Standards | | LS | 1 | 0 | | 0 | n/a |
| | | | | | **Signalization Plans Technical Subtotal** | **30** | **202** | |
| 22.17 | Quality Assurance/Quality Control | | LS | % | 5% | | 10 | |
| 22.18 | Supervision | | LS | % | 5% | | 10 | |
| | | | | | **22. Signalization Plans Total** | **30** | **222** | |

## Project Activity 23: Lighting Analysis

Estimator:

Harts Bridge Modification D-B DCP/RFP
P-11--18

| Representing | Print Name | Signature / Date |
|---|---|---|
| FDOT District | | |
| Consultant Name | | |

***NOTE: Signature Block is optional, per District preference***

| Task No. | Task | Units | No. of Units | Hours/ Units | Total Hours | Comments |
|---|---|---|---|---|---|---|
| 23.1 | Lighting Justification Report | LS | 1 | 0 | 0 | n/a |
| 23.2 | Lighting Design Analysis Report | LS | 1 | 128 | 128 | Includes analysis and point-by-point photo metrics of typical section, poles, luminaire, wind loading, underdeck, pedestrian, rest area, sign, highmast or conventional and hardware criteria. The lighting design analysis report includes a description of the applicable FDOT Lighting Design Criteria that will be used for the project, including the pole nominal height, luminaire photometric distribution type, arm length, pole arrangement and location. It includes the cost comparison between conventional and high mast (if necessary). The report shall include the evaluation of lighting design alternatives and a recommendation on the alternative to use. The alternatives shall consider different pole heights, spacing, lamp wattage. Includes the lighting calculations for each lighted sign to comply with AASHTO criteria. Corridor Lighting: 80 hours + 8 hours for each signalized intersection lighting design = 80 hrs + 8 hrs x 6 signalized intersections = 128 hrs |
| 23.3 | Aeronautical Evaluation | LS | 1 | 0 | 0 | n/a |
| 23.4 | Voltage Drop Calculations | EA | 4 | 4 | 16 | Voltage drop calculation for each circuit - Assume 4 Circuits = 4 x 4 hrs = 16 hrs |
| 23.5 | FDEP Coordination and Report | LS | 1 | 0 | 0 | n/a |
| 23.6 | Reference and Master Design Files | LS | 1 | 245 | 245 | Establishing the lighting master design file to include all applicable reference files. This includes all work to create elements showing the alignment in plan view. Includes design and layout of proposed light poles, conductors and conduit runs, load center locations, pull box, service points, electrical service feed, and efforts required for drafting and clean up of reference files. Corridor Lighting - 25 hours for set up, and 90 hours per mile including ramps and cross roads + 16 hours for each signalized intersection lighting design = (1.04 miles Mainline + 0.34 miles Bridge/Wall Mount = 1.38 total miles) = 25 set up + (1.38 miles x 90 hrs/mile) + (6 signalized intersections x 16 hrs) = 245 hrs |
| 23.7 | Temporary Lighting | LS | 1 | 0 | 0 | n/a |
| 23.8 | Design Documentation | LS | 1 | 16 | 16 | Design Documentation |
| 23.9 | Quantities | LS | 1 | 30 | 30 | Determine the quantities for each plan sheet included on the various quantity sheets. (2 hrs per plan sheet) 15 plan sheets x 2 hrs = 30 hrs |
| 23.10 | Cost Estimate | LS | 1 | 12 | 12 | 2 Cost Estimates x 6 hrs = 12 hrs |
| 23.11 | Technical Special Provisions and Modified Special Provisions | LS | 1 | 0 | 0 | n/a |
| 23.12 | Other Lighting Analysis | LS | 1 | 0 | 0 | n/a |
| | | **Lighting Analysis Technical Subtotal** | | | **447** | |
| 23.13 | Field Reviews | LS | 1 | 16 | 16 | 2 Reviews x 2 People x 4 hrs |

## Project Activity 23: Lighting Analysis

| | | | | | | |
|---|---|---|---|---|---|---|
| 23.14 | Technical Meetings | LS | 1 | 8 | 8 | |
| 23.15 | Quality Assurance/Quality Control | LS | % | 5% | 22 | |
| 23.16 | Independent Peer Review | LS | % | 0% | 0 | |
| 23.17 | Supervision | LS | % | 5% | 22 | |
| | | | | **Lighting Analysis Nontechnical Subtotal** | **68** | |
| 23.18 | Coordination | LS | % | 3% | 15 | |
| | | | | **23. Lighting Analysis Total** | **530** | |

## Project Activity 23: Lighting Analysis

| Technical Meetings | Units | No of Units | Hours/ Unit | Total Hours | Comments | PM Attendance at Meeting Required? | Number |
|---|---|---|---|---|---|---|---|
| FDOT Lighting Design | EA | 0 | 0 | 0 | | | 0 |
| FDOT Traffic Design | EA | 0 | 0 | 0 | | | 0 |
| Power Company (service point coordination) | EA | 1 | 2 | 2 | | | 0 |
| Maintaining Agency (cities, counties) | EA | 2 | 3 | 6 | | | 0 |
| Airport authority | EA | 0 | 0 | 0 | | | 0 |
| FDEP Lighting (coast areas) | EA | 0 | 0 | 0 | | | 0 |
| Other Meetings | EA | 0 | 0 | 0 | | | 0 |
| **Subtotal Technical Meetings** | | | | **8** | | **Subtotal Project Manager Meetings** | **0** |
| Progress Meetings (if required by FDOT) | EA | 0 | 0 | 0 | PM attendance at Progress Meetings is manually entered on General Task 3 | | - - |
| Phase Review Meetings | EA | 0 | 0 | 0 | PM attendance at Phase Review Meetings is manually entered on General Task 3 | | - - |
| **Total Meetings** | | | | **8** | | **Total Project Manager Meetings (carries to Tab 3)** | **0** |

Carries to 23.14 Carries to Tab 3

# 24. Lighting Plans

Estimator

Harts Bridge Modification D-B DCP/RFP
P-11--18

| Representing | Print Name | Signature / Date |
|---|---|---|
| FDOT District | | |
| Consultant Name | | |

***NOTE: Signature Block is optional, per District preference***

| Task No. | Task | Scale | Units | No. of Units | Hours/ Unit | No. of Sheets | Total Hours | Comments |
|---|---|---|---|---|---|---|---|---|
| 24 1 | Key Sheet | | Sheet | 1 | 4 | 1 | 4 | 1 KS Required |
| 24 2 | Summary of Pay Items Including Designer Interface (TRNS•Port) Input | | Sheet | 0 | 0 | 0 | 0 | n/a |
| 24 3 | Tabulation of Quantities | | Sheet | 2 | 9 | 2 | 18 | 2 TOQ Sheets Required (12 hrs for first Sheet and 6 for the second sheet) = 18 hrs |
| 24 4 | General Notes/Pay Item Notes | | Sheet | 1 | 4 | 1 | 4 | 1 GN Sheet |
| 24 5 | Pole Data, Legend and Criteria | | Sheet | 4 | 10 | 4 | 40 | 4 Sheets Required x 10 hrs = 40 hrs |
| 24 6 | Service Point Details | | Sheet | 1 | 8 | 1 | 8 | 1 Service Pole Detail Sheet |
| 24 7 | Project Layout | | Sheet | 0 | 0 | 0 | 0 | n/a |
| 24 8 | Plan Sheet | | Sheet | 15 | 4 | 15 | 60 | 15 Plan Sheets at 40 Scale x 4 hrs = 60 hrs |
| 24 9 | Special Details | | Sheet | 2 | 12 | 2 | 24 | 2 Special Detail Sheets |
| 24.10 | Temporary Lighting Data and Details | | Sheet | 0 | 0 | 0 | 0 | n/a |
| 24.11 | Traffic Control Plan Sheets | | Sheet | 0 | 0 | 0 | 0 | n/a |
| 24 12 | Interim Standards | | LS | 1 | 0 | | 0 | n/a |
| | | | | | **Lighting Plans Technical Subtotal** | **26** | **158** | |
| 24 13 | Quality Assurance/Quality Control | | LS | % | 5% | | 8 | |
| 24 14 | Supervision | | LS | % | 5% | | 8 | |
| | | | | | **24. Lighting Plans Total** | **26** | **174** | |

# 35. Geotechnical

Estimator:

Enter project name & description

999999-1-52-01

| Representing | Print Name | Signature / Date |
|---|---|---|
| | | |
| Terracon Consultants, Inc. | | |

***NOTE: Signature Block is optional, per District preference***

| Task No. | Task | Units | No of Units | Hours/ Unit | Total Hours | Comments |
|---|---|---|---|---|---|---|
| | **Roadway** | | | | | |
| 35.1 | Document Collection and Review | LS | 1 | 8 | 8 | |
| 35.2 | Develop Detailed Boring Location Plan | LS | 1 | 2 | 2 | |
| 35.3 | Stake Borings/Utility Clearance | Boring | 0 | 0 | 0 | Roadway Borings completed in previous phase |
| 35.4 | Muck Probing | Crew Day | 1 | 4 | 4 | |
| 35.5 | Coordinate and Develop MOT Plans for Field Investigation | EA | 1 | 6 | 6 | |
| 35.6 | Drilling Access Permits | Location | 0 | 0 | 0 | |
| 35.7 | Property Clearances | EA | 0 | 0 | 0 | |
| 35.8 | Groundwater Monitoring | EA | 0 | 0 | 0 | |
| 35.9 | LBR/Resilient Modulus Sampling | EA | 1 | 6 | 6 | |
| 35.10 | Coordination of Field Work | 100 lf of boring | 0 | 0 | 0 | |
| 35.11 | Soil and Rock Classification - Roadway | 100 lf of boring | 0 | 0 | 0 | |
| 35.12 | Design LBR | LS | 1 | 8 | 8 | |
| 35.13 | Laboratory Data | 100 lf of boring | 0 | 0 | 0 | |
| 35.14 | Seasonal High Water Table | Boring | 89 | 1 | 89 | 89 Total Roadway Borings already performed |
| 35.15 | Parameters for Water Retention Areas | EA | 0 | 0 | 0 | |
| 35.16 | Delineate Limits of Unsuitable Material | Cross-section | 10 | 4 | 40 | Organics Anticipated along entire cooridor |
| 35.17 | Electronic Files for Cross-Sections | 100 lf of boring | 16 | 2 | 32 | 1620 feet of Roadway borings |
| 35.18 | Embankment Settlement and Stability | Embankment Boring | 10 | 4 | 40 | |
| 35.19 | Monitor Existing Structures | LS | 1 | 4 | 4 | |

## 35. Geotechnical

| Task No. | Task | Units | No of Units | Hours/ Unit | Total Hours | Comments |
|---|---|---|---|---|---|---|
| 35.20 | Stormwater Volume Recovery and/or Background Seepage Analysis | EA | 0 | 0 | 0 | |
| 35.21 | Geotechnical Recommendations | LS | 1 | 40 | 40 | |
| 35.22 | Pavement Condition Survey and Pavement Evaluation Report | LS | 1 | 0 | 0 | Pavement Cores Already Collected |
| 35.23 | Preliminary Roadway Report | LS | 1 | 0 | 0 | Preliminary Roadway/Data Report already completed |
| 35.24 | Final Report | EA | 1 | 60 | 60 | |
| 35.25 | Auger Boring Drafting | 100 lf boring | 4 8 | 4 | 19 | 480 feet of augers |
| 35.26 | SPT Boring Drafting | 100 lf boring | 11 4 | 6 | 68 | 1140 feet of SPT |
| | | | | **Roadway Geotechnical Subtotal** | **426** | |
| | **Structures** | | | | | |
| 35.27 | Develop Detailed Boring Location Plan | LS | 1 | 0 | 0 | |
| 35.28 | Stake Borings/Utility Clearance | Boring | 6 | 0 5 | 3 | 6 borings for Temporary Sheet Pile Wall still to be drilled |
| 35.29 | Coordinate and Develop MOT Plans for Field Investigation | EA | 1 | 8 | 8 | MOT will be necessary in the right lane in downtown Jacksonville |
| 35.30 | Drilling Access Permits | Location | 0 | 0 | 0 | |
| 35.31 | Property Clearances | EA | 0 | 0 | 0 | |
| 35.32 | Collection of Corrosion Samples | EA | 0 | 0 | 0 | |
| 35.33 | Coordination of Field Work | 100 lf of boring | 2 4 | 0 5 | 1 | 240 feet of drilling |
| 35.34 | Soil and Rock Classification - Structures | 100 lf of boring | 2.4 | 2 5 | 6 | 240 feet of drilling |
| 35.35 | Tabulation of Laboratory Data | 100 lf of boring | 2.4 | 1 | 2 | 240 feet of drilling |
| 35.36 | Estimate Design Groundwater Level for Structures | EA | 5 | 1 | 5 | 6 borings for Temporary Sheet Pile Wall still to be drilled |
| 35.37 | Selection of Foundation Alternatives (BDR) | Bridge boring | 0 | 0 | 0 | |
| 35.38 | Detailed Analysis of Selected Foundation Alternate(s) | Bridge boring | 3 | 12 | 36 | Analyses for 3 bridge borings performed by CSI Geo in previous phase |
| 35.39 | Bridge Construction and Testing Recommendations | Bridge boring | 3 | 3 | 9 | |
| 35.40 | Lateral Load Analysis (Optional) | Bridge boring | 0 | 0 | 0 | Duplication of Structural Effort? |
| 35.41 | Walls | Wall Boring | 19 | 2 | 38 | 19 Wall Borings Previously Drilled by CSI Geo |
| 35.42 | Sheet Pile Wall Analysis (Optional) | Wall Boring | 11 | 3 | 33 | 11 combined borings for sheet pile wall analysis |
| 35.43 | Design Soil Parameters for Signs, Signals, High Mast Lights, and Strain Poles and Geotechnical Recommendations | Boring | 15 | 1 5 | 23 | 13 Mast Arm and 2 Sign Structures |

## 35. Geotechnical

| Task No. | Task | Units | No of Units | Hours/ Unit | Total Hours | Comments |
|---|---|---|---|---|---|---|
| 35.44 | Box Culvert Analysis | EA | 0 | 0 | 0 | |
| 35.45 | Preliminary Report - BDR | EA | 0 | 0 | 0 | |
| 35.46 | Final Report - Bridge and Associated Walls | EA | 2 | 60 | 120 | 1 Report for each Bridge |
| 35.47 | Final Reports - Signs, Signals, Box Culvert, Walls and High Mast Lights | EA | 2 | 40 | 80 | 1 Report for Miscellaneous Structures and 1 Report for Walls |
| 35.48 | SPT Boring Drafting | 100 lf of boring | 15.4 | 5 | 77 | 1540 total linear feet of drilling to be drafted |
| 35.49 | Other Geotechnical | LS | 1 | 0 | 0 | |
| | | | | **Structural Geotechnical Subtotal** | **441** | |
| | | | | **Geotechnical Technical Subtotal** | **867** | |
| 35.50 | Technical Special Provisions and Modified Special Provisions | EA | 1 | 40 | 40 | |
| 35.51 | Field Reviews | LS | 1 | 0 | 0 | |
| 35.52 | Technical Meetings | LS | 1 | 40 | 40 | Meetings listed below |
| 35.53 | Quality Assurance/Quality Control | LS | % | 3% | 26 | |
| 35.54 | Supervision | LS | % | 3% | 26 | |
| | | | | **Geotechnical Nontechnical Subtotal** | **132** | |
| 35.55 | Coordination | LS | % | 3% | 30 | |
| | | | | **35. Geotechnical Total** | **1029** | |

| Technical Meetings | Units | No of Units | Hours/ Unit | Total Hours | Comments | PM Attendance at Meeting Required? | Number |
|---|---|---|---|---|---|---|---|
| Kickoff Meeting with FDOT | EA | 0 | 0 | 0 | | | 0 |
| Boring Layout Approval | EA | 0 | 0 | 0 | | | 0 |
| Attend in BDR Review Meeting | EA | 0 | 0 | 0 | | | 0 |
| 30/60/90% Submittal Review | EA | 1 | 40 | 40 | Terracon is only submitting the 90% for Review | | 0 |
| Other Meetings | EA | 0 | 0 | 0 | | | 0 |
| **Subtotal Technical Meetings** | | | | **40** | | **Subtotal Project Manager Meetings** | **0** |
| Progress Meetings (if required by FDOT) | EA | 0 | 0 | 0 | PM attendance at Progress Meetings is manually entered on General Task 3 | | - - |
| Phase Review Meetings | EA | 0 | 0 | 0 | PM attendance at Phase Review Meetings is manually entered on General Task 3 | | - - |
| **Total Meetings** | | | | **40** | | **Total Project Manager Meetings (carries to Tab 3)** | **0** |

Carries to 35.18 Carries to Tab 3

| Hart Bridge Expressway Modifications - Independent Peer Review (New Spans 35 and 91 & Existing Steel Structure adjacent to New Span 35) | | |
|---|---|---|
| Item No. | Peer Reviewed Item per FDM 121.12 | Anticipated HOURS |
| 1 | Compatibility of bridge geometry with roadway geometrics including typical sections, horizontal alignment, and vertical alignment. Minimum lateral offsets and vertical clearance requirements | 4 |
| 2 | Compatibility of construction phasing with Traffic Control Plans | 4 |
| 3 | Conflicts with underground and overhead utilities | 2 |
| 4 | Compliance with AASHTO, Department and FHWA design requirements | 2 |
| 5 | Conformity to Department Standard Plans | 2 |
| 6 | Structural Analysis Methodology, design assumptions, and independent confirmation of design results | 116 |
| 7 | Design results/recommendations (independent verification of the design). | 80 |
| 8 | Completeness and accuracy of bridge plans | 24 |
| 9 | Technical Special Provisions, and Modified Special Provisions where necessary | 0 |
| 10 | Constructability assessment limited to looking at fatal flaws in design approach | 24 |
| 11 | A tabulated list of all review comments from the independent review engineer and responses from the originator of the design | 8 |
| 12 | 90% Submittal: A standard peer review certification letter following the format presented in Form 121-B (see FDM 103) signed by the independent review engineer. All outstanding/unresolved comments and issues presented in this letter are required to be resolved and implemented prior to the 100% plans submittal. | 4 |
| 13 | 100% Submittal: A certification letter following the format presented in Form 121-C (see FDM 103) signed and sealed by the independent review engineer stating that all review comments have been adequately addressed and that the design is in compliance with all Department and FHWA requirements. | 6 |

Total 276

# ESTIMATE OF WORK EFFORT AND COST - PRIME CONSULTANT

Name of Project: Hart Bridge Expwy Modification - Independent Peer Review
County: Duval
FPN: 999999-1-52-01
FAP No.: 54321

Consultant Name: CONSOR Engineers, LLC
Consultant No.: enter consultants proj number
Date: 7/9/2019
Estimator: Christopher Howard, PE

| Staff Classification | Total Staff Hours From "SH Summary - | Project Manager | Senior Engineer | Project Engineer | Staff Classification 4 | Staff Classification 5 | Staff Classification 6 | Staff Classification 7 | Staff Classification 8 | Staff Classification 9 | Staff Classification 10 | Staff Classification 11 | Staff Classification 12 | SH By Activity | Salary Cost By Activity | Average Rate Per Task |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | $94.71 | $73.18 | $48.70 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | | | |
| 3. Project General and Project Common Tasks | 6 | 3 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | $504 | $83.95 |
| 4. Roadway Analysis | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0 | #DIV/0! |
| 5. Roadway Plans | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0 | #DIV/0! |
| 6a. Drainage Analysis | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0 | #DIV/0! |
| 6b. Drainage Plans | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0 | #DIV/0! |
| 7. Utilities | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0 | #DIV/0! |
| 8. Environmental Permits, Compliance & Clearances | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0 | #DIV/0! |
| 9. Structures - Misc. Tasks, Dwgs, Non-Tech. | 276 | 28 | 193 | 55 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 276 | $19,454 | $70.49 |
| 10. Structures - Bridge Development Report | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0 | #DIV/0! |
| 11. Structures - Temporary Bridge | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0 | #DIV/0! |
| 12. Structures - Short Span Concrete Bridge | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0 | #DIV/0! |
| 13. Structures - Medium Span Concrete Bridge | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0 | #DIV/0! |
| 14. Structures - Structural Steel Bridge | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0 | #DIV/0! |
| 15. Structures - Segmental Concrete Bridge | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0 | #DIV/0! |
| 16. Structures - Movable Span | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0 | #DIV/0! |
| 17. Structures - Retaining Walls | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0 | #DIV/0! |
| 18. Structures - Miscellaneous | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0 | #DIV/0! |
| 19. Signing & Pavement Marking Analysis | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0 | #DIV/0! |
| 20. Signing & Pavement Marking Plans | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0 | #DIV/0! |
| 21. Signalization Analysis | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0 | #DIV/0! |
| 22. Signalization Plans | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0 | #DIV/0! |
| 23. Lighting Analysis | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0 | #DIV/0! |
| 24. Lighting Plans | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0 | #DIV/0! |
| 25. Landscape Architecture Analysis | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0 | #DIV/0! |
| 26. Landscape Architecture Plans | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0 | #DIV/0! |
| 27. Survey (Field & Office Support) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0 | #DIV/0! |
| 28. Photogrammetry | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0 | #DIV/0! |
| 29. Mapping | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0 | #DIV/0! |
| 30. Terrestrial Mobile LiDAR | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0 | #DIV/0! |
| 31. Architecture Development | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0 | #DIV/0! |
| 32. Noise Barriers Impact Design Assessment | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0 | #DIV/0! |
| 33. Intelligent Transportation Systems Analysis | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0 | #DIV/0! |
| 34. Intelligent Transportation Systems Plans | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0 | #DIV/0! |
| 35. Geotechnical | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0 | #DIV/0! |
| 36. 3D Modeling | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | $0 | #DIV/0! |
| **Total Staff Hours** | 282 | 31 | 196 | 55 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 282 | | |
| **Total Staff Cost** | | $2,936.01 | $14,343.28 | $2,678.50 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | $0.00 | | $19,957.79 | $70.77 |

Check = $19,957.79

## Project Activity 3: General Tasks

Estimator

Hart Bridge Expwy Modification - Independent Peer Review

999999-1-52-01

| Representing | Print Name | Signature / Date |
|---|---|---|
| FDOT District | | |
| Consultant Name | | |

***NOTE: Signature Block is optional, per District preference***

| Task No. | Task | Units | No of Units | Hours/ Unit | Total Hours | Comments |
|---|---|---|---|---|---|---|
| 3.1 | Public Involvement | | | | | |
| 3.1.1 | Community Awareness Plan | LS | 1 | 0 | 0 | |
| 3.1.2 | Notifications | LS | 1 | 0 | 0 | |
| 3.1.3 | Prepare Mailing Lists | LS | 1 | 0 | 0 | |
| 3.1.4 | Median Modification Letters | LS | 1 | 0 | 0 | |
| 3.1.5 | Driveway Modification Letters | LS | 1 | 0 | 0 | |
| 3.1.6 | Newsletters | LS | 1 | 0 | 0 | |
| 3.1.7 | Renderings and Fly Throughs | LS | 1 | 0 | 0 | |
| 3.1.8 | PowerPoint Presentation | LS | 1 | 0 | 0 | |
| 3.1.9 | Public Meeting Preparations | LS | 1 | 0 | 0 | |
| 3.1.10 | Public Meeting Attendance/Followup | LS | 1 | 0 | 0 | |
| 3.1.11 | Other Agency Meetings | LS | 1 | 0 | 0 | |
| 3.1.12 | Web Site | LS | 1 | 0 | 0 | |
| | | | **3.1 Public Involvement Subtotal** | | **0** | |
| 3.2 | Joint Project Agreements | EA | 0 | 0 | 0 | |
| 3.3 | Specifications Package Preparation | LS | 1 | 0 | 0 | |
| 3.4 | Contract Maintenance and Project Documentation | LS | 1 | 6 | 6 | Execute Subagreement (2hr), Maintenance (2 mnths x 2hr/mnth) |
| 3.5 | Value Engineering (Multi-Discipline Team) Review | LS | 1 | 0 | 0 | |
| 3.6 | Prime Consultant Project Manager Meetings | LS | 1 | 0 | 0 | See listing below |
| 3.7 | Plans Update | LS | 1 | 0 | 0 | |

## Project Activity 3: General Tasks

| Task No. | Task | Units | No of Units | Hours/ Unit | Total Hours | Comments |
|---|---|---|---|---|---|---|
| 3.8 | Post Design Services | LS | 1 | 0 | 0 | |
| 3.9 | Digital Delivery | LS | 1 | 0 | 0 | |
| 3.10 | Risk Assessment Workshop | LS | 1 | 0 | 0 | |
| 3.11 | Railroad, Transit, and/or Airport Coordination | LS | 1 | 0 | 0 | |
| 3.11.1 | Aeronautical Evaluation | LS | 1 | 0 | 0 | |
| 3.12 | Landscape and Existing Vegetation Coordination | LS | 1 | 0 | 0 | |
| 3.13 | Other Project General Tasks | LS | 1 | 0 | 0 | |
| | **3. Project Common and Project General Tasks Total** | | | | **6** | |

| **3.6 - List of Project Manager Meetings** | **Units** | **No of Units** | **Hours/ Unit** | **Total Hours** | **Comments** |
|---|---|---|---|---|---|
| Roadway Analysis | EA | 0 | 0 | 0 | |
| Drainage | EA | 0 | 0 | 0 | |
| Utilities | EA | 0 | 0 | 0 | |
| Environmental | EA | 0 | 0 | 0 | |
| Structures | EA | 0 | 0 | 0 | |
| Signing & Pavement Marking | EA | 0 | 0 | 0 | |
| Signalization | EA | 0 | 0 | 0 | |
| Lighting | EA | 0 | 0 | 0 | |
| Landscape Architecture | EA | 0 | 0 | 0 | |
| Survey | EA | 0 | 0 | 0 | |
| Photogrammetry | EA | 0 | 0 | 0 | |
| ROW & Mapping | EA | 0 | 0 | 0 | |
| Terrestrial Mobile LiDAR | EA | 0 | 0 | 0 | |
| Architecture | EA | 0 | 0 | 0 | |
| Noise Barriers | EA | 0 | 0 | 0 | |
| ITS Analysis | EA | 0 | 0 | 0 | |
| Geotechnical | EA | 0 | 0 | 0 | |
| Progress Meetings | EA | 0 | 0 | 0 | |
| Phase Reviews | EA | 0 | 0 | 0 | |
| Field Reviews | EA | 0 | 0 | 0 | |
| **Total Project Manager Meetings** | | **0** | | **0** | Total PM Meeting Hours carries to Task 3.6 above |

**Notes:**

1. **If the hours per meeting vary in length (hours) enter the average in the hour/unit column.**
2. **Do not double count agency meetings between permitting agencies.**
3. **Project manager meetings are calculated in each discipline sheet and brought forward to Column D, except for Photogrammetry.**

## Project Activity 9: Structures Summary and Miscellaneous Tasks and Drawings

Estimator:

Hart Bridge Expwy Modification - Independent Peer Review

999999-1-52-01

| Representing | Print Name | Signature / Date |
|---|---|---|
| FDOT District | | |
| Consultant Name | | |

***NOTE: Signature Block is optional, per District preference***

| Task No. | Task | Units | Design and Production Staffhours | | | | Comments |
|---|---|---|---|---|---|---|---|
| | | | No. of Units | Hours per Unit | No. of Sheets | Total | |
| | **General Drawings** | | | | | | |
| 9.1 | Key Sheet and Index of Drawings | Sheet | 0 | 0 | 0 | 0 | |
| 9.2 | Project Layout | Sheet | 0 | 0 | 0 | 0 | |
| 9.3 | General Notes and Bid Item Notes | Sheet | 0 | 0 | 0 | 0 | |
| 9.4 | Miscellaneous Common Details | Sheet | 0 | 0 | 0 | 0 | |
| 9.5 | Incorporate Report of Core Borings | Sheet | 0 | 0 | 0 | 0 | |
| 9.6 | Standard Plans- Bridges | LS | 1 | 0 | | 0 | |
| 9.7 | Existing Bridge Plans | LS | 1 | 0 | | 0 | |
| 9.8 | Assemble Plan Summary Boxes and Quantities | LS | 1 | 0 | | 0 | |
| 9.9 | Cost Estimate | LS | 1 | 0 | | 0 | |
| 9.10' | Technical Special Provisions and Modified Special Provisions | LS | 1 | 0 | | 0 | |
| | **Structures - Summary and Miscellaneous Tasks and Drawings** | | | | 0 | 0 | |

| Task No. | Task | Total | Task 10 | Task 11 | Task 12 | Task 13 | Task 14 | Task 15 | Task 16 | Task 17 | Task 18 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 10-16 | Bridge 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | |
| 10-16 | Bridge 2 | 0 | | | | | | | | | |
| 10-16 | Bridge 3 | 0 | | | | | | | | | |
| 10-16 | Bridge 4 | 0 | | | | | | | | | |
| 10-16 | Bridge 5 | 0 | | | | | | | | | |
| 10-16 | Bridge 6 | 0 | | | | | | | | | |

## Project Activity 9: Structures Summary and Miscellaneous Tasks and Drawings

| | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 10-16 | Bridge 7 | 0 | | | | | | | | | |
| 10-16 | Bridge 8 | 0 | | | | | | | | | |
| 10-16 | Bridge 9 | 0 | | | | | | | | | |
| 10-16 | Bridge 10 | 0 | | | | | | | | | |
| 17 | Retaining Walls | 0 | | | | | | | | 0 | |
| 18 | Miscellaneous Structures | 0 | | | | | | | | | 0 |
| | **Structures Technical Subtotal** | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |

| Task No. | Task | Units | No. of Units | Hours per Unit | Total | Comments |
|---|---|---|---|---|---|---|
| 9.11 | Field Reviews | LS | 1 | 0 | 0 | |
| 9.12 | Technical Meetings | LS | 1 | 0 | 0 | Meetings are listed below |
| 9.13 | Quality Assurance/Quality Control | LS | % | 0% | 0 | |
| 9.14 | Independent Peer Review | LS | 1 | 276 | 276 | See attached Speadsheet |
| 9.15 | Supervision | LS | % | 0% | 0 | |
| | **Structures Nontechnical Subtotal** | | | | 276 | |
| 9.16 | Coordination | LS | 1 | 0 | 0 | |
| | **9. Structures - Summary and Miscellaneous Tasks and Drawings** | | | | 276 | |

| Technical Meetings | Units | No of Units | Hours/ Unit | Total Hours | Comments | PM Attendance at Meeting Required? | Number |
|---|---|---|---|---|---|---|---|
| BDR Coordination/Review | EA | 0 | 0 | 0 | | | 0 |
| 90/100% Comment Review | EA | 0 | 0 | 0 | | | 0 |
| Aesthetics Coordination | EA | 0 | 0 | 0 | | | 0 |
| Regulatory Agency | EA | 0 | 0 | 0 | | | 0 |
| Local Governments (cities, counties) | EA | 0 | 0 | 0 | | | 0 |
| Utility Companies | EA | 0 | 0 | 0 | | | 0 |
| Other Meetings | EA | 0 | 0 | 0 | | | 0 |
| **Subtotal Technical Meetings** | | | | 0 | | | 0 |
| Progress Meetings (if required by FDOT) | EA | 0 | 0 | 0 | *PM attendance at Progress Meetings is manually entered on General Task 3* | | - - |
| Phase Review Meetings | EA | 0 | 0 | 0 | *PM attendance at Phase Review Meetings is manually entered on General Task 3* | | - - |
| **Total Meetings** | | | | 0 | **Total Project Manager Meetings (carries to Tab 3)** | | **0** |

Carries to 9.11

Carries to Tab 3

| Hart Bridge Expressway Modifications - Independent Peer Review (New Spans 35 and 91 & Existing Steel Structure adjacent to New Span 35) | | |
|---|---|---|
| Item No. | Peer Reviewed Item per FDM 121.12 | Anticipated HOURS |
| 1 | Compatibility of bridge geometry with roadway geometrics including typical sections, horizontal alignment, and vertical alignment. Minimum lateral offsets and vertical clearance requirements | 4 |
| 2 | Compatibility of construction phasing with Traffic Control Plans | 4 |
| 3 | Conflicts with underground and overhead utilities | 2 |
| 4 | Compliance with AASHTO, Department and FHWA design requirements | 2 |
| 5 | Conformity to Department Standard Plans | 2 |
| 6 | Structural Analysis Methodology, design assumptions, and independent confirmation of design results | 116 |
| 7 | Design results/recommendations (independent verification of the design). | 80 |
| 8 | Completeness and accuracy of bridge plans | 24 |
| 9 | Technical Special Provisions, and Modified Special Provisions where necessary | 0 |
| 10 | Constructability assessment limited to looking at fatal flaws in design approach | 24 |
| 11 | A tabulated list of all review comments from the independent review engineer and responses from the originator of the design | 8 |
| 12 | 90% Submittal: A standard peer review certification letter following the format presented in Form 121-B (see FDM 103) signed by the independent review engineer. All outstanding/unresolved comments and issues presented in this letter are required to be resolved and implemented prior to the 100% plans submittal. | 4 |
| 13 | 100% Submittal: A certification letter following the format presented in Form 121-C (see FDM 103) signed and sealed by the independent review engineer stating that all review comments have been adequately addressed and that the design is in compliance with all Department and FHWA requirements. | 6 |
| | Total | 276 |