Legislative ID# 160175B

MAY 6, 2016

EXHIBIT A

CITY OF GAINESVILLE
every path starts with passion
FLORIDA

SCOPE OF SERVICES

FOR

FINANCIAL PROJECT ID(S). 211365-04-32-01

SCOPE OF SERVICES FOR CONSULTING ENGINEERING SERVICES

SOUTHWEST 62ND BOULEVARD FOUR LANE CONNECTOR

This Exhibit forms an integral part of the agreement between the City of Gainesville (hereinafter referred to as the CITY), Florida Department of Transportation (hereinafter referred to as the DEPARTMENT or FDOT) and HNTB Corporation (hereinafter referred to as the CONSULTANT) relative to the transportation facility described as follows:

Financial Project ID: ***211365-04- 32-01***

Federal Aid Project No.: ***S12500R2***

County Section No.: ***n/a***

Description: ***Southwest 62nd Boulevard Connector from Southwest 43rd Street to Southwest 20th Avenue***

Bridge No(s).: ***not yet assigned***

Rail Road Crossing No: ***N/A***

1 PURPOSE

The purpose of this Exhibit is to describe the scope of work and the responsibilities of the CONSULTANT and the CITY in connection with the design and preparation of a complete set of construction contract documents and incidental engineering services, as necessary, for improvements to the transportation facility described herein.

Known alternative construction contracting methods include: N/A

The general objective is for the CONSULTANT to prepare a set of preliminary plans, specifications, supporting engineering analysis, calculations and other technical documents in accordance with FDOT policy, procedures and requirements. These Contract documents will be used to obtain permits and complete right-of-way maps for the acquisition of right of way needed for the roadway, bridge and stormwater ponds identified in the preliminary plans. The CONSULTANT shall follow a systems engineering process to ensure that all required project components are included to meet the objectives of this project.

The Scope of Services establishes which items of work in the City of Gainesville's design standards, FDOT Plans Preparation Manual and other pertinent manuals are specifically prescribed to accomplish the work included in this contract, and also indicate which items of work will be the responsibility of the CONSULTANT and/or the CITY.

The CONSULTANT shall be aware that as a project is developed, certain modifications and/or improvements to the original concepts may be required. The CONSULTANT shall incorporate these refinements into the design and consider such refinements to be an

anticipated and integral part of the work. The refinements are anticipated to minor refinements and will not include major changes in the proposed typical section (rural vs. urban) or alignment. Major changes shall be a basis for a supplemental fee request(s). The basis of the fee proposal is attached to this scope of work.

The CONSULTANT shall demonstrate good project management practices while working on this project. These include communication with the CITY and others as necessary, management of time and resources, and documentation. The CONSULTANT shall set up and maintain throughout the design of the project a contract file in accordance with CITY procedures. CONSULTANTs are expected to know the laws and rules governing their professions and are expected to provide services in accordance with current regulations, codes and ordinances and recognized standards applicable to such professional services. The Consultant shall provide qualified technical and professional personnel to perform to CITY standards and procedures, the duties and responsibilities assigned under the terms of this agreement. The Consultant shall minimize to the maximum extent possible the CITY's need to apply its own resources to assignments authorized by the CITY.

The CITY will provide contract administration, management services, and technical reviews of all work associated with the development and preparation of the deliverables for this project. The CITY's technical reviews are for high-level conformance and are not meant to be comprehensive reviews. The CONSULTANT shall be fully responsible for all work performed and work products developed under this Scope of Services. The CITY may provide job-specific information and/or functions as outlined in this contract, if favorable.

2 PROJECT DESCRIPTION

The CONSULTANT shall investigate the status of the project and become familiar with concepts and commitments (typical sections, alignments, etc.) developed from prior studies and/or activities. If a Preliminary Engineering Report is available from a prior or current Project Development and Environmental (PD&E) study, the CONSULTANT shall use the approved concepts as a basis for the design unless otherwise directed by the CITY.

The proposed Interim Build Alternative – two lane rural section.

2.1 Project General and Roadway (Activities 3, 4, and 5)

Public Involvement: ***N/A***

Other Agency Presentations/Meetings: ***N/A***

Joint Project Agreements: ***N/A***

Specification Package Preparation: ***N/A***

Value Engineering: ***N/A***

Risk Assessment Workshop: ***N/A***

Plan Type: ***Phase II (50%) roadway plans***

Typical Section: ***two lane rural section with 5-ft shoulders and a 12-ft multi-use path***

Pavement Design: ***One pavement design***

Pavement Type Selection Report(s): ***N/A (asphalt pavement)***

Cross Slope: ***N/A (new construction)***

Access Management Classification: ***Class 5***

Transit Route Features: ***Bus stop locations to be provided by RTS. (8-ft by 5-ft landing pads). Sidewalk and multi-use path alignment will be adjusted to avoid additional right of way acquisition..***

Major Intersections/Interchanges: ***Southwest 43rd Street***

Roadway Alternative Analysis: ***N/A***

Level of TCP Plans: ***N/A***.

Temporary Lighting: ***N/A***

Temporary Signals: ***N/A***

Temporary Drainage: ***N/A***

Design Variations/Exceptions: ***N/A***

Back of Sidewalk Profiles: ***N/A***

2.2 Drainage (Activities 6a and 6b)

System Type: ***Rural with treatment swales within the proposed right of way. Three ponds and one floodplain compensation pond will be constructed. The number of cross drains will be determined during final design. One bridge crossing over the Hogtown Creek.***

2.3 Utilities Coordination (Activity 7)

The CONSULTANT is responsible to certify that all necessary arrangements for utility work on this project have been made and will not conflict with the physical construction schedule. The CONSULTANT should coordinate with CITY personnel to coordinate transmittals to Utility Companies and meet production schedules.

The CONSULTANT shall ensure FDOT standards, policies, procedures, practices, and design criteria are followed concerning utility coordination.

The CONSULTANT may employ more than one individual or utility engineering consultant to provide utility coordination and engineering design expertise. The CONSULTANT shall identify a dedicated person responsible for managing all utility coordination activities. This person shall be contractually referred to as the Utility Coordination Manager and shall be identified in the CONSULTANT proposal. The Utility Coordination Manager shall be required to satisfactorily demonstrate to the FDOT District Utilities Administrator that they have the following knowledge, skills, and expertise:

A minimum of 4 years of experience performing utility coordination in accordance with FDOT, Federal Highway Administration (FHWA), and American Association of State Highway and Transportation Officials (AASHTO) standards, policies, and procedures.

A thorough knowledge of the FDOT plans production process and District utility coordination process.

A thorough knowledge of FDOT agreements, standards, policies, and procedures.

The Utility Coordination Manager shall be responsible for managing all utility coordination, including the following:

Assuring that Utility Coordination and accommodation is in accordance to the FDOT, FHWA, and AASHTO standards, policies, procedures, and design criteria.

Assisting the engineer of record in identifying all existing utilities and coordinating any new installations. Assisting the Engineer of Record with resolving utility conflicts.

Scheduling and performing utility coordination meetings, keeping and distribution of minutes/action items of all utility meetings, and ensuring expedient follow-up on all unresolved issues.

Distributing all plans, conflict matrixes and changes to affected utility owners and making sure this information is properly coordinated and documented.

Utility Owners

Utility Owner	Contact Information
AT&T Long Distance	Sunil Parray 904-578-8000 sparray@pea-inc.net
AT&T Florida	George Johnson 352-371-5280 GJ9815@att.com
City of Gainesville Traffic Operations	Travis Law 352-334-2155 lawtg@cityofgainesville.com
Cox Communications	Gary Harell 352-337-2052 gary.Harrell@cox.com
Duke Energy Transmission	Francis Castro 813-909-1210 jewilliams@ucseng.com
Gainesville Regional Utilities (GRU) Communications	Mike Chappell 352-393-6923 chappellmr@gru.com
GRU Electric	Kelly McCoy 352-344-6063 mccoyka@gru.com
GRU Gas	Philip Lancaster 352-334-6078 lancasterod@gru.com
GRU Water/Wastewater	Tony Cunningham 352-393-1615 cunninghaal@gru.com

2.4 Environmental Permits, Compliances, and Clearances (Activity 8)

SJRWMD, FDEP Sovereign and Submerged Lanes(TIFTT), NPDES, ACOE, CITY

The CITY will provide compensatory wetland mitigation in accordance with Section 373.4137, Florida Statutes.

2.5 Structures (Activities 9 – 18)

Bridge(s): ***Proposed bridge over Hogtown Creek***

Type of Bridge Structure Work: Abbreviated BDR

The final retaining wall depths and width will be based on the under the bridge approaches will be based on the determination of the100-year floodplain elevation and the final bridge and roadway on permanent retaining wall typical section (two lane).

Summary of Retaining Walls for Approaches to Hogtown Creek Bridge

Factor	Wall 1	Wall 2	Wall 3	Wall 4	Wall 5	Wall 6
Description	South approach. west side	South approach, north side	In lieu of spill slope	North approach, west side	South approach, east side	In lieu of spill slope
Recommendation	MSE	MSE	MSE	MSE	MSE	MSE

Notes:
(1) Mechanically Stabilized Earth (MSE) retaining walls.
(2) The side walls are located at the back of sidewalk (northbound lanes only). Limited area is available for maintenance.
(3) The side walls retain sidewalk.
(4) The leveling pad for each wall will be located below the 100-year flood elevation in some locations.
(5) Each wall is in a fill condition.

Noise Barrier Walls:

N/A

Miscellaneous: ***Miscellaneous retaining (gravity) walls may be required to minimize and avoid R/W and environmental impact. No structural design will be performed.***

2.6 Signing and Pavement Markings (Activities 19 & 20)

2.7 Signalization (Activities 21 & 22)

N/A

2.8 Lighting (Activities 23 & 24)

N/A

2.9 Landscape Architecture (Activities 25 & 26)

N/A

2.10 Survey (Activity 27)

Design Survey: ***as shown on the Concept Plans, plus 25-ft outside of the proposed R/W limits shown.***

Subsurface Utility Exploration: ***N/A***

Right of Way Survey: ***as shown on the Concept Plans, plus 25-ft outside of the proposed R/W limits shown.***

2.11 Photogrammetry (Activity 28)

N/A

2.12 Mapping (Activity 29)

Control Survey Map: ***as shown on the Concept Plans***

Right of Way Map: ***as shown on the Concept Plans,***

Legal Descriptions: ***as shown on the Concept Plans***

Maintenance Map: ***N/A***

Miscellaneous Items: ***N/A***

2.13 Terrestrial Mobile LiDAR (Activity 30)

N/A

2.14 Architecture (Activity 31)

N/A

2.15 Noise Barriers (Activity 32)

N/A

2.16 Intelligent Transportation Systems (Activities 33 & 34)

2.17 Geotechnical (Activity 35)

As shown on the attached boring plan

2.18 Project Schedule

Within ten (10) days after the Notice-To-Proceed, and prior to the CONSULTANT beginning work, the CONSULTANT shall provide a detailed project activity/event schedule for CITY and CONSULTANT scheduled activities required to meet the current CITY Production Date. The schedule shall be based upon the ***attached schedule***. The schedule shall be accompanied by an anticipated payout and fiscal progress curve. For the purpose of scheduling, the CONSULTANT shall allow for a ***three*** week review time for each phase submittal and any other submittals as appropriate.

The schedule shall indicate all required submittals.

The fees and price proposals are based on the negotiated schedule of ***14*** months. However, the contract deadline is ***24*** months from the Notice to Proceed.

Periodically, throughout the life of the contract, the project schedule and payout and fiscal progress curves shall be reviewed and, with the approval of the CITY, adjusted as necessary to incorporate changes in the Scope of Services and progress to date.

The approved schedule and schedule status report, along with progress and payout curves, shall be submitted with the monthly progress report.

The schedule shall be submitted in an FDOT system-compatible format.

2.19 Submittals

The CONSULTANT shall furnish construction contract documents as required by the CITY to adequately control, coordinate, and approve the work concepts. The CONSULTANT shall distribute submittals as directed by the CITY. The CITY will determine the specific number of copies required prior to each submittal.

2.20 Provisions for Work

All work shall be prepared with English units in accordance with the latest editions of standards and requirements utilized by the CITY which include, but are not limited to, publications such as:

- General
  - Title 29, Part 1910, Standard 1910.1001, Code of Federal Regulations (29 C.F.R. 1910.1001) – Asbestos Standard for Industry, U.S. Occupational Safety and Health Administration (OSHA)
  - 29 C.F.R. 1926.1101 – Asbestos Standard for Construction, OSHA
  - 40 C.F.R. 61, Subpart M - National Emission Standard for Hazardous Air Pollutants (NESHAP), Environmental Protection Agency (EPA)
  - 40 C.F.R. 763, Subpart E – Asbestos-Containing Materials in Schools, EPA
  - 40 C.F.R. 763, Subpart G – Asbestos Worker Protection, EPA
  - Americans with Disabilities Act (ADA) Standards for Accessible Design
  - AASHTO – A Policy on Design Standards Interstate System
  - AASHTO – Roadside Design Guide
  - AASHTO – Roadway Lighting Design Guide

- AASHTO – A Policy for Geometric Design of Highways and Streets
- AASHTO – Highway Safety Manual
- Rule Chapter 5J-17, Florida Administrative Code (F.A.C.), Minimum Technical Standards for Professional Surveyors and Mappers
- Chapter 469, Florida Statutes (F.S.) – Asbestos Abatement
- Rule Chapter 62-257, F.A.C., Asbestos Program
- Rule Chapter 62-302, F.A.C., Surface Water Quality Standards
- Code of Federal Regulations (C.F.R.)
- Florida Administrative Codes (F.A.C.)
- Chapters 20, 120, 215, 455, Florida Statutes (F.S.) – Florida Department of Business & Professional Regulations Rules
- Florida Department of Environmental Protection Rules
- FDOT Basis of Estimates Manual
- FDOT Computer Aided Design and Drafting (CADD) Manual
- FDOT Design Standards
- FDOT Flexible Pavement Design Manual
- FDOT - Florida Roundabout Guide
- FDOT Handbook for Preparation of Specifications Package
- FDOT Instructions for Design Standards
- FDOT Instructions for Structures Related Design Standards
- FDOT Manual of Uniform Minimum Standards for Design, Construction and Maintenance for Streets and Highways (“Florida Greenbook”)
- FDOT Materials Manual
- FDOT Pavement Type Selection Manual
- FDOT Plans Preparation Manual
- FDOT Procedures and Policies
- FDOT Project Development and Environmental Manual
- FDOT Project Traffic Forecasting Handbook
- FDOT Public Involvement Handbook
- FDOT Rigid Pavement Design Manual
- FDOT Standard Specifications for Road and Bridge Construction
- FDOT Utility Accommodation Manual
- Federal Highway Administration (FHWA) - Manual on Uniform Traffic Control Devices (MUTCD)
- FHWA – National Cooperative Highway Research Program (NCHRP) Report 672, Roundabouts: An Informational Guide
- FHWA Roadway Construction Noise Model (RCNM) and Guideline Handbook
- Florida Fish and Wildlife Conservation Commission - Standard Manatee Construction Conditions 2005
- Florida Statutes (F.S.)
- Florida’s Level of Service Standards and Guidelines Manual for Planning
- Model Guide Specifications – Asbestos Abatement and Management in Buildings, National Institute for Building Sciences (NIBS)
- Quality Assurance Guidelines
- Safety Standards

2 PROJECT DESCRIPTION

- Any special instructions from the DEPARTMENT

- Roadway
  - FDOT – Florida Intersection Design Guide
  - FDOT - Project Traffic Forecasting Handbook
  - FDOT - Quality/Level of Service Handbook
  - Florida's Level of Service Standards and Highway Capacity Analysis for the SHS
  - Transportation Research Board (TRB) - Highway Capacity Manual
- Permits
  - Chapter 373, F.S. – Water Resources
  - US Fish and Wildlife Service Endangered Species Programs
  - Florida Fish and Wildlife Conservation Commission Protected Wildlife Permits
  - Bridge Permit Application Guide, COMDTPUB P16591.3C
  - Building Permit
- Drainage
  - FDOT Bridge Hydraulics Handbook
  - FDOT Culvert Handbook
  - FDOT Drainage Manual
  - FDOT Erosion and Sediment Control Manual
  - FDOT Exfiltration Handbook
  - FDOT Hydrology Handbook
  - FDOT Open Channel Handbook
  - FDOT Optional Pipe Materials Handbook
  - FDOT Storm Drain Handbook
  - FDOT Stormwater Management Facility Handbook
  - FDOT Temporary Drainage Handbook
  - FDOT Drainage Connection Permit Handbook
  - FDOT Bridge Scour Manual
- Survey and Mapping
  - All applicable Florida Statutes and Administrative Codes
  - Applicable Rules, Guidelines Codes and authorities of other Municipal, County, State and Federal Agencies.
  - FDOT Aerial Surveying Standards for Transportation Projects Topic 550-020-002
  - FDOT Right of Way Mapping Handbook
  - FDOT Surveying Procedure Topic 550-030-101
  - Florida Department of Transportation Right of Way Procedures Manual
  - Florida Department of Transportation Surveying Handbook
  - Right of Way Mapping Procedure 550-030-015
- Traffic Engineering and Operations and ITS
  - AASHTO - An Information Guide for Highway Lighting

- AASHTO - Guide for Development of Bicycle Facilities
- FHWA Standard Highway Signs Manual
- FDOT Manual on Uniform Traffic Studies (MUTS)
- FDOT Median Handbook
- FDOT Traffic Engineering Manual
- National Electric Safety Code
- National Electrical Code

- Florida's Turnpike Enterprise
  - Florida's Turnpike Plans Preparation and Practices Handbook (TPPPH)
  - Florida's Turnpike Lane Closure Policy
  - Florida's Turnpike Drainage Manual Supplement
  - Rigid Pavement Design Guide for Toll Locations with Electronic Toll Collection
  - Flexible Pavement Design Guide for Toll Locations with Electronic Toll Collection
  - Florida's Turnpike General Tolling Requirements (GTR)
  - Additional Florida's Turnpike Enterprise standards, guides, and policies for design and construction can be found on the FTE Design Website: http://design.floridasturnpike.com

- Traffic Monitoring
  - American Institute of Steel Construction (AISC) Manual of Steel Construction, referred to as "AISC Specifications"
  - American National Standards Institute (ANSI) RP-8-00 Recommended Practice for Roadway Lighting
  - AASHTO AWS D1.1/ANSI Structural Welding Code – Steel
  - AASHTO D1.5/AWS D1.5 Bridge Welding Code
  - FHWA Traffic Detector Handbook
  - FDOT General Interest Roadway Data Procedure
  - FHWA Traffic Monitoring Guide
  - FDOT's Traffic/Polling Equipment Procedures

- Structures
  - AASHTO Load and Resistance Factor Design (LRFD) Bridge Design Specifications and Interims
  - AASHTO LRFD Movable Highway Bridge Design Specifications and Interims
  - AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires and Traffic Signals, and Interims.
  - AASHTO/-AWS-D1. 5M/D1.5: An American National Standard Bridge Welding Code
  - AASHTO Guide Specifications for Structural Design of Sound Barriers
  - AASHTO Manual for Condition Evaluation and Load and Resistance Factor Rating (LRFR) of Highway Bridges
  - FDOT Bridge Load Rating Manual
  - FDOT Structures Manual

2 PROJECT DESCRIPTION

- FDOT Structures Design Bulletins (available on FDOT Structures web site only)

- Geotechnical
  - FHWA Checklist and Guidelines for Review of Geotechnical Reports and Preliminary Specifications
  - Manual of Florida Sampling and Testing Methods
  - Soils and Foundation Handbook

- Landscape Architecture
  - Florida Department of Agriculture and Consumer Services Grades and Standards for Nursery Plants

- Architectural
  - Building Codes
  - Florida Building Code:
    - Building
    - Fuel Gas
    - Mechanical
    - Plumbing
    - Existing Building
  - Florida Accessibility Code for Building Construction
  - Rule Chapter 60D, F.A.C., Division of Building Construction
  - Chapter 553, F.S. – Building Construction Standards
  - ANSI A117.1 2003 Accessible and Usable Building and Facilities
  - Titles II and III, Americans With Disabilities Act (ADA), Public Law 101-336; and the ADA Accessibility Guidelines (ADAAG)

- Architectural – Fire Codes and Rules
  - National Fire Protection Association (NFPA) - Life Safety Code
  - NFPA 70 - National Electrical Code
  - NFPA 101 - Life Safety Code
  - NFPA 10 - Standard for Portable Fire Extinguishers
  - NFPA 11 - Standard for Low-Expansion Foam Systems
  - NFPA 11A - Standard for High- and Medium-Expansion Foam Systems
  - NFPA 12 - Standard for Carbon Dioxide Extinguishing Systems
  - NFPA 13 - Installation of Sprinkler Systems
  - NFPA 30 - Flammable and Combustible Liquids Code
  - NFPA 54 - National Gas Fuel Code
  - NFPA 58 - LP-Gas Code
  - Florida Fire Prevention Code as adopted by the State Fire Marshal – Consult with the Florida State Fire Marshal's office for other frequently used codes.

- Architectural – Extinguishing Systems
  - NFPA 10 - Fire Extinguishers

- NFPA 13 - Sprinkler
- NFPA 14 - Standpipe and Hose System
- NFPA 17 - Dry Chemical
- NFPA 20 - Centrifugal Fire Pump
- NFPA 24 - Private Fire Service Mains
- NFPA 200 - Standard on Clean Agent Fire Extinguishing Systems

- Architectural – Detection and Fire Alarm Systems
  - NFPA 70 - Electrical Code
  - NFPA 72 - Standard for the Installation, Maintenance and Use of Local Protective Signaling Systems
  - NFPA 72E - Automatic Fire Detectors
  - NFPA 72G - Installation, Maintenance, and Use of Notification Appliances
  - NFPA 72H -Testing Procedures for Remote Station and Proprietary Systems
  - NFPA 74 - Household Fire Warning Equipment
  - NFPA 75 - Protection of Electronic Computer Equipment
- Architectural – Mechanical Systems
  - NFPA 90A - Air Conditioning and Ventilating Systems
  - NFPA 92A - Smoke Control Systems
  - NFPA 96 - Removal of Smoke and Grease-Laden Vapors from Commercial Cooking Equipment
  - NFPA 204M - Smoke and Heating Venting
- Architectural – Miscellaneous Systems
  - NFPA 45 - Laboratories Using Chemicals
  - NFPA 80 - Fire Doors and Windows
  - NFPA 88A - Parking Structures
  - NFPA 105- Smoke and Draft-control Door Assemblies
  - NFPA 110 - Emergency and Standby Power Systems
  - NFPA 220 - Types of Building Construction
  - NFPA 241 - Safeguard Construction, Alteration, and Operations
  - Rule Chapter 69A-47, F.A.C., Uniform Fire Safety For Elevators
  - Rule Chapter 69A-51, F.A.C., Boiler Safety
- Architectural – Energy Conservation
  - Rule Chapter 60D-4, F.A.C., Rules For Construction and Leasing of State Buildings To Insure Energy Conservation
  - Section 255.255, F.S., Life-Cycle Costs
- Architectural – Elevators
  - Rule Chapter 61C-5, F.A.C., Florida Elevator Safety Code
  - ASME A-17.1, Safety Code for Elevators and Escalators
  - Architectural – Floodplain Management Criteria
  - Section 255.25, F.S., Approval Required Prior to Construction or Lease of Buildings
  - Rules of the Federal Emergency Management Agency (FEMA)

- Architectural – Other
  - Rule Chapter 64E-6, F.A.C., Standards for On Site Sewage Disposal Systems (Septic Tanks)
  - Rule Chapter 62-600, F.A.C., Domestic Wastewater Facilities
  - Rule Chapter 62-761, F.A.C., Underground Storage Tank Systems
  - American Concrete Institute
  - American Institute of Architects - Architect's Handbook of Professional Practice
  - American Society for Testing and Materials - ASTM Standards
  - Brick Institute of America
  - DMS - Standards for Design of State Facilities
  - Florida Concrete Products Association
  - FDOT – ADA/Accessibility Procedure
  - FDOT – Building Code Compliance Procedure
  - FDOT – Design Build Procurement and Administration
  - LEED (Leadership in Energy and Environmental Design) Green Building Rating System
  - National Concrete Masonry Association
  - National Electrical Code
  - Portland Cement Association - Concrete Masonry Handbook
  - United State Green Building Council (USGBC)

2.21 Services to be Performed by the CITY When appropriate and /or available, the CITY will provide project data including:

- Numbers for field books.
- Preliminary Horizontal Network Control.
- Access for the CONSULTANT to utilize the DEPARTMENT's Information Technology Resources.
- All CITY agreements with Utility Agency Owner (UAO).
- All certifications necessary for project letting.
- Building Construction Permit Coordination (Turnpike)
- All information that may come to the CITY pertaining to future improvements.
- All future information that may come to the CITY during the term of the CONSULTANT's Agreement, which in the opinion of the CITY is necessary for the prosecution of the work.
- Available traffic and planning data.
- All approved utility relocations.
- Project utility certification to the CITY's Central Office.
- Any necessary title searches.
- Engineering standards review services.
- All available information in the possession of the CITY pertaining to utility companies whose facilities may be affected by the proposed construction.
- All future information that may come to the CITY pertaining to subdivision plans so that the CONSULTANT may take advantage of additional areas that can be utilized as part of the existing right of way.
- Systems traffic for Projected Design Year, with K, D, and T factors.

- Existing right of way maps.
- Existing cross slope data for all RRR projects.
- Existing pavement evaluation report for all RRR projects.
- PD&E Documents
- Design Reports
- Letters of authorization designating the CONSULTANT as an agent of the CITY in accordance with F.S. 337.274.
- Phase reviews of plans and engineering documents.
- Regarding Environmental Permitting Services:
  - Approved Permit Document when available.
  - Approval of all contacts with environmental agencies.
  - General philosophies and guidelines of the CITY to be used in the fulfillment of this contract. Objectives, constraints, budgetary limitations, and time constraints will be completely defined by the Project Manager.
  - Appropriate signatures on application forms.

3 PROJECT COMMON AND PROJECT GENERAL TASKS

Project Common Tasks

Project Common Tasks, as listed below, are work efforts that are applicable to many project activities, 4 (Roadway Analysis) through 35 (Geotechnical). These tasks are to be included in the project scope in each applicable activity when the described work is to be performed by the CONSULTANT.

Cost Estimates: The CONSULTANT shall be responsible for producing a construction cost estimate using the DEPARTMENT's Long Range Estimate (L.R.E.) system will be used to produce a conceptual estimate, according to District policy.

Technical Special Provisions: N/A)

Field Reviews: The CONSULTANT shall make as many trips to the project site as required to obtain necessary data for all elements of the project.

Technical Meetings: The CONSULTANT shall attend technical meetings necessary to execute the Scope of Services of this as noted in the negotiated staff hour estimate. This includes meetings with CITY and/or Agency staff, between disciplines and subconsultants, such as access management meetings, pavement design meetings, local governments, railroads, airports, progress review meetings (phase review), and miscellaneous meetings. The CONSULTANT shall prepare, and submit to the CITY's Project Manager for review, the meeting minutes for all meetings attended by them. The meeting minutes are due within five (5) working days of attending the meeting.

Quality Assurance/Quality Control: It is the intention of the CITY that design CONSULTANTS, including their subconsultant(s), are held responsible for their work, including plans review. The purpose of CONSULTANT plan reviews is to ensure that CONSULTANT plans follow the plan preparation procedures outlined in the Plans Preparation Manual, that state and federal design criteria are followed with the CITY concept, and that the CONSULTANT submittals are complete. All subconsultant document submittals shall be submitted by the subconsultant directly to the CONSULTANT for their independent Quality Assurance/Quality Control review and subsequent submittal to the CITY.

It is the CONSULTANT'S responsibility to independently and continually QC their plans and other deliverables. The CONSULTANT should regularly communicate with the CITY's Design Project Manager to discuss and resolve issues or solicit opinions from those within designated areas of expertise.

The CONSULTANT shall be responsible for the professional quality, technical accuracy and coordination of all surveys, designs, drawings, specifications and other services furnished by the CONSULTANT and their subconsultant(s) under this contract.

The CONSULTANT shall provide a Quality Control Plan that describes the procedures to

be utilized to verify, independently check, and review all maps, design drawings, specifications, and other documentation prepared as a part of the contract. The CONSULTANT shall describe how the checking and review processes are to be documented to verify that the required procedures were followed. The Quality Control Plan shall be one specifically designed for this project. The CONSULTANT shall submit a Quality Control Plan for approval within twenty (20) business days of the written Notice to Proceed and it shall be signed by the CONSULTANT's Project Manager and the CONSULTANT QC Manager. The Quality Control Plan shall include the names of the CONSULTANT's staff that will perform the quality control reviews. The Quality Control reviewer shall be a Florida Licensed Professional Engineer fully prequalified under F.A.C. 14-75 in the work type being reviewed. A marked up set of prints from a Quality Control Review indicating the reviewers for each component (structures, roadway, drainage, signals, geotechnical, signing and marking, lighting, surveys, etc.) and a written resolution of comments on a point-by-point basis will be required, if requested by the CITY, with each phase submittal. The responsible Professional Engineer, Landscape Architect, or Professional Surveyor & Mapper that performed the Quality Control review will sign a statement certifying that the review was conducted and found to meet required specifications.

The CONSULTANT shall, without additional compensation, correct all errors or deficiencies in the designs, maps, drawings, specifications and/or other products and services.

Independent Peer Review: N/A

Supervision: The CONSULTANT shall supervise all technical design activities.

Coordination: The CONSULTANT shall coordinate with all disciplines of the project to produce a final set of construction documents.

Deliverables

The project deliverables are summarized below

- Design Survey
- Right of Way Control Maps (60%, 90% and Final)
- Geotechnical Reports (boring plan, Draft Report and Final Report
- Typical Section Package (Draft and Final)
- Design Criteria Report (Draft and Final)
- Pond Siting Report Update (Draft and Final)
- Bridge Concept Report (Draft and Final)
- Design Noise Report Update (if required)
- 30% Plans
    - Key Sheet
    - Drainage Maps
    - Typical Section
    - Project Layout

  - Plan and Profile (shows proposed signal locations)
  - Intersection Layout
  - Cross Section Pattern Sheet
  - Cross Sections
  - Master Temporary Traffic Control Plan
- Draft Right of Way Requirements Map
- Utility Coordination and Designation of Utilities
- Disposition of Comments
- 50% Plans (Draft and Final)
  - Key Sheet
  - Summary of Pay Items
  - Drainage Maps
  - Typical Sections
  - Project Layout
  - Plan and Profile
  - Intersection Layout
  - Drainage Structures
  - Outfall/Lateral Ditch System
  - Stormwater and Floodplain Pond Details
  - Pond Cross Sections
  - Cross Section Pattern Sheet
  - Cross Sections
  - Stormwater Pollution Prevention Plan
  - Master Temporary Traffic Control Plan
  - Utility Sheets (no adjustments)
  - Environmental Data Sheets
  - Mitigation Plans (to be determined)
  - Hogtown Creek Bridge Plan and Elevation
- Final Right of Way Requirements Map
- SJRWMD Environmental Resource Permit Application
- TIFFT right of way map for FDEP
- FDEP Permit Application for Sovereign and Submerged Lands
- Right of Way Maps (60%, 90% and Final)

Project General Tasks

Project General Tasks, described in Sections 3.1 through 3.7 below, represent work efforts that are applicable to the project as a whole and not to any one or more specific project activity. The work described in these tasks shall be performed by the CONSULTANT when included in the project scope.

3.1 Public Involvement N/A

3.1.1 Community Awareness Plan N/A

3.1.2 Notifications N/A

3.1.3 Preparing Mailing Lists N/A

3.1.4 Median Modification Letters N/A

3.1.5 Driveway Modification Letters (N/A)

3.1.6 Newsletters (N/A)

3.1.7 Renderings and Fly-Throughs (N/A)

3.1.8 PowerPoint Presentations (N/A)

3.1.9 Public Meeting Preparations (N/A)

3.1.10 Public Meeting Attendance and Follow-up (N/A)

3.1.11 Other Agency Meetings (N/A)

3.1.12 Web Site (N/A)

3.2 Joint Project Agreements (N/A)

3.3 Specifications Package Preparation (N/A)

3.4 Contract Maintenance and Electronic Document Management System (EDMS)

Contract maintenance includes project management effort for complete setup and maintenance of files, developing monthly progress reports, schedule updates, work effort to develop and execute subconsultant agreements, etc.

3.5 Value Engineering (Multi-Discipline Team) Review (N/A)

3.6 Prime Consultant Project Manager Meetings

Includes only the Prime Consultant Project Manager's time for travel and attendance at Activity Technical Meetings and other meetings listed in the meeting summary for Task 3.6 on tab 3 Project General Task of the staff hour forms. Staff hours for other personnel attending Activity Technical Meetings are included in the meeting task for that specific Activity.

3.7 Plans Update (N/A)

3.8 Post Design Services (N/A)

3.9 Digital Delivery

The CONSULTANT shall deliver the preliminary plans and documents in digital format in accordance with DEPARTMENT CADD standards.

3.10 Risk Assessment Workshop (N/A)

3.11 Railroad, Transit and/or Airport Coordination (N/A)

3.12 Other Project General Tasks (N/A)

4 ROADWAY ANALYSIS

The CONSULTANT shall analyze and document Roadway Tasks in accordance with all applicable manuals, guidelines, standards, handbooks, procedures, and current design memorandums.

4.1 Typical Section Package

The approved typical section from the PD&E study will be used.

4.2 Pavement Type Selection Report (N/A)

4.3 Pavement Design Package

The CONSULTANT shall provide an approved Pavement Design Package (asphalt pavement only) prior to the Phase I plans submittal date (asphalt).

4.4 Cross-Slope Correction (N/A)

4.5 Horizontal/Vertical Master Design Files

The CONSULTANT shall design the geometrics using the design standards that are most appropriate with proper consideration given to the design traffic volumes, design speed, capacity and levels of service, functional classification, adjacent land use, design consistency and driver expectancy, aesthetics, pedestrian and bicycle concerns, ADA requirements, elder road user policy, access management, PD&E documents and scope of work. The CONSULTANT shall also develop utility conflict information to be provided to project Utility Coordinator in the format requested by the CITY, and shall review Utility Work Schedules.

4.6 Access Management

The median openings, driveways and intersection approved by the CITY in the PD&E study will be used.

4.7 Roundabout Evaluation (N/A)

4.8 Roundabout Final Design Analysis (N/A)

4.9 Cross Section Design Files

The CONSULTANT shall establish and develop cross section design files in accordance with the CADD manual.

4.10 Traffic Control Analysis (N/A)

4.11 Master TCP Design Files

The CONSULTANT shall develop master Traffic Control Plan (TCP) files (for Level II and Level III only) showing each phase of the Traffic Control Plan.

4.12 Design Variations and Exceptions (N/A)

4.13 Design Report

The CONSULTANT shall prepare all applicable report(s) as listed in the Project Description section of this scope.

The CONSULTANT shall submit to the CITY design notes, data, and calculations to document the design conclusions reached during the development of the contract plans.

The design notes, data, and computations shall be recorded on size 8½"x11" sheets, fully titled, numbered, dated, indexed and signed by the designer and the checker. Computer output forms and other oversized sheets shall be folded to 8½"x11" size. The data shall be in a hardback folder for submittal to the CITY.

4.14 Quantities

The CONSULTANT shall develop accurate quantities and the supporting documentation, including construction days when required.

4.15 Cost Estimate

A cost estimate will be prepared at the Phase I submittal using the FDOT LRE system and based on unit prices in the Phase II submittal

4.16 Technical Special Provisions (N/A)

4.17 Other Roadway Analyses

4.18 Field Reviews

4.19 Monitor Existing Structures (N/A)

4.20 Technical Meetings

4.21 Quality Assurance/Quality Control

4.22 Independent Peer Review

4.23 Supervision

4.24 Coordination

5 ROADWAY PLANS

The CONSULTANT shall prepare Roadway, Traffic Control, Utility Adjustment Sheets, plan sheets, notes, and details. The plans shall include the following sheets necessary to convey the intent and scope of the project for the purposes of construction.

5.1 Key Sheet

5.2 Summary of Pay Items Including Quantity Input

5.3 Typical Section Sheets

5.3.1 Typical Sections

5.3.2 Typical Section Details

5.4 General Notes/Pay Item Notes

5.5 Summary of Quantities Sheets (N/A)

5.6 Project Layout

5.7 Plan/Profile Sheet

5.8 Profile Sheet (N/A)

5.9 Plan Sheet (N/A)

5.10 Special Profile (N/A)

5.11 Back-of-Sidewalk Profile Sheet (N/A)

5.12 Interchange Layout Sheet (N/A)

5.13 Ramp Terminal Details (Plan View) (N/A)

5.14 Intersection Layout Details

5.15 Special Details

5.16 Cross-Section Pattern Sheet(s)

5.17 Roadway Soil Survey Sheet(s)

5.18 Cross Sections

5.19 Temporary Traffic Control Plan Sheets

A master TCP will be provided sufficient for the SJRWMD permit only.

5.20 Temporary Traffic Control Cross Section Sheets (N/A)

5.21 Temporary Traffic Control Detail Sheets (N/A)

5.22 Utility Adjustment Sheets

Existing utilities will be shown, but proposed adjustments will not be defined until the final design is completed. Designate level information only.

5.23 Selective Clearing and Grubbing Sheet(s) (N/A)

5.24 Project Network Control Sheet(s)

5.25 Environmental Detail Sheets

Preparation of detail sheets for potential environmental issues such as, underground fuel tanks and monitoring wells, septic tanks within the proposed right of way. All piping and pumps in association with the above referenced issues shall also be located and identified by the survey. The CONSULTANT shall relay to the CITY any findings of contaminated soil, monitoring wells, or any features (particularly springs or sinks) relating to contamination or hazardous material.

Coordination with Permits/Environmental staff and preparing Dredge & Fill Detail sheets where applicable.

5.26 Utility Verification Sheet(s) (SUE Data) (N/A)

5.27 Quality Assurance/Quality Control

5.28 Supervision

6a DRAINAGE ANALYSIS

The CONSULTANT shall analyze and document Drainage Tasks in accordance with all applicable manuals, guidelines, standards, handbooks, procedures, and current design memorandums.

The CONSULTANT shall be responsible for designing a drainage and stormwater management system. All design work shall comply with the requirements of the appropriate regulatory agencies and the DEPARTMENT's Drainage Manual.

The CONSULTANT shall coordinate fully with the appropriate permitting agencies and the CITY's staff. All activities and submittals should be coordinated through the CITY's Project Manager. The work will include the engineering analyses for any or all of the following:

6a.1 Drainage Map Hydrology

Accurately delineate drainage basin boundaries to be used in defining the system hydrology. Basin delineation shall incorporate existing survey and/or LiDAR and shall be supplemented, as necessary, with other appropriate data sources (such as permitted site plans) and field observations. Basin delineations shall also include any existing collection systems in a logical manner to aid in the development of the hydraulic model. Prepare the Drainage Maps in accordance with the Plans Preparation Manual.

6a.2 Base Clearance Report

Analyze, determine, and document high water elevations per basin which will be used to set roadway profile grade and roadway materials. Determine surface water elevations at cross drains, floodplains, outfalls and adjacent stormwater ponds. Determine groundwater elevations at intervals between the above-mentioned surface waters. Document findings in a Base Clearance Report.

6a.3 Pond Siting Analysis and Report

Evaluate pond sites using a preliminary hydrologic analysis. Document the results and coordination for all of the project's pond site analyses. The Drainage Manual provides specific documentation requirements.

6a.4 Design of Cross Drains

Analyze the hydraulic design and performance of cross drains. Check existing cross drains to determine if they are structurally sound and can be extended. Document the design as required. Determine and provide flood data as required.

6a.5 Design of Ditches

Design roadway conveyance and outfall ditches. This task includes capacity calculations, longitudinal grade adjustments, flow changes, additional adjustments for ditch convergences, selection of suitable channel lining, design of side drain pipes, and documentation. (Design of linear stormwater management facilities in separate task.)

6a.6 Design of Stormwater Management Facility (Offsite or Infield Pond)

Design stormwater management facilities to meet requirements for stormwater quality treatment and attenuation. Develop proposed pond layout (contributing drainage basin, shape, contours, slopes, volumes, tie-ins, etc.), perform routing, pollutant loading calculations, recovery calculations, design the outlet control structure and buoyancy calculations for pond liners when necessary.

6a.7 Design of Stormwater Management Facility (Roadside Ditch as Linear Pond) (N/A)

6a.8 Design of Floodplain Compensation

Determine floodplain encroachments, coordinate with regulatory agencies, and develop proposed compensation area layout (shape, contours, slopes, volumes, etc.). Document the design following the requirements of the regulatory agency.

6a.9 Design of Storm Drains

Develop a “working drainage map”, determine runoff, inlet locations, and spread. Calculate hydraulic losses (friction, utility conflict and, if necessary, minor losses). Determine design tailwater and, if necessary, outlet scour protection.

6a.10 Optional Culvert Material (N/A)

6a.11 French Drain Systems (N/A)

6a.12 Drainage Wells (N/A)

6a.13 Drainage Design Documentation Report

Compile drainage design documentation into report format. Include documentation for all the drainage design tasks and associated meetings and decisions, except for stand-alone reports, such as the Pond Siting Analysis Report and Bridge Hydraulics Report.

6a.14 Bridge Hydraulic Report

Calculate hydrology, hydraulics, deck drainage, scour, and appropriate counter measures. Prepare report and the information for the Bridge Hydraulics Recommendation Sheet.

6a.15 Temporary Drainage Analysis (N/A)

6a.16 Cost Estimate

6a.17 Technical Special Provisions

6a.18 Other Drainage Analysis

6a.19 Field Reviews

6a.20 Technical Meetings

6a.21 Environmental Look-Around Meetings

6a.22 Quality Assurance/Quality Control

6a.23 Independent Peer Review

6a.24 Supervision

6a.25 Coordination

6b DRAINAGE PLANS

The CONSULTANT shall prepare Drainage plan sheets, notes, and details. The plans shall include the following sheets necessary to convey the intent and scope of the project for the purposes of construction.

The intent is to provide plan information sufficient for SJRWMD permitting only consistent with Phase II plan submittals.

6b.1 Drainage Map (Including Interchanges)

6b.2 Bridge Hydraulics Recommendation Sheets

6b.3 Summary of Drainage Structures

6b.4 Optional Pipe/Culvert Material (N/A)

6b.5 Drainage Structure Sheet(s) (Per Structure) (N/A)

6b.6 Miscellaneous Drainage Detail Sheets

6b.7 Lateral Ditch Plan/Profile (N/A)

6b.8 Lateral Ditch Cross Sections (N/A)

6b.9 Retention/Detention Pond Detail Sheet(s)

6b.10 Retention Pond Cross Sections (Only for estimating quantities. Will not include in plans)

6b.11 Erosion Control Plan Sheet(s)

6b.12 SWPPP Sheet(s)

6b.13 Quality Assurance/Quality Control

6b.14 Supervision

7 UTILITIES

The CONSULTANT shall identify utility facilities and secure agreements, utility work schedules, and plans from the Utility Agency Owners (UAO) ensuring all conflicts that exist between utility facilities and the CITY's construction project are addressed. The CONSULTANT shall certify all utility negotiations have been completed and that arrangements have been made for utility work to be undertaken.

7.1 Utility Kickoff Meeting

Before any contact with the UAO(s), the CONSULTANT shall meet with the District Utility Office (DUO) to receive guidance, as may be required, to assure that all necessary coordination will be accomplished in accordance with CITY and FDOT District II procedures. CONSULTANT shall bring a copy of the design project work schedule reflecting utility activities.

7.2 Identify Existing Utility Agency Owner(s)

The Consultant shall identify all utilities within and adjacent to the project limits that may be impacted by the project.

7.3 Make Utility Contacts

First Contact: The CONSULTANT shall send letters and two sets of plans to each utility, one set for the utility office, and one set to the CITY Offices as required by the District. Includes contact by phone for meeting coordination. Request type, size, location, easements, and cost for relocation if reimbursement is claimed. Request the voltage level for power lines in the project area. Send UAO requests for reimbursement to FDOT for a legal opinion. Include the meeting schedule (if applicable) and the design schedule. Include typical meeting agenda. If scheduling a meeting, give 4 weeks advance notice.

Not all projects will have all contacts as described above.

7.4 Exception Processing (N/A)

7.5 Preliminary Utility Meeting

The CONSULTANT shall schedule (time and place), notify participants, and conduct a preliminary utility meeting with all UAO(s) having facilities located within the project limits for the purpose of presenting the project, review the current design schedule, evaluate the utility information collected, provide follow-up information on compensable property rights from the FDOT Legal Office, discuss the utility work by highway contractor option with each utility, and discuss any future design issues that may impact utilities. This is also an opportunity for the UAO(s) to present proposed facilities. The CONSULTANT shall keep accurate minutes and distribute a copy to all attendees.

7.6 Individual/Field Meetings

The CONSULTANT shall meet with each UAO as necessary, separately or together, throughout the project design duration to provide guidance in the interpretation of plans,

review changes to the plans and schedules, optional clearing and grubbing work, and assist in the development of the UAO(s) plans and work schedules. The CONSULTANT is responsible for motivating the UAO to complete and return the necessary documents after each Utility Contact or Meeting.

7.7 Collect and Review Plans and Data from UAO(s)

The CONSULTANT shall review utility marked plans and data individually as they are received for content. Ensure information from the UAO (utility type, material and size) is sent to the designer for inclusion in the plans. Forward all requests for utility reimbursement and supporting documentation to the DUO.

7.8 Subordination of Easements Coordination

The CONSULTANT, if requested by the CITY or FDOT District II, shall transmit to and secure from the UAO the executed subordination agreements prepared by the appropriate CITY office. The CONSULTANT shall coordinate with the DUO the programming of the necessary work program funds to compensate the UAO.

7.9 Utility Design Meeting (N/A)

7.10 Review Utility Markups & Work Schedules and Processing of Schedules & Agreements (N/A)

7.11 Utility Coordination/Follow-up (N/A)

7.12 Utility Constructability Review (N/A)

7.13 Additional Utility Services (N/A)

7.14 Processing Utility Work by Highway Contractor (UWHC) (N/A)

7.15 Contract Plans to UAO(s) (N/A)

7.16 Certification/Close-Out (N/A)

7.17 Other Utilities (N/A)

8 ENVIRONMENTAL PERMITS, COMPLIANCE AND CLEARANCES

The CONSULTANT shall notify the CITY Project Manager, Environmental Permit Coordinator and other appropriate CITY personnel in advance of all scheduled meetings with the regulatory agencies to allow a CITY representative to attend. The CONSULTANT shall copy in the Project Manager and the Environmental Permit Coordinator on all permit related correspondence and meetings.

8.1 Preliminary Project Research

The CONSULTANT shall perform preliminary project research and shall be responsible for regulatory agency coordination to assure that design efforts are properly directed toward permit requirements. The research shall include a review of the project's PD&E documents including but not limited to the Environmental Document, Wetland Evaluation Report, Endangered Species and Biological Assessment and Essential Fish and Habitat Report.

The CONSULTANT shall also review for any existing easements or other restrictions that may exist both within or proposed project boundary. The CONSULTANT shall determine if any Sovereign Submerged Lands easements need to modified or acquired. Project research may include but should not be limited to review of available federal, state, and local permit files and databases, local government information including county and property appraiser data. This information will be shown on the plans as appropriate.

8.2 Field Work

8.2.1 Pond Site Alternatives:
The CONSULTANT shall review alternative pond sites as directed by the CITY.

8.2.2 Establish Wetland Jurisdictional Lines and Assessments:
The CONSULTANT shall collect all data and information necessary to determine the boundaries of wetlands and other surface waters defined by the rules or regulations of each agency processing or reviewing a permit application necessary to construct the CITY project.

The CONSULTANT shall be responsible for, but not limited to, the following activities:

- Determine landward extent of wetlands and other surface waters as defined in Rule Chapter 62-340, F.A.C. as ratified in Section 373.4211, F.S.
- Determine the jurisdictional boundaries and obtain a jurisdictional determination of wetlands and other surface waters as defined by rules or regulations of any permitting authority that is processing a CITY permit application.
- Prepare aerial maps showing the jurisdictional boundaries of wetlands and surface waters. Aerial maps shall be reproducible, of a scale no greater than 1"=200' and be recent photography. The maps shall show the jurisdictional limits of each agency. Photo copies of aerials are not acceptable. All jurisdictional boundaries are to be tied to the project's baseline of survey. When necessary, a wetland specific survey will be prepared by a registered surveyor and mapper.
- Prepare a written assessment of the current condition and functional value of the wetlands and other surface waters. Prepare data in tabular form which includes the ID number for each wetland impacted, size of wetland to be impacted, type of impact and

identify any wetland within the project limits that will not be impacted by the project.

- Prepare appropriate Agency Forms to obtain required permits Forms may include but are not limited to the United States Army Corps of Engineers (USACE) "Wetland Determination Data Form – Atlantic and Gulf Coastal Plain Region"; the USACE "Approved Jurisdictional Determination Form"; Uniform Mitigation Assessment Method forms and/or project specific data forms.

8.2.3 Species Surveys:
The CONSULTANT shall conduct wildlife surveys as defined by rules or regulations of any permitting authority that is processing a CITY permit.

8.2.4 Archaeological Surveys:
The CONSULTANT shall conduct Archaeological field surveys as required, in accordance with Part 2, Chapter 12 of the PD&E Manual.

8.3 Agency Verification of Wetland Data

The CONSULTANT shall be responsible for verification of wetland data identified in Section 8.2 and coordinating regulatory agency field reviews, including finalization of wetland assessments and jurisdictional determinations with applicable agencies.

8.4 Complete and Submit All Required Permit Applications

The CONSULTANT shall prepare permit application packages as identified in the Project Description section. The permit application package must be approved by the CITY prior to submittal to the regulatory agency.

The CONSULTANT shall collect all of the data and information necessary to obtain the environmental permits required to construct the project. The CONSULTANT shall prepare each permit application for CITY approval in accordance with the rules and/or regulations of the environmental agency responsible for issuing a specific permit and/or authorization to perform work.

The CONSULTANT will submit all permit applications, as directed by the CITY, and be responsible for payment of all permit fees.

8.5 Prepare Dredge and Fill Sketches (as needed)

8.6 Prepare USCG Permit (N/A)

8.7 Prepare Water Management District Right of Way Occupancy Permit

8.8 Prepare Coastal Construction Control Line (CCCL) Permit Application (as needed) (N/A)

8.9 Prepare Tree Permit Information (n/a)

8.10 Mitigation Design (Optional Service)

If wetland impacts cannot be avoided, the CONSULTANT shall prepare a mitigation plan to be included as a part of the Environmental Resource Permit and or Section 404 permit applications.

Prior to the development of alternatives, the CONSULTANT shall meet with the Project Manager to determine the CITY's policies in proposing mitigation. The CONSULTANT shall proceed in the development of a mitigation plan based upon the general guidelines provided by the CITY.

The CONSULTANT will be directed by the CITY to investigate the mitigation options that meet federal and state requirements in accordance with section 373.4137, F.S. Below are mitigation options:

- Payment to DEP/WMD for mitigation services as defined in Section 373.4137, F.S.
- Monetary participation in offsite regional mitigation plans
- Purchase of mitigation credits from a mitigation bank
- Creation/restoration on public lands
- Creation/restoration on right of way purchased by the CITY
- Creation/restoration on existing CITY right of way

In the event that physical creation or restoration is the only feasible alternative to offset wetland impacts, the CONSULTANT shall collect all of the data and information necessary to prepare an alternative mitigation plans report that may for coordination with all permitting agencies and commenting agencies who are processing or reviewing a permit application for a CITY project.

Prior to selection of a final mitigation site, the CONSULTANT will provide the following services in the development of alternative mitigation plans:

- Preliminary jurisdictional determination for each proposed site
- Selection of alternative sites
- Coordination of alternative sites with the CITY/all environmental agencies
- Written narrative listing potential sites with justifications for both recommended and non-recommended sites.

8.11 Mitigation Coordination and Meetings

The CONSULTANT shall coordinate with CITY personnel prior to approaching any environmental permitting or reviewing agencies. Once a mitigation plan has been reviewed and approved by the CITY, the CONSULTANT will be responsible for coordinating the proposed mitigation plan with the environmental agencies.

8.12 Other Environmental Permits (N/A)

Environmental Clearances, Reevaluations and Technical Support

8.13 Technical Support to the CITY for Environmental Clearances and Re-evaluations (N/A)

8.14 Preparation of Environmental Clearances and Reevaluations (N/A)

8.15 Contamination Impact Analysis (N/A)

The CONSULTANT shall perform the necessary analysis to complete the Contamination

8.16 Asbestos Survey (N/A)

8.17 Technical Meetings

8.18 Quality Assurance/Quality Control

8.19 Supervision

8.20 Coordination

9 STRUCTURES - SUMMARY AND MISCELLANEOUS TASKS AND DRAWINGS

The CONSULTANT shall analyze, design, and develop contract documents for all structures in accordance with applicable provisions as defined in Section 2.19, Provisions for Work. Individual tasks identified in Sections 9 through 18 are defined in the Staff Hour Estimation Handbook and within the provision defined in Section 2. 20, Provisions for Work. Contract documents shall display economical solutions for the given conditions.

The CONSULTANT shall provide Design Documentation to the CITY with each submittal consisting of structural design calculations and other supporting documentation developed during the development of the plans. The design calculations submitted shall adequately address the complete design of all structural elements. These calculations shall be neatly and logically presented on digital media or, at the CITY's request, on 8 ½"x11" paper and all sheets shall be numbered. The final design calculations shall be signed and sealed by a Florida-licensed professional engineer. A cover sheet indexing the contents of the calculations shall be included and the engineer shall sign and seal that sheet. All computer programs and parameters used in the design calculations shall include sufficient backup information to facilitate the review task.

9.1 Key Sheet and Index of Drawings

9.2 Project Layout

9.3 General Notes and Bid Item Notes

9.4 Miscellaneous Common Details

9.5 Incorporate Report of Core Borings

9.6 Existing Bridge Plans

9.7 Assemble Plan Summary Boxes and Quantities

9.8 Cost Estimate

9.9 Technical Special Provisions

9.10 Field Reviews

9.11 Technical Meetings

9.12 Quality Assurance/Quality Control

9.13 Independent Peer Review

9.14 Supervision

9.15 Coordination

10 STRUCTURES - BRIDGE DEVELOPMENT REPORT

The Consultant shall prepare an abbreviated Bridge Development Report (BDR) sufficient to establish type, span location and costs. There will be no wall justification report provided. The BDR shall be submitted as part of the Phase I Roadway Submittal, General Requirements.

General Requirements

10.1 Bridge Geometry

10.2 Ship Impact Data Collection

10.3 Ship Impact Criteria

Superstructure Alternatives

10.4 Short-Span Concrete

10.5 Medium-Span Concrete

10.6 Long Span Concrete

10.7 Structural Steel

Foundation and Substructure Alternatives

10.8 Pier/Bent

10.9 Shallow Foundations / GRS Abutments

10.10 Deep Foundations

Movable Span

10.11 Data Collection and Design Criteria

10.12 Movable Span Geometrics and Clearances

10.13 Deck System Evaluation

10.14 Framing Plan Development

10.15 Main Girder Preliminary Design

10.16 Conceptual Span Balance/Counterweight

10.17 Support System Development

10.18 Drive Power Calculations

10.19 Drive System Development

10.20 Power and Control Development

10.21 Conceptual Pier Design

10.22 Foundation Analysis (FL PIER)

10.23 Tender Visibility Study

Other BDR Issues

10.24 Aesthetics

10.25 TCP/Staged Construction Requirements

10.26 Constructability Requirements

10.27 Load Rating for Damaged/Widened Structures

10.28 Quantity and Cost Estimates

10.29 Quantity and Cost Estimates - Movable Span

10.30 Wall Type Justification

Report Preparation

10.31 Exhibits

10.32 Exhibits - Movable Span

10.33 Report Preparation

10.34 Report Preparation - Movable Span

10.35 BDR Submittal Package

Preliminary Plans

See bridge staff hour sheets for description of the activities for this abbreviated bridge development report.

11 STRUCTURES - TEMPORARY BRIDGE (N/A)

12 STRUCTURES - SHORT SPAN CONCRETE BRIDGE (N/A)

13 STRUCTURES - MEDIUM SPAN CONCRETE BRIDGE (N/A)

14 STRUCTURES - STRUCTURAL STEEL BRIDGE (N/A)

15 STRUCTURES - SEGMENTAL CONCRETE BRIDGE (N/A)

16 STRUCTURES - MOVABLE SPAN (N/A)

17 STRUCTURES - RETAINING WALLS (N/A)

18 STRUCTURES – MISCELLANEOUS (N/A)

19 SIGNING AND PAVEMENT MARKING ANALYSIS (N/A

20 SIGNING AND PAVEMENT MARKING PLANS (N/A)

21 SIGNALIZATION ANALYSIS (N/A)

22 SIGNALIZATION PLANS (N/A)

23 LIGHTING ANALYSIS (N/A)

24 LIGHTING PLANS (N/A)

25 LANDSCAPE ARCHITECTURE ANALYSIS (N/A)

26 LANDSCAPE ARCHITECTURE PLANS (N/A)

27 SURVEY

The CONSULTANT shall perform survey tasks in accordance with all applicable statutes, manuals, guidelines, standards, handbooks, procedures, and current design memoranda, as well as the FDOT District II Survey Database Guidelines. .

The CONSULTANT shall submit all survey notes and computations to document the surveys. All field survey work shall be recorded in approved media and submitted to the CITY. Field books submitted to the CITY must be of an approved type. The field books and/or databases shall be certified by the surveyor in responsible charge of work being performed before the final product is submitted.

The survey notes and/or databases shall include documentation of decisions reached from meetings, telephone conversations or site visits. All like work (such as bench lines, reference points, etc.) shall be recorded contiguously. The CITY may not accept field survey radial locations of section corners, platted subdivision lot and block corners, alignment control points, alignment control reference points and certified section corner references. The CITY may instead require that these points be surveyed by true line, traverse or parallel offset but must notify the consultant of this requirement before staff hour estimating and fee negotiations begin

Survey limits will extend 25-ft on either side of the proposed right of way as shown in the Concept Plans.

27.1 Horizontal Project Control (HPC)

Establish or recover HPC, for the purpose of establishing horizontal control on the Florida State Plane Coordinate System or datum approved by the District Surveyor (DS) or District Location Surveyor (DLS); may include primary or secondary control points. Includes analysis and processing of all field collected data, and preparation of forms.

27.2 Vertical Project Control (VPC)

Establish or recover VPC, for the purpose of establishing vertical control on datum approved by the District Surveyor (DS) or the District Location Surveyor (DLS).; may include primary or secondary vertical control points. Includes analysis and processing of all field collected data, and preparation of forms.

27.3 Alignment and/or Existing Right of Way (R/W) Lines

Establish, recover or re-establish project alignment. Also includes analysis and processing of all field collected data, existing maps, and/or reports for identifying mainline, ramp, offset, or secondary alignments. Depict alignment and/or existing R/W lines (in required format) per CITY R/W Maps, platted or dedicated rights of way.

27.4 Aerial Targets (N/A)

27.5 Reference Points

Reference Horizontal Project Network Control (HPNC) points, project alignment, vertical control points, section, ¼ section, center of section corners and General Land Office (G.L.O.) corners as required.

27.6 Topography/Digital Terrain Model (DTM) (3D)

Locate all above ground features and improvements for the limits of the project by collecting the required data for the purpose of creating a DTM with sufficient density. Shoot all break lines, high and low points. Effort includes field edits, analysis and processing of all field collected data, existing maps, and/or reports.

27.7 Planimetric (2D)

Locate all above ground features and improvements. Deliver in appropriate electronic format. Effort includes field edits, analysis and processing of all field collected data, existing maps, and/or reports.

27.8 Roadway Cross Sections/Profiles

Perform cross sections or profiles. May include analysis and processing of all field-collected data for comparison with DTM.

27.9 Side Street Surveys

Refer to tasks of this document as applicable.

27.10 Underground Utilities (N/A)

Designation includes 2-dimensional collection of existing utilities utilizing electromagnetic and geophysical prospecting equipment to mark the approximate horizontal locations of utility mains throughout the project limits. Effort includes selected 3-dimensional verification as needed for designation. Survey includes collection of data on points as needed for designates. Includes analysis and processing of all field collected data, and delivery of all appropriate electronic files.

27.11 Outfall Survey (N/A)

Locate all above ground features and improvements for the limits of the project by collecting the required data for the purpose of a DTM. Survey with sufficient density of shots. Shoot all break lines, high and low points. Includes field edits, analysis and processing of all field collected data, existing maps, and/or reports.

27.12 Drainage Survey

Locate underground data (XYZ, pipe size, type, condition and flow line) that relates to above ground data. Includes field edits, analysis and processing of all field collected data, existing maps, and/or reports.

27.13 Bridge Survey (Minor/Major) (N/A)

27.14 Channel Survey

Provide cross section each side of bridge, one upstream and downstream at one bridge length from the proposed bridge location and one upstream and downstream 500'. Locate all topographic features and improvements for the limits of the project by collecting the required data. Includes field edits, analysis and processing of all field collected data, maps, and/or reports.

27.15 Pond Site Survey

Refer to tasks of this document as applicable.

27.16 Mitigation Survey N/A

Refer to tasks of this document as applicable.

27.17 Jurisdiction Line Survey

Perform field location (2-dimensional) of jurisdiction limits as defined by respective authorities, also includes field edits, analysis and processing of all field collected data, preparation of reports.

27.18 Geotechnical Support

Perform 3-dimensional (X,Y,Z) field location, or stakeout, of boring sites established by geotechnical engineer. Includes field edits, analysis and processing of all field collected data and/or reports.

27.19 Sectional/Grant Survey

Perform field location/placement of section corners, 1/4 section corners, and fractional corners where pertinent. Includes analysis and processing of all field-collected data and/or reports.

27.20 Subdivision Location

Survey all existing recorded subdivision/condominium boundaries, tracts, units, phases, blocks, street R/W lines, common areas. Includes analysis and processing of all field collected data and/or reports. If unrecorded subdivision is on file in the public records of the subject county, tie existing monumentation of the beginning and end of unrecorded subdivision.

27.21 Maintained R/W (N/A)

Perform field location (2-dimensional) of maintained R/W limits as defined by respective authorities, if needed. Also includes field edits, analysis and processing of all field collected data, preparation of reports.

27.22 Boundary Survey (N/A)

Perform boundary survey as defined by DEPARTMENT standards. Includes analysis and processing of all field-collected data, preparation of reports.

27.23 Water Boundary Survey

Perform Mean High Water, Ordinary High Water and Safe Upland Line surveys as required by DEPARTMENT standards.

27.24 Right of Way Staking, Parcel / Right of Way Line (N/A)

Perform field staking and calculations of existing/proposed R/W lines for on-site review purposes.

27.25 Right of Way Monumentation (N/A)

Set R/W monumentation as depicted on final R/W maps for corridor and water retention areas.

27.26 Line Cutting

Perform all efforts required to clear vegetation from the line of sight.

27.27 Work Zone Safety

Provide work zone as required by DEPARTMENT standards.

27.28 Miscellaneous Surveys

Refer to tasks of this document, as applicable, to perform surveys not described herein. The percent for Supplemental will be determined at negotiations. This item can only be used if

authorized in writing by the District Surveyor (DS), District Location Surveyor (DLS) or their representative.

27.29 Supplemental Surveys

Supplemental survey days and hours are to be approved in advance by DS or DLS. Refer to tasks of this document, as applicable, to perform surveys not described herein.

27.30 Document Research

Perform research of documentation to support field and office efforts involving surveying and mapping.

27.31 Field Review

Perform verification of the field conditions as related to the collected survey data.

27.32 Technical Meetings

Attend meetings as required and negotiated by the Surveying and Mapping CITY.

27.33 Quality Assurance/Quality Control (QA/QC)

Establish and implement a QA/QC plan. Also includes subconsultant review, response to comments and any resolution meetings if required, preparation of submittals for review, etc.

27.34 Supervision

Perform all activities required to supervise and coordinate project. These activities must be performed by the project supervisor, a Florida P.S.M. or their delegate as approved by the District Surveying Office.

27.35 Coordination

Coordinate survey activities with other disciplines. These activities must be performed by the project supervisor, a Florida P.S.M. or their delegate as approved by the District Surveying Office.

28 PHOTOGRAMMETRY (N/A)

29 MAPPING

The CONSULTANT will be responsible for the preparation of control survey maps, right of way maps, maintenance maps, sketches, other miscellaneous survey maps, and legal descriptions as required for this project in accordance with all applicable DEPARTMENT Manuals, Procedures, Handbooks, District specific requirements, and Florida Statutes. All maps, surveys and legal descriptions will be prepared under the direction of a Florida Professional Surveyor and Mapper (PSM) to DEPARTMENT size and format requirements utilizing DEPARTMENT approved software, and will be designed to provide a high degree of uniformity and maximum readability. The CONSULTANT will submit maps, legal descriptions, quality assurance check prints, checklists, electronic media files and any other documents as required for this project to the DEPARTMENT for review at stages of completion as negotiated.

Master CADD File

29.1 Alignment

29.2 Section and 1/4 Section Lines

29.3 Subdivisions / Property Lines

29.4 Existing Right of Way

29.5 Topography

29.6 Parent Tract Properties and Existing Easements

29.7 Proposed Right of Way Requirements

The ENGINEER OF RECORD (EOR) will provide the proposed requirements. The PSM is responsible for calculating the final geometry. Notification of Final Right of Way Requirements along with the purpose and duration of all easements will be specified in writing.

The number of R/W parcels anticipated is shown on the Concept Plans.

29.8 Limits of Construction

The limits of construction DGN file as provided by the EOR will be imported or referenced to the master CADD file. Additional labeling will be added as required. The PSM is required to advise the EOR of any noted discrepancies between the limits of construction line and the existing/proposed right of way lines, and for making adjustments as needed when a resolution is determined.

29.9 Jurisdictional/Agency Lines

These lines may include, but are not limited to, jurisdictional, wetland, water boundaries, and city/county limit lines.

Sheet Files

29.10 Control Survey Cover Sheet

29.11 Control Survey Key Sheet

29.12 Control Survey Detail Sheet

29.13 Right of Way Map Cover Sheet

29.14 Right of Way Map Key Sheet

29.15 Right of Way Map Detail Sheet

29.16 Maintenance Map Cover Sheet (N/A)

29.17 Maintenance Map Key Sheet (N/A)

29.18 Maintenance Map Detail Sheet (N/A)

29.19 Reference Point Sheet

This sheet(s) will be included with the Control Survey Map, Right of Way Map and Maintenance Map.

29.20 Project Network Control Sheet (N/A)

This sheet depicts the baseline, the benchmarks, the primary and secondary control points and their reference points including the type of material used for each point, their XYZ coordinates, scale factors and convergence angles. This sheet(s) may be included with the Control Survey Map, Right of Way Map and Maintenance Map.

29.21 Table of Ownerships Sheet

Miscellaneous Surveys and Sketches

29.22 Parcel Sketches

29.23 TIITF Sketches

A new TIIFT sovereign and submerged lands permit will be required. Sketches and maps will be prepared in accordance with DEPARTMENT standards.

29.24 Other Specific Purpose Survey(s)

29.25 Boundary Survey(s) Map (N/A)

29.26 Right of Way Monumentation Map (N/A)

29.27 Title Search Map (N/A)

29.28 Title Search Report

29.29 Legal Descriptions

29.30 Final Map/Plans Comparison

The PSM will perform a comparison of the final right of way maps with the available construction plans to review the correctness of the type of parcel to be acquired and the stations/offsets to the required right of way. The PSM will coordinate with the EOR to resolve any conflicts or discrepancies and provide documentation of the review.

29.31 Field Reviews

29.32 Technical Meetings

29.33 Quality Assurance/Quality Control

29.34 Supervision

29.35 Coordination

29.36 Supplemental Mapping

This task is to cover efforts resulting from major design and/or development changes after 60% map development that affect the right of way requirements/parent tract property lines and may include any number of tasks. Request and approval to utilize the Supplemental Mapping hours will be in writing and approved by the District Right of Way Surveyor prior to any work being done under this task.

30 TERRESTRIAL MOBILE LiDAR (N/A)

31 ARCHITECTURE DEVELOPMENT (N/A)

32 NOISE BARRIERS IMPACT DESIGN ASSESSMENT IN THE DESIGN PHASE (Pending Results of Public Hearing)

The CONSULTANT shall fulfill the commitments resulting from the traffic noise analysis and noise barrier evaluation performed during the Project Development and Environment (PD&E) Phase, as directed and clarified by the CITY.

The noise analysis shall be performed in accordance with the FDOT's Noise Policy (Part 2, Chapter 17 of the FDOT's PD&E Manual) and the FDOT's Traffic Noise Modeling and Analysis Guidelines. The noise analysis and noise abatement evaluation shall be performed by or supervised/reviewed by a person(s) who has attended the Department's Traffic Noise Analysis training course or has attended and successfully completed the National Highway Institute's Highway Traffic Noise Course (FHWA-NHI-142051). The Federal Highway Administration (FHWA) approved noise model, the Traffic Noise Model (TNM) Version 2.5 (or most current version) shall be used for the noise analysis, unless otherwise directed by the **DEPARTMENT.**

32.1 Noise Analysis

The CONSULTANT shall review the preferred PD&E alternative to identify any design changes that would require a reanalysis of traffic noise. Coordination will be held with the District Environmental Management Office, prior to initiating any reanalysis, to discuss possible effects of design changes on the validity of in the noise study performed during PD&E.

The CONSULTANT shall perform a land use review to identify noise sensitive sites that may have received a building permit subsequent to the PD&E noise study but prior to the Date of Public Knowledge (DPK), or to identify areas where the land use may have changed or is subject to change. New noise sensitive sites meeting DPK requirements that were not considered during the PD&E phase will be subject to a traffic noise analysis to be performed by the CONSULTANT. Additionally, noise sensitive sites analyzed in the PD&E phase may have to be re-analyzed if affected by design changes.

The CONSULTANT shall review any commitments made during the PD&E phase regarding possible traffic noise impacts to special use locations. Analysis of special use locations shall be performed using the DEPARTMENT's "A Method to Determine Reasonableness and Feasibility of Noise Abatement at Special Use Locations" document and shall be coordinated with the District Environmental Management Office.

The CONSULTANT shall review the commitments made during the PD&E phase regarding noise barrier concepts determined to be potentially feasible and reasonable. The CONSULTANT will update the analysis of feasibility and reasonableness for noise barriers recommended for further consideration during the design phase and for any additional noise barriers required, using design information (e.g., profile data, horizontal alignment data, etc.) and incorporate into the analysis any new conditions or additional costs related to noise barrier construction that have been identified during design. A design phase noise analysis

will be performed at any additional locations required (based on DPK requirements or roadway design changes). Additional survey may also be required at proposed barrier locations.

Changes to, or fulfillment of, the original noise abatement commitments made during PD&E shall be documented in a Noise Study Report (NSR) Addendum to be prepared by the CONSULTANT in coordination with the District Environmental Management Office. A copy of the final NSR Addendum shall be provided to the District Environmental Management Office.

No changes are anticipated.

Traffic Data: N/A

32.2 Noise Barrier Evaluation

The CONSULTANT will present the data along with recommendations to the DEPARTMENT for selection of the noise barrier's locations, barriers heights and lengths to be incorporated into the design plans. These recommendations shall consider the noise barrier feasibility and reasonableness.

An evaluation of proposed noise barriers will be performed to identify any engineering conflicts or constraints. The CONSULTANT will be responsible for documenting any resolutions to engineering conflicts or issues that require modification to or preclude construction of a noise barrier. At a minimum, the engineering review will consider the following:

- Right of way needs including access rights (air, light, view, ingress/egress, outdoor advertising conflicts)
- Limited access issues
- Necessary construction and maintenance easements
- Safety issues (e.g., line of sight)
- Maintenance issues
- Structural and vegetative restrictions within easement
- Utility conflicts
- Drainage issues
- Environmental issues
- Other criteria as applicable

The CONSULTANT shall re-analyze noise barrier(s) for feasibility and reasonableness and re-establish barrier height and length if design constraints require alteration in a barrier's location or dimensions.

After reestablishing the recommended height and length of the barrier(s), the CONSULTANT shall coordinate with design engineers and the District Planning and Environmental Office to include the barrier(s) on the design plans. In addition, the CONSULTANT will present a memo to the CITY Project Manager containing a recommendation for selection of the barrier height and length to be carried forward for public input. This recommendation shall consider amount of noise reduction provided, engineering constraints and cost (reasonableness). In addition, the CONSULTANT will also consider the overall visual appearance in relation to the existing and proposed site conditions. This includes smoothing the profile along the top of a noise barrier to the extent

possible while minimizing any loss in the amount of noise reduction provided and extending the ends of a noise barrier to cover additional receivers. Extending the ends of a noise barrier will not exceed the cost criteria and will only be performed when it is appropriate and in the public interest.

32.3 Public Involvement (N/A)

32.4 Outdoor Advertising Identification (N/A)

32.5 Noise Study Report (NSR) Addendum

The results of noise barrier evaluations performed by the CONSULTANT shall be documented in the NSR Addendum (in accordance with Chapter 32 of the FDOT's Plans Preparation Manual (PPM)) and shall include the results of the computer modeling (electronically), public involvement activities and final noise abatement commitments.

32.6 Technical Meetings

Prior to proceeding with the noise barrier analysis, the CONSULTANT shall discuss and coordinate with the appropriate District Project Manager and the District Environmental Management Office staff. The purpose of this discussion will be for the CITY to provide the CONSULTANT with all pertinent project information and to confirm the methodologies to be used to conduct the noise analysis. This meeting is mandatory and should occur after the Notice to Proceed is given to the CONSULTANT. It is the responsibility of the CONSULTANT to undertake the necessary action (i.e. phone calls, meetings, correspondence, etc. to ensure that District Project Manager and the District Environmental Management Office staff is kept informed of the noise analysis efforts so that these tasks are accomplished in a manner that will enhance the overall success of the project.

32.7 Quality Assurance/Quality Control

QA/QC reviews will be performed for all NSR Addendums submitted to the CITY. Documentation of the QA/QC will be provided to the District Project Manager.

The **CONSULTANT** shall ensure that the noise barrier(s) location(s), length, height and aesthetics as shown on the final design plans are consistent with the results of the noise barrier evaluation and recommendation documented in the original NSR and/or the NSR Addendum.

32.8 Supervision

32.9 Coordination

33 INTELLIGENT TRANSPORTATION SYSTEMS ANALYSIS (N/A)

34 INTELLIGENT TRANSPORTATION SYSTEMS PLANS (N/A)

35 GEOTECHNICAL

The CONSULTANT shall, for each project, be responsible for a complete geotechnical investigation. All work performed by the CONSULTANT shall be in accordance with DEPARTMENT standards, or as otherwise directed by the District Geotechnical Engineer. The District Geotechnical Engineer will make interpretations and changes regarding geotechnical standards, policies and procedures and provide guidance to the CONSULTANT.

Before beginning each phase of investigation and after the Notice to Proceed is given, the CONSULTANT shall submit an investigation plan for approval and meet with the CITY's Geotechnical Engineer or representative to review the project scope and CITY requirements. The investigation plan shall include, but not be limited to, the proposed boring locations and depths, and all existing geotechnical information from available sources to generally describe the surface and subsurface conditions of the project site. Additional meetings may be required to plan any additional field efforts, review plans, resolve plans/report comments, resolve responses to comments, and/or any other meetings necessary to facilitate the project.

The CONSULTANT shall notify the CITY in adequate time to schedule a representative to attend all related meetings and field activities.

35.1 Document Collection and Review

CONSULTANT will review printed literature including topographic maps, county agricultural maps, aerial photography (including historic photos), ground water resources, geology bulletins, potentiometric maps, pile driving records, historic construction records and other geotechnical related resources. Prior to field reconnaissance, CONSULTANT shall review U.S.G.S., S.C.S. and potentiometric maps, and identify areas with problematic soil and groundwater conditions.

Roadway

The CONSULTANT shall be responsible for coordination of all geotechnical related field work activities. The CONSULTANT shall retain all samples until acceptance of Phase IV plans. Rock cores shall be retained as directed in writing by the District Geotechnical Engineer.

Obtain pavement cores as directed in writing by the District Geotechnical Engineer.

If required by the District Geotechnical Engineer, a preliminary roadway exploration shall be performed before the Phase I plans submittal. The preliminary roadway exploration will be performed and results provided to the Engineer of Record to assist in setting roadway grades and locating potential problem areas. The preliminary roadway exploration shall be

performed as directed in writing by the District Geotechnical Engineer.

CONSULTANT shall perform specialized field-testing as required by project needs and as directed in writing by the District Geotechnical Engineer.

All laboratory testing and classification will be performed in accordance with applicable DEPARTMENT standards, ASTM Standards or AASHTO Standards, unless otherwise specified in the Contract Documents.

35.2 Develop Detailed Boring Location Plan

Develop a detailed boring location plan. Meet with CITY Geotechnical Project Manager for boring plan approval. If the drilling program expects to encounter artesian conditions, the CONSULTANT shall submit a methodology(s) for plugging the borehole to the CITY for approval prior to commencing with the boring program.

35.3 Stake Borings/Utility Clearance

Stake borings and obtain utility clearance.

35.4 Muck Probing

Probe standing water and surficial muck in a detailed pattern sufficient for determining removal limits to be shown in the Plans.

35.5 Coordinate and Develop MOT Plans for Field Investigation

Coordinate and develop Maintenance of Traffic (MOT) plan. All work zone traffic control will be performed in accordance with the DEPARTMENT's Roadway and Traffic Design Standards Index 600 series.

35.6 Drilling Access Permits

Obtain all State, County, City, and Water Management District permits for performing geotechnical borings, as needed.

35.7 Property Clearances

Notify property tenants in person of drilling and field activities, if applicable. Written notification to property owners/tenants is the responsibility of the CITY's Project Manager.

35.8 Groundwater Monitoring

Monitor groundwater, using piezometers.

35.9 LBR / Resilient Modulus Sampling

Collect appropriate samples for Limerock Bearing Ratio (LBR) testing. Deliver Resilient Modulus samples to the District Materials Office or the State Materials Office in Gainesville, as directed by the CITY.

35.10 Coordination of Field Work

Coordinate all field work required to provide geotechnical data for the project.

35.11 Soil and Rock Classification - Roadway

Refine soil profiles recorded in the field, based on results of laboratory testing.

35.12 Design LBR

Determine design LBR values from the 90% and mean methods when LBR testing is required by the CITY.

35.13 Laboratory Data

Tabulate laboratory test results for inclusion in the geotechnical report, the report of tests sheet (Roadway Soil Survey Sheet), and for any necessary calculations and analyses.

35.14 Seasonal High Water Table

Review the encountered ground water levels and estimate seasonal high ground water levels. Estimate seasonal low ground water levels, if requested.

35.15 Parameters for Water Retention Areas

Calculate parameters for water retention areas, exfiltration trenches, and/or swales.

35.16 Delineate Limits of Unsuitable Material

Delineate limits of unsuitable material(s) in both horizontal and vertical directions. Assist the Engineer of Record with detailing these limits on the cross-sections. If requested, prepare a plan view of the limits of unsuitable material.

35.17 Electronic Files for Cross-Sections

Create electronic files of boring data for cross-sections.

35.18 Embankment Settlement and Stability

Estimate the total magnitude and time rate of embankment settlements. Calculate the factor of safety against slope stability failure.

35.19 Monitor Existing Structures

Coordinate with EOR and structural engineer (when applicable) to identify and develop mitigation strategies for sensitive structures and facilities which require special considerations for settlement, vibration and/or groundwater monitoring by the contractor during construction. When there is risk of damage to the structure or facility, provide recommendations in the geotechnical report addressing project specific needs and coordinate those locations with the EOR. See PPM Volume I Chapter 34 and Chapter 9 of the Soils and Foundations Handbook.

35.20 Stormwater Volume Recovery and/or Background Seepage Analysis

Perform stormwater volume recovery analysis as directed by the CITY.

35.21 Geotechnical Recommendations

Provide geotechnical recommendations regarding the proposed roadway construction project including the following: description of the site/alignment, design recommendations and discussion of any special considerations (i.e. removal of unsuitable material, consolidation of weak soils, estimated settlement time/amount, groundwater control, high groundwater conditions relative to pavement base, etc.) Evaluate and recommend types of geosynthetics and properties for various applications, as required.

35.22 Pavement Condition Survey and Pavement Evaluation Report (N/A)

35.23 Preliminary Roadway Report

If a preliminary roadway investigation is performed, submit a preliminary roadway report before the Phase I plans submittal. The purpose of the preliminary roadway report will be to assist in setting road grades and locating potential problems.

- Copies of U.S.G.S. and S.C.S. maps with project limits shown.
- A report of tests sheet that summarizes the laboratory test results, the soil stratification (i.e. soils grouped into layers of similar materials) and construction recommendations relative to Standard Indices 500 and 505.
- The results of all tasks discussed in all previous sections regarding data interpretation and analysis.
- An appendix that contains stratified soil boring profiles, laboratory test data sheets, sample embankment settlement and stability calculations, design LBR calculation/graphs, and other pertinent calculations.
- The CONSULTANT will respond in writing to any changes and/or comments from the CITY and submit any responses and revised reports.

35.24 Final Report

The Final Roadway Report shall include the following:

- Copies of U.S.G.S. and S.C.S. maps with project limits shown.
- A report of tests sheet that summarizes the laboratory test results, the soil stratification (i.e. soils grouped into layers of similar materials) and construction recommendations relative to Standard Indices 500 and 505.
- The results of all tasks discussed in all previous sections regarding data interpretation and analysis.
- An appendix that contains stratified soil boring profiles, laboratory test data sheets, sample embankment settlement and stability calculations, design LBR calculation/graphs, and other pertinent calculations.
- The CONSULTANT will respond in writing to any changes and/or comments from the CITY and submit any responses and revised reports.

35.25 Auger Boring Drafting

Draft auger borings as directed by the CITY.

35.26 SPT Boring Drafting

Draft SPT borings as directed by the CITY.

Structures

The CONSULTANT shall be responsible for coordination of all geotechnical related fieldwork activities. The CONSULTANT shall retain all samples until acceptance of Phase IV plans. Rock cores shall be retained as directed in writing by the District Geotechnical Engineer.

CONSULTANT shall perform specialized field-testing as required by needs of project and as directed in writing by the District Geotechnical Engineer.

All laboratory testing and classification will be performed in accordance with applicable DEPARTMENT standards, ASTM Standards or AASHTO Standards, unless otherwise specified in the Contract Documents.

The staff hour tasks for high embankment fills and structural foundations for bridges, box culverts, walls, high-mast lighting, overhead signs, mast arm signals, strain poles, buildings, and other structures include the following:

35.27 Develop Detailed Boring Location Plan

Develop a detailed boring location plan. Meet with CITY Geotechnical Project Manager for boring plan approval. If the drilling program expects to encounter artesian conditions, the CONSULTANT shall submit a methodology(s) for plugging the borehole to the CITY for approval prior to commencing with the boring program.

35.28 Stake Borings/Utility Clearance

Stake borings and obtain utility clearance.

35.29 Coordinate and Develop MOT Plans for Field Investigation

Coordinate and develop MOT plan. All work zone traffic control will be performed in accordance with the DEPARTMENT's Roadway and Traffic Design Standards Index 600 series.

35.30 Drilling Access Permits

Obtain all State, County, City, and Water Management District permits for performing geotechnical borings, as needed.

35.31 Property Clearances

Notify property tenants in person of drilling and field activities, if applicable. Written notification to property owners/tenants is the responsibility of the CITY's Project Manager.

35.32 Collection of Corrosion Samples

Collect corrosion samples for determination of environmental classifications.

35.33 Coordination of Field Work

Coordinate all field work required to provide geotechnical data for the project.

35.34 Soil and Rock Classification - Structures

Soil profiles recorded in the field should be refined based on the results of laboratory testing.

35.35 Tabulation of Laboratory Data

Laboratory test results should be tabulated for inclusion in the geotechnical report and for the necessary calculations and analyses.

35.36 Estimate Design Groundwater Level for Structures

Review encountered groundwater levels, estimate seasonal high groundwater levels, and evaluate groundwater levels for structure design.

35.37 Selection of Foundation Alternatives (BDR)

Evaluation and selection of foundation alternative, including the following:

- GRS-IBS
- Spread footings
- Prestressed concrete piling - various sizes
- Steel H- piles
- Steel pipe piles
- Drilled shafts
- Foundation analyses shall be performed using approved DEPARTMENT methods. Assist in selection of the most economical, feasible foundation alternative.

35.38 Detailed Analysis of Selected Foundation Alternate(s)

Detailed analysis and basis for the selected foundation alternative. Foundation analyses shall be performed using approved DEPARTMENT methods and shall include:

- GRS-IBS (including the parameters identified in the Instructions for Developmental Design Standard D6025 to be provided by the Geotechnical Engineer)
- Spread footings (including soil bearing capacity, minimum footing width, and minimum embedment depth).
- For pile and drilled shaft foundations, provide graphs of ultimate axial soil resistance versus tip elevations. Calculate scour resistance and/or downdrag (negative skin friction), if applicable.
- CONSULTANT shall assist the Engineer of Record in preparing the Pile Data Table (including test pile lengths, scour resistance, downdrag, minimum tip elevation, etc.)
- Provide the design soil profile(s), which include the soil model/type of each

layer and all soil-engineering properties required for the Engineer of Record to run the FBPier computer program. Review lateral analysis of selected foundation for geotechnical compatibility.

- Estimated maximum driving resistance anticipated for pile foundations.
- Provide settlement analysis.

35.39 Bridge Construction and Testing Recommendations

Provide construction and testing recommendations including potential constructability problems.

35.40 Lateral Load Analysis (Optional)

Perform lateral load analyses as directed by the CITY.

35.41 Walls

Provide the design soil profile(s), which include the soil model/type of each layer and all soil engineering properties required by the Engineer of Record for conventional wall analyses and recommendations. Review wall design for geotechnical compatibility and constructability.

Evaluate the external stability of conventional retaining walls and retained earth wall systems. For retained earth wall systems, calculate and provide minimum soil reinforcement lengths versus wall heights, and soil parameters assumed in analysis. Estimate differential and total (long term and short term) settlements.

Provide wall construction recommendations.

35.42 Sheet Pile Wall Analysis (Optional)

Analyze sheet pile walls as directed by the CITY.

35.43 Design Soil Parameters for Signs, Signals, High Mast Lights, and Strain Poles and Geotechnical Recommendations (N/A)

35.44 Box Culvert Analysis (N/A)

35.45 Preliminary Report - BDR

The preliminary structures report shall contain the following discussions as appropriate for the assigned project:

- Copies of U.S.G.S. and S.C.S. maps with project limits shown.
- Summary of structure background data, S.C.S., U.S.G.S., geologic and potentiometric data.
- The results of all tasks discussed in all previous sections regarding data interpretation and analysis).
- Recommendations for foundation installation, or other site preparation soils-related construction considerations with plan sheets as necessary.

- Any special provisions required for construction that are not addressed in the DEPARTMENT's Standard specification.
- An Appendix which includes SPT and CPT boring/sounding profiles, data from any specialized field tests, engineering analysis, notes/sample calculations, sheets showing ultimate bearing capacity curves versus elevation for piles and drilled shafts, a complete FHWA check list, pile driving records (if available), and any other pertinent information.

35.46 Final Report - Bridge and Associated Walls (N/A)

35.47 Final Reports - Signs, Signals, Box Culvert, Walls, and High Mast Lights (N/A)

35.48 SPT Boring Drafting

Prepare a complete set of drawings to include all SPT borings, auger borings and other pertinent soils information in the plans. Include these drawings in the Final Geotechnical Report. Draft borings, location map, S.C.S. map and U.S.D.A. map as directed by the DEPARTMENT. Soil symbols must be consistent with those presented in the latest Florida Department of Transportation Soils and Foundations Handbook.

35.49 Other Geotechnical

Other geotechnical effort specifically required for the project as determined by the CITY, and included in the geotechnical upset limit.

35.50 Technical Special Provisions

35.51 Field Reviews

Identify and note surface soil and rock conditions, surface water conditions and locations, and preliminary utility conflicts. Observe and note nearby structures and foundation types.

35.52 Technical Meetings

35.53 Quality Assurance/Quality Control

35.54 Supervision

35.55 Coordination

36 PROJECT REQUIREMENTS

36.1 Liaison Office

The CITY and the CONSULTANT will designate a Liaison Office and a Project Manager who shall be the representative of their respective organizations for the Project. While it is expected the CONSULTANT shall seek and receive advice from various state, regional, and local agencies, the final direction on all matters of this project remain with the CITY Project Manager.

36.2 Key Personnel

The CONSULTANT's work shall be performed and directed by the key personnel identified in the proposal presentations by the CONSULTANT. Any changes in the indicated personnel shall be subject to review and approval by CITY.

36.3 Progress Reporting

The CONSULTANT shall meet with the CITY as required and shall provide a written monthly progress report with approved schedule, schedule status, and payout curve or by using the earned value method that describe the work performed on each task. The report will include assessing project risk through monthly documentation of identifying and updating the risk category and approach for monitoring those tasks. Invoices shall be submitted after the CITY approves the monthly progress report and the payout curve or with earned value analysis. The Project Manager will make judgment on whether work of sufficient quality and quantity has been accomplished by comparing the reported percent complete against actual work accomplished.

36.4 Correspondence

Copies of all written correspondence between the CONSULTANT and any party pertaining specifically to this contract shall be provided to the CITY for their records within one (1) week of the receipt or mailing of said correspondence.

36.5 Professional Endorsement

The CONSULTANT shall have a Licensed Professional Engineer in the State of Florida sign and seal all reports, documents, technical special provisions, and plans as required by CITY standards.

36.6 Computer Automation

The project will be developed utilizing Computer Aided Drafting and Design (CADD) systems. The CITY makes available software to help assure quality and conformance with policy and procedures regarding CADD. It is the responsibility of the CONSULTANT to meet the requirements in the DEPARTMENT's CADD Manual. The CONSULTANT shall submit final documents and files as described therein.

36.7 Coordination with Other Consultants

The CONSULTANT is to coordinate his work with any and all adjacent and integral consultants so as to effect complete and homogenous plans and specifications for the project(s) described herein.

36.8 Optional Services

At the CITY's option, the CONSULTANT may be requested to provide optional services. The fee for these services shall be negotiated in accordance with the terms detailed in Exhibit B, Method of Compensation, for a fair, competitive and reasonable cost, considering the scope and complexity of the project(s). Additional services may be authorized by Letter of Authorization or supplemental amendment in accordance with paragraph 2.00 of the Standard Consultant Agreement. The additional services may include Construction Assistance, Review of Shop Drawings, Final Bridge Load Rating, update (Category II) bridge plans electronically (CADD) for the Final "As-Built" conditions, based on documents provided by the DEPARTMENT (CADD Services Only) or other Services as required.

37 INVOICING LIMITS

Payment for the work accomplished shall be in accordance with Method of Compensation of this contract. Invoices shall be submitted to the CITY, in a format prescribed by the CITY. The CITY Project Manager and the CONSULTANT shall monitor the cumulative invoiced billings to ensure the reasonableness of the billings compared to the project schedule and the work accomplished and accepted by the CITY.

The CONSULTANT shall provide a list of key events and the associated total percentage of work considered to be complete at each event. This list shall be used to control invoicing. Payments will not be made that exceed the percentage of work for any event until those events have actually occurred and the results are acceptable to the CITY.

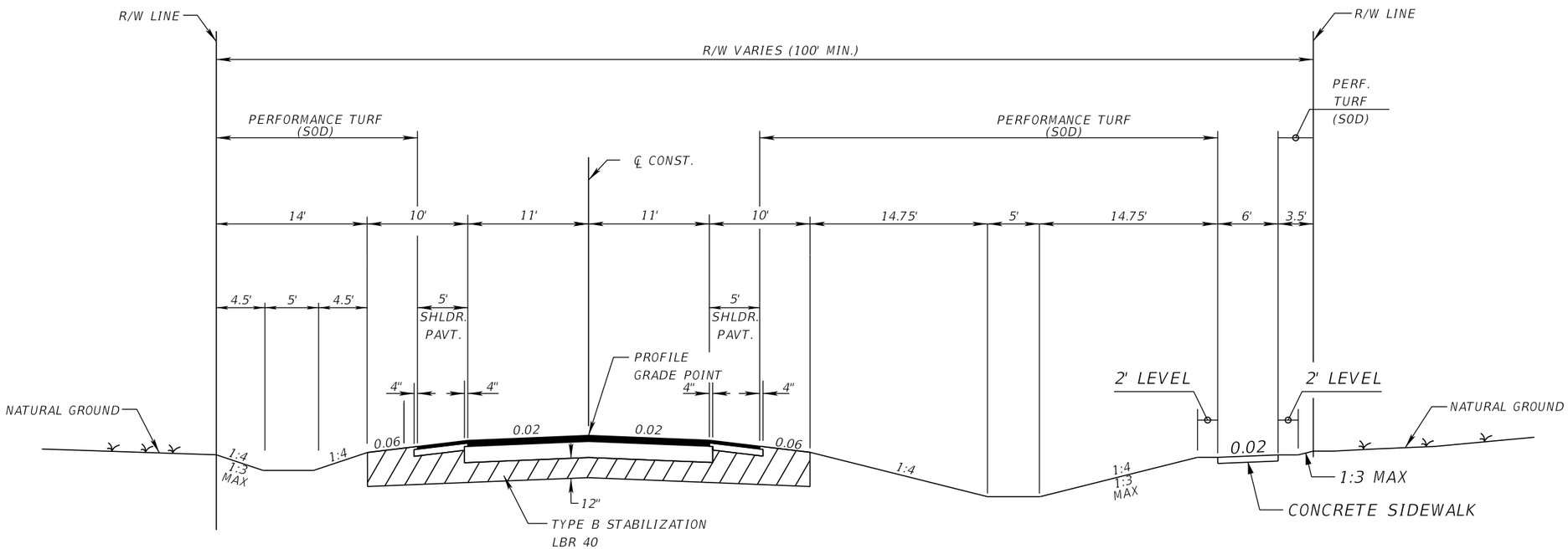
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID: 211365-4 | FEDERAL AID PROJECT NO.: S124002R | COUNTY NAME: ALACHUA

SECTION NO.: N/A | ROAD DESIGNATION: SW 62ND BOULEVARD | LIMITS/MILEPOST: N/A

PROJECT DESCRIPTION: SW 62ND BLVD CONNECTOR FROM SW 43RD STREET TO SR 26 (NEWBERRY ROAD). ALIGNMENT SET TO MAXIMIZE USE OF TREATMENT SWALE WITHIN EXISTING RIGHT OF WAY.

PROPOSED STRUCTURE SECTION
INTERIM ALTERNATIVE RURAL SECTION (OPTION 2)



NOTE: WILL REQUIRE RECONSTRUCTION OF SOUTHBOUND LANES WITH FUTURE FOUR LANE CONSTRUCTION.

TYPICAL SECTION
SW 62ND BOULEVARD
RURAL OPTION

DESIGN SPEED = 45 MPH

APPROVED BY: TERREL SHAW, P.E. 50096	FDOT CONCURRENCE	FHWA CONCURRENCE
Engineer Of Record Signature and Date	TERESA SCOTT, P.E. Public Works Director Date	N/A Printed Name FHWA Transportation Engineer Date

$USER$ $DATE$ $TIME$ $FILE$

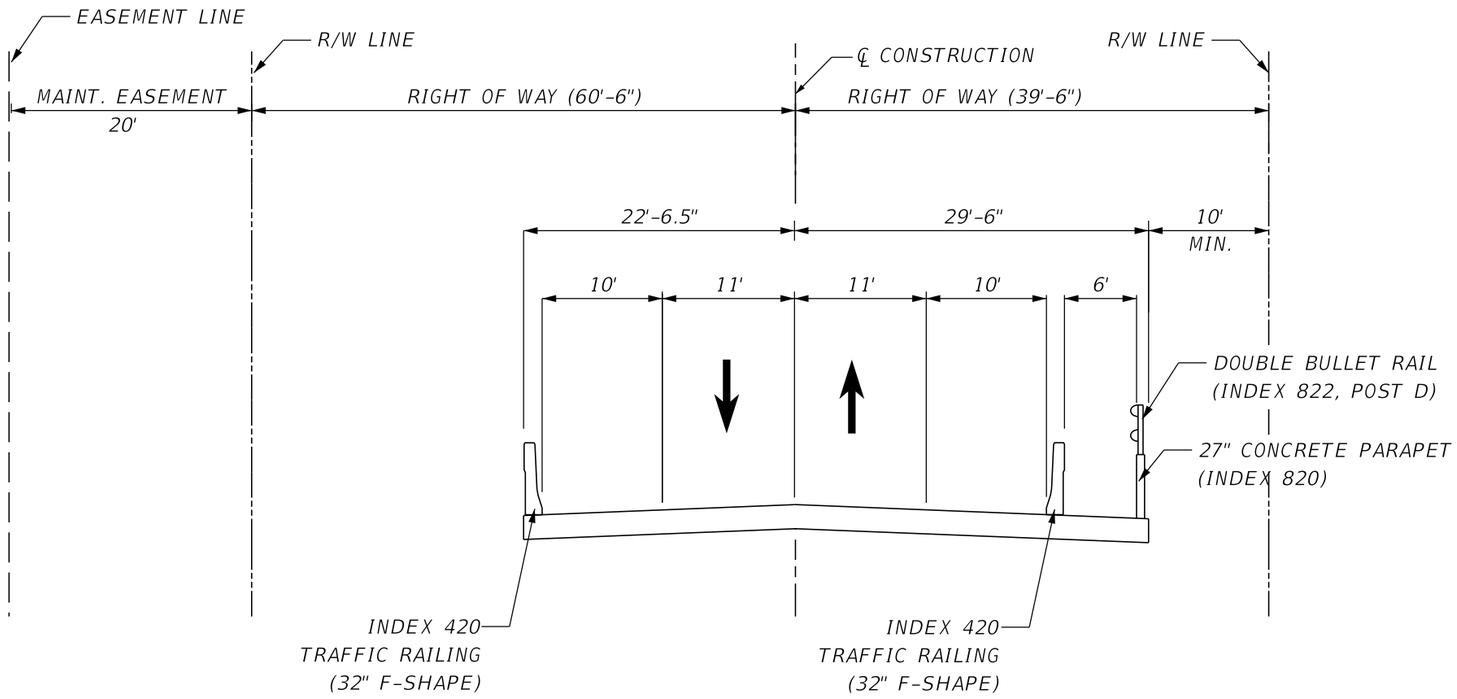
PROJECT IDENTIFICATION

FINANCIAL PROJECT ID: 211365-4 | FEDERAL AID PROJECT NO.: S124002R | COUNTY NAME: ALACHUA

SECTION NO.: N/A | ROAD DESIGNATION: SW 62ND BOULEVARD | LIMITS/MILEPOST: N/A

PROJECT DESCRIPTION: SW 62ND BLVD CONNECTOR FROM SW 43RD STREET TO SR 26 (NEWBERRY ROAD)

PROPOSED STRUCTURE SECTION
INTERIM ALTERNATIVE SINGLE BRIDGE OPTION



TYPICAL SECTION
SW 62ND BOULEVARD
HOGTOWN CREEK BRIDGE

DESIGN SPEED = 45 MPH

APPROVED BY: TERREL SHAW, P.E. 50096	FDOT CONCURRENCE	FHWA CONCURRENCE
Engineer Of Record Signature and Date	TERESA SCOTT, P.E. Public Works Director Date	N/A Printed Name FHWA Transportation Engineer Date

$USER$ $DATE$ $TIME$ $FILE$

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

CITY OF GAINESVILLE

ROAD NO.	COUNTY	FINANCIAL PROJECT ID

SW 62ND BOULEVARD INTERIM ALTERNATIVE PROJECT LAYOUT (01)

SHEET NO. 1

jconser 4/13/2016 3:12:38 PM \\jaxw00\pmwork\JOBS\61477 Gainesville SW 62nd\Techprod\CADD\roadway\PLANRD03.dgn

Version 02 4/13/2016

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

CITY OF GAINESVILLE

ROAD NO.	COUNTY	FINANCIAL PROJECT ID

SW 62ND BOULEVARD INTERIM ALTERNATIVE PLAN (01)

SHEET NO. 2

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4/13/2016

Version 02

SW 40th BLVD

END PROPOSED R/W

BEGIN PROPOSED MSE WALLS

BEGIN PROPOSED TCE AND MAINTENANCE AGREEMENT

BEGIN PROPOSED R/W

20

25

30

35

40

45

SW 62nd BLVD

END PROPOSED R/W

BEGIN PROPOSED NOISE WALL

BEGIN PROPOSED R/W

END PROPOSED R/W

Pond 2A

Pond 2B

Matchline A

Matchline B

06687-004-000

Floodplain Compensation Pond 1

LEGEND

XXXXX-XXX-XXX PARCEL ID'S

PROPOSED RIGHT OF WAY

PARCELS

PROPOSED TCE AND MAINTENANCE AGREEMENT

MSE WALLS

PROPOSED BRIDGE

0 50 200

Feet

Version 02 4/13/2016

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

CITY OF GAINESVILLE

ROAD NO.	COUNTY	FINANCIAL PROJECT ID

SW 62ND BOULEVARD INTERIM ALTERNATIVE PLAN (02)

SHEET NO. 3

jconser 4/13/2016 3:12:51 PM \\jaxw00\pmwork\J0B5\61477 Gainesville SW 62nd\Techprod\CADD\roadway\PLANRD03.dgn

LEGEND

XXXXX-XXX-XXX PARCEL ID'S
PROPOSED RIGHT OF WAY
PARCELS
PROPOSED TCE AND MAINTENANCE AGREEMENT
MSE WALLS
PROPOSED BRIDGE

0 50 200
Feet

Pond 3A
SW 20th AVE
06680-013-000
06680-005-000
SW 62nd BLVD
Henderson
06680-003-000
SW 62nd BLVD
06680-016-002
Matchline C
06680-000-000
06680-016-001
END PROPOSED R/W
END PROPOSED TCE AND MAINTENANCE AGREEMENT
06680-022-000
Woodlands of Gainesville
Cabana Beach Apartments
END PROPOSED MSE WALLS
PROPOSED NOISE WALL
06680-023-000
Matchline B

REVISIONS

DATE	DESCRIPTION	DATE	DESCRIPTION

CITY OF GAINESVILLE

ROAD NO.	COUNTY	FINANCIAL PROJECT ID

SW 62ND BOULEVARD INTERIM ALTERNATIVE PLAN (03)

SHEET NO. 4

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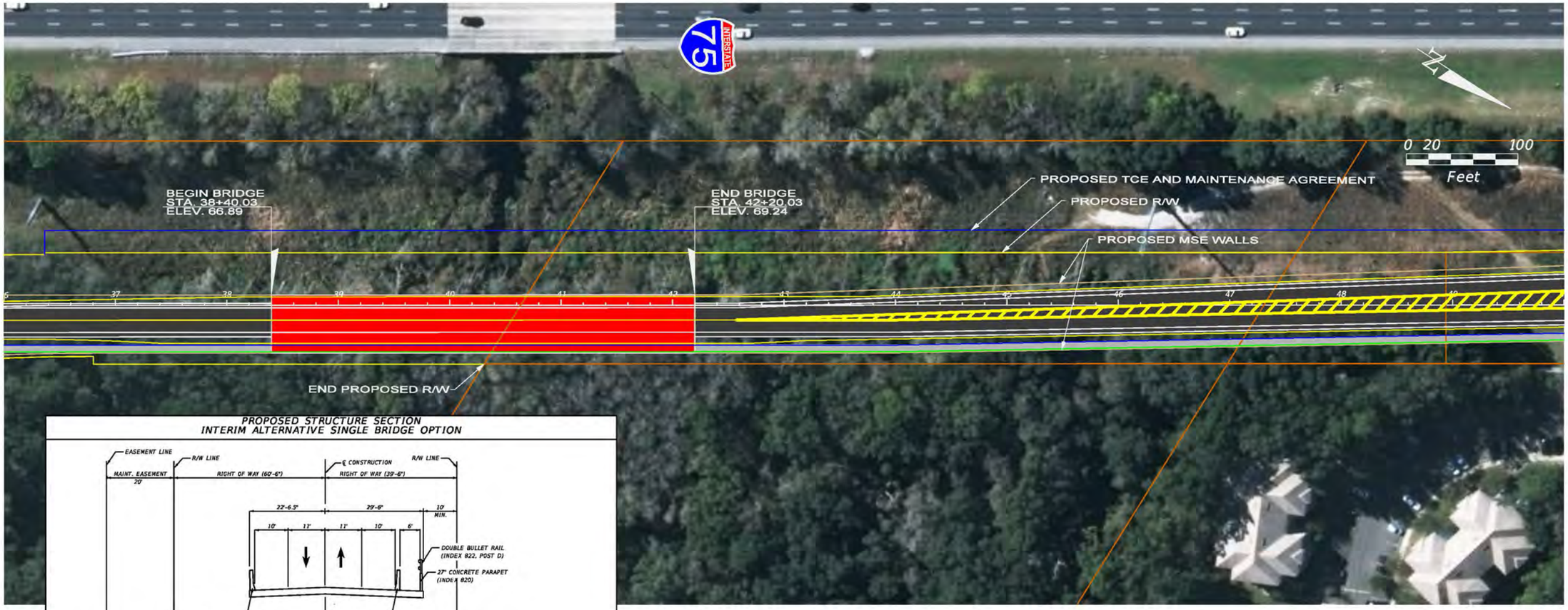
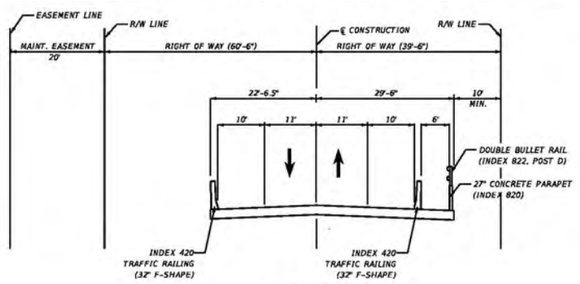
Version 02 4/13/2016

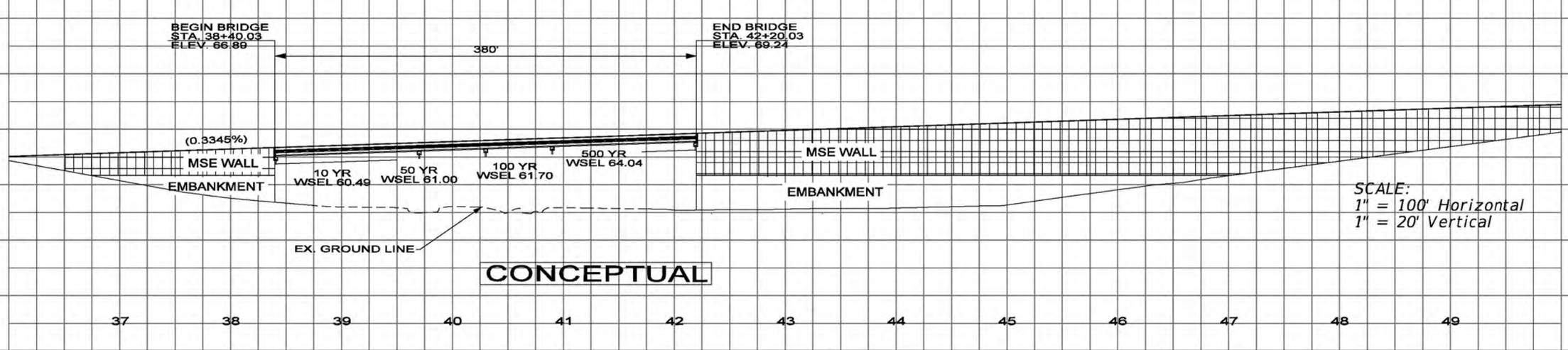


PROPOSED STRUCTURE SECTION
INTERIM ALTERNATIVE SINGLE BRIDGE OPTION



TYPICAL SECTION
SW 62ND BOULEVARD
HOGTOWN CREEK BRIDGE

DESIGN SPEED = 45 MPH



CONCEPTUAL

SCALE:
1" = 100' Horizontal
1" = 20' Vertical

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

CITY OF GAINESVILLE

ROAD NO.	COUNTY	FINANCIAL PROJECT ID
N/A	ALACHUA	211365-3

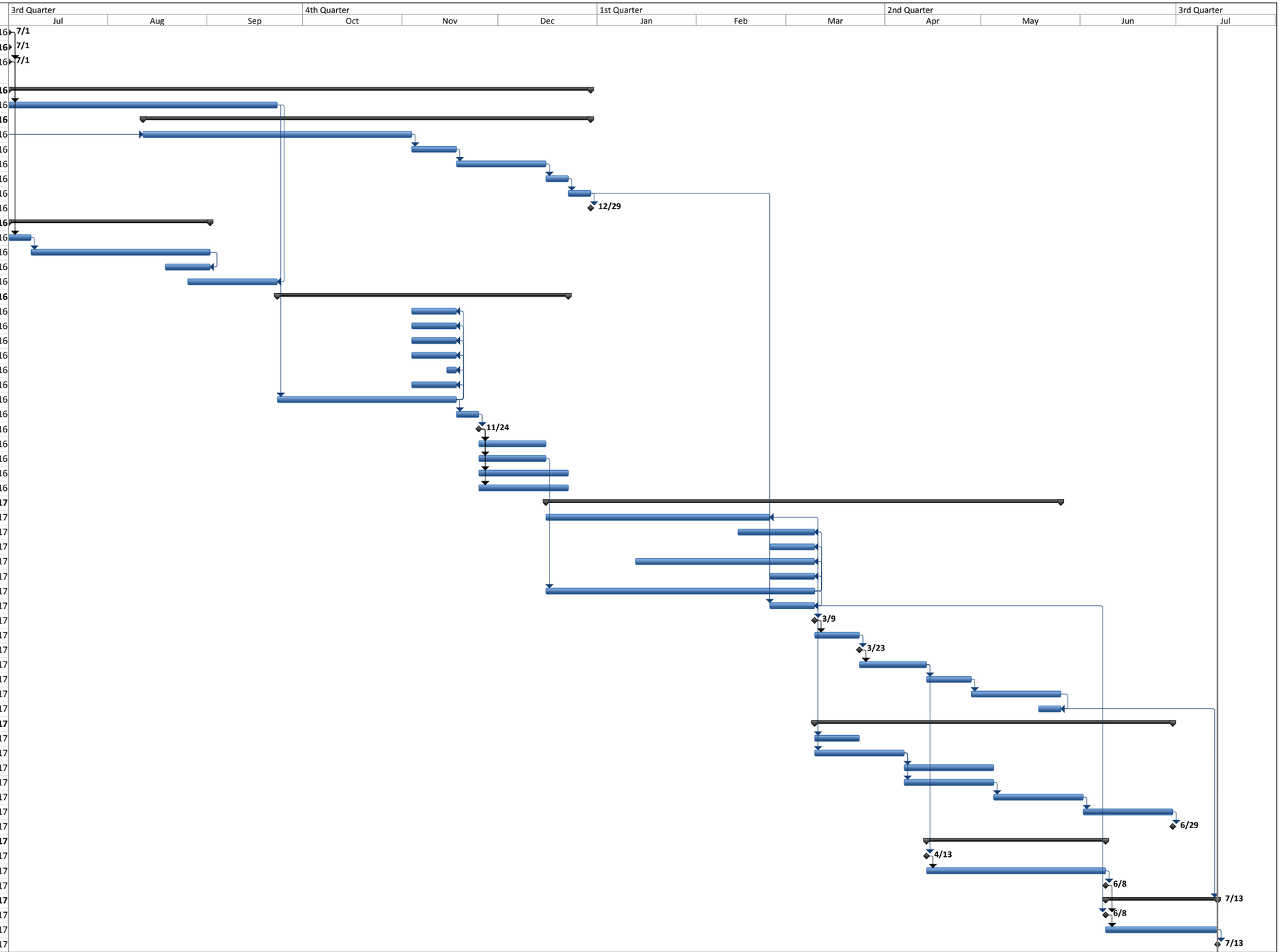
SOUTHWEST 62ND BOULEVARD INTERIM ALTERNATIVE BRIDGE PLAN (01)

SHEET NO. 5

90\pmwork\J0BS\61477 Gainesville SW 62nd\Techprod\CADD\roadway\plprrd02a-1_100a.dgn

SCHEDULE

ID	Task Name	Duration	Start	Finish
1	Design Notice to Proceed	0 days	Fri 7/1/16	Fri 7/1/16
2	**Design Requirements**	**0 days**	**Fri 7/1/16**	**Fri 7/1/16**
3	Approval of Locally Approved Concept (alignment, typical, design variations)	0 days	Fri 7/1/16	Fri 7/1/16
4	**Data Collection**	**130 days**	**Fri 7/1/16**	**Thu 12/29/16**
5	Design Survey	60 days	Fri 7/1/16	Thu 9/22/16
6	**Right of Way Control Maps**	**100 days**	**Fri 8/12/16**	**Thu 12/29/16**
7	Prepare 60% Maps	60 days	Fri 8/12/16	Thu 11/3/16
8	Agency Review 60%	10 days	Fri 11/4/16	Thu 11/17/16
9	Prepare 90% Maps	20 days	Fri 11/18/16	Thu 12/15/16
10	Agency Review 90%	5 days	Fri 12/16/16	Thu 12/22/16
11	Prepare Final Maps	5 days	Fri 12/23/16	Thu 12/29/16
12	Final Maps	0 days	Thu 12/29/16	Thu 12/29/16
13	**Geotechnical Data and Reports**	**45 days**	**Fri 7/1/16**	**Thu 9/1/16**
14	Boring Plan	5 days	Fri 7/1/16	Thu 7/7/16
15	Borings	40 days	Fri 7/8/16	Thu 9/1/16
16	Boring Survey	10 days	Fri 8/19/16	Thu 9/1/16
17	Wetland Delineations	20 days	Fri 8/26/16	Thu 9/22/16
18	**30% Plans**	**65 days**	**Fri 9/23/16**	**Thu 12/22/16**
19	Pavement Type Selection Report Update	10 days	Fri 11/4/16	Thu 11/17/16
20	Pavement Design Report Update	10 days	Fri 11/4/16	Thu 11/17/16
21	Pond Siting Report Update	10 days	Fri 11/4/16	Thu 11/17/16
22	Noise Wall Barrier Design Report	10 days	Fri 11/4/16	Thu 11/17/16
23	Cost Estimate (LRE)	3 days	Tue 11/15/16	Thu 11/17/16
24	ROW Requirements Draft	10 days	Fri 11/4/16	Thu 11/17/16
25	30% Plans	40 days	Fri 9/23/16	Thu 11/17/16
26	Internal QC Process	5 days	Fri 11/18/16	Thu 11/24/16
27	City of Gainesville Submittal	0 days	Thu 11/24/16	Thu 11/24/16
28	ERC Review	15 days	Fri 11/25/16	Thu 12/15/16
29	Comment Resolution	15 days	Fri 11/25/16	Thu 12/15/16
30	Utility Coordination Meeting #1	20 days	Fri 11/25/16	Thu 12/22/16
31	SJRWMD Pre-Application Meeting	20 days	Fri 11/25/16	Thu 12/22/16
32	**50% Plans**	**115 days**	**Thu 12/15/16**	**Thu 5/25/17**
33	Drainage Analysis and Report	50 days	Fri 12/16/16	Thu 2/23/17
34	Draft ERP Permit Application	18 days	Tue 2/14/17	Thu 3/9/17
35	Cost Estimate	10 days	Fri 2/24/17	Thu 3/9/17
36	Bridge Development Report	40 days	Fri 1/13/17	Thu 3/9/17
37	Design Report	10 days	Fri 2/24/17	Thu 3/9/17
38	50% Plans	60 days	Thu 12/15/16	Thu 3/9/17
39	ROW Requirements Final	10 days	Fri 2/24/17	Thu 3/9/17
40	Internal Draft Submittal	0 days	Thu 3/9/17	Thu 3/9/17
41	Internal QC Process	10 days	Fri 3/10/17	Thu 3/23/17
42	City of Gainesville Submittal	0 days	Thu 3/23/17	Thu 3/23/17
43	ERC Review	15 days	Fri 3/24/17	Thu 4/13/17
44	Comment Resolution	10 days	Fri 4/14/17	Thu 4/27/17
45	Revisions	20 days	Fri 4/28/17	Thu 5/25/17
46	Finalize ERP Permit Application	5 days	Fri 5/19/17	Thu 5/25/17
47	**Right of Way Maps (Acquisition)**	**80 days**	**Fri 3/10/17**	**Thu 6/29/17**
48	Prepare TIFT ROW Map	10 days	Fri 3/10/17	Thu 3/23/17
49	Prepare 60% Maps	20 days	Fri 3/10/17	Thu 4/6/17
50	Agency Review 60%	20 days	Fri 4/7/17	Thu 5/4/17
51	Prepare 90% Maps	20 days	Fri 4/7/17	Thu 5/4/17
52	Agency Review 90%	20 days	Fri 5/5/17	Thu 6/1/17
53	Prepare Final Maps	20 days	Fri 6/2/17	Thu 6/29/17
54	Final Maps	0 days	Thu 6/29/17	Thu 6/29/17
55	**SJRWMD Permits**	**40 days**	**Thu 4/13/17**	**Thu 6/8/17**
56	ERP Submitted to SJRWMD	0 days	Thu 4/13/17	Thu 4/13/17
57	Agency Review	40 days	Fri 4/14/17	Thu 6/8/17
58	SJRWMD Permit Received	0 days	Thu 6/8/17	Thu 6/8/17
59	**Sovereign and Submerged Lands Permit**	**25 days**	**Thu 6/8/17**	**Thu 7/13/17**
60	Permit Submitted	0 days	Thu 6/8/17	Thu 6/8/17
61	Agency Review	25 days	Fri 6/9/17	Thu 7/13/17
62	FDEP Permit Received	0 days	Thu 7/13/17	Thu 7/13/17



Project: 416501-2 Draft Schedule
Date: Fri 5/6/16

Task	Summary	External Milestone	Inactive Summary	Manual Summary Rollup	Finish-only
Split	Project Summary	Inactive Task	Manual Task	Manual Summary	Deadline
Milestone	External Tasks	Inactive Milestone	Duration-only	Start-only	Progress

FEE SUMMARY SHEET

ESTIMATE OF WORK EFFORT AND COST - PRIME CONSULTANT

Name of Project: SW 62nd Blvd Interim Alternative Preliminary Plans and Permits - SW 43rd Street to SW 52nd Street
County: Alachua
FPN: 211365-4-32-00
FAP No.: S124002R

Consultant Name: HNTB
Consultant No.: enter consultants proj. number
Date: 5/6/2016
Estimator: insert name

Staff Classification	Total Staff Hours From "SH Summary -	Project Manager	Senior Engineer	Project Engineer	Engineer Intern	Designer	Contract Administrator	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
		$87.76	$63.21	$49.62	$27.72	$40.08	$37.40	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00			
3. Project General and Project Common Tasks	148	104	7	7	8	0	22	0	0	0	0	0	0	148	$10,961	$74.06
4. Roadway Analysis	1,094	55	164	328	328	219	0	0	0	0	0	0	0	1,094	$49,338	$45.10
5. Roadway Plans	241	12	36	72	71	48	0	0	0	0	0	0	0	239	$10,793	$45.16
6a. Drainage Analysis	673	34	101	202	201	135	0	0	0	0	0	0	0	673	$30,374	$45.13
6b. Drainage Plans	416	21	62	125	124	83	0	0	0	0	0	0	0	415	$18,728	$45.13
7. Utilities	8	0	1	2	3	2	0	0	0	0	0	0	0	8	$326	$40.72
8. Environmental Permits, Compliance & Clearances	352	18	53	106	106	70	0	0	0	0	0	0	0	353	$15,933	$45.14
9. Structures - Misc. Tasks, Dwgs, Non-Tech.	77	4	12	23	23	15	0	0	0	0	0	0	0	77	$3,490	$45.32
10. Structures - Bridge Development Report	252	13	38	76	75	50	0	0	0	0	0	0	0	252	$11,397	$45.23
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	16	1	2	5	5	3	0	0	``	0	0	0	0	16	$721	$45.07
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!
Total Staff Hours	3,277	262	476	946	944	625	22	0	0	0	0	0	0	3,275	$152,062.08	
Total Staff Cost		$22,993.12	$30,087.96	$46,940.52	$26,167.68	$25,050.00	$822.80	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00		**$152,062.08**	**$46.43**

Check = $152,062.08

Survey Field Days by Subconsultant
4 - Person Crew:

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.

SALARY RELATED COSTS:				$152,062.08
OVERHEAD:	141.45%			$215,091.81
OPERATING MARGIN:	36.00%			$54,742.35
FCCM (Facilities Capital Cost Money):	0.071%			$107.96
EXPENSES:	8.79%			$13,366.26
Survey (Field - if by Prime)	0 days @	$ -	/ day	$0.00
SUBTOTAL ESTIMATED FEE:				**$435,370.46**
Subconsultant: Cardno - Survey				$146,929.94
Subconsultant: Cardno - ROW Control Maps				$71,449.89
Subconsultant: Cardno - SUE (removed based on scope clarification)				$0.00
Subconsultant: Cardno - Utility Coordination				$8,367.33
Subconsultant: Cardno - Tree Survey (deferred to final design)				$0.00
Subconsultant: Cardno - ROW Mapping				$64,526.51
Subconsultant: ETP - Noise				$8,941.55
Subconsultant: ERS - Wetlands				$31,668.40
Subconsultant: Terracon - Geotechnical (portions deferred to final design)				$176,406.10
Subconsultant: Sub 10				$0.00
Subconsultant: Sub 11				$0.00
Subconsultant: Sub 12				$0.00
SUBTOTAL ESTIMATED FEE:				**$943,660.18**
Geotechnical Field and Lab Testing				$0.00
SUBTOTAL ESTIMATED FEE:				**$943,660.18**
Limiting Amount Services (other misclaneous services)				$20,000.00
GRAND TOTAL ESTIMATED FEE:				**$963,660.18**

HNTB

STAFF HOURS

Project Activity 3: General Tasks

Estimator:

SW 62nd Blvd Interim Alternative Preliminary Plans and Permits - SW 43rd Street to SW 52nd Street

211365-4-32-00

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**	

Project Activity 3: General Tasks

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
3.2	Joint Project Agreements	EA	0	0	0	
3.3	Specifications Package Preparation	LS	1	0	0	
3.4	Contract Maintenance and EDMS	LS	1	0	0	
3.5	Value Engineering (Multi-Discipline Team) Review	LS	1	0	0	
3.6	Prime Consultant Project Manager Meetings	LS	1	116	116	See listing below
3.7	Plans Update	LS	1	0	0	
3.8	Post Design Services	LS	1	0	0	
3.9	Digital Delivery	LS	1	32	32	8 hrs initial setup + 3 hrs per discipline x 8 disciplines (Rdwy, Drain, Struct, SPM, Signals, Light, Survey, Geo) = 32 hrs total
3.10	Risk Assessment Workshop	LS	1	0	0	
3.11	Railroad, Transit, and/or Airport Coordination	LS	1	0	0	
3.12	Other Project General Tasks	LS	1	0	0	
3. Project Common and Project General Tasks Total					**148**	

Project Activity 3: General Tasks

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
3.6 - List of Project Manager Meetings		**Units**	**No of Units**	**Hours/ Unit**	**Total Hours**	**Comments**
Roadway Analysis		EA	7	4	28	
Drainage		EA	2	4	8	
Utilities		EA	1	4	4	
Environmental		EA	1	4	4	
Structures		EA	3	4	12	
Signing & Pavement Marking		EA	0	4	0	
Signalization		EA	0	4	0	
Lighting		EA	0	4	0	
Landscape Architecture		EA	0	4	0	
Survey		EA	0	4	0	
Photogrammetry		EA	0	4	0	
ROW & Mapping		EA	0	4	0	
Terrestrial Mobile LiDAR		EA	0	4	0	
Architecture		EA	0	4	0	
Noise Barriers		EA	0	4	0	
ITS Analysis		EA	0	4	0	
Geotechnical		EA	0	4	0	
Progress Meetings		EA	12	4	48	
Phase Reviews		EA	2	4	8	
Field Reviews		EA	1	4	4	
Total Project Manager Meetings			29		116	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 4: Roadway Analysis

Estimator:

SW 62nd Blvd Interim Alternative Preliminary Plans and Permits - SW 43rd Street to SW 52nd Street

211365-4-32-00

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
4.1	Typical Section Package	LS	1	0	0	Not included. Utilize approved Typical Section from the PD&E.
4.2	Pavement Type Selection Report	LS	1	1	1	Report not included. Prepare pavement type design memo for project file. 1 hr
4.3	Pavement Design Package	LS	1	36	36	One asphalt pavement design- rural section 36 hrs initial setup and design, includes paved shoulder. ESAL, traffic forecast, and design traffic to be provided by others.
4.4	Cross-Slope Correction	LS	1	0	0	Not included.
4.5	Horizontal /Vertical Master Design Files	LS	1	420	420	Roadway design 320 hrs SW 62nd Blvd. Intersection designs: SW 43rd-SW 62nd,@ 24 hrs/intersection = 24 hrs. Prepare Utility Conflict information for use by the Utility Coordinator (2 hrs/utility per submittal = 9 UAO's identified x 2 hrs/UAO x 2 submittals = 72 hrs).
4.6	Access Management	LS	1	0	0	Not included. Utilize approved openings, driveways, and intersection locations from the PD&E.
4.7	Roundabout Evaluation	LS	1	0	0	Not included.
4.8	Roundabout Final Design Analysis	LS	1	0	0	Not included.
4.9	Cross Section Design Files	LS	1	270	270	Rdwy design @ 100-ft section intervals (rural), 180 hr/Mi x 1.1 Mi = 198 Pond 2A (700-ft) + Pond 2B (545-ft) + Pond 3A (1,200-ft) + FPC Pond (810-ft) = 4 Ponds @ 18 hr/Pond = 72 hrs
4.10	Traffic Control Analysis	LS	1	24	24	Develop conceptual TCP scheme (24 hrs-new alignment, interface locations only). Sufficient detail for WMD permit only. Task does not include; notes, lane closure analysis, special details, temporary signalization, temporary drainage, temporary lighting or interim/phase cross sections.
4.11	Master TCP Design Files	LS	1	40	40	100' scale drawings depicting conceptual phasing; no details, dimensions, devices, minimal labelling, etc. 36 hrs/mile @ 1.10 miles= 40 hrs
4.12	Design Variations and Exceptions	LS	1	0	0	No Exceptions or Variations are anticipated.
4.13	Design Report	LS	1	48	48	Prepare design report for approval and use on project (8 hrs). Prepare hardcopy of design documentation (40 hrs) for Phase II submittal. 48 hrs total.
4.14	Quantities	LS	1	48	48	Develop Phase II quantities (40 hrs)- 1 submittal only. Develop construction duration estimation based on Phase II quantities (8 hrs).
4.15	Cost Estimate	LS	1	10	10	Initial Phase I setup of FDOT LRE- 4 hrs. Prepare and generate Engineers Estimate at Phase II - 6 hrs = 10. hrs total
4.16	Technical Special Provisions	LS	1	0	0	Not included
4.17	Other Roadway Analyses	LS	1	0	0	No additional analyses included
Roadway Analysis Technical Subtotal					**897**	

Project Activity 4: Roadway Analysis

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
4.18	Field Reviews	LS	1	24	24	Field review design meeting; 2 engineers x (6 hrs travel + 6 hr review) = 24 hrs
4.19	Monitor Existing Structures	LS	1	0	0	Not included
4.20	Technical Meetings	LS	1	51	51	Meetings are listed below
4.21	Quality Assurance/Quality Control	LS	%	5%	45	
4.22	Independent Peer Review	LS	%	0%	0	Not included
4.23	Supervision	LS	%	5%	45	
Roadway Analysis Nontechnical Subtotal					**165**	
4.24	Coordination	LS	%	3%	32	
4. Roadway Analysis Total					**1094**	

Technical Meetings	Units	No of Units	Hours/ Unit	Total Hours	PM Attendance at Meeting Required?	Number
Typical Section	EA	0	0	0		0
Pavement	EA	1	9	9	yes	1
Access Management	EA	0	0	0		0
15% Line and Grade	EA	1	10	10	yes	1
Driveways	EA	0	0	0		0
Local Governments (cities, counties, MPO)	EA	1	0	0	yes	1
Work Zone Traffic Control	EA	0	0	0		0
30/60/90/100% Comment Review Meetings	EA	2	0	0		2
Other Meetings	EA	2	0	0		2
Subtotal Technical Meetings				**19**	**Subtotal Project Manager Meetings**	7
Progress Meetings (if required by FDOT)	EA	6	4	24	*PM attendance at Progress Meetings is manually entered on General Task 3*	- -
Phase Review Meetings	EA	2	4	8	*PM attendance at Phase Review Meetings is manually entered on General Task 3*	- -
Total Meetings				**51**	**Total Project Manager Meetings (carries to Tab 3)**	**7**

Carries to 4.17

Carries to Tab 3

Project Activity 5: Roadway Plans

Estimator:

SW 62nd Blvd Interim Alternative Preliminary Plans and Permits - SW 43rd Street to SW 52nd Street

211365-4-32-00

Task No.	Task	Scale	Units	No. of Units or Sheet	Hours/ Unit or Sheet	Total Hours	Comments
5.1	Key Sheet		Sheet	1	5	5	4 hrs initial + 1/2 hr Phase I & Phase II submittals = 5 hrs
5.2	Summary of Pay Items Including Quantity Input		Sheet	1	2	2	2 hrs to develop initial pay item list, PI No's only, no quantities.
5.3	Typical Section Sheets						
5.3.1	Typical Sections		EA	3	12	36	3 typical sections (undivided, on bridge and permanent retaining wall and divided)
5.3.2	Typical Section Details		EA	0	0	0	Not included.
5.4	General Notes/Pay Item Notes		Sheet	1	8	8	Provide typical and specific General Notes.
5.5	Summary of Quantities Sheets		Sheet	0	0	0	Not included.
5.6	Project Layout		Sheet	1	9	9	Alignment for project length. Insets required due to nonlinear configuration and side street connection.
5.7	Plan/Profile Sheet		Sheet	9	4	36	50' scale sheets, 700-ft coverage/sheet. 5,800/700 = 9 sheets
5.8	Profile Sheet		Sheet	0	0	0	See Task 5.7.
5.9	Plan Sheet		Sheet	0	0	0	See Task 5.7.
5.10	Special Profile		Sheet	0	0	0	Not included.
5.11	Back-of-Sidewalk Profile Sheet		Sheet	0	0	0	Not included.
5.12	Interchange Layout Sheet		Sheet	0	0	0	Not included.
5.13	Ramp Terminal Details (Plan View)		Sheet	0	0	0	Not included.
5.14	Intersection Layout Details		Sheet	2	4	8	20' scale details at the following intersections; SW 42nd-SW 62nd, SW 24th-SW 43rd
5.15	Special Details		EA	1	6	6	Bus bay/ boarding detail. 6 hrs x 75% = 4 hrs
5.16	Cross-Section Pattern Sheet(s)		Sheet	1	4	4	4 hrs.
5.17	Roadway Soil Survey Sheet(s)		Sheet	1	1	1	Provided by Geotechnical Engineer, incorporated into plan set.
5.18	Cross Sections		EA	116	0.3	35	5,800-ft @ 50' intervals = 116 sections
5.19	Temporary Traffic Control Plan Sheets		Sheet	21	1	21	100' scale conceptual level phases. Assume 3 phase construction, 7 sheets/ phase = 21 sheets
5.20	Temporary Traffic Control Cross Section Sheets		EA	0	0	0	Not included.
5.21	Temporary Traffic Control Detail Sheets		Sheet	0	0	0	Not included.

Project Activity 5: Roadway Plans

Task No.	Task	Scale	Units	No. of Units or Sheet	Hours/ Unit or Sheet	Total Hours	Comments
5.22	Utility Adjustment Sheets		Sheet	9	1.5	14	50' scale sheets, 700-ft coverage/sheet.
5.23	Selective Clearing and Grubbing Sheet(s)		Sheet	0	0	0	Not included.
5.24	Project Network Control Sheet(s)		Sheet	1	1	1	Provided by Surveyor, incorporated into plan set.
5.25	Environmental Detail Sheets		Sheet	13	2.5	33	50' scale sheets, 700-ft coverage/sheet plus four ponds
5.26	Utility Verification Sheet(s) (SUE Data)		Sheet	0	0	0	Not included.
Roadway Plans Technical Subtotal						**219**	
5.27	Quality Assurance/Quality Control		LS	%	5%	11	
5.28	Supervision		LS	%	5%	11	
5. Roadway Plans Total						**241**	

Project Activity 6a: Drainage Analysis

Estimator:

SW 62nd Blvd Interim Alternative Preliminary Plans and Permits - SW 43rd Street to SW 52nd Street

211365-4-32-00

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
6a.1	Drainage Map Hydrology	Per Map	0	0	0	Hours are included in Section 6B.1
6a.2	Base Clearance Report	Per Location	2	16	32	Basin 2 and Basin 3 evaluation
6a.3	Pond Siting Analysis and Report	Per Basin	1	12	12	Minor revisions to report that was provided during the PD&E phase. Pond 2B may be relocated.
6a.4	Design of Cross Drains	EA	2	4	8	Keeping access from the west to the east , near SW 40th Blvd. South connection to Pond 2A. Will need to connect to Pond 2A.
6a.5	Design of Ditches	Per Ditch Mile	4	15	60	Roadside Ditches, 5800 ft (LT and RT)
6a.6	Design of Stormwater Management Facility (Offsite or Infield Pond)	EA	3	60	180	Design for Ponds 2A, 2B, and 3A.
6a.7	Design of Stormwater Management Facility (Roadside Ditch as Linear Pond)	Per Cell	0	0	0	N/A
6a.8	Design of Floodplain Compensation	Per Floodplain Basin	1	40	40	1 floodplain compensation pond
6a.9	Design of Storm Drains	EA	30	2.5	75	Inlets at SW 43rd St., south and north of bridge + outlet systems for ponds = 30 inlets
6a.10	Optional Culvert Material	EA	0	0	0	N/A
6a.11	French Drain Systems	Per Cell	0	0	0	N/A
6a.12	Drainage Wells	EA	0	0	0	N/A
6a.13	Drainage Design Documentation Report	LS	1	48	48	
6a.14	Bridge Hydraulic Report	EA	1	80	80	Will need D50 values from Geotech; Will update hydraulics of the report with actual parameter from proposed bridge. Will model scour and provide a BHRS (included in 6B.2).

Project Activity 6a: Drainage Analysis

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
6a.15	Temporary Drainage Analysis	LS	0	0	0	
6a.16	Cost Estimate	LS	1	4	4	Initial Phase I- 2 hrs. Prepare and generate Engineers Estimate at Phase II - 2 hrs = 4 hrs total
6a.17	Technical Special Provisions	LS	1	0	0	N/A
6a.18	Other Drainage Analysis	LS	1	0	0	N/A
Drainage Analysis Technical Subtotal					**539**	
6a.19	Field Reviews	LS	1	12	12	Field review design meeting; 1 engineers x (6 hrs travel + 6 hr review) = 12 hrs
6a.20	Technical Meetings	LS	1	48	48	Meetings are listed below
6a.21	Environmental Look-Around (ELA) Meeting	LS	1	0	0	N/A
6a.22	Quality Assurance/Quality Control	LS	%	5%	27	
6a.23	Independent Peer Review	LS	%	0%	0	
6a.24	Supervision	LS	%	5%	27	
Drainage Analysis Nontechnical Subtotal					**114**	
6a.25	Coordination	LS	%	3%	20	
6a. Drainage Analysis Total					**673**	

Technical Meetings	Units	No of Units	Hours/ Unit	Total Hours	PM Attendance at Meeting Required?	Number
Base Clearance Water Elevation	EA	0	0	0		0
Pond Siting	EA	0	0	0		0
Agency	EA	2	8	16	yes	2
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				**16**		2
Progress Meetings (if required by FDOT)	EA	2	8	16	*PM attendance at Progress Meetings is manually entered on General Task 3*	- -
Phase Review Meetings	EA	2	8	16	*PM attendance at Phase Review Meetings is manually entered on General Task 3*	- -
Total Meetings				**48**	**Total Project Manager Meetings (carries to Tab 3)**	**2**

Carries to 6.19

Carries to Tab 3

6b. Drainage Plans

Estimator:

SW 62nd Blvd Interim Alternative Preliminary Plans and Permits - SW 43rd Street to SW 52nd Street
211365-4-32-00

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	32	64	(2 sheets @ 200' scale) includes delineated areas, labels, etc to be used in both the report and the plans. Plan view only.
6b.2	Bridge Hydraulics Recommendation Sheets		Sheet	1	32	32	BHRS at Hogtown Creek
6b.3	Summary of Drainage Structures		Sheet	2	16	32	30 structures/19 structures per sheet = 2 sheets
6b.4	Optional Pipe/Culvert Material		Sheet	0	0	0	(50% construction plans; Permit submittal only)
6b.5	Drainage Structure Sheet(s) (Per Structure)		EA	0	0	0	30 structures (50% construction plans; Permit submittal only) Drainage paragraphs on a detail sheet (see 6.b.6)
6b.6	Miscellaneous Drainage Detail Sheets		Sheet	4	16	64	Pond Outfall Details (3 Ponds); drainage structure paragraphs (station, offset, grate elevation, flowlines)
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	3	40	120	Ponds 2A, 2B, and 3A
6b.10	Retention Pond Cross Sections		EA	0	0	0	Needed for estimating quantities only. Hours are located in 4.9.
6b.11	Erosion Control Plan Sheet(s)		Sheet	9	6	54	50' scale sheets, 700-ft coverage/sheet. 5,800-ft project length/700-ft-sht = 9 sheets.
6b.12	SWPPP Sheet(s)		Sheet	2	6	12	2 sheets
					Drainage Plans Technical Subtotal	**378**	
6b.13	Quality Assurance/Quality Control		LS	%	5%	19	
6b.14	Supervision		LS	%	5%	19	
					6. Drainage Plans Total	**416**	

Project Activity 7: Utilities

Estimator:

SW 62nd Blvd Interim Alternative Preliminary Plans and Permits - SW 43rd Street to SW 52nd Street
211365-4-32-00

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
7.1	Utility Kickoff Meeting	LS	1	4	4	Meeting is listed below
7.2	Identify Existing Utility Agency Owners (UAO(s))	LS	1	2	2	
7.3	Make Utility Contacts	LS	1	2	2	
7.4	Exception Processing	LS	1	0	0	
7.5	Preliminary Utility Meeting	LS	1	0	0	Meeting is listed below
7.6	Individual/Field Meetings	LS	1	0	0	Meetings are listed below
7.7	Collect and Review Plans and Data from UAO(s)	LS	1	0	0	
7.8	Subordination of Easements Coordination	LS	1	0	0	
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	
7.11	Utility Coordination/Followup	LS	1	0	0	
7.12	Utility Constructability Review	LS	1	0	0	
7.13	Additional Utility Services	LS	1	0	0	
7.14	Processing Utility Work by Highway Contractor (UWHC)	LS	1	0	0	
7.15	Contract Plans to UAO(s)	LS	1	0	0	
7.16	Certification/Close-Out	LS	1	0	0	
7.17	Other Utilities	LS	1	0	0	
				7. Utilities Total	**8**	

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	1	4	4		1
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				**4**	**Total Project Manager Meetings (carries to Tab 3)**	**1**

Carries to Tab 3

Project Activity 8: Environmental Permits

Estimator:

SW 62nd Blvd Interim Alternative Preliminary Plans and Permits - SW 43rd Street to SW 52nd Street

211365-4-32-00

Task No.	Task	Units	No. of Units	Hours/ Units	Total Hours	Comments
	Environmental Permits, Compliances and Clearances					
8.1	Preliminary Project Research	LS	1	0	0	
	Permits					
8.2	**Field Work**					
8.2.1	Pond Site Alternatives	per pond site	0	0	0	ERS
8.2.2	Establish Wetland Jurisdictional Lines and Assessments	LS	1	0	0	ERS
8.2.3	Species Surveys	LS	1	0	0	ERS
8.2.4	Archeological Surveys	LS	1	0	0	SEARCH
8.3	Agency Verification of Wetland Data	LS	1	0	0	ERS
8.4	**Complete And Submit All Required Permit Applications**					
8.4.1	Complete and Submit All Required Wetland Permit Applications	LS	1	180	180	SJRWMD + ACOE
8.4.2	Complete and Submit All Required Species Permit Applications	LS	1	0	0	ERS
8.5	Prepare Dredge and Fill Sketches (as needed)	LS	1	18	18	6 sheets at 3 hours ea. (3 plan view sheets (3 separate locations) + 3 cross sections (1 for ea location).
8.6	Prepare USCG Permit Sketches	LS	1	0	0	n/a
8.7	Prepare Water Management District Right-of-Way Occupancy Permit	LS	1	0	0	n/a
8.8	Prepare Coastal Construction Control Line (CCCL) Permit Application	LS	1	0	0	n/a
8.9	Prepare Tree Permit Information	LS	1	0	0	
8.10	Mitigation Design	LS	1	0	0	TBD
8.11	Mitigation Coordination and Meetings	LS	1	0	0	TBD
8.12	Other Environmental Permits	LS	1	80	80	Sovereign Submerged Lands permit

Project Activity 8: Environmental Permits

Task No.	Task	Units	No. of Units	Hours/ Units	Total Hours	Comments
	Environmental Clearances/Reevaluations					
8.13	**Technical support to Department for Environmental Clearances and Reevaluations (use when consultant provides technical support only)**					
8.13.1	NEPA or SEIR Reevaluation	LS	1	0	0	n/a
8.13.2	Archaeological and Historical Features	LS	1	0	0	n/a
8.13.3	Wetland Impact Analysis	LS	1	0	0	n/a
8.13.4	Essential Fish Habitat	LS	1	0	0	n/a
8.13.5	Wildlife and Habitat Impact Analysis	LS	1	0	0	n/a
8.13.6	Section 7 or Section 10 Consultation	LS	1	0	0	n/a
8.14	**Preparation of Environmental Clearances and Reevaluations (use when consultant prepares all documents associated with reevaluation)**					
8.14.1	NEPA or SEIR Reevaluation	LS	1	0	0	n/a
8.14.2	Archaeological and Historical Features	LS	1	0	0	n/a
8.14.3	Wetland Impact Analysis	LS	1	0	0	n/a
8.14.4	Essential Fish Habitat	LS	1	0	0	n/a
8.14.5	Wildlife and Habitat Impact Analysis	LS	1	0	0	n/a
8.14.6	Section 7 or Section 10 Consultation	LS	1	0	0	n/a
8.15	Contamination Impact Analysis	LS	1	0	0	n/a
8.16	Asbestos Survey	LS	1	0	0	n/a
	Environmental Permits, Compliance, and Clearances/Reevaluations Technical Subtotal				**278**	
8.17	Technical Meetings	LS	1	36	36	Meetings are listed below
8.18	Quality Assurance/Quality Control	LS	%	5%	14	
8.19	Supervision	LS	%	5%	14	
	Environmental Permits, Compliance and Clearances Nontechnical Subtotal				**64**	
8.20	Coordination	LS	%	3%	10	
	8. Environmental Permits, Compliance and Clearances Total				**352**	

Project Activity 8: Environmental Permits

Task No.	Task	Units	No. of Units	Hours/ Units	Total Hours	Comments

Technical Meetings	Units	No of Units	Hours/ Unit	Total Hours	PM Attendance at Meeting Required?	Number
WMD	EA	1	4	4		1
NMFS	EA	0	0	0		0
USACE	EA	0	0	0		0
USCG	EA	0	0	0		0
USFWS	EA	0	0	0		0
FFWCC	EA	0	0	0		0
FDOT	EA	0	0	0		0
Other Meetings	EA	2	4	8		0
Subtotal Technical Meetings				**12**	**Subtotal Project Manager Meetings**	1
Progress Meetings (if required by FDOT)	EA	4	4	16	*PM attendance at Progress Meetings is manually entered on General Task 3*	- -
Phase Review Meetings	EA	2	4	8	*PM attendance at Phase Review Meetings is manually entered on General Task 3*	- -
Total Meetings				**36**	**Total Project Manager Meetings (carries to Tab 3)**	**1**

Carries to 8.18

Carries to Tab 3

Project Activity 9: Structures Summary and Miscellaneous Tasks and Drawings

Estimator: Denise L. Burton

SW 62nd Blvd
211365-4-32-00

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	1	0	1	0	
9.2	Project Layout	Sheet	1	0	1	0	
9.3	General Notes and Bid Item Notes	Sheet	1	0	1	0	
9.4	Miscellaneous Common Details	Sheet	1	0	1	0	
9.5	Incorporate Report of Core Borings	Sheet	1	0	1	0	
9.6	Existing Bridge Plans	LS	1	0		0	
9.7	Assemble Plan Summary Boxes and Quantities	LS	1	0		0	
9.8	Cost Estimate	LS	1	0		0	
9.9	Technical Special Provisions	LS	1	0		0	

Project Activity 9: Structures Summary and Miscellaneous Tasks and Drawings

Structures - Summary and Miscellaneous Tasks and Drawings Subtotal					5	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	252	252	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									
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		252	252	0	0	0	0	0	0	0	0

Task No.	**Task**	**Units**	**No. of Units**	**Hours per Unit**	**Total**	**Comments**
9.10	Field Reviews	LS	1	8	8	Includes 1 -4 hour field meeting and 4 hour travel time to Gainesville.
9.11	Technical Meetings	LS	1	14	14	Meetings are listed below
9.12	Quality Assurance/Quality Control	LS	%	7%	18	This should be (5% to 10%) x ("Structures - Summary and Miscellaneous Tasks and Drawings Subtotal, cell G21" + "Structures Technical Subtotal, cell C35")
9.13	Independent Peer Review	LS	1	0	0	Only 30% plans generated.
9.14	Supervision	LS	%	5%	13	This should be (3% to 7%) x ("Structures - Summary and Miscellaneous Tasks and Drawings Subtotal, cell G21" + "Structures Technical Subtotal, cell C35")
Structures Nontechnical Subtotal					53	
9.15	Coordination	LS	1	24	24	
9. Structures - Summary and Miscellaneous Tasks and Drawings Nontechnical and Coordination Total					77	

Project Activity 9: Structures Summary and Miscellaneous Tasks and Drawings

Technical Meetings	Units	No of Units	Hours/ Unit	Total Hours	PM Attendance at Meeting Required?	Number
BDR Coordination/Review	EA	1	6	6		1
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	1	6	6		1
Utility Companies	EA	0	0	0		0
Other Meetings	EA	1	2	2		1
Subtotal Technical Meetings				**14**		3
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				**14**	**Total Project Manager Meetings (carries to Tab 3)**	**3**

Carries to 9.11

Carries to Tab 3

Project Activity 10: BDR

Estimator: Denise L. Burton

Bridge Identifier (Number or Name):

SW 62nd Blvd

211365-4-32-00

Task No.	Task	Units	No of Units	Hours/ Unit	No. of Sheets	Total Hours	Comments
	General Requirement						
10.1	Bridge Geometry	LS	1	8		8	Tangent Alignment
10.2	Ship Impact Data Collection	LS	1	0		0	
10.3	Ship Impact Criteria	EA	0	0		0	
	Superstructure Alternatives						
10.4	Short Span Concrete Bridge	EA ALT	0	0		0	
10.5	Medium Span Concrete Bridge	EA ALT	1	12		12	1 ALT (380 ft-7 span, Type II)
10.6	Long Span Concrete Bridge	EA ALT	0	0		0	
10.7	Structural Steel Bridge	EA ALT	0	0		0	
	Foundation & Substructure Alternatives						
10.8	Pier/Bent	EA Type	2	8		16	1 ALT x (1 End Bent + 1 Intermediate Bent)= 2 designs
10.9	Shallow Foundations / GRS Abutments	EA Type	0	0		0	
10.10	Deep Foundations	EA Foundation Evaluated	2	16		32	Unknown/variable soil conditions & scour considerations. Run FB-Pier stability analysis on 2 conditions x 1 ALT = 2 design runs

Project Activity 10: BDR

Task No.	Task	Units	No of Units	Hours/ Unit	No. of Sheets	Total Hours	Comments
	Movable Span						
10.11	Data Collection and Design Criteria	LS	1	0		0	
10.12	Movable Span Geometrics and Clearances	LS	1	0		0	
10.13	Deck System Evaluation	LS	1	0		0	
10.14	Framing Plan Development	LS	1	0		0	
10.15	Main Girder Preliminary Design	LS	1	0		0	
10.16	Conceptual Span Balance/Counterweight	LS	1	0		0	
10.17	Support System Development	LS	1	0		0	
10.18	Drive Power Calculations	LS	1	0		0	
10.19	Drive System Development	LS	1	0		0	
10.20	Power and Control Development	LS	1	0		0	
10.21	Conceptual Pier Design	LS	1	0		0	
10.22	Foundation Analysis (FL PIER)	LS	1	0		0	
10.23	Tender Visibility Study	LS	1	0		0	
	Other BDR Issues						
10.24	Aesthetics	LS	1	0		0	No aesthetics
10.25	TCP/Staged Construction Requirements	LS	1	0		0	No staged bridge construction, no existing bridge. Future expansion not anticipated for several years.
10.26	Constructibility Requirements	LS	1	16		16	Investigate viable bridge and wall construction access schems which avoid conservation areas and right-of-way constraints.
10.27	Load Rating for damaged/widened structures	EA Unit	1	0		0	
10.28	Quantity and Cost Estimates	EA ALT	1	32		32	1 Bridge ALT and cost (1x24=24hrs). Wall type/configuration for future phase and cost alternatives (16 hrs)
10.29	Quantity and Cost Estimates - Movable Span	LS	1	0		0	
10.30	Wall Type Justification	LS	1	24		24	Although there is no wall justification report, there will be some time developing MSE walls within 100-yr flood plain and wetlands. Investigate MSE w/plastic straps and/or MSE on tiered sheet pile. Consider possible settlement issues and mitigation measures.
	Report Preparation						
10.31	Exhibits	EA SHEET	5	12		60	Plan & Elev (1 sht); Typical Section; End Bent; Intermediate Bent; Wall details (5 sheets total)
10.32	Exhibits - Movable Span	EA SHEET	0	0		0	
10.33	Report Preparation	LS	1	40		40	
10.34	Report Preparation - Movable Span	LS	1	0		0	
10.35	BDR Submittal Package	LS	1	12		12	
	10. Structures - Bridge Development Report Total					**252**	

Project Activity 21: Signalization Analysis

Estimator:

SW 62nd Blvd Interim Alternative Preliminary Plans and Permits - SW 43rd Street to SW 52nd Street

211365-4-32-00

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	
21.2	Traffic Data Analysis	PI	0	0	0	
21.3	Signal Warrant Study	LS	1	0	0	
21.4	System Timings	LS	1	0	0	
21.5	Reference and Master Signalization Design File	PI	0	0	0	
21.6	Reference and Master Interconnect Communication Design File	LS	1	0	0	
21.7	Overhead Street Name Sign Design	EA	0	0	0	
21.8	Pole Elevation Analysis	LS	1	0	0	
21.9	Traffic Signal Operation Report	LS	1	0	0	
21.10	Quantities	LS	1	0	0	
21.11	Cost Estimate	LS	1	16	16	Preliminarily locate mast arm locations sufficient for ROW needs and estimate costs. Locations will be shown on roadway plans.
21.12	Technical Special Provisions	LS	1	0	0	
21.13	Other Signalization Analysis	LS	1	0	0	
Signalization Analysis Technical Subtotal					**16**	
21.14	Field Reviews	LS	1	0	0	
21.15	Technical Meetings	LS	1	0	0	Meetings are listed below
21.16	Quality Assurance/Quality Control	LS	%	0%	0	
21.17	Independent Peer Review	LS	%	0%	0	
21.18	Supervision	LS	%	0%	0	
Signalization Analysis Nontechnical Subtotal					**0**	

Project Activity 21: Signalization Analysis

21.19	Coordination	LS	%	0%	0	
21. Signalization Analysis Total					**16**	

Technical Meetings	Units	No of Units	Hours/ Unit	Total Hours	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		0
Maintaining Agency (cities, counties)	EA	0	0	0		0
Railroads	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 21.15		Carries to Tab 3

HNTB

AUDIT INFORMATION

HNTB

HNTB JN#61477

Audited Overhead Rate	141.45%
FCCM	0.071%
Operating Margin	36%
Expense Percentage	8.79%

Class	Last	First	Currently Hourly Rate	Weight	Weighted Rate	Overhead	FCCM	Operating Margin	Expenses	Loaded Rate
Project Manager/Chief Engineer										
	Shaw	Terry	$ 87.76	100%	$ 87.76					
				100%	**$ 87.76**	141.45%	0.071%	36%	8.79%	**$ 251.27**
Senior Engineer/Planner										
	Denney	Robert	$ 67.92	20%	$ 13.58					
	Switzer	Barry	$ 64.56	20%	$ 12.91					
	Bobo	Bradnon	$ 61.20	60%	$ 36.72					
				100%	**$ 63.21**	141.45%	0.071%	36%	8.79%	**$ 180.98**
Project Engineer/Planner										
	Ross	Matt	$ 54.24	20%	$ 10.85					
	Sharma	Anil	$ 49.60	20%	$ 9.92					
	Burton	Denise	$ 48.08	60%	$ 28.85					
				100%	**$ 49.62**	141.45%	0.071%	36%	8.79%	**$ 142.07**
Engineer/Planner										
	Luetzow	Katherine	$ 36.48	50%	$ 18.24					
	Archual	Adam	$ 35.68	50%	$ 17.84					
				100%	**$ 36.08**	141.45%	0.071%	36%	8.79%	**$ 103.30**
Engeering Intern										
	Monsalve	Ruby	$ 29.04	15%	$ 4.36					
	Lenis	Sandra	$ 27.52	45%	$ 12.38					
	Conser	John David	$ 27.44	40%	$ 10.98					
				100%	**$ 27.72**	141.45%	0.071%	36%	8.79%	**$ 79.37**
Designer										
	Nguyen	Hoa	$ 40.08	100%	$ 40.08					
				100%	**$ 40.08**	141.45%	0.071%	36%	8.79%	**$ 114.75**
Contract Administrator										
	Snodgrass	Katherine	$ 35.60	75%	$ 26.70					
	Henderson	Marcie	$ 42.80	25%	$ 10.70					
				100%	**$ 37.40**	141.45%	0.071%	36%	8.79%	**$ 107.08**

I Certify that the above information is current and accurate as of this date.

Lisa A Poole

Lisa Poole, Florida District Business Manager

4.13.16

Date

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION

OPERATING MARGIN JUSTIFICATION

375-030-82
PROCUREMENT
02/16

1. CONTACT INFORMATION

a. Firm Name:			b. Phone No.:
HNTB			904-596-7983
c. Address (including suite number):	d. City:	e. State:	f. Zip Code:
7077 Bonneval Road, $600	Jacksonville	FL	32256

2. COMPLEXITY OF PROJECT

The degree of difficulty associated with this project. Are there unique aspects to the project? Degree of coordination with others outside FDOT should be considered. This includes other agencies, municipalities, etc. multiple districts, multimodal projects

LOW – Straight-forward projects. Well defined and specific scope of services.

Typical Project Type

- **Bridge Inspection:** bridge inspection except scour; All
- **CEI:** Category 1 Bridges, 3R Rural, signalization, simple and straight-forward projects.
- **Design:** simple 3R-Rural; 3R Urban ride only.
- **Geotechnical:** standard.
- **PD&E:** Small simple projects with specific scopes.
- **Planning:** Data/traffic counts.
- **Survey:** resurfacing 3R rural/urban.
- **Traffic Operations:** turn-lane projects (design).

MEDIUM – Projects with some specialized areas requiring some specialized skills.

Typical Project Type

- **Bridge Inspection:** generally not applicable.
- **CEI:** resurfacing with some improvements; ITS, construction on new alignments, and signal system timing, development and implementation; rural arterials and rural interstate capacity improvements.
- **Design:** 3R Urban with some improvements, intersection, improvements with safety, Category 1 bridges.
- **PD&E:** widening with limited issues and bridge replacement with limited impacts.
- **Railroads:** all.
- **Survey:** survey in water areas.
- **Traffic Operations:** traffic operations studies and signal design projects.

HIGH – Complex multi-disciplined projects requiring specialized skills with significant management issues. Project that has numerous complicated traffic phases, involved highly technical construction features requiring specialized skills of the inspection staff. A complex project may also include complex involvement by multiple third parties (i.e., multiple utility relocations, railroads, airports, regulatory agencies, municipalities). The size of the project will not necessarily determine whether the construction project is complex. Large, repetitive projects on their own are not considered complex.

Typical Project Type

- **Bridge Inspection:** bridge scour.
- **CEI:** CEI for multi-level bridges in a corridor or interchange; numerous complicated traffic phases; specialized technical skills; Coating Systems; bridge projects involving movable spans, significant post-tensioning operations, pre-cast segmental components, and steel structures with large horizontal and vertical curvature; Multiple third party involvement (railroads, utilities, airports, municipalities, regulatory agencies)
- **Design:** new alignments, major widening, major reconstruction, railroad bridge design, Segmental Class 2 bridges, Movable Bridges.
- **PD&E:** PD&E with Feasibility study, multiple disciplines, significant issues;
- **Planning:** large planning (multimodal).
- **Survey:** pilings and bridges.
- **Traffic Operations:** ITS

Complexity of Project Allowed Range: 5% to 7%	**Consultant %: 7.00%**

JUSTIFICATION:
Roadway on new alignment with bridges and permanent retaining wall systems.

3. DEGREE OF (FINANCIAL) RISK

Indicate the amount of financial risk assumed by the consultant in relation to this project.

LOW – Contracts with well-defined and specific scopes, minimal probability of costs overruns and low financial risk exposure. Scope clarification meeting held, if applicable.

Typical Project Type

- **Bridge Inspection:** bridge inspections.
- **CEI:** subconsultants providing support personnel, ITS.
- **Design:** simple 3R rural, 3R urban ride only.
- **Geotechnical:** all.
- **PD&E:** accurate and specific scope & pre-negotiation meetings.
- **Planning:** most planning.
- **Survey:** all, including SUE.
- **Traffic Operations:** traffic operations studies; traffic counts.

MEDIUM – Projects with potential for additional coordination efforts with outside agencies/parties; coordination with several Districts, multiple municipalities, etc.

Typical Project Type

- **Bridge Inspection:** bridge scour.
- **CEI:** standard CEI contract.
- **Design:** design for new alignments, major reconstruction, and widening.
- **PD&E:** experimental design and broad scopes.
- **Planning:** some planning.
- **Railroads:** all.
- **Traffic Operations:** traffic signal projects, ITS design

HIGH – lump sum consultant contracts with possibility of overrunning costs; experimental design; projects involving significant financial risk, hazardous materials, and potential for significant unknown issues.

Typical Project Type

- **CEI:** high visibility, lump sum CEI contracts, multiple projects.
- **Design:** projects with multiple bridges.
- **PD&E:** multiple alternatives, multiple agency approval required.
- **Planning:** large multimodal projects (airports, seaports, railroads, transit).

Degree of (Financial) Risk Allowed Range: 3% to 5%	**Consultant %: 4.00%**

JUSTIFICATION:
Design for new alignments.

4. PROJECT SCHEDULE

LOW – no critical short term deadlines or requirements for large staffing concentrations, unfunded projects to go on the shelf.

Typical Project Type

- **Bridge Inspection:** bridge inspection; bridge scour.
- **CEI:** resurfacing; support services.
- **Design:** all 3R projects, standard schedule
- **PD&E:** no design phase scheduled in Work Program.
- **Planning:** all.
- **Railroads:** all.
- **Traffic Operations:** ITS.
- **Survey:** all 3R projects.

MEDIUM – standard schedule.

Typical Project Type

- **Bridge Inspection:** generally not applicable.
- **CEI:** ITS; push button construction.
- **Design:** standard design; bridges, large corridors.
- **Traffic Operations:** traffic counts.
- **Survey:** increased number of crews needed

HIGH – High visibility projects with short durations and aggressive schedules requiring large commitment of staff. Fast track projects with high profile and quick implementation schedule.

Typical Project Type

- **Bridge Inspection:** generally not applicable.
- **CEI:** multi-financial project contract, construction bonus, urban (day & night), high visibility; phased utility reallocations by others during the construction project.
- **Design:** mobility/economic stimulus.
- **PD&E:** design phase funded in the Work Program, bridge replacements.

Project Schedule Allowed Range: 1% to 3%	**Consultant %: 2.00%**

JUSTIFICATION:
Standard design

5. COST CONTROL EFFORTS

The degree to which the Consultant controls its costs for wages rates (by region), overhead, expenses and FCCM. The cost control is not generally dependent upon the type of project. Factors to be considered in negotiating this criteria are the following, and other project-specific items:

- Burdened salary rates (by region) by classification.
- Reasonableness of the proposed distribution of staffing for the project.
- Specialized services requiring specialized staff.
- Reimbursed or excluded premium overtime.

LOW – (3% to 6%) Lower or minimal cost control efforts.

MEDIUM – (7% to 15%) Moderate cost control efforts.

HIGH – (16% to 27%) Substantial cost control efforts.

Cost Control Efforts Allowed Range: 3% to 27%	**Consultant %: 23.00%**

JUSTIFICATION:
High - overhead is 141.45% which is significantly lower than the statewide averge of 169.21%

6. OPERATING MARGIN JUSTIFICATION TOTAL

The total for items **2 through 5** will be calculated for you.	
Total Allowed Range: 12% to 42%	**Consultant %: 36.0%**

7. CONTRACT DURATION ADJUSTMENT FACTOR

For contracts of longer duration (reference table below), the Department shall allow a Contract Duration Adjustment Factor (CDAF). CDAF is defined as an economic price adjustment, necessitated by instability of labor costs for an extended period of contract performance (Reference 48 CFR Section 16.203). CDAF is not negotiated, but shall be a fixed number of points based on the overall anticipated length of contract (project schedule). CDAF points shall be allocated by the Department as follows:

Anticipated Length of Contract	CDAF Points
0-12 Months	**0**
13-24 Months	**0**
25-36 Months	**3**
37-48 Months	**4.5**
49-60 Months	**5.5**

a) For new contracts, CDAF is applied beginning with the first labor hour incurred.
b) CDAF shall only be applicable for contracts selected (contract final ranking) on or after November 1, 2014.
c) In the event a contract selected on or after November 1, 2014 is extended (time extension) by six or more months, CDAF shall be applied prospectively to the extended/remaining services only, in accordance with the table shown above.
d) CDAF shall not be applied to contracts selected before November 1, 2014, nor contract amendments/time extensions for contracts selected before November 1, 2014.
e) For calculation purposes, CDAF shall be added to operating margin and applied to unloaded direct salaries.
f) CDAF is applicable only to consultant firms who are awarded operating margin points.

For Calculation purposes, CDAF shall be added to Operating Margin and applied to direct salaries:

Allowed CDAF for this project: 0

CARDNO

STAFF HOURS

SURVEY

ESTIMATE OF WORK EFFORT AND COST - SUBCONSULTANT

Name of Project: Design Survey - SW 62nd Boulevard South of SW 20th Avenue (does not include SW 20th)
County: Alachua
FPN: 211365-1
FAP No.: 1/0/1900

Consultant Name: HNTB / Cardno
Consultant No.: enter consultants proj. number
Date: 4/18/2016
Estimator: insert name

Staff Classification	Total Staff Hours From "SH Summary Firm"	Senior Surveyor & Mapper	Surveyor & Mapper	Survey Technician	Secretary / Clerical	Staff Classification 6	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
		$198.18	$162.11	$123.18	$68.75	$0.00	$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!
6. Drainage Analysis	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)	320	36	96	147	41	0	0	0	0	0	0	0	0	320	$43,623	$136.32
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	320	36	96	147	41	0	0	0	0	0	0	0	0	320		
Total Staff Cost		$7,134.48	$15,562.56	$18,107.46	$2,818.75	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00		**$43,623.25**	**$136.32**

Check = $43,623.25

Notes:
1. This sheet to be used by Subconsultant to calculate its fee.
2. Crew days based on 9 hour days under 50 miles

SALARY RELATED COSTS:					$43,623.25
OVERHEAD:		0%			$0.00
OPERATING MARGIN:		0%			$0.00
FCCM (Facilities Capital Cost Money):		0.00%			$0.00
EXPENSES:		0.00%			$0.00
SUBTOTAL ESTIMATED FEE:					**$43,623.25**
3 Man Survey Crew Days	63.1	**Days**			
3 Man Survey Crew	567.9	hours @	$ 181.91	/ hour	$103,306.69
3 Man Designating Crew Days	0	**Days**			
3 Man Designating Crew	0.0	hours@	$ -	/ hour	$0.00
3 man Locating Crew		hours @	$ -	/ hour	$0.00
Designating Truck		hours @	$ -	/ hour	$0.00
Maintenance of Traffic	0.0	hours @	$ -	/ hour	$0.00
SUBTOTAL ESTIMATED FEE:					**$146,929.94**
Optional Services					$0.00
GRAND TOTAL ESTIMATED FEE:					**$146,929.94**

Project Activity 27: Survey

Estimator: Daryl Thie

Design Survey - SW 62nd Boulevard South of SW 20th Avenue (does not include SW 20th)
211365-1

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)									Establish Primary and Secondary Horizontal Control. through the project limits 1.69 miles. Static GPS observations will be used and processed using OPUS. Estimated 4 Primary control points and 9 secondary. Additional office support requested for preparing Control Point datasheets for primary control points only. Includes control for Compensation pond
	2-Lane Roadway	Mile	1.69	1.48	2.50	1.25	3.13	4.00	10.00	
	Multi-lane Roadway	Mile			0.00		0.00		0.00	
	Interstate	Mile			0.00		0.00		0.00	
27.2	Vertical PC / Bench Line									Establish Bench Marks and TBM's throughout the project limits 1.69 miles. Estimated 4 Bench Marks and 9 TBM will be established. Additional office support requested for preparing Control Point datasheets for the BM's. Included control for Compensation Pond
	2-Lane Roadway	Mile	1.69	2.07	3.50	1.25	4.38	4.00	14.00	
	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									Recover/ Establish the centerline alignment and right of way of SW 62nd to include running new alignment on southerly extension. Also alignment for SW 42nd Street and SW 24th Avenue, SW 40th Blvd. and SW 20th Avenue Additional office support requested for calculating alignment and review with FDOT for approval
		Mile	1.96	3.06	6.00	1.25	7.50	4.00	23.99	
27.4	Aerial Targets			Units/Day						N/A
	2-Lane Roadway	EA			0.00		0.00		0.00	
	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						Stake and reference the centerline of 62nd SW 43rd Street and SW 24th Avenue at 1000' intervals including the beginning and ending stations and all PC. PT. and non curve PI. Estimated 22 points for this project.
	2-Lane Roadway	EA	22.00	5.00	4.40	1.25	5.50	3.00	13.20	
	Multi-lane Roadway	EA			0.00		0.00		0.00	
	Interstate	EA			0.00		0.00		0.00	
	Reference Points	"B"		Units/Day						
	Non Alignment Points/Approximate	EA			0.00		0.00		0.00	
27.6	Topography/DTM (3D)									Provide full Topo/DTM from right of way to right of way and out 25 feet along SW 62nd and its southerly extension approximatley 1.13 miles @ 425 feet per day = 14 days. Provide full Topo/DTM along road to storage sites approximatley 800 feet @ 638 feet per day average= 1.5 days, SW 43rd Street and SW 24th Avenue - 2278 feet @ 450"/days Total Topo/DTM 5 days - Total Topo/DTM 20.5 days
		Mile	1.69	12.13	20.50	1.25	25.63	3.00	61.50	
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

Project Activity 27: Survey

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
27.10	Underground Utilities									
	Designates	Mile/Site			0.00		0.00		0.00	
	Locates	Point			0.00		0.00		0.00	
	Survey		25%	0.00	0.00		0.00		0.00	See Limiting Amount Staff Hour estimate for Designating for this item
27.11	Outfall Survey									storm drain inverts included in design survey Topo/DTM
		Mile			0.00		0.00		0.00	
27.12	Drainage Survey			Units/Day						No outfall surveys required
		EA			0.00		0.00		0.00	
27.13	Bridge Survey									no existing bridges
	Minor / Major	EA			0.00		0.00		0.00	
27.14	Channel Survey									Bridge Hydraulics for Hog Town Creek at SW 62nd crossing, provide cross section each side of proposed bridge, one upstream and down stream one bridge length and one upstream and down stream 500'
		EA	1.00	3.00	3.00	1.25	3.75	3.00	9.00	
27.15	Pond Site Survey									3 ponds sites (2A, 2B, 3A & New Compensation Pond South of Hog Town Creek) (26.4 acres)
		EA	26.40	0.52	13.82	1.25	17.28	3.00	41.47	
27.16	Mitigation Survey									N/A compensation pond included in pond site surveys
		Mile			0.00		0.00		0.00	
27.17	Jurisdiction Line Survey									Survey of wetlands as staked by others for ponds and main roadway
		Mile	2.00	1.50	3.00	1.25	3.75	3.00	9.00	
27.18	Geotechnical Support			Units/Day						Survey Geotechnical boring locations estimated at 171. Procedure will be to stake boring location and obtain a ground elevation at that time.
		EA	171	38.85714	4.40	1.25	5.50	3.00	13.20	
27.19	Sectional / Grant Survey									
		Corner			0.00		0.00		0.00	Included in Right of way control survey
		Mile			0.00		0.00		0.00	
27.20	Subdivision Location									Included in Right of way control survey
		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									Included in right of way mapping
		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	
27.25	R/W Monumentation									N/A
		Point			0.00		0.00		0.00	

Project Activity 27: Survey

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
27.26	Line Cutting									N/A
		Mile			0.00					
27.27	Work Zone Safety									.5 hours per crew day
			40	0.05	2.00					
27.28	Miscellaneous Surveys									
					0.00		0.00		0.00	
Survey Subtotal				**Crew Days**	**63.1**	**Field Support Hours**	**76**	**Office Support Hours**	**195**	
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
			0%	63	0	1.25	0	3.00	0	
27.30	Document Research	Units								Certified Corner cards and ogirional government survey notes
			2.00						2	
27.31	Field Reviews	Units								Field reiew for QA/QC od design survey and utility designating
			8.00						8	
27.32	Technical Meetings	LS								
			0.00						0	
27.33	Quality Assurance / Quality Control	LS								
								8%	16	
27.34	Supervision	LS								
								8%	15	
27.35	Coordination	LS								
								4%	8	
		27. Survey Total		**Crew Days**	**63.1**	**Field Support Hours**	**76**	**Office Support Hours**	**244**	

SPLS =
PLS =
Office Support =
Total Hours = 320

Technical Meetings				
Kickoff Meeting with FDOT	EA	0	0	0
Baseline Approval Review	EA	0	0	0
Network Control Review	EA	0	0	0
Vertical Control Review	EA	0	0	0
Local Governments (cities, counties)	EA	0	0	0
Final Submittal Review	EA	0	0	0
Other Meetings	EA	0	0	0
Subtotal Technical Meetings				**0**
Progress Meetings	EA	0	0	0
Phase Review Meetings	EA	0	0	0
Total Meetings				**0**

Carries to 27.32

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

CARDNO

STAFF HOURS

ROW CONTROL MAPS

ESTIMATE OF WORK EFFORT AND COST - SUBCONSULTANT

Name of Project: Right of Way Control Maps - SW 62nd Boulevard South of SW 20th Avenue (does not include SW 20th)
County: Alachua
FPN: 0
FAP No.: 1/0/1900

Consultant Name: HNTB / Cardno
Consultant No.: enter consultants proj. number
Date: 4/18/2016
Estimator: Daryl Thie

Staff Classification	Total Staff Hours From "SH Summary - Firm"	Senior Surveyor & Mapper	Surveyor & Mapper	Survey Technician	Secretary / Clerical	Staff Classification 6	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
		$198.18	$162.11	$123.18	$68.75	$0.00	$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!
6. Drainage Analysis	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)	115	13	34	54	14	0	0	0	0	0	0	0	0	115	$15,702	$136.54
28. Photogrammetry	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
29. Mapping	240	7	17	194	22	0	0	0	0	0	0	0	0	240	$29,553	$123.14
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	354	20	51	248	36	0	0	0	0	0	0	0	0	355		
Total Staff Cost		$3,963.60	$8,267.61	$30,548.64	$2,475.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00		**$45,254.85**	**$127.48**

Check = $45,254.85

Notes:
1. This sheet to be used by Subconsultant to calculate its fee.
2. Crew days based on 9 hour days under 50 miles

SALARY RELATED COSTS:				$45,254.85
OVERHEAD:		0%		$0.00
OPERATING MARGIN:		0%		$0.00
FCCM (Facilities Capital Cost Money):		0.00%		$0.00
EXPENSES:		0.00%		$0.00
SUBTOTAL ESTIMATED FEE:				**$45,254.85**
3 Man Survey Crew Days	16	**Days**		
3 Man Survey Crew	144.0	hours @	$ 181.91 / hour	$26,195.04
3 Man Designating Crew Days	0	**Days**		
3 Man Designating Crew	0.0	hours@	$ - / hour	$0.00
3 man Locating Crew		hours @	$ - / hour	$0.00
Designating Truck		hours @	$ - / hour	$0.00
Maintenance of Traffic	0.0	hours @	$ - / hour	$0.00
SUBTOTAL ESTIMATED FEE:				**$71,449.89**
Optional Services				$0.00
GRAND TOTAL ESTIMATED FEE:				**$71,449.89**

Project Activity 27: Survey

Estimator: Daryl Thie

Right of Way Control Maps - SW 62nd Boulevard South of SW 20th Avenue (does not include SW 20th)
0

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			0.00		0.00		0.00	Supplement existing control from Design survey to tie in sections and subdivisions
	Multi-lane Roadway	Mile	1.00	1.00	1.00	1.25	1.25	3.00	3.00	
	Interstate	Mile			0.00		0.00		0.00	
27.2	Vertical PC / Bench Line									
	2-Lane Roadway	Mile			0.00		0.00		0.00	N/A
	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									N/A
		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	N/A
	Multi-lane Roadway	EA			0.00		0.00		0.00	
	Interstate	EA			0.00		0.00		0.00	
	Reference Points	"B"		Units/Day						
	Non Alignment Points/Approximate	EA			0.00		0.00		0.00	N/A
27.6	Topography/DTM (3D)									
		Mile			0.00		0.00		0.00	N/A
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									

Project Activity 27: Survey

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
27.10	Underground Utilities									
	Designates	Mile/Site			0.00		0.00		0.00	
	Locates	Point			0.00		0.00		0.00	
	Survey		25%	0.00	0.00		0.00		0.00	N/A
27.11	Outfall Survey									N/A
		Mile			0.00		0.00		0.00	
27.12	Drainage Survey			Units/Day						N/A
		EA			0.00		0.00		0.00	
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	
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						N/A
		EA			0.00				0.00	
27.19	Sectional / Grant Survey									
		Corner	20	0.60	12.00	2.00	24.00	5.00	60.00	run 3 sections for control maps, additional office suport for research, calculating secition breakdowm and certified corner cards
		Mile			0.00		0.00		0.00	
27.20	Subdivision Location									Tie down 4 subduvisions/condo
		Block	1	0.5	0.50	2.00	1.00	5.00	2.50	
27.21	Maintained R/W									N/A
		Mile			0.00		0.00		0.00	
27.22	Boundary Survey									tie boundaries for proposed ponds(10 Tax ID Parcels)
		EA	10.00	0.20	2.00		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	
27.25	R/W Monumentation									N/A
		Point			0.00		0.00		0.00	

Project Activity 27: Survey

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
27.26	Line Cutting									N/A
		Mile			0.00					
27.27	Work Zone Safety									.5 hours per crew day
			10	0.05	0.50					
27.28	Miscellaneous Surveys									
					0.00		0.00		0.00	
Survey Subtotal				**Crew Days**	**16.0**	**Field Support Hours**	**26**	**Office Support Hours**	**66**	
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
			0%	16	0	1.25	0	3.00	0	
27.30	Document Research	Units								Certified Corner cards and ogirional government survey notes
			2.00						2	
27.31	Field Reviews	Units								Field reiew for QA/QC od design survey and utility designating
			8.00						8	
27.32	Technical Meetings	LS								
			0.00						0	
27.33	Quality Assurance / Quality Control	LS								
								10%	7	
27.34	Supervision	LS								
								7%	5	
27.35	Coordination	LS								
								3%	2	
		27. Survey Total		**Crew Days**	**16.0**	**Field Support Hours**	**26**	**Office Support Hours**	**89**	

SPLS =
PLS =
Office Support =
Total Hours = 115

Technical Meetings				
Kickoff Meeting with FDOT	EA	0	0	0
Baseline Approval Review	EA	0	0	0
Network Control Review	EA	0	0	0
Vertical Control Review	EA	0	0	0
Local Governments (cities, counties)	EA	0	0	0
Final Submittal Review	EA	0	0	0
Other Meetings	EA	0	0	0
Subtotal Technical Meetings				**0**
Progress Meetings	EA	0	0	0
Phase Review Meetings	EA	0	0	0
Total Meetings				**0**

Carries to 27.32

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

Project Activity 29: Mapping

Estimator:

Right of Way Control Maps - SW 62nd Boulevard South of SW 20th Avenue (does not include SW 20th)

0

Task No.	Task	Units	No. of Units	Hours/ Unit	No. of Sheets	Total Hours	Comments
	Master CADD File						
29.1	Alignment	Mile	0	0		0	
29.2	Section and 1/4 Section Lines	Section	0	0		0	
29.3	Subdivisions / Property Lines	EA	0	0		0	
29.4	Existing R/W	Mile	0	0		0	
29.5	Topography	Mile	0	0		0	
29.6	Parent Tract Properties/Existing Easements	Parcel	0	0		0	
29.7	Proposed R/W Requirements	Parcel	0	0		0	
29.8	Limits of Construction	Mile	0	0		0	
29.9	Jurisdictional/Agency Lines	Linear Mile	0	0		0	
	Sheet Files						
29.10	Control Survey Cover Sheet	Sheet	1	8	1	8	
29.11	Control Survey Key Sheet	Sheet	1	28	1	28	1 @ 1"=400'
29.12	Control Survey Detail Sheet	Sheet	7	20	7	140	5 sheets main roadway, 2 sheets ponds @ 1"=40'
29.13	R/W Map Cover Sheet	Sheet	0	0		0	
29.14	R/W Map Key Sheet	Sheet	0	0		0	
29.15	R/W Map Detail Sheet	Sheet	0	0		0	
29.16	Maintenance Map Cover Sheet	Sheet	0	0		0	
29.17	Maintenance Map Key Sheet	Sheet	0	0		0	
29.18	Maintenance Map Detail Sheet	Sheet	0	0		0	
29.19	Reference Point Sheet	Sheet	1	4	1	4	
29.20	Project Network Control Sheet	Sheet	0	0		0	
29.21	Table of Ownerships Sheet	Sheet	0	0		0	

Project Activity 29: Mapping

Task No.	Task	Units	No. of Units	Hours/ Unit	No. of Sheets	Total Hours	Comments
	Miscellaneous						
29.22	Parcel Sketches	Parcel	0	0		0	
29.23	TIITF Sketches	Parcel	0	0		0	
29.24	Other Specific Purpose Survey Map	EA	0	0		0	
29.25	Boundary Survey(s) Map	EA	0	0		0	
29.26	R/W Monumentation Map	Sheet	0	0		0	
29.27	Title Search Map	LS	0	0		0	
29.28	Title Search Report	LS	0	0		0	
29.29	Legal Descriptions	Parcel	0	0	0	0	
29.30	Final Maps/Plans Comparison	Sheet	0	0		0	
				Mapping Technical Subtotal	**10**	**180**	
29.31	Field Reviews	EA	1	5		4.5	
29.32	Technical Meetings	LS	2	5		9	
29.33	Quality Assurance/Quality Control	EA	%	10%		18	
29.34	Supervision	EA	%	10%		17	
				Mapping Nontechnical Subtotal		**48.5**	
29.35	Coordination	LS	%	5%		11	
29.36	Supplemental Mapping	LA	%	0%		0	
				29. Mapping Total	**10**	**240**	

Project Activity 29: Mapping

Task No.	Task	Units	No. of Units	Hours/ Unit	No. of Sheets	Total Hours	Comments
	Technical Meetings						
	Kickoff meeting	EA	0	0		0	
	Control map review	EA	0	0		0	
	45/60/90/final map review	EA	0	0		0	
	Other meetings	EA	0	0		0	
	Subtotal technical meetings					**0**	
	Progress Meetings	EA	0	0		0	
	Phase Review Meetings	EA	0	0		0	
	Total Meetings					**0**	

Carries to 29.32

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

CARDNO

STAFF HOURS

UTILITY

COORDINATION

ESTIMATE OF WORK EFFORT AND COST - SUBCONSULTANT

Name of Project: Utility Coordination - SW 62nd Boulevard South of SW 20th Avenue (does not include any work along SW 20th)
County: Alachua
FPN: 211365-1
FAP No.: 1/0/1900

Consultant Name: HNTB / Cardno
Consultant No.: enter consultants proj. number
Date: 4/18/2016
Estimator: Daryl Thie, PLS

Staff Classification	Total Staff Hours From "SH Summary - Firm"	Senior Surveyor & Mapper	Surveyor & Mapper	Survey Technician	Project Manager (SUE)	Senior Utility Coordinator	Utility Locator	Utility Coordinator	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
		$0.00	$0.00	$0.00	$0.00	$120.09	$0.00	$72.25	$68.75	$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!
6. Drainage Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
7. Utilities	75	0	0	0	0	62	0	8	5	0	0	0	0	75	$8,367	$111.56
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)	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!
Total Staff Hours	75	0	0	0	0	62	0	8	5	0	0	0	0	75		
Total Staff Cost		$0.00	$0.00	$0.00	$0.00	$7,445.58	$0.00	$578.00	$343.75	$0.00	$0.00	$0.00	$0.00		$8,367.33	$111.56
														Check =	$8,367.33	

Notes:
1. This sheet to be used by Subconsultant to calculate its fee.
2. Crew days based on 10 hour days over 51 miles

SALARY RELATED COSTS:					$8,367.33
OVERHEAD:	0%				$0.00
OPERATING MARGIN:	0%				$0.00
FCCM (Facilities Capital Cost Money):	0.00%				$0.00
EXPENSES:	0.00%				$0.00
SUBTOTAL ESTIMATED FEE:					**$8,367.33**
3 Man Survey Crew		hours @	$ -	/ hour	$0.00
3 Man Designating Crew		hours@	$ -	/ hour	$0.00
3 man Locating Crew		hours @	$ -	/ hour	$0.00
Designating Truck		hours @	$ -	/ hour	$0.00
Maintenance of Traffic	0.0	hours @	$ -	/ hour	$0.00
SUBTOTAL ESTIMATED FEE:					**$8,367.33**
Optional Services					$0.00
GRAND TOTAL ESTIMATED FEE:					**$8,367.33**

Project Activity 7: Utilities

Estimator: Terri Carmichael

ordination - SW 62nd Boulevard South of SW 20th Avenue (does not include any work along SW 20th)

11 UAO's

211365-1

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
7.1	Kickoff Meeting	LS	1	6	6	2 hrs travel+2 hour meeting+2 hr notes=6 hrs
7.2	Identify Existing UAO(s)	LS	9	0.500	5	Run design ticket, verify contacts, setup files, Cox, GRU (water, waste water, sewer, distribution, transmission, gas, fiber), AT&T,
7.3	Make Utility Contacts	LS	9	1	5	.50 hr per initial contact x 9 utilities
7.4	Exception Processing	LS	1	0	0	N/A
7.5	Preliminary Utility Meeting	LS	1	8	8	2 hr prep + 2 hrs travel+2 hour meeting+2 hr notes=8 hrs
7.6	Individual/Field Meetings	LS	3	7	21	1 hr prep + 2 hrs travel+2 hour meeting+2 hr notes=7 hrs (anticipate 3 meetings)
7.7	Collect and Review Plans and Data from UAO(s)	LS	9	2	18	9 UAO's: some will take more, others less time
7.8	Subordination of Easements Coordination	LS	3	2	6	Possible subordination at 3 locations x 2 hrs = 6 hrs
7.9	Utility Design Meeting	LS	0	0	0	N/A
7.10	Review Utility Markups & Work Schedules, and Processing of Schedules & Agreements	LS	0	0	0	N/A
7.11	Utility Coordination/Followup	LS	0	0	0	N/A
7.12	Utility Constructability Review	LS	0	0	0	N/A
7.13	Additional Utility Services	LS	0	0	0	N/A
7.14	Processing Utility Work by Highway Contractor (UWHC)	LS	2	3	6	Preliminary discussion with GRU water and sewer about entering into UWHCA
7.15	Contract Plans to UAO(s)	LS	0	0	0	N/A
7.16	Certification/Close-Out	LS	0	0	0	N/A
7.17	Other Utilities	LS	0	0	0	N/A
ilities Total					**75**	

Project Activity 7: Utilities

Technical Meetings		
Kickoff	EA	1
Preliminary Meeting	EA	1
Individual UAO Meetings	EA	2
Field Meetings	EA	1
Design Meeting	EA	0
Other Meetings	EA	0
Total Technical Meetings		**5**

CARDNO

STAFF HOURS

TREE SURVEY

ESTIMATE OF WORK EFFORT AND COST - SUBCONSULTANT

Name of Project: Tree Survey - SW 62nd Boulevard South of SW 20th Avenue (does not include SW 20th)
County: Alachua
FPN: 211365-1
FAP No.: 1/0/1900

Consultant Name: HNTB / Cardno
Consultant No.: enter consultants proj. number
Date: 4/18/2016
Estimator: insert name

Staff Classification	Total Staff Hours From "SH Summary Firm"	Senior Surveyor & Mapper	Surveyor & Mapper	Survey Technician	Secretary / Clerical	Staff Classification 6	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
		$198.18	$162.11	$123.18	$68.75	$0.00	$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!
6. Drainage Analysis	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)	119	12	36	59	12	0	0	0	0	0	0	0	0	119	$16,307	$137.03
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	119	12	36	59	12	0	0	0	0	0	0	0	0	119		
Total Staff Cost		$2,378.16	$5,835.96	$7,267.62	$825.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00		**$16,306.74**	**$137.03**

Check = $16,306.74

Notes:
1. This sheet to be used by Subconsultant to calculate its fee.
2. Crew days based on 9 hour day under 50 miles

SALARY RELATED COSTS:					$16,306.74
OVERHEAD:		0%			$0.00
OPERATING MARGIN:		0%			$0.00
FCCM (Facilities Capital Cost Money):		0.00%			$0.00
EXPENSES:		0.00%			$0.00
SUBTOTAL ESTIMATED FEE:					**$16,306.74**
3 Man Survey Crew	151.2	hours @	$ 181.91	/ hour	$27,504.79
3 Man Designating Crew	0.0	hours@	$ -	/ hour	$0.00
3 man Locating Crew	0.0	hours @	$ -	/ hour	$0.00
Designating Truck	0.0	hours @	$ -	/ hour	$0.00
Maintenance of Traffic	0.0	hours @	$ -	/ hour	$0.00
SUBTOTAL ESTIMATED FEE:					**$43,811.53**
Optional Services					$0.00
GRAND TOTAL ESTIMATED FEE:					**$43,811.53**

Project Activity 27: Survey

Estimator: Daryl Thie

Tree Survey - SW 62nd Boulevard South of SW 20th Avenue (does not include SW 20th)
211365-1

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			0.00		0.00		0.00	
	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			0.00		0.00		0.00	
	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									
		Mile			0.00		0.00		0.00	
27.4	Aerial Targets			Units/Day						
	2-Lane Roadway	EA			0.00		0.00		0.00	
	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	
	Multi-lane Roadway	EA			0.00		0.00		0.00	
	Interstate	EA			0.00		0.00		0.00	
	Reference Points	"B"		Units/Day						
	Non Alignment Points/Approximate	EA			0.00		0.00		0.00	
27.6	Topography/DTM (3D)									
		Mile			0.00		0.00		0.00	
27.7	Planimetric (2D)									
		Mile			0.00		0.00		0.00	
27.8	Roadway Cross-Sections/Profiles									
		Mile			0.00		0.00		0.00	
27.9	Side Street Surveys									

Project Activity 27: Survey

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
27.10	Underground Utilities									
	Designates	Mile/Site			0.00		0.00		0.00	
	Locates	Point			0.00		0.00		0.00	
	Survey		25%	0.00	0.00		0.00		0.00	
27.11	Outfall Survey									
		Mile			0.00		0.00		0.00	
27.12	Drainage Survey			Units/Day						
		EA			0.00		0.00		0.00	
27.13	Bridge Survey									
	Minor / Major	EA			0.00		0.00		0.00	
27.14	Channel Survey									
		EA			0.00		0.00		0.00	
27.15	Pond Site Survey									
		EA			0.00		0.00		0.00	
27.16	Mitigation Survey									Tree Survey per City of Gainesville Tree ordinance for the new alignment of SW 62nd, pond 2A, 2B 3A, and the Flood Plain Compensation Pond south of Hogtown Creek only. Trees to be flagged and identified by City of Gainesville arborist.
		Mile	1.00	16.00	16.00	1.25	20.00	5.00	80.00	
27.17	Jurisdiction Line Survey									
		Mile			0.00		0.00		0.00	
27.18	Geotechnical Support			Units/Day						
		EA			0.00				0.00	
27.19	Sectional / Grant Survey									
		Corner			0.00		0.00		0.00	
		Mile			0.00		0.00		0.00	
27.20	Subdivision Location									
		Block			0.00		0.00		0.00	
27.21	Maintained R/W									
		Mile			0.00		0.00		0.00	
27.22	Boundary Survey									
		EA			0.00		0.00		0.00	
27.23	Water Boundary Survey									
		EA			0.00		0.00		0.00	
27.24	R/W Staking / R/W Line									
		EA			0.00		0.00		0.00	
		Mile			0.00		0.00		0.00	
27.25	R/W Monumentation									

Project Activity 27: Survey

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
		Point			0.00		0.00		0.00	

Project Activity 27: Survey

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
27.26	Line Cutting									
		Mile			0.00					
27.27	Work Zone Safety									.5 hours per crew day
			16	0.05	0.80					
27.28	Miscellaneous Surveys									
					0.00		0.00		0.00	
Survey Subtotal				**Crew Days**	**16.8**	**Field Support Hours**	**20**	**Office Support Hours**	**80**	
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
			0%	17	0	1.25	0	3.00	0	
27.30	Document Research	Units								
									0	
27.31	Field Reviews	Units								
									0	
27.32	Technical Meetings	LS								
									0	
27.33	Quality Assurance / Quality Control	LS								
								10%	8	
27.34	Supervision	LS								
								8%	6	
27.35	Coordination	LS								
								6%	4	
27. Survey Total				**Crew Days**	**16.8**	**Field Support Hours**	**20**	**Office Support Hours**	**99**	

SPLS =
PLS =
Office Support =
Total Hours = 119

Technical Meetings				
Kickoff Meeting with FDOT	EA	0	0	0
Baseline Approval Review	EA	0	0	0
Network Control Review	EA	0	0	0
Vertical Control Review	EA	0	0	0
Local Governments (cities, counties)	EA	0	0	0
Final Submittal Review	EA	0	0	0
Other Meetings	EA	0	0	0
Subtotal Technical Meetings				**0**
Progress Meetings	EA	0	0	0
Phase Review Meetings	EA	0	0	0
Total Meetings				**0**

Carries to 27.32

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

CARDNO

STAFF HOURS

ROW MAPPING

ESTIMATE OF WORK EFFORT AND COST - SUBCONSULTANT

Name of Project: Right of Way Survey and Mapping - SW 62nd Boulevard South of SW 20th Avenue (does not include SW 20th)
County: Alachua
FPN: 211365-1
FAP No.: 1/0/1900

Consultant Name: HNTB / Cardno
Consultant No.: enter consultants proj. number
Date: 4/18/2016
Estimator: insert name

Staff Classification	Total Staff Hours From "SH Summary - Firm"	Senior Surveyor & Mapper	Surveyor & Mapper	Survey Technician	Secretary / Clerical	Staff Classification 6	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
		$198.18	$162.11	$123.18	$68.75	$0.00	$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!
6. Drainage Analysis	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, Nor-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)	58	6	17	29	6	0	0	0	0	0	0	0	0	58	$7,930	$136.72
28. Photogrammetry	0	0	0	0	0	0	0	0	0	0	0	0	0	0	$0	#DIV/0!
29. Mapping	294	9	26	238	21	0	0	0	0	0	0	0	0	294	$36,759	$125.03
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	352	15	43	267	27	0	0	0	0	0	0	0	0	352		
Total Staff Cost		$2,972.70	$6,970.73	$32,889.06	$1,856.25	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00		**$44,688.74**	**$126.96**

Check = $44,688.74

Notes:
1. This sheet to be used by Subconsultant to calculate its fee.
2. Crew days based on 9 hour days under 50 miles

SALARY RELATED COSTS:					$44,688.74
OVERHEAD:		0%			$0.00
OPERATING MARGIN:		0%			$0.00
FCCM (Facilities Capital Cost Money):		0.00%			$0.00
EXPENSES:		0.00%			$0.00
SUBTOTAL ESTIMATED FEE:					**$44,688.74**
3 **Man Survey Crew Days**	7.2	**Days**			
3 Man Survey Crew	64.8	hours @	$ 181.91	/ hour	$11,787.77
3 **Man Designating Crew Days**	0	**Days**			
3 Man Designating Crew	0.0	hours@	$ -	/ hour	$0.00
3 man Locating Crew		hours @	$ -	/ hour	$0.00
Designating Truck		hours @	$ -	/ hour	$0.00
Maintenance of Traffic	0.0	hours @	$ -	/ hour	$0.00
SUBTOTAL ESTIMATED FEE:					**$56,476.51**
Title Searches 14 @ $575 each					$8,050.00
GRAND TOTAL ESTIMATED FEE:					**$64,526.51**

Project Activity 27: Survey

Estimator: Daryl Thie

Right of Way Survey and Mapping - SW 62nd Boulevard South of SW 20th Avenue (does not include SW 20th)
211365-1

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			0.00		0.00		0.00	
	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			0.00		0.00		0.00	
	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									
		Mile			0.00		0.00		0.00	
27.4	Aerial Targets			Units/Day						
	2-Lane Roadway	EA			0.00		0.00		0.00	
	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	
	Multi-lane Roadway	EA			0.00		0.00		0.00	
	Interstate	EA			0.00		0.00		0.00	
	Reference Points	"B"		Units/Day						
	Non Alignment Points/Approximate	EA			0.00		0.00		0.00	
27.6	Topography/DTM (3D)									
		Mile			0.00		0.00		0.00	
27.7	Planimetric (2D)									
		Mile			0.00		0.00		0.00	
27.8	Roadway Cross-Sections/Profiles									
		Mile			0.00		0.00		0.00	
27.9	Side Street Surveys									

Project Activity 27: Survey

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
27.10	Underground Utilities									
	Designates	Mile/Site			0.00		0.00		0.00	
	Locates	Point			0.00		0.00		0.00	
	Survey		25%	0.00	0.00		0.00		0.00	
27.11	Outfall Survey									
		Mile			0.00		0.00		0.00	
27.12	Drainage Survey			Units/Day						
		EA			0.00		0.00		0.00	
27.13	Bridge Survey									
	Minor / Major	EA			0.00		0.00		0.00	
27.14	Channel Survey									
		EA			0.00		0.00		0.00	
27.15	Pond Site Survey									
		EA			0.00		0.00		0.00	
27.16	Mitigation Survey									
		Mile			0.00		0.00		0.00	
27.17	Jurisdiction Line Survey									
		Mile			0.00		0.00		0.00	
27.18	Geotechnical Support			Units/Day						
		EA			0.00				0.00	
27.19	Sectional / Grant Survey									
		Corner			0.00		0.00		0.00	
		Mile			0.00		0.00		0.00	
27.20	Subdivision Location									
		Block			0.00		0.00		0.00	
27.21	Maintained R/W									
		Mile			0.00		0.00		0.00	
27.22	Boundary Survey									
		EA	14.00	0.50	7.00	2.00	14.00	4.00	28.00	Individual property ties that may be needed
27.23	Water Boundary Survey									
		EA			0.00		0.00		0.00	
27.24	R/W Staking / R/W Line									
		EA			0.00		0.00		0.00	
		Mile			0.00		0.00		0.00	
27.25	R/W Monumentation									
		Point			0.00		0.00		0.00	

Project Activity 27: Survey

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
27.26	Line Cutting									
		Mile			0.00					
27.27	Work Zone Safety									.5 hours per crew day
			4	0.05	0.20					
27.28	Miscellaneous Surveys									
					0.00		0.00		0.00	
Survey Subtotal				**Crew Days**	**7.2**	**Field Support Hours**	**14**	**Office Support Hours**	**28**	
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
			0%	7	0	1.25	0	3.00	0	
27.30	Document Research	Units								Certified Corner cards and ogirional government survey notes
			2.00						2	
27.31	Field Reviews	Units								Field reiew for QA/QC od design survey and utility designating
			8.00						8	
27.32	Technical Meetings	LS								
			0.00						0	
27.33	Quality Assurance / Quality Control	LS								
								10%	3	
27.34	Supervision	LS								
								8%	2	
27.35	Coordination	LS								
								3%	1	
	27. Survey Total			**Crew Days**	**7.2**	**Field Support Hours**	**14**	**Office Support Hours**	**44**	

SPLS =
PLS =
Office Support =
Total Hours = 58

Technical Meetings				
Kickoff Meeting with FDOT	EA	0	0	0
Baseline Approval Review	EA	0	0	0
Network Control Review	EA	0	0	0
Vertical Control Review	EA	0	0	0
Local Governments (cities, counties)	EA	0	0	0
Final Submittal Review	EA	0	0	0
Other Meetings	EA	0	0	0
Subtotal Technical Meetings				**0**
Progress Meetings	EA	0	0	0
Phase Review Meetings	EA	0	0	0
Total Meetings				**0**

Carries to 27.32

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

Project Activity 29: Mapping

Estimator: f Way Survey and Mapping - SW 62nd Boulevard South of SW 20th Avenue (does not include SW 20th)

211365-1

Task No.	Task	Units	No. of Units	Hours/ Unit	No. of Sheets	Total Hours	Comments
	Master CADD File						
29.1	Alignment	Mile	0	0		0	
29.2	Section and 1/4 Section Lines	Section	0	0		0	
29.3	Subdivisions / Property Lines	EA	0	0		0	
29.4	Existing R/W	Mile	0	0		0	
29.5	Topography	Mile	0	0		0	
29.6	Parent Tract Properties/Existing Easements	Parcel	0	0		0	
29.7	Proposed R/W Requirements	Parcel	0	0		0	
29.8	Limits of Construction	Mile	0	0		0	
29.9	Jurisdictional/Agency Lines	Linear Mile	0	0		0	
	Sheet Files						
29.10	Control Survey Cover Sheet	Sheet	0	0		0	
29.11	Control Survey Key Sheet	Sheet	0	0		0	
29.12	Control Survey Detail Sheet	Sheet	0	0		0	
29.13	R/W Map Cover Sheet	Sheet	1	4	1	4	
29.14	R/W Map Key Sheet	Sheet	1	15	1	15	1 @ 1"=400'
29.15	R/W Map Detail Sheet	Sheet	7	20	7	140	5 sheets main roadway, 2 sheets ponds @ 1"=40'
29.16	Maintenance Map Cover Sheet	Sheet	0	0		0	
29.17	Maintenance Map Key Sheet	Sheet	0	0		0	
29.18	Maintenance Map Detail Sheet	Sheet	0	0		0	
29.19	Reference Point Sheet	Sheet	0	0		0	
29.20	Project Network Control Sheet	Sheet	0	0		0	N/A
29.21	Table of Ownerships Sheet	Sheet	1	8	1	8	14 parcels

Project Activity 29: Mapping

Task No.	Task	Units	No. of Units	Hours/ Unit	No. of Sheets	Total Hours	Comments
	Miscellaneous						
29.22	Parcel Sketches	Parcel	0	0		0	
29.23	TIITF Sketches	Parcel	1	16	3	16	at Hog Town bridge
29.24	Other Specific Purpose Survey Map	EA	0	0		0	
29.25	Boundary Survey(s) Map	EA	0	0		0	
29.26	R/W Monumentation Map	Sheet	0	0		0	
29.27	Title Search Map	LS	0	0		0	N/A
29.28	Title Search Report	LS	0	0		0	14 parcels @ $575 each
29.29	Legal Descriptions	Parcel	15	2	15	23	14 parcels plus 1 TIITF
29.30	Final Maps/Plans Comparison	Sheet	1	16	13	16	
				Mapping Technical Subtotal	**41**	**222**	
29.31	Field Reviews	EA	1	9		9	
29.32	Technical Meetings	LS	2	9		18	
29.33	Quality Assurance/Quality Control	EA	%	10%		22	
29.34	Supervision	EA	%	5%		10	
				Mapping Nontechnical Subtotal		**59**	
29.35	Coordination	LS	%	5%		13	
29.36	Supplemental Mapping	LA	%	0%		0	
				29. Mapping Total	**41**	**294**	

Project Activity 29: Mapping

Task No.	Task	Units	No. of Units	Hours/ Unit	No. of Sheets	Total Hours	Comments
	Technical Meetings						
	Kickoff meeting	EA	0	0	0		
	Control map review	EA	0	0	0		
	45/60/90/final map review	EA	0	0	0		
	Other meetings	EA	0	0	0		
	Subtotal technical meetings				**0**		
	Progress Meetings	EA	0	0	0		
	Phase Review Meetings	EA	0	0	0		
	Total Meetings				**0**		

Carries to 29.32

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

CARDNO

AUDIT INFORMATION

FDOT

Florida Department of Transportation

RICK SCOTT
GOVERNOR

605 Suwannee Street
Tallahassee, FL 32399-0450

JIM BOXOLD
SECRETARY

January 13, 2016

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

Dear Mr. Lairscey:

The Florida Department of Transportation has reviewed your application for qualification package and determined that the data submitted is adequate to technically qualify 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

- 5.1 - Conventional 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
- 13.7 - Transportation Statistics

Group 15 - Landscape Architect

Your overhead audit has been accepted, enabling your firm to compete for Professional Services projects advertised at the unlimited level, with estimated fees of any dollar amount. This status shall be valid until December 31, 2016 for contracting purposes.

	Home/ Branch		Facilities			Published
	Office	Field Office	Capital Cost of Money	Overtime Premium	Direct Expense	Fee Schedule
Indirect Costs	165.07%	129.24%	0.735%	Reimbursed	20.43% (Home) 22.68% (Field)*	Yes

Subsurface Utility Engineering Rates

Vacuum Excavation Equipment	$66.78 per hour
Designating Equipment	$20.54 per hour
Survey Equipment	$27.35 per hour

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

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
Professional Services
Qualification Administrator

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION

CERTIFICATION OF USE OF SUBS & ALL LOWER TIER SUBS

375-030-40
PROCUREMENT
12/15

Advertisement No.: _____
Financial Project No.: 211365-4
Project Description: SW 62nd Boulevard

I, the undersigned, certify that I have disclosed all subs and lower tier subconsultants/sub-vendors proposed to be used by my firm to perform services on the subject FDOT contract.
In accordance with Section 7A of the Standard Professional Services Contract, I understand that: The Consultant will not sublet, assign or transfer any work under this Agreement to other subconsultants/sub-vendors not specified in the Agreement without the written consent of the Department.
I will comply with the aforementioned FDOT contractual requirement.
Additionally, I certify that all rates proposed by my firm in the fee proposal do not reflect blending of costs with subs and all lower tier subconsultants/sub-vendors.

I further certify that either:
(Indicate choice by checking box)

☒ There are no subs or lower tier subconsultants/sub-vendors to my consultant firm on this contract.

Or

☐ I have disclosed all subs and lower tier subconsultants/sub-vendors to my firm, and the full list of subs and all lower tier subconsultants/sub-vendors who may be utilized by my firm on this contract is provided below:

Firm Name: Cardno, Inc.

Signature: 

Name of Certifying Official (Print): R. Mark Pitchford

Title: Vice President

Date of Certification: 4/11/16

Certification of Current Cost or Pricing Data (F.A.R. 15.406-2)

Consultant Name: Cardno, Inc.

Financial Project ID No.: 211365-4

Project Description: SW 62nd Boulevard

Advertisement No.:

Date: April 11, 2016

Wage Certification

This is to certify, that, the wage rates listed for employees in the Department's Automated Fee Proposal spreadsheet (i.e., cost and pricing data as referenced under FAR subsection 15.403-4) submitted to the Contracting Officer or the Contracting Officer's representative, are current as of this date. I have attached a copy of the current payroll register that supports these rates.

Certification of Accounting Practices

I certify that the practices used in estimating costs and pricing the proposal are consistent with cost accounting practices.

Certification of Direct Costs

I certify that any direct costs proposed are not included as overhead in the Consultant's accounting system.

Signature

Vice President

Title

Cardno
380 Park Place Blvd
Suite 300
Clearwater, FL 33759

Phone: 727-531-3505
Phone :800-861-834
Fax: 727-539-1294
www.cardno.com

Cardno Certified Payroll
Period End: 04/01/16 PayDate: 04/08/16

Employee Number	Employee Name (Last Suffix, First MI)	Net Amount	Hourly Pay Rate	Earnings Code	Current Hours	Current Amount	Total Earning Amount
005018	Abbott, Steve	$2,109.86	34.69	REG	68.00	2,358.92	$2,790.19
				Life			
				LTD			
				STD			
				PTO	12.00	416.28	
004717	Albanese, Mike	$2,116.65	36.06	REG	72.00	2,596.18	$2,900.73
				Life			
				LTD			
				STD			
				PTO	8.00	288.46	
004820	Bishop, Kelly	$1,572.63	29.59	REG	80.00	2,367.34	$2,381.70
				Life			
				LTD			
				STD			
006229	Bottorff, Tylor	$3,258.01	66.53	REG	80.00	5,322.13	$5,349.53
				Life			
				LTD			
				STD			
006006	Carmichael, Terri	$1,983.70	38.46	REG	76.00	2,922.96	$3,109.74
				Life			
				LTD			
				STD			
				PTO	4.00	153.84	
006072	Colson, Chad	$1,179.82	23.61	REG	80.00	1,888.46	$1,897.77
				Life			
				LTD			
				STD			
005556	Comellas, Jeraldo	$4,380.45	85.42	REG	80.00	6,833.79	$6,876.89
				Life			
				LTD			
				STD			
006131	Conner, Michael	$1,231.63	26.52	REG	80.00	2,121.60	$2,454.75
				Life			
				LTD			
				STD			
				OT	8.00	318.24	
005759	Connolly, Edward	$1,979.34	50.48	REG	80.00	4,038.46	$4,060.05
				Life			
				LTD			
				STD			
006014	Crawfis, Joshua	$783.51	13.90	REG	79.00	1,098.02	$1,102.78
				Life			
				LTD			
				STD			
101623	Crews, Terry	$2,236.72	38.46	REG	80.00	3,076.92	$3,093.72
				Life			
				LTD			
				STD			

Cardno
Shaping the Future

Cardno
380 Park Place Blvd
Suite 300

Phone: 727-531-3505
Phone :800-861-834
Fax: 727-539-1294

Employee Number	Employee Name (Last Suffix, First MI)	Net Amount	Hourly Pay Rate	Earnings Code	Current Hours	Current Amount	Total Earning Amount
005934	Dardis, Martin	$2,432.95	44.99	REG	76.00	3,419.54	$3,641.22
				Life			
				LTD			
				STD			
				PTO	4.00	179.98	
004652	DiMarino, Anthony	$2,966.79	62.44	REG	80.00	4,995.20	$5,025.44
				Life			
				LTD			
				STD			
004708	Dyson, Bruce	$1,298.29	19.15	REG	80.00	1,531.76	$2,084.79
				Life			
				LTD			
				STD			
				OT	19.00	545.69	
450555	Francis, Hayden	$1,134.09	20.00	REG	80.00	1,600.00	$1,788.72
				Life			
				LTD			
				STD			
				OT	6.00	180.00	
006268	Harvey, Paul	$1,541.33	19.76	REG	80.00	1,580.80	$1,840.24
				Life			
				LTD			
				STD			
				OT	8.50	251.94	
005997	Harvey, Roy Branden	$1,375.08	26.51	REG	72.00	1,908.90	$2,131.97
				Life			
				LTD			
				STD			
				PTO	8.00	212.10	
005352	Hill, Deborah	$2,301.73	53.97	REG	80.00	4,317.30	$4,422.39
				Life			
				LTD			
				STD			
450123	Keene, Darren	$1,315.76	17.34	REG	80.00	1,387.20	$1,746.30
				Life			
				LTD			
				STD			
				OT	13.50	351.14	
004641	Kurtz, Kevin	$1,912.53	35.62	REG	72.00	2,564.65	$2,867.80
				Life			
				LTD			
				STD			
				PTO	8.00	284.96	
005885	Moore, John	$237.98	59.97	REG	38.50	2,308.98	$2,308.98
				Life			
				LTD			
				STD			
005686	Mulroney, Patrick	$1,429.54	25.76	REG	72.00	1,854.36	$2,071.00
				Life			
				LTD			
				STD			
				PTO	16.95	206.04	
004730	Patterson, Michael	$3,075.26	59.86	REG	40.00	2,394.49	$4,814.94
				Life			
				LTD			
				STD			

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Phone: 727-531-3505
Phone :800-861-834
Fax: 727-539-1294

Employee Number	Employee Name (Last Suffix, First MI)	Net Amount	Hourly Pay Rate	Earnings Code	Current Hours	Current Amount	Total Earning Amount
				PTO	40.00	2,394.49	
450274	Pawlowski, Roger	$1,025.19	17.00	REG	64.75	1,100.75	$1,342.08
				Life			
				LTD			
				STD			
				OT	9.25	235.88	
006019	Pilia, Carlo	$3,216.55	59.86	REG	80.00	4,788.98	$4,814.25
				Life			
				LTD			
				STD			
005213	Price, Jay R II	$1,490.53	16.90	REG	80.00	1,352.00	$2,219.18
				Life			
				LTD			
				STD			
				OT	34.00	861.90	
002779	Proulx, Chris	$2,524.43	53.24	REG	72.00	3,833.57	$4,283.38
				Life			
				LTD			
				STD			
				PTO	8.00	425.95	
450272	Reider, Barry	$1,011.94	15.30	REG	80.00	1,224.00	$1,455.40
				Life			
				LTD			
				STD			
				OT	9.75	223.76	
006256	Rivera, Eliezer	$1,703.37	17.00	REG	80.00	1,360.00	$2,321.32
				Life			
				LTD			
				STD			
				OT	37.50	956.25	
005546	Rudd, Ricky	$955.79	16.20	REG	80.00	1,296.15	$1,546.25
				Life			
				LTD			
				STD			
				OT	10.00	243.03	
006209	Sloan, Rhett	$2,594.73	44.28	REG	72.00	3,187.96	$3,558.98
				Life			
				LTD			
				STD			
				PTO	8.00	354.22	
004677	Stanbridge, Earl	$1,204.82	21.50	REG	80.00	1,720.00	$1,843.31
				Life			
				LTD			
				STD			
				OT	3.50	112.88	
005196	Strasser, Paula	$1,419.97	24.44	REG	80.00	1,954.88	$2,143.43
				Life			
				LTD			
				STD			
				OT	4.50	164.94	
005887	Thie, Daryl	$2,527.97	68.08	REG	64.00	4,357.31	$5,498.10
				Life			
				LTD			
				STD			
				PTO	16.00	1,089.33	
005049	Trayner, Andy	$1,632.10	36.06	REG	80.00	2,884.62	$2,906.71
				Life			
				LTD			

Cardno
Shaping the Future

Cardno
380 Park Place Blvd
Suite 300
Clearwater, FL 33759

Phone: 727-531-3505
Phone :800-861-834
Fax: 727-539-1294

Employee Number	Employee Name (Last Suffix, First MI)	Net Amount	Hourly Pay Rate	Earnings Code	Current Hours	Current Amount	Total Earning Amount
				STD			
005642	Vertalics, Louis	$470.21	24.94	REG	0.00	0.00	$816.68
				Life			
				LTD			
				STD			
				PTO	32.00	798.03	
005555	Warner, Kim	$1,327.62	20.77	REG	80.00	1,661.38	$2,168.11
				Life			
				LTD			
				STD			
				OT	16.00	498.41	
005657	Whichard, Jesse	$1,343.81	18.03	REG	80.00	1,442.69	$1,814.57
				Life			
				LTD			
				STD			
				OT	13.50	365.18	
005663	Woods, Jon	$850.00	18.69	REG	80.00	1,494.80	$2,062.59
				Life			
				LTD			
				STD			
				OT	20.00	560.55	

I certify that the above rates are true and correct as of the Period End Date

Certified By: _____ **Date:** 4/11/16

R. MARK PITCHFORD, VICE PRESIDENT

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION

OPERATING MARGIN JUSTIFICATION

375-030-82
PROCUREMENT
12/14

1. CONTACT INFORMATION

a. Firm Name:			b. Phone No.:
Cardno, Inc.			386-755-2626
c. Address (including suite number):	d. City:	e. State:	f. Zip Code:
159 SW Spencer Court, Ste. 106	Lake City	FL	32024

2. COMPLEXITY OF PROJECT

Indicate the degree of difficulty associated with this project. Are there unique aspects to the project? Degree of coordination with others outside FDOT should be considered. This includes other agencies, municipalities, multiple districts, multimodal projects, etc.

LOW – Simple, straight-forward projects. Small and specific scope of services, very minor improvements.

Typical Project Type

- **Bridge Inspection:** all bridge inspection except scour.
- **CEI:** 3R Rural, Painting, CEI signalization, simple and straight-forward projects.
- **Design:** simple 3R-Rural; 3R Urban ride only.
- **Geotechnical:** standard.
- **PD&E:** Small simple projects with specific scopes.
- **Planning:** Data/traffic counts.
- **Survey:** resurfacing 3R rural/urban.
- **Traffic Operations:** turn-lane projects (design).

MEDIUM – Projects with some specialized areas requiring some specialized skills. Moderate improvements on a project.

Typical Project Type

- **Bridge Inspection:** generally not applicable.
- **CEI:** CEI resurfacing with some improvements.
- **Design:** 3R Urban with some improvements, intersection, improvements with safety, Category 1 bridges.
- **PD&E:** widening with limited issues and bridge replacement with limited impacts.
- **Railroads:** all.
- **Survey:** survey in water areas.
- **Traffic Operations:** traffic operations studies and signal design projects.

HIGH – Complex multi-disciplined projects requiring specialized skills with significant management issues. Major improvements on a project.

Typical Project Type

- **Bridge Inspection:** bridge scour.
- **CEI:** CEI for multisections in a corridor, MOT Issues, specialized skills, ITS, construction on new alignments and signal system timing, development and implementation.
- **Design:** new alignments, major widening, major reconstruction, railroad bridge design, Segmental Class 2 bridges, Movable Bridges.
- **PD&E:** PD&E with Feasibility study, multiple disciplines, significant issues;
- **Planning:** large planning (multimodal).
- **Survey:** pilings and bridges.
- **Traffic Operations:** ITS

Complexity of Project Allowed Range: 5% to 7%	**Consultant %: 6.00%**

JUSTIFICATION:

The survey for the project will be that of full design requiring right of way mapping and section and creek survey adding to the complexity of the survey for this project. We are therefore asking for the middle in the allowed range for this category.

3. DEGREE OF (FINANCIAL) RISK

Indicate the amount of financial risk assumed by the consultant in relation to this project.
LOW – Contracts with well-defined and specific scopes, minimal probability of costs overruns and low financial risk exposure. Scope clarification meeting held, if applicable.

Typical Project Type

- **Bridge Inspection:** bridge inspection.
- **CEI:** CEI subconsultants providing support personnel, ITS, maximum limiting amount contracts.
- **Design:** simple 3R rural, 3R urban ride only.
- **Geotechnical:** all.
- **PD&E:** accurate and specific scope & pre-negotiation meetings.
- **Planning:** most planning.
- **Survey:** all, including SUE.
- **Traffic Operations:** traffic operations studies; traffic counts.

MEDIUM – Projects with potential for additional coordination efforts with outside agencies/parties; coordination with several Districts, multiple municipalities, etc.

Typical Project Type

- **Bridge Inspection:** bridge scour.
- **CEI:** standard CEI.
- **Design:** design for new alignments, major reconstruction, and widening.
- **PD&E:** experimental design and broad scopes.
- **Planning:** some planning.
- **Railroads:** all.
- **Traffic Operations:** traffic signal projects, ITS

HIGH – lump sum contracts with possibility of overrunning costs; experimental design; projects involving significant financial risk, hazardous materials, and potential for significant unknown issues.

Typical Project Type

- **CEI:** high visibility, lump sum contracts, multiple projects.
- **Design:** projects with multiple bridges.
- **PD&E:** multiple alternatives, multiple agency approval required.
- **Planning:** large multimodal projects (airports, seaports, railroads, transit).

Degree of (Financial) Risk Allowed Range: 3% to 5%	**Consultant %: 3.00%**

JUSTIFICATION:
Cardno's survey and mapping and Utility Coordination for this project is anticipated to be based on a lump sum fee, therefore increasing the degree of risk. However, we feel we can develop an accurate scope and estimate that still allows for the lower end in this category.

4. PROJECT SCHEDULE

LOW – no critical short term deadlines or requirements for large staffing concentrations, unfunded projects to go on the shelf.

Typical Project Type

- **Bridge Inspection:** bridge inspection; bridge scour.
- **CEI:** ITS; stand-alone resurfacing; ride only, support services.
- **Design:** all 3R projects, standard schedule
- **PD&E:** no design phase scheduled in Work Program.
- **Planning:** all.
- **Railroads:** all.
- **Traffic Operations:** ITS.
- **Survey:** all 3R projects.

MEDIUM – standard schedule.

Typical Project Type

- **Bridge Inspection:** generally not applicable.
- **CEI:** push button construction.
- **Design:** standard design; bridges, large corridors.
- **Traffic Operations:** traffic counts.
- **Survey:** increased number of crews needed

HIGH – High visibility projects with short durations and aggressive schedules requiring large commitment of staff. Fast track projects with high profile and quick implementation schedule.

Typical Project Type

- **Bridge Inspection:** generally not applicable.
- **CEI:** multiprojects, construction bonus, CEI urban (day & night), high visibility; short duration, utility reallocation by others.
- **Design:** mobility/economic stimulus.
- **PD&E:** design phase funded in the Work Program, bridge replacements.

Project Schedule Allowed Range: 1% to 3%	**Consultant %: 1.00%**

JUSTIFICATION:
Our surveying and right of way mapping along with subsurface utility engineering and utility coordination work will be important to keeping the project schedule. The overall project schedule, however, is not advanced to our knowledge at this time, so we are asking for the low end of this category.

5. COST CONTROL EFFORTS

Indicate the degree to which the Consultant controls its costs for wages rates (by region), overhead, expenses and FCCM. The cost control is not generally dependent upon the type of project. Factors to be considered in negotiating this criteria are the following, and other project-specific items:

- Burdened salary rates (by region) by classification.
- Reasonableness of the proposed distribution of staffing for the project.
- Specialized services requiring specialized staff.
- Reimbursed or excluded premium overtime.

LOW – (3% to 6%) Lower or minimal cost control efforts.

MEDIUM – (7% to 15%) Moderate cost control efforts.

HIGH – (16% to 27%) Substantial cost control efforts.

Cost Control Efforts Allowed Range: 3% to 27%	**Consultant %: 16.00%**

JUSTIFICATION:
Cardno blends our office and field staff in such a way as to provide economical rates to this contract, while still providing the highest quality staff. Additionally, we introduce both 2 and 3 person survey and SUE crews for additional economical benefit to the project when safety considerations will allow for a 2 person crew. Our knowledge of this project and our familiarity with the surveying and subsurface utility engineering procedures for District 2 will allow us to streamline our procedures and work more efficiently, while reducing project management and administrative time and efforts for both Cardno and the Department.

6. OPERATING MARGIN JUSTIFICATION TOTAL

The total for items **2 through 5** will be calculated for you.

Total Allowed Range: 12% to 42%	Consultant %: 26.0%

7. CONTRACT DURATION ADJUSTMENT FACTOR

For contracts of longer duration (reference table below), the Department shall allow a Contract Duration Adjustment Factor (CDAF). CDAF is defined as an economic price adjustment, necessitated by instability of labor costs for an extended period of contract performance (Reference 48 CFR Section 16.203). CDAF is not negotiated, but shall be a fixed number of points based on the overall anticipated length of contract (project schedule). CDAF points shall be allocated by the Department as follows:

Anticipated Length of Contract	CDAF Points
0-12 Months	0
13-24 Months	0
25-36 Months	3
37-48 Months	4.5
49-60 Months	5.5

a) For new contracts, CDAF is applied beginning with the first labor hour incurred.
b) CDAF shall only be applicable for contracts selected (contract final ranking) on or after November 1, 2014.
c) In the event a contract selected on or after November 1, 2014 is extended (time extension) by six or more months, CDAF shall be applied prospectively to the extended/remaining services only, in accordance with the table shown above.
d) CDAF shall not be applied to contracts selected before November 1, 2014, nor contract amendments/time extensions for contracts selected before November 1, 2014.
e) For calculation purposes, CDAF shall be added to operating margin and applied to unloaded direct salaries.
f) CDAF is applicable only to consultant firms who are awarded operating margin points.

For Calculation purposes, CDAF shall be added to Operating Margin and applied to direct salaries:

Allowed CDAF for this project:

Cardno, Inc.
BASIS OF HOURLY LOADED RATES

Based on Payroll Register Dated:	8-Apr-16 (Pay Date)	
Rates Escalated to Mid-Point of Project (if applicable) at an annual rate of:		0%
Operating Margin:	26.00%	
Overhead:	165.07%	
FCCM:	0.735%	
Direct Expenses	20.43%	

Calculation of Escalation Factor:

Year	Month	Escalation Factor	Total
Subtotal		1	1
		/	1
	Escalation to be Used		1

Senior Surveyor & Mapper

Person	Hourly Rate	Weighting Percentage	Weighted Rate
Daryl Thie, PSM	**$ 68.08**	80%	$ 54.47
Martin Dardis, PSM	**$ 44.99**	20%	$ 9.00
	Average Hourly Rate:		$ 63.47
	Effective Escalation Factor:		1
	Escalated Average Hourly Rate:		$ 63.47
	Direct Labor:		$ 63.47
	Overhead (on Direct Labor):	165.07%	$ 104.77
	Operating Margin (on Direct Labor):	26.00%	$ 16.50
	FCCM (on Direct Labor):	0.735%	$ 0.47
	Direct Expenses (on Direct Labor):	20.43%	$ 12.97
	Total Loaded Rate:		**$ 198.18**

Surveyor & Mapper

Person	Hourly Rate	Weighting Percentage	Weighted Rate
Daryl Thie, PSM	**$ 68.08**	30%	$ 20.42
Martin Dardis, PSM	**$ 44.99**	70%	$ 31.50
	Average Hourly Rate:		$ 51.92
	Effective Escalation Factor:		1
	Escalated Average Hourly Rate:		$ 51.92
	Direct Labor:		$ 51.92
	Overhead (on Direct Labor):	165.07%	$ 85.70
	Operating Margin (on Direct Labor):	26.00%	$ 13.50
	FCCM (on Direct Labor):	0.735%	$ 0.38
	Direct Expenses (on Direct Labor):	20.43%	$ 10.61
	Total Loaded Rate:		**$ 162.11**

Cardno, Inc.
BASIS OF HOURLY LOADED RATES

Survey Technician

Person	Hourly Rate	Weighting Percentage	Weighted Rate
Martin Dardis	**$ 44.99**	70%	$ 31.50
Roy Branden Harvey	**$ 26.51**	30%	$ 7.95

Average Hourly Rate:		$ 39.45
Effective Escalation Factor:		1
Escalated Average Hourly Rate:		$ 39.45
Direct Labor:		$ 39.45
Overhead (on Direct Labor):	165.07%	$ 65.12
Operating Margin (on Direct Labor):	26.00%	$ 10.26
FCCM (on Direct Labor):	0.735%	$ 0.29
Direct Expenses (on Direct Labor):	20.43%	$ 8.06
Total Loaded Rate:		**$ 123.18**

Party Chief

Person	Hourly Rate	Weighting Percentage	Weighted Rate
Patrick Mulroney	**$ 25.76**	34%	$ 8.76
Louis Vertalics	**$ 24.94**	33%	$ 8.23
Earl Stanbridge	**$ 21.50**	33%	$ 7.10

Average Hourly Rate:		$ 24.08
Effective Escalation Factor:		1
Escalated Average Hourly Rate:		$ 24.08
Direct Labor:		$ 24.08
Overhead (on Direct Labor):	165.07%	$ 39.75
Operating Margin (on Direct Labor):	26.00%	$ 6.26
FCCM (on Direct Labor):	0.735%	$ 0.18
Direct Expenses (on Direct Labor):	20.43%	$ 4.92
Total Loaded Rate:		**$ 75.19**

Cardno, Inc.
BASIS OF HOURLY LOADED RATES

Instrument Person

Person	Hourly Rate	Weighting Percentage	Weighted Rate
Bruce Dyson	**$ 19.15**	34%	$ 6.51
Jon Woods	**$ 18.69**	33%	$ 6.17
Darren Keene	**$ 17.34**	33%	$ 5.72

Average Hourly Rate:		$ 18.40
Effective Escalation Factor:		1
Escalated Average Hourly Rate:		$ 18.40
Direct Labor:		$ 18.40
Overhead (on Direct Labor):	165.07%	$ 30.37
Operating Margin (on Direct Labor):	26.00%	$ 4.78
FCCM (on Direct Labor):	0.735%	$ 0.14
Direct Expenses (on Direct Labor):	20.43%	$ 3.76
Total Loaded Rate:		**$ 57.45**

Rod Person

Person	Hourly Rate	Weighting Percentage	Weighted Rate
Joshua Crawfis	**$ 13.90**	25.00%	$ 3.48
Jay Price	**$ 16.90**	25.00%	$ 4.23
Barry Reider	**$ 15.30**	25.00%	$ 3.83
Roger Pawlowski	**$ 17.00**	25.00%	$ 4.25

Average Hourly Rate:		$ 15.78
Effective Escalation Factor:		1
Escalated Average Hourly Rate:		$ 15.78
Direct Labor:		$ 15.78
Overhead (on Direct Labor):	165.07%	$ 26.05
Operating Margin (on Direct Labor):	26.00%	$ 4.10
FCCM (on Direct Labor):	0.735%	$ 0.12
Direct Expenses (on Direct Labor):	20.43%	$ 3.22
Total Loaded Rate:		**$ 49.27**

Secretary / Clerical

Person	Hourly Rate	Weighting Percentage	Weighted Rate
Kelly Bishop	**$ 29.59**	10%	$ 2.96
Kim Warner	**$ 20.77**	80%	$ 16.61
Paula Strasser	**$ 24.44**	10%	$ 2.44

Average Hourly Rate:		$ 22.02
Effective Escalation Factor:		1
Escalated Average Hourly Rate:		$ 22.02
Direct Labor:		$ 22.02
Overhead (on Direct Labor):	165.07%	$ 36.35
Operating Margin (on Direct Labor):	26.00%	$ 5.73
FCCM (on Direct Labor):	0.735%	$ 0.16
Direct Expenses (on Direct Labor):	20.43%	$ 4.50
Total Loaded Rate:		**$ 68.75**

2-Person Survey Crew

Classification	Hourly Loaded Rate	Rate Factors/Day	Total Loaded Rate
Party Chief	$ 75.19	1	$ 75.19
Instrument Man	$ 57.45	1	$ 57.45
	Per Hour		$ 132.64

3-Person Survey Crew

Classification	Hourly Loaded Rate	Rate Factors/Day	Total Loaded Rate
Party Chief	$ 75.19	1	$ 75.19
Instrument Man	$ 57.45	1	$ 57.45
Rod Man	$ 49.27	1	$ 49.27
	Per Hour		$ 181.91

4-Person Survey Crew

Classification	Hourly Loaded Rate	Rate Factors/Day	Total Loaded Rate
Party Chief	$ 75.19	1	$ 75.19
Instrument Man	$ 57.45	1	$ 57.45
Rod Man	$ 49.27	2	$ 98.54
	Per Hour		$ 231.18

Cardno, Inc.
BASIS OF HOURLY LOADED RATES

Based on Payroll Register Dated:	8-Apr-16 (Pay Date)	
Rates Escalated to Mid-Point of Project (if applicable) at an annual rate of:		0%
Operating Margin:	26.00%	
Overhead:	165.07%	
FCCM:	0.735%	
Direct Expenses	20.430%	

Calculation of Escalation Factor:

Year	Month	Escalation Factor	Total
Subtotal	1		1
		/	1
	Escalation to be Used		1

Project Manager

Person	Hourly Rate	Weighting Percentage	Weighted Rate
Jerry Comellas, Jr., PE	**$ 85.42**	10%	$ 8.54
Daryl Thie, PLS	**$ 68.08**	90%	$ 61.27

Average Hourly Rate:		$ 69.82
Effective Escalation Factor:		1
Escalated Average Hourly Rate:		$ 69.82
Direct Labor:		$ 69.82
Overhead (on Direct Labor):	165.07%	$ 115.25
Operating Margin (on Direct Labor):	26.00%	$ 18.15
FCCM (on Direct Labor):	0.735%	$ 0.51
Direct Expenses (on Direct Labor):	20.43%	$ 14.26
Total Loaded Rate:		**$ 218.00**

Secretary / Clerical

Person	Hourly Rate	Weighting Percentage	Weighted Rate
Kelly Bishop	**$ 29.59**	10%	$ 2.96
Kim Warner	**$ 20.77**	80%	$ 16.61
Paula Strasser	**$ 24.44**	10%	$ 2.44

Average Hourly Rate:		$ 22.02
Effective Escalation Factor:		1
Escalated Average Hourly Rate:		$ 22.02
Direct Labor:		$ 22.02
Overhead (on Direct Labor):	165.07%	$ 36.35
Operating Margin (on Direct Labor):	26.00%	$ 5.73
FCCM (on Direct Labor):	0.735%	$ 0.16
Direct Expenses (on Direct Labor):	20.43%	$ 4.50
Total Loaded Rate:		**$ 68.75**

Cardno, Inc.
BASIS OF HOURLY LOADED RATES

Utility Locator

Person	Hourly Rate	Weighting Percentage	Weighted Rate
Kevin Kurtz	**$ 35.62**	10%	$ 3.56
Steve Abbott	**$ 34.69**	80%	$ 27.75
Mike Albanese	**$ 36.06**	10%	$ 3.61

Average Hourly Rate:		$ 34.92
Effective Escalation Factor:		1
Escalated Average Hourly Rate:		$ 34.92
Direct Labor:		$ 34.92
Overhead (on Direct Labor):	165.07%	$ 57.64
Operating Margin (on Direct Labor):	26.00%	$ 9.08
FCCM (on Direct Labor):	0.735%	$ 0.26
Direct Expenses (on Direct Labor):	20.43%	$ 7.13
Total Loaded Rate:		**$ 109.03**

Engineering Technician

Person	Hourly Rate	Weighting Percentage	Weighted Rate
Eliezer Rivera	**$ 17.00**	25.00%	$ 4.25
Ricky Rudd	**$ 16.20**	25.00%	$ 4.05
Hayden Francis	**$ 20.00**	25.00%	$ 5.00
Jesse Whichard	**$ 18.03**	25.00%	$ 4.51

Average Hourly Rate:		$ 17.81
Effective Escalation Factor:		1
Escalated Average Hourly Rate:		$ 17.81
Direct Labor:		$ 17.81
Overhead (on Direct Labor):	165.07%	$ 29.40
Operating Margin (on Direct Labor):	26.00%	$ 4.63
FCCM (on Direct Labor):	0.735%	$ 0.13
Direct Expenses (on Direct Labor):	20.43%	$ 3.64
Total Loaded Rate:		**$ 55.61**

Cardno, Inc.
BASIS OF CREW LOADED RATES

2-Person Locating Crew

Classification	Hourly Loaded Rate	Rate Factors/Day		Total Loaded Rate
Utility Locator	$ 109.03		8	$ 872.24
Engineering Technician	$ 55.61		8	$ 444.88
		Subtotal		$ 1,317.12
Vac Truck	$ 66.78		8	$ 534.24
		8 Hour Day		$ 1,851.36
		Per hour		$ 231.42

2-Person Designating Crew

Classification	Hourly Loaded Rate	Rate Factors/Day		Total Loaded Rate
Utility Locator	$ 109.03		8	$ 872.24
Engineering Technician	$ 55.61		8	$ 444.88
		Subtotal		$ 1,317.12
Des Truck	$ 20.54		8	$ 164.32
		8 Hour Day		$ 1,481.44
		Per Hour		$ 185.18

3-Person Locating Crew

Classification	Hourly Loaded Rate	Rate Factors/Day		Total Loaded Rate
Utility Locator	$ 109.03		8	$ 872.24
Engineering Technician	$ 55.61		16	$ 889.76
		Subtotal		$ 1,762.00
Vac Truck	$ 66.78		8	$ 534.24
		8 Hour Day		$ 2,296.24
		Per hour		$ 287.03

Cardno, Inc.
BASIS OF CREW LOADED RATES

3-Person Designating Crew

Classification	Hourly Loaded Rate	Rate Factors/Day	Total Loaded Rate
Utility Locator	$ 109.03	8	$ 872.24
Engineering Technician	$ 55.61	16	$ 889.76
		Subtotal	$ 1,762.00
Des Truck	$ 20.54	8	$ 164.32
		8 Hour Day	$ 1,926.32
		Per Hour	$ 240.79

Maintenance of Traffic

Classification	Hourly Loaded Rate	Rate Factors/Day	Total Loaded Rate
Utility Locator	$ 109.03	1	$ 109.03
Engineering Techncian	$ 55.61	1	$ 55.61
Engineering Techncian	$ 55.61	1	$ 55.61
		Subtotal	$ 220.25
		Per Hour	$ 220.25

Designating Truck	$ 20.54
Locating Truck	$ 66.78

Cardno, Inc.
BASIS OF HOURLY LOADED RATES

Based on Payroll Register Dated:	8-Apr-16 (Pay Date)
Rates Escalated to Mid-Point of Project (if applicable) at an annual rate of:	0%
Operating Margin:	26.00%
Overhead:	165.07%
FCCM:	0.735%
Direct Expenses	20.430%

Calculation of Escalation Factor:

Year	Month	Escalation Factor	Total
Subtotal	1		1
		/	1
	Escalation to be Used		1

Secretary / Clerical

Person	Hourly Rate	Weighting Percentage	Weighted Rate
Kelly Bishop	**$ 29.59**	10%	$ 2.96
Kim Warner	**$ 20.77**	80%	$ 16.61
Paula Strasser	**$ 24.44**	10%	$ 2.44

Average Hourly Rate:		$ 22.02
Effective Escalation Factor:		1
Escalated Average Hourly Rate:		$ 22.02
Direct Labor:		$ 22.02
Overhead (on Direct Labor):	165.07%	$ 36.35
Operating Margin (on Direct Labor):	26.00%	$ 5.73
FCCM (on Direct Labor):	0.735%	$ 0.16
Direct Expenses (on Direct Labor):	20.43%	$ 4.50
Total Loaded Rate:		**$ 68.75**

Senior Utility Coordinator

Person	Hourly Rate	Weighting Percentage	Weighted Rate
Terri Carmichael	**$ 38.46**	50%	$ 19.23
Terry Crews	**$ 38.46**	50%	$ 19.23

Average Hourly Rate:		$ 38.46
Effective Escalation Factor:		1
Escalated Average Hourly Rate:		$ 38.46
Direct Labor:		$ 38.46
Overhead (on Direct Labor):	165.07%	$ 63.49
Operating Margin (on Direct Labor):	26.00%	$ 10.00
FCCM (on Direct Labor):	0.735%	$ 0.28
Direct Expenses (on Direct Labor):	20.43%	$ 7.86
Total Loaded Rate:		**$ 120.09**

Cardno, Inc.
BASIS OF HOURLY LOADED RATES

Utility Coordinator

Person	Hourly Rate	Weighting Percentage	Weighted Rate
Paul Harvey	**$ 19.76**	50%	$ 9.88
Michael Conner	**$ 26.52**	50%	$ 13.26

Average Hourly Rate:		$ 23.14
Effective Escalation Factor:		1
Escalated Average Hourly Rate:		$ 23.14
Direct Labor:		$ 23.14
Overhead (on Direct Labor):	165.07%	$ 38.20
Operating Margin (on Direct Labor):	26.00%	$ 6.02
FCCM (on Direct Labor):	0.735%	$ 0.17
Direct Expenses (on Direct Labor):	20.43%	$ 4.73
Total Loaded Rate:		**$ 72.25**

ETP

STAFF HOURS

NOISE

ESTIMATE OF WORK EFFORT AND COST - PRIME CONSULTANT

Name of Project:	SW 62nd Blvd 4-Lane Arterial Connector	Consultant Name:	Environmental Transportation Planning
County:	Alachua	Consultant No.:	enter consultants proj. number
FPN:	211365-6-28-01, 02, 03	Date:	4/28/2015
FAP No.:	N/A	Estimator:	Robbin Ossi, AICP

Staff Classification	Hours From "SH Summary - Firm"	Senior Planner	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	#REF!	SH By Activity	Salary Cost By Activity	Average Rate Per Task
		$56.18	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00			
32. Noise Barriers Impact Design Assessment	55	55	0	0	0	0	0	0	0	0	0	0	0	55	$3,090	$56.18
Total Staff Hours	55	55	0	0	0	0	0	0	0	0	0	0	0	55		
Total Staff Cost		$3,089.90	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00		**$3,089.90**	**$56.18**

Check = $3,089.90

Survey Field Days by Subconsultant	
4 - Person Crew:	

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

SALARY RELATED COSTS:		$3,089.90
OVERHEAD:	158.08%	$4,884.51
OPERATING MARGIN:	28.00%	$865.17
FCCM (Facilities Capital Cost Money):	0.00%	$0.00
EXPENSES:	3.30%	$101.97
SUBTOTAL ESTIMATED FEE:		**$8,941.55**
Optional Services		$0.00
GRAND TOTAL ESTIMATED FEE:		**$8,941.55**

32. Noise Barrier Assessment

Estimator:

SW 62nd Blvd 4-Lane Arterial Connector
211365-6-28-01, 02, 03

Representing	Print Name	Signature / Date
FDOT District		
Environmental Transportation Planning	**Robbin Ossi**	

NOTE: Signature Block is optional, per District preference

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
32.1	Noise Analysis	LS	1	0	0	
32.2	Noise Barrier Evaluation	LS	1	0	0	
32.3	Public Involvement	LS	1	0	0	
32.4	Outdoor Advertising Identification	LS	1	0	0	
32.5	Noise Study Report (NSR) Addendum	LS	1	0	0	
Noise Barrier Impact Design Assessment in the Design Phase Technical Subtotal					**0**	
32.6	Technical Meetings	LS	1	55	55	Meetings are listed below
32.7	Quality Assurance/Quality Control	LS	%	0%	0	
32.8	Supervision	LS	%	0%	0	
Noise Barrier Impact Design Assessment in the Design Phase Nontechnical Subtotal					**55**	
32.9	Coordination	LS	%	0%	0	
32. Noise Barrier Impact Design Assessment in the Design Phase Total					**55**	

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
Alternative Evaluation with FDOT	EA	0	0	0		0
Local Agency (cities, counties)	EA	0	0	0		0
Other Meetings	EA	11	5	55	Noise Barrier meetings with impacted property owners and renters. Estimate 1 general noise-specific public meeting and 10 small meetings with individual property owners.	0
Subtotal Technical Meetings				**55**	**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				**55**	**Total Project Manager Meetings (carries to Tab 3)**	**0**

ERS

WETLANDS

ESTIMATE OF WORK EFFORT AND COST - SUBCONSULTANT

Name of Project: SW 62nd
County: 0
FPN: 0
FAP No.: 1/0/1900

Consultant Name: Environmental Resource Solutions, Inc.
Consultant No.: enter consultants proj. number
Date: 4/18/2016
Estimator: insert name

Staff Classification	Total Staff Hours From "SH Summary Firm"	KA Project Manager	JM Sr. Env. Scientist	DY Sr. Env. Specialist	JN Sr. Env. Specialist	AJ Env. Specialist	KC Env. Specialist	WE Env. Technician	TS GIS/CADD	DC Clerical	Staff Classification 10	Staff Classification 11	Staff Classification 12	SH By Activity	Salary Cost By Activity	Average Rate Per Task
		$55.71	$45.33	$36.48	$33.83	$28.13	$28.13	$21.21	$12.00	$15.60	$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!
6. Drainage Analysis	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	305	31	0	61	61	61	92	0	0	0	0	0	0	306	$10,320	$33.72
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)	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!
Total Staff Hours	305	31	0	61	61	61	92	0	0	0	0	0	0	306		
Total Staff Cost		$1,727.01	$0.00	$2,225.28	$2,063.63	$1,715.93	$2,587.96	$0.00	$0.00	$0.00	$0.00	$0.00	$0.00		**$10,319.81**	**$33.72**

Check = $10,319.81

Notes:
1. This sheet to be used by Subconsultant to calculate its fee.

SALARY RELATED COSTS:				$10,319.81
OVERHEAD:	168.55%			$17,394.04
OPERATING MARGIN:	28%			$2,889.55
FCCM (Facilities Capital Cost Money):	0.00%			$0.00
EXPENSES:	10.32%			$1,065.00
SUBTOTAL ESTIMATED FEE:				**$31,668.40**
Survey (Field)	0	4-man crew da	$ - / day	$0.00
Geotechnical Field and Lab Testing				$0.00
SUBTOTAL ESTIMATED FEE:				**$31,668.40**
Optional Services				$0.00
GRAND TOTAL ESTIMATED FEE:				**$31,668.40**

Project Activity 8: Environmental Permits

Estimator: SW 62nd

0

Task No.	Task	Units	No. of Units	Hours/ Units	Total Hours	Comments
	Environmental Permits, Compliances and Clearances					
8.1	Preliminary Project Research	LS	1	12	12	
	Permits					
8.2	Complete Permit Involvement Form	LS	1	0	0	
8.3	**Field Work**					
8.3.1	Pond Site Alternatives	LS	1	0	0	
8.3.2	Establish Wetland Jurisdictional Lines and Assessments	LS	1	0	0	To be done under PD&E contract
8.3.3	Species Surveys	LS	1	0	0	
8.3.4	Archeological	LS	1	0	0	
8.4	Agency Verification of Wetland Data	LS	1	24	24	
8.5	**Complete And Submit All Required Permit Applications**					
8.5.1	Complete and Submit All Required Wetland Permit Applications	LS	1	80	80	Includes completion of UMAM evaluation
8.5.2	Complete and Submit All Required Species Permit Applications	LS	1	0	0	
8.6	Prepare Dredge and Fill Sketches (as needed)	LS	1	24	24	
8.7	Prepare USCG Permit Sketches	LS	1	0	0	
8.8	Prepare Water Management District Right-of-Way Occupancy Sketches	LS	1	0	0	
8.9	Prepare Coastal Construction Control Line (CCCL) Permit Application	LS	1	0	0	
8.10	Prepare Tree Permit Information	LS	1	0	0	
8.11	Mitigation Design	LS	1	0	0	
8.12	Mitigation Coordination and Meetings	LS	1	120	120	Includes coordination with City of Gainesville/Aluchau county for potential mitigation options. TBD when plan is selected.

Project Activity 8: Environmental Permits

Task No.	Task	Units	No. of Units	Hours/ Units	Total Hours	Comments
8.13	Other Environmental Permits	LS	1	0	0	
	Environmental Clearances/Reevaluations					
8.14	**Technical support to Department for Environmental Clearances and Reevaluations**					
8.14.1	NEPA or SEIR Reevaluation	LS	1	0	0	
8.14.2	Archaeological and Historical Features	LS	1	0	0	
8.14.3	Wetland Impact Analysis	LS	1	0	0	
8.14.4	Essential Fish Habitat	LS	1	0	0	
8.14.5	Wildlife and Habitat Impact Analysis	LS	1	0	0	
8.14.6	Section 7 or Section 10 Consultation	LS	1	0	0	
8.15	**Preparation of Environmental Clearances and Reevaluations**					
8.15.1	NEPA or SEIR Reevaluation	LS	1	0	0	
8.15.2	Archaeological and Historical Features	LS	1	0	0	
8.15.3	Wetland Impact Analysis	LS	1	0	0	
8.15.4	Wildlife and Habitat Impact Analysis	LS	1	0	0	
8.15.5	Section 7 or Section 10 Consultation	LS	1	0	0	
8.16	Contamination Impact Analysis	LS	1	0	0	
8.17	Asbestos Survey	LS	1	0	0	
Environmental Permits, Compliance, and Clearances/Reevaluations Technical Subtotal					**260**	
8.18	Technical Meetings	LS	1	20	20	Meetings are listed below
8.19	Quality Assurance/Quality Control	LS	%	3%	8	
8.20	Supervision	LS	%	3%	8	
Environmental Permits, Compliance and Clearances Nontechnical Subtotal					**36**	
8.21	Coordination	LS	%	3%	9	
8. Environmental Permits, Compliance and Clearances Total					**305**	

Project Activity 8: Environmental Permits

Task No.	Task	Units	No. of Units	Hours/ Units	Total Hours	Comments
	Technical Meetings					
	WMD	EA	2	4	8	
	NMFS	EA	0	0	0	
	ACOE	EA	1	4	4	
	USCG	EA	0	0	0	
	USFWS	EA	0	0	0	
	FFWCC	EA	0	0	0	
	FDOT	EA	2	4	8	
	Other Meetings	EA	0	0	0	
	Subtotal Technical Meetings				**20**	
	Progress Meetings	EA	0	0	0	
	Phase Review Meetings	EA	0	0	0	
	Total Meetings				**20**	

Carries to 8.18

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

TERRACON GEOTECHNICAL

April 15, 2016 (Revised May 6, 2016)
Terracon Proposal No. PEQ150033A

HNTB
7077 Bonneval Road
Jacksonville, Florida 32216

Attn: Mr. Terrel Shaw, P.E.
P: (904) 596-7983
E: tlshaw@hntb.com

Re: Revised Proposal for Preliminary Geotechnical Engineering Services
SW 62ND Boulevard Connector From SW 43RD Street To SR 26 (Newberry Road)
Gainesville, Alachua County, Florida
Terracon Proposal No. PEQ150033A

Dear Mr. Shaw:

As per your request, Terracon Consultants, Inc. (Terracon) is pleased to present this revised proposal to provide Preliminary Geotechnical Services associated with the design of the SW 62ND Blvd project in Alachua County, Florida. Based on our e-mail correspondence with you, we understand a preliminary effort is requested due to limited funding for design. It is our understanding the design will include roadway, bridges, retaining walls, stormwater treatment facilities, and miscellaneous structures. This revision is made in light of the recent anticipated changes in stormwater treatment facilities and the removal of side street connectors from the design.

A. PROJECT INFORMATION

The purpose of this project is to develop an improved north-south corridor between SR24 (Archer Road) and SR26 (Newberry Road) in Gainesville, Alachua County, Florida. The intent is to provide congestion relief to the primary arteries in the corridor, including I-75, Archer Road, and Newberry Road. We understand the preferred alternative is a four-lane divided arterial with accommodations for future bus rapid transit.

B. SCOPE OF SERVICES

Based on our recent e-mail correspondence, we understand the following scope of preliminary geotechnical services is requested:

- For the preliminary roadway exploration, 15 Standard Penetration Test (SPT) borings to a depth of 20 feet below ground surface;
- For the preliminary bridge exploration, six SPT borings to a depth of 125 feet below ground surface; and
- For the preliminary stormwater treatment areas, 76 SPT borings to a depth of 20 feet below ground surface; along with appropriate field and laboratory permeability testing as required by FDOT and SJRWMD.

Along with the field exploration activities listed above, laboratory classification and index property testing will be conducted on selected soil samples, as appropriate. The field exploration and laboratory testing will be documented in a Geotechnical Report prepared under the direction of a licensed Professional Engineer.

The Geotechnical Report will include a Preliminary Roadway Soil Survey Sheet, and Report of Core Borings Sheets for the SPT borings detailed above. Our estimated fee to provide this scope of work is $175,406.10, as shown on the appended Fee Estimate. This fee estimate is based on the attached staff hour estimates.

Terracon appreciates the opportunity to be of service to you on this project. If you should have any questions, please do not hesitate to contact us.

Sincerely,

TERRACON CONSULTANTS, INC.

Brett H. Harbison, P.E.
Department Manager

John B. Kimberly IV, P.E.
Principal

Attachments: Fee Estimate
Staff Hour Estimate

FEE ESTIMATE
SW 62ND BLVD CONNECTOR FROM SW 43RD STREET TO SR 26 (NEWBERRY ROAD)
ALACHUA COUNTY, FLORIDA
FIN NO.: 211365-4

DECRIPTION OF WORK	QTY.	RATE	UNIT	AMOUNT
I. FIELD EXPLORATION				
104-Aggregate Sieve Anlsys of Fine & Coarse AASHTO T27	0	$90.00	Test	$ -
106-Aggregate Specific Gravity/Absorption Coarse AASHTO T85	0	$75.00	Test	$ -
107-Aggregate Total Moisture Content by Drying AASHTO T255	0	$75.00	Test	$ -
300-Concrete Beam Flexural Testing ASTM C78	0	$25.00	Test	$ -
301-Concrete Compressive Strength of Grout\Mortar ASTM C109	0	$25.00	Test	$ -
302-Concrete Cylinder Curing, Capping & Breaking ASTM C39	0	$15.00	Test	$ -
303-Concrete Drilled Cores & Sawed Beams ASTM C42	0	$25.00	Test	$ -
305-Concrete Pavement Coring - 4" Dia	0	$175.00	Each	$ -
306-Concrete Pavement Coring - 6" Dia	0	$200.00	Each	$ -
401-Geo Auger Borings-H& & Truck/Mud Bug	0	$10.00	LF	$ -
402-Geo Auger Borings-Track	0	$15.00	LF	$ -
406-Geo Barge (Rental without labor)	0	$2,500.00	Week	$ -
407-Geo Chainsaw (Owned)	0	$25.00	Day	$ -
408-Geo Concrete Pad & Cover for Monitoring Wells	0	$300.00	Each	$ -
409-Geo CPT Truck/Mud Bug 0-50 Ft	0	$10.00	LF	$ -
410-Geo CPT Truck/Mud Bug 50-100 Ft	0	$12.00	LF	$ -
411-Geo CPT Truck/Mud Bug 100-150 Ft	0	$14.00	LF	$ -
412-Geo CPT Truck/Mud Bug 150-200 Ft	0	$15.00	LF	$ -
413-Geo Crosshole Sonic Logging (CSL)	0	$2,000.00	Day	$ -
414-Geo Dilatometer Sounding	0	$150.00	Hour	$ -
415-Geo Double Ring Infiltration ASTM D3385	0	$500.00	Each	$ -
418-Geo Drill Crew Support Vehicle	0	$100.00	Day	$ -
419-Geo Drilling Crew 2-Person	48	$150.00	Hour	$ 7,200.00
420-Geo Drilling Crew 3-Person	0	$210.00	Hour	$ -
421-Geo Dynamic Pile Testing/Pile Driving Analysis	0	$2,000.00	Day	$ -
422-Geo Extra SPT Samples-Barge/Track/Amphibious 0-50 Ft	0	$60.00	Each	$ -
423-Geo Extra SPT Samples-Barge/Track/Amphibious 50-100 Ft	0	$82.50	Each	$ -
424-Geo Extra SPT Samples-Barge/Track/Amphibious 100-150 Ft	0	$112.50	Each	$ -
425-Geo Extra SPT Samples-Barge/Track/Amphibious 150-200 Ft	0	$135.00	Each	$ -
426-Geo Extra SPT Samples-Barge/Track/Amphibious 200-250 Ft	0	$150.00	Each	$ -
427-Geo Extra SPT Samples-Truck/Mud Bug 0-50 Ft	306	$40.00	Each	$ 12,240.00
428-Geo Extra SPT Samples-Truck/Mud Bug 50-100 Ft	60	$55.00	Each	$ 3,300.00
429-Geo Extra SPT Samples-Truck/Mud Bug 100-150 Ft	30	$75.00	Each	$ 2,250.00
430-Geo Extra SPT Samples-Truck/Mud Bug 150-200 Ft	0	$90.00	Each	$ -
431-Geo Extra SPT Samples-Truck/Mud Bug 200-250 Ft	0	$105.00	Each	$ -
432-Geo Field Permeability 0-10 Ft Open-End Borehole Method	5	$300.00	Each	$ 1,500.00
433-Geo Field Permeability 10-25 Ft Open-End Borehole Method	0	$400.00	Each	$ -
434-Geo Ground Penetrating Radar (GPR)	0	$175.00	Hour	$ -
435-Geo Grout Boreholes- Barge/Track/Amphibious 0-50 Ft	0	$7.50	LF	$ -
436-Geo Grout Boreholes- Barge/Track/Amphibious 50-100 Ft	0	$9.00	LF	$ -
437-Geo Grout Boreholes- Barge/Track/Amphibious 100-150 Ft	0	$12.00	LF	$ -
438-Geo Grout Boreholes- Barge/Track/Amphibious 150-200 Ft	0	$15.00	LF	$ -
439-Geo Grout Boreholes- Barge/Track/Amphibious 200-250 Ft	0	$18.00	LF	$ -
440-Geo Grout Boreholes- Truck/Mud Bug 0-50 Ft	2120	$5.00	LF	$ 10,600.00
441-Geo Grout Boreholes- Truck/Mud Bug 50-100 Ft	300	$6.00	LF	$ 1,800.00
442-Geo Grout Boreholes- Truck/Mud Bug 100-150 Ft	150	$8.00	LF	$ 1,200.00
443-Geo Grout Boreholes- Truck/Mud Bug 150-200 Ft	0	$10.00	LF	$ -
444-Geo Grout Boreholes- Truck/Mud Bug 200-250 Ft	0	$12.00	LF	$ -
445-Geo Grouted Monitor Well 2" 0-50 Ft	0	$30.00	LF	$ -
446-Geo H& Auger with DCP (0-50 ft) ASTM D1452	0	$25.00	LF	$ -
447-Geo H& Auger with SCP (0-50 ft) ASTM D1453	0	$20.00	LF	$ -
448-Geo Mini Shaft Inspection	0	$250.00	Hour	$ -
449-Geo Noise Monitoring	0	$200.00	Hour	$ -
450-Geo Piezometer 2" 0-50 Ft	0	$25.00	LF	$ -
451-Geo Pile Integrity Testing	0	$200.00	Hour	$ -
452-Geo Rock Coring Brg/Track/Amph 0-50 Ft 4" ID & over	0	$52.50	LF	$ -
453-Geo Rock Coring Brg/Track/Amph 0-50 Ft less than 4" ID	0	$50.00	LF	$ -
454-Geo Rock Coring Brg/Track/Amph 50-100 Ft 4" ID & over	0	$57.00	LF	$ -
455-Geo Rock Coring Brg/Track/Amph 50-100 Ft less than 4" ID	0	$55.00	LF	$ -
456-Geo Rock Coring Brg/Track/Amph 100-150 Ft 4" ID & over	0	$64.50	LF	$ -
457-Geo Rock Corg Brg/Track/Amph 100-150 Ft less than 4" ID	0	$62.00	LF	$ -
458-Geo Rock Corg Brg/Track/Amph 150-200 Ft 4" ID & over	0	$75.00	LF	$ -
459-Geo Rock Corg Brg/Track/Amph 150-200 Ft less than 4" ID	0	$70.00	LF	$ -
460-Geo Rock Corg Brg/Track/Amph 200-250 Ft 4" ID & over	0	$85.00	LF	$ -
461-Geo Rock Corg Brg/Track/Amph 200-250 Ft less than 4" ID	0	$80.00	LF	$ -

FEE ESTIMATE
SW 62ND BLVD CONNECTOR FROM SW 43RD STREET TO SR 26 (NEWBERRY ROAD)
ALACHUA COUNTY, FLORIDA
FIN NO.: 211365-4

DECRIPTION OF WORK	QTY.	RATE	UNIT	AMOUNT
462-Geo Rock Coring Truck/Mud Bug 0-50 Ft 4" ID & over	0	$35.00	LF	$ -
463-Geo Rock Coring Truck/Mud Bug 0-50 Ft less than 4" ID	0	$32.00	LF	$ -
464-Geo Rock Coring Truck/Mud Bug 50-100 Ft 4" ID over	0	$38.00	LF	$ -
465-Geo Rock Coring Truck/Mud Bug 50-100 Ft less than 4" ID	0	$35.00	LF	$ -
466-Geo Rock Coring Truck/Mud Bug 100-150 Ft 4" ID & over	0	$43.00	LF	$ -
467-Geo Rock Coring Truck/Mud Bug 100-150 Ft less than 4" ID	0	$40.00	LF	$ -
468-Geo Rock Coring Truck/Mud Bug 150-200 Ft 4" ID & over	0	$50.00	LF	$ -
469-Geo Rock Coring Truck/Mud Bug 150-200 Ft less than 4" ID	0	$47.00	LF	$ -
470-Geo Rock Coring Truck/Mud Bug 200-250 Ft 4" ID & over	0	$59.00	LF	$ -
471-Geo Rock Coring Truck/Mud Bug 200-250 Ft less than 4" ID	0	$56.00	LF	$ -
472-Geo Saximeter Testing	0	$110.00	Hour	$ -
473-Geo SPT Barge/Track/Amphibious 0-50 Ft	0	$18.75	LF	$ -
474-Geo SPT Barge/Track/Amphibious 50-100 Ft	0	$24.00	LF	$ -
475-Geo SPT Barge/Track/Amphibious 100-150 Ft	0	$31.50	LF	$ -
476-Geo SPT Barge/Track/Amphibious 150-200 Ft	0	$42.00	LF	$ -
477-Geo SPT Barge/Track/Amphibious 200-250 Ft	0	$53.00	LF	$ -
478-Geo SPT Truck/Mud Bug 0-50 Ft	2120	$12.50	LF	$ 26,500.00
479-Geo SPT Truck/Mud Bug 50-100 Ft	300	$16.00	LF	$ 4,800.00
480-Geo SPT Truck/Mud Bug 100-150 Ft	150	$21.00	LF	$ 3,150.00
481-Geo SPT Truck/Mud Bug 150-200 Ft	0	$28.00	LF	$ -
482-Geo SPT Truck/Mud Bug 200-250 Ft	0	$35.00	LF	$ -
483-Geo Temp Casing 3" Barge/Track/Amphibious 0-50 Ft	0	$13.50	LF	$ -
484-Geo Temp Casing 3" Barge/Track/Amphibious 50-100 Ft	0	$15.00	LF	$ -
485-Geo Temp Casing 3" Barge/Track/Amphibious 100-150 Ft	0	$18.00	LF	$ -
486-Geo Temp Casing 3" Barge/Track/Amphibious 150-200 Ft	0	$21.00	LF	$ -
487-Geo Temp Casing 3" Barge/Track/Amphibious 200-250 Ft	0	$24.00	LF	$ -
488-Geo Temp Casing 3" Truck/Mud Bug 0-50 Ft	300	$9.00	LF	$ 2,700.00
489-Geo Temp Casing 3" Truck/Mud Bug 50-100 Ft	300	$10.00	LF	$ 3,000.00
490-Geo Temp Casing 3" Truck/Mud Bug 100-150 Ft	0	$12.00	LF	$ -
491-Geo Temp Casing 3" Truck/Mud Bug 150-200 Ft	0	$14.00	LF	$ -
492-Geo Temp Casing 3" Truck/Mud Bug 200-250 Ft	0	$16.00	LF	$ -
493-Geo Temp Casing 4" Barge/Track/Amphibious 0-50 Ft	0	$18.00	LF	$ -
494-Geo Temp Casing 4" Barge/Track/Amphibious 50-100 Ft	0	$19.50	LF	$ -
495-Geo Temp Casing 4" Barge/Track/Amphibious 100-150 Ft	0	$22.50	LF	$ -
496-Geo Temp Casing 4" Barge/Track/Amphibious 150-200 Ft	0	$25.50	LF	$ -
497-Geo Temp Casing 4" Barge/Track/Amphibious 200-250 Ft	0	$29.00	LF	$ -
498-Geo Temp Casing 4" Truck/Mud Bug 0-50 Ft	0	$12.00	LF	$ -
499-Geo Temp Casing 4" Truck/Mud Bug 50-100 Ft	0	$13.00	LF	$ -
500-Geo Temp Casing 4" Truck/Mud Bug 100-150 Ft	0	$15.00	LF	$ -
501-Geo Temp Casing 4" Truck/Mud Bug 150-200 Ft	0	$17.00	LF	$ -
502-Geo Temp Casing 4" Truck/Mud Bug 200-250 Ft	0	$19.00	LF	$ -
503-Geo Temp Casing 6" Barge/Track/Amphibious 150-200 Ft	0	$29.00	LF	$ -
504-Geo Temp Casing 6" Barge/Track/Amphibious 200-250 Ft	0	$33.00	LF	$ -
505-Geo Temp Casing 6" Barge/Track/Amphibious 0-50 Ft	0	$20.00	LF	$ -
506-Geo Temp Casing 6" Barge/Track/Amphibious 50-100 Ft	0	$23.00	LF	$ -
507-Geo Temp Casing 6" Barge/Track/Amphibious 100-150 Ft	0	$26.00	LF	$ -
508-Geo Temp Casing 6" Truck/Mud Bug 0-50 Ft	0	$14.00	LF	$ -
509-Geo Temp Casing 6" Truck/Mud Bug 50-100 Ft	0	$16.00	LF	$ -
510-Geo Temp Casing 6" Truck/Mud Bug 100-150 Ft	0	$18.00	LF	$ -
511-Geo Temp Casing 6" Truck/Mud Bug 150-200 Ft	0	$20.00	LF	$ -
512-Geo Temp Casing 6" Truck/Mud Bug 200-250 Ft	0	$22.00	LF	$ -
513-Geo Thermal Integrity Tester (TI)	0	$250.00	Hour	$ -
514-Geo Truck/Mud Bug Mobil (30 miles straightline distance)	0	$500.00	Each	$ -
515-Geo Undisturbed Samples Barge/Track/Amphibious 0-50 Ft	0	$225.00	Each	$ -
516-Geo Undisturbed Samples Barge/Track/Amphibious 50-100 Ft	0	$300.00	Each	$ -
517-Geo Undisturbed Samples Brg/Track/Amph 100-150 Ft	0	$375.00	Each	$ -
518-Geo Undisturbed Samples Brg/Track/Amph 150-200 Ft	0	$450.00	Each	$ -
519-Geo Undisturbed Samples Truck/Mud Bug 0-50 Ft	4	$150.00	Each	$ 600.00
520-Geo Undisturbed Samples Truck/Mud Bug 50-100 Ft	0	$200.00	Each	$ -
521-Geo Undisturbed Samples Truck/Mud Bug 100-150 Ft	0	$250.00	Each	$ -
522-Geo Undisturbed Samples Truck/Mud Bug 150-200 Ft	0	$300.00	Each	$ -
523-Geo Vibration & Noise Monitoring	0	$1,000.00	Day	$ -
524-Geo Vibration Monitoring	0	$1,000.00	Day	$ -
525-Geo Well Development	0	$150.00	Hour	$ -
600-Mobilization - Crosshole Sonic Logging (CSL) Equipment	0	$350.00	Each	$ -
602-Mobilization - Vibration Monitoring Equipment	0	$100.00	Each	$ -

FEE ESTIMATE
SW 62ND BLVD CONNECTOR FROM SW 43RD STREET TO SR 26 (NEWBERRY ROAD)
ALACHUA COUNTY, FLORIDA
FIN NO.: 211365-4

DECRIPTION OF WORK	QTY.	RATE	UNIT	AMOUNT
603-Mobilization Asphalt Coring Equipment	0	$500.00	Each	$ -
605-Mobilization Barge Small	0	$6,000.00	Each	$ -
606-Mobilization Concrete Coring	0	$500.00	Each	$ -
607-Mobilization Cone Penetrometer Test Rig	0	$2,500.00	Each	$ -
608-Mobilization Drill Rig Amphibious	0	$5,000.00	Each	$ -
610-Mobilization Drill Rig Track Mount	0	$3,000.00	Each	$ -
611-Mobilization Drill Rig Trailer Mount	0	$500.00	Each	$ -
612-Mobilization Drill Rig Truck Mount	0	$500.00	Each	$ -
613-Mobilization Mini-Shaft Inspection Device	0	$1,000.00	Each	$ -
614-Mobilization Mudbug/All Terrain Vehicle	3	$600.00	Each	$ 1,800.00
615-Mobilization Pile Driving Analyzer Equipment	0	$350.00	Each	$ -
616-Mobilization Pile Integrity Tester Equipment	0	$250.00	Each	$ -
618-Mobilization Support Boat	0	$200.00	Each	$ -
619-Mobilization Tri-Pod	0	$2,500.00	Each	$ -
703-MOT Light Tower	0	$200.00	Each	$ -
706-MOT Portable Sign	16	$175.00	Each	$ 2,800.00
708-MOT Provide Channelizing Devices – Cone	0	$10.00	Each	$ -
II. LABORATORY TESTING				
800-Soils Chloride Soil or Water FM 5-552	0	$45.00	Test	$ -
801-Soils Consol-Addtl Incrmnts AASHTO T216 (13 to 24 Loads)	0	$50.00	Each	$ -
802-Soils Consol-Addtl Incrmnts AASHTO T216 (up to 12 Loads)	0	$500.00	Each	$ -
804-Soils Consol-Extend Load Incrmnts AASHTO T216	0	$50.00	Day	$ -
805-Soils Corrosion Series FM 5-550 through 5-553	16	$150.00	Test	$ 2,400.00
806-Soils Direct Shear Consolid Drained/ Point AASHTO T236	0	$230.00	Test	$ -
808-Soils Flexible Wall Permeability ASTM D5084	0	$300.00	Test	$ -
809-Soils Hydrometer Only AASHTO T88	0	$150.00	Test	$ -
810-Soils Limerock Bearing Ratio (LBR) FM 5-515	10	$330.00	Test	$ 3,300.00
811-Soils Liquid Limit AASHTO T89	48	$40.00	Test	$ 1,920.00
812-Soils Materials Finer than 200 Sieve FM 1-T011	6	$50.00	Test	$ 300.00
816-Soils Moisture Content Lab AASHTO T265	0	$15.00	Test	$ -
817-Soils Moisture Content Laboratory AASHTO T265	97	$15.00	Test	$ 1,455.00
819-Soils Organic Content Ignition FM 1 T-267	32	$45.00	Test	$ 1,440.00
821-Soils Particle Size Anlys AASHTO T88 (Incl. Hydrometer)	0	$150.00	Test	$ -
822-Soils Particle Size Anlys AASHTO T88 (No Hydrometer)	91	$90.00	Test	$ 8,190.00
823-Soils Permeability Constant Head AASHTO T215	10	$250.00	Test	$ 2,500.00
824-Soils Permeability Falling Head FM 5-513	0	$300.00	Test	$ -
825-Soils pH Soil or Water FM 5-550	0	$30.00	Test	$ -
826-Soils Plastic Limit & Plasticity Index AASHTO T90	48	$40.00	Test	$ 1,920.00
827-Soils Proctor Modified FM 1-T180	0	$130.00	Test	$ -
828-Soils Proctor Standard AASHTO T99	0	$130.00	Test	$ -
829-Soils Resistivity Soil or Water FM 5-551	0	$50.00	Test	$ -
830-Soils Shrinkage Factor AASHTO T92	0	$60.00	Test	$ -
831-Soils Specific Gravity AASHTO T100	0	$75.00	Test	$ -
833-Soils Sulfate Soil or Water FM 5-553	0	$65.00	Test	$ -
835-Soils Triaxl Consl-Drain (CD) Per Point\Cell ASTM D7181	0	$225.00	Test	$ -
836-Soils Tri Cnsl-Undrn (CU) Pt\Cell AASHTO T297/ASTM D4767	0	$175.00	Test	$ -
837-Soil Tri Uncsl-Undrn (UU) Pt\Cell AASHTO T296/ASTM D2850	0	$125.00	Test	$ -
838-Soils Unconfined Compression - Rock ASTM D7012, Method C	0	$225.00	Test	$ -
839-Soils Unconfined Compress - Soil AASHTO T208/ASTM D2166	0	$100.00	Test	$ -
III. PROFESSIONAL AND TECHNICAL SERVICES				
Chief Engineer	23	$249.62	Hour	$ 5,741.17
Senior Engineer	59	$165.91	Hour	$ 9,788.58
Project Engineer	152	$125.08	Hour	$ 19,011.54
Engineering Intern	141	$90.17	Hour	$ 12,714.33
Senior Engineering Technician	94	$80.96	Hour	$ 7,610.34
CADD/Computer Technician	94	$104.11	Hour	$ 9,786.07
Secretary/Clerical	23	$82.13	Hour	$ 1,889.07
	586			
TOTAL ESTIMATED FEE				**$ 175,406.10**