SCOPE OF SERVICES

FOR

RESURFACING, REHABILITATION, & RESTORATION

FINANCIAL PROJECT ID. 437759-1-32-01

State Road (SR) 30A (US 98/Back Beach Road/Panama City Beach Parkway)

from the Walton County Line to Heather Drive

DISTRICT THREE

BAY COUNTY
1 PURPOSE __________________________________________________________

2 PROJECT DESCRIPTION ___________________________________________
2.1 Project General and Roadway (Activities 3, 4, and 5) ________________
2.2 Drainage (Activities 6a and 6b) ____________________________________
2.3 Utilities Coordination (Activity 7) _________________________________
2.4 Environmental Permits, Compliances, and Clearances (Activity 8) ____
2.5 Structures (Activities 9 – 18) (Not applicable to this project) __________
2.6 Signing and Pavement Markings (Activities 19 & 20) _________________
2.7 Signalization (Activities 21 & 22) _________________________________
2.8 Lighting (Activities 23 & 24) ____________________________________
2.9 Landscape Architecture (Activities 25 & 26) (Not applicable to this project)
2.10 Survey (Activity 27) (To be Provided by the DEPARTMENT) __________
2.11 Photogrammetry (Activity 28) (Not applicable to this project) _________
2.12 Mapping (Activity 29) (Not applicable to this project) ________________
2.13 Terrestrial Mobile LiDAR (Activity 30) (Not applicable to this project)
2.14 Architecture (Activity 31) (Not applicable to this project) ____________
2.15 Noise Barriers (Activity 32) (Not applicable to this project) __________
2.16 Intelligent Transportation Systems (Activities 33 & 34) ______________
2.17 Geotechnical (Activity 35) ______________________________________
2.18 3D Modeling (Activity 36) (Not applicable to this project) ____________
2.19 Project Schedule ________________________________________________
2.20 Submittals _____________________________________________________
2.21 Provisions for Work ______________________________________________
2.22 Services to be Performed by the DEPARTMENT ______________________

3 PROJECT COMMON AND PROJECT GENERAL TASKS ______________________
3.1 Public Involvement _______________________________________________
3.1.1 Community Awareness Plan ____________________________________
3.1.2 Notifications __________________________________________________
3.1.3 Preparing Mailing Lists _________________________________________
3.1.4 Median Modification Letters _____________________________________
3.1.5 Driveway Modification Letters ___________________________________
3.1.6 Newsletters (Not applicable to this project) _________________________
3.1.7 Renderings and Fly-Throughs (Not applicable to this project) _______
3.1.8 PowerPoint Presentations ________________________________________
3.1.9 Public Meeting Preparations _____________________________________
3.1.10 Public Meeting Attendance and Follow-up _________________________
3.1.11 Other Agency Meetings (Not applicable to this project) _____________
3.1.12 Web Site _____________________________________________________
3.2 Joint Project Agreements _________________________________________
3.3 Specifications Package Preparation (To be Prepared during Plans Update)
3.4 Contract Maintenance and Electronic Document Management System (EDMS)
3.5 Value Engineering (Multi-Discipline Team) Review (Not applicable to this project)
3.6 Prime Consultant Project Manager Meetings _________________________55
3.7 Plans Update __________________________________________________56
3.8 Post Design Services ____________________________________________56
3.9 Digital Delivery ________________________________________________58
3.10 Risk Assessment Workshop (Not applicable to this project) __________58
3.11 Railroad, Transit and/or Airport Coordination (Not applicable to this project)58
3.12 Landscape and Existing Vegetation Coordination ______________________58
3.13 Other Project General Tasks (Not applicable to this project) _____________58

4 ROADWAY ANALYSIS _____________________________________________58
    4.1 Typical Section Package _________________________________________58
    4.2 Pavement Type Selection Report (Not applicable to this project) ______59
    4.3 Pavement Design Package (To Be Provided by the DEPARTMENT) __________59
    4.4 Cross-Slope Correction __________________________________________59
    4.5 Horizontal/Vertical Master Design Files _____________________________59
    4.6 Access Management _____________________________________________60
    4.7 Roundabout Evaluation (Not applicable to this project) ______________61
    4.8 Roundabout Final Design Analysis (Not applicable to this project) ________61
    4.9 Cross Section Design Files _________________________________________61
    4.10 Traffic Control Analysis _________________________________________61
    4.11 Master TCP Design Files (Not applicable to this project) ______________62
    4.12 Selective Clearing and Grubbing (Not applicable to this project) __________62
    4.13 Tree Disposition Plans (Not applicable to this project) ________________62
    4.14 Design Variations and Exceptions _________________________________62
    4.15 Design Report _________________________________________________62
    4.16 Quantities _____________________________________________________63
    4.17 Cost Estimate __________________________________________________63
    4.18 Technical Special Provisions and Modified Special Provisions (Not applicable to this project) __________64
    4.19 Other Roadway Analyses (Not applicable to this project) ______________64
    4.20 Field Reviews _________________________________________________64
    4.21 Monitor Existing Structures ______________________________________64
    4.22 Technical Meetings _____________________________________________64
    4.23 Quality Assurance/Quality Control __________________________________64
    4.24 Independent Peer Review (Not applicable to this project) _____________64
    4.25 Supervision ____________________________________________________64
    4.26 Coordination ___________________________________________________64

5 ROADWAY PLANS _________________________________________________65
    5.1 Key Sheet _____________________________________________________65
    5.2 Summary of Pay Items Including Quantity Input ______________________65
    5.3 Typical Section Sheets __________________________________________65
    5.4 General Notes/Pay Item Notes _____________________________________65
    5.5 Summary of Quantities Sheets _____________________________________65
    5.6 Project Layout _________________________________________________66
    5.7 Plan/Profile Sheet (Not applicable to this project) _________________66
    5.8 Profile Sheet (Not applicable to this project) ______________________66
5.9 Plan Sheet ........................................ 66
5.10 Special Profile (Not applicable to this project) .................. 66
5.11 Back-of-Sidewalk Profile Sheet ................................ 66
5.12 Interchange Layout Sheet (Not applicable to this project) ..... 66
5.13 Ramp Terminal Details (Plan View) (Not applicable to this project) ........... 66
5.14 Intersection Layout Details .................................. 66
5.15 Special Details (Not applicable to this project) ................. 66
5.16 Cross-Section Pattern Sheet(s) (Not applicable to this project) ............... 66
5.17 Roadway Soil Survey Sheet(s) .................................. 66
5.18 Cross Sections .............................................. 66
5.19 Temporary Traffic Control Plan Sheets .......................... 66
5.20 Temporary Traffic Control Cross Section Sheets (Not applicable to this project) ........... 66
5.21 Temporary Traffic Control Detail Sheets (Not applicable to this project) ........ 66
5.22 Utility Adjustment Sheets .................................... 66
5.23 Selective Clearing and Grubbing Sheet(s) (Not applicable to this project) ... 66
5.24 Tree Disposition Plan Sheet(s) (Not applicable to this project) ................. 66
5.25 Project Network Control Sheet(s) ................................ 66
5.26 Environmental Detail Sheets (Not applicable to this project) ............... 66
5.27 Utility Verification Sheet(s) (SUE Data) ......................... 66
5.28 Quality Assurance/Quality Control ................................ 66
5.29 Supervision .................................................. 66

6a DRAINAGE ANALYSIS ............................................... 67
6a.1 Drainage Map Hydrology (Not applicable to this project) ............ 68
6a.2 Base Clearance Calculations (Not applicable to this project) ........... 68
6a.3 Pond Siting Analysis and Report (Not applicable to this project) .......... 68
6a.4 Design of Cross Drains ........................................ 68
6a.5 Design of Ditches ............................................. 68
6a.6 Design of Stormwater Management Facility (Offsite or Infield Pond) (Not applicable to this project) ........... 68
6a.7 Design of Stormwater Management Facility (Roadside Treatment Swales and Linear Ponds) ......................... 68
6a.8 Design of Floodplain Compensation (Not applicable to this project) ...... 68
6a.9 Design of Storm Drains ........................................ 68
6a.10 Optional Culvert Material ....................................... 69
6a.11 French Drain Systems (Not applicable to this project) ................ 69
6a.11a Existing French Drain Systems (Not applicable to this project) ........ 69
6a.12 Drainage Wells (Not applicable to this project) .......................... 69
6a.13 Drainage Design Documentation Report .......................... 69
6a.14 Bridge Hydraulic Report (Not applicable to this project) .............. 69
6a.15 Temporary Drainage Analysis (Not applicable to this project) .......... 69
6a.16 Cost Estimate (Not applicable to this project) .......................... 69
6a.17 Technical Special Provisions and Modified Special Provisions (Not applicable to this project) ........... 69
6a.18 Hydroplaning Analysis ........................................ 69
6a.19 Existing Permit Analysis (Not applicable to this project) 
6a.20 Other Drainage Analysis (Not applicable to this project) 
6a.21 Field Reviews 
6a.22 Technical Meetings 
6a.23 Environmental Look-Around Meetings (Not applicable to this project) 
6a.24 Quality Assurance/Quality Control 
6a.25 Independent Peer Review (Not applicable to this project) 
6a.26 Supervision 
6a.27 Coordination 

6b DRAINAGE PLANS 
6b.1 Drainage Map (Including Interchanges) (Not applicable to this project) 
6b.2 Bridge Hydraulics Recommendation Sheets (Not applicable to this project) 
6b.3 Summary of Drainage Structures 
6b.4 Optional Pipe/Culvert Material 
6b.5 Drainage Structure Sheet(s) (Per Structure) 
6b.6 Miscellaneous Drainage Detail Sheets 
6b.7 Lateral Ditch Plan/Profile 
6b.8 Lateral Ditch Cross Sections 
6b.9 Retention/Detention Pond Detail Sheet(s) (Not applicable to this project) 
6b.10 Retention Pond Cross Sections (Not applicable to this project) 
6b.11 Erosion Control Plan Sheet(s) 
6b.12 SWPPP Sheet(s) 
6b.13 Quality Assurance/Quality Control 
6b.14 Supervision 

7 UTILITIES 
7.1 Utility Kickoff Meeting 
7.2 Identify Existing Utility Agency Owner(s) 
7.3 Make Utility Contacts (To Be Conducted by the DEPARTMENT) 
7.4 Exception Processing 
7.5 Preliminary Utility Meeting 
7.6 Individual/Field Meetings 
7.7 Collect and Review Plans and Data from UAO(s) 
7.8 Subordination of Easements Coordination (To Be Conducted by the DEPARTMENT) 
7.9 Utility Design Meeting 
7.10 Review Utility Markups & Work Schedules and Processing of Schedules & Agreements 
7.11 Utility Coordination/Follow-up 
7.12 Utility Constructability Review (To Be Conducted by the DEPARTMENT) 
7.13 Additional Utility Services (To be Conducted by the DEPARTMENT or Included via Supplemental Agreement) 
7.14 Processing Utility Work by Highway Contractor (UWHC) (To Be Conducted by the DEPARTMENT) 
7.15 Contract Plans to UAO(s) 
7.16 Certification/Close-Out (To Be Conducted by the DEPARTMENT)
7.17 Other Utilities (Not applicable to this project)____________________________74

8 ENVIRONMENTAL PERMITS, COMPLIANCE, AND ENVIRONMENTAL CLEARANCES ____________________________74
8.1 Preliminary Project Research___________________________________________75
8.2 Field Work __________________________________________________________75
8.3 Agency Verification of Wetland Data (Not applicable to this project) ________75
8.4 Complete and Submit All Required Permit Applications ___________________75
8.5 Coordinate and Review Dredge and Fill Sketches (Not applicable to this project) _____________________________76
8.6 Prepare USCG Permit Sketches (Not applicable to this project) ______________76
8.7 Prepare Water Management District or Local Water Control District Right of Way Occupancy Permit Application (Not applicable to this project) ____________76
8.8 Prepare Coastal Construction Control Line (CCCL) Permit Application (Not applicable to this project) ______76
8.9 Prepare Tree Permit Information (Not applicable to this project) ____________76
8.10 Compensatory Mitigation Plan (Not applicable to this project) _____________76
8.11 Mitigation Coordination and Meetings (Not applicable to this project) ________76
8.12 Other Environmental Permits ____________________________________________76
8.13 Technical Support to the DEPARTMENT for Environmental Clearances and Re-evaluations (use when CONSULTANT provides technical support only) ______77
8.14 Preparation of Environmental Clearances and Reevaluations (TO BE PROVIDED BY THE DEPARTMENT) ____________________________77
8.15 Contamination Impact Analysis (Not applicable to this project) _____________77
8.16 Asbestos Survey (Not applicable to this project) __________________________77
8.17 Technical Meetings ___________________________________________________77
8.18 Quality Assurance/Quality Control ______________________________________78
8.19 Supervision __________________________________________________________78
8.20 Coordination ___________________________________________________________________________78

9 STRUCTURES - SUMMARY AND MISCELLANEOUS TASKS AND DRAWINGS and tasks 9.1 – 9.16 are not applicable to this project. __________78

10 STRUCTURES - BRIDGE DEVELOPMENT REPORT and tasks 10.1 – 10.35 are not applicable to this project. ______________________________________78

11 STRUCTURES - TEMPORARY BRIDGE and tasks 11.1 – 11.8 are not applicable to this project. ____________________________78

12 STRUCTURES - SHORT SPAN CONCRETE BRIDGE and tasks 12.1 – 12.28 are not applicable to this project. ______________________________________78

13 STRUCTURES - MEDIUM SPAN CONCRETE BRIDGE and tasks 13.1 – 13.55 are not applicable to this project. ______________________________________78

14 STRUCTURES - STRUCTURAL STEEL BRIDGE and tasks 14.1 – 14.62 are not applicable to this project. ____________________________78
15 **STRUCTURES - SEGMENTAL CONCRETE BRIDGE** and tasks 15.1 – 15.77 are not applicable to this project.  

16 **STRUCTURES - MOVABLE SPAN** and tasks 16.1 – 16.102 are not applicable to this project.  

17 **STRUCTURES - RETAINING WALL** and tasks 17.1 – 17.21 are not applicable to this project.  

18 **STRUCTURES – MISCELLANEOUS** and tasks 18.1 – 18.35 are not applicable to this project.  

19 **SIGNING AND PAVEMENT MARKING ANALYSIS**  
   19.1 Traffic Data Analysis  
   19.2 No Passing Zone Study (Not applicable to this project)  
   19.3 Reference and Master Design File  
   19.4 Multi-Post Sign Support Calculations (Not applicable to this project)  
   19.5 Sign Panel Design Analysis (Not applicable to this project)  
   19.6 Sign Lighting/Electrical Calculations (Not applicable to this project)  
   19.7 Quantities  
   19.8 Cost Estimate  
   19.9 Technical Special Provisions and Modified Special Provisions (Not applicable to this project)  
   19.10 Other Signing and Pavement Marking Analysis  
   19.11 Field Reviews  
   19.12 Technical Meetings  
   19.13 Quality Assurance/Quality Control  
   19.14 Independent Peer Review (Not applicable to this project)  
   19.15 Supervision  
   19.16 Coordination  

20 **SIGNING AND PAVEMENT MARKING PLANS**  
   20.1 Key Sheet  
   20.2 Summary of Pay Items Including Designer Interface Quantity Input  
   20.3 Tabulation of Quantities  
   20.4 General Notes/Pay Item Notes  
   20.5 Project Layout  
   20.6 Plan Sheet  
   20.7 Typical Details  
   20.8 Guide Sign Work Sheet(s) (Not applicable to this project)  
   20.9 Traffic Monitoring Site (Not applicable to this project)  
   20.10 Cross Sections (Not applicable to this project)  
   20.11 Special Service Point Details  
   20.12 Special Details  
   20.13 Interim Standards (Not applicable to this project)  
   20.14 Quality Assurance/Quality Control  
   20.15 Supervision
## SIGNALIZATION ANALYSIS

<table>
<thead>
<tr>
<th>Section</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>21.1</td>
<td>Traffic Data Collection (Not applicable to this project)</td>
</tr>
<tr>
<td>21.2</td>
<td>Traffic Data Analysis (Not applicable to this project)</td>
</tr>
<tr>
<td>21.3</td>
<td>Signal Warrant Study (Not applicable to this project)</td>
</tr>
<tr>
<td>21.4</td>
<td>Systems Timings (Not applicable to this project)</td>
</tr>
<tr>
<td>21.5</td>
<td>Reference and Master Signalization Design File</td>
</tr>
<tr>
<td>21.6</td>
<td>Reference and Master Interconnect Communication Design File (Not applicable to this project)</td>
</tr>
<tr>
<td>21.7</td>
<td>Overhead Street Name Sign Design (Not applicable to this project)</td>
</tr>
<tr>
<td>21.8</td>
<td>Pole Elevation Analysis (Not applicable to this project)</td>
</tr>
<tr>
<td>21.9</td>
<td>Traffic Signal Operation Report (Not applicable to this project)</td>
</tr>
<tr>
<td>21.10</td>
<td>Quantities</td>
</tr>
<tr>
<td>21.11</td>
<td>Cost Estimate</td>
</tr>
<tr>
<td>21.12</td>
<td>Technical Special Provisions and Modified Special Provisions (Not applicable to this project)</td>
</tr>
<tr>
<td>21.13</td>
<td>Other Signalization Analysis (Not applicable to this project)</td>
</tr>
<tr>
<td>21.14</td>
<td>Field Reviews</td>
</tr>
<tr>
<td>21.15</td>
<td>Technical Meetings</td>
</tr>
<tr>
<td>21.16</td>
<td>Quality Assurance/Quality Control</td>
</tr>
<tr>
<td>21.17</td>
<td>Independent Peer Review (Not applicable to this project)</td>
</tr>
<tr>
<td>21.18</td>
<td>Supervision</td>
</tr>
<tr>
<td>21.19</td>
<td>Coordination</td>
</tr>
</tbody>
</table>

## SIGNALIZATION PLANS

<table>
<thead>
<tr>
<th>Section</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>22.1</td>
<td>Key Sheet</td>
</tr>
<tr>
<td>22.2</td>
<td>Summary of Pay Items Including Designer Interface Quantity Input</td>
</tr>
<tr>
<td>22.3</td>
<td>Tabulation of Quantities</td>
</tr>
<tr>
<td>22.4</td>
<td>General Notes/Pay Item Notes</td>
</tr>
<tr>
<td>22.5</td>
<td>Plan Sheet</td>
</tr>
<tr>
<td>22.6</td>
<td>Interconnect Plans (Not applicable to this project)</td>
</tr>
<tr>
<td>22.7</td>
<td>Traffic Monitoring Site (Not applicable to this project)</td>
</tr>
<tr>
<td>22.8</td>
<td>Guide Sign Worksheet (Not applicable to this project)</td>
</tr>
<tr>
<td>22.9</td>
<td>Special Details</td>
</tr>
<tr>
<td>22.10</td>
<td>Special Service Point Details</td>
</tr>
<tr>
<td>22.11</td>
<td>Mast Arm/Monotube Tabulation Sheet (Not applicable to this project)</td>
</tr>
<tr>
<td>22.12</td>
<td>Strain Pole Schedule (Not applicable to this project)</td>
</tr>
<tr>
<td>22.13</td>
<td>TCP Signal (Temporary) (Not applicable to this project)</td>
</tr>
<tr>
<td>22.14</td>
<td>Temporary Detection Sheet (Not applicable to this project)</td>
</tr>
<tr>
<td>22.15</td>
<td>Utility Conflict Sheet</td>
</tr>
<tr>
<td>22.16</td>
<td>Interim Standards (Not applicable to this project)</td>
</tr>
<tr>
<td>22.17</td>
<td>Quality Assurance/Quality Control</td>
</tr>
<tr>
<td>22.18</td>
<td>Supervision</td>
</tr>
</tbody>
</table>

## LIGHTING ANALYSIS

<table>
<thead>
<tr>
<th>Section</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>23.1</td>
<td>Lighting Justification Report (Not applicable to this project)</td>
</tr>
<tr>
<td>23.2</td>
<td>Lighting Design Analysis Report</td>
</tr>
<tr>
<td>23.3</td>
<td>Aeronautical Evaluation (Not applicable to this project)</td>
</tr>
<tr>
<td>Section</td>
<td>Description</td>
</tr>
<tr>
<td>---------</td>
<td>-------------</td>
</tr>
<tr>
<td>23.4</td>
<td>Voltage Drop Calculations</td>
</tr>
<tr>
<td>23.5</td>
<td>FDEP Coordination and Report (Not applicable to this project)</td>
</tr>
<tr>
<td>23.6</td>
<td>Reference and Master Design Files</td>
</tr>
<tr>
<td>23.7</td>
<td>Temporary Lighting (Not applicable to this project)</td>
</tr>
<tr>
<td>23.8</td>
<td>Design Documentation</td>
</tr>
<tr>
<td>23.9</td>
<td>Quantities</td>
</tr>
<tr>
<td>23.10</td>
<td>Cost Estimate</td>
</tr>
<tr>
<td>23.11</td>
<td>Technical Special Provisions and Modified Special Provisions (Not applicable to this project)</td>
</tr>
<tr>
<td>23.12</td>
<td>Other Lighting Analysis (Not applicable to this project)</td>
</tr>
<tr>
<td>23.13</td>
<td>Field Reviews</td>
</tr>
<tr>
<td>23.14</td>
<td>Technical Meetings</td>
</tr>
<tr>
<td>23.15</td>
<td>Quality Assurance/Quality Control</td>
</tr>
<tr>
<td>23.16</td>
<td>Independent Peer Review (Not applicable to this project)</td>
</tr>
<tr>
<td>23.17</td>
<td>Supervision</td>
</tr>
<tr>
<td>23.18</td>
<td>Coordination</td>
</tr>
<tr>
<td>24</td>
<td>LIGHTING PLANS</td>
</tr>
<tr>
<td>24.1</td>
<td>Key Sheet</td>
</tr>
<tr>
<td>24.2</td>
<td>Summary of Pay Items Including Designer Interface Quantity Input</td>
</tr>
<tr>
<td>24.3</td>
<td>Tabulation of Quantities</td>
</tr>
<tr>
<td>24.4</td>
<td>General Notes/Pay Item Notes</td>
</tr>
<tr>
<td>24.5</td>
<td>Pole Data, Legend &amp; Criteria</td>
</tr>
<tr>
<td>24.6</td>
<td>Service Point Details</td>
</tr>
<tr>
<td>24.7</td>
<td>Project Layout</td>
</tr>
<tr>
<td>24.8</td>
<td>Plan Sheet</td>
</tr>
<tr>
<td>24.9</td>
<td>Special Details</td>
</tr>
<tr>
<td>24.10</td>
<td>Temporary Lighting Data and Details (Not applicable to this project)</td>
</tr>
<tr>
<td>24.11</td>
<td>Traffic Control Plan Sheets</td>
</tr>
<tr>
<td>24.12</td>
<td>Interim Standards (Not applicable to this project)</td>
</tr>
<tr>
<td>24.13</td>
<td>Quality Assurance/Quality Control</td>
</tr>
<tr>
<td>24.14</td>
<td>Supervision</td>
</tr>
<tr>
<td>25</td>
<td>LANDSCAPE ARCHITECTURE ANALYSIS and tasks 25.1 – 25.17 are not applicable to this project.</td>
</tr>
<tr>
<td>26</td>
<td>LANDSCAPE ARCHITECTURE PLANS and tasks 26.1 – 26.16 are not applicable to this project.</td>
</tr>
<tr>
<td>27</td>
<td>SURVEY and tasks 27.1 – 27.35 to be provided by the DEPARTMENT on this project.</td>
</tr>
<tr>
<td>28</td>
<td>PHOTOGRAMMETRY and tasks 28.1 – 28.25 are not applicable to this project.</td>
</tr>
<tr>
<td>29</td>
<td>MAPPING and tasks 29.1 – 29.36 are not applicable to this project.</td>
</tr>
</tbody>
</table>
30 TERRESTRIAL MOBILE LiDAR and tasks 30.1 – 30.19 are not applicable to this project. _____________________________87

31 ARCHITECTURE DEVELOPMENT and tasks 31.1 – 31.143 are not applicable to this project. ____________________________87

32 NOISE BARRIERS IMPACT DESIGN ASSESSMENT IN THE DESIGN PHASE and tasks 32.1 – 32.9 are not applicable to this project. __________________________87

33 INTELLIGENT TRANSPORTATION SYSTEMS ANALYSIS ________87

33.1 ITS Analysis ____________________________________________88
33.2 Communications Plan (Not applicable to this project) __________88
33.3 Lightning Protection Analysis (Not applicable to this project) __________88
33.4 Power Subsystem (Not applicable to this project) ________________88
33.5 Voltage Drop Calculations (Not applicable to this project) __________88
33.6 Design Documentation ________________________________________88
33.7 Existing ITS _______________________________________________89
33.8 Queue Analysis (Not applicable to this project) _________________89
33.9 Reference and Master ITS Design File __________________________89
33.10 Reference and Master Communications Design File (Not applicable to this project) __________________________89
33.11 Pole Elevation Analysis (Not applicable to this project) ________89
33.12 Sign Panel Design Analysis (Not applicable to this project) __________89
33.13 Quantities _________________________________________________89
33.14 Cost Estimate ______________________________________________89
33.15 Technical Special Provisions and Modified Special Provisions __________89
33.16 Other ITS Analyses (Not applicable to this project) _______________90
33.17 Field Reviews ______________________________________________90
33.18 Technical Meetings __________________________________________90
33.19 Quality Assurance / Quality Control ___________________________90
33.20 Supervision ________________________________________________91
33.21 Coordination ______________________________________________91

34 INTELLIGENT TRANSPORTATION SYSTEMS PLANS __________91

34.1 Key Sheet _________________________________________________91
34.2 Summary of Pay Items Including Designer Interface Quantity Input _______91
34.3 Tabulation of Quantities ______________________________________91
34.4 General Notes / Pay Item Notes _________________________________91
34.5 Project Layout ______________________________________________91
34.6 Typical and Special Details ___________________________________91
34.7 Plan Sheet _________________________________________92
34.8 ITS Communications Plans (Not applicable to this project) __________92
34.9 Fiber Optic Splice Diagrams (Not applicable to this project) __________92
34.10 Lightning Protection Plans (Not applicable to this project) __________92
34.11 Cross Sections (Not applicable to this project) ________________92
34.12 Guide Sign Work Sheet(s) (Not applicable to this project) __________92
34.13 Special Service Point Details (Not applicable to this project) ______92
34.14 Strain Pole Schedule (Not applicable to this project) 92
34.15 Overhead / Cantilever Sign Structure (Not applicable to this project) 92
34.16 Other Overhead Sign Structures (Long Span, Monotube, etc.) (Not applicable to this project) 92
34.17 Traffic Control Plans (Not applicable to this project) 92
34.18 Interim Standards (Not applicable to this project) 92
34.19 GIS Data and Asset Management Requirements 92
34.20 Quality Assurance / Quality Control 93
34.21 Supervision 93

35 GEOTECHNICAL 93
35.1 Document Collection and Review 94
35.2 Develop Detailed Boring Location Plan 95
35.3 Stake Borings/Utility Clearance 95
35.4 Muck Probing (Not applicable to these projects) 95
35.5 Coordinate and Develop MOT Plans for Field Investigation 95
35.6 Drilling Access Permits 96
35.7 Property Clearances (Not applicable to this project) 96
35.8 Groundwater Monitoring 96
35.9 LBR / Resilient Modulus Sampling (Not applicable to these projects) 96
35.10 Coordination of Field Work 96
35.11 Soil and Rock Classification - Roadway 96
35.12 Design LBR 96
35.13 Laboratory Data 96
35.14 Seasonal High Water Table 97
35.15 Parameters for Water Retention Areas 97
35.16 Delineate Limits of Unsuitable Material 97
35.17 Electronic Files for Cross-Sections 97
35.18 Embankment Settlement and Stability (Not applicable to these projects) 97
35.19 Monitor Existing Structures (Not applicable to these projects) 97
35.20 Stormwater Volume Recovery and/or Background Seepage Analysis 97
35.21 Geotechnical Recommendations 97
35.22 Pavement Condition Survey and Pavement Evaluation Report 98
35.23 Preliminary Roadway Report 98
35.24 Final Report 99
35.25 Auger Boring Drafting 100
35.26 SPT Boring Drafting 100

Structures and tasks 35.27 – 35.48 are not applicable to this project. 100
35.49 Other Geotechnical (Not applicable to these projects) 100
35.50 Technical Special Provisions and Modified Special Provisions 100
35.51 Field Reviews 100
35.52 Technical Meetings 100
35.53 Quality Assurance/Quality Control 100
35.54 Supervision 100
35.55 Coordination 100

36 3D MODELING and tasks 36.1 – 36.9 are not applicable to this project. 100
<table>
<thead>
<tr>
<th>Section</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>37</td>
<td>PROJECT REQUIREMENTS</td>
<td>100</td>
</tr>
<tr>
<td>37.1</td>
<td>Liaison Office</td>
<td>100</td>
</tr>
<tr>
<td>37.2</td>
<td>Key Personnel</td>
<td>101</td>
</tr>
<tr>
<td>37.3</td>
<td>Progress Reporting</td>
<td>101</td>
</tr>
<tr>
<td>37.4</td>
<td>Correspondence</td>
<td>101</td>
</tr>
<tr>
<td>37.5</td>
<td>Professional Endorsement</td>
<td>101</td>
</tr>
<tr>
<td>37.6</td>
<td>Computer Automation</td>
<td>101</td>
</tr>
<tr>
<td>37.7</td>
<td>Coordination with Other Consultants</td>
<td>101</td>
</tr>
<tr>
<td>37.8</td>
<td>Optional Services</td>
<td>102</td>
</tr>
<tr>
<td>38</td>
<td>INVOICING LIMITS</td>
<td>102</td>
</tr>
</tbody>
</table>
SCOPE OF SERVICES FOR CONSULTING ENGINEERING SERVICES
HIGHWAY DESIGN

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

Financial Project ID: 437759-1-32-01
County Section No.’s: 46010000, 46010001 & 46160000
Description: State Road (SR) 30A (US 98/Back Beach Road/Panama City Beach Parkway) from the Walton County Line to Heather Drive
County: Bay
Context Classifications:
  C1 – Natural (Project Begin to Phillips Inlet Bridge)
  C2 – Rural (Phillips Inlet Bridge to 1.106 miles east of County Line)
  C3C – Suburban Commercial (1.106 miles east of County Line to Wild Heron Way)
  C2 – Rural (Wild Heron Way to Downing Street)
  C3C – Suburban Commercial (Downing Street to Manistee Drive)
  C4 – Urban (Manistee Drive to Project End)

1 PURPOSE

The purpose of this Exhibit is to describe the scope of work and the responsibilities of the CONSULTANT and the DEPARTMENT 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.

- Major work mix include: RESURFACING
- Major work groups include: 3.1
- Minor work groups include: 7.1, 7.2, 7.3, 9.1, 9.2

Alternative construction contracting methods have NOT been identified for this project at this time.

The general objective is for the CONSULTANT to prepare a set of contract documents including plans, specifications, supporting engineering analysis, calculations and other technical documents in accordance with FDOT policy, procedures and requirements. These Contract documents will be used by the contractor to build the project and test the project
components. These Contract documents will be used by the DEPARTMENT or its Construction Engineering Inspection (CEI) representatives for inspection and final acceptance of the project. The CONSULTANT shall follow a systems engineering process to ensure that all required project components are included in the development of the Contract documents and the project can be built as designed and to specifications.

The Scope of Services establishes which items of work in the *FDOT Design Manual (FDM)* 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 DEPARTMENT.

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. This shall not be a basis for any supplemental fee request(s).

The CONSULTANT shall demonstrate good project management practices while working on this project. These include communication with the DEPARTMENT 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 DEPARTMENT 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 Department standards and procedures, the duties and responsibilities assigned under the terms of this agreement. The Consultant shall minimize to the maximum extent possible the Department’s need to apply its own resources to assignments authorized by the Department.

The DEPARTMENT will provide contract administration, management services, and technical reviews of all work associated with the development and preparation of contract documents, including Construction documents. The Department’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 DEPARTMENT 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 projects and become familiar with concepts and commitments (typical sections, alignments, etc.) developed from prior studies. 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 DEPARTMENT.
Financial Project ID: 437759-1-32-01

This 3R project primarily consists of resurfacing State Road (SR) 30A (US 98/Back Beach Road/Panama City Beach Parkway) from the Walton County Line to Heather Drive. SR 30A will be resurfaced from the Walton County Line (Section 46010000, CMP 0.000) to the visible pavement change on the west side of the intersection with Heather Drive (Section 46160000, CMP 5.679).

Existing travel lanes, auxiliary lanes, median crossovers and paved shoulders will be resurfaced. The typical section generally consists of four 12’ travel lanes, 12’ outside shoulders (4’ paved) and 2’ paved inside shoulders.

Left turn lanes will be constructed at the following locations (Section 46160000) as part of this project: Palm Beach Drive (CMP 0.605) (both directions), Dolphin Drive (CMP 0.708) (both directions), Gulf View Drive (CMP 0.827) (both directions) and Gainous Road (CMP 1.089) (eastbound only). Refer to the Unsignalized Intersection Studies that were performed in April 2018 by FDOT District Three Traffic Operations. The CONSULTANT shall coordinate with the DEPARTMENT’s Design Project Manager and Traffic Operations on the recommendation on whether the median openings should be made directional.

The right-of-way varies throughout the project limits, but is generally 200’ in width. No additional right-of-way will be required.

The CONSULTANT shall take a practical approach to all projects by identifying cost savings on any/all phases of a project (design, right-of-way acquisition, and construction). Guidance can be found in the DEPARTMENT’s Complete Streets Handbook and the FDOT Design Manual.

SR 30A has been designated as a “Hurricane Evacuation Route”.

SR 30A is a designated Strategic Intermodal System (SIS) highway facility. The CONSULTANT shall be responsible for identifying and obtaining any Design Variations needed for deviating from SIS criteria.

Two (2) signalized intersections exist within the project limits (Section 46160000). The first is a fully actuated signal at the intersection with County Road (CR) 30 (Front Beach Road) (CMP 0.303). The traffic detector loops on CR 30 and SR 30A that are impacted by the resurfacing operation will be replaced. Other anticipated signal work at this location includes reconstructing pedestrian detectors and signal heads to meet Americans with Disabilities (ADA) access requirements. The second signal is an emergency signal at Downing Street (CMP 2.434). No work at this signalized intersection is anticipated.

A signalized intersection will be constructed at the intersection of SR 30A and Griffin Boulevard (Section 46160000, CMP 4.917) in FY 2019 as a Traffic Operations Push-Button project. If applicable, the traffic detector loops on Griffin Boulevard and SR 30A
that are impacted by the resurfacing operation will be replaced. The CONSULTANT will need to coordinate with the proposed signalization project.

Pedestrian lighting will be constructed at the intersection with CR 30 (Front Beach Road).

The CONSULTANT shall evaluate providing bicycle and pedestrian facilities throughout the project limits, making recommendations whether sidewalk (both sides) or a multi-use trail should be constructed, as well as the placement of the recommended pedestrian facility.

Numerous ADA improvements to existing pedestrian features will be included in this project. These improvements will consist of repairing deficient sidewalk, replacing/retrofitting non-compliant curb ramps, meeting clear space requirements and upgrading pedestrian signal features at the intersection with CR 30 (Front Beach Road). An ADA Survey Report will be required. See Section 4.15.

Two (2) bridges exist within the project limits (BR460072 and BR460078 – over Phillips Inlet). These bridges have concrete decks and no work other than striping and guardrail upgrades is expected. The guardrail end anchorages and connections to the bridge rail will be upgraded.

Per the FDOT Traffic Operations Office and the Roadway Characteristics Inventory (RCI) Database, the posted (justified) speed limit on SR 30A is 45 mph from the beginning of the project to CMP 0.555 (Section 46160000) near Palm Beach Drive where it increases to 55 mph. The posted speed (55 mph) is maintained through CMP 5.225 (Section 46160000) near Cobb Road where the posted speed decreases to 45 mph and is carried through the end of the project at Heather Drive. Initial field observations of the posted speed limit agree with the RCI Database. Any contradictions to the posted (justified) speeds described above (found posted in the field, or proposed by CONSULTANT) will require close coordination with the DEPARTMENT’s Design Project Manager and approval from the FDOT Traffic Operations Office on the project’s Typical Section Package.

All guardrail shall be evaluated for conformance to FDOT Standard Plans for type, height, and offset to the travel lanes and hazards. Existing guardrail shall be evaluated to determine if the length of advancement meets FDOT Standard Plans. The guardrail should be extended if required.

It is the DEPARTMENT’s desire to make every effort to avoid impacts to trees within the project limits. The CONSULTANT shall be cognizant of the limits of construction and any work activities that may pose a threat to existing trees or their root systems. Any tree impacts perceived to be unavoidable shall be closely reviewed with the DEPARTMENT’s Design Project Manager who will in turn review with other DEPARTMENT staff as appropriate. When there is the potential to impact trees, the CONSULTANT shall be prepared to provide and present alternate design scenarios with corresponding cost estimates and implications (drainage, utilities, etc.) when requested.
COORDINATION REQUIREMENTS: This project should be coordinated with any and all adjacent County, State or private projects, including the following known projects:

1) FPID 424285-4-52-01 - FDOT Project - Bridge repair/rehabilitation of SR 30 (US 98) Phillips Inlet Bridges. The project was let in May 2018. The DEPARTMENT's Design Project Manager is Bill Howell, Atkins (850-638-2288).


3) FPID 436871-1-58-01 - Bay County Landscaping Project (JPA) - SR 30 (US 98/Back Beach Road/Panama City Beach Parkway) from the Walton County Line to CR 30 (Front Beach Road). The DEPARTMENT’s Design Project Manager is Pamela Miner, Atkins (850-638-2288).

4) FPID 435518-6-58-01 - CANDIDATE LAP Project with Bay County - Sidewalk construction on CR 30 (Front Beach Road) from 30A (US 98/Back Beach Road/Panama City Beach Parkway) to Kelly Street. The DEPARTMENT’S LAP Coordinator for this project is Craig Gavin (850-330-1468).

5) FPID 437179-2-22-01 - CANDIDATE PD&E Project - SR 30 (US 98/Back Beach Road/Panama City Beach Parkway) from the Walton County Line to CR 79 (Arnold Road). The DEPARTMENT’s Design Project Manager is Iris Waters (850-330-1625).

Features installed on FDOT R/W by non-FDOT, private entities should be considered by the CONSULTANT as they relate to potential impacts. Within these project limits, landscaping, irrigation, signs, mailboxes, etc. are expected to be encountered and potentially impacted by construction activities. The construction plans must address the course of action for coordination.

SPECIFIC EXCLUSIONS: This project has been discussed with District Three Management and no project specific exclusions have been identified at this time.

All necessary Geotechnical efforts will be provided by the CONSULTANT.

This project will be let to construction as a Conventional Bid Item project.

The CONSULTANT shall incorporate the following into the design of this facility:

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

Public Involvement: This project will have a Community Awareness Plan (CAP) Level II, including a Public Information Meeting/Workshop and/or Public Hearing. The CONSULTANT shall create project specific .shtm files immediately prior to each Public Information Meeting/Workshop and Public Hearing to be
posted by the DEPARTMENT to the NWFLRoads.com web site. See Section 3.1.12 for specific requirements.

Joint Project Agreements: There have been NO JPAs identified at this time. Section 3.2 provides additional guidance.

Lane Closure(s) During Design Phase Approval: If a lane closure is anticipated for any purpose during the design phase of a project (i.e., survey, geotechnical investigation, pavement coring, etc.) the CONSULTANT shall provide the DEPARTMENT’s Design Project Manager with all the necessary project/task related information in a memo form to pursue approval from the District Design Office. Needed information includes 1) the location of the lane closure, 2) the scope of work at the location, 3) the duration of closure, 4) when (date/time) that the work is requested to be performed, 5) Google Earth *.kmz file(s) of the location(s), and 6) MOT plan. The approval must be received before the specified work can commence.

Specification Package Preparation: To be negotiated and completed during the Plans Update phase. See the requirements described in Sections 3.3 & 3.7.

Plan Type: The CONSULTANT shall provide only the roadway and/or structures plans and miscellaneous details necessary to construct this project. The DEPARTMENT’s intent is to minimize the design and survey effort where possible. The CONSULTANT shall develop and sign and seal the plans electronically in accordance with Sections 3.9 & 37.5.

Typical Section: The SR 30A typical section generally consists of four 12’ travel lanes, 12’ outside shoulders (4’ paved), 2’ paved inside shoulders and a 40’ grassed median.

Resurfacing Limits: SR 30A will be resurfaced from the Walton County Line (Section 46010000, CMP 0.000) to the visible pavement change on the west side of the intersection with Heather Drive (Section 46160000, CMP 5.679). Special care should be given at the begin/end of projects to prevent “dips” in the roadway. Transition details should be provided in the plans as necessary and may require the resurfacing operation to cross the county/state line to prevent a dip.

Right-of-Way: Right-of-way (R/W) acquisition will not be required for this project. Existing R/W lines, including stations and offset distances at breaks, will be shown on all plan sheets. The existing R/W varies but is generally 200’ in width.

License Agreements may be appropriate and used for the purpose of harmonizing driveways and slopes where sidewalk is to be constructed, repaired or replaced. The CONSULTANT will be required to assist in defining and presenting the requirements at each location.

Pavement Design: The DEPARTMENT will provide the Pavement Designs for this project. Three (3) pavement designs are anticipated. One for the mainline, one for the new turn lanes and one for the paved median openings. If a multi-use path is
constructed as part of this project, a pavement design will also be required. The CONSULTANT may have to provide milling/paving details if necessary to prevent build-up of asphalt in the gutters at select locations.

All excess milled asphalt not used by the Contractor in the resurfacing mix is to become the property of the Contractor.

Cross Slope: There have been no cross-slope deficiencies identified in this project at this time. As early as possible, the collected survey data along this project shall be analyzed by the CONSULTANT to determine if minimum and maximum cross slope requirements are met throughout the project limits. Once the determination is made that cross slope correction will be implemented, the CONSULTANT must determine if any additional survey is required to provide an adequate design and accurate quantities. The CONSULTANT will coordinate with the DEPARTMENT’s Design Project Manager and the District Survey Office to determine how much additional survey is required and what is the most economical method of obtaining the additional data. The CONSULTANT shall then review the cross sections with the District Construction Office and the District Bituminous Engineer to determine the method of correction (variable depth milling or overbuild) and the details/tables required. A proposed design for cross slope correction must be included in the Phase II Plans.

Access Management Classification: SR 30A has an Access Management Classification of 3 from project begin to CMP 1.106 (46010000), an Access Management Classification of 7 from CMP 0.000 to CMP 0.440 (46010001) and an Access Management Classification of 5 from CMP 0.303 to project end (46160000).

Access Management improvements have been identified by the District Three Traffic Operations Office as part of unsignalized intersection studies for four locations. Median turn lanes will be constructed at Gainous Road, Palm Beach Drive, Dolphin Drive and Gulf View Drive. The median openings at Palm Beach Drive, Dolphin Drive and Gulf View Drive shall also be evaluated for conversion to directional median openings. No other locations have been identified; however, the CONSULTANT will be responsible for reviewing the available crash history and coordinating with the DEPARTMENT and local government contacts to identify any locations that may warrant further study or improvements. The CONSULTANT is to be aware that only a minimal amount of access management work (if any) will be considered for this 3R project.

All recommendations for access management improvements are to be closely coordinated with the DEPARTMENT’s Design Project Manager. The CONSULTANT shall be aware that certain proposed deviations from access management and median opening spacing standards must be presented to the District Access Management Review Committee (AMRC)(see also Sections 3.1.4 and 4.6). At a minimum, non-typical access management, driveway, and median opening issues that cannot be resolved by standard review processes at the District Design Office level, as well as proposed full movement median openings not
meeting the spacing standards in Rule Chapter 14-97, F.A.C by a threshold of 10% or more shall be taken to the AMRC for review.

Transit Route Features: N/A

Major Intersections/Interchanges: Two (2) signalized intersections exist within the project limits (Section 46160000): CR 30 (Front Beach Road) (CMP 0.303) and Downing Street (Emergency Signal) (CMP 2.434). A third signalized intersection will be constructed at Griffin Boulevard (CMP 4.917) in FY 2019.

Level of TCP Plans: The CONSULTANT shall provide a TCP Level I.

Traffic Control Plans (TCP) will be required for this project. The FDOT Standard Plans, 102 series, should be utilized for all work being performed on or adjacent to existing roadways. A reduction in the number of lanes will require that a lane closure analysis be performed by the CONSULTANT. See Section 4.10 for further guidance. SR 30A has been designated as a “Hurricane Evacuation Route”. All lanes must be open for traffic within 12 hours of a hurricane evacuation notice and shall remain open for the duration of the event as directed by the Project Administrator.

Consideration must also be given to the movement and safety of pedestrian and bicycle traffic during construction.

Design Variations/Exceptions: The CONSULTANT should review all existing features within the project limits for a functional design that will meet FDOT design standards and make a determination whether a Design Variation or Exception is appropriate.

Conditions may be identified during design that may warrant design variations or exceptions. The CONSULTANT is to submit the requests for Variations and Exceptions to the DEPARTMENT as early as possible for approval in order to minimize potential schedule delays. The CONSULTANT is to be aware that omitting certain work items may require approval at the District Director level (see FDM 114.1.1). The CONSULTANT will coordinate with the DEPARTMENT's Project Manager to obtain this approval.

Back of Sidewalk Profiles: The CONSULTANT shall provide back of sidewalk profiles, if sidewalk is recommended.

2.2 Drainage (Activities 6a and 6b)

System Type: SR 30A generally has an open drainage system throughout the project limits. However, there are several median locations with a closed system that includes curb & gutter and inlets.

One area with apparent flooding issues that should be analyzed is the north side of SR 30A between Ashley Drive and Wells Street. Drainage analysis will also be
required for the proposed median turn lanes at Gainous Road, Palm Beach Drive, Dolphin Drive and Gulf View Drive.

Other than the locations mentioned above, minimal drainage improvements are anticipated including constructing mitered end sections and repairing inlets.

A number of sidedrains have broken mitered end sections. Every location should be reviewed and any broken mitered end that is creating a safety hazard should be reconstructed.

The CONSULTANT should review all locations for a functional design that will meet FDOT clearzone criteria. A Design Exception will be required if any drainage structure creates a hazard in the clear zone, and is to remain.

All existing drainage structures within the limits of construction shall be shown on the construction plans. The CONSULTANT shall inspect all drainage structures for function, scour, erosion, structural integrity, accumulation of sediments, and design as it pertains to pedestrian and vehicular safety. Prior to submitting staffhours, the CONSULTANT shall clearly communicate the drainage survey needs to the SURVEYOR and shall minimize the survey effort where possible. Drainage design treatments should be discussed with the DEPARTMENT’s Design Project Manager and the District Drainage Office before being added to the construction plans.

2.3 Utilities Coordination (Activity 7)

The DEPARTMENT will be responsible for utility coordination associated with this project.

The CONSULTANT will identify which utilities exist within the corridor by calling Sunshine 811. A copy of the Sunshine 811 “design” ticket listing all utility owners within the project limits shall be provided within 10 business days of the Notice to Proceed (NTP).

Once the draft design is apparent, the CONSULTANT shall determine if any additional survey is required regarding utility designations in order to provide an adequate design and accurate quantities. The CONSULTANT will coordinate with the DEPARTMENT’s Design Project Manager and the District Survey Office to determine how much additional survey is required and what is the most economical method of obtaining the additional data.

The CONSULTANT will be responsible for showing areas that may be affected by construction. The CONSULTANT will evaluate utilities for potential impacts and prepare a Utility Conflict Matrix as directed by Section 7.7 of this document. An example Utility Conflict Matrix can be provided by the DEPARTMENT’s Design Project Manager if necessary. The matrix will be required with the Phase II submittal and will be updated and submitted with every phase thereafter.

Above-ground utility installations that have been struck three times within the latest 5-year period shall be assessed for relocation options. For installations with
a crash history WITHOUT viable options for relocation within the R/W, the CONSULTANT will be responsible for obtaining Design Exceptions. Above-ground utility installations with a crash history WITH available R/W for relocation shall be relocated or the Utility Agency Owner (UAO) will be responsible for pursuing and obtaining a Design Exception.

The CONSULTANT is to review the UAO marked up plans and the Utility Work Schedules as they are received and assure that they are compatible with the proposed design features in the plans. The CONSULTANT shall review the specific details of the markups and schedules with the Area Utility Manager as required to finalize the status of each potential conflict. The CONSULTANT shall also verify that the schedules conform to the construction phasing and MOT sequences.

The CONSULTANT shall provide a written review of the critical path utility relocation activities and durations, considering possible concurrent construction activities, and a recommendation of Utility Dependent Time to be added to the overall Contract Time. This “written review” will be referred to as the Utility Schedule Report and will be required at the Phase III Submittal (and subsequent submittals) with the CONSULTANT’s Contract Time Estimate. The Utility Schedule Report will be revisited, updated, and resubmitted as necessary to the DEPARTMENT’s Area Utility Manager and Design Project Manager as the Utility Work Schedules are finalized.

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

The CONSULTANT shall coordinate with appropriate agencies for all necessary permits. Potential agencies requiring coordination include, but are not limited to: Northwest Florida Water Management District, Department of Environmental Protection, and US Army Corps of Engineers.

The CONSULTANT shall be responsible for the identification, coordination and applications for all permits necessary to construct this project. All application and processing fees, including fees for any public notice required by the permit, shall be paid for by the CONSULTANT.

The DEPARTMENT will provide compensatory wetland mitigation in accordance with Section 373.4137, Florida Statutes if required. The CONSULTANT shall coordinate with the District Permit Coordinator if wetland mitigation is anticipated.

2.5 Structures (Activities 9 – 18) (Not applicable to this project)

2.6 Signing and Pavement Markings (Activities 19 & 20)

The CONSULTANT shall be responsible for the design, details, and quantities associated with signing and pavement markings for this project. The CONSULTANT shall coordinate with the DEPARTMENT’s Design Project Manager and the District Roadway Design Engineer to determine the most
appropriate type of edge line for this application. If consideration of audible and vibratory pavement marking treatment is required by the FDOT Design Manual, provide the DEPARTMENT’s Design Project Manager with an explanation of crash history, treatment recommendations, and a *.kmz graphically representing proposed audible and vibratory treatment to pursue approval from the District Design Office. The CONSULTANT shall evaluate the existing signage to determine the need for additional signs, correcting redundant or conflicting signage, and the replacement of damaged signs.

The Phillips Inlet bridges (BR460072 and BR460078) will be restriped as part of this project with Integrated Multi-Polymer Pavement Markings (Developmental Specifications 712 and 971). Coordination between the CONSULTANT, District Three and Central Office will be required.

The CONSULTANT shall evaluate and design all signs to meet current Design Standards and the FDOT Multi-Post Sign Program.

Regarding pavement markings, the CONSULTANT shall communicate with the DEPARTMENT to determine the specific survey needs required for locating pavement markings based on the anticipated needs of the project and the proposed scope of work.

A No Passing Zone Study will NOT be required.

2.7 Signalization (Activities 21 & 22)

Intersections:

Two (2) signalized intersections exist within the project limits at the following locations:

1) CR 30 (Front Beach Road) (CMP 0.303) – mast arms
2) Downing Street (Emergency Signal) (CMP 2.434) – mast arms

One (1) signalized intersection will be constructed in FY 2019:

1) Griffin Boulevard (CMP 4.917) – mast arms

The CONSULTANT shall review and coordinate with the DEPARTMENT (and the local maintaining agency as necessary) whether to install video detection at the signalized intersections where traffic detector loops are impacted by the milling operation.

Other anticipated signal work throughout the project includes reconstructing pedestrian detectors and signal heads to meet Americans with Disabilities Act (ADA) access requirements. Potentially, some of the signal heads will have LED indications and some will have incandescent heads. At this time, upgrades to LED indications is NOT included in this project.
2.8 Lighting (Activities 23 & 24)

The CONSULTANT shall provide for roadway and pedestrian lighting at the intersection with CR 30 (Front Beach Road) (CMP 0.303).

2.9 Landscape Architecture (Activities 25 & 26) (Not applicable to this project)

2.10 Survey (Activity 27) (To be Provided by the DEPARTMENT)

Design Survey: The design survey will be provided by the DEPARTMENT for this project.

Subsurface Utility Exploration: To be provided by the DEPARTMENT if deemed necessary. There have been no needs identified at this time.

2.11 Photogrammetry (Activity 28) (Not applicable to this project)

2.12 Mapping (Activity 29) (Not applicable to this project)

2.13 Terrestrial Mobile LiDAR (Activity 30) (Not applicable to this project)

2.14 Architecture (Activity 31) (Not applicable to this project)

2.15 Noise Barriers (Activity 32) (Not applicable to this project)

2.16 Intelligent Transportation Systems (Activities 33 & 34)

Conduit for future fiber optic cable along SR 30A will be installed under the proposed sidewalk/multi-use trail (if constructed) from the intersection at CR 30 (CMP 0.303) to the end of the project (CMP 5.679). All recommendations for ITS improvements, including conduit location, size, and configuration, are to be closely coordinated with the DEPARTMENT’s Design Project Manager, the DEPARTMENT’s Traffic Operations office and the Bay County Traffic Operations Center. No other ITS work is anticipated.

2.17 Geotechnical (Activity 35)

The Pavement Condition Survey (including coring, testing, and preparing the report) will be provided by the DEPARTMENT. The DEPARTMENT will be responsible for the Pavement Designs.

The CONSULTANT shall be responsible for all necessary geotechnical activities associated with this project. The CONSULTANT shall coordinate with the DEPARTMENT’s Design Project Manager and the DEPARTMENT’s Geotechnical Project Manager regarding information needed.

2.18 3D Modeling (Activity 36) (Not applicable to this project)
2.19 Project Schedule

Within ten (10) days after the Notice-To-Proceed, and prior to the CONSULTANT beginning work, the CONSULTANT shall provide a detailed Critical Path Method (CPM) project schedule. The DEPARTMENT and CONSULTANT scheduled activities are required to meet the current DEPARTMENT Production Date. The project schedule shall include the following: project FPID and project description, FDOT PSM standard activity codes and description for all activities, original duration, activity start date, activity finish date, activity percent complete, activity predecessor(s) and successor(s). The schedule shall be based upon the durations and schedule negotiated during the project staff hour negotiations process. 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 (3) week review time for each phase review and other submittals as appropriate.

The schedule shall indicate, at a minimum, proposed dates for Phase I, II, III, and IV plans and all other appropriate milestones and required submittals.

All fees and price proposals are to be based on the negotiated schedule of XX months for final construction contract documents. However, the contract deadline is XX 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 DEPARTMENT, adjusted as necessary to incorporate changes in the Scope of Services and progress to date.

The approved monthly updated project schedule and schedule status report, along with progress and payout curves, shall be submitted with the monthly progress report to the DEPARTMENT’s Design Project Manager. The CONSULTANT will also be required to make monthly schedule updates for tasks assigned to the CONSULTANT in FDOT Project Suite Enterprise Edition (PSEE). Schedule updates are due the last Friday of each month.

Initial and revised schedules shall be submitted electronically in *.pdf, Word, or Excel format.

Additional information, the PSEE link, and schedule update training can be found at http://www.fdot.gov/designsupport/Districts/D3/default.shtm.

2.20 Submittals

The CONSULTANT shall furnish construction contract documents as required by the DEPARTMENT to adequately control, coordinate, and approve the work concepts. The CONSULTANT shall distribute submittals as directed by the DEPARTMENT. The DEPARTMENT will determine the specific number of copies required prior to each submittal.
The DEPARTMENT’s Electronic Review and Comment (ERC) system will be used for project reviews. Upon Notice to Proceed, the DEPARTMENT’s Design Project Manager will coordinate with the CONSULTANT to provide the required access into the ERC system.

Phase Submittal Delivery: The delivery will include ONLY the submittal components (not the entire project directory and files). The delivery will be transmitted to the DEPARTMENT’s Design Project Manager via ftp site, FTA, or other electronic file storage media and will include all construction plans components (roadway, signing & pavement marking, signalization, etc.) in *.pdf format, as well as the other submittal components described below for each submittal. The CONSULTANT shall coordinate with the DEPARTMENT’s Design Project Manager to determine whether hard copy sets of plans or CDs/DVDs are required at any or all phase submittals. The CONSULTANT shall provide a *.kmz file of the project with each submittal. The *.kmz file needs to include the layers necessary to compare proposed construction features with the existing utilities as well as the limits of construction (LOC) and right-of-way (R/W).


PRIOR TO PHASE I SUBMITTAL:

The CONSULTANT shall submit one (1) electronic copy of the Access Management Study (see Sections 2.1 and 4.6) to the DEPARTMENT’s Design Project Manager for review with FDOT Management for possible inclusion. This submittal must occur well in advance of the Phase I submittal date to allow time for review and consideration by the DEPARTMENT. Once approved, the CONSULTANT shall transmit a digitally sealed copy to the DEPARTMENT’s Design Project Manager.

Quality Assurance/ Quality Control (QA/QC) Plan: The CONSULTANT shall submit their QA/QC Plan that will be used during the design of this project to the DEPARTMENT’s Design Project Manager for reference within 20 (twenty) calendar days of the written Notice to Proceed. As a minimum, the QA/QC Plan shall include the details of all plan review processes to be utilized and sufficient file documentation to show that the QA/QC plan has been followed. See Section 3.0 (Project Common Tasks).

Alignment & Survey Submittals: To be prepared by the DEPARTMENT.

UAO Identification / Sunshine 811 “Design” Ticket: A copy of the Sunshine 811 “design” ticket listing all utility owners within the project limits shall be transmitted to the Design Project Manager and the Area Utility Manager at the onset of the design survey effort. The ticket shall be included with all phase submittals. See Section 7.2 for additional information regarding this requirement.
Within 30 (thirty) calendar days of the written Notice to Proceed, the CONSULTANT shall submit a revised construction cost estimate using the DEPARTMENT's Long Range Estimating System (L.R.E.). The revised estimate shall be based on all work items likely to be included in the project whether or not explicitly defined in this initial scope of work, including, but not limited to, work items being analyzed for possible inclusion in the scope after DEPARTMENT approval. This estimate is understood to be preliminary and will be used to better budget construction costs. The District Preliminary Estimates Office will provide the CONSULTANT with a version of the L.R.E. in the system for their use.

Miscellaneous Design/Production Document Submittals: The CONSULTANT shall submit to the DEPARTMENT for review, and receive concurrence for, the Initial Project Schedule, the Community Awareness Plan, the Typical Section Package, Pavement Design, Design Variations and/or Exceptions (if applicable), and other documents as required by the FDOT Design Manual (FDM) and the Scope of Services.

**PHASE I:**

The CONSULTANT shall submit to the DEPARTMENT's Design Project Manager for distribution:

- one (1) electronic copy of the Plans,
- one (1) electronic copy of the QC Marked-up Plans,

The submittal shall, at a minimum, include *.pdf files of the components listed above, as well as the Design Report, *.kmz file of the project, ADA Survey Report, and Sunshine 811 “design” ticket.

Along with the Phase I plans submittal, the CONSULTANT shall submit the construction cost estimate using the DEPARTMENT’s Long Range Estimating System (L.R.E.). The District Preliminary Estimates Office will provide the CONSULTANT with a version of the L.R.E. in the system for their use.

Following the PHASE I review and prior to the PHASE II submittal, the District Survey Office requests that the prime CONSULTANT provide the DEPARTMENT and Survey Consultant with the plans and allow time for a review to check the survey/construction layout, alignments, control information (including R/W control if applicable), curve data, layout information, etc.

**PHASE II:**

The CONSULTANT shall submit to the DEPARTMENT’s Design Project Manager for distribution:

- one (1) electronic copy of the Plans,
- one (1) electronic copy of the QC Marked-up Plans,
- one (1) electronic copy of any Technical Special Provision (if applicable)
one (1) audible and vibratory markings recommendation (see Section 19.10)

The submittal shall, at a minimum, include *.pdf files of the components listed above, as well as the Design Report, *.kmz file of the project, Sunshine 811 “design” ticket, Utility Conflict Matrix, ADA Survey Report, and a scanned copy of the Constructability Phase Review Checklist (per the Construction Project Administration Manual (CPAM)).

Along with the Phase II plans submittal, the CONSULTANT shall submit the construction cost estimate using the DEPARTMENT’s Long Range Estimating System (L.R.E.). The District Preliminary Estimates Office will provide the CONSULTANT with a version of the L.R.E. in the system for their use.

The CONSULTANT shall submit plans to each of the affected local government(s) designated contact for a three-week review. See Section 3.1.2 of this document for details regarding Local Government Involvement.

**PHASE III:**

The CONSULTANT shall submit to the DEPARTMENT’s Design Project Manager for distribution:

- one (1) electronic copy of the Plans,
- one (1) electronic copy of the QC Marked-up Plans,
- one (1) electronic copy of any Technical Special Provision (if applicable)
- one (1) electronic copy of the CONSULTANT’s Construction Cost Estimate,
- one (1) electronic copy of the CONSULTANT’s Contract Time Estimate,
- one (1) electronic copy of the CONSULTANT’s Utility Schedule Report (see Section 7.10),
- two (2) hard copies of the Geotechnical Report

The submittal shall, at a minimum, include *.pdf files of the components listed above, as well as the Design Report, *.kmz file of the project, Sunshine 811 “design” ticket, Utility Conflict Matrix, ADA Survey Report, and a scanned copy of the Constructability Phase Review Checklist (per the Construction Project Administration Manual (CPAM)).

The CONSULTANT shall submit plans to each of the affected local government(s) designated contact for a three-week review. See Section 3.1.2 of this document for details regarding Local Government Involvement.

**PHASE IV:**

The CONSULTANT shall submit to the DEPARTMENT’s Design Project Manager for distribution:
▪ one (1) electronic copy of the Plans,
▪ one (1) electronic copy of the QC Marked-up Plans,
▪ one (1) electronic copy of the CONSULTANT’s Construction Cost Estimate,
▪ one (1) electronic copy of the CONSULTANT’s Contract Time Estimate,
▪ one (1) electronic copy of the CONSULTANT’s Utility Schedule Report (see Section 7.10),
▪ two (2) hard copies of the Geotechnical Report

The submittal shall, at a minimum, include *.pdf files of the components listed above, as well as the Design Report, *.kmz file of the project, Sunshine 811 “design” ticket, Utility Conflict Matrix, ADA Survey Report, and a scanned copy of the Constructability Phase Review Checklist (per the Construction Project Administration Manual (CPAM)).

SUBMITTAL FOR “THE SHELF”:

The CONSULTANT must submit a District 3 Change Memo to the District Preliminary Estimates Office to have Project Preconstruction (PrP) unlocked if changes are made following the PHASE IV submittal that affect the pay-items or quantities in PrP. A copy of the District 3 Change Memo can be obtained from the DEPARTMENT’s Design Project Manager or the District Preliminary Estimates Office.

Upon addressing the PHASE IV review comments, the CONSULTANT shall submit to the DEPARTMENT’s Design Project Manager the following in an electronic format via ftp site, FTA, or other electronic file storage media:

▪ PHASE IV Plans,
▪ PHASE IV QC Marked-up Plans,
▪ Design Report,
▪ Engineer’s Construction Cost Estimate,
▪ CONSULTANT’s Contract Time Estimate,
▪ *.kmz file of the project,
▪ Sunshine 811 “design” ticket,
▪ Utility Conflict Matrix
▪ Utility Schedule Report,
▪ Geotechnical Reports,
▪ ADA Survey Report,
▪ Constructability Phase Review Checklist

The CONSULTANT shall transmit the applicable electronic project files to the DEPARTMENT’s Area Utility Manager.
**PHASE IV RE-SUBMITTAL:**

If the project spends one (1) year or more “on the shelf” and/or substantial changes have been made during Plans Update to the plans, pay items, or quantities after the Phase IV review, the CONSULTANT shall prepare a second Phase IV submittal. This submittal will include the requirements listed for Phase IV. This submittal will be made well in advance of the Final Submittal to the DEPARTMENT’s Plans Processing Group. This will allow time to address comments in advance of the Final Submittal.

The DEPARTMENT’s Design Project Manager will determine whether the Phase IV re-submittal will include a distribution to the local governments. See Section 3.1.2 of this document for details regarding Local Government Involvement.

The CONSULTANT must submit a District 3 Change Memo to the District Preliminary Estimates Office to have PrP unlocked if changes are made during Plans Update that affect the pay-items or quantities in PrP. A copy of the District 3 Change Memo can be obtained from the DEPARTMENT’s Design Project Manager or the District Preliminary Estimates Office.

The CONSULTANT must submit an electronic copy of the Plans Update Memo to describe in general terms the changes made to each sheet since the project was “shelved”. A copy of the Plans Update Memo can be obtained from the DEPARTMENT’s Design Project Manager.

Any design changes affecting utilities that occur after the PHASE IV or PHASE IV Resubmittal must be coordinated with the DEPARTMENT’s Design Project Manager and submitted to the DEPARTMENT’s Area Utility Manager so that Utility Work Schedules can be updated.

The effort for preparing a PHASE IV Re-Submittal will be negotiated as a part of the Plans Update Services. See Section 3.7 for more information regarding Plans Update.

**FINAL PLANS SUBMITTAL TO PLANS PROCESSING:**

This submittal will occur upon addressing PHASE IV (or PHASE IV RE-SUBMITTAL) comments or following the Plans Update phase and less than one (1) year spent “on the shelf”.

If changes are made to the plans after the PHASE IV review that affect the pay-items or quantities in PrP, the CONSULTANT must submit a District 3 Change Memo to the District Preliminary Estimates Office to have PrP unlocked. A copy of the District 3 Change Memo can be obtained from the DEPARTMENT’s Design Project Manager or the District Preliminary Estimates Office.

The CONSULTANT must submit an electronic copy of the Plans Update Memo to describe in general terms the changes made to each sheet since the project was
“shelved”. A copy of the Plans Update Memo can be obtained from the DEPARTMENT’s Design Project Manager.

Final Project Submittal to ERC: The CONSULTANT shall submit the following to the DEPARTMENT’s Design Project Manager via ftp site, FTA, or other electronic file storage media to post to ERC for the District’s Plans Processing Group’s review:

- electronic *.pdf copy of each component of the final plans. The plans must be electronically sealed using the Digital Delivery method for the second and subsequent submittals. Not the first.
- a complete Specifications Package including any Technical Special Provisions and/or incentive/disincentive cost analyses and backup documentation (when necessary)
- the Project-CADD.zip folder with all project design files
- the Compliance Certification Checklist Report. This report shall be signed by the Engineer of Record to certify that all electronic deliverables are complete, in the proper format, and all plans and specifications are signed and sealed with the same program.

Any design changes since the previous submittal affecting utilities must be coordinated with the DEPARTMENT’s Design Project Manager and submitted to the DEPARTMENT’s Area Utility Manager so that Utility Work Schedules can be updated.

The CONSULTANT will expeditiously address the comments received in ERC and be prepared to resubmit the final plans package once the review period in ERC is complete. A minimum of two (2) complete reviews using the ERC system will occur at this juncture, followed by subsequent Final Project CD/DVD submittals as necessary.

Final Project Submittal: The CONSULTANT shall submit the following to the DEPARTMENT’s Design Project Manager via ftp site, FTA, or other electronic file storage media for the District’s Plans Processing Group’s review once the ERC reviews are complete:

- final plans electronically sealed using the Digital Delivery method
- a complete Specifications Package including any Technical Special Provisions and/or incentive/disincentive cost analyses and backup documentation (when necessary)
- the Project-CADD.zip folder with all project design files
- the Compliance Certification Checklist Report. This report shall be signed by the Engineer of Record to certify that all electronic deliverables are complete, in the proper format, and all plans and specifications are signed and sealed with the same program.
- all project data and its location noted in the project journal.
Upon addressing all comments received during the Final Plans Processing review, the CONSULTANT shall transmit electronic project files to the DEPARTMENT’s Area Utility Manager as described in the requirements above.

2.21 Provisions for Work

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

- **General**
  - 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.), Standards of Practice 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 Standard Plans
  - 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 Materials Manual
- FDOT Pavement Type Selection Manual
- FDOT Design Manual
- FDOT Procedures and Policies
- FDOT Procurement Procedure 001-375-030, Compensation for Consultant Travel Time on Professional Services Agreements
- 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
- Manual on Speed Zoning for Highways, Roads, and Streets in Florida
- Federal Highway Administration (FHWA) - Manual on Uniform Traffic Control Devices (MUTCD)
- 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
- 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
- **US Army Corps of Engineers, 33 CFR 325.1 (d)**

### 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
  - **District 3 Surveying Guidelines**
  - **Survey Safety Handbook**
  - **Minimum Technical Standards for Surveying and Mapping Rule 5J-17**
  - 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
  - **All other applicable Department procedures, handbooks, and manuals**

- 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
  - Minimum Specifications for Traffic Control Signal Devices
  - 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/-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
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 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
2.22 Services to be Performed by the DEPARTMENT

Project Data:
When appropriate the DEPARTMENT will provide project data currently on file, including, when available:
- Available traffic and planning data.
- 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
- **Straight Line Diagram (SLD)**
- **Existing as-built construction plans**
- **Long Range Estimates (LRE)**

Regarding Utilities:
- All Department agreements with Utility Agency Owner (UAO).
- All approved utility relocations.
- All available information in the possession of the DEPARTMENT pertaining to utility companies whose facilities may be affected by the proposed construction.
- Project utility certification to the DEPARTMENT’s Central Office.
- **Provide Utility Coordination**
- **Provide necessary Subsurface Utility Excavation (SUE) support**

Regarding Surveying Services:
- **Provide all necessary survey for the project.**

Regarding Environmental Permitting Services:
- Approved Permit Document when available
- Approval of all contacts with environmental agencies.
- General philosophies and guidelines of the DEPARTMENT 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.

Regarding Pavement Design and Geotechnical Services:
Provide Pavement Survey Information (coring, testing and report preparation)
Provide Pavement Design(s)
Provide necessary Geotechnical Support

Miscellaneous Services:
- All certifications necessary for project letting.
- Access for the CONSULTANT to utilize the DEPARTMENT’s Information Technology Resources.
- Building Construction Permit Coordination (Turnpike)
- All information that may come to the DEPARTMENT pertaining to future improvements.
- All future information that may come to the DEPARTMENT during the term of the CONSULTANT’s Agreement, which in the opinion of the DEPARTMENT is necessary for the prosecution of the work.
- Letters of authorization designating the CONSULTANT as an agent of the DEPARTMENT in accordance with F.S. 337.274.
- Phase reviews of plans and engineering documents.
- Any necessary title searches.
- Engineering standards review services.
- All future information that may come to the DEPARTMENT 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.
- Previously constructed Highway Beautification or Landscape Construction Plans
- Landscape Opportunity Plan(s)
- Conduct project specific presentations given to Local Governments and MPO/TPOs as necessary and as prepared/supported by the CONSULTANT

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 and reviewing and updating the cost estimate when scope changes occur and/or at milestones of the project. Prior to 60% plans and completion of quantities, the DEPARTMENT’s Long Range Estimate (L.R.E.) system will be used to produce a conceptual estimate, according to District policy. Once the quantities have been developed (beginning at 60% plans and no later than 90% plans) the CONSULTANT shall be responsible for inputting the pay items and quantities into AASHTOWare Project Preconstruction through the use of the DEPARTMENT’s Designer Interface for generating
the summary of quantities and the FDOT’s in-house estimates. A Summary of Pay Items sheet shall be prepared with all required Phase II, III, and IV Plans submittals.

Prior to Phase I - Within 30 (thirty) calendar days of the written Notice to Proceed, the CONSULTANT shall submit a revised construction cost estimate using the DEPARTMENT’s Long Range Estimating System (L.R.E.). The revised estimate shall be based on all work items likely to be included in the project whether or not explicitly defined in this initial scope of work, including, but not limited to, work items being analyzed for possible inclusion in the scope after DEPARTMENT approval. This estimate is understood to be preliminary and will be used to better budget construction costs. The District Preliminary Estimates Office will provide the CONSULTANT with a version of the L.R.E. in the system for their use.

Phase I - The project shall be established in PrP by Phase I (30%). The District Preliminary Estimates Office will create the project(s) in the system upon receiving a copy of the Notice to Proceed for the design contract. The District Preliminary Estimates Office will also create a version in the L.R.E. System for the CONSULTANT’s use at Phase I. The CONSULTANT can request access to the assigned L.R.E. through the DEPARTMENT’s Design Project Manager. For the Phase I (30%) submittal, the CONSULTANT shall submit the cost estimate using the DEPARTMENT’s Long Range Estimating (L.R.E.) system. This estimate will be reviewed by the District Preliminary Estimates Office within the L.R.E. System. The Phase I (30%) L.R.E. shall be complete and ready for review at the time of the plans submittal.

Phase II - A Project Summary of Pay Items sheet shall be prepared with Phase II and subsequent plans submittals. The Phase II (60%) submittal shall have all pay items identified with or without quantities. If quantities have not been determined at this point, the CONSULTANT shall load a quantity of “1.0”. For the Phase II (60%) submittal, the CONSULTANT shall submit the cost estimate using the DEPARTMENT’s Long Range Estimating (L.R.E.) system. This estimate will be reviewed by the District Preliminary Estimates Office within the L.R.E. System. The Phase II (60%) L.R.E. shall be complete and ready for review at the time of the plans submittal.

Phases III & IV – At Phase III (90%) the CONSULTANT shall have all quantities loaded into PrP, with only minor changes anticipated at subsequent submittals. Within PrP, the CONSULTANT shall run a Project Edit Report for the project at Phases III and IV just prior to submitting the plans to the DEPARTMENT for review. The “Project Edit Report” lists all pay items loaded in the project (by category) and identifies obsolete pay items in PrP. The complete submittal package, including the CONSULTANT’s construction cost estimate, will be provided to the District Preliminary Estimates Office at phases III (90%) and IV (100%). If the project includes a Special Detour, the CONSULTANT shall prepare and submit a Special Detour Quantity Worksheet for submittals beginning at Phase III (90%). The Special Detour Worksheet should be submitted at every subsequent phase submittal and updated if necessary. The above shall be provided for each component set of plans (i.e., Roadway, Bridge, Signing and Marking, etc.).
Technical Special Provisions: The CONSULTANT shall provide Technical Special Provisions for all items of work not covered by the Standard Specifications for Road and Bridge Construction and the workbook of implemented modifications.

A Technical Special Provision shall not modify the Standard Specifications and implemented modifications in any way.

The Technical Special Provisions shall provide a description of work, materials, equipment and specific requirements, method of measurement and basis of payment. Proposed Technical Special Provisions will be submitted to the District Specifications Office for initial review at the time of the Phase III plans review submission to the DEPARTMENT’s Project Manager. This timing will allow for adequate processing time prior to final submittal. The Technical Special Provisions will be reviewed for suitability in accordance with the Handbook for Preparation of Specification Packages. The District Specifications Office will forward the Technical Special Provisions to the District Legal Office for their review and comment. All comments will be returned to the CONSULTANT for correction and resolution. Final Technical Special Provisions shall be digitally signed and sealed in accordance with applicable Florida Statutes.

The CONSULTANT shall contact the appropriate District Specifications Office for details of the current format to be used before starting preparations of Technical Special Provisions.

Modified Special Provisions: The CONSULTANT shall provide Modified Special Provisions as required by the project. Modified Special Provisions are defined in the Specifications Handbook.

A Modified Special Provision shall not modify the first nine sections of the Standard Specifications and implemented modifications in any way. All modifications to other sections must be justified to the appropriate District and Central Specifications Offices to be included in the project's specifications package.

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 all technical meetings necessary to execute the Scope of Services of this contract. This includes meetings with DEPARTMENT 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 DEPARTMENT’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 (QA/QC): It is the intention of the DEPARTMENT 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/\textit{FDOT Design Manual}, that state and federal design criteria are followed with the DEPARTMENT 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 DEPARTMENT.

It is the CONSULTANT'S responsibility to independently and continually QC their plans and other deliverables. The CONSULTANT should regularly communicate with the DEPARTMENT'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, landscape, surveys, etc.) and a written resolution of comments on a point-by-point basis will be required, if requested by the DEPARTMENT, 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.

\textbf{Independent Peer Review: N/A}

\textbf{Supervision:} The CONSULTANT shall supervise all technical design activities.

\textbf{Coordination:} The CONSULTANT shall coordinate with all disciplines of the project to produce a final set of construction documents.
Project General Tasks

Project General Tasks, described in Sections 3.1 through 3.13 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

This project has been determined to be a Community Awareness Plan (CAP) Level 2 project with a minimum of one (1) Public Meeting/Workshop and/or Public Hearing (if directional median opening modifications are incorporated). This type of project has varying levels of public acceptance, permanent closure or modification to the access for one or more abutting property owners, and a noticeable degree of traffic disruption. Examples are urban or rural multi-lane resurfacing, safety projects to address access management concerns, bridge replacements, and other project type that proposes modification to currently available turning movements (not minor driveway turnout modifications or closures). Access management changes (specifically median crossover closures and modifications) will necessitate a Public Hearing vs. Public Meeting/Workshop when a Public Hearing was NOT conducted during a PD&E phase. Access management changes will also necessitate a Public Hearing if the proposed changes differ from the changes shown during a previous PD&E Public Hearing.

Prior to negotiations, the CONSULTANT shall coordinate with the DEPARTMENT’s Design Project Manager and Public Information Director to discuss the specific public involvement activities anticipated for this project.

3.1.1 Community Awareness Plan

All projects require the development of a Community Awareness Plan (CAP).

Prepare a Community Awareness Plan (CAP) for review and approval by the DEPARTMENT within 30 calendar days after receiving Notice to Proceed. The objective of the plan is to notify local governments, affected property owners, tenants, and the public of the DEPARTMENT’S proposed construction and the anticipated impact of that construction. The CAP shall address timeframes for each review and shall include tentative dates for each public involvement requirement for the project. The CAP will also document all public involvement activities conducted throughout the project’s duration. In addition to the benefits of advance notification, the process should allow the DEPARTMENT to resolve controversial issues during the design phase. Four areas of specific concern are: (1) Influences on access to businesses and residences, (2) Drainage, (3) Maintenance of Traffic during construction, and (4) right-of-way acquisition.
3.1.2 Notifications

**PHASE SUBMITTAL NOTIFICATIONS:**

The CONSULTANT shall prepare an email notification and a distribution list for plans at Phase II, Phase III, and any subsequent Phase IV re-submittal to the office(s) designated by the local government(s) and applicable regional authorities for a three-week review. The email notifications and plans will be distributed by the DEPARTMENT. The need to re-submit Phase IV Plans will depend on the duration of time spent “on the shelf” and the amount of changes that have occurred since the last submittal to the Local Governments at Phase III. See Section 2.20 regarding Phase IV re-submittals. The Phase IV re-submittal to the Local Governments should take place well in advance of the Final Submittal to the District for Plans Processing to allow time to address comments received from the Local Governments.

Each comment or request provided by the local government shall be evaluated by the CONSULTANT and discussed with the DEPARTMENT’s Design Project Manager. Responses will be prepared by the CONSULTANT for the District Consultant Project Management Engineer’s signature. All comments or requests shall be responded to in writing within thirty (30) calendar days of receipt of comments.

**PUBLIC MEETING/ WORKSHOP/ HEARING INVITATIONS:**

Public Meeting/ Workshop/ Hearing Invitations shall be prepared by the CONSULTANT for all parties affected by the subject project.

Email Notifications and Mass Mail-outs shall provide:

- **FPID Number**
- **State Road Number and Local Road Name**
- **Project Limits**
- **A Project Map**
- **Type of Work**
- **Construction Letting Timeframe (ie, Spring 20XX, Winter 20XX)**
- **DEPARTMENT contact persons**
- **Meeting/Workshop Date, Time, Location, and Format (if applicable)**
- **Meeting/Workshop Location Map (if applicable)**

Email Notification to Public Officials:

- **Notifications shall be prepared as an email by the CONSULTANT for all pertinent public officials as described in Section 3.1.3. The email notification to the public officials shall be emailed by the DEPARTMENT**
no less than 15 calendar days before a public meeting/workshop/hearing or following the Phase II distribution for CAP II projects without a public meeting/workshop/hearing.

- In addition to the email notification, a flier or tri-fold will be required as an attachment to relay all of the pertinent information described above.

- The CONSULTANT shall submit the draft email notification along with the attachment(s) and distribution list at the designated time in the project schedule. The distribution list shall be an MS Excel file and shall include the name, title, and email address of each intended recipient.

Mail-out to Property Owners:

- A notification/invitation letter and/or a project information flier/ tri-fold will be prepared and sent to all property owners, tenants, and business operators as defined in Section 3.1.3. This notification shall be mailed by the CONSULTANT no less than 10 calendar days before the meeting/workshop/hearing or following the Phase II distribution for CAP II projects without a public meeting/workshop/hearing.

- Property owners and tenants will be contacted through mass mailings and/or hand delivered flyers. These letters shall be prepared for the District Consultant Project Management Engineer’s signature and shall be on DEPARTMENT letterhead.

Media Notification:

- Draft press releases will be prepared by the CONSULTANT and sent to the District Public Information Office for publishing during the week of Public Information Meetings/Workshops/Hearings. Any press release or advertisement will indicate that the meeting/workshop/hearing is a DEPARTMENT activity and will be coordinated by the CONSULTANT. Two (2) newspaper display advertisements no less than (4"X6") with graphic will be published in the local section, the first shall be 14 calendar days in advance of the meeting/workshop/hearing, and the second will be the day before the meeting/workshop/hearing date. If there is not a daily newspaper in the area, notice must run on publishing day if it falls prior to the meeting/workshop/hearing date.

- In addition, notice of public meetings/workshops/hearings must be posted in the Florida Administrative Register a minimum of 14 calendar days prior. These notices shall be developed and paid for by the CONSULTANT after being approved by the DEPARTMENT.

- The CONSULTANT shall pay the cost of all media notifications.

All notification/invitation letters intended for physical mail-out shall be on DEPARTMENT letterhead. The CONSULTANT shall pay postage for the mail-
out to property owners and will be responsible for the physical mail-out effort (printing, envelope stuffing, stamping, etc.).

The CONSULTANT must review all notices, letters, and attachments for accuracy and spelling and ensure that notices are sent to the person currently holding the public official positions. The CONSULTANT must attempt to affirm the validity of all email addresses submitted for each notification.

Examples of any of this correspondence can be made available upon request to the DEPARTMENT’s Design Project Manager.

3.1.3 Preparing Mailing Lists

**PHASE SUBMITTAL NOTIFICATIONS:**

The distribution list for the phase submittal notifications described in Section 3.1.2 will be submitted to the DEPARTMENT’s Design Project Manager at Phase II, Phase III, and any subsequent Phase IV re-submittal. The distribution list shall be an MS Excel file and shall include the name, title, and email address of each intended recipient.

**Mail-out to Public Officials:**

- Public Officials who are to receive notification of projects shall include, (but not be limited to):

  **County**
  - County Manager
  - County Public Information Director
  - County Commissioners
  - County Public Works Director
  - County Engineer

  **City**
  - City Commission
  - Mayor
  - City Manager
  - Engineer / Public Work Director

  **Regional**
  - Regional Planning Council/ MPO/ TPO/ TPA
  - College Campus Facilities Department

  **Regional Authorities (Governor Appointed)**
  - Northwest Florida Transportation Corridor Authority (NFTCA)(if applicable – for projects along or intersecting US 98 or alternate US 98 routes)
PUBLIC MEETING/WORKSHOP/HEARING INVITATIONS:

Public Meeting/Workshop/Hearing Invitations shall be prepared by the CONSULTANT in accordance with the guidance and timeframes described in Section 3.1.2.

The mailing list shall be prepared by the CONSULTANT to include all affected parties. Media in the project area will also be identified and placed on the mailing list to be used for news releases, advertisements or any concerns. The mailing list will be submitted along with the notifications/invitations to the DEPARTMENT’s Design Project Manager for review and approval.

Email Notifications/Invitations to Public Officials:

- Public Officials who are to receive notification of projects and public meetings/workshops/hearings shall include, (but not be limited to):

  Federal/State
  - Legislative Delegation/Congress (Federal & State)
  - Water Management Districts
  - US Post Master
  - Florida Highway Patrol (Major & Commander)
    *especially if Troop Headquarters is located in municipality
  - Military Installations (if within project’s proximity)

  County
  - County Manager
  - County Public Information Director
  - County Commissioners
  - County Public Works Director
  - County Engineer
  - County Emergency Management Director
  - Sheriff’s Department
  - Sheriff’s Department Public Information / Public Affairs
  - County Airport Director
  - County Seaport Director
  - County Public Transit System
  - County Schools Superintendent
  - Transportation Director
  - Fire & Rescue Departments

  City
  - City Commission
  - Mayor
  - City Manager
  - Engineer / Public Work Director
  - City Police Chief
Regional
- Merchants Association
- Chamber of Commerce
- Convention & Visitors Bureau
- Tourist Development Regional Planning Council/ MPO/ TPO/ TPA
- Local Americans with Disabilities Act (ADA)/ Pedestrian Advocacy Groups
- Local Hospitals
- Seaport Authority
- Airport Authority
- Local Colleges/Universities (if within project’s proximity)

Regional Authorities (Governor Appointed)
- Northwest Florida Transportation Corridor Authority (NFTCA) (if applicable – for projects along or intersecting US 98 or alternate US 98 routes)

Mail-out to Property Owners:

- A notification/invitation will be written and sent to all property owners, tenants, and business operators whose property, home, or business lies in whole or in part within a minimum of 300 feet of the centerline of the project. In addition, the CONSULTANT must include any businesses or neighborhoods located down side roads that may be impacted by the project. The CONSULTANT shall utilize Direct Mail Services, Tax Collector Office and/or any other source to identify and obtain the address of property owners and business operators along the project.

Mail-out to Media Outlets:

- Media in the project area will also be identified and placed on the mailing list to be used for news releases, advertisements or any concerns.

3.1.4 Median Modification Letters

The CONSULTANT shall prepare a median modification letter to be sent to property owners along the corridor, where affected by median modifications. In addition, the CONSULTANT shall prepare a sketch of each proposed median modification for inclusion in the letter. The letters will be on DEPARTMENT letterhead and signed by the District Design Engineer.

The CONSULTANT shall be aware that certain proposed deviations from access management and median opening spacing standards must be presented to the District Access Management Review Committee (AMRC) (see also Sections 2.1 and 4.6). Access management changes (specifically median crossover closures and modifications) will necessitate a Public Hearing vs. Public Meeting/Workshop when a Public Hearing was NOT conducted during a PD&E phase.
The CONSULTANT shall pay postage for these letters and will be responsible for the physical mail-out effort (printing, envelope stuffing, stamping, etc.).

3.1.5 Driveway Modification Letters

The CONSULTANT shall prepare a driveway modification letter to be sent to property owners along the corridor where driveway modifications are proposed. In addition, the CONSULTANT shall prepare a sketch of each proposed driveway modification for inclusion in the letter. Driveway modifications will be closely coordinated with and approved by the DEPARTMENT’s Design Project Manager. The letters will be on DEPARTMENT letterhead and signed by the District Design Engineer.

The CONSULTANT shall be aware that certain proposed deviations from access management and median opening spacing standards must be presented to the District Access Management Review Committee (AMRC)(see also Sections 2.1 and 4.6).

The CONSULTANT shall pay postage for these letters and will be responsible for the physical mail-out effort (printing, envelope stuffing, stamping, etc.).

3.1.6 Newsletters (Not applicable to this project)

3.1.7 Renderings and Fly-Throughs (Not applicable to this project)

3.1.8 PowerPoint Presentations

The CONSULTANT shall prepare PowerPoint presentations for use in public meetings.

3.1.9 Public Meeting Preparations

Following the Phase II plans submittal, and typically in advance of the Phase III submittal, the CONSULTANT shall assist the DEPARTMENT in scheduling the FDOT Public Information Meeting/Workshop or Hearing. Tuesday and Thursday evenings are preferred. The CONSULTANT shall be aware of and avoid other scheduled FDOT Public Meetings or Hearings. The CONSULTANT shall assist the DEPARTMENT in determining when local government meetings are scheduled (MPO/TPO, County Commission, and/or City Council Meetings) and shall avoid scheduling the FDOT meeting to conflict with the local government meetings.

The CONSULTANT will investigate potential meeting sites to advise the DEPARTMENT on their suitability. The CONSULTANT will pay all costs for meeting site rentals and insurance. No DEPARTMENT meetings will be held on public school system properties. In addition, churches and religious facilities are to be considered if no other secular or municipal buildings are available. In accordance with Section 4 of Executive Order 07-126, any hotel or conference center used for hosting an FDOT Public Information Meeting/Workshop must be designated under the FDEP’s Green Lodging Program. Prospective sites for the
meeting shall be convenient to residents along the corridor and shall be inspected for suitability. Consideration shall be given to capacity, lighting, and other physical characteristics that may influence the selection of the site. The site shall meet ADA standards and the CONSULTANT shall provide signs to indicate the location of the available handicapped accesses.

Room size will be based on the number of mailouts. The proposed meeting site shall be presented to the DEPARTMENT for approval prior to the CONSULTANT negotiating use of the site.

In preparation for a FDOT Public Information Meeting/Workshop, the CONSULTANT shall provide:

- Project Information/Fact Sheets
- Script or Agenda for any planned presentation (if applicable)
- All necessary graphics and displays (see requirements below)
- Meeting equipment set-up and teardown
- Legal and/or display advertisements

In preparation for a FDOT Public Hearing, the CONSULTANT shall provide:

- Materials related to the required presentation (agenda/script, electronic slide presentation or video)
- Project Information/Fact Sheets
- All necessary graphics and displays (see requirements below)
- Meeting equipment set-up and teardown
- Court Reporter
- Legal and/or display advertisements

The CONSULTANT shall be aware of all of the pertinent requirements for scheduling and conducting Public Hearings as described in the DEPARTMENT’s Project Development and Environmental (PD&E) Manual.

The CONSULTANT shall prepare all materials, displays, and/or wall graphics for use during the meeting. These include but are not limited to the following:

- Self-addressed comment forms to allow attendees to provide written comments within 10 days after the FDOT Public Information Meeting/Workshop. The DEPARTMENT’s Design Project Manager shall be listed as the contact for all comments.

- Sign-in sheets

- At least two (2) foam boards (36"X24") (or a display similar in nature) displaying a typical section. The drawing shall be in color with computer images of automobiles, bicycles, and pedestrians occupying the designated travel areas.
At least two foam boards (36"X24") (or a display similar in nature) displaying a computer enhance photograph utilizing an existing conditions photo to reflect proposed conditions. For intersection projects, 2 computer-enhanced photographs showing the existing conditions and proposed improvements will be required. “Before and After” depictions of select work elements are encouraged for 3R projects as well to help demonstrate proposed changes to the public.

Two (2) copies of the project in plan view. The project plan view shall be on (36"X24") foam boards or rollouts (or a display similar in nature). For projects of substantial length, projects can be rolled out on tables or placed on the wall. The photo or roll-outs shall be 1"=50', 1"=100' (or a legible scale) raster drawings, to scale aerial photos, or colored CADD drawings with the following information:

- existing right-of-way lines
- proposed right-of-way lines
- proposed pavement markings (pavement should be black or gray with the correct color of pavement markings (white or yellow)
- existing structures adjacent to the roadway (homes, businesses, etc.)
- proposed driveway and median openings
- proposed ponds designated as wet or dry
- designation of proposed signalized intersections.

Displays and other materials prepared for Public Meeting(s) shall NOT depict the CONSULTANT’s logo. Displays and materials shall only depict the DEPARTMENT’s logo/seal.

The CONSULTANT shall be aware that along with the mail-outs described in Section 3.1.3, all of the above deliverables must be submitted to the DEPARTMENT's Design Project Manager well in advance of the mail-out and meeting/workshop to allow time for review, approval, and signatures if necessary.

The CONSULTANT shall be aware that all of the above deliverables, along with any other materials proposed to be displayed at the Public Meeting/Workshop or Public Hearing, must be presented to DEPARTMENT staff at a pre-meeting workshop for review and approval in advance of the Public Meeting/Workshop or Public Hearing.

3.1.10 Public Meeting Attendance and Follow-up

The purpose of the FDOT Public Information Meeting/Workshop is to present to the public the results of the detailed design for the project and receive comments on the proposed design.

The CONSULTANT shall provide all support necessary for the DEPARTMENT to hold a Public Information Meeting/Workshop. The CONSULTANT is expected to actively participate in all portions of the meeting. Conducting the meeting will take
knowledgeable CONSULTANT staff and will require enough staff members to handle the crowd anticipated for the meeting.

The CONSULTANT shall also provide office support personnel to ensure attendees register (CONSULTANT must provide a sign-in sheet with space available for the person’s name, address, and telephone number).

Briefing of the DEPARTMENT Design staff by the CONSULTANT (who will be on hand during the meeting) will be done twice. The first time is to be at least seven days prior to the meeting and the second time will be just before the meeting to make sure the staff is up to date on the project and understands the project well enough to discuss it with the public and to answer questions. The CONSULTANT shall assist the DEPARTMENT’s Design Project Manager with ensuring that the appropriate DEPARTMENT staff are invited and included in the pre-Public Information Meeting/Workshop briefings. This will include (at a minimum) representatives from the Public Information Office and the Design Office. In addition, the DEPARTMENT’s Transportation Planning Area’s Urban Liaisons shall be notified of any briefings and public meetings.

FDOT Public Information Meetings/Workshops are held between the 60% - 90% plans stage. Depending on the amount of time spent “on-the-shelf”, an additional meeting may be required six (6) months prior to letting, however, staff hours for this effort will be negotiated at the appropriate time.

The meeting format will be informal allowing the public to come and go. The meeting will be scheduled for one (1) hour in length. Although the meeting is scheduled for a one (1) hour period, the CONSULTANT staff will be available for some time before and/or after those set hours in order to maintain public contact, etc.

Proper signage using display boards no smaller than 2'X2' will be displayed near and on the site directing participants to the meeting place. In addition, the site must meet ADA standards and the CONSULTANT shall provide signs to indicate the location of the available handicapped accesses. A “Title VI” board will be required at the meeting site. The CONSULTANT shall coordinate with the DEPARTMENT to attain “Title VI” board requirements.

If issues are identified by participants at the meeting, their significance will be determined by the CONSULTANT and the DEPARTMENT; i.e., are the issues valid enough for further consideration or do they have elements which may require further consideration.

Addressing the issues and responding to them is also an integral part of the meeting process. This is to be accomplished by the CONSULTANT. The CONSULTANT shall prepare responses to the issues on DEPARTMENT letterhead to be signed by the District Consultant Project Management Engineer. The CONSULTANT shall pay for the postage. The DEPARTMENT shall review and approve all response letters prior to mailing. Elected Public Officials require a 48 hour response time and will require signature by the District Secretary.
3.1.11 Other Agency Meetings (Not applicable to this project)

3.1.12 Web Site

The CONSULTANT shall create project specific .shtm files for each Public Information Meeting/Workshop and Public Hearing to be posted by the DEPARTMENT to the NWFLRoads.com web site. Templates and instructions can be obtained through the DEPARTMENT's Design Project Manager.

These web files shall be submitted in draft form to the DEPARTMENT’s Design Project Manager at the time of the pre-meeting workshop with DEPARTMENT staff that is referenced in Section 3.1.9. Once all materials to be displayed at the Public Meeting/Workshop or Public Hearing have been approved by the DEPARTMENT, the web files shall be updated if necessary and resubmitted at least seven days prior to the Public Meeting/Workshop or Public Hearing.

3.2 Joint Project Agreements

There have been no Joint Project Agreements (JPAs) identified at this time.

Should the need for a JPA become a requirement, a supplemental agreement will be negotiated for these services. The CONSULTANT services may include all coordination, meetings, etc., required to include JPA plans (prepared by others) in contract plans package including all necessary revisions/modifications to contract documents to ensure plans compatibility.

3.3 Specifications Package Preparation (To be Prepared during Plans Update)

The CONSULTANT shall prepare and provide a specifications package in accordance with the DEPARTMENT’S Procedure Topic No. 630-010-005 Specifications Package Preparation and the Specifications Handbook. The CONSULTANT shall provide the DEPARTMENT names of at least two team members who have successfully completed the Specifications Package Preparation Training and will be responsible for preparing the Specifications Package for the project. The Specifications Package shall be prepared using the DEPARTMENT's Specs on the Web application. The CONSULTANT shall be able to document that the procedure defined in the Handbook for the Preparation of Specifications Packages is followed, which includes the quality assurance/quality control procedures. The specifications package shall address all items and areas of work and include any Mandatory Specifications, Modified Special Provisions, and Technical Special Provisions. The District Specifications Office can be contacted for more information.

The specifications package must be submitted for review to the District Specifications Office at least 30 days prior to the contract package to Tallahassee or District due date, or sooner if required by the District Specifications Office. This submittal does not require signing and sealing and shall be coordinated through the District’s Project Manager. The CONSULTANT shall coordinate with the DEPARTMENT on the submittal requirements, but at a minimum shall consist of
(1) the complete specifications package, (2) a copy of the marked-up workbook used to prepare the package, and (3) a copy of the final project plans.

Final submittal of the specifications package must occur at least 10 working days prior to the contract package to Tallahassee due date. This submittal shall be digitally signed, dated, and sealed in accordance with applicable Florida Statutes.

All current special provisions and supplemental specifications can be found on the DEPARTMENT’S Internet web site at the State Program Management Office Web Page (http://www.dot.state.fl.us/programmanagement/specs.shtm) under the Standard Specifications for Road and Bridge Construction and Implemented Modifications. The DEPARTMENT will post permits/utility schedules obtained by the DEPARTMENT to their Specifications Web site for informational purposes. The actual work effort will entail utilization of the Specs on the Web electronic files, including updates of new files that may be issued from time to time as mandatory revisions, and assembling the package in accordance with the DEPARTMENT’s Specification Package Preparation Training. The DEPARTMENT may also require inclusion of special provisions necessary to convey particular DEPARTMENT needs.

The Standard Specifications, for Road and Bridge Construction and, Special Provisions or Supplemental Specifications from the applicable workbook of implemented modifications may not be modified unless absolutely necessary to control project-specific requirements. Provide justification of the project specific need, and coordinate with the District Specifications Office.

Developmental Specifications are developed around a new process, procedure, or material approved for limited use by the State Program Management Office. These specifications are signed and sealed by the professional engineer responsible for authorizing use and monitoring performance in the field. Developmental Specifications are requested from the District Specifications Office on a project by project basis.

Contact the District Specifications Office for formatting requirements and the availability of a Technical Special Provision for the anticipated work on the project. The DEPARTMENT has a database of previously approved Technical Special Provisions that may be used as a basis of formulation of any proposed Technical Special Provisions. Each modification must be justified to the DEPARTMENT's Specifications Office to be included in the project's Specifications Package as Technical Special Provisions. Technical Special Provisions shall be submitted in conformity with FDOT Handbook for Preparation of Specifications Packages and FDOT Procedure No. 630-010-005-f. If any portion of the project is federally funded, all Technical Special Provisions must also conform to Chapter 23, Part 635 of the Code of Federal Regulations for this project.

Prepare a complete Specifications Package as described in Section 115.3 of the FDOT Design Manual. Submit the Specifications Package and the Workbook generated via Specs on the Web that was used to compile the Specifications
Package within the electronic final plans package. Submittal requirements are further detailed in Chapter 131 of the FDOT Design Manual and Section 2.20 of this Scope of Services.

Any Plan Revision, Mandatory Specification Revision or any other change occurring after the “Transmit Package for Letting” Date that requires a Supplemental Specifications Package, will be the responsibility of the CONSULTANT.

For “goes-with” projects, the CONSULTANT for the lead project will be responsible for compiling the Specifications Package and any required Supplemental Specifications Packages. Technical Special Provisions will be the responsibility of the CONSULTANT for that project which requires the TSP.

It is the intent of the DEPARTMENT that the Specifications Package and any Supplements be prepared by & signed and sealed by the Engineer of Record preparing the project plans, except as noted above for projects being let together. In this case, the Engineer of Record for the lead project will be required to sign and seal the Specification Package and any required Supplements.

3.4 Contract Maintenance and Electronic Document Management System (EDMS)

Contract maintenance includes project management effort for complete setup and maintenance of files, electronic folders and documents and developing technical monthly progress reports and schedule updates.

The CONSULTANT will be required to provide written monthly progress reports (preferably electronic via email) documenting actions taken, actions to be taken, status of project schedule, and contacts with the DEPARTMENT (the DEPARTMENT employee contacted, the issue, and the resolution), and the status of the plans.

The CONSULTANT will also be required to make monthly schedule updates for tasks assigned to the CONSULTANT in FDOT Project Suite Enterprise Edition (PSEE). Schedule updates are due the last Friday of each month.

3.5 Value Engineering (Multi-Discipline Team) Review (Not applicable to this project)

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

The effort needed for Plans Update services will vary from project to project, depending on size and complexity of the project, as well as the duration of time spent “on the shelf”.

Staffhours negotiated for this task during the initial staffhour and fee submittal will include efforts necessary to kick-off Plans Update Services due to an accelerated schedule. It is recommended that the CONSULTANT coordinate with the DEPARTMENT’s Contract Manager to differentiate the staffhours for the Plans Update effort in the Automated Fee Proposal (AFP) from the Basic Services effort. Staffhours for the remainder of the anticipated Plans Update Services will be negotiated following Basic Services and at the time that the plans come “off the shelf”.

The CONSULTANT shall perform engineering analyses and/or make revisions to original plans and documents, as requested by the DEPARTMENT, to reflect additions, deletions and/or modifications prior to and subsequent to letting. The CONSULTANT shall be aware that minor modifications and/or updates to the original plans are to be expected. These minor refinements shall not be a basis for any payment under the Plans Update supplemental agreement.

3.8 Post Design Services

Staffhours and fees for Post Design Services will be submitted and negotiated post-letting and in advance of the Pre-Construction Conference.

Identifying the effort needed for post design services will vary significantly from project to project depending on size and complexity of the project. The approach described herein assists the DEPARTMENT in determining an initial estimate of the work effort needed for the Engineer of Record (EOR) to support the DEPARTMENT in the construction of a project.

Post Design Services include Construction Assistance and Review of Shop Drawings as noted below. In addition, these services are included for the CONSULTANT to attend and provide information at the preconstruction meeting. Subsequent construction field meetings are to be attended as required. The frequency of meetings shall be based on the complexity of the project and as directed by the DEPARTMENT’s Design Project Manager.

The EOR will be required to respond to any request from the Contractor within 24 hours. This does not mean that the issue will be resolved; it simply means that the EOR has received the request, states an immediate course of action, and begins the communication process.

The activities associated with Post Design Services can be characterized as the following:
Meetings: The EOR is expected to attend all pre-construction meetings as well as those regularly scheduled meetings throughout the construction phase when deemed necessary by the DEPARTMENT's Construction Project Manager.

Construction Assistance: This includes responses to Requests for Information (RFI), interpretation of construction plans and documents, and engineering solutions to changed conditions encountered in the field. Site visits shall be made by the EOR consultant when agreed upon with the DEPARTMENT’s Construction Project Manager. The CONSULTANT shall provide to the DEPARTMENT qualified representation during the construction phase to address issues concerning the intent and interpretation of the construction contract plans and documents prepared in the work. From time to time during construction the CONSULTANT may be requested by the DEPARTMENT or its designated representative to review contractor proposed field changes or to respond with a recommended solution to remedy particular field situations not covered by the plans and specifications.

Plan Revisions: This includes effort required to provide revised plan sheets reflecting any changes made during the Right-of-Way Acquisition or Construction phases of a project. During Right-of-Way or Construction phases, the Consultant may be requested by the DEPARTMENT to review proposed field changes or to respond with a recommended solution to remedy particular field situations not covered by the plans and specifications.

Shop Drawing Review: This includes review of shop drawings and erection plans for all components supplied by the contractor and required by the bid documents. For all independently supported sign structures of which the contractor is responsible, the consultant will review and check all the foundation, sign structure design, and shop drawings submitted by the contractor. Shop drawing reviews shall be performed by the CONSULTANT in accordance with the Standard Specifications for Road and Bridge Construction.

Load Ratings: Projects involving bridges typically have the load rating done during the design phase work. If the as-built bridge complies with the bid documents, the EOR should be willing to certify the load rating performed during design is adequate for the as-built condition of the bridge. However, if the as-built bridge was built in a modified or altered condition from the bid documents an updated load rating may be required. Therefore, during construction the EOR may be asked to perform an updated load rating based on the as-built condition of the bridge. As an aid in the negotiations the Structures Design Office has established guidelines for the development of staff-hours for load rating various bridge types.

Post design services may also include:

- Reestablishment of the original survey control just prior to construction (Refer to Section 5-7.1 of the Standard Specifications for Road and Bridge Construction).
- Flagging R/W for acquisition
• Monumentation of the R/W after construction is complete for projects with right-of-way acquisition
• Comprehensive utility coordination and conflict resolution during construction.

Note: All services will be agreed upon by the DEPARTMENT’s Construction Project Manager and approved by the DEPARTMENT’s Design Project Manager.

The CONSULTANT shall submit a “Post Design Services Status Report” in *.xlsx format with every invoice during this phase. A blank example of this report can be provided by the DEPARTMENT’s Design Project Manager.

Post Design Services are not intended for instances of CONSULTANT errors and/or omissions.

3.9 Digital Delivery

The CONSULTANT shall deliver final contract plans and documents in digital format. The final contract plans and documents shall be digitally signed and sealed files delivered to the DEPARTMENT on acceptable electronic media, as determined by the DEPARTMENT.

3.10 Risk Assessment Workshop (Not applicable to this project)

3.11 Railroad, Transit and/or Airport Coordination (Not applicable to this project)

3.12 Landscape and Existing Vegetation Coordination

Coordinate to ensure preservation and protection of existing vegetation. Relocation of existing vegetation may be necessary in some cases. Space for proposed landscape should be preserved and conflicts with drainage, utilities, ITS, and signage should be minimized. Coordination with the District Landscape Architect may be necessary as defined in 4.12. Additionally, coordination with the Florida Scenic Highways program should be included to ensure any requirements of the FSH program are met.

3.13 Other Project General Tasks (Not applicable to this project)

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 CONSULTANT shall provide an approved signed and sealed Typical Section Package to be submitted to the DEPARTMENT for review and concurrence prior to the Phase I plans submittal date. This package shall include the following:
• Transmittal Letter, Location Map(s), Typical Section(s), Project Control Sheet(s)

4.2 Pavement Type Selection Report (Not applicable to this project)

4.3 Pavement Design Package (To Be Provided by the DEPARTMENT)

The Pavement Condition Survey (including coring, testing, and preparing the report) will be provided by the DEPARTMENT.

The DEPARTMENT will be responsible for the Pavement Design.

4.4 Cross-Slope Correction

Includes the effort necessary to review the existing cross-slopes and the need for overbuild with the District Construction Office and the District Bituminous Engineer and to prepare needed overbuild details, notes, and tables.

As early as possible, the collected survey data along this project shall be analyzed by the CONSULTANT to determine if minimum and maximum cross slope requirements are met throughout the project limits. Once the determination is made that cross slope correction will be implemented, the CONSULTANT must determine if any additional survey is required to provide an adequate design and accurate quantities. The CONSULTANT will coordinate with the DEPARTMENT’s Design Project Manager and the District Survey Office to determine how much additional survey is required and what is the most economical method of obtaining the additional data. The CONSULTANT shall then review the cross sections with the District Construction Office and the District Bituminous Engineer to determine the method of correction (variable depth milling or overbuild) and the details/tables required. A proposed design for cross slope correction must be included in the Phase II Plans.

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, existing vegetation to be preserved, pedestrian and bicycle concerns, ADA requirements, Safe Mobility for Life Program, 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 DEPARTMENT, and shall review Utility Work Schedules.

Note: When the project includes a 3D Model deliverable, also include Activity 36 3D Modeling.
4.6 Access Management

The CONSULTANT shall incorporate access management standards for each project in coordination with DEPARTMENT staff. The CONSULTANT shall review adopted access management standards and the existing access conditions (interchange spacing, signalized intersection spacing, median opening spacing, and connection spacing). The degree of application shall be determined by the CONSULTANT in agreement with the DEPARTMENT’s Design Project Manager after taking into consideration the effort of work as well as whether the project is located on an FIHS (or SIS) corridor. Access management standards shall be implemented on all new construction or widening projects located on the FIHS (or SIS) corridor. Along non-FIHS corridors (or SIS), access management standards shall be applied on all multi-lane reconstruction projects or projects affecting the roadway classification. However, the degree of implementation shall be carefully considered for RRR projects. For those types of projects, access management standards should be more location/site specific. Access Management considerations should be developed after review of historic crash data for specific locations along the roadway. When access management criteria are applied, the CONSULTANT shall review adopted access management standards and the existing access conditions (interchange spacing, signalized intersection spacing, median opening spacing, and connection spacing). Median openings proposed to be closed, relocated, or substantially altered shall be shown on plan sheets and submitted with supporting documentation at the DEPARTMENT’s first review (Phase I or Phase II) of the plans submittal.

The CONSULTANT shall be aware that certain proposed deviations from access management and median opening spacing standards must be presented to the District Access Management Review Committee (AMRC)(see also Sections 2.1 and 3.1.4). At a minimum, access management, driveway, and median opening issues not resolved in the District’s staff level process, as well as proposed full movement median openings not meeting the spacing standards in Rule Chapter 14-97, F.A.C by a threshold of 10% or more shall be taken to the AMRC for review.

The DEPARTMENT shall provide access management classification information and information derived from PD&E studies and public hearings to be used by the CONSULTANT. Projects that propose modification to currently available turning movements by dividing a state highway, erecting median barriers, or having the effect of closing or modifying an existing access to an abutting property owner will necessitate a Public Hearing vs. Public Meeting/Workshop only when a Public Hearing was NOT conducted during a PD&E phase.

Unused/nonfunctional driveways may need to be replaced with curb and gutter when future use of the driveway is not feasible. The CONSULTANT will be responsible for notifying property owners in writing prior to altering or removing driveways. The CONSULTANT shall coordinate this activity with the DEPARTMENT’s Design Project Manager prior to notifying the property owners. The CONSULTANT’s notification will be via a prepared letter, on FDOT letterhead, requesting permission to alter or remove any driveways as appropriate. The DEPARTMENT’s Design Project Manager or District Consultant Project
Management Engineer will review and approve/reject the proposed closures and will ultimately sign any closure letter(s) to be sent to property owners. Driveway widths should be evaluated to determine if improvements are warranted to provide better refuge for pedestrians on the sidewalk or to improve safety at intersections. The design should comply with Rule 14-96, Connection Permit Applications, and Rule 14-97, Access Management.

4.7 Roundabout Evaluation (Not applicable to this project)

4.8 Roundabout Final Design Analysis (Not applicable to this project)

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

The CONSULTANT shall design a safe and effective Traffic Control Plan to move vehicular and pedestrian traffic during all phases of construction. The design shall include construction phasing of roadways ingress and egress to existing property owners and businesses, routing, signing and pavement markings, and detour quantity tabulations, roadway pavement, drainage structures, ditches, front slopes, back slopes, drop offs within clear zone, and traffic monitoring sites. Special consideration shall be given to the construction of the drainage system when developing the construction phases. Positive drainage must be maintained at all times. The design shall include construction phasing of roadways to accommodate the construction or relocation of utilities when the contract includes Joint Project Agreements (JPAs).

The CONSULTANT shall investigate the need for temporary traffic signals, temporary lighting, alternate detour roads, and the use of materials such as sheet piling in the analysis. The Traffic Control Plan shall be prepared by a certified designer who has completed the DEPARTMENT’s training course, and in accordance with the DEPARTMENT’s Standard Plans and the FDOT Design Manual.

The CONSULTANT shall conduct a Lane Closure Analysis to determine work conditions when no lane closures will be allowed.

The CONSULTANT shall consider the local impact of any lane closures or alternate routes. When the need to close a road is identified during this analysis, the CONSULTANT shall notify the DEPARTMENT’s Project Manager as soon as possible. Proposed road closings must be reviewed and approved by the DEPARTMENT. Diligence shall be used to minimize negative impacts by appropriate specifications, recommendations or plans development. Local impacts to consider will be local events, holidays, peak seasons, detour route deterioration and other eventualities. The CONSULTANT shall be responsible for obtaining local authorities permission for use of detour routes not on state highways.
4.11 Master TCP Design Files (Not applicable to this project)

4.12 Selective Clearing and Grubbing (Not applicable to this project)

4.13 Tree Disposition Plans (Not applicable to this project)

4.14 Design Variations and Exceptions

If available, the DEPARTMENT shall furnish the Variation/Exception Report. The CONSULTANT shall prepare the documentation necessary to gain DEPARTMENT approval of all appropriate Design Variations and/or Design Exceptions before the first submittal.

4.15 Design Report

The CONSULTANT shall be responsible for preparing a Design Report for each phase submittal as referenced in the FDOT Design Manual (114.3.1.5 for 3R Projects). The Design Report is synonymous with the following: Design Documentation Book, Design Docs, Doc Book, and 3R/RRR Report.

The Design Report shall include (if applicable), but not be limited to the following (in no particular order):

- Assessment of Existing Conditions
- Design notes, data, and calculations compiled in an executive summary format to document and describe the design conclusions reached during the development of the contract plans. Examples of design conclusions warranting an executive summary include, but are not limited to: alignments and profile decisions, median opening spacing, maintenance of traffic (MOT) phasing, temporary construction easements, etc.
- Straight Line Diagram
- Scope of Services
- Community Awareness Plan
- Project Schedule
- Traffic Forecasting Report
- Pavement Design
- Typical Section Package
- Design Variations/Exceptions
- Constructability Phase Review Checklist (as required by the CPAM)
- Load Ratings
- Supporting Crash Data
- Comments & Responses
- Engineer’s Cost Estimate/ LRE (see Section 3.0, Project Common Tasks and Section 4.17, Cost Estimates)
- Sunshine 811 Design Ticket
- Utility Conflict Matrix
- Lane Closure Analysis
The components of the Design Report will vary for each phase submittal based on the production schedule and project milestones. Draft/unsigned/unapproved components (i.e., Design Variations/Exceptions, Contract Time, Load Ratings, etc.) shall be included for informational purposes and clearly designated as DRAFT.

**ADA Survey Report:** This task shall include the effort to prepare the ADA Survey Report. This report will provide photographic and tabular documentation of the existing pedestrian features (sidewalk, curb ramps, bus stops, pedestrian signal/detectors, etc.). In addition, the CONSULTANT shall review all legs of all sideroad intersections (signalized and unsignalized) to determine if pedestrian signals and/or crosswalks are needed. The report shall identify the deficiencies and make recommendations for improvement. The CONSULTANT will be responsible for contacting the District Bike/Ped Coordinator, ADA Coordinator, Area Maintenance Office and the District Traffic Operations Office to determine if any project specific pedestrian access or safety related complaints have been received. The ADA Survey Report will be required with the PHASE I submittal.

4.16 **Quantities**

The CONSULTANT shall develop accurate quantities and the supporting documentation, including proposed construction days and total contract time.

4.17 **Cost Estimate**

The CONSULTANT shall be responsible for producing a construction cost estimate and reviewing and updating the cost estimate when scope changes occur and/or at milestones of the project.

**Prior to Phase I - Within 30 (thirty) calendar days of the written Notice to Proceed, the CONSULTANT shall submit a revised construction cost estimate using the DEPARTMENT’s Long Range Estimating System (L.R.E.). The revised estimate shall be based on all work items likely to be included in the project whether or not explicitly defined in this initial scope of work, including, but not limited to, work items being analyzed for possible inclusion in the scope after DEPARTMENT approval. This estimate is understood to be preliminary and will be used to better budget construction costs. The District Preliminary Estimates Office will provide the CONSULTANT with a version of the L.R.E. in the system for their use.**

**Phase II - For the Phase II (60%) submittal, the CONSULTANT shall submit the cost estimate using the DEPARTMENT’s Long Range Estimating System (L.R.E.).**

**Phases III & IV - The complete submittal package, including the CONSULTANT’s construction cost estimate, will be provided to the District**
Preliminary Estimates Office at phases III (90%) and IV (100%). The above shall be provided for each component set of plans (i.e., Roadway, Bridge, Signing and Marking, etc.). If the project includes a Special Detour, the CONSULTANT shall prepare and submit a Special Detour Quantity Worksheet for submittal at phase III (90%).

4.18 Technical Special Provisions and Modified Special Provisions (Not applicable to this project)

4.19 Other Roadway Analyses (Not applicable to this project)

4.20 Field Reviews

4.21 Monitor Existing Structures

The CONSULTANT shall perform field observations to visually identify existing structures within the project limits which may require settlement, vibration or groundwater monitoring by the contractor during construction in accordance with FDM Chapter 307. The CONSULTANT shall identify the necessary pay items to be included in the bid documents to monitor existing structures.

Optional Services (may be negotiated at a later date if needed): The CONSULTANT shall coordinate with and assist the geotechnical engineer and/or structural engineer to develop mitigation strategies (when applicable).

4.22 Technical Meetings

This task includes, but is not limited to, effort for the Post 60% Review Workshop (if required). These workshops are typically held with DEPARTMENT Area Operations personnel in conjunction with the Utility Design Meeting (see section 7.9). The workshops take place at a location appropriate for the project that will allow for a same-day project site visit. The workshops may consist of a Project Briefing, Project Design Review Workshop, and a Field Review; however, the format and need for the meeting will depend on the project’s complexity and the CONSULTANT’s familiarity with the District’s policies and procedures. The workshop will be co-chaired by the CONSULTANT and the DEPARTMENT’s Design Project Manager. The DEPARTMENT’s Area Utility Manager will chair and take minutes of the utility coordination segment of the workshop.

4.23 Quality Assurance/Quality Control

4.24 Independent Peer Review (Not applicable to this project)

4.25 Supervision

4.26 Coordination
5 ROADWAY PLANS

The CONSULTANT shall prepare Roadway, Drainage, 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.

Contamination – All underground fuel tanks and monitoring wells within the proposed right-of-way are to be located and shown/tabulated in the plans. All piping and pumps in association with the tanks shall also be located and identified by the survey. The CONSULTANT shall relay to the DEPARTMENT any findings of contaminated soil, monitoring wells, or any features (particularly springs or sinks) relating to contamination or hazardous material.

5.1 Key Sheet

5.2 Summary of Pay Items Including Quantity Input

The CONSULTANT shall be responsible for inputting pay items and quantities into the DEPARTMENT’s Project Preconstruction (PrP) System through the use of the DEPARTMENT’s Designer Interface.

Phase I - The project shall be established in PrP by Phase I (30%). The District Preliminary Estimates Office will create the project(s) in the system upon receiving a copy of the Notice to Proceed for the design contract.

Phase II - A Summary of Pay Items sheet shall be prepared with Phase II and subsequent plans submittals. The Phase II (60%) submittal shall have all pay items identified with or without quantities. If quantities have not been determined at this point, the CONSULTANT shall load a quantity of “1.0”.

Phases III & IV – At Phase III (90%) the CONSULTANT shall have all quantities loaded into PrP, with only minor change anticipated at subsequent submittals. Within PrP, the CONSULTANT shall run a Project Edit Report for the project at Phases III and IV just prior to submitting the plans to the DEPARTMENT for review. This program outputs invalid pay items that may be erroneously loaded for a project. The above shall be provided for each component set of plans (i.e., Roadway, Bridge, Signing and Marking, etc.).

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
5.6 Project Layout

5.7 Plan/Profile Sheet (Not applicable to this project)

5.8 Profile Sheet (Not applicable to this project)

5.9 Plan Sheet

5.10 Special Profile (Not applicable to this project)

5.11 Back-of-Sidewalk Profile Sheet

5.12 Interchange Layout Sheet (Not applicable to this project)

5.13 Ramp Terminal Details (Plan View) (Not applicable to this project)

5.14 Intersection Layout Details

5.15 Special Details (Not applicable to this project)

5.16 Cross-Section Pattern Sheet(s) (Not applicable to this project)

5.17 Roadway Soil Survey Sheet(s)

5.18 Cross Sections

5.19 Temporary Traffic Control Plan Sheets

5.20 Temporary Traffic Control Cross Section Sheets (Not applicable to this project)

5.21 Temporary Traffic Control Detail Sheets (Not applicable to this project)

5.22 Utility Adjustment Sheets

5.23 Selective Clearing and Grubbing Sheet(s) (Not applicable to this project)

5.24 Tree Disposition Plan Sheet(s) (Not applicable to this project)

5.25 Project Network Control Sheet(s)

5.26 Environmental Detail Sheets (Not applicable to this project)

5.27 Utility Verification Sheet(s) (SUE Data)

5.28 Quality Assurance/Quality Control

5.29 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 field inspect the project for the structural condition of all side drains, cross drains, and drainage under the roadway area and make recommendations concerning repairs, extensions, replacement/upgrade, or removal of such facilities. Drainage structures shall be assessed and designed to meet clear zone requirements within existing right of way or a Design Variation or Exception must be obtained. Culverts that warrant replacement shall be itemized and detailed as appropriate in the construction plans. The CONSULTANT shall contact and document discussions with the DEPARTMENT’s local Maintenance Office (or the local maintaining agency for off-system projects) regarding historical drainage problems in the project area.

One area with apparent flooding issues that should be analyzed is the north side of SR 30A between Ashley Drive and Wells Street. Drainage analysis will also be required for the proposed median turn lanes at Gainous Road, Palm Beach Drive, Dolphin Drive and Gulf View Drive.

In the areas of poor drainage, significant addition of impervious surface, or inadequacy of sufficient downstream conveyance, the CONSULTANT shall address the requirements of Ch. 14-86 F.A.C. Alternate detention facilities shall be conceptually designed, costed and presented to the DEPARTMENT for consideration. Detention facilities to be considered include open basins, underground pipes or vaults, and french drains. The DEPARTMENT will decide on the alternate to be used.

Flood data requirements will be determined in accordance with DEPARTMENT procedures. Flood data will be required in plans under the following conditions 1) necessary for all structures that are being modified, 2) necessary for all structures that have a history of flooding or other hydraulic problems even if the structure is not to be modified, 3) necessary for structures that may not be modified but share a drainage basin with another structure being modified and are being impacted by such modification.

The CONSULTANT will consider alternate culvert materials in accordance with the DEPARTMENT’s Drainage Manual.

Prior to Phase II (60%) plans submittal, the CONSULTANT shall meet with the District Drainage Engineer. The purpose of this meeting is to provide information to the CONSULTANT that will better coordinate the Preliminary and Final Drainage Design efforts.

The CONSULTANT shall provide the DEPARTMENT’s District Drainage Engineer a signed and sealed Drainage Design Study. The study shall include a narrative description of existing and proposed drainage structures, conditions, and facilities, and a listing of environmental regulatory permits required. All hydrologic and hydraulic drainage
computations for the design presented in the plans shall be included along with supporting design information such as drainage maps, geotechnical data (such as soil borings and permeability tests), and correspondence that directly affected design decisions.

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

6a.1 Drainage Map Hydrology (Not applicable to this project)

6a.2 Base Clearance Calculations (Not applicable to this project)

6a.3 Pond Siting Analysis and Report (Not applicable to this project)

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) (Not applicable to this project)

6a.7 Design of Stormwater Management Facility (Roadside Treatment Swales and Linear Ponds)

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

6a.8 Design of Floodplain Compensation (Not applicable to this project)

6a.9 Design of Storm Drains

Delineate contributing drainage areas, 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

Determine acceptable options for pipe materials using the Culvert Service Life Estimator.

6a.11 French Drain Systems (Not applicable to this project)

6a.11a Existing French Drain Systems (Not applicable to this project)

6a.12 Drainage Wells (Not applicable to this project)

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 (Not applicable to this project)

6a.15 Temporary Drainage Analysis (Not applicable to this project)

6a.16 Cost Estimate (Not applicable to this project)

6a.17 Technical Special Provisions and Modified Special Provisions (Not applicable to this project)

6a.18 Hydroplaning Analysis

Perform a hydroplaning analysis to assist in the determination of the appropriate roadway geometry for all necessary locations (both typical sections and critical cross sections) as needed. See the FDOT Hydroplaning Guidance and FDOT FDM Chapters 210 and 211 for more information.

6a.19 Existing Permit Analysis (Not applicable to this project)

6a.20 Other Drainage Analysis (Not applicable to this project)

6a.21 Field Reviews

6a.22 Technical Meetings

6a.23 Environmental Look-Around Meetings (Not applicable to this project)

6a.24 Quality Assurance/Quality Control

6a.25 Independent Peer Review (Not applicable to this project)

6a.26 Supervision
6a.27 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.

6b.1 Drainage Map (Including Interchanges) (Not applicable to this project)
6b.2 Bridge Hydraulics Recommendation Sheets (Not applicable to this project)
6b.3 Summary of Drainage Structures
6b.4 Optional Pipe/Culvert Material
6b.5 Drainage Structure Sheet(s) (Per Structure)
6b.6 Miscellaneous Drainage Detail Sheets
6b.7 Lateral Ditch Plan/Profile
6b.8 Lateral Ditch Cross Sections
6b.9 Retention/Detention Pond Detail Sheet(s) (Not applicable to this project)
6b.10 Retention Pond Cross Sections (Not applicable to this project)
6b.11 Erosion Control Plan Sheet(s)
6b.12 SWPPP Sheet(s)
6b.13 Quality Assurance/Quality Control
6b.14 Supervision

7 UTILITIES

All Utility Coordination activities will be performed by the DEPARTMENT. The CONSULTANT will coordinate with FDOT Area Utility Manager regarding information needed.

7.1 Utility Kickoff Meeting

Before any contact with the UAO(s), the CONSULTANT shall meet or teleconference with the DEPARTMENT’s Area Utility Manager to receive guidance, as may be required, to assure that all necessary coordination will be

A-70
accomplished in accordance with DEPARTMENT 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 will identify all utilities in the corridor during the survey phase by calling Sunshine 811. As-built documentation shall be requested from each UAO for verification of complete designation, and a review will be made to ensure that field designated data is included on the Phase I plans. Proper identification of design coordination contact information shall be made during this activity. A copy of the Sunshine 811 “design” ticket listing all utility owners within the project limits shall be provided within 10 business days of the Notice to Proceed (NTP) as part of all subsequent phase submittals.

The DEPARTMENT will assist in identifying all utilities in the corridor.

7.3 Make Utility Contacts (To Be Conducted by the DEPARTMENT)

The DEPARTMENT’s Area Utility Manager will make contact and distribute plans to the applicable UAO’s. A memo requesting that the UAO’s verify/mark all existing facilities will be sent along with the plans.

7.4 Exception Processing

For above-ground utility installations that are to remain within the horizontal clearance area WITHOUT viable options for relocation within the R/W, the CONSULTANT will be responsible for obtaining Design Exceptions. For above-ground utility installations that are to remain within the horizontal clearance area WITH available R/W and options for relocation, the UAO will be responsible for obtaining Design Exceptions. The DEPARTMENT will coordinate all necessary Utility Exceptions.

7.5 Preliminary Utility Meeting

The DEPARTMENT shall schedule (time and place), notify participants, and conduct a preliminary utility meeting with all affected UAO(s) for the purpose of presenting the project, review the current design schedule, evaluate the utility information collected, provide follow-up information on compensable interest requests, 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 facility relocations with the CONSULTANT and other UAOs. 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, standard or selective 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. Field reviews shall be coordinated with the DEPARTMENT’s Area Utility Manager.

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

The CONSULTANT will be responsible for reviewing and implementing identified utility locations into the plans as well as producing a Potential Utility Conflict Matrix. The Matrix will include location (station, offset, depth) of existing facilities in relation to proposed construction features, and will be submitted with the Phase II submittal. Subsequent phase submittals will require that the Utility Conflict Matrix be updated and submitted reflecting any design changes or new information. Marked plans provided from UAOs may need to be acquired through the Department’s Project Suite Enterprise Edition (PSEE) system.

7.8 Subordination of Easements Coordination (To Be Conducted by the DEPARTMENT)

The CONSULTANT, if requested by the DEPARTMENT, shall transmit to and secure from the UAO the executed subordination agreements prepared by the appropriate DEPARTMENT office. The CONSULTANT shall obtain information as required from the UAO(s) for the programming of the necessary work program funds to compensate the UAO for reimbursable expenses.

7.9 Utility Design Meeting

The DEPARTMENT’s Area Utility Manager shall coordinate with the DEPARTMENT’s Design Project Manager and schedule (time and place), notify participants, and conduct a Utility Design Meeting with all affected UAO(s). This meeting may be held in conjunction with the Post 60% Workshop described in Section 4.22. The CONSULTANT shall be prepared to discuss impacts to existing trees/vegetation and proposed landscape, drainage, traffic signalization, maintenance of traffic (construction phasing), review the current design schedule and letting date, evaluate the utility information collected, provide follow-up information on compensable property rights from FDOT Legal Office, discuss with each UAO the utility work by highway contractor option, discuss any future design issues that may impact utilities, etc., to the extent that they may have an effect on existing or proposed utility facilities with particular emphasis on drainage and maintenance of traffic with each UAO. The intent of this meeting shall be to assist the UAOs in identifying and resolving conflicts between utilities and proposed construction before completion of the plans, including utility adjustment details. Also to work with the UAOs to recommend potential resolution between known utility conflicts with proposed construction plans as may be deemed practical by the UAO. The CONSULTANT shall keep accurate minutes of all meetings and distribute a copy to all attendees within 3 days.
7.10 Review Utility Markups & Work Schedules and Processing of Schedules & Agreements

The CONSULTANT is to review the UAO marked up plans and the Utility Work Schedules as they are received and assure that they are compatible with the proposed design features in the plans. The CONSULTANT shall review the specific details of the markups and schedules with the Area Utility Manager as required to finalize the status of each potential conflict. The CONSULTANT shall also verify that the schedules conform to the construction phasing and MOT sequences.

UTILITY SCHEDULE REPORT - The CONSULTANT shall provide a written review of the critical path utility relocation activities and durations, considering possible concurrent construction activities, and a recommendation of Utility Dependent Time to be added to the overall Contract Time. This “written review” will be referred to as the Utility Schedule Report and will be required at the Phase III Submittal (and subsequent submittals) with the CONSULTANT’s Contract Time Estimate. The Utility Schedule Report will be revisited, updated, and resubmitted as necessary to the DEPARTMENT’s Area Utility Manager and Design Project Manager as the Utility Work Schedules are finalized.

Any design changes affecting utilities that occur after the Phase IV Resubmittal must be submitted to the DEPARTMENT’s Area Utility Manager so that Utility Work Schedules can be updated.

7.11 Utility Coordination/Follow-up

Utility Coordination and Follow-up activities will be performed by the DEPARTMENT and the CONSULTANT if requested by the DEPARTMENT.

This includes follow-up, interpreting plans, and assisting with coordination of the completion of the UAO(s) work schedule and agreements. Includes phone calls, face-to-face meetings, etc., to motivate and ensure the UAO(s) complete and return the required documents in accordance with the project schedule. Ensure the resolution of all known conflicts. This task can be applied to all phases of the project.

7.12 Utility Constructability Review (To Be Conducted by the DEPARTMENT)

Utility Constructability Review activities will be performed by the DEPARTMENT.

7.13 Additional Utility Services (To be Conducted by the DEPARTMENT or Included via Supplemental Agreement)

The CONSULTANT may be required to provide additional utility services. Additional services will be determined when the services are required and requested. This item is not usually included in the scope at the time of negotiation. It is normally added as a supplemental agreement when the need is identified.
7.14 Processing Utility Work by Highway Contractor (UWHC) (To Be Conducted by the DEPARTMENT)

Processing of any Utility Work by the Highway Contractor will be performed by the DEPARTMENT.

As directed by the DEPARTMENT, the CONSULTANT shall assist with the determination of the DEPARTMENT's cost participation, attend additional coordination meetings, prepare and process UWHC agreements, review tabulation of quantities prepared by the UAO(s), perform UWHC constructability and bidability reviews, review pay items and cost estimates, and review and incorporate Technical Special Provisions (TSPs) or Modified Special Provisions (MSP) prepared by the UAO. This item is not usually included in the scope at the time of negotiation. It is normally added as a supplemental agreement when the need is identified. Effort for the EOR is not included in this task, see Roadway Analysis Task Group 4.

7.15 Contract Plans to UAO(s)

The CONSULTANT will be responsible for providing the necessary electronic files to the DEPARTMENT's Design Project Manager for submittal to the Area Utility Manager at each Phase Submittal.

7.16 Certification/Close-Out (To Be Conducted by the DEPARTMENT)

Utility Certification will be performed after all Utility Work Schedules have been executed and the coordination of construction related issues has been completed by the DEPARTMENT.

Utility Coordination Close-Out will include archiving all project documents and files in an orderly fashion consistent with the DEPARTMENT's EDMS archiving process.

7.17 Other Utilities (Not applicable to this project)

8 ENVIRONMENTAL PERMITS, COMPLIANCE, AND ENVIRONMENTAL CLEARANCES

The CONSULTANT shall notify the DEPARTMENT Project Manager, Environmental Permit Coordinator and other appropriate personnel in advance of all scheduled meetings with the regulatory agencies to allow a DEPARTMENT representative to attend. The CONSULTANT shall copy in the Project Manager and the Environmental Permit Coordinator on all permit related correspondence and meetings. The Consultant shall use current regulatory guidelines and policies for all permits required as identified in Section 2.4.
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 but should not be limited to a review of the project’s PD&E documents including the Environmental Document, Natural Resources Evaluation, and Cultural Resources Assessment Survey.

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

8.2 Field Work

8.2.1 Pond Site Alternatives: (Not applicable to this project)

8.2.2 Establish Wetland Jurisdictional Lines and Assessments: (Not applicable to this project)

8.2.3 Species Surveys: (Not applicable to this project)

8.3 Agency Verification of Wetland Data (Not applicable to this project)

8.4 Complete and Submit All Required Permit Applications

The CONSULTANT shall collect all of the data and information necessary to prepare the permit applications and obtain the environmental permits required to construct the project as identified in the Project Description and as described in 8.4.1, 8.4.2, and 8.12 (Other Permits). The CONSULTANT shall prepare each permit application in accordance with the rules and/or regulations of the regulatory agency responsible for issuing a specific permit and/or authorization to perform work. The permit application packages must be approved by the DEPARTMENT prior to submittal to regulatory agencies.

The CONSULTANT will have a Pre-Application meeting with the permitting agency for all projects that require permits. The DEPARTMENT’s Design Project Manager, District Drainage Engineer, and District Permit Coordinator will be invited to the Pre-Application meeting (when required), and will be forwarded all correspondence and meeting minutes., District Drainage Engineer, and District Permit Coordinator will be invited to the Pre-Application meeting, and will be forwarded all correspondence and meeting minutes.

The CONSULTANT will submit all permit applications, as directed by the DEPARTMENT, and be responsible for payment of all permit fees. The CONSULTANT will file any public notices required by the permits, in a
publication selected by the DEPARTMENT, and will be responsible for payment of all fees associated with the filing the public notice.

8.4.1 Complete and Submit all Required Wetland Permit Applications: (Not applicable to this project)

8.4.2 Complete and Submit all Species Permit Applications:

The CONSULTANT shall prepare, complete and submit required species permit applications to the appropriate agencies. This includes federal and state protected species permit application packages as required. The work includes completion of application package (i.e. project location map, aerials, affidavit of ownership, pictures, additional technical analysis, etc.), and cover letter with project description as well as completion of applicable forms. The Engineer of Record (EOR) shall prepare a narrative, in layman terms, for the inclusion in the permit application package. It shall include work being performed in this project, impacts to the environment and methods of construction specifically related to the environmentally sensitive species. This brief description will aid the regulatory agency reviewer in understanding the scope of the project. The CONSULTANT shall respond to agency RAIs, including necessary revisions to the application package. All responses and completed applications must be approved by the District Permit Coordinator prior to submittal to the regulatory agency.

8.5 Coordinate and Review Dredge and Fill Sketches (Not applicable to this project)

8.6 Prepare USCG Permit Sketches (Not applicable to this project)

8.7 Prepare Water Management District or Local Water Control District Right of Way Occupancy Permit Application (Not applicable to this project)

8.8 Prepare Coastal Construction Control Line (CCCL) Permit Application (Not applicable to this project)

8.9 Prepare Tree Permit Information (Not applicable to this project)

8.10 Compensatory Mitigation Plan (Not applicable to this project)

8.11 Mitigation Coordination and Meetings (Not applicable to this project)

8.12 Other Environmental Permits

ENVIRONMENTAL CLEARANCES, RE-EVALUATIONS, AND TECHNICAL SUPPORT
8.13 Technical Support to the DEPARTMENT for Environmental Clearances and Re-evaluations (use when CONSULTANT provides technical support only)

The CONSULTANT shall provide engineering and environmental support for the DEPARTMENT to obtain environmental clearances resulting from any changes to the project after the initial environmental phase has been completed.

8.13.1 NEPA or SEIR Re-evaluation: During the development of the final design plans, the CONSULTANT shall be responsible for coordinating with the District Project Manager to provide necessary engineering information required in the preparation of the re-evaluation by the DEPARTMENT. The preparation of environmental re-evaluations includes those as listed in Part 1, Chapter 13 of the DEPARTMENT’s PD&E Manual: Right of Way, Design Change, and Construction Advertisement.

Re-evaluations will be completed in accordance with Part 1, Chapter 13 of the PD&E Manual. The CONSULTANT shall provide information to update the Project Commitment Record for incorporation into the re-evaluation.

It is the responsibility of the CONSULTANT to provide the District Project Manager with engineering information on major design changes including changes in typical section, roadway alignment, pond site selection, right of way requirements, bridge to box culvert, drainage, and traffic volumes that may affect noise models.

8.13.2 Archaeological and Historical Features: (Not applicable to this project)

8.13.3 Wetland Impact Analysis: (Not applicable to this project)

8.13.4 Essential Fish Habitat Impact Analysis: (Not applicable to this project)

8.13.5 Protected Species and Habitat Impact Analysis: The CONSULTANT shall provide necessary technical information to the District’s Project Manager to analyze the impacts to all protected species and habitat in accordance with Part 2, Chapter 16 of the PD&E Manual due to changes in the project. The CONSULTANT shall perform the necessary analysis to complete agency consultation in accordance with Section 7 or Section 10 of the Endangered Species Act.

8.14 Preparation of Environmental Clearances and Reevaluations (TO BE PROVIDED BY THE DEPARTMENT)

8.15 Contamination Impact Analysis (Not applicable to this project)

8.16 Asbestos Survey (Not applicable to this project)

8.17 Technical Meetings

At the Pre-construction Conference, the EOR must be prepared to discuss the Erosion Control Plan, including environmentally sensitive areas, and known risk, proposed avoidance measures, and the special requirements listed in the permit for
this project. Payment for attending the Pre-construction Conference will be made through Post Design Services, to be negotiated post-Letting.

8.18 Quality Assurance/Quality Control

8.19 Supervision

8.20 Coordination

9 STRUCTURES - SUMMARY AND MISCELLANEOUS TASKS AND DRAWINGS and tasks 9.1 – 9.16 are not applicable to this project.

10 STRUCTURES - BRIDGE DEVELOPMENT REPORT and tasks 10.1 – 10.35 are not applicable to this project.

11 STRUCTURES - TEMPORARY BRIDGE and tasks 11.1 – 11.8 are not applicable to this project.

12 STRUCTURES - SHORT SPAN CONCRETE BRIDGE and tasks 12.1 – 12.28 are not applicable to this project.

13 STRUCTURES - MEDIUM SPAN CONCRETE BRIDGE and tasks 13.1 – 13.55 are not applicable to this project.

14 STRUCTURES - STRUCTURAL STEEL BRIDGE and tasks 14.1 – 14.62 are not applicable to this project.

15 STRUCTURES - SEGMENTAL CONCRETE BRIDGE and tasks 15.1 – 15.77 are not applicable to this project.

16 STRUCTURES - MOVABLE SPAN and tasks 16.1 – 16.102 are not applicable to this project.

17 STRUCTURES - RETAINING WALL and tasks 17.1 – 17.21 are not applicable to this project.

18 STRUCTURES – MISCELLANEOUS and tasks 18.1 – 18.35 are not applicable to this project.
19 SIGNING AND PAVEMENT MARKING ANALYSIS

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

*The Phillips Inlet bridges (BR460072 and BR460078) will be restriped as part of this project with Integrated Multi-Polymer Pavement Markings (Developmental Specifications 712 and 971). Coordination between the CONSULTANT, District Three and Central Office will be required.*

19.1 Traffic Data Analysis

*The CONSULTANT shall evaluate the existing signage to determine the need for additional signs, correcting redundant or conflicting signage, and the replacement of damaged signs. It is NOT the DEPARTMENT’s intent to replace signs based solely on age or installation date. Existing signage problems/issues that are discovered during the design phase should be communicated to the maintaining agency to be addressed as appropriate.*

*The CONSULTANT shall prepare a detailed summary of additional or modified traffic regulations affected by this project. The summary shall include affected regulatory signs (No U, No Left, No Parking etc.), signals (including school zones, pedestrian devices, intersection control beacons, post-mounted warning devices) or pavement markings. This information is to be forwarded to the District Traffic Operations Engineer for use in fulfilling Florida Statute 335.10(1). The CONSULTANT may refer to Traffic Engineering Topic Number 750-010-011: Traffic Regulation Approval Process, and the Roadway Characteristic Inventory (RCI) database for additional information.*

19.2 No Passing Zone Study (Not applicable to this project)

19.3 Reference and Master Design File

The CONSULTANT shall prepare the Signing & Marking Design file to include all necessary design elements and all associated reference files.

19.4 Multi-Post Sign Support Calculations (Not applicable to this project)

19.5 Sign Panel Design Analysis (Not applicable to this project)

19.6 Sign Lighting/Electrical Calculations (Not applicable to this project)

19.7 Quantities

19.8 Cost Estimate

19.9 Technical Special Provisions and Modified Special Provisions (Not applicable to this project)
19.10 Other Signing and Pavement Marking Analysis

*Audible and Vibratory Markings Recommendation:* Provide the DEPARTMENT’s Design Project Manager with an explanation of crash history, treatment recommendations, and a *.kmz* graphically representing proposed audible and vibratory treatment to pursue approval from the District Design Office.

19.11 Field Reviews

19.12 Technical Meetings

19.13 Quality Assurance/Quality Control

19.14 Independent Peer Review (Not applicable to this project)

19.15 Supervision

19.16 Coordination

20 SIGNING AND PAVEMENT MARKING PLANS

The CONSULTANT shall prepare a set of Signing and Pavement Marking Plans in accordance with the *FDOT Design Manual* that includes the following. *The plans shall include only those sheets, of the following list of sheets, necessary to convey the intent and scope of the project for construction.*

20.1 Key Sheet

20.2 Summary of Pay Items Including Designer Interface Quantity Input

20.3 Tabulation of Quantities

20.4 General Notes/Pay Item Notes

20.5 Project Layout

20.6 Plan Sheet

20.7 Typical Details

20.8 Guide Sign Work Sheet(s) (Not applicable to this project)

20.9 Traffic Monitoring Site (Not applicable to this project)

20.10 Cross Sections (Not applicable to this project)

20.11 Special Service Point Details
20.12 Special Details

20.13 Interim Standards (Not applicable to this project)

20.14 Quality Assurance/Quality Control

The CONSULTANT shall be responsible for the professional quality, technical accuracy and coordination of traffic design drawings, specifications and other services furnished by the CONSULTANT 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 design drawings, specifications and other services 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 may be one utilized by the CONSULTANT as part of their normal operation or it may be one specifically designed for this project.

20.15 Supervision

21 SIGNALIZATION ANALYSIS

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

21.1 Traffic Data Collection (Not applicable to this project)

21.2 Traffic Data Analysis (Not applicable to this project)

21.3 Signal Warrant Study (Not applicable to this project)

21.4 Systems Timings (Not applicable to this project)

21.5 Reference and Master Signalization Design File

The CONSULTANT shall prepare the Signalization Design file to include all necessary design elements and all associated reference files.

21.6 Reference and Master Interconnect Communication Design File (Not applicable to this project)

21.7 Overhead Street Name Sign Design (Not applicable to this project)

21.8 Pole Elevation Analysis (Not applicable to this project)

21.9 Traffic Signal Operation Report (Not applicable to this project)
21.10 Quantities

21.11 Cost Estimate

21.12 Technical Special Provisions and Modified Special Provisions (Not applicable to this project)

21.13 Other Signalization Analysis (Not applicable to this project)

21.14 Field Reviews

The CONSULTANT shall collect information from the maintaining agencies and conduct a field review. The review should include, but is not limited to, the following:

- Existing Signal and Pedestrian Phasing
- Controller Make, Model, Capabilities and Condition/Age
- Condition of Signal Structure(s)
- Type of Detection as Compared With Current District Standards
- Interconnect Media
- Controller Timing Data

21.15 Technical Meetings

21.16 Quality Assurance/Quality Control

The CONSULTANT shall be responsible for the professional quality, technical accuracy and coordination of traffic design drawings, specifications and other services furnished by the CONSULTANT 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 design drawings, specifications and other services 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 may be one utilized by the CONSULTANT as part of their normal operation or it may be one specifically designed for this project.

21.17 Independent Peer Review (Not applicable to this project)

21.18 Supervision

21.19 Coordination
22 SIGNALIZATION PLANS

The CONSULTANT shall prepare a set of Signalization Plans in accordance with all applicable manuals, guidelines, standards, handbooks, procedures, and current design memorandums, which includes the following:

22.1 Key Sheet
22.2 Summary of Pay Items Including Designer Interface Quantity Input
22.3 Tabulation of Quantities
22.4 General Notes/Pay Item Notes
22.5 Plan Sheet
22.6 Interconnect Plans (Not applicable to this project)
22.7 Traffic Monitoring Site (Not applicable to this project)
22.8 Guide Sign Worksheet (Not applicable to this project)
22.9 Special Details
22.10 Special Service Point Details
22.11 Mast Arm/Monotube Tabulation Sheet (Not applicable to this project)
22.12 Strain Pole Schedule (Not applicable to this project)
22.13 TCP Signal (Temporary) (Not applicable to this project)
22.14 Temporary Detection Sheet (Not applicable to this project)
22.15 Utility Conflict Sheet
22.16 Interim Standards (Not applicable to this project)
22.17 Quality Assurance/Quality Control

The CONSULTANT shall be responsible for the professional quality, technical accuracy and coordination of traffic design drawings, specifications and other services furnished by the CONSULTANT 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 design drawings, specifications and other services 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 may be one utilized by the CONSULTANT as part of their normal operation or it may be one specifically designed for this project.

22.18 Supervision

23 LIGHTING ANALYSIS

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

23.1 Lighting Justification Report (Not applicable to this project)

23.2 Lighting Design Analysis Report

The CONSULTANT shall prepare a Preliminary Lighting Design Analysis Report. The report shall be submitted under a separate cover with the Phase II plans submittal. The report shall provide analyses for each signalized intersection lighting design and each typical section of the mainline, typical section for the ramps (one and/or two lanes), interchanges, underdeck lighting, and arterial roads. Each lighting calculation shall be properly identified as to the area that it covers.

The report shall include the Lighting Design Criteria that will be used. For projects with corridor lighting, the report shall include the evaluation of at least three lighting design alternatives. The report shall provide a recommendation on the alternative to use. Each alternative shall be properly described; the alternatives shall consider different pole heights, lamp wattage, and arm lengths. Each alternative shall be provided with a cost estimate that includes initial cost in addition to operations and maintenance cost for one year.

The report shall also include the lighting calculations for each lighted sign.

After approval of the preliminary report, the CONSULTANT shall submit a revised report for each submittal. The Lighting Design Analysis Report shall include:

- Voltage drop calculations
- Load analysis calculations for each branch circuit

23.3 Aeronautical Evaluation (Not applicable to this project)

23.4 Voltage Drop Calculations

The CONSULTANT shall submit voltage drop calculations showing the equation or equations used along with the number of luminaries per circuit, the length of each circuit, the size conductor or conductors used and their ohm resistance values. The voltage drop incurred on each circuit (total volts and percentage of drop) shall be calculated, and all work necessary to calculate the voltage drop values for each circuit should be presented in such a manner as to be duplicated by the District.
The Voltage Drop Calculations shall be submitted as part of the Lighting Design Analysis Report.

23.5 **FDEP Coordination and Report (Not applicable to this project)**

23.6 **Reference and Master Design Files**

The CONSULTANT shall prepare the Lighting Design file to include all necessary design elements and all associated reference files.

23.7 **Temporary Lighting (Not applicable to this project)**

23.8 **Design Documentation**

The CONSULTANT shall submit a Design Documentation with each plans submittal under a separate cover and not part of the roadway documentation book. At a minimum, the design documentation shall include:

- Phase submittal checklist.
- Structural calculations for special conventional pole concrete foundations.
- Correspondence with the power company concerning new electrical service.

23.9 **Quantities**

23.10 **Cost Estimate**

23.11 **Technical Special Provisions and Modified Special Provisions (Not applicable to this project)**

23.12 **Other Lighting Analysis (Not applicable to this project)**

23.13 **Field Reviews**

The CONSULTANT shall collect information from the maintaining agencies and conduct a field review. The review should include but is not limited to the following:

- Existing Lighting Equipment
- Load Center, Capabilities and Condition/Age
- Condition of Lighting Structure(s)
- Verification of horizontal clearances
- Verification of breakaway requirements

23.14 **Technical Meetings**

23.15 **Quality Assurance/Quality Control**

23.16 **Independent Peer Review (Not applicable to this project)**

23.17 **Supervision**
23.18 Coordination

24 LIGHTING PLANS

The CONSULTANT shall prepare a set of Lighting Plans in accordance with all applicable manuals, guidelines, standards, handbooks, procedures, and current design memorandums.

24.1 Key Sheet

24.2 Summary of Pay Items Including Designer Interface Quantity Input

24.3 Tabulation of Quantities

24.4 General Notes/Pay Item Notes

24.5 Pole Data, Legend & Criteria

24.6 Service Point Details

24.7 Project Layout

24.8 Plan Sheet

24.9 Special Details

24.10 Temporary Lighting Data and Details (Not applicable to this project)

24.11 Traffic Control Plan Sheets

24.12 Interim Standards (Not applicable to this project)

24.13 Quality Assurance/Quality Control

The CONSULTANT shall be responsible for the professional quality, technical accuracy and coordination of traffic design drawings, specifications and other services furnished by the CONSULTANT 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 design drawings, specifications and other services 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 may be one utilized by the CONSULTANT as part of their normal operation or it may be one specifically designed for this project.

24.14 Supervision
25 LANDSCAPE ARCHITECTURE ANALYSIS and tasks 25.1 – 25.17 are not applicable to this project.

26 LANDSCAPE ARCHITECTURE PLANS and tasks 26.1 – 26.16 are not applicable to this project.

27 SURVEY and tasks 27.1 – 27.35 to be provided by the DEPARTMENT on this project.

28 PHOTOGRAMMETRY and tasks 28.1 – 28.25 are not applicable to this project.

29 MAPPING and tasks 29.1 – 29.36 are not applicable to this project.

30 TERRESTRIAL MOBILE LiDAR and tasks 30.1 – 30.19 are not applicable to this project.

31 ARCHITECTURE DEVELOPMENT and tasks 31.1 – 31.143 are not applicable to this project.

32 NOISE BARRIERS IMPACT DESIGN ASSESSMENT IN THE DESIGN PHASE and tasks 32.1 – 32.9 are not applicable to this project.

33 INTELLIGENT TRANSPORTATION SYSTEMS ANALYSIS

The CONSULTANT shall analyze and document Intelligent Transportations System (ITS) Analysis Tasks in accordance with all applicable manuals, guidelines, standards, handbooks, procedures, existing ITS standard operating procedures, strategic plans, Florida’s SEMP guidelines, National and regional ITS architectures, and current design memoranda.

ITS work includes the application of sensor, computer, electronics and communication technologies and management strategies, in an integrated manner, to improve the safety and efficiency of the surface transportation system. ITS includes, but is not limited to, Advanced Traffic Management Systems (ATMS), Advanced Traveler Information Systems (ATIS), Advanced Rural Transportation Systems (ARTS), Advanced Public Transportation Systems (APTS), Advanced Highway Systems (AHS), Commercial Vehicle Operation (CVO) and Electronic Toll Collection (ETC) Systems.

In instances where the CONSULTANT performs analysis or prepares the design packages for the deployment of ITS, the CONSULTANT will not be allowed to compete as a proposing firm, or participate as a subconsultant to a proposing firm during subsequent advertisements involving work performed under this contract.
33.1 ITS Analysis

The CONSULTANT shall review the approved preliminary engineering report, typical section package, traffic technical memorandum and proposed geometric design alignment to identify impacts to existing ITS components (if applicable) and proposed ITS field device placements. The CONSULTANT shall review all related District ITS plans and documentation for the project corridor to ensure all cited ITS elements are included in this project, and develop a Concept of Operations (ConOps), Project Systems Engineering Management Plan (PSEMP), RTVM, and other documents as necessary for conformance with Federal Highway Administration (FHWA) requirements. The CONSULTANT shall use applicable DEPARTMENT requirements and guidelines, including, but not limited to, the FDOT Design Manual, Standard Plans, and Standard Specifications for Road and Bridge Construction in the design of ITS. The CONSULTANT design is expected to include the following attributes, facilities, infrastructure, ITS devices, systems, and associated work:

Conduit for future fiber optic cable along SR 30A will be installed under the proposed sidewalk/multi-use trail (if constructed) from the intersection at CR 30 (CMP 0.303) to the end of the project (CMP 5.679). All recommendations for ITS improvements, including conduit location, size, and configuration, are to be closely coordinated with the DEPARTMENT’s Design Project Manager, the DEPARTMENT’s Traffic Operations office and the Bay County Traffic Operations Center. No other ITS work is anticipated.

33.2 Communications Plan (Not applicable to this project)

33.3 Lightning Protection Analysis (Not applicable to this project)

33.4 Power Subsystem (Not applicable to this project)

33.5 Voltage Drop Calculations (Not applicable to this project)

33.6 Design Documentation

The CONSULTANT shall submit a Design Documentation Book with each plan submittal under separate cover and not part of the roadway documentation book. At a minimum, the design documentation book shall include:

- Computation books for all applicable items on plans.
- Phase submittal checklist.
- Three-way quantity check list
- Structural calculations for all structures
- Voltage drop calculations.
- Load analysis calculations.
33.7 Existing ITS

The CONSULTANT shall research any required legacy system or system components that may be impacted by new work, such as: existing communications; existing types, numbers, locations, models, manufacturers, and age of ITS devices; as-built plans; existing operating software; existing center-to-field devices; and C2C communications and capabilities.

33.8 Queue Analysis (Not applicable to this project)

33.9 Reference and Master ITS Design File

The CONSULTANT shall prepare the ITS design file to include all necessary design elements and the reference files for topo, R/W roadway, utilities files, etc. This effort includes the design and layout of proposed ITS devices, including but not limited to: CCTV / Detection poles, DMS, detection devices, advanced traffic controllers, conduit, cabinet-related pull boxes, service points, fiber optic sizing, and communications hubs. All existing ITS infrastructure shall be referenced to the new ITS plan sheets (if applicable).

33.10 Reference and Master Communications Design File (Not applicable to this project)

33.11 Pole Elevation Analysis (Not applicable to this project)

33.12 Sign Panel Design Analysis (Not applicable to this project)

33.13 Quantities

The CONSULTANT shall include all work required to determine the quantities for all items, including ITS structures and devices, interconnect, and infrastructure (such as conduits, pull boxes, splice boxes, fusion splices, splice enclosures, etc.). This work effort shall include generating accurate quantities for computing the engineer’s estimate as required by the District. Use digital submittal of plans as required by the DEPARTMENT.

33.14 Cost Estimate

The CONSULTANT shall prepare an engineer’s cost estimate for the project using historical data from the FDOT or from other Industry sources. The CONSULTANT shall also load the pay items and quantities into AASHTOWare Project Preconstruction for generating the summary of quantities and the FDOT’s in-house estimates.


The CONSULTANT shall develop Technical Special Provisions (TSP) and Modified Special Provisions (MSP) for the specific items or conditions of the project
that are not addressed in the FDOT’S Standard Specifications, Supplemental Specifications and Special Provisions.

33.16 Other ITS Analyses (Not applicable to this project)

33.17 Field Reviews

The CONSULTANT shall conduct a field review for the required phase submittals. The review shall identify necessary data for all elements of the project including, but not limited to, the following:

- Existing ITS Field Devices as compared with the latest FDOT standards and District requirements
- Device Make, Model, Capabilities, Condition / Age, Existence of SunGuide Software Driver
- Condition of Structure(s), cabinets, and other above-ground infrastructure and devices
- Type of Detection as Compared with Current District Standards
- Underground Infrastructure
- Proximity of other utilities
- Traffic Operations
- Any other field reconnaissance as necessary to develop a complete ITS design package

33.18 Technical Meetings

The CONSULTANT shall attend meetings as necessary support the project.

33.19 Quality Assurance / Quality Control

The CONSULTANT shall be responsible for the professional quality, technical accuracy and coordination of designs, drawings, specifications, and other services and work furnished by the CONSULTANT 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 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 may be one utilized by the CONSULTANT as part of their normal operation or may be one specifically designed for this project. The CONSULTANT shall utilize the District’s quality control checklist. The responsible Professional Engineer that performed the Quality Control review shall sign a statement certifying that the review was conducted.

The CONSULTANT shall, without additional compensation, correct all errors or deficiencies in their works.
33.20 Supervision

The CONSULTANT shall provide all efforts required to supervise all technical design activities.

33.21 Coordination

The CONSULTANT shall coordinate with Survey, Geotech, Drainage, Structures, Lighting, Roadway Design, Utilities, municipalities, maintaining agencies and Traffic Operations to produce a final set of construction contract documents and to ensure that a high degree of accuracy for the design plans is achieved.

34 INTELLIGENT TRANSPORTATION SYSTEMS PLANS

The CONSULTANT shall prepare a set of ITS Plans in accordance with the Plans Preparation Manual that includes the following:

34.1 Key Sheet

The CONSULTANT shall prepare the key sheet in accordance with the latest format depicted in the FDOT Design Manual.

MUTCD

Standard Specs

Standard Plans

34.2 Summary of Pay Items Including Designer Interface Quantity Input

The CONSULTANT shall include quantity input into Designer Interface and create the CADD generated sheet.

34.3 Tabulation of Quantities

The CONSULTANT shall place pay item numbers, descriptions, quantities and grand totals on the tabulation sheet(s) and provide updating of the tabulation of quantities sheets during the design period.

34.4 General Notes / Pay Item Notes

The CONSULTANT shall include all pertinent general notes and pay item notes as deemed fit and as established by the District.

34.5 Project Layout
34.6 Typical and Special Details

The CONSULTANT shall prepare typical and / or special details for conditions in the project not addressed by the DEPARTMENT’s Standard Plans for Design, Construction, Maintenance, and Utility Operations on the State Highway System. The CONSULTANT shall prepare special details not addressed by FDOT Standard Plans, including block diagrams, hub cabinets, wiring diagrams, solar power service, and special mounting details.

34.7 Plan Sheet

The CONSULTANT shall prepare the ITS plan sheets utilizing the Design file to include all necessary information related to the project design elements and all associated reference files. The plan sheets shall include general and pay item notes and pay items. The plans shall depict the location of pull boxes, splice boxes, conduit runs and device locations with setbacks from the travel way. Devices shall be located by station and offset.

34.8 ITS Communications Plans (Not applicable to this project)

34.9 Fiber Optic Splice Diagrams (Not applicable to this project)

34.10 Lightning Protection Plans (Not applicable to this project)

34.11 Cross Sections (Not applicable to this project)

34.12 Guide Sign Work Sheet(s) (Not applicable to this project)

34.13 Special Service Point Details (Not applicable to this project)

34.14 Strain Pole Schedule (Not applicable to this project)

34.15 Overhead / Cantilever Sign Structure (Not applicable to this project)

34.16 Other Overhead Sign Structures (Long Span, Monotube, etc.) (Not applicable to this project)

34.17 Traffic Control Plans (Not applicable to this project)

34.18 Interim Standards (Not applicable to this project)

34.19 GIS Data and Asset Management Requirements

The CONSULTANT is responsible for providing Geographic Information System (GIS), spatial data, for the ITS components design. This information is required to integrate ITS components to the SunGuide software. A coordinate point compatible with the Florida State Plane System or FDOT’s current coordinate plane system shall be collected for all ITS components part of the Project design. All GIS information provided shall be compatible with the FDOT’s ITS FM asset management software.
The information shall be transferred to the as-built plans and submitted to the District in electronic format along with the as-built plans.

The Global Positioning System (GPS) unit shall be provided by the CONSULTANT and used to collect data with a minimum accuracy of three (3) meters when differentially corrected. The CONSULTANT shall collect spatial data points and physical address location for:

- DMS location (mainline and arterial)
- Vehicle detection pole location
- HAR system components
- CCTV camera pole location
- Ground mounted cabinets
- Fiber optic cable path (fiber backbone)
- Communications hubs
- Standard route markers
- Lateral fiber optic cable connections
- Lateral power cable connections
- Pull boxes (power and fiber)
- Splice boxes
- Power drops (service point and cable path)

### 34.20 Quality Assurance / Quality Control

The CONSULTANT shall utilize the District’s quality control checklist for traffic design drawings in addition to the QC effort described in section three.

### 34.21 Supervision

The CONSULTANT shall supervise all technical design activities.

### 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 DEPARTMENT’s Geotechnical Engineer or representative to review the project scope and DEPARTMENT 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. Upon approval of the investigation plan by the DEPARTMENT, the CONSULTANT shall submit an updated schedule prior to initiating the investigation plan.
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 DEPARTMENT in adequate time to schedule a representative to attend all related meetings and field activities.

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

CONSULTANT shall perform specialized field-testing as required by project needs.

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

*All Standard Penetration Testing will be performed using an automatic hammer.*

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 and shall include a preliminary economic analysis, a plan for geotechnical investigation, and all field reconnaissance results. 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 *note, but not be limited to, the following as applicable unless directed otherwise* in writing by the District Geotechnical Engineer.

- Location survey stakes
- Bench marks
- Geological formation
- Surface soils (i.e., potential muck pockets)
- Surface water table
- General site conditions
- Debris and/or sanitary dump locations
- Rock type
- Conditions for detours
- Foundation type, condition and location
- Nearby structure type, condition and location
- Evidence of scour
- Site conditions relevant to boring plan including utilities, site access, private property access, equipment necessary, etc.
- Flow through soils, dunes, exposure, flood elevations on FIRM maps
- Possible obstructions to construction

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, and the Florida Department of Transportation Soils and Foundations Handbook unless otherwise specified in the Contract Documents.

35.2 Develop Detailed Boring Location Plan

Develop a detailed boring location plan. Meet with DEPARTMENT 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 DEPARTMENT for approval prior to commencing with the boring program.

35.3 Stake Borings/Utility Clearance

Auger borings with water table readings, Standard Penetration Test (SPT) borings with water table readings, and Cone Penetrometer Test (CPT) soundings with water table readings shall be performed as applicable. Submit copies of field boring logs with driller’s notes via fax or email to the DEPARTMENT’s Geotechnical Project Manager.

Stake borings and cores and obtain utility clearance.

35.4 Muck Probing (Not applicable to these projects)

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/Standard Plans 102 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 (Not applicable to this project)

35.8 Groundwater Monitoring

Monitor groundwater, using piezometers.

35.9 LBR / Resilient Modulus Sampling (Not applicable to these projects)

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 DEPARTMENT.

35.13 Laboratory Data

The laboratory testing for roadway shall consist of, but not be limited to, the following tests by designated procedures or directives available from the Geotechnical Project Manager:

- Sieve analysis conducted according to AASHTO T88 and additional applicable methods: AASHTO M-92, AASHTO M 145, AASHTO M 146, AASHTO M 147, FM 1-T87
- Atterberg limits conducted according to AASHTO T89 and AASHTO T90 and additional applicable methods: FM 1-T87, AASHTO M 146
- LBR tests conducted according to FM 5-515 and additional applicable methods: Modification of AASHTO T-180 Method D, AASHTO M-92
- Corrosion testing for alternate culvert materials including pH (FM 5-550), resistivity (FM 5-551), chloride content (FM 5-552) and sulfate content (FM 5-553), and/or according to FDOT directives
- Consolidation tests according to AASHTO T216 with an unload/reload cycle near the preconsolidation pressure
- Triaxial compression tests according to AASHTO T297
- Moisture content according to AASHTO T265
- Conduct hydrometer analysis according to AASHTO T88
- Organic content according to FM 1-T 267 and additional applicable methods: AASHTO T194, AASHTO M-231, AASHTO T87
- Specific Gravity according to AASHTO T100 and additional applicable methods: AASHTO T88, ASTM D-854, AASHTO 132
- Torvane sensitivity and/or pocket pentrometer tests as directed by the Project Manager/Engineer
- Quantitative determination of asphalt content from asphalt paving mixtures by the ignition method according to FM 5-563.
- Mechanical analysis of extracted aggregate according to FM 1-T 30 and additional applicable methods: AASHTO M-231, AASHTO T27

(FM – Florida Methods available from the Tallahassee Maps and Publications Department.)

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 (Not applicable to these projects)

35.19 Monitor Existing Structures (Not applicable to these projects)

35.20 Stormwater Volume Recovery and/or Background Seepage Analysis

Perform stormwater volume recovery analysis as directed by the DEPARTMENT.

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

Pavement Evaluation Report: Pavement coring, testing, and a pavement condition evaluation shall be performed by the CONSULTANT. The evaluation and report submittal shall be in accordance with Section 3.2 of the Materials Manual: Flexible Pavement Coring and Evaluation. The CONSULTANT will be responsible for recommendations regarding milling and recycling.

The condition of the pavement at each core location shall be observed and recorded on the Pavement Evaluation Coring and Condition Data Sheet (Form #675-030-09), and input into the Pavement Coring Reporting (PCR) system.

The CONSULTANT shall provide the District Materials Office the opportunity to review the Pavement Coring. A Coring plan shall be submitted to the District Bituminous Engineer, for concurrence, prior to commencing with any coring. The Pavement Design shall be submitted for concurrence, prior to the first phase submittal.

When the project includes adding paved shoulders, the shoulder subgrade shall be evaluated to assist the pavement designer in determining the need for subgrade stabilization or alternate pavement designs. Classification and LBR testing of subgrade soils may be necessary. Refer to the Flexible Pavement Design Manual, Chapter 8. Coordinate the extent of sampling and testing needed with the Pavement Designer and the District Geotechnical Project Manager.

35.23 Preliminary Roadway Report

If a preliminary roadway investigation is performed, submit a preliminary roadway report before the Phase 1 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, including water tables plotted to elevation) 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, seasonal high and/or low water tables, and other pertinent calculations.
- Electronic input files for plotting the boring data on the roadway and pond plan and cross section sheets.
The CONSULTANT will respond in writing to any changes and/or comments from the DEPARTMENT 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, including water tables plotted to elevation) 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, seasonal high and/or low water tables, and other pertinent calculations.
- Electronic input files for plotting the boring data on the plan and cross section sheets.

Final reports will incorporate comments from the DEPARTMENT and contain any additional field or laboratory test results, design parameters and special provisions for the contract plans. These reports will be submitted to the District Geotechnical Engineer for review prior to project completion. After review by the District Geotechnical Engineer, the reports will be submitted to the District Geotechnical Engineer in final form and will include the following:

- All original plan sheets (11” x 17”)
- One set of all plan and specification documents, in electronic format, according to DEPARTMENT requirements
- Two sets of record prints
- Six sets of any special provisions
- All reference and support documentation used in preparation of contract plans package

Additional final reports (up to four), aside from stated above, may be needed and requested for the DEPARTMENT’s Project Manager and other disciplines.

The final reports, special provisions, as well as record prints, will be signed and sealed by a Professional Engineer licensed in the State of Florida.

Draft the detailed boring/sounding standard sheet, including environmental classification, results of laboratory testing, and specialized construction requirements, for inclusion in final plans.
35.25 Auger 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.

35.26 SPT Boring Drafting

Draft SPT borings as directed by the DEPARTMENT.

Structures and tasks 35.27 – 35.48 are not applicable to this project.

35.49 Other Geotechnical (Not applicable to these projects)

35.50 Technical Special Provisions and Modified 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 3D MODELING and tasks 36.1 – 36.9 are not applicable to this project.

37 PROJECT REQUIREMENTS

37.1 Liaison Office

The DEPARTMENT 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 DEPARTMENT Project Manager.
37.2 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 DEPARTMENT.

37.3 Progress Reporting

The CONSULTANT shall meet with the DEPARTMENT 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 DEPARTMENT 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.

37.4 Correspondence

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

37.5 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 Modified Special Provisions, and plans as required by DEPARTMENT standards.

37.6 Computer Automation

The project will be developed utilizing Computer Aided Drafting and Design (CADD) systems. The DEPARTMENT 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. The Engineer of Record must certify that the electronic plans and documents for the project meet the requirements of the DEPARTMENT’s CADD Manual.

37.7 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.
37.8 Optional Services

At this time, there have been NO “optional” or “supplemental” services identified to be negotiated.

At the DEPARTMENT’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.

38 INVOICING LIMITS

Payment for the work accomplished shall be in accordance with Method of Compensation of this contract. Invoices shall be submitted to the DEPARTMENT through the DEPARTMENT’s Consultant Invoice Transmittal System (CITS) or in a format prescribed by the DEPARTMENT. The DEPARTMENT 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 DEPARTMENT.

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 DEPARTMENT.
Bay County
Resurfacing, Rehabilitation, Restoration (RRR) Project

SR 30A (US 98 / Panama City Beach Parkway)
From Walton County Line to Heather Drive

FPID: 437759-1
Section No's.: 46010000, 46160000, & 46010001

PROJECT LOCATION MAP
FDOT Long Range Estimating System - Production  
R3: Project Details by Sequence Report

Project: 437759-1-52-01  
Letting Date: 10/2020

Description: SR 30A (US 98) FROM CR 30 FRONT BEACH RD TO HEATHER DR

District: 03  
County: 46 BAY  
Market Area: 01  
Units: English

Contract Class: 1  
Lump Sum Project: N  
Design/Build: N  
Project Length: 5.406 MI

Project Manager: SAM WEEDE

Version 5-P Project Grand Total $17,125,991.84

Description: SR 30A (US 98) FROM WALTON CO LINE TO HEATHER DR.; Copy Vers3, added extension to Co Line, changed sidewalk constructions sequences to show new 6’ sidewalk each side. 2018 6MU

Sequence: 1 RSD - Resurfacing, Divided  
Net Length: 1.131 MI

Description: Sec 46010000, CMP0.000-0.451, CMP0.836-1.106, Sec 46010001, CMP0.000-0.410, Rural, M/R 4-12’ lanes, 4’ outside paved shoulders, 2’ inside shoulders, plus all incidentals WITHIN THESE LIMITS

Special Conditions: Excepting Phillips Inlet Bridges 460078/460072

---

**EARTHWORK COMPONENT**

User Input Data
Description Value
Standard Clearing and Grubbing Limits L/R 5.34 / 5.34
Incidental Clearing and Grubbing Area 0.00

Pay Items
<table>
<thead>
<tr>
<th>Pay item</th>
<th>Description</th>
<th>Quantity</th>
<th>Unit</th>
<th>Unit Price</th>
<th>Extended Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>110-1-1</td>
<td>CLEARING &amp; GRUBBING</td>
<td>1.46 AC</td>
<td>$25,000.00</td>
<td>$36,500.00</td>
<td></td>
</tr>
</tbody>
</table>

Earthwork Component Total
$36,500.00

---

**ROADWAY COMPONENT**

User Input Data
Description Value
Number of Lanes 4
Roadway Pavement Width L/R 24.00 / 24.00
Structural Spread Rate 275
Friction Course Spread Rate 80

Pay Items
<table>
<thead>
<tr>
<th>Pay item</th>
<th>Description</th>
<th>Quantity</th>
<th>Unit</th>
<th>Unit Price</th>
<th>Extended Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>327-70-8</td>
<td>MILLING EXIST ASPH PAVT, 2 1/2&quot; AVG DEPTH</td>
<td>31,848.96 SY</td>
<td>$2.50</td>
<td>$79,622.40</td>
<td></td>
</tr>
<tr>
<td>334-1-53</td>
<td>SUPERPAVE ASPH CONC, TRAF C, PG76-22</td>
<td>4,379.23 TN</td>
<td>$110.00</td>
<td>$481,715.30</td>
<td></td>
</tr>
<tr>
<td>337-7-25</td>
<td>ASPH CONC FC, INC BIT, FC-5, PG76-22</td>
<td>1,273.96 TN</td>
<td>$135.00</td>
<td>$171,984.60</td>
<td></td>
</tr>
</tbody>
</table>

https://fdotwp1.dot.state.fl.us/LongRangeEstimating/estimates/LREAESR04R3E.asp  
5/23/2018
### X-Items

<table>
<thead>
<tr>
<th>Pay item</th>
<th>Description</th>
<th>Quantity</th>
<th>Unit</th>
<th>Unit Price</th>
<th>Extended Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>334-1-53</td>
<td>SUPERPAVE ASPH CONC, TRAF C, PG76-22</td>
<td>163.00</td>
<td>TN</td>
<td>$110.00</td>
<td>$17,930.00</td>
</tr>
<tr>
<td></td>
<td><strong>Comment:</strong> for overbuild/cross slope correction</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>706-3</td>
<td>RETRO-REFLECTIVE PAVEMENT MARKERS</td>
<td>598.00</td>
<td>EA</td>
<td>$4.00</td>
<td>$2,392.00</td>
</tr>
<tr>
<td>710-11-103</td>
<td>PAINTED PAVT MARK, STD, WHITE, SOLID, 12&quot;</td>
<td>0.36</td>
<td>GM</td>
<td>$1,684.99</td>
<td>$606.60</td>
</tr>
<tr>
<td>710-11-124</td>
<td>PAINTED PAVT MARK, STD, WHITE, SOLID, 18&quot;</td>
<td>56.00</td>
<td>LF</td>
<td>$1.25</td>
<td>$70.00</td>
</tr>
<tr>
<td>710-11-125</td>
<td>PAINTED PAVT MARK, STD, WHITE, SOLID, 24&quot;</td>
<td>569.00</td>
<td>LF</td>
<td>$2.19</td>
<td>$1,246.11</td>
</tr>
<tr>
<td>710-11-160</td>
<td>PAINTED PAVT MARK, STD, WHITE, MESSAGE</td>
<td>21.00</td>
<td>EA</td>
<td>$53.34</td>
<td>$1,120.14</td>
</tr>
<tr>
<td>710-11-170</td>
<td>PAINTED PAVT MARK, STD, WHITE, ARROWS</td>
<td>42.00</td>
<td>EA</td>
<td>$39.65</td>
<td>$1,665.30</td>
</tr>
<tr>
<td>710-90</td>
<td>PAINTED PAVEMENT MARKINGS, FINAL SURFACE</td>
<td>1.00</td>
<td>LS</td>
<td>$85,000.00</td>
<td>$85,000.00</td>
</tr>
<tr>
<td>711-11-123</td>
<td>THERMOPLASTIC, STD, WHITE, SOLID, 12&quot;</td>
<td>56.00</td>
<td>LF</td>
<td>$2.70</td>
<td>$151.20</td>
</tr>
<tr>
<td>711-11-124</td>
<td>THERMOPLASTIC, STD, WHITE, SOLID, 18&quot;</td>
<td>48.00</td>
<td>LF</td>
<td>$3.72</td>
<td>$178.56</td>
</tr>
<tr>
<td>711-11-160</td>
<td>THERMOPLASTIC, STD, WHITE, MESSAGE</td>
<td>21.00</td>
<td>EA</td>
<td>$157.43</td>
<td>$3,306.03</td>
</tr>
<tr>
<td>711-11-170</td>
<td>THERMOPLASTIC, STD, WHITE, ARROW</td>
<td>42.00</td>
<td>EA</td>
<td>$82.85</td>
<td>$3,479.70</td>
</tr>
</tbody>
</table>

#### Turnouts/Crossovers Subcomponent

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asphalt Adjustment</td>
<td>8.00</td>
</tr>
<tr>
<td>Milling Code</td>
<td>Y</td>
</tr>
<tr>
<td>Friction Course Code</td>
<td>Y</td>
</tr>
</tbody>
</table>

### Pay Items

<table>
<thead>
<tr>
<th>Pay item</th>
<th>Description</th>
<th>Quantity</th>
<th>Unit</th>
<th>Unit Price</th>
<th>Extended Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>327-70-8</td>
<td>MILLING EXIST ASPH PAVT, 2 1/2&quot; AVG DEPTH</td>
<td>2,547.92</td>
<td>SY</td>
<td>$2.50</td>
<td>$6,369.80</td>
</tr>
<tr>
<td>334-1-53</td>
<td>SUPERPAVE ASPH CONC, TRAF C, PG76-22</td>
<td>350.34</td>
<td>TN</td>
<td>$110.00</td>
<td>$38,537.40</td>
</tr>
<tr>
<td>337-7-25</td>
<td>ASPH CONC FC, INC, BIT, FC-5, PG76-22</td>
<td>101.92</td>
<td>TN</td>
<td>$135.00</td>
<td>$13,759.20</td>
</tr>
</tbody>
</table>

#### Pavement Marking Subcomponent

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Include Thermo/Tape/Other</td>
<td>Y</td>
</tr>
<tr>
<td>Pavement Type</td>
<td>Asphalt</td>
</tr>
<tr>
<td>Solid Stripe No. of Paint Applications</td>
<td>1</td>
</tr>
<tr>
<td>Solid Stripe No. of Stripes</td>
<td>4</td>
</tr>
<tr>
<td>Skip Stripe No. of Paint Applications</td>
<td>1</td>
</tr>
<tr>
<td>Skip Stripe No. of Stripes</td>
<td>2</td>
</tr>
</tbody>
</table>

### Pay Items

<table>
<thead>
<tr>
<th>Pay item</th>
<th>Description</th>
<th>Quantity</th>
<th>Unit</th>
<th>Unit Price</th>
<th>Extended Amount</th>
</tr>
</thead>
</table>
### Pay Items

<table>
<thead>
<tr>
<th>Pay Item</th>
<th>Description</th>
<th>Quantity</th>
<th>Unit</th>
<th>Unit Price</th>
<th>Extended Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>706-3</td>
<td>RETRO-REFLECTIVE PAVEMENT MARKERS</td>
<td>458.00 EA</td>
<td>EA</td>
<td>$4.00</td>
<td>$1,832.00</td>
</tr>
<tr>
<td>710-11-101</td>
<td>PAINTED PAVT, STD, WHITE, SOLID, 6&quot;</td>
<td>4.52 GM</td>
<td>GM</td>
<td>$1,073.16</td>
<td>$4,850.68</td>
</tr>
<tr>
<td>710-11-131</td>
<td>PAINTED PAVT, STD, WHITE, SKIP, 6&quot;</td>
<td>2.26 GM</td>
<td>GM</td>
<td>$666.24</td>
<td>$1,505.70</td>
</tr>
<tr>
<td>711-15-101</td>
<td>THERMOPLASTIC, STD-OP, WHITE, SOLID, 6&quot;</td>
<td>4.52 GM</td>
<td>GM</td>
<td>$4,968.52</td>
<td>$22,457.71</td>
</tr>
<tr>
<td>711-15-131</td>
<td>THERMOPLASTIC, STD-OP, WHITE, SKIP, 6&quot;</td>
<td>2.26 GM</td>
<td>GM</td>
<td>$2,453.07</td>
<td>$5,543.94</td>
</tr>
</tbody>
</table>

### Peripherals Subcomponent

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Off Road Bike Path(s)</td>
<td>0</td>
</tr>
<tr>
<td>Off Road Bike Path Width L/R</td>
<td>0.00 / 0.00</td>
</tr>
<tr>
<td>Bike Path Structural Spread Rate</td>
<td>0</td>
</tr>
<tr>
<td>Noise Barrier Wall Length</td>
<td>0.00</td>
</tr>
<tr>
<td>Noise Barrier Wall Begin Height</td>
<td>0.00</td>
</tr>
<tr>
<td>Noise Barrier Wall End Height</td>
<td>0.00</td>
</tr>
</tbody>
</table>

### Pay Items

<table>
<thead>
<tr>
<th>Pay Item</th>
<th>Description</th>
<th>Quantity</th>
<th>Unit</th>
<th>Unit Price</th>
<th>Extended Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>339-1</td>
<td>MISCELLANEOUS ASPHALT PAVEMENT</td>
<td>25.40 TN</td>
<td>TN</td>
<td>$225.00</td>
<td>$5,715.00</td>
</tr>
<tr>
<td>536-1-0</td>
<td>GUARDRAIL- ROADWAY, GEN/LS TL-2</td>
<td>722.00 LF</td>
<td>LF</td>
<td>$22.00</td>
<td>$15,884.00</td>
</tr>
<tr>
<td>536-8-12</td>
<td>APPROACH TRANS CONN TO RIGID BA, F&amp;I, 2</td>
<td>4.00 EA</td>
<td>EA</td>
<td>$2,350.00</td>
<td>$9,400.00</td>
</tr>
<tr>
<td>536-85-22</td>
<td>GUARDRAIL END TREA- FLARED APP TERM</td>
<td>4.00 EA</td>
<td>EA</td>
<td>$2,524.96</td>
<td>$10,099.84</td>
</tr>
</tbody>
</table>

**Roadway Component Total**

$986,423.21

### SHOULDER COMPONENT

### User Input Data

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Outside Shoulder Width L/R</td>
<td>12.00 / 12.00</td>
</tr>
<tr>
<td>Total Outside Shoulder Perf. Turf Width L/R</td>
<td>2.67 / 2.67</td>
</tr>
<tr>
<td>Paved Outside Shoulder Width L/R</td>
<td>4.00 / 4.00</td>
</tr>
<tr>
<td>Structural Spread Rate</td>
<td>110</td>
</tr>
<tr>
<td>Friction Course Spread Rate</td>
<td>80</td>
</tr>
<tr>
<td>Total Width (T) / 1/8&quot; Overlap (O)</td>
<td>T</td>
</tr>
<tr>
<td>Rumble Strips No. of Sides</td>
<td>0</td>
</tr>
</tbody>
</table>

### Pay Items

<table>
<thead>
<tr>
<th>Pay Item</th>
<th>Description</th>
<th>Quantity</th>
<th>Unit</th>
<th>Unit Price</th>
<th>Extended Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>327-70-1</td>
<td>MILLING EXIST ASPH PAVT, 1&quot; AVG DEPTH</td>
<td>5,308.16 SY</td>
<td>SY</td>
<td>$2.60</td>
<td>$13,801.22</td>
</tr>
<tr>
<td>334-1-53</td>
<td>SUPERPAVE ASPH CONC, TRAF C, PG76-22</td>
<td>291.95 TN</td>
<td>TN</td>
<td>$110.00</td>
<td>$32,114.50</td>
</tr>
<tr>
<td>337-7-25</td>
<td>ASPH CONC FC, INC BIT.FC-5,PG76-22</td>
<td>212.33 TN</td>
<td>TN</td>
<td>$135.00</td>
<td>$28,664.55</td>
</tr>
<tr>
<td>570-1-2</td>
<td>PERFORMANCE TURF, SOD</td>
<td>3,543.20 SY</td>
<td>SY</td>
<td>$3.02</td>
<td>$10,700.46</td>
</tr>
</tbody>
</table>

### Erosion Control
### X-Items

<table>
<thead>
<tr>
<th>Pay item</th>
<th>Description</th>
<th>Quantity</th>
<th>Unit</th>
<th>Unit Price</th>
<th>Extended Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>104-10-3</td>
<td>SEDIMENT BARRIER</td>
<td>8,000.00</td>
<td>LF</td>
<td>$2.33</td>
<td>$18,640.00</td>
</tr>
<tr>
<td>104-11</td>
<td>FLOATING TURBIDITY BARRIER</td>
<td>400.00</td>
<td>LF</td>
<td>$12.64</td>
<td>$5,056.00</td>
</tr>
<tr>
<td>104-18</td>
<td>INLET PROTECTION SYSTEM</td>
<td>8.00</td>
<td>EA</td>
<td>$139.46</td>
<td>$1,115.68</td>
</tr>
<tr>
<td>107-1</td>
<td>LITTER REMOVAL</td>
<td>60.00</td>
<td>AC</td>
<td>$45.00</td>
<td>$2,700.00</td>
</tr>
<tr>
<td>107-2</td>
<td>MOWING</td>
<td>60.00</td>
<td>AC</td>
<td>$65.00</td>
<td>$3,900.00</td>
</tr>
</tbody>
</table>

**Shoulder Component Total**

$116,692.41

### MEDIAN COMPONENT

**User Input Data**

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Median Width</td>
<td>42.00</td>
</tr>
<tr>
<td>Performance Turf Width</td>
<td>5.34</td>
</tr>
<tr>
<td>Total Median Shoulder Width L/R</td>
<td>8.00 / 8.00</td>
</tr>
<tr>
<td>Paved Median Shoulder Width L/R</td>
<td>2.00 / 2.00</td>
</tr>
<tr>
<td>Structural Spread Rate</td>
<td>110</td>
</tr>
<tr>
<td>Friction Course Spread Rate</td>
<td>80</td>
</tr>
<tr>
<td>Total Width (T) / 8&quot; Overlap (O)</td>
<td>T</td>
</tr>
<tr>
<td>Rumble Strips</td>
<td>0</td>
</tr>
</tbody>
</table>

### Pay Items

<table>
<thead>
<tr>
<th>Pay item</th>
<th>Description</th>
<th>Quantity</th>
<th>Unit</th>
<th>Unit Price</th>
<th>Extended Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>327-70-1</td>
<td>MILLING EXIST ASPH PAVT, 1&quot; AVG DEPTH</td>
<td>2,654.08 SY</td>
<td>$2.60</td>
<td>$6,900.61</td>
<td></td>
</tr>
<tr>
<td>334-1-53</td>
<td>SUPERPAVE ASPH CONC, TRAF C, PG76-22</td>
<td>145.97 TN</td>
<td>$110.00</td>
<td>$16,056.70</td>
<td></td>
</tr>
<tr>
<td>337-7-25</td>
<td>ASPH CONC FC,INC BIT,FC-5,PG76-22</td>
<td>106.16 TN</td>
<td>$135.00</td>
<td>$14,331.60</td>
<td></td>
</tr>
<tr>
<td>570-1-2</td>
<td>PERFORMANCE TURF, SOD</td>
<td>3,543.20 SY</td>
<td>$3.02</td>
<td>$10,700.46</td>
<td></td>
</tr>
</tbody>
</table>

**Median Component Total**

$47,989.37

### SIGNING COMPONENT

<table>
<thead>
<tr>
<th>Pay item</th>
<th>Description</th>
<th>Quantity</th>
<th>Unit</th>
<th>Unit Price</th>
<th>Extended Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>700-1-11</td>
<td>SINGLE POST SIGN, F&amp;I GM, &lt;12 SF</td>
<td>8.00 AS</td>
<td>$325.41</td>
<td>$2,603.28</td>
<td></td>
</tr>
<tr>
<td>700-1-12</td>
<td>SINGLE POST SIGN, F&amp;I GM, 12-20 SF</td>
<td>2.00 AS</td>
<td>$1,038.68</td>
<td>$2,077.36</td>
<td></td>
</tr>
<tr>
<td>700-1-50</td>
<td>SINGLE POST SIGN, RELOCATE</td>
<td>10.00 AS</td>
<td>$58.59</td>
<td>$585.90</td>
<td></td>
</tr>
<tr>
<td>700-1-60</td>
<td>SINGLE POST SIGN, REMOVE</td>
<td>1.00 AS</td>
<td>$24.46</td>
<td>$24.46</td>
<td></td>
</tr>
<tr>
<td>700-2-60</td>
<td>MULTI- POST SIGN, REMOVE</td>
<td>3.00 AS</td>
<td>$356.97</td>
<td>$1,070.91</td>
<td></td>
</tr>
</tbody>
</table>

**Signing Component Total**

$6,361.91

**Sequence 1 Total**

$1,193,966.90
**Sequence:** 2 RSU - Resurfacing, Undivided  
**Net Length:** 0.245 MI  
1,292 LF

**Description:** M/R 12’ RT Lanes w/4’ bicycle keyholes (within limits from Walton Co to CR 30)  
**Special Conditions:** plus items/quantities for widening EBRT at CR30 for bicycle keyhole

### EARTHWORK COMPONENT

**User Input Data**

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard Clearing and Grubbing Limits L/R</td>
<td>0.00 / 0.00</td>
</tr>
<tr>
<td>Incidental Clearing and Grubbing Area</td>
<td>1.00</td>
</tr>
</tbody>
</table>

**Pay Items**

<table>
<thead>
<tr>
<th>Pay item</th>
<th>Description</th>
<th>Quantity Unit</th>
<th>Unit Price</th>
<th>Extended Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>110-1-1</td>
<td>CLEARING &amp; GRUBBING</td>
<td>1.00 AC</td>
<td>$25,000.00</td>
<td>$25,000.00</td>
</tr>
</tbody>
</table>

**Earthwork Component Total**

$25,000.00

### ROADWAY COMPONENT

**User Input Data**

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Lanes</td>
<td>2</td>
</tr>
<tr>
<td>Roadway Pavement Width L/R</td>
<td>4.00 / 12.00</td>
</tr>
<tr>
<td>Structural Spread Rate</td>
<td>275</td>
</tr>
<tr>
<td>Friction Course Spread Rate</td>
<td>80</td>
</tr>
</tbody>
</table>

**Pay Items**

<table>
<thead>
<tr>
<th>Pay item</th>
<th>Description</th>
<th>Quantity Unit</th>
<th>Unit Price</th>
<th>Extended Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>327-70-8</td>
<td>MILLING EXIST ASPH PAVT,2 1/2” AVG DEPTH</td>
<td>2,296.92 SY</td>
<td>$2.50</td>
<td>$5,742.30</td>
</tr>
<tr>
<td>334-1-53</td>
<td>SUPERPAVE ASPH CONC, TRAF C, PG76-22</td>
<td>315.83 TN</td>
<td>$110.00</td>
<td>$34,741.30</td>
</tr>
<tr>
<td>337-7-25</td>
<td>ASPH CONC FC,INC BIT,FC-5,PG76-22</td>
<td>91.88 TN</td>
<td>$135.00</td>
<td>$12,403.80</td>
</tr>
</tbody>
</table>

**X-Items**

<table>
<thead>
<tr>
<th>Pay item</th>
<th>Description</th>
<th>Quantity Unit</th>
<th>Unit Price</th>
<th>Extended Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>160-4</td>
<td>TYPE B STABILIZATION</td>
<td>330.00 SY</td>
<td>$8.00</td>
<td>$2,640.00</td>
</tr>
<tr>
<td>285-706</td>
<td>OPTIONAL BASE,BASE GROUP 06</td>
<td>330.00 SY</td>
<td>$30.00</td>
<td>$9,900.00</td>
</tr>
<tr>
<td>334-1-53</td>
<td>SUPERPAVE ASPH CONC, TRAF C, PG76-22</td>
<td>46.00 TN</td>
<td>$110.00</td>
<td>$5,060.00</td>
</tr>
<tr>
<td>337-7-25</td>
<td>ASPH CONC FC,INC BIT,FC-5,PG76-22</td>
<td>24.00 TN</td>
<td>$135.00</td>
<td>$3,240.00</td>
</tr>
<tr>
<td>570-1-2</td>
<td>PERFORMANCE TURF, SOD</td>
<td>660.00 SY</td>
<td>$3.02</td>
<td>$1,993.20</td>
</tr>
</tbody>
</table>

**Pavement Marking Subcomponent**

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Include Thermo/Tape/Other</td>
<td>Y</td>
</tr>
<tr>
<td>Pavement Type</td>
<td>Asphalt</td>
</tr>
<tr>
<td>Solid Stripe No. of Paint Applications</td>
<td>1</td>
</tr>
<tr>
<td>Solid Stripe No. of Stripes</td>
<td>2</td>
</tr>
<tr>
<td>Pay Items</td>
<td>Description</td>
</tr>
<tr>
<td>-----------</td>
<td>--------------------------------------------------</td>
</tr>
<tr>
<td>706-3</td>
<td>RETRO-REFLECTIVE PAVEMENT MARKERS</td>
</tr>
<tr>
<td>710-11-101</td>
<td>PAINTED PAVT MARK, STD, WHITE, SOLID, 6”</td>
</tr>
<tr>
<td>710-11-231</td>
<td>PAINTED PAVT MARK, STD, YELLOW, SKIP, 6”</td>
</tr>
<tr>
<td>711-16-101</td>
<td>THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6”</td>
</tr>
<tr>
<td>711-16-231</td>
<td>THERMOPLASTIC, STD-OTH, YELLOW, SKIP, 6”</td>
</tr>
<tr>
<td></td>
<td>Roadway Component Total</td>
</tr>
<tr>
<td></td>
<td>Sequence 2 Total</td>
</tr>
</tbody>
</table>
**Sequence:** 3 RSU - Resurfacing, Undivided  

**Net Length:** 0.352 MI  
1,858 LF

**Description:** M/R 12' Left Turn Lanes (within limits from Walton Co to CR 30)

### ROADWAY COMPONENT

#### User Input Data

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Lanes</td>
<td>1</td>
</tr>
<tr>
<td>Roadway Pavement Width L/R</td>
<td>0.00 / 12.00</td>
</tr>
<tr>
<td>Structural Spread Rate</td>
<td>275</td>
</tr>
<tr>
<td>Friction Course Spread Rate</td>
<td>80</td>
</tr>
</tbody>
</table>

#### Pay Items

<table>
<thead>
<tr>
<th>Pay item</th>
<th>Description</th>
<th>Quantity Unit</th>
<th>Unit Price</th>
<th>Extended Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>327-70-8</td>
<td>MILLING EXIST ASPH PAVT,2 1/2&quot; AVG DEPTH</td>
<td>2,477.38 SY</td>
<td>$2.50</td>
<td>$6,193.45</td>
</tr>
<tr>
<td>334-1-53</td>
<td>SUPERPAVE ASPH CONC, TRAFFIC, PG76-22</td>
<td>340.64 TN</td>
<td>$110.00</td>
<td>$37,470.40</td>
</tr>
<tr>
<td>337-7-25</td>
<td>ASPH CONC FC,INC BIT, FC-5, PG76-22</td>
<td>99.10 TN</td>
<td>$135.00</td>
<td>$13,378.50</td>
</tr>
</tbody>
</table>

#### Pavement Marking Subcomponent

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Include Thermo/Tape/Other</td>
<td>Y</td>
</tr>
<tr>
<td>Pavement Type</td>
<td>Asphalt</td>
</tr>
<tr>
<td>Solid Stripe No. of Paint Applications</td>
<td>1</td>
</tr>
<tr>
<td>Solid Stripe No. of Stripes</td>
<td>2</td>
</tr>
<tr>
<td>Skip Stripe No. of Paint Applications</td>
<td>1</td>
</tr>
<tr>
<td>Skip Stripe No. of Stripes</td>
<td>0</td>
</tr>
</tbody>
</table>

#### Pay Items

<table>
<thead>
<tr>
<th>Pay item</th>
<th>Description</th>
<th>Quantity Unit</th>
<th>Unit Price</th>
<th>Extended Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>710-11-101</td>
<td>PAINTED PAVT MARK, STD, WHITE, SOLID, 6&quot;</td>
<td>0.70 GM</td>
<td>$1,073.16</td>
<td>$751.21</td>
</tr>
<tr>
<td>711-16-101</td>
<td>THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6&quot;</td>
<td>0.70 GM</td>
<td>$4,567.21</td>
<td>$3,197.05</td>
</tr>
</tbody>
</table>

**Roadway Component Total**  

$60,990.61

**Sequence 3 Total**  

$60,990.61
Sequence: 4 MIS - Miscellaneous Construction  

**Description:** Const 6’ sidewalk both sides (within limits from Walton Co to CR 30)

### EARTHWORK COMPONENT

**User Input Data**

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard Clearing and Grubbing Limits L/R</td>
<td>0.00 / 0.00</td>
</tr>
<tr>
<td>Incidental Clearing and Grubbing Area</td>
<td>0.00</td>
</tr>
</tbody>
</table>

**X-Items**

<table>
<thead>
<tr>
<th>Pay item</th>
<th>Description</th>
<th>Quantity Unit</th>
<th>Unit Price</th>
<th>Extended Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>120-1</td>
<td>REGULAR EXCAVATION</td>
<td>2,642.20 CY</td>
<td>$15.00</td>
<td>$39,633.00</td>
</tr>
<tr>
<td>120-2-2</td>
<td>BORROW EXCAVATION, TRUCK MEASURE</td>
<td>708.00 CY</td>
<td>$20.00</td>
<td>$14,160.00</td>
</tr>
</tbody>
</table>

**Earthwork Component Total**  
$53,793.00

### SHOULDER COMPONENT

**User Input Data**

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
</table>

**X-Items**

<table>
<thead>
<tr>
<th>Pay item</th>
<th>Description</th>
<th>Quantity Unit</th>
<th>Unit Price</th>
<th>Extended Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>515-1-2</td>
<td>PIPE HANDRAIL - GUIDERAIL, ALUMINUM</td>
<td>175.00 LF</td>
<td>$55.00</td>
<td>$9,625.00</td>
</tr>
<tr>
<td>522-1</td>
<td>CONCRETE SIDEWALK AND DRIVEWAYS, 4&quot;</td>
<td>5,764.80 SY</td>
<td>$55.00</td>
<td>$317,064.00</td>
</tr>
<tr>
<td>522-2</td>
<td>CONCRETE SIDEWALK AND DRIVEWAYS, 6&quot;</td>
<td>900.00 SY</td>
<td>$65.00</td>
<td>$58,500.00</td>
</tr>
<tr>
<td>570-1-2</td>
<td>PERFORMANCE TURF, SOD</td>
<td>6,200.00 SY</td>
<td>$3.02</td>
<td>$18,724.00</td>
</tr>
</tbody>
</table>

**Shoulder Component Total**  
$403,913.00

**Sequence 4 Total**  
$457,706.00
Sequence: 5 RSD - Resurfacing, Divided

Net Length: 5.406 MI
28,544 LF

Description: Sec 46010001, CMP0.410-0.440, Sec 46160000, CMP0.303-5.679, Rural, M/R 4-12’ lanes, 4’ outside paved shoulders, 2’ inside shoulders, plus all incidentals

Special Conditions: -includes overbuild for cross-slope correction, lighting at CR30 intersection, minimal ADA upgrades to existing features. -the extra asphalt for the transition to the 6-lane section at the end is accounted for in the turnouts/crossovers subcomponent or in the auxiliary lane sequences.

EARTHWORK COMPONENT

User Input Data
Description Value
Standard Clearing and Grubbing Limits L/R 5.34 / 5.34
Incidental Clearing and Grubbing Area 0.00

Pay Items
Pay item Description Quantity Unit Unit Price Extended Amount
110-1-1 CLEARING & GRUBBING 7.00 AC $25,000.00 $175,000.00

Earthwork Component Total $175,000.00

ROADWAY COMPONENT

User Input Data
Description Value
Number of Lanes 4
Roadway Pavement Width L/R 24.00 / 24.00
Structural Spread Rate 275
Friction Course Spread Rate 80

Pay Items
Pay item Description Quantity Unit Unit Price Extended Amount
327-70-8 MILLING EXIST ASPH PAVT, 2 1/2” AVG DEPTH 152,232.96 SY $2.50 $380,582.40
334-1-53 SUPERPAVE ASPH CONC, TRAF C, PG76-22 20,932.03 TN $110.00 $2,302,523.30
337-7-25 ASPH CONC FC, INC BIT, FC-5, PG76-22 6,089.32 TN $135.00 $822,058.20

X-Items
Pay item Description Quantity Unit Unit Price Extended Amount
120-2-2 BORROW EXCAVATION, TRUCK MEASURE 3,850.00 CY $20.00 $77,000.00
Comment: ditch reconstruction in areas of poor drainage/ to increase capacity
334-1-53 SUPERPAVE ASPH CONC, TRAF C, PG76-22 921.00 TN $110.00 $101,310.00
Comment: for overbuild/cross slope correction
570-1-2 PERFORMANCE TURF, SOD 5,100.00 SY $3.02 $15,402.00
706-3 RETRO-REFLECTIVE PAVEMENT MARKERS 1,056.00 EA $4.00 $4,224.00
710-11-103 PAINTED PAVT MARK, STD, WHITE, SOLID, 12” 1.74 GM $1,684.99 $2,931.88
710-11-124 PAINTED PAVT MARK, STD, WHITE, SOLID, 18” 270.00 LF $1.25 $337.50
710-11-125 PAINTED PAVT MARK, STD, WHITE, SOLID, 24” 2,721.00 LF $2.19 $5,958.99
<table>
<thead>
<tr>
<th>Pay Item</th>
<th>Description</th>
<th>Quantity</th>
<th>Unit</th>
<th>Unit Price</th>
<th>Extended Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>327-70-8</td>
<td>MILLING EXIST ASPH PAVT, 2 1/2&quot; AVG DEPTH</td>
<td>35,013.58</td>
<td>SY</td>
<td>$2.50</td>
<td>$87,533.95</td>
</tr>
<tr>
<td>334-1-53</td>
<td>SUPERPAVE ASPH CONC, TRAF C, PG76-22</td>
<td>4,814.37</td>
<td>TN</td>
<td>$110.00</td>
<td>$529,580.70</td>
</tr>
<tr>
<td>337-7-25</td>
<td>ASPH CONC FC, INC BIT, FC-5, PG76-22</td>
<td>1,400.54</td>
<td>TN</td>
<td>$135.00</td>
<td>$189,072.90</td>
</tr>
</tbody>
</table>

### Turnouts/Crossovers Subcomponent

**Description**
- Asphalt Adjustment: 23.00
- Milling Code: Y
- Friction Course Code: Y

### Pay Items

<table>
<thead>
<tr>
<th>Pay Item</th>
<th>Description</th>
<th>Quantity</th>
<th>Unit</th>
<th>Unit Price</th>
<th>Extended Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>710-11-141</td>
<td>PAINTED PAVT MARK, STD, WH, DOT GUIDE, 6&quot;</td>
<td>0.06</td>
<td>GM</td>
<td>$644.58</td>
<td>$38.67</td>
</tr>
<tr>
<td>710-11-160</td>
<td>PAINTED PAVT MARK, STD, WHITE, MESSAGE</td>
<td>98.00</td>
<td>EA</td>
<td>$53.34</td>
<td>$5,227.32</td>
</tr>
<tr>
<td>710-11-170</td>
<td>PAINTED PAVT MARK, STD, WHITE, ARROWS</td>
<td>355.00</td>
<td>EA</td>
<td>$39.65</td>
<td>$14,075.75</td>
</tr>
<tr>
<td>710-11-201</td>
<td>PAINTED PAVT MARK, STD, YELLOW, SOLID, 6&quot;</td>
<td>4.62</td>
<td>GM</td>
<td>$1,068.16</td>
<td>$4,934.90</td>
</tr>
<tr>
<td>710-90</td>
<td>PAINTED PAVEMENT MARKINGS, FINAL SURFACE</td>
<td>1.00</td>
<td>LS</td>
<td>$85,000.00</td>
<td>$85,000.00</td>
</tr>
<tr>
<td>711-11-123</td>
<td>THERMOPLASTIC, STD, WHITE, SOLID, 12&quot;</td>
<td>9,200.00</td>
<td>LF</td>
<td>$2.70</td>
<td>$24,840.00</td>
</tr>
<tr>
<td>711-11-124</td>
<td>THERMOPLASTIC, STD, WHITE, SOLID, 18&quot;</td>
<td>270.00</td>
<td>LF</td>
<td>$3.72</td>
<td>$1,004.40</td>
</tr>
<tr>
<td>711-11-125</td>
<td>THERMOPLASTIC, STD, WHITE, SOLID, 24&quot;</td>
<td>2,721.00</td>
<td>LF</td>
<td>$4.15</td>
<td>$11,292.15</td>
</tr>
<tr>
<td>711-11-141</td>
<td>THERMOPLASTIC, STD, WHITE, DOT GUIDE, 6&quot;</td>
<td>0.06</td>
<td>GM</td>
<td>$2,440.54</td>
<td>$146.43</td>
</tr>
<tr>
<td>711-11-160</td>
<td>THERMOPLASTIC, STD, WHITE, MESSAGE</td>
<td>98.00</td>
<td>EA</td>
<td>$157.43</td>
<td>$15,428.14</td>
</tr>
<tr>
<td>711-11-170</td>
<td>THERMOPLASTIC, STD, WHITE, ARROW</td>
<td>355.00</td>
<td>EA</td>
<td>$82.85</td>
<td>$29,411.75</td>
</tr>
<tr>
<td>711-15-201</td>
<td>THERMOPLASTIC, STD-OP, YELLOW, SOLID, 6&quot;</td>
<td>4.62</td>
<td>GM</td>
<td>$4,969.91</td>
<td>$22,960.98</td>
</tr>
</tbody>
</table>

### Pavement Marking Subcomponent

**Description**
- Include Thermo/Tape/Other: Y
- Pavement Type: Asphalt
- Solid Stripe No. of Paint Applications: 1
- Solid Stripe No. of Stripes: 4
- Skip Stripe No. of Paint Applications: 1
- Skip Stripe No. of Stripes: 2

### Pay Items

<table>
<thead>
<tr>
<th>Pay Item</th>
<th>Description</th>
<th>Quantity</th>
<th>Unit</th>
<th>Unit Price</th>
<th>Extended Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>706-3</td>
<td>RETRO-REFLECTIVE PAVEMENT MARKERS</td>
<td>2,189.00</td>
<td>EA</td>
<td>$4.00</td>
<td>$8,756.00</td>
</tr>
<tr>
<td>710-11-101</td>
<td>PAINTED PAVT MARK, STD, WHITE, SOLID, 6&quot;</td>
<td>21.62</td>
<td>GM</td>
<td>$1,073.16</td>
<td>$23,201.72</td>
</tr>
<tr>
<td>710-11-131</td>
<td>PAINTED PAVT MARK, STD, WHITE, SOLID, 6&quot;</td>
<td>10.81</td>
<td>GM</td>
<td>$666.24</td>
<td>$7,202.05</td>
</tr>
</tbody>
</table>
PAINTED PAVT
MARK, STD, WHITE, SKIP, 6"

711-15-101 THERMOPLASTIC, STD-OP, WHITE, SOLID, 6" 21.62 GM $4,968.52 $107,419.40

711-15-131 THERMOPLASTIC, STD-OP, WHITE, SKIP, 6" 10.81 GM $2,453.07 $26,517.69

Roadway Component Total $4,905,973.17

SHOULDER COMPONENT

User Input Data

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Outside Shoulder Width L/R</td>
<td>12.00 / 12.00</td>
</tr>
<tr>
<td>Total Outside Shoulder Perf. Turf Width L/R</td>
<td>2.67 / 2.67</td>
</tr>
<tr>
<td>Paved Outside Shoulder Width L/R</td>
<td>4.00 / 4.00</td>
</tr>
<tr>
<td>Structural Spread Rate</td>
<td>110</td>
</tr>
<tr>
<td>Friction Course Spread Rate</td>
<td>80</td>
</tr>
<tr>
<td>Total Width (T) / 8&quot; Overlap (O)</td>
<td>T</td>
</tr>
<tr>
<td>Rumble Strips (\frac{1}{2}) No. of Sides</td>
<td>0</td>
</tr>
</tbody>
</table>

Pay Items

<table>
<thead>
<tr>
<th>Pay item</th>
<th>Description</th>
<th>Quantity</th>
<th>Unit</th>
<th>Unit Price</th>
<th>Extended Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>327-70-1</td>
<td>MILLING EXIST ASPH PAVT, 1&quot; AVG DEPTH</td>
<td>25,372.16 SY</td>
<td>$2.60</td>
<td>$65,967.62</td>
<td></td>
</tr>
<tr>
<td>334-1-53</td>
<td>SUPERPAVE ASPH CONC, TRAF C, PG76-22</td>
<td>1,395.47 TN</td>
<td>$110.00</td>
<td>$153,501.70</td>
<td></td>
</tr>
<tr>
<td>337-7-25</td>
<td>ASPH CONC FC, INC BIT, FC-5, PG76-22</td>
<td>1,014.89 TN</td>
<td>$135.00</td>
<td>$137,010.15</td>
<td></td>
</tr>
<tr>
<td>570-1-2</td>
<td>PERFORMANCE TURF, SOD</td>
<td>16,935.92 SY</td>
<td>$3.02</td>
<td>$51,146.48</td>
<td></td>
</tr>
</tbody>
</table>

X-Items

<table>
<thead>
<tr>
<th>Pay item</th>
<th>Description</th>
<th>Quantity</th>
<th>Unit</th>
<th>Unit Price</th>
<th>Extended Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>520-1-10</td>
<td>CONCRETE CURB &amp; GUTTER, TYPE F</td>
<td>160.00 LF</td>
<td>$28.00</td>
<td>$4,480.00</td>
<td></td>
</tr>
<tr>
<td>522-1</td>
<td>CONCRETE SIDEWALK AND DRIVEWAYS, 4&quot;</td>
<td>267.00 SY</td>
<td>$55.00</td>
<td>$14,685.00</td>
<td></td>
</tr>
<tr>
<td>527-2</td>
<td>DETECTABLE WARNINGS</td>
<td>220.00 SF</td>
<td>$30.00</td>
<td>$6,600.00</td>
<td></td>
</tr>
<tr>
<td>570-1-2</td>
<td>PERFORMANCE TURF, SOD</td>
<td>580.00 SY</td>
<td>$3.02</td>
<td>$1,751.60</td>
<td></td>
</tr>
</tbody>
</table>

Erosion Control

<table>
<thead>
<tr>
<th>Pay item</th>
<th>Description</th>
<th>Quantity</th>
<th>Unit</th>
<th>Unit Price</th>
<th>Extended Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>104-10-3</td>
<td>SEDIMENT BARRIER</td>
<td>27,200.00 LF</td>
<td>$2.33</td>
<td>$63,376.00</td>
<td></td>
</tr>
<tr>
<td>104-11</td>
<td>FLOATING TURBIDITY BARRIER</td>
<td>400.00 LF</td>
<td>$12.64</td>
<td>$5,056.00</td>
<td></td>
</tr>
<tr>
<td>104-12</td>
<td>STAKED TURBIDITY BARRIER- NYL REINF PVC</td>
<td>200.00 LF</td>
<td>$8.20</td>
<td>$1,640.00</td>
<td></td>
</tr>
<tr>
<td>104-18</td>
<td>INLET PROTECTION SYSTEM</td>
<td>72.00 EA</td>
<td>$139.46</td>
<td>$10,041.12</td>
<td></td>
</tr>
<tr>
<td>107-1</td>
<td>LITTER REMOVAL</td>
<td>360.00 AC</td>
<td>$45.00</td>
<td>$16,200.00</td>
<td></td>
</tr>
<tr>
<td>107-2</td>
<td>MOWING</td>
<td>360.00 AC</td>
<td>$65.00</td>
<td>$23,400.00</td>
<td></td>
</tr>
</tbody>
</table>

Shoulder Component Total $554,855.67

MEDIAN COMPONENT
User Input Data

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Median Width</td>
<td>42.00</td>
</tr>
<tr>
<td>Performance Turf Width</td>
<td>5.34</td>
</tr>
<tr>
<td>Total Median Shoulder Width L/R</td>
<td>8.00 / 8.00</td>
</tr>
<tr>
<td>Paved Median Shoulder Width L/R</td>
<td>2.00 / 2.00</td>
</tr>
<tr>
<td>Structural Spread Rate</td>
<td>110</td>
</tr>
<tr>
<td>Friction Course Spread Rate</td>
<td>80</td>
</tr>
<tr>
<td>Total Width (T) / 8&quot; Overlap (O)</td>
<td>T</td>
</tr>
<tr>
<td>Rumble Strips</td>
<td>0</td>
</tr>
</tbody>
</table>

Pay Items

<table>
<thead>
<tr>
<th>Pay item</th>
<th>Description</th>
<th>Quantity</th>
<th>Unit</th>
<th>Unit Price</th>
<th>Extended Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>327-70-1</td>
<td>MILLING EXIST ASPH PAVT, 1&quot; AVG DEPTH</td>
<td>12,686.08 SY</td>
<td>$2.60</td>
<td>$32,983.81</td>
<td></td>
</tr>
<tr>
<td>334-1-53</td>
<td>SUPERPAVE ASPH CONC, TRAF C, PG76-22</td>
<td>697.73 TN</td>
<td>$110.00</td>
<td>$76,750.30</td>
<td></td>
</tr>
<tr>
<td>337-7-25</td>
<td>ASPH CONC FC,INC BIT,FC-5,PG76-22</td>
<td>507.44 TN</td>
<td>$135.00</td>
<td>$68,504.40</td>
<td></td>
</tr>
<tr>
<td>570-1-2</td>
<td>PERFORMANCE TURF, SOD</td>
<td>16,935.92 SY</td>
<td>$3.02</td>
<td>$51,146.48</td>
<td></td>
</tr>
</tbody>
</table>

Median Component Total

$229,384.99

DRAINAGE COMPONENT

<table>
<thead>
<tr>
<th>Pay item</th>
<th>Description</th>
<th>Quantity</th>
<th>Unit</th>
<th>Unit Price</th>
<th>Extended Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>430-174-136</td>
<td>PIPE CULV, OPT MATL, ROUND,36&quot;SD</td>
<td>144.00 LF</td>
<td>$108.53</td>
<td>$15,628.32</td>
<td></td>
</tr>
<tr>
<td>430-982-138</td>
<td>MITERED END SECT, OPTIONAL RD, 36&quot; CD</td>
<td>16.00 EA</td>
<td>$3,570.02</td>
<td>$57,120.32</td>
<td></td>
</tr>
</tbody>
</table>

Drainage Component Total

$72,748.64

SIGNING COMPONENT

<table>
<thead>
<tr>
<th>Pay item</th>
<th>Description</th>
<th>Quantity</th>
<th>Unit</th>
<th>Unit Price</th>
<th>Extended Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>700-1-11</td>
<td>SINGLE POST SIGN, F&amp;I GM, &lt;12 SF</td>
<td>32.00 AS</td>
<td>$325.41</td>
<td>$10,413.12</td>
<td></td>
</tr>
<tr>
<td>700-1-50</td>
<td>SINGLE POST SIGN, RELOCATE</td>
<td>11.00 AS</td>
<td>$58.59</td>
<td>$644.49</td>
<td></td>
</tr>
<tr>
<td>700-1-60</td>
<td>SINGLE POST SIGN, REMOVE</td>
<td>8.00 AS</td>
<td>$24.46</td>
<td>$195.68</td>
<td></td>
</tr>
<tr>
<td>700-2-14</td>
<td>MULTI- POST SIGN, F&amp;I GM, 31-50 SF</td>
<td>2.00 AS</td>
<td>$5,020.15</td>
<td>$10,040.30</td>
<td></td>
</tr>
</tbody>
</table>

Signing Component Total

$21,293.59

SIGNALIZATIONS COMPONENT

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Type</td>
<td>Miscellaneous</td>
</tr>
<tr>
<td>Multiplier</td>
<td>1</td>
</tr>
<tr>
<td>Description</td>
<td>Loop replacement where impacted by resurfacing at CR30 intersection</td>
</tr>
</tbody>
</table>
### Pay Items

<table>
<thead>
<tr>
<th>Pay item</th>
<th>Description</th>
<th>Quantity Unit</th>
<th>Unit Price</th>
<th>Extended Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>630-2-11</td>
<td>CONDUIT, F&amp; I, OPEN TRENCH</td>
<td>750.00 LF</td>
<td>$7.00</td>
<td>$5,250.00</td>
</tr>
<tr>
<td>630-2-12</td>
<td>CONDUIT, F&amp; I, DIRECTIONAL BORE</td>
<td>250.00 LF</td>
<td>$19.00</td>
<td>$4,750.00</td>
</tr>
<tr>
<td>632-7-1</td>
<td>SIGNAL CABLE- NEW OR RECO, FUR &amp; INSTALL</td>
<td>1.00 PI</td>
<td>$3,209.40</td>
<td>$3,209.40</td>
</tr>
<tr>
<td>635-2-11</td>
<td>PULL &amp; SPLICE BOX, F&amp;I, 13&quot; x 24&quot;</td>
<td>16.00 EA</td>
<td>$495.27</td>
<td>$7,924.32</td>
</tr>
<tr>
<td>639-1-112</td>
<td>ELECTRICAL POWER SRV, F&amp;I, OH, M, PUR BY CON</td>
<td>1.00 AS</td>
<td>$1,433.33</td>
<td>$1,433.33</td>
</tr>
<tr>
<td>639-2-1</td>
<td>ELECTRICAL SERVICE WIRE, F&amp;I</td>
<td>60.00 LF</td>
<td>$1.43</td>
<td>$85.80</td>
</tr>
<tr>
<td>649-21-10</td>
<td>STEEL MAST ARM ASSEMBLY, F&amp;I, 60'</td>
<td>4.00 EA</td>
<td>$45,000.00</td>
<td>$180,000.00</td>
</tr>
<tr>
<td>650-1-14</td>
<td>VEH TRAF SIGNAL, F&amp;I ALUMINUM, 3 S 1 W</td>
<td>12.00 AS</td>
<td>$1,000.00</td>
<td>$12,000.00</td>
</tr>
<tr>
<td>653-1-11</td>
<td>PEDESTRIAN SIGNAL, F&amp;I LED COUNT, 1 WAY</td>
<td>8.00 AS</td>
<td>$779.05</td>
<td>$6,232.40</td>
</tr>
<tr>
<td>660-1-102</td>
<td>LOOP DETECTOR INDUCTIVE, F&amp;I, TYPE 2</td>
<td>12.00 EA</td>
<td>$171.98</td>
<td>$2,063.76</td>
</tr>
<tr>
<td>660-2-106</td>
<td>LOOP ASSEMBLY, F&amp;I, TYPE F</td>
<td>12.00 AS</td>
<td>$886.91</td>
<td>$10,642.92</td>
</tr>
<tr>
<td>665-1-11</td>
<td>PEDESTRIAN DETECTOR, F&amp;I, STANDARD</td>
<td>8.00 EA</td>
<td>$247.60</td>
<td>$1,980.80</td>
</tr>
<tr>
<td>670-5-111</td>
<td>TRAF CNTL ASSEM, F&amp;I, NEMA, 1 PREEMPT</td>
<td>1.00 AS</td>
<td>$21,959.86</td>
<td>$21,959.86</td>
</tr>
<tr>
<td>700-3-101</td>
<td>SIGN PANEL, F&amp;I GM, UP TO 12 SF</td>
<td>4.00 EA</td>
<td>$90.76</td>
<td>$363.04</td>
</tr>
</tbody>
</table>

**Signalizations Component Total**

$283,050.75

### LIGHTING COMPONENT

#### Conventional Lighting Subcomponent

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spacing</td>
<td>MIN</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Pay Items</th>
<th>Description</th>
<th>Quantity Unit</th>
<th>Extended Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>650-1-14</td>
<td>VEH TRAF SIGNAL, F&amp;I ALUMINUM, 3 S 1 W</td>
<td>12.00 AS</td>
<td>$12,000.00</td>
</tr>
<tr>
<td>653-1-11</td>
<td>PEDESTRIAN SIGNAL, F&amp;I LED COUNT, 1 WAY</td>
<td>12.00 AS</td>
<td>$6,112.20</td>
</tr>
<tr>
<td>660-1-102</td>
<td>LOOP DETECTOR INDUCTIVE, F&amp;I, TYPE 2</td>
<td>12.00 AS</td>
<td>$2,063.76</td>
</tr>
<tr>
<td>660-2-106</td>
<td>LOOP ASSEMBLY, F&amp;I, TYPE F</td>
<td>12.00 AS</td>
<td>$10,642.92</td>
</tr>
<tr>
<td>665-1-11</td>
<td>PEDESTRIAN DETECTOR, F&amp;I, STANDARD</td>
<td>8.00 EA</td>
<td>$1,980.80</td>
</tr>
<tr>
<td>670-5-111</td>
<td>TRAF CNTL ASSEM, F&amp;I, NEMA, 1 PREEMPT</td>
<td>1.00 AS</td>
<td>$21,959.86</td>
</tr>
<tr>
<td>700-3-101</td>
<td>SIGN PANEL, F&amp;I GM, UP TO 12 SF</td>
<td>4.00 EA</td>
<td>$363.04</td>
</tr>
</tbody>
</table>

**Lighting Component Total**

$283,050.75
<table>
<thead>
<tr>
<th>Pay item</th>
<th>Description</th>
<th>Quantity</th>
<th>Unit</th>
<th>Unit Price</th>
<th>Extended Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>630-2-11</td>
<td>CONDUIT, F&amp; I, OPEN TRENCH</td>
<td>200.00 LF</td>
<td>LF</td>
<td>$7.00</td>
<td>$1,400.00</td>
</tr>
<tr>
<td>630-2-12</td>
<td>CONDUIT, F&amp; I, DIRECTIONAL BORE</td>
<td>800.00 LF</td>
<td>LF</td>
<td>$19.00</td>
<td>$15,200.00</td>
</tr>
<tr>
<td>635-2-11</td>
<td>PULL &amp; SPLICE BOX, F&amp;I, 13&quot; x 24&quot;</td>
<td>12.00 EA</td>
<td>EA</td>
<td>$495.27</td>
<td>$5,943.24</td>
</tr>
<tr>
<td>635-2-12</td>
<td>PULL &amp; SPLICE BOX, F&amp;I, 24&quot; x 36&quot;</td>
<td>1.00 EA</td>
<td>EA</td>
<td>$1,202.79</td>
<td>$1,202.79</td>
</tr>
<tr>
<td>715-1-13</td>
<td>LIGHTING CONDUCTORS, F&amp;I, INSUL, NO.4-2</td>
<td>1,400.00 LF</td>
<td>LF</td>
<td>$2.46</td>
<td>$3,444.00</td>
</tr>
<tr>
<td>715-4-13</td>
<td>LIGHT POLE COMPLETE, F&amp;I-STD, 40'</td>
<td>12.00 EA</td>
<td>EA</td>
<td>$4,500.00</td>
<td>$54,000.00</td>
</tr>
<tr>
<td>715-500-1</td>
<td>POLE CABLE DIST SYS, CONVENTIONAL</td>
<td>12.00 EA</td>
<td>EA</td>
<td>$448.10</td>
<td>$5,377.20</td>
</tr>
</tbody>
</table>

Subcomponent Total $86,567.23

<table>
<thead>
<tr>
<th>Pay item</th>
<th>Description</th>
<th>Quantity</th>
<th>Unit</th>
<th>Unit Price</th>
<th>Extended Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>715-7-12</td>
<td>LOAD CENTER, F&amp;I, PRIMARY VOLTAGE</td>
<td>1.00 EA</td>
<td>EA</td>
<td>$15,000.00</td>
<td>$15,000.00</td>
</tr>
</tbody>
</table>

X-Items

Lighting Component Total $101,567.23

Sequence 5 Total $6,343,874.04
**Sequence:** 6 RSU - Resurfacing, Undivided  
**Net Length:** 1.540 MI 8,131 LF

**Description:** M/R 12’ RT Lanes w/4’ bicycle keyholes from CR 30 to Heather Drive

### ROADWAY COMPONENT

#### User Input Data

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Lanes</td>
<td>2</td>
</tr>
<tr>
<td>Roadway Pavement Width L/R</td>
<td>4.00 / 12.00</td>
</tr>
<tr>
<td>Structural Spread Rate</td>
<td>275</td>
</tr>
<tr>
<td>Friction Course Spread Rate</td>
<td>80</td>
</tr>
</tbody>
</table>

#### Pay Items

<table>
<thead>
<tr>
<th>Pay item</th>
<th>Description</th>
<th>Quantity Unit</th>
<th>Unit Price</th>
<th>Extended Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>327-70-8</td>
<td>MILLING EXIST ASPH PAVT,2 1/2” AVG DEPTH</td>
<td>14,455.47 SY</td>
<td>$2.50</td>
<td>$36,138.68</td>
</tr>
<tr>
<td>334-1-53</td>
<td>SUPERPAVE ASPH CONC, TRAF C, PG76-22</td>
<td>1,987.63 TN</td>
<td>$110.00</td>
<td>$218,639.30</td>
</tr>
<tr>
<td>337-7-25</td>
<td>ASPH CONC FC,INC BIT,FC-5,PG76-22</td>
<td>578.22 TN</td>
<td>$135.00</td>
<td>$78,059.70</td>
</tr>
</tbody>
</table>

**Pavement Marking Subcomponent**

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Include Thermo/Tape/Other</td>
<td>Y</td>
</tr>
<tr>
<td>Pavement Type</td>
<td>Asphalt</td>
</tr>
<tr>
<td>Solid Stripe No. of Paint Applications</td>
<td>1</td>
</tr>
<tr>
<td>Solid Stripe No. of Stripes</td>
<td>4</td>
</tr>
<tr>
<td>Skip Stripe No. of Paint Applications</td>
<td>1</td>
</tr>
<tr>
<td>Skip Stripe No. of Stripes</td>
<td>1</td>
</tr>
</tbody>
</table>

#### Pay Items

<table>
<thead>
<tr>
<th>Pay item</th>
<th>Description</th>
<th>Quantity Unit</th>
<th>Unit Price</th>
<th>Extended Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>706-3</td>
<td>RETRO-REFLECTIVE PAVEMENT MARKERS</td>
<td>208.00 EA</td>
<td>$4.00</td>
<td>$832.00</td>
</tr>
<tr>
<td>710-11-101</td>
<td>PAINTED PAVT MARK,STD,WHITE,SOLID,6”</td>
<td>6.16 GM</td>
<td>$1,073.16</td>
<td>$6,610.67</td>
</tr>
<tr>
<td>710-11-231</td>
<td>PAINTED PAVT MARK,STD,YELLOW,SKIP,6”</td>
<td>1.54 GM</td>
<td>$619.98</td>
<td>$954.77</td>
</tr>
<tr>
<td>711-16-101</td>
<td>THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6”</td>
<td>6.16 GM</td>
<td>$4,567.21</td>
<td>$28,134.01</td>
</tr>
<tr>
<td>711-16-231</td>
<td>THERMOPLASTIC, STD-OTH, YELLOW, SKIP, 6”</td>
<td>1.54 GM</td>
<td>$2,071.86</td>
<td>$3,190.66</td>
</tr>
</tbody>
</table>

**Roadway Component Total**  
$372,559.79

**Sequence 6 Total**  
$372,559.79
### Sequence: 7 RSU - Resurfacing, Undivided

**Net Length:** 3.060 MI 16,157 LF

**Description:** M/R 12' Left Turn Lanes from CR 30 to Heather Drive

#### ROADWAY COMPONENT

**User Input Data**

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Lanes</td>
<td>1</td>
</tr>
<tr>
<td>Roadway Pavement Width L/R</td>
<td>0.00 / 12.00</td>
</tr>
<tr>
<td>Structural Spread Rate</td>
<td>275</td>
</tr>
<tr>
<td>Friction Course Spread Rate</td>
<td>80</td>
</tr>
</tbody>
</table>

#### Pay Items

<table>
<thead>
<tr>
<th>Pay Item</th>
<th>Description</th>
<th>Quantity Unit</th>
<th>Unit Price</th>
<th>Extended Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>327-70-8</td>
<td>MILLING EXIST ASPH PAVT, 2 1/2&quot; AVG DEPTH</td>
<td>21,542.40 SY</td>
<td>$2.50</td>
<td>$53,856.00</td>
</tr>
<tr>
<td>334-1-53</td>
<td>SUPERPAVE ASPH CONC, TRAF C, PG76-22</td>
<td>2,962.08 TN</td>
<td>$110.00</td>
<td>$325,828.80</td>
</tr>
<tr>
<td>337-7-25</td>
<td>ASPH CONC FC, INC BIT, FC-5, PG76-22</td>
<td>861.70 TN</td>
<td>$135.00</td>
<td>$116,329.50</td>
</tr>
</tbody>
</table>

#### Pavement Marking Subcomponent

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Include Thermo/Tape/Other</td>
<td>Y</td>
</tr>
<tr>
<td>Pavement Type</td>
<td>Asphalt</td>
</tr>
<tr>
<td>Solid Stripe No. of Paint Applications</td>
<td>1</td>
</tr>
<tr>
<td>Solid Stripe No. of Stripes</td>
<td>2</td>
</tr>
<tr>
<td>Skip Stripe No. of Paint Applications</td>
<td>1</td>
</tr>
<tr>
<td>Skip Stripe No. of Stripes</td>
<td>0</td>
</tr>
</tbody>
</table>

#### Pay Items

<table>
<thead>
<tr>
<th>Pay Item</th>
<th>Description</th>
<th>Quantity Unit</th>
<th>Unit Price</th>
<th>Extended Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>710-11-101</td>
<td>PAINTED PAVT MARK, STD, WHITE, SOLID, 6&quot;</td>
<td>6.12 GM</td>
<td>$1,073.16</td>
<td>$6,567.74</td>
</tr>
<tr>
<td>711-16-101</td>
<td>THERMOPLASTIC, STD-OTH, WHITE, SOLID, 6&quot;</td>
<td>6.12 GM</td>
<td>$4,567.21</td>
<td>$27,951.33</td>
</tr>
</tbody>
</table>

**Roadway Component Total**

$530,533.37

**Sequence 7 Total**

$530,533.37
Sequence: 8 MIS - Miscellaneous Construction

Description: Const 6’ sidewalk on eastbound/south side of SR 30A from CR 30 to Heather Drive
Special Conditions: connecting to existing sidewalk constructed thru development

---

**EARTHWORK COMPONENT**

User Input Data

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard Clearing and Grubbing Limits L/R</td>
<td>0.00 / 0.00</td>
</tr>
<tr>
<td>Incidental Clearing and Grubbing Area</td>
<td>0.00</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>X-Items</th>
<th>Pay item</th>
<th>Description</th>
<th>Quantity</th>
<th>Unit</th>
<th>Unit Price</th>
<th>Extended Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>110-1-1</td>
<td>CLEARING &amp; GRUBBING</td>
<td>12.07 AC</td>
<td>$25,000.00</td>
<td>$301,750.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>120-1</td>
<td>REGULAR EXCAVATION</td>
<td>3,526.80 CY</td>
<td>$15.00</td>
<td>$52,902.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>120-2-2</td>
<td>BORROW EXCAVATION, TRUCK MEASURE</td>
<td>5,019.60 CY</td>
<td>$20.00</td>
<td>$100,392.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>162-1-11</td>
<td>PREPARED SOIL LAYER, FINISH SOIL, 6”</td>
<td>17,800.00 SY</td>
<td>$2.85</td>
<td>$50,730.00</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Earthwork Component Total $505,774.00

---

**ROADWAY COMPONENT**

<table>
<thead>
<tr>
<th>X-Items</th>
<th>Pay item</th>
<th>Description</th>
<th>Quantity</th>
<th>Unit</th>
<th>Unit Price</th>
<th>Extended Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>400-0-11</td>
<td>CONC CLASS NS, GRAVITY WALL</td>
<td>68.27 CY</td>
<td>$950.00</td>
<td>$64,856.50</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Roadway Component Total $64,856.50

---

**SHOULDER COMPONENT**

User Input Data

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>X-Items</th>
<th>Pay item</th>
<th>Description</th>
<th>Quantity</th>
<th>Unit</th>
<th>Unit Price</th>
<th>Extended Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>104-19</td>
<td>CHEMICAL TREATMENT FOR EROSION CONTROL</td>
<td>45,187.00 SY</td>
<td>$1.45</td>
<td>$65,521.15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>515-1-2</td>
<td>PIPE HANDRAIL - GUIDERAIL, ALUMINUM</td>
<td>380.00 LF</td>
<td>$55.00</td>
<td>$20,900.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>522-1</td>
<td>CONCRETE SIDEWALK AND DRIVEWAYS, 4”</td>
<td>14,892.00 SY</td>
<td>$55.00</td>
<td>$819,060.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>522-2</td>
<td>CONCRETE SIDEWALK AND DRIVEWAYS, 6”</td>
<td>986.40 SY</td>
<td>$65.00</td>
<td>$64,116.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>524-1-29</td>
<td>CONC DITCH PAVT, 4&quot;, REINFORCED</td>
<td>370.00 SY</td>
<td>$75.00</td>
<td>$27,750.00</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Shoulder Component Total $997,347.15

---

**DRAINAGE COMPONENT**

<table>
<thead>
<tr>
<th>Pay Items</th>
<th>Description</th>
<th>Quantity</th>
<th>Unit</th>
<th>Unit Price</th>
<th>Extended Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>430-174-124</td>
<td>920.00 LF</td>
<td>$82.00</td>
<td>$75,440.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Code</td>
<td>Description</td>
<td>Quantity</td>
<td>Unit</td>
<td>Unit Cost</td>
<td>Total Cost</td>
</tr>
<tr>
<td>------------</td>
<td>--------------------------------------------------</td>
<td>----------</td>
<td>------</td>
<td>-----------</td>
<td>-------------</td>
</tr>
<tr>
<td>430-174-130</td>
<td>PIPE CULV, OPT MATL, ROUND, 24&quot; SD</td>
<td>144.00</td>
<td>LF</td>
<td>$100.08</td>
<td>$14,411.52</td>
</tr>
<tr>
<td>430-982-138</td>
<td>MITERED END SECT, OPTIONAL RD, 36&quot; CD</td>
<td>6.00</td>
<td>EA</td>
<td>$3,570.02</td>
<td>$21,420.12</td>
</tr>
<tr>
<td>430-984-129</td>
<td>MITERED END SECT, OPTIONAL RD, 24&quot; SD</td>
<td>26.00</td>
<td>EA</td>
<td>$1,203.29</td>
<td>$31,285.54</td>
</tr>
</tbody>
</table>

**Drainage Component Total**

$142,557.18

**Sequence 8 Total**

$1,710,534.83
**Sequence:** 9 MIS - Miscellaneous Construction  
**Net Length:** 0.000 MI 0 LF

**Description:** Const 6’ sidewalk on westbound/north side of SR 30A from CR 30 to Heather Drive  
**Special Conditions:** connecting to existing sidewalk constructed thru development

---

### EARTHWORK COMPONENT

**User Input Data**

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard Clearing and Grubbing Limits L/R</td>
<td>0.00 / 0.00</td>
</tr>
<tr>
<td>Incidental Clearing and Grubbing Area</td>
<td>0.00</td>
</tr>
</tbody>
</table>

### X-Items

<table>
<thead>
<tr>
<th>Pay item</th>
<th>Description</th>
<th>Quantity</th>
<th>Unit</th>
<th>Unit Price</th>
<th>Extended Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>110-1-1</td>
<td>CLEARING &amp; GRUBBING</td>
<td>12.22 AC</td>
<td>$25,000.00</td>
<td>$305,500.00</td>
<td></td>
</tr>
<tr>
<td>120-1</td>
<td>REGULAR EXCAVATION</td>
<td>3,632.40 CY</td>
<td>$15.00</td>
<td>$54,486.00</td>
<td></td>
</tr>
<tr>
<td>120-2-2</td>
<td>BORROW EXCAVATION, TRUCK MEASURE</td>
<td>5,078.40 CY</td>
<td>$20.00</td>
<td>$101,568.00</td>
<td></td>
</tr>
<tr>
<td>162-1-11</td>
<td>PREPARED SOIL LAYER, FINISH SOIL, 6&quot;</td>
<td>18,007.00 SY</td>
<td>$2.85</td>
<td>$51,319.95</td>
<td></td>
</tr>
</tbody>
</table>

**Earthwork Component Total**

$512,873.95

---

### ROADWAY COMPONENT

**X-Items**

<table>
<thead>
<tr>
<th>Pay item</th>
<th>Description</th>
<th>Quantity</th>
<th>Unit</th>
<th>Unit Price</th>
<th>Extended Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>400-0-11</td>
<td>CONC CLASS NS, GRAVITY WALL</td>
<td>69.80 CY</td>
<td>$950.00</td>
<td>$66,310.00</td>
<td></td>
</tr>
</tbody>
</table>

**Roadway Component Total**

$66,310.00

---

### SHOULDER COMPONENT

**User Input Data**

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
</table>

### X-Items

<table>
<thead>
<tr>
<th>Pay item</th>
<th>Description</th>
<th>Quantity</th>
<th>Unit</th>
<th>Unit Price</th>
<th>Extended Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>104-19</td>
<td>CHEMICAL TREATMENT FOR EROSION CONTROL</td>
<td>45,512.50 SY</td>
<td>$1.45</td>
<td>$65,993.12</td>
<td></td>
</tr>
<tr>
<td>515-1-2</td>
<td>PIPE HANDRAIL - GUIDERAIL, ALUMINUM</td>
<td>390.00 LF</td>
<td>$55.00</td>
<td>$21,450.00</td>
<td></td>
</tr>
<tr>
<td>522-1</td>
<td>CONCRETE SIDEWALK AND DRIVEWAYS, 4&quot;</td>
<td>15,338.79 SY</td>
<td>$55.00</td>
<td>$843,633.45</td>
<td></td>
</tr>
<tr>
<td>522-2</td>
<td>CONCRETE SIDEWALK AND DRIVEWAYS, 6&quot;</td>
<td>1,020.00 SY</td>
<td>$65.00</td>
<td>$66,300.00</td>
<td></td>
</tr>
<tr>
<td>524-1-29</td>
<td>CONC DITCH PAVT, 4&quot;, REINFORCED</td>
<td>412.00 SY</td>
<td>$75.00</td>
<td>$30,900.00</td>
<td></td>
</tr>
</tbody>
</table>

**Shoulder Component Total**

$1,028,276.58

---

### DRAINAGE COMPONENT

**Pay Items**

<table>
<thead>
<tr>
<th>Pay item</th>
<th>Description</th>
<th>Quantity</th>
<th>Unit</th>
<th>Unit Price</th>
<th>Extended Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>430-174-124</td>
<td></td>
<td>936.00 LF</td>
<td>$82.00</td>
<td>$76,752.00</td>
<td></td>
</tr>
</tbody>
</table>

---

**Total**

$512,873.95 + $66,310.00 + $1,028,276.58 + $76,752.00 = $1,684,212.53
<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Quantity</th>
<th>Unit Cost</th>
<th>Total Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>430-174-130</td>
<td>PIPE CULV, OPT MATL, ROUND, 24&quot; SD</td>
<td>152.00</td>
<td>LF</td>
<td>$100.08</td>
</tr>
<tr>
<td>430-982-138</td>
<td>MITERED END SECT, OPTIONAL RD, 36&quot; CD</td>
<td>6.00</td>
<td>EA</td>
<td>$3,570.02</td>
</tr>
<tr>
<td>430-984-129</td>
<td>MITERED END SECT, OPTIONAL RD, 24&quot; SD</td>
<td>26.00</td>
<td>EA</td>
<td>$1,203.29</td>
</tr>
</tbody>
</table>

**Drainage Component Total**  
$144,669.82

**Sequence 9 Total**  
$1,752,130.35
FDOT Long Range Estimating System - Production
R3: Project Details by Sequence Report

Project: 437759-1-52-01
Letting Date: 10/2020
Description: SR 30A (US 98) FROM CR 30 FRONT BEACH RD TO HEATHER DR
District: 03  County: 46 BAY  Market Area: 01  Units: English
Contract Class: 1  Lump Sum Project: N  Design/Build: N  Project Length: 5.406 MI
Project Manager: SAM WEEDE

Version 5-P Project Grand Total
$17,125,991.84
Description: SR 30A (US 98) FROM WALTON CO LINE TO HEATHER DR.; Copy Vers3, added extension to Co Line, changed sidewalk constructions sequences to show new 6' sidewalk each side. 2018 6MU

Resurfacing Lane Mile Cost $516,933.05
Project Sequences Subtotal $12,526,558.32
102-1 Maintenance of Traffic 10.00 % $1,252,655.83
101-1 Mobilization 10.00 % $1,377,921.42
Project Sequences Total $15,157,135.57
Project Unknowns 12.00 % $1,818,856.27
Design/Build 0.00 % $0.00
Non-Bid Components:
Pay item Description Quantity Unit Unit Price Extended Amount
999-25 INITIAL CONTINGENCY AMOUNT (DO NOT BID) LS $150,000.00 $150,000.00
Project Non-Bid Subtotal $150,000.00
Version 5-P Project Grand Total $17,125,991.84