


**SECOND AMENDMENT TO ENGINEERING SERVICES AGREEMENT  
SR 434 ROUNDABOUTS FROM WEST OF JETTA POINT TO  
SOUTH OF ARTESIA STREET  
(PS-3047-20/RTB)**

**THIS SECOND AMENDMENT** is made and entered into this \_\_\_\_ day of \_\_\_\_\_, 202\_\_\_\_, and is to that certain Agreement made and entered into on the 25<sup>th</sup> day of November, 2020, as amended on the 4<sup>th</sup> day of August, 2022, between **AECOM TECHNICAL SERVICES, INC.**, whose address is 150 N. Orange Avenue, Suite 200, Orlando, FL 32801, in this Amendment referred to as “CONTRACTOR”, and **SEMINOLE COUNTY**, a charter county and political subdivision of the State of Florida, whose address is Seminole County Services Building, 1101 E. 1<sup>st</sup> Street, Sanford, Florida 32771, in this Amendment referred to as “COUNTY”.

**WITNESSETH:**



**WHEREAS**, CONTRACTOR and COUNTY entered into the above referenced Agreement on November 25, 2020, as amended on August 4, 2022, to provide engineering services to Seminole County for the State Road 434 roundabouts from west of Jetta Point to south of Artesia Street Project; and

**WHEREAS**, the parties desire to amend the Agreement in order to add additional services to the Scope of Services, revise the Rate and Fee Schedule, and to enable both parties to continue to enjoy the mutual benefits the Agreement provides; and

**WHEREAS**, Section 21 of the Agreement provides that any amendments will be valid only when expressed in writing and duly signed by the parties.

**NOW, THEREFORE**, in consideration of the mutual understandings and agreements contained in this Second Amendment, the parties agree to amend the Agreement as follows:

1. Exhibit A of the Agreement is revised to include the additional services outlined in the new Scope of Services attached to this Second Amendment as Exhibit A.

2. Exhibit C of the Agreement is revised by the new Rate and Fee Schedule attached to this Second Amendment as Exhibit C.


3. Except as modified by this Second Amendment, all terms and conditions of the original Agreement remain in full force and effect for the term of the Agreement.

**IN WITNESS WHEREOF**, the parties have executed this Second Amendment for the purposes stated above.

AECOM TECHNICAL SERVICES, INC.

\_\_\_\_\_  
Witness  
\_\_\_\_\_  
Print Name

By: \_\_\_\_\_  
JANET EVERETT, Vice President

Date: \_\_\_\_\_  


\_\_\_\_\_  
Witness  
\_\_\_\_\_  
Print Name

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SEMINOLE COUNTY, FLORIDA

\_\_\_\_\_  
Witness

\_\_\_\_\_  
Print Name

\_\_\_\_\_  
Witness

\_\_\_\_\_  
Print Name

By: \_\_\_\_\_

ROBERT BRADLEY,  
Procurement Administrator

Date: \_\_\_\_\_

For the use and reliance of  
Seminole County only.

As authorized for execution by the Board of  
County Commissioners at its \_\_\_\_\_,  
202\_\_\_\_\_ regular meeting.

Approved as to form and  
legal sufficiency.

\_\_\_\_\_  
County Attorney

RM/dbd  
3/21/2024

Attachments:

- Exhibit A – Scope of Services
- Exhibit C – Rate and Fee Schedule



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**EXHIBIT A**

**SCOPE OF SERVICES**

**FOR THE**

**SR 434 ROUNDABOUTS PROJECT**

**FROM JETTA PT. TO ARTESIA ST.**

**SEMINOLE COUNTY, FLORIDA**

**CONTRACT AMENDMENT No. 2**

**Seminole County CIP: 01785145  
Financial Project ID: 446491-1-38-01**

**September 14, 2023**

# **SCOPE OF SERVICE FOR SR 434 ROUNDABOUTS**

**FROM JETTA PT. TO ARTESIA ST.**

**Seminole County, Florida**

**Contract Amendment No. 2**

This Exhibit forms an integral part of Contract Amendment No. 2 between Seminole County (hereinafter referred to as the COUNTY) and AECOM Technical Services, Inc. (hereinafter referred to as the CONSULTANT) relative to the transportation facility described as follows:

**Financial Project ID: 446491-1-38-01**

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# **SR 434 ROUNDABOUTS FROM JETTA PT TO ARTESIA ST**

## **Contract Amendment No. 2**

### **SCOPE OF SERVICES**

#### **SECTION 1 – PURPOSE**

This scope of services is for the work associated with the alternative analysis requested by the Florida Department of Transportation (FDOT) on June 29, 2023 and included in the contract for this project. The work efforts outlined below are for new work associated with the request from FDOT to reduce Right of Way impacts along SR 434.

#### **SECTION 2 – PROJECT OBJECTIVE**

The objective of this work effort is to provide the County with an alternative concept to reduce Right of Way impacts as requested by FDOT per the coordination meeting on June 29, 2023 to be summarized in an Concept Evaluation Memo and concept plan/profile set. Final design of this concept, if approved by the County, will occur as part of a separate contract amendment.

#### **SECTION 3 – SPECIFIC SCOPE ITEMS**

Specific work efforts associated with this Contract Amendment will include the following:

### **3 PROJECT GENERAL AND COMMON TASKS (AMENDED)**

#### **3.4 Contract Maintenance and Project Documentation**

Contract maintenance includes project management effort for complete setup and maintenance of files, electronic folders, and documents, developing technical monthly progress reports and schedule updates. Project documentation includes the compilation and delivery of final documents, reports or calculations that support the development of the items listed below.

#### **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.

## **4 ROADWAY ANALYSIS (AMENDED)**

### **4.1 Typical Section Package**

Prepare two (2) Typical Sections per alternative concept and two (2) Typical Sections for the Final Concept.

### **4.5 Horizontal/Vertical Geometry**

#### **Alternative Analysis**

The Consultant will develop up to four (4) Alternative Concepts. Alternative Concepts include lowering the proposed roadway profile and reviewing underdrain feasibility, modifying roadway elements (horizontal roadway geometry, sidewalk/shared-use path, and median islands), roundabout alternatives, and potential utility impacts.

#### **Final Alternative Concept**

The County, FDOT, and the Consultant shall collaborate to select and develop one (1) Final Concept that will be incorporated into the final design for FPN 446491-1-38-01.

### **4.8 Cross Section Design Files**

Review cross sections to determine the preliminary anticipated Limits of Construction and Right of Way for the alternative concept matrix and final concept plan. The consultant shall provide up to 10 cross sections at critical locations with the Final Concept Plan.

### **4.13 Design Variations and Exceptions**

Identify variations and exceptions required for alternative concepts and provide as part of the evaluation matrix.

### **4.19 Other Roadway Analysis**

Develop a preliminary curb return detail for sidewalk connections.

### **4.22 Technical Meetings**

The Consultant will attend two (2) meetings with the County and two (2) meetings with FDOT to discuss as part of the Alternatives Analysis. The County and FDOT shall provide comments to the Consultant to be incorporated in Final Concept.

The Consultant will attend two (2) meetings with the County (1 prior to meeting with FDOT and 1 after) and two (2) meetings with FDOT to discuss the Final Alternative Concept.

### **4.23 Quality Assurance/Quality Control**

### **4.25 Supervision**

The SUBCONSULTANT shall perform the following tasks.

#### **4.7 Roundabout Evaluation**

No further roundabout evaluation will take place.

##### **4.7.1 Roundabout Final Design Analysis (Mactavandash Drive and Hammock Lane Locations)**

As partial two-lane roundabouts at these locations indicate acceptable levels of service, the CONSULTANT shall perform the following analysis:

**-Case I Design Alternatives** – A Case I roundabout design permits a truck (WB-62FL) to take both lanes through entry and within the circulatory roadway. This type of design can generally allow for a smaller inscribed circle diameter (ICD). One (1) alternative shall be developed at each of the Mactavandash Drive and Hammock Lane intersections.

**-Case II Design with Turbo Features** – A turbo-style roundabout features raised lane dividers between entry lanes and between circulatory lanes. Because the raised lane dividers assist in providing speed control, the ICD and approach curvature can typically be minimized. One (1) alternative shall be developed at each of the Mactavandash Drive and Hammock Lane intersections.

##### **4.7.2 Roundabout Final Design Analysis (Artesia Street)**

To reduce or eliminate right-of-way impacts to the residential properties on the north side of the Artesia Street intersection, the CONSULTANT shall prepare one (1) alternative with the Artesia Street roundabout shifted south and showing minimum 4-ft wide splitter islands on the Artesia Street approaches.

#### **4.23 Quality Assurance/Quality Control**

#### **4.25 Supervision**

### **5 Roadway Plans (AMENDED)**

#### **5.2.1 Typical Sections**

Develop (2) Typical Sections for each alternative concept and two (2) typical sections for the final concept.

#### **5.2.2 Typical Section Details**

Develop one (1) typical section detail for curb return.

#### **5.5 Plan/Profile Sheet**



### **Alternative Analysis**

The Consultant shall analyze up to four (4) alternative concepts. The Consultant shall prepare a Concept Evaluation Memo, Plan and Profile Sheets for each alternative concept and matrix comparing the results of the alternative evaluation.

### **Final Alternative Concept**

The Consultant shall develop one (1) set of concept plan and profile sheets. The final concept will include the preferred alternative concept determined in Alternative Analysis, a baseline and profile, preliminary Right of Way and Limit of Construction.

### **5.26 Quality Assurance/Quality Control**

### **5.27 Supervision**

## **6a DRAINAGE ANALYSIS (AMENDED)**

### **6a.1 Drainage Map Hydrology**

Review up to four (4) alternatives and conceptual review of changes to hydrology to determine potential revisions to drainage design.

### **6a.3 Pond Siting Analysis**

Preliminary review of potential basin changes and conceptual evaluation of three (3) additional pond sites if needed based on profile changes and hydraulic gradeline constraints.

### **6a.5 Design of Ditches**

Review of offsite ditches for potential elimination based on alternative roadway profile changes. Review of concepts to eliminate ditches or reduce the cross section width.

### **6a.6 Design of Stormwater Management Facility**

Baseflow evaluation of Pond 250 and 450 for potential lowering of water table and evaluation of potential impacts to surrounding environmental resources.

### **6a.6b Incorporate Offsite Stormwater Management Facilities**

Review of offsite ponds draining through the corridor for potential impacts associated with four (4) alternatives for roadway. Conceptual piping of offsite systems in plan view where ditches are eliminated.

### **6a.8 Design of Floodplain Compensation**

Preliminary review of potential impacts/changes to floodplain impact/compensation based on four (4) alternatives, no calculations, only evaluation to determine feasibility and identification of potential issues with each alternative.

### **6a.9 Design of Storm Drains**

Preliminary review of storm drain system for each alternative for feasibility and identification of potential issues for each alternative. Line and grade calculations for trunklines and conceptual plan view layout will be used to determine minimum grade at critical locations.

### **6a.13 Drainage Design Documentation Report**

Provide a drainage memo to document the summary of findings from the evaluation. Exhibits will be limited to only the 11x17 drainage maps and primarily include a narrative and matrix. Line and grade calculations will be provided as an appendix. Right of way and construction costs shall not be included in the matrix or memo.

### **6a.21 Other Drainage Analysis**

Underdrain feasibility analysis for eight (8) potential outfall locations. Identification of issues/feasibility of existing outfalls based on Estimated Seasonal High Water Elevation and conceptual underdrain elevations.

### **6a.23 Technical Meetings**

Eight (8) Meetings with FDOT and the County.

### **6a.25 Quality Assurance/Quality Control**

### **6a.27 Supervision**

## **6b DRAINAGE PLANS (AMENDED)**

### **6b.1 Drainage Map**

11x17 plan view drainage maps consistent with scale and layout provided for original design shall be developed for up to four (4) alternatives. Labeling will be minimal and only including basin name, pond name, critical low point elevations (minimum grade from line and grade storm drain calculation), underdrain outfall locations, and offsite basins. Profile portion shall only include concept profile from roadway and critical low point elevation w/ estimated HGL and underdrain outfall points with biological indicator elevations.

### **6b.13 Quality Assurance/Quality Control**

### **6b.14 Supervision**

## **8 ENVIRONMENTAL PERMITS and ENVIRONMENTAL CLEARANCES (AMENDED)**

### **8.2.1 Pond Site Alternatives**

The CONSULTANT shall review any new alternative pond sites as directed by the COUNTY and information shall be included as part of the Concept Evaluation Memo.

**Project Staff Hour Summary**

Name of Consultant: **AECOM Technical Services, Inc.**

SR 434 Roundabouts from W of Jetta Point to S of Artesia St - SA 2 Design Reanalysis  
446491-1-38-01

Activity No.	Activity	Project Staff Hours												Total Hours	
		AECOM	KAI	Sub 2	Sub 3	Sub 4	Sub 5	Sub 6	Sub 7	Sub 8	Sub 9	Sub 10	Sub 11		Sub 12
3	Project Common and General Tasks	28	12												40
4	Roadway Analysis	782	171												953
5	Roadway Plans	436	60												496
6a	Drainage Analysis	591													591
6b	Drainage Plans	180													180
7	Utilities	0													0
8	Env. Permits and Env. Clearances	8													8
9	Structures - Summary, Misc. Tasks, Dwgs.	0													0
10	BDR	0													0
11	Temporary Bridge	0													0
12	Short Span Concrete Bridge	0													0
13	Medium Span Concrete Bridge	0													0
14	Structural Steel Bridge	0													0
15	Segmental Concrete Bridge	0													0
16	Movable Span	0													0
17	Retaining Walls	0													0
18	Miscellaneous Structures	0													0
19	Signing & Pavement Marking Analysis	0													0
20	Signing & Pavement Marking Plans	0													0
21	Signalization Analysis	0													0
22	Signalization Plans	0													0
23	Lighting Analysis	0													0
24	Lighting Plans	0													0
25	Landscape Analysis	0													0
26	Landscape Plans	0													0
27	Survey - Field and Office Support	0													0
28	Photogrammetry	0													0
29	Mapping	0													0
30	Terrestrial Mobile LiDAR	0													0
31	Architecture Development	0													0
32	Noise Barriers Impact Design Assessment	0													0
33	ITS Analysis	0													0
34	ITS Plans	0													0
35	Geotechnical	0													0
36	3D Modeling	0													0
<b>Project Total</b>		<b>2,025</b>	<b>243</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>2,268</b>
27	Survey Field Crew Days	0													0

- Notes: 1. Staff hours for prime consultant come directly from each discipline's worksheet.  
 2. Staff hours for subconsultants are to be entered manually into columns D through O.  
 3. For workbooks prepared by subconsultants, their project hours will be totaled in column C.

**ESTIMATE OF WORK EFFORT FOR TECHNICAL PROPOSALS - GRAND TOTAL**

Financial Project Number: 446491-1-38-01

Project Name: SR 434 Roundabouts from W of Jetta Point to S of Artesia St - SA 2 Design Reanalysis

FAP Number: 0

Date: 12/27/2023 Name of Consultant: AECOM Technical Services, Inc.

WORK ACTIVITY	Hours from "Summary" sheet	EMPLOYEE CLASSIFICATION												TOTAL STAFF HOURS		ON CADD	
	Grand Total Hours	Project Manager	Chief Engineer 1	Senior Engineer 1	Engineer 2	Engineer 1	Engineering Intern	Senior Designer	Senior Landscape Architect	Landscape Designer	Senior Env Specialist	Env Specialist	Senior Utility Coordinator	RANGE			PERCENT
		Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours				
3. Project General and Project Common Tasks	40	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
4. Roadway Analysis	953	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
5. Roadway Plans	496	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
6a. Drainage Analysis	591	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
6b. Drainage Plans	180	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
7. Utilities	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
8. Environmental Permits and Env. Clearances	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
9. Structures - Misc. Tasks, Dwgs, Non-Tech.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
10. Structures - Bridge Development Report	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
11. Structures - Temporary Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
12. Structures - Short Span Concrete Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
13. Structures - Medium Span Concrete Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
14. Structures - Structural Steel Bridge	0	14	0	0	0	0	0	0	0	0	0	0	0	0	0		
15. Structures - Segmental Concrete Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
16. Structures - Movable Span	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
17. Structures - Retaining Walls	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
18. Structures - Miscellaneous	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
19. Signing & Pavement Marking Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
20. Signing & Pavement Marking Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
21. Signalization Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
22. Signalization Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
23. Lighting Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
24. Lighting Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
25. Landscape Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
26. Landscape Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
27. Survey (Field & Office Support)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
28. Photogrammetry	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
29. Mapping	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
30. Terrestrial Mobile LiDAR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
31. Architecture Development	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
32. Noise Barriers Impact Design Assessment	0	32	0	0	0	0	0	0	0	0	0	0	0	0	0		
33. Intelligent Transportation Systems Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
34. Intelligent Transportation Systems Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
35. Geotechnical	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
36. 3D Modeling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
<b>TOTALS</b>	<b>2268</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>		
												<b>Field Survey Estimate:</b>					
												0	4-person crew days	(Prime Consultant)	0	0	

- Notes:
- This worksheet provides the distribution of the grand total staff hours for a project.
  - Percentages for staff hour distribution by classification are entered below in rows 65 to 99 of this sheet.
  - Total Staff Hours (column O) may not match staff hours from Summary worksheet (column B) due to rounding. Staff hours calculated for employee classifications are to be adjusted so totals in columns B and O match.
  - Formulas under "Total Staff Hours Range" (columns O & P) may be adjusted to provide desired range.
  - This spreadsheet to be provided in Technical Proposals for Districts that require a breakdown of hours by classification.

**ESTIMATE OF WORK EFFORT FOR TECHNICAL PROPOSALS - GRAND TOTAL**

Financial Project Number: 446491-1-38-01

Project Name: SR 434 Roundabouts from W of Jetta Point to S of Artesia St - SA 2 Design Reanalysis

FAP Number: 0

Date: 12/27/2023

Name of Consultant: AECOM Technical Services, Inc.

Staff Hour Distribution Percentages - Grand Total														
	Hours from "Summary" sheet Grand Total	Project Manager	Chief Engineer 1	Senior Engineer 1	Engineer 2	Engineer 1	Engineering Intern	Senior Designer	Senior Landscape Architect	Landscape Designer	Senior Env Specialist	Env Specialist	Senior Utility Coordinator	Total
3. Project General and Project Common Tasks	40	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.00%
4. Roadway Analysis	953	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.00%
5. Roadway Plans	496	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.00%
6a. Drainage Analysis	591	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.00%
6b. Drainage Plans	180	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.00%
7. Utilities	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.00%
8. Environmental Permits and Env. Clearances	8	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.00%
9. Structures - Misc. Tasks, Dwgs, Non-Tech.	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.00%
10. Structures - Bridge Development Report	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.00%
11. Structures - Temporary Bridge	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.00%
12. Structures - Short Span Concrete Bridge	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.00%
13. Structures - Medium Span Concrete Bridge	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.00%
14. Structures - Structural Steel Bridge	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.00%
15. Structures - Segmental Concrete Bridge	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.00%
16. Structures - Movable Span	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.00%
17. Structures - Retaining Walls	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.00%
18. Structures - Miscellaneous	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.00%
19. Signing & Pavement Marking Analysis	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.00%
20. Signing & Pavement Marking Plans	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.00%
21. Signalization Analysis	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.00%
22. Signalization Plans	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.00%
23. Lighting Analysis	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.00%
24. Lighting Plans	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.00%
25. Landscape Analysis	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.00%
26. Landscape Plans	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.00%
27. Survey (Field & Office Support)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.00%
28. Photogrammetry	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.00%
29. Mapping	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.00%
30. Terrestrial Mobile LiDAR	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.00%
31. Architecture Development	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.00%
32. Noise Barriers Impact Design Assessment	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.00%
33. Intelligent Transportation Systems Analysis	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.00%
34. Intelligent Transportation Systems Plans	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.00%
35. Geotechnical	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.00%
36. 3D Modeling	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.00%

Note: This spreadsheet to be used in Technical Proposal for Districts requiring the Grand Total hours be provided along with percentage distribution by classification.

**ESTIMATE OF WORK EFFORT FOR TECHNICAL PROPOSALS - FIRM TOTAL**

Financial Project Number: 446491-1-38-01  
 FAP Number: 0

Project Name: SR 434 Roundabouts from W of Jetta Point to S of Artesia St - SA 2 Design Reanalysis  
 Date: 12/27/2023 Name of Consultant: AECOM Technical Services, Inc.

WORK ACTIVITY	Hours from "Summary" sheet		EMPLOYEE CLASSIFICATION											TOTAL STAFF HOURS		ON CADD	
	Firm	Total	Project Manager	Chief Engineer 1	Senior Engineer 1	Engineer 2	Engineer 1	Engineering Intern	Senior Designer	Senior Landscape Architect	Landscape Designer	Senior Env Specialist	Env Specialist	Senior Utility Coordinator	RANGE		
	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours			PERCENT
3. Project General and Project Common Tasks	28	28	28	0	0	0	0	0	0	0	0	0	0	0	28	31	
4. Roadway Analysis	782	39	0	469	0	0	274	0	0	0	0	0	0	0	782	860	
5. Roadway Plans	436	22	0	131	0	0	283	0	0	0	0	0	0	0	436	480	
6a. Drainage Analysis	591	29	0	355	0	207	0	0	0	0	0	0	0	0	591	650	
6b. Drainage Plans	180	0	0	18	0	162	0	0	0	0	0	0	0	0	180	198	
7. Utilities	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
8. Environmental Permits, and Env. Clearances	8	0	0	0	0	0	0	0	0	0	8	0	0	0	8	9	
9. Structures - Misc. Tasks, Dwgs, Non-Tech.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
10. Structures - Bridge Development Report	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
11. Structures - Temporary Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
12. Structures - Short Span Concrete Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
13. Structures - Medium Span Concrete Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
14. Structures - Structural Steel Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
15. Structures - Segmental Concrete Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
16. Structures - Movable Span	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
17. Structures - Retaining Walls	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
18. Structures - Miscellaneous	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
19. Signing & Pavement Marking Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
20. Signing & Pavement Marking Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
21. Signalization Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
22. Signalization Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
23. Lighting Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
24. Lighting Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
25. Landscape Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
26. Landscape Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
27. Survey (Field & Office Support)	0	27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
28. Photogrammetry	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
29. Mapping	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
30. Terrestrial Mobile LiDAR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
31. Architecture Development	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
32. Noise Barriers Impact Design Assessment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
33. Intelligent Transportation Systems Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
34. Intelligent Transportation Systems Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
35. Geotechnical	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
36. 3D Modeling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
<b>TOTALS</b>	<b>2,025</b>	<b>118</b>	<b>0</b>	<b>973</b>	<b>0</b>	<b>369</b>	<b>557</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>8</b>	<b>0</b>	<b>0</b>	<b>2,025</b>	<b>2,228</b>		

Field Survey Estimate:

0 4-person crew days

**FIRM TOTAL**

**2,025 2,228**

Notes:

1. This worksheet provides the distribution of a firm's total staff hours for a project.
2. Percentages for staff hour distribution by classification are entered below in rows 64 to 98 of this sheet.
3. Total Staff Hours (column O) may not match staff hours from Summary worksheet (column B) due to rounding. Staff hours calculated for employee classifications are to be adjusted so totals in columns B and O match.
4. Formulas under "Total Staff Hours Range" (columns O & P) may be adjusted to provide desired range.

**ESTIMATE OF WORK EFFORT FOR TECHNICAL PROPOSALS - FIRM TOTAL**

Financial Project Number: 446491-1-38-01

Project Name SR 434 Roundabouts from W of Jetta Point to S of Artesia St - SA 2 Design Reanalysis

FAP Number: 0

Date: 12/27/2023

Name of Consultant: AECOM Technical Services, Inc.

Staff Hour Distribution Percentages - Firm Total														
	Hours from "Summary" sheet Firm Total	Project Manager	Chief Engineer 1	Senior Engineer 1	Engineer 2	Engineer 1	Engineering Intern	Senior Designer	Senior Landscape Architect	Landscape Designer	Senior Env Specialist	Env Specialist	Senior Utility Coordinator	Total
3. Project General and Project Common Tasks	28	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.00%
4. Roadway Analysis	782	5.0%	0.0%	60.0%	0.0%	0.0%	35.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.00%
5. Roadway Plans	436	5.0%	0.0%	30.0%	0.0%	0.0%	65.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.00%
6a. Drainage Analysis	591	5.0%	0.0%	60.0%	0.0%	35.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.00%
6b. Drainage Plans	180	0.0%	0.0%	10.0%	0.0%	90.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.00%
7. Utilities	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.00%
8. Environmental Permits, and Env. Clearances	8	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.0%	0.0%	0.0%	100.00%
9. Structures - Misc. Tasks, Dwg, Non-Tech.	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.00%
10. Structures - Bridge Development Report	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.00%
11. Structures - Temporary Bridge	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.00%
12. Structures - Short Span Concrete Bridge	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.00%
13. Structures - Medium Span Concrete Bridge	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.00%
14. Structures - Structural Steel Bridge	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.00%
15. Structures - Segmental Concrete Bridge	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.00%
16. Structures - Movable Span	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.00%
17. Structures - Retaining Walls	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.00%
18. Structures - Miscellaneous	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.00%
19. Signing & Pavement Marking Analysis	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.00%
20. Signing & Pavement Marking Plans	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.00%
21. Signalization Analysis	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.00%
22. Signalization Plans	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.00%
23. Lighting Analysis	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.00%
24. Lighting Plans	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.00%
25. Landscape Analysis	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.00%
26. Landscape Plans	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.00%
27. Survey (Field & Office Support)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.00%
28. Photogrammetry	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.00%
29. Mapping	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.00%
30. Terrestrial Mobile LiDAR	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.00%
31. Architecture Development	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.00%
32. Noise Barriers Impact Design Assessment	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.00%
33. Intelligent Transportation Systems Analysis	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.00%
34. Intelligent Transportation Systems Plans	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.00%
35. Geotechnical	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.00%
36. 3D Modeling	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.00%



**ESTIMATE OF WORK EFFORT FOR TECHNICAL PROPOSALS - FIRM TOTAL**

Financial Project Number: 446491-1-38-01  
 FAP Number: 0

Project Name: SR 434 Roundabouts from W of Jetta Point to S of Artesia St - SA 2 Design Reanalysis  
 Date: 12/27/2023 Name of Consultant: Kittelson & Associates

WORK ACTIVITY	Hours from "Summary" sheet		EMPLOYEE CLASSIFICATION											TOTAL STAFF HOURS		ON CADD	
	Firm	Total	Principal Engineer (QA/QC)	Associate Engineer	Senior Engineer/PM	Engineer	Engineer Intern	Associate Technician	Senior Designer	CADD / Computer Tech	Secretary / Clerical				RANGE		
	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	Hours	PERCENT		
3. Project General and Project Common Tasks	12	12	0	0	0	0	0	0	0	0	0	0	0	12	13		
4. Roadway Analysis	171	10	161	0	0	0	0	0	0	0	0	0	0	171	188		
5. Roadway Plans	60	3	0	0	57	0	0	0	0	0	0	0	0	60	66		
6a. Drainage Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
6b. Drainage Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
7. Utilities	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
8. Environmental Permits, and Env. Clearances	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
9. Structures - Misc. Tasks, Dwgs, Non-Tech.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
10. Structures - Bridge Development Report	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
11. Structures - Temporary Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
12. Structures - Short Span Concrete Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
13. Structures - Medium Span Concrete Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
14. Structures - Structural Steel Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
15. Structures - Segmental Concrete Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
16. Structures - Movable Span	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
17. Structures - Retaining Walls	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
18. Structures - Miscellaneous	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
19. Signing & Pavement Marking Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
20. Signing & Pavement Marking Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
21. Signalization Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
22. Signalization Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
23. Lighting Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
24. Lighting Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
25. Landscape Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
26. Landscape Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
27. Survey (Field & Office Support)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
28. Photogrammetry	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
29. Mapping	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
30. Terrestrial Mobile LiDAR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
31. Architecture Development	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
32. Noise Barriers Impact Design Assessment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
33. Intelligent Transportation Systems Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
34. Intelligent Transportation Systems Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
35. Geotechnical	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
36. 3D Modeling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
<b>TOTALS</b>	<b>243</b>	<b>25</b>	<b>161</b>	<b>0</b>	<b>57</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>243</b>	<b>267</b>		

Field Survey Estimate:

0 4-person crew days

**FIRM TOTAL**

**243**

**267**

Notes:

1. This worksheet provides the distribution of a firm's total staff hours for a project.
2. Percentages for staff hour distribution by classification are entered below in rows 64 to 98 of this sheet.
3. Total Staff Hours (column O) may not match staff hours from Summary worksheet (column B) due to rounding. Staff hours calculated for employee classifications are to be adjusted so totals in columns B and O match.
4. Formulas under "Total Staff Hours Range" (columns O & P) may be adjusted to provide desired range.

**ESTIMATE OF WORK EFFORT FOR TECHNICAL PROPOSALS - FIRM TOTAL**

Financial Project Number: 446491-1-38-01

Project Name SR 434 Roundabouts from W of Jetta Point to S of Artesia St - SA 2 Design Reanalysis

FAP Number: 0

Date: 12/27/2023

Name of Consultant: Kittelson & Associates

Staff Hour Distribution Percentages - Firm Total														
	Hours from "Summary" sheet Firm Total	Principal Engineer (QA/QC)	Associate Engineer	Senior Engineer/PM	Engineer	Engineer Intern	Associate Technician	Senior Designer	CADD / Computer Tech	Secretary / Clerical				Total
3. Project General and Project Common Tasks	12	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.00%
4. Roadway Analysis	171	6.0%	94.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.00%
5. Roadway Plans	60	5.0%	0.0%	0.0%	95.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	100.00%
6a. Drainage Analysis	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.00%
6b. Drainage Plans	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.00%
7. Utilities	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.00%
8. Environmental Permits, and Env. Clearances	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.00%
9. Structures - Misc. Tasks, Dwg, Non-Tech.	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.00%
10. Structures - Bridge Development Report	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.00%
11. Structures - Temporary Bridge	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.00%
12. Structures - Short Span Concrete Bridge	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.00%
13. Structures - Medium Span Concrete Bridge	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.00%
14. Structures - Structural Steel Bridge	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.00%
15. Structures - Segmental Concrete Bridge	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.00%
16. Structures - Movable Span	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.00%
17. Structures - Retaining Walls	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.00%
18. Structures - Miscellaneous	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.00%
19. Signing & Pavement Marking Analysis	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.00%
20. Signing & Pavement Marking Plans	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.00%
21. Signalization Analysis	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.00%
22. Signalization Plans	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.00%
23. Lighting Analysis	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.00%
24. Lighting Plans	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.00%
25. Landscape Analysis	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.00%
26. Landscape Plans	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.00%
27. Survey (Field & Office Support)	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.00%
28. Photogrammetry	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.00%
29. Mapping	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.00%
30. Terrestrial Mobile LiDAR	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.00%
31. Architecture Development	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.00%
32. Noise Barriers Impact Design Assessment	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.00%
33. Intelligent Transportation Systems Analysis	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.00%
34. Intelligent Transportation Systems Plans	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.00%
35. Geotechnical	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.00%
36. 3D Modeling	0	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.00%

**ESTIMATE OF WORK EFFORT AND COST - PRIME CONSULTANT**

Name of Project: SR 434 Roundabouts from W of Jetta Point to S of Artesia St - SA 2 Design Reanalysis  
 County: Seminole  
 FPN: 446491-1-38-01  
 FAP No.: 1/0/1900

Consultant Name: AECOM Technical Services, Inc.  
 Consultant No.: enter consultants proj. number  
 Date: 12/27/2023  
 Estimator: insert name

Staff Classification	Total Staff Hours From "SH Summary"	Project Manager	Chief Engineer 1	Senior Engineer 1	Engineer 2	Engineer 1	Engineering Intern	Senior Designer	Senior Landscape Architect	Landscape Designer	Senior Env Specialist	Env Specialist	Senior Utility Coordinator	SH By Activity	Salary Cost By Activity	Average Rate Per Task
3. Project General and Project Common Tasks	28	28	0	0	0	0	0	0	0	0	0	0	0	28	\$2,694	\$96.20
4. Roadway Analysis	782	39	0	469	0	0	274	0	0	0	0	0	0	782	\$57,929	\$74.08
5. Roadway Plans	436	22	0	131	0	0	283	0	0	0	0	0	0	436	\$25,365	\$58.18
6a. Drainage Analysis	591	29	0	355	0	207	0	0	0	0	0	0	0	591	\$46,132	\$78.06
6b. Drainage Plans	180	0	0	18	0	162	0	0	0	0	0	0	0	180	\$9,873	\$54.85
7. Utilities	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
8. Environmental Permits, and Env. Clearances	8	0	0	0	0	0	0	0	0	0	8	0	0	8	\$374	\$46.81
9. Structures - Misc. Tasks, Dwgs, Non-Tech.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
10. Structures - Bridge Development Report	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
11. Structures - Temporary Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
12. Structures - Short Span Concrete Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
13. Structures - Medium Span Concrete Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
14. Structures - Structural Steel Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
15. Structures - Segmental Concrete Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
16. Structures - Movable Span	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
17. Structures - Retaining Walls	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
18. Structures - Miscellaneous	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
19. Signing & Pavement Marking Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
20. Signing & Pavement Marking Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
21. Signalization Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
22. Signalization Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
23. Lighting Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
24. Lighting Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
25. Landscape Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
26. Landscape Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
27. Survey (Field & Office Support)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
28. Photogrammetry	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
29. Mapping	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
30. Terrestrial Mobile LIDAR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
31. Architecture Development	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
32. Noise Barriers Impact Design Assessment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
33. Intelligent Transportation Systems Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
34. Intelligent Transportation Systems Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
35. Geotechnical	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
36. 3D Modeling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
<b>Total Staff Hours</b>	2,025	118	0	973	0	369	557	0	0	0	8	0	0	2,025		
<b>Total Staff Cost</b>		\$11,351.60	\$0.00	\$90,051.15	\$0.00	\$18,693.54	\$21,895.67	\$0.00	\$0.00	\$0.00	\$374.48	\$0.00	\$0.00		\$142,366.44	\$70.30

Check = \$142,366.44

Survey Field Days by Subconsultant  
 4 - Person Crew:

- Notes:  
 1. This sheet to be used by Prime Consultant to calculate the Grand Total fee.  
 2. Manually enter fee from each subconsultant. Unused subconsultant rows may be hidden.

SALARY RELATED COSTS:			\$142,366.44
OVERHEAD:		131.94%	\$187,838.28
OPERATING MARGIN:		34.79%	\$49,529.28
FCCM (Facilities Capital Cost Money):		0.00%	\$0.00
EXPENSES:		10.82%	\$15,404.05
Survey (Field - if by Prime)	0	4-person crew days @	\$ - / day
<b>SUBTOTAL ESTIMATED FEE:</b>			<b>\$395,138.05</b>
Subconsultant: KAI			\$47,804.32
Subconsultant: Sub 2			\$0.00
Subconsultant: Sub 3			\$0.00
Subconsultant: Sub 4			\$0.00
Subconsultant: Sub 5			\$0.00
Subconsultant: Sub 6			\$0.00
Subconsultant: Sub 7			\$0.00
Subconsultant: Sub 8			\$0.00
Subconsultant: Sub 9			\$0.00
Subconsultant: Sub 10			\$0.00
Subconsultant: Sub 11			\$0.00
Subconsultant: Sub 12			\$0.00
<b>SUBTOTAL ESTIMATED FEE:</b>			<b>\$442,942.37</b>
Geotechnical Field and Lab Testing			\$0.00
<b>SUBTOTAL ESTIMATED FEE:</b>			<b>\$442,942.37</b>
Optional Services			\$0.00
<b>GRAND TOTAL ESTIMATED FEE:</b>			<b>\$442,942.37</b>

**ESTIMATE OF WORK EFFORT AND COST - SUBCONSULTANT**

Name of Project: SR 434 Roundabouts from W of Jetta Point to S of Artesia St - SA 2 Design Reanalysis  
 County: Seminole  
 FPN: 446491-1-38-01  
 FAP No.: 1/0/1900

Consultant Name: AECOM Technical Services, Inc.  
 Consultant No.: enter consultants proj. number  
 Date: 12/27/2023  
 Estimator: Brandon W. Kelley, PE

Staff Classification	Total Staff Hours From "SH Summary Firm"	Principal Engineer	Associate Engineer	Senior Engineer/PM	Engineer	Engineer Intern	Associate Technician	Secretary/Clerical						SH By Activity	Salary Cost By Activity	Average Rate Per Task
		\$68.67	\$62.91	\$50.45	\$36.72	\$30.81	\$46.35	\$22.98								
3. Project General and Project Common Tasks	12	12	0	0	0	0	0	0	0	0	0	0	0	12	\$824	\$68.67
4. Roadway Analysis	171	10	161	0	0	0	0	0	0	0	0	0	0	171	\$10,815	\$63.25
5. Roadway Plans	60	3	0	0	57	0	0	0	0	0	0	0	0	60	\$2,299	\$38.32
6a. Drainage Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
6b. Drainage Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
7. Utilities	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
8. Environmental Permits, and Env. Clearances	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
9. Structures - Misc. Tasks, Dwgs, Non-Tech.	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
10. Structures - Bridge Development Report	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
11. Structures - Temporary Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
12. Structures - Short Span Concrete Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
13. Structures - Medium Span Concrete Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
14. Structures - Structural Steel Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
15. Structures - Segmental Concrete Bridge	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
16. Structures - Movable Span	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
17. Structures - Retaining Walls	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
18. Structures - Miscellaneous	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
19. Signing & Pavement Marking Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
20. Signing & Pavement Marking Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
21. Signalization Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
22. Signalization Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
23. Lighting Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
24. Lighting Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
25. Landscape Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
26. Landscape Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
27. Survey (Field & Office Support)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
28. Photogrammetry	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
29. Mapping	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
30. Terrestrial Mobile LIDAR	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
31. Architecture Development	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
32. Noise Barriers Impact Design Assessment	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
33. Intelligent Transportation Systems Analysis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
34. Intelligent Transportation Systems Plans	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
35. Geotechnical	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
36. 3D Modeling	0	0	0	0	0	0	0	0	0	0	0	0	0	0	\$0	#DIV/0!
<b>Total Staff Hours</b>	243	25	161	0	57	0	0	0	0	0	0	0	0	243		
<b>Total Staff Cost</b>		\$1,716.75	\$10,128.51	\$0.00	\$2,093.04	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00		<b>\$13,938.30</b>	<b>\$57.36</b>

Check = \$13,938.30

Notes:

- This sheet to be used by Subconsultant to calculate its fee.

SALARY RELATED COSTS:			\$13,938.30
OVERHEAD:		203.35%	\$28,343.53
OPERATING MARGIN:		34.00%	\$4,739.02
FCCM (Facilities Capital Cost Money):		0.441%	\$61.47
EXPENSES:		5.18%	\$722.00
<b>SUBTOTAL ESTIMATED FEE:</b>			<b>\$47,804.32</b>
Survey (Field)	0	4-person crew	\$ - / day
Geotechnical Field and Lab Testing			\$0.00
<b>SUBTOTAL ESTIMATED FEE:</b>			<b>\$47,804.32</b>
Optional Services			\$0.00
<b>GRAND TOTAL ESTIMATED FEE:</b>			<b>\$47,804.32</b>

**Project Staff Hour Summary**

Estimator:	SR 434 Roundabouts from W of Jetta Point to S of Artesia St - SA 2 Design Reanalysis 446491-1-38-01
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Representing	Print Name	Signature / Date
Seminole County		
AECOM		

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

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
3.1	Public Involvement					
3.1.1	Community Awareness Plan	LS	1	0	0	
3.1.2	Notifications	LS	1	0	0	
3.1.3	Preparing Mailing Lists	LS	1	0	0	
3.1.4	Median Modification Letters	LS	1	0	0	
3.1.5	Driveway Modification Letters	LS	1	0	0	
3.1.6	Newsletters	LS	1	0	0	
3.1.7	Renderings and Fly Throughs	LS	1	0	0	
3.1.8	PowerPoint Presentation	LS	1	0	0	
3.1.9	Public Meeting Preparations	LS	1	0	0	
3.1.10	Public Meeting Attendance/Followup	LS	1	0	0	
3.1.11	Other Agency Meetings	LS	1	0	0	
3.1.12	Web Site	LS	1	0	0	
<b>3.1 Public Involvement Subtotal</b>					<b>0</b>	
3.2	Joint Project Agreements	EA	0	0	0	
3.3	Specifications & Estimates					
3.3.1	Specifications Package Preparation	LS	1	0	0	
3.3.2	Estimated Quantities Report Preparation	Report	0	Calculated Hours 0	0	
		Components	0			
3.4	Contract Maintenance and Project Documentation	LS	1	16	16	4 hrs/month x 4 months
3.5	Value Engineering (Multi-Discipline Team) Review	LS	1	0	0	
3.6	Prime Consultant Project Manager Meetings	LS	1	12	12	See listing below
3.7	Plans Update	LS	1	0	0	

**Project Staff Hour Summary**

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
3.8	Post Design Services	LS	1	0	0	
3.9	Digital Delivery	LS	1	0	0	
3.10	Risk Assessment Workshop	LS	1	0	0	
3.11	Railroad, Transit, and/or Airport Coordination	LS	1	0	0	
3.11.1	Aeronautical Evaluation	LS	1	0	0	
3.12	Landscape and Existing Vegetation Coordination	LS	1	0	0	
3.13	Other Project General Tasks	LS	1	0	0	
<b>3. Project Common and Project General Tasks Total</b>					<b>28</b>	
<b>3.6 - List of Project Manager Meetings</b>						
		Units	No of Units	Hours/ Unit	Total Hours	Comments
	Roadway Analysis	EA	8	1.5	12	virtual
	Drainage	EA	0	0	0	
	Utilities	EA	0	0	0	
	Environmental	EA	0	0	0	
	Structures	EA	0	0	0	
	Signing & Pavement Marking	EA	0	0	0	
	Signalization	EA	0	0	0	
	Lighting	EA	0	0	0	
	Landscape Architecture	EA	0	0	0	
	Survey	EA	0	0	0	
	Photogrammetry	EA	0	0	0	
	ROW & Mapping	EA	0	0	0	
	Terrestrial Mobile LiDAR	EA	0	0	0	
	Architecture	EA	0	0	0	
	Noise Barriers	EA	0	0	0	
	ITS Analysis	EA	0	0	0	
	Geotechnical	EA	0	0	0	
	Progress Meetings	EA	0	0	0	
	Phase Reviews	EA	0	0	0	
	Field Reviews	EA	0	0	0	
<b>Total Project Manager Meetings</b>			8		12	Total PM Meeting Hours carries to Task 3.6 above

**Notes:**

1. If the hours per meeting vary in length (hours) enter the average in the hour/unit column.
2. Do not double count agency meetings between permitting agencies.

**Project Staff Hour Summary**

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
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3. Project manager meetings are calculated in each discipline sheet and brought forward to Column D, except for Photogrammetry.

**Project Staff Hour Summary**

Estimator: SR 434 Roundabouts from W of Jetta Point to S of Artesia St - SA 2 Design Reanalysis  
446491-1-38-01

Representing	Print Name	Signature / Date
FDOT District		
Consultant Name		

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

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
3.1	Public Involvement					
3.1.1	Community Awareness Plan	LS	1	0	0	
3.1.2	Notifications	LS	1	0	0	
3.1.3	Preparing Mailing Lists	LS	1	0	0	
3.1.4	Median Modification Letters	LS	1	0	0	
3.1.5	Driveway Modification Letters	LS	1	0	0	
3.1.6	Newsletters	LS	1	0	0	
3.1.7	Renderings and Fly Throughs	LS	1	0	0	
3.1.8	PowerPoint Presentation	LS	1	0	0	
3.1.9	Public Meeting Preparations	LS	1	0	0	
3.1.10	Public Meeting Attendance/Followup	LS	1	0	0	
3.1.11	Other Agency Meetings	LS	1	0	0	
3.1.12	Web Site	LS	1	0	0	
<b>3.1 Public Involvement Subtotal</b>					<b>0</b>	
3.2	Joint Project Agreements	EA	0	0	0	
3.3	Specifications & Estimates					
3.3.1	Specifications Package Preparation	LS	1	0	0	
3.3.2	Estimated Quantities Report Preparation	Report	0	Calculated Hours	0	
		Components	0			
3.4	Contract Maintenance and Project Documentation	LS	1	0	0	
3.5	Value Engineering (Multi-Discipline Team) Review	LS	1	0	0	
3.6	Prime Consultant Project Manager Meetings	LS	1	12	12	See listing below
3.7	Plans Update	LS	1	0	0	



**Project Staff Hour Summary**

<b>Task No.</b>	<b>Task</b>	<b>Units</b>	<b>No of Units</b>	<b>Hours/ Unit</b>	<b>Total Hours</b>	<b>Comments</b>
3.8	Post Design Services	LS	1	0	0	
3.9	Digital Delivery	LS	1	0	0	
3.10	Risk Assessment Workshop	LS	1	0	0	
3.11	Railroad, Transit, and/or Airport Coordination	LS	1	0	0	
3.11.1	Aeronautical Evaluation	LS	1	0	0	
3.12	Landscape and Existing Vegetation Coordination	LS	1	0	0	
3.13	Other Project General Tasks	LS	1	0	0	
<b>3. Project Common and Project General Tasks Total</b>					<b>12</b>	
<b>3.6 - List of Project Manager Meetings</b>						
		<b>Units</b>	<b>No of Units</b>	<b>Hours/ Unit</b>	<b>Total Hours</b>	<b>Comments</b>
	Roadway Analysis	EA	8	1.5	12	
	Drainage	EA	0	0	0	
	Utilities	EA	0	0	0	
	Environmental	EA	0	0	0	
	Structures	EA	0	0	0	
	Signing & Pavement Marking	EA	0	0	0	
	Signalization	EA	0	0	0	
	Lighting	EA	0	0	0	
	Landscape Architecture	EA	0	0	0	
	Survey	EA	0	0	0	
	Photogrammetry	EA	0	0	0	
	ROW & Mapping	EA	0	0	0	
	Terrestrial Mobile LiDAR	EA	0	0	0	
	Architecture	EA	0	0	0	
	Noise Barriers	EA	0	0	0	
	ITS Analysis	EA	0	0	0	
	Geotechnical	EA	0	0	0	
	Progress Meetings	EA	0	0	0	
	Phase Reviews	EA	0	0	0	
	Field Reviews	EA	0	0	0	
<b>Total Project Manager Meetings</b>			8		12	Total PM Meeting Hours carries to Task 3.6 above

**Notes:**

1. If the hours per meeting vary in length (hours) enter the average in the hour/unit column.
2. Do not double count agency meetings between permitting agencies.

**Project Staff Hour Summary**

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
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3. Project manager meetings are calculated in each discipline sheet and brought forward to Column D, except for Photogrammetry.

**Project Staff Hour Summary**

Estimator: Kristine Prince

SR 434 Roundabouts from W of Jetta Point to S of Artesia St - SA 2 Design Reanalysis

446491-1-38-01

Representing	Print Name	Signature / Date
Seminole County		
AECOM		

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

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
4.1	Typical Section Package	LS	10	4	40	4 Alternative Concepts - 2 Typical Sections per Alternative @ 4 hrs. 1 Final Concept - 2 Typical Sections @ 4 hrs
4.2	Pavement Type Selection Report	LS	1	0	0	
4.3	Pavement Design Package	LS	1	0	0	
4.4	Cross-Slope Correction	LS	1	0	0	
4.5	Horizontal /Vertical Master Design Files	LS	5	70	350	4 Alternative Concepts - 70 hours per Alternative (lowering SR 434 proposed profile, horizontal geometry, modifying sidewalks/shared use path, median islands) 1 Final Concept - 70 hrs (1 Baseline and Profile; does not include roundabout profiles or sidestreet profiles)
4.6	Access Management	LS	1	0	0	
4.7	Roundabout Final Design Analysis	LS	1	0	0	
4.8	Cross Section Design Files	LS	5	40	200	4 Alternative Concepts - 40 hours per Alternative (For Right of Way and LOC determination) 1 Final Concept - 40 hrs.(For Right of Way, LOC determination and 10 sections)
4.9	Temporary Traffic Control Plan Analysis	LS	1	0	0	
4.10	Master TTCP Design Files	LS	1	0	0	
4.11a	Selective Clearing and Grubbing of Existing VegetationField Assessment	LS	1	0	0	
4.11b	Selective Clearing and Grubbing Site Inventory of Existing Vegetation and Cross-Discipline Coordination (OPTIONAL SERVICES)	LS	1	0	0	
4.11c	Selective Clearing and Grubbing- Existing Vegetation Maintenance Report	LS	1	0	0	
4.12	Tree Dispostion Plan	LS	1	0	0	
4.13	Design Variations and Exceptions	LS	4	10	40	Identify the variations and exceptions needed for 4 alternatives at 10 hrs ea.
4.14	Design Report	LS	1	0	0	
4.15	Roadway Quantities for EQ Report	Length (Miles)	0.00	Calculated Hours	0	
		Complexity				
		Interchanges Rest Areas	0	0		
4.16	TTCP Quantities for EQ Report	Complexity		Calculated Hours	0	

**Project Staff Hour Summary**

<b>Task No.</b>	<b>Task</b>	<b>Units</b>	<b>No of Units</b>	<b>Hours/ Unit</b>	<b>Total Hours</b>	<b>Comments</b>
4.16	1. For Quantities for EQ Report	Major Phases	0	0	0	
4.17	Cost Estimate	LS	1	0	0	
4.18	Technical Special Provisions and Modified Special Provisions	LS	1	0	0	
4.19	Other Roadway Analyses	LS	1	16	16	Detail for Curb Return and Sidewalk Connections
<b>Roadway Analysis Technical Subtotal</b>					<b>646</b>	

**Project Staff Hour Summary**

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
4.20	Field Reviews	LS	1	0	0	
4.21	Monitor Existing Structures	LS	1	0	0	
4.22	Technical Meetings	LS	1	72	72	Meetings are listed below
4.23	Quality Assurance/Quality Control	LS	%	5%	32	
4.24	Independent Peer Review	LS	%	0%	0	
4.25	Supervision	LS	%	5%	32	
<b>Roadway Analysis Nontechnical Subtotal</b>					<b>136</b>	
4.26	Coordination	LS	%	0%	0	Coordination included in Other Meetings
<b>4. Roadway Analysis Total</b>					<b>782</b>	

Technical Meetings	Units	No of Units	Hours/ Unit	Total Hours	Comments	PM Attendance at Meeting Required?	Number
Typical Section	EA	2	3	6	2 people @ 1.5 hrs.	yes	2
Pavement	EA	0	0	0			0
Access Management	EA	0	0	0			0
15% Line and Grade	EA	2	3	6	2 people @ 1.5 hrs. x 2 meetings	yes	2
Driveways	EA	0	0	0			0
Local Governments (cities, counties, MPO)	EA	4	3	12	2 people @ 1.5 hrs. x 4 meetings	yes	4
Work Zone Traffic Control	EA	0	0	0			0
30/60/90/100% Comment Review Meetings	EA	0	0	0			0
Other Meetings	EA	16	3	48	Coordination Meetings with Drainage and KAI for Roundabouts (weekly meetings x 1.5 hr x 2 people)	no	0
<b>Subtotal Technical Meetings</b>				<b>72</b>		<b>Subtotal Project Manager Meetings</b>	<b>8</b>
Progress Meetings (if required by FDOT)	EA	0	0	0	<i>PM attendance at Progress Meetings is manually entered on General Task 3</i>		--
Phase Review Meetings	EA	0	0	0	<i>PM attendance at Phase Review Meetings is manually entered on General Task 3</i>		--
<b>Total Meetings</b>				<b>72</b>	<b>Total Project Manager Meetings (carries to Tab 3)</b>		<b>8</b>

Carries to 4.21

Carries to Tab 3

**Project Staff Hour Summary**

Estimator: Brandon W. Kelley, PE

SR 434 Roundabouts from W of Jetta Point to S of Artesia St - SA 2 Design Reanalysis

446491-1-38-01

Representing	Print Name	Signature / Date
Seminole County		
Kittelson & Associates, Inc.	Brandon W. Kelley, PE	

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

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
4.1	Typical Section Package	LS	0	0	0	
4.2	Pavement Type Selection Report	LS	0	0	0	
4.3	Pavement Design Package	LS	0	0	0	
4.4	Cross-Slope Correction	LS	0	0	0	
4.5	Horizontal /Vertical Master Design Files	LS	0	0	0	
4.6	Access Management	LS	0	0	0	
4.7	Roundabout Final Design Analysis	LS	1	140	140	Revision: 50 hr per revision of Mactavandash and Hammock Lane. 40 hr per Artesia Revision. Will include revised designs and updated speed & design vehicle checks. Proposed time includes revision per FDOT and County Comment.
4.8	Cross Section Design Files	LS	0	0	0	
4.9	Temporary Traffic Control Plan Analysis	LS	0	0	0	
4.10	Master TTCP Design Files	LS	0	0	0	
4.11a	Selective Clearing and Grubbing of Existing VegetationField Assessment	LS	0	0	0	
4.11b	Selective Clearing and Grubbing Site Inventory of Existing Vegetation and Cross-Discipline Coordination (OPTIONAL SERVICES)	LS	0	0	0	
4.11c	Selective Clearing and Grubbing- Existing Vegetation Maintenance Report	LS	0	0	0	
4.12	Tree Disposition Plan	LS	0	0	0	
4.13	Design Variations and Exceptions	LS	0	0	0	
4.14	Design Report	LS	0	0	0	
4.15	Roadway Quantities for EQ Report	Length (Miles)	0.00	Calculated Hours	0	
		Complexity				
		Interchanges Rest Areas	0	0		
4.16	TTCP Quantities for EQ Report	Complexity		Calculated Hours	0	

**Project Staff Hour Summary**

<b>Task No.</b>	<b>Task</b>	<b>Units</b>	<b>No of Units</b>	<b>Hours/ Unit</b>	<b>Total Hours</b>	<b>Comments</b>
4.16	1101 - Quantities for EQ Report	Major Phases	0	0	0	
4.17	Cost Estimate	LS	0	0	0	
4.18	Technical Special Provisions and Modified Special Provisions	LS	0	0	0	
4.19	Other Roadway Analyses	LS	0	0	0	
<b>Roadway Analysis Technical Subtotal</b>					<b>140</b>	

**Project Staff Hour Summary**

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
4.20	Field Reviews	LS	0	0	0	
4.21	Monitor Existing Structures	LS	0	0	0	
4.22	Technical Meetings	LS	1	17	17	Meetings are listed below
4.23	Quality Assurance/Quality Control	LS	%	5%	7	
4.24	Independent Peer Review	LS	%	0%	0	
4.25	Supervision	LS	%	5%	7	
<b>Roadway Analysis Nontechnical Subtotal</b>					<b>31</b>	
4.26	Coordination	LS	%	0%	0	
<b>4. Roadway Analysis Total</b>					<b>171</b>	

Technical Meetings	Units	No of Units	Hours/ Unit	Total Hours	Comments	PM Attendance at Meeting Required?	Number
Typical Section	EA	0	0	0			0
Pavement	EA	0	0	0			0
Access Management	EA	0	0	0			0
15% Line and Grade	EA	0	0	0			0
Driveways	EA	0	0	0			0
Local Governments (cities, counties, MPO)	EA	4	2	8	Initial Meeting for Design Changes / Review of Revised Designs. Meetings with both FDOT and County. 4 meetings at 1 hr apiece with 2 KAI.	yes	1
Work Zone Traffic Control	EA	0	0	0			0
30/60/90/100% Comment Review Meetings	EA	0	0	0			0
Other Meetings	EA	6	1.5	9	Meeting with FDOT Central Office to discuss roundabout design revisions and Coordination Meeting with AECOM	yes	1
<b>Subtotal Technical Meetings</b>				<b>17</b>			<b>2</b>
Progress Meetings (if required by FDOT)	EA	0	0	0		<i>PM attendance at Progress Meetings is manually entered on General Task 3</i>	--
Phase Review Meetings	EA	0	0	0		<i>PM attendance at Phase Review Meetings is manually entered on General Task 3</i>	--
<b>Total Meetings</b>				<b>17</b>		<b>Total Project Manager Meetings (carries to Tab 3)</b>	<b>2</b>

Carries to 4.21

Carries to Tab 3



**Project Staff Hour Summary**

Estimator: Kristine Prince

SR 434 Roundabouts from W of Jetta Point to S of Artesia St - SA 2 Design Reanalysis

446491-1-38-01

Representing	Print Name	Signature / Date
Seminole County		
AECOM		

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

Task No.	Task	Scale	Units	No. of Units or Sheet	Hours/ Unit or Sheet	Total Hours	Comments
5.1	Key Sheet		Sheet	0	0	0	
5.2	Typical Section Sheets						
5.2.1	Typical Sections		EA	10	6	60	4 Alternative Concepts - 2 Typical Sections per Alternative @ 6 hrs. 1 Final Concept - 2 Typical Sections @ 6 hrs
5.2.2	Typical Section Details		EA	1	6	6	Detail for Curb Return and Sidewalk Connections
5.3	General Notes/Pay Item Notes		Sheet	0	0	0	
5.4	Project Layout		Sheet	0	0	0	
5.5	Plan/Profile Sheet		Sheet	110	3	330	4 Alternative Plan and Profile Sheets with Right of Way and LOC (22 sheets per alternative) Final Alternative Plan and Profile Sheets with Right of Way and LOC (22 sheets)
5.6	Profile Sheet		Sheet	0	0	0	
5.7	Plan Sheet		Sheet	0	0	0	
5.8	Special Profile		Sheet	0	0	0	
5.9	Back-of-Sidewalk Profile Sheet		Sheet	0	0	0	
5.10	Interchange Layout Sheet		Sheet	0	0	0	
5.11	Ramp Terminal Details (Plan View)		Sheet	0	0	0	
5.12	Intersection Layout Details		Sheet	0	0	0	
5.13	Special Details		EA	0	0	0	

**Project Staff Hour Summary**

Task No.	Task	Scale	Units	No. of Units or Sheet	Hours/ Unit or Sheet	Total Hours	Comments
5.14	Cross-Section Pattern Sheets		Sheet	0	0	0	
5.15	Roadway Soil Survey Sheets		Sheet	0	0	0	
5.16	Cross Sections		EA	0	0	0	
5.17	Temporary Traffic Control Plan Sheets		Sheet	0	0	0	
5.18	Temporary Traffic Control Cross Section Sheets		EA	0	0	0	
5.19	Temporary Traffic Control Detail Sheets		Sheet	0	0	0	
5.20	Utility Adjustment Sheets		Sheet	0	0	0	
5.21	Selective Clearing and Grubbing Sheets						
5.21.1	Selective Clearing and Grubbing		Sheet	0	0	0	
5.21.2	Selective Clearing and Grubbing Details		Sheet	0	0	0	
5.22	Tree Disposition Sheets						
5.22.1	Tree Disposition Plan Sheets		Sheet	0	0	0	
5.22.2	Tree Disposition Plan Tables and Schedules		Sheet	0	0	0	
5.23	Project Control Sheets		Sheet	0	0	0	
5.24	Environmental Detail Sheets		Sheet	0	0	0	
5.25	Utility Verification Sheets (SUE Data)		Sheet	0	0	0	
<b>Roadway Plans Technical Subtotal</b>						<b>396</b>	
5.26	Quality Assurance/Quality Control		LS	%	5%	20	
5.27	Supervision		LS	%	5%	20	
<b>5. Roadway Plans Total</b>						<b>436</b>	

**Project Staff Hour Summary**

Estimator: Brandon W. Kelley, PE

SR 434 Roundabouts from W of Jetta Point to S of Artesia St - SA 2 Design Reanalysis

446491-1-38-01

Representing	Print Name	Signature / Date
Seminole County		
Kittelson & Associates, Inc.	Brandon W. Kelley, PE	

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

Task No.	Task	Scale	Units	No. of Units or Sheet	Hours/ Unit or Sheet	Total Hours	Comments
5.1	Key Sheet		Sheet	0	0	0	
5.2	Typical Section Sheets						
5.2.1	Typical Sections		EA	0	0	0	
5.2.2	Typical Section Details		EA	0	0	0	
5.3	General Notes/Pay Item Notes		Sheet	0	0	0	
5.4	Project Layout		Sheet	0	0	0	
5.5	Plan/Profile Sheet		Sheet	0	0	0	
5.6	Profile Sheet		Sheet	0	0	0	
5.7	Plan Sheet		Sheet	18	3	54	6 Design Check Sheets per Roundabout: Fastest Path and 5 Design Truck Exhibits = 18 total
5.8	Special Profile		Sheet	0	0	0	
5.9	Back-of-Sidewalk Profile Sheet		Sheet	0	0	0	
5.10	Interchange Layout Sheet		Sheet	0	0	0	
5.11	Ramp Terminal Details (Plan View)		Sheet	0	0	0	
5.12	Intersection Layout Details		Sheet	0	0	0	
5.13	Special Details		EA	0	0	0	

**Project Staff Hour Summary**

Task No.	Task	Scale	Units	No. of Units or Sheet	Hours/ Unit or Sheet	Total Hours	Comments
5.14	Cross-Section Pattern Sheets		Sheet	0	0	0	
5.15	Roadway Soil Survey Sheets		Sheet	0	0	0	
5.16	Cross Sections		EA	0	0	0	
5.17	Temporary Traffic Control Plan Sheets		Sheet	0	0	0	
5.18	Temporary Traffic Control Cross Section Sheets		EA	0	0	0	
5.19	Temporary Traffic Control Detail Sheets		Sheet	0	0	0	
5.20	Utility Adjustment Sheets		Sheet	0	0	0	
5.21	Selective Clearing and Grubbing Sheets						
5.21.1	Selective Clearing and Grubbing		Sheet	0	0	0	
5.21.2	Selective Clearing and Grubbing Details		Sheet	0	0	0	
5.22	Tree Disposition Sheets						
5.22.1	Tree Disposition Plan Sheets		Sheet	0	0	0	
5.22.2	Tree Disposition Plan Tables and Schedules		Sheet	0	0	0	
5.23	Project Control Sheets		Sheet	0	0	0	
5.24	Environmental Detail Sheets		Sheet	0	0	0	
5.25	Utility Verification Sheets (SUE Data)		Sheet	0	0	0	
<b>Roadway Plans Technical Subtotal</b>						<b>54</b>	
5.26	Quality Assurance/Quality Control		LS	%	5%	3	
5.27	Supervision		LS	%	5%	3	
<b>5. Roadway Plans Total</b>						<b>60</b>	

**Project Staff Hour Summary**

Estimator:

SR 434 Roundabouts from W of Jetta Point to S of Artesia St - SA 2 Design Reanalysis

446491-1-38-01

<b>Representing</b>	<b>Print Name</b>	<b>Signature / Date</b>
FDOT District		
Consultant Name	Dustin Perkins	

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

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
6a.1	Drainage Map Hydrology	Per Map	12	5	60	Preliminary basin updates for check on potential profile changes and adjustments to basins. These are only draft updates to run draft calculation updates. (4 alternatives with basin hydrology for 3 maps each). Will be used for line and grade computations, hours adjusted to 5 hrs per map based on potential additional pond sites.
6a.2	Base Clearance Calculations	Per Location	0	0	0	N/A, it is anticipated base clearance will not be met in several locations. Preliminary underdrain analysis will be included to evaluate mitigation option for base clearance variation.
6a.3	Pond Siting Analysis and Report	Per Basin	11	8	88	Preliminary review of potential basin changes and conceptual evaluation of 3 additional pond sites if needed based on profile changes and hydraulic gradeline constraints. (1 alternatives with 2 basins and 3 alternative with 3 basins) for a total of 11 basins (1 x 2 + 3 x 3 = 11). Use 8 hrs per basin for re-computing treatment/attenuation needs to determine volumetric DHW and TW for line and grade computations.
6a.4	Design of Cross Drains	EA	0	0	0	No changes, design of offsite systems is complete and DHW's can be referenced for this effort.
6a.5	Design of Ditches	Per Ditch Mile	2.6	8	21	Review of offsite ditches for potential elimination based on alternative roadway profile changes. (4 alternatives, conceptual review of ditches for each at 2 hrs/mile) = 4(alternative) x 2.6(miles) x 2 (hrs/mile) = 21 hrs. No calculations, review of concepts only.
6a.6a	Design of Stormwater Management Facility (Offsite or Infield Pond)	EA	2	8	16	Baseflow evaluation for lowering of NWL for 2 already designed ponds, conceptual review of SJRWMD constraints for lowered water table and preliminary review of impacts to surrounding wetlands for population of matrix.
6a.6b	Incorporate Offsite Stormwater Management Facilities	EA	13	8	104	Review of offsite ponds draining through the corridor and potential impacts for 4 alternatives, review of downstream losses and consolidation of systems where feasible. (13 facilities @ 2 hrs each for 4 alternatives = 13 x 2 x 4 = 104 hrs)
6a.7	Design of Stormwater Management Facility (Roadside Treatment Swales and Linear Ponds)	Per Cell	0	0	0	
6a.8	Design of Floodplain Compensation	Per Floodplain Basin	1	8	8	Preliminary review of potential impacts/changes to floodplain impact/compensation based on 4 alternatives, no calculations only evaluation to determine feasibility and identification of potential issues with each alternative. (4 alternatives with 1 floodplain area at 2 hrs each) = 4 x 1 x 2 = 8 hrs
6a.9	Design of Storm Drains	EA	128	1	128	159 previously designed structures, preliminary review of storm drain system as designed for each alternative. No correction of inlet locations or spread analysis, only review of hydraulic gradelines and identification of potential issue areas for 4 alternatives. (159 inlets at 0.1 hrs/inlet for 4 alternatives = 159 (inlets) x 0.2 (hrs/inlet) x 4 (alternatives) = 127.2 hrs. These will be provided in line and grade computations to set minimum gutter elevations.
6a.10	Optional Culvert Material	EA	0	0	0	
6a.11	French Drain Systems	Per Cell	0	0	0	
6a.11.1	Existing French Drain Systems	Per Cell	0	0	0	
6a.12	Drainage Wells	EA	0	0	0	
6a.13	Drainage Design Documentation Report	LS	1	40	40	Drainage Memo for up to four (4) alternatives documenting alternative analysis of three (3) additional pond sites, changes in basin divides, offsite/onsite runoff collection systems. Memo shall discuss benefits and risks associated with each alternative.
6a.14	Bridge Hydraulic Report	EA	0	0	0	

**Project Staff Hour Summary**

Task No.	Task	Units	No of Units	Hours/ Unit	Total Hours	Comments
6a.15	Temporary Drainage Analysis	LS	0	0	0	
6a.16	Drainage Quantities for EQ Report	Drainage Structures	0	Calculated Hours 0	0	
6a.17	Cost Estimate	LS	0	0	0	
6a.18	Technical Special Provisions / Modified Special Provisions	LS	0	0	0	
6a.19	Hydroplaning Analysis	LS	0	0	0	
6a.20	Existing Permit Analysis	LS	1	0	0	
6a.21	Other Drainage Analysis	LS	1	40	40	Underdrain feasibility review for lowering of the profile. 8 potential outfall locations to be reviewed for ESHWE vs. roadway profile and conceptual underdrain elevations. 8 (outfall locations) x 5 (hrs/outfall location) = 40 hrs. Effort includes conceptual underdrain inverts to set minimum base elevations for sections of the roadway profile.
6a.22	Noise Barrier Evaluation	LS	1	0	0	
6a.23	Erosion Control Plan	Per Mile	0	0	0	
<b>Drainage Analysis Technical Subtotal</b>					<b>505</b>	
6a.24	Field Reviews	LS	1	0	0	
6a.25	Technical Meetings	LS	1	36	36	Seminole County, FDOT, and internal coordination meetings.
6a.26	Environmental Look-Around (ELA) Meeting	LS	1	0	0	
6a.27	Quality Assurance/Quality Control	LS	%	5%	25	
6a.28	Independent Peer Review	LS	%	0%	0	
6a.29	Supervision	LS	%	5%	25	
<b>Drainage Analysis Nontechnical Subtotal</b>					<b>86</b>	
6a.30	Coordination	LS	%	0%	0	Coordination included in technical meetings.
<b>6a. Drainage Analysis Total</b>					<b>591</b>	

Technical Meetings	Units	No of Units	Hours/ Unit	Total Hours	Comments	PM Attendance at Meeting Required?	Number
Base Clearance Water Elevation	EA	0	0	0			0
Pond Siting	EA	0	0	0			0
Agency	EA	0	0	0			0
Local Governments (cities, counties)	EA	4	1.5	6	4 meetings with Seminole County		0
FDOT Drainage	EA	4	1.5	6	4 meetings with FDOT		0
Other Meetings	EA	16	1.5	24	Internal discipline coordination meetings		0
<b>Subtotal Technical Meetings</b>				<b>36</b>			<b>0</b>
Progress Meetings (if required by FDOT)	EA	0	0	0	PM attendance at Progress Meetings is manually entered on General Task 3		--
Phase Review Meetings	EA	0	0	0	PM attendance at Phase Review Meetings is manually entered on General Task 3		--
<b>Total Meetings</b>				<b>36</b>	<b>Total Project Manager Meetings (carries to Tab 3)</b>		<b>0</b>

Carries to 6a.25

Carries to Tab 3

**Project Staff Hour Summary**

Estimator: **6b. Drainage Plans Staff Hours** SR 434 Roundabouts from W of Jetta Point to S of Artesia St - SA 2 Design Reanalysis  
446491-1-38-01

<b>Representing</b>	<b>Print Name</b>	<b>Signature / Date</b>
<b>FDOT District</b>		
<b>Consultant Name</b>	<b>Dustin Perkins</b>	

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

Task No.	Task	Project Parameter			Staff Hours				Documentation
		Description	Units	Complexity	Calculated	Department	Consultant	Negotiated	Provide documentation when negotiated hours differ from the calculated hours.
6b.1	Drainage Map (Including Interchanges)	Length (Miles)	<b>6.80</b>	Mid Range	164	0	164	0	11x17 Drainage Maps for 4 alternatives (1.7 miles per alternative), maps will reflect changes in basins, low point critical elevations, biological indicators, underdrain outfalls, trunklines and conceptual storm drain network, roadway profiles with critical elevations used to establish roadway profiles.
6b.2	Bridge Hydraulics Recommendation Sheets	Bridges	0		0	0	0	0	
6b.3	Drainage Structures	Drainage Structures	0		0	0	0	0	
		Details	0		0	0	0	0	
6b.4	Lateral Ditches	Ditches	0	Standard	0	0	0	0	
			0	Complex	0	0	0	0	
		Cross Section Alignments	0		0	0	0	0	
6b.5	Retention/Detention/Floodplain Compensation Ponds	Ponds	0	Standard	0	0	0	0	
			0	Complex	0	0	0	0	
		Cross Section Alignments	0		0	0	0	0	
6b.6	Erosion Control Plan	Length (Miles)	<b>0.00</b>		0	0	0	0	
6b.7	SWPPP		0		0	0	0	0	
<b>Drainage Plans Technical Subtotal</b>					<b>164</b>	<b>0</b>	<b>164</b>	<b>164</b>	
6b.8	Quality Assurance/Quality Control	%	<b>1</b>	5%	8			8	
6b.9	Supervision	%	<b>1</b>	5%	8			8	
<b>6. Drainage Plans Total</b>								<b>180</b>	

**Project Staff Hour Summary**

Estimator:

SR 434 Roundabouts from W of Jetta Point to S of Artesia St - SA 2 Design Reanalysis

446491-1-38-01

Representing	Print Name	Signature / Date
FDOT District		
Consultant Name		

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

Task No.	Task	Units	No. of Units	Hours/ Units	Total Hours	Comments
<b>Environmental Permits and Environmental Clearances</b>						
8.1	Preliminary Project Research	LS	1	0	0	
<b>Permits</b>						
8.2	<b>Field Work</b>					
8.2.1	Pond Site Alternatives	per pond site	1	8	8	review potential new pond sites
8.2.2	Establish Wetland Jurisdictional Lines and Assessments	LS	1	0	0	
8.2.3	Species Surveys	LS	1	0	0	
8.3	Agency Verification of Wetland Data	LS	1	0	0	
8.4	<b>Complete And Submit All Required Permit Applications</b>					
8.4.1	Complete and Submit All Required Wetland Permit Applications	LS	1	0	0	
8.4.2	Complete and Submit All Required Species Permit Applications	LS	1	0	0	
8.5	Coordinate and Review Dredge and Fill Sketches	LS	1	0	0	
8.6	<b>Complete and Submit Documentation for Coordination and/or USCG Permit Application</b>					
8.6.1	Prepare and submit required documents for USCG coordination	LS	1	0	0	
8.6.2	Complete and submit USCG Bridge Application	LS	1	0	0	
8.7	Prepare Water Management District or Local Water Control District Right of Way Occupancy Permit Application	LS	1	0	0	
8.8	Prepare Coastal Construction Control Line (CCCL) Permit Application	LS	1	0	0	
8.9	Prepare USACE Section 408 Application to Alter a Civil Works Project	LS	1	0	0	
8.10	Compensatory Mitigation Plan	LS	1	0	0	
8.11	Mitigation Coordination and Meetings	LS	1	0	0	
8.12	Regulatory Agency Support	LS	1	0	0	



**Project Staff Hour Summary**

Task No.	Task	Units	No. of Units	Hours/ Units	Total Hours	Comments
	<b>Environmental Clearances/Reevaluations</b>					
8.13	<b>Technical support to Department for Environmental Clearances and Reevaluations (use when consultant provides technical support only)</b>					
8.13.1	NEPA or SEIR Reevaluation	LS	1	0	0	
8.13.2	Archaeological and Historical Resources	LS	1	0	0	
8.13.3	Wetland Impact Analysis	LS	1	0	0	
8.13.4	Essential Fish Habitat Impact Analysis	LS	1	0	0	
8.13.5	Protected Speices and Habitat Impact Analysis	LS	1	0	0	
8.14	<b>Preparation of Environmental Clearances and Reevaluations (use when consultant prepares all documents associated with reevaluation)</b>					
8.14.1	NEPA or SEIR Reevaluation	LS	1	0	0	
8.14.2	Archaeological and Historical Resources	LS	1	0	0	
8.14.3	Wetland Impact Analysis	LS	1	0	0	
8.14.4	Essential Fish Habitat Impact Analysis	LS	1	0	0	
8.14.5	Protected Species and Habitat Impact Analysis	LS	1	0	0	
8.15	Other Environmental Permits	LS	1	0	0	
8.16	Contamination Impact Analysis	LS	1	0	0	
8.17	Asbestos Survey	LS	1	0	0	
<b>Environmental Permits and Environmental Clearances/Reevaluations Technical Subtotal</b>					<b>8</b>	
8.18	Technical Meetings	LS	1	0	0	Meetings are listed below
8.19	Quality Assurance/Quality Control	LS	%	0%	0	
8.20	Supervision	LS	%	0%	0	
<b>Environmental Permits and Environmental Clearances Nontechnical Subtotal</b>					<b>0</b>	
8.21	Coordination	LS	%	0%	0	
<b>8. Environmental Permits and Environmental Clearances Total</b>					<b>8</b>	

Technical Meetings	Units	No of Units	Hours/ Unit	Total Hours	Comments	PM Attendance at Meeting Required?	Number
WMD	EA	0	0	0			0
NMFS	EA	0	0	0			0
USACE	EA	0	0	0			0

**Project Staff Hour Summary**

Task No.	Task	Units	No. of Units	Hours/ Units	Total Hours	Comments		
USCG		EA	0	0	0			0
USFWS		EA	0	0	0			0
FFWCC		EA	0	0	0			0
FDOT		EA	0	0	0			0
Other Meetings		EA	0	0	0			0
<b>Subtotal Technical Meetings</b>					<b>0</b>	<b>Subtotal Project Manager Meetings</b>		<b>0</b>
Progress Meetings (if required by FDOT)		EA	0	0	0	<i>PM attendance at Progress Meetings is manually entered on General Task 3</i>		
Phase Review Meetings		EA	0	0	0	<i>PM attendance at Phase Review Meetings is manually entered on General Task 3</i>		
<b>Total Meetings</b>					<b>0</b>	<b>Total Project Manager Meetings (carries to Tab 3)</b>		<b>0</b>

Carries to 8.18

Carries to Tab 3

**PROPOSED STAFFING FORM** for SR 434 Roundabout Design - SA 2Consultant Name: **AECOM Technical Services, Inc.**

Emp #	Name	Rate	Position	Average Rate	Multiplier	Loaded Rate
	John Metroka	\$77.90	Senior Engineer 2			
690034	Gary Foster	\$81.17	Senior Engineer 2			
	Alex Mousadi	\$95.12	Senior Engineer 2			
				\$84.73	2.7755	\$235.17
682297	Jan Everett	\$133.65	Chief Engineer 2			
650443	Bruno Fiori	\$105.34	Chief Engineer 2			
				\$119.50	2.7755	\$331.66
	Jeff Blazowski	\$108.17	Chief Engineer 1			
				\$108.17	2.7755	\$300.23
685040	Marty Peate	\$105.72	Chief Planner			
				\$105.72	2.7755	\$293.43
687502	Debbie Devivero	\$41.54	Contract Coordinator			
	Shannon Negro	\$36.00	Contract Coordinator			
				\$38.77	2.7755	\$107.61
669302	Samantha Forgas	\$50.55	Engineer 1			
682429	Grace Lozano	\$50.24	Engineer 1			
	John Chandler	\$51.20	Engineer 1			
				\$50.66	2.7755	\$140.62
656300	Kristine Prince	\$64.66	Engineer 2			
				\$64.66	2.7755	\$179.46
	Jake Rogalski	\$37.67	Engineering Intern			
	Elizabeth Sofsky	\$40.95	Engineering Intern			
				\$39.31	2.7755	\$109.10
	Daniela Alviz	\$32.21	Environmental Specialist			
	Daniel Chomin-Varden	\$31.85	Environmental Specialist			
				\$32.03	2.7755	\$88.90
	Pam Hartwick	\$39.20	GIS Specialist			
				\$39.20	2.7755	\$108.80
	John Roque	\$28.93	Landscape Designer			
				\$28.93	2.7755	\$80.30
	Larissa Krinos	\$32.51	Planner			
				\$32.51	2.7755	\$90.23
684629	Chris Rizzolo	\$96.20	Project Manager 3			
				\$96.20	2.7755	\$267.00
	Edgar Montanez	\$61.67	Senior Designer			
683142	Jason Vincent	\$53.15	Senior Designer			
				\$57.41	2.7755	\$159.34

## EXHIBIT C

<b>Emp #</b>	<b>Name</b>	<b>Rate</b>	<b>Position</b>	<b>Average Rate</b>	<b>Multiplier</b>	<b>Loaded Rate</b>
692635	Bill Liatsos	\$104.98	Senior Engineer 1			
688687	Dustin Perkins	\$105.56	Senior Engineer 1			
684036	Mike S. Phillips	\$67.11	Senior Engineer 1			
				\$92.55	2.7755	<b>\$256.87</b>
684355	Robert Martini	\$44.95	Chief Designer			
692147	Glen Dvorovy	\$47.74	Chief Designer			
				\$46.35	2.7755	<b>\$128.63</b>
	Aleksa Kopanja	\$33.90	Engineering Technician			
				\$33.90	2.7755	<b>\$94.09</b>
	Thang Le	\$37.41	Senior Engineering Technician			
	Kaitlin Phillips	\$37.15	Senior Engineering Technician			
				\$37.28	2.7755	<b>\$103.47</b>
	October Richey	\$43.33	Senior Environmental Specialist			
703496	Jay Burrell	\$50.29	Senior Environmental Specialist			
				\$46.81	2.7755	<b>\$129.92</b>
660307	Mike Brown	\$54.84	Senior Landscape Architect			
685825	David Crawley	\$88.31	Senior Landscape Architect			
				\$71.58	2.7755	<b>\$198.66</b>
685224	Megan McKinney	\$67.13	Senior Planner			
688271	Lauren Brooks	\$64.19	Senior Planner			
692830	Adam Purcell	\$58.03	Senior Planner			
				\$63.12	2.7755	<b>\$175.18</b>
712539	Grant Denty	\$58.86	Senior Utility Coordinator			
				\$58.86	2.7755	<b>\$163.37</b>