



4800 Ashford Dunwoody Road  
Dunwoody, Georgia 30338  
dunwoodyga.gov | 678.382.6700

## **MEMORANDUM**

**To:** Mayor and City Council

**From:** Michael Smith, Public Works Director

**Date:** August 12, 2019

**Subject:** **Approval of a Contract Amendment with AECOM to Provide Final Design Plans for Intersection Improvements at Chamblee Dunwoody Road and Womack Road**

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### **BACKGROUND**

In 2017, the city council approved a contract with AECOM for conceptual design of corridor improvements along Chamblee Dunwoody Road in Dunwoody Village. Since completing the traffic study, the project has been on hold to allow for completion of the Dunwoody Village master plan update. However, at the city council retreat earlier this year, the mayor and city council discussed expediting the Womack intersection project. It is now a good time to move forward with the intersection design and have beneficial coordination with the master plan update and the recently initiated facility plan for the North DeKalb Cultural Arts Center that is adjacent to the intersection.

The preliminary concept for the traffic improvements includes adding a left turn lane on Womack Road and possibly extending the northbound left turn lane on Chamblee Dunwoody Road. Additionally, sidewalks, bike lanes and streetscape improvements consistent with the Dunwoody Village master plan will be incorporated within the footprint of the project.

As an addition to the original contract for the Chamblee Dunwoody corridor conceptual design, AECOM has provided a cost proposal of up to \$101,910 to complete the final engineering plans for the Womack intersection. The cost is consistent with the scope of work and is well below the \$150,000 that the city has budgeted for this project.

### **RECOMMENDED ACTION**

Staff recommends approval of an amendment to AECOM's contract (RFQ 17-01) in the amount of \$110,000, including contingency, for engineering design of intersection improvements at Chamblee Dunwoody Road and Womack Road.

July 22, 2019

Mr. Michael Smith  
Director of Public Works  
Attn: Mr. Ishri Sankar, PE  
City of Dunwoody  
4800 Ashford Dunwoody Rd.  
Dunwoody, GA 30338

**Re: Scope and Fee Proposal  
Womack Rd. at Chamblee Dunwoody Rd. Intersection Improvement**

Dear Ishri,

Enclosed please find our technical proposal and fee estimate for preparation of construction plans for the City's desired improvements to the intersection of Womack Road at Chamblee Dunwoody Road (CDR). AECOM understands these improvements to be limited to the addition of a westbound left turn lane along Womack Road as depicted in the concept layout for the Chamblee Dunwoody Road Village Corridor Improvements (PI #0015069), extension of the northbound left turn lane along CDR, and replacement of the existing span wire traffic signal with decorative mast arms. The aforementioned concept layout is appended to the end of this proposal.

**Task 1 – Survey**

Accura Engineering will perform topographic and property survey for the corridor generally following GDOT standards. The survey area will extend 600' down Womack Road, 150' north and 620' south along CDR, and 250' west down Ashford Center Parkway. The corridor width will be 90' along Womack Road and 110' along the other three legs. Only the three (3) properties along the north side of Womack Road and the twelve (12) bordering the southern leg of CDR will be fully resolved. In the remaining areas of the project, only the existing right of way line location will be determined. The survey will take approximately eight (8) weeks to complete after notice to proceed.

In the fee section of this proposal, we have included hours and fee for the survey effort described above. In addition, we have included the unit cost for a one-day minor survey update as a contingency in case additional survey or property info is needed.

**Task 2 – Subsurface Utility Engineering (SUE)**

Quality Level B SUE will be conducted along both sides of Womack Road and along the east side of Chamblee Dunwoody Road within the aforementioned survey limits. The deliverable will be a UTLE Microstation file showing the designated utilities. Overhead utilities, including pole data table, are not included in the scope.

**Task 3 – Roadway Design**

AECOM will advance the Womack Road intersection concept developed as part of the Village Project and the extension of the northbound left turn lane to full construction plans, including quantities, generally following GDOT's Plan Presentation Guide. Below are highlights of the roadway design scope.

- Limits of the project are anticipated to be as follows.
  - Approximately 500' down Womack Road. Limits will be set based on fitting in the appropriate left turn lane length and taper.

- Approximately 200' down Ashford Center Parkway to achieve any lane realignment needed on this side of the intersection.
  - Approximately 500' south along CDR to extend the existing northbound left turn lane by 100'.
  - Approximately 100' north along CDR to allow for stop bar and crosswalk realignment to accommodate the new signal.
- The widening along Womack Road will be unsymmetrical and will occur on the north side to avoid impacts to all but the library parcel, which is owned by the City.
  - The widening along CDR will likely occur to the east side, similar to the existing, where there is wide existing right of way, and avoiding the pole line on the west side; however, symmetrical widening is not excluded and will be evaluated as well.
  - There is insufficient sight distance looking south for the west-to-north right turn from Womack Road. The sight distance is obscured by an embankment. AECOM will evaluate sloping the embankment to achieve the needed sight distance; this could result in additional easement needed from the residence on that corner as well as partial demolition or reconstruction of an existing wall behind the sidewalk.
  - A wall is likely needed along the northern edge of Womack Rd. to avoid impacts to the library parking lot. And depending on whether symmetrical or unsymmetrical widening is selected, another wall may be needed at the southwest quadrant of the intersection. It is assumed that these can be GDOT standard walls. Structural design is excluded from this proposal.
  - Bike lanes are present along Womack Road and Chamblee Dunwoody Road. These facilities will remain. The only exception is the westbound bike lane along Womack Road; this one may be terminated just prior to the formation of the new turn lane to allow bicyclists the ability to make the southbound left turn.
  - There is an existing striped bulb-out between Womack Road and the library entrance. This bulb-out will be converted to curb and gutter in accordance with current industry standards.
  - It is assumed that the project will add less than 5,000 sf of impervious area and will be exempt from the City's MS4 / Post Construction Stormwater Management policy. And if the project does add 5,000 sf of impervious, it is anticipated that BMP's would be infeasible due to site limitations and the limited availability of right of way. AECOM is therefore including hours for MS4 infeasibility analysis as a contingency cost to be authorized by the City if needed.
  - The drainage and stormwater design will be in accordance with City standards, including gutter spread.
  - This proposal is assuming that the total disturbed area for this project will be greater than one acre, so full erosion control plans and an NPDES permit will be required.
  - The full depth pavement design will utilize GDOT's pavement design tool. No overlay design will be done. It is assumed that the City's typical overlay thickness can be utilized.
  - AECOM will prepare the blank 24-series utility sheets to send out to the utility owners for their existing locations and will plot information received from the utility owners on the plans; however, it

is assumed that submittals to and from the utility owners will flow through the City and the City will be the main point of contact for the utility owners.

#### **Task 4 – Traffic Design**

AECOM will provide final signal design plans for the intersection of Chamblee Dunwoody Road at Womack Road. These plans will be developed in accordance with GDOT's Signal Design Guidelines and the MUTCD. The design will be based on the proposed intersection geometrics and relevant recommendations from the traffic study. It will include, but not be limited to, proposed pole, mast arm and signal head locations, proposed phasing diagram, proposed vehicle detector locations, proposed conduit and junction box locations, proposed pedestrian accommodations, as well as replacement of any existing connections to a traffic signal communication network. Signal quantities will be provided.

#### **Task 5 – Public Involvement**

AECOM will develop a project layout plan view on aerial imagery and a typical section for use as a public outreach tool. These layouts will be colored, line drawings – not architectural renderings. In addition, AECOM will participate in one (1) public meeting arranged by the City. AECOM participants will include the Project Manager and Roadway Design Lead.

#### **Task 6 – Right of Way Plans**

AECOM will develop right of way plan sheets only for any needed right of way or easements on the project. The plan sheets will generally follow GDOT conventions showing the right of way elements graphically with labeled points as well as parcel data tables. Full right of way plans to include a cover sheet and right of way maps are not included as part of this proposal. It is assumed that fifteen (15) parcels would be impacted.

#### **Task 7 – Bid Document Support**

The City will take the lead in preparing the bid documents and communicating with the contractors. AECOM will support this effort by providing plan-related information such as quantities, calculations, and special provisions and answering contractor questions regarding the design or plan presentation.

#### **Deliverables**

AECOM will deliver construction plans and an opinion of probable construction cost. The construction estimate will utilize GDOT pay item numbers. The plans will generally follow GDOT conventions and will consist of the sections below.

- Section 1 – Cover
- Section 2 – Index
- Section 4 – General Notes
- Section 5 – Typical Sections
- Section 6 – Summary of Quantities
- Sections 13 – Roadway Construction Plans (3 plan sheets assumed)
- Sections 15 – Roadway Profiles
- Section 17 – Driveway Profiles
- Section 21 – Drainage Area Map
- Section 22 - Drainage Profiles
- Section 23 - Earthwork Cross-Sections
- Section 24 - Utility Plans
- Section 26 - Signing & Marking Plans
- Section 27 – Traffic Signal Plans
- Section 31 – Retaining Wall Envelopes

- Section 54 – Erosion Control Plans (BMP's only)
- Section 60 – Right of Way Plans

### **Meetings**

AECOM will participate in one plan review with the City at the completion of Final Plans. This review will consist of AECOM submitting the plans to the City for review and comment, followed by AECOM addressing the City's comments. Two (2) additional meeting are provided for by this proposal.

### **Excluded from the scope of services**

The following items are excluded from the scope and fee.

- Detailed MS4 BMP calculations or design other than the feasibility contingency
- Landscape and hardscape design
- Utility coordination
- No GDOT coordination or submittals are included.
- The design fee does not include hours for significant modifications to the vertical alignment of the existing road.
- Right of way staking
- Public meetings or other public outreach (beyond one public information meeting)
- Environmental permitting
- Traffic counts
- Construction oversight or administration
- Irrigation design
- NEPA services
- Subsurface Utility Exploration (SUE) services
- Permitting for traffic signal modifications
- Lighting design
- Shop drawing review
- No Phase I or II ESA scope or fee has been included
- Special provisions
- No detention or drainage studies beyond storm sewer design
- Geotechnical elements such as pavement evaluation, soil survey, and wall/bridge foundation investigations

### **Fee**

AECOM will fulfill the scope outlined herein for the **lump sum fee of \$101,910**; this includes \$9,980 in contingency.

This fee is broken down by task below. A detailed hourly breakdown can be provided upon request.

Task 1: Survey	\$ 25,950
Task 2: SUE	\$ 7,080
Task 3: Roadway Design	\$ 41,495
Task 4: Traffic Design	\$ 7,000
Task 5: Public Involvement	\$ 3,175
Task 6: Right of Way	\$ 4,900
Task 7: Bid Document Support	\$ 2,630
<b>Subtotal</b>	<b>\$ 92,230</b>

<b>Recommended Contingency – Survey</b>	<b>\$ 3,000</b>
<b>Recommended Contingency – MS4</b>	<b>\$ 6,680</b>
<b>Total Fee</b>	<b>\$ 101,910</b>

As a contingency, the cost for MS4 services as needed and a unit cost for a one-day minor survey update are included below. These can be activated by the City to cover any issues that may arise. Proration of the unit rate can be discussed as needed.

MS4 services as described in the scope	\$ 6,680 LS
One-day minor survey update	\$ 1,500/ea

AECOM recommends including a minimum contingency amount of \$3,000; this would be enough to cover two minor survey updates.

#### **Schedule**

AECOM anticipates a total duration of sixteen (16) weeks to complete the scope as outlined in this proposal; this includes eight (8) weeks for survey and eight (8) weeks for design. This does not account for utility coordination and right of way acquisition, which will dictate the critical path. AECOM understands the City anticipates the total schedule length to be twenty-four (24) weeks from NTP to Final Plans completion.

#### **Project Management**

Will Sheehan, P.E. will be the project manager and point of contact for this project. Project invoices will be submitted to the City on a monthly basis.

We look forward to continuing quality work with the City of Dunwoody. Please feel free to contact Will Sheehan at 678.808.8962 or by email to [william.sheehan@aecom.com](mailto:william.sheehan@aecom.com) should you have any questions.

Thank you.



Garrick Edwards, P.E.  
Director of Transportation



Will Sheehan, P.E.  
Roadway Engineer