

Tim Ware
Executive Director

May 14, 2018

Mr. Craig Eddy, Vice President
Michael Baker International
Hillcrest Building, Suite 101
1801 Bayberry Court
Richmond, Virginia 23226

RE: Notice-to-Proceed for Task Order Request #16 Supplement for Air Quality Modeling and Tech Memos to Support Proposed Improvements Along I-95 Near Exits 126 and 136

Dear Mr. Eddy:

Attached, please find the approved Task Order Request #16 Supplement for work on Air Quality Modeling and Tech Memos to support proposed improvements along I-95 near Exits 126 and 136. This Task Order is necessary to support recent update of the FAMPO Long Range Transportation Plan (LRTP). The work effort includes documentation of purpose, need, and performance of proposed I-95 improvements and Air Quality modeling in regards to MPO area attainment status. The total contact amount is not to exceed \$24,013. This letter will also serve as your Notice to Proceed.

Thanks for your assistance in this matter.

Sincerely,



Tim Ware
Executive Director

Attachment

**Cc: Contract File
FAMPO Policy Committee**

TASK ORDER REQUEST #16 supplement AQ Modeling & Tech Memos to support proposed improvements along I-95 near Exits 126 and 136

May 11, 2018

OVERVIEW

The task order scope described below is necessary to support the recent update of the FAMPO Long Range Transportation Plan. Work effort includes documentation of purpose, need, and performance of proposed I-95 improvements and Air Quality modeling in regards to MPO area attainment status.

Task 1 – Tech memo supporting proposed improvements near Exit 126

The consultant will provide a technical memorandum to document the need for and proposed solution to forecasted operational challenges between I-95 exits 126 and 130. The improvements are limited to the 4th southbound lane, 4th northbound lane and the 5th deceleration lane southbound. The Task 1 analysis will report performance for weekday AM, Weekday PM and Sunday PM (northbound) for the years described below. The tech memo will generally cover the following elements:

1. Executive Summary (1/2 page)
2. Background and Introduction (1/2 – 1 page)
3. Baseline and Build Conditions (description and figures)
4. 2030 & 2045 Land Use
5. 2030 & 2045 Travel Forecasts (methodology, assumptions and numbers)
6. 2030 & 2045 Traffic Operations (Comparison with Baseline (methodology, delay, queues, speed, throughput))
7. Safety:
8. Environmental:
9. ROW:
10. Project Costs:
11. Project Support:

It is understood that VDOT or GWRC will provide the content for items 8 through 11 and the consultant will format and integrate this information into the document.

For items 1 through 6, the consultant will organize, format and provide the technical content from work already done and will assemble the document to be stand-alone, cohesive and understandable. Item #7 (safety) will require new effort not previously accomplished. For this item, VDOT will provide crash history statistics and the consultant will prepare a safety analysis which includes the following items:

- Converting I-95 from 3 GP lanes to 4 GP lanes between Exits 126 and 130:
 - Take 5-year crash data from VDOT and compute crash rates for the NB and SB I-95.
 - Normalize crash rates with AADTs for current traffic conditions
 - Compare normalized experienced crash rate with expected crash rate for I-95 per Highway Safety Manual (HSM) procedures
 - Compute expected crash rate for I-95 with 4 lanes cross-sections
 - Compare the crash experience between 3-lanes and 4-lanes alternatives

- Provide summary and high points
- Adding 5th deceleration lane for I-95 SB
 - Similar analysis as in previous bullet

For Task 1, a draft tech memo will be delivered by the end of May 2018. Revisions will be made after VDOT and FHWA review and a final document will be prepared within 2-weeks after comments are received. No in-person meetings are assumed as part of this effort.

Task 2 - Tech memo supporting proposed improvements at Exit 136

In a similar style as described in Task 1, the consultant will document the need for and proposed solution to forecasted operational challenges at the Exit 136 southbound off-ramp terminus. As with Task 1, this will take the form of a tech memo and VDOT and/or GWRC will provide the content for items 8 through 11. Item #7 (safety) will require the same effort described in Task 1. Unlike Task 1, this analysis of Exit 136 will only consider Weekday AM and Weekday PM but not weekend. Delivery deadlines are the same as described for Task 1.

Task 3 – Air Quality Modeling

As a result of new interim FHWA guidance, the 2045 LRTP Air Quality conformity analysis will require the development of an additional AQ analysis scenario for the year 2023. As part of Baker's task to determine the potential air quality implications of the 2045 LRTP, Baker will develop an additional travel demand model setup and outputs for the analysis year 2023. This model set will include 2023 land use and special generator inputs as well as the 2023 highway network. The results of the 2023 scenario will be packaged and delivered by May 22nd with the analysis Baker is doing for other AQ analysis years (scoped separately).

SCHEDULE

The draft tech memos will be delivered by May 31 to allow time for VDOT & FHWA review. Revised / final memos will be delivered within 2-weeks after review comments are received. The Air Quality modeling results will be delivered by May 22.

COST

The total labor cost is \$24,013 which is derived from 122 hours at fully burdened rates spread across multiple job classifications from the Consultant Team. There are no direct expenses associated with this task order. Therefore, the total supplemental project cost will be \$24,013.

AQ & Traffic Study for I-95 Improvements near Exits 126 & 136

5/11/2018

TEAM PROJECT TOTALS

	Labor	ODCs	Total
Baker	\$ 3,063	\$ -	\$ 3,063
ATCS	\$ 20,950	\$ -	\$ 20,950
	\$ 24,013	\$ -	\$ 24,013