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Client Authorization

☒ New Contract
☐ Amendment No.

Date: September 10, 2021
Project No. 84588.20

Project Name: Buck Moore Road Corridor Capacity Study

To: Mr. James Slaton, City Manager
City of Lake Wales
201 W. Central Avenue
Lake Wales, FL 33853
jslaton@lakewalesfl.gov

Cc Email: mbennett@lakewalesfl.gov

Phone No: (863) 678-4182

Estimated Date of Completion:

Cost Estimate	Amendment	Contract Total
Labor		$25,000
Expenses		Included
TOTAL		$25,000

☒ Lump Sum ☐ Time & Expenses
☐ Cost + Fixed Fee ☐ Labor Multiplier

PROJECT DESCRIPTION

The City of Lake Wales is growing and the number of projects proposing a large number of residential units is at an all-time high. The planned Buck Moore Road Corridor Capacity Study is intended to identify the roadway design requirements and implement a plan of action in advance of the traffic exceeding the ability of the existing facility to serve that volume.

On either side of Buck Moore Road there are a substantial number of undeveloped properties that have historically been used for agriculture, primarily citrus fruit groves. At this time, the Buck Moore Road Corridor, a north-south connector road and collector level facility, has no fewer than six (6) proposed residential projects totaling nearly 750 units. The expected trip generation from these projects, combined with the existing traffic currently using the roadway during peak periods, will approach the point where capacity and a good level of service cannot be maintained.

Based on this understanding, the City of Lake Wales has requested this proposal to conduct a corridor capacity analysis that will identify both the short-term (5-10 years) and long-term (Year 2045) requirements for roadway and intersection geometrics that will obtain/maintain the adopted level of service standard. This study includes both the evaluation of roadway capacity needs and also the most appropriate introduction of multi-modal elements (bicycle, pedestrian, transit) that will be consistent with the anticipated services and vision for this area of the City.

SCOPE OF SERVICES

1.0 Project Management & Communication

VHB will maintain coordination with the City for the duration of the assignment. Weekly or Bi-weekly calls will be scheduled to review progress and findings. A study progress report will be prepared and submitted with each invoice. A Project Kick-off meeting will be scheduled with the City with the VHB Project Manager and the key City staff that will be involved in communications and study input and review.

1.1 Project Kick-off Meeting

The kick-off meeting will be held in the City offices or virtually as preferred by the City. A data needs list will be provided and discussed, the project schedule will be reviewed and the goals and objectives for the study will be finalized. Any additional scoping or edits to the original planned services will be confirmed during this meeting.

2.0 Data Collection

VHB will obtain and review the information available from the City related to the existing land use, future land use plans, traffic counts, level of service standards, design standards, subdivision plans and plat maps, land development regulations, existing right-of-way, as-built roadway plans, etc. that are pertinent to the study conduct.

2.1 Filed Review & Traffic Data Collection

VHB will conduct one (1) comprehensive field review of the surrounding corridor elements including the adjacent properties, the roadway conditions and geometrics, traffic control, access to properties and above ground utilities that can be observed. VHB will obtain from Polk County and the Florida Department of Transportation (FDOT) any available traffic count data for State Road 60, Buck Moore Road, State Road 17 (Burns Avenue), Sunset Drive and Grant Road.

Following review of the available existing traffic data, VHB will collect roadway segment and intersection traffic and turning movement counts to facilitate the existing conditions analysis and the estimation for future traffic assignment. This scope assumes a total of seven (7) roadway segment counts for a 24-hour period and four (4) intersection turning movement counts for a two-hour period during the morning and afternoon peak travel periods.

2.2 Base Mapping

GIS base maps will be prepared for the corridor study area with a range of layers depicting the existing conditions, development plans, traffic information, natural features, and the roadway network. These maps will be used to evaluate, document, and present the findings and recommendations for the study.

2.3 VHB will obtain and use the current FDOT/TPO Reginal Planning Modal for the Year 2045 and the most current year to be used in the base calibration requirements to prepare for the future year forecasts.

3.0 Future Development Evaluation

The planned and approved development in the study corridor and the immediate surrounding area will be collected from the City. These projects will be used to update the land use information in the Regional Planning Model (RPM). The results of that update will produce the future year traffic estimate for the corridor and form the basis for the conceptual design and recommendations for traffic control.

3.1 Regional Planning Model

The RPM has recently been updated and adopted by the Polk TPO. The model includes the future land use as provided to the County and the roadway network that is contained in the financially feasible plan for Polk County. Using this model, VHB will incorporate modifications to the land use type, density and

roadway network modifications needed to represent the future conditions on Buck Moore Road and the network connections at the north, middle and south ends of the corridor.

3.2 Travel Demand Forecasts

Using the modified model design for this corridor study, the estimated future traffic demand for the Buck Moore Road corridor and intersection approaches will be produced. As an added value item, each of the proposed project will be evaluated using the selected link tool in the model to provide the individual project traffic assignment. This is useful in analyzing the project traffic impacts and evaluating the associated traffic impact studies for accuracy.

3.2.1 Selected Link or Selected Zone Analysis

The adopted regional travel demand model will be used to evaluate the origin/destination of future traffic volumes on Buck Moore Road, defining the percentage of traffic that can be attributed to origins and destinations outside of the city limits. These volumes would be considered "background" traffic that is not generated within the city but uses the study corridor.

3.3 Roadway Recommendations

Recommendations for the design year (2045) roadway requirements will be made using the FDOT QLOS guidelines for capacity estimates and lane requirements for non-state roadways. Typical section(s) will be prepared to reflect the requirements for the future facility (number of lanes, median type, design speed, etc.). The focus will be on maintaining safe and efficient service but minimizing the number of lanes and the amount of impervious pavement needed to serve the volume.

3.4 Intersection Design Recommendations

The corridor contains five (5) intersections that serve both local and regional traffic. The three interior intersections (Sunset Drive, Sunset Point Drive and Grant Road) connect the local traffic to Buck Moore Road and the two on each end, SR 17, and SR 60, serve both local and regional trips. The difference in trip types suggests that intersection design may be and should be considered for alternative concepts such as roundabouts. The intersections other than SR 60 will be evaluated to determine if they will best serve the future traffic volume as unsignalized or with a roundabout or turbo-roundabout design. The intersection analysis for the future traffic volumes will review both convention and traditional design options.

4.0 Multimodal Considerations

The study will evaluate the potential needs and design for pedestrian, bicycle and trail facilities in the corridor based on the desired connectivity, anticipated similar facilities in the area, and the propensity for use by residents and visitors for commuting or recreational purposes. The typical section recommendations will include the suggested multimodal facilities that will be appropriate to serve the future modal options.

5.0 Documentation

VHB will prepare interim work products (draft roadway typical sections, corridor access control) for review by the city and one (1) final study report that will include a description of the data, the study process, the recommendations that are developed and the consistency with the established goals for the City. This report will be first submitted as a draft (1) before any comments are addressed the report finalized.

6.0 Presentation of Findings

VHB will be available upon request for one (1) presentation to City staff and/or the City Commission to support the staff/elected official discussion of the findings and describe the study process and benefits of the recommendations. A brief 10-12 slides PowerPoint presentation would be developed and provided for this presentation.

ASSUMPTIONS

It is understood that VHB will perform the services described above under the sole direction of the Client. In the performance of these services, VHB will communicate the status of its efforts with those of other project team members as well. The following project and scope assumptions are made:

- The planned development that will impact the study corridor will be identified and provided by the City
- The adopted level of service standard, or one that will be the basis for the study, will be provided by the City
- The City will provide the development plans, proposed access driveway locations, and existing public right-of-way information, and
- Coordination/communications with the private development community is not anticipated for this assignment and those meetings, if required, will be completed as an additional service.

SERVICES NOT INCLUDED

The following services are not included in this Agreement:

- Impact Fee Estimates
- Utility and other capacity or needs requirements
- Detailed design (beyond conceptual typical sections or intersection geometrics)
- Design or construction costs estimates
- Coordination with any other government authority other than to obtain available traffic data

Should work be required in these areas or areas not previously described, VHB will prepare a new proposal or Amendment, at the Client's request, that contains the Additional Scope of Services, fees, and updated schedule required to complete the additional work items.

CLIENT FURNISHED INFORMATION

VHB will rely upon the accuracy and completeness of Client-furnished information in connection with the performance of services under this Agreement.

SCHEDULE

VHB will begin performance of the above services on the date written authorization to proceed is received. The schedule is also subject to timely delivery of information promised by the Client and is exclusive of Client and local review of interim products.

COMPENSATION

VHB will perform the Scope of Services contained in this Agreement for a lump sum fee of $25,000 including reimbursables. For lump sum Tasks, VHB will bill on a percent complete basis and reserves the right to adjust budgeted amounts from lump sum Task to lump sum Task as may be required.

Prepared by: Brent Lacy | ***GMS*** **Document Approval: B. Siwinski**

Please execute this Client Authorization for VHB to proceed with the above scope of services at the stated estimated costs. No services will be provided until it is signed and returned to VHB.

☐ Subject to attached terms & conditions

☒ Subject to terms & conditions in our original agreement dated 07/23/2021

VANASSE HANGEN BRUSTLIN, INC. AUTHORIZATION

By: Gary M. Siwinski

Print Benjamin Siwinski *for*

Title: Managing Director, Gulf Coast

Date: September 10, 2021

CLIENT AUTHORIZATION (Please sign original and return)

By:

Print:

Title:

Date: