

CONSULTANT WORK ORDER PROPOSAL

Date: June 22, 2018

Dear Mr. Rey:

Kimley-Horn and Associates, Inc. (Consultant, Kimley-Horn, or KHA) proposes to provide the services identified below for the project entitled “**Work Order No. 3, Park-and-Ride Facility Traffic Assessment**”, pursuant to its Professional Service Agreement with the Town of Miami Lakes (the Town) for **2017-32, Continuing Civil Engineering Services for Miscellaneous Projects**, dated **November 16, 2017**.

I. General

The Town is proposing to develop a park-and-ride transit facility. The proposed facility will be located on NW 77th Avenue south of NW 154th Street within the Town of Miami Lakes. The Town desires a traffic assessment to analyze the potential benefit to vehicular traffic flow that is anticipated by the proposed park-and-ride transit facility. As part of this assessment, the Town would like to assess the potential Miami-Dade County Department of Transportation and Public Works (DTPW) transit route benefit and single-occupant vehicle traffic reduction from the park-and-ride facility.

A conceptual design of the park-and-ride transit facility with the NW 77th Avenue realignment will also be prepared based on the evaluation of existing DTPW transit and Town of Miami Lakes Moover routes. An opinion of probable cost will also be prepared for the proposed park-and-ride transit facility.

II. Scope of Work

Task 1 – Park-and-Ride Facility Ridership Forecast

Subtask 1A – Transit Service Assessment

Existing transit route alignments and schedules will be obtained for DTPW Transit Routes 54, 73, and 267 as these routes have been identified as the potential existing routes that would serve the proposed park-and-ride facility.

Subtask 1B – Park-and-Ride Facility Usage Forecasting

Transit boarding will be examined to determine the forecast of the proposed park-and-ride facility's usage. Three (3) analysis scenarios will be examined to determine the proposed park-and-ride facility's usage: (1) Existing (to be utilized for validation of the model baseline); (2) Future (build-out year of park-and-ride facility) No-Build (without the proposed park-and-ride facility); and (3) Future (build-out year of park-and-ride facility) Build (with the proposed park-and-ride facility).

The Federal Transit Administration's (FTA's) Simplified Trips-on-Project Software (STOPS) transit travel model will be utilized. Specifically, the Florida Department of Transportation (FDOT) developed a South Florida specific version of the STOPS model that covers the tri-county area and includes all transit routes in Palm Beach, Broward, and Miami-Dade Counties. FDOT's South Florida version of the STOPS model will be used to forecast the park-and-ride facility's ridership for three (3) scenarios: (1) Existing; (2) Future (build-out year of park-and-ride facility) No-Build; and (3) Future (build-out year of park-and-ride facility) Build. The Existing scenario will examine the existing boardings for DTPW Routes 54, 73, and 267 at bus stops within the vicinity of the proposed park-and-ride facility. The Existing boarding data will be validated with current ridership data obtained from DTPW. Two (2) future model scenarios will

also be analyzed, with and without the proposed park-and-ride facility. The Build scenario will be utilized to establish the number of boardings that are expected at the proposed park-and-ride facility. The Build scenario will modify the alignment of DTPW Routes 54, 73, and 267 to account for a new stop at the proposed park-and-ride facility. The Build scenario will also include the proposed Palmetto Express Bus, 72nd Avenue/67th Avenue Enhanced Bus, and 57th Avenue Enhanced Bus North, as described in DTPW's 2017 Transit Development Plan (TDP). The forecasted boarding data for the future No-Build and Build scenarios will be compared for bus stops within the vicinity of the proposed park-and-ride facility to establish the number of "New" trips associated with the proposed park-and-ride facility when accounting for riders diverting from existing stops to the proposed park-and-ride facility and new bus routes.

Subtask 1C – Park-and-Ride Facility Trip Generation

Trip generation for the proposed park-and-ride facility will be developed based on the boarding data developed in Subtask 1B. The equivalent to trip generation for a park-and-ride facility is the facility's forecasted boardings for kiss-and-ride (i.e. drop-off) and park-and-ride users. The person-trip boarding data for kiss-and-ride and park-and-ride users will be converted to vehicle trips to determine the equivalent vehicle trips that the park-and-ride facility will reduce from adjacent roadways. The person-trip to vehicle trip conversion will be based on the average vehicle occupancy factor from the Institute of Transportation Engineer's (ITE) *Trip Generation Handbook*, 3rd Edition Tables C.1 through C.10.

Subtask 1D – Trip Distribution and Assignment

Trip reduction and net new trips generated by the park-and-ride facility will be geographically distributed and assigned along roadway corridors based on the park-and-ride facility usage and trip generation analysis prepared as part of Subtasks 1B and 1C, location and proximity of residential areas, roadways and sidewalk connectivity. Trip origin-and-destination data prepared as part of A&P Consulting Transportation Engineers' *NW 154th Street Corridor Trips East and West of SR 826/Palmetto Expressway*, July 2017 will also be used to determine the trip reduction and net new trips and trip assignment.

Task 2 – Methodology Determination

Prior to initiating traffic data collection and traffic assessment, Kimley-Horn will correspond with DTPW. The methodology for estimating the project's expected traffic impact and expected modal shift will be addressed.

The purpose of this correspondence is to outline the requirements of park-and-ride transit facility; identify the roadway segments, intersections, and peak periods to be evaluated; and to identify a methodology for estimating park-and-ride transit facility usage forecasting. The methodology will include a procedure for analyzing the trips prior to the park-and-ride transit facility being in operation, procedure for park-and-ride transit facility usage forecasting, and a procedure for geographic distribution of forecasted park-and-ride transit facility trips.

The methodology will be summarized in a technical memorandum submitted to the Traffic Engineering Division for review and concurrence. Kimley-Horn will revise the methodology one (1) time if necessary in response to DTPW.

Task 3 – Traffic Data Gathering and Collection

Continuous 24-hour (Tuesday, Wednesday, or Thursday) roadway segment data will be gathered from readily available sources. Continuous 24-hour roadway segment data will be obtained from Florida Department of Transportation's (FDOT's) *Florida Transportation Information*, 2016, Marlin Engineering Inc.'s *Traffic Operations and Mobility Study*, January 2017, and from traffic data collected by H.W. Lochner, Inc. in 2018. Traffic data will be collected at a maximum of five (5) continuous 24-hour roadway segments (Tuesday, Wednesday, or Thursday). All traffic counts will be adjusted to account for seasonal variation using the appropriate FDOT seasonal adjustment factors to represent peak season traffic conditions.

Intersection data collection will not be collected as part of this work order.

Task 4 – Traffic Assessment

Vehicular roadway conditions will be analyzed to determine the anticipated impact of proposed park-and-ride facility. A capacity analysis for future conditions with project scenario will be examined.

Subtask 4A – Vehicular Roadway Capacity Analysis

Vehicular roadway conditions will be examined to determine the level of service for the study area roadway segments. Two (2) capacity analysis scenarios will be examined for study area roadway segments: future without project and future with project.

Roadway segment capacity analysis will be examined to determine the level of service for study area roadways. Annual average daily traffic (AADT) volumes will be compared to level of service thresholds contained in FDOT's *Quality/Level of Service*, 2013.

Subtask 4B – Documentation of Findings

The park-and-ride traffic assessment will be documented in a report. The report will include graphics and tabulations, plus text to describe the study procedure, key assumptions, traffic analysis methods, findings and recommendations. Ten (10) bound copies (if requested) and one (1) electronic file of the traffic benefit study will be provided.

Subtask 4C – Response to Agency Comments

Kimley-Horn will prepare two (2) sets of responses to the DTPW comments that directly relate to analyses performed in accordance with the agreed-upon methodology. The responses may include revising analyses, updating recommendations, and revising the report. Responses to comments beyond the agreed-upon traffic methodology completed as part of Task 1 will be considered an additional service.

Task 5 – Meetings

As part of the study process, the Consultant will prepare for and attend a maximum of four (4) meetings at the direction of the Client. These meetings may consist of meetings with the project team and/or Miami-Dade County staff.

Task 6 – Conceptual Park-and-Ride Site Plan

Prior to initialing this task, the Consultant will coordinate with the Town and Miami-Dade DTPW regarding the design criteria for the proposed park-and-ride.

The Consultant will prepare a conceptual plan of the parking lot layout, associated transit facilities, and NW 77th Avenue realignment on a 11"x17" sheet. The plan will and will include right-of-way lines, and labels for the locations of the FDOT NW 77th Avenue realignment and location of the park-and-ride portion of the Par 3 Passive Park.

The conceptual plan will be submitted to the Town and Miami-Dade DTPW in PDF format for review. The Consultant will address (1) round of comments from both the Town and Miami-Dade DTPW. Upon Town approval of the conceptual plan the Consultant will prepare a 24" by 36" colored plan view rendering of the parking lot layout and associated transit facilities.

Task 7 – Opinion of Probable Cost

In this Task, the Consultant will develop a preliminary Opinion of Probable Cost (OPC) based on the conceptual plans prepared in Task 6 and FDOT NW 77th Avenue realignment documents.

The OPC will cover the improvements within the limits of the park-and-ride area and will establish general cost categories included:

1. Mobilization
2. Clearing & Grubbing
3. Roadway
4. Drainage
5. Bus Shelter
6. Lighting
7. Signing & Marking
8. Landscaping & Irrigation
9. Design & Permitting
10. Contingency

The OPC will exclude all costs related to right of way acquisition and land dedication. The Consultant will include all assumptions made in development of the OPC as part of the submittal.

The OPC will be submitted to the Town and County in PDF format for review. The Consultant will address (1) round of comments from the Town and the County.

Task 8 – Miami-Dade County Transportation and Public Works (DTPW) Presentation

Kimley-Horn will prepare for, attend, and present at one (1) meeting with Miami-Dade DTPW. Kimley-Horn will prepare a brief PowerPoint presentation that will summarize the project's purpose and objective, study procedure, and present the results of the study. Meeting notes will be prepared and submitted to the Town.

III. Subconsultants

The below listed Subconsultants will assist in the performance of the Work.

Subconsultant Name	Specialty or Expertise
National Data & Surveying Services, Inc.	Traffic Data Collection

IV. Schedule of Work – Time of Performance

Consultant shall submit the deliverables and perform the Work as depicted in the tables below for each phase.

	SCHEDULE OF DELIVERABLES**		
Task	Major Task, Sub-Task, Activity, or Deliverable	Duration (specify weeks or calendar days)	Delivery Date* (cumulative weeks, or calendar days)
1	Park-and-Ride Facility Ridership Forecast	60 days	60 days
2	Methodology Determination	5 days	65 days
3	Traffic Data Gathering and Collection	20 days	85 days
4	Traffic Assessment	40 days	125 days
5	Meetings	ongoing	ongoing
6	Conceptual Park-and-Ride Site Plan	30	155 days
7	Opinion of Probable Cost	14 days	169 days
8	Miami-Dade DTPW Presentation	20 days	189 days

* An updated schedule, indicating actual delivery dates, based on the above durations, will be provided to the Town upon receipt of the NTP.

Deliverables: At the completion of each task, Kimley-Horn will provide to the Town all files associated with each deliverable. These files include drawing files, transportation model output worksheets, ArcGIS files, and any other supporting documentation associated with each deliverable.

Kimley-Horn will provide the following items:

- Traffic assessment methodology
- Traffic assessment
- Conceptual site plan of proposed park-and-ride facility and NW 77th Avenue realignment
- Opinion of probable cost for proposed park-and-ride facility

V. Compensation

Consultant shall perform the Work detailed in this Proposal for a Total Lump Sum fee of Sixty-Two Thousand, Three Hundred, Ninety-Six Dollars and Twenty-Nine Cents (\$62,396.29). The Town shall not be liable for any fee, cost, expense or reimbursable expense or other compensation beyond this amount unless approved in a supplemental Work Order. Said fee includes an allowance for Reimbursable Expenses required in connection with the Work, which shall not exceed \$0.00. Said Reimbursable Expenses shall be used in accordance with the Agreement Provisions and shall conform to the limitations of Florida Statutes § 112.061.

The following is a cost breakdown:

SUMMARY OF COMPENSATION*			
<i>Task, Sub-task, or Activity ID #</i>	<i>Major Task Name and/or Activity Description</i>	<i>Fee Amount</i>	<i>Fee Basis</i>
1	Park-and-Ride Facility Ridership Forecast	\$27,890.30	Lump Sum
2	Methodology Determination	\$2,249.12	Lump Sum
3	Traffic Data Gathering and Collection	\$479.86	Lump Sum
4	Traffic Assessment	\$8,492.80	Lump Sum
5	Meetings	\$4,558.00	Lump Sum
6	Conceptual Park-and-Ride Site Plan	\$11,061.10	Lump Sum
7	Opinion of Probable Cost	\$3,875.58	Lump Sum
8	Miami-Dade DTPW Presentation	\$2,589.53	Lump Sum
	<i>Subtotal – Professional Fees</i>	<i>\$61,196.29</i>	<i>Lump Sum</i>
	<i>Allowance for Reimbursable Expenses</i>	<i>\$0.00</i>	
	<i>Sub-Consultant</i>	<i>\$1,200.00</i>	<i>Lump Sum</i>
	TOTAL	\$62,396.29	Lump Sum

*Note: Compensation should match the Task, Activities, and/or Deliverables identified.

VI. Additional Services

The Town may establish an allowance for additional services requested by the Town and for unforeseen circumstances, which shall be utilized at the sole discretion of the Town.

VII. DATA PROVIDED BY THE TOWN

The information and/or documents listed in Task 3 are to be provided by the Town.

VIII. PROJECT MANAGER

Consultant's Project Manager for this Work Order assignment will be Adrian K. Dabkowski, P.E., PTOE

Submitted by: _____
Gary R. Ratay, P.E.
Kimley-Horn and Associates, Inc.

Reviewed and approval by:

Department Director

Alex Rey
Town Manager

Procurement Manager

Consultant Name: Kimley-Horn and Associates, Inc.
Contract No.: 2012-04KH
Date: 6/6/2018
Estimator:

Project No.: B-

Description: Assessment of the Proposed NW 77th Avenue Park-and-Ride Facility

1 - SUBTOTAL ESTIMATED FEE: (multiplier 2.9)
Subconsultant: National Data & Survey, Inc.
Subconsultant: Sub 2
Subconsultant: Sub 3
Subconsultant: Sub 4
Subconsultant: Sub 5

Geotechnical Field and Lab Testing:

Survey Fee (or Survey Crew Fee):

Other Misc. Fee: Reimbursable Expenses

Additional Services (Allowance)

Reimbursables (Allowance)

<u> </u> 3 - man Survey Crew:	<u> </u> crew days at <u> </u> / day = \$ <u> </u> -
4 - man Survey Crew:	crew days at <u> </u> / day = \$ <u> </u> -

Notes:

1. This sheet is 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.
3. The basis for work activity descriptions shall be the FICE/FDOT Standard Scope and Staff Hour Estimation Handbook.