I. GENERAL REQUIREMENTS

A. Purpose of Contract

The purpose of this contract is to provide the Department with professional services for:

a) Routine Annual Recurring Volume and Classification Traffic Counts,
b) Special Traffic Counts,
c) Portable Traffic Monitoring Site (PTMS) loop system inspection program as defined in Section III.

The traffic data produced by the Consultant will provide the Department with valuable input into the development of long range planning and design of traffic operational improvement projects to be included in the Department's Work Program.

The loop system inspection program will provide the Department the opportunity to repair damaged or non-functioning loop traffic count systems. The Consultant shall adhere to the instructions and directions found in the FDOT Traffic Monitoring Handbook.

B. Major Objective

The major objectives of this agreement are to obtain volume traffic counts, classification counts, special traffic counts, and inspection of PTMS loop systems to provide repair recommendations, as expeditiously and accurately as possible.

C. Issuance of Task Work Orders

1. Authorization to perform a data collection task(s) and loop system inspection shall be given to the Consultant through a written work order issued by the Departments Project Manager. Each task work order will be negotiated by fixed unit cost separately, specifying the data collection type, the task to be performed, the limits of work, appropriate job class (at an established approved wage rate) with estimated man-hours, the date required for data submission to the District, and the negotiated total price.
2. The Department will negotiate a specific Scope of Work. This scope may be amended to delete or increase work activities, but the total cost of any amended activities must remain within the authorized original amount.

D. Reference Documents

The following documents are referenced herein and are a part of this Scope of Services. The consultant shall follow the procedures in the latest version of these documents and as they are updated from time to time:

1. Traffic Monitoring Handbook
2. Procedure 525-030-150 Traffic Monitoring

II. DESCRIPTION OF DATA COLLECTION TYPES

A. Volume Counts and Classification Counts

1. Purpose

The purpose of this activity is to provide the Department with professional traffic services to conduct necessary data collection activities required by the Department. The data collected by the Consultant will support the annual counts program, project development and environmental studies, roadway design, construction, project scheduling, access management, corridor plans, traffic operations and maintenance.

2. Major Objective

The major objective of this action is to obtain daily directional or non-directional traffic count data and classification data as specified under the Scope of Work as expeditiously as possible while maintaining a high degree of accuracy and thoroughness.

3. Scope of Work

The Consultant shall collect 24-hour continuous traffic machine volume counts and classification counts with fifteen minute subtotals and hourly totals at urban locations and forty-eight hour continuous traffic machine volume counts and classification counts with fifteen minute subtotals and hourly totals at rural locations as described in the Traffic Characteristics Inventory (TCI) or as shown on the count location maps. Volume count data and classification data shall be collected for a full 24 or 48 hours.

The Consultant shall count the locations according to their directional or non-directional characteristics. All directional counts at a particular station
location must be counted on the same day and hour to be usable and during the weekday period Monday P.M. through Friday A.M. The Consultant shall contact the Project Manager for count periods approaching holidays and special occasions.

The Consultant shall supply portable automatic traffic counters that use road tubes or loop sensors. The traffic counters shall be capable of collecting data in fifteen minute and hourly intervals, outputting the data to a printer, and providing the time and day for each location counted.

4. General Project Requirements

The Consultant shall provide the following documentation for each location: One pdf or other printable file and one txt file of the raw volume count data and classification data from each location transmitted in a format acceptable to the Department. Data files must be compatible with the Survey Processing Software (SPS).

These files shall contain the following information: station identification number (i.e., district, county, station number, direction and lane), location, state road number, comments, date and daily raw volume count data and classification data in 15 minute intervals and hourly totals.

Study Type: Urban directional, twenty-four hour continuous traffic machine volume counts and classification counts by lane with 15 minute subtotals and hourly totals with road tubes or loop sensors.

Study Type: Urban non-directional, 24 hour continuous traffic machine volume counts with fifteen minute subtotals and hourly totals with road tubes or loop sensors.

Study Type: Rural directional, 48 hour continuous traffic machine volume counts and classification counts by lane with fifteen minute subtotals and hourly totals with road tubes or loop sensors.

Study Type: Rural non-directional, 48 hour continuous traffic machine volume counts with fifteen minute subtotals and hourly totals with road tubes or loop sensors.

a. Executive Summary
The report for each study type shall contain an executive summary providing a general overview of the contents of the report and general comments about the location.

b. Sealing of Reports

Annual Counts and Special Counts are not required to be signed and sealed by a professional engineer. In extremely rare instances, a Special Count may need to be signed and sealed by the Consultant's Florida Registered Professional Engineer in responsible charge of the count project. This will only be required when directed by the Departments Project manager.

c. Consultant Personnel

The Consultant's work shall be performed and/or directed by the key personnel identified in the technical/fee proposal presentation by the Consultant. Any changes in the indicated personnel or the Consultant's proposal shall be subject to review and approval by the Department.

d. Legal Proceedings

The Consultant shall serve as an expert witness in any legal proceeding if required by the Department. The fee for these services shall be established if, and when, they are needed.

e. Errors or Omissions

The Consultant shall be responsible for the professional quality, technical accuracy, and the coordination of all traffic data collection services furnished to the Department under this Agreement.

The Consultant shall be responsible, without additional compensation, for all errors and omissions which result from said firm's substandard performance of the services described herein.

The Consultant shall, without additional compensation, correct, or revise any errors or deficiencies in its traffic data collection reports. Revised traffic data collection reports shall be submitted to the Department within three weeks of notification of error or deficiency.

f. Professional Liability

The Department's review, approval, acceptance, or payment for the services required under this Agreement shall not be construed as a
waiver of any rights under this Agreement or waiver of any cause of action arising out of the performance of this agreement.

The Consultant shall be and remain liable to the Department in accordance with applicable law for all damages to the Department caused by the Consultant's negligent performance of any of the services furnished under this agreement.

The rights and remedies of the Department provided for under this Agreement are in addition to any other rights and remedies provided by law.

If the consultant is comprised of more than one legal entity, each such entity shall jointly and severally be liable hereunder.

The Consultant shall have and maintain, in accordance with this Agreement, a professional liability insurance policy or policies with a company or companies authorized to do business in the State of Florida affording Professional Liability coverage for the professional services to be rendered in accordance with this Agreement.

g. Subcontracting Services

If the Consultant desires to subcontract portions of the work described herein, the subcontracting firm(s) selected by the Consultant must be approved in writing and qualified by the Department prior to initiation of any work, if they are not identified in this Agreement.

h. Length of Services

The provisions of this Agreement shall remain in full force and in effect for sixty (60) months, or through completion of all services required of the Consultant, or the payment to the Consultant for the performance of authorized services described herein.

i. Specific Restrictions

The Department recommends to the Consultant the following general schedule to achieve the purpose and major objective outlined above.

Gainesville Urban Area - Must be counted during the spring semester (excluding spring break week) or in the fall semester beginning two weeks after college classes begin.

October 15 is the last day volume counts and classification counts will be accepted by the Department for the calendar year. November 14
5. **Period of Performance**

Volume counts and classification counts shall be submitted to the Department's Project Manager every two weeks. Reset counts shall be submitted within three weeks of notification from the Department.

The Consultant shall submit invoices on a monthly basis using the Consultant Invoice Transmittal System (CITS) in a procedure as required by the Department.

6. Compensation for activities will be based on negotiated activities at the unit rates specified in Exhibit “B”

### B. SPECIAL TRAFFIC COUNTS

1. **DESCRIPTION OF SERVICES**

   This data collection function will involve performing special traffic volume counts and classification counts at specified locations as determined by the Department’s Project Manager. All special counts will be located in District 2 and may be requested for roadways both on and off the State Highway System.

   Bicycle, pedestrian and other non-motorized counts are included and may also be on or off the State Highway System.

   Data collection devices and methods for special counts may require non-traditional count equipment such as manual counts, infrared sensors, radar and video recording to acquire the counts.

   The special traffic counts shall be submitted in a format acceptable to the Department and in accordance with current traffic count procedures.

2. **SCOPE OF WORK**

   The Consultant shall provide the Department with special traffic volume counts and classification counts at specified locations as determined by the Department’s Project Manager. The length of time and the type of special count (volume, classification, non-directional, directional) will be determined by the Department’s Project Manager.

3. **PERIOD OF PERFORMANCE**
The Consultant shall submit all special traffic count data to the Department’s Project Manager within ten (10) working days after field Counts have been completed.

III LOOP INSPECTION PROGRAM

A. DESCRIPTION OF SERVICES

The Consultant will test and inspect damaged or non-functional loop systems as identified by the Department and provide recommendations for repair or reconstruction as needed. In addition, the Consultant shall also provide adequate training for District Planning staff and Construction inspection staff in loop inspection techniques and the use of inspection equipment.

B. SERVICES TO BE PROVIDED

The Consultant shall provide a written analysis of damaged or non-functional loop systems and, if applicable, descriptive sketches in sufficient detail showing recommended corrective action to restore the loop systems to active use. The Consultant shall also provide in-district loop inspection training, including the use of appropriate inspection equipment as directed by the Department.

C. WORK ASSIGNMENT PROVISIONS

As directed by the Department’s Project Manager, the Consultant shall perform field inspection of loop site locations and train District Planning and Construction staff. The consultant shall have sufficient staff available to perform field inspection(s) within five (5) working days notice.

D. SERVICE AND DELIVERIES

Upon completion of the loop site inspection, the Consultant shall submit to the Department a brief narrative of the loop condition and written recommendation(s) for repairs of any damaged or non-functioning system.

IV SAFETY PROCEDURE

All Consultant traffic technicians shall have been provided a minimum of two weeks training by accompanying an experienced field technician who is collecting traffic data. All Consultant personnel shall be provided training in first aid techniques and be familiar with the following safety procedure before they are allowed in the field.

All consultant vehicles used to collect traffic data shall be equipped with the following equipment.

1. Four-way flashing lights
2. A minimum of two yellow strobes mounted on a light bar, centrally positioned on top of the vehicle.

3. Triangular safety signs mounted inside rear doors such that they are visible when the doors are open.

4. First Aid Kit.

5. Fire Extinguisher.

6. Any other equipment the Consultant deems necessary for safe operation.

All Consultant personnel who collect traffic count/vehicle data shall adhere to the following procedure:

1. Seat safety belts shall be worn during the operation of vehicles.

2. Orange Safety vests and United Laboratories approved safety glasses safety prescription glasses shall be worn during field operations.

3. Reflective safety vests shall be worn during low visibility situations.

4. Vehicle lights shall be used in the following manner:
   A. Turn signal and yellow roof mounted strobe lights shall be activated as the traffic count vehicle approaches the work site usually five hundred to one thousand feet (500' - 1,000') in advance of the site.
   B. Four-way flashers shall be activated at the work site and remain activated until work is completed.
   C. The proper turn signal shall be activated when leaving the work site.
   D. Strobe lights shall also remain activated as the vehicle leaves the work site and re-enters traffic flow.
   E. Strobe lights shall be turned off after the vehicle safely re-enters traffic flow.

5. All Consultant personnel shall conform to OSHA RULES & REGULATIONS.

Vehicles shall be parked where there is adequate space to park the vehicle safely. The vehicle shall be parked a minimum of four (4) feet from the edge of pavement.
Field technicians shall use extreme caution when setting or retrieving road tubes or other equipment.

Field technicians shall use discretion regarding their safety in hazardous situations in which there is dense fog, heavy rain, lightning, etc.

Field technicians shall advise their supervisors when there is a need for a two-person operation to set equipment safely.

V. DEPARTMENT RESPONSIBILITIES

A. Data and Services

The Department shall provide the following:

1. All available procedures, standards, and policies applicable to the services to be performed.

2. Attachments, maps, computer printouts, specifications, etc., pertinent to the Consultant’s responsibilities.

3. Portable Traffic Monitoring Site (PTMS) design plans (as available).

4. The Department employee as the Project Manager who shall be the representative of the Department for the project.

5. The Department employee as the District Professional Services Administrator who shall be the representative of the Department for all matters pertaining to contract administration.

Each traffic data report submitted by the Consultant shall be processed by Department Planning staff within twenty (20) working days of receipt from the Consultant. Processing consists of entering the collected data into a local computer file, checking data for validity if the data is accepted, uploading the results to the Traffic Characteristics Inventory (TCI).

B. Quality Assurance

1. Prior to the commencement of any work, all equipment will be tested and certified annually, and the certification sent to the Departments Project
Manager by January 31. Additional traffic counters placed into service by the Consultant shall be certified similarly. The Consultant shall document the certification process in writing to the Department's Project Manager (i.e., identification/serial numbers of the traffic counters passing or failing) prior to the commencement of work.

2. After the commencement of work, the Consultant may be required to verify his traffic counter's accuracy at station locations by conducting a manual traffic count for a minimum period to be determined by the Department's Project Manager, not to exceed thirty (30) minutes per count and not to exceed ten percent (10%) of the total locations assigned. The portable automatic and manual traffic counts shall not differ by more than ten percent (10%). Traffic counters that fail this test shall be repaired at the Consultant's expense and re-subjected to quality assurance item one (1) above before being placed back into service.

3. The Consultant shall replace road tubes, or test for leaks by application of air pressure and blown clean, at least once every month. They shall be inspected visually prior to each use. When possible, the Consultant's field personnel shall briefly monitor the traffic data instrument's operation after installation. The Consultant shall document road tube checks (i.e., replacement, testing for leaks, etc.) in writing to the Department's Project Manager.

4. The Consultant shall notify the Department Project Manager on a weekly basis (via e-mail) the locations of the Consultant field technicians for the following week. Random Site inspections by Department personnel may be conducted to verify the Consultant's traffic data. In the event that the Consultant's traffic data disagrees with the Department's traffic data (i.e., random site inspections or the Department's previous two years' history data) at the same location by more than ten percent (10%), the Department shall verify its traffic counter's accuracy. If the Department's traffic counters' accuracy is verified, the Consultant shall be required to verify his traffic counter's accuracy (See quality assurance item one (1) above) or redo the volume count(s). Traffic counters that fail the second time shall be repaired at the Consultant's expense and subjected to quality assurance item one (1) above before being placed back into service. If the Department's traffic counters' assurance is not verified, then the Consultant's traffic data shall be accepted.

NOTE: The Department shall provide the consultant with volume count locations, count station location maps, and station inventory upon completion of contract negotiations.