

Lee County Board Of County Commissioners

Agenda Item Summary

Blue Sheet No. 20041352

1. REQUESTED MOTION:

ACTION REQUESTED: Approve Supplemental Task Authorization No. 1, Contract No. 2472 to Gray-Calhoun and Associates in the amount of \$114,193.89, under CN-03-04 – Miscellaneous Traffic Engineering Services – Summerlin ITS Design.

WHY ACTION IS NECESSARY: Board approval required.

WHAT ACTION ACCOMPLISHES: Authorizes consultant firm of Gray-Calhoun and Associates to provide professional services for the designs for installation of an Intelligent Transportation System (ITS) along CR869/Summerlin Road from North of Cypress Lake Drive to South of Boy Scout Drive.

2. DEPARTMENTAL CATEGORY:

09 Transportation

COMMISSION DISTRICT #:

C9A

3. MEETING DATE:

11-23-2004

4. AGENDA:

- CONSENT
- ADMINISTRATIVE
- APPEALS
- PUBLIC
- WALK ON
- TIME REQUIRED:

5. REQUIREMENT/PURPOSE:

(Specify)

- STATUTE
- ORDINANCE
- ADMIN. CODE AC-4-4
- OTHER

6. REQUESTOR OF INFORMATION:

- A. COMMISSIONER
- B. DEPARTMENT Transportation
- C. DIVISION
- BY: Scott Gilbertson, Director

7. BACKGROUND:

On April 15, 2003, the Board entered approved contract negotiations be commenced with thirteen (13) firms under CN-03-04 to provide professional services involving Traffic Surveys and Data Collection, Traffic Control Evaluations, Reports and Studies; Traffic Signal Timing Plan Development; Roadway Safety Audits; Traffic Impact Report/Geometric Concepts/Miscellaneous Transportation Planning; Intelligent Transportation Systems (ITS); Design Plans; Signal & Construction Inspections and Miscellaneous Services at various sites in Lee County for projects undertaken by County Departments/Divisions.

Supplemental Task Authorization No. 1 provides professional services for the designs for installation of an Intelligent Transportation System (ITS) along CR 869/Summerlin Road from North of Cypress Lake Drive to South of Boy Scout Drive. Design for the Intelligent Transportation System for Summerlin Road will include data and network communication facilities, traffic monitoring cameras, dynamic message signs and signal systems. This system will include the creation of a coordinated signal system on Summerlin Road through data connections to traffic signals, traffic cameras for monitoring and managing roadway conditions and dynamic message signs to display information to motorists. The communication facilities design also includes features for future network connections between county departments and the sharing of system information with other departments and agencies. Installation of ITS equipment from these ITS design plans will take place during the construction phase of Project #6007, Summerlin Road, Boy Scout - Cypress Lake Drive.

Funds will be available in the following account string: 20600718804.506540

Attachment: Supplemental Task Authorization for Execution.

8. MANAGEMENT RECOMMENDATIONS:

9. RECOMMENDED APPROVAL:

A Department Director	B Purchasing or Contracts	C Human Resources	D Other	E County Attorney	F Budget Services			G County Manager
					OA	OM	Risk	GC
<i>[Signature]</i> 11-7-04	<i>[Signature]</i> 11/3	N/A	<i>[Signature]</i> 11/3/04	<i>[Signature]</i>	<i>[Signature]</i> 11/8/04	<i>[Signature]</i> 11-2-04	<i>[Signature]</i>	<i>[Signature]</i> 11/10/04

10. COMMISSION ACTION:

- APPROVED
- DENIED
- DEFERRED
- OTHER

Rec. by CoAtty
Date: 11/5/04
Time: 11:40
Forwarded To:
Admin. 11/8/04

RECEIVED BY
COUNTY ADMIN. *[Signature]*
11/3/04
COUNTY ADMIN
FORWARDED TO: *[Signature]*
11-9-04

LEE COUNTY PROFESSIONAL SERVICE/SERVICE PROVIDER AGREEMENT
CHANGE ORDER/SUPPLEMENTAL TASK AUTHORIZATION

Change Order
 Supplemental Task Authorization

NO.: #1

(A Change Order or Supplemental Task Authorization Requires Approval by the Department Director for Expenditures Under \$25,000 or Approval by the County Manager for Expenditures Between \$25,000 and \$50,000 or Approval by the Board of County Commissioners for Expenditures over \$50,000)

CONTRACT/PROJECT NAME: Miscellaneous Traffic Engineering Services - Summerlin ITS Design

CONSULTANT: Gray-Calhoun and Associates PROJECT NO.: 6007

SOLICIT NO.: CN 03-04 CONTRACT NO.: 2472 ACCOUNT NO.: 20600718804

REQUESTED BY: Mike Chodakowsky DATE OF REQUEST: 06/24/04

Upon the completion and execution of this Change Order or Supplemental Task Authorization by both parties the Consultant/Provider is authorized to and shall proceed with the following:

EXHIBIT "CO/STA-A: SCOPE OF PROFESSIONAL SERVICE: DATED: 06/24/04

EXHIBIT "CO/STA-B: COMPENSATION & METHOD OF PAYMENT: DATED: 06/24/04

EXHIBIT "CO/STA-C: TIME AND SCHEDULE OF PERFORMANCE: DATED: 06/24/04

EXHIBIT "CO/STA-D: CONSULTANT'S/PROVIDERS ASSOCIATED
SUB-CONSULTANT(S)/SUB-CONTRACTORS: DATED: 06/24/04

EXHIBIT "CO/STA-E: PROJECT GUIDELINES AND CRITERIA: DATED: 06/24/04

It is understood and agreed that the acceptance of this modification by the CONSULTANT/PROVIDER constitutes an accord and satisfaction.

RECOMMENDED:
By: [Signature] 12/4/04
Date
Department Director

ACCEPTED:
By: [Signature]
Consultant/Provider
(Print Name) JAY H. CALHOUN

COUNTY APPROVAL:
By: _____
Date Approved: _____
Department Director
(Print Name) _____
(Under \$25,000)

By: [Signature] 9/14/04
Date
Contracts Mgmt

Date Accepted: 8/3/04
Corporate Seal

Date Approved: _____
By: _____
County Manager (Between
(\$25,000 and under \$50,000)
Date Approved: _____

APPROVED:
By: _____
*County Attorney's Office Date

By: _____
Chairman
Board of County Commissioners
Date Approved: _____

*County Attorney signature needed
for over Board level expenditures only.

CHANGE ORDER AGREEMENT No. _____

or
 SUPPLEMENTAL TASK AUTHORIZATION No. #1

EXHIBIT "CO/STA-A"

Date: 06/24/04

SCOPE OF PROFESSIONAL SERVICES

Miscellaneous Traffic Engineering Services – Summerlin ITS Design

(Enter Project Name from Page 1 of the
Change Order or Supplemental Task Authorization)

SECTION 1.00 CHANGE(S) TO PROFESSIONAL SERVICES

The "Scope of Professional Services" as set forth in Exhibit "A" of the Professional Services Agreement, or Service Provider Agreement, referred to hereinbefore is hereby supplemented, changed or authorized, so that the CONSULTANT or SERVICE PROVIDER, shall provide and perform the following professional services, tasks, or work as a supplement to, change to, or authorized to, the scope of services previously agreed to and authorized:

STA #1 supplements the Miscellaneous Traffic Engineering Services Contract (CN 03-04) to authorize the consultant firm Gray-Calhoun and Associates to provide professional services for the designs for installation of an Intelligent Transportation System (ITS) along CR 869/Summerlin Road from north of Cypress Lake Drive to south of Boy Scout Drive. The specific services to be provided by the Consultant under this contract supplement are contained in attachment "A" of this document and are detailed in Tasks 1 through 9. The anticipated contract duration is 12 months.

*Attach additional pages, if needed.

CHANGE ORDER AGREEMENT No.
or
 SUPPLEMENTAL TASK AUTHORIZATION No. #1

EXHIBIT "CO/STA-B"

Date: 06/24/04

COMPENSATION AND METHOD OF PAYMENT

For Miscellaneous Traffic Engineering Services – Summerlin ITS Design

(Enter Project Name from Page 1 of the
Change Order or Supplemental Task Authorization)

SECTION 1.00 CHANGE(S) IN COMPENSATION

The compensation the CONSULTANT, or SERVICE PROVIDER, shall be entitled to receive for providing and performing the supplemented, changed or authorized services, tasks, or work as set forth and enumerated in the Scope of Services set forth in this CHANGE ORDER OR SUPPLEMENTAL TASK AUTHORIZATION AGREEMENT, Exhibit "CO/STA-A", attached hereto shall be as follows:

NOTE: A Lump Sum (L.S.) or Not-to-Exceed (N.T.E.) amount of compensation to be paid the CONSULTANT should be established and set forth below for each task or sub-task described and authorized in Exhibit "S/COA-A". In accordance with Professional Services Agreement Article 5.03(2) "Method of Payment", tasks to be paid on a Work-in-Progress payment basis should be identified (WIPP).

Task Number	Task Title	Amount of Compensation	Indicate Basis of Compensation LS or NTE	If Applicable Indicate (W.I.P.P.)
1.0	Project Management	\$14,089.94	NTE	W.I.P.P.
2.0	Concept of Operations Plan	\$11,811.20	NTE	W.I.P.P.
3.0	Communication System Design	\$10,508.53	NTE	W.I.P.P.
4.0	Video Camera System Design	\$6,204.99	NTE	W.I.P.P.
5.0	Video Detection System Design	\$5,275.78	NTE	W.I.P.P.
6.0	Dynamic Message System Design	\$6,204.99	NTE	W.I.P.P.
7.0	Device Structure Design	\$5,282.06	NTE	W.I.P.P.
7A	Geotechnical Investigations	\$5,500.00	NTE	W.I.P.P.
7B	Structure Design	\$16,160.00	NTE	W.I.P.P.
8.0	Preparation of Plans Package	\$21,012.42	NTE	W.I.P.P.
9.0	Preparation of Technical Specifications	\$9,231.45	NTE	W.I.P.P.
10.0	Lump Sum Expenses	\$2,912.54	L.S.	W.I.P.P.
TOTAL		\$114,193.89		

(Unless list is continued on next page)

CHANGE ORDER AGREEMENT No. _____
or
 SUPPLEMENTAL TASK AUTHORIZATION No. 1

EXHIBIT "CO/STA-D"

Date: 06/24/04

CONSULTANT'S, OR SERVICE PROVIDER'S, ASSOCIATED SUB-CONSULTANT(S) AND
SUBCONTRACTOR(S)
for Miscellaneous Traffic Engineering Services – Summerlin ITS

CONSULTANT, or SERVICE PROVIDER, intends to engage the following sub-consultant(s) and/or sub-contractor(s) to assist the CONSULTANT, or SERVICE PROVIDER, in providing and performing the services, tasks, or work required under this CHANGE ORDER, or SUPPLEMENTAL TASK AUTHORIZATION AGREEMENT.

(If none, enter the word "none" in the space below.)

Service and/or Work to be Provided or Performed	Name and Address of Individual or Firm	Disadvantaged, Minority or Women Business Enterprise, (If Yes, Indicate Type)			Sub-Consultant Services are Exempted from Prime Consultant=s Insurance Coverage	
		Yes	No	Type	Yes	No
Structural Services	Pitman Hartenstein and Associates 12701 World Plaza Lane, Bldg 80 Ft. Myers, FL 33907		X		X	
Geotechnical Services	Ardaman & Associates, Inc. 59970 Bavaria Road Fort Myers, Florida 33913		X		X	

CHANGE ORDER AGREEMENT No. _____

or

SUPPLEMENTAL TASK AUTHORIZATION No. #1

EXHIBIT "CO/STA-E"

Date: 06/24/04

PROJECT GUIDELINES AND CRITERIA

for Miscellaneous Traffic Engineering Services – Summerlin ITS Design

(Enter Project Name from Page 1 of the
Change Order or Supplemental Task Authorization Agreement)

As a supplement, or change, to the Project Guidelines and Criteria set forth in the Professional Services Agreement, or Service Provider Agreement, Exhibit "E", the COUNTY has established the following Guidelines, Criteria, Goals, Objectives, Constraints, Schedule, Budget, and/or Requirements which shall serve as a guide to the CONSULTANT, or SERVICE PROVIDER, in performing the professional services, tasks, or work to be provided pursuant to the professional services set forth hereinbefore in CHANGE ORDER or SUPPLEMENTAL TASK AUTHORIZATION AGREEMENT, Exhibit "CO/STA-A", attached hereto:

(If none, enter the word "None" in the space below.)

ITEM No. 1

None

**Lee County Miscellaneous Traffic Engineering Services
Work Order #1 Authorization
(CO/STA #1 – Attachment Exhibit A)**

SUMMERLIN ROAD INTELLIGENT TRANSPORTATION SYSTEM

INTRODUCTION

This project includes the design for installation of an Intelligent Transportation System (ITS) along CR 869/Summerlin Road from north of Cypress Lake Drive to south of Boy Scout Drive. The specific services to be provided by the Consultant under this contract are presented in this document as Task 1 through Task 9. The anticipated contract duration is 12 months.

TASK 1 – PROJECT MANAGEMENT

This task includes any management activities by the Consultant that will result in the successful completion of the design services as defined in this contract. The task also involves the monitoring and coordination of work required by the County or others to assure the timely and efficient completion of this contract. Included are: interagency and utility coordination; status reports; meetings; and project records and files.

Subtask 1A – Interagency and Utility Coordination

The Consultant shall coordinate with the Roadway Consultant on all issues required to effectively coordinate the two design plan sets. The Consultant shall assist the County in obtaining design approvals, additional permits, agreements, etc., from any agencies involved in or affected by the implementation of the project plans prepared by the Consultant. This effort should be limited because the Roadway Consultant will have already completed this work for the roadway section. This could include meetings and correspondence between the Consultant and individual agencies; the preparation of support data and agreements for processing by the County and other appropriate agencies; and coordination of input, reviews and other project-related information from the County and other agencies.

Subtask 1B – Status Reports

Each month during the contract, the Consultant shall prepare and submit a concise monthly status report that addresses the technical activities performed during the previous month and those anticipated to be performed during the current month. The monthly status report shall include, in graphical format, a time line for the services specified in this contract. Each contract task and the amount of time scheduled by the Consultant shall be identified and be consistent with the terms and conditions of the contract. Completion dates for the critical project tasks shall be specified. The Consultant shall also include the critical design milestones for the roadway design on the schedule to ensure coordination between the two schedules. The Consultant shall depict contract progress on the time line. Additionally, a summary of each contract task, the estimated percentage of total contract services each represents, the percent completion of each,

and the total percent completion of the contract services shall be presented in tabular format on a monthly basis.

Subtask 1C – Meetings

The Consultant will be responsible for conducting monthly meetings to address technical, management and coordination issues. The Consultant shall prepare a meeting notice and agenda, take minutes at each meeting and distribute copies to all attendees and appropriate others. A task list for “action items” will be developed with the responsible party determined. The Consultant shall attend the roadway design progress meetings.

Subtask 1D – Project Records and Files

The Consultant shall maintain a comprehensive documentation file for the project.

County Responsibility

The County will review and provide comments on the monthly status reports within one week of submittal, and provide guidance as necessary in the resolution of reported problems or schedule variations.

Task Deliverables

- Meeting Minutes
- Invoices
- Monthly Status Reports

TASK 2 – CONCEPT OF OPERATIONS PLAN

The Consultant shall develop a Concept of Operations Plan that shall define the system architecture and include market packages. The Concept of Operations Plan shall be a high-level plan and will include a summary of the systems, the operational facility needs, integration and testing, coordination, performing and procuring operations and maintenance, training and documentation, and operation procurement and contracting. The Concept of Operations Plan shall also include the project’s integration in the established regional architecture, including jurisdictional coordination. An analysis of the expected maintenance and operations costs will be completed.

The Consultant shall develop the draft Concept of Operations Plans and submit two copies to the County. The Consultant shall submit two copies of the final version in hard print and one copy in electronic form prior to the final submittal of the Plans.

County Responsibility

The County will review and comment upon, as appropriate, the Consultant's submittal of a draft Concept of Operations Plan. The County will review and approve, as appropriate, the Consultant's submittal of the final Concept of Operations Plan.

Task Deliverables

- Draft Concept of Operations Plan
- Final Concept of Operations Plan

TASK 3 – COMMUNICATIONS SYSTEM DESIGN

The Consultant shall develop the design for the communications system necessary to fully integrate the ITS devices, including the video cameras, DMSs, video detection and intersection controllers into the system using County-maintained fiber-optic communications cable and, potentially wireless communication devices.

The Consultant shall prepare a fiber allocation table designating buffer tubes to other agencies. The County will determine the agencies to be included. The Consultant shall prepare a fiber optic cable splicing schematic that identifies cables by name, size of cable, names of fibers for system operation, names of fibers for video operation, names of fibers for DMS operation, and names of spare fibers designated by color of buffer tube and color of fiber for each fiber entering an enclosure. The Consultant shall perform a bandwidth analysis, to include the requirements for the ITS components and available spare capacity. All fibers entering an enclosure shall be capped, expressed through the enclosure or spliced. The cable schematic shall be prepared on half-sized plan sheets and included in the plans package. The Consultant shall perform optical loss budget calculations on selected cable runs to assure that attenuation does not reduce the optical power to unacceptable levels. The Consultant shall document any control center communication design requirements to fully integrate the ITS devices into the central SunGuide system.

County Responsibility

The County will review and approve, as appropriate, the Consultant's submittal of the communication system and the design requirements for the control center.

Task Deliverables

- Communication System Design Requirements Technical Memorandum
- Communication System Splice Schematic

TASK 4 – VIDEO CAMERA SYSTEM DESIGN

The Consultant shall develop the design for the installation and integration of five video cameras into the central SunGuide system. This task shall include the locations of cameras, mounting hardware and all communications hardware. Video location work shall be prepared and included into the plans package.

The Consultant shall finalize the location of each camera with assistance of the County who will provide a bucket truck for the location review. A camcorder will be used to verify the image that will be provided by the cameras. A copy of the camcorder video and the proposed mounting heights for each camera location shall be submitted to the County for review and approval.

County Responsibilities

The County will review and approve the Consultant's submittal of the video camera system design.

Task Deliverables

- Video Camera System Requirements Technical Memorandum
- Camera location Review CD

TASK 5 – VIDEO DETECTION SYSTEM DESIGN

The Consultant shall review the designs for the installation of the SOLO video detection systems. The Consultant shall analyze and recommend an approach to transmit the video from the local intersection cabinet to the traffic control center. The Consultant shall develop and implement a plan to integrate the video from detection units into the central SunGuide system. This design shall include any communications hardware needed to complete the installation.

County Responsibilities

The County will review and approve the Consultant's submittal of the video detection communications system design.

Task Deliverables

- Video Detection Communications System Requirements Technical Memorandum

TASK 6 – DYNAMIC MESSAGE SIGN DESIGN

The Consultant shall develop the design for the installation and integration of two Dynamic Message Signs (DMSs) into the central SunGuide system. This task shall include the location of the DMSs, design of the DMSs, mounting hardware and all communication hardware. DMS location work shall be prepared and included into the plans.

County Responsibility

The County will review and approve the Consultant's submittal of the DMS installations.

Task Deliverables

- DMS Installation Requirements Technical Memorandum

TASK 7 – DEVICE STRUCTURE DESIGN

This task involves the development of design requirements for each of the device structures included in this contract. Included in this task are: engineering analysis; geotechnical; field investigation-structures; laboratory testing; structures report; and final analysis and report.

Engineering Analysis – The Consultant shall design the structures with anchor/connection bolts and foundations that are sufficient to support the given structures at distances and clearances shown in the plans. The design shall be in accordance with the latest edition of the AASHTO publication “Standard Specifications for Structural Supports for Highway Signs, Luminaries and Traffic Signals”, as modified by Chapter 29 of the latest edition of the Florida Department of Transportation (FDOT) Plans Preparation Manual. The structure plan sheets shall be signed and sealed by a professional structural engineer registered in the State of Florida, certifying that the design is sufficient for the proposed installation.

Subtask 7A – Geotechnical Investigation

Geotechnical – The Consultant shall be responsible for a complete geotechnical investigation at all proposed DMS and video camera locations. All services performed by the Consultant shall be in accordance with Lee County standards, the FDOT Plans Preparation Manual, the Soils and Foundations Manual, related directives, Federal Highway Administration (FHWA) Checklist and Guidelines for Review of Geotechnical Reports and Preliminary Plans and Specifications, FHWA Work Zone Traffic Control Practices Manual and Pavement Coring and Evaluation Procedure. The County will make all determinations regarding the County geotechnical standards, policies and procedures.

Prior to beginning the investigation and after the Notice to Proceed is given, the Consultant shall submit an investigation plan for approval and meet with the County to review the project scope and County requirements. The investigation plan shall include, but not be limited to, the proposed boring locations and depths and any existing geotechnical information from available sources to generally describe the surface and subsurface conditions of the project site.

The Consultant shall notify the County in adequate time to schedule a representative to attend any related conferences.

Field Investigation-Structures – The geotechnical investigation for structural foundations shall include, but not be limited to:

- One 30-foot Standard Penetration Test (SPT) boring at each DMS structure location. One 15-foot SPT boring at each video camera location.
- Borings shall be sampled continuously in the top 10 feet and on five-foot centers thereafter.
- Additional specialized field-testing as required by needs of project.

It shall be assumed to be extremely aggressive, eliminating the testing of soils for corrosion testing.

Laboratory Testing – All laboratory testing will be performed in accordance with Florida Sampling and Testing Methods or ASTM or by related directives.

Laboratory testing for structural foundations will include the following, as required by the needs of the project:

- Organic Content
- Moisture Content
- Sieve Analysis
- Atterberg Limits

Subtask 7B – Structure Design

Structures Report – The analysis shall include documentation for each of the DMS locations and a typical for the video camera locations. The structures report shall contain the following discussions as appropriate for the assigned project:

- Summary of structure background data
- Analysis of structure foundation, including but not limited to, the following:
 1. Sample calculations (or computer print-out)
 2. Shaft diameter and length
 3. Deflection
 4. Structure height
 5. Imposed loads (lateral and axial loads)
- Draft of Report of Core Boring Sheet, including design parameters such as total unit weight, angle of internal friction, cohesion and specialized construction requirements, for inclusion in final construction plans
- Summary of soil test results
- Any special provisions required for construction that are not addressed in the County's standard specification

Final Analysis and Report – The final reports will incorporate comments from the County and will contain any additional field or laboratory test results, recommended foundation alternatives along with design parameters and special provisions for the construction plans. These reports will be submitted to the County for review prior to project completion. After review by the County, the reports will be submitted in final form and will include the following:

- All original plan sheets
- One set of reproducible sheets
- Record prints
- Any special provisions
- All reference and support documentation used in preparation of contract plans package

County Responsibility

The County will review and approve, as appropriate, the Consultant's submittal of the Structures Report. The County, through plans and Technical Specification reviews, will review and approve, as appropriate, the Consultant's submittal of the design requirements for the project locations.

Task Deliverables

- Two copies of the Structures Report
- Two copies of the Final Analysis and Report

TASK 8 – PREPARATION OF PLANS PACKAGE

The Consultant shall prepare a complete Plans Package suitable for contract letting by the County for the installation and implementation of the Summerlin Road ITS as defined by this contract. The communications plans will include fiber optic cabling or other communication technology, conduit installation, location of pull and junction boxes, etc. The Consultant shall determine how new conduit will be tied into the conduit being installed under the roadway project. The communications system plans shall be prepared at a scale of one inch equals 40 feet. Video location work shall be at a scale of one inch equals 40 feet. An individual plan sheet is required for each video location. DMS location work shall be prepared at a scale of one inch equals 40 feet. An individual plan sheet is required for each DMS location. The complete base plans will be provided by the roadway designer.

County Responsibility

The County will provide assistance to the Consultant in determining the specific format and content of the plans. The County will provide expeditious review and comments during the staged completion of the plans.

Task Deliverables

- Two copies of the 60 Percent Plans
- Two copies of the 90 Percent Plans
- Two copies of the Final Plans
- One computer disk with Final Plans

TASK 9 – PREPARATION OF TECHNICAL SPECIFICATIONS

The Consultant shall develop minimum Technical Specifications for all devices that will be required for the installation of this project. The Consultant shall include all relative information from the Lee County Specifications.

The Technical Specifications shall be arranged in a format that is in agreement with current County requirements. An example of the County's current formatting requirements will be provided for the Consultant's guidance.

County Responsibility

The County will provide the Consultant an example of the required format of the Technical Specifications. The County will provide expeditious review and comment during staged development of the Technical Specifications.

Task Deliverables

- Two copies of the first draft of the Technical Specifications with submittal of the 60 Percent Plans
- Two copies of the final Technical Specifications with submittal of the Final Plans
- One computer disk with Final Technical Specifications

ACTIVITY	SUMMARY FEE SHEET													
	PRINCIPAL ENGINEER		SENIOR ITS ENGINEER		SENIOR COMMUNICATIONS ENGINEER		TRANSPORTATION ENGINEER		SENIOR ITS TECHNICIAN		SENIOR DESIGNER		TOTAL HOURS	TOTAL DOLLARS
	Man-hours	Hourly Rate	Man-hours	Hourly Rate	Man-hours	Hourly Rate	Man-hours	Hourly Rate	Man-hours	Hourly Rate	Man-hours	Hourly Rate		
TASK 1-PROJECT MANAGEMENT	18	\$53.52		\$61.00	60	\$54.85	24	\$24.71		\$28.09		\$23.54	102	4,847.40
TASK 2-CONCEPT OF OPERATIONS PLAN	4	\$53.52	8	\$61.00	40	\$54.85	32	\$24.71		\$28.09	16	\$23.54	100	4,063.44
TASK 3-COMMUNICATIONS SYSTEM DESIGN	4	\$53.52	8	\$61.00	32	\$54.85	24	\$24.71		\$28.09	24	\$23.54	92	3,615.28
TASK 4-VIDEO CAMERA SYSTEM DESIGN	4	\$53.52	4	\$61.00	16	\$54.85	8	\$24.71	8	\$28.09	16	\$23.54	56	2,134.72
TASK 5-VIDEO DETECTION SYSTEM DESIGN		\$53.52	8	\$61.00	16	\$54.85		\$24.71	16	\$28.09		\$23.54	40	1,815.04
TASK 6-DYNAMIC MESSAGE SIGN DESIGN	4	\$53.52	4	\$61.00	16	\$54.85	8	\$24.71	8	\$28.09	16	\$23.54	56	2,134.72
TASK 7-DEVICE STRUCTURE DESIGN	4	\$53.52	16	\$61.00	8	\$54.85		\$24.71		\$28.09	8	\$23.54	36	1,817.20
TASK 8-PREPARATION OF PLANS PACKAGE	8	\$53.52	4	\$61.00	32	\$54.85	80	\$24.71		\$28.09	120	\$23.54	244	7,228.96
TASK 9-PREPARATION OF TECHNICAL SPECIFICATIONS	4	\$53.52	4	\$61.00	24	\$54.85	40	\$24.71	8	\$28.09	8	\$23.54	88	3,175.92
TOTALS	50	\$2,676.00	56	\$3,416.00	244	\$13,383.40	216	\$5,337.36	40	\$1,123.60	208	\$4,896.32	814	30,832.68

TOTAL CONTRACT FEE COMPUTATIONS

PROJECT: Lee County Summerlin Road ITS
CONSULTANT: Gray-Calhoun & Associates, Inc.
DATE: June 1, 2004

Basic Activities Maximum Limiting Fees (Salary Costs)	\$ 30,832.68
Cost Elements & Additives	
Multiplier 2.9067	
SUBTOTAL	\$ 89,621.35
(c) Direct Reimbursables (Out-of-Pocket) (Lump Sum)	\$ 2,912.54
(d) Consultant Basic Activities	\$
(e) Subconsultant Basic Activities	\$
(f) Ardaman & Associates, Inc. (Subtask 7A-Geotechnical Investigation)	\$ 5,500.00
(g) PHA (Subtask 7B-Structure Design)	\$ 16,160.00
TOTAL FEE	\$ 114,193.89



Ardaman & Associates, Inc.

Geotechnical Engineering and
Material Consulting

Ardaman Proposal No. 04-520

May 24, 2004

Gray-Calhoun & Associates

4350 W. Cypress Street

Suite 340

Tampa, Florida 33607-4175

Attention: Ms. Sara E. Olney, EI

**Subject: Proposal for Geotechnical Engineering Services
Summerlin Road Intelligent Transportation System
Lee County, Florida**

Dear Ms. Olney:

Attached is a summary of our services and costs for geotechnical engineering required for the Summerlin Road ITS project in accordance with TASK 6. The Scope is based upon five video camera locations and two DMS structure locations.

We estimate cost for our services will not exceed **\$5,500**. We will invoice in accordance with unit fees for actual services rendered.

We trust this proposal meets with you approval, please contact us if you should have any questions. **A signed and dated copy of the attached Project/Proposal Acceptance form must be returned to this office, via fax or mail, as our authorization to proceed.**

Very truly yours,

ARDAMAN & ASSOCIATES, INC.

Gary A. Drew, P.E.

Branch Manager

GAD/egs

Attachment: Project Proposal Acceptance Form

**Scope of Services for Geotechnical
Summerlin Road Intelligent Transportation System
Lee County, Florida**

1. Investigation Plan

4 hrs. Project Engineer @\$105.00/hr.	\$420.00
1 hr. Technical Secretary @\$39.00/hr.	<u>\$39.00</u>
	Subtotal: \$459.00

2. Field Investigation

• Borehole Locations and Utility Checks	
4 hrs. Sr. Engineering Technician @\$62.00/hr.	\$248.00
• Test Boring Permit	\$100.00
• Mobilization of Drilling Crew and Equipment	\$250.00
• 7 Standard Penetration Test Borings	
125 ft. from 0-25 ft. @\$12.50/ft.	\$1,562.50
10 ft. from 25-50 ft. @\$14.50/ft.	<u>\$145.00</u>
	Subtotal: \$2,305.50

3. Laboratory Testing

2 Organic Content @\$28.00/ea.	\$56.00
4 Moisture Content @\$11.00/ea.	\$44.00
4 Sieve Analysis @\$38.00/ea.	\$152.00
1 Atterberg Limit @\$87.00/ea.	<u>\$87.00</u>
	Subtotal: \$339.00

4. Structures Report

1 hr. Sr. Project Engineer @\$117.00/hr.	\$117.00
12 hrs. Project Engineer @\$105.00/hr.	\$1,260.00
4 hrs. Technical Draftsperson @\$39.00/hr.	\$156.00
3 hrs. Technical Secretary @\$39.00/hr.	<u>\$78.00</u>
	Subtotal: \$1,611.00

5. Final Analysis and Report

1 hr. Sr. Project Engineer @\$117.00/hr.	\$117.00
4 hrs. Project Engineer @\$105.00/hr.	\$420.00
4 hrs. Technical Draftsperson @\$39.00/hr.	\$156.00
2 hrs. Technical Secretary @\$39.00/hr.	<u>\$78.00</u>
	Subtotal: \$771.00

Total Estimated Cost: \$5,485.50





Ardaman & Associates, Inc.

PROPOSAL/PROJECT ACCEPTANCE

PROJECT INFORMATION:

Client Name Gray-Calhoun & Associates
Project Name Summerlin Road Intelligent Transportation System
Project Location Lee County, Florida
Proposal Number and Date 04-520 - May 24, 2004
Description of Services Geotechnical Engineering Services

Total Estimated Cost: Per Proposal No. 04-520 - \$5, 485.50

PAYMENT RESPONSIBILITY:

Invoices to be paid by _____
Address _____
City/State _____ Zip Code _____ Phone _____
Attention _____ Title _____

APPROVAL OF CHARGES:

If the invoices are to be approved by a party other than the party responsible for payment above, please fill in the space below.

Firm _____
Address _____
City/State _____ Zip Code _____ Phone _____
Attention _____ Title _____

PROPERTY OWNER IDENTIFICATION: (If other than above)

Name _____
Address _____
City/State _____ Zip Code _____ Phone _____
Attention _____ Title _____

SPECIAL INSTRUCTIONS:

PAYMENT TERMS:

Net 30 days from invoice date; invoices will be sent every four weeks for continued or extended projects. Interest charges, 1-1/2% per month following the due date.

PROPOSAL ACCEPTANCE:

The Terms and Conditions of this Proposal, including the Terms on this page and the General Conditions on the reverse are:

Accepted this _____ day of _____, 2004.

(Print or type individual, firm or corporate body name)

(Signature of authorized representative)

(Print or type name of authorized representative and title)

GENERAL CONDITIONS

Payment - Payment shall be due within 30 days after date of invoice. Interest at the rate of 18% per annum from 30 days after date of invoice to date payment is received will be added to all amounts not paid within 30 days after date of invoice. In the event that any law limiting the amount of interest or other charges permitted to be collected is interpreted so that this charge violates such law for any reason, the interest charge is hereby reduced to the extent necessary to eliminate such violation. All attorney fees and expenses associated with collection of past due invoices will be paid by Client.

Insurance - Ardaman & Associates, Inc. (A&A) maintains Workers' Compensation and Employer's Liability Insurance in conformance with state law. In addition, we maintain Comprehensive General Liability Insurance and Automobile Liability Insurance with bodily injury limits of \$1,000,000.00 and property damage limits of \$1,000,000.00. A certificate of insurance can be supplied evidencing such coverage which contains a clause providing that fifteen days written notice be given prior to cancellation.

Right-of-Entry - Unless otherwise agreed, Client will furnish right-of-entry on the property for A&A to make the planned borings, surveys, and/or explorations. A&A will take reasonable precautions to minimize damage to the property caused by its equipment and sampling procedures, but the cost of restoration or damage which may result from the planned operations is not included in the contracted amount. If Client desires to restore the property to its former condition, A&A will accomplish this and add the cost to its fee.

Damage to Existing Man-Made Objects - It shall be the responsibility of the Owner or his duly authorized representative to disclose the presence and accurate location of all hidden or obscure man-made objects relative to field tests, sampling, or boring locations. When cautioned, advised or given data in writing that reveal the presence or potential presence of underground or overground obstructions, such as utilities, A&A will give special instructions to its field personnel. As evidenced by your acceptance of this proposal, Client agrees to indemnify and save harmless A&A from all claims, suits, losses, personal injuries, death and property liability resulting from unusual subsurface conditions or damages to subsurface structures, owned by Client or third parties, occurring in the performance of the proposed work, whose presence and exact locations were not revealed to A&A in writing, and to reimburse A&A for expenses in connection with any such claims or suits, including reasonable attorney's fees.

Warranty and limitation of Liability - A&A shall perform services for Client in a professional manner, using that degree of care and skill ordinarily exercised by and consistent with the standards of competent consultants practicing in the same or a similar locality as the project. In the event any portion of the services fails to comply with this warranty obligation and A&A is promptly notified in writing prior to one year after completion of such portion of the services, A&A will re-perform such portion of the services, or if re-performance is impracticable, A&A will refund the amount of compensation paid to A&A for such portion of the services.

This warranty is in lieu of all other warranties. No other warranty, expressed or implied, including warranties of merchantability and fitness for a particular purpose is made or intended by the proposal for consulting services, by furnishing an oral response of the findings made or by any representations made regarding the services included in this agreement. In no event shall A&A be liable for any special, indirect, incidental or consequential loss or damages. The remedies set forth herein are exclusive and the total liability of consultant whether in contract, tort (including negligence whether sole or concurrent), or otherwise arising out of, connected with or resulting from the services provided pursuant to this Agreement shall not exceed the total fees paid by Client or \$50,000.00, whichever is greater. At additional cost, Client may obtain a higher limit prior to commencement of services.

For services involving or related to pollution, it is further agreed that the Client shall indemnify and hold harmless A&A and their consultants, agents and employees from and against all claims, damages, losses and expenses, direct and indirect or consequential damages, including but not limited to fees and charges of attorneys and court and arbitration costs, arising out of or resulting from the performance of the work by A&A, or claims against A&A arising from the work or others. This indemnification provision extends to claims against A&A which arise out of, are related to, or are based upon, the disposal, discharge, escape, release or saturation of vapors, fumes, acids, alkalis, toxic chemicals, liquids, gases or any other material, irritant, contaminant or pollutant in or into the atmosphere or on, onto, upon, in or into the surface or subsurface.

Sampling or Testing Location - Unless specifically stated to the contrary, the unit fees included in this proposal do not include costs associated with professional land surveying of the site or the accurate horizontal and vertical locations of tests. Field tests or boring locations described in our report or shown on our sketches are based on specific information furnished to us by others or estimates made in the field by our technicians. Such dimensions, depths or elevations should be considered as approximations unless otherwise stated in the report.

Sample Handling and Retention - Generally test samples or specimens are consumed and/or substantially altered during the conduct of tests and A&A, at its sole discretion, will dispose (subject to the following) of any remaining residue immediately upon completion of test unless required in writing by the Client to store or otherwise handle the samples. (a) NON HAZARDOUS SAMPLES: At Client's written request, A&A will maintain preservable test samples and specimens or the residue therefrom for thirty (30) days after submission of A&A's report to Client free of storage charges. After the initial 30 days and upon written request, A&A will retain test specimens or samples for a mutually acceptable storage charge and period of time. (b) HAZARDOUS OR POTENTIALLY HAZARDOUS SAMPLES: In the event that samples contain substances or constituents hazardous or detrimental to human health, safety or the environment as defined by federal, state or local statutes, regulations, or ordinances ("Hazardous Substances" and "Hazardous Constituents", respectively), A&A will, after completion of testing and at Client's expense: (i) return such samples to Client; (ii) using a manifest signed by Client as generator, will have such samples transported to a location selected by Client for final disposal. Client agrees to pay all costs associated with the storage, transport, and disposal of such samples. Client recognizes and agrees that A&A is acting as a bailee and at no time does A&A assume title of said waste.

Discovery of Unanticipated Hazardous Materials - Hazardous materials or certain types of hazardous materials may exist at a site where there is no reason to believe they could or should be present. A&A and Client agree that the discovery of unanticipated hazardous materials constitutes a changed condition mandating a re-negotiation of the scope of work or termination of services. A&A and client also agree that the discovery of unanticipated hazardous materials may make it necessary for A&A to take immediate measures to protect health and safety. A&A agrees to notify Client as soon as practicable should unanticipated hazardous materials or suspected hazardous materials be encountered. Client encourages A&A to take any and all measures that, in A&A's professional opinion, are justified to preserve and protect the health and safety of A&A's personnel and the public. Client to compensate A&A for the additional cost of working to protect employees' and the public's health and safety. In addition, Client waives any claim against A&A, and agrees to defend, indemnify and save A&A harmless from any claim or liability for injury or loss arising from A&A's discovery of unanticipated hazardous materials or suspected hazardous materials. Client also agrees to compensate A&A for a time spent and expenses incurred by A&A in defense of any such claim, with such compensation to be based upon A&A's prevailing fee schedule and expense reimbursement policy relative to recovery of direct project costs.

Joint and Several Liability - The concept of joint and several liability is basically this: When two or more parties are considered responsible for causing injury or damage, any one of the parties may be made to provide compensation for as much as 100% of the damages assessed. When applied to hazardous materials projects, it is possible that the concept of joint and several liability could be construed to make A&A partly or wholly responsible for damages created directly or indirectly by the hazardous materials. Client agrees that it would be unfair for A&A to be exposed to such an action, because A&A had nothing whatsoever to do with the creation of the hazardous condition. Accordingly, Client waives any claim against A&A, and agrees to defend, indemnify and save A&A harmless from any claim or liability for injury or loss arising from application of a joint and several liability concept that would, in any manner, hold or seek to hold A&A responsible for creating a hazardous condition or permitting one to exist. Client also agrees to compensate A&A for any time spent and expenses incurred by A&A in defense of any such claim, with such compensation to be based upon A&A's prevailing fee schedule and expense reimbursement policy relative to recovery of direct project costs.

Legal Jurisdiction - The parties agree that any actions brought to enforce any provision of this Agreement shall only be brought in a court of competent jurisdiction located in Orlando, Orange County, Florida.

Force Majeure - A&A shall not be held responsible for any delay or failure in performance of any part of this Agreement to the extent such delay or failure is caused by fire, flood, explosion, war, strike, embargo, government requirement, civil or military authority, acts of God, act or omission of subcontractors, carriers, client or other similar causes beyond its control.