

**SEMINOLE COUNTY GOVERNMENT
AGENDA MEMORANDUM**

SUBJECT: Professional Services: PS-1666-07/BLH - Final Design Services for State Road 426/County Road 419 Widening

DEPARTMENT: Administrative Services

DIVISION: Purchasing and Contracts

AUTHORIZED BY: Steve Howard

CONTACT: Jacqui Perry

EXT: 7114

MOTION/RECOMMENDATION:

Approve negotiated rates and award PS-1666-07/BLH - Final Design Services for State Road 426/County Road 419 Widening to Inwood Consulting Engineers, Inc. of Oviedo, Florida (Not to Exceed \$1,800,000.00 over the term of the agreement).

County-wide

Ray Hooper

BACKGROUND:

PS-1666-07/BLH will provide professional services for Final Engineering Design Services for the widening of State Road 426/County Road 419. On June 12, 2007, the Board approved the ranking and authorized staff to negotiate with Inwood Consulting Engineers, Inc. of Oviedo, Florida, the top ranked firm.

The Award Agreement includes the negotiated rates as Exhibit C. The term of the Agreement shall run for a period of seven years, and may be renewed for two (2) successive periods not to exceed one (1) year each. Authorization for the performance of services by the Consultant under this Agreement shall be in the form of written Work Orders issued and executed by the County and signed by the Consultant. The work and dollar amount for each work order will be based on the project.

This is a budgeted project and funds are available in the account line for Engineering-Construction & Design (077541.560680, CIP#00191646).

STAFF RECOMMENDATION:

Staff recommends the Board approve negotiated rates and award PS-1666-07/BLH - Final Design Services for State Road 426/County Road 419 Widening to Inwood Consulting Engineers, Inc. of Oviedo, Florida (Not to Exceed 1,800,000.00 over the term of the agreement).

ATTACHMENTS:

1. PS-1666-07_B LH Award Agreement to Inwood Consulting Engineers, Inc.

Additionally Reviewed By:

County Attorney Review (Ann Colby)

DESIGN SERVICES AGREEMENT (PS-1666-07/JVP)

THIS AGREEMENT is made and entered into this _____ day of _____, 20____, by and between **INWOOD CONSULTING ENGINEERS, INC.**, duly authorized to conduct business in the State of Florida, whose address is 870 Clark Street, Oviedo, Florida 32765, hereinafter called "CONSULTANT" and **SEMINOLE COUNTY**, a political subdivision of the State of Florida, whose address is Seminole County Services Building, 1101 East First Street, Sanford, Florida 32771, hereinafter called "COUNTY".

W I T N E S S E T H:

WHEREAS, COUNTY desires to retain the services of a competent and qualified CONSULTANT to provide design services for the State Road 426/County Road 419 widening in Seminole County; and

WHEREAS, COUNTY has requested and received expressions of interest for the retention of services of consultants; and

WHEREAS, CONSULTANT is competent and qualified to furnish design services to COUNTY and desires to provide professional services according to the terms and conditions stated herein,

NOW, THEREFORE, in consideration of the mutual understandings and covenants set forth herein, COUNTY and CONSULTANT agree as follows:

SECTION 1. SERVICES. COUNTY does hereby retain CONSULTANT to furnish professional services and perform those tasks as further described in the Scope of Services attached hereto as Exhibit A and made a part hereof. Required services shall be specifically enumerated, described, and depicted in the Work Orders authorizing performance of the specific project, task, or study. This Agreement standing alone does not authorize the performance of any work or require COUNTY to place any orders for work.

SECTION 2. TERM. This Agreement shall take effect on the date of its execution by COUNTY and shall run for a period of seven(7) years, and at the sole option of COUNTY, may be renewed for two (2) successive

periods not to exceed one (1) year each. Expiration of the term of this Agreement shall have no effect upon Work Orders issued pursuant to this Agreement and prior to the expiration date. Obligations entered therein by both parties shall remain in effect until completion of the work authorized by the Work Order.

SECTION 3. AUTHORIZATION FOR SERVICES. Authorization for performance of professional services by CONSULTANT under this Agreement shall be in the form of written Work Orders issued and executed by COUNTY and signed by CONSULTANT. A sample Work Order is attached hereto as Exhibit B. Each Work Order shall describe the services required, state the dates for commencement and completion of work, and establish the amount and method of payment. The Work Orders will be issued under and shall incorporate the terms of this Agreement. COUNTY makes no covenant or promise as to the number of available projects or that CONSULTANT will perform any project for COUNTY during the life of this Agreement. COUNTY reserves the right to contract with other parties for the services contemplated by this Agreement when it is determined by COUNTY to be in the best interest of COUNTY to do so.

SECTION 4. TIME FOR COMPLETION. The services to be rendered by CONSULTANT shall be commenced as specified in such Work Orders as may be issued hereunder and shall be completed within the time specified therein. In the event COUNTY determines that significant benefits would accrue from expediting an otherwise established time schedule for completion of services under a given Work Order, that Work Order may include a negotiated schedule of incentives based on time savings.

SECTION 5. COMPENSATION. COUNTY agrees to compensate CONSULTANT for the professional services called for under this Agreement on either a "Fixed Fee Basis" or on a "Time Basis Method". If a Work Order is issued under a Time Basis Method, then CONSULTANT shall be compensated in accordance with the rate schedule attached as Exhibit C. If a Work

Order is issued for a Fixed Fee Basis, then the applicable Work Order Fixed Fee amount shall include any and all reimbursable expenses.

SECTION 6. REIMBURSABLE EXPENSES. If a Work Order is issued on a Time Basis Method, then reimbursable expenses are in addition to the hourly rates. Reimbursable expenses are subject to the applicable "Not-to-Exceed" or "Limitation of Funds" amount set forth in the Work Order. Reimbursable expenses may include actual expenditures made by CONSULTANT, its employees, or its professional associates in the interest of the Project for the expenses listed in the following paragraphs:

(a) Expenses of transportation, when traveling in connection with the Project based on Sections 112.061(7) and (8), Florida Statutes, or its successor; long distance calls and telegrams; and fees paid for securing approval of authorities having jurisdiction over the Project.

(b) Expense of reproductions, postage, and handling of drawings and specifications.



(c) If authorized in writing in advance by COUNTY, the cost of other expenditures made by CONSULTANT in the interest of the Project.

SECTION 7. PAYMENT AND BILLING.

(a) If the Scope of Services required to be performed by a Work Order is clearly defined, the Work Order shall be issued on a Fixed Fee Basis. CONSULTANT shall perform all work required by the Work Order, but in no event shall CONSULTANT be paid more than the negotiated Fixed Fee amount stated therein.

(b) If the Scope of Services is not clearly defined, the Work Order may be issued on a Time Basis Method and contain a Not-to Exceed amount. If a Not-to-Exceed amount is provided, CONSULTANT shall perform all work required by the Work Order, but in no event shall CONSULTANT be paid more than the Not-to-Exceed amount specified in the applicable Work Order.

(c) If the Scope of Services is not clearly defined, the Work Order may be issued on a Time Basis Method and contain a Limitation of Funds amount. CONSULTANT is not authorized to exceed that amount without the prior written approval of COUNTY. Said approval, if given by COUNTY, shall indicate a new Limitation of Funds amount. CONSULTANT shall advise COUNTY whenever CONSULTANT has incurred expenses on any Work Order that equals or exceeds eighty percent (80%) of the Limitation of Funds amount.

(d) For Work Orders issued on a Fixed Fee Basis, CONSULTANT may invoice the amount due based on the percentage of total Work Order services actually performed and completed, but in no event shall the invoice amount exceed a percentage of the Fixed Fee amount equal to a percentage of the total services actually completed. COUNTY shall pay CONSULTANT ninety percent (90%) of the approved amount on Work Orders issued on a Fixed Fee Basis.

(e) For Work Orders issued  on a Time Basis Method with a Not-to-Exceed amount, CONSULTANT may invoice the amount due for actual work hours performed, but in no event shall the invoice amount exceed a percentage of the Not-to-Exceed amount equal to a percentage of the total services actually completed. COUNTY shall pay CONSULTANT ninety percent (90%) of the approved amount on Work Orders issued on a Time Basis Method with a Not-to-Exceed amount.

(f) Each Work Order issued on a Fixed Fee Basis or Time Basis Method with a Not-to-Exceed amount shall be treated separately for retainage purposes. If COUNTY determines that work is substantially complete and the amount retained is considered to be in excess, COUNTY may, at its sole and absolute discretion, release the retainage or any portion thereof.

(g) For Work Orders issued on a "Time Basis Method" with a Limitation of Funds amount, CONSULTANT may invoice the amount due for

services actually performed and completed. COUNTY shall pay CONSULTANT one hundred percent (100%) of the approved amount on Work Orders issued on a Time Basis Method with a Limitation of Funds amount.

(h) Payments shall be made by COUNTY to CONSULTANT when requested as work progresses for services furnished, but not more than once monthly. Each Work Order shall be invoiced separately. At the close of each calendar month, CONSULTANT shall render to COUNTY a properly dated itemized invoice describing any services rendered, the cost of the services, the name and address of CONSULTANT, Work Order Number, Contract Number, and all other information required by this Agreement.

The original invoice and one (1) copy shall be sent to:

Director of County Finance
Seminole County Board of County Commissioners
Post Office Box 8080
Sanford, Florida 32772

Two (2) duplicate copies of the invoice shall be sent to:

Public Works Department
520 W. Lake Mary Blvd.
Sanford, FL 32773



(i) Payment shall be made after review and approval by COUNTY within thirty (30) days of receipt of a proper invoice from CONSULTANT.

SECTION 8. GENERAL TERMS OF PAYMENT AND BILLING.

(a) Upon satisfactory completion of work required hereunder and upon acceptance of the work by COUNTY, CONSULTANT may invoice COUNTY for the full amount of compensation provided for under the terms of this Agreement including any retainage and less any amount already paid by COUNTY. COUNTY shall pay CONSULTANT within thirty (30) days of receipt of proper invoice.

(b) COUNTY may perform or have performed an audit of the records of CONSULTANT after final payment to support final payment hereunder. This audit would be performed at a time mutually agreeable to CONSULTANT and COUNTY subsequent to the close of the final fiscal period in which

the last work is performed. Total compensation to CONSULTANT may be determined subsequent to an audit as provided for in subsections (b) and (c) of this Section, and the total compensation so determined shall be used to calculate final payment to CONSULTANT. Conduct of this audit shall not delay final payment as provided by subsection (a) of this Section.

(c) In addition to the above, if federal funds are used for any work under the Agreement, the Department of Housing and Urban Development, the Comptroller General of the United States, or any of their duly authorized representatives shall have access to any books, documents, papers, and records of CONSULTANT which are directly pertinent to work performed under this Agreement for purposes of making audit, examination, excerpts, and transcriptions.

(d) CONSULTANT agrees to maintain all books, documents, papers, accounting records, and other evidence pertaining to work performed under this Agreement in such a  manner as will readily conform to the terms of this Agreement and to make such materials available at CONSULTANT's office at all reasonable times during the Agreement period and for five (5) years from the date of final payment under the contract for audit or inspection as provided for in subsections (b) and (c) of this Section.

(e) In the event any audit or inspection conducted after final payment, but within the period provided in paragraph (d) of this Section, reveals any overpayment by COUNTY under the terms of the Agreement, CONSULTANT shall refund such overpayment to COUNTY within thirty (30) days of notice by COUNTY.

SECTION 9. RESPONSIBILITIES OF CONSULTANT.

(a) CONSULTANT shall be responsible for the professional quality, technical accuracy, competence, methodology, accuracy, and the coordination of all of the following which are listed for illustration purposes

and not as a limitation: documents, analysis, reports, data, plans, plats, maps, surveys, specifications, and any and all other services of whatever type or nature furnished by CONSULTANT under this Agreement. CONSULTANT shall, without additional compensation, correct or revise any errors or deficiencies in his plans, analysis, data, reports, designs, drawings, specifications, and any and all other services of whatever type or nature.

(b) Neither COUNTY's review, approval, or acceptance of, nor payment for, any of the services required shall be construed to operate as a waiver of any rights under this Agreement nor of any cause of action arising out of the performance of this Agreement; and CONSULTANT shall be and always remain liable to COUNTY in accordance with applicable law for any and all damages to COUNTY caused by CONSULTANT's negligent or wrongful performance of any of the services furnished under this Agreement.

(c) CONSULTANT shall be required to comply with the provisions of federal law applicable to construction contracts using federal funds. Said provisions are attached to this Agreement as Exhibit D.

SECTION 10. OWNERSHIP OF DOCUMENTS. All deliverable analysis, reference data, survey data, plans, and reports or any other form of written instrument or document that may result from CONSULTANT's services or have been created during the course of CONSULTANT's performance under this Agreement shall become the property of COUNTY after final payment is made to CONSULTANT.

SECTION 11. TERMINATION.

(a) COUNTY may, by written notice to CONSULTANT, terminate this Agreement or any Work Order issued hereunder, in whole or in part, at any time, either for COUNTY's convenience or because of the failure of CONSULTANT to fulfill its Agreement obligations. Upon receipt of such notice, CONSULTANT shall:

(1) immediately discontinue all services affected unless the notice directs otherwise; and

(2) deliver to COUNTY all data, drawings, specifications, reports, estimates, summaries, and any and all such other information and materials of whatever type or nature as may have been accumulated by CONSULTANT in performing this Agreement, whether completed or in process.

(b) If the termination is for the convenience of COUNTY, CONSULTANT shall be paid compensation for services performed to the date of termination. If this Agreement calls for the payment based on a Fixed Fee amount, CONSULTANT shall be paid no more than a percentage of the Fixed Fee amount equivalent to the percentage of the completion of work, as determined solely and conclusively by COUNTY, contemplated by this Agreement.

(c) If the termination is due to the failure of CONSULTANT to fulfill its Agreement obligations,  COUNTY may take over the work and prosecute the same to completion by other Agreements or otherwise. In such case, CONSULTANT shall be liable to COUNTY for all reasonable additional costs occasioned to COUNTY thereby. CONSULTANT shall not be liable for such additional costs if the failure to perform the Agreement arises without any fault or negligence of CONSULTANT; provided, however, that CONSULTANT shall be responsible and liable for the actions of its subcontractors, agents, employees, and persons and entities of a similar type or nature. Such causes may include acts of God or of the public enemy, acts of COUNTY in either its sovereign or contractual capacity, fires, floods, epidemics, quarantine restrictions, strikes, freight embargoes, and unusually severe weather; but, in every case, the failure to perform must be beyond the control and without any fault or negligence of CONSULTANT.

(d) If after notice of termination for failure to fulfill its

Agreement obligations it is determined that CONSULTANT had not so failed, the termination shall be conclusively deemed to have been effected for the convenience of COUNTY. In such event, adjustment in the Agreement price shall be made as provided in subsection (b) of this Section.

(e) The rights and remedies of COUNTY provided for in this Section are in addition and supplemental to any and all other rights and remedies provided by law or under this Agreement.

SECTION 12. AGREEMENT AND WORK ORDER IN CONFLICT. Whenever the terms of this Agreement conflict with any Work Order issued pursuant to it, the Agreement shall prevail.

SECTION 13. EQUAL OPPORTUNITY EMPLOYMENT. CONSULTANT agrees that it will not discriminate against any employee or applicant for employment for work under this Agreement because of race, color, religion, sex, age, disability, or national origin and will take steps to ensure that applicants are employed, and employees are treated during employment, without regard to race, color, religion, sex, age, disability, or national origin. This provision shall include, but not be limited to, the following: employment; upgrading, demotion or transfer; recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship.

SECTION 14. NO CONTINGENT FEES. CONSULTANT warrants that it has not employed or retained any company or person, other than a bona fide employee working solely for CONSULTANT, to solicit or secure this Agreement and that it has not paid or agreed to pay any person, company, corporation, individual, or firm, other than a bona fide employee working solely for CONSULTANT, any fee, commission, percentage, gift, or other consideration contingent upon or resulting from award or making of this Agreement. For the breach or violation of this provision, COUNTY shall have the right to terminate the Agreement at its sole discretion,

without liability and to deduct from the Agreement price, or otherwise recover, the full amount of such fee, commission, percentage, gift, or consideration.

SECTION 15. CONFLICT OF INTEREST.

(a) CONSULTANT agrees that it will not contract for or accept employment for the performance of any work or service with any individual, business, corporation, or government unit that would create a conflict of interest in the performance of its obligations pursuant to this Agreement with COUNTY.

(b) CONSULTANT agrees that it will neither take any action nor engage in any conduct that would cause any COUNTY employee to violate the provisions of Chapter 112, Florida Statutes, relating to ethics in government.

(c) In the event that CONSULTANT causes or in any way promotes or encourages a COUNTY officer, employee, or agent to violate Chapter 112, Florida Statutes, COUNTY shall have the right to terminate this Agreement.

SECTION 16. ASSIGNMENT. This Agreement, or any interest herein, shall not be assigned, transferred, or otherwise encumbered, under any circumstances, by the parties hereto without prior written consent of the other party and in such cases only by a document of equal dignity herewith.

SECTION 17. SUBCONTRACTORS. In the event that CONSULTANT, during the course of the work under this Agreement, requires the services of any subcontractors or other professional associates in connection with services covered by this Agreement, CONSULTANT must first secure the prior express written approval of COUNTY. If subcontractors or other professional associates are required in connection with the services covered by this Agreement, CONSULTANT shall remain fully responsible for the services of subcontractors or other professional associates.

SECTION 18. INDEMNIFICATION OF COUNTY. CONSULTANT agrees to hold harmless, replace, and indemnify COUNTY, its commissioners, officers, employees, and agents against any and all claim, losses, damages or lawsuits for damages, arising from the negligent, reckless, or intentionally wrongful provision of services hereunder by CONSULTANT, whether caused by CONSULTANT or otherwise.

SECTION 19. INSURANCE.

(a) GENERAL. CONSULTANT shall at its own cost procure the insurance required under this Section.

(1) CONSULTANT shall furnish COUNTY with a Certificate of Insurance signed by an authorized representative of the insurer evidencing the insurance required by this Section (Professional Liability, Workers' Compensation/Employer's Liability and Commercial General Liability). COUNTY, its officials, officers, and employees shall be named additional insured under the Commercial General Liability policy. The Certificate of Insurance shall provide that COUNTY shall be given not less than thirty (30) days written notice prior to the cancellation or restriction of coverage. Until such time as the insurance is no longer required to be maintained by CONSULTANT, CONSULTANT shall provide COUNTY with a renewal or replacement Certificate of Insurance not less than thirty (30) days before expiration or replacement of the insurance for which a previous certificate has been provided.

(2) The Certificate shall contain a statement that it is being provided in accordance with the Agreement and that the insurance is in full compliance with the requirements of the Agreement. In lieu of the statement on the Certificate, CONSULTANT shall (at the option of COUNTY) submit a sworn notarized statement from an authorized representative of the insurer that the Certificate is being provided in accordance with the Agreement and that the insurance is in full compliance with the requirements of the Agreement. **The Certificate shall have this**

Agreement number clearly marked on its face.

(3) In addition to providing the Certificate of Insurance, if required by COUNTY, CONSULTANT shall, within thirty (30) days after receipt of the request, provide COUNTY with a certified copy of each of the policies of insurance providing the coverage required by this Section.

(4) Neither approval by COUNTY nor failure to disapprove the insurance furnished by a CONSULTANT shall relieve CONSULTANT of its full responsibility for performance of any obligation including CONSULTANT's indemnification of COUNTY under this Agreement.

(b) INSURANCE COMPANY REQUIREMENTS. Insurance companies providing the insurance under this Agreement must meet the following requirements:

(1) Companies issuing policies (other than Workers' Compensation) must be authorized to conduct business in the State of Florida and prove same by maintaining  Certificates of Authority issued to the companies by the Department of Insurance of the State of Florida. Policies for Workers' Compensation may be issued by companies authorized as a group self-insurer by Section 440.57, Florida Statutes.

(2) In addition, such companies other than those authorized by Section 440.57, Florida Statutes, shall have and maintain a Best's Rating of "A" or better and a Financial Size Category of "VII" or better according to A.M. Best Company.

(3) If during the period which an insurance company is providing the insurance coverage required by this Agreement, an insurance company shall: (i) lose its Certificate of Authority; (ii) no longer comply with Section 440.57, Florida Statutes; or (iii) fail to maintain the requisite Best's Rating and Financial Size Category, CONSULTANT shall, as soon as CONSULTANT has knowledge of any such circumstance, immediately notify COUNTY and immediately replace the

insurance coverage provided by the insurance company with a different insurance company meeting the requirements of this Agreement. Until such time as CONSULTANT has replaced the unacceptable insurer with an insurer acceptable to COUNTY, CONSULTANT shall be deemed to be in default of this Agreement.

(c) SPECIFICATIONS. Without limiting any of the other obligations or liability of CONSULTANT, CONSULTANT shall, at its sole expense, procure, maintain, and keep in force amounts and types of insurance conforming to the minimum requirements set forth in this subsection. Except as otherwise specified in the Agreement, the insurance shall become effective prior to the commencement of work by CONSULTANT and shall be maintained in force until the Agreement completion date. The amounts and types of insurance shall conform to the following minimum requirements.

(1) Workers' Compensation/Employer's Liability.

(A) CONSULTANT'S  insurance shall cover CONSULTANT for liability which would be covered by the latest edition of the standard Workers' Compensation Policy as filed for use in Florida by the National Council on Compensation Insurance, without restrictive endorsements. CONSULTANT will also be responsible for procuring proper proof of coverage from its subcontractors of every tier for liability which is a result of a Workers' Compensation injury to the subcontractor's employees. The minimum required limits to be provided by both CONSULTANT and its subcontractors are outlined in subsection (c) below. In addition to coverage for the Florida Workers' Compensation Act, where appropriate, coverage is to be included for the United States Longshoremen and Harbor Workers' Compensation Act, Federal Employers' Liability Act, and any other applicable federal or state law.

(B) Subject to the restrictions of coverage found in the standard Workers' Compensation Policy, there shall be no maximum

limit on the amount of coverage for liability imposed by the Florida Workers' Compensation Act, the United States Longshoremen's and Harbor Workers' Compensation Act, or any other coverage customarily insured under Part One of the standard Workers' Compensation Policy.

(C) The minimum amount of coverage under Part Two of the standard Workers' Compensation Policy shall be:

\$ 500,000.00	(Each Accident)
\$1,000,000.00	(Disease-Policy Limit)
\$ 500,000.00	(Disease-Each Employee)

(2) Commercial General Liability.

(A) CONSULTANT's insurance shall cover CONSULTANT for those sources of liability which would be covered by the latest edition of the standard Commercial General Liability Coverage Form (ISO Form CG 00 01) as filed for use in the State of Florida by the Insurance Services Office, without the attachment of restrictive endorsements other than the elimination of Coverage C, Medical Payment, and the elimination of coverage for Fire ~~Damage~~ Legal Liability.

(B) The minimum limits to be maintained by CONSULTANT (inclusive of any amounts provided by an Umbrella or Excess policy) shall be as follows:

	<u>LIMITS</u>
General Aggregate	Three (3) Times the Each-Occurrence Limit
Personal & Advertising Injury Limit	\$1,000,000.00
Each Occurrence Limit	\$1,000,000.00

(3) Professional Liability Insurance. CONSULTANT shall carry professional liability insurance with limits of not less than ONE MILLION AND NO/100 DOLLARS (\$1,000,000.00).

(d) COVERAGE. The insurance provided by CONSULTANT pursuant to this Agreement shall apply on a primary basis, and any other insurance or self-insurance maintained by COUNTY or COUNTY's officials, officers,

or employees shall be in excess of and not contributing to the insurance provided by or on behalf of CONSULTANT.

(e) OCCURRENCE BASIS. The Workers' Compensation Policy and the Commercial General Liability required by this Agreement shall be provided on an occurrence rather than a claims-made basis. The Professional Liability insurance policy must be on an occurrence basis or claims-made basis. If a claims-made basis, the coverage must respond to all claims reported within three (3) years following the period for which coverage is required and which would have been covered had the coverage been on an occurrence basis.

(f) OBLIGATIONS. Compliance with the foregoing insurance requirements shall not relieve CONSULTANT, its employees, or its agents of liability from any obligation under a Section or any other portions of this Agreement.

SECTION 20. ALTERNATIVE DISPUTE RESOLUTION.

(a) In the event of a  dispute related to any performance or payment obligation arising under this Agreement, the parties agree to exhaust COUNTY protest procedures prior to filing suit or otherwise pursuing legal remedies. COUNTY procedures for proper invoice and payment disputes are set forth in Section 22.15, "Prompt Payment Procedures," Seminole County Administrative Code.

(b) CONSULTANT agrees that it will file no suit or otherwise pursue legal remedies based on facts or evidentiary materials that were not presented for consideration in COUNTY protest procedures set forth in subsection (a) above of which CONSULTANT had knowledge and failed to present during COUNTY protest procedures.

(c) In the event that COUNTY protest procedures are exhausted and a suit is filed or legal remedies are otherwise pursued, the parties shall exercise best efforts to resolve disputes through voluntary mediation. Mediator selection and the procedures to be employed in

voluntary mediation shall be mutually acceptable to the parties. Costs of voluntary mediation shall be shared equally among the parties participating in the mediation.

SECTION 21. REPRESENTATIVES OF COUNTY AND CONSULTANT.

(a) It is recognized that questions in the day-to-day conduct of performance pursuant to this Agreement will arise. COUNTY, upon request by CONSULTANT, shall designate in writing and shall advise CONSULTANT in writing of one (1) or more of its employees to whom all communications pertaining to the day-to-day conduct of this Agreement shall be addressed. The designated representative shall have the authority to transmit instructions, receive information, and interpret and define COUNTY's policy and decisions pertinent to the work covered by this Agreement.

(b) CONSULTANT shall at all times during the normal work week designate or appoint one or more representatives of CONSULTANT who are authorized to act on behalf of and  bind CONSULTANT regarding all matters involving the conduct of the performance pursuant to this Agreement and shall keep COUNTY continually and effectively advised of such designation.

SECTION 22. ALL PRIOR AGREEMENTS SUPERSEDED. This document incorporates and includes all prior negotiations, correspondence, conversations, agreements, or understandings applicable to the matters contained herein and the parties agree that there are no commitments, agreements, or understandings concerning the subject matter of this Agreement that are not contained or referred to in this document. Accordingly, it is agreed that no deviation from the terms hereof shall be predicated upon any prior representations or agreements, whether oral or written.

SECTION 23. MODIFICATIONS, AMENDMENTS OR ALTERATIONS. No modification, amendment, or alteration in the terms or conditions contained

herein shall be effective unless contained in a written document executed with the same formality and of equal dignity herewith.

SECTION 24. INDEPENDENT CONTRACTOR. It is agreed that nothing herein contained is intended or should be construed as in any manner creating or establishing a relationship of co-partners between the parties or as constituting CONSULTANT (including its officers, employees, and agents) an agent, representative, or employee of COUNTY for any purpose, or in any manner, whatsoever. CONSULTANT is to be and shall remain forever an independent contractor with respect to all services performed under this Agreement.

SECTION 25. EMPLOYEE STATUS. Persons employed by CONSULTANT in the performance of services and functions pursuant to this Agreement shall have no claim to pension, workers' compensation, unemployment compensation, civil service, or other employee rights or privileges granted to COUNTY's officers and employees, either by operation of law or by COUNTY.



SECTION 26. SERVICES NOT PROVIDED FOR. No claim for services furnished by CONSULTANT not specifically provided for herein shall be honored by COUNTY.

SECTION 27. PUBLIC RECORDS LAW. CONSULTANT acknowledges COUNTY's obligations under Article I, Section 24, Florida Constitution, and Chapter 119, Florida Statutes, to release public records to members of the public upon request. CONSULTANT acknowledges that COUNTY is required to comply with Article I, Section 24, Florida Constitution, and Chapter 119, Florida Statutes, in the handling of the materials created under this Agreement and that said statute controls over the terms of this Agreement.

SECTION 28. COMPLIANCE WITH LAWS AND REGULATIONS. In providing all services pursuant to this Agreement, CONSULTANT shall abide by all statutes, ordinances, rules, and regulations pertaining to or regulating

the provisions of such services, including those now in effect and hereafter adopted. Any violation of said statutes, ordinances, rules, or regulations shall constitute a material breach of this Agreement and shall entitle COUNTY to terminate this Agreement immediately upon delivery of written notice of termination to CONSULTANT.

SECTION 29. NOTICES. Whenever either party desires to give notice unto the other, it must be given by written notice, sent by registered or certified United States mail, return receipt requested, addressed to the party for whom it is intended at the place last specified. The place for giving of notice shall remain such until it shall have been changed by written notice in compliance with the provisions of this Section. For the present, the parties designate the following as the respective places for giving of notice, to-wit:

For COUNTY:
Public Works Department
520 W. Lake Mary Blvd.
Sanford, FL 32773



For CONSULTANT:
Inwood Consulting Engineers, Inc.
870 Clark Street
Oviedo, FL 32765

SECTION 30. RIGHTS AT LAW RETAINED. The rights and remedies of COUNTY, provided for under this Agreement, are in addition and supplemental to any other rights and remedies provided by law.

IN WITNESS WHEREOF, the parties hereto have made and executed this Agreement on the date below written for execution by COUNTY.

ATTEST:

INWOOD CONSULTING ENGINEERS, INC.

ANDREW D. DEWITT, Secretary

By: _____

ALEX B. HULL, President

(CORPORATE SEAL)

Date: _____

(County Signature Page Follows)

ATTEST:

BOARD OF COUNTY COMMISSIONERS
SEMINOLE COUNTY, FLORIDA

By: _____
MARYANNE MORSE
Clerk to the Board of
County Commissioners of
Seminole County, Florida.

CARLTON HENLEY, Chairman

Date: _____

For use and reliance
of Seminole County only.

As authorized for execution by
the Board of County Commissioners
at their _____, 20____
regular meeting.

Approved as to form and
legal sufficiency.

County Attorney

Attachments:

- Exhibit A - Scope of Services
- Exhibit B - Sample Work Order
- Exhibit C - Rate Schedule
- Exhibit D - Federal Requirements



AEC:jjr
7/5/07
P:\Users\jroyal\Purchasing 2007\Agreements\PS-1666-07-Inwood.doc

**TENTATIVE SCOPE OF SERVICES
PHASE II - HIGHWAY FINAL DESIGN & PERMITTING**

County Project Number: *PS-1666-07/BLH*

Financial Project ID: *415030-1-38-01*

Description: *SR 426/CR 419, from Pine Avenue to Lockwood Boulevard in Seminole
County*

EXHIBIT A

1	PURPOSE	1
2	PROJECT DESCRIPTION	2
2.1	Roadway	2
2.2	Drainage	2
2.3	Utility Coordination	2
2.4	Permits	2
2.5	Structures (N/A)	2
2.6	Signing and Pavement Markings	2
2.7	Signals	3
2.8	Landscape Architecture	3
2.9	Survey	3
2.10	Geotechnical	3
2.11	Project Schedule	3
2.12	Submittals	4
2.13	Provisions for Work	5
2.14	Services to be Performed by the COUNTY and or FDOT	6
3	PROJECT GENERAL TASKS	6
3.1	Public Involvement	6
3.2	Joint Project Agreements	7
3.3	Contract Maintenance	7
3.4	Prime Project Manager Meetings	7
4	ROADWAY ANALYSIS	8
4.1	Typical Section Package	9
4.2	Pavement Design Package	9
4.3	Access Management	9
4.4	Horizontal/Vertical Master Design Files	9
4.5	Cross Section Design Files	9
4.6	Traffic Control Analysis	9
4.7	Design Report	10
4.8	Computation Book and Quantities	10
4.9	Cost Estimate	10
4.10	Field Reviews	10
4.11	Technical Meetings	10
4.12	Quality Assurance/Quality Control	10
4.13	Supervision	10
4.14	Coordination	10
5	ROADWAY PLANS	10
5.1	Key Sheet	10
5.2	Summary of Pay Items Including Quantity Input	10
5.3	Drainage Map	10
5.4	Typical Section Sheets	10
5.5	General Notes/Pay Item Notes	10
5.6	Summary of Quantities	10
5.7	Bridge Hydraulics Recommendation Sheets (N/A)	10
5.8	Summary of Drainage Structures	10

EXHIBIT A

5.9	Project Layout	10
5.10	Plan/Profile Sheet	10
5.11	Special Profile	11
5.12	Back of Sidewalk Profile Sheet	11
5.13	Ramp Terminal Details (Plan View) (N/A)	11
5.14	Intersection Layout Details	11
5.15	Miscellaneous Detail Sheets	11
5.16	Drainage Structure Sheet	11
5.17	Miscellaneous Drainage Detail Sheets	11
5.18	Retention/Detention Ponds Detail Sheet	11
5.19	Retention Pond Cross Sections	11
5.20	Roadway Soil Survey Sheet	11
5.21	Cross Sections	11
5.22	Traffic Control Data Sheet	11
5.23	Utility Adjustment Sheets	11
5.24	Erosion Control Plan	11
5.25	SWPPP	11
5.26	Project Control Network Sheet	11
5.27	Utility Verification Sheet (SUE Data)	11
5.28	Quality Assurance/Quality Control	11
5.29	Supervision	11
6	DRAINAGE ANALYSIS	11
6.1	Determine Base Clearance Water Elevation	11
6.2	Pond Siting Analysis and Report	12
6.3	Design of Outfalls	12
6.4	Design of Stormwater Management Facility (Offsite Pond)	12
6.5	Design of Storm Drains	12
6.6	Optional Culvert Material	12
6.7	French Drain Design	12
6.8	Drainage Design Documentation Report	12
6.9	Bridge Hydraulic Report (N/A)	12
6.10	Cost Estimate	12
6.11	Technical Special Provisions	12
6.12	Field Reviews	12
6.13	Technical Meetings	12
6.14	Quality Assurance/Quality Control	13
6.15	Supervision	13
6.16	Coordination	13
7	UTILITIES	13
7.1	Identify Existing UAO(s)	13
7.2	Make Utility Contacts	13
7.3	Preliminary Utility Meeting	13
7.4	Individual/Field Meetings	13
7.5	Collect and Review Plans and Data from UAO(s)	13
7.6	Utility Design Meeting	14
7.7	Review Utility Markups	14
7.8	Utility Coordination/Follow-up	14
7.9	Utility Constructability Review	14
7.10	Utility Design	14
8	ENVIRONMENTAL PERMITS	14
8.1	Preliminary Project Research	14

EXHIBIT A

8.2	Complete Permit Involvement Form	14
8.3	Establish Wetland Jurisdictional Lines	15
8.4	Agency Verification of Wetland Data	15
8.5	Complete and Submit All Required Permit Applications	15
8.6	Prepare Dredge and Fill Sketches	15
8.7	Prepare USCG Permit Sketches (N/A)	15
8.8	Prepare Easement Sketches	15
8.9	Prepare Right-of-Way Occupancy Sketches	15
8.10	Prepare Coastal Construction Control Line (CCCL) Permit Sketches (N/A)	15
8.11	Prepare Tree Permit Information (N/A)	15
8.12	Mitigation Coordination and Meetings	15
8.13	Mitigation Design	16
8.14	Environmental Clearances	16
8.15	Technical Meetings	17
8.16	Quality Assurance/Quality Control	17
8.17	Supervision	17
8.18	Coordination	17
9	STRUCTURES - SUMMARY AND MISCELLANEOUS TASKS AND DRAWINGS (N/A)	17
10	STRUCTURES - BRIDGE CONCEPT REPORT (N/A)	17
11	STRUCTURES - MEDIUM SPAN CONCRETE BRIDGE (N/A)	17
12	STRUCTURES - MISCELLANEOUS	17
12.1	Mast Arms	17
13	SIGNING AND PAVEMENT MARKING ANALYSIS	17
13.1	Reference and Master Design File	17
13.2	Multi-Post Sign Support Calculations	17
13.3	Sign Panel Design Analysis	17
13.4	Quantities	17
13.5	Computation Book	17
13.6	Cost Estimates	17
13.7	Technical Special Provisions	17
13.8	Field Reviews	17
13.9	Technical Meetings	17
13.10	Quality Assurance/Quality Control	18
13.11	Supervision	18
13.12	Coordination	18
14	SIGNING AND PAVEMENT MARKING PLANS	18
14.1	Key Sheet	18
14.2	Tabulation of Quantities	18
14.3	General Notes/Pay Item Notes	18
14.4	Plan Sheet	18
14.5	Typical Details	18
14.6	Guide Sign Work Sheet(s)	18
14.7	Interim Standards	18
14.8	Quality Assurance/Quality Control	18
14.9	Supervision	18

EXHIBIT A

15	SIGNALIZATION ANALYSIS	18
15.1	Traffic Data Collection	18
15.2	Traffic Data Analysis	18
15.3	Reference and Master Signalization Design File	18
15.4	Overhead Street Name Sign Design	19
15.5	Pole Elevation Analysis	19
15.6	Quantities	19
15.7	Cost Estimate	19
15.8	Technical Special Provisions	19
15.9	Field Reviews	19
15.10	Technical Meetings	19
15.11	Quality Assurance/Quality Control	19
15.12	Supervision	19
15.13	Coordination	19
16	SIGNALIZATION PLANS	19
16.1	Key Sheet	19
16.2	Tabulation of Quantities	19
16.3	General Notes/Pay Item Notes	19
16.4	Plan Sheet	19
16.5	Interconnect Plans	19
16.6	Traffic Monitoring Site	19
16.7	Guide Sign Worksheet	19
16.8	Special Details	19
16.9	Special Service Point Details	19
16.10	Mast Arm Tabulation Sheet	19
16.11	Quality Assurance/Quality Control	20
16.12	Supervision	20
17	LIGHTING ANALYSIS	20
17.1	Lighting Justification Report	20
17.2	Lighting Design Analysis Report	20
17.3	Aeronautical Evaluation	20
17.4	Voltage Drop Calculations	20
17.5	FDEP Coordination and Report	21
17.6	Reference and Master Design Files	21
17.7	Temporary Lighting	21
17.8	Design Documentation	21
17.9	Quantities	21
17.10	Cost Estimate	21
17.11	Technical Special Provisions	21
17.12	Field Reviews	21
17.13	Technical Meetings	21
17.14	Quality Assurance/Quality Control	21
17.15	Independent Peer Review	21
17.16	Supervision	22
17.17	Coordination	22
18	LIGHTING PLANS	22
18.1	Key Sheet	22
18.2	Summary of Pay Item Sheet Including CES Input	22
18.3	Tabulation of Quantities	22
18.4	General Notes/Pay Item Notes	22

EXHIBIT A

18.5	Pole Data and Legend & Criteria	22
18.6	Service Point Details	22
18.7	Project Layout	22
18.8	Plan Sheet	22
18.9	Special Details	22
18.10	Temporary Lighting Data and Details	22
18.11	Traffic Control Plan Sheets	22
18.12	Interim Standards	22
18.13	Quality Assurance/Quality Control	22
18.14	Supervision	22
19	LANDSCAPE ARCHITECTURE ANALYSIS	22
19.1	Data Collection	22
19.2	Site Inventory and Analysis	22
19.3	Planting Design	23
19.4	Computation Book and Quantities	23
19.5	Cost Estimates	23
19.6	Technical Special Provisions	23
19.7	Field Reviews	23
19.8	Technical Meetings	23
19.9	Quality Assurance/Quality Control	23
19.10	Supervision	23
19.11	Coordination	23
20	LANDSCAPE ARCHITECTURE PLANS	23
20.1	Key Sheet	23
20.2	Tabulation of Quantities	23
20.3	General Notes	23
20.4	Tree and Vegetation Inventory, Protection and Relocation Plans	23
20.5	Planting and Hardscape Plans for Linear Roadway Projects	23
20.6	Planting Details and Notes	23
20.7	Cost Estimate	23
20.8	Quality Assurance/Quality Control	23
20.9	Supervision	23
21	SURVEY	24
21.1	Horizontal Project Network Control (HPNC)	24
21.2	Vertical Project Network Control (VPNC)	24
21.3	Alignment and/or Existing Right of Way Lines	24
21.4	Aerial Targets (N/A)	24
21.5	Reference Points	24
21.6	Topography (2D)	24
21.7	Digital Terrain Model (DTM)	24
21.8	Roadway Cross Sections/Profiles	25
21.9	Side Street Surveys	25
21.10	Underground Utilities	25
21.11	Outfall Survey	25
21.12	Drainage Survey	25
21.13	Bridge Survey (N/A)	25
21.14	Channel Survey (N/A)	25
21.15	Pond Site Survey	25
21.16	Mitigation Survey	25
21.17	Jurisdiction Line Survey	25
21.18	Geotechnical Support	26

EXHIBIT A

21.19	Sectional/Grant Survey	26
21.20	Subdivision Location	26
21.21	Maintained R/W (N/A)	26
21.22	Boundary Survey	26
21.23	Water Boundary Survey	26
21.24	Right of Way Staking (N/A)	26
21.25	Right of Way Monumentation	26
21.26	Line Cutting	26
21.27	Work Zone Safety	26
21.28	Miscellaneous Surveys	26
21.29	Supplemental Surveys (N/A)	26
21.30	Document Research	27
21.31	Field Review	27
21.32	Technical Meetings	27
21.33	Quality Control/Quality Assurance	27
21.34	Supervision	27
21.35	Coordination	27
22	RIGHT OF WAY MAPPING	27
22.1	Alignment	27
22.2	Section and 1/4 Section Lines	27
22.3	Subdivisions	27
22.4	Existing Right-of way	27
22.5	Topography	27
22.6	Parent Tract Properties / Existing Easements	27
22.7	Proposed R/W Requirements	27
22.8	Limits of Construction	28
22.9	Jurisdictional/Agency Lines	28
22.10	Control Survey Cover Sheet	28
22.11	Control Survey Key Sheet	28
22.12	Control Survey Detail Sheet	28
22.13	Right-of-Way Map Cover Sheet	28
22.14	Right-of-Way Map Key Sheet	28
22.15	Right-of-Way Map Detail Sheet	28
22.16	Reference Point Sheet	28
22.17	Table of Ownerships Sheet	28
22.18	TIITF Sketches	28
22.19	Title Search Map	28
22.20	Title Search Report	28
22.21	Legal Descriptions	28
22.22	Final maps / Plans Comparison	28
22.23	Field Reviews	29
22.24	Technical Meetings	29
22.25	Quality Assurance / Quality Control	29
22.26	Supervision	29
22.27	Coordination	29
23	GEOTECHNICAL	29
23.1	Document Collection and Review	29
23.2	Detailed Boring Location Plan	30
23.3	Stake Borings/Utility Clearance	30
23.4	MOT Plans for Field Investigation	30
23.5	Drilling Access Permits	30
23.6	Property Clearances	30
23.7	Groundwater Monitoring	30

EXHIBIT A

23.8	LBR Sampling	30
23.9	Coordination of Field Work	30
23.10	Soil and Rock Classification - Roadway	30
23.11	Design LBR	31
23.12	Laboratory Data	31
23.13	Seasonal High Water Table	31
23.14	Parameters for Water Retention Areas	31
23.15	Limits of Unsuitable Material	31
23.16	ASCII Files for Cross-Sections	31
23.17	Embankment Settlement and Stability	31
23.18	Stormwater Volume Recovery and/or Background Seepage Analysis	31
23.19	Geotechnical Recommendations	31
23.20	Preliminary Report	31
23.21	Final Report	32
23.22	Auger Boring Drafting	32
23.23	SPT Boring Drafting	32
23.24	Detailed Boring Location Plan	32
23.25	Stake Borings/Utility Clearance	32
23.26	MOT Plans for Field Investigation	33
23.27	Drilling Access Permits	33
23.28	Property Clearances	33
23.29	Collection of Corrosion Samples	33
23.30	Coordination of Field Work	33
23.31	Soil and Rock Classification - Structures	33
23.32	Tabulation of Laboratory Data	33
23.33	Design Groundwater Level for Structures	33
23.34	Selection of Foundation Alternatives (BDR) (N/A)	33
23.35	Detailed Analysis of Selected Foundation Alternate(s)	34
23.36	Bridge Construction and Testing Recommendations (N/A)	34
23.37	Lateral Load Analysis (Optional)	34
23.38	Walls	34
23.39	Sheet Pile Wall Analysis (Optional)	34
23.40	Soil Parameters for Signs, Signals, High Mast Lights, and Strain Poles and Geotechnical Recommendations	34
23.41	Box Culvert Analysis	34
23.42	Preliminary Report - BDR (N/A)	35
23.43	Final Report - Bridge and Associated Walls (N/A)	35
23.44	Final Reports - Signs, Signals, Box Culvert, Walls, and High Mast Lights	35
23.45	Drafting	36
23.46	Technical Special Provisions	36
23.47	Field Reviews	36
23.48	Technical Meetings	36
23.49	Quality Assurance/Quality Control	36
23.50	Supervision	36
23.51	Coordination	36
23.52	Optional Preliminary Contamination Assessment	36
24	RIGHT OF WAY ASSESSMENT	37
24.1	Coordination	37
24.2	Initial Inspection	37
24.3	Alternative Analysis	37
24.4	Identify Compensable Impacts	37
24.5	Appraisals	37
24.6	Identify cost efficient compensable impacts	37
24.7	Values and Damages Report	37
24.8	Reports on Assessment Alternatives	37

EXHIBIT A

25	PROJECT REQUIREMENTS	37
25.1	Liaison Office	37
25.2	Key Personnel	37
25.3	Progress Reporting	37
25.4	Correspondence	38
25.5	Professional Endorsement	38
25.6	Computer Automation	38
25.7	Coordination With Other Consultants	38
25.8	Optional Services	38
26	INVOICING LIMITS	38

**SCOPE OF SERVICES FOR CONSULTING ENGINEERING SERVICES
HIGHWAY AND BRIDGE FINAL DESIGN & PERMITTING**

This Exhibit forms an integral part of the agreement between the Seminole County Board of County Commissioners (hereinafter referred to as the COUNTY) and (hereinafter referred to as the CONSULTANT) relative to the transportation facility described as follows:

County Project Number: *PS-1666-07/BLH*
Financial Project ID: **415030-1-38-01**
Description: *SR 426/CR 419, from Pine Avenue to Lockwood Boulevard in Seminole County*

1 PURPOSE

The purpose of this Exhibit is to describe the scope of work and the responsibilities of the CONSULTANT and the COUNTY in connection with the design and preparation of a complete set of construction contract plans and special provisions, if necessary, for:

- Roadway improvements to the transportation facility described herein

The general objective is for the CONSULTANT to prepare a set of plans to be used by the contractor to build the project, and by the COUNTY to ensure the project is built as designed and to specifications. Elements of work shall include roadways, structures, intersections, geotechnical activities, surveys, drainage, signing and pavement markings, signalization, utility relocation, landscaping, right-of-way maps and legal descriptions, maintenance of traffic, cost estimates, environmental permits, environmental mitigation plans, quantity computation books, and all necessary incidental items for a complete project.

The Scope of Services establishes which items of work described in the Plan Preparation Manual(s) published by the Florida Department of Transportation (hereinafter referred to as the DEPARTMENT) and other pertinent manuals to accomplish the work are specifically included in this contract, and also which of the items of work will be the responsibility of the CONSULTANT or the COUNTY.

All plans and design documents are to be prepared with standard English values in accordance with all applicable COUNTY and DEPARTMENT Manuals and guidelines.

The CONSULTANT shall be aware that as a project is developed, certain modifications and/or improvements to the original recommendation may be required. The CONSULTANT is to incorporate these refinements into the design and will consider this effort to be an anticipated and integral part of the work. This will not be a basis for any supplemental fee request(s).

The CONSULTANT shall demonstrate good project management practices while working on this project. These include communication with the COUNTY and others as necessary, management of time and resources, and documentation. The CONSULTANT shall set up and maintain throughout the design of the project a contract file in accordance to COUNTY procedures. It shall be the CONSULTANT's responsibility to utilize the very best engineering judgment, practices and principles possible during the prosecution of the work commissioned under this contract.

The COUNTY will provide contract administration and management services. Both the COUNTY and the DEPARTMENT will provide technical reviews of all work associated with the development and preparation of the contract plans. The COUNTY will provide job specific information and/or functions as outlined in this contract.

2 PROJECT DESCRIPTION

The CONSULTANT shall investigate the status of the projects and become familiar with concepts and commitments (typical sections, alignments, etc.) developed from prior studies. If a Preliminary Engineering Report is available from a prior or current PD&E study, the CONSULTANT shall review the study and develop recommended alternatives. The CONSULTANT shall use the approved concepts from the review as a basis for the design unless otherwise directed by the COUNTY.

The CONSULTANT shall incorporate the following into the design of this facility:

2.1 Roadway

Plan Type: Plan/Profile.

Typical Section: Mainline: four-lane divided urban curb and gutter with 12' lanes, 4-foot bike lanes, 5-foot sidewalk both directions.

Limits: SR 426/CR 419, from Pine Avenue to Lockwood Boulevard, with an approximate length of 3.03 miles

Major Intersections/Interchanges: List all intersections/interchanges that will require additional plan sheets:

- Pine Avenue
- Lake Jessup Avenue
- Central Avenue (SR 434)
- CR 426
- Division Street
- Academy Avenue/Stephen Street
- Evans Street/Carolyn Drive
- Bishop Avenue/Weaverlee Woods Boulevard
- Lockwood Boulevard

Variations/Exceptions: None anticipated. If needed, the proper application letters will be developed.

2.2 Drainage

Refer to the Preliminary Engineering Report dated 2006 prepared for the PD&E study for SR 426/CR 419, from Pine Avenue to Lockwood Boulevard.

2.3 Utility Coordination

Refer to the Preliminary Engineering Report dated 2006 prepared for the PD&E study for SR 426/CR 419, from Pine Avenue to Lockwood Boulevard.

2.4 Permits

Refer to the Preliminary Engineering Report dated 2006 prepared for the PD&E study for SR 426/CR 419, from Pine Avenue to Lockwood Boulevard.

2.5 Structures (N/A)

2.6 Signing and Pavement Markings

Striping and ground signs within project limits. No overhead or cantilever signs anticipated.

2.7 Signals

Intersections: New Mast Arm signals at the major intersections listed above.

Traffic Data Collection: Traffic counts for mainline and turning movement counts at the major intersection listed above, and at the proposed median opening locations.

Traffic Studies: Design Traffic Study to include traffic projections, traffic simulation analysis, intersection lane geometry and queue length calculations.

2.8 Landscape Architecture

Planting Plans: Xeriscape landscaping in median and areas behind the sidewalk on SR 426/CR 419, from Pine Avenue to Lockwood Boulevard.

2.9 Survey

Design Survey: Full topographic survey for roadway corridor and pond sites

Right of Way Survey: Right of way maps according to FDOT procedures for the project corridor

2.10 Geotechnical

Standard Penetration Test Borings, Auger borings, field permeability tests and associated lab testing.

2.11 Project Schedule

Within ten (10) days after the Notice-To-Proceed, and prior to the CONSULTANT beginning work, the CONSULTANT shall provide a detailed project activity/event schedule for COUNTY and CONSULTANT activities required to meet the current COUNTY Production Date. The schedule shall be accompanied by an anticipated payout and fiscal progress curve. Additional specific scheduling requirements are:

The schedule shall indicate, at a minimum, submission dates for Phase I, II, III, and IV plans, right-of-way maps, and all other required submittals.

For purposes of scheduling, the CONSULTANT shall allow for the following COUNTY work activity and submittal review times:

<u>Work Activity/Submittal Review</u> <u>(to be determined by COUNTY)</u>	<u>Time (weeks)</u> <u>(to be determined by COUNTY)</u>
- Preliminary Engineering Review	4
Roadway Plans Review	4
- Right of Way Maps Review	
(Phase I, Phase II)	8
(Phase IV)	4
- Alternative Drainage Design Concept Report Review	4
- Pond Siting Report	4
- Environmental Permitting Packages Review	4
- Environmental Mitigation Plan Review	4
- Jurisdictional Determination Report Review	4
- Traffic Studies and Analysis Report Review	4
- Preparation of Right-of-Way Documents Activity	10
- Acquisition of Right-of-Way Activity	104
- Prepare/Execute Utility Agreements Activity	16
- Landscape Development Plan	4

EXHIBIT A

Periodically, throughout the life of the project, the schedule and curves shall be reviewed and, with the approval of the COUNTY, adjusted as necessary to incorporate changes in the work concept and progress to date.

The approved schedule and schedule status report, along with progress and payout curves shall be submitted with the monthly progress report. Bi-weekly status reports should be emailed to the COUNTY project manager.

The schedule shall be submitted in Microsoft Project format.

2.12 Submittals

The CONSULTANT shall furnish plans and documents as required by the COUNTY to adequately control, coordinate, and approve the plans. The CONSULTANT shall distribute phase submittals as directed by the COUNTY.

The CONSULTANT shall provide copies of the required plans and documents as listed below. These are the anticipated printing requirements for the project. This tabulation will be used for estimating purposes, and the Project Manager will determine the specific number of copies required prior to each submittal.

Engineering Items:

	<u>No. of Copies Required</u>
▪ Preliminary Engineering Review Report	2
▪ Roadway Design:	
○ Typical Section Package	1
○ Pavement Design Report	1
○ Design Documentation	1
○ Computation Book	2
○ Technical Special Provisions	2
○ Lane Closure Analysis Worksheets	2
▪ Drainage:	
○ Pond Siting Report: Final	2
○ Drainage Design Documentation Report	2
▪ Traffic Operations - Traffic Report	2
▪ Environmental Items	
○ Environmental Resource Permit Application Package	2
○ Mitigation Plan	2
○ Jurisdictional Determination Report	2
○ Coast Guard Navigation Permit Application Package (If applicable)	2
○ National Pollutant Discharge Elimination System (NPDES) Permit Application Package	5
▪ Design/Right-Of-Way Surveys	
○ Map and Plat Copies	2
○ Certified Right-of-Way Control Survey Drawings	2
○ Aerial Photograph Original Negatives	1
○ Rectified Aerial Raster Image (HMR Format)	1
○ 24"x36" Aerial Mylars (R/W Format)	1
▪ Geotechnical	
○ Roadway Report - Preliminary	2
○ Roadway Report - Final	2

EXHIBIT A

2.13 Provisions for Work

All maps, plans and designs are to be prepared with English values in accordance with all applicable current COUNTY manuals, memorandums, and guidelines.

<p>General</p>	<p>Florida Statutes Florida Administrative Codes Florida Department of Transportation Project Development and Environmental Manual Florida Department of Transportation Plans Preparation Manual Florida Department of Transportation Standard Specifications for Road and Bridge Construction Florida Department of Transportation Handbook for Preparation of Specifications Package Florida Department of Transportation Design Standards for Design, Construction, Maintenance, and Utility Operations on the State Highway System Manual of Uniform Minimum Standards for Design, Construction, and Maintenance for Streets and Highways Bicycle Facilities Planning and Design Manual, Rev. Ed. 1982 CADD Production Criteria Handbook CADD Manual Florida's Level of Service Standards and Guidelines Manual for Planning Equivalent Single Axle Load Guidelines Design Traffic Procedure K-Factor Estimation Process Project Traffic Forecasting Guidelines Florida Department of Transportation Basis of Estimates Manual Quality Assurance Guidelines Safety Standards Rule 61G17-6, F.A.C., Minimum Technical Standards for Professional Surveyors and Mappers Department of Environmental Protection Rules Governing Mean High Water and Jurisdictional Line Surveys Any special instructions from the DEPARTMENT Utility Accommodations Guidelines Policy for Geometric Design of Highways and Streets</p>
<p>Permits</p>	<p>Chapter 373, F.S. Bridge Permit Application Guide, COMDT PUB P16591.3B</p>
<p>Drainage</p>	<p>Drainage Manual Drainage Handbooks <ul style="list-style-type: none"> ▪ Storm Drain ▪ Optional Pipe Materials ▪ Stormwater Management Facility ▪ Cross Drain ▪ Erosion and Sediment Control ▪ Hydrology </p>
<p>Survey</p>	<p>Location Survey Manual Highway Field Survey Specifications Automated Survey Data Gathering Outline Specifications for Aerial Surveys and Photogrammetry for Transportation Projects Standards for Consultant-Submitted G.P.S. Static Control Projects EFB User Guide Chapter 472, F.S. Chapter 177, F.S. FDEP Bureau of Surveying and Mapping</p>
<p>Traffic Operation Manuals</p>	<p>American Disabilities Act ASSHTO - Guide for Development of Bicycle Facilities Federal Highway Administration Standard Highway Signs Manual Florida Department of Transportation Traffic Engineering Manual Florida Department of Transportation Manual on Uniform Traffic Studies (MUTS) National Electrical Code National Electric Safety Code Minimum Specifications for Traffic Control Signal Devices Florida Department of Transportation - Florida Roundabout Guide</p>

EXHIBIT A

Traffic Operation Manuals (continued)	FHWA - Roundabouts: An Informational Guide Florida Department of Transportation Median Handbook AASHTO - An Information Guide for Highway Lighting
Mapping	Right-of-Way Mapping Florida Department of Transportation Right-of-Way Handbook Florida Department of Transportation Right-of-Way Manual
Geotechnical	Soils and Foundation Handbook Manual of Florida Sampling and Testing Methods
Landscape Architecture	Florida Highway Landscape Guide

2.14 Services to be Performed by the COUNTY and or FDOT

The COUNTY will provide those services and materials as set forth below:

- Provide pre-numbered survey books in which to record field data.
- Furnish standard COUNTY monuments for the bench line.
- Regarding Environmental Permitting Services:
 - Approve all contacts with environmental agencies.
 - Provide general philosophies and guidelines of the COUNTY to be used in the fulfillment of this contract. Objectives, constraints, budgetary limitations and time constraints will be completely defined by the Project Manager.
 - FDOT will provide the appropriate signatures on application forms.
- Provide the appropriate letters of authorization designating the CONSULTANT as an agent of the COUNTY
- Provide phase reviews of roadway plans
- Furnish an approved Environmental Document when available
- All future information that may come to the COUNTY during the term of the CONSULTANT's Agreement and which in the opinion of the COUNTY is necessary to the prosecution of the work
- Furnish available traffic and planning data
- Furnish all approved utility relocations
- Provide project utility certification to the DEPARTMENT's District Utility Office
- Project data currently on file
- Engineering standards and review services
- All available information in the possession of the COUNTY pertaining to utility companies whose facilities may be affected by the proposed construction
- All future information that may come to the COUNTY pertaining to subdivision plans so that the CONSULTANT may take advantage of additional areas that can be utilized as part of the existing right-of-way
- Systems traffic for Projected Design Year, with K, D, and T factors
- Existing right-of-way maps
- Project Development and Environmental Documents

3 PROJECT GENERAL TASKS

3.1 Public Involvement

Public involvement is an important aspect of the project development process. Public involvement includes communicating to all interested persons, groups, and government organizations information regarding the development of the project. The City of Oviedo (the CITY) shall assume a lead role in the Public Involvement portions of the design effort. The CITY shall hold four (4) stakeholder meetings, one (1) public meeting including a formal presentation and issue three (3) project newsletters. The CONSULTANT is responsible for preparation of exhibits and handouts and participates in the public meetings. In addition, the CONSULTANT shall be prepared to work with a local public advisory group during the design of the project. The CITY is responsible for developing

and maintaining a current mailing list and for facilitating all meetings. The public meeting can not be held at any K-12 school facilities.

3.2 Joint Project Agreements

Includes all coordination, meetings, etc. required to include Joint Project Agreement (JPA) plans (prepared by others) in contract plans package including all necessary revisions/modifications to contract documents to ensure plans compatibility.

3.3 Contract Maintenance

Includes project management effort for complete setup and maintenance of files, developing monthly progress reports, schedule updates, work effort to develop and execute subconsultant agreements, etc.

3.4 Prime Project Manager Meetings

Includes Prime CONSULTANT Project Manager staff hours for phase review, progress review, all technical meetings, and other coordination activities, including any travel time. Meetings required for each Activity are included in the meetings section for that specific Activity.

PROJECT COMMON TASKS

These tasks are applicable to most activities of the project included in this Scope of Work as identified in Sections 4 through 31.

Cost Estimates: The CONSULTANT shall be responsible for producing a construction cost estimate and reviewing and updating the cost estimate if any scope changes occur and/or at milestone of the project. This estimate will be used to compare with the DEPARTMENT's Long Range Estimate (L.R.E.) for conformity and accuracy of the estimate. Changes to the L.R.E. inputs will be performed by the DEPARTMENT. A Summary of Pay Items sheet shall be prepared with the Phase II, III, and IV Plans.

Technical Special Provisions: The CONSULTANT shall provide Technical Special Provisions for all items of work not covered by the Standard Specifications for Road and Bridge Construction and recurring special provisions. The recurring special provisions and supplemental specifications are accessible on the DEPARTMENT's mainframe computer. Standard Specifications, recurring special provisions and supplemental specifications should not be modified unless absolutely necessary to control project specific requirements. The first nine sections of the standard specifications, recurring special provisions and supplemental specifications shall not be modified without written approval of the State Specifications Engineer. All modifications to other sections must be justified to the appropriate District Specifications Office to be included in the project's specifications package as Technical Special Provisions.

The Technical Special Provisions shall be technical in nature and shall provide a description of work, materials, equipment and specific requirements, method of measurement and basis of payment. These provisions shall be submitted on 8-1/2"x11" sheets and shall not have holes punched or be bound in any way that would create a problem for high volume reproduction.

The CONSULTANT shall contact the appropriate District Specifications Office for details of the current format to be used before starting preparations of Technical Special Provisions.

Field Reviews: Includes all trips required to obtain necessary data for all elements of the project.

Technical Meetings: Includes meetings with COUNTY and/or Agency staff, between disciplines and subconsultants, such as access management meetings, pavement design meetings, local governments, railroad companies, progress review meetings (phase review), and miscellaneous meetings.

Quality Assurance/Quality Control: It is the intention of the COUNTY that design CONSULTANTS are held responsible for their work, including plans review. Detailed checking of CONSULTANT

EXHIBIT A

plans or assisting in designing portions of the project for the CONSULTANT is not the intent of having external design consultants. The purpose of CONSULTANT plan reviews is to ensure that CONSULTANT plans follow the plan preparation procedures outlined in the Plans Preparation Manual, that state and federal design criteria are followed with the COUNTY concept, and that the CONSULTANT submittals are complete.

The CONSULTANT shall be responsible for the professional quality, technical accuracy and coordination of all surveys, designs, drawings, specifications and other services furnished by the CONSULTANT under this contract.

The CONSULTANT shall provide a Quality Control Plan that describes the procedures to be utilized to verify, independently check, and review all maps, design drawings, specifications, and other documentation prepared as a part of the contract. The CONSULTANT shall describe how the checking and review processes are to be documented to verify that the required procedures were followed. The Quality Control Plan may be one utilized by the CONSULTANT as part of their normal operation or it may be one specifically designed for this project. The Quality Control Plan shall include pre-60% and pre-90% plan submittal meetings at the CONSULTANT's office to ensure that the CONSULTANT is prepared for the submittal and that the QA/QC process is underway. The CONSULTANT shall submit a Quality Control Plan for approval within 20 (twenty) calendar days of the written Notice to Proceed. A marked up set of prints from a Quality Control Review indicating the reviewers for each component (structures, roadway, drainage, signals, geotechnical, signing and marking, lighting, surveys, etc) and a written resolution of comments on a point by point basis will be required with each phase submittal. The responsible Professional Engineer, Landscape Architect or Professional Surveyor that performed the Quality Control review will sign a statement certifying that the review was conducted.

The CONSULTANT shall, without additional compensation, correct all errors or deficiencies in the designs, maps, drawings, specifications and/or other services.

Independent Peer Review: When directed by the COUNTY, a subconsultant shall perform Independent Peer Reviews.

Supervision: Includes all efforts required to supervise all technical design activities.

Coordination: Includes all efforts to coordinate with all disciplines of the project to produce a final set of construction documents.

4 ROADWAY ANALYSIS

The CONSULTANT shall analyze and document Roadway Tasks in accordance with all applicable manuals, guidelines, standards, handbooks, procedures, and current design memorandums.

4.1a Preliminary Engineering Review

The CONSULTANT shall review and analyze the design concept presented in the PD&E Study and prepare a technical report identifying cost effective solutions and providing recommended alternatives before proceeding with final design. The COUNTY with DEPARTMENT concurrence will determine the preferred design alternative.

4.1b Noise Analysis

The CONSULTANT shall prepare a noise impact study for the proposed improvements according to Chapter 17 of the FDOT PD&E Manual and using the latest version of the Traffic Noise Model software (TNM 1.1). As required in the PD&E Reevaluation, a noise study will be performed for the seven single family homes located south of SR 434 between Robert Street and Roxboro Road. The study will determine the cost and feasibility of providing noise abatement measures at these homes. If

a noise wall or other noise abatement measures are recommended, the fees for providing the design services will be negotiated as a Supplemental Agreement to this contract.

4.1 Typical Section Package

The CONSULTANT shall provide an approved Typical Section Package prior to the Phase I submittal.

4.2 Pavement Design Package

The CONSULTANT shall provide an approved Pavement Design Package prior to the Phase II Plans submittal date.

4.3 Access Management

Memo to County detailing changes to approved access management plan.

4.4 Horizontal/Vertical Master Design Files

The CONSULTANT shall design the geometrics using the design standards that are most appropriate with proper consideration given to the design traffic volumes, design speed, capacity and levels of service, functional classification, adjacent land use, design consistency and driver expectancy, aesthetics, pedestrian and bicycle concerns, ADA requirements, elder road user policy, access management, PD&E documents and scope of work.

4.5 Cross Section Design Files

The CONSULTANT shall establish and develop cross section design files in accordance with the CADD manual.

4.6 Traffic Control Analysis

The CONSULTANT will prepare a Traffic Control Data Sheet (T.C.D.S.) for inclusion as part of the Roadway Plans. The intent of the T.C.D.S., as prepared by the CONSULTANT, is to provide adequate minimum requirements and direction to the construction contractor regarding specific project and construction plan conditions, and to enable the contractor to prepare a detailed maintenance of traffic plan for approval by the COUNTY prior to construction beginning.

The T.C.D.S. will explain the following:

- Recommended phasing intent
- Special construction techniques, methodologies, materials or sequencing of events
- Unusual or extraordinary typical section applications
- Unique traffic conditions or access requirements
- Other conditions known to the CONSULTANT that would positively or negatively affect the preparation of the detailed maintenance of traffic plan by the roadway contractor.

The T.C.D.S. will include as a minimum, the following:

- General Notes
- Graphical and written phasing typical sections
- Graphical and written description of requirements at intersections and major driveways within the project limits
- An erosion sediment control plan approved by SJRWMD for use throughout the different construction phases of the project. This document is also to be used in conjunction with the MOT plans.

4.7 Design Report

The CONSULTANT shall prepare all applicable report(s) as listed in the Project Description section of this scope.

The CONSULTANT shall submit to the COUNTY design notes, data, and calculations to document the design conclusions reached during the development of the contract plans.

The design notes, data, and computations shall be recorded on size 8-1/2"x11" sheets, fully titled, numbered, dated, indexed and signed by the designer and the checker. Computer output forms and other oversized sheets shall be folded to 8-1/2"x11" size. The data shall be in a hardback folder for submittal to the COUNTY.

4.8 Computation Book and Quantities

The CONSULTANT shall prepare the computation book and various summary of quantities sheets. This includes all efforts required to develop the computation book and the supporting documentation, including construction days when required.

4.9 Cost Estimate

4.10 Field Reviews

4.11 Technical Meetings

4.12 Quality Assurance/Quality Control

4.13 Supervision

4.14 Coordination

5 ROADWAY PLANS

The CONSULTANT shall prepare Roadway, Drainage, Traffic Control, Utility Adjustment Sheets, plan sheets, notes, and details. The plans shall include the following sheets necessary to convey the intent and scope of the project for the purposes of construction:

5.1 Key Sheet

5.2 Summary of Pay Items Including Quantity Input

5.3 Drainage Map

5.4 Typical Section Sheets

5.5 General Notes/Pay Item Notes

5.6 Summary of Quantities

5.7 Bridge Hydraulics Recommendation Sheets (N/A)

5.8 Summary of Drainage Structures

5.9 Project Layout

5.10 Plan/Profile Sheet

- 5.11 Special Profile
- 5.12 Back of Sidewalk Profile Sheet
- 5.13 Ramp Terminal Details (Plan View) (N/A)
- 5.14 Intersection Layout Details
- 5.15 Miscellaneous Detail Sheets
- 5.16 Drainage Structure Sheet
- 5.17 Miscellaneous Drainage Detail Sheets
- 5.18 Retention/Detention Ponds Detail Sheet
- 5.19 Retention Pond Cross Sections
- 5.20 Roadway Soil Survey Sheet
- 5.21 Cross Sections
- 5.22 Traffic Control Data Sheet
- 5.23 Utility Adjustment Sheets
- 5.24 Erosion Control Plan
- 5.25 SWPPP
- 5.26 Project Control Network Sheet
- 5.27 Utility Verification Sheet (SUE Data)
- 5.28 Quality Assurance/Quality Control
- 5.29 Supervision

6 DRAINAGE ANALYSIS

The CONSULTANT shall analyze and document Drainage Tasks in accordance with all applicable Manuals, guidelines, standards, handbooks, procedures, and current design memorandums.

The CONSULTANT shall be responsible for designing a drainage and stormwater management system. All design work shall comply with the requirements of the appropriate regulatory agencies and the DEPARTMENT's Drainage Manual.

Coordinate fully with the appropriate permitting agencies and the COUNTY's staff. All activities and submittals should be coordinated through the COUNTY's Project Manager. The work will include the engineering analyses for any or all of the following.

6.1 Determine Base Clearance Water Elevation

Analyze, determine and document high water elevations which will be used to set roadway profile grade. Determine surface water elevations at cross drains, floodplains, outfalls and adjacent

stormwater ponds. Determine groundwater elevations at intervals between the above mentioned surface waters.

6.2 Pond Siting Analysis and Report

Evaluate pond sites using a preliminary hydrologic analysis. Document the results and coordination for all of the project's pond site analyses. The Drainage Manual provides specific documentation requirements.

6.3 Design of Outfalls

Analyze and document the design of ditch or piped outfalls.

6.4 Design of Stormwater Management Facility (Offsite Pond)

Design stormwater management facilities to meet requirements for stormwater quality treatment and attenuation. Develop proposed pond layout (shape, contours, slopes, etc.), do routing calculations, and design the outlet control structure.

6.5 Design of Storm Drains

Develop a "working drainage map," determine runoff, inlet locations, and spread. Calculate hydraulic losses (friction, utility conflict and, if necessary, minor losses). Determine Design Tailwater and, if necessary, outlet scour protection.

6.6 Optional Culvert Material

Determine acceptable options for pipe materials.

6.7 French Drain Design

Design French Drain Systems to provide stormwater treatment and attenuation. Identify location for percolation tests and review these, determine the size and length of French Drains, design the control structure/weir, and model the system of inlets, conveyances, French Drains, and other outfalls using a routing program such as ICPR.

6.8 Drainage Design Documentation Report

Compile drainage design documentation into report format. Include documentation for all the drainage design tasks and associated meetings and decisions, except the Pond Siting Analyses and Report and Bridge Hydraulics Report.

6.9 Bridge Hydraulic Report (N/A)

Calculate hydrology, hydraulics, scour, and deck drainage. Prepare report and the information for the Bridge Hydraulics Recommendation Sheet.

6.10 Cost Estimate

6.11 Technical Special Provisions

6.12 Field Reviews

6.13 Technical Meetings

6.14 Quality Assurance/Quality Control

6.15 Supervision

6.16 Coordination

7 UTILITIES

The CONSULTANT shall identify utility facilities and secure agreements, utility work schedules, and plans from the Utility Agency Owners (UAO) ensuring no conflicts exist between utility facilities and the COUNTY's construction project.

7.1 Identify Existing UAO(s)

Identify all utilities in the corridor; check with Maintenance for Permits, Sunshine State One Call, Subsurface Utility Engineering (SUE) Report, Design Location Survey, and Existing Plans.

7.2 Make Utility Contacts

First Contact: Send letters and two sets of plans to each utility, one set for the utility office, one set each to construction and maintenance if required. Includes contact by phone for meeting coordination. Request type, size, location, easements, cost for compensable relocation, and justification for any utility exceptions. Include the meeting schedule (if applicable) and the design schedule. Include typical meeting agenda.

Second Contact: At a minimum of 4 weeks prior to the meeting, the CONSULTANT shall transmit two complete sets of Phase II plans to each UAO having facilities located within the project limits, and one set to the COUNTY Offices as required by the District.

Third Contact: Assemble packages. Send letters and two sets of plans to the UAO(s) including all component sets, one set for the utility office, one set to construction and maintenance if required. Include the design schedule. Not all projects will have all contacts as described above.

7.3 Preliminary Utility Meeting

The CONSULTANT shall schedule (time and place), notify participants, and conduct a preliminary utility meeting with all affected UAO(s) for the purpose of presenting the project, review the current design schedule, evaluate the utility information collected, provide follow-up information on compensable interest requests, discuss the utility work by highway contractor option with each utility, and discuss any future design issues that may impact utilities. This is also an opportunity for the UAO(s) to present proposed facilities. The CONSULTANT shall keep accurate minutes and distribute a copy to all attendees.

7.4 Individual/Field Meetings

The CONSULTANT shall meet with each UAO separately throughout the project design duration to provide guidance in the interpretation of plans, review changes to the plans and schedules, optional clearing and grubbing work, and assist in the development of the UAO(s) plans and work schedules. The CONSULTANT is responsible for motivating the UAO to complete and return the necessary documents after each Utility Contact or Meeting.

7.5 Collect and Review Plans and Data from UAO(s)

Ensure information (utility type, material and size) is sent to the designer for inclusion in the plans.

7.6 Utility Design Meeting

At a minimum of three weeks prior to the meeting, the CONSULTANT shall transmit two complete sets of Phase II plans to each UAO having facilities located within the project limits, and one set to the COUNTY Offices as required by the District. The CONSULTANT shall schedule (time and place), notify participants, and conduct a Utility meeting with all affected UAO(s). The CONSULTANT shall be prepared to discuss drainage, traffic signalization, maintenance of traffic (construction phasing), review the current design schedule and letting date, evaluate the utility information collected, provide follow-up information on compensable interest requests, discuss the utility work by highway contractor option with each utility, discuss any future design issues that may impact utilities, etc., to the extent that they may have an effect on existing or proposed utility facilities with particular emphasis on drainage and maintenance of traffic with each UAO. The intent of this meeting shall be to identify and resolve conflicts between utilities and proposed construction prior to completion of the plans, including utility adjustment details. Also recommend resolution between known utility conflicts with proposed construction plans as practical. The CONSULTANT shall keep accurate minutes of all meetings and distribute a copy to all attendees.

7.7 Review Utility Markups

Review utility marked up plans individually as they are received for content and coordinate review with the designer.

7.8 Utility Coordination/Follow-up

This includes follow-up, interpreting plans, and assisting and the completion of the UAO(s) work schedule and agreements. Includes phone calls, face-to-face meetings, etc., to motivate and ensure the UAO(s) complete and return the required documents in accordance with the project schedule. Ensure the resolution of all known conflicts. This task can be applied to all phases of the project.

7.9 Utility Constructability Review

Review utility schedules against construction contract time, and phasing for compatibility. Coordinate with construction office.

7.10 Utility Design

Include all design work for the relocation of the existing utilities and for new utilities owned by the County and the City.

8 ENVIRONMENTAL PERMITS

The CONSULTANT shall notify the COUNTY Project Manager, Environmental Permit Coordinator and other appropriate personnel in advance of all scheduled meetings with the regulatory agencies to allow a COUNTY representative to attend. The CONSULTANT shall copy in the Project Manager and the Environmental Permit Coordinator on all permit related correspondence and meetings.

8.1 Preliminary Project Research

The CONSULTANT shall perform preliminary project research and shall be responsible for early identification of and coordination with the appropriate regulatory agencies to assure that design efforts are properly directed toward permit requirements.

8.2 Complete Permit Involvement Form

The CONSULTANT shall document permit involvement in coordination with the District Permit Coordinator and COUNTY Project Manager. To be done upon completion of preliminary project research.

8.3 Establish Wetland Jurisdictional Lines

The CONSULTANT shall collect all data and information necessary to determine the boundaries of wetlands and surface waters defined by the rules or regulations of each agency processing or reviewing a permit application necessary to construct a COUNTY project.

The CONSULTANT shall be responsible for but not limited to the following activities:

- Determine landward extent of state waters as defined in Chapter 62-340 FAC as ratified in Section 373.4211 FS
- Determine the jurisdictional boundaries of wetlands and surface waters as defined by rules or regulations of any other permitting authority that is processing a COUNTY permit application.
- Prepare aerial maps showing the jurisdictional boundaries of wetlands and surface waters. Aerial maps shall be reproducible, of a scale no greater than 1"=200' and be recent photography. The maps shall show the jurisdictional limits of each agency. Xerox copies of aerials are not acceptable. All jurisdictional boundaries are to be tied to the project's baseline of survey. When necessary, jurisdictional maps shall be signed and sealed by either a Registered Professional Engineer or a Registered Land Surveyor.
- Acquire written verification of jurisdictional lines from the appropriate environmental agencies.
- Prepare a written assessment of the current condition and relative value of the function being performed by wetlands and surface waters. Prepare data in tabular form which includes ID number for each wetland impacted, size of wetland to be impacted, type of impact and identify any wetland within the project limits that will not be impacted by the project.

8.4 Agency Verification of Wetland Data

The CONSULTANT shall be responsible for verification of wetland data identified in Section 8.3 and coordinating regulatory agency field reviews, including finalization of wetland assessments with applicable agencies.

8.5 Complete and Submit All Required Permit Applications

The CONSULTANT shall prepare permit packages as identified in the Project Description section.

The CONSULTANT shall collect all of the data and information necessary to obtain the environmental permits required to construct a project.

The CONSULTANT shall prepare each permit application for COUNTY approval in accordance with the rules and/or regulations of the environmental agency responsible for issuing a specific permit and/or authorization to perform work.

8.6 Prepare Dredge and Fill Sketches

8.7 Prepare USCG Permit Sketches (N/A)

8.8 Prepare Easement Sketches

8.9 Prepare Right-of-Way Occupancy Sketches

8.10 Prepare Coastal Construction Control Line (CCCL) Permit Sketches (N/A)

8.11 Prepare Tree Permit Information (N/A)

8.12 Mitigation Coordination and Meetings

The CONSULTANT shall coordinate with COUNTY personnel prior to approaching any environmental permitting or reviewing agencies. Once a mitigation plan has been reviewed and

approved by the COUNTY, the CONSULTANT will be responsible for coordinating the proposed mitigation plan with the environmental agencies.

8.13 Mitigation Design

If wetland impacts cannot be avoided, the CONSULTANT shall prepare a mitigation plan to be included as a part of the Environmental Resource or Wetlands Resource Permit applications.

Prior to the development of alternatives, the CONSULTANT shall meet with the Project Manager to determine the COUNTY's policies in proposing mitigation. The CONSULTANT shall proceed in the development of a mitigation plan based upon the general guidelines provided by the COUNTY.

The CONSULTANT will be directed by the COUNTY to investigate the following methods of mitigation:

- Payment to DEP/WMD per acre of wetlands impacted as defined in CH 373.4137 FS
- Monetary participation in offsite regional mitigation plans
- Monetary participation in a private mitigation bank
- Creation/restoration on public lands
- Creation/restoration on right-of-way purchased by the COUNTY
- Creation/restoration on existing COUNTY right-of-way

In the event that physical creation or restoration is the only feasible alternative to offset wetland impacts, the CONSULTANT shall collect all of the data and information necessary to prepare alternative mitigation plans that be acceptable to all permitting agencies and commenting agencies who are processing or reviewing a permit application for a COUNTY project. The fee to develop alternative mitigation plans and then prepare the final mitigation design and construction documents will be negotiated as a Supplemental Agreement based on the unit rates and labor rates established in the contract.

Prior to selection of a final mitigation site, the CONSULTANT will provide the following services in the development of alternative mitigation plans.

- Preliminary jurisdictional determination for each proposed site
- Selection of alternative sites
- Coordination of alternative sites with the COUNTY/all environmental agencies
- Written narrative listing potential sites with justifications for both non-recommended

8.14 Environmental Clearances

The CONSULTANT shall prepare clearances for all pond and/or mitigation sites identified after the PD&E was completed. If required, fees for these services will be negotiated as a Supplemental Agreement to the contract.

Archaeological and Historical Features: The CONSULTANT shall collect data necessary to completely analyze the impacts to all cultural and historic resources by the pond and/or mitigation sites and prepare a Cultural Resource Assessment Request Package.

Wetland Impact Analysis: The CONSULTANT shall analyze the impacts to wetlands for the pond and/or mitigation sites and complete the Wetlands Evaluation Report.

Wildlife and Habitat Impact Analysis: The CONSULTANT shall collect data necessary to perform an Endangered Species Biological Assessment, and analyze the impacts to wildlife and habitat by the pond and/or mitigation sites.

Contamination Impact Analysis: The CONSULTANT shall perform the necessary analysis to complete the Contamination Screening Evaluation for the pond and/or mitigation sites and complete the Contamination Screening Evaluation Report.

- 8.15 Technical Meetings
- 8.16 Quality Assurance/Quality Control
- 8.17 Supervision
- 8.18 Coordination

9 STRUCTURES - SUMMARY AND MISCELLANEOUS TASKS AND DRAWINGS (N/A)

10 STRUCTURES - BRIDGE CONCEPT REPORT (N/A)

11 STRUCTURES - MEDIUM SPAN CONCRETE BRIDGE (N/A)

12 STRUCTURES - MISCELLANEOUS

MAST ARMS

12.1 Mast Arms

Mast arms and foundations to be designed per Seminole County Standard Mast Arm Drawings

13 SIGNING AND PAVEMENT MARKING ANALYSIS

The CONSULTANT shall analyze and document Signing and Pavement Markings Tasks in accordance with all applicable manuals, guidelines, standards, handbooks, procedures, and current design memorandums.

13.1 Reference and Master Design File

The CONSULTANT shall prepare the Signing & Marking Design file to include all necessary design elements and all associated reference files.

13.2 Multi-Post Sign Support Calculations

The CONSULTANT shall determine the appropriate column size from the DEPARTMENT's Multi-Post Sign Program.

13.3 Sign Panel Design Analysis

Establish sign layout, letter size and series for non-standard signs.

13.4 Quantities

13.5 Computation Book

13.6 Cost Estimates

13.7 Technical Special Provisions

13.8 Field Reviews

13.9 Technical Meetings

13.10 Quality Assurance/Quality Control

13.11 Supervision

13.12 Coordination

14 SIGNING AND PAVEMENT MARKING PLANS

The CONSULTANT shall prepare a set of Signing and Pavement Marking Plans in accordance with the Plans Preparation Manual that includes the following:

14.1 Key Sheet

14.2 Tabulation of Quantities

14.3 General Notes/Pay Item Notes

14.4 Plan Sheet

14.5 Typical Details

14.6 Guide Sign Work Sheet(s)

14.7 Interim Standards

14.8 Quality Assurance/Quality Control

14.9 Supervision

Overhead Sign Structure Sheet and Soil Boring Sheet are prepared in other activities of this scope.

15 SIGNALIZATION ANALYSIS

The CONSULTANT shall analyze and document Signalization Analysis Tasks in accordance with all applicable manuals, guidelines, standards, handbooks, procedures, and current design memorandums.

15.1 Traffic Data Collection

The CONSULTANT shall perform all effort required for traffic data collection, including traffic counts for mainline and turning movement counts at Raymond Ave, Tollgate Trail, Palm Springs Drive, Rangeline Road intersections along with turning movement counts at the proposed median openings.

15.2 Traffic Data Analysis

The CONSULTANT shall conduct a Design Traffic Study to include traffic projections, intersection lane geometry, and queue length calculations, and to determine signal operation plan and local signal timings. A *Design Traffic Technical Memorandum* will be prepared to describe the traffic data collection, modeling and analysis. A traffic simulation analysis using CORSIM will be developed to optimize the storage lengths, signal timings and corridor Level of Service.

15.3 Reference and Master Signalization Design File

The CONSULTANT shall prepare the Signalization Design file to include all necessary design elements and all associated reference files.

15.4 Overhead Street Name Sign Design

The CONSULTANT shall design Signal Mounted Overhead Street Name signs.

15.5 Pole Elevation Analysis

15.6 Quantities

15.7 Cost Estimate

15.8 Technical Special Provisions

15.9 Field Reviews

The CONSULTANT shall collect information from the maintaining agencies and conduct a field review. The review should include but is not limited to the following:

- Existing Signal and Pedestrian Phasing
- Controller Make, Model, Capabilities and Condition/Age
- Condition of Signal Structure(s)
- Type of Detection as Compared With Current District Standards
- Interconnect Media
- Controller Timing Data

15.10 Technical Meetings

15.11 Quality Assurance/Quality Control

15.12 Supervision

15.13 Coordination

16 SIGNALIZATION PLANS

The CONSULTANT shall prepare a set of Signalization Plans in accordance with the Plans Preparation Manual, which includes the following:

16.1 Key Sheet

16.2 Tabulation of Quantities

16.3 General Notes/Pay Item Notes

16.4 Plan Sheet

16.5 Interconnect Plans

16.6 Traffic Monitoring Site

16.7 Guide Sign Worksheet

16.8 Special Details

16.9 Special Service Point Details

16.10 Mast Arm Tabulation Sheet

16.11 Quality Assurance/Quality Control**16.12 Supervision**

Signal Structure Sheet and Soil Boring Sheet are prepared in other activities of this scope.

17 LIGHTING ANALYSIS

The CONSULTANT shall analyze and document Lighting Tasks in accordance with all applicable manuals, guidelines, standards, handbooks, procedures, and current design memorandums.

17.1 Lighting Justification Report

The CONSULTANT shall prepare a Lighting Justification Report. The report shall be submitted under a separate cover with the Phase I plans submittal, titled Lighting Design Analysis Report

17.2 Lighting Design Analysis Report

The CONSULTANT shall prepare a Preliminary Lighting Design Analysis Report. The report shall be submitted under a separate cover prior to the Phase II plans submittal. The report shall provide analyses for each typical section of the mainline, typical section for the ramps (one and/or two lanes), interchanges, underdeck lighting, and arterial roads. Each lighting calculation shall be properly identified as to the area that it covers.

The report shall include the Lighting Design Criteria that will be used and shall include the evaluation of at least three lighting design alternatives and a recommendation on the alternative to use. Each alternative shall be properly described; the alternatives shall consider different pole heights, lamp wattage, and arm lengths. Each alternative shall be provided with a cost estimate that includes initial cost in addition to operations and maintenance cost for one year.

After approval of the preliminary report the CONSULTANT shall submit a revised report including a detailed lighting design analysis for each submittal.

17.3 Aeronautical Evaluation

The CONSULTANT shall prepare an Aeronautical Evaluation/Airspace Analysis Report for those projects within XX miles of an airport. It shall be submitted for approval by the DEPARTMENT and by FAA prior to Phase II plans submittal.

The report shall include an evaluation of the glide slope of all adjacent airport runways (including future runways) and the preparation of the required FAA forms and special lighting calculations based on NO PENETRATION of the approach or transitional surfaces and coordination with the Airport Manager.

The report shall include a profile drawing for each condition affected by the runway approach and transitional surfaces. This drawing(s) shall show the roadway profile grade line at the edge of the shoulder pavement with proper baseline stations, the FAR Part 77 - 50:1 (or 34:1) approach surface line and the 7:1 transitional surface line. The scale of this drawing shall be 1"=100' horizontal and 1"=10' vertical. The proposed location of each light pole shall be properly shown at the respective station to clearly indicate that no penetration to either the approach surface or to the transitional surface is anticipated.

17.4 Voltage Drop Calculations

The CONSULTANT shall submit voltage drop calculations showing the equation or equations used along with the number of luminaries per circuit, the length of each circuit, the size conductor or conductors used and their ohm resistance values. The voltage drop incurred on each circuit (total volts

and percentage of drop) shall be calculated, and all work necessary to calculate the voltage drop values for each circuit should be presented in such a manner as to be duplicated by the District.

Load analysis calculations shall be submitted for each branch circuit breaker and main breaker

17.5 FDEP Coordination and Report

17.6 Reference and Master Design Files

The CONSULTANT shall prepare the Lighting Design file to include all necessary design elements and all associated reference files.

17.7 Temporary Lighting

The CONSULTANT shall provide temporary lighting for all affected phases of construction to light all detour roadways in areas where required. The temporary lighting shall be included with the Traffic Control Plans with proper notes, quantities and details.

17.8 Design Documentation

The CONSULTANT shall submit a Roadway Lighting Design Documentation Book with each lighting plans submittal under a separate cover and not part of the roadway documentation book. At a minimum, the design documentation book shall include:

- Lighting Calculations.
- Back up sheet for each bid item quantity total on each lighting plan sheet (Phase III and Phase IV submittals).
- Phase submittal checklist.
- Three-way quantity check list (Phase III and IV submittals).
- Structural calculations for special conventional pole concrete foundations.
- Structural calculations for the high mast pole foundations.
- Letter to the power company requesting service.
- Power company confirmation letter on the requested services (Phase III and Phase IV submittals).
- Voltage drop calculations (Phase III and Phase IV submittals).
- Load analysis calculations (Phase III and Phase IV submittals).

17.9 Quantities

17.10 Cost Estimate

17.11 Technical Special Provisions

17.12 Field Reviews

The CONSULTANT shall collect information from the maintaining agencies and conduct a field review. The review should include but is not limited to the following:

- Existing Lighting Equipment
- Load Center; Capabilities and Condition/Age
- Condition of Lighting Structure(s)

17.13 Technical Meetings

17.14 Quality Assurance/Quality Control

17.15 Independent Peer Review

17.16 Supervision

17.17 Coordination

18 LIGHTING PLANS

The CONSULTANT shall prepare a set of Lighting Plans in accordance with the Plans Preparation Manual, which includes the following.

18.1 Key Sheet

18.2 Summary of Pay Item Sheet Including CES Input

18.3 Tabulation of Quantities

18.4 General Notes/Pay Item Notes

18.5 Pole Data and Legend & Criteria

18.6 Service Point Details

18.7 Project Layout

18.8 Plan Sheet

18.9 Special Details

18.10 Temporary Lighting Data and Details

18.11 Traffic Control Plan Sheets

18.12 Interim Standards

18.13 Quality Assurance/Quality Control

18.14 Supervision

Foundation Detail Sheets and Soil Boring Sheets are prepared in other activities of this scope.

19 LANDSCAPE ARCHITECTURE ANALYSIS

The CONSULTANT shall analyze and document Landscape and Hardscape Architecture Tasks in accordance with all applicable manuals, guidelines, standards, handbooks, procedures, and current design memorandums.

19.1 Data Collection

All research required to collect data necessary to complete the initial design analysis. This includes identifying local ordinances and collection of other project data.

19.2 Site Inventory and Analysis

This includes identification of opportunities and constraints for the proposed project based on existing site conditions. Summary of analysis, if required, is included in conceptual design.

19.3 Planting Design

Conceptual Design: Includes delineation of all proposed planting and hardscape types, scheme development and preliminary costs, and areas and reports. The design shall be submitted with the Phase I plans.

Final Design: Includes identifying the species/type, size, location, spacing, and quality of all plants.

19.4 Computation Book and Quantities

19.5 Cost Estimates

19.6 Technical Special Provisions

19.7 Field Reviews

19.8 Technical Meetings

19.9 Quality Assurance/Quality Control

19.10 Supervision

19.11 Coordination

20 LANDSCAPE ARCHITECTURE PLANS

The CONSULTANT shall prepare a set of Landscape and Hardscape Plans which includes the following:

20.1 Key Sheet

20.2 Tabulation of Quantities

20.3 General Notes

20.4 Tree and Vegetation Inventory, Protection and Relocation Plans

20.5 Planting and Hardscape Plans for Linear Roadway Projects

20.6 Planting Details and Notes

20.7 Cost Estimate

20.8 Quality Assurance/Quality Control

20.9 Supervision

TECHNICAL MAINTENANCE PLAN

Written or graphic guide for care of the plantings after the warranty period. Maintenance details and specifications shall recommend: a mowing schedule and maintained grass height; fertilization schedules, formulas, rates and methods of application; weeding schedule and method chemical, mechanical, or manual; edging schedule; herbicide schedules formulas, rates, methods of application, precautions; pruning schedule and methods to maintain health and clear sight requirements; mulching materials, thickness and replacement frequency; and litter pick-up. This Maintenance Plan will be developed in coordination with the local government entity who assumes the maintenance obligation.”

21 SURVEY

The CONSULTANT shall perform survey tasks in accordance with all applicable statutes, manuals, guidelines, standards, handbooks, procedures, and current design memoranda.

The CONSULTANT shall submit all survey notes and computations to document the surveys. All field survey work shall be recorded in approved media and submitted to the COUNTY. Field books submitted to the COUNTY must be of an approved type. The field books shall be certified by the surveyor in responsible charge of work being performed before the final product is submitted.

The survey notes shall include documentation of decisions reached from meetings, telephone conversations or site visits. All like work (such as bench lines, reference points, etc.) shall be recorded contiguously. The COUNTY may not accept field survey radial locations of section corners, platted subdivision lot and block corners, alignment control points, alignment control reference points and certified section corner references. The COUNTY may instead require that these points be surveyed by true line, traverse or parallel offset.

21.1 Horizontal Project Network Control (HPNC)

Establish or recover HPNC, for the purpose of establishing horizontal control on the Florida State Plane Coordinate System or datum approved by the District Location Surveyor (DLS); may include primary or secondary control points. Includes analysis and processing of all field collected data, and preparation of forms.

21.2 Vertical Project Network Control (VPNC)

Establish or recover VPNC, for the purpose of establishing vertical control on datum approved by the District Location Surveyor (DLS); may include primary or secondary vertical control points. Includes analysis and processing of all field collected data, and preparation of forms

21.3 Alignment and/or Existing Right of Way Lines

Establish, recover or re-establish project alignment. Also includes analysis and processing of all field collected data, existing maps, and/or reports for identifying mainline, ramp, offset, or secondary alignments. Depict alignment and/or existing R/W lines (in required format) per COUNTY R/W Maps, platted or dedicated rights of way.

21.4 Aerial Targets (N/A)

Place, locate, and maintain required aerial targets and/or photo identifiable points. Includes analysis and processing of all field collected data, existing maps, and/or reports.

21.5 Reference Points

Reference HPNC points, project alignment, vertical control points, section, ¼ section, center of section corners and G.L.O. corners as required.

21.6 Topography (2D)

Locate all above ground features and improvements. Deliver in appropriate electronic format. Effort includes field edits, analysis and processing of all field collected data, existing maps, and/or reports

21.7 Digital Terrain Model (DTM)

Locate all above ground features and improvements for the limits of the project by collecting the required data for the purpose of creating a DTM with sufficient density. Shoot all break lines, high and low points. Effort includes field edits, analysis and processing of all field collected data, existing maps, and/or reports.

21.8 Roadway Cross Sections/Profiles

Perform field survey check sections or profiles to verify the required accuracy of the digital terrain model and/or to determine existing cross slope. Includes analysis and processing of all field collected data for comparison with DTM.

21.9 Side Street Surveys

Refer to tasks of this document as applicable.

21.10 Underground Utilities

Designation includes 2-dimensional collection of existing utilities and selected 3-dimensional verification as needed for designation. Location includes non-destructive excavation to determine size, type and location of existing utility, as necessary for final 3-dimensional verification. Survey includes collection of data on points as needed for designates and locates. Includes analysis and processing of all field collected data, and delivery of all appropriate electronic files.

21.11 Outfall Survey

Locate all above ground features and improvements for the limits of the project by collecting the required data for the purpose of a D.T.M. Survey with sufficient density of shots. Shoot all break lines, high and low points. Includes field edits, analysis and processing of all field collected data, existing maps, and/or reports.

21.12 Drainage Survey

Locate underground data (XYZ, pipe size, type, condition and flow line) that relates to above ground data. Includes field edits, analysis and processing of all field collected data, existing maps, and/or reports

21.13 Bridge Survey (N/A)

Locate required above ground features and improvements for the limits of the bridge. Includes field edits, analysis and processing of all field collected data, existing maps, and/or reports.

21.14 Channel Survey (N/A)

Locate all topographic features and improvements for the limits of the project by collecting the required data for the purpose of a D.E.M. Survey with sufficient density of shots. Shoot all break lines, high and low points. Includes field edits, analysis and processing of all field collected data, maps, and/or reports.

21.15 Pond Site Survey

Refer to tasks of this document as applicable.

21.16 Mitigation Survey

Refer to tasks of this document as applicable. If needed, the mitigation site survey will be negotiated as a Supplemental Agreement.

21.17 Jurisdiction Line Survey

Perform field location (2-dimensional) of jurisdiction limits as defined by respective authorities, also includes field edits, analysis and processing of all field collected data, preparation of reports.

21.18 Geotechnical Support

Perform 3-dimensional (X, Y, Z) field location, or stakeout, of boring sites established by geotechnical engineer. Includes field edits, analysis and processing of all field collected data and/or reports.

21.19 Sectional/Grant Survey

Perform field location/placement of section corners, 1/4 section corners, and fractional corners where pertinent. Includes analysis and processing of all field-collected data and/or reports.

21.20 Subdivision Location

Survey all existing recorded subdivision/condominium boundaries, tracts, units, phases, blocks, street R/W lines, common areas. Includes analysis and processing of all field collected data and/or reports. If unrecorded subdivision is on file in the public records of the subject county, tie existing monumentation of the beginning and end of unrecorded subdivision.

21.21 Maintained R/W (N/A)

Perform field location (2-dimensional) of maintained R/W limits as defined by respective authorities, if needed. Also includes field edits, analysis and processing of all field collected data, preparation of reports.

21.22 Boundary Survey

Perform boundary survey as defined by COUNTY standards. Includes analysis and processing of all field collected data, preparation of reports.

21.23 Water Boundary Survey

Perform Mean High Water, Ordinary High Water and Safe Upland Line surveys as required by COUNTY standards.

21.24 Right of Way Staking (N/A)

Perform field staking and calculations of existing/proposed R/W lines for on-site review purposes.

21.25 Right of Way Monumentation

Set R/W monumentation as depicted on final R/W maps for corridor and water retention areas.

21.26 Line Cutting

Perform all efforts required to clear vegetation from the line of sight.

21.27 Work Zone Safety

Provide work zone as required by COUNTY standards.

21.28 Miscellaneous Surveys

Refer to tasks of this document, as applicable, to perform surveys not described herein.

21.29 Supplemental Surveys (N/A)

Supplemental survey days and hours are to be approved in advance by DLS. Refer to tasks of this document, as applicable, to perform surveys not described herein.

21.30 Document Research

Perform research of documentation to support field and office efforts involving surveying and mapping.

21.31 Field Review

Perform verification of the field conditions as related to the collected survey data.

21.32 Technical Meetings

Attend meetings as required and negotiated by the Surveying and Mapping Department.

21.33 Quality Control/Quality Assurance

Establish and implement a QAQC plan. Also includes subconsultant review, response to comments and any resolution meetings if required, preparation of submittals for review, etc.

21.34 Supervision

Perform all activities required to supervise and coordinate project. These activities must be performed by the project supervisor, a Florida Professional Surveyor.

21.35 Coordination

22 RIGHT OF WAY MAPPING

22.1 Alignment

This includes final alignment survey map of the mainline SR 426/CR 419 and major side streets.

22.2 Section and 1/4 Section Lines

This includes mapping of section line on key map and detail sheets.

22.3 Subdivisions

This includes field reconnaissance tasks, field retracement tasks, field traverse tasks computations for subdivision blocks adjoining the project corridor.

22.4 Existing Right-of way

Includes mapping for existing mainline and side streets Rights-of-Way .

22.5 Topography

Import graphics into master CAD file. Adjust and modify as needed for clear graphic representation.

22.6 Parent Tract Properties / Existing Easements

Map parent tracts for acquisition parcels and plot all easements revealed in the title search.

22.7 Proposed R/W Requirements

Map and dimension all proposed R/W Acquisition Parcels and Remainders.

22.8 Limits of Construction

Import into master CAD file, resolve problem areas with designer and edit as needed for clear graphic representation.

22.9 Jurisdiction/Agency Lines

This project lies within both the City of Oviedo.

22.10 Control Survey Cover Sheet

Prepare a cover sheet in Department approved format.

22.11 Control Survey Key Sheet

22.12 Control Survey Detail Sheet

Prepare five (5) detail sheets at 1"=40'.

22.13 Right-of-Way Map Cover Sheet

Prepare a cover sheet in Department approved format.

22.14 Right-of-Way Map Key Sheet

Copy and modify the Control Survey key sheet.

22.15 Right-of-Way Map Detail Sheet

Copy and modify the five (5) Control Survey detail sheets at 1"=40'. Two (2) additional sheets will be reserved for WRA sites if needed.

22.16 Reference Point Sheet

22.17 Table of Ownerships Sheet

22.18 TITF Sketches

22.19 Title Search Map

Prepare map showing all required parcels necessary to be title searched. This map will use Seminole County Tax Assessors Maps as its base.

22.20 Title Search Report

22.21 Legal Descriptions

This includes the preparation of Descriptions as required for Parcel or Easement Acquisition.

22.22 Final maps / Plans Comparison

Review construction plans to insure acquisition limits are consistent between them and the R/W Maps.

22.23 Field Reviews

Field inspect Topography prior to final R/W mapping submittal to insure that no additional improvements have been constructed and that all pertinent items shown on the master topography file have been illustrated thereon.

22.24 Technical Meetings

Includes meetings with Consultant, County and Department staff members to review or discuss project needs.

22.25 Quality Assurance / Quality Control

Includes QA / QC reviews of maps prior to stage submittals.

22.26 Supervision

Includes office staff supervision throughout the project mapping phases.

22.27 Coordination

Includes coordination with the Consultant, County and the Department.

23 GEOTECHNICAL

The CONSULTANT shall, for each project, be responsible for a complete geotechnical investigation. All work performed by the CONSULTANT shall be in accordance with COUNTY standards, or as otherwise directed by the DEPARTMENT'S District Geotechnical Engineer. The DEPARTMENT'S District Geotechnical Engineer will make interpretations and changes regarding geotechnical standards, policies and procedures and provide guidance to the CONSULTANT.

Prior to beginning each phase of investigation and after the Notice to Proceed is given, the CONSULTANT shall submit investigation plan for approval and meet with the COUNTY'S and DEPARTMENT'S Geotechnical Engineer or representative 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 all existing geotechnical information from available sources to generally describe the surface and subsurface conditions of the project site. Additional meetings may be required to plan any additional field efforts, review plans, resolve plans/report comments, resolve responses to comments, and/or any other meetings necessary to facilitate the project.

The CONSULTANT shall notify the COUNTY and DEPARTMENT in adequate time to schedule a representative to attend all related meetings and field activities.

23.1 Document Collection and Review

CONSULTANT will review printed literature including topographic maps, county agricultural maps, aerial photography (including historic photos), ground water resources, geology bulletins, potentiometric maps, pile driving records, historic construction records and other geotechnical related resources. Prior to field reconnaissance, CONSULTANT shall review U.S.G.S., S.C.S. and potentiometric maps, and identify areas with problematic soil and groundwater conditions.

ROADWAY

The CONSULTANT shall be responsible for coordination of all geotechnical related fieldwork activities. The CONSULTANT shall retain all samples until acceptance of Phase IV plans. Rock cores shall be retained as directed in writing by the District Geotechnical Engineer.

Obtain pavement cores as directed in writing by the District Geotechnical Engineer.

If required by the District Geotechnical Engineer, a preliminary roadway exploration shall be performed before the Phase I plans submittal. The preliminary roadway exploration will be performed and results provided to the Engineer of Record to assist in setting roadway grades and locating potential problem areas. The preliminary roadway exploration shall be performed as directed in writing by the District Geotechnical Engineer.

CONSULTANT shall perform specialized field-testing as required by project needs and as directed in writing by the District Geotechnical Engineer.

All laboratory testing and classification will be performed in accordance with applicable COUNTY standards, ASTM Standards or AASHTO Standards, unless otherwise specified in the Contract Documents.

23.2 Detailed Boring Location Plan

Develop a detailed boring location plan. Meet with COUNTY Geotechnical Project Manager for boring plan approval. If the drilling program expects to encounter artesian conditions, the CONSULTANT shall submit a methodology(s) for plugging the borehole to the COUNTY for approval prior to commencing with the boring program.

23.3 Stake Borings/Utility Clearance

Stake borings and obtain utility clearance.

23.4 MOT Plans for Field Investigation

Coordinate and develop Maintenance of Traffic (MOT) plan. All work zone traffic control will be performed in accordance with the DEPARTMENT's Roadway and Traffic Design Standards Index 600 series.

23.5 Drilling Access Permits

Obtain all State, County, City, and Water Management District permits for performing geotechnical borings, as needed.

23.6 Property Clearances

Notify property tenants in person of drilling and field activities, if applicable. Written notification to property owners/tenants is the responsibility of the COUNTY's Project Manager.

23.7 Groundwater Monitoring

Monitor groundwater, using piezometers.

23.8 LBR Sampling

Collect appropriate samples for Limerock Bearing Ratio (LBR) testing.

23.9 Coordination of Field Work

Coordinate all field work required to provide geotechnical data for the project.

23.10 Soil and Rock Classification - Roadway

Refine soil profiles recorded in the field, based on results of laboratory testing.

23.11 Design LBR

Determine design LBR values from the 90% and mean methods.

23.12 Laboratory Data

Tabulate laboratory test results for inclusion in the geotechnical report, the report of tests sheet (Roadway Soil Survey Sheet), and for any necessary calculations and analyses.

23.13 Seasonal High Water Table

Review the encountered ground water levels and estimate seasonal high ground water levels. Estimate seasonal low ground water levels, if requested.

23.14 Parameters for Water Retention Areas

Calculate parameters for water retention areas, exfiltration trenches, and/or swales.

23.15 Limits of Unsuitable Material

Delineate limits of unsuitable material(s) in both horizontal and vertical directions. Assist the Engineer of Record with detailing these limits on the cross-sections. If requested, prepare a plan view of the limits of unsuitable material.

Assist the Engineer of Record in determining the limits of required subsoil excavation.

23.16 ASCII Files for Cross-Sections

Create ASCII files of boring data for cross-sections.

23.17 Embankment Settlement and Stability

Estimate the total magnitude and time rate of embankment settlements. Calculate the factor of safety against slope stability failure.

23.18 Stormwater Volume Recovery and/or Background Seepage Analysis

Perform stormwater volume recovery analysis as directed by the COUNTY.

23.19 Geotechnical Recommendations

Provide geotechnical recommendations regarding the proposed roadway construction project including the following: description of the site/alignment, design recommendations and discussion of any special considerations (i.e. removal of unsuitable material, consolidation of weak soils, estimated settlement time/amount, groundwater control, high groundwater conditions relative to pavement base, etc.) Evaluate and recommend types of geosynthetics and properties for various applications, as required.

23.20 Preliminary Report

If a preliminary roadway investigation is performed, a preliminary roadway report shall be submitted before the Phase I plans submittal. The purpose of the preliminary roadway report will be to assist in setting road grades and locating potential problems.

- Copies of U.S.G.S. and S.C.S. maps with project limits shown
- A report of tests sheet that summarizes the laboratory test results, the soil stratification (i.e. soils grouped into layers of similar materials) and construction recommendations relative to Standard Indices 500 and 505

- Results of all tasks discussed in the previous section (Data Interpretation and Analysis).
- An appendix that contains stratified soil boring profiles, laboratory test data sheets, sample embankment settlement and stability calculations, design LBR calculation/graphs, and other pertinent calculations.
- The CONSULTANT will respond in writing to any changes and/or comments from the COUNTY and submit any responses and revised reports.

23.21 Final Report

The Final Roadway Report shall include the following:

- Copies of U.S.G.S. and S.C.S. maps with project limits shown
- A report of tests sheet that summarizes the laboratory test results, the soil stratification (i.e. soils grouped into layers of similar materials) and construction recommendations relative to Standard Indices 500 and 505
- Results of all tasks discussed in the previous section (Data Interpretation and Analysis).
- An appendix that contains stratified soil boring profiles, laboratory test data sheets, sample embankment settlement and stability calculations, design LBR calculation/graphs, and other pertinent calculations.
- The CONSULTANT will respond in writing to any changes and/or comments from the COUNTY and submit any responses and revised reports.

23.22 Auger Boring Drafting

Draft auger borings as directed by the COUNTY.

23.23 SPT Boring Drafting

Draft SPT borings as directed by the COUNTY.

STRUCTURES

The CONSULTANT shall be responsible for coordination of all geotechnical related fieldwork activities. The CONSULTANT shall retain all samples until acceptance of Phase IV plans. Rock cores shall be retained as directed in writing by the District Geotechnical Engineer.

CONSULTANT shall perform specialized field-testing as required by needs of project and as directed in writing by the District Geotechnical Engineer.

All laboratory testing and classification will be performed in accordance with applicable COUNTY standards, ASTM Standards or AASHTO Standards, unless otherwise specified in the Contract Documents.

The staff hour tasks for high embankment fills and structural foundations for bridges, box culverts, walls, high-mast lighting, overhead signs, mast arm signals, strain poles, buildings, and other structures include the following:

23.24 Detailed Boring Location Plan

Develop a detailed boring location plan. Meet with COUNTY Geotechnical Project Manager for boring plan approval. If the drilling program expects to encounter artesian conditions, the CONSULTANT shall submit a methodology(s) for plugging the borehole to Florida Department of Transportation for approval prior to commencing with the boring program.

23.25 Stake Borings/Utility Clearance

Stake borings and obtain utility clearance.

23.26 MOT Plans for Field Investigation

Coordinate and develop MOT plan. All work zone traffic control will be performed in accordance with the DEPARTMENT's Roadway and Traffic Design Standards Index 600 series.

23.27 Drilling Access Permits

Obtain all State, County, City, and Water Management District permits for performing geotechnical borings, as needed.

23.28 Property Clearances

Notify property tenants in person of drilling and field activities, if applicable. Written notification to property owners/tenants is the responsibility of the COUNTY's Project Manager.

23.29 Collection of Corrosion Samples

Collect corrosion samples for determination of environmental classifications.

23.30 Coordination of Field Work

Coordinate all field work required to provide geotechnical data for the project.

23.31 Soil and Rock Classification - Structures

Soil profiles recorded in the field should be refined based on the results of laboratory testing.

23.32 Tabulation of Laboratory Data

Laboratory test results should be tabulated for inclusion in the geotechnical report and for the necessary calculations and analyses.

23.33 Design Groundwater Level for Structures

Review encountered ground water levels, estimate seasonal high groundwater levels, and evaluate groundwater levels for structure design.

23.34 Selection of Foundation Alternatives (BDR) (N/A)

Evaluation and selection of foundation alternative, including the following:

- Spread footings
- Prestressed concrete piling - various sizes
- Steel H- piles
- Steel pipe piles
- Drilled shafts

Foundation analyses shall be performed using approved Florida Department of Transportation methods. Assist in selection of the most economical, feasible, foundation alternative.

23.35 Detailed Analysis of Selected Foundation Alternate(s)

Detailed analysis and basis for the selected foundation alternative. Foundation analyses shall be performed using approved Florida Department of Transportation methods and shall include:

- For pile and drilled shaft foundations, provide graphs of ultimate axial soil resistance versus tip elevations. Calculate scour resistance and/or downdrag (negative skin friction), if applicable.
- CONSULTANT shall assist the Engineer of Record in preparing the Pile Data Table (including test pile lengths, scour resistance, downdrag, minimum tip elevation, etc.)
- Provide the design soil profile(s), which include the soil model/type of each layer and all soil-engineering properties required for the Engineer of Record to run the FBPIer computer program. Review lateral analysis of selected foundation for geotechnical compatibility.
- Shallow foundation bearing capacity (including soil bearing capacity, minimum footing width, and minimum embedment depth).
- Estimated maximum driving resistance anticipated for pile foundations.
- Provide settlement analysis.

23.36 Bridge Construction and Testing Recommendations (N/A)

Provide construction and testing recommendations including potential constructability problems.

23.37 Lateral Load Analysis (Optional)

Perform lateral load analyses as directed by the COUNTY.

23.38 Walls

Provide the design soil profile(s), which include the soil model/type of each layer and all soil engineering properties required by the Engineer of Record for conventional wall analyses and recommendations. Review wall design for geotechnical compatibility and constructability.

Evaluate the external stability of conventional retaining walls and retained earth wall systems. For retained earth wall systems, calculate and provide minimum soil reinforcement lengths versus wall heights, and soil parameters assumed in analysis. Estimate differential and total (long term and short term) settlements.

Provide wall construction recommendations.

23.39 Sheet Pile Wall Analysis (Optional)

Analyze sheet pile walls as directed by the COUNTY.

23.40 Soil Parameters for Signs, Signals, High Mast Lights, and Strain Poles and Geotechnical Recommendations

Provide the design soil profile(s) that include the soil model/type of each layer and all soil properties required by the Engineer of Record for foundation design. Review design for geotechnical compatibility and constructability.

23.41 Box Culvert Analysis

- Provide the design soil profile(s) that include the soil model/type of each layer and all soil properties required by the Engineer of Record for foundation design. Review design for geotechnical compatibility and constructability.
- Provide lateral earth pressure coefficients.
- Provide box culvert construction and design recommendations.
- Estimate differential and total (long term and short term) settlements.
- Evaluate wingwall stability.

23.42 Preliminary Report – BDR (N/A)

The preliminary structures report shall contain the following discussions as appropriate for the assigned project:

- Copies of U.S.G.S. and S.C.S. maps with project limits shown.
- Summary of structure background data, SCS, USGS, geologic and potentiometric data.
- The results of all tasks discussed in the previous section (Data Interpretation and Analysis).
- Recommendations for foundation installation, or other site preparation soils-related construction considerations with plan sheets as necessary.
- Any special provisions required for construction that are not addressed in the DEPARTMENT's Standard specification.
- An Appendix which includes SPT and CPT boring/sounding profiles, data from any specialized field tests, engineering analysis, notes/sample calculations, sheets showing ultimate bearing capacity curves versus elevation for piles and drilled shafts,, a complete FHWA check list, pile driving records (if available) and any other pertinent information.

23.43 Final Report - Bridge and Associated Walls (N/A)

The final structures report shall include the following:

- Copies of U.S.G.S. and S.C.S. maps with project limits shown.
- Summary of structure background data, SCS, USGS, geologic and potentiometric data.
- The results of all tasks discussed in the previous section (Data Interpretation and Analysis).
- Recommendations for foundation installation, or other site preparation soils-related construction considerations with plan sheets as necessary.
- Any special provisions required for construction that are not addressed in the DEPARTMENT's Standard specification.
- An Appendix which includes SPT and CPT boring/sounding profiles, data from any specialized field tests, engineering analysis, notes/sample calculations, sheets showing ultimate bearing capacity curves versus elevation for piles and drilled shafts,, a complete FHWA check list, pile driving records (if available) and any other pertinent information.

23.44 Final Reports - Signs, Signals, Box Culvert, Walls, and High Mast Lights

The final reports shall include the following:

- Copies of U.S.G.S. and S.C.S. maps with project limits shown.
- Summary of structure background data, SCS, USGS, geologic and potentiometric data.
- The results of all tasks discussed in the previous section (Data Interpretation and Analysis).
- Recommendations for foundation installation, or other site preparation soils-related construction considerations with plan sheets as necessary.
- Any special provisions required for construction that are not addressed in the DEPARTMENT's Standard specification.
- An Appendix which includes SPT and CPT boring/sounding profiles, data from any specialized field tests, engineering analysis, notes/sample calculations, sheets showing ultimate bearing capacity curves versus elevation for piles and drilled shafts,, a complete FHWA check list, pile driving records (if available) and any other pertinent information.

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

EXHIBIT A

- All original plan sheets (11" x 17")
- One set of all plan and specification documents, in electronic format, according to COUNTY requirements
- Two sets of record prints
- Six sets of any special provisions
- All reference and support documentation used in preparation of contract plans package

Additional final reports (up to four), aside from stated above, may be needed and requested for the COUNTY's Project Manager and other disciplines.

The final reports, special provisions, as well as record prints, will be signed and sealed by a Professional Engineer registered in the State of Florida.

- Draft the detailed boring/sounding standard sheet, including environmental classification, results of laboratory testing, and specialized construction requirements, for inclusion in final plans.

23.45 Drafting

Prepare a complete set of drawings to include all SPT borings, auger borings and other pertinent soils information in the plans. Include these drawings in the Final Geotechnical Report. Draft borings, location map, S.C.S. map and U.S.D.A. map as directed by the COUNTY. Soil symbols must be consistent with those presented in the latest Florida Department of Transportation Soils and Foundations Handbook.

23.46 Technical Special Provisions

23.47 Field Reviews

Identify and note surface soil and rock conditions, surface water conditions and locations, and preliminary utility conflicts. Observe and note nearby structures and foundation types.

23.48 Technical Meetings

23.49 Quality Assurance/Quality Control

23.50 Supervision

23.51 Coordination

23.52 Optional Preliminary Contamination Assessment

When required, all work shall be performed in accordance with current Florida Department of Environmental Regulation (DER) and Federal OSHA and EPA standards. If required, fees for the Preliminary Contamination Assessment will be negotiated as a Supplemental Agreement to the contract. The following work shall be included, but not limited to:

- A minimum of four borings will be required per site.
- Soil gas analysis will be required by use of a flame ionization detector; e.g. Organic Vapor Analyzer (OVA).
- Installation of monitoring wells may be required.
- Water sampling and laboratory analysis may be required. The State of Florida Department of Health shall certify the laboratory performing the analysis.
- Four copies of the draft PCA report will be required for review and comment by the COUNTY. After comments have been addressed, six signed and sealed copies of the final PCA report shall be submitted to the COUNTY. Copies of all documents will be additionally transmitted to the COUNTY in electronic format in accordance with the COUNTY's current standards.

24 RIGHT OF WAY ASSESSMENT

24.1 Coordination

Initial meeting with Engineer and other Consultants and Subsequent Team Meetings

24.2 Initial Inspection

Initial inspection of Road Project and Area Improvements

24.3 Alternative Analysis

Review proposed Right of Way alternatives

24.4 Identify Compensable Impacts

24.5 Appraisals

Prepare abbreviated Appraisals on parcels (Assumed 25 parcels) affected by each alternative

24.6 Identify cost efficient compensable impacts

Coordinate with the engineer to identify cost efficient compensable impacts on affected parcels related to each alternative.

24.7 Values and Damages Report

Report to client with probable right of way values and damages on each alternative, as requested

24.8 Reports on Assessment Alternatives

Provide reports on Assessment Alternatives, appraisal findings including real estate damage estimates and costs to cure, as well as business damages where applicable

25 PROJECT REQUIREMENTS

25.1 Liaison Office

The COUNTY and the CONSULTANT will designate a Liaison Office and a Project Manager who shall be the representative of their respective organizations for the Project. While it is expected the CONSULTANT shall seek and receive advice from various state, regional, and local agencies, the final direction on all matters of this project remain with the COUNTY Project Manager.

25.2 Key Personnel

The CONSULTANT's work shall be performed and directed by the key personnel identified in the proposal presentations by the CONSULTANT. Any changes in the indicated personnel shall be subject to review and approval by COUNTY.

25.3 Progress Reporting

The CONSULTANT shall meet with the COUNTY as required and shall provide a written progress and schedule status reports that describe the work performed on each task. Progress and schedule status reports shall be delivered to the COUNTY concurrently with the monthly invoice. In addition, a bi-weekly progress report should be submitted to the COUNTY as an email attachment. Quarterly one-on-one evaluation meetings will be scheduled between the COUNTY Project Manager and

EXHIBIT A

CONSULTANT Project Manager to discuss the performance of the CONSULTANT for the project. The Project Manager will make judgment on whether work of sufficient quality and quantity has been accomplished by comparing the reported percent complete against actual work accomplished.

25.4 Correspondence

Copies of all written correspondence between the CONSULTANT and any party pertaining specifically to this contract shall be provided to the COUNTY for their records within one (1) week of the receipt or mailing of said correspondence.

25.5 Professional Endorsement

The CONSULTANT shall have a Registered Professional Engineer in the State of Florida sign and seal all reports, documents, and plans as required by COUNTY standards.

25.6 Computer Automation

The project will be developed utilizing Computer Aided Drafting and Design (CADD) systems. The DEPARTMENT makes available software to help assure quality and conformance with policy and procedures regarding CADD. It is the responsibility of the CONSULTANT to meet the requirements in the DEPARTMENT's CADD Manual. The CONSULTANT will submit final documents and files as described therein.

25.7 Coordination With Other Consultants

The CONSULTANT is to coordinate his work with any and all adjacent and integral consultants so as to effect complete and homogenous plans and specifications for the project(s) described herein.

25.8 Optional Services

At the COUNTY's option, the CONSULTANT may be requested to provide post design services. The fee for these services shall be negotiated in accordance with the terms detailed in Exhibit B, Method of Compensation, for a fair, competitive and reasonable cost, considering the scope and complexity of the project(s). A supplemental agreement adding the additional services shall be executed in accordance with paragraph 2.00 of the Standard Consultant Agreement. The additional services may include Construction Assistance, Review of Shop Drawings, Bridge Load Rating(s) update, or other Post Design Services as required.

26 INVOICING LIMITS

Payment for the work accomplished will be in accordance with Method of Compensation of this contract. Invoices shall be submitted to the COUNTY, in a format prescribed by the COUNTY. The COUNTY Project Manager and the CONSULTANT shall monitor the cumulative invoiced billings to insure the reasonableness of the billings compared to the project schedule and the work accomplished and accepted by the COUNTY.

The CONSULTANT will provide a list of key events and the associated total percentage of work considered to be complete at each event. This list will be used to control invoicing. Payments will not be made that exceed the percentage of work for any event until those events have actually occurred and the results are acceptable to the COUNTY.

SR 426/CR 419, from Pine Avenue to Lockwood Boulevard

<p style="text-align: center;">Tentative Scope of Services Phase III: Post Design Services</p>
--

A. PURPOSE AND INTENT

Seminole County (COUNTY) wishes to select a Professional Engineering Firm (CONSULTANT) to provide professional engineering post design services in connection with the design and construction of approximately 3.03 mile of SR 426 / CR 419 from Pine Avenue to Lockwood Boulevard.

This document defines the scope of work and the responsibilities of the CONSULTANT. Our purpose is to achieve quality post design services from competent professionals in order to satisfactorily complete construction. These services are intended to address changed conditions or services not covered that occur following acceptance of final plans, including changes required as part of right of way acquisition. These services are not intended for instances of CONSULTANT error and/or omissions.

B. PROJECT DESCRIPTION

The project is located in Oviedo, Florida. It consists of four-laning SR 426 / CR 419 and associated improvements.

C. SCOPE OF WORK REQUIREMENTS

The following descriptions provide a non-exclusive summary of the specific tasks within this Scope-of-Services and are the minimum criteria for project performance and execution. The COUNTY will issue work orders on an as needed basis. The CONSULTANT is responsible to provide the following required professional services as requested:

1.0 Plans and Right of Way Documents Update and Maintenance

The CONSULTANT shall perform engineering analyses and/or make revisions to the plans, right of way maps, legal descriptions and special provisions, as requested by the COUNTY and the FDOT, to reflect additions, deletions and/or modifications prior to and subsequent to construction advertising. Whenever the plans or Right of Way Maps are revised, the CONSULTANT shall submit two (2) sets of signed and sealed half size prints of the revised sheets and one (1) set of the revised reproducibles. The Right of Way maps and drainage maps will be full size.

2.0 Construction Assistance

The CONSULTANT shall provide to the COUNTY qualified representation during the construction phase concerning the intent and interpretation of the construction plans and documents. Should changed conditions be encountered in the field and when requested by the COUNTY, the CONSULTANT shall respond in a timely manner with suitable engineering solutions which take into account the changed conditions.

On site appearance of CONSULTANT shall be made during construction at the written request of the COUNTY.

From time to time during construction, the COUNTY may request the CONSULTANT to review contractor proposed field changes or to respond with a recommended solution to remedy particular field situations not covered by the plans and specifications.

3.0 Permit Updates

The CONSULTANT shall provide valid permits extending through construction. The CONSULTANT shall apply for and provide the necessary information to modify, extend or renew required permits, prior to or subsequent to construction advertising.

4.0 Review Structural Shop Drawings

The CONSULTANT shall review structural shop drawings during construction as needed.

5.0 Survey Update

If requested, the CONSULTANT shall provide additional field survey updates prior to and during the construction contract.

6.0 Web Site Updates (N/A)

The CONSULTANT will maintain and update as needed the web site previously developed for this project. The web site will include information such as the project scope, schedule and progress.

7.0 Newsletters

The CONSULTANT will prepare and send out newsletters to inform the public of when construction will begin, general project information, and construction contacts. The newsletter will be sent to all those on the mailing list.

Board of County Commissioners

SAMPLE WORK ORDER

SEMINOLE COUNTY, FLORIDA

Work Order Number: _____

Master Agreement No.: _____ Dated: _____
Contract Title: _____
Project Title: _____

Consultant: _____
Address: _____

ATTACHMENTS TO THIS WORK ORDER:
[] drawings/plans/specifications
[] scope of services
[] special conditions
[] _____

METHOD OF COMPENSATION:
[] fixed fee basis
[] time basis-not-to-exceed
[] time basis-limitation of funds

TIME FOR COMPLETION: The services to be provided by the CONSULTANT shall commence upon execution of this Agreement by the parties and shall be completed within "X" (days, months, years) of the effective date of this agreement. Failure to meet the completion date may be grounds for Termination for Default.

Work Order Amount: _____ DOLLARS (\$_____)

IN WITNESS WHEREOF, the parties hereto have made and executed this Work Order on this _____ day of _____, 20____, for the purposes stated herein.

(THIS SECTION TO BE COMPLETED BY THE COUNTY)

ATTEST:

_____, Secretary By: _____, President
(CORPORATE SEAL) Date: _____

BOARD OF COUNTY COMMISSIONERS
SEMINOLE COUNTY, FLORIDA

WITNESSES:

_____, (Procurement Analyst) By: Robert L. Hunter, Procurement Supervisor
_____, (Procurement Analyst) Date: As authorized by Section 8.153 Seminole County Administrative Code.

WORK ORDER TERMS AND CONDITIONS

- a) Execution of this Work Order by the COUNTY shall serve as authorization for the CONSULTANT to provide, for the stated project, professional services as set out in the Scope of Services attached as Exhibit "A" to the Master Agreement cited on the face of this Work Order and as further delineated in the attachments listed on this Work Order.
- b) Term: This work order shall take effect on the date of its execution by the County and expires upon final delivery, inspection, acceptance and payment unless terminated earlier in accordance with the Termination provisions herein.
- c) The CONSULTANT shall provide said services pursuant to this Work Order, its Attachments, and the cited Master Agreement (as amended, if applicable) which is incorporated herein by reference as if it had been set out in its entirety.
- d) Whenever the Work Order conflicts with the cited Master Agreement, the Master Agreement shall prevail.
- e) METHOD OF COMPENSATION - If the compensation is based on a:
 - (i) FIXED FEE BASIS, then the Work Order Amount becomes the Fixed Fee Amount and the CONSULTANT shall perform all work required by this Work Order for the Fixed Fee Amount. The Fixed Fee is an all-inclusive Firm Fixed Price binding the CONSULTANT to complete the work for the Fixed Fee Amount regardless of the costs of performance. In no event shall the CONSULTANT be paid more than the Fixed Fee Amount.
 - (ii) TIME BASIS WITH A NOT-TO-EXCEED AMOUNT, then the Work Order Amount becomes the Not-to-Exceed Amount and the CONSULTANT shall perform all the work required by this Work Order for a sum not exceeding the Not-to-Exceed Amount. In no event is the CONSULTANT authorized to incur expenses exceeding the not-to-exceed amount without the express written consent of the COUNTY. Such consent will normally be in the form of an amendment to this Work Order. The CONSULTANT's compensation shall be based on the actual work required by this Work Order and the Labor Hour Rates established in the Master Agreement.
 - (iii) TIME BASIS WITH A LIMITATION OF FUNDS AMOUNT, then the Work Order Amount becomes the Limitation of Funds amount and the CONSULTANT is not authorized to exceed the Limitation of Funds amount without prior written approval of the COUNTY. Such approval, if given by the COUNTY, shall indicate a new Limitation of Funds amount. The CONSULTANT shall advise the COUNTY whenever the CONSULTANT has incurred expenses on this Work Order that equals or exceeds eighty percent (80%) of the Limitation of Funds amount. The CONSULTANT's compensation shall be based on the actual work required by this Work Order and the Labor Hour Rates established in the Master Agreement.
- f) Payment to the CONSULTANT shall be made by the COUNTY in strict accordance with the payment terms of the referenced Master Agreement.
- g) It is expressly understood by the CONSULTANT that this Work Order, until executed by the COUNTY, does not authorize the performance of any services by the CONSULTANT and that the COUNTY, prior to its execution of the Work Order, reserves the right to authorize a party other than the CONSULTANT to perform the services called for under this Work Order; if it is determined that to do so is in the best interest of the COUNTY.
- h) The CONSULTANT shall sign the Work Order first and the COUNTY second. This Work Order becomes effective and binding upon execution by the COUNTY and not until then. A copy of this Work Order will be forwarded to the CONSULTANT upon execution by the COUNTY.



FEE SCHEDULE FOR INWOOD CONSULTING ENGINEERS, INC.

PS-1666-07/BLH

**FINAL DESIGN SERVICES FOR SR 426/CR 419 WIDENING
From Pine Avenue to W. of Lockwood Blvd.**

CATEGORY	CONTRACT RATE	MULTIPLIER	FINAL HOURLY RATE
Principal	\$67.64	2.90	\$196.15
Project Manager	\$61.48	2.90	\$178.29
Senior Engineer	\$56.63	2.90	\$164.22
Project Engineer	\$38.41	2.90	\$111.39
Engineering Intern	\$28.70	2.90	\$83.24
Designer	\$32.36	2.90	\$93.84
Administrative / Clerical	\$17.54	2.90	\$50.85

Multiplier Calculation

Direct Raw Labor	100.00%
Audited Overhead (General + Fringe)	161.24%
Subtotal Labor and Overhead	261.24%

Profit @ 12% of 261.24%	31.35%
TOTAL	292.59%

Capped per Seminole County: 290.00%

This is to certify that the above contract rates will be utilized on this contract.


 Andrew D. DeWitt, Vice President

6-13-07

Date

EXHIBIT C

INWOOD CONSULTING ENGINEERS, INC.

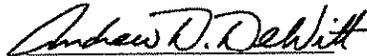
BACKUP FOR WAGE RATE JUSTIFICATION

County's Project No.: PS-1666-07/BLH
 Project Description: SR 426 / CR 419 Final Design
 From Pine Avenue to W. of Lockwood Blvd.
 Seminole County

Job Classification	Personnel	Time of Raise	Current Salary 2007	Percent	Adjusted Salary Rate	Multiplied Salary Rate (x 2.90)
Principal	Work Activities: Public Involvement, Contract Maintenance, QA/QC					\$196.15
	Alex Hull	Annual 1/1	\$65.50	80.00%	\$52.40	
	Ed Buck	Annual 1/1	\$62.00	20.00%	\$12.40	
	AVERAGE HOURLY RATE = \$64.80					
	EFFECTIVE ESCALATION FACTOR = 1.04380					
ESCALATED AVERAGE HOURLY RATE = \$67.64						
Project Manager	Work Activities: Engineering, Quality Control, Contract Maintenance					\$178.29
	Andy DeWitt	Annual 1/1	\$62.50	50.00%	\$31.25	
	Co-Co Wu	Annual 1/1	\$55.29	50.00%	\$27.65	
	AVERAGE HOURLY RATE = \$58.90					
	EFFECTIVE ESCALATION FACTOR = 1.04380					
ESCALATED AVERAGE HOURLY RATE = \$61.48						
Senior Engineer	Work Activities: Engineering, Design, QA/QC, Cost Estimates					\$164.22
	David Coleman	Annual 1/1	\$62.00	25.00%	\$15.50	
	Derek Dean	Annual 1/1	\$51.00	50.00%	\$25.50	
	Renato Chuw	Annual 1/1	\$53.00	25.00%	\$13.25	
	AVERAGE HOURLY RATE = \$54.25					
EFFECTIVE ESCALATION FACTOR = 1.04380						
ESCALATED AVERAGE HOURLY RATE = \$56.63						
Project Engineer	Work Activities: Engineering, Design, Permitting, Plans Production					\$111.39
	Kate Spiess	Annual 1/1	\$35.00	80.00%	\$28.00	
	Janet Middleton	Annual 1/1	\$44.00	20.00%	\$8.80	
	AVERAGE HOURLY RATE = \$36.80					
	EFFECTIVE ESCALATION FACTOR = 1.04380					
ESCALATED AVERAGE HOURLY RATE = \$38.41						
Engineering Intern	Work Activities: Engineering, Design, Plans Production					\$83.24
	Kara Myers	Annual 1/1	\$28.50	50.00%	\$14.25	
	Jack Miller	Annual 1/1	\$26.50	50.00%	\$13.25	
	AVERAGE HOURLY RATE = \$27.50					
	EFFECTIVE ESCALATION FACTOR = 1.04380					
ESCALATED AVERAGE HOURLY RATE = \$28.70						
Designer	Work Activities: Plans Production, Quantities					\$93.84
	Abdoul Remadna	Annual 1/2	\$29.50	50.00%	\$14.75	
	Jose Ayala	Annual 1/1	\$32.50	50.00%	\$16.25	
	WEIGHTED AVERAGE = \$31.00					
	EFFECTIVE ESCALATION FACTOR = 1.04380					
ESCALATED AVERAGE HOURLY RATE = \$32.36						
Administrative/Clerical	Work Activities: Clerical, Reports, Mailing, Newsletters, Public. Inv.					\$50.85
	Cheryl Atkins	Annual 1/1	\$16.00	20.00%	\$3.20	
	Mandy Rankin	Annual 1/1	\$17.00	80.00%	\$13.60	
	AVERAGE HOURLY RATE = \$16.80					
	EFFECTIVE ESCALATION FACTOR = 1.04380					
ESCALATED AVERAGE HOURLY RATE = \$17.54						

Print Name: Andrew D. DeWitt, PE, Vice President

Signature:



Date:

6-13-07

* The Wage Rate at Mid-Point of Contract was based on a salary escalation factor of 1.0438, representing a 4% annual rate increase that will become effective on January 01, 2008. The "Escalation Factor" assumes the contract begins August 1, 2007 and will last 24 months; this factor was calculated as follows:

$$((5 \text{ months})(1.00) + (12 \text{ months})(1.04) + (7 \text{ months})(1.04)(1.04)) / 24 \text{ months} = 1.0438$$



RECEIVED

JUN 19 2006

Florida Department of Transportation

JEB BUSH GOVERNOR

605 Suwannee Street Tallahassee, FL 32399-0450 June 14, 2006

DENVER J. STUTLER, JR. SECRETARY

Alex Hull, President INWOOD CONSULTING ENGINEERS, INC. 870 Clark Street Oviedo, Florida 32765

Dear Mr. Hull:

The Florida Department of Transportation has reviewed your application for qualification package and determined that the data submitted is adequate to qualify your firm for the following types of work:

Group 2 - Project Development and Environmental (PD&E) Studies

Group 3 - Highway Design - Roadway

- 3.1 - Minor Highway Design
3.2 - Major Highway Design
3.3 - Complex Highway Design

Group 6 - Traffic Engineering and Operations Studies

- 6.1 - Traffic Engineering Studies
6.2 - Traffic Signal Timing

Group 7 - Traffic Operations Design

- 7.1 - Signing, Pavement Marking and Channelization
7.2 - Lighting
7.3 - Signalization

Group 13 - Planning

13.5 - Subarea/Corridor Planning

Your Unlimited Notice of Qualification shall be valid until June 30, 2007 at such time as your December 31, 2006 overhead audit will be due to comply with the Department's 150 day requirement on overhead audits. We will automatically notify your firm 45 to 60 days prior to your update deadline.

On the basis of data submitted the Department has approved your accounting system and considers the rates listed below as acceptable rates for qualification purposes.

Table with 5 columns: Overhead Rate, Home/Branch Office, Facilities Capital Cost of Money, Overtime Premium Reimbursed, Direct Expense. Values: 161.24%, 0.625%, 4.45%

Should you have any questions, please feel free to contact me at 850/414-4485.

Sincerely,

Lorraine E. Odom (handwritten signature)

Lorraine E. Odom Professional Services Qualification Administrator

LEO/smr

LOCAL AGENCY PROGRAM/FEDERAL-AID CERTIFICATION

The Bidder hereby declares that the undersigned is the person or persons responsible within the firm for the final decision as to the price(s) and amount of this bid and the Bidder further declares that:

1. The price(s) and amount of this bid have been arrived at independently, without consultation, communication, or agreement for the purpose of restricting competition with any other contractor, bidder or potential bidder.
2. Neither the price(s) nor the amount of this bid have been disclosed to any other firm or person who is a bidder or potential bidder on this project, and will not be so disclosed prior to the bid opening.
3. No attempt has been made or will be made to solicit, cause, or induce any firm or person to refrain from bidding on this project, or to submit a bid higher than the bid of this firm, or any intentionally high or non-competitive bid or other form of complementary bid.
4. The bid is made in good faith and not pursuant to any agreement or discussion with, or inducement from, any other firm or person to submit a complementary bid.
5. The Bidder has not offered or entered into a subcontract or agreement regarding the purchase of materials or services from any other firm or person, or offered, promised, or paid cash or anything of value to any other Bidder or person, whether in connection with this or any other project, in consideration for an agreement or promise by any other firm or person to refrain from bidding or to submit a complementary bid on this project.
6. The Bidder has not accepted or been promised any subcontract or agreement regarding the sale of materials or services to any other firm or person, and has not been promised or paid cash or anything of value by any other firm or person, whether in connection with this or any other project, in consideration for the firm's submitting a complementary bid, or agreeing to do so, on this project.
7. The Bidder has made a diligent inquiry of all members, officers, employees, and agents of the Bidder with responsibilities relating to the preparation, approval or submission of the firm's bid on this project and have been advised by each of them that he or she has not participated in any communication, consultation, discussion, agreement, collusion, act, or other conduct inconsistent with any of the statements and representations made in this Declaration.

Local Agency Program/Federal-Aid Certification

8. As required by Section 337.165, Florida Statutes, the Bidder has fully informed the CITY in writing of all convictions of the firm, its affiliates (as defined in Section 337.165(1)(a), Florida Statutes), and all directors, officers, and employees of the firm and its affiliates for violation of state or federal antitrust laws with respect to a public contract or for violation of any state or federal law involving fraud, bribery, collusion, conspiracy, or material misrepresentation with respect to a public contract. This includes disclosure of the names of current employees of the firm or affiliates who were convicted of contract crimes while in the employ of another company.
9. The Bidder certifies that, except as noted below, neither the firm nor any person associated therewith in the capacity of owner, partner, director, officer, principal, investigator, project director, manager, auditor, and/or position involving the administration of federal funds:
 - a. is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions, as defined in 49 CFR s29.110(a), by any federal department or agency;
 - b. has within a three-year period preceding this certification been convicted of or had a civil judgment rendered against it for: commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a federal, state, or local government transaction or public contract; violation of federal or state antitrust statutes; or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
 - c. is presently indicted for or otherwise criminally or civilly charged by a federal, state, or local governmental entity with commission of any of the offenses enumerated in paragraph 9(b) of this certification; and
 - d. has within a three-year period preceding this certification had one or more federal, state, or local government public transactions terminated for cause or default.
10. The Bidder certifies that it shall not knowingly enter into any transaction with any subcontractor, material supplier, or vendor who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this project by any federal agency unless authorized by the CITY.

11. The firm certifies that the bidder is not a nonresident alien, or a foreign corporation/entity formed under the laws of a country other than the United States.
12. The Bidder certifies that no Federally appropriated funds have been paid, or will be paid by or on behalf of the undersigned, to any person for influencing or attempting to influence any officer or employee of any Federal agency, a Member of Congress an officer or employee of any Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment or modification of any Federal contract, grant, loan or cooperative agreement.

If any funds other than Federally appropriated funds have been paid by the Agency to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

Where the Bidder is unable to declare or certify as to any of the statements contained in the above stated paragraphs numbered (1) through (12), the Bidder has provided an explanation by attached separate sheet.

Company Name

Authorized Signature

Printed Name

Date

Executive Order 11246 - Equal Employment Opportunity

SOURCE: The provisions of Executive Order 11246 of Sept. 24, 1965, appear at 30 FR 12319, 12935, 3 CFR, 1964-1965 Comp., p.339, unless otherwise noted.

Under and by virtue of the authority vested in me as President of the United States by the Constitution and statutes of the United States, it is ordered as follows:

Part I - Nondiscrimination in Government Employment

[Part I superseded by EO 11478 of Aug. 8, 1969, 34 FR 12985, 3 CFR, 1966-1970 Comp., p. 803]

Part II - Nondiscrimination in Employment by Government Contractors and Subcontractors

Subpart A - Duties of the Secretary of Labor

SEC. 201. The Secretary of Labor shall be responsible for the administration and enforcement of Parts II and III of this Order. The Secretary shall adopt such rules and regulations and issue such orders as are deemed necessary and appropriate to achieve the purposes of Parts II and III of this Order.

[Sec. 201 amended by EO 12086 of Oct. 5, 1978, 43 FR 46501, 3 CFR, 1978 Comp., p. 230]

Subpart B - Contractors' Agreements

SEC. 202. Except in contracts exempted in accordance with Section 204 of this Order, all Government contracting agencies shall include in every Government contract hereafter entered into the following provisions:

"During the performance of this contract, the contractor agrees as follows:

"(1) The contractor will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. The contractor will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex or national origin. Such action shall include, but not be limited to the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The contractor agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided by the contracting officer setting

forth the provisions of this nondiscrimination clause.

"(2) The contractor will, in all solicitations or advancements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex or national origin.

"(3) The contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice, to be provided by the agency contracting officer, advising the labor union or workers' representative of the contractor's commitments under Section 202 of Executive Order No. 11246 of September 24, 1965, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

"(4) The contractor will comply with all provisions of Executive Order No. 11246 of Sept. 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.

"(5) The contractor will furnish all information and reports required by Executive Order No. 11246 of September 24, 1965, and by the rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the contracting agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

"(6) In the event of the contractor's noncompliance with the nondiscrimination clauses of this contract or with any of such rules, regulations, or orders, this contract may be cancelled, terminated, or suspended in whole or in part and the contractor may be declared ineligible for further Government contracts in accordance with procedures authorized in Executive Order No. 11246 of Sept. 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order No. 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.

"(7) The contractor will include the provisions of paragraphs (1) through (7) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to Section 204 of Executive Order No. 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The contractor will take such action with respect to any subcontract or purchase order as may be directed by the Secretary of Labor as

a means of enforcing such provisions including sanctions for noncompliance: Provided, however, that in the event the contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction, the contractor may request the United States to enter into such litigation to protect the interests of the United States." [Sec. 202 amended by EO 11375 of Oct. 13, 1967, 32 FR 14303, 3 CFR, 1966-1970 Comp., p. 684, EO 12086 of Oct. 5, 1978, 43 FR 46501, 3 CFR, 1978 Comp., p. 230]

SEC. 203. Each contractor having a contract containing the provisions prescribed in Section 202 shall file, and shall cause each of his subcontractors to file, Compliance Reports with the contracting agency or the Secretary of Labor as may be directed. Compliance Reports shall be filed within such times and shall contain such information as to the practices, policies, programs, and employment policies, programs, and employment statistics of the contractor and each subcontractor, and shall be in such form, as the Secretary of Labor may prescribe.

(b) Bidders or prospective contractors or subcontractors may be required to state whether they have participated in any previous contract subject to the provisions of this Order, or any preceding similar Executive order, and in that event to submit, on behalf of themselves and their proposed subcontractors, Compliance Reports prior to or as an initial part of their bid or negotiation of a contract.

(c) Whenever the contractor or subcontractor has a collective bargaining agreement or other contract or understanding with a labor union or an agency referring workers or providing or supervising apprenticeship or training for such workers, the Compliance Report shall include such information as to such labor union's or agency's practices and policies affecting compliance as the Secretary of Labor may prescribe: Provided, That to the extent such information is within the exclusive possession of a labor union or an agency referring workers or providing or supervising apprenticeship or training and such labor union or agency shall refuse to furnish such information to the contractor, the contractor shall so certify to the Secretary of Labor as part of its Compliance Report and shall set forth what efforts he has made to obtain such information.

(d) The Secretary of Labor may direct that any bidder or prospective contractor or subcontractor shall submit, as part of his Compliance Report, a statement in writing, signed by an authorized officer or agent on behalf of any labor union or any agency referring workers or providing or supervising apprenticeship or other training, with which the bidder or prospective contractor deals, with

supporting information, to the effect that the signer's practices and policies do not discriminate on the grounds of race, color, religion, sex or national origin, and that the signer either will affirmatively cooperate in the implementation of the policy and provisions of this Order or that it consents and agrees that recruitment, employment, and the terms and conditions of employment under the proposed contract shall be in accordance with the purposes and provisions of the order. In the event that the union, or the agency shall refuse to execute such a statement, the Compliance Report shall so certify and set forth what efforts have been made to secure such a statement and such additional factual material as the Secretary of Labor may require.

[Sec. 203 amended by EO 11375 of Oct. 13, 1967, 32 FR 14303, 3 CFR, 1966-1970 Comp., p. 684; EO 12086 of Oct. 5, 1978, 43 FR 46501, 3 CFR, 1978 Comp., p. 230]

SEC. 204. The Secretary of Labor may, when he/she deems that special circumstances in the national interest so require, exempt a contracting agency from the requirement of including any or all of the provisions of Section 202 of this Order in any specific contract, subcontract, or purchase order. The Secretary of Labor may, by rule or regulation, also exempt certain classes of contracts, subcontracts, or purchase orders (1) whenever work is to be or has been performed outside the United States and no recruitment of workers within the limits of the United States is involved; (2) for standard commercial supplies or raw materials; (3) involving less than specified amounts of money or specified numbers of workers; or (4) to the extent that they involve subcontracts below a specified tier. The Secretary of Labor may also provide, by rule, regulation, or order, for the exemption of facilities of a contractor which are in all respects separate and distinct from activities of the contractor related to the performance of the contract: Provided, That such an exemption will not interfere with or impede the effectuation of the purposes of this Order: And provided further, That in the absence of such an exemption, all facilities shall be covered by the provisions of this Order.

Subpart C - Powers and Duties of the Secretary of Labor and the Contracting Agencies

SEC. 205. The Secretary of Labor shall be responsible for securing compliance by all Government contractors and subcontractors with this Order and any implementing rules or regulations. All contracting agencies shall comply with the terms of this Order and any implementing rules, regulations, or orders of the Secretary of Labor. Contracting agencies shall cooperate with the Secretary of Labor and shall furnish such information and assistance as the Secretary may require.

[Sec. 205 amended by EO 12086 of Oct. 5, 1978, 43 FR 46501, 3 CFR, 1978 Comp., p. 230]

SEC. 206. The Secretary of Labor may investigate the employment practices of any Government contractor or subcontractor to determine whether or not the contractual provisions specified in Section 202 of this Order have been violated. Such investigation shall be conducted in accordance with the procedures established by the Secretary of Labor.

(b) The Secretary of Labor may receive and investigate complaints by employees or prospective employees of a Government contractor or subcontractor which allege discrimination contrary to the contractual provisions specified in Section 202 of this Order.

[Sec. 206 amended by EO 12086 of Oct. 5, 1978, 43 FR 46501, 3 CFR, 1978 Comp., p. 230]

SEC. 207. The Secretary of Labor shall use his/her best efforts, directly and through interested Federal, State, and local agencies, contractors, and all other available instrumentalities to cause any labor union engaged in work under Government contracts or any agency referring workers or providing or supervising apprenticeship or training for or in the course of such work to cooperate in the implementation of the purposes of this Order. The Secretary of Labor shall, in appropriate cases, notify the Equal Employment Opportunity Commission, the Department of Justice, or other appropriate Federal agencies whenever it has reason to believe that the practices of any such labor organization or agency violate Title VI or Title VII of the Civil Rights Act of 1964 or other provision of Federal law.

[Sec. 207 amended by EO 12086 of Oct. 5, 1978, 43 FR 46501, 3 CFR, 1978 Comp., p. 230]

SEC. 208. The Secretary of Labor, or any agency, officer, or employee in the executive branch of the Government designated by rule, regulation, or order of the Secretary, may hold such hearings, public or private, as the Secretary may deem advisable for compliance, enforcement, or educational purposes.

(b) The Secretary of Labor may hold, or cause to be held, hearings in accordance with Subsection of this Section prior to imposing, ordering, or recommending the imposition of penalties and sanctions under this Order. No order for debarment of any contractor from further Government

contracts under Section 209(6) shall be made without affording the contractor an opportunity for a hearing.

Subpart D - Sanctions and Penalties

SEC. 209. In accordance with such rules, regulations, or orders as the Secretary of Labor may issue or adopt, the Secretary may:

- (1) Publish, or cause to be published, the names of contractors or unions which it has concluded have complied or have failed to comply with the provisions of this Order or of the rules, regulations, and orders of the Secretary of Labor.
- (2) Recommend to the Department of Justice that, in cases in which there is substantial or material violation or the threat of substantial or material violation of the contractual provisions set forth in Section 202 of this Order, appropriate proceedings be brought to enforce those provisions, including the enjoining, within the limitations of applicable law, of organizations, individuals, or groups who prevent directly or indirectly, or seek to prevent directly or indirectly, compliance with the provisions of this Order.
- (3) Recommend to the Equal Employment Opportunity Commission or the Department of Justice that appropriate proceedings be instituted under Title VII of the Civil Rights Act of 1964.
- (4) Recommend to the Department of Justice that criminal proceedings be brought for the furnishing of false information to any contracting agency or to the Secretary of Labor as the case may be.
- (5) After consulting with the contracting agency, direct the contracting agency to cancel, terminate, suspend, or cause to be cancelled, terminated, or suspended, any contract, or any portion or portions thereof, for failure of the contractor or subcontractor to comply with equal employment opportunity provisions of the contract. Contracts may be cancelled, terminated, or suspended absolutely or continuance of contracts may be conditioned upon a program for future compliance approved by the Secretary of Labor.
- (6) Provide that any contracting agency shall refrain from entering into further contracts, or extensions or other modifications of existing contracts, with any noncomplying contractor, until such contractor has satisfied the Secretary of Labor that such contractor has established and will carry out

personnel and employment policies in compliance with the provisions of this Order.

(b) Pursuant to rules and regulations prescribed by the Secretary of Labor, the Secretary shall make reasonable efforts, within a reasonable time limitation, to secure compliance with the contract provisions of this Order by methods of conference, conciliation, mediation, and persuasion before proceedings shall be instituted under subsection (a)(2) of this Section, or before a contract shall be cancelled or terminated in whole or in part under subsection (a)(5) of this Section.

[Sec. 209 amended by EO 12086 of Oct. 5, 1978, 43 FR 46501, 3 CFR, 1978 Comp., p. 230]

SEC. 210. Whenever the Secretary of Labor makes a determination under Section 209, the Secretary shall promptly notify the appropriate agency. The agency shall take the action directed by the Secretary and shall report the results of the action it has taken to the Secretary of Labor within such time as the Secretary shall specify. If the contracting agency fails to take the action directed within thirty days, the Secretary may take the action directly.

[Sec. 210 amended by EO 12086 of Oct. 5, 1978, 43 FR 46501, 3 CFR, 1978 Comp., p. 230]

SEC. 211. If the Secretary shall so direct, contracting agencies shall not enter into contracts with any bidder or prospective contractor unless the bidder or prospective contractor has satisfactorily complied with the provisions of this Order or submits a program for compliance acceptable to the Secretary of Labor.

[Sec. 211 amended by EO 12086 of Oct. 5, 1978, 43 FR 46501, 3 CFR, 1978 Comp., p. 230]

SEC. 212. When a contract has been cancelled or terminated under Section 209(a)(5) or a contractor has been debarred from further Government contracts under Section 209(a)(6) of this Order, because of noncompliance with the contract provisions specified in Section 202 of this Order, the Secretary of Labor shall promptly notify the Comptroller General of the United States.

[Sec. 212 amended by EO 12086 of Oct. 5, 1978, 43 FR 46501, 3 CFR, 1978 Comp., p. 230]

Subpart E - Certificates of Merit

SEC. 213. The Secretary of Labor may provide for issuance of a United States Government Certificate of Merit to employers or labor unions, or other agencies which are or may hereafter be engaged in work under Government contracts, if the Secretary is satisfied that the personnel and

employment practices of the employer, or that the personnel, training, apprenticeship, membership, grievance and representation, upgrading, and other practices and policies of the labor union or other agency conform to the purposes and provisions of this Order.

SEC. 214. Any Certificate of Merit may at any time be suspended or revoked by the Secretary of Labor if the holder thereof, in the judgment of the Secretary, has failed to comply with the provisions of this Order.

SEC. 215. The Secretary of Labor may provide for the exemption of any employer, labor union, or other agency from any reporting requirements imposed under or pursuant to this Order if such employer, labor union, or other agency has been awarded a Certificate of Merit which has not been suspended or revoked.

Part III - Nondiscrimination Provisions in Federally Assisted Construction Contracts

SEC. 301. Each executive department and agency, which administers a program involving Federal financial assistance shall require as a condition for the approval of any grant, contract, loan, insurance, or guarantee thereunder, which may involve a construction contract, that the applicant for Federal assistance undertake and agree to incorporate, or cause to be incorporated, into all construction contracts paid for in whole or in part with funds obtained from the Federal Government or borrowed on the credit of the Federal Government pursuant to such grant, contract, loan, insurance, or guarantee, or undertaken pursuant to any Federal program involving such grant, contract, loan, insurance, or guarantee, the provisions prescribed for Government contracts by Section 202 of this Order or such modification thereof, preserving in substance the contractor's obligations thereunder, as may be approved by the Secretary of Labor, together with such additional provisions as the Secretary deems appropriate to establish and protect the interest of the United States in the enforcement of those obligations. Each such applicant shall also undertake and agree (1) to assist and cooperate actively with the Secretary of Labor in obtaining the compliance of contractors and subcontractors with those contract provisions and with the rules, regulations and relevant orders of the Secretary, (2) to obtain and to furnish to the Secretary of Labor such information as the Secretary may require for the supervision of such compliance, (3) to carry out sanctions and penalties for violation of such obligations imposed upon contractors and subcontractors by the Secretary of Labor pursuant to Part II, Subpart D, of this Order, and (4) to

refrain from entering into any contract subject to this Order, or extension or other modification of such a contract with a contractor debarred from Government contracts under Part II, Subpart D, of this Order.

[Sec. 301 amended by EO 12086 of Oct. 5, 1978, 43 FR 46501, 3 CFR, 1978 Comp., p. 230]

SEC. 302. "Construction contract" as used in this Order means any contract for the construction, rehabilitation, alteration, conversion, extension, or repair of buildings, highways, or other improvements to real property.

(b) The provisions of Part II of this Order shall apply to such construction contracts, and for purposes of such application the administering department or agency shall be considered the contracting agency referred to therein.

(c) The term "applicant" as used in this Order means an applicant for Federal assistance or, as determined by agency regulation, other program participant, with respect to whom an application for any grant, contract, loan, insurance, or guarantee is not finally acted upon prior to the effective date of this Part, and it includes such an applicant after he/she becomes a recipient of such Federal assistance.

SEC. 303. The Secretary of Labor shall be responsible for obtaining the compliance of such applicants with their undertakings under this Order. Each administering department and agency is directed to cooperate with the Secretary of Labor and to furnish the Secretary such information and assistance as the Secretary may require in the performance of the Secretary's functions under this Order.

(b) In the event an applicant fails and refuses to comply with the applicant's undertakings pursuant to this Order, the Secretary of Labor may, after consulting with the administering department or agency, take any or all of the following actions: (1) direct any administering department or agency to cancel, terminate, or suspend in whole or in part the agreement, contract or other arrangement with such applicant with respect to which the failure or refusal occurred; (2) direct any administering department or agency to refrain from extending any further assistance to the applicant under the program with respect to which the failure or refusal occurred until satisfactory assurance of future compliance has been received by the Secretary of Labor from such applicant; and (3) refer the case to the Department of Justice or the Equal Employment Opportunity Commission for appropriate law

enforcement or other proceedings.

(c) In no case shall action be taken with respect to an applicant pursuant to clause (1) or (2) of subsection (b) without notice and opportunity for hearing.

[Sec. 303 amended by EO 12086 of Oct. 5, 1978, 43 FR 46501, 3 CFR, 1978 Comp., p. 230]

SEC. 304. Any executive department or agency which imposes by rule, regulation, or order requirements of nondiscrimination in employment, other than requirements imposed pursuant to this

Order, may delegate to the Secretary of Labor by agreement such responsibilities with respect to compliance standards, reports, and procedures as would tend to bring the administration of such requirements into conformity with the administration of requirements imposed under this Order: Provided, That actions to effect compliance by recipients of Federal financial assistance with requirements imposed pursuant to Title VI of the Civil Rights Act of 1964 shall be taken in conformity with the procedures and limitations prescribed in Section 602 thereof and the regulations

of the administering department or agency issued thereunder.

Part IV - Miscellaneous

SEC. 401. The Secretary of Labor may delegate to any officer, agency, or employee in the Executive branch of the Government, any function or duty of the Secretary under Parts II and III of this Order.

[Sec. 401 amended by EO 12086 of Oct. 5, 1978, 43 FR 46501, 3 CFR, 1978 Comp., p. 230]

SEC. 402. The Secretary of Labor shall provide administrative support for the execution of the program known as the "Plans for Progress."

SEC. 403. Executive Orders Nos. 10590 (January 19, 1955), 10722 (August 5, 1957), 10925 (March 6, 1961), 11114 (June 22, 1963), and 11162 (July 28, 1964), are hereby superseded and the President's Committee on Equal Employment Opportunity established by Executive Order No.

10925 is hereby abolished. All records and property in the custody of the Committee shall be transferred to the Office of Personnel Management and the Secretary of Labor, as appropriate.

(b) Nothing in this Order shall be deemed to relieve any person of any obligation assumed or imposed under or pursuant to any Executive Order superseded by this Order. All rules, regulations, orders, instructions, designations, and other directives issued by the President's Committee on Equal Employment Opportunity and those issued by the heads of various departments or agencies under or pursuant to any of the Executive orders superseded by this Order, shall, to the extent that they are

not inconsistent with this Order, remain in full force and effect unless and until revoked or superseded by appropriate authority. References in such directives to provisions of the superseded orders shall be deemed to be references to the comparable provisions of this Order.

[Sec. 403 amended by EO 12107 of Dec. 28, 1978, 44 FR 1055, 3 CFR, 1978 Comp., p, 264]

SEC. 404. The General Services Administration shall take appropriate action to revise the standard Government contract forms to accord with the provisions of this Order and of the rules and regulations of the Secretary of Labor.

SEC. 405. This Order shall become effective thirty days after the date of this Order.

**REQUIRED CONTRACT PROVISIONS
FEDERAL-AID CONSTRUCTION CONTRACTS
(REV3-10-99) (7-00)**

- I. General
- II. Nondiscrimination
- III. Nonsegregated Facilities
- IV. Payment of Predetermined Minimum Wage
- V. Statements and Payrolls
- VI. Record of Materials, Supplies, and Labor
- VII. Subletting or Assigning the Contract
- VIII. Safety: Accident Prevention
- IX. False Statements Concerning Highway Projects
- X. Implementation of Clean Air Act and Federal Water Pollution Control Act
- XI. Certification Regarding Debarment, Suspension, Ineligibility, and Voluntary Exclusion
- XII. Certification Regarding Use of Contract Funds for Lobbying

I. GENERAL

1. These Contract provisions shall apply to all work performed on the Contract by the Contractor's own organization and with the assistance of workers under the Contractor's immediate superintendence and to all work performed on the Contract by piecework, station work, or by subcontract.

2. Except as otherwise provided for in each section, the Contractor shall insert in each subcontract all of the stipulations contained in these Required Contract Provisions, and further require their inclusion in any lower tier subcontract or purchase order that may in turn be made. The Required Contract Provisions shall not be incorporated by reference in any case. The Prime Contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with these Required Contract Provisions.

3. A breach of any of the stipulations contained in these Required Contract Provisions shall be sufficient grounds for termination of the Contract.

4. A breach of the following clauses of the Required Contract Provisions may also be grounds for debarment as provided in 29 CFR 5.12:

- Section I, paragraph 2;
- Section IV, paragraphs 1, 2, 3, 4, and 7;
- Section V, paragraphs 1 and 2a through 2g.

5. Disputes arising out of the labor standards provisions of Section IV (except paragraph 5) and Section V of these Required Contract Provisions shall not be subject to the general disputes clause of this Contract. Such disputes shall be resolved in accordance with the procedures of the U.S. Department of Labor (DOL) as set forth in 29 CFR 5, 6, and 7. Disputes within the meaning of this clause include disputes between the Contractor (or any of its subcontractors) and the contracting

agency, the DOL, or the Contractor's employees or their representatives.

6. Selection of Labor: During the performance of this Contract, the Contractor shall not:

a. discriminate against labor from any other State, possession, or territory of the United States (except for employment preference for Appalachian contracts, when applicable, as specified in Attachment A), or

b. employ convict labor for any purpose within the limits of the project unless it is labor performed by convicts who are on parole, supervised release, or probation.

II. NONDISCRIMINATION

(Applicable to all Federal-aid construction Contracts and to all related subcontracts of \$10,000 or more.)

1. Equal Employment Opportunity: Equal employment opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (28 CFR 35, 29 CFR 1630 and 41 CFR 60) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140 shall constitute the EEO and specific affirmative action standards for the Contractor's project activities under this Contract. The Equal Opportunity Construction Contract Specifications set forth under 41 CFR 60-4.3 and the provisions of the American Disabilities Act of 1990 (42 U.S.C. 12101 *et seq.*) set forth under 28 CFR 35 and 29 CFR 1630 are incorporated by reference in this Contract. In the execution of this Contract, the Contractor agrees to comply with the following minimum specific requirement activities of EEO:

a. The Contractor will work with the State highway agency (SHA) and the Federal Government in carrying out EEO obligations and in their review of his/her activities under the Contract.

b. The Contractor will accept as his operating policy the following statement:

"It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, color, national origin, age or disability. Such action shall include: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship, preapprenticeship, and/or on-the-job training."

2. EEO Officer: The Contractor will designate and make known to the SHA contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active Contractor program of EEO and who must be assigned adequate authority and responsibility to do so.

3. Dissemination of Policy: All members of the Contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action, or who are substantially involved in such action, will be made fully cognizant of, and will implement, the Contractor's EEO policy and Contractual responsibilities to provide EEO in each grade and

classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:

a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer.

b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the Contractor.

c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the Contractor's procedures for locating and hiring minority group employees.

d. Notices and posters setting forth the Contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.

e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.

4. **Recruitment:** When advertising for employees, the Contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minority groups in the area from which the project work force would normally be derived.

a. The Contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minority group applicants. To meet this requirement, the contractor will identify sources of potential minority group employees, and establish with such identified sources procedures whereby minority group applicants may be referred to the Contractor for employment consideration.

b. In the event the Contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, he is expected to observe the provisions of that agreement to the extent that the system permits the contractor's compliance with EEO Contract provisions. (The DOL has held that where implementation of such agreements have the effect of discriminating against minorities or women, or obligates the Contractor to do the same, such implementation violates Executive Order 11246, as amended.)

c. The Contractor will encourage his present employees to refer minority group applicants for employment. Information and procedures with regard to referring minority group applicants will be discussed with employees.

5. **Personnel Actions:** Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, national origin, age or disability. The following procedures shall be followed:

a. The Contractor will conduct periodic inspections of project sites to insure that working

conditions and employee facilities do not indicate discriminatory treatment of project site personnel.

b. The Contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.

c. The Contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the Contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.

d. The Contractor will promptly investigate all complaints of alleged discrimination made to the Contractor in connection with his obligations under this Contract, will attempt to resolve such complaints, and will take appropriate corrective action within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the Contractor will inform every complainant of all of his avenues of appeal.

6. Training and Promotion:

a. The contractor will assist in locating, qualifying, and increasing the skills of minority group and women employees, and applicants for employment.

b. Consistent with the Contractor's work force requirements and as permissible under Federal and State regulations, the Contractor shall make full use of training programs, i.e., apprenticeship, and on-the-job training programs for the geographical area of contract performance. Where feasible, 25 percent of apprentices or trainees in each occupation shall be in their first year of apprenticeship or training. In the event a special provision for training is provided under this Contract, this subparagraph will be superseded as indicated in the special provision.

c. The Contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.

d. The Contractor will periodically review the training and promotion potential of minority group and women employees and will encourage eligible employees to apply for such training and promotion.

7. Unions: If the Contractor relies in whole or in part upon unions as a source of employees, the Contractor will use his/her best efforts to obtain the cooperation of such unions to increase opportunities for minority groups and women within the unions, and to effect referrals by such unions of minority and female employees. Actions by the Contractor either directly or through a Contractor's association acting as agent will include the procedures set forth below:

a. The Contractor will use best efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minority group members and women for membership in the unions and increasing the skills of minority group employees and women so that they may qualify for higher paying employment.

b. The Contractor will use best efforts to incorporate an EEO clause into each union agreement

to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, national origin, age or disability.

c. The Contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the Contractor, the Contractor shall so certify to the SHA and shall set forth what efforts have been made to obtain such information.

d. In the event the union is unable to provide the Contractor with a reasonable flow of minority and women referrals within the time limit set forth in the collective bargaining agreement, the Contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, national origin, age or disability; making full efforts to obtain qualified and/or qualifiable minority group persons and women. (The DOL has held that it shall be no excuse that the union with which the Contractor has a collective bargaining agreement providing for exclusive referral failed to refer minority employees.) In the event the union referral practice prevents the Contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these Specifications, such Contractor shall immediately notify the SHA.

8. Selection of Subcontractors, Procurement of Materials and Leasing of Equipment: The Contractor shall not discriminate on the grounds of race, color, religion, sex, national origin, age or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment.

a. The Contractor shall notify all potential subcontractors and suppliers of his/her EEO obligations under this Contract.

b. Disadvantaged business enterprises (DBE), as defined in 49 CFR 23, shall have equal opportunity to compete for and perform subcontracts which the Contractor enters into pursuant to this Contract. The Contractor will use his best efforts to solicit bids from and to utilize DBE subcontractors or subcontractors with meaningful minority group and female representation among their employees. Contractors shall obtain lists of DBE construction firms from SHA personnel.

c. The Contractor will use his best efforts to ensure subcontractor compliance with their EEO obligations.

9. Records and Reports: The Contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of 3 years following completion of the Contract work and shall be available at reasonable times and places for inspection by authorized representatives of the SHA and the FHWA.

a. The records kept by the Contractor shall document the following:

(1) The number of minority and non-minority group members and women employed in each work classification on the project;

(2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women;

(3) The progress and efforts being made in locating, hiring, training, qualifying, and

upgrading minority and female employees; and

(4) The progress and efforts being made in securing the services of DBE subcontractors or subcontractors with meaningful minority and female representation among their employees.

b. The Contractors will submit an annual report to the SHA each July for the duration of the project, indicating the number of minority, women, and nonminority group employees currently engaged in each work classification required by the Contract work. This information is to be reported on Form FHWA-1391. If on-the-job training is being required by special provision, the Contractor will be required to collect and report training data.

III. NONSEGREGATED FACILITIES

(Applicable to all Federal-aid construction Contracts and to all related subcontracts of \$10,000 or more.)

a. By submission of this bid, the execution of this Contract or subcontract, or the consummation of this material supply agreement or purchase order, as appropriate, the bidder, Federal-aid construction Contractor, subcontractor, material supplier, or vendor, as appropriate, certifies that the firm does not maintain or provide for its employees any segregated facilities at any of its establishments, and that the firm does not permit its employees to perform their services at any location, under its control, where segregated facilities are maintained. The firm agrees that a breach of this certification is a violation of the EEO provisions of this Contract. The firm further certifies that no employee will be denied access to adequate facilities on the basis of sex or disability.

b. As used in this certification, the term "segregated facilities" means any waiting rooms, work areas, restrooms and washrooms, restaurants and other eating areas, timeclocks, locker rooms, and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees which are segregated by explicit directive, or are, in fact, segregated on the basis of race, color, religion, national origin, age or disability, because of habit, local custom, or otherwise. The only exception will be for the disabled when the demands for accessibility override (e.g. disabled parking).

c. The Contractor agrees that it has obtained or will obtain identical certification from proposed subcontractors or material suppliers prior to award of subcontracts or consummation of material supply agreements of \$10,000 or more and that it will retain such certifications in its files.

IV. PAYMENT OF PREDETERMINED MINIMUM WAGE

(Applicable to all Federal-aid construction Contracts exceeding \$2,000 and to all related subcontracts, except for projects located on roadways classified as local roads or rural minor collectors, which are exempt.)

1. General:

a. All mechanics and laborers employed or working upon the site of the work will be paid unconditionally and not less often than once a week and without subsequent deduction or rebate on any account [except such payroll deductions as are permitted by regulations (29 CFR 3) issued by

the Secretary of Labor under the Copeland Act (40 U.S.C. 276c)] the full amounts of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment. The payment shall be computed at wage rates not less than those contained in the wage determination of the Secretary of Labor (hereinafter "the wage determination") which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the Contractor or its subcontractors and such laborers and mechanics. The wage determination (including any additional classifications and wage rates conformed under paragraph 2 of this Section IV and the DOL poster (WH-1321) or Form FHWA-1495) shall be posted at all times by the Contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers. For the purpose of this Section, contributions made or costs reasonably anticipated for bona fide fringe benefits under Section 1(b)(2) of the Davis-Bacon Act (40 U.S.C. 276a) on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of Section IV, paragraph 3b, hereof. Also, for the purpose of this Section, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs, which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in paragraphs 4 and 5 of this Section IV.

b. Laborers or mechanics performing work in more than 1 classification may be compensated at the rate specified for each classification for the time actually worked therein, provided, that the employer's payroll records accurately set forth the time spent in each classification in which work is performed.

c. All rulings and interpretations of the Davis-Bacon Act and related acts contained in 29 CFR 1, 3, and 5 are herein incorporated by reference in this Contract.

2. Classification:

a. The SHA Contracting officer shall require that any class of laborers or mechanics employed under the Contract, which is not listed in the wage determination, shall be classified in conformance with the wage determination.

b. The Contracting officer shall approve an additional classification, wage rate and fringe benefits only when the following criteria have been met:

(1) the work to be performed by the additional classification requested is not performed by a classification in the wage determination;

(2) the additional classification is utilized in the area by the construction industry;

(3) the proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination; and

(4) with respect to helpers, when such a classification prevails in the area in which the work is performed.

c. If the Contractor or subcontractors, as appropriate, the laborers and mechanics (if known) to be employed in the additional classification or their representatives, and the Contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the Contracting officer to the DOL, Administrator of the Wage and Hour Division, Employment Standards Administration, Washington, D.C. 20210. The Wage and Hour Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the Contracting officer or will notify the Contracting officer within the 30-day period that additional time is necessary.

d. In the event the Contractor or subcontractors, as appropriate, the laborers or mechanics to be employed in the additional classification or their representatives, and the Contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the Contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the Contracting officer, to the Wage and Hour Administrator for determination. Said Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the Contracting officer or will notify the Contracting officer within the 30-day period that additional time is necessary.

e. The wage rate (including fringe benefits where appropriate) determined pursuant to paragraph 2c or 2d of this Section IV shall be paid to all workers performing work in the additional classification from the first day on which work is performed in the classification.

3. Payment of Fringe Benefits:

a. Whenever the minimum wage rate prescribed in the Contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the Contractor or subcontractors, as appropriate, shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly case equivalent thereof.

b. If the Contractor or subcontractor, as appropriate, does not make payments to a trustee or other third person, he/she may consider as a part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, provided, that the Secretary of Labor has found, upon the written request of the Contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the Contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

4. Apprentices and Trainees (Programs of the U.S. DOL) and Helpers:

a. Apprentices:

(1) Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the DOL, Employment and Training Administration, Bureau of Apprenticeship and Training, or with a State apprenticeship agency recognized by the Bureau, or if a person is employed in his/her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been

certified by the Bureau of Apprenticeship and Training or a State apprenticeship agency (where appropriate) to be eligible for probationary employment as an apprentice.

(2) The allowable ratio of apprentices to journeyman-level employees on the job site in any craft classification shall not be greater than the ratio permitted to the Contractor as to the entire work force under the registered program. Any employee listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate listed in the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a Contractor or subcontractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman-level hourly rate) specified in the Contractor's or subcontractor's registered program shall be observed.

(3) Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeyman-level hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator for the Wage and Hour Division determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination.

(4) In the event the Bureau of Apprenticeship and Training, or a State apprenticeship agency recognized by the Bureau, withdraws approval of an apprenticeship program, the Contractor or subcontractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the comparable work performed by regular employees until an acceptable program is approved.

b. Trainees:

(1) Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the DOL, Employment and Training Administration.

(2) The ratio of trainees to journeyman-level employees on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed.

(3) Every trainee must be paid at not less than the rate specified in the approved program for his/her level of progress, expressed as a percentage of the journeyman-level hourly rate specified in

the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman-level wage rate on the wage determination which provides for less than full fringe benefits for apprentices, in which case such trainees shall receive the same fringe benefits as apprentices.

(4) In the event the Employment and Training Administration withdraws approval of a training program, the Contractor or subcontractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

c. Helpers:

Helpers will be permitted to work on a project if the helper classification is specified and defined on the applicable wage determination or is approved pursuant to the conformance procedure set forth in Section IV.2. Any worker listed on a payroll at a helper wage rate, who is not a helper under an approved definition, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed.

5. Apprentices and Trainees (Programs of the U.S. DOT):

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeymen shall not be greater than permitted by the terms of the particular program.

6. Withholding:

The SHA shall upon its own action or upon written request of an authorized representative of the DOL withhold, or cause to be withheld, from the Contractor or subcontractor under this Contract or any other Federal Contract with the same Prime Contractor, or any other Federally-assisted Contract subject to Davis-Bacon prevailing wage requirements which is held by the same Prime Contractor, as much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the Contractor or any subcontractor the full amount of wages required by the Contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the Contract, the SHA Contracting officer may, after written notice to the Contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

7. Overtime Requirements:

No Contractor or subcontractor contracting for any part of the Contract work which may require or involve the employment of laborers, mechanics, watchmen, or guards (including

apprentices, trainees, and helpers described in paragraphs 4 and 5 above) shall require or permit any laborer, mechanic, watchman, or guard in any workweek in which he/she is employed on such work, to work in excess of 40 hours in such workweek unless such laborer, mechanic, watchman, or guard receives compensation at a rate not less than one-and-one-half times his/her basic rate of pay for all hours worked in excess of 40 hours in such workweek.

8. Violation:

Liability for Unpaid Wages; Liquidated Damages: In the event of any violation of the clause set forth in paragraph 7 above, the Contractor and any subcontractor responsible thereof shall be liable to the affected employee for his/her unpaid wages. In addition, such Contractor and subcontractor shall be liable to the United States (in the case of work done under Contract for the District of Columbia or a territory, to such District or to such territory) for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer, mechanic, watchman, or guard employed in violation of the clause set forth in paragraph 7, in the sum of \$10 for each calendar day on which such employee was required or permitted to work in excess of the standard work week of 40 hours without payment of the overtime wages required by the clause set forth in paragraph 7.

9. Withholding for Unpaid Wages and Liquidated Damages:

The SHA shall upon its own action or upon written request of any authorized representative of the DOL withhold, or cause to be withheld, from any monies payable on account of work performed by the Contractor or subcontractor under any such Contract or any other Federal Contract with the same Prime Contractor, or any other Federally-assisted Contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same Prime Contractor, such sums as may be determined to be necessary to satisfy any liabilities of such Contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in paragraph 8 above.

V. STATEMENTS AND PAYROLLS

(Applicable to all Federal-aid construction Contracts exceeding \$2,000 and to all related subcontracts, except for projects located on roadways classified as local roads or rural collectors, which are exempt.)

1. Compliance with Copeland Regulations (29 CFR 3):

The Contractor shall comply with the Copeland Regulations of the Secretary of Labor which are herein incorporated by reference.

2. Payrolls and Payroll Records:

a. Payrolls and basic records relating thereto shall be maintained by the Contractor and each subcontractor during the course of the work and preserved for a period of 3 years from the date of completion of the Contract for all laborers, mechanics, apprentices, trainees, watchmen, helpers, and guards working at the site of the work.

b. The payroll records shall contain the name, social security number, and address of each such employee; his or her correct classification; hourly rates of wages paid (including rates of

contributions or costs anticipated for bona fide fringe benefits or cash equivalent thereof the types described in Section 1(b)(2)(B) of the Davis Bacon Act); daily and weekly number of hours worked; deductions made; and actual wages paid. In addition, for Appalachian Contracts, the payroll records shall contain a notation indicating whether the employee does, or does not, normally reside in the labor area as defined in Attachment A, paragraph 1. Whenever the Secretary of Labor, pursuant to Section IV, paragraph 3b, has found that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in Section 1(b)(2)(B) of the Davis Bacon Act, the Contractor and each subcontractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, that the plan or program has been communicated in writing to the laborers or mechanics affected, and show the cost anticipated or the actual cost incurred in providing benefits. Contractors or subcontractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprentices and trainees, and ratios and wage rates prescribed in the applicable programs.

c. Each Contractor and subcontractor shall furnish, each week in which any contract work is performed, to the SHA resident engineer a payroll of wages paid each of its employees (including apprentices, trainees, and helpers, described in Section IV, paragraphs 4 and 5, and watchmen and guards engaged on work during the preceding weekly payroll period). The payroll submitted shall set out accurately and completely all of the information required to be maintained under paragraph 2b of this Section V. This information may be submitted in any form desired. Optional Form WH-347 is available for this purpose and may be purchased from the Superintendent of Documents (Federal stock number 029-005-0014-1), U.S. Government Printing Office, Washington, D.C. 20402. The Prime Contractor is responsible for the submission of copies of payrolls by all subcontractors.

d. Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the Contractor or subcontractor or his/her agent who pays or supervises the payment of the persons employed under the Contract and shall certify the following:

(1) that the payroll for the payroll period contains the information required to be maintained under paragraph 2b of this Section V and that such information is correct and complete;

(2) that such laborer or mechanic (including each helper, apprentice, and trainee) employed on the Contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in the Regulations, 29 CFR 3;

(3) that each laborer or mechanic has been paid not less than the applicable wage rate and fringe benefits or cash equivalent for the classification of work performed, as specified in the applicable wage determination incorporated into the Contract.

e. The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 2d of this Section V.

f. The falsification of any of the above certifications may subject the Contractor to civil or criminal prosecution under 18 U.S.C. 1001 and 31 U.S.C. 231.

g. The Contractor or subcontractor shall make the records required under paragraph 2b of this Section V available for inspection, copying, or transcription by authorized representatives of the SHA, the FHWA, or the DOL, and shall permit such representatives to interview employees during working hours on the job. If the Contractor or subcontractor fails to submit the required records or to make them available, the SHA, the FHWA, the DOL, or all may, after written notice to the Contractor, sponsor, applicant, or owner, take such actions as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

VI. RECORD OF MATERIALS, SUPPLIES, AND LABOR

1. On all Federal-aid Contracts on the National Highway System, except those which provide solely for the installation of protective devices at railroad grade crossings, those which are constructed on a force account or direct labor basis, highway beautification Contracts, and Contracts for which the total final construction cost for roadway and bridge is less than \$1,000,000 (23 CFR 635) the Contractor shall:

a. Become familiar with the list of specific materials and supplies contained in Form FHWA-47, "Statement of Materials and Labor Used by Contractor of Highway Construction Involving Federal Funds," prior to the commencement of work under this Contract.

b. Maintain a record of the total cost of all materials and supplies purchased for and incorporated in the work, and also of the quantities of those specific materials and supplies listed on Form FHWA-47, and in the units shown on Form FHWA-47.

c. Furnish, upon the completion of the Contract, to the SHA resident engineer on Form FHWA-47 together with the data required in paragraph 1b relative to materials and supplies, a final labor summary of all contract work indicating the total hours worked and the total amount earned.

2. At the Prime Contractor's option, either a single report covering all Contract work or separate reports for the Contractor and for each subcontract shall be submitted.

VII. SUBLETTING OR ASSIGNING THE CONTRACT

1. The Contractor shall perform with its own organization Contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the Contract) of the total original Contract price, excluding any specialty items designated by the State. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original Contract price before computing the amount of work required to be performed by the Contractor's own organization (23 CFR 635).

a. "Its own organization" shall be construed to include only workers employed and paid directly by the Prime Contractor and equipment owned or rented by the Prime Contractor, with or without operators. Such term does not include employees or equipment of a subcontractor, assignee, or agent of the Prime Contractor.

b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of Contracting organizations qualified and expected to bid on the Contract as a whole and in general are to be limited to minor components of the overall Contract.

2. The Contract amount upon which the requirements set forth in paragraph 1 of Section VII is computed includes the cost of material and manufactured products which are to be purchased or produced by the Contractor under the Contract provisions.

3. The Contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the Contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the SHA contracting officer determines is necessary to assure the performance of the Contract.

4. No portion of the Contract shall be sublet, assigned or otherwise disposed of except with the written consent of the SHA contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the Contractor of any responsibility for the fulfillment of the Contract. Written consent will be given only after the SHA has assured that each subcontract is evidenced in writing and that it contains all pertinent provisions and requirements of the Prime Contract.

VIII. SAFETY: ACCIDENT PREVENTION

1. In the performance of this Contract the Contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR 635). The Contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the SHA contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the Contract.

2. It is a condition of this Contract, and shall be made a condition of each subcontract, which the Contractor enters into pursuant to this Contract, that the Contractor and any subcontractor shall not permit any employee, in performance of the Contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29 CFR 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 333).

3. Pursuant to 29 CFR 1926.3, it is a condition of this Contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of Contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 333).

IX. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

In order to assure high quality and durable construction in conformity with approved plans and

specifications and a high degree of reliability on statements and representations made by Engineers, Contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, the following notice shall be posted on each Federal-aid highway project (23 CFR 635) in 1 or more places where it is readily available to all persons concerned with the project:

NOTICE TO ALL PERSONNEL ENGAGED ON FEDERAL-AID HIGHWAY PROJECTS

18 U.S.C. 1020 reads as follows:

"Whoever, being an officer, agent, or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or

Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 1, 1916, (39 Stat. 355), as amended and supplemented;

Shall be fined not more than \$10,000 or imprisoned not more than 5 years or both."

X. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT

(Applicable to all Federal-aid construction contracts and to all related subcontracts of \$100,000 or more.)

By submission of this bid or the execution of this Contract, or subcontract, as appropriate, the bidder, Federal-aid construction Contractor, or subcontractor, as appropriate, will be deemed to have stipulated as follows:

1. That any facility that is or will be utilized in the performance of this contract, unless such contract is exempt under the Clean Air Act, as amended (42 U.S.C. 1857 et seq., as amended by Pub.L. 91-604), and under the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251 et seq., as amended by Pub.L. 92-500), Executive Order 11738, and regulations in implementation thereof (40 CFR 15) is not listed, on the date of Contract award, on the U.S. Environmental Protection Agency (EPA) List of Violating Facilities pursuant to 40 CFR 15.20.

2. That the firm agrees to comply and remain in compliance with all the requirements of Section 114 of the Clean Air Act and Section 308 of the Federal Water Pollution Control Act and all regulations

and guidelines listed thereunder.

3. That the firm shall promptly notify the SHA of the receipt of any communication from the Director, Office of Federal Activities, EPA, indicating that a facility that is or will be utilized for the contract is under consideration to be listed on the EPA List of Violating Facilities.

4. That the firm agrees to include or cause to be included the requirements of paragraph 1 through 4 of this Section X in every nonexempt subcontract, and further agrees to take such action as the government may direct as a means of enforcing such requirements.

XI. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION

1. Instructions for Certification - Primary Covered Transactions:

(Applicable to all Federal-aid contracts - 49 CFR 29)

a. By signing and submitting this proposal, the prospective primary participant is providing the certification set out below.

b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this covered transaction. The prospective participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective primary participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction.

c. The certification in this clause is a material representation of fact upon which reliance was placed when the department or agency determined to enter into this transaction. If it is later determined that the prospective primary participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause of default.

d. The prospective primary participant shall provide immediate written notice to the department or agency to whom this proposal is submitted if any time the prospective primary participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

e. The terms "covered transaction," "debarred," "suspended," "ineligible," "lower tier covered transaction," "participant," "person," "primary covered transaction," "principal," "proposal," and "voluntarily excluded," as used in this clause, have the meanings set out in the Definitions and Coverage sections of rules implementing Executive Order 12549. You may contact the department or agency to which this proposal is submitted for assistance in obtaining a copy of those regulations.

f. The prospective primary participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction.

g. The prospective primary participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," provided by the department or agency entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.

h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the nonprocurement portion of the "Lists of Parties Excluded From Federal Procurement or Nonprocurement Programs" (Nonprocurement List) which is compiled by the General Services Administration.

i. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

j. Except for transactions authorized under paragraph f of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.

* * * * *

**Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--
Primary Covered Transactions**

1. The prospective primary participant certifies to the best of its knowledge and belief, that it and its principals:

a. Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;

b. Have not within a 3-year period preceding this proposal been convicted of or had a civil judgement rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or Contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;

c. Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph 1b of this certification; and

d. Have not within a 3-year period preceding this application/proposal had 1 or more public transactions (Federal, State or local) terminated for cause or default.

2. Where the prospective primary participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

* * * * *

2. Instructions for Certification - Lower Tier Covered Transactions:

(Applicable to all subcontracts, purchase orders and other lower tier transactions of \$25,000 or more - 49 CFR 29)

a. By signing and submitting this proposal, the prospective lower tier is providing the certification set out below.

b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances.

d. The terms "covered transaction," "debarred," "suspended," "ineligible," "primary covered transaction," "participant," "person," "principal," "proposal," and "voluntarily excluded," as used in this clause, have the meanings set out in the Definitions and Coverage sections of rules implementing Executive Order 12549. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations.

e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.

f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.

g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the Nonprocurement List.

h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

* * * * *

**Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--
Lower Tier Covered Transactions:**

1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency.

2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

* * * * *

XII. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

(Applicable to all Federal-aid construction Contracts and to all related subcontracts which exceed \$100,000 - 49 CFR 20)

1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal Contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal Contract, grant, loan, or cooperative agreement.

b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal Contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

EXHIBIT D

2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

3. The prospective participant also agrees by submitting his or her bid or proposal that he or she shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.

**EQUAL EMPLOYMENT OPPORTUNITY REQUIREMENTS FOR FEDERAL JOBS.
(REV 5-13-04) (FA 5-20-04) (1-05)**

SUBARTICLE 7-1.1 (Pages 60 and 61) is expanded by the following:

The FHWA-1273 Electronic version, dated March 10, 1994 is posted on the Department's website at the following URL address www.dot.state.fl.us/specificationsoffice/federal/df1273.pdf . Take responsibility to obtain this information and comply with all requirements posted on this website up through five calendar days before the opening of bids.

Comply with the provisions contained in FHWA-1273 and certify monthly compliance with the EEO provisions of FHWA-1273 (Section II. Nondiscrimination and Section III. Nonsegregated Facilities).

If the Department's website cannot be accessed, contact the Department's Specifications Office Web Coordinator at (850) 414-4113.

SECTION 6

CONTROL OF MATERIALS

6-12 Products and Source of Supply.

6-12.2 Source of Supply-Steel (Federal-Aid Contracts Only): For Federal-aid Contracts, only use steel and iron produced in the United States, in accordance with the Buy America provisions of 23 CFR 635.410, as amended. Ensure that all manufacturing processes for this material occur in the United States. As used in this specification, a manufacturing process is any process that modifies the chemical content, physical shape or size, or final finish of a product, beginning with the initial melting and mixing and continuing through the bending and coating stages. A manufactured steel or iron product is complete only when all grinding, drilling, welding, finishing and coating have been completed. If a domestic product is taken outside the United States for any process, it becomes foreign source material. When using steel and iron as a component of any manufactured product incorporated into the project (e.g., concrete pipe, prestressed beams, corrugated steel pipe, etc.), these same provisions apply, except that the manufacturer may use minimal quantities of foreign steel and iron when the cost of such foreign materials does not exceed 0.1% of the total Contract amount or \$2,500, whichever is greater. These requirements are applicable to all steel and iron materials incorporated into the finished work, but are not applicable to steel and iron items that the Contractor uses but does not incorporate into the finished work. Provide a certification from the producer of steel or iron, or any product containing steel or iron as a component, stating that all steel or iron furnished or incorporated into the furnished product was manufactured in the United States in accordance with the requirements of this specification and the Buy America provisions of 23 CFR 635.410, as amended. Such certification shall also include (1) a statement that the product was produced entirely within the United States, or (2) a statement that the product was produced within the United States except for minimal quantities of foreign steel and iron valued at \$ (actual value). Furnish each such certification to the Engineer prior to incorporating the material into the project. When FHWA allows the use of foreign steel on a project, furnish invoices to document the cost of such material, and obtain the Engineer's written approval prior to incorporating the material into the project.