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**IFB NO. Y18-712-RC**

**INVITATION FOR BIDS**

**FOR**

**WALLACE ROAD AND DR. PHILLIPS BOULEVARD INTERSECTION  
IMPROVEMENTS (FPID: 435587-1-58-01 FAN: D517-119-B)**

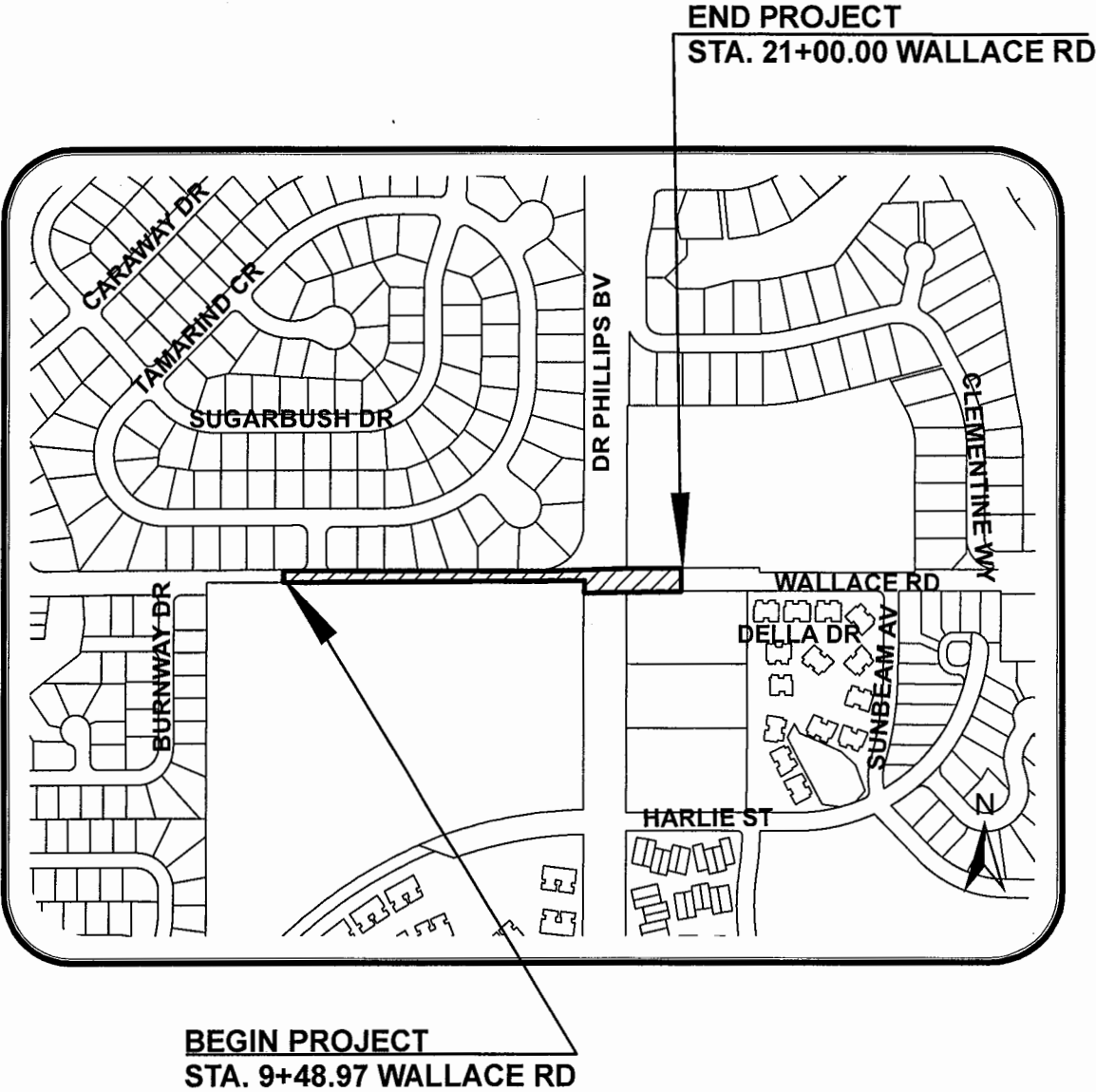
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**VOLUME II**

**PART H**

**WALLACE RD AT DR PHILLIPS BLVD  
INTERSECTION IMPROVEMENTS  
PROJECT**

**LOCATION MAP**





## **SOUTH FLORIDA WATER MANAGEMENT DISTRICT**

Regulation Division

June 9, 2015

Mr. Luis Alvan  
Orange County Public Works  
4200 S. John Young Parkway  
Orlando, FL 32839-9205

**Subject: Exemption for Wallace Road Intersection Improvements  
Application No. 150410-9,  
Exemption No. 48-02427-P  
Orange County**

Dear Mr. Alvan:

The South Florida Water Management District (District) has reviewed the information submitted and has determined that the proposed project is exempt from the requirement to obtain an Environmental Resource Permit, pursuant to rule 62-330.051, Florida Administrative Code.

Activities which qualify for this exemption must be conducted and operated using appropriate best management practices and in a manner which does not cause or contribute to a water quality violation pursuant to Chapters 62-302 or 62-4, Florida Administrative Code.

This letter does not relieve you from the responsibility of obtaining other permits (federal, state or local) which may be required for the project.

The determination that this project qualifies as an exempt activity may be revoked if the installation is substantially modified, if the basis for the exemption is determined to be materially incorrect, or if the installation results in violation of state water quality standards. Any changes made in the construction plans or location of the project may necessitate a permit from the District. Therefore, you are advised to contact the District before beginning the project and before beginning any work in wetlands which is not specifically described in the submittal.

The notice of determination that the project qualifies as an exempt activity constitutes final agency action by the District unless a petition for administrative hearing is filed. Upon timely filing of a petition, this Notice will not be effective until further Order of the District.

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DISTRICT HEADQUARTERS: 3301 Gun Club Road, West Palm Beach, Florida 33406 • (561) 686-8800 • (800) 432-2045

Mailing Address: PO BOX 24680 West Palm Beach FL, 33416-4680

LOWER WEST COAST SERVICE CENTER: 2301 McGregor Boulevard, Fort Myers, FL 33901 • (239) 338-2929 • (800) 248-1201

OKEECHOBEE SERVICE CENTER: 3800 N.W. 16<sup>th</sup> Blvd, Suite A, Okeechobee, FL 34972 • (863) 462-5260 • (800) 250-4200

ORLANDO SERVICE CENTER: 1707 Orlando Central Parkway, Suite 200, Orlando FL 32809 • (407) 858-6100 • (800) 250-4250

**sfwmd.gov**

Mr. Luis Alvan

Wallace Road Intersection Improvements, Application No. 150410-9

June 9, 2015

Page 2

Should you have any questions concerning this matter, please contact this office.

Sincerely,



Charles R. Walter, P.G.  
Service Center Administrator  
South Florida Water Management District

CW/cb

Enclosure

cc: Mr. Claude Cassagnol  
GTC Engineering Corporation  
98 S. Semoran Blvd.  
Orlando, FL 32807

## NOTICE OF RIGHTS

As required by Sections 120.569(1), and 120.60(3), Fla. Stat., the following is notice of the opportunities which may be available for administrative hearing or judicial review when the substantial interests of a party are determined by an agency. Please note that this Notice of Rights is not intended to provide legal advice. Not all the legal proceedings detailed below may be an applicable or appropriate remedy. You may wish to consult an attorney regarding your legal rights.

### **RIGHT TO REQUEST ADMINISTRATIVE HEARING**

A person whose substantial interests are or may be affected by the South Florida Water Management District's (SFWMD or District) action has the right to request an administrative hearing on that action pursuant to Sections 120.569 and 120.57, Fla. Stat. Persons seeking a hearing on a SFWMD decision which does or may affect their substantial interests shall file a petition for hearing with the District Clerk within 21 days of receipt of written notice of the decision, unless one of the following shorter time periods apply: 1) within 14 days of the notice of consolidated intent to grant or deny concurrently reviewed applications for environmental resource permits and use of sovereign submerged lands pursuant to Section 373.427, Fla. Stat.; or 2) within 14 days of service of an Administrative Order pursuant to Subsection 373.119(1), Fla. Stat. "Receipt of written notice of agency decision" means receipt of either written notice through mail, electronic mail, or posting that the SFWMD has or intends to take final agency action, or publication of notice that the SFWMD has or intends to take final agency action. Any person who receives written notice of a SFWMD decision and fails to file a written request for hearing within the timeframe described above waives the right to request a hearing on that decision.

### **FILING INSTRUCTIONS**

The Petition must be filed with the Office of the District Clerk of the SFWMD. Filings with the District Clerk may be made by mail, hand-delivery, or e-mail. **Filings by facsimile will not be accepted after October 1, 2014.** A petition for administrative hearing or other document is deemed filed upon receipt during normal business hours by the District Clerk at SFWMD headquarters in West Palm Beach, Florida. Any document received by the office of the District Clerk after 5:00 p.m. shall be filed as of 8:00 a.m. on the next regular business day. Additional filing instructions are as follows:

- Filings by mail must be addressed to the Office of the District Clerk, P.O. Box 24680, West Palm Beach, Florida 33416.
- Filings by hand-delivery must be delivered to the Office of the District Clerk. **Delivery of a petition to the SFWMD's security desk does not constitute filing. To ensure proper filing, it will be necessary to request the SFWMD's security officer to contact the Clerk's office.** An employee of the SFWMD's Clerk's office will receive and file the petition.
- Filings by e-mail must be transmitted to the District Clerk's Office at [clerk@sfwmd.gov](mailto:clerk@sfwmd.gov). The filing date for a document transmitted by electronic mail shall be the date the District Clerk receives the complete document. A party who files a document by e-mail shall (1) represent that the original physically signed document will be retained by that party for the duration of the proceeding and of any subsequent appeal or subsequent proceeding in that cause and that the party shall produce it upon the request of other parties; and (2) be responsible for any delay, disruption, or interruption of the electronic signals and accepts the full risk that the document may not be properly filed.

## **INITIATION OF AN ADMINISTRATIVE HEARING**

Pursuant to Rules 28-106.201 and 28-106.301, Fla. Admin. Code, initiation of an administrative hearing shall be made by written petition to the SFWMD in legible form and on 8 and 1/2 by 11 inch white paper. All petitions shall contain:

1. Identification of the action being contested, including the permit number, application number, SFWMD file number or any other SFWMD identification number, if known.
2. The name, address and telephone number of the petitioner and petitioner's representative, if any.
3. An explanation of how the petitioner's substantial interests will be affected by the agency decision.
4. A statement of when and how the petitioner received notice of the SFWMD's decision.
5. A statement of all disputed issues of material fact. If there are none, the petition must so indicate.
6. A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the SFWMD's proposed action.
7. A statement of the specific rules or statutes the petitioner contends require reversal or modification of the SFWMD's proposed action.
8. If disputed issues of material fact exist, the statement must also include an explanation of how the alleged facts relate to the specific rules or statutes.
9. A statement of the relief sought by the petitioner, stating precisely the action the petitioner wishes the SFWMD to take with respect to the SFWMD's proposed action.

A person may file a request for an extension of time for filing a petition. The SFWMD may, for good cause, grant the request. Requests for extension of time must be filed with the SFWMD prior to the deadline for filing a petition for hearing. Such requests for extension shall contain a certificate that the moving party has consulted with all other parties concerning the extension and that the SFWMD and any other parties agree to or oppose the extension. A timely request for extension of time shall toll the running of the time period for filing a petition until the request is acted upon.

~~If the SFWMD takes action with substantially different impacts on water resources from the notice of intended agency decision, the persons who may be substantially affected shall have an additional point of entry pursuant to Rule 28-106.111, Fla. Admin. Code, unless otherwise provided by law.~~

## **MEDIATION**

The procedures for pursuing mediation are set forth in Section 120.573, Fla. Stat., and Rules 28-106.111 and 28-106.401-.405, Fla. Admin. Code. The SFWMD is not proposing mediation for this agency action under Section 120.573, Fla. Stat., at this time.

## **RIGHT TO SEEK JUDICIAL REVIEW**

Pursuant to Sections 120.60(3) and 120.68, Fla. Stat., a party who is adversely affected by final SFWMD action may seek judicial review of the SFWMD's final decision by filing a notice of appeal pursuant to Florida Rule of Appellate Procedure 9.110 in the Fourth District Court of Appeal or in the appellate district where a party resides and filing a second copy of the notice with the District Clerk within 30 days of rendering of the final SFWMD action.



# STORMWATER POLLUTION PREVENTION PLAN

**Project: Wallace Road at Dr. Phillips Boulevard  
Intersection Improvements**

Prepared by:

GTC Engineering Corporation

98 South Semoran Blvd., Orlando, FL 32807

Claude L. Cassagnol, P.E.

Professional Engineer

Fla. Reg. No 0035490

**I. PROJECT IDENTIFICATION**

a. Project Name:

Wallace Road at Dr. Phillips Boulevard Intersection Improvements  
Orange County, Florida

Contractor:

Name \_\_\_\_\_  
Mailing Address \_\_\_\_\_  
Telephone No. \_\_\_\_\_  
Fax No. \_\_\_\_\_  
Contact Person / Agent \_\_\_\_\_

b. Applicable Regulatory Agencies:

**Orange County Environmental Protection Division (OCEPD)**  
800 Mercy Drive, Suite 4  
Orlando, FL 32808  
Contact: Dan Homblette (407) 836-1490

**Florida Department of Environmental Protection (FDEP)**  
Twin Towers Office Building  
2600 Blair Stone Road, MS 2500  
Tallahassee, FL 32399-2400  
(850) 245-7522



## II. SITE DESCRIPTION

### A. Nature of Construction Activities

This Project entails proposed improvements along Wallace Road (a 2-lane roadway with an rural typical section) consisting of adding an eastbound right turn lane onto Dr. Phillips Boulevard, and a westbound left turn lane into the YMCA, and associated stormwater treatment facilities. The Project length is 1151 ft. (0.22 miles) of new construction/reconstruction/pavement & drainage improvements, located in Orange County, Sections 26, 27, T 23 S, R 28 E. The project will be constructed within the public right-of-way and maintenance or construction easements.

The Stormwater Management Systems will consist of collecting stormwater runoff via curb inlets, roadside swales and ditch bottom inlets and conveying it to existing swales along the roadways.

### B. Major Soil Disturbing Activities

Soil disturbing activities will generally be associated with clearing and grubbing of the site, placement of embankment for roadway construction, construction of the stormwater conveyance system, and excavation of the stormwater treatment facilities.

The roadway construction, stormwater conveyance system, and stormwater treatment facilities will be constructed in phases to limit the amount of exposed soil on the project.

The proposed storm water treatment facilities shall be excavated, graded, shaped and dressed to the greatest extent possible prior to any roadway construction. The Contractor shall stabilize, seed and mulch, and sod disturbed areas as construction activities progress to limit the amount of erosion, and fugitive soils leaving the site. After completion of the roadway construction and stormwater conveyance system, the proposed stormwater treatment facilities shall be cleaned, de-silted, and the final sodding placed. The Contractor will be responsible for providing temporary seed and water for areas that have been cleared and will remain inactive for a period greater than 14 calendar days.

### C. Area Estimates

Total Project Area:            2.28 Acres.

Total Area to be Disturbed:    2.28 Acres.

D. Runoff Data

(1) Runoff Coefficient Before, During, and After Construction:

Pre-construction:	<u>0.30</u>
During Construction:	<u>0.40</u>
Post-Construction:	<u>0.35</u>

(2) Description of Soil or Quality of Discharge:  
Pomello/Zolfo – Group C, Smyrna – Group B/D

(3) Estimates of Size of Drainage Area for Each Outfall:

<u>Headwall west of Teasel Drive</u>	Drainage Area	<u>4.15 ac</u>
<u>Existing inlet at NW corner</u>		
<u>of intersection of Wallace Road</u>		
<u>and Dr. Phillips Blvd.</u>	Drainage Area	<u>0.47 ac.</u>
<u>Swale on west side of Dr. Phillips</u>		
<u>Bldv. south of Wallace Road</u>	Drainage Area	<u>0.49 ac.</u>

E. Site Map

The Construction Plans are being used as the site maps. The location of the required information is described below. The sheet numbers for all the items discussed below are identified on the Key Sheet of the Construction Plans.

- (1) Drainage patterns: The drainage basin divides and flow directions are shown on the Drainage Maps. The arrows on the drainage maps indicate stormwater flow patterns. Arrows pointing to the alignment represent offsite flow to the project corridor, while arrows pointing away from the alignment indicate runoff flowing away from the project corridor.
- (2) Approximate slopes: The slopes of the site can be seen in the Cross Sections, and the Plan and Profile Sheets of the Construction Plans.

- (3) Areas of soil disturbance: The areas to be disturbed are indicated on the Plan and Profile, and the Cross Sections . Any areas, where permanent features are shown to be constructed above or below ground, will be disturbed.
- (4) Areas not to be disturbed (List of areas of the project that are not to be disturbed during construction if any).
- (5) Location of permanent controls: The Plan and Profile Sheets indicate the locations of permanent controls.
- (6) Areas to be stabilized: Permanent stabilization is shown on the Typical Section, and the Plan and Profiles Sheets.

F. Discharge points to surface waters: The Plan and Profile Sheets indicate the discharge points. The following are the locations of the outfalls:

Pond \_\_\_ outfall/ Lat. \_\_\_ ° \_\_\_ ' \_\_\_ ", Long. \_\_\_ ° \_\_\_ ' \_\_\_ " Receiving waters \_\_\_\_\_  
 Pond \_\_\_ outfall/ Lat. \_\_\_ ° \_\_\_ ' \_\_\_ ", Long. \_\_\_ ° \_\_\_ ' \_\_\_ " Receiving waters \_\_\_\_\_  
 Pond \_\_\_ outfall/ Lat. \_\_\_ ° \_\_\_ ' \_\_\_ ", Long. \_\_\_ ° \_\_\_ ' \_\_\_ " Receiving waters \_\_\_\_\_  
 Pond \_\_\_ outfall/ Lat. \_\_\_ ° \_\_\_ ' \_\_\_ ", Long. \_\_\_ ° \_\_\_ ' \_\_\_ " Receiving waters \_\_\_\_\_

### III. CONTROLS

Description of appropriate controls, BMPs, and measures that will be implemented at the construction site: Clearly describe for each major activity identified in II.B appropriate control measures and timing during the construction process that measures will be implemented.

Activity	Controls/BMPs	Timing
Clearing and grubbing	<u>Silt Fence</u>	<u>Duration of work</u>
Excavation	<u>Silt Fence, Synthetic Bales</u> <u>Sock Covered Perforated Pipe</u>	<u>Duration of work</u>
Embankment	<u>Silt Fence, Synthetic Bales</u> <u>Sock Covered Perforated Pipe</u>	<u>Duration of work</u>

#### IV. EROSION AND SEDIMENT CONTROLS

(1) Stabilization Practices

Stabilization measures shall be initiated as soon as practical in portions of the site where construction activities have ceased temporarily or permanently, but in no case shall the time be greater than fourteen (14) days after construction activity has temporarily or permanently ceased. Unless otherwise specified in the contract documents, areas disturbed during construction are to be seeded and mulched.

(2) Structural Practices

Staked Silt Fence (1116 Linear Feet)  
Sock Covered Perforated Pipe (5)(Each)  
Synthetic Bales (36 bales) (Each)  
Other structural practices

All erosion control devices shall be installed according to the contract documents, Orange County Specifications, and FDOT Roadway and Traffic Design Standards.

(3) The project will be constructed in increments to minimize disturbed soil. The contractor is advised that for areas of disturbed soil greater than 10 acres, a temporary (or permanent) sediment basin providing 3,600 cubic feet of storage per acre drained, or equivalent control measures, shall be provided where attainable until the final stabilization of the site. For drainage locations which serve more than 10 disturbed acres at one time and where a temporary sediment basin providing 3,600 cubic feet of storage per acre drained, or equivalent controls is not attainable, smaller sediment basins and/or sediment traps should be used according to EPA FRL 5987-2.

(4) For locations serving less than 10 acres sediment basins and/ or sediment traps are recommended but not required. At a minimum, silt fences or equivalent sediment controls are required for all sideslopes and downslope boundaries of the construction area.

#### V. STORMWATER MANAGEMENT

(1) Once the roadway is constructed, stormwater runoff will be collected, conveyed and treated by the storm sewer system described and shown in the contract documents in accordance with the provisions of the South Florida Water Management District. BMPs to be installed during the construction process are described in Sections III and IV above,

and in the contract documents.

- (2) Velocity dissipation devices shall be placed during construction at discharge locations and along the length of any outfall channel for the purpose of providing a non-erosive velocity flow from the structure to a water course so that the natural physical and biological characteristics and functions are maintained and protected.

## VI. CONTROLS FOR OTHER POTENTIAL POLLUTANTS

### (1) Waste Disposal

The Contractor will provide litter control and collection within the project boundaries during construction activities. All fertilizer, hydrocarbon, or other chemical containers shall be disposed of by the Contractor according to EPA's standard practices as detailed by the manufacturer. No solid materials including building and construction materials shall be discharged to wetlands or buried on-site.

### (2) Offsite Vehicle Tracking

Will be controlled by the following methods:

- Loaded haul trucks to be covered with tarpaulin
- Excess dirt on road removed daily
- Stabilized construction entrance (see attached details)
- Other – excess dirt on the roads shall be removed daily. The contractor will provide pollution control by implementing dust control during dust generating activities such as excavation and milling operations. This will be accomplished by using street or vacuum sweepers. Excess dirt shall be prevented from entering existing inlets.

The Contractor shall be responsible for constructing and maintaining stabilized construction entrances when entering or exiting a public road for on-site and off-site locations of stockpiled materials. The Contractor shall be responsible for modifying the system or procedures as needed, and as directed by County.

### (3) Sanitary Waste

All sanitary waste will be collected from portable units by a licensed Sanitary Waste Management Contractor, as required by the state regulations.

### (4) Fertilizer and Pesticides

Fertilizers and soil sterilizers will be used on this project in accordance with "FDOT Standard Specifications for Road and Bridge Construction, Section 570 or 577," at

the discretion of the Contractor and coordination with the Project Engineer.

(5) Toxic Substances

Contractor will be responsible for properly handling, storage and disposal of toxic materials in accordance with all applicable EPA environmental regulations. Application, generation and migration of toxic substances shall be limited.

**VII. APPROVED STATE OR LOCAL PLANS**

Water Management District Permit # N/A

Army Corps of Engineers Permit # N/A

- (1) This SWPPP is hereby certified to reflect requirements applicable to protecting surface water resources in the construction plans as permitted by the South Florida Water Management District.
- (2) The SWPPP shall be amended to reflect any change applicable to protecting surface water resources in sediment and erosion plan or permit approved State, regional, or local officials for which written notices are received. Where such written notice of change is received, a re-certification shall be included in the SWPPP that the plan has been modified to address such changes.

**VIII. MAINTENANCE**

The contractor will be responsible for the maintenance and repairs of erosion and sediment control devices, and removal of temporary erosion and sediment control devices after the Notice of Termination.

The following practices will be used to maintain erosion and sediment controls:

(1) General

The Contractor shall install and maintain rain gauges on the project site and record weekly rainfall in accordance with the NPDES Permit No. \_\_\_\_\_. All control measures will be maintained by the Contractor daily.

All measures will be maintained in good working order. If a repair is necessary, it will be initiated within 24 hours of the report.

(2) Structural practices Controls

Built up sediment will be removed from staked silt fences when it reaches one-half

the height of the fence.

Seeding, sodding, and planting will be inspected for bare spots, washouts, and healthy growth.

Stabilized construction entrances shall be maintained to prevent clogging of rock bedding which may impede the usefulness of the structure.

Hay bales shall be replaced every three months or when they have served their usefulness so as not to block or impede storm flow or drainage.

ITEM	MAINTENANCE	PROPOSED REPLACEMENT INTERVAL
Silt Fence	Sediment build-up will be removed when the sediment build up reaches ½ the silt fence height.	1 year
Synthetic Bales	Remove sediment when it reaches ½ height of bales.	3 months
Sock Covered Perforated Pipe	Remove sediment when it reaches ½ height of pipe.	3 months

**IX. INSPECTION**

(1) Inspection Areas:

Locations of areas to be inspected may include:

- Discharge points to “Waters of the United States”
- Discharge points to MS4 facilities
- Areas not meeting the “Final Stabilization” criteria
- Materials storage / stockpiles
- Sedimentation facilities
- Structural control facilities

- Vehicle entrances / exits
- On-site stormwater management systems

Qualified personnel shall inspect the above items at least once every seven calendar days and within 24 hours of the end of a storm that is 0.25 inches or greater. Where sites have been finally stabilized, inspections shall be conducted at least once every month. Inspections shall check for evidence of, or the potential for pollutants entering the stormwater system.

- (2) Based on the results of the inspection, all maintenance operations required to assure proper operation of all controls; BMPs, practices, or measures identified in the SWPPP shall be done in a timely manor, but in no case later than 7 days following the inspection. If needed, the pollution prevention controls, BMPs, and measures identified shall be revised as appropriate, but in no case later than 7 days following the inspection.
- (3) The Contractor shall submit a weekly report to the Orange County documenting the daily inspections and maintenance or repairs to the erosion and sediment control devices. A report summarizing the scope of the inspection, name(s) and qualifications of personnel making the inspection, the date, major observations relating to the implementation of the stormwater pollution prevention plan, and required maintenance actions taken shall be made and retained as a part of the SWPPP for at least three years from the date that the site is finally stabilized. Where a report does not identify any incidents of non-compliance, the report shall contain a certification that the project is in compliance the SWPPP and the Generic Permit for Stormwater Discharge.
- (4) The Contractor's Superintendent shall be authorized and have the responsibility for ensuring compliance with the SWPPP.
- (5) All erosion and water pollution abatement and control measures will be inspected by the Contractor.
- (6) Contractor shall maintain copies of all required reports and shall complete all SWPPP inspection report forms required for the NPDES permit.
- (7) The Contractor shall use the Construction Inspection Report form for inspections. Also, the contractor is responsible for documenting this portion of the SWPPP. If contaminated soil or groundwater is encountered, contact the appropriate Orange County Environmental Protection and Florida Department of Environmental Protection officials.



**Orange County Environmental Protection Division– Waste Management**  
Mr. Dennis Weatherford - Phone (407) 836-1404

**Florida Department of Environmental Protection – Central District Emergency Response** - Phone (407) 893-3337

## **X. NON-STORM WATER DISCHARGES**

Except for flows from fire fighting activities, sources of non-stormwater listed in Part IV.A.3 of the FDEP-Generic Permit for Stormwater Discharge from Construction Activities that Disturb Five or More Acres of Land that are combined with stormwater discharges associated with construction activity must be clearly identified in this plan by the Contractor. The Contractor is responsible for the implementation of the appropriate pollution prevention and treatment measures for the non-stormwater component(s) of the discharge.

## **XI. CONTRACTORS**

The Prime Contractor must clearly identify for each measure identified in the SWPPP, the contractor(s) and/or subcontractor(s) that will implement the measure. All contractors and subcontractors identified in the plan must sign a copy of the certification statement in Part V.E.2 of the FDEP-Generic Permit for Stormwater Discharge from Construction Activities that Disturb Five or More Acres of Land that is attached to this plan as Appendix "A". All certifications must be included in the SWPPP. All contractors and subcontractors identified shall sign a copy of the certification statement before conduction any professional service identified in the SWPPP.

## **XII. NOTICE OF TERMINATION**

Contractor shall file Notices of Termination of construction with all applicable regulatory agencies.

**APPENDIX "A"**

**ORANGE COUNTY HIGHWAY CONSTRUCTION DIVISION**

**CONTRACTOR CERTIFICATION**

**NPDES GENERAL PERMIT FOR STORM WATER DISCHARGES  
FROM**

**Wallace Road at Dr. Phillips Boulevard Intersection Improvements  
PROJECT NAME**

"I certify under penalty of law that I understand the terms and conditions of the generic stormwater permit issued pursuant to Section 403.0885, F.S., that authorizes the stormwater discharges associated with industrial activity from the construction site identified as part of this certification."

\_\_\_\_\_  
Signature Date

\_\_\_\_\_  
Name and Title

\_\_\_\_\_  
Address or Post Office Box (Construction Site)

\_\_\_\_\_  
City State Zip Code

\_\_\_\_\_  
Telephone Area Code Number

BCC Mtg. Date: October 4, 2016

Prepared by and return to:

Katherine W. Latorre  
Assistant County Attorney  
Orange County Attorney's Office  
P.O. Box 1393  
Orlando, FL 32802

Project: Wallace Road at Dr. Phillips Blvd. Intersection Project

## UTILITY RELOCATION AGREEMENT

This Utility Relocation Agreement ("Agreement"), effective as of the latest date of execution, is made and entered into by and between ORANGE COUNTY, a charter county and political subdivision of the State of Florida ("COUNTY"), and BELLSOUTH TELECOMMUNICATIONS, LLC, a Georgia limited liability company, d/b/a AT&T FLORIDA ("AT&T") (AT&T and COUNTY are collectively referred to herein as the "PARTIES").

### WITNESSETH

WHEREAS, COUNTY is constructing the Wallace Road at Dr. Phillips Boulevard Intersection Project ("Project") on Wallace Road, Orlando, Florida; and

WHEREAS, the Project impacts certain AT&T utility facilities ("Facilities") located on real property abutting the Wallace Road right-of-way and owned by the Dr. P. Phillips Foundation, a Florida non-for-profit corporation, having its principal place of business in the County of Orange, ("Dr. Phillips Foundation Easement") pursuant to that Deed of Easement recorded in the Orange County Official Record Book 10782, Page 9181 and attached hereto as **Exhibit "A;"** and

WHEREAS, COUNTY has requested that AT&T remove the Facilities from the Dr. Phillips Foundation Easement and relocate them to a different location inside the same easement to accommodate the Project; and

WHEREAS, the parties desire to memorialize their mutual understanding of the terms and conditions of the relocation of the Facilities as set forth herein.

**NOW THEREFORE**, in consideration of the mutual covenants hereinafter contained, it is agreed by both parties as follows:

1. Consistent with the terms of this Agreement, AT&T shall relocate its Facilities from their current location in the Dr. Phillips Foundation Easement to another location in the same easement, as depicted in **Exhibit "B,"** attached hereto and incorporated herein by this reference ("Relocation"). The estimated timeframe for completion of the Relocation is 60 days from the effective date of this Agreement. It is understood that such timeframe is an

Prepared by and return to:

Katherine W. Latorre  
Assistant County Attorney  
Orange County Attorney's Office  
P.O. Box 1393  
Orlando, FL 32802

Project: Wallace Road at Dr. Phillips Blvd. Intersection Project

## UTILITY RELOCATION AGREEMENT

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### WITNESSETH

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WHEREAS, the Project impacts certain AT&T utility facilities ("Facilities") located on real property abutting the Wallace Road right-of-way and owned by the Dr. P. Phillips Foundation, a Florida non-for-profit corporation, having its principal place of business in the County of Orange, ("Dr. Phillips Foundation Easement") pursuant to that Deed of Easement recorded in the Orange County Official Record Book 10782, Page 9181 and attached hereto as **Exhibit "A,"** and

WHEREAS, COUNTY has requested that AT&T remove the Facilities from the Dr. Phillips Foundation Easement and relocate them to a different location inside the same easement to accommodate the Project; and

WHEREAS, the parties desire to memorialize their mutual understanding of the terms and conditions of the relocation of the Facilities as set forth herein.

**NOW THEREFORE,** in consideration of the mutual covenants hereinafter contained, it is agreed by both parties as follows:

1. Consistent with the terms of this Agreement, AT&T shall relocate its Facilities from their current location in the Dr. Phillips Foundation Easement to another location in the same easement, as depicted in **Exhibit "B,"** attached hereto and incorporated herein by this reference ("Relocation"). The estimated timeframe for completion of the Relocation is 60 days from the effective date of this Agreement. It is understood that such timeframe is an

estimate and may be extended due to circumstances outside of AT&T's control.

2. COUNTY agrees that all costs and expenses incurred by AT&T associated with the Relocation shall be paid by COUNTY after receipt of invoices for such costs and expenses, in accordance with the terms outlined below.
3. Based on the Project 100% construction plans dated June 2015, submitted by COUNTY, and designed by GTC Engineering Corporation, AT&T has prepared a good faith estimate for Relocation ("Estimate"), which explains in detail the methods, procedures, and assumptions upon which it is based. The Estimate is attached hereto as **Exhibit "C,"** and is incorporated herein by this reference. The Estimate may be subject to change due schedule or duration of the construction work. COUNTY shall be responsible for payment of actual costs incurred by AT&T that do not exceed such Estimate by more than twenty five percent (25%). The Estimate shown in **Exhibit "C"** is an estimate. The final charges to be paid by COUNTY shall be based upon actual construction costs at the time of construction.
4. Invoices from AT&T shall be accompanied by supporting documentation, showing costs incurred by AT&T. AT&T may submit one or more invoices to the COUNTY for payment, following incurring the costs identified on the invoices. COUNTY shall submit payment to AT&T in accordance with this Agreement and the Local Government Prompt Payment Act, Chapter 218, Part VII, Florida Statutes (2015), as may be amended, but in any event within sixty (60) days of receipt by a COUNTY employee authorized to accept such proof of payment.
5. During construction, COUNTY shall allow AT&T continuous, unobstructed access to all the Facilities until the Relocation is complete.
6. For the duration of this Agreement, COUNTY and AT&T, and their respective agents and/or contractors and subcontractors shall each provide and maintain insurance or self-insurance coverage of such types and in such amounts as may be deemed necessary by each party. Such insurance or self-insurance shall include at a minimum workers' compensation and employers' liability, business automobile liability and commercial general liability coverage. COUNTY and AT&T shall be included as additional insured on all liability policies maintained by their respective agents, contractors and subcontractors. Neither party to this Agreement or its officers and employees shall, by this Agreement, be deemed to assume any liability for the acts, omissions and/or negligence of the other party. Each party shall defend, indemnify and hold the other party harmless from all claims, damages, actions, losses, suits, judgments, fines, liabilities, costs and expenses arising out of or resulting from the negligent performance of its respective operations under the Agreement. Notwithstanding the foregoing, such indemnification by COUNTY shall be subject to the limitations provided in section 768.28, Florida Statutes, as may be amended, and no further waiver of

sovereign immunity shall be implied thereby. The provisions of this paragraph will survive the termination of this Agreement.

- 7. Any notice or other communication permitted or required to be given hereunder by one party to the other shall be in writing and shall be delivered or mailed, by registered or certified United States Mail, postage prepaid, return receipt requested, or by nationally recognized, overnight courier (e.g., Federal Express) the party entitled or required to receive the same, as follows:

To AT&T:                                    Bellsouth Telecommunications, LLC  
  Attention: Area Manager  
  9101 SW 24<sup>th</sup> Street  
  Miami, FL 33165

To COUNTY:                                   Orange County, Florida  
  P.O. Box 1393  
  Orlando, Florida 32802-1393  
  Attention: Orange County Administrator

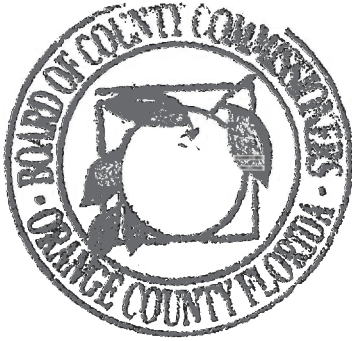
With a copy to:                              Orange County Public Works  
  P.O. Box 1393  
  Orlando, Florida 32802-1393  
  Attention: Director

- 8. This Agreement is governed by the Laws of the State of Florida and appropriate venue is only in the Ninth Judicial Circuit of Orange County, Florida.
- 9. This Agreement and its attached exhibits constitute the entire Agreement between the parties and supersede any previous understanding between the parties. Changes to this Agreement affecting the terms must be made in writing by addendum and approved and executed in substantially the same manner as this document. If any provision in this Agreement is invalidated, all remaining provisions shall continue in full force and effect, unless terminated.
- 10. AT&T hereby acknowledges that time is of the essence to the lawful performance of the duties and obligations contained in this Agreement.
- 11. Neither party shall be held liable or responsible to the other Party nor be deemed to have defaulted under or breached this Agreement for failure or delay in fulfilling or performing any term of this Agreement when such failure or delay is caused by or results from any cause beyond the reasonable control of the affected Party, including but not limited to, fire, flood, embargo, war, an act of war (whether war is declared or not), insurrection, riot, civil commotion, strike,

lockout or other labor disturbance, act of god or act, omission or delay in acting by any governmental authority or the other Party or an activity or operational or service requirement of a Party as an electric utility; provided, however, that the Party claiming the right to excuse performance by reason of force majeure shall use reasonable commercial efforts and diligence to avoid or remove such cause of nonperformance, and shall continue performance hereunder with reasonable dispatch whenever such cause is removed. Either Party shall provide the other Party with prompt written notice of any delay or failure to perform that occurs by reason of force majeure.

12. The terms, provisions, covenants and conditions of this Agreement shall be binding upon and inure to the benefit of AT&T and COUNTY, their respective successors and assigns; provided however, that this Agreement shall not be assignable without the prior written consent of the other party hereto.
13. Nothing herein shall be construed as a waiver of COUNTY's sovereign immunity pursuant to section 768.28, Florida Statutes, as may be amended.

IN WITNESS WHEREOF, the parties hereto have caused these presents to be executed by their duly authorized officers, and their official seals hereto affixed, the day and year below names signatures.



ORANGE COUNTY, FLORIDA  
By: Board of County Commissioners

By: *Teresa Jacobs*  
Teresa Jacobs  
Orange County Mayor

Date: 10.4.16

ATTEST: Martha O. Haynie, County Comptroller  
As Clerk of the Board of County Commissioners

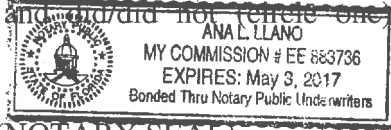
By: *Katie Smith*  
Deputy Clerk  
Printed Name: Katie Smith

BELLSOUTH TELECOMMUNICATIONS, LLC  
d/b/a "AT&T Florida"

By: B. Macias Jr.  
Print Name: B. MACIAS JR.  
Title: DIRECTOR

STATE OF FLORIDA  
COUNTY OF MIAMI-DADE

The foregoing instrument was acknowledged before me this 12TH day of August, 2016 by B. MACIAS JR., as DIRECTOR of BELLSOUTH TELECOMMUNICATIONS, LLC, a foreign limited liability company d/b/a "AT&T Florida," who is personally known to me and has produced \_\_\_\_\_ as identification and ~~and did not~~ ~~take an~~ oath.



(NOTARY SEAL)

Notary Public, State of Florida

Name: ANA L. LLANO  
Notary Commission No. EE 883736  
My Commission Expires: 5/3/2017



**EXHIBIT A**  
(Dr. Phillips Foundation Easement)

APPROVED  
BY ORANGE COUNTY BOARD  
OF COUNTY COMMISSIONERS  
JUL 29 2014 KHBS

Project: Wallace Road – YMCA Dr. Phillips (RAC)

DOC# 20140384247 B: 10782 P: 9181  
07/30/2014 04:24:17 PM Page 1 of 5  
Rec Fee: \$44.00  
Deed Doc Tax: \$1,764.00  
DOR Admin Fee: \$0.00  
Intangible Tax: \$0.00  
Mortgage Stamp: \$0.00  
Martha O. Haynie, Comptroller  
Orange County, FL  
SA - Ret To: TROY FINNEGAN ESQ



## ROAD RIGHT-OF-WAY AND APPURTENANCES EASEMENT

THIS INDENTURE, Made this 13<sup>th</sup> day of June, A.D. 2014, between THE DR. P. PHILLIPS FOUNDATION, a Florida not-for-profit corporation, having its principal place of business in the county of Orange, whose address is 7400 Dr. Phillips Blvd., Orlando, Florida 32819-5146, GRANTOR, and ORANGE COUNTY, a charter county and a political subdivision of the state of Florida, whose address is P.O. Box 1393, Orlando, Florida 32802-1393, GRANTEE.

WITNESSETH, That the GRANTOR, in consideration of the sum of \$1.00 and other valuable considerations, paid by the GRANTEE, the receipt whereof is hereby acknowledged, does hereby give and grant to the GRANTEE and its assigns, a non-exclusive easement for road right-of-way purposes, with full authority to enter upon, construct, and maintain, as the GRANTEE and its assigns may deem necessary, a public road right-of-way and appurtenances over, under, upon, and through the following described lands situate in Orange County aforesaid to-wit ("Easement Area"):

### SEE ATTACHED SCHEDULE "A"

**Property Appraiser's Parcel Identification Number:**

**a portion of**

**27-23-28-0000-00-025**

TO HAVE AND TO HOLD said easement unto said GRANTEE and its assigns forever, subject to the terms and conditions set forth hereinbelow.

THE GRANTEE herein and its assigns shall have the right to clear and keep clear all trees, undergrowth, and other obstructions that may interfere with normal operation or maintenance of the road right-of-way and/or appurtenances, out of and away from the herein granted easement, and the GRANTOR, its heirs, successors, and assigns agree not to build, construct, or create, nor permit others to build, construct, or create any buildings or other structures in the Easement Area that may interfere with the normal operation or maintenance of the road right-of-way and/or appurtenances. All utilities placed in the Easement Area will be underground. The GRANTEE, at the GRANTEE's cost and expense, shall be responsible for the relocation of any existing utility facilities in the Easement Area and the construction of any roadway improvements in the Easement Area.

This easement is non-exclusive. The GRANTOR shall have the authority to use and to authorize others to use the Easement Area in any manner consistent with Grantee's use and rights. The GRANTOR reserves the right, but is not obligated, to cultivate and care for the grass, trees and shrubbery within said Easement Area, at any time the GRANTEE has failed to do so.

Project: Wallace Road – YMCA Dr. Phillips (RAC)

To the extent permitted by law, and without waiving the GRANTEE's sovereign immunity and Florida Statutes §768.28, the GRANTEE covenants and agrees to indemnify, protect, defend, and hold harmless the GRANTOR from and against any and all claims, actions, causes of action, loss, damage, injury, liability, cost or expense, including without limitation attorneys' fees (whether incurred before, during or after trial, or upon any appellate level, or in arbitration, mediation, or in any proceeding in bankruptcy or insolvency), arising from the GRANTEE's negligent use of the Easement Area.

SIGNATURE PAGE AND SCHEDULE "A" FOLLOW

Project: Wallace Road – YMCA Dr. Phillips (RAC)

IN WITNESS WHEREOF, the said GRANTOR has caused these presents to be executed in its name by Kenneth D. Robinson, its President.

THE DR. P. PHILLIPS FOUNDATION,  
a Florida not-for-profit corporation

Signed, sealed, and delivered  
in the presence of:

Troy W Finnegan  
Witness

Troy W. Finnegan  
Printed Name

LuAnn McCollum  
Witness

LuAnn McCollum  
Printed Name

(Signature of TWO Witnesses required by Florida Law)

**STATE OF FLORIDA  
COUNTY OF ORANGE**

I HEREBY CERTIFY, that on this 13<sup>th</sup> day of June, 2014, before me personally appeared Kenneth D. Robinson, as President of THE DR. P. PHILLIPS FOUNDATION, a Florida not-for-profit corporation, to me known to be, or who has produced \_\_\_\_\_ as identification, the individual and officer described in and who executed the foregoing conveyance and acknowledged the execution thereof to be his free act and deed as such officer thereunto duly authorized, and that the official seal of said corporation is duly affixed thereto, and the said conveyance is the act and deed of said corporation.

Witness my hand and official seal this 13<sup>th</sup> day of June, 2014.

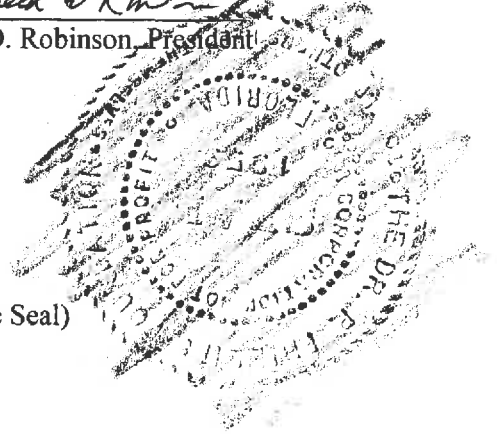
(Notary Seal)



**TROY W. FINNEGAN**  
MY COMMISSION # EE 178184  
EXPIRES: July 6, 2016  
Bonded Thru Budget Notary Services

By: Kenneth D Robinson  
Kenneth D. Robinson, President

(Corporate Seal)



Troy W Finnegan  
Notary Signature  
Troy W Finnegan  
Printed Notary Name

**This instrument prepared by:**  
Troy Finnegan, Esq.  
General Counsel  
Dr. Phillips Charities  
7400 Dr. Phillips Blvd.  
Orlando, FL 32819

Notary Public in and for  
the county and state aforesaid

My commission expires: July 6, 2016

SCHEDULE "A"

Description :


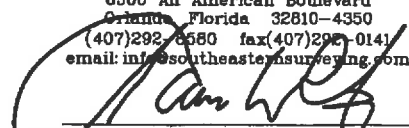
A portion of the SE 1/4 of the NE 1/4 of Section 27, Township 23 South, Range 28 East, Orange County, Florida being more particularly described as follows :

Commence at the Northeast corner of the SE 1/4 of the NE 1/4 of Section 27, Township 23 South, Range 28 East, Orange County, Florida; thence S 89°56'40" W a distance of 75.00 feet along the North line of said SE 1/4 of the NE 1/4 to the Point of Beginning; said point being on a Northerly projection of the West right of way line of Dr. Phillips Boulevard per Official Records Book 2490, Page 1235, Public Records of Orange County, Florida; thence S 00°06'25" W a distance of 67.12 feet along said Northerly projection and along the West right of way line of said Dr. Phillips Boulevard to a point; thence leaving said West right of way line N 44°53'35" W a distance of 24.14 feet to a point on a line that is 50.00 feet South of and parallel with the said North line; thence S 89°56'40" W a distance of 538.36 feet along said parallel line to a point; thence N 00°03'20" W a distance of 20.00 feet to a point on a line that is 30.00 feet South of and parallel with said North line; thence S 89°56'40" W a distance of 701.61 feet along said parallel line to a point on the West line of said SE 1/4 of the NE 1/4; thence N 00°01'10" E a distance of 30.00 feet along said West line to a point on the North line of said SE 1/4 of the NE 1/4; thence N 89°56'40" E a distance of 1257.15 feet along said North line to the Point of Beginning.

Containing 1.12 acres more or less.

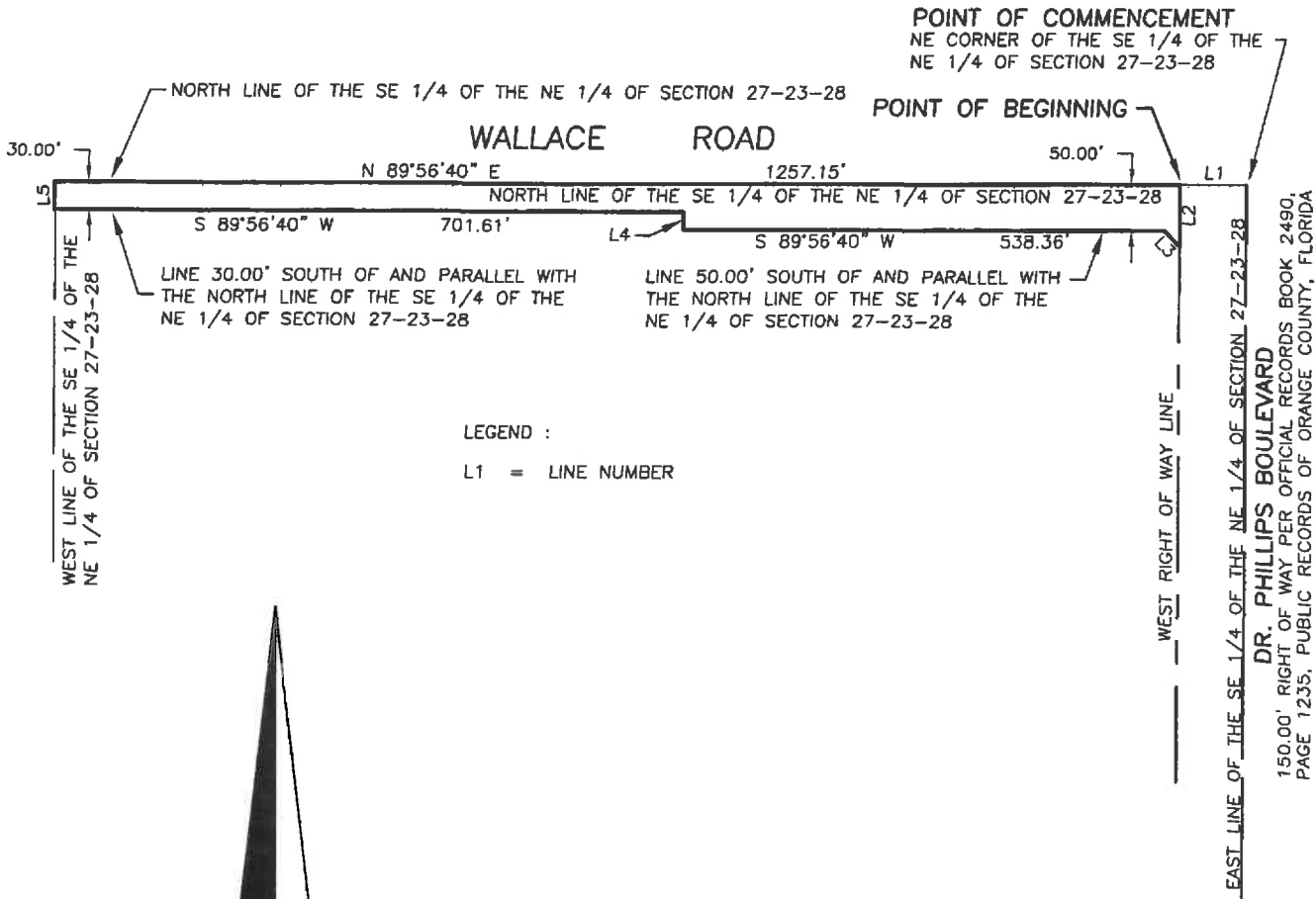
**SURVEYORS REPORT**

1. Bearings shown hereon are based on the North line of the SE 1/4 of the NE 1/4 of Section 27, Township 23 South, Range 28 East being N 89°56'40" E assumed.
2. I hereby certify that the "Sketch of Description" of the above described property is true and correct to the best of my knowledge and belief as recently drawn under my direction and that it meets the Minimum Technical Standards for Land Surveying Chapter 5J-17.050-.052 requirements.

<b>DESCRIPTION</b>  FOR  CENTRAL FLORIDA YMCA	Date: 12/31/2013 KR		CERTIFICATION NUMBER LB2108 56925006
	Job No.: 56925	Scale: 1"=200'	 SOUTHEASTERN SURVEYING AND MAPPING CORPORATION 6500 All American Boulevard Orlando, Florida 32810-4350 (407)292-6580 fax(407)292-0141 email: info@southeasternsurveying.com
REVISED: 1/10/14 BMD Chapter 5J-17.050-.052, Florida Administrative Code requires that a legal description drawing bear the notation that <b>THIS IS NOT A SURVEY.</b>			
SHEET 1 OF 2 SEE SHEET 2 FOR SKETCH			 JAMES L. PETERSEN

SKETCH OF DESCRIPTION

LINE TABLE		
LINE	LENGTH	BEARING
L1	75.00'	S 89°56'40" W
L2	67.12'	S 00°06'25" W
L3	24.14'	N 44°53'35" W
L4	20.00'	N 00°03'20" W
L5	30.00'	N 00°01'10" E



SOUTHEASTERN SURVEYING  
AND MAPPING CORPORATION  
8500 All American Boulevard  
Orlando, Florida 32810-4350  
(407)292-8580 fax(407)292-0141  
Certification Number LB-2108

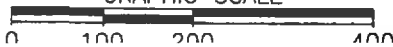
NOTE :  
NOT VALID WITHOUT SHEET 1.

REVISED: 1/10/14 BMD

Drawing No. 56925006  
Job No. 56925  
Date: 12/31/2013  
SHEET 2 OF 2  
See Sheet 1 for Description

THIS IS NOT A SURVEY

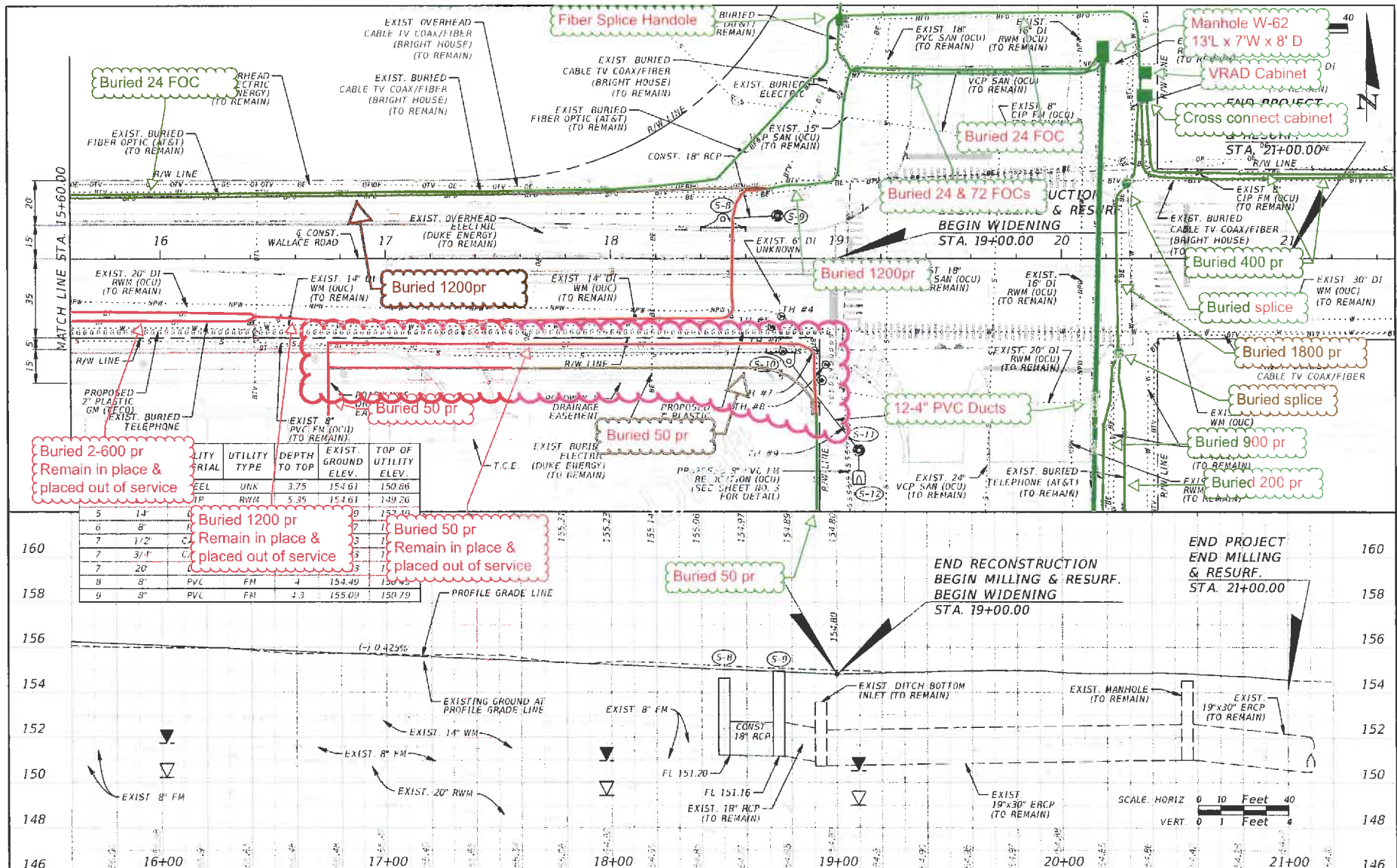
1" = 200'  
GRAPHIC SCALE



## **EXHIBIT B**

(Facility Relocation)

See attachment for location of existing and proposed facility



**Buried 2-600 pr**  
Remain in place & placed out of service

**Buried 1200 pr**  
Remain in place & placed out of service

**Buried 50 pr**  
Remain in place & placed out of service

DEPTH TO TOP	EXIST. GROUND ELEV.	TOP OF UTILITY ELEV.
5	154.09	154.09
7	154.01	154.01
7	154.01	154.01
7	154.01	154.01
8	154.01	154.01
9	155.09	155.09

REVISIONS			
DATE	DESCRIPTION	DATE	DESCRIPTION

**GTC Engineering Corporation**  
98 South Semoran Blvd., Orlando, FL 32807  
Phone Number - 407.588.0402  
Certificate of Authorization Number 6758  
Claude L. Caniggio, P.E.  
P.E. Number 15496

**ORANGE COUNTY PUBLIC WORKS**  
GTC PROJECT NO. FLO 20.05  
WALLACE ROAD INTERSECTION IMPROVEMENTS  
OCPW PROJECT NO. 2722

**UTILITY ADJUSTMENT PLAN**  
STA. 15+60.00 TO STA. 19+32.62

SHEET NO. 33



## **EXHIBIT C**

(Estimate)

The relocation of the AT&T Florida buried cable facilities within the Dr Phillips Foundation Easements requested by Orange County will require the following:

AT&T Florida will place approximately 300' of buried 50pr cable by trenching and/or directional bore, cutover and remove from service the existing 50pr cable within the same said easement as shown on attachment in exhibit "B".

The relocation is required due to the Orange County Intersection Improvements of Wallace Rd & Dr Phillips Blvd.

The estimated cost for AT&T Florida to place proposed buried 50pr cable, cutover and remove from service existing 50pr in conflict with the Orange County Intersection improvements has been determined to be at \$5,193.75 from the latest information available. This is only an estimated cost and may vary depending on working services at the time of cutting over of existing facilities.

**PART H**  
**TECHNICAL PROVISIONS**

**TP 101 - Mobilization**

**MOBILIZATION**

Mobilization shall include all items detailed in Article 101 of the Standard Specifications, the Special Provisions and on the plans, except as directed by the Engineer.

Preservation of Property Corners including all items detailed in Section 7-11 of the Standard Specifications shall be included in the contract price for mobilization.

**Basis of Payment**

The work and incidental costs covered under Mobilization will be paid for at the contract lump sum price and will be paid in partial payments in accordance with the following:

Percent of Original Contract Amount Earned	Allowable Percent of the Lump Sum Price for the Items*
5	25
10	50
25	75
50	100

\*Partial payments as detailed above will be limited to 10% of the original Contract amount for the roadway pay items. Any amount of mobilization in excess of 10% of the roadway pay items will be paid upon completion of all work.

Payment shall be made under:

Pay Item:

101-1	Mobilization	Lump Sum
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**PART H**  
**TECHNICAL PROVISIONS**

**Wallace Road and Dr. Phillips Boulevard Intersection Improvements**

**TP 102 – Maintenance of Traffic**

**MAINTENANCE OF TRAFFIC**

All Maintenance of Traffic work shall conform to the requirements of Section 102 of the Standard Specifications, Index 600 of the FDOT Design Standards, the plans, and/or as herein modified, except as directed by the Engineer.

The road shall be kept open to two-way traffic on a paved surface during construction except when full closures are allowed by the plans or by the Engineer. The Contractor shall not be permitted to isolate residences or places of business. Access shall be provided to all residences and all places of business whenever construction interferes with the existing means of access.

The Contractor shall furnish, erect and maintain all necessary traffic control devices, including flagmen and pilot cars, in accordance with the *Manual of Uniform Traffic Control Devices for Streets and Highways*, published by the U.S. Department of Transportation, Federal Highway Administration. The Contractor shall provide and maintain in a safe condition the entire project limits included, but not limited to pre-existing conditions, driving lanes, temporary approaches, crossings, and intersections with trails, roads, streets, business parking lots, residences, garages and completed work. The Contractor shall take all necessary precautions for the protection of the work and the safety of the public in accordance with Section 102.

The Contractor shall present his signed and sealed Maintenance of Traffic Plan that is approved by Orange County Traffic Engineering to the Engineer at the preconstruction conference, and shall be fully and solely responsible for the adequacy of the Maintenance of Traffic plan regardless of the source. The plan shall be signed and sealed by a professional engineer licensed in the State of Florida.

The Contractor shall be responsible for installation of signs for all business along the project corridor. Signs should be manufactured and installed in accordance with FDOT design standards. No special compensation will be made to the contractor to defray costs of any of the work or delays for complying with the requirements of installing business signs, but such costs shall be considered as having been included in the price stipulated for the Maintenance of Traffic pay item.

**Basis of Payment**

All materials, work and incidental costs related to Maintenance of Traffic will be paid for at the contract lump sum price. All material, labor and equipment necessary for the construction and maintenance of the entire project limits included, but not limited to pre-existing conditions, driving lanes, temporary approaches, crossings, intersections with trails, roads, streets, business parking lots, residences, garages, temporary driving lanes, side streets, driveway connections, and completed work, as may be directed by the Engineer shall be included in the contract price.

Payment shall be made under:

**Pay Item:**

102-1

Maintenance of Traffic

Lump Sum

## **PART H**

### **TECHNICAL PROVISIONS**

#### **TP 104 - Prevention, Control and Abatement of Erosion and Water Pollution**

##### LAND CLEARING

Prevention, control and abatement of erosion and water pollution shall conform to the requirements of Section 104 of the Standard Specifications, National Pollution Discharge Elimination System (NPDES) requirements, except as modified by these Technical Provisions or as directed by the Engineer.

The Contractor shall present at the Preconstruction Conference its Storm Water Pollution Prevention Plan (SWPPP) and a separate schedule to manage erosion and water pollution. This schedule shall include a complete outline of the proposed construction of all erosion and pollution control and abatement items required.

The Contractor shall be responsible for the preparation and submittal of the Notice of Intent (NOI) and Notice of Termination (NOT) to the Florida Department of Environmental Protection (FDEP) and shall obtain the FDEP Generic Permit for Stormwater Discharge from Large and Small Construction Activities.

##### DEWATERING

The term treatment as used in this technical provision means the application of all FDEP approved techniques and/or methods available to remove the exceedances out of dewatering effluent except impounding. Impounding is not considered a treatment method for purposes of compensation under this technical provision.

The CONTRACTOR shall include in his/her bid all applicable costs, including monitoring, resulting from treatment and disposal of contaminated groundwater with concentration levels that exceed the allowable limits of the FDEP generic permit, and shall not be entitled to any adjustment in the Contract Price as a result of any change in the permit fees or unanticipated treatment and disposal costs.

Prior to any work commencing, and for the duration of the work, the CONTRACTOR is responsible for meeting all the conditions of the applicable permits and submitting any required reports to the appropriate agencies.

The CONTRACTOR shall dewater only in relation to the location and relocation of facilities owned by the COUNTY. No compensation shall be provided for dewatering performed for facilities that are not owned by the COUNTY.

##### **Permitting**

If exceedances are found in the dewatering effluent, the CONTRACTOR will be required to:

1. Immediately notify the COUNTY and report the exceedances that are encountered.
2. Meet with the FDEP to determine any and all alternatives that are acceptable.
3. Obtain prior COUNTY approval of treatment and disposal alternatives.
4. Obtain prior written COUNTY authorization to use pay item TP 104-14

## PART H TECHNICAL PROVISIONS

### Wallace Road and Dr. Phillips Boulevard Intersection Improvements

5. Apply and obtain any and all permits and/or treatment approvals that FDEP requires including, but not limited to:
  - a. Generic Permit for Discharges from Petroleum Contaminated Sites (62-621.300(1), F.A.C.). Allows discharges from sites with automotive gasoline, aviation gasoline, jet fuel, or diesel fuel contamination.
  - b. Permit for all Other Contaminated Sites (62-04; 62-302; 62-620 & 62-660, F.A.C.). The coverage is available only through the individual NPDES permit issued by FDEP. Allows discharges from sites with general contaminant issues, i.e. ground water and/or soil contamination other than petroleum fuel contamination.
  - c. Generic Permit for the Discharge of Produced Ground Water from Any Non-Contaminated Site Activity (62-621.300(2), F.A.C.).
  - d. Generic Permit for Stormwater Discharge from Large or Small Construction Activities (62-621.300(4) (a), F.A.C.).
  
6. Apply and obtain any and all permits and/or treatment approvals that the Water Management District requires including, but not limited to:
  - a. No-Notice Short-Term Dewatering Permit (40E-20.302(3), F.A.C.) If the CONTRACTOR'S proposed work is expected to exceed 90 days in duration, or does not meet any of the other requirements listed with the requirements of Rule 40E-20.302(3), the CONTRACTOR must apply for and obtain a Dewatering General Water Use Permit (40E-20.302(2) F.A.C.)

The CONTRACTOR shall not be entitled to file, or recover under, any delay claim based on preparation of permit applications and the time required for obtaining the applicable permits. If, prior to or during the dewatering, it is determined that the disposal or discharge of the dewatering effluent is not authorized by the FDEP's Generic Permit for the Discharge of Produced Ground Water from Any Non-Contaminated Site Activity, the CONTRACTOR shall diligently pursue further required permit(s) from FDEP or other agencies without resort to delay claims or recompense from the COUNTY for either permit application activities or the time required to obtain such permits.

The CONTRACTOR shall consider and anticipate the potential need to obtain the herein discussed permits in developing his schedule, and shall make every effort to avoid or minimize potential impacts to his critical path that might result from delays in dewatering activities due to the time necessary for the CONTRACTOR to obtain the necessary permits. The CONTRACTOR shall make every effort to schedule activities requiring dewatering as late as possible during his schedule, and shall schedule activities not impacted by dewatering as early as possible. For each day, up to a maximum of one hundred eighty (180) days that the CONTRACTOR diligently pursues such permit(s) and is unable to avoid adversely impacting his

**PART H**  
**TECHNICAL PROVISIONS**

**Wallace Road and Dr. Phillips Boulevard Intersection Improvements**

critical path, a day will be added to the time allotted to the CONTRACTOR to complete performance of the Project.

**Treatment**

The CONTRACTOR shall implement the appropriate treatment that is acceptable to FDEP, COUNTY, and, if necessary, the Water Management District to attain compliance for all exceedances encountered during dewatering activities. Treatments may include, but are not limited to: chemical treatment, ion exchange treatment, filtration, and disposal of discharged groundwater in a properly permitted facility.

The CONTRACTOR shall:

1. Make every effort to minimize the spread of contamination into uncontaminated areas;
2. Provide for the health and safety of all workers at the job site and make provisions necessary for the health and safety of the public that may be exposed to any potentially hazardous conditions;
3. Ensure such provisions adhere to all applicable laws, rules or regulations covering hazardous conditions in a manner commensurate with the level of severity of the conditions;
4. If necessary, provide contamination assessment and remediation personnel to handle site assessment, determine the course of action necessary for site security, and perform the necessary steps under applicable laws, rules, and regulations for additional assessment and/or remediation work to resolve the contamination issue;
5. Delineate the contamination area(s), any staging or holding area required, and develop a work plan that will provide the schedule of projected completion dates for the final resolution of the contamination issue;
6. Maintain jurisdiction over activities inside any delineated contamination areas and any associated staging or holding areas;
7. Be responsible for the health and safety of workers within the delineated areas; and
8. Provide continuous access to representatives of regulatory or enforcement agencies having jurisdiction.

**Basis of Payment**

All work and incidental costs required to comply with the articles of this specification will be paid at the contract lump sum price for Prevention, Control and Abatement of Erosion and Water Pollution.

Payment will be made under:

Pay Item:

104-14	Prevention, Control and Abatement of Erosion and Water Pollution	Lump Sum
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## PART H TECHNICAL PROVISIONS

### **Wallace Road and Dr. Phillips Boulevard Intersection Improvements TP 105 CONTRACTOR QUALITY CONTROL GENERAL REQUIREMENTS**

#### **105-1 General.**

##### **105-1.1 Quality Control Documentation.**

###### **105-1.1.1 Submission of Materials Certification and Reporting Test Results:**

Submit certifications prior to placement of materials. Report test results at completion of the test and meet the requirements of the applicable Specifications.

**105-1.1.2 Databases:** Obtain access to the Department's databases prior to testing and material placement. Database access information is available through the Department's website. Enter all required and specified documentation and test results in the Department databases.

**105-1.1.3 Worksheets:** Make available to the Department, when requested, worksheets used for collecting test information. Ensure the worksheets at a minimum contain the following:

1. Project Identification Number,
2. Time and Date,
3. Laboratory Identification and Name,
4. Training Identification Numbers (TIN) and initials,
5. Record details as specified within the test method.

##### **105-1.2 Inspections to Assure Compliance with Acceptance Criteria.**

**105-1.2.1 General:** The Department is not obligated to make an inspection of materials at the source of supply, manufacture, or fabrication. Provide the Engineer with unrestricted entry at all times to such parts of the facilities that concern the manufacture, fabrication, or production of the ordered materials. Bear all costs incurred in determining whether the material meets the requirements of these Specifications.

**105-1.2.2 Quality Control (QC) Inspection:** Provide all necessary inspection to assure effective QC of the operations related to materials acceptance. This includes but is not limited to sampling and testing, production, storage, delivery, construction and placement. Ensure that the equipment used in the production and testing of the materials provides accurate and precise measurements in accordance with the applicable Specifications. Maintain a record of all inspections, including but not limited to, date of inspection, results of inspection, and any subsequent corrective actions taken. Make available to the Department the inspection records, when requested.

**105-1.2.3 Notification of Placing Order:** Order materials sufficiently in advance of their incorporation in the work to allow time for sampling, testing and inspection. Notify the Engineer prior to placing orders for materials.

Submit to the Engineer a fabrication schedule for all items requiring commercial inspection at least 30 days before beginning fabrication. These items include steel bridge components, moveable bridge components, pedestrian bridges, castings, forgings, structures erected either partially or completely over the travelled roadway or mounted on bridges as overhead traffic signs (some of these may be further classified as cantilevered, overhead trusses, or monotubes) or any other item identified as an item requiring commercial inspection in the Contract Documents.

### **105-2 Additional Requirements for Lump Sum Projects.**

Prepare and submit to the Engineer a project-specific list of material items and quantities to be used on the project as a Job Guide Schedule in the same format as the current Sampling, Testing, and Reporting Guide 21 calendar days prior to commencement of construction. Submit up-to-date quantities for the items on the Job Guide Schedule to the Engineer with each monthly progress estimate. The Department may not authorize payment of any progress estimate not accompanied by updated Job Guide Schedule quantities. Maintain the Job Guide Schedule throughout the project including the quantity placed since the previous submittal, and total to date quantity and any additional materials placed. Do not commence work activities that require testing until the Job Guide Schedule has been reviewed and accepted by the Engineer. At final acceptance, submit a final Job Guide Schedule that includes all materials used on the project in the same format as the monthly reports.

### **105-3 Quality Control Program.**

Certain operations require personnel with specific qualifications. Certain materials require production under an approved Quality Control (QC) Plan to ensure that these materials meet the requirements of the Contract Documents. Applicable materials include hot mix asphalt, portland cement concrete (Structural), earthwork, cementitious materials, timber, steel and miscellaneous metals, galvanized metal products, prestressed and/or precast concrete products, drainage products, and fiber reinforced polymer products. For all applicable materials included in the Contract, submit a QC Plan prepared in accordance with the requirements of this Section to the Engineer. Do not incorporate any of these materials into the project prior to the Engineer's approval of the QC Plan.

Steel and Miscellaneous Metal products, including aluminum, are defined as the metal components of bridges, including pedestrian and moveable bridges, overhead and cantilevered sign supports, ladders and platforms, bearings, end wall grates, roadway gratings, drainage items, expansion joints, roadway decking, shear connectors, handrails, galvanized products, fencing, guardrail, light poles, high mast light poles, standard mast arm assemblies and Monotube assemblies, stay in-place forms, casing pipe, strain poles, fasteners, connectors and other hardware.

### **105-4 Producer Quality Control Program.**

**105-4.1 General:** When accreditation or certification is required, make supporting documents from the two previous inspections performed by the accrediting or certifying agency available to the Department upon request.

Obtain Department approval prior to beginning production. Meet and maintain the approved Producer Quality Control Program requirements at all times. Production of these products without the Department's prior acceptance of the Producer Quality Control Program may result in rejection of the products. Continued approval will be subject to satisfactory results from Department evaluations, including the Independent Assurance program. In cases of non-compliance with the accepted Producer Quality Control Program, identify all affected material and do not incorporate or supply to the Department projects. The following conditions may result in suspension of a Producer Quality Control Program:

1. Failure to timely supply information required.
2. Repeated failure of material to meet Standard Specification

requirements.



3. Failure to take immediate corrective action relative to deficiencies in the performance of the Producer Quality Control Program.

4. Certifying materials that are not produced under an accepted Producer Quality Control Program for use on Department projects.

5. Failure to correct any deficiencies related to any requirement of the Producer Quality Control Program, having received notice from the Department, within the amount of time defined in the notice.

**105-4.2 Producer Quality Control Program Requirements:**

**105-4.2.1 Hot Mix Asphalt, Portland Cement Concrete (Structural), Earthwork, Cementitious Materials, Timber, Steel and Miscellaneous Metals, Galvanized Metal Products, Prestressed and/or Precast Concrete Products, Drainage Products, and Fiber Reinforced Polymer Products Quality Control Program:** Have an accepted Producer Quality Control Program, developed in accordance with this Section, during the production of materials to be used on Department projects.

**105-4.2.2 Prestressed Concrete Quality Control Program:** Have a current certification from a Department approved precast prestressed concrete plant certification agency and a Department accepted Producer Quality Control Plan, meeting the requirements of this Section. The list of Department approved certification agencies is available on the website of the State Materials Office (SMO).

**105-4.2.3 Steel and Miscellaneous Metals Quality Control Program:** Have an accepted Producer Quality Control Plan, developed in accordance with this Section and a current American Institute for Steel Construction (AISC) certification, provided that AISC certification program is available for the category of the fabrication products.

**105-4.3 Submittal:** Depending on the type of products, producers shall submit their proposed Producer Quality Control Programs to the SMO or to the District Materials Office, as described below:

**105-4.3.1 State Materials Office (SMO):** Producers of cementitious materials, steel and miscellaneous metals, galvanized metal products, aggregates, and fiber reinforced polymer products must submit their proposed Producer Quality Control Program to the SMO for review and acceptance.

**105-4.3.2 District Materials Office:** Producers of hot mix asphalt, portland cement concrete (structural), earthwork, timber, prestressed and/or precast concrete products and drainage products must submit their proposed Producer Quality Control Program to the local District Materials Office for acceptance. Producers located outside the State must contact the SMO for address information of the District Materials Office responsible for the review of the proposed Quality Control Program.

**105-4.4 Compliance with the Materials Manual.**

Producers of Flexible Pipe shall meet the requirements of Section 6.1, Volume II of the Department's Materials Manual, which may be viewed at the following URL:  
<http://www.fdot.gov/programmanagement/Implemented/URLinSpecs/Section61V2.shtm>.

Producers of Precast Concrete Pipe shall meet the requirements of Section 6.2, Volume II of the Department's Materials Manual, which may be viewed at the following URL:  
<http://www.fdot.gov/programmanagement/Implemented/URLinSpecs/Section62V2.shtm>.

Producers of Precast Concrete Drainage Structures shall meet the requirements of Section 6.3, Volume II of the Department's Materials Manual, which may be viewed at the following URL:

<http://www.fdot.gov/programmanagement/Implemented/URLinSpecs/Section63V2.shtm>.

Producers of Precast/Prestressed Concrete Products shall meet the requirements of Sections 8.1 and 8.3 of the Department's Materials Manual, which may be viewed at the following URLs:

<http://www.fdot.gov/programmanagement/Implemented/URLinSpecs/Section81V1.shtm>.

<http://www.fdot.gov/programmanagement/Implemented/URLinSpecs/Section83V1.shtm>.

Producers of Precast Prestressed Concrete Products using Self Consolidating Concrete shall meet the requirements of Section 8.4, Volume II of the Department's Materials Manual, which may be viewed at the following URL:

<http://www.fdot.gov/programmanagement/Implemented/URLinSpecs/Section84V2.shtm>.

Producers of Incidental Precast/Prestressed Concrete Products shall meet the requirements of Section 8.2, Volume II of the Department's Materials Manual, which may be viewed at the following URL:

<http://www.fdot.gov/programmanagement/Implemented/URLinSpecs/Section82V2.shtm>.

Producers of Portland Cement Concrete shall meet the requirements of Section 9.2, Volume II of the Department's Materials Manual, which may be viewed at the following URL:

<http://www.fdot.gov/programmanagement/Implemented/URLinSpecs/Section92V2.shtm>.

Producers of Structural Steel and Miscellaneous Metal Components shall meet the requirements of Sections 11.1, 11.2, 11.3, 11.4, 11.5 and 11.6 of the Department's Materials Manual, which may be viewed at the following URLs:

<http://www.fdot.gov/programmanagement/Implemented/URLinSpecs/Section111V1.shtm>.

<http://www.fdot.gov/programmanagement/Implemented/URLinSpecs/Section112V2.shtm>.

<http://www.fdot.gov/programmanagement/Implemented/URLinSpecs/Section113V2.shtm>.

<http://www.fdot.gov/programmanagement/Implemented/URLinSpecs/Section114V2.shtm>.

<http://www.fdot.gov/programmanagement/Implemented/URLinSpecs/Section115V2.shtm>.

<http://www.fdot.gov/programmanagement/Implemented/URLinSpecs/Section116V2.shtm>.

Producers of Fiber Reinforced Polymer Composites shall meet the requirements of Section 12-1, Volume II of the Department's Materials Manual, which may be viewed at the following URL:

<http://www.fdot.gov/programmanagement/Implemented/URLinSpecs/Section121V2.shtm>.

**105-4.5 Producer Quality Control (QC) Plan Review and Acceptance:** The Department will respond to the producer within 21 calendar days of receipt of the proposed Producer Quality Control Program. The Department may perform evaluation activities to verify compliance with submitted documents prior to acceptance.

If the Producer Quality Control Program must be revised for any reason, including non-compliance, submit the revision to the Department. The Department will respond to the producer within seven calendar days of receipt of the revised Producer Quality Control Program.

**105-4.6 Producer's Quality Control (QC) Plan:** Submit detailed policies, methods and procedures to ensure the specified quality of all applicable materials and related production operations. Include other items in addition to these guidelines as necessary.

**105-4.6.1 Personnel:**

**105-4.6.1.1 Qualifications:** Submit the Training Identification Numbers (TINs) or any other information which will be traceable to the certification agency's training location and dates for all technicians performing sampling, testing and inspection for both field

and laboratory tests. Submit the names of the Construction Training and Qualification Program (CTQP) certifications and other pertinent certifications held and the expiration dates for each certification for each technician. Include employed and subcontracted technicians.

**105-4.6.1.2 Level of Responsibility:** Identify the primary contact for the Department. Identify roles and responsibilities of various personnel involved in the QC process.

**105-4.6.2 Raw Materials:**

**105-4.6.2.1 Source:** Identify the sources of raw materials. Submit locations and plant or mine numbers when applicable.

**105-4.6.2.2 Certification:** Submit methods of verifying compliance of certification with the Specifications.

**105-4.6.2.3 Disposition of Failing Materials:** Describe the system for controlling non-conforming materials, including procedures for identification, isolation and disposition.

**105-4.6.3 Storage Facilities for Raw Materials:** Describe measures and methods, including bedding details, for preventing segregation, contamination and degradation.

Describe methods of identifying individual materials. Where applicable, submit a site plan showing the locations of various materials.

**105-4.6.4 Production Equipment:** Describe calibration frequencies, maintenance schedule and procedures for production equipment.

**105-4.6.5 Plant Requirements:**

**105-4.6.5.1 Plant Identification:** For those facilities producing materials listed in 105-3, submit the mailing address, physical address including county and X,Y (latitude and longitude) coordinates of the plant, telephone and fax numbers, email address, primary contact at the plant, responsible person in charge, facility number provided by the Department, owner information including parent company, vendor number, designed production capacity, and other information as required.

**105-4.6.5.2 Process Control System:** Describe the methods and measures established to ensure Contract compliance for the produced materials that are supplemental to the QC sampling and testing program described in the Contract Documents. These methods and measures will include, but are not limited to, inspection schedule, additional sampling and testing, maintenance schedule, etc.

**105-4.6.5.3 Loading and Shipping Control:** Describe the methods and measures for preventing segregation, contamination and degradation during loading and shipping operations. Describe the methods established for materials to be in compliance with the Specifications at the point of use.

**105-4.6.5.4 Types of Products Generated:** Describe the products the plant is approved to produce under Department guidelines.

**105-4.7 Other Requirements:**

**105-4.7.1 Submittal of Certification:** Submit certifications issued by the plant/Contractor for the applicable products approved by the Department.

**105-4.7.2 Statement of Compliance:** Include a statement of compliance with all quality requirements set forth by the Department in the Contract Documents and Department manuals.

**105-4.7.3 Documentation Storage:** Identify location of document storage to enable Department review. Include QC charts, qualification and accreditation records, inspection reports, and other pertinent supporting documents.

**105-4.8 Final Manufactured Product - Plant Operations:** Describe inspection schedule and methods for identifying defects and non-compliance with the Specifications. Describe corrective actions and methods to resolve them.

**105-4.8.1 Storage:** When storage of the produced materials is required and it is not defined in the Contract Documents, describe the methods and duration for storage. Include measures and methods for preventing segregation, contamination and degradation during storage.

**105-4.8.2 Disposition of Failing Materials:** When not described in the Specifications, describe the methods and measures for identifying and controlling the failing materials. Include preventive and corrective measures. Describe disposition of failing materials.

**105-4.9 Testing Laboratories:** Identify the laboratories performing testing. Ensure that the testing laboratories comply with the Laboratory Qualification Program requirements of this Section or other applicable requirements.

**105-4.10 Department Inspection Access:** Include a statement allowing the Department access including the right to photograph, video record, and digitally record both the production process and the products produced for the Department while Department representatives are on or at the production facility. The Department representatives shall not be required to obtain further written or oral consent to take said photographs, video recordings, or digital recordings of a production process and products while conducting inspections.

#### **105-5 Contractor Quality Control (QC) Plan.**

**105-5.1 General:** Submit the Contractor QC Plan in the Department's database seven days prior to beginning work on any QC material as defined in this Section. The QC Plan may be submitted as a whole or in portions for the work related to the Contract.

Update the QC Plan at least five working days prior to the implementation of any changes.

If at any time the Work is not in compliance with the Contract Documents, the Engineer may suspend operations in accordance with 8-6.1.

**105-5.2 Personnel Qualification:** Submit the Training Identification Numbers for all technicians performing sampling, testing and inspection for field tests. Include employed and subcontracted technicians.

**105-5.3 Production Facilities:** Identify the producers of materials listed in 105-4.4 for the project. Include the Department's facility ID number as part of the identification. All producers must have accepted Producer's Quality Control Program and be listed on the Department's Production Facility Listing.

**105-5.3.1 Structural Concrete Mix Designs:** Identify the approved structural concrete mix designs for each structural concrete production facility for review and approval by the Engineer. Do not begin work on the material without the Engineer's approval. The Engineer will review and respond within five calendar days of submittal.

**105-5.4 Testing Laboratories:** Identify the laboratories performing testing. Ensure that the testing laboratories comply with the Laboratory Qualification Program requirements of this Section.

#### **105-6 Contractor Certification of Compliance.**

Provide the Engineer with a notarized monthly certification of compliance with the Contract Documents, to accompany each progress estimate, on a form provided by the Engineer. The Department may not authorize payment of any progress estimate not accompanied by an executed certification document.

Final payment in accordance with 9-8 will not be made until a final notarized certification summarizing all QC exceptions has been submitted.

### **105-7 Lab Qualification Program.**

Testing laboratories participating in the Department's Acceptance Program must have current Department qualification when testing materials that are used on Department projects. In addition, they must have one of the following:

1. Current AASHTO (AAP) accreditation.
2. Inspected on a regular basis per ASTM D 3740 for earthwork, ASTM D 3666 for asphalt and ASTM C 1077 for concrete for test methods used in the Acceptance Program, with all deficiencies corrected, and under the supervision of a Specialty Engineer.
3. Current Construction Materials Engineering Council (CMEC) program accreditation or other independent inspection program accreditation acceptable to the Engineer and equivalent to (1) or (2) above.

After meeting the criteria described above, submit a Laboratory Qualification Application to the Department. The application is available from the Department's website. Obtain the Department's qualification prior to beginning testing. The Department may inspect the laboratory for compliance with the accreditation requirements prior to issuing qualification.

Meet and maintain the qualification requirements at all times. Testing without Department's qualification may result in a rejection of the test results. Continued qualifications are subject to satisfactory results from Department evaluations, including Independent Assurance evaluations. In case of suspension or disqualification, prior to resumption of testing, resolve the issues to the Department's satisfaction and obtain reinstatement of qualification. The following conditions may result in suspension of a laboratory's qualified status:

1. Failure to timely supply required information.
2. Loss of accredited status.
3. Failure to correct deficiencies in a timely manner.
4. Unsatisfactory performance.
5. Changing the laboratory's physical location without notification to the accrediting agency and the Engineer.
6. Delays in reporting the test data in the Department's database.
7. Incomplete or inaccurate reporting.
8. Using unqualified technicians performing testing.

Should any qualified laboratory falsify records, the laboratory qualification will be subject to revocation by the Engineer. Falsification of project-related documentation will be subject to further investigation and penalty under State and Federal laws.

It is prohibited for any contract laboratory or staff to perform Contractor QC testing and any other Acceptance Program testing on the same contract.

### **105-8 Personnel Qualifications.**

**105-8.1 General:** Provide qualified personnel for sampling, testing and inspection of materials and construction activities. Ensure that qualifications are maintained during the course of sampling, testing and inspection.

Construction operations that require a qualified technician must not begin until the Department verifies that the technician is on the CTQP list of qualified technicians. The CTQP lists are subject to satisfactory results from periodic Independent Assurance evaluations.

**105-8.2 Quality Control (QC) Manager:** Designate a QC Manager who has full authority to act as the Contractor's agent to institute any and all actions necessary to administer, implement, monitor, and as necessary, adjust quality control processes to ensure compliance with the Contract Documents. The QC Manager must speak and understand English. The QC Manager must be on-site at the project on a daily basis or always available upon four hours notice. Ensure that the QC Manager is qualified as such through the Construction Training and Qualification Program. The QC Manager and the Superintendent must not be the same individual.

Under the direction of the QC Manager, and using Department's standard forms provided by the Engineer, summarize the daily QC activities including testing and material sampling. Since erasures are strictly prohibited on all reports and forms, use blue or colored ink. Do not use black ink. If manual corrections to original data are necessary, strike through, correct, and date the entry, including the initials of the person making the correction. Make copies of the completed forms available for the Department to review daily unless otherwise required in the Specifications. Ensure that the QC test data is entered into the Department's database on a daily basis. Maintain all QC related reports and documentation for a period of three years from final acceptance of the project. Make copies available for review by the Department upon request.

**105-8.3 Temporary Traffic Control (Maintenance of Traffic) Personnel:** Worksite Traffic Supervisors, flaggers, and other personnel responsible for work zone related transportation management and traffic control must obtain training and certification in accordance with the Department's Temporary Traffic Control (Maintenance of Traffic) Training Handbook located at the following URL address:

<http://www.fdot.gov/roadway/TTC/Default.shtm>.

**105-8.4 Earthwork Quality Control (QC) Personnel:**

**105-8.4.1 Earthwork Level I:** Ensure the technician who samples soil and earthwork materials from the roadway project, takes earthwork moisture and density readings, and records those data in the Density Log Book holds a CTQP Earthwork Construction Inspection Level I qualification.

**105-8.4.2 Earthwork Level II:** Ensure the technician responsible for determining the disposition of soil and earthwork materials on the roadway, and for interpreting and meeting Contract Document requirements holds a CTQP Earthwork Construction Inspection Level II qualification.

**105-8.5 Asphalt Quality Control (QC) Personnel:**

**105-8.5.1 Plant Technicians:** For asphalt plant operations, provide a QC technician, qualified as a CTQP Asphalt Plant Level II Technician, available at the asphalt plant at all times when producing mix for the Department. Perform all asphalt plant related testing with a CTQP Asphalt Plant Level I Technician. As an exception, measurements of temperature may be performed by someone under the supervision of a CTQP Plant Level II technician.

**105-8.5.2 Paving Technicians:** For paving operations (with the exception of miscellaneous or temporary asphalt), keep a qualified CTQP Asphalt Paving Level II Technician on the roadway at all times when placing asphalt mix for the Department, and perform all testing with a CTQP Asphalt Paving Level I Technician. As an exception, measurements of cross-slope, temperature, and yield (spread rate) can be performed by someone under the supervision of a CTQP Paving Level II Technician at the roadway.

**105-8.5.3 Mix Designer:** Ensure all mix designs are developed by individuals who are CTQP qualified as an Asphalt Hot Mix Designer.

**105-8.5.4 Documentation:** Document all QC procedures, inspection, and all test results and make them available for review by the Engineer throughout the life of the Contract. Identify in the asphalt producer's QC Plan the QC Managers and Asphalt Plant Level II technicians responsible for the decision to resume production after a quality control failure.

**105-8.6 Concrete QC Personnel:**

**105-8.6.1 Concrete Field Technician - Level I:** Ensure technicians performing plastic property testing on concrete for materials acceptance are qualified CTQP Concrete Field Technicians Level I. Plastic property testing will include but not be limited to slump, temperature, air content, water-to-cementitious materials ratio calculation, and making and curing concrete cylinders. Duties will include initial sampling and testing to confirm specification compliance prior to beginning concrete placements, ensuring timely placement of initial cure and providing for the transport of compressive strength samples to the designated laboratories.

**105-8.6.2 Concrete Field Inspector - Level II:** Ensure field inspectors responsible for the quality of concrete being placed on the following structure types are qualified CTQP Concrete Field Inspectors Level II:

1. Moveable bridges
2. Bridges over a water opening of 1,000 feet or more
3. Bridges with a span of 190 feet or more
4. Cable supported or cable stayed bridges
5. Post-tensioned bridges
6. Steel girder or steel truss bridges
7. Multi-level roadways

With the exception of concrete traffic railing placements, a Level II Inspector must be present on the jobsite during all concrete placements. Prior to the placement of concrete, the inspector will inspect the element to be cast to ensure compliance with Contract Documents. A Level II Inspector's duties may include ensuring that concrete testing, inspection, and curing in the field are performed in accordance with the Contract Documents. The QC Inspector will inform the Verification Inspector of anticipated concrete placements and LOT sizes.

**105-8.6.3 Concrete Laboratory Technician - Level I:** Ensure technicians testing cylinders and recording concrete strength for material acceptance are qualified CTQP Concrete Laboratory Technicians Level I. Duties include final curing, compressive strength testing, and the recording/reporting of all test data.

**105-8.7 Supervisory Personnel - Post-Tensioned and Movable Bridge Structures:**

**105-8.7.1 General:** Provide supervisory personnel meeting the qualification requirements only for the post-tensioned and movable bridge types detailed in this Article. Submit qualifications to the Engineer at the pre-construction conference. Do not begin construction until the qualifications of supervisory personnel have been approved by the Engineer.

**105-8.7.2 Proof of License or Certification:** Submit a copy of the Professional Engineer license current and in force issued by the state in which registration is held. The license must be for the field of engineering that the construction work involves such as Civil, Electrical or Mechanical. Under certain circumstances Florida registration may be required.

Submit a copy of the license issued by the State of Florida for tradesmen that require a license indicating that the license is in force and is current. Submit a copy of the

certification issued by the International Society of Automation for each Certified Control Systems Technician.

**105-8.7.3 Experience Record:** Submit the following information for supervisory personnel to substantiate their experience record. The supervisor (project engineer, superintendent/manager or foreman) seeking approval must provide a notarized certification statement attesting to the completeness and accuracy of the information submitted. Submit the following experience information for each individual seeking approval as a supervisor:

Project owner's name and telephone number of an owner's representative, project identification number, state, city, county, highway number and feature intersected.

Detailed descriptions of each bridge construction experience and the level of supervisory authority during that experience. Report the duration in weeks, as well as begin and end dates, for each experience period.

The name, address and telephone number of an individual that can verify that the experience being reported is accurate. This individual should have been an immediate supervisor unless the supervisor cannot be contacted in which case another individual with direct knowledge of the experience is acceptable.

**105-8.7.4 Concrete Post-Tensioned Segmental Box Girder Construction:** Ensure the individuals filling the following positions meet the minimum requirements as follows:

**105-8.7.4.1 Project Engineer-New Construction:** Ensure the project engineer is a registered Professional Engineer with five years of bridge construction experience. Ensure a minimum of three years of experience is in segmental box girder construction engineering and includes a minimum of one year in segmental casting yard operations and related surveying, one year in segment erection and related surveying, including post-tensioning and grouting of longitudinal tendons and a minimum of one year as the project engineer in responsible charge of segmental box girder construction engineering. Ensure this individual is present at the site of construction, at all times while segmental box girder construction or segment erection is in progress.

**105-8.7.4.2 Project Engineer-Repair and Rehabilitation:** Ensure the project engineer is a registered Professional Engineer with five years of bridge construction experience. Ensure a minimum of three years of experience is in segmental box girder construction engineering and includes one year of post-tensioning and grouting of longitudinal tendons and a minimum of one year as the project engineer in responsible charge of segmental box girder rehabilitation engineering or segmental box girder new construction engineering.

**105-8.7.4.3 Project Superintendent/Manager-New Construction:** Ensure the project superintendent/manager has a minimum of ten years of bridge construction experience or is a registered Professional Engineer with five years of bridge construction experience. Ensure that a minimum of three years of experience is in segmental box girder construction operations and includes a minimum of one year in the casting yard operations and related surveying, one year in segment erection and related surveying including post-tensioning and grouting of longitudinal tendons and a minimum of one year as the project superintendent/manager in responsible charge of segmental box girder construction operations. Ensure this individual is present at the site of construction, at all times while segmental box girder construction or segment erection is in progress.

**105-8.7.4.4 Project Superintendent/Manager-Repair and Rehabilitation:** Ensure the project superintendent/manager has a minimum of five years of bridge construction experience or is a registered Professional Engineer with three years of bridge



construction experience. Ensure that a minimum of two years of experience is in segmental box girder construction operations and includes a minimum of one year experience performing post-tensioning and grouting of longitudinal tendons and a minimum of one year as the project superintendent/manager in responsible charge of segmental box girder rehabilitation operations or segmental box girder new construction operations.

**105-8.7.4.5 Foreman-New Construction:** Ensure that the foreman has a minimum of five years of bridge construction experience with two years of experience in segmental box girder operations and a minimum of one year as the foreman in responsible charge of segmental box girder new construction operations. Ensure this individual is present at the site of construction, at all times while segmental box girder construction or segment erection is in progress.

**105-8.7.4.6 Foreman-Repair and Rehabilitation:** Ensure the foreman has a minimum of five years of bridge construction experience with two years of experience in segmental box girder operations and a minimum of one year as the foreman in responsible charge of segmental box girder rehabilitation operations or segmental box girder new construction operations.

**105-8.7.4.7 Geometry Control Engineer/Manager:** Ensure that the geometry control engineer/manager for construction of cast-in-place box segments is a registered Professional Engineer with one year of experience, a non-registered Engineer with three years of experience or a registered Professional Land Surveyor with three years of experience in geometry control for casting and erection of cast-in-place box segments. Credit for experience in cast-in-place box girder geometry control will be given for experience in precast box girder geometry control but not vice versa.

Ensure that the geometry control engineer/manager for precast box segments is a registered Professional Engineer with one year of experience or non-registered with three years of experience in casting yard geometry control of concrete box segments.

The geometry control engineer/manager must be responsible for and experienced at implementing the method for establishing and maintaining geometry control for segment casting yard operations and segment erection operations and must be experienced with the use of computer programs for monitoring and adjusting theoretical segment casting curves and geometry. This individual must be experienced at establishing procedures for assuring accurate segment form setup, post-tensioning duct and rebar alignment and effective concrete placement and curing operations as well as for verifying that casting and erection field survey data has been properly gathered and recorded. Ensure this individual is present at the site of construction, at all times while cast-in-place segmental box girder construction is in progress or until casting yard operations and segment erection is complete.

**105-8.7.4.8 Surveyor:** Ensure that the surveyor in charge of geometry control surveying for box segment casting and/or box segment erection has a minimum of one year of bridge construction surveying experience. Ensure this individual is present at the site of construction, at all times while segmental box girder construction or segment erection is in progress.

**105-8.7.5 Movable Bridge Construction:** Ensure the individual filling the following positions meet the minimum requirements as follows:

**105-8.7.5.1 Electrical Journeyman:** Ensure the electrical journeyman holds, an active journeyman electrician's license and has at least five years experience in industrial electrical work, or is a Certified Control Systems Technician. A Certified Control

Systems Technician will not be permitted to perform electrical power work including, but not limited to, conduit and wire-way installation or power conductor connection. Ensure the electrical journeyman has successfully completed the installation of one similar movable bridge electrical system during the last three years.

#### **105-8.7.5.2 Control Systems Engineer and Mechanical Systems**

**Engineer:** Ensure the control systems engineer and mechanical systems engineer are both registered Professional Engineers with a minimum of 10 years supervisory experience each in movable bridge construction. Ensure the engineers have working knowledge of the movable bridge leaf motion control techniques, mechanical equipment and arrangements specified for this project. Ensure that each engineer has been in responsible control of the design and implementation of at least three movable bridge electrical control and machinery systems within the past 10 years of which, at least one of the three bridges was within the last three years. Ensure that a minimum of one of the three bridge designs incorporated the same type of leaf motion control and machinery systems specified for this project.

#### **105-8.7.6 Concrete Post-Tensioned Other Than Segmental Box Girder**

**Construction:** Ensure the individual filling the following positions meet the minimum requirements as follows:

**105-8.7.6.1 Project Engineer:** Ensure the project engineer is a registered Professional Engineer with five years of bridge construction experience. Ensure that a minimum of three years of experience is in concrete post-tensioned construction. Ensure that the three years of experience includes experience in girder erection, safe use of cranes, stabilization of girders; design of false work for temporary girder support, post-tensioning and grouting operations, and a minimum of one year as the project engineer in responsible charge of post-tensioning related engineering responsibilities.

**105-8.7.6.2 Project Superintendent/Manager:** Ensure the project superintendent/manager has a minimum of ten years of bridge construction experience or is a registered Professional Engineer with five years of bridge construction experience and has a minimum of three years of supervisory experience in girder erection, safe use of cranes, stabilization of girders; design of falsework for temporary girder support post-tensioning, grouting operations and a minimum of one year as the project superintendent/manager in responsible charge of post-tensioning related operations.

**105-8.7.6.3 Foreman:** Ensure the foreman has a minimum of five years of bridge construction experience with two years of experience in post-tensioning related operations and a minimum of one year as the foreman in responsible charge of post-tensioning related operations.

#### **105-8.7.7 Post-Tensioning (PT) and Filler Injection Personnel Qualifications:**

Perform all stressing and filler injection operations in the presence of the Engineer and with personnel meeting the qualifications of this article. Coordinate and schedule all PT and filler injection activities to facilitate inspection by the Engineer.

**105-8.7.7.1 Post-Tensioning:** Perform all PT field operations under the direct supervision of a Level II CTQP Qualified PT Technician who must be present at the site of the post-tensioning work during the entire duration of the operation. For the superstructures of bridges having concrete post-tensioned box or I girder construction, provide at least two CTQP Qualified PT Technicians, Level I or II, on the work crew. The supervisor of the work crew, who must be a Level II CTQP Qualified PT Technician, may also be a work crew member, in which case, the supervisor shall count as one of the two CTQP qualified work crew members. For PT

operations other than the superstructures of post-tensioned box or I girder construction, perform all PT operations under the direct supervision of a Level II CTQP Qualified PT Technician who must be present at the site of the PT work during the entire duration of the operation. Work crew members are not required to be CTQP qualified.

**105-8.7.7.2 Grouting:** Perform all grouting field operations under the direct supervision of a Level II CTQP Qualified Grouting Technician who must be present at the site of the grouting work during the entire duration of the operation. For the superstructures of bridges having concrete post-tensioned box or I girder construction, provide at least two CTQP Qualified Grouting Technicians, Level I or II, on the work crew. The supervisor of the work crew, who must be a Level II CTQP Qualified Grouting Technician, may also be a work crew member, in which case, the supervisor shall count as one of two CTQP qualified work crew members. For grouting operations other than the superstructures of post-tensioned box or I girder construction, perform all grouting operations under the direct supervision of a Level II CTQP Qualified Grouting Technician who must be present at the site of the grouting work during the entire duration of the operation. Work crew members are not required to be CTQP qualified.

Perform all vacuum grouting operations under the direct supervision of a crew foreman who has been trained and has experience in the use of vacuum grouting equipment and procedures. Submit the crew foreman's training and experience records to the Engineer for approval prior to performing any vacuum grouting operation.

**105-8.7.7.3 Flexible Filler Injection:** Perform all filler injection operations under the direct supervision of a Filler Injection Foreman who has American Segmental Bridge Institute (ASBI) certification in the flexible filler process. Provide at least two CTQP Qualified Grouting Technicians with ASBI certification in the flexible filler process, one of whom must be a Level II CTQP Qualified Grouting Technician. Both technicians must be present at the site of the flexible filler injection work during the entire duration of the operation.

Provide a Filler Injection Quality Control (QC) Inspector who has ASBI certification in the flexible filler process. The Filler Injection QC Inspector must be present at the site of the flexible filler injection work during the entire duration of the operation.

Verifiable experience performing injection of similar flexible filler on at least two projects is acceptable in lieu of ASBI certification in the flexible filler process.

Perform all flexible filler repair operations under the direct supervision of a crew foreman who has been trained and has verifiable experience in the use of vacuum flexible filler repair equipment and procedures. Submit the crew foreman's training and experience records to the Engineer prior to performing any flexible filler operation.

**105-8.7.8 Failure to Comply with Bridge Qualification Requirements:** Make an immediate effort to reestablish compliance. If an immediate effort is not put forth as determined by the Engineer, payment for the bridge construction operations requiring supervisors to be qualified under this Specification will be withheld up to 60 days. Cease all bridge construction and related activities (casting yard, etc.) if compliance is not met within 60 days, regardless of how much effort is put forth. Resume bridge construction operations only after written approval from the Engineer stating that compliance is reestablished.

**105-8.8 Prestressed Concrete Plant Quality Control Personnel:** Obtain personnel certifications from Department accredited training providers. The list of Department approved courses and their accredited providers is available on the SMO website at the following URL:

<http://www.fdot.gov/materials/administration/resources/training/structural/concrete-prestressed.shtm>.

Ensure each prestressed concrete plant has an onsite production manager, an onsite plant quality control manager, a plant engineer, and adequate onsite QC inspectors/technicians to provide complete QC inspections and testing.

Ensure the plant manager for QC has at least five years of related experience and a current Precast/Prestressed Concrete Institute (PCI) QC Personnel Certification Level III and a current certificate of completion of Section 450 Specification examination.

Ensure that the QC inspector/technician has a current certificate of completion of Section 450 Specification examination.

Ensure that the batch plant operators of the ready mixed concrete batch plants meet the requirements of Section 9.2 of the Materials Manual. Ensure that the batch plant operators of the onsite centrally mixed concrete plants meet the requirements of Section 105.

#### **105-8.8.1 Additional Requirements for Quality Control Personnel of Prestressed Manufacturing Facilities:**

**105-8.8.1.1 Testing Personnel:** Ensure personnel performing tests have the following certifications:

Personnel performing plastic property tests must have ACI Concrete Field Testing Technician-Grade I certification.

Personnel performing laboratory compressive strength testing must have ACI Concrete Laboratory Testing Technician Level I certification or ACI Concrete Strength Testing Technician certification.

**105-8.8.1.2 Batch Plant Operator:** Ensure the concrete batch plant operator is qualified as a CTQP Concrete Batch Plant Operator. As an alternative to CTQP qualification, the Department will accept the Precast Concrete Structures Association (PCSA) Batch Plant Operator Certification.

**105-8.9 Signal Installation Inspector:** Provide an inspector trained and certified by the International Municipal Signal Association (IMSA) as a Traffic Signal Inspector to perform all signal installation inspections. Use only Department approved signal inspection report forms during the signal inspection activities. Ensure all equipment, materials, and hardware is in compliance with Department Specifications and verify that all equipment requiring certification is listed on the Department's Approved Product List (APL). Submit the completed signal inspection report forms, certified by the IMSA Traffic Signal Inspector to the Engineer.

The Department's approved inspection report forms are available at the following URL: <http://www.fdot.gov/traffic/>.

#### **105-8.10 Pipe and Precast Concrete Products Manufacturing Facilities Quality Control Personnel:**

**105-8.10.1 General:** Obtain personnel certifications from Department accredited training providers. The list of Department approved courses and their accredited providers is available on the SMO website at the following URL:

<http://www.fdot.gov/materials/administration/resources/training/structural/index.shtm>.

#### **105-8.10.2 Precast Concrete Drainage Structures, Precast Concrete Box Culvert, Precast Concrete Pipe, and Incidental Precast Concrete Manufacturing Facilities Quality Control Personnel:**

**105-8.10.2.1 Level I Quality Control Inspectors:** Ensure that the Level I Inspectors have the following certifications:

##### **105-8.10.2.1.1 Precast Concrete Drainage Technician Level I:**

PCI Quality Control Technician Level I certification. As an alternative, a current Precast Concrete Quality Control Technician Level I certification in the respective work area will be accepted.

CTQP Concrete Field Technician Level I.

**105-8.10.2.1.2 Incidental Precast Concrete Technician Level I:**

PCI Quality Control Technician Level I certification. As an alternative, a current Precast Concrete Quality Control Technician Level I certification in the respective work area will be accepted.

CTQP Concrete Field Technician Level I.

**105-8.10.2.1.3 Precast Concrete Pipe Technician Level I:**

Precast Concrete Quality Control Technician Level I certification.

CTQP Concrete Field Technician Level I.

**105-8.10.2.2 Level II Quality Control Inspectors:** Ensure that Level II Inspectors have the following certifications:

**105-8.10.2.2.1 Precast Concrete Drainage Technician Level II:**

Precast Concrete Drainage Technician Level I, in accordance with 105-8.10.2.1.1.

PCI Quality Control Technician Level II certification. As an alternative, a current Precast Concrete Quality Control Technician Level II certification in the respective work area will be accepted.

**105-8.10.2.2.2 Incidental Precast Concrete Technician Level II:**

Incidental Precast Concrete Technician Level I, in accordance with 105-8.10.2.1.2.

PCI Quality Control Technician Level II certification. As an alternative a current Precast Concrete Quality Control Technician Level II in the respective work area will be accepted.

Level II technicians who will perform quality control of incidental prestressed products must have a current certificate of completion of Section 450 Specification examination.

**105-8.10.2.2.3 Precast Concrete Pipe Technician Level II:**

Precast Concrete Pipe Technician Level I, in accordance with 105-8.10.2.1.3.

Precast Concrete Pipe Technician Certification Level II.

**105-8.10.2.3 Plant Quality Control Manager:** Ensure that the QC manager has a minimum of two years construction related experience in the specific work area and has the following certifications:

**105-8.10.2.3.1 Precast Concrete Drainage Facilities:**

Precast Concrete Drainage Technician Level II in accordance with 105-8.10.2.2.1.

**105-8.10.2.3.2 Incidental Precast Concrete Facilities:**

Incidental Precast Concrete Technician Level II in accordance with 105-8.10.2.2.2.

Section 450 Specification Certification if the plant produces incidental prestressed products.

**105-8.10.2.3.3 Precast Concrete Pipe Facilities:**

Precast Concrete Pipe Technician Level II in accordance with 105-8.10.2.2.3.

**105-8.10.2.4 Additional Requirements for Quality Control Personnel of Precast Concrete Drainage, Precast Concrete Box Culvert, and Incidental Precast Concrete Manufacturing Facilities:**

**105-8.10.2.4.1 Testing Personnel:** Ensure personnel performing tests have the following certifications:

Personnel performing plastic property tests must have ACI Concrete Field Testing Technician-Grade I certification.

Personnel performing laboratory compressive strength testing must have ACI Concrete Laboratory Testing Technician Level 1 certification or ACI Concrete Strength Testing Technician certification.

**105-8.10.2.4.2 Batch Plant Operator:** Ensure the concrete batch plant operator is qualified as a CTQP Concrete Batch Plant Operator. As an alternative to CTQP qualification, the Department will accept the Precast Concrete Structures Association (PCSA) Batch Plant Operator Certification.

For dry cast concrete pipe and dry cast drainage structures, as an alternative to CTQP qualification, the Department will accept the ACPA Quality School Level II Certification.

**105-8.11 Structural Steel and Miscellaneous Metals Fabrication Facility Quality Control Personnel:** Ensure each fabrication facility has an onsite production manager, an onsite facility manager for QC, a plant engineer, and on site QC inspectors/technicians to provide complete QC inspections and testing.

Ensure that the facility manager for QC and QC inspectors/technicians meet the certification requirements set forth in the latest version of AASHTO/NSBA Steel Bridge Collaboration S 4.1, Steel Bridge Fabrication QC/QA Guide Specification, including the years of experience required in Table 105-5 below. The facility manager for QC must meet the requirements of Table 105-5 for every structural steel member type produced by a plant with QC being managed by the facility manager for QC. The facility manager for QC will report directly to the plant manager or plant engineer and must not be the plant production manager nor report to or be the subordinate of the plant production manager. QC inspectors/technicians must be the employees of, and must report directly to the facility manager for QC.

TABLE 105-5 Experience Requirements for QC Inspectors/Technicians And Facility Manager for Quality Control		
Structural Steel Member Type	Minimum Years of Experience Required	
	QC Inspector/Technician	Facility Manager for QC
Rolled beam bridges	1 year	3 years
Welded plate girders (I sections, box sections, etc.)	2 years	4 years
Complex structures, such as trusses, arches, cable stayed bridges, and moveable bridges	3 years	5 years
Fracture critical (FC) members	3 years	5 years

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#### TP 110 – Clearing and Grubbing

##### **CLEARING AND GRUBBING**

All clearing and grubbing shall be performed in accordance with the requirements of Section 110 of the Standard Specifications, except as directed by the Engineer.

Scope of work to include but not be limited to, the removal of all rigid, asphalt pavement, Portland cement concrete pavement, curb, curb and gutter, ditch pavement, sidewalk, driveway aprons, concrete slabs, concrete structures, brick, fences, gravity walls, retaining walls, cutting trees, pipes, etc.

Clearing and Grubbing shall also include the removal of existing pavement and base course and backfilling with suitable material, as shown in the construction plans. Removal of the existing roadway shall also include the proper disposal of the removed materials as specified above.

##### **Basis of Payment**

All work and incidental costs required to perform clearing and grubbing as herein specified will be paid for at the contract lump sum price.

Payment shall be made under:

Pay Item:

110-1-1	Clearing and Grubbing	Lump Sum
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**TP 120 - Excavation, Embankment and Grading**

**EXCAVATION, EMBANKMENT AND GRADING**

All excavation and embankment work shall conform to the requirements of Section 120 of the "Standard Specifications", and the provisions of this section, except as directed by the Engineer.

**Basis of Payment**

Subsoil Excavation will be paid for at the contract price per cubic yard.

Payment shall constitute full compensation for all work described herein and in the Special Provisions and shall include the excavation and disposal of muck, clay, rock, or any other material that is unsuitable in its original position and that is excavated below the finished grading template. Work under this pay item shall also include the excavation of all suitable material within the specified limits as necessary to excavate the unsuitable material. The bottom of the finished grading template shall be considered to be the top of the finished base, shoulders, and slopes for stabilized bases and the finished shoulder and slope lines and bottom of base or rigid pavement for rigid pavement or all other bases. Payment shall also include the provision, placement, shaping, and compaction of suitable backfill material to replace the removed unsuitable material up to the original grade line or to the bottom of the proposed roadway base material, whichever is lower.

The limits of Subsoil Excavation indicated in the construction plans are considered to be particularly variable, in accordance with field conditions actually encountered.

Excavation, Embankment and Grading will be paid for at the contract lump sum price.

Payment shall constitute full compensation for all work described herein and in the Special Provisions and shall include grading of shoulders, graded road connections, slopes, compaction, final dressing, subsoil excavation, replacement material and all work required for completing the project that is not paid for under the other pay items. Also included are removals and off-site disposal or on-site utilization of all materials, structures, abandoned utilities and obstructions as directed by the Engineer.

**Payment shall be made under:**

Item 120-9	Excavation Embankment and Grading	Lump Sum (LS)
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#### TP 160 – Stabilized Subgrade

##### **STABILIZED SUBGRADE**

All work shall be performed in accordance with the requirements of Section 160 of the Standard Specifications (Stabilizing) and shall be constructed to the limits, thickness, and specified limerock bearing ratio as shown on the plans, except as directed by the Engineer.

##### **Method of Measurement**

Quantities of stabilized subgrade measured for payment under this Section shall be the actual area in square yards of satisfactorily installed stabilized subgrade.

##### **Basis of Payment**

Stabilized subgrade will be paid for at the contract unit price per square yard installed and accepted and shall include the cost of furnishing and hauling additional stabilizing materials required, and all mixing, shaping and compacting of the stabilized area. The increased thickness of the Type B stabilization under curb and gutter sections shall be considered incidental and included in the contract unit price.

Payment shall be made under:

##### Pay Item:

160-4	Type B Stabilization (12") (Min LBR 40)	Per Square Yard
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#### TP 270- Soil Cement Base (Primed)

#### **SOIL-CEMENT BASE (PRIMED)**

Construction of a Soil Cement Base shall consist of soil, water, and portland cement uniformly mixed, moistened, compacted, finished and cured in accordance with these specifications and shall conform to the lines, grades, thicknesses and typical cross-sections shown on the plans. Soil cement base that is not finished and cured within (36) hours after compaction has been achieved may be rejected and subject to removal and replacement if so directed by the Engineer.

#### **Testing**

- A. The Contractor shall submit a mix design prepared by an independent Geotechnical Engineer to the Engineer for acceptance before using the material for road construction. Processing of the base shall proceed after the design mix is accepted by the Engineer. A modified Portland Cement Association (PCA) Short Cut Procedure for sand soil test method may be used in lieu of the wet-dry/freeze-thaw test method. However, a 7-day minimum laboratory compressive strength of 300 psi shall be used to determine the cement content when using the modified PCA test method.
  
- B. Construction of the soil cement base shall proceed only after 48 hours prior notice has been received by the Engineer and the County's geotechnical engineer. The geotechnical engineer shall be present during construction. The following is the minimum information/test data to be obtained during construction:
  - 1. Area & Date of Construction
  - 2. Average Cement Content
  - 3. Uniformity of Mix
  - 4. Moisture Content at Time of Compaction
  - 5. Percent Compaction
  - 6. Compacted Thickness
  - 7. 7-Day Compressive Strength Tests

The geotechnical engineer will prepare and submit to the Engineer a signed report documenting all field tests and observations.

#### **Materials**

##### A. Portland Cement

Portland Cement shall be Type I, II, III, or Type I-S or Type I-P and shall comply with FDOT Standard Specification Section 921. Portland Cement shall also comply with ASTM C-150 and/or AASHTO M-85 and be produced in the United States. Cement which is

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partially set, lumpy or caked shall not be used. One cubic foot of Portland Cement shall be considered to weigh 94 lbs.

**B. Water**

Water shall be clean and free from substances deleterious to the hardening of the soil cement mixture.

**C. Soil**

Only soils which have proven themselves to produce a high quality soil cement base shall be acceptable. New sources of soil cement material shall be accepted by the County prior to use.

Specific Requirements for Soil:

Organic Material (As per FM 1-T267)	Maximum 5%
Total Clay and Silt Content (minus No. 200 [75µm sieve) (As per AASHTO T 88, no hydrometer test)	Maximum 25%
Plastic Index (As per AASHTO T 90)	Maximum 10%
Liquid Limit (As per AASHTO T 89)	Maximum 25%
Gradation: (As per AASHTO T 88)	
Passing 2 inch [50 mm] sieve	Minimum 100%
Passing No. 4 [4.75 mm] sieve	Minimum 55%
Passing No. 10 [2.00 mm] sieve	Minimum 37%

As an exception to the above requirements, the Contractor may use any material meeting the requirements for Limerock in Section 911 of the FDOT Standard Specifications.

**D. Prime Coat**

The prime coat shall be emulsified Asphalt Grades SS-1 or SS-1H, or Special MS-Emulsion, diluted per the manufacturer's recommendations.

**Equipment**

Soil Cement may be constructed with any machine, combination of machines or equipment that will produce the results meeting the requirements for soil pulverization, cement application, mixing, uniform depth control, water application, incorporation of materials, compaction, finishing and curing as required to comply with these specifications.

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##### **Construction Methods**

###### **A. General**

The Soil-Cement base shall be placed under the supervision of a competent superintendent having a minimum of two (2) years experience in the construction of soil-cement base courses. Soil-Cement base proportioning and construction shall only be performed when ambient temperatures measured in the shade are at 45°F and rising and that temperatures are not forecast to fall below 35°F for 48 hours following placement of the material. All mixing, shaping, finishing and compaction shall be completed within four hours starting from the time mixing commences.

###### **B. Mix Proportioning**

The Soil-Cement base shall be proportioned using Strength Design criteria. Proportioning of the soil, cement and water shall be performed in a pugmill at a central mix plant. Mixing shall be sufficiently achieved to prevent cement balls from forming when water is added. The Contractor shall continuously monitor plant batching and mixing of the materials and submit to the Engineer reports of the gradation, cement content and moisture content prepared by the independent Geotechnical Engineer. The County's Geotechnical Engineer shall monitor the installation and conduct applicable tests and inspections as outlined in this Section.

###### **C. Preparation**

Before construction operations are begun, the area to be paved shall be graded and shaped as required to receive the spread of soil-cement mixture delivered from the plant and allow construction in conformance with the grades, lines, thicknesses and typical cross sections shown on the plans. Additional soil needed, if any, shall be placed as directed. Unsuitable soil or materials shall be removed and replaced with acceptable soil. The subgrade shall be compacted to the density, thickness, lines, grades, and typical sections shown on the plans. The contractor shall maintain the required density until the base is placed on the subgrade.

###### **D. Pulverization**

The soil to be used in mixing shall be so pulverized that, at the completion of moist-mixing, 100 percent by dry weight passes a 1" sieve, and a minimum of 80% passes a No. 4 sieve, exclusive of gravel or stone retained on these sieves.

###### **E. Application of Cement**

The specified quantity of Portland Cement required for full depth treatment shall be metered out at the plant in accurate proportion in accordance with the mix design. The percentage of

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moisture in the soil, at the time of cement application at the plant, shall not exceed the quantity that will permit a uniform and intimate mixture of soil and cement during proportioning and shall not exceed 2% below the optimum moisture content for the soil cement mixture.

#### **F. Mixing**

After the cement has been applied, it shall be thoroughly mixed with the soil at the pugmill. Mixing shall continue until the cement has been thoroughly blended with the soil in order to prevent the formation of cement balls when water is applied. Any uncompacted soil and cement mixture that has not been compacted and finished shall not remain undisturbed for more than thirty (30) minutes.

#### **G. Application of Water and Moist Mixing**

Immediately after and/or during the mixing of soil and cement, the moisture content of the soil cement mixture shall be determined by the laboratory. Water shall be applied uniformly in quantities required to obtain the proper design moisture content within the range provided by the contractor's geotechnical engineer. After the final application of water, mixing shall continue until a uniform and intimate mixture of soil, cement and water is obtained.

When water application and mixing have been completed, the percentage of moisture in the mixture, based on oven-dry weights, shall be no more than two percentage points above the specified optimum moisture content, and shall be less than that quantity which will cause the soil cement mixture to become unstable during compaction and finishing.

#### **H. Spreading**

The mixed base material shall be hauled to the placement site in trucks equipped with protective covers and immediately placed on top of the prepared subgrade. The material shall be graded to conform to the lines and grades of the finished pavement section as shown on the project drawings and shall be placed in a sufficient thickness to assure the minimum required compacted thickness free from high and low spots. No more than 60 minutes will be allowed between placement of adjacent passes of the spreader at any location, except at construction joints.

#### **I. Compaction**

The material shall be placed in a single, uniformly thick, loose layer and evenly compacted to a density not less than 97% of the modified maximum density determined by AASHTO T-134 on representative samples of soil cement mixture obtained from the roadway at the time compaction begins. Not more than four hours shall elapse from the time of batching to final compaction and the material shall not remain undisturbed for more than two hours. The surface of the base course may require the addition of water during the final rolling and shaping operation to prevent excessive surface moisture losses prior to sealing the base.

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##### **J. Finishing**

After the mixture has been initially compacted, the surface of the soil cement shall be shaped to the required lines, grades and cross-section. During the shaping operations, the surface shall be lightly scarified to loosen any imprints left by the compacting or shaping equipment, when deemed necessary. The resulting surface shall then be compacted to the specified density with a pneumatic tire roller. Rolling shall be supplemented by broom-dragging, if required.

The moisture content of the surface material must be maintained at not less than its specified optimum moisture content during finishing operations. Surface compaction and finishing shall be done in such a manner as to produce a smooth, dense surface, free of surface compaction planes, cracks, ridges, or loose material. Surface-finishing methods may vary, provided a smooth, dense surface free of surface compaction planes is produced. The moisture and density requirements shall be determined by the methods prescribed in AASHTO T-134.

##### **K. Surface Requirements (Scalping or Hard-Planing)**

After completing compaction and finishing but not later than the beginning of the next calendar day after constructing any section of the base, the surface shall be tested with a template cut to the required crown and/or with a 15 foot straight-edge laid parallel to the centerline. All irregularities greater than 1/4 inch shall be immediately corrected with a blade adjusted to the lightest cut which will insure a surface that does not contain depressions greater than 1/4 inch under the template or the straight-edge. The material removed shall be wasted. Additional wetting during and after that final shaping operation shall be provided to keep the base continuously moist.

##### **L. Prime/Curing**

After finishing the soil cement it shall be protected against drying for 7 days by applying a bituminous curing material as soon as possible after completing finishing operations. The finished soil cement shall be kept continuously wet until the curing material is placed. Curing material shall consist of a mixture of 60% grade SS-1 and 40% water applied at the rate of 0.15 to 0.20 gallons per square yard.

The prime coat bituminous material specified shall be uniformly applied to the surface of the completed soil cement. The exact rate and temperature of application to give complete coverage without excessive runoff will be accepted by the Engineer. At the time the bituminous material is applied, the soil cement surface shall be dense, free of all loose and extraneous material, and contain sufficient moisture to prevent penetration of the bituminous material. Water shall be applied in sufficient quantity to fill the surface voids of the soil cement immediately before the bituminous curing material is applied. The bituminous material shall be sanded using a sufficient amount of clean sand to prevent bleeding or traffic pick-up.

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##### **M. Construction Joints**

Prior to the beginning of each day's construction, a straight transverse construction joint shall be formed by cutting back into the completed work to form a true vertical face.

##### **N. Thickness**

During various stages of construction test holes or trenches shall be dug in the mixture to determine the thickness. After completing the base, test holes shall be dug or drilled at intervals of not more than 300 feet (closer intervals if necessary) and the thickness of the base shall be determined from measurements made in these test holes.

Where the base is deficient in thickness by more than 1/2 inch, the area of deficient base shall be removed and replaced with base of the required thickness at the Contractor's sole expense. At the Engineer's option such deficient thickness base may be left in place, provided the deficiency is not more than one inch. This deficiency shall be made up in asphaltic concrete, provided the control grades can be maintained. Payment will be made on the basis of full depth soil-cement. No additional payment will be made for asphaltic concrete required to make up deficiencies in soil-cement base thicknesses.

##### **Opening To Traffic**

The Contractor will not be permitted to drive heavy equipment over the completed sections, but light weight pneumatic-tired equipment may be permitted after 24 hours, provided the surface has hardened sufficiently to prevent the equipment's marking the surface and provided the protection and curing specified are not impaired.

##### **Maintenance**

The Contractor shall maintain the base to a true and satisfactory surface until the wearing surface is constructed. Should any repairs or patching be necessary, they shall extend to the full depth of the base and shall be made in a manner that will assure restoration of a uniform base course conforming to the requirements of these specifications. The bituminous curing coating shall be maintained until the wearing surface is constructed.

##### **Inspection**

The Engineer, Geotechnical Engineer and Contractor shall inspect the base for deficiencies after a minimum of seven 7 days have elapsed and prior to applying the asphalt wearing surface. All deficiencies shall be corrected and accepted by the Engineer 48 hours prior to commencing paving operations.

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**Method of Measurement**

Quantities measured for payment under this Section shall be the actual area in square yards of soil cement base constructed to limits, thicknesses, lines and grades shown on the plans, completed and accepted.

**Basis of Payment**

Soil Cement Base will be paid for at the contract unit price per square yard completed and accepted. The cost of the cement, prime coat and cover material, including the spreading of each, shall be included in the contract unit price.

Payment shall be made under:

Item No

270-12	12" Soil Cement Base, (Primed) (300 psi)	Per Square Yard
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**TP 285 – Optional Base Course**

**OPTIONAL BASE COURSE**

Work specified in this Section consists of constructing Optional Base Course in Section 285 of the “Standard Specifications”, except as amended herein. The plant, methods of operation and equipment shall conform to Section 320; general construction requirements shall be as specified in Section 320; and materials and compositions shall conform to Section 330 of the “Standard Specifications”, except as directed by the Engineer.

**Method of Measurement**

Quantities measured for payment under this Section shall be the actual area in square yards of optional base course installed within the limits of the contract.

**Basis of Payment**

Optional Base Course will be paid for at the contract unit price per square yard, completed and accepted. No additional payment will be made for thickness greater than indicated neither on the plans nor for pavement of unauthorized areas.

Payment shall constitute full compensation including but not limited to all labor, equipment, materials including bituminous material (plant mix), bituminous material (tack coat) and all other incidental costs necessary to complete the work as specified.

**Payment shall be made under:**

Item No

285-7-13	Base Group 13 (8.0” Type B-12.5 Only) (Black Base)	Per Square Yard (SY)
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## **PART H**

### **TECHNICAL PROVISIONS**

#### **Wallace Road and Dr. Phillips Boulevard Intersection Improvements**

##### **TP 327 – Milling of Existing Asphalt Pavement**

###### **MILLING OF EXISTING ASPHALT PAVEMENT**

Milling of existing asphalt pavement shall be performed in accordance with the requirements of Sections 327 and 300 of the “Standard Specifications”, except as amended herein. The work specified in this Section consists of removing existing asphaltic concrete pavement by milling to lower the finished grade adjacent to existing curb prior to resurfacing, except as directed by the Engineer.

Milled material becomes the property of the Contractor.

###### **Equipment**

The milling machine shall be capable of maintaining a depth of cut and cross slope that achieves the results specified in the plans and specifications. The overall length of the machine (out to out measurements excluding the conveyor) shall be a minimum of 18 feet. The minimum cutting width shall be 6 feet.

The milling machine shall be equipped with a built-in automatic grade control system that controls the transverse slope and the longitudinal profile to produce the specified results. Any commercially manufactured milling machine meeting the above requirements shall be accepted prior to starting the project. If after milling has started the milling machine cannot consistently produce the specified results, the milling machine will be rejected for further use.

Equipment permitted when milling adjacent to existing curbs or other areas. Use of a smaller milling machine will be subject to the Engineer’s acceptance, where it is impractical to use the above-described equipment.

The milling machine shall be equipped with means to effectively limit the amount of dust escaping the removal operation.

###### **Construction**

The Contractor shall remove the existing raised reflective pavement markers prior to milling. Include the cost of removing existing pavement markers in the price for milling.

The milling machine shall be operated to minimize the amount of dust being emitted from the machine. Pre-wetting of the pavement may be required.

Where traffic will be maintained on the milled surface prior to placing the new asphaltic concrete, the striation patterns shall produce an acceptable riding surface. The Engineer will accept the traveling speed of the milling machine to produce an acceptable riding surface. Before opening a milled area to traffic, the pavement shall be thoroughly swept with power broom or other acceptable equipment to remove, to the greatest extent practicable, fine material, which will dust under traffic. This operation shall be conducted in such a manner that will minimize the potential of creating a traffic hazard and minimize air pollution.

Sweeping the milled surface with a power broom is required before placing asphaltic concrete.

The sweeping operation shall be performed immediately after the milling to prevent milled material infiltrating into the storm sewer system when the milling operation is near a municipal curb and gutter or a closed drainage system.

This operation shall include thoroughly removing all milled material from the gutter to prevent it from being swept into inlet openings or grates. Curbs shall not be damaged during the removal operation. The Engineer may require the equipment and/or methods be changed to achieve satisfactory results.

### **Milled Surface**

Milled surfaces shall have a reasonably uniform texture, shall be within ¼ inch of a true profile grade and shall have no deviation in excess of ¼ inch from a straightedge applied to the pavement perpendicular to the centerline. Variations of the longitudinal joint between multiple cut areas shall not exceed ¼ inch. Areas varying from a true surface in excess of the above stated tolerance may be accepted without correction if the Engineer determines that they were caused by a pre-existing condition, which could not have reasonably been corrected by the milling operations. Any unsuitable texture or profile, as determined by the Engineer, shall be corrected by the Contractor at no additional compensation.

The Engineer may require re-milling of any area where a surface lamination causes a non-uniform texture to occur.

### **Method of Measurement**

Quantities measured for payment under this Section shall be square yards, of milling acceptably completed.

### **Basis of Payment**

Milling Existing Asphalt Pavement will be paid for at the contract unit price per square yard.

Payment shall be full compensation for all work specified in this Section, including hauling off or otherwise disposing of the milled material.

### **Payment shall be made under:**

ITEM NO.

327-70-4      Milling Existing Asphalt Pavement (3" Avg. Depth) - Per Square Yard (SY)

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TECHNICAL PROVISIONS  
**Wallace Road and Dr. Phillips Boulevard Intersection Improvements**  
TP 334 – Superpave Asphaltic Concrete Pavement

**SUPERPAVE ASPHALTIC CONCRETE PAVING**

**334-1 GENERAL**

Work specified in this Provision consists of the application of Asphaltic Concrete structural courses properly produced and laid upon a prepared and accepted base in accordance with these specifications and in conformity with the lines, grades, thicknesses and cross-sections provided in the plans. Base preparation and Asphaltic Concrete Friction Courses are covered under separate provisions.

This Provision is intended to stand alone for the production and placement of structural course asphalt and replaces Sections 330 and 334 of the FDOT Standard Specifications for Road and Bridge Construction except when specific references are made to these or other Sections. Any references to FDOT Specification Sections shall mean the latest FDOT Standard Specifications for Road and Bridge Construction, including Supplements. Any incorrect references to or conflicts with the FDOT specifications, test methods, or standards shall be brought to the attention of the Engineer for clarification.

The Engineer will have the right to disapprove of any material or process that does not conform to these specifications.

The Contractor shall document all QC procedures, Process Control, inspection, and all test results and make them available for review by the Engineer throughout the Contract duration.

All test methods designated as FM refer to the FDOT Florida Sampling and Testing Methods.

**334-2 CONTRACTOR QUALITY CONTROL REQUIREMENTS**

**334-2.1 GENERAL:** The Contractor shall be responsible for the overall quality of the materials and workmanship of the work covered under this Provision.

Ensure that the qualifications and certifications of personnel and laboratories are maintained throughout the Contract duration. Provide proof of qualifications and all applicable certifications to the County prior to construction operations commencing. Notify the County immediately when there is a change in any qualification or certification during the Contract duration.

**334-2.2 PERSONNEL:** Provide personnel who are both qualified and certified in all activities related to asphalt mix production at the plant and placement on the roadway, especially for the sampling, testing and inspection of materials and construction activities. At a minimum, a certified Paving Level II technician shall be present on site at all times during paving operations. Provide documentation to the

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### TECHNICAL PROVISIONS

#### **Wallace Road and Dr. Phillips Boulevard Intersection Improvements**

##### TP 334 – Superpave Asphaltic Concrete Pavement

Engineer that the personnel responsible for the production and placement of asphalt products under the Contract are qualified and certified.

**334-2.3 TESTING LABORATORY:** Furnish or have furnished a fully equipped asphalt laboratory (permanent or portable) at the production site. Provide documentation to the Engineer that any Laboratory used is FDOT qualified and certified.

**334-2.4 EQUIPMENT:** Provide equipment and methods conforming to Section 320 of the FDOT Standard Specifications for Road and Bridge Construction. Provide a sufficient number of trucks to transport the asphalt mixture from the plant to the job site such that paving of each lane can proceed in one smooth uninterrupted operation. In determining the number of trucks required the Contractor shall consider the capacity of the trucks, the length of the approved haul route from the plant to the job site, traffic conditions, weather conditions, and any other factors that could impact the round trip travel time. Stopping the paver to wait for trucks bringing the asphalt mixture will not be acceptable. In addition to meeting the requirements in Section 320-5, the paving machine shall be capable of pushing the asphalt truck as it dumps the asphalt mixture into the hopper. Stopping the paving machine to allow the next asphalt truck to back up to it to fill the hopper is not an acceptable procedure, and shall not be allowed.

Unless otherwise approved by the Engineer, the paving machine shall weigh a minimum of 26,000 pounds.

**334-2.5 MINIMUM QUALITY CONTROL REQUIREMENTS:** Perform the following activities necessary to maintain quality and process control and meet specification requirements:

**Stockpiles:** Ensure each aggregate component is placed in an individual stockpile, and separated from adjacent stockpiles, either by space or by a system of bulkheads. Prevent the intermingling of different materials in stockpiles. Form and maintain stockpiles in a manner that will prevent separation, contamination, segregation, etc. Identify each individual stockpile, including RAP, as shown on the mix design.

**Incoming Aggregate:** Obtain gradations and bulk specific gravity (Gsb) values from aggregate supplier for reference; determine the gradation of all component materials; routinely compare gradations and Gsb values to mix design.

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##### TP 334 – Superpave Asphaltic Concrete Pavement

**Cold Bins:** Calibrate the cold gate/feeder belt for each material; determine cold gate/feeder belt settings; observe operation of cold feeder for uniformity.

**Dryer:** Observe pyrometer for aggregate temperature control; observe efficiency of the burner.

**For Batch Plants:** Determine percent used and weight to be pulled from each bin to assure compliance with Mix Design, check mixing time, and check operations of weigh bucket and scales.

**For Drum Mixer Plants:** Determine aggregate moisture content, and calibrate the weigh bridge on the charging conveyor.

**Control Charts:** Plot and keep charts updated daily for all Quality Control Sampling and Testing and post in the asphalt lab where they can be seen. Maintain the following charts:

1. Sample test results for the following: No. 8 sieve, No. 200 sieve, asphalt binder content, air voids, and density.
2. Gradation of incoming aggregate.
3. Gradation and asphalt content of RAP.
4. Any other test result or material characteristic (as determined by the Contractor) necessary for process control.

The above listed minimum activities are to be considered normal activities necessary to control the production of hot mix asphalt at an acceptable quality level. It is recognized, however, that depending on the type of process or materials, some of the activities listed may not be necessary and in other cases, additional activities may be required. The frequency of these activities will also vary with the process and the materials. When the process varies from the defined process average and variability targets, the frequency of these activities will be increased until the proper conditions have been restored.

#### **334-2.6 MINIMUM PROCESS CONTROL TESTING REQUIREMENTS:**

##### **Asphalt Plant**

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1. Hot Mix Asphalt: Determine the asphalt binder content; mix gradation and volumetric properties at a minimum frequency of one per day. In the event that the daily production exceeds 1,000 tons, perform these tests a minimum of two times per day.
2. Aggregate (Including RAP): One sample per 1,000 tons of incoming material as it is stockpiled for gradation. The testing of RAP material shall include the determination of asphalt binder content and gradation of extracted aggregate.
3. Monitor the mix temperature for the first five loads and every fifth load thereafter.
4. Monitor the aggregate moisture content from stockpiles or combined cold feed aggregate - one per day.
5. Other tests (as determined necessary by the Contractor) for process control.

#### **Roadway**

1. Monitor the mix temperature for the first five loads and at a minimum every fifth load thereafter.
2. Monitor the prime/tack spread rate as needed to control operations and ensure that it meets or exceeds the target spread rate.
3. Monitor the pavement cross slope at a frequency necessary to fulfill the requirements of the plans and section 334-3.10.3 below, and identify a system to control the cross slope of each pavement layer during construction.
4. Monitor the mix spread rate at the beginning of each day's production, and as needed to control the operations, at a minimum of once per 200 tons placed to ensure that the spread rate meets or exceeds the target spread rate. When determining the spread rate, use an average of five truckloads of mix.
5. Monitor mat placement thickness every 25' to ensure the minimum design thickness is met.
6. Monitor the pavement temperature with an infrared temperature device. Monitor the roadway density with either 6 inch diameter roadway cores, a nuclear density gauge, or other density measuring device, at a minimum frequency of once per 1,500 feet of pavement. Maintain daily records of the testing results and

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make them available for review by the Engineer throughout the life of the Contract.

7. Monitor the pavement smoothness with a 15-foot rolling straightedge as required by section 334-3.10.4 below.

#### **334-3 GENERAL CONSTRUCTION REQUIREMENTS**

##### **334-3.1 DESCRIPTION**

Construct plant-mixed hot bituminous pavements. Establish and maintain a quality control system in accordance with section 334-2 above that provides assurance that all materials, products and completed construction submitted for acceptance meet Contract requirements.

##### **334-3.2 LIMITATIONS OF OPERATIONS**

**334-3.2.1 Weather Limitations:** Do not transport asphalt mix from the plant to the roadway unless all weather conditions are suitable for the laying operations.

##### **334-3.2.2 Limitations of Laying Operations:**

**334-3.2.2.1 General:** Spread the mixture only when the surface upon which it is to be laid has been previously prepared, is intact, firm, and properly cured, and is substantially dry. Do not place friction course until the adjacent shoulder area has been dressed and grassed.

**334-3.2.2.2 Temperature:** Spread the mixture only when the air temperature in the shade and away from artificial heat is at least 40°F and rising for layers greater than 1 inch in thickness and at least 45°F and rising for layers 1 inch or less in thickness (including leveling courses). The minimum temperature requirement for leveling courses with a spread rate of 50 lb/yd<sup>2</sup> or less is 50°F and rising.

**334-3.2.2.3 Wind:** Do not spread the mixture when the wind is blowing to such an extent that proper and adequate compaction cannot be maintained or when sand, dust, etc., are being deposited on the surface being paved to the extent that the bond between layers will be diminished.

**334-3.2.2.4 Night Paving:** Provide sufficient lighting for night operations.

##### **334-3.3 ROADWAY SURFACE PREPARATION**



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**334-3.3.1 Cleaning:** Prior to the laying of the mixture, clean the surface of the base or pavement to be covered of all loose and deleterious material by the use of a vacuum truck. Power brooms or blowers may be used when the use of a vacuum truck is impractical, supplemented by hand brooming where necessary. Surface must be dry prior to laying of the mixture.

**334-3.3.2 Patching and Leveling Courses:** Where an asphalt mix is to be placed on an existing pavement or old base which is irregular, or wherever the plans indicate, bring the existing surface to proper grade and cross-section by the application of patching or leveling courses. Wherever a patch is required, the width shall be taken out to the full width of each lane affected and the length shall extend far enough longitudinally to fully encompass the affected area. The existing pavement receiving a patch or leveling course shall be milled as shown on the plans or as required by the Engineer.

**334-3.3.3 Application Over Surface Treatment:** Where an asphalt mix is to be placed over a newly constructed surface treatment, sweep and dispose of all loose material from the paving area.

**334-3.3.4 Coating Surfaces of Contacting Structures:** Paint all structures which will be in actual contact with the asphalt mixture, with the exception of the vertical faces of existing pavements and curbs or curb and gutter, with a uniform coating of asphalt cement to provide a closely bonded, watertight joint.

##### **334-3.3.5 Tack Coat:**

**334-3.3.5.1 Tack Coat Required:** Apply a tack coat, meeting the requirements of Section 300 in the FDOT Standard Specifications for Road and Bridge Construction, on existing pavement structures that are to be overlaid with an asphalt mix and between successive layers of all asphalt mixes. The use of trackless tack coat listed on FDOT's Approved Product List may be allowed as approved by the Engineer.

**334-3.3.5.2 Tack Coat at Engineer's Option:** Apply a tack coat on the following surfaces only when so directed by the Engineer:

1. Freshly primed bases.
2. Surface treatment.

#### **334-3.4 ASPHALT PLANT PREPARATION**

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Ensure the following requirements are met at the asphalt plant:

##### **Asphalt Cement**

- Asphalt cement is delivered to the asphalt plant at a temperature not to exceed 370°F.
- Asphalt cement is maintained in storage within a range of 230 to 370°F in advance of mixing operations.
- Constant heating is maintained within these limits, and that high fluctuations in temperature during a day's production is avoided.

##### **Aggregate Blending:**

- All aggregates to be blended or proportioned are placed in separate bins at the cold hopper.
- Proportioning is performed by means of securely positioned calibrated gates or other approved devices.
- 

##### **Aggregate Cold Bins:**

- Bin compartments are constructed to prevent any spilling or leakage of aggregate from one bin to another.
- Bin compartments have the capacity and design to permit a uniform flow of aggregates.
- Bin compartments are mounted over a feeder of uniform speed, which will deliver the specified proportions of aggregate to the drier.
- Bins are equipped with vibrators to ensure a uniform flow of aggregate at all times.
- Each bin compartment is provided with a gate which is adjustable in the vertical direction.
- Gates can be held securely at any specified vertical opening.
- Gates are equipped with a measuring device for measuring the vertical opening of the gates from a horizontal plane level with the bottom of the feeder.

##### **Mineral Filler:**

Mineral filler (if required in the mix design) is fed or weighed in separately from the other aggregates.

##### **Aggregate Heating and Drying:**

- Aggregates are heated and dried before screening.
- The temperature of the aggregates is controlled so that the temperature of the completed mixture at the plant falls within the permissible range allowed by

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#### Wallace Road and Dr. Phillips Boulevard Intersection Improvements

##### TP 334 – Superpave Asphaltic Concrete Pavement

this Section.

##### **Aggregate Screening:**

- Oversized pieces of aggregate are removed by the use of a scalping screen.
- Oversized material is not returned to the stockpile for reuse unless it has been crushed

and reprocessed into sizes that will pass the scalping screen.

- The quantity of aggregates being discharged onto the screens does not exceed the capacity of the screens to actually separate the aggregates into the required sizes.
- A maximum of 10% plus-10 material in the minus-10 bin is maintained.

#### **334-3.5 MIXTURE PREPARATION**

Ensure the following requirements are met:

**334-3.5.1 Batch Mixing:** The dried aggregates and mineral filler (if required), prepared as specified and proportioned to meet the verified mix design, shall be conveyed to the empty mixer. The accurately measured hot asphalt binder shall be introduced into the mixer simultaneously with, or after, the hot aggregates. The blended materials shall be continuously mixed until thoroughly uniform with all particles fully coated. The mixing time begins when the measuring devices for both the asphalt and the aggregates indicate that all the material is in the mixer, and continues until the material begins to leave the mixing unit. In no case will the mixing time be less than 35 seconds.

**334-3.5.2 Continuous Mixing:** The dried aggregates and mineral filler (if required), prepared as specified and proportioned to meet the verified mix design, shall be introduced into the mixer in synchronization with the accurate feeding of the hot asphalt cement. The blended materials shall be sufficiently mixed until thoroughly uniform with all particles fully coated.

**334-3.5.3 Mix Temperature:** The ingredients of the mix shall be heated and combined in such a manner as to produce a mixture with a temperature, when discharged from the pugmill or surge bin, which is within the master range as defined below.

The temperature of the completed mixture shall be determined using a quick-reading thermometer through a hole in the side of the loaded truck immediately after loading. A 1/4 inch hole on both sides of the truck body within the middle third of the length of the body, and at a distance from 6 to 10 inches above the surface supporting the mixture shall be provided.

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The normal frequency for taking asphalt mix temperatures will be for each day, for each design mix on the first five loads and once every five loads thereafter. The temperature of the asphalt mix at the plant and at the roadway shall be taken at the normal frequency before the mix is placed. The temperature shall be recorded on the front of the respective delivery ticket. The Engineer shall review the plant and roadway temperature readings and may take additional temperature measurements at any time.

The master range for all mix designs will be the established temperature from the mix design  $\pm 30^{\circ}\text{F}$ . Reject for use on the project any load or portion of a load of asphalt mix at the plant or at the roadway with a temperature outside of this master range. The Engineer will be immediately notified of the rejection.

If any single load at the plant or at the roadway is within the master range but differs from the established mix temperature by more than  $\pm 25^{\circ}\text{F}$  or if the average difference of

the temperature measurements from the established mix temperature for five loads exceeds  $\pm 15^{\circ}\text{F}$ , the temperature of every load will be monitored until the temperature falls within the specified tolerance range in Table 334-1; at this time the normal frequency may be resumed.

#### **Table 334-1**

##### **Temperature Tolerance From Verified Mix Design**

Any Single Measurement

$\pm 25^{\circ}\text{F}$

Average of Any Five Consecutive Measurements

$\pm 15^{\circ}\text{F}$

**334-3.5.4 Maximum Period of Storage:** The maximum time that any mix may be kept in a hot storage or surge bin shall be 72 hours.

**334-3.5.5 Contractor's Responsibility for Mixture Requirements:** Produce a homogeneous mixture, free from moisture and with no segregated materials, that meets all specification requirements. Also apply these requirements to all mixes produced by the drum mixer process and all mixes processed through a hot storage or surge bin, both before and after storage.

#### **334-3.6 MIXTURE TRANSPORT**

Transport the mixture in tight vehicles previously cleaned of all foreign material. After cleaning, thinly coat the inside surface of the truck bodies with soapy water or an asphalt release agent as needed to prevent the mixture from adhering to the beds. Do not allow excess liquid to pond in the truck body. Do not use diesel fuel or any

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other hazardous or environmentally detrimental material as a coating for the inside surface of the truck body. Cover each load during transport from the asphalt plant to the jobsite at all times.

#### **334-3.7 MIXTURE PLACEMENT**

##### **334-3.7.1 Requirements Applicable to All Mixture Types:**

**334-3.7.1.1 Alignment of Edges:** Lay all asphalt concrete mixtures, including leveling courses, other than the pavement edge just adjacent to curb and gutter or other true edges, by the stringline method to obtain an accurate, uniform alignment of the pavement edge. Control the unsupported pavement edge to ensure that it will not deviate more than  $\pm 1.5$  inches from the stringline.

**334-3.7.1.2 Temperature of Spreading:** Maintain the temperature of the mix at the time of spreading within the master range as defined in 334-3.5.3.

**334-3.7.1.3 Rain and Surface Conditions:** Immediately cease transportation of asphalt mixtures from the plant when rain begins at the roadway. Do not place asphalt mixtures while rain is falling, or when there is standing water on the surface to be covered. Once the rain has stopped and water has been removed from the tacked surface to the satisfaction of the Engineer and the temperature of the mixture caught in transit still meets the requirements as specified in 334-3.7.1.2, the Contractor may then place the mixture caught in transit.

**334-3.7.1.4 Speed of Paver:** Establish the forward speed of the asphalt paver based on the rate of delivery of the mix to the roadway but not faster than the optimum speed needed to adequately compact the pavement.

**334-3.7.1.5 Automatic Screed Control:** For all asphalt courses placed with an asphalt paver, equip the paver with automatic longitudinal screed controls of either the skid type, traveling stringline type, or non-contact averaging ski type with a minimum length of 25 feet. On the final layer of asphalt base, overbuild, and structural courses, and for friction courses, use the joint matcher in lieu of the skid, traveling stringline, or non-contact averaging ski on all passes after the initial pass. Equip the asphalt paver with electronic cross slope controls.

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**334-3.7.1.6 Number of Crews Required:** For each paving machine operated, use a separate crew, each crew operating as a full unit. The technician who will be in charge of all paving operations shall be state approved and properly certified as deemed appropriate by the Engineer. The Contractor's technician in charge of the paving operations may be responsible for more than one crew but must be physically accessible to the Engineer at all times when placing mix.

**334-3.7.1.7 Checking Depth of Layer:** Check the depth of each layer at frequent intervals, and make adjustments when the thickness deviates from the design thickness. When making an adjustment, allow the paving machine to travel a minimum distance of 32 feet to stabilize before the second check is made to determine the effects of the adjustment.

**334-3.7.1.8 Hand Spreading:** In limited areas where the use of the spreader is impossible or impracticable, the Contractor may spread and finish the mixture by hand.

**334-3.7.1.9 Straightedging and Back-patching:** Straightedge and backpatch after obtaining initial compaction and while the material is still hot.

#### **334-3.7.2 Requirements Applicable to Courses Other Than Leveling:**

**334-3.7.2.1 Spreading and Finishing:** Upon arrival, dump the mixture in the approved mechanical spreader, and immediately spread and strike-off the mixture to the full width required, and to such loose depth for each course that, when the work is completed, the required specified thickness is placed. Carry a uniform amount of mixture ahead of the screed at all times.

**334-3.7.2.2 Thickness of Layers:** Construct each course of Type SP mixture in layers of thickness as shown in Section 334-4.1.3.

**334-3.7.2.3 Laying Width:** For regular roadways, pave to the full lane width, except in areas where physically constrained. For other applications such as sidewalks, provide a spreader capable of placing and screeding to the plan width. If necessary due to the traffic requirements, lay the mixture in strips in such a manner as to provide for the passage of traffic. As an option, where the road is closed to traffic, lay the mixture to the full width with machines traveling in echelon. Plan longitudinal joints such that they are not placed where a permanent wheel path will occur.

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**334-3.7.2.4 Correcting Defects:** Before starting any rolling, check the surface. Correct any irregularities; remove all drippings, fat sandy accumulations from the screed, and fat spots from any source; and replace them with satisfactory material. Do not skin patch. When correcting a depression while the mixture is hot, scarify the surface and add fresh mixture.

#### **334-3.7.3 Requirements Applicable Only to Leveling Courses:**

**334-3.7.3.1 Patching Depressions:** Before spreading any leveling course, fill all depressions in the existing surface more than 1 inch deep by spot patching with leveling course mixture, and then compact them thoroughly.

**334-3.7.3.2 Spreading Leveling Courses:** Place all courses of leveling by the use of two motor graders, equip one with a spreader box. Other types of leveling devices may be used if approved by the Engineer.

**334-3.7.3.3 Rate of Application:** When using Type SP-9.5 (fine graded) for leveling, do not allow the average spread of a layer to be less than 50 lb/yd<sup>2</sup> or more than 75 lb/yd<sup>2</sup>. The quantity of mix for leveling shown in the plans represents the average for the entire project.

#### **334-3.8 MIXTURE COMPACTION**

**334-3.8.1 Equipment and Sequence:** For each paving or leveling train in operation, furnish a separate set of rollers, with their operators.

Select equipment, sequence, and coverage of rolling to meet the specified mix design density. The coverage is the number of times the roller passes over a given area of pavement.

Regardless of the rolling procedure used, complete the final rolling before the surface temperature of the pavement drops to the extent that effective compaction may not be achieved or the rollers begin to damage the pavement.

**334-3.8.2 Standard Rolling Procedure:** Meet the following equipment, sequence, and coverage requirements:

1. Seal Rolling: Provide two coverages with a tandem steel-wheeled roller, weighing 5 to 12 tons, following as close behind the spreader as possible without pick-up, undue displacement, or blistering of the material. Use static mode only for all compaction. No vibration will be allowed.

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2. Intermediate rolling: Provide five coverages with a self-propelled pneumatic-tired roller, following as close behind the seal rolling operation as the mix will permit.

3. Final rolling: Provide one coverage with a tandem steel-wheeled roller (static mode only), weighing 5 to 12 tons, after completing the seal rolling and intermediate rolling, but before the surface pavement temperature drops to the extent that effective compaction may not be achieved or the rollers begin to damage the pavement.

For patching and leveling courses, the first structural layer placed on a milled surface, and on the first overbuild course, use only a self-propelled pneumatic-tired roller.

The Contractor may use equipment, sequences, or coverages other than those specified in the standard rolling procedure if so authorized by the Engineer.

**334-3.8.3 Compaction at Crossovers, Intersections, etc.:** When using a separate paving machine to pave the crossovers, compact the crossovers with one, 8 to 12 ton tandem steel roller (static mode only). If placing crossovers, intersections, and acceleration and deceleration lanes with the main run of paving, also use a traffic roller to compact these areas.

**334-3.8.4 Rolling Procedures:** Ensure that the initial rolling is longitudinal.

Where the lane being placed is adjacent to a previously placed lane, pinch or roll the center joint prior to the rolling of the rest of the lane.

Roll across the mat, overlapping the adjacent pass by at least 6 inches. Roller passes should end at approximate 45° angles to the pavement centerline. Roll slowly enough to avoid displacement of the mixture, and correct any displacement at once by the use of rakes and the addition of fresh mixture if required.

Continue final rolling to eliminate all roller marks.

**334-3.8.5 Number of Pneumatic-tired Rollers Required:** Use a sufficient number of self-propelled pneumatic-tired rollers to ensure that the rolling of the surface for the required number of passes does not delay any other phase of the laying operation and does not result in excessive cooling of the mixture before completing the rolling. In the event that the rolling falls behind, discontinue the laying operation until the rolling operations are sufficiently caught up.



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**334-3.8.6 Compaction of Areas Inaccessible to Rollers:** Use hand tamps or other satisfactory means to compact areas which are inaccessible to a roller, such as areas adjacent to curbs, headers, gutters, bridges, manholes, etc.

**334-3.8.7 Correcting Defects:** Do not allow the rollers to deposit gasoline, oil, or grease onto the pavement. Remove and replace any areas damaged by such deposits as directed by the Engineer. While rolling is in progress, test the surface continuously, and correct all discrepancies to comply with the surface requirements.

Remove and replace all drippings, fat or lean areas, and defective construction of any description. Remedy depressions that develop before completing the rolling by loosening the mixture and adding new mixture to bring the depressions to a true surface. Should any depression remain after obtaining the final compaction, remove the full depth of the mixture, and replace it with sufficient new mixture to form a true and even surface.

Correct all high spots, high joints, and honeycombing as directed by the Engineer.

Remove and replace any mixture remaining unbonded after rolling. Correct all defects prior to laying the subsequent course.

#### **334-3.9 JOINTS**

**334-3.9.1 General:** When laying fresh mixture against the exposed edges of joints (trimmed or formed as provided below), place it in close contact with the exposed edge to produce an even, well-compacted joint after rolling.

**334-3.9.2 Transverse Joints:** Place the mixture as continuously as possible. Do not pass the roller over the unprotected end of the freshly laid mixture except when discontinuing the laying operation long enough to permit the mixture to become chilled.

When thus interrupting the laying operation, construct a transverse joint by cutting back on the previous run to expose the full depth of the mat.

**334-3.9.3 Longitudinal Joints:** For all layers of pavement except the leveling course, place each layer so that longitudinal construction joints are offset 6 to 12 inches laterally between successive layers. The Engineer may waive this requirement where offsetting is not feasible due to the sequence of construction.

#### **334-3.10 SURFACE REQUIREMENTS**

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**334-3.10.1 General:** Construct a smooth pavement with good surface texture and the proper cross-slope.

**334-3.10.2 Texture of the Finished Surface of Paving Layers:** Produce a finished surface of uniform texture and compaction with no pulled, torn, raveled, crushed or loosened portions and free of segregation, bleeding, flushing, sand streaks, sand spots, or ripples. Correct any area of the surface that does not meet the foregoing requirements in accordance with 334-3.10.5.

Do not use asphalt concrete mixtures containing aggregates that cause a different color appearance in the final wearing surface in sections less than 1 mile in length and across the full width of the roadway unless approved by the Engineer.

**334-3.10.3 Cross Slope:** Construct a pavement surface with cross slopes in compliance with the requirements of the Contract Documents. Furnish a level with a minimum length of 4 feet or a digital measuring device approved by the Engineer for the control of cross slope. Make this level or measuring device available at the jobsite at all times during paving operations. Utilize electronic transverse screed controls on the paving machine (unless directed otherwise by the Engineer) to obtain an accurate transverse slope of the pavement surface.

**334-3.10.3.1 Quality Control Checks:** Measure the cross slope of the pavement surface by placing the measuring device perpendicular to the roadway centerline. Report the cross slope to the nearest 0.1%. Record all the measurements on an approved form and submit to the Engineer for documentation. The cross slope report shall be submitted to the Engineer prior to the next scheduled paving operation.

Measure the cross slope at a minimum frequency of one measurement every 100 feet during paving operations to ensure that the cross slope is uniform and in compliance with the design cross slope. When the difference between the measured cross slope and the design cross slope exceeds  $\pm 0.2\%$  for travel lanes (including turn lanes) or  $\pm 0.5\%$  for shoulders, make all corrections immediately to bring the cross slope into the acceptable range.

When the cross slope is consistently within the acceptable range, upon the approval of the Engineer, the frequency of the cross slope measurements can be reduced to one measurement every 250 feet during paving operations.

For intersections, tapers, crossovers, transitions at beginning and end of project and similar areas, adjust the cross slope to match the actual site conditions or as directed by the Engineer.

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**334-3.10.4 Pavement Smoothness:** Construct a smooth pavement meeting the requirements of this Specification. The County will provide a representative to be present when smoothness testing is performed.

**334-3.10.4.1 General:** Furnish a 15 foot manual and a 15 foot rolling straightedge meeting the requirements of FM 5-509. Make them available at the job site at all times during paving operations. Obtain a smooth surface on all pavement courses placed, and then straightedge all final structural and friction course layers in accordance with 334-3.10.4.5.

**334-3.10.4.2 Test Method:** Perform all straightedge testing in accordance with FM 5-509 with one pass of the rolling straightedge operated along the outside wheel path of each lane being tested. The Engineer may require additional testing at other locations within the lane.

**334-3.10.4.3 Traffic Control:** Provide traffic control in accordance with 334-3.2 and FDOT Design Standard Indices (600 series as applicable) during all testing. When traffic control cannot be provided in accordance with the applicable indices, submit an alternative Traffic Control Plan. The cost of this traffic control is included in the Contract bid prices for other pay items.

##### **334-3.10.4.5 Quality Control Checks:**

**334-3.10.4.5.1 General:** Straightedge the final Type SP structural layer and friction course layer with a rolling straightedge. Test all pavement lanes and ramps where the width is constant using a rolling straightedge and document all deficiencies on a form approved by the Engineer. Notify the Engineer of the location and time of all straightedge checks a minimum of 48 hours before beginning. Testing shall be conducted by a certified Paving Level I or higher technician. Maintain a field record during testing on a form approved by the Engineer identifying the areas tested and listing the location and degree of all deficiencies found. The field record shall be signed by the technician conducting the test and the Engineer or Engineer's Representative observing the test.

**334-3.10.4.5.2 Rolling Straightedge Exceptions:** Testing with the rolling straightedge will not be required in the following areas: intersections, tapers, crossovers, parking lots and similar areas. In addition, testing with the rolling straightedge will not be performed on the following areas when they are less than 50 feet in length: turn lanes, acceleration/deceleration lanes and side streets. However, correct any

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individual surface irregularity in these areas that deviates from the plan grade in excess of 3/8 inch as determined by a 15 foot manual straightedge, and that the Engineer deems to be objectionable, in accordance with 334-3.10.5.

In addition, the Engineer may also waive the straightedging requirements on ramps and superelevated sections where the geometrical orientation of the pavement results in an inaccurate measurement with the rolling straightedge.

**334-3.10.4.5.3 Intermediate Layers:** Straightedge all intermediate Type SP layers (structural and overbuild) as necessary to construct a smooth pavement.

On roadways with a design speed 50 miles per hour or greater, when an intermediate Type SP layer will be opened to traffic, straightedge the pavement with a rolling straightedge and correct all deficiencies in excess of 3/8 inch within 72 hours of placement, unless directed otherwise by the Engineer. Correct all deficiencies in accordance with 334-3.10.5.

**334-3.10.4.5.4 Final Type SP Structural Layer:** Straightedge the final Type SP structural layer with a rolling straightedge, either behind the final roller of the paving train or as a separate operation. The Engineer will verify the straightedge testing by observing the Quality Control straightedging operations. Correct all deficiencies in excess of 3/16 inch in accordance with 334-3.10.5, and retest the corrected areas prior to placing the friction course.

For bicycle paths, straightedge the final structural layer with a rolling straightedge, either behind the final roller of the paving train or as a separate operation. Correct all deficiencies in excess of 5/16 inch in accordance with 334-3.10.5. Retest all corrected areas. If the Engineer determines that the deficiencies on the bicycle path are due to field geometrical conditions, the Engineer will waive corrections.

**334-3.10.4.5.5 Friction Course Layer:** Acceptance for pavement smoothness will be based on verified Quality Control measurements using the rolling straightedge. The Engineer will verify the straightedge testing by observing the Quality Control straightedging operations.

At the completion of all paving operations, straightedge the friction course as a separate operation. As an exception, if approved by the Engineer, straightedge the friction course behind the final roller of the paving train. Correct all deficiencies in excess of 3/16 inch in accordance with 334-3.10.5. Recheck all corrected areas.

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**334-3.10.5 Correcting Unacceptable Pavement:** Correct all areas of unacceptable pavement at no cost to the County. Correct deficiencies in the Type SP structural layers or in the friction course by removing and replacing the full depth of the layer, extending for a distance on either side of the defective area as determined by the Engineer, but in no case less than 50 feet on either side of the defective area for the full width of the paving lane. At the discretion of the Engineer, removal and replacement of the entire limits of the new pavement may be required.

#### **334-3.11 FINISHED SURFACE PROTECTION**

Keep sections of newly compacted asphalt concrete, which are to be covered by additional courses, clean until the successive course is laid.

Do not dump embankment or base material directly on the pavement. Dress shoulders before placing the friction course on adjacent pavement.

Equip blade graders operating adjacent to the pavement during shoulder construction with a 2 by 8 inch or larger board, or other attachment providing essentially the same results, attached to their blades in such manner that it extends below the blade edge in order to protect the pavement surface from damage by the grader blade.

To prevent rutting or other distortion, protect sections of newly finished dense graded friction course and the last structural layer prior to the friction course from traffic until the surface temperature has cooled below 160°F.

The Contractor may use artificial methods to cool the pavement to expedite paving operations. The County may direct the Contractor to use artificial cooling methods when maintenance of traffic requires opening the pavement to traffic at the earliest possible time.

#### **334-3.12 STRIPING**

Following final cooling and compaction of the mat and prior to opening to traffic, place temporary painted traffic stripes in accordance with TP-710 and Standard Specification 710 on each paved surface that will receive traffic, including intermediate structural courses, final structural courses that will serve as the surface course, and friction courses. Following thirty (30) days after placement of the final surface course, structural or friction, place thermoplastic striping in accordance with TP-711 and Standard Specification 711 and place raised reflective pavement markers. Final pavement markings are subject to a 180 day observation period under normal traffic. The observation period shall begin with the satisfactory completion and acceptance of the work. The pavement markings shall show no signs of failure due to blistering, excessive cracking, chipping, discoloration, poor adhesion to the pavement, loss of reflectivity or vehicular damage. The County reserves the right to

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check the color and retroreflectivity within 30 days prior to the end of the observation period. Replace, at no additional expense to the County, any pavement markings that do not perform satisfactorily under traffic during the 180 day observation period.

**334-4 SUPERPAVE ASPHALTIC CONCRETE**

**334-4.1 DESCRIPTION**

**334-4.1.1 General:** Construct a Superpave Asphaltic Concrete pavement using the type of mixture specified in the Contract on a properly prepared and accepted base. Superpave mixes are identified as Type SP-9.5, Type SP-12.5 or Type SP-19.0.

Meet the requirements of 334-2 for personnel, plant, methods and equipment. Meet the general construction requirements of 334-3.

**334-4.1.2 Traffic Levels:** The requirements for Type SP Asphaltic Concrete mixtures are based on the design traffic level of the project, expressed in 18-Kip Equivalent Single Axle Loads (ESAL's). The traffic levels applicable for this specification are as shown in Table 1.

<b>Traffic Level</b>	<b>Million ESAL's</b>	<b>Typical Applications</b>
A	<0.3	Local roads, county roads, and city streets where truck traffic is light or prohibited
B	0.3 to <3	Arterial roads, Collector roads, access streets, medium duty city streets and the majority of county roadways
C	3 to < 10	

The traffic level(s) for the project are as specified in the Contract. A Type SP mix one traffic level higher than the traffic level specified in the Contract, up to a Traffic Level C mix, may be substituted at no cost to the County. In situations where the design traffic level is not specified in the Contract, a Traffic Level C mix shall be used.

**334-4.1.3 Layers:** Use only fine graded Superpave mixes.

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**334-4.1.3.1 Layer Thickness:** The allowable structural layer thicknesses for fine Type SP Asphaltic Concrete mixtures are as follows:

Type SP-9.5.....	1 1/4 – 1 1/2 inches
Type SP-12.5.....	1 1/2 – 2 1/2 inches
Type SP-19.0.....	2- 3 inches

In addition to the minimum and maximum thickness requirements, the following restrictions are placed on fine mixes when used as a structural course:

- Type SP-9.5 - Limited to the top two structural layers, two layers maximum.
- Type SP-12.5 -. May be used in multiple lifts.
- Type SP-19.0 - May not be used in the final (top) structural layer.

**334-4.1.3.2 Additional Requirements:** The following requirements also apply to fine Type SP Asphaltic Concrete mixtures:

**334-4.1.3.2.1** When construction includes the paving of adjacent shoulders ( $\leq 5$  feet wide), the layer thickness for the upper pavement layer and shoulder shall be the same and paved in a single pass, unless called for differently in the contract documents.

**334-4.1.3.2.2** All overbuild layers shall be Type SP Asphalt Concrete designed at the traffic level as stated in the Contract. Use the minimum and maximum layer thicknesses as specified above unless called for differently in the contract documents. On variable thickness overbuild layers, the minimum allowable thickness may be reduced by 1/4 inch, and the maximum allowable thickness may be increased 1/2 inch, unless called for differently in the contract documents.

**334-4.2 MIX COMPOSITION**

**334-4.2.1 General:** Compose the asphalt mixture using a combination of aggregates (coarse, fine or mixtures thereof), mineral filler, if required, and asphalt binder material. Size, grade and combine the aggregate proportions to meet the grading and physical properties of the approved mix design. Aggregates from various sources may be combined.

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**334-4.2.2 Mix Design:** Submit to the Engineer the proposed mix design and proof that this mix design is on the FDOT District 5 accepted list. The Engineer will verify with the FDOT District 5 Bituminous Engineer that the mix is on the approved list. No mix design revisions will be allowed. A new design mix will be required for any substitution of an aggregate product, binder, or other design component unless approved by the Engineer. The Engineer will consider any marked variations from mix design parameters or any evidence of inadequate field performance of a mix design as sufficient evidence that the properties of the mix design have changed, and the Engineer will no longer allow the use of that mix design. Provide certification from the plant (either in a statement on the delivery ticket or on a separate sheet) that the mix provided is in conformance with the design mix.

Only currently pre-approved FDOT asphalt mix designs are accepted. No mix design revisions will be allowed without prior approval from the Engineer. Provide certification from the plant (either in a statement on the delivery ticket or on a separate sheet) that the mix provided is in conformance with the design mix.

**334-4.2.3 Additional Information:** Provide the following information to the Engineer with each FDOT approved mix design submitted for use:

- The approved FDOT Mix Design Number.
- The design traffic level and the design number of gyrations ( $N_{\text{design}}$ ).
- The source and description of the materials to be used.
- The FDOT source number product code of the aggregate components furnished from an FDOT approved source.
- The gradation and proportions of the raw materials as intended to be combined in the paving mixture. The gradation of the component materials shall be representative of the material at the time of use. Compensate for any change in aggregate gradation in handling and processing as necessary.
- A single percentage of the combined mineral aggregate passing each specified sieve. Degradation of the aggregate due to processing (particularly -No. 200 [-75  $\mu\text{m}$ ]) should be accounted for and identified for the applicable sieves.
- The bulk specific gravity value for each individual aggregate (and RAP) component, as identified in the FDOT aggregate control program.
- A single percentage of asphalt binder by weight of total mix intended to be incorporated in the completed mixture, shown to the nearest 0.1%.



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- A target temperature at which the mixture is to be discharged from the plant and a target roadway temperature. Do not exceed a target temperature of 340°F for modified asphalts and 315°F for unmodified asphalts.
- The physical properties achieved at four different asphalt binder contents, one of which shall be at the optimum asphalt content, and must conform to all specified physical requirements.
- The ignition oven calibration factor.

**334-4.3 MATERIALS**

**334-4.3.1 General Requirements:** Meet the material requirements specified in Division III of the FDOT Standard Specifications for Road and Bridge Construction. Specific references are as follows:

Coarse Aggregate: Stone, Slag, Crushed Gravel, Crushed Reclaimed Portland Cement Concrete Pavement, Crushed Glass.....Section 901  
Fine Aggregate.....Section 902  
Superpave PG Asphalt Binder ..... Section 916-1

**334-4.3.2 Superpave Asphalt Binder:** Unless specified otherwise in the Contract, use a PG 58-22 or PG 67-22 asphalt binder unless the use of a different binder or recycling agent has been approved by the Florida Department of Transportation and the Engineer for a particular mix design.

**334-4.3.3 Use of Reclaimed Asphalt Pavement (RAP) Material:**

**334-4.3.3.1 General Requirements:** Reclaimed Asphalt Pavement (RAP) may be used as a component material of the asphalt mixture, with the exception of Friction Course mixes, subject to the following requirements:

- Assume responsibility for the production and placement of asphalt mixes which incorporate RAP as a component material.
- Use only RAP that has been approved by the FDOT. Provide documentation of the FDOT approval.
- Limit the amount of RAP material used in the mix to a maximum of 30% by weight of total aggregate, unless otherwise approved the Engineer.
- Use any suitable means to prevent oversized RAP material from showing up in the completed recycled mixture. Take immediate

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corrective action if oversized RAP material appears in the completed recycled mix.

- Provide stockpiled RAP material that is reasonably consistent in characteristics and contains no aggregate particles which are soft or conglomerates of fines.
- Provide RAP having a minimum average asphalt content of 4.0% by weight. The Engineer may sample the stockpile to verify that this requirement is met.

#### 334-4.4 ACCEPTANCE

**334-4.4.1 General:** The asphalt mixture will be accepted based on one of the following methods as determined by the Engineer and/or the Contract Documents:

- 1) Certification, Contractor Process Control Testing, and Acceptance Testing by the Engineer
- 2) Other method(s) as determined by the Contract

**334-4.4.2 Certification by the Contractor:** Submit a Notarized Certification of Specification Compliance letter by an officer of the company who is in responsible charge of paving operations. The letter shall be submitted on company letterhead to the Engineer and shall state that all material produced and placed on the project was in substantial compliance with the Specifications.

**334-4.4.3 Contractor Process Control Testing:** Provide supporting test data documenting all quality and process control testing as described in 334-2 above. A pre-qualified Independent Laboratory as approved by the Engineer may be utilized for the Process Control testing.

**334-4.4.4 Acceptance Testing by the Engineer:** The Engineer may employ the use of a pre-qualified Independent Geotechnical Engineering firm and/or Laboratory to perform acceptance testing. For every 500 feet of pavement placed per lane per day, take a set of three (3) randomly placed cores, six (6) inches in diameter, for determining density and thickness. A minimum of two sets of three cores will be taken per roadway. Acceptance will be based on the following:

**334-4.4.4.1 Density:** The minimum acceptable average density for each course of asphaltic concrete placed shall be ninety-two (92%) percent of the design unit weight ( $G_{mm}$ ) of the job mix, with no test lower than ninety and eight tenths (90.8%) percent or higher than ninety-five (95%) percent.

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**334-4.4.4.2 Thickness:** Meet the minimum design thickness on all cores. When a deficiency in thickness is found, the Engineer may require additional cores to be taken to determine the extent of the thickness deficiency. For any thickness that is less than the design thickness, remove and replace the full depth of the layer, extending for a distance on either side of the defective area as determined by the Engineer, but in no case less than 50 feet on either side of the defective area for the full width of the paving lane. At the discretion of the Engineer, removal and replacement of the entire limits of the new pavement may be required. For any thickness that is greater than the design thickness, the Engineer will make a determination about acceptance.

**334-4.4.4.3 Surface Tolerance:** The asphalt mixture will be accepted on the roadway with respect to surface tolerance in accordance with the applicable requirements of 334-3.10.

**334-4.4.4.4 Additional Tests:** The County reserves the right to run any test at any time for informational purposes and for determining the effectiveness of the Contractor's quality control and process control.

#### **334-4.5 METHOD OF MEASUREMENT**

For the work specified under this Section the quantity to be paid for shall be the actual area in Square Yards (SY) of asphaltic concrete placed and accepted within the limits of the contract.

#### **334-4.6 BASIS OF PAYMENT**

Type SP Asphaltic Concrete will be paid for at the contract unit price per square yard, completed and accepted. No additional payment will be made for thickness of asphalt greater than the design thickness.

The bid price for the asphalt mix will include the cost of the liquid asphalt or the asphalt recycling agent. There will be no separate payment for the asphalt binder material in the asphalt mix.

Payment shall be made under:

Item No. 334-1-13    Type 12.5 Asphaltic Concrete, (Traffic Level C) - per square yard (SY)

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##### **TP 337 – Superpave Asphaltic Concrete Friction Courses**

### **SUPERPAVE ASPHALTIC CONCRETE FRICTION COURSES**

#### **337-1 DESCRIPTION**

337-1.1 General: Construct a Superpave Asphaltic Concrete Friction Course pavement using the type of mixture specified in the Contract. Superpave Friction Course mixes are identified as Type FC-5, FC-9.5 and FC-12.5. Meet the requirements of TP 334-2 for personnel, plant, methods and equipment. Meet the general construction requirements of TP 334-3.

337-1.2 Thickness: The thickness of the friction course layer will be the plan thickness as shown in the plans per mix type. FC-9.5 will be 1", FC-12.5 will be 1-1/2", and FC-5 will be 3/4".

337-1.3 Contractor's Process Control: Provide the necessary quality and process control of the friction course mix production and placement in accordance with the applicable provisions of TP 334-2 and TP 334-3. The contractor will monitor the spread rate periodically to ensure uniform thickness. Provide quality control procedures for daily monitoring and control of spread rate. If the spread rate drops below the target value, immediately make all corrections necessary to bring the spread rate into the acceptable range.

#### **337-2 MIX COMPOSITION**

337-2.1 General: Compose the asphalt mixture using a combination of aggregates (coarse, fine, or a mixture thereof) and asphalt binder. Some mixtures may require fibers and/or hydrated lime. Size, grade and combine the aggregate proportions to meet the grading and physical properties of the approved mix design and the requirements of this Section.

337-2.2 Mix Design: Any submitted mix design must be pre-approved by the FDOT. Submit to the Engineer the proposed mix design and proof that the mix design is on the FDOT District 5 accepted list. No mix design revisions will be allowed. A new design mix will be required for any substitution of an aggregate product, aggregate gradation, binder, or other design component unless approved by the Engineer. The Engineer will consider any marked variations from mix design parameters or any evidence of inadequate field performance of a mix design as sufficient evidence that the properties of the mix design have changed, and the Engineer will no longer allow the use of that mix design. Provide certification from the plant (either in a statement on the delivery ticket or on a separate sheet) that the mix provided is in conformance with the design mix.

337-2.3 Asphalt Binder: Meet the requirements of Section 916, and any additional requirements or modifications specified herein for the various mixtures. Use PG 76-22 asphalt binder meeting the requirements of Section 916-1 of the FDOT Standard Specifications for Road and Bridge Construction. ARB-5 and ARB-12 shall not be used as the asphalt rubber binder unless otherwise approved by the Engineer. Limit the amount of Reclaimed Asphalt Pavement (RAP)

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material used in the mix design to equal to or less than 20% by weight of the total aggregate, unless otherwise approved by the Engineer.

337-2.4 Additional Information: Provide the following information to the Engineer with each FDOT approved mix design submitted for use:

- The approved FDOT Mix Design Number.
- The design traffic level and the design number of gyrations ( $N_{\text{design}}$ ).
- The source and description of the materials to be used.
- The FDOT source number product code of the aggregate components furnished from an FDOT approved source.
- The gradation and proportions of the raw materials as intended to be combined in the paving mixture. The gradation of the component materials shall be representative of the material at the time of use. Compensate for any change in aggregate gradation in handling and processing as necessary.
- A single percentage of the combined mineral aggregate passing each specified sieve. Degradation of the aggregate due to processing (particularly -No. 200 [-75  $\mu\text{m}$ ]) should be accounted for and identified for the applicable sieves.
- The bulk specific gravity value for each individual aggregate (and RAP) component, as identified in the FDOT aggregate control program.
- A single percentage of asphalt binder by weight of total mix intended to be incorporated in the completed mixture, shown to the nearest 0.1%.
- A target temperature at which the mixture is to be discharged from the plant and a target roadway temperature. Do not exceed a target temperature of 340°F for modified asphalts and 315°F for unmodified asphalts.
- The physical properties achieved at four different asphalt binder contents, one of which shall be at the optimum asphalt content, and must conform to all specified physical requirements.
- The ignition oven calibration factor.

#### 337-3 PECIAL CONSTRUCTION REQUIREMENTS

337-3.1 FC-9.5 and FC-12.5:

337-3.1.1 Temperature:

337-3.1.1.1 Air Temperature at Laydown: Spread the mixture only when the air temperature (the temperature in the shade away from artificial heat) is at 45°F and rising.

337-3.1.1.2 Temperature of the mix: Heat and combine the asphalt binder and aggregate in a manner to produce a mix having a temperature, when discharged from the plant and at the time of spreading on the roadway, meeting the requirements of TP 334-3.5.3.

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337-3.1.2 Prevention of Adhesion: To minimize adhesion to the drum during the rolling operations, the Contractor may add a small amount of liquid detergent to the water in the roller.

At intersections and in other areas where the pavement may be subjected to cross-traffic before it has cooled, spray the approaches with water to wet the tires of the approaching vehicles before they cross the pavement.

337-3.1.3 Transportation Requirements of Friction Course Mixtures: Cover all loads of friction course mixtures with a tarpaulin.

337-3.2 FC-5:

337-3.2.1 Hot Storage: When using surge or storage bins in the normal production of FC-5, do not leave the mixture in the surge or storage bin for more than one hour.

337-3.2.2 Longitudinal Grade Controls for Open-Graded Friction Courses: Use either longitudinal grade control (skid, ski or traveling stringline) or a joint matcher.

337-3.2.3 Temperature:

337-3.2.3.1 Air Temperature at Laydown: Spread the mixture only when the air temperature (the temperature in the shade away from artificial heat) is at 65°F and rising. As an exception, place the mixture at temperatures lower than 65°F, only when approved by the Engineer based on the Contractor's demonstrated ability to achieve a satisfactory surface texture and appearance of the finished surface. In no case shall the mixture be placed at temperatures lower than 60°F.

337-3.2.3.2 Temperature of the Mix: Heat and combine the asphalt binder and aggregate in a manner to produce a mix having a temperature, when discharged from the plant and at the time of spreading on the roadway, meeting the requirements of TP 334-3.5.3. The target mixing temperature shall be established at 320°F.

337-3.2.4 Compaction: Provide two, static steel-wheeled rollers, with an effective compactive weight in the range of 135 to 200 PLI, determined as follows:

$$\text{PLI} = \frac{\text{Total Weight of Roller (pounds)}}{\text{Total Width of Drums (inches)}}$$

(Any variation of this equipment requirement must be approved by the Engineer.) Establish an appropriate rolling pattern for the pavement in order to effectively seat the mixture without crushing the aggregate. In the event that the roller begins to crush the aggregate, reduce the number of coverages or the PLI of the rollers. If the rollers continue to crush the aggregate, use a tandem steel-wheel roller weighing not more than 135 lb/in (PLI) of drum width.

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##### 337-3.2.5 Special Equipment

337-3.2.5.1 Fiber Supply System: Use a separate feed system to accurately proportion the required quantity of mineral fibers into the mixture in such a manner that uniform distribution is obtained. Interlock the proportioning device with the aggregate feed or weigh system to maintain the correct proportions for all rates of production and batch sizes. Control the proportion of fibers to within plus or minus 10% of the amount of fibers required. Provide flow indicators or sensing devices for the fiber system, interlocked with plant controls so that the mixture production will be interrupted if introduction of the fiber fails.

When a batch plant is used, add the fiber to the aggregate in the weigh hopper or as approved and directed by the Engineer. Increase the batch dry mixing time by 8 to 12 seconds, or as directed by the Engineer, from the time the aggregate is completely emptied into the pugmill. Ensure that the fibers are uniformly distributed prior to the addition of asphalt binder into the pugmill.

When a drum-mix plant is used, add and uniformly disperse the fiber with the aggregate prior to the addition of the asphalt binder. Add the fiber in such a manner that it will not become entrained in the exhaust system of the drier or plant.

337-3.2.5.2 Hydrated Lime Supply System: For FC-5 mixes containing granite, use a separate feed system to accurately proportion the required quantity of hydrated lime into the mixture in such a manner that uniform coating of the aggregate is obtained prior to the addition of the asphalt. Add the hydrated lime in such a manner that it will not become entrained in the exhaust system of the drier or plant. Interlock the proportioning device with the aggregate feed or weigh system to maintain the correct proportions for all rates of production and batch sizes and to ensure that all mixture produced is properly treated with hydrated lime. Control the proportion of hydrated lime to within plus or minus 10% of the amount of hydrated lime required. Provide and interlock flow indicators or sensing devices for the hydrated lime system with plant controls so that the mixture production will be interrupted if introduction of the hydrated lime fails. The addition of the hydrated lime to the aggregate may be accomplished by Method (A) or (B) as follows:

337-3.2.5.2.1 Method (A) - Dry Form: Add hydrated lime in a dry form to the mixture according to the type of asphalt plant being used.

When a batch plant is used, add the hydrated lime to the aggregate in the weigh hopper or as approved and directed by the Engineer. Increase the batch dry mixing time by eight to twelve seconds, or as directed by the Engineer, from the time the aggregate is completely emptied into the pugmill. Uniformly distribute the hydrated lime prior to the addition of asphalt binder into the pugmill.

When a drum-mix plant is used, add and uniformly disperse the hydrated lime to the aggregate prior to the addition of the asphalt. Add the hydrated lime in such a manner that it will not become entrained in the exhaust system of the drier or plant.

337-3.2.5.2.2 Method (B) - Hydrated Lime/Water Slurry: Add the required quantity of hydrated lime (based on dry weight) in a hydrated lime/water slurry form to the aggregate. Provide a solution consisting of hydrated lime and water in concentrations as directed by the Engineer. Use

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a plant equipped to blend and maintain the hydrated lime in suspension and to mix it with the aggregates uniformly in the proportions specified.

337-3.2.5.3 Hydrated Lime Pretreatment: For FC-5 mixes containing granite, pretreat the aggregate with hydrated lime prior to incorporating the aggregate into the mixture. Use a feed system to accurately proportion the aggregate and required quantity of hydrated lime, and mix them in such a manner that uniform coating of the aggregate is obtained. Control the proportion of hydrated lime to within  $\pm 10\%$  of the amount required. Aggregate pretreated with hydrated lime in this manner shall be incorporated into the asphalt mixture within 45 days of pretreatment.

337-3.2.5.3.1 Hydrated Lime Pretreatment Methods: Pretreat the aggregate using one of the following two methods:

Pretreatment Method A – Dry Form: Add the required quantity of hydrated lime in a dry form to the aggregate. Assure that the aggregate at the time of pretreatment contains a minimum of 3% moisture over saturated surface dry (SSD) conditions. Utilize equipment to accurately proportion the aggregate and hydrated lime and mix them in such a manner as to provide a uniform coating.

Pretreatment Method B – Hydrated Lime/Water Slurry: Add the required quantity of hydrated lime (based on dry weight) in a hydrated lime/water slurry form to the aggregate. Provide a solution consisting of hydrated lime and water in a concentration to provide effective treatment. Use equipment to blend and maintain the hydrated lime in suspension, to accurately proportion the aggregate and hydrated lime/water slurry, and to mix them to provide a uniform coating.

337-3.2.5.3.2 Blending Quality Control Records: Maintain adequate Quality Control records for the Engineer's review for all pretreatment activities. Include as a minimum the following information (for each batch or day's run of pretreatment): pretreatment date, aggregate certification information, certified test results for the hydrated lime, aggregate moisture content prior to blending, as-blended quantities of aggregate and hydrated lime, project number, customer name, and shipping date.

337-3.2.5.3.3 Certification: In addition to the aggregate certification, provide a certification with each load of material delivered to the HMA plant, that the material has been pretreated in conformance with these specifications. Include also the date the material was pretreated.

#### 337-4 ACCEPTANCE

337-4.1 FC-9.5 and FC-12.5: Meet the requirements of TP 334-4.4.

337-4.2 FC-5: Meet the requirements of TP 334-4, excluding TP 334-4.4.4.

Prior to the issuance of substantial completion, the contractor shall submit to the Engineer the complete cross slope report for the entire friction course placed within the project limits.



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##### **337-5 FAILING MATERIAL**

Assume responsibility for removing and replacing all defective material placed on the project, at no cost to the County.

##### **337-6 METHOD OF MEASUREMENT**

For the work specified under this Section the quantity to be paid for shall be the actual area in Square Yards (SY) of asphaltic concrete friction course placed and accepted within the limits of the contract.

The bid price for the asphalt mix will include the cost of the asphalt binder, asphalt cement, anti-stripping agent, blending and handling and the tack coat application as directed in Article 300-8 of the FDOT Standard Specifications for Road and Bridge Construction, as well as fiber stabilizing additive and hydrated lime (if required). There will be no separate payment or unit price adjustment for the asphalt binder material in the asphalt mix.

##### **337-7 BASIS OF PAYMENT**

Price and payment will be full compensation for all the work specified under this Section (including the applicable requirements of Articles 300 and 320 of the FDOT Standard Specifications for Road and Bridge Construction.

##### **Payment shall be made under:**

ITEM NO. 337-7-43	Asphaltic Concrete Friction Course (1.5") (FC-12.5), (Traffic Level C)
	(Incl. Tack Coat) Per Square Yard (SY)

## TP 344 - CONCRETE FOR LAP (OFF-SYSTEM)

### 344-1 Description.

**344-1 General:** Construct concrete based on the type of work as described in the Contract and the concrete work categories as defined below.

**344-1.2 Work Categories:** Construction will fall into one of the following concrete work categories:

**344-1.2.1 Concrete Work Category 1:** Includes the construction of sidewalks, curb and gutter, ditch and slope pavement, or other non-reinforced cast-in-place elements.

**344-1.2.2 Concrete Work Category 2:** Includes the construction of precast concrete including concrete barriers, traffic railing barriers, parapets, sound barriers, inlets, manholes, junction boxes, pipe culverts, storm sewers, box culverts, prestressed concrete poles, concrete bases for light poles, highway sign foundations, retaining wall systems, traffic separators or other structural precast elements.

**344-1.2.3 Concrete Work Category 3:** Includes the work associated with the placement and/or construction of structural cast-in-place concrete meeting the requirements of this section.

### 344-2 Materials.

**344-2.1 General:** Use concrete composed of a mixture of Portland cement, aggregates, and water, with or without chemical or mineral admixtures that meet the following requirements:

**344-2.1.1 Portland Cement:** Portland cements meeting the requirements of AASHTO M-85 or ASTM C-150 is required. Different brands of cement, cement of the same brand from different facilities or different types of cement shall be stored separately and shall not be mixed.

**344-2.1.2 Coarse and Fine Aggregates:** Aggregates shall meet ASTM C 33. Fine Aggregate shall meet Specification 902.

**344-2.1.3 Water:** Water shall meet the requirements of ASTM C 1602.

**344-2.1.4 Chemical Admixtures:** Chemical admixtures shall be listed on the FDOT Approved Products List. Admixtures may be added at the dosage rates recommended by the manufacturer.

**344-2.1.5 Pozzolans and Slag:** Pozzolans and Slag shall meet the requirements of Table 344-1. Fly ash shall not include the residue resulting from the burning of municipal garbage or any other refuse with coal, or the burning of industrial or municipal garbage in incinerators.

Table 344-1		
Type or Class	Test Method	Exceptions
Class C Fly Ash	ASTM C 618	Not to be used with Types IP or IS cements.
Class F Fly Ash	ASTM C 618	Not to be used with Types IP or IS cements.
Petroleum Coke Class F	ASTM C 618	Not to be used with Types IP or IS cements.
Bark Ash Class F	ASTM C 618	Not to be used with Types IP or IS cements.
Silica Fume	ASTM C 1240	
Metakaolin	ASTM C 618	

Slag	ASTM C 989	Use only ground granulated blast-furnace slag grade 100 or 120.
Ultra Fine Fly Ash	ASTM C 618	Not to be used with Types IP or IS cements.

### 344-3 Production, Mixing and Delivery of Concrete.

#### 344-3.1 Concrete Production Requirements:

**344-3.1.1 Category 1:** Use a concrete production facility that is certified by the National Ready Mixed Concrete Association (NRMCA) or listed on the FDOT list of non-structural concrete producers. Concrete production facilities listed on the FDOT Producers with Accepted QC Programs list for structural concrete may also be used for Category 1.

**344-3.1.2 Category 2:** Use a prestressed and or precast facility listed on the FDOT Producers with Accepted QC Programs for precast or prestressed concrete.

**344-3.1.3 Category 3:** Use a structural concrete facility listed on the FDOT Producers with Accepted QC Programs for structural concrete.

#### 344-3.2 Classes of Concrete: Meet the requirements of Table 344-2.

Table 344-2						
Class	Minimum Strength (28 day) (psi)	Target Slump (inches)	Target Range (inches)	Air Content Range (%)	Minimum Total Cementitious Materials Content (lb/yd <sup>3</sup> )	Maximum Water to Cementitious Material Ratio (lb/lb)
Category 1						
Class NS	2,500	N/A	N/A	N/A	N/A	N/A
Category 3						
I	3,000	3	± 1.5	0.0 to 6.0	470	0.53
I (Pavement)	3,000	2	± 1.5	0.0 to 6.0	470	0.50
II	3,400	3	± 1.5	0.0 to 6.0	470	0.53
II (Bridge Deck)	4,500	3	± 1.5	0.0 to 6.0	611	0.44
III	5,000	3	± 1.5	0.0 to 6.0	611	0.44
III (Seal)	3,000	8	± 1.5	0.0 to 6.0	611	0.53
IV	5,500	3	± 1.5	0.0 to 6.0	658	0.41
IV (Drilled Shaft)	4,000	8.5	± 1.5	0.0 to 6.0	658	0.41
V (Special)	6,000	3	± 1.5	0.0 to 6.0	752	0.37
V	6,500	3	± 1.5	0.0 to 6.0	752	0.37
VI	8,500	3	± 1.5	0.0 to 6.0	752	0.37

**344-3.3 Contractors Quality Control:** For Categories 1 and 2, assume full responsibility for controlling all operations and processes such that the requirements of these Specifications are met at all times.

For Category 3, furnish a Quality Control (QC) plan to identify to the Engineer how quality will be ensured at the project site. During random inspections, the Engineer will use this document to verify that the construction of the project is in agreement with the QC plan.

**344-3.4 Concrete Mix Design:** Before producing any Category 1 or Category 2, submit the proposed mix designs to the Engineer on a form provided by the Engineer. For Category 3,

submit to the Engineer for approval, FDOT approved mix designs. Do not use concrete mix designs without prior approval of the Engineer.

Materials may be adjusted provided that the theoretical yield requirement of the approved mix design is met. Show all required original approved design mix data and batch adjustments on an Engineer approved concrete delivery ticket.

**344-3.5 Delivery:** For Category 1, the maximum allowable mixing, agitation, and placement time of concrete is 120 minutes. For Category 3, the maximum allowable transit time of concrete is 75 minutes for non-agitator trucks and 90 minutes for agitator trucks, when a water-reducing and retarding admixture Type D, Type G, or Type II is used.

Furnish a delivery ticket on a form approved by the Engineer with each batch of concrete before unloading at the placement site. Record material quantities incorporated into the mix on the delivery ticket. Ensure that the Batcher responsible for producing the concrete signs the delivery ticket certifying that the batch was produced and delivered in accordance with these requirements. Sign the delivery ticket certifying that the concrete was placed in accordance with these requirements. Provide a copy to the Engineer of the ticket for Verification Testing.

**344-3.6 Placing Concrete:**

**344-3.6.1 Concreting in Cold Weather:** Do not mix or place concrete when the air temperature at placement is below 45°F.

During the curing period, if NOAA predicts the ambient temperature to fall below 35°F for 12 hours or more or to fall below 30°F for more than 4 hours, enclose the structure in such a way that the air temperature within the enclosure can be kept above 50°F for a period of 3 days after placing the concrete or until the concrete reaches a minimum compressive strength of 1,500 psi.

Assume all risks connected with the placing and curing of concrete. Although the Engineer may give permission to place concrete, the Contractor is responsible for satisfactory results. If the placed concrete is determined to be unsatisfactory, remove, dispose of, and replace the concrete at no expense to the Agency. The Engineer may perform random verification tests to confirm that the placed concrete meets the requirements of the specification.

**344-3.6.2 Concreting in Hot Weather:** For Category 3, hot weather concreting is defined as the production, placing and curing of concrete when the concrete temperature at placing exceeds 86°F but is less than 100°F.

Unless the specified hot weather concreting measures are in effect, reject concrete exceeding 86°F at the time of placement. Regardless of special measures taken, reject concrete exceeding 100°F. Predict the concrete temperatures at placement time and implement hot weather measures to avoid production shutdown.

**344-3.7 Mixers:** For Category 3 concrete, do not place concrete from a truck mixer that does not have a current FDOT mixer identification card.

**344-3.8 Small Quantities of Concrete for Category 1:** With approval of the Engineer, small quantities of concrete, less than 3 cubic yards placed in one day and less than 0.5 cubic yards placed in a single placement may be accepted using a pre-bagged mixture. The Engineer may verify that the pre-bagged mixture is prepared in accordance with the manufacturer's recommendations and will meet the requirements of this Specification.

**344-3.9 Sampling and Testing:**

**344-3.9.1 Category 1:** The Contractor may sample and test the concrete to verify its quality. The minimum 28 day compressive strength requirement for this concrete is 2,500 psi. The Engineer will perform verification testing of the contractor's samples.

**344-3.9.2: Category 2:** No sampling and testing is required for category 2.

**344-3.9.3 Category 3:** The Contractor will randomly select a sample from each 200 cubic yards or one day's production to determine plastic properties and to make three 4 x 8 inch cylinders for testing by the Contractor at 28 days to ensure that the design compressive strength has been met for the class of concrete as specified in Table 344-2. The Engineer will randomly verify one of every four Contractor tests.

**344-3.10 Records:** Ensure the following records are available for review for at least 3 years after final acceptance of the project:

1. Approved concrete mix designs.
2. Materials source (delivery tickets, certifications, certified mill test reports).
3. A copy of the scale company or testing agency report showing the observed deviations from quantities checked during calibration of the scales and meters.
4. A copy of the documentation certifying the admixture weighing/measuring devices.

#### **344-4 Acceptance of the Work.**

**344-4.1 Category 1 Work:** Category 1 work will be accepted based on certification by the batcher and contractor on the delivery ticket.

**344-4.2 Category 2 Work:** Certify that the precast elements were produced by a production facility on the FDOT's list of Producers with Accepted QC Programs for precast or prestressed concrete. In addition, the producer's logo shall be stamped on the element. The producer shall not use the Florida Department of Transportation QC stamp on elements used on this project. Provide a statement of certification from the manufacturer of the precast element that the element meets the requirements of this Specification.

**344-4.3 Category 3 Work:** Category 3 concrete will be accepted based on the Engineer's test results for plastic properties and compressive strength requirements for the class of concrete as defined in Table 344-2. In addition, a Delivery Ticket as described in 344-3.5 will be required for acceptance of the material at the project site.

**344-4.4 Small Quantities of Concrete:** Category 3 concrete meeting the definition of 344-3.8 will be accepted in accordance with 344-4.3 based on test results for plastic properties and compressive strength.

#### **344-5 Method of Measurement.**

The quantities to be paid for will be the items shown in the plans, completed and accepted.

#### **344-6 Payment.**

Prices and payments will be full compensation for all work and materials specified in this Section.

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**TP 425 – Inlets, Manholes, and Junction Boxes**

**INLETS, MANHOLES, AND JUNCTION BOXES**

Construction of Inlets, Manholes and Junction Boxes shall conform to the requirements of Section 425 of the "Standard Specifications" and applicable FDOT Design Standards and Details contained in the plans, except as directed by the Engineer. Precast inlet tops shall not be used for any type of inlet.

Method of Measurement

The quantities measured for payment under this Section shall be the number of inlets, manholes, junction boxes, yard drains, special end walls, and shallow ditch drains satisfactorily completed and accepted, including drainage structure under drains where required.

Basis of Payment

Structures included in this Section will be paid for at the contract unit price each, completed and accepted. Payments shall constitute full compensation for furnishing all materials and completing all work described herein or shown on the plans, including all excavation; dewatering; subsoil excavation and replacement material; backfilling and compacting around structures; disposal of surplus material; and furnishing and placing of all concrete; reinforcing steel; gratings; frames; covers, and any other necessary fittings as shown in the plans, required for acceptable construction, or as directed by the Engineer. Where required, drainage structure underdrains shall be included in the unit price for inlets and manholes. Any alteration of pipe grades up to one (1) foot to clear utilities shall be made and connections to structures made at no additional cost to the County or utility.

Payment shall be made under:

Item No. 425-1-311	Inlets, Curb, Type P-1, <10'	Each
Item No. 425-1-321	Inlets, Curb, Type P-2, <10'	Each
Item No. 425-1-521	Inlets, Ditch Bottom, Type C, <10'	Each
Item No. 425-1-541	Inlets, Ditch Bottom, Type D, <10'	Each
Item No. 425-1-910	Inlets, Closed Flume (Type I) (Single Barrel)	Each
Item No. 425-2-41	Manholes, P-7, <10'	Each
Item No. 425-2-61	Manholes, P-8, <10'	Each

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### **TP 430- Pipe Culverts and Storm Sewers**

#### **PIPE CULVERTS AND STORM SEWERS**

Construction of Pipe Culverts, Storm Sewers and Mitered End Sections shall conform to the requirements of Section 430 of the Standard Specifications, except as modified herein or as directed by the Engineer. All round and elliptical pipes shall be steel reinforced concrete pipe (SRCP).

Lifting holes in reinforced concrete pipe are prohibited.

Proposed storm sewer pipe to be connected to existing structures shall have openings cut into the existing structure without permanently damaging the structure. All structure openings shall be grouted watertight, with non-shrink grout, after pipe installation, and the structure shall be restored as approved by the Engineer.

The cost of connections to existing structures shall be included in the price bid for the pipe.

Final pipe inspection requirements shall conform to Section 430-4.8 of the Standard Specifications. All culverts and storm sewer pipes shall be videoed by the contractor and inspected and approved by the Engineer prior to final paving.

The only acceptable repair method shall be remove and relay / replace, or as otherwise directed by the Engineer. The repair cost shall be borne solely and completely by the Contractor.

All pipe culvert designated in the plans to be desilted shall be videoed in accordance to Section 430-4.8 of the Standard Specifications and approved by the Engineer prior to payment.

#### **Concrete Pipe Joints**

Each joint in a concrete pipe culvert or storm sewer shall be wrapped on the exterior of the pipe with a band of filter fabric measuring 3 feet wide centered on the joint and lapped a minimum of 2 feet. The filter fabric shall meet the requirements of Section 985 of the Standard Specifications and shall be secured against the outside of the pipe by stainless metal or plastic strapping or by other methods approved by the Engineer. These costs shall be included in the per linear foot price for the pipe.

#### **Method of Measurement**

Quantities measured for payment under this Section shall be the length in linear feet of pipe culvert or storm sewer measured in place, completed and accepted. Measurements shall be from the inside face of structure wall to inside face of structure wall.

For mitered end sections the quantity measured for payment shall be the number completed and accepted.

#### **Basis of Payment**

Pipe Culverts and Storm Sewers will be paid for at the contract unit price completed and accepted. The unit price shall include connection of proposed pipes to existing structures and the replacement of the backfill, base course, and pavement removed for pipe trenching. Payment shall be full compensation for all work and materials described herein, including excavation (in whatever material is encountered), dewatering, removing unsuitable material and replacing with select bedding material, backfilling, compaction,

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furnishing and installing all pipe, disposing of surplus materials, and other work as may be required for an acceptable installation.

Payment shall be made under:

Item No

430-175-118	Pipe Culvert, Steel Reinforced Concrete, Class III, Round, 18"	LF
430-175-215	Pipe Culvert, Steel Reinforced Concrete, Class IV, Elliptical, 12"X18"	LF
430-175-224	Pipe Culvert, Steel Reinforced Concrete, Class IV, Elliptical, 19"X30"	LF
430-94-2	Desilting Pipe, 0 - 24"	LF
430-982-623	Mitered end Section, Class IV, Elliptical, 12"X18" CD	EA



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**TP 520 - Concrete Gutter, Curb Elements and Traffic Separator**

**CONCRETE GUTTER, CURB ELEMENTS, AND TRAFFIC SEPARATOR**

Construction of concrete curb and gutter, concrete traffic separator, and concrete valley gutter shall conform to the requirements of Section 520 of the Standard Specifications, except as directed by the Engineer.

**Foundation**

Foundation material upon which the concrete is to be placed shall be compacted to meet the specified densities and shall be thoroughly wetted but free of standing water just prior to placing concrete.

**Contraction Joints**

Contraction joints shall be sawed to a minimum depth of 1 1/2 inches. Sawing shall begin as soon as the concrete has hardened to the degree that excessive raveling will not occur. Sawing shall progress in the same direction and sequence as the concrete placement. Every third joint shall be sawed first, then saw intermediate joints.

For concrete placed before noon, all joints shall be sawed the same day of placement. For concrete placed after noon, all third joints shall be sawed the day of placement; all other joints prior to noon the following day.

**Curing**

Concrete shall be cured as provided in Section 520-8, except as modified herein or as approved by the Engineer. Curing material shall be applied to the concrete surfaces after finishing as soon as the concrete has hardened sufficiently to prevent marring the surface or within one hour after finishing is completed, whichever occurs first. Applying curing materials shall not be held up due to other activities on the project. Contractor shall schedule and provide manpower necessary to conform to these requirements.

Spraying equipment, including spray tip and nozzle, shall be as recommended by manufacturer's printed literature, or an acceptable equal.

Equipment shall be maintained and nozzles replaced as required to provide consistent uniform spray pattern.

A uniform coating meeting the manufacturer's recommended minimum application rate shall be applied. Areas appearing to have insufficient curing compound, as determined solely by the Engineer, shall be re-coated immediately to provide required uniform coverage.

Storage containers having greater than a five gallon capacity may be utilized only with prior approval by the Engineer. The contractor shall submit the manufacturer's descriptive literature describing the placement, storage and mixing requirements for storage containers exceeding five gallons. The contractor shall provide and utilize mechanical mixers for all containers larger than five gallons. The mixers shall be equivalent to the manufacturer's requirements. The contractor shall conform to all storage, mixing and application requirements.

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**Repairs**

Where replacement is necessary, complete sections between existing contraction joints shall be removed and replaced.

**Method of Measurement**

For curb or curb and gutter, the quantity to be paid will be plan quantity, in linear feet, measured along the face of the completed and accepted curb or curb and gutter.

For valley gutter or shoulder gutter, the quantity to be paid will be plan quantity, in linear feet, measured along the gutter line of the completed and accepted valley gutter or shoulder gutter.

For concrete traffic separator of constant width, the quantity to be paid will be plan quantity, in linear feet, measured along the center of its width, completed and accepted, including the length of the nose.

For concrete traffic separator of varying width, the quantity to be paid will be plan quantity, in square yards, completed and accepted.

**Basis of Payment**

Items covered by this Section will be paid for at the contract unit price. Payment shall constitute full compensation for all work described herein, including all labor, equipment, materials and incidentals necessary to complete each item of work.

Payment shall be made under:

Pay Item:

520- 1-7	Concrete Curb and Gutter (Type E)	per linear foot
520- 1-8	Concrete Curb and Gutter, Special (Ribbon)	per linear foot
520- 1-10	Concrete Curb and Gutter (Type F)	per linear foot
520- 3	Valley Gutter- Concrete	per linear foot

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**TP 522 – Concrete Sidewalks, 4 inch thickness; Concrete Driveways, 6-inch thickness**

**CONCRETE SIDEWALKS, 4 INCH THICKNESS**

Construction of 4-inch concrete sidewalk and 6-inch concrete driveway shall conform to the requirements of Section 522 of the Standard Specifications, and Indexes 304 and 310 of the FDOT Design Standards, except as directed by the Engineer.

**Foundation**

Foundation material shall meet the specified densities and shall be thoroughly wetted but free of standing water just prior to placing concrete.

**Contraction Joints**

Contraction joints shall be sawed. All joints shall be straight lines oriented at 90 degrees to the edge of sidewalk, radially if in a curve, or as directed otherwise. The minimum depth of joints shall be 1 1/2 inches or 1/4 the nominal thickness of concrete placed, whichever is greater.

Joint installation shall proceed in the same direction and sequence as the concrete placement. Sawing shall begin as soon as the concrete has hardened to the degree that excessive raveling will not occur. Every third transverse joint and all longitudinal joints shall be sawcut within 8 hours after finishing. Remaining transverse joints, shall be sawcut by noon the following day.

**Construction Joints**

Construction joints shall be constructed at the end of all pours and at other locations where the concrete placement operations are stopped for as long as 30 minutes. They shall be placed at least 10 feet from any other transverse construction joint or end of pavement section.

Metal keyways shall be installed at all construction joints in driveway crossings 6-inches and greater in thickness. Concrete thickness shall be increased by 2-inches for a minimum distance of 6-inches either side of construction joints.

**Curing**

Concrete shall be cured as provided in Section 520-8, except as modified herein. Curing material shall be applied to the concrete surfaces after finishing as soon as the concrete has hardened sufficiently to prevent marring the surface or within one hour after finishing is completed, whichever occurs first. Applying curing materials shall not be held up due to other activities on the project. Contractor shall schedule and provide manpower necessary to conform to these requirements.

Spraying equipment, including spray tip and nozzle, shall be as recommended by the manufacturers' printed literature, or an acceptable equal.

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Equipment shall be maintained and nozzles replaced as required to provide a consistently uniform spray pattern.

A uniform coating meeting the manufacturer's recommended minimum application rate shall be applied. Areas appearing to have insufficient curing compound, as determined solely by the County, shall be re-coated immediately to provide the required uniform coverage.

Storage containers having greater than a five gallon capacity may be utilized only with prior approval of the Engineer. The Contractor shall submit the manufacturer's descriptive literature describing the placement, storage and mixing requirements for storage exceeding five gallons. The Contractor shall provide and utilize mechanical mixers for all containers larger than five gallons. The mixers shall be equivalent to or exceed the manufacture's requirements.

The Contractor shall conform to all storage, mixing and application requirements.

**Replacement**

Where 6-inch concrete has to be replaced due to cracks, it shall be replaced with a uniform thickness of 8-inch concrete covering no less than 40 square feet and extending to existing sawed contraction joints. Replacement concrete shall extend at least 3-inches beneath existing concrete at a minimum thickness of 3-inches.

**Method of Measurement**

Quantities measured for payment under this Section shall be the actual area in square yards of concrete constructed in place.

**Basis of Payment**

Concrete Sidewalk including ramps and driveways will be paid for at the contract unit prices, completed and accepted. Payment shall constitute full compensation for all work described herein, and shall include all labor, equipment, materials, clearing and grubbing, excavation, grading, compaction, expansion material (asphalt impregnated), and all incidentals necessary to complete the work to the lines, grades, and thickness indicated on the plans.

Subgrade preparation and additional concrete required for thickened slabs as indicated on the plans or as directed by the Engineer shall be included in the contract unit price for 6-inch Concrete Sidewalk.

Payment shall be made under:

Pay Item:

522-1	Sidewalk Concrete, 4" Thick	Per Square Yard
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**TP 527 – Detectable Warnings on Walking Surfaces**

**DETECTABLE WARNINGS on WALKING SURFACES**

The work specified in this Section consists of the furnishing and installing of detectable warnings on walking surfaces in accordance with Section 527 of the Standard Specifications except as directed by the Engineer.

**Method of Measurement**

Quantities to be paid for under this Section shall be as set forth in Section 527 of the Standard Specifications.

**Basis of Payment**

The basis of payment shall be as set forth in Section 527 of the Standard Specifications.

Payment shall be made under:

**Pay Item:**

527-2	Detectable Warnings	Per Square Foot
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**TP 530 - Riprap (Rubble)**

**RIPRAP (RUBBLE)**

Constructing Riprap (Rubble) shall conform to the requirements of Section 530 of the Standard Specifications, except as directed by the Engineer.

**Method of Measurement**

Quantities measured for payment under this Section shall be the in place tons of riprap (rubble). This price shall include the filter fabric and bedding stone placed under the riprap.

**Basis of Payment**

Rubble riprap will be paid for at the contract unit price, completed and accepted. Payment shall be full compensation for all work described herein and shall include all materials, bedding stone, filter fabric, hauling, excavation and backfill.

Payment shall be made under:

**Pay Item:**

530-3-3	Riprap-Rubble, Bank and Shore	Per Ton
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## **PART H TECHNICAL PROVISIONS**

### **Wallace Road and Dr. Phillips Boulevard Intersection Improvements**

#### **TP 570 – Performance Turf**

##### **PERFORMANCE TURF**

Establish a growing, healthy turf over all areas designated in the Plans. Use sod in areas designated in the Plans to be sodded. Maintain turf areas until final acceptance of all contract work. Work shall include all mulching, sodding, fertilizing, clipping removal, litter control, edging and watering necessary to provide routine maintenance of the grassed area throughout the establishment period or until the work is accepted by the Engineer.

There must be at least 90% coverage of healthy grass prior to acceptance by the Engineer. The Engineer, at any time, may require replanting of any areas in which the establishment of the grass stand does not appear to be developing satisfactorily.

The CONTRACTOR shall mow grassed areas every 14 days, or as required by the Engineer, until final acceptance of the work.

##### **MATERIALS**

###### **General**

All sod shall meet the requirements of the Florida Department of Agriculture and Consumer Services and all applicable state laws, and shall be approved by the Engineer before installation.

All sod and mulch shall be free of noxious weeds and exotic pest plants, plant parts or seed listed in the current Category I “List of Invasive Species” from the Florida Exotic Pest Plant Council (FLEPPC, <http://www.fleppc.org> ). Any plant officially listed as being noxious or undesirable by any Federal Agency, any agency of the State of Florida or any local jurisdiction in which the project is being constructed shall not be used. Any such noxious or invasive plant or plant part found to be delivered in seed, sod or mulch will be removed by the CONTRACTOR at his expense and in accordance with the law.

All materials shall meet plant quarantine and certification entry requirements of Florida Department of Agriculture & Consumer Services, Division of Plant Industry Rules.

## **PART H**

### **TECHNICAL PROVISIONS**

#### **Wallace Road and Dr. Phillips Boulevard Intersection Improvements**

##### **Sod**

Types: Unless a particular type of sod is called for in the Contract Documents, sod may be either centipede, bahia, or bermuda at the CONTRACTOR'S option. It shall be well matted with roots. Where sodding will adjoin, or be in sufficiently close proximity to, private lawns, other types of sod may be used if desired by the affected property owners and approved by the Engineer.

Dimensions: The sod shall be taken up in commercial-size rectangles, or rolls, preferably 12 inches by 24 inches or larger, except where 6 inch strip sodding is called for, or as rolled sod at least 12 inches in width and length consistent with the equipment and methods used to handle the rolls and place the sod. Sod shall be a minimum of 1-1/4 inches thick including a 3/4 inch thick layer of roots and topsoil. Reducing the width of rolled sod is not permitted after the sod has been taken up from the initial growing location. Any netting contained within the sod shall be certified by the manufacturer to be degradable within three years.

Condition: The sod shall be sufficiently thick to secure a dense stand of live turf. The sod shall be live, fresh and uninjured, at the time of planting. It shall have a soil mat of sufficient thickness adhering firmly to the roots to withstand all necessary handling. It shall be planted within 48 hours after being cut and kept moist from the time it is cut until it is planted. No sod which has been cut for more than 48 hours may be used unless specifically authorized by the Engineer. A letter of certification from the turf Contractor as to when the sod was cut, and what type, shall be provided to the Engineer upon delivery of the sod to the job site.

The source of the sod may be inspected and approved by the Engineer prior to being cut for use in the work.

##### **Mulch**

The mulch material shall be compost meeting the requirements below, hardwood barks, shavings or chips; or inorganic mulch materials as approved by the Engineer; or hydraulically applied wood fiber mulch or bonded fiber matrix (BFM) for the establishment of turf material.

##### **Prepared Soil Layer**

All material shall be suitable for plant growth. The organic matter content of the prepared soil layer after mixing shall be a minimum of 2.5%, a maximum of 10%, in accordance with FM 1-T-267 and have a pH value of 4.5 or greater and less than or equal to 8.5 as determined in accordance with FM 5-550. The organic matter content shall be created using any of the following materials.



## **PART H TECHNICAL PROVISIONS**

### **Wallace Road and Dr. Phillips Boulevard Intersection Improvements**

Prepared soil layer materials may be obtained from either, or a combination of, the following sources:

- (1) Excavation within the limits of construction on the project. Such material may be stockpiled or windrowed on the project in areas approved by the Engineer.
- (2) Designated borrow pits for the project.
- (3) From other sources of organic soil materials provided by the Contractor.

**Organic Soil:** This may consist of muck, mucky peat and peat and shall have an organic matter content of 30% or more if the mineral fraction is more than 50% clay, or more than 20% organic matter if the mineral fraction has no clay.

**Compost:** Meet the requirements of Florida Department of Environmental Protection Rule 62.709.550 Type Y (yard waste), Type YM (yard waste and manure), Type A (municipal solid waste compost) or Rule 62.640.850 Type AA (composted biosolids) and have unrestricted distribution.

**Compost for use as a Soil Amendment:** If the electrical conductivity (EC) value of the compost exceeds 4.0dS (mmhos/cm) based on the saturated paste extract method, the compost shall be leached with water prior to application.

**Compost for use as a Mulch:** The compost shall contain no foreign matter, such as glass, plastic or metal shards. The compost shall be slightly coarse to coarse in nature (over half of the solids shall be from particles 1/2 inches in size and no greater than 6 inches. Preference shall be given to compost or mulch made from uncontaminated woody waste materials.

#### **Fertilizer**

Ensure that all employees applying fertilizer, possess a current Florida Department of Agriculture and Consumer Services Commercial Applicator license in accordance with Section 482.1562, F.S. provide a copy of current certificates to the Engineer. Fertilizers shall comply with the State and County fertilizer laws.

The numerical designations for fertilizer indicate the minimum percentages (respectively) of (1) total nitrogen, (2) available phosphoric acid, and (3) water-soluble potash, contained in the fertilizer. At least 50% of the nitrogen shall be from a slow-release source.

## **PART H**

### **TECHNICAL PROVISIONS**

#### **Wallace Road and Dr. Phillips Boulevard Intersection Improvements**

##### **Certification**

The CONTRACTOR shall provide the Engineer a certified test report from the manufacturer of the commercial fertilizer confirming that the requirements of this Section are met. The certified test report shall include test results for total nitrogen, available phosphoric acid, water-soluble potash, and sulfur. Each certification shall cover one batch per type for dry type fertilizer.

##### **Fertilizer Rates**

Soil laboratory fertilization recommendations are based on the amount (lbs) of nutrients (N, P<sub>2</sub>O<sub>5</sub>, K<sub>2</sub>O) to apply per given area (usually 1,000 square feet.). From this recommendation it is necessary to select an appropriate fertilizer grade and then determine how much of this fertilizer to apply to the area.

If a complete fertilizer (containing all three primary nutrients) is not available in the ratio of N-P-K necessary to match the ratio required in the fertilizer recommendation, mixed-grade or single-nutrient fertilizers should be used to satisfy each nutrient requirement.

To calculate fertilizer rates:

- Measure the area to be fertilized in square feet.
- Select fertilizers, to be used based on the soil testing laboratory recommendations by matching the ratio of nutrients recommended to the fertilizer grades available.
- Determine the amount of fertilizer to apply to a given area (1,000 square feet.) by dividing the recommended amount of nutrient by the percentage of the nutrient (on a decimal basis) in the fertilizer. Apply no more than 0.25 lbs P<sub>2</sub>O<sub>5</sub>/1000 square feet per application prior to planting.
- Adjust the amount of fertilizer to the project area.

##### **Insecticides and Herbicides**

Use products found on the following website, <http://state.ceris.purdue.edu/>, approved by the Florida Department of Agriculture for the State of Florida. The use of restricted products is prohibited. Do not use any products in the sulfonylurea family of chemicals. Herbicide application by broadcast spraying is not allowed.

## **PART H TECHNICAL PROVISIONS**

### **Wallace Road and Dr. Phillips Boulevard Intersection Improvements**

CONTRACTOR shall procure any necessary licenses, pay all charges and fees, and give all notices necessary for lawful performance of the work.

CONTRACTOR shall ensure that all insecticides and herbicides are applied in accordance with Chapter 5E-9, Florida Administrative Code. Provide a copy of current certificates upon request, to the Engineer.

CONTRACTOR shall ensure that employees who work with herbicides comply with all applicable Federal, State, and local regulations.

CONTRACTOR shall comply with all regulations and permits issued by any regulatory agency within whose jurisdiction work is being performed. Post all permit placards in a protected, conspicuous location at the work site.

CONTRACTOR shall acquire all permits required for aquatic plant control as outlined in Chapter 62C-20, Florida Administrative Code, Rules of the Florida Department of Environmental Protection. Contact the Regional Field Office of Bureau of Invasive Plant Management of the Florida Department of Environmental Protection for proper permits and subsequent approval. If application of synthetic organo-auxin herbicides is necessary, meet the requirements of Chapter 5E-2, Florida Administrative Code.

#### **Water**

The water used in the grassing operations may be obtained from any approved source.

The water shall be free of any substance, which might be harmful to plant growth. Effluent water shall meet all Federal, State and local requirements.

#### **Construction Methods**

Incorporate turf installation into the project at the earliest practical time.

Use the methods and materials necessary to establish and maintain the initial grassing until final acceptance.

Sod: Place the sod on the prepared surface, with edges in close contact. Do not use sod which has been cut for more than 48 hours.

Place the sod to the edge of all landscape areas as shown in the Plans and as shown in the Design Standards.

**PART H**  
**TECHNICAL PROVISIONS**

**Wallace Road and Dr. Phillips Boulevard Intersection Improvements**

Place rolled sod parallel with the roadway and cut any exposed netting even with the sod edge.

Monitor placed sod for growth of pest plants and noxious weeds. If pest plants and/or noxious weeds manifest themselves within 30 days of placement of the sod during the months April through October, within 60 days of placement of the sod during the months of November through March treat affected areas by means acceptable to the COUNTY at no expense to the COUNTY. If pest plants and/or noxious weeds manifest themselves after the timeframes described above from date of placement of sod, the Engineer, at his sole option, will determine if treatment is required and whether or not the CONTRACTOR will be compensated for such treatment.

Remove and replace any sod as directed by the Engineer.

**Turf Establishment**

Perform all work necessary, including watering and fertilizing, to sustain an established turf until final acceptance, at no additional expense to the COUNTY. Provide the filling, leveling, and repairing of any washed or eroded areas, as may be necessary.

Established turf is defined as follows:

1. An established root system (leaf blades break before seedlings or sod can be pulled from the soil by hand).
2. No bare spots larger than one square foot.
3. No continuous streaks running perpendicular to the face of the slope.
4. No deformation of the turf areas caused by mowing or other CONTRACTOR equipment.
5. No exposed sod netting.
6. No pests or noxious weeds.

Monitor turf areas and remove all competing vegetation, pest plants, and noxious weeds (as listed by the Florida Exotic Pest Plant Council, Category I “List of Invasive Species”, Current Edition, <http://www.fleppc.org>). Remove such vegetation regularly by manual, mechanical, or chemical control means, as necessary. When selecting herbicides, pay particular attention to ensure use of chemicals that will not harm desired turf. Use herbicides in accordance with provision

## **PART H TECHNICAL PROVISIONS**

### **Wallace Road and Dr. Phillips Boulevard Intersection Improvements**

During the entire establishment period and until turf is established in accordance with this specification, continue inspection and maintenance of erosion and sedimentation control. Take responsibility for the proper removal and disposal of all erosion and sedimentation control items after turf has been established.

Notify the Engineer, with a minimum of seven calendar days advance notice, to conduct inspections of the turf at approximate 90-day intervals during the establishment period to determine establishment. Results of such inspections will be made available to the CONTRACTOR within seven calendar days of the date of inspection. Determination of an established turf will be based on the entire project and not in sections.

The CONTRACTOR'S establishment obligations of this specification will not apply to deficiencies due to the following factors, if found by the Engineer to be beyond the control of the CONTRACTOR, his subcontractors, vendors or suppliers:

- Determination that the deficiency was due to the failure of other features of the Contract.
- Determination that the deficiency was the responsibility of a third party performing work not included in the Contract or its actions.

The COUNTY will only pay for replanting as necessary due to factors determined by the COUNTY to be beyond the control of the CONTRACTOR.

#### **Litter Removal**

During each cycle all litter and debris are to be removed prior to and upon completion of a mowing cycle. Litter and debris removal includes the pickup removal, and disposal from the right-of-way and COUNTY property of any obstacle such as wood, signs, tires, cans, etc., which cannot be traversed by the mowing equipment. It will also be the CONTRACTOR'S responsibility to remove any item such as bags of trash, newspapers, magazines, food containers, boxes, sheets of paper, etc., which will be torn, ripped, scattered or further subdivided by the mowers, which will result in an objectionable appearance.

#### **Clipping Removal**

During each cycle all grass clippings that are not uniformly distributed, and detract from the appearance of the mowing operation will be removed from the site by the CONTRACTOR, upon completion of the mowing operation to allow for a neat and clean appearance after completion. The CONTRACTOR will remove and dispose of all grass clippings from the pavement, curbs and curb inlets located within the limits of the project.

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**TECHNICAL PROVISIONS**

**Wallace Road and Dr. Phillips Boulevard Intersection Improvements**

The grass clipping removal will be performed in conjunction with the mowing cycle. It is the responsibility of the CONTRACTOR to maintain the inlet openings free from the debris generated during their right-of-way mowing operation. Grass clippings will not be blown into drains or storm drain inlets. Failure to adhere to this will result in the CONTRACTOR, at his/her own expense within two (2) working days, jetting out these pipes and drains or reimbursing the COUNTY for the clean-up effort carried out by COUNTY personnel.

**Edging**

Edging is the removal of all weeds, sand, vegetation, debris and plant material by the CONTRACTOR from all edges of curbs, to maintain these areas in an attractive and manicured condition. Edging includes the removal of growth mechanically and manually and shall be performed in conjunction with the mowing cycle. The edging of curbs will create a distinct void; approximately one-half (1/2) inch horizontally between the structure and the turf. String trimmers will not be used in edging. Edging also includes the removal of all sand and debris from the areas designated to be edged. Upon completion of edging by the CONTRACTOR, no growth, sand or debris will touch any of the structures designated to be edged. The CONTRACTOR from the areas designated for edging will remove all sand and debris.

NOTE: Areas specified for edging will not be treated with herbicide.

**Basis of Payment**

All material, work, and incidental costs related to prepare the area for turf will be paid for at the contract unit price completed and accepted. The unit price shall also include:

1. Clearing and grubbing work to include but not limited to, the removal of all rigid, asphalt pavement, Portland cement concrete pavement, curb, curb and gutter, ditch pavement, and brick.
2. Excavation in whatever material encountered, removing unsuitable material, and replacing with select bedding material, backfilling, compaction, furnishing and installing, disposing of surplus material, and other work as may be required for acceptable installation and establishment of turf.

Payment shall be made under:

Item No. 570- 1-2	Performance Turf (SOD)	Per Square Yard
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**PART H**  
**TECHNICAL PROVISIONS**

**Wallace Road and Dr. Phillips Boulevard Intersection Improvements**

**TP 603 – Signalization**

**SIGNALIZATION**

The signalization shown on the plans shall be constructed in accordance with Sections 603, 632, 634, 641, 646, 650, 653, 660, 663, 665, 671, 682, and 700 of the Standard Specifications, except where noted on the plans and indicated by the following Technical Provisions. All traffic signal equipment shall be listed on the Florida Department of Transportation's Approved Products List.

**SHOP DRAWINGS**

The Contractor shall provide shop drawings for all signalization equipment and installation. These shop drawings will be reviewed and approved by the Engineer prior to the Contractor placing orders for the signalization equipment and beginning construction.

**SIGNAL CABLE**

Signal Cable shall conform to the requirements of Section 632 of the "Standard Specifications" except payment will be included in the lump sum price for signalization.

**SPAN WIRE ASSEMBLIES**

Span wire assemblies shall be furnished and installed according to Section 634 of the "Standard Specifications" except payment will be included in the lump sum price for signalization.

**PRESTRESSED CONCRETE POLES**

Prestressed concrete poles shall be furnished and installed according to Section 641 of the "Standard Specifications" except payment will be included in the lump sum price for signalization.

**ALUMINUM POLES, PEDESTALS AND POSTS**

Aluminum poles, pedestals and posts shall be furnished and installed according to Section 646 of the "Standard Specifications" except payment will be included in the lump sum price for signalization.

## **PART H**

### **TECHNICAL PROVISIONS**

#### **Wallace Road and Dr. Phillips Boulevard Intersection Improvements**

##### **VEHICULAR TRAFFIC SIGNAL ASSEMBLIES**

Vehicular traffic signal assemblies shall conform to Section 650 of the “Standard Specifications” except payment will be included in the lump sum price for signalization.

##### **PEDESTRIAN SIGNAL ASSEMBLIES**

Pedestrian signal assemblies shall conform to Section 653 of the “Standard Specifications” except payment will be included in the lump sum price for signalization.

##### **VEHICLE DETECTION SYSTEM**

Vehicle detection systems shall be furnished and installed according to Section 660 of the “Standard Specifications” except payment will be included in the lump sum price for signalization.

Each loop assembly shall include loop lead-in cable to connect the loop to the loop detector in the controller cabinet.

##### **SIGNAL PRIORITY AND PRE-EMPTION SYSTEMS**

Signal priority and pre-emption systems shall conform to Section 663 of the “Standard Specifications” except payment will be included in the lump sum price for signalization.

##### **PEDESTRIAN DETECTOR ASSEMBLIES**

Pedestrian detector assemblies shall be furnished and installed according to Section 665 of the “Standard Specifications” except payment will be included in the lump sum price for signalization.

##### **TRAFFIC CONTROLLERS**

Traffic Controllers shall conform to the requirements of Section 671 of the “Standard Specifications” except payment will be included in the lump sum price for signalization.

##### **VIDEO EQUIPMENT**

Video equipment shall conform to Section 682 of the “Standard Specifications” except payment will be included in the lump sum price for signalization.

##### **HIGHWAY SIGNING**



**PART H**  
**TECHNICAL PROVISIONS**

**Wallace Road and Dr. Phillips Boulevard Intersection Improvements**

Highway signing shall conform to Section 700 of the “Standard Specifications” except highway signing shown on the traffic signal plans will be paid as part of the lump sum price for signalization.

**METHOD OF MEASUREMENT**

Quantities measured for payment under this Section shall be in lump sum for each complete traffic control signal system installed at an intersection.

**BASIS OF PAYMENT**

Signalization will be paid for at the contract lump sum prices for each traffic control signal system installed at an intersection, completed and accepted. The cost of the signal communication system between signals shall be included in the contract price for each intersection signalization. Payment shall constitute full compensation for all work described herein and shown in the plans.

Payment shall be made under:

ITEM NO. 603-1	Signalization	Lump Sum (LS)
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**PART H**  
**TECHNICAL PROVISIONS**

**Wallace Road and Dr. Phillips Boulevard Intersection Improvements**

**TP 700 - Highway Signing**

**HIGHWAY SIGNING**

The furnishing and installing of all Highway Signing as shown on the plans shall conform to the requirements of Section 700 of the Standard Specifications, except as amended herein or as directed by the Engineer. All highway signs shall be of the type specified and installed at the locations shown on the plans.

The materials and methods shall comply with Section 700 of the Standard Specifications and shall be accepted by the Orange County Traffic Engineering Division prior to installation.

Sign posts for single column signs shall be a minimum of 14 gauge 2"x2" square welded steel with 3/8" knockouts on 1" centers on all four sides. The posts shall be listed on the FDOT's Qualified Products List and shall be galvanized and sealed with a polymer topcoat.

**Method of Measurement**

The quantities measured for payment under this Section shall be in accordance with Article 700-2.3 of the Standard Specifications.

**Basis of Payment**

Payment for furnishing and installing highway signs shall be in accordance with Section 700-2.4 of the Standard Specifications.

Payment shall be made under:

<u>Pay Item:</u>		
700-1-11	Single Post Sign, F&I GM, 12 SF	AS
700-1-60	Single Post Sign, Remove	AS

**PART H**  
**TECHNICAL PROVISIONS**

**Wallace Road and Dr. Phillips Boulevard Intersection Improvements**

**TP 705 - Object Markers and Delineators**

**OBJECT MARKERS AND DELINEATORS**

The furnishing and installing of all Object Markers and Delineators as shown on the plans shall conform to the requirements of Section 705 of the Standard Specifications, except as amended herein or as directed by the Engineer.

**Method of Measurement**

The quantities measured for payment under this Section shall be in accordance with Article 705-4 of the Standard Specifications.

**Basis of Payment**

Payment for furnishing and installing object markers and delineators shall be in accordance with Section 705-5 of the Standard Specifications.

Payment shall be made under:

Pay Item:

705-11-1	Delineator, Flexible Tubular	EA
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**PART H**  
**TECHNICAL PROVISIONS**

**Wallace Road and Dr. Phillips Boulevard Intersection Improvements**

**TP 706 - Raised Retro-Reflective Pavement Markers  
and Bituminous Adhesive**

**RAISED RETRO-REFLECTIVE PAVEMENT MARKERS and BITUMINOUS  
ADHESIVE**

The furnishing and installing of all retro-reflective pavement markers as shown on the plans shall conform to the requirements of Section 706 of the Standard Specifications, except as amended herein or as directed by the Engineer. All retro-reflective pavement markers shall be Class B and the type shall be as shown on the plans.

**Method of Measurement**

The quantities measured for payment under this Section shall be in accordance with Article 706-6 of the Standard Specifications.

**Basis of Payment**

Section 706-7 of the Standard Specifications is deleted and the following is substituted:

The quantity for the furnishing and installing of retro-reflective pavement markers shall be paid for at the contract unit price per each.

Payment shall be made under:

**Pay Item:**

706-3-1	Retro-Reflective Pavement Marker (Bi-Directional) (White-Red)	EA
706-3-2	Retro-Reflective Pavement Marker (Bi-Directional) (Yellow-Yellow)	EA

**PART H**  
**TECHNICAL PROVISIONS**

**Wallace Road and Dr. Phillips Boulevard Intersection Improvements**

**TP 710 - Painted Pavement Markings**

**PAINTED PAVEMENT MARKINGS**

The placing of painted traffic stripes and markings as shown on the plans shall conform to the requirements of Section 710 of the Standard Specifications, except as amended herein or as directed by the Engineer.

**Method of Measurement**

Quantities measured for payment shall be the units for each designated item in the proposal. The quantity to be paid for under this Section shall include all labor and material for the placing of all pavement markings as shown on the plans, including the removal of any existing pavement markings.

**Basis of Payment**

All materials, work and incidental costs related to Painted Pavement Markings will be paid for at the contract lump sum price for work completed and accepted. Payment shall be full compensation for all the work specified herein and shall include all equipment, labor and materials required for an acceptable installation. Payment for this section shall include one (1) application of painted pavement markings to be applied to the final pavement surface during the 30day cure period.

Payment shall be made under:

Pay Item:

710-90	Painted Pavement Markings, Final Surface	LS
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# PART H TECHNICAL PROVISIONS

## Wallace Road and Dr. Phillips Boulevard Intersection Improvements

### TP 711 - Thermoplastic Traffic Stripes and Markings

#### **THERMOPLASTIC TRAFFIC STRIPES AND MARKINGS**

The placing of thermoplastic traffic stripes and markings as shown on the plans shall conform to the requirements of Section 711 of the Standard Specifications, except as amended herein or as directed by the Engineer.

#### **Materials**

The materials to be used under this Section shall be in accordance with Article 711-2 of the Standard Specifications.

#### **Method of Measurement**

The quantities to be paid for under this Section shall be the length measured in linear feet, net miles of Thermoplastic Solid Traffic Stripe or the per each quantity of messages and directional arrows as measured and accepted by the Engineer. The payment shall include all labor and material for the placing of all pavement markings as shown on the plans, including removal of existing pavement markings.

#### **Basis of Payment**

The quantity for the placing of the thermoplastic pavement markings shall be paid for at the contract unit price.

Payment shall be made under:

#### **Pay Item:**

711-11-123	Solid Traffic Stripe (White) (12") (Thermoplastic)	LF
711-11-124	Solid Traffic Stripe (White) (18") (Thermoplastic)	LF
711-11-125	Solid Traffic Stripe (White) (24") (Thermoplastic)	LF
711-11-151	Skip Traffic Stripe (6' - 10') (6" White) (Thermoplastic)	LF
711-11-160	Pavement Messages, Thermoplastic, (School)	EA
711-11-170	Directional Arrows, (Thermoplastic)	EA
711-11-224	Solid Traffic Stripe (Yellow) (18") (Thermoplastic)	LF
711-11-251	Skip Traffic Stripe (2' - 4') (6" Yellow) (Thermoplastic)	LF
711-15-111	Solid Traffic Stripe (White) (6") (Thermoplastic)	NM
711-15-112	Solid Traffic Stripe (White) (8") (Thermoplastic)	NM
711-15-211	Solid Traffic Stripe (Yellow) (6") (Thermoplastic)	NM

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**TECHNICAL PROVISIONS**

**Wallace Road and Dr. Phillips Boulevard Intersection Improvements**

**TP 900-1- As Built Plans**

**AS-BUILT PLANS**

The As-Built Plans shall incorporate all the changes made to the red line As-Built plans. They shall show locations and elevations of paving, swales, ditches, pipe inverts and structures constructed and all relocated or reset property corners, section corners and 1/4 section corners.

Upon the completion of the project, the Contractor shall submit to the County one (1) set of 24"x36" paper Full Size Drawings with Statement of Certifications, certifying that the project was constructed according to the Construction Plans and Specifications, and that the AS BUILT PLANS are correct representation of what was constructed. The plans shall delineate all red line information contained on the As-Built Plans.

The Contractor shall include the Statement of Certification on either the cover sheet certifying all of the sheets or certify each individual sheet. The Statement of Certifications shall be signed and sealed by a Professional Engineer and/or a Professional Surveyor and Mapper, both registered in the State of Florida.

**Basis of Payment**

As-Built Plans will be paid for at the contract lump sum price, completed and accepted.

Payment shall be made under:

Pay Item:

900-1	As-Built Plans	Lump Sum
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**PART H**  
**TECHNICAL PROVISIONS**

**Wallace Road and Dr. Phillips Boulevard Intersection Improvements**

**TP 900-2 Indemnification**

**INDEMNIFICATION**

The Contractor shall indemnify, defend, and hold harmless the COUNTY and all its officers, agents, and employees, from all claims, losses, damages, costs, charges, or expenses arising out of any acts, action, neglect, or omission by the Contractor during the performance of the Contract, whether direct or indirect, and whether to any person or property to which the COUNTY or said parties may be subject, except that neither the Contractor nor any of its subcontractors are liable under this Section for damages arising out of the injury or damage to persons or property directly caused or resulting from the sole negligence of the COUNTY or any of its officers, agents, or employees.

Payment shall be made under:

Pay Item:

900-2

Indemnification

Lump Sum



## **PART H**

# **TECHNICAL PROVISIONS**

### **Wallace Road and Dr. Phillips Boulevard Intersection Improvements**

#### **TP 900-3 – Groundwater Treatment and Disposal**

### **GROUNDWATER TREATMENT AND DISPOSAL**

#### **General**

If concentrations of tested groundwater quality parameters exceed those allowable in the Florida Department of Environmental Protection (FDEP) Generic Permit for the Discharge of Produced Groundwater from any Non-Contaminated Site Activity (62-621.300(2), F.A.C.), treatment may be required under this technical provision.

The term treatment as used in this technical provision means the application of all FDEP approved techniques and/or methods available to remove the exceedances out of dewatering effluent except impounding. Impounding is not considered a treatment method for purposes of compensation under this technical provision.

The CONTRACTOR shall include in his/her bid all applicable costs, including monitoring, resulting from treatment and disposal of contaminated groundwater with concentration levels that exceed the allowable limits of the FDEP generic permit, and shall not be entitled to any adjustment in the Contract Price as a result of any change in the permit fees or unanticipated treatment and disposal costs.

Prior to any work commencing, and for the duration of the work, the CONTRACTOR is responsible for meeting all the conditions of the applicable permits and submitting any required reports to the appropriate agencies.

The CONTRACTOR shall dewater only in relation to the location and relocation of facilities owned by the COUNTY. No compensation shall be provided for dewatering performed for facilities that are not owned by the COUNTY.

#### **Permitting**

If exceedances are found in the dewatering effluent, the CONTRACTOR will be required to:

1. Immediately notify the COUNTY and report the exceedances that are encountered.
2. Meet with the FDEP to determine any and all alternatives that are acceptable.
3. Obtain prior COUNTY approval of treatment and disposal alternatives.
4. Obtain prior written COUNTY authorization to use pay item TP 900-3-1.
5. Apply and obtain any and all permits and/or treatment approvals that FDEP requires including, but not limited to:
  - a. Generic Permit for Discharges from Petroleum Contaminated Sites (62-621.300(1), F.A.C.). Allows discharges from sites with automotive gasoline, aviation gasoline, jet fuel, or diesel fuel contamination.

## PART H TECHNICAL PROVISIONS

### Wallace Road and Dr. Phillips Boulevard Intersection Improvements

- b. Permit for all Other Contaminated Sites (62-04; 62-302; 62-620 & 62-660, F.A.C.). The coverage is available only through the individual NPDES permit issued by FDEP. Allows discharges from sites with general contaminant issues, i.e. ground water and/or soil contamination other than petroleum fuel contamination.
  - c. Generic Permit for the Discharge of Produced Ground Water from Any Non-Contaminated Site Activity (62-621.300(2), F.A.C.).
  - d. Generic Permit for Stormwater Discharge from Large or Small Construction Activities (62-621.300(4) (a), F.A.C.).
6. Apply and obtain any and all permits and/or treatment approvals that the Water Management District requires including, but not limited to:
- a. No-Notice Short-Term Dewatering Permit (40E-20.302(3), F.A.C.) If the CONTRACTOR'S proposed work is expected to exceed 90 days in duration, or does not meet any of the other requirements listed with the requirements of Rule 40E-20.302(3), the CONTRACTOR must apply for and obtain a Dewatering General Water Use Permit (40E-20.302(2) F.A.C.)

The CONTRACTOR shall not be entitled to file, or recover under, any delay claim based on preparation of permit applications and the time required for obtaining the applicable permits. If, prior to or during the dewatering, it is determined that the disposal or discharge of the dewatering effluent is not authorized by the FDEP's Generic Permit for the Discharge of Produced Ground Water from Any Non-Contaminated Site Activity, the CONTRACTOR shall diligently pursue further required permit(s) from FDEP or other agencies without resort to delay claims or recompense from the COUNTY for either permit application activities or the time required to obtain such permits.

The CONTRACTOR shall consider and anticipate the potential need to obtain the herein discussed permits in developing his schedule, and shall make every effort to avoid or minimize potential impacts to his critical path that might result from delays in dewatering activities due to the time necessary for the CONTRACTOR to obtain the necessary permits. The CONTRACTOR shall make every effort to schedule activities requiring dewatering as late as possible during his schedule, and shall schedule activities not impacted by dewatering as early as possible. For each day, up to a maximum of one hundred eighty (180) days that the CONTRACTOR diligently pursues such permit(s) and is unable to avoid adversely impacting his critical path, a day will be added to the time allotted to the CONTRACTOR to complete performance of the Project.

**PART H**  
**TECHNICAL PROVISIONS**

**Wallace Road and Dr. Phillips Boulevard Intersection Improvements**

**Treatment**

The CONTRACTOR shall implement the appropriate treatment that is acceptable to FDEP, COUNTY, and, if necessary, the Water Management District to attain compliance for all exceedances encountered during dewatering activities. Treatments may include, but are not limited to: chemical treatment, ion exchange treatment, filtration, and disposal of discharged groundwater in a properly permitted facility.

The CONTRACTOR shall:

1. Make every effort to minimize the spread of contamination into uncontaminated areas;
2. Provide for the health and safety of all workers at the job site and make provisions necessary for the health and safety of the public that may be exposed to any potentially hazardous conditions;
3. Ensure such provisions adhere to all applicable laws, rules or regulations covering hazardous conditions in a manner commensurate with the level of severity of the conditions;
4. If necessary, provide contamination assessment and remediation personnel to handle site assessment, determine the course of action necessary for site security, and perform the necessary steps under applicable laws, rules, and regulations for additional assessment and/or remediation work to resolve the contamination issue;
5. Delineate the contamination area(s), any staging or holding area required, and develop a work plan that will provide the schedule of projected completion dates for the final resolution of the contamination issue;
6. Maintain jurisdiction over activities inside any delineated contamination areas and any associated staging or holding areas;
7. Be responsible for the health and safety of workers within the delineated areas; and
8. Provide continuous access to representatives of regulatory or enforcement agencies having jurisdiction.

**Method of Measurement**

Quantities to be paid for under this Section shall be the actual number of calendar days, when Groundwater Treatment & Disposal occurs. This does not include preparation of permit application(s) or time to obtain the permit(s).

**Basis of Payment**

Groundwater Treatment & Disposal will be paid for at the contract unit price per day. The price and payment for groundwater treatment and disposal shall constitute full compensation for cost of permitting and providing all labor, materials, tools, equipments, monitoring, reporting, treating and disposing of groundwater produced from dewatering systems.

Item No: 900-3      Groundwater - Treatment & Disposal

Days

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**IFB NO. Y18-712-RC**

**INVITATION FOR BIDS**

**FOR**

**WALLACE ROAD AND DR. PHILLIPS BOULEVARD INTERSECTION  
IMPROVEMENTS (FPID: 435587-1-58-01 FAN: D517-119-B)**

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**VOLUME III**  
**FDOT LAP SPECIFICATIONS**

**LAP DIVISION 1 SPECIFICATIONS.**

(REV 9-1-17) (7-18)

Construction Checklist Specifications  
from  
Department of Transportation  
Standard Specifications for Road and Bridge Construction

*The following excerpts from the Standard Specifications and Special Provisions are provided for use in LAP Specifications as needed in accordance with the Local Agency Program Checklist for Construction Contracts (Phase 58) – Federal and State Requirements (525-070-44)*

**FROM SECTION 1 – DEFINITIONS AND TERMS:**

**Department Name Orange County Department of Public Works**

**Engineer Julie R. Naditz, P.E., Highway Construction Division**

**Contractor’s Engineer of Record.**

A Professional Engineer registered in the State of Florida, other than the Engineer of Record or his subcontracted consultant, who undertakes the design and drawing of components of the permanent structure as part of a redesign or Cost Savings Initiative Proposal, or for repair designs and details of the permanent work. The Contractor’s Engineer of Record may also serve as the Specialty Engineer.

The Contractor’s Engineer of Record must be an employee of a pre-qualified firm. The firm shall be pre-qualified in accordance with the Rules of the Department of Transportation, Chapter 14-75. Any Corporation or Partnership offering engineering services must hold a Certificate of Authorization from the Florida Department of Business and Professional Regulation.

As an alternate to being an employee of a pre-qualified firm, the Contractor’s Engineer of Record may be a pre-qualified Specialty Engineer. For items of the permanent work declared by the State Construction Office to be ”major” or “structural”, the work performed by a pre-qualified Specialty Engineer must be checked by another pre-qualified Specialty Engineer. An individual Engineer may become pre-qualified in the work groups listed in the Rules of the Department of Transportation, Chapter 14-75, if the requirements for the Professional Engineer are met for the individual work groups. Pre-qualified Specialty Engineers are listed on the State Construction Website. Pre-qualified Specialty Engineers will not be authorized to perform redesigns or Cost Savings Initiative Proposal designs of items fully detailed in the plans.

**Specialty Engineer.**

A Professional Engineer registered in the State of Florida, other than the Engineer of Record or his subcontracted consultant, who undertakes the design and drawing preparation of components, systems, or installation methods and equipment for specific temporary portions of the project work or for special items of the permanent works not fully detailed in the plans and required to be furnished by the Contractor. The Specialty Engineer may also provide designs and details, repair designs and details, or perform Engineering Analyses for items of the permanent work declared by the State Construction Office to be “minor” or “non-structural”.

For items of work not specifically covered by the Rules of the Department of Transportation, a Specialty Engineer is qualified if he has the following qualifications:

- (1) Registration as a Professional Engineer in the State of Florida.
- (2) The education and experience necessary to perform the submitted design as required by the Florida Department of Business and Professional Regulation.

## **FROM SECTION 4 (ALTERATION OF WORK).**

### **4-3 Alteration of Plans or of Character of Work.**

**4-3.1 General:** The Engineer reserves the right to make, at any time prior to or during the progress of the work, such increases or decreases in quantities, whether a significant change or not, and such alterations in the details of construction, whether a substantial change or not, including but not limited to alterations in the grade or alignment of the road or structure or both, as may be found necessary or desirable by the Engineer. Such increases, decreases or alterations shall not constitute a breach of Contract, shall not invalidate the Contract, nor release the Surety from any liability arising out of this Contract or the Surety bond. The Contractor agrees to perform the work, as altered, the same as if it had been a part of the original Contract.

The term "significant change" applies only when:

1. The Engineer determines that the character of the work as altered differs materially in kind or nature from that involved or included in the original proposed construction, or

2. A major item of work, as defined in 1-3, is increased in excess of 125% or decreased below 75% of the original Contract quantity. The Department will apply any price adjustment for an increase in quantity only to that portion in excess of 125% of the original Contract item quantity in accordance with 4-3.2 below. In the case of a decrease below 75% the Department will only apply a price adjustment for the additional costs that are a direct result of the reduction in quantity.

In (1) above, the determination by the Engineer shall be conclusive. If the determination is challenged by the Contractor in any proceeding, the Contractor must establish by clear and convincing proof that the determination by the Engineer was without any reasonable basis.

**4-3.2 Increase, Decrease or Alteration in the Work:** The Engineer reserves the right to make alterations in the character of the work which involve a substantial change in the nature of the design or in the type of construction or which materially increases or decreases the cost or time of performance. Such alteration shall not constitute a breach of Contract, shall not invalidate the Contract or release the Surety.

Notwithstanding that the Contractor shall have no formal right whatsoever to any extra compensation or time extension deemed due by the Contractor for any cause unless and until the Contractor follows the procedures set forth in 5-12.2 for preservation, presentation and resolution of the claim, the Contractor may at any time, after having otherwise timely submitted a notice of intent to claim or preliminary time extension request pursuant to 5-12.2 and 8-7.3.2, submit to the Department a request for equitable adjustment of compensation or time or other dispute resolution proposal. The Contractor shall in any request for equitable adjustment of compensation, time, or other dispute resolution proposal certify under oath and in writing, in accordance with the formalities required by Florida law, that the request is made in good faith, that any supportive data submitted is accurate and complete to the Contractor's best knowledge and belief, and that the amount of the request accurately reflects what the Contractor in good faith believes to be the Department's responsibility. Such certification must be made by an officer or director of the Contractor with the authority to bind the Contractor. Any such certified statements of entitlement and costs shall be subject to the audit provisions set forth in 5-12.14. While the submittal or review of a duly certified request for equitable adjustment shall neither create, modify, nor activate any legal rights or obligations as to the Contractor or the Department, the Department will review the content of any duly certified request for equitable

adjustment or other dispute resolution proposal, with any further action or inaction by the Department thereafter being in its sole discretion. Any request for equitable adjustment that fails to fully comply with the certification requirements will not be reviewed by the Department.

The monetary compensation provided for below constitutes full and complete payment for such additional work and the Contractor shall have no right to any additional monetary compensation for any direct or indirect costs or profit for any such additional work beyond that expressly provided below. The Contractor shall be entitled to a time extension only to the extent that the performance of any portion of the additional work is a controlling work item and the performance of such controlling work item actually extends completion of the project due to no fault of the Contractor. All time related costs for actual performance of such additional work are included in the compensation already provided below and any time extension entitlement hereunder will be without additional monetary compensation. The Contractor shall have no right to any monetary compensation or damages whatsoever for any direct or indirect delay to a controlling work item arising out of or in any way related to the circumstances leading up to or resulting from additional work (but not relating to the actual performance of the additional work, which is paid for as otherwise provided herein), except only as provided for under 5-12.6.2.1.

**4-3.2.1 Allowable Costs for Extra Work:** The Engineer may direct in writing that extra work be done and, at the Engineer’s sole discretion, the Contractor will be paid pursuant to an agreed Supplemental Agreement or in the following manner:

1. Labor and Burden: The Contractor will receive payment for actual costs of direct labor and burden for the additional or unforeseen work. Labor includes foremen actually engaged in the work; and will not include project supervisory personnel nor necessary on-site clerical staff, except when the additional or unforeseen work is a controlling work item and the performance of such controlling work item actually extends completion of the project due to no fault of the Contractor. Compensation for project supervisory personnel, but in no case higher than a Project Manager’s position, shall only be for the pro-rata time such supervisory personnel spent on the contract. In no case shall an officer or director of the Company, nor those persons who own more than 1% of the Company, be considered as project supervisory personnel, direct labor or foremen hereunder.

Payment for burden shall be limited solely to the following:

Table 4-3.2.1	
Item	Rate
FICA	Rate established by Law
FUTA/SUTA	Rate established by Law
Medical Insurance	Actual
Holidays, Sick & Vacation benefits	Actual
Retirement benefits	Actual
Workers Compensation	Rates based on the National Council on Compensation Insurance basic rate tables adjusted by Contractor’s actual experience modification factor in effect at the time of the additional work or unforeseen work.
Per Diem	Actual but not to exceed State of Florida’s rate
Insurance*	Actual



Table 4-3.2.1	
Item	Rate
*Compensation for Insurance is limited solely to General Liability Coverage and does not include any other insurance coverage (such as, but not limited to, Umbrella Coverage, Automobile Insurance, etc.).	

At the Pre-construction conference, certify to the Engineer the following:

- a. A listing of on-site clerical staff, supervisory personnel and their pro-rated time assigned to the contract,
- b. Actual Rate for items listed in Table 4-3.2.1,
- c. Existence of employee benefit plan for Holiday, Sick and Vacation benefits and a Retirement Plan, and,
- d. Payment of Per Diem is a company practice for instances when compensation for Per Diem is requested.

Such certification must be made by an officer or director of the Contractor with authority to bind the Contractor. Timely certification is a condition precedent to any right of the Contractor to recover compensations for such costs, and failure to timely submit the certification will constitute a full, complete, absolute and irrevocable waiver by the Contractor of any right to recover such costs. Any subsequent changes shall be certified to the Engineer as part of the cost proposal or seven calendar days in advance of performing such extra work.

2. Materials and Supplies: For materials accepted by the Engineer and used on the project, the Contractor will receive the actual cost of such materials incorporated into the work, including Contractor paid transportation charges (exclusive of equipment as hereinafter set forth). For supplies reasonably needed for performing the work, the Contractor will receive the actual cost of such supplies.

3. Equipment: For any machinery or special equipment (other than small tools), including fuel and lubricant, the Contractor will receive 100% of the "Rental Rate Blue Book" for the actual time that such equipment is in operation on the work, and 50% of the "Rental Rate Blue Book" for the time the equipment is directed to standby and remain on the project site, to be calculated as indicated below. The equipment rates will be based on the latest edition (as of the date the work to be performed begins) of the "Rental Rate Blue Book for Construction Equipment" or the "Rental Rate Blue Book for Older Construction Equipment," whichever is applicable, as published by Machinery Information Division of PRIMEDIA Information, Inc. (version current at the time of bid), using all instructions and adjustments contained therein and as modified below. On all projects, the Engineer will adjust the rates using regional adjustments and Rate Adjustment Tables according to the instructions in the Blue Book.

Allowable Equipment Rates will be established as set out below:

- a. Allowable Hourly Equipment Rate = Monthly Rate/176  
x Adjustment Factors x 100%.
- b. Allowable Hourly Operating Cost = Hourly Operating  
Cost x 100%.
- c. Allowable Rate Per Hour = Allowable Hourly  
Equipment Rate + Allowable Hourly Operating Cost.
- d. Standby Rate = Allowable Hourly Equipment  
Rate x 50%.

The Monthly Rate is The Basic Machine Rate Plus Any Attachments. Standby rates will apply when equipment is not in operation and is directed by the Engineer to standby at the project site when needed again to complete work and the cost of moving the equipment will exceed the accumulated standby cost. Standby rates will not apply on any day the equipment operates for eight or more hours. Standby payment will be limited to only that number of hours which, when added to the operating time for that day equals eight hours. Standby payment will not be made on days that are not normally considered work days on the project.

The Department will allow for the cost of transporting the equipment to and from the location at which it will be used. If the equipment requires assembly or disassembly for transport, the Department will pay for the time to perform this work at the rate for standby equipment.

Equipment may include vehicles utilized only by Labor, as defined above.

4. Indirect Costs, Expenses, and Profit: Compensation for all indirect costs, expenses, and profit of the Contractor, including but not limited to overhead of any kind, whether jobsite, field office, division office, regional office, home office, or otherwise, is expressly limited to the greater of either (a) or (b) below:

a. Solely a mark-up of 17.5% on the payments in (1) through (3), above.

1. Bond: The Contractor will receive compensation for any premium for acquiring a bond for such additional or unforeseen work at the original Contract bond rate paid by the Contractor. No compensation for bond premium will be allowed for additional or unforeseen work paid by the Department via initial contingency pay item.

2. The Contractor will be allowed a markup of 10% on the first \$50,000 and a markup of 5% on any amount over \$50,000 on any subcontract directly related to the additional or unforeseen work. Any such subcontractor mark-up will be allowed only by the prime Contractor and a first tier subcontractor, and the Contractor must elect the markup for any eligible first tier subcontractor to do so.

b. Solely the formula set forth below and only as applied solely as to such number of calendar days of entitlement that are in excess of ten cumulative calendar days as defined below.

$$D = \frac{A \times C}{B}$$

Where A = Original Contract Amount

B = Original Contract Time

C = 8%

D = Average Overhead Per Day

Cumulative Calendar Days is defined as the combined total number of calendar days granted as time extensions due to either extra work, excluding overruns to existing contract items, that extend the duration of the project or delay of a controlling work item caused solely by the Department, or the combined total number of calendar days for which

a claim of entitlement to a time extension due to delay of a controlling work item caused solely by the Department is otherwise ultimately determined to be in favor of the Contractor.

No compensation, whatsoever, will be paid to the Contractor for any jobsite overhead and other indirect impacts when the total number of calendar days granted for time extension due to delay of a controlling work item caused solely by the Department is, or the total number of calendar days for which entitlement to a time extension due to delay of a controlling work item caused solely by the Department is otherwise ultimately determined in favor of the Contractor to be, equal to or less than ten calendar days and the Contractor also fully assumes all monetary risk of any and all partial or single calendar day delay periods, due to delay of a controlling work item caused solely by the Department, that when combined together are equal to or less than ten calendar days and regardless of whether monetary compensation is otherwise provided for hereunder for one or more calendar days of time extension entitlement for each calendar day exceeding ten calendar days. All calculations under this provision shall exclude weather days, Holidays, and Special Events.

Further, for (a) and (b) above, in the event there are concurrent delays to one or more controlling work items, one or more being caused by the Department and one or more being caused by the Contractor, the Contractor shall be entitled to a time extension for each day that a controlling work item is delayed by the Department but shall have no right to nor receive any monetary compensation for any indirect costs for any days of concurrent delay.

**4-3.2.2 Subcontracted Work:** Compensation for the additional or unforeseen work performed by a subcontractor shall be limited solely to that provided for in 4-3.2.1 (1), (2), (3) and (4)(a). In addition, the Contractor compensation is expressly limited to the greater of the total provided in either 4-3.2.1(4)(a) or (4)(b), except that the Average Overhead Per-Day calculation is as follows:

$$D_s = \frac{A_s \times C}{B}$$

Where  $A_s$  = Original Contract Amount minus Original

Subcontract amounts(s)\*

$B$  = Original Contract Time

$C$  = 8%

$D_s$  = Average Overhead Per-Day

\* deduct Original Subcontract Amount(s) of subcontractor(s) performing the work

The subcontractor may receive compensation for any premium for acquiring a bond for the additional or unforeseen work; provided, however, that such payment for additional subcontractor bond will only be paid upon presentment to the Department of clear and convincing proof that the subcontractor has actually submitted and paid for separate bond premiums for such additional or unforeseen work in such amount and that the subcontractor was required by the Contractor to acquire a bond.

The Contractor shall require the subcontractor to submit a certification, in accordance with 4-3.2.1 (1), as part of the cost proposal and submit such to the Engineer. Such certification must be made by an officer or director of the subcontractor with authority to bind

the subcontractor. Timely certification is a condition precedent to any right of the Contractor to recover compensation for such subcontractor costs, and failure to timely submit the certification will constitute a full, complete, absolute and irrevocable waiver by the Contractor of any right to recover such subcontractor costs.

**4-3.3 No Waiver of Contract:** Changes made by the Engineer will not be considered to waive any of the provisions of the Contract, nor may the Contractor make any claim for loss of anticipated profits because of the changes, or by reason of any variation between the approximate quantities and the quantities of work actually performed. All work shall be performed as directed by the Engineer and in accordance with the Contract Documents.

**4-3.4 Conditions Requiring a Supplemental Agreement or Unilateral Payment:** A Supplemental Agreement or Unilateral Payment will be used to clarify the Plans and Specifications of the Contract; to provide for unforeseen work, grade changes, or alterations in the Plans which could not reasonably have been contemplated or foreseen in the original Plans and Specifications; to change the limits of construction to meet field conditions; to provide a safe and functional connection to an existing pavement; to settle documented Contract claims; to make the project functionally operational in accordance with the intent of the original Contract and subsequent amendments thereto.

A Supplemental Agreement or Unilateral Payment may be used to expand the physical limits of the project only to the extent necessary to make the project functionally operational in accordance with the intent of the original Contract. The cost of any such agreement extending the physical limits of the project shall not exceed \$100,000 or 10% of the original Contract price, whichever is greater.

Perform no work to be covered by a Supplemental Agreement or Unilateral Payment before written authorization is received from the Engineer. The Engineer's written authorization will set forth sufficient work information to allow the work to begin. The work activities, terms and conditions will be reduced to written Supplemental Agreement or Unilateral Payment form promptly thereafter. No payment will be made on a Supplemental Agreement or Unilateral Payment prior to the Department's approval of the document.

**4-3.5 Extra Work:** Extra work authorized in writing by the Engineer will be paid in accordance with the formula in 4-3.2. Such payment will be the full extent of all monetary compensation entitlement due to the Contractor for such extra work. Any entitlement to a time extension due to extra work will be limited solely to that provided for in 4-3.2 for additional work.

**4-3.6 Connections to Existing Pavement, Drives and Walks:** Generally adhere to the limits of construction at the beginning and end of the project as detailed in the Plans. However, if the Engineer determines that it is necessary to extend the construction in order to make suitable connections to existing pavement, the Engineer will authorize such a change in writing.

For necessary connections to existing walks and drives that are not indicated in the Plans, the Engineer will submit direction regarding the proper connections in accordance with the Design Standards.

**4-3.7 Differing Site Conditions:** During the progress of the work, if subsurface or latent physical conditions are encountered at the site differing materially from those indicated in the Contract, or if unknown physical conditions of an unusual nature differing materially from those ordinarily encountered and generally recognized as inherent in the work provided for in the Contract are encountered at the site, the party discovering such conditions shall promptly notify

the other party in writing of the specific differing conditions before the Contractor disturbs the conditions or performs the affected work.

Upon receipt of written notification of differing site conditions from the Contractor, the Engineer will investigate the conditions, and if it is determined that the conditions materially differ and cause an increase or decrease in the cost or time required for the performance of any work under the Contract, an adjustment will be made, excluding loss of anticipated profits, and the Contract will be modified in writing accordingly. The Engineer will notify the Contractor whether or not an adjustment of the Contract is warranted.

The Engineer will not allow a Contract adjustment for a differing site condition unless the Contractor has submitted the required written notice.

The Engineer will not allow a Contract adjustment under this clause for any effects caused to any other Department or non-Department projects on which the Contractor may be working.

**4-3.8 Changes Affecting Utilities:** The Contractor shall be responsible for identifying and assessing any potential impacts to a utility that may be caused by the changes proposed by the Contractor, and the Contractor shall at the time of making the request for a change notify the Department in writing of any such potential impacts to utilities.

Department approval of a Contractor proposed change does not relieve the Contractor of sole responsibility for all utility impacts, costs, delays or damages, whether direct or indirect, resulting from Contractor initiated changes in the design or construction activities from those in the original Contract Specifications, Design Plans (including Traffic Control Plans) or other Contract Documents and which effect a change in utility work different from that shown in the Utility Plans, joint project agreements or utility relocation schedules.

**4-3.9 Cost Savings Initiative Proposal:**

**4-3.9.1 Intent and Objective:**

1. This Subarticle applies to any cost reduction proposal (hereinafter referred to as a Proposal) that the Contractor initiates and develops for the purpose of refining the Contract to increase cost effectiveness or significantly improve the quality of the end result. A mandatory Cost Savings Initiative Workshop will be held prior to Contract Time beginning for the Contractor and Department to discuss potential Proposals. This Subarticle does not, however, apply to any such proposal unless the Contractor identifies it at the time of its submission to the Department as a proposal submitted pursuant to this Subarticle.

2. The Department will consider Proposals that would result in net savings to the Department by providing a decrease in the cost of the Contract. Proposals must result in savings without impairing essential functions and characteristics such as safety, service, life, reliability, economy of operation, ease of maintenance, aesthetics and necessary standard design features. However, nothing herein prohibits the Contractor from submitting Proposals when the required functions and characteristics can be combined, reduced or eliminated because they are nonessential or excessive. The Department will not recognize the Contractor's correction of plan errors that result in a cost reduction, as a Proposal.

3. The Department reserves the right to reject at its discretion any Proposal submitted that proposes a change in the design of the pavement system or that would require additional right-of-way. Pending the Department's execution of a formal supplemental agreement implementing an approved Proposal, the Contractor shall remain obligated to perform the work in accordance with the terms of the existing Contract. The Department may grant time extensions to allow for the time required to develop and review a Proposal.

4. For potential Proposals not discussed at the Cost Savings Initiative Workshop, a mandatory concept meeting will be held for the Contractor and Department to discuss the potential Proposal prior to development of the Proposal.

**4-3.9.2 Subcontractors:** The Department encourages the Contractor to include the provisions of this Subarticle in Contracts with subcontractors and to encourage submission of Proposals from subcontractors. However, it is not mandatory to submit Proposals to the Department or to accept or transmit subcontractor proposed Proposals to the Department.

**4-3.9.3 Data Requirements:** As a minimum, submit the following information with each Proposal:

1. a description of the difference between the existing Contract requirement, including any time extension request, and the proposed change, and the comparative advantages and disadvantages.

2. separate detailed cost estimates for both the existing Contract requirement and the proposed change. Break down the cost estimates by pay item numbers indicating quantity increases or decreases and deleted pay items. Identify additional proposed work not covered by pay items within the Contract, by using pay item numbers in the Basis of Estimates Manual. In preparing the estimates, include overhead, profit, and bond within pay items in the Contract. Separate pay item(s) for the cost of overhead, profit, and bond will not be allowed.

3. an itemization of the changes, deletions or additions to plan details, plan sheets, design standards and Specifications that are required to implement the Proposal if the Department adopts it. Submit preliminary plan drawings sufficient to describe the proposed changes.

4. engineering or other analysis in sufficient detail to identify and describe specific features of the Contract that must be changed if the Department accepts the Proposal with a proposal as to how these changes can be accomplished and an assessment of their effect on other project elements. The Department may require that engineering analyses be performed by a prequalified consultant in the applicable class of work. Support all design changes that result from the Proposal with drawings and computations signed and sealed by the Contractor's Engineer of Record. Written documentation or drawings will be submitted clearly delineating the responsibility of the Contractor's Engineer of Record.

5. the date by which the Department must approve the Proposal to obtain the total estimated cost reduction during the remainder of the Contract, noting any effect on the Contract completion time or delivery schedule.

6. a revised project schedule that would be followed upon approval of the Proposal. This schedule would include submittal dates and review time for the Department and Peer reviews.

**4-3.9.4 Processing Procedures:** Submit Proposals to the Engineer or his duly authorized representative. The Department will process Proposals expeditiously; however, the Department is not liable for any delay in acting upon a Proposal submitted pursuant to this Subarticle. The Contractor may withdraw, in whole or in part, a Proposal not accepted by the Department within the period specified in the Proposal. The Department is not liable for any Proposal development cost in the case where the Department rejects or the Contractor withdraws a Proposal.

The Engineer is the sole judge of the acceptability of a Proposal and of the estimated net savings in construction costs from the adoption of all or any part of such proposal.

In determining the estimated net savings, the Department reserves the right to disregard the Contract bid prices if, in the judgment of the Engineer, such prices do not represent a fair measure of the value of work to be performed or to be deleted.

Prior to approval, the Engineer may modify a Proposal, with the concurrence of the Contractor, to make it acceptable. If any modification increases or decreases the net savings resulting from the Proposal, the Department will determine the Contractor's fair share upon the basis of the Proposal as modified and upon the final quantities. The Department will compute the net savings by subtracting the revised total cost of all bid items affected by the Proposal from the total cost of the same bid items as represented in the original Contract.

Prior to approval of the Proposal that initiates the supplemental agreement, submit acceptable Contract-quality plan sheets revised to show all details consistent with the Proposal design.

**4-3.9.5 Computations for Change in Contract Cost of Performance:** If the Proposal is adopted, the Contractor's share of the net savings as defined hereinafter represents full compensation to the Contractor for the Proposal.

The Department will not include its costs to process and implement a Proposal in the estimate. However, the Department reserves the right, where it deems such action appropriate, to require the Contractor to pay the Department's cost of investigating and implementing a Proposal as a condition of considering such proposal. When the Department imposes such a condition, the Contractor shall accept this condition in writing, authorizing the Department to deduct amounts payable to the Department from any monies due or that may become due to the Contractor under the Contract.

**4-3.9.6 Conditions of Acceptance for Major Design Modifications of Category 2 Bridges:** A Proposal that proposes major design modifications of a category 2 bridge, as determined by the Engineer, shall have the following conditions of acceptance:

All bridge Plans relating to the Proposal shall undergo an independent peer review conducted by a single independent engineering firm referred to for the purposes of this article as the Independent Review Engineer who is not the originator of the Proposal design, and is pre-qualified by the Department in accordance with Rule 14-75, Florida Administrative Code. The independent peer review is intended to be a comprehensive, thorough verification of the original work, giving assurance that the design is in compliance with all Department requirements. The Independent Review Engineer's comments, along with the resolution of each comment, shall be submitted to the Department. The Independent Review Engineer shall sign and seal the submittal cover letter stating that all comments have been adequately addressed and the design is in compliance with the Department requirements. If there are any unresolved comments the Independent Review Engineer shall specifically list all unresolved issues in the signed and sealed cover letter.

The Contractor shall designate a primary engineer responsible for the Proposal design and as such will be designated as the Contractor's Engineer of Record for the Proposal design. The Department reserves the right to require the Contractor's Engineer of Record to assume responsibility for design of the entire structure.

New designs and independent peer reviews shall be in compliance with all applicable Department, FHWA and AASHTO criteria requirements including bridge load ratings.

**4-3.9.7 Sharing Arrangements:** If the Department approves a Proposal, the Contractor shall receive 50% of the net reduction in the cost of performance of the Contract as

determined by the final negotiated agreement between the Contractor and the Department. The net reduction will be determined by subtracting from the savings of the construction costs the reasonable documented engineering costs incurred by the contractor to design and develop a Proposal. The reasonable documented engineering costs will be paid by the Department. Engineering costs will be based on the consultant's certified invoice and may include the costs of the Independent Review Engineer in 4-3.9.6. The total engineering costs to be subtracted from the savings to determine the net reduction will be limited to 25% of the construction savings and shall not include any markup by the Contractor or the costs for engineering services performed by the Contractor.

**4-3.9.8 Notice of Intellectual Property Interests and Department's Future Rights to a Proposal:**

**4-3.9.8.1 Notice of Intellectual Property Interests:** The Contractor's Proposal submittal shall identify with specificity any and all forms of intellectual property rights that either the Contractor or any officer, shareholder, employee, consultant, or affiliate, of the Contractor, or any other entity who contributed in any measure to the substance of the Contractor's Proposal development, have or may have that are in whole or in part implicated in the Proposal. Such required intellectual property rights notice includes, but is not limited to, disclosure of any issued patents, copyrights, or licenses; pending patent, copyright or license applications; and any intellectual property rights that though not yet issued, applied for or intended to be pursued, could nevertheless otherwise be subsequently the subject of patent, copyright or license protection by the Contractor or others in the future. This notice requirement does not extend to intellectual property rights as to stand-alone or integral components of the Proposal that are already on the Department's Approved Product List (APL) or Design Standard Indexes, or are otherwise generally known in the industry as being subject to patent or copyright protection.

**4-3.9.8.2 Department's Future Rights to a Proposal:** Notwithstanding 7-3 nor any other provision of the Standard Specifications, upon acceptance of a Proposal, the Contractor hereby grants to the Department and its contractors (such grant being expressly limited solely to any and all existing or future Department construction projects and any other Department projects that are partially or wholly funded by or for the Department) a royalty-free and perpetual license under all forms of intellectual property rights to manufacture, to use, to design, to construct, to disclose, to reproduce, to prepare and fully utilize derivative works, to distribute, display and publish, in whole or in part, and to permit others to do any of the above, and to otherwise in any manner and for any purpose whatsoever do anything reasonably necessary to fully utilize any and all aspects of such Proposal on any and all existing and future construction projects and any other Department projects.

Contractor shall hold harmless, indemnify and defend the Department and its contractors and others in privity therewith from and against any and all claims, liabilities, other obligations or losses, and reasonable expenses related thereto (including reasonable attorneys' fees), which are incurred or are suffered by any breach of the foregoing grants, and regardless of whether such intellectual property rights were or were not disclosed by the Contractor pursuant to 4-3.9.8.1, unless the Department has by express written exception in the Proposal acceptance process specifically released the Contractor from such obligation to hold harmless, indemnify and defend as to one or more disclosed intellectual property rights.



## **FROM SECTION 5 – CONTROL OF THE WORK (CLAIMS).**

### **5-12 Claims by Contractor.**

**5-12.1 General:** When the Contractor deems that extra compensation or a time extension is due beyond that agreed to by the Engineer, whether due to delay, additional work, altered work, differing site conditions, breach of Contract, or for any other cause, the Contractor shall follow the procedures set forth herein for preservation, presentation and resolution of the claim.

Submission of timely notice of intent to file a claim, preliminary time extension request, time extension request, and the certified written claim, together with full and complete claim documentation, are each a condition precedent to the Contractor bringing any circuit court, arbitration, or other formal claims resolution proceeding against the Department for the items and for the sums or time set forth in the Contractor's certified written claim. The failure to provide such notice of intent, preliminary time extension request, time extension request, certified written claim and full and complete claim documentation within the time required shall constitute a full, complete, absolute and irrevocable waiver by the Contractor of any right to additional compensation or a time extension for such claim.

### **5-12.2 Notice of Claim:**

**5-12.2.1 Claims For Extra Work:** Where the Contractor deems that additional compensation or a time extension is due for work or materials not expressly provided for in the Contract or which is by written directive expressly ordered by the Engineer pursuant to 4-3, the Contractor shall submit written notification to the Engineer of the intention to make a claim for additional compensation before beginning the work on which the claim is based, and if seeking a time extension, the Contractor shall also submit a preliminary request for time extension pursuant to 8-7.3.2 within ten calendar days after commencement of a delay and a request for Contract Time extension pursuant to 8-7.3.2 within thirty calendar days after the elimination of the delay. If such written notification is not submitted and the Engineer is not afforded the opportunity for keeping strict account of actual labor, material, equipment, and time, the Contractor waives the claim for additional compensation or a time extension. Such notice by the Contractor, and the fact that the Engineer has kept account of the labor, materials and equipment, and time, shall not in any way be construed as establishing the validity of the claim or method for computing any compensation or time extension for such claim. On projects with an original Contract amount of \$3,000,000 or less within 90 calendar days after final acceptance of the project in accordance with 5-11, and on projects with an original Contract amount greater than \$3,000,000 within 180 calendar days after final acceptance of the project in accordance with 5-11, the Contractor shall submit full and complete claim documentation as described in 5-12.3 and duly certified pursuant to 5-12.9. However, for any claim or part of a claim that pertains solely to final estimate quantities disputes the Contractor shall submit full and complete claim documentation as described in 5-12.3 and duly certified pursuant to 5-12.9, as to such final estimate claim dispute issues, within 90 or 180 calendar days, respectively, of the Contractor's receipt of the Department's final estimate.

If the Contractor fails to submit a certificate of claim as described in 5-12.9, the Department will so notify the Contractor in writing. The Contractor shall have ten calendar days from receipt of the notice to resubmit the claim documentation, without change, with a certificate of claim as described in 5-12.9, without regard to whether the resubmission is within the applicable 90 or 180 calendar day deadline for submission of full and complete claim documentation. Failure by the Contractor to comply with the ten calendar day notice shall constitute a waiver of the claim.

**5-12.2.2 Claims For Delay:** Where the Contractor deems that additional compensation or a time extension is due on account of delay, differing site conditions, breach of Contract, or any other cause other than for work or materials not expressly provided for in the Contract (Extra Work) or which is by written directive of the Engineer expressly ordered by the Engineer pursuant to 4-3, the Contractor shall submit a written notice of intent to the Engineer within ten days after commencement of a delay to a controlling work item expressly notifying the Engineer that the Contractor intends to seek additional compensation, and if seeking a time extension, the Contractor shall also submit a preliminary request for time extension pursuant to 8-7.3.2 within ten calendar days after commencement of a delay to a controlling work item, as to such delay and providing a reasonably complete description as to the cause and nature of the delay and the possible impacts to the Contractor's work by such delay, and a request for Contract Time extension pursuant to 8-7.3.2 within thirty calendar days after the elimination of the delay. On projects with an original Contract amount of \$3,000,000 or less within 90 calendar days after final acceptance of the project in accordance with 5-11, and on projects with an original Contract amount greater than \$3,000,000 within 180 calendar days after final acceptance of the project in accordance with 5-11, the Contractor shall submit full and complete documentation as described in 5-12.3 and duly certified pursuant to 5-12.9.

If the Contractor fails to submit a certificate of claim as described in 5-12.9, the Department will so notify the Contractor in writing. The Contractor shall have ten calendar days from receipt of the notice to resubmit the claim documentation, without change, with a certificate of claim as described in 5-12.9, without regard to whether the resubmission is within the applicable 90 or 180 calendar day deadline for submission of full and complete claim documentation. Failure by the Contractor to comply with the ten calendar day notice shall constitute a waiver of the claim.

There shall be no Contractor entitlement to any monetary compensation or time extension for any delays or delay impacts, whatsoever, that are not to a controlling work item, and then as to any such delay to a controlling work item entitlement to any monetary compensation or time extension shall only be to the extent such is otherwise provided for expressly under 4-3 or 5-12, except that in the instance of delay to a non-controlling item of work the Contractor may be compensated for the direct costs of idle labor or equipment only, at the rates set forth in 4-3.2.1(1) and (3), and then only to the extent the Contractor could not reasonably mitigate such idleness.

**5-12.3 Content of Written Claim:** As a condition precedent to the Contractor being entitled to additional compensation or a time extension under the Contract, for any claim, the Contractor shall submit a certified written claim to the Department which will include for each individual claim, at a minimum, the following information:

1. A detailed factual statement of the claim providing all necessary dates, locations, and items of work affected and included in each claim;
2. The date or dates on which actions resulting in the claim occurred or conditions resulting in the claim became evident;
3. Identification of all pertinent documents and the substance of any material oral communications relating to such claim and the name of the persons making such material oral communications;
4. Identification of the provisions of the Contract which support the claim and a statement of the reasons why such provisions support the claim, or alternatively, the provisions of the Contract which allegedly have been breached and the actions constituting such breach;

5. A detailed compilation of the amount of additional compensation sought and a breakdown of the amount sought as follows:

- a. documented additional job site labor expenses;
- b. documented additional cost of materials and supplies;
- c. a list of additional equipment costs claimed, including each piece of equipment and the rental rate claimed for each;
- d. any other additional direct costs or damages and the documents in support thereof;
- e. any additional indirect costs or damages and all documentation in support thereof.

6. A detailed compilation of the specific dates and the exact number of calendar days sought for a time extension, the basis for entitlement to time for each day, all documentation of the delay, and a breakout of the number of days claimed for each identified event, circumstance or occurrence.

Further, the Contractor shall be prohibited from amending either the bases of entitlement or the amount of any compensation or time stated for any and all issues claimed in the Contractor's written claim submitted hereunder, and any circuit court, arbitration, or other formal claims resolution proceeding shall be limited solely to the bases of entitlement and the amount of any compensation or time stated for any and all issues claimed in the Contractor's written claim submitted hereunder. This shall not, however, preclude a Contractor from withdrawing or reducing any of the bases of entitlement and the amount of any compensation or time stated for any and all issues claimed in the Contractor's written claim submitted hereunder at any time.

**5-12.4 Action on Claim:** The Engineer will respond in writing on projects with an original Contract amount of \$3,000,000 or less within 90 calendar days of receipt of a complete claim submitted by a Contractor in compliance with 5-12.3, and on projects with an original Contract amount greater than \$3,000,000 within 120 calendar days of receipt of a complete claim submitted by a Contractor in compliance with 5-12.3. Failure by the Engineer to respond to a claim in writing within 90 or 120 days, respectively, after receipt of a complete claim submitted by the Contractor in compliance with 5-12.3 constitutes a denial of the claim by the Engineer. If the Engineer finds the claim or any part thereof to be valid, such partial or whole claim will be allowed and paid for to the extent deemed valid and any time extension granted, if applicable, as provided in the Contract. No circuit court or arbitration proceedings on any claim, or a part thereof, may be filed until after final acceptance per 5-11 of all Contract work by the Department or denial hereunder, whichever occurs last.

**5-12.5 Pre-Settlement and Pre-Judgment Interest:** Entitlement to any pre-settlement or pre-judgment interest on any claim amount determined to be valid subsequent to the Department's receipt of a certified written claim in full compliance with 5-12.3, whether determined by a settlement or a final ruling in formal proceedings, the Department shall pay to the Contractor simple interest calculated at the Prime Rate (as reported by the Wall Street Journal as the base rate on corporate loans posted by at least 75% of the nations 30 largest banks) as of the 60th calendar day following the Department's receipt of a certified written claim in full compliance with 5-12.3, such interest to accrue beginning 60 calendar days following the Department's receipt of a certified written claim in full compliance with 5-12.3 and ending on the date of final settlement or formal ruling.

**5-12.6 Compensation for Extra Work or Delay:**

**5-12.6.1 Compensation for Extra Work:** Notwithstanding anything to the contrary contained in the Contract Documents, the Contractor shall not be entitled to any compensation beyond that provided for in 4-3.2.

**5-12.6.2 Compensation for Delay:** Notwithstanding anything to the contrary contained in the Contract Documents, the additional compensation set forth in 5-12.6.2.1 shall be the Contractor's sole monetary remedy for any delay other than to perform extra work caused by the Department unless the delay shall have been caused by acts constituting willful or intentional interference by the Department with the Contractor's performance of the work and then only where such acts continue after Contractor's written notice to the Department of such interference. The parties anticipate that delays may be caused by or arise from any number of events during the term of the Contract, including, but not limited to, work performed, work deleted, supplemental agreements, work orders, disruptions, differing site conditions, utility conflicts, design changes or defects, time extensions, extra work, right-of-way issues, permitting issues, actions of suppliers, subcontractors or other contractors, actions by third parties, suspensions of work by the Engineer pursuant to 8-6.1, shop drawing approval process delays, expansion of the physical limits of the project to make it functional, weather, weekends, holidays, special events, suspension of Contract Time, or other events, forces or factors sometimes experienced in construction work. Such delays or events and their potential impacts on the performance by the Contractor are specifically contemplated and acknowledged by the parties in entering into this Contract, and shall not be deemed to constitute willful or intentional interference with the Contractor's performance of the work without clear and convincing proof that they were the result of a deliberate act, without reasonable and good-faith basis, and specifically intended to disrupt the Contractor's performance.

**5-12.6.2.1 Compensation for Direct Costs, Indirect Costs, Expenses, and Profit thereon, of or from Delay:** For any delay claim, the Contractor shall be entitled to monetary compensation for the actual idle labor and equipment, and indirect costs, expenses, and profit thereon, as provided for in 4-3.2.1(4) and solely for costs incurred beyond what reasonable mitigation thereof the Contractor could have undertaken.

**5-12.7 Mandatory Claim Records:** After submitting to the Engineer a notice of intent to file a claim for extra work or delay, the Contractor must keep daily records of all labor, material and equipment costs incurred for operations affected by the extra work or delay. These daily records must identify each operation affected by the extra work or delay and the specific locations where work is affected by the extra work or delay, as nearly as possible. The Engineer may also keep records of all labor, material and equipment used on the operations affected by the extra work or delay. The Contractor shall, once a notice of intent to claim has been timely filed, and not less than weekly thereafter as long as appropriate, submit the Contractor's daily records to the Engineer and be likewise entitled to receive the Department's daily records. The daily records to be submitted hereunder shall be done at no cost to the recipient.

**5-12.8 Claims For Acceleration:** The Department shall have no liability for any constructive acceleration of the work, nor shall the Contractor have any right to make any claim for constructive acceleration nor include the same as an element of any claim the Contractor may otherwise submit under this Contract. If the Engineer gives express written direction for the Contractor to accelerate its efforts, such written direction will set forth the prices and other pertinent information and will be reduced to a written Contract Document promptly. No payment will be made on a Supplemental Agreement for acceleration prior to the Department's approval of the documents.

**5-12.9 Certificate of Claim:** When submitting any claim, the Contractor shall certify under oath and in writing, in accordance with the formalities required by Florida law, that the claim is made in good faith, that the supportive data are accurate and complete to the Contractor's best knowledge and belief, and that the amount of the claim accurately reflects what the Contractor in good faith believes to be the Department's liability. Such certification must be made by an officer or director of the Contractor with the authority to bind the Contractor.

**5-12.10 Non-Recoverable Items:** The parties agree that for any claim the Department will not have liability for the following items of damages or expense:

1. Loss of profit, incentives or bonuses;
2. Any claim for other than extra work or delay;
3. Consequential damages, including, but not limited to, loss of bonding capacity, loss of bidding opportunities, loss of credit standing, cost of financing, interest paid, loss of other work or insolvency;
4. Acceleration costs and expenses, except where the Department has expressly and specifically directed the Contractor in writing "to accelerate at the Department's expense"; nor
5. Attorney fees, claims preparation expenses and costs of litigation.

**5-12.11 Exclusive Remedies:** Notwithstanding any other provision of this Contract, the parties agree that the Department shall have no liability to the Contractor for expenses, costs, or items of damages other than those which are specifically identified as payable under 5-12. In the event any legal action for additional compensation, whether on account of delay, acceleration, breach of contract, or otherwise, the Contractor agrees that the Department's liability will be limited to those items which are specifically identified as payable in 5-12.

**5-12.12 Settlement Discussions:** The content of any discussions or meetings held between the Department and the Contractor to settle or resolve any claims submitted by the Contractor against the Department shall be inadmissible in any legal, equitable, arbitration or administrative proceedings brought by the Contractor against the Department for payment of such claim. Dispute Resolution Board, State Arbitration Board and Claim Review Committee proceedings are not settlement discussions, for purposes of this provision.

**5-12.13 Personal Liability of Public Officials:** In carrying out any of the provisions of the Contract or in exercising any power or authority granted to the Secretary of Transportation, Engineer or any of their respective employees or agents, there shall be no liability on behalf of any employee, officer or official of the Department for which such individual is responsible, either personally or as officials or representatives of the Department. It is understood that in all such matters such individuals act solely as agents and representatives of the Department.

**5-12.14 Auditing of Claims:** All claims filed against the Department shall be subject to audit at any time following the filing of the claim, whether or not such claim is part of a suit pending in the Courts of this State. The audit may be performed, at the Department's sole discretion, by employees of the Department or by any independent auditor appointed by the Department, or both. The audit may begin after ten days written notice to the Contractor, subcontractor, or supplier. The Contractor, subcontractor, or supplier shall make a good faith effort to cooperate with the auditors. As a condition precedent to recovery on any claim, the Contractor, subcontractor, or supplier must retain sufficient records, and provide full and reasonable access to such records, to allow the Department's auditors to verify the claim and failure to retain sufficient records of the claim or failure to provide full and reasonable access to such records shall constitute a waiver of that portion of such claim that cannot be verified and

shall bar recovery thereunder. Further, and in addition to such audit access, upon the Contractor submitting a written claim, the Department shall have the right to request and receive, and the Contractor shall have the affirmative obligation to submit to the Department any and all documents in the possession of the Contractor or its subcontractors, materialmen or suppliers as may be deemed relevant by the Department in its review of the basis, validity or value of the Contractor's claim.

Without limiting the generality of the foregoing, the Contractor shall upon written request of the Department make available to the Department's auditors, or upon the Department's written request, submit at the Department's expense, any or all of the following documents:

1. Daily time sheets and foreman's daily reports and diaries;
2. Insurance, welfare and benefits records;
3. Payroll register;
4. Earnings records;
5. Payroll tax return;
6. Material invoices, purchase orders, and all material and supply acquisition contracts;
7. Material cost distribution worksheet;
8. Equipment records (list of company owned, rented or other equipment used);
9. Vendor rental agreements and subcontractor invoices;
10. Subcontractor payment certificates;
11. Canceled checks for the project, including, payroll and vendors;
12. Job cost report;
13. Job payroll ledger;
14. General ledger, general journal, (if used) and all subsidiary ledgers and journals together with all supporting documentation pertinent to entries made in these ledgers and journals;
15. Cash disbursements journal;
16. Financial statements for all years reflecting the operations on this project;
17. Income tax returns for all years reflecting the operations on this project;
18. All documents which reflect the Contractor's actual profit and overhead during the years this Contract was being performed and for each of the five years prior to the commencement of this Contract;
19. All documents related to the preparation of the Contractor's bid including the final calculations on which the bid was based;
20. All documents which relate to each and every claim together with all documents which support the amount of damages as to each claim;
21. Worksheets used to prepare the claim establishing the cost components for items of the claim including, but not limited to, labor, benefits and insurance, materials, equipment, subcontractors, and all documents that establish which time periods and individuals were involved, and the hours and rates for such individuals.

## **FROM SECTION 6 – CONTROL OF MATERIALS (CONVICT LABOR AND BUY AMERICA).**

### **6-5 Products and Source of Supply.**

**6-5.1 Source of Supply–Convict Labor (Federal-Aid Contracts Only):** Do not use materials that were produced after July 1, 1991, by convict labor for Federal-aid highway construction projects unless the prison facility has been producing convict-made materials for Federal-aid highway construction projects before July 1, 1987.

Use materials that were produced prior to July 2, 1991, by convicts on Federal-aid highway construction projects free from the restrictions placed on the use of these materials by 23 U.S.C. 114. The Department will limit the use of materials produced by convict labor for use in Federal-aid highway construction projects to:

1. Materials produced by convicts on parole, supervised release, or probation from a prison or,

2. Materials produced in a qualified prison facility.

The amount of such materials produced for Federal-aid highway construction during any 12-month period shall not exceed the amount produced in such facility for use in such construction during the 12-month period ending July 1, 1987.

**6-5.2 Source of Supply–Steel:** Use steel and iron manufactured 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 continuing through the final shaping and coating. If a steel or iron product is taken outside the United States for any manufacturing process, it becomes foreign source material. When using steel or iron materials as a component of any manufactured product (e.g., concrete pipe, prestressed beams, corrugated steel pipe, etc.), these same provisions apply. Foreign steel and iron may be used when the total actual 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. Submit a certification from the manufacturer of steel or iron, or any product containing steel or iron, stating that all steel or iron furnished or incorporated into the furnished product was produced and manufactured in the United States or a statement that the product was produced within the United States except for minimal quantities of foreign steel and iron valued at \$ (actual cost). Submit each such certification to the Engineer prior to incorporating the material or product into the project. Prior to the use of foreign steel or iron materials on a project, submit invoices to document the actual cost of such material, and obtain the Engineer’s written approval prior to incorporating the material into the project

## **FROM SECTION 7 – LEGAL REQUIREMENTS AND RESPONSIBILITIES TO THE PUBLIC (FHWA 1273, WAGE RATES, E-VERIFY, TITLE VI, DBE, AND ON-THE-JOB TRAINING).**

**Compliance with FHWA 1273:** The FHWA-1273 Electronic version, dated May 1, 2012 is posted on the Department's website at the following URL address <http://www.fdot.gov/programmanagement/Implemented/URLinSpecs/Files/FHWA1273.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.

If the Department's website cannot be accessed, contact the Department's Specifications Office Web Coordinator at (850) 414-4101.

#### **7-1.4 Compliance with Federal Endangered Species Act and other Wildlife**

**Regulations:** The Federal Endangered Species Act requires that the Department investigate the potential impact to a threatened or endangered species prior to initiating an activity performed in conjunction with a highway construction project. If the Department's investigation determines that there is a potential impact to a protected, threatened or an endangered species, the Department will conduct an evaluation to determine what measures may be necessary to mitigate such impact. When mitigation measures and/or special conditions are necessary, these measures and conditions will be addressed in the Contract Documents or in permits as identified in 7-2.1.

In addition, in cases where certain protected, threatened or endangered species are found or appear within close proximity to the project boundaries, the Department has established guidelines that will apply when interaction with certain species occurs, absent of any special mitigation measures or permit conditions otherwise identified for the project.

These guidelines are posted at the following URL address:

<http://www.fdot.gov/programmanagement/Implemented/URLinSpecs/files/endangeredwildlifeguidelines.pdf> .

Take responsibility to obtain this information and take all actions and precautions necessary to comply with the conditions of these guidelines during all project activities.

Prior to establishing any off-project activity in conjunction with a project, notify the Engineer of the proposed activity. Covered activities include but are not necessarily limited to borrow pits, concrete or asphalt plant sites, disposal sites, field offices, and material or equipment storage sites. Include in the notification the Financial Project ID, a description of the activity, the location of the site by township, range, section, county, and city, a site location map including the access route, the name of the property owner, and a person to contact to arrange a site inspection. Submit this notification at least 30 days in advance of planned commencement of the off-site activity, to allow for the Department to conduct an investigation without delaying job progress.

Do not perform any off-project activity without obtaining written clearance from the Engineer. In the event the Department's investigation determines a potential impact to a protected, threatened or endangered species and mitigation measures or permits are necessary, coordinate with the appropriate resource agencies for clearance, obtain permits and perform mitigation measures as necessary. Immediately notify the Engineer in writing of the results of this coordination with the appropriate resource agencies. Additional compensation or time will not be allowed for permitting or mitigation, associated with Contractor initiated off-project activities.

**7-1.8 Compliance with Section 4(f) of the USDOT Act:** Section 4(f) of the USDOT Act prohibits the U. S. Secretary of Transportation from approving a project which requires the use



of publicly owned land of a public park, recreation area or a wildlife and waterfowl refuge, or of any historic site of national, state, or local significance unless there is no prudent or feasible alternative to using that land and the program or project includes all possible planning to minimize the harm to the site resulting from the use.

Before undertaking any off-project activity associated with any federally assisted undertaking, ensure that the proposed site does not represent a public park, recreation area, wildlife or waterfowl refuge, or a historic site (according to the results of the Cultural Resources Survey discussed in 120-6.2). If such a site is proposed, notify the Engineer and provide a description of the proposed off-site activity, the Financial Project ID, the location of the site by township, range, section, a county or city map showing the site location, including the access route and the name of the property. It is the Contractor’s responsibility to submit justification for use of Section 4(f) property that is sufficient for the Florida Department of Transportation and the Federal Highway Administration to make a Section 4(f) determination. Submit this notification sufficiently in advance of planned commencement of the off-site activity to allow a reasonable time for the Engineer to conduct an investigation without delaying job progress. Do not begin any off-project activity without obtaining written clearance from the Engineer.

**7-16 Wage Rates for Federal-Aid Projects.**

For this Contract, payment of predetermined minimum wages applies.

The U.S. Department of Labor (USDOL) Wage Rates applicable to this Contract are listed in table below, as modified up through ten days prior to the opening of bids.

Wage Rate Decision Number	Associated Work
FL223	Highway

Obtain the applicable General Decision(s) (Wage Tables) through the Department’s Office of Construction website and ensure that employees receive the minimum compensation applicable. Review the General Decisions for all classifications necessary to complete the project. Request additional classifications through the Engineer’s office when needed.

For guidance on the requirements for the payment of wages and benefits and the submittal of certified payrolls, and for general guidance and examples of multiple wage rates when assigned to a Contract, refer to the Department’s Office of Construction website. Questions regarding wage rates and the applicability of wage tables should be submitted in accordance with 2-4.

**7-24 Disadvantaged Business Enterprise Program.**

~~7-24.1 Disadvantaged Business Enterprise Affirmative Action Plan: Prior to award of the Contract, have an approved Disadvantaged Business Enterprise (DBE) Affirmative Action Program Plan filed with the Equal Opportunity Office. Update and resubmit the plan every three years. No Contract will be awarded until the Department approves the Plan. The DBE Affirmative Action Program Plan is incorporated into and made a part of the Contract.~~

**7-24.2 Required Contract and Subcontract DBE Assurance Language:** In accordance with 49 CFR 26.13 (b), the Contract FDOT signs with the Contractor (and each subcontract the

prime contractor signs with a subcontractor) must include the following assurance: “The Contractor, sub-recipient or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The Contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT-assisted Contracts. Failure by the Contractor to carry out these requirements is a material breach of this Contract, which may result in the termination of this Contract or such other remedy as the recipient deems appropriate, which may include, but is not limited to,

1. Withholding monthly progress payments;
2. Assessing sanctions;
3. Liquidated damages; and/or
4. Disqualifying the Contractor from future bidding as non-responsible.”

~~7-24.3 Plan Requirements: Include the following in the DBE Affirmative Action Program Plan:~~

~~1. A policy statement, signed by an authorized representative (president, chief executive officer, or chairman of the contractor), expressing a commitment to use DBEs in all aspects of contracting to the maximum extent feasible, outlining the various levels of responsibility, and stating the objectives of the program. Circulate the policy statement throughout the Contractor’s organization.~~

~~2. The designation of a Liaison Officer within the Contractor’s organization, as well as support staff, necessary and proper to administer the program, and a description of the authority, responsibility, and duties of the Liaison Officer and support staff. The Liaison Officer and staff are responsible for developing, managing, and implementing the program on a day-to-day basis for carrying out technical assistance activities for DBEs and for disseminating information on available business opportunities so that DBEs are provided an equitable opportunity to participate in Contracts let by the Department.~~

~~3. Utilization of techniques to facilitate DBE participation in contracting activities which include, but are not limited to:~~

~~a. Soliciting price quotations and arranging a time for the review of Plans, quantities, specifications, and delivery schedules, and for the preparation and presentation of quotations.~~

~~b. Providing assistance to DBEs in overcoming barriers such as the inability to obtain bonding, financing, or technical assistance.~~

~~c. Carrying out information and communication programs or workshops on contracting procedures and specific contracting opportunities in a timely manner, with such programs being bilingual where appropriate.~~

~~d. Encouraging eligible DBEs to apply for certification with the Department.~~

~~e. Contacting Minority Contractor Associations and city and county agencies with programs for disadvantaged individuals for assistance in recruiting and encouraging eligible DBE contractors to apply for certification with the Department.~~

**7-24.4 DBE Records and Reports:** Submit the following through the Equal Opportunity Compliance System:

1. DBE Commitments - at or before the Pre-Construction Conference.

2. Report monthly, through the Equal Opportunity Compliance System on the Department’s Website, actual payments (including retainage) made to DBEs for work performed with their own workforce and equipment in the area in which they are certified. Report payments

made to all DBE and Minority Business Enterprise (MBE) subcontractors and DBE and MBE construction material and major suppliers.

The Equal Opportunity Office will provide instructions on accessing this system. Develop a record keeping system to monitor DBE affirmative action efforts which include the following:

1. the procedures adopted to comply with these Specifications;
  2. the number of subordinated Contracts on Department projects awarded to DBEs;
  3. the dollar value of the Contracts awarded to DBEs;
  4. the percentage of the dollar value of all subordinated Contracts awarded to DBEs as a percentage of the total Contract amount;
  5. a description of the general categories of Contracts awarded to DBEs;
- and
6. the specific efforts employed to identify and award Contracts to DBEs.

Upon request, provide the records to the Department for review.

Maintain all such records for a period of five years following acceptance of final payment and have them available for inspection by the Department and the Federal Highway Administration.

#### **7-24.5 Counting DBE Participation and Commercially Useful Functions:**

49 CFR Part 26.55 specifies when DBE credit shall be awarded for work performed by a DBE. DBE credit can only be awarded for work actually performed by DBEs themselves for the types of work for which they are certified. When reporting DBE Commitments, only include the dollars that a DBE is expected to earn for work they perform with their own workforce and equipment. Update DBE Commitments to reflect changes to the initial amount that was previously reported or to add DBEs not initially reported.

When a DBE participates in a contract, the value of the work is determined in accordance with 49 CFR Part 26.55, for example:

1. The Department will count only the value of the work performed by the DBE toward DBE goals. The entire amount of the contract that is performed by the DBE's own forces (including the cost of supplies, equipment and materials obtained by the DBE for the contract work) will be counted as DBE credit.

2. The Department will count the entire amount of fees or commissions charged by the DBE firm for providing a bona fide service, such as professional, technical, consultant, or managerial services or for providing bonds or insurance specifically required for the performance of a Department-assisted contract, toward DBE goals, provided that the Department determines the fees to be reasonable and not excessive as compared with fees customarily followed for similar services.

3. When the DBE subcontracts part of the work of its contract to another firm, the Department will count the value of the subcontracted work only if the DBE's subcontractor is itself a DBE. Work that a DBE subcontracts to a non-DBE firm does not count toward DBE goals.

4. When a DBE performs as a participant in a joint venture, the Department will count the portion of the dollar value of the contract equal to the distinct, clearly defined portion of the work the DBE performs with its own forces toward DBE goals.

5. The Contractors shall ensure that only expenditures to DBEs that perform a commercially useful function (CUF) in the work of a contract may be counted toward

the voluntary DBE goal.

6. A DBE performs a commercially useful function when it is responsible for execution of the work of the contract and is carrying out its responsibilities by actually performing, managing, and supervising the work involved. To perform a commercially useful function, the DBE must also be responsible, with respect to materials and supplies used on the contract, for negotiating price, determining quality and quantity, ordering the material, and installing (where applicable) and paying for the material itself.

7. Contractors wishing to use joint checks involving DBE credit must provide written notice to the District Contract Compliance Office prior to issuance of the joint check. The Contractor must also provide a copy of the notice to the DBE subcontractor and maintain a copy with the project records.

8. To determine whether a DBE is performing a commercially useful function, the Department will evaluate the amount of work subcontracted, industry practices, whether the amount the firm is to be paid under the contract is commensurate with the work it is actually performing and the DBE credit claimed for its performance of the work, and other relevant factors.

9. A DBE does not perform a commercially useful function if its role is limited to that of an extra participant in a transaction, contract, or project through which funds are passed in order to obtain the appearance of DBE participation.

10. If a DBE does not perform or exercise responsibility for at least 30% of the total cost of its contract with its own workforce, or if the DBE subcontracts a greater portion of the work of a contract than would be expected on the basis of normal industry practice for the type of work involved, the DBE has not performed a commercially useful function.

**7-24.6 Prompt Payments:** Meet the requirements of 9-5 for payments to all DBE subcontractors.

### **7-25 On-The-Job Training Requirements.**

As part of the Contractor's equal employment opportunity affirmative action program, training shall be provided as follows:

The Contractor shall provide On-The-Job Training aimed at developing full journeymen in the type of trade or job classification involved in the work. In the event the Contractor subcontracts a portion of the contract work, it shall determine how many, if any, of the trainees are to be trained by the subcontractor provided, that the Contractor shall retain the primary responsibility for meeting the training requirements imposed by this Section. Ensure that, when feasible, 25% of trainees in each occupation are in their first year of training. The Contractor shall incorporate the requirements of this Section into such subcontract.

The number of trainees will be estimated on the number of calendar days of the contract, the dollar value, and the scope of work to be performed. The trainee goal will be finalized at a Post-Preconstruction Trainee Evaluation Meeting and the goal will be distributed among the work classifications based on the following criteria:

1. Determine the number of trainees on Federal Aid Contract:
  - a. No trainees will be required for contracts with a Contract Time allowance of less than 275 calendar days.
  - b. If the Contract Time allowance is 275 calendar days or more, the number of trainees shall be established in accordance with the following chart:

Estimated Contract Amount	Trainees Required
\$2,000,000 or less	0
Over \$2,000,000 to \$4,000,000	2
Over \$4,000,000 to \$6,000,000	3
Over \$6,000,000 to \$12,000,000	5
Over \$12,000,000 to \$18,000,000	7
Over \$18,000,000 to \$24,000,000	9
Over \$24,000,000 to \$31,000,000	12
Over \$31,000,000 to \$37,000,000	13
Over \$37,000,000 to \$43,000,000	14
Over \$43,000,000 to \$49,000,000	15
Over \$49,000,000 to \$55,000,000	16
Over \$55,000,000 to \$62,000,000	17
Over \$62,000,000 to \$68,000,000	18
Over \$68,000,000 to \$74,000,000	19
Over \$74,000,000 to \$81,000,000	20
Over \$81,000,000 to \$87,000,000	21
Over \$87,000,000 to \$93,000,000	22
Over \$93,000,000 to \$99,000,000	23
Over \$99,000,000 to \$105,000,000	24
Over \$105,000,000 to \$112,000,000	25
Over \$112,000,000 to \$118,000,000	26
Over \$118,000,000 to \$124,000,000	27
Over \$124,000,000 to \$130,000,000	28
Over \$130,000,000 to *	
*One additional trainee per \$6,000,000 of estimated Construction Contract amount over \$130,000,000	

Further, if the Contractor or subcontractor requests to utilize banked trainees as discussed later in this Section, a Banking Certificate will be validated at this meeting allowing credit to the Contractor for previously banked trainees. Banked credits of prime Contractors working as Subcontractors may be accepted for credit. The Contractor’s Project Manager, the Construction Project Engineer and the Department’s District Contract Compliance Manager will attend this meeting. Within ten days after the Post-Preconstruction Training Evaluation Meeting, the Contractor shall submit to the Department for approval an On-The-Job Training Schedule indicating the number of trainees to be trained in each selected classification and the portion of the Contract Time during which training of each trainee is to take place. This schedule may be subject to change if any of the following occur:

1. When a start date on the approved On-The-Job Training Schedule has been missed by 14 or more days;
2. When there is a change in previously approved classifications;
3. When replacement trainees are added due to voluntary or involuntary termination

The revised schedule will be resubmitted to and approved by the Department’s District Contract Compliance Manager.

The following criteria will be used in determining whether or not the Contractor has complied with this Section as it relates to the number of trainees to be trained:

1. Credit will be allowed for each trainee that is both enrolled and satisfactorily completes training on this Contract. Credit for trainees, over the established number for this Contract, will be carried in a “bank” for the Contractor and credit will be allowed for those surplus trainees in subsequent, applicable projects. A “banked” trainee is described as an employee who has been trained on a project, over and above the established goal, and for which the Contractor desires to preserve credit for utilization on a subsequent project.

2. Credit will be allowed for each trainee that has been previously enrolled in the Department’s approved training program on another contract and continues training in the same job classification and completes their training on a different contract.

3. Credit will be allowed for each trainee who, due to the amount of work available in their classification, is given the greatest practical amount of training on the contract regardless of whether or not the trainee completes training.

4. Credit will be allowed for any training position indicated in the approved On-The-Job Training Schedule, if the Contractor can demonstrate that made a good faith effort to provide training in that classification was made.

5. No credit will be allowed for a trainee whose employment by the Contractor is involuntarily terminated unless the Contractor can clearly demonstrate good cause for this action.

Training and upgrading of minorities, women and economically disadvantaged persons toward journeyman status is a primary objective of this Section. Accordingly, the Contractor shall make every effort to enroll minority trainees and women (e.g., by conducting systematic and direct recruitment through public and private sources likely to yield minority and women trainees) to the extent such persons are available within a reasonable area of recruitment. If a non-minority male is enrolled into the On-The-Job Training Program, the On-The-Job Training Notification of Personnel Action Form notifying the District Contract Compliance Manager of such action shall be accompanied by a disadvantaged certification or a justification for such action acceptable to the Department’s District Contract Compliance Manager. The Contractor will be given an opportunity and will be responsible for demonstrating the steps that it has taken in pursuance thereof, prior to a determination as to whether the Contractor is in compliance with this Section. This training is not intended, and shall not be used, to discriminate against any applicant for training, whether a minority, woman or disadvantaged person.

No employee shall be employed as a trainee in any classification in which they have successfully completed a training course leading to journeyman status, or have been employed as a journeyman. The Contractor may satisfy this requirement by including appropriate questions in the employee application or by other suitable means. Regardless of the method used, the Contractor’s records should document the findings in each case.

The minimum length and type of training for each classification will be as established at the Post-Preconstruction Trainee Evaluation Meeting and approved by the Department. Graduation to journeyman status will be based upon satisfactory completion of a Proficiency Demonstration set up at the completion of training and established for the specific training classification, completion of the minimum hours in a training classification range, and the employer’s satisfaction that the trainee does meet journeyman status in the classification of training. Upon reaching journeyman status, the following documentation must be forwarded to the District Contract Compliance Office:

1. Trainee Enrollment and Personnel Action Form

2. Proficiency Demonstration Verification Form indicating completion of each standard established for the classification signed by representatives of both the Contractor and the Department.

The Department and the Contractor shall establish a program that is tied to the scope of the work in the project and the length of operations providing it is reasonably calculated to meet the equal employment opportunity obligations of the Contractor and to qualify the average trainee for journeyman status in the classifications concerned, by at least, the minimum hours prescribed for a training classification. Furthermore, apprenticeship programs registered with the U.S. Department of Labor, Bureau of Apprenticeship and Training, or with a State apprenticeship agency recognized by the Bureau and training programs approved but not necessarily sponsored by the U.S. Department of Labor, Manpower Administration, Bureau of Apprenticeship and Training shall also be considered acceptable provided it is being administered in a manner consistent with the equal employment obligations of Federal Aid highway construction contract. Approval or acceptance of a training schedule shall be obtained from the Department prior to commencing work on the classifications covered by the program.

A voluntary On-The-Job Training Program is available to a Contractor which has been awarded a state funded project. Through this program, the Contractor will have the option to train employees on state funded projects for "banked credit" as discussed previously in this provision, to be utilized on subsequent Federal Aid Projects where training is required. Those Contractors availing themselves of this opportunity to train personnel on state funded projects and bank trainee hours for credit shall comply with all training criteria set forth in this Section for Federal Aid Projects; voluntary banking may be denied by the Department if staff is not available to monitor compliance with the training criteria.

It is the intention of these provisions that training is to be provided in the construction crafts rather than clerk-typists or secretarial type positions. Training is permissible in lower level management positions such as office engineers, estimators, etc., where the training is oriented toward construction applications. Training in the laborer classifications, except Common/General Laborer, may be permitted provided that significant and meaningful training is provided and approved by the District Contract Compliance Office.

When approved in advance by the District Contract Compliance Manager, credit will be given for training of persons in excess of the number specified herein under the current contract or a Contractor will be allowed to bank trainees who have successfully completed a training program and may apply those trainees to a training requirement in subsequent project(s) upon approval of the Department's District Contract Compliance Manager. This credit will be given even though the Contractor may receive training program funds from other sources, provided such other source do not specifically prohibit the Contractor from receiving other form of compensation. Offsite training is permissible as long as the training is an integral part of an approved training program and does not compromise a significant part of the overall training. Credit for offsite training indicated above may only be made to the Contractor when it does one or more of the following and the trainees are concurrently employed on a Federal Aid Project:

1. Contributes to the cost of the training,
2. Provides the instruction to the trainee,
3. Pays the trainee's wages during the offsite training period.

The Contractor shall compensate the trainee at no less than the laborer rate established in the Contract at the onset of training. The compensation rate will be increased to the

journeyman's wage upon graduation from the training program for the remainder of the time the trainee works in the classification in which they were trained.

The Contractor shall furnish the trainee a copy of the program they will follow in providing the training. The Contractor shall provide each trainee with a certification showing the type and length of training satisfactorily completed. The Contractor shall enroll a trainee in one training classification at a time to completion before the trainee can be enrolled in another classification on the same project.

The Contractor shall maintain records to document the actual hours each trainee is engaged in training on work being performed as a part of this Contract.

The Contractor shall submit to the District Contract Compliance Manager a copy of an On-The-Job Training Notification of Personnel Action form no later than seven days after the effective date of the action when the following actions occur: a trainee is transferred on the project, transferred from the project to continue training on another contract, completes training, is upgraded to journeyman status or voluntary terminates or is involuntary terminated from the project.

The Contractor shall furnish to the District Contract Compliance Manager a copy of a Monthly Time Report for each trainee. The Monthly Time Report for each month shall be submitted no later than the tenth day of the subsequent month. The Monthly Time Report shall indicate the phases and sub-phases of the number of hours devoted to each proficiency.

Highway or Bridge Carpenter Helper, Mechanic Helper, Rodman/Chainman, and Timekeeper classifications will not be approved for the On-The-Job Training Program.

The number of trainees may be distributed among the work classifications on the basis of the Contractor's needs and the availability of journeymen in the various classifications within a reasonable area of recruitment.

The Contractor will have fulfilled the responsibilities of this Specification when acceptable training has been provided to the trainee as specified above.

#### **7-26 Cargo Preference Act – Use of United States-Flag Vessels.**

Pursuant to Title 46 CFR 381, the Contractor agrees

1. To utilize privately owned United States-flag commercial vessels to ship at least 50 percent of the gross tonnage (computed separately for dry bulk carriers, dry cargo liners, and tankers) involved, whenever shipping any equipment, material, or commodities pursuant to this Contract, to the extent such vessels are available at fair and reasonable rates for United States-flag commercial vessels.

2. To furnish within 20 days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated, 'on-board' commercial ocean bill-of-lading in English for each shipment of cargo described in paragraph 1 of this Article to both the Contracting Officer (through the prime contractor in the case of subcontractor bills-of-lading) and to the Division of National Cargo, Office of Market Development, Maritime Administration, Washington, DC 20590.

3. To insert the substance of the provisions of this clause in all subcontracts issued pursuant to this Contract.



### **7-29 E-Verify.**

The Contractor shall utilize the U.S. Department of Homeland Security's E-Verify system to verify the employment eligibility of all new employees hired by the Contractor during the term of the Contract and shall expressly require any subcontractors performing work or providing services pursuant to the Contract to likewise utilize the U.S. Department of Homeland Security's E-Verify system to verify the employment eligibility of all new employees hired by the subcontractor during the Contract term.

### **7-31 Title VI Assurance – DOT 1050.2A, Appendix A and Appendix E.**

**7-31.1 Appendix A:** During the performance of this Contract, the Contractor, for itself, its assignees and successors in interest (hereinafter referred to as the "Contractor") agrees as follows:

1. Compliance with Regulations: The Contractor shall comply with the Regulations relative to nondiscrimination in Federally-assisted programs of the US Department of Transportation (hereinafter, "USDOT") Title 49, Code of Federal Regulations, Part 21, as they may be amended from time to time, (hereinafter referred to as the Regulations), which are herein incorporated by reference and made a part of this Contract.

2. Nondiscrimination: The Contractor, with regard to the work performed by it during the Contract, shall not discriminate on the basis of race, color, national origin or sex in the selection and retention of sub-contractors, including procurements of materials and leases of equipment. The Contractor shall not participate either directly or indirectly in the discrimination prohibited by Section 21.5 of the Regulations, including employment practices when the Contract covers a program set forth in Appendix B of the Regulations.

3. Solicitations for subcontractors, including procurements of materials and equipment: In all solicitations either by competitive bidding or negotiation made by the Contractor for work to be performed under subcontract, including procurements of materials or leases of equipment, each potential subcontractor or supplier shall be notified by the Contractor of the Contractor's obligations under this contract and the Regulations relative to nondiscrimination on the basis of race, color, national origin, or sex.

4. Information and Reports: The Contractor shall provide all information and reports required by the Regulations or directives issued pursuant thereto, and shall permit access to its books, records, accounts, other sources of information and its facilities as may be determined by the Florida Department of Transportation or the Federal Highway Administration, Federal Transit Administration, Federal Aviation Administration, and Federal Motor Carrier Safety Administration to be pertinent to ascertain compliance with such Regulations, order and instructions. Where any information required of a Contractor is in the exclusive possession of another who fails or refuses to furnish this information the Contractor shall so certify to the Florida Department of Transportation, or the Federal Highway Administration, Federal Transit Administration, Federal Aviation Administration, or Federal Motor Carrier Safety Administration as appropriate, and shall set forth what efforts it has made to obtain the information.

5. Sanctions for Noncompliance: In the event of the Contractor's noncompliance with the nondiscrimination provisions of this Contract, the Florida Department of Transportation shall impose such Contract sanctions as it or the Federal Highway Administration, Federal Transit Administration, Federal Aviation Administration, or Federal Motor Carrier Safety Administration may determine to be appropriate, including, but not limited to:

a. withholding of payments to the Contractor under the Contract until the Contractor complies, or  
b. cancellation, termination or suspension of the Contract, in whole or in part.

6. Incorporation of Provisions: The Contractor shall include the provisions of this appendix in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Regulations, or directives issued pursuant thereto. The Contractor shall take such action with respect to any subcontract or procurement as the Florida Department of Transportation or the Federal Highway Administration, Federal Transit Administration, Federal Aviation Administration, or Federal Motor Carrier Safety Administration may direct as a means of enforcing such provisions including sanctions for noncompliance, provided, however, that, in the event a Contractor becomes involved in, or is threatened with, litigation with a subcontractor or supplier as a result of such direction, the Contractor may request the Florida Department of Transportation to enter into such litigation to protect the interests of the Florida Department of Transportation, and, in addition, the Contractor may request the United States to enter into such litigation to protect the interests of the United States.

**7-31.2 Appendix E:** During the performance of this Contract, the Contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the “Contractor” agrees to comply with the following non-discrimination statutes and authorities; including but not limited to:

1. Title VI of the Civil Rights Act of 1964 (42 U.S.C. § 2000d et seq., 78 stat. 252), (prohibits discrimination on the basis of race, color, national origin); and 49 CFR Part 21;
2. The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, (42 U.S.C. § 4601), (prohibits unfair treatment of persons displaced or whose property has been acquired of Federal or Federal-aid programs and projects);
3. Federal-Aid Highway Act of 1973, (23 U.S.C § 324 et seq.), (prohibits discrimination on the basis of sex);
4. Section 504 of the Rehabilitation Act of 1973 (29 U.S.C. § 794 et seq.), as amended, (prohibits discrimination on the basis of disability); and 49 CFR Part 27;
5. The Age Discrimination Act of 1975, as amended, (42 U.S.C. § 6101 et seq.), (prohibits discrimination on the basis of age);
6. Airport and Airway Improvement Act of 1982, (49 U.S.C. 471, Section 47123), as amended, (prohibits discrimination based on race, creed, color national origins or sex);
7. The Civil Rights Restoration Act of 1987 (PL 100-209), (Broadened the scope, coverage and applicability of Title VI of the Civil Rights Act of 1964, The Age Discrimination Act of 1975 and Section 504 of the Rehabilitation Act of 1973, by expanding the definition of the terms “programs or activities” to include all of the programs or activities of the Federal-aid recipients, sub-recipients and contractors, whether such programs or activities are Federally funded or not);
8. Titles II and III of the Americans with Disabilities Act, which prohibits discrimination on the basis of disability in the operation of public entities, public and private transportation systems, places of public accommodation, and certain testing entities (42 U.S.C. §§ 12131 – 12189) as implemented by Department of Transportation regulations at 49 C.F.R. parts 37 and 38;

9. The Federal Aviation Administration's Non-discrimination statute (49 U.S.C. § 47123) (prohibits discrimination on the basis of race, color, national origin, and sex);

10. Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, which ensures non-discrimination against minority populations by discouraging programs, policies, and activities with disproportionately high and adverse human health or environmental effects on minority and low-income populations;

11. Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency, and resulting agency guidance, national origin discrimination includes discrimination because of limited English proficiency (LEP). To ensure compliance with Title VI, you must take reasonable steps to ensure that LEP persons have meaningful access to your programs (70 Fed. Reg. at 74087 to 74100);

12. Title IX of the Education Amendments of 1972, as amended, which prohibits discrimination based on sex in education programs, or activities (20 U.S.C. 1681 et seq.).

**FROM SECTION 8 (SUBLETTING, CONTRACT TIME EXTENSIONS, AND LIQUIDATED DAMAGES).**

**8-1 Subletting or Assigning of Contracts.**

**SECTION 8-1 IS NOT APPLICABLE FOR THIS CONTRACT.**

**8-7.3.2 Contract Time Extensions:** The Department may grant an extension of Contract Time when a controlling item of work is delayed by factors not reasonably anticipated or foreseeable at the time of bid. The Department may allow such extension of time only for delays occurring during the Contract Time period or authorized extensions of the Contract Time period. When failure by the Department to fulfill an obligation under the Contract results in delays to the controlling items of work, the Department will consider such delays as a basis for granting a time extension to the Contract.

Whenever the Engineer suspends the Contractor's operations, as provided in 8-6, for reasons other than the fault of the Contractor, the Engineer will grant a time extension for any delay to a controlling item of work due to such suspension. The Department will not grant time extensions to the Contract for delays due to the fault or negligence of the Contractor.

The Department does not include an allowance for delays caused by the effects of inclement weather or suspension of Contractor's operations as defined in 8-6.4, in establishing Contract Time. The Engineer will continually monitor the effects of weather and, when found justified, grant time extensions on either a bimonthly or monthly basis. The Engineer will not require the Contractor to submit a request for additional time due to the effects of weather.

The Department will grant time extensions, on a day for day basis, for delays caused by the effects of rains or other inclement weather conditions, related adverse soil conditions or suspension of operations as defined in 8-6.4 that prevent the Contractor from productively performing controlling items of work resulting in:

1. The Contractor being unable to work at least 50% of the normal work day on pre-determined controlling work items; or
2. The Contractor must make major repairs to work damaged by weather, provided that the damage is not attributable to the Contractor's failure to perform or neglect; and provided that the Contractor was unable to work at least 50% of the normal workday on pre-determined controlling work items.

No additional compensation will be made for delays caused by the effects of inclement weather.

The Department will consider the delays in delivery of materials or component equipment that affect progress on a controlling item of work as a basis for granting a time extension if such delays are beyond the control of the Contractor or supplier. Such delays may include an area-wide shortage, an industry-wide strike, or a natural disaster that affects all feasible sources of supply. In such cases, the Contractor shall furnish substantiating letters from a representative number of manufacturers of such materials or equipment clearly confirming that the delays in delivery were the result of an area-wide shortage, an industry-wide strike, etc. No additional compensation will be made for delays caused by delivery of materials or component equipment.

The Department will not consider requests for time extension due to delay in the delivery of custom manufactured equipment such as traffic signal equipment, highway lighting equipment, etc., unless the Contractor furnishes documentation that he placed the order for such equipment in a timely manner, the delay was caused by factors beyond the manufacturer's control, and the lack of such equipment caused a delay in progress on a controlling item of work. No additional compensation will be paid for delays caused by delivery of custom manufactured equipment.

The Department will consider the affect of utility relocation and adjustment work on job progress as the basis for granting a time extension only if all the following criteria are met:

1. Delays are the result of either utility work that was not detailed in the Plans, or utility work that was detailed in the Plans but was not accomplished in reasonably close accordance with the schedule included in the Contract Documents.
2. Utility work actually affected progress toward completion of controlling work items.
3. The Contractor took all reasonable measures to minimize the effect of utility work on job progress, including cooperative scheduling of the Contractor's operations with the scheduled utility work at the preconstruction conference and providing adequate advance notification to utility companies as to the dates to coordinate their operations with the Contractor's operations to avoid delays.

As a condition precedent to an extension of Contract Time the Contractor must submit to the Engineer:

A preliminary request for an extension of Contract Time must be made in writing to the Engineer within ten calendar days after the commencement of a delay to a controlling item of work. If the Contractor fails to submit this required preliminary request for an extension of Contract Time, the Contractor fully, completely, absolutely and irrevocably waives any entitlement to an extension of Contract Time for that delay. In the case of a continuing delay only a single preliminary request for an extension of Contract Time will be required. Each such preliminary request for an extension of Contract Time shall include as a minimum the commencement date of the delay, the cause of the delay, and the controlling item of work affected by the delay.

Furthermore, the Contractor must submit to the Engineer a request for a Contract Time extension in writing within 30 days after the elimination of the delay to the controlling item of work identified in the preliminary request for an extension of Contract Time. Each request for a Contract Time extension shall include as a minimum all documentation that the Contractor wishes the Department to consider related to the delay, and the exact number of days requested to be added to Contract Time. If the Contractor contends that the delay is compensable, then the Contractor shall also be required to submit with the request for a Contract Time extension a detailed cost analysis of the requested additional compensation. If the Contractor fails to submit this required request for a Contract Time extension, with or without a detailed cost analysis, depriving the Engineer of the timely opportunity to verify the delay and the costs of the delay, the Contractor waives any entitlement to an extension of Contract Time or additional compensation for the delay.

Upon timely receipt of the preliminary request of Contract Time from the Contractor, the Engineer will investigate the conditions, and if it is determined that a controlling item of work is being delayed for reasons beyond the control of the Contractor the Engineer will take appropriate action to mitigate the delay and the costs of the delay. Upon timely receipt of the request for a Contract Time extension the Engineer will further investigate the conditions, and if it is determined that there was an increase in the time or the cost of performance of the controlling item of work beyond the control of the Contractor, then an adjustment of Contract Time will be made, and a monetary adjustment will be made, excluding loss of anticipated profits, and the Contract will be modified in writing accordingly.

The existence of an accepted schedule, including any required update(s), as stated in 8-3.2, is a condition precedent to the Contractor having any right to the granting of an extension of Contract Time or any monetary compensation arising out of any delay. Contractor failure to have an accepted schedule, including any required update(s), for the period of potential impact, or in the event the currently accepted schedule and applicable updates do not accurately reflect the actual status of the project or fail to accurately show the true controlling or non-controlling work activities for the period of potential impact, will result in any entitlement determination as to time or money for such period of potential impact being limited solely to the Department's analysis and identification of the actual controlling or non-controlling work activities. Further, in such instances, the Department's determination as to entitlement as to either time or compensability will be final, unless the Contractor can prove by clear and convincing evidence to a Disputes Review Board that the Department's determination was without any reasonable factual basis.

**8-10 Liquidated Damages for Failure to Complete the Work.**

**8-10.2 Amount of Liquidated Damages:** Applicable liquidated damages are the amounts established in the following schedule:

Original Contract Amount	Daily Charge Per Calendar Day
\$50,000 and under.....	\$956
Over \$50,000 but less than \$250,000.....	\$964
\$250,000 but less than \$500,000.....	\$1,241
\$500,000 but less than \$2,500,000.....	\$1,665
\$2,500,000 but less than \$5,000,000.....	\$2,712
\$5,000,000 but less than \$10,000,000.....	\$3,447
\$10,000,000 but less than \$15,000,000.....	\$4,866
\$15,000,000 but less than \$20,000,000.....	\$5,818
\$20,000,000 and over.....	\$9,198 plus 0.00005 of any amount over \$20 million (Round to nearest whole dollar)

**FROM SECTION 9 (PARTIAL PAYMENTS).**

**9-5 Partial Payments.**

**9-5.1 General:** The Engineer will make partial payments on monthly estimates based on the amount of work that the Contractor completes during the month (including delivery of certain materials, as specified herein below). The Engineer will make approximate monthly payments, and the Department will correct all partial estimates and payments in the subsequent estimates and in the final estimate and payment.

The Department will base the amount of such payments on the total value of the work that the Contractor has performed to the date of the estimate, based on the quantities completed and the Contract prices, less payments previously made and less any retainage withheld.

Retainage will not be withheld until the percent of Contract Time used exceeds 75%. From that time forward, the Department will withhold retainage of 10% of the amount due

on the current estimate as retainage when the percent of Contract Time used exceeds the percent of Contract amount earned by more than 15%.

Contract amount is defined as the original Contract amount adjusted by approved supplemental agreements.

Retainage will be determined for each job on multiple job Contracts. The Department will not accept Securities, Certificates of Deposit or letters of credit as a replacement for retainage. Amounts withheld will not be released until payment of the final estimate.

**9-5.2 Unsatisfactory Payment Record:** In accordance with Sections 255.05 and 337.16 of the Florida Statutes, and the rules of the Department, the Department may disqualify the Contractor from bidding on future Department contracts if the Contractor's payment record in connection with contract work becomes unsatisfactory.

**9-5.3 Withholding Payment:**

**9-5.3.1 Withholding Payment for Defective Work:** If the Department discovers any defective work or material prior to the final acceptance, or if the Department has a reasonable doubt as to the integrity of any part of the completed work prior to final acceptance, then the Department will not allow payment for such defective or questioned work until the Contractor has remedied the defect and removed any causes of doubt.

**9-5.3.2 Withholding Payment for Failure to Comply:** The Department will withhold progress payments from the Contractor if he fails to comply with any or all of the following within 60 days after beginning work:

1. comply with and submit required paperwork relating to prevailing wage rate provisions, Equal Employment Opportunity, On-The-Job Training, and Affirmative Action;
2. comply with the requirement to all necessary information, including actual payments to DBEs, all other subcontractors and major suppliers, through the Internet based Equal Opportunity Reporting System;
3. comply with or make a good faith effort to ensure employment opportunity for minorities and females in accordance with the required contract provisions for Federal Aid Construction Contracts, and
4. comply with or make a good faith effort to meet On-The-Job Training goals.

The Department will withhold progress payments until the Contractor has satisfied the above conditions.

**9-5.4 Release of Retainage After Acceptance:** When the Contractor has furnished the Department with all submittals required by the Contract, such as invoices, EEO reports, materials certifications, certification of materials procured, etc., (excluding Contractor's letter of acceptance of final amount due and Form 21-A release) and the Engineer has determined that the measurement and computation of pay quantities is correct, the Department may reduce the retainage to \$1,000 plus any amount that the Department elects to deduct for defective work as provided in 9-5.3.

The Department will not allow a semifinal estimate under the provisions of the above paragraphs unless the time elapsing between (1) acceptance of the project and receipt of all test reports, invoices, etc., and (2) submission of the final estimate to the Contractor for acceptance, exceeds or is expected to exceed ten days.

The Department may deduct from payment estimates any sums that the Contractor owes to the Department on any account. Where more than one project or job (separate job number) is included in the Contract, the Department will distribute the reduced retainage as

provided in the first paragraph of this Subarticle to each separate project or job in the ratio that the Contract value of the work for the particular job bears to the total Contract amount.

**9-5.5 Partial Payments for Delivery of Certain Materials:**

**9-5.5.1 General:** The Department will allow partial payments for new materials that will be permanently incorporated into the project and are stockpiled in approved locations in the project vicinity. Stockpile materials so that they will not be damaged by the elements and in a manner that identifies the project on which they are to be used.

The following conditions apply to all payments for stockpiled materials:

1. There must be reasonable assurance that the stockpiled material will be incorporated into the specific project on which partial payment is made.

2. The stockpiled material must be approved as meeting applicable specifications.

3. The total quantity for which partial payment is made shall not exceed the estimated total quantity required to complete the project.

4. The Contractor shall furnish the Engineer with copies of certified invoices to document the value of the materials received. The amount of the partial payment will be determined from invoices for the material up to the unit price in the Contract.

5. Delivery charges for materials delivered to the jobsite will be included in partial payments if properly documented.

6. Partial payments will not be made for materials which were stockpiled prior to award of the Contract for a project.

**9-5.5.2 Partial Payment Amounts:** The following partial payment restrictions apply:

1. Partial payments less than \$5,000 for any one month will not be processed.

2. Partial payments for structural steel and precast prestressed items will not exceed 85% of the bid price for the item. Partial payments for all other items will not exceed 75% of the bid price of the item in which the material is to be used.

3. Partial payment will not be made for aggregate and base course material received after paving or base construction operations begin except when a construction sequence designated by the Department requires suspension of paving and base construction after the initial paving operations, partial payments will be reinstated until the paving and base construction resumes.

**9-5.5.3 Off Site Storage:** If the conditions of 9-5.5.1 are satisfied, partial payments will be allowed for materials stockpiled in approved in-state locations. Additionally, partial payments for materials stockpiled in approved out-of-state locations will be allowed if the conditions of 9-5.5.1 and the following conditions are met:

1. Furnish the Department a Materials Bond stating the supplier guarantees to furnish the material described in the Contract to the Contractor and Department. Under this bond, the Obligor shall be the material supplier and the Obligees shall be the Contractor and the Florida Department of Transportation. The bond shall be in the full dollar amount of the bid price for the materials described in the contract.

2. The following clauses must be added to the construction Contract between the Contractor and the supplier of the stockpiled materials:



“Notwithstanding anything to the contrary, <supplier> will be liable to the Contractor and the Florida Department of Transportation should <supplier> default in the performance of this agreement.”

“Notwithstanding anything to the contrary, this agreement, and the performance bond issued pursuant to this agreement, does not alter, modify, or otherwise change the Contractor’s obligation to furnish the materials described in this agreement to the Florida Department of Transportation.”

3. The agreement between the Contractor and the supplier of the stockpiled materials must include provisions that the supplier will store the materials and that such materials are the property of the Contractor.

**9-5.6 Certification of Payment to Subcontractors:** The term “subcontractor,” as used herein, includes persons or firms furnishing materials or equipment incorporated into the work or stockpiled for which the Department has made partial payment and firms working under equipment-rental agreements. The Contractor is required to pay all subcontractors for satisfactory performance of their Contracts before the Department will make a further progress (partial) payment. The Contractor shall also return all retainage withheld to the subcontractors within 30 days after the subcontractor’s work is satisfactorily complete, as determined by the Department. Prior to receipt of any progress (partial) payment, the prime contractor shall certify that all subcontractors having an interest in the Contract were paid for satisfactory performance of their Contracts and that the retainage is returned to subcontractors within 30 days after satisfactory completion of the subcontractor’s work. Provide this certification in the form designated by the Department.

Within 30 days of the Contractor’s receipt of the final progress payment or any other payments thereafter, except the final payment, the Contractor shall pay all subcontractors and suppliers having an interest in the Contract for all work completed and materials furnished. The Department will honor an exception to the above when the Contractor demonstrates good cause for not making any required payment and furnishes written notification of any such good cause to both the Department and the affected subcontractors or suppliers within said 30 day period.

The Contractor shall indemnify and provide defense for the Department when called upon to do so for all claims or suits against the Department, by third parties, pertaining to Contractor payment or performance issues arising out of the Contract. It is expressly understood that the monetary limitation on the extent of the indemnification shall be the approved Contract amount, which shall be the original Contract amount as may be increased by subsequent Supplemental Agreements.

General Decision Number: FL180223 01/05/2018 FL223

Superseded General Decision Number: FL20170223

State: Florida

Construction Type: Highway

County: Orange County in Florida.

HIGHWAY CONSTRUCTION PROJECTS

Note: Under Executive Order (EO) 13658, an hourly minimum wage of \$10.35 for calendar year 2018 applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2015. If this contract is covered by the EO, the contractor must pay all workers in any classification listed on this wage determination at least \$10.35 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in calendar year 2018. The EO minimum wage rate will be adjusted annually. Please note that this EO applies to the above-mentioned types of contracts entered into by the federal government that are subject to the Davis-Bacon Act itself, but it does not apply to contracts subject only to the Davis-Bacon Related Acts, including those set forth at 29 CFR 5.1(a)(2)-(60). Additional information on contractor requirements and worker protections under the EO is available at [www.dol.gov/whd/govcontracts](http://www.dol.gov/whd/govcontracts).

Modification Number	Publication Date
0	01/05/2018

\* ELEC0915-004 12/01/2017

	Rates	Fringes
ELECTRICIAN.....	\$ 28.18	38%+0.35
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SUFL2013-041 08/19/2013		

	Rates	Fringes
CARPENTER, Includes Form Work....	\$ 15.73	0.00
CEMENT MASON/CONCRETE FINISHER...	\$ 12.95	0.31
FENCE ERECTOR.....	\$ 10.23	0.00
HIGHWAY/PARKING LOT STRIPING: Operator (Striping Machine).....	\$ 15.45	0.00
HIGHWAY/PARKING LOT STRIPING: Painter.....	\$ 12.13	0.00
IRONWORKER, ORNAMENTAL.....	\$ 13.48	0.00

IRONWORKER, REINFORCING.....	\$ 16.28	0.00
IRONWORKER, STRUCTURAL.....	\$ 16.42	0.00
LABORER (Traffic Control Specialist).....	\$ 11.61	0.00
LABORER: Asphalt, Includes Raker, Shoveler, Spreader and Distributor.....	\$ 14.05	0.00
LABORER: Common or General.....	\$ 10.95	0.00
LABORER: Flagger.....	\$ 13.09	0.00
LABORER: Grade Checker.....	\$ 15.25	0.00
LABORER: Mason Tender - Cement/Concrete.....	\$ 12.58	0.00
LABORER: Pipelayer.....	\$ 14.12	0.00
OPERATOR: Backhoe/Excavator/Trackhoe.....	\$ 18.33	0.00
OPERATOR: Bobcat/Skid Steer/Skid Loader.....	\$ 12.88	0.00
OPERATOR: Broom/Sweeper.....	\$ 12.91	0.00
OPERATOR: Bulldozer.....	\$ 15.22	0.00
OPERATOR: Concrete Finishing Machine.....	\$ 15.44	0.00
OPERATOR: Crane.....	\$ 23.11	0.00
OPERATOR: Curb Machine.....	\$ 18.45	0.00
OPERATOR: Drill.....	\$ 13.04	0.00
OPERATOR: Forklift.....	\$ 10.43	0.00
OPERATOR: Gradall.....	\$ 14.71	0.00
OPERATOR: Grader/Blade.....	\$ 18.20	0.00
OPERATOR: Loader.....	\$ 14.64	0.00
OPERATOR: Mechanic.....	\$ 18.05	0.00
OPERATOR: Milling Machine.....	\$ 14.79	0.00
OPERATOR: Oiler.....	\$ 16.67	0.00
OPERATOR: Paver (Asphalt, Aggregate, and Concrete).....	\$ 14.91	0.00
OPERATOR: Piledriver.....	\$ 17.23	0.00

OPERATOR: Post Driver (Guardrail/Fences).....	\$ 15.97	0.00
OPERATOR: Roller.....	\$ 13.50	0.00
OPERATOR: Scraper.....	\$ 12.21	0.00
OPERATOR: Screed.....	\$ 14.24	0.00
OPERATOR: Trencher.....	\$ 14.25	0.00
PAINTER: Spray.....	\$ 19.57	0.00
TRAFFIC SIGNALIZATION:		
Traffic Signal Installation.....	\$ 17.23	0.00
TRUCK DRIVER: Dump Truck.....	\$ 13.82	0.00
TRUCK DRIVER: Flatbed Truck.....	\$ 14.28	0.00
TRUCK DRIVER: Lowboy Truck.....	\$ 15.89	0.00
TRUCK DRIVER: Slurry Truck.....	\$ 11.96	0.00
TRUCK DRIVER: Water Truck.....	\$ 13.29	0.00

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WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

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Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at [www.dol.gov/whd/govcontracts](http://www.dol.gov/whd/govcontracts).

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

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The body of each wage determination lists the classification

and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of "identifiers" that indicate whether the particular rate is a union rate (current union negotiated rate for local), a survey rate (weighted average rate) or a union average rate (weighted union average rate).

#### Union Rate Identifiers

A four letter classification abbreviation identifier enclosed in dotted lines beginning with characters other than "SU" or "UAVG" denotes that the union classification and rate were prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2014. PLUM is an abbreviation identifier of the union which prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. 07/01/2014 is the effective date of the most current negotiated rate, which in this example is July 1, 2014.

Union prevailing wage rates are updated to reflect all rate changes in the collective bargaining agreement (CBA) governing this classification and rate.

#### Survey Rate Identifiers

Classifications listed under the "SU" identifier indicate that no one rate prevailed for this classification in the survey and the published rate is derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As this weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SULA2012-007 5/13/2014. SU indicates the rates are survey rates based on a weighted average calculation of rates and are not majority rates. LA indicates the State of Louisiana. 2012 is the year of survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. 5/13/2014 indicates the survey completion date for the classifications and rates under that identifier.

Survey wage rates are not updated and remain in effect until a new survey is conducted.

#### Union Average Rate Identifiers

Classification(s) listed under the UAVG identifier indicate that no single majority rate prevailed for those classifications; however, 100% of the data reported for the classifications was union data. EXAMPLE: UAVG-OH-0010 08/29/2014. UAVG indicates that the rate is a weighted union average rate. OH indicates the state. The next number, 0010 in the example, is an internal number used in producing the wage determination. 08/29/2014 indicates the survey completion date for the classifications and rates under that identifier.

A UAVG rate will be updated once a year, usually in January of each year, to reflect a weighted average of the current negotiated/CBA rate of the union locals from which the rate is based.

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WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- \* an existing published wage determination
- \* a survey underlying a wage determination
- \* a Wage and Hour Division letter setting forth a position on a wage determination matter
- \* a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations  
Wage and Hour Division  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator  
U.S. Department of Labor  
200 Constitution Avenue, N.W.  
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board  
U.S. Department of Labor  
200 Constitution Avenue, N.W.

Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

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END OF GENERAL DECISION

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION  
**CERTIFICATION REGARDING DEBARMENT, SUSPENSION,  
INELIGIBILITY AND VOLUNTARY EXCLUSION-  
LOWER TIER COVERED TRANSACTIONS FOR FEDERAL AID CONTRACTS**  
(Compliance with 2 CFR Parts 180 and 1200)

375-030-32  
PROCUREMENT  
11/15

It is certified that neither the below identified firm nor its principals are presently suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any federal department or agency.

Name of Consultant/Contractor: \_\_\_\_\_

By: \_\_\_\_\_

Date: \_\_\_\_\_

Title: \_\_\_\_\_

Instructions for Certification

**Instructions for Certification - Lower Tier Participants:**

(Applicable to all subcontracts, purchase orders and other lower tier transactions requiring prior FHWA approval or estimated to cost \$25,000 or more - 2 CFR Parts 180 and 1200)

- 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," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).
- 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 exceeding the \$25,000 threshold.
- 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 is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (<https://www.epls.gov/>), which is compiled by the General Services Administration.
- 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.



STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION  
**CERTIFICATION FOR DISCLOSURE OF LOBBYING ACTIVITIES  
ON FEDERAL-AID CONTRACTS**  
**(Compliance with 49CFR, Section 20.100 (b))**

375-030-33  
PROCUREMENT  
10/01

The prospective participant certifies, by signing this certification, that to the best of his or her knowledge and belief:

(1) 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.

(2) 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 of Lobbying Activities", in accordance with its instructions. (Standard Form-LLL can be obtained from the Florida Department of Transportation's Professional Services Administrator or Procurement Office.)

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 Section 1352, Title 31, U.S. Code. 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.

The prospective participant also agrees by submitting his or her 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 subrecipients shall certify and disclose accordingly.

Name of Consultant: \_\_\_\_\_

By: \_\_\_\_\_ Date: \_\_\_\_\_

Authorized Signature: \_\_\_\_\_

Title: \_\_\_\_\_

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION  
**DISCLOSURE OF LOBBYING ACTIVITIES**

375-030-34  
 PROCUREMENT  
 02/16

Is this form applicable to your firm?

YES  NO

If no, then please complete section 4 below for "Prime"

<b>1. Type of Federal Action:</b> a. contract b. grant c. cooperative agreement d. loan e. loan guarantee f. loan insurance	<b>2. Status of Federal Action:</b> a. bid/offer/application b. initial award c. post-award	<b>3. Report Type:</b> a. initial filing b. material change <b>For Material Change Only:</b> Year: _____ Quarter: _____ Date of last report: _____ (mm/dd/yyyy)
<b>4. Name and Address of Reporting Entity:</b> <input type="checkbox"/> Prime <input type="checkbox"/> Subawardee Tier _____, if known: _____ _____ _____ Congressional District, if known: 4c _____		<b>5. If Reporting Entity in No. 4 is a Subawardee, Enter Name and Address of Prime:</b> _____ _____ _____ Congressional District, if known: _____
<b>6. Federal Department/Agency:</b> _____ _____	<b>7. Federal Program Name/Description:</b> _____ _____ CFDA Number, if applicable: _____	
<b>8. Federal Action Number, if known:</b> _____	<b>9. Award Amount, if known:</b> \$ _____	
<b>10. a. Name and Address of Lobbying Registrant</b> (if individual, last name, first name, MI): _____ _____ _____	<b>b. Individuals Performing Services</b> (including address if different from No. 10a) (last name, first name, MI): _____ _____ _____	
<b>11. Information requested through this form is authorized by title 31 U.S.C. section 1352. This disclosure of lobbying activities is a material representation of fact upon which reliance was placed by the tier above when this transaction was made or entered into. This disclosure is required pursuant to 31 U.S.C. 1352. This information will be available for public inspection. Any person who fails to file the required disclosure shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.</b>	Signature: _____ Print Name: _____ Title: _____ Telephone No.: _____ Date (mm/dd/yyyy): _____	
<b>Federal Use Only:</b>		Authorized for Local Reproduction Standard Form LLL (Rev. 7-97)

## INSTRUCTIONS FOR COMPLETION OF SF-LLL, DISCLOSURE OF LOBBYING ACTIVITIES

This disclosure form shall be completed by the reporting entity, whether subawardee or prime Federal recipient, at the initiation or receipt of a covered Federal action, or a material change to a previous filing, pursuant to title 31 U.S.C. section 1352. The filing of a form is required for each payment or agreement to make payment to any lobbying entity for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with a covered Federal action. Complete all items that apply for both the initial filing and material change report. Refer to the implementing guidance published by the Office of Management and Budget for additional information.

1. Identify the type of covered Federal action for which lobbying activity is and/or has been secured to influence the outcome of a covered Federal action.
2. Identify the status of the covered Federal action.
3. Identify the appropriate classification of this report. If this is a followup report caused by a material change to the information previously reported, enter the year and quarter in which the change occurred. Enter the date of the last previously submitted report by this reporting entity for this covered Federal action.
4. Enter the full name, address, city, State and zip code of the reporting entity. Include Congressional District, if known. Check the appropriate classification of the reporting entity that designates if it is, or expects to be, a prime or subaward recipient. Identify the tier of the subawardee, e.g., the first subawardee of the prime is the 1st tier. Subawards include but are not limited to subcontracts, subgrants and contract awards under grants.
5. If the organization filing the report in item 4 checks "Subawardee," then enter the full name, address, city, State and zip code of the prime Federal recipient. Include Congressional District, if known.
6. Enter the name of the Federal agency making the award or loan commitment. Include at least one organizational level below agency name, if known. For example, Department of Transportation, United States Coast Guard.
7. Enter the Federal program name or description for the covered Federal action (item 1). If known, enter the full Catalog of Federal Domestic Assistance (CFDA) number for grants, cooperative agreements, loans, and loan commitments.
8. Enter the most appropriate Federal identifying number available for the Federal action identified in item 1 (e.g., Request for Proposal (RFP) number; Invitation for Bid (IFB) number; grant announcement number; the contract, grant, or loan award number; the application/proposal control number assigned by the Federal agency). Include prefixes, e.g., "RFP-DE-90-001."
9. For a covered Federal action where there has been an award or loan commitment by the Federal agency, enter the Federal amount of the award/loan commitment for the prime entity identified in item 4 or 5.
10. (a) Enter the full name, address, city, State and zip code of the lobbying registrant under the Lobbying Disclosure Act of 1995 engaged by the reporting entity identified in item 4 to influence the covered Federal action.  
  
(b) Enter the full names of the individual(s) performing services, and include full address if different from 10 (a). Enter Last Name, First Name, and Middle Initial (MI).
11. The certifying official shall sign and date the form, print his/her name, title, and telephone number.

According to the Paperwork Reduction Act, as amended, no persons are required to respond to a collection of information unless it displays a valid OMB Control Number. The valid OMB control number for this information collection is OMB No. 0348-0046. Public reporting burden for this collection of information is estimated to average 10 minutes per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Office of Management and Budget, Paperwork Reduction Project (0348-0046), Washington, DC 20503.

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION  
**NON-COLLUSION DECLARATION AND  
COMPLIANCE WITH 49 CFR § 29**

575-060-13  
RIGHT OF WAY  
05/01  
Page 1 of 3

ITEM/SEGMENT NO.: \_\_\_\_\_  
F.A.P. NO.: \_\_\_\_\_  
MANAGING DISTRICT: \_\_\_\_\_  
PARCEL NO.: \_\_\_\_\_  
COUNTY OF: \_\_\_\_\_  
BID LETTING OF: \_\_\_\_\_

I, \_\_\_\_\_, hereby declare that I am  
(NAME)  
\_\_\_\_\_ of \_\_\_\_\_  
(TITLE) (FIRM)  
of \_\_\_\_\_  
(CITY AND STATE)

and that I am the person responsible within my firm for the final decision as to the price(s) and amount of this Bid on this State Project.

I further declare that:

1. The prices(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 other 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 of my firm is made in good faith and not pursuant to any agreement or discussion with, or inducement from, any firm or person to submit a complementary bid.
5. My firm has not offered or entered into a subcontract or agreement regarding the purchase of materials or services from any firm or person, or offered, promised or paid cash or anything of value to any firm or person, whether in connection with this or any other project, in consideration for an agreement or promise by any firm or person to refrain from bidding or to submit a complementary bid on this project.
6. My firm has not accepted or been promised any subcontract or agreement regarding the sale of materials or services to any firm or person, and has not been promised or paid cash or anything of value by any firm or person, whether in connection with this or any other project, in consideration for my firm's submitting a complementary bid, or agreeing to do so, on this project.
7. I have made a diligent inquiry of all members, officers, employees, and agents of my firm with responsibilities relating to the preparation, approval or submission of my 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.
8. As required by Section 337.165, Florida Statutes, the firm has fully informed the Department of Transportation 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. I certify that, except as noted below, neither my 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 §29.110(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 him or her 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. I(We), certify that I(We), 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 contract by any Federal Agency unless authorized by the Department.

Where I am unable to declare or certify as to any of the statements contained in the above stated paragraphs numbered (1) through (10), I have provided an explanation in the "Exceptions" portion below or by attached separate sheet.

EXCEPTIONS:

(Any exception listed above will not necessarily result in denial of award, but will be considered in determining bidder responsibility. For any exception noted, indicate to whom it applies, initiating agency and dates of agency action. Providing false information may result in criminal prosecution and/or administrative sanctions.)

I declare under penalty of perjury that the foregoing is true and correct.

CONTRACTOR: \_\_\_\_\_ (Seal)

BY: \_\_\_\_\_  
NAME AND TITLE PRINTED

WITNESS: \_\_\_\_\_

BY: \_\_\_\_\_  
SIGNATURE

WITNESS: \_\_\_\_\_

Executed on this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_

**FAILURE TO FULLY COMPLETE AND EXECUTE THIS DOCUMENT  
MAY RESULT IN THE BID BEING DECLARED NONRESPONSIVE**

## REQUIRED CONTRACT PROVISIONS

This certification applies to subcontractors, material suppliers, vendors and other lower tier participants.

- Appendix B of 49 CFR Part 29 -

### Appendix B—Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion—Lower Tier Covered Transactions

#### *Instructions for Certification*

1. By signing and submitting this proposal, the prospective lower tier participant is providing the certification set out below.
2. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered. 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.
3. 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 when submitted or has become erroneous by reason of changed circumstances.
4. 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 person to whom this proposal is submitted for assistance in obtaining a copy of those regulations.
5. The prospective lower tier participant agrees by submitting this proposal that 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.
6. 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.
7. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that it 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.
8. 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 a participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
9. Except for transactions authorized under paragraph 5 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 voluntary 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.

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION  
**Vendor Eligibility Check Prior to Contract Award**

375-030-91  
PROCUREMENT  
10/16

Project Description(s): \_\_\_\_\_

Financial Project Number(s): \_\_\_\_\_

In accordance with State law:

Section 287.133(2)(b), Florida Statutes, provides that public entities may not contract with firms that have been excluded from participating in the public contracting process.

A public entity may not accept any bid, proposal, or reply from, award any contract to, or transact any business in excess of the threshold amount provided in s. 287.017, F.S., for CATEGORY TWO with any person or affiliate on the convicted vendor list for a period of 36 months following the date that person or affiliate was placed on the convicted vendor list unless that person or affiliate has been removed from the list pursuant to Section 287.133(3)(f), F.S. A public entity that was transacting business with a person at the time of the commission of a public entity crime resulting in that person being placed on the convicted vendor list may not accept any bid, proposal, or reply from, award any contract to, or transact any business with any other person who is under the same, or substantially the same, control as the person whose name appears on the convicted vendor list so long as that person's name appears on the convicted vendor list.

A contract award (reference 2 CFR 180.220) must not be made to parties listed on the government-wide Excluded Parties List System in the System for Award Management (SAM), in accordance with the OMB guidelines at 2 CFR 180 that Implement Executive Orders 12549 (3 CFR Part 1986 Comp., p. 189) and 12689 (3 CFR Part 1989 Comp., p. 235), "Debarment and Suspension." Pursuant to 23 CFR 172.7(b)(3), a contracting agency shall verify suspension and debarment actions and eligibility status of consultants and subconsultants prior to entering into an agreement or contract in accordance with 2 CFR part 1200 and 2 CFR part 180, when the identities of such subconsultants are known prior to execution of the subject agreement or contract. The Excluded Parties List System in SAM contains the names of parties debarred, suspended, or otherwise excluded by agencies, as well as parties declared ineligible under statutory or regulatory authority other than Executive Order 12549.

The Convicted Vendor List/ Suspended Vendor List / Discriminatory Vendor List / Federal Excluded Parties List/ Vendor Complaint Lists are available at the following Department of Management Services site:

[http://www.dms.myflorida.com/business\\_operations/state\\_purchasing/vendor\\_information/convicted\\_suspended\\_discriminatory\\_complaints\\_vendor\\_lists](http://www.dms.myflorida.com/business_operations/state_purchasing/vendor_information/convicted_suspended_discriminatory_complaints_vendor_lists)

I have checked the aforementioned lists to verify that the vendor (and all subs where known) is eligible for contract award/execution:

Procurement Office or Contracting Awarding Office:

\_\_\_\_\_  
Printed Name

\_\_\_\_\_  
Signature

Date: \_\_\_\_\_

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION  
**LAP CERTIFICATION OF CURRENT CAPACITY**

525-010-48  
PROGRAM MANAGEMENT  
12/09  
Page 1 of 2

CONFIDENTIAL

For bids to be received on \_\_\_\_\_  
(Letting Date)

Fill in your FDOT Vendor Number VF _____ (Only applicable to FDOT pre-qualified contractors)
--

CERTIFICATE

I hereby certify that the amount of any proposal submitted by this bidder for the above letting does not exceed the amount of the Firm's CURRENT CAPACITY (maximum capacity rating less total uncompleted work).

The total uncompleted work as shown on  
the "Status of Contracts on Hand" report (page 2) \$ \_\_\_\_\_

I further certify that the "Status of Contracts on Hand" report (page 2) was prepared as follows:

1. If the letting is before the 25<sup>th</sup> day of the month, the certificate and report reflect the uncompleted work as of the 15<sup>th</sup> day of the month, last preceding the month of the letting.
2. If the letting is after the 25<sup>th</sup> day of the month, the certificate and report reflects the uncompleted work in progress as of the 15<sup>th</sup> day of the month of the letting.
3. All new contracts (and subcontracts) awarded earlier than five days before the letting date are included in the report and charged against our total rating.

I certify that the information above is correct.

\_\_\_\_\_  
NAME OF FIRM

Sworn to and subscribed this \_\_\_\_\_ day  
of \_\_\_\_\_, 20 \_\_\_\_\_

By: \_\_\_\_\_  
\_\_\_\_\_  
Title



**STATUS OF CONTRACTS ON HAND**

(Furnish complete information about all your contracts, whether prime or subcontracts; whether in progress or awarded, but not yet begun; and regardless of whom contracted with.)

1 OWNER, LOCATION AND DESCRIPTION	2 CONTRACT (OR SUBCONTRACT) AMOUNT	3 AMOUNT SUBLET TO OTHERS	4 BALANCE OF CONTRACT AMOUNT	5 UNCOMPLETED AMOUNT TO BE DONE BY YOU		6 AS PRIME CONTRACTOR	AS SUBCONTRACTOR
				AS PRIME CONTRACTOR	AS SUBCONTRACTOR		
TOTALS					\$0.00		\$0.00
TOTAL UNCOMPLETED WORK ON HAND TO BE DONE BY YOU (TOTAL COLUMNS 5 AND 6)					\$0.00		\$0.00

NOTE: Columns 2 and 3 to show total contract (or subcontract) amounts. Column 4 to be difference between columns 2 and 3. Amount in columns 5 or 6 to be uncompleted portion of amount in column 4. All amounts to be shown to nearest \$100. The Contractor may consolidate and list as a single item all contracts which, individually, do not exceed 3% of total, and which, in the aggregate, amount to less than 20% of the total.

### **DBE Utilization**

The Department began its DBE race neutral program January 1, 2000. **Contract specific goals are not placed on Federal/State contracts;** however, the Department has an overall 10.65% DBE goal it must achieve. In order to assist contractors in determining their DBE commitment level, the Department has reviewed the estimates for this letting.

As you prepare your bid, please monitor potential or anticipated DBE utilization for contracts. When the low bidder executes the contract with the Department, information will be requested of the contractor's DBE participation for the project. While the utilization is not mandatory in order to be awarded the project, continuing utilization of DBE firms on contracts supports the success of Florida's DBE Program, and supports contractors' Equal Employment Opportunity and DBE Affirmative Action Programs.

Any project listed as 0% DBE availability does not mean that a DBE may not be used on that project. A 0% DBE availability may have been established due to any of the following reasons: limited identified subcontracting opportunities, minimal contract days, and/or small contract dollar amount. Contractors are encouraged to identify any opportunities to subcontract to DBE's.

Please contact the Equal Opportunity Office at (850) 414-4747 if you have any questions regarding this information. Forms may be downloaded at: [www.dot.state.fl.us/proceduraldocuments/](http://www.dot.state.fl.us/proceduraldocuments/).

### **DBE Reporting**

If you are the prime contractor on a project, enter your DBE participation in the Equal Opportunity Compliance system prior to the pre-construction or pre-work conference for all federal and state funded projects. This **will not** become a mandatory part of the contract. It will assist the Department in tracking and reporting planned or estimated DBE utilization. During the contract, the prime contractor is required to report actual payments to DBE and MBE subcontractors through the web-based Equal Opportunity Compliance (EOC) system.

All DBE payments must be reported whether or not you initially planned to utilize the company. In order for our race neutral DBE Program to be successful, your cooperation is imperative. If you have any questions, please contact EOOHelp@dot.state.fl.us.

### **Bid Opportunity List**

The Federal DBE Program requires States to maintain a database of all firms that are participating or attempting to participate on FDOT-assisted contracts. The list must include all firms that bid on prime contracts or bid or quote subcontracts on FDOT-assisted projects, including both **DBE's and non-DBEs**.

Please complete the Bidders Opportunity List through the Equal Opportunity Compliance system within 3 business days of submission of the bid or proposal for ALL subcontractors or sub-consultants who quoted to you for specific project for this letting. The web address to the Equal Opportunity Compliance system is:

<https://www3.dot.state.fl.us/EqualOpportunityCompliance/Account.aspx/Login?ReturnUrl=%2fEqualOpportunityCompliance%2f>.

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION  
**DBE BID PACKAGE INFORMATION**

275-030-11  
EQUAL OPPORTUNITY OFFICE  
10/17  
Page 2 of 2

**DBE/AA Plans**

Contractors bidding on FDOT contracts are to have an approved DBE Affirmative Action Plan (FDOT Form 275-030-11B) on file with the FDOT Equal Opportunity Office before execution of a contract. DBE/AA Plans must be received with the contractors bid or received by the Equal Opportunity Office prior to the award of the contract.

Plans are approved by the Equal Opportunity Office in accordance with Ch. 14-78, Florida Administrative Code. Plans that do not meet these mandatory requirements may not be approved. Approvals are for a (3) three year period and should be updated at anytime there is a change in the company's DBE Liaison Officer and/or President. Contractors may evidence adoption of the DBE/AA Policy and Plan and/or a change in the designated DBE Liaison officer as follows:

- Print the first page of the document on company stationery ("letterhead") that indicates the company's name, mailing address, phone number, etc.
- Print the company's name in the "\_\_\_\_" space; next to "Date" print the month/day/year the policy is being signed; record the signature of the company's Chief Executive Officer, President or Chairperson in the space next to "by" and print the full first and last name and position title of the official signing the policy.
- Print the DBE Liaison's full name, email address, business mailing address and phone number the bottom of email.

E-mail the completed and signed DBE AA Plan to: **[ecofirms@dot.state.fl.us](mailto:ecofirms@dot.state.fl.us)**.

The Department will review the policy, update department records and issue a notification of approval or disapproval; a copy of the submitted plan will not be returned to the contractor.