



*“Dedicated to Excellence.....  
People Serving People”*

---

VENDOR INFORMATION  
FY2011 Street Resurfacing

PLEASE FILL OUT AND RETURN TO BE PLACED ON PLANHOLDERS LIST.

COMPANY NAME \_\_\_\_\_

STREET ADDRESS \_\_\_\_\_

MAILING ADDRESS (including zip code) \_\_\_\_\_

PHONE (    ) \_\_\_\_\_ FAX (    ) \_\_\_\_\_

EMAIL \_\_\_\_\_

CONTACT  
PERSON \_\_\_\_\_

PLEASE RETURN TO:  
PUBLIC WORKS DEPARTMENT  
ENGINEERING DIVISION  
VIA  
EMAIL: JYOUNG@PCGOV.ORG

SPECIFICATIONS AND CONTRACT DOCUMENTS

FOR

## **FY2011 Street Resurfacing**



CITY OF PANAMA CITY  
ENGINEERING DEPARTMENT  
POST OFFICE BOX 1880  
9 HARRISON AVENUE  
PANAMA CITY, FLORIDA, 32402  
(850) 872-3015  
(850) 872-3077 FAX  
[engineering@pegov.org](mailto:engineering@pegov.org)

## TABLE OF CONTENTS

### DIVISION 1 - STANDARD SPECIFICATIONS

SECTION 1 .....	Invitation for Bids
SECTION 2 .....	Instructions to Bidders
SECTION 3 .....	Forms
SECTION 4 .....	General Covenants & Conditions
SECTION 6 .....	Technical Specifications – Stabilization
SECTION 7 .....	Technical Specifications – Site Preparation
SECTION 10 .....	Technical specifications – Erosion Control/Envir Prot.
SECTION 12 .....	Technical Specifications – Sodding
SECTION 13 .....	Technical specifications – Grassing (by seeding)
SECTION 14 .....	Technical Specifications - Asphaltic Concrete Pavement
SECTION 27 .....	Special Conditions
SECTION 37 .....	Technical Specifications – Traffic Signals

Standard Detail sheets:

Manhole Ring & Cover

Water Valve Collars

Typical Intersection

Traffic Loops

### DIVISION 2 - HUD CONTRACT PROVISIONS

1. HUD Form 2554 - Supplementary Conditions of the Contract for Construction
2. Executive Order 11246 – Equal Employment Opportunity
3. Davis-Bacon Wage Determination
4. Notice to All Employees
5. Certification with regard to previous contracts subject to E.O. Clause  
**(to be filled out and returned with bid documents)**

## INVITATION FOR BIDS

The City of Panama City will accept sealed bids for **FY 2011 Street Paving Project** until 2:30 p.m. CST on **March 29, 2011**, at the Purchasing Office, 519 E. 7th Street, Panama City, Florida, 32401, at which time and place all bids will be publicly opened and read aloud. Bids are invited upon the items and quantities of work as follows:

1. City-wide resurfacing and striping project – General Fund and HUD

Contract documents, including drawings and technical specifications, are on file at the office of Mike Kazunas, City Engineer, Room 206, 9 Harrison Avenue, Panama City, Florida, phone (850) 872-3015. There is a **\$50** non-refundable fee for plans and specifications. Please call to schedule pick up of plans/specs, or they may be downloaded for free from the City's web site at [www.panamacity-fl.gov](http://www.panamacity-fl.gov). Contractors downloading the package will be responsible for checking the same web site for addenda prior to submitting their bid.

A certified check or bank draft, payable to the order of City of Panama City, negotiable U.S. Government Bonds (at par value) or a satisfactory bid bond executed by the Bidder and an acceptable surety in an amount equal to five percent (5%) of the total bid shall be submitted with each bid on the form provided by the City.

The estimated cost of this construction project equals or exceeds \$250,000. Therefore, bidders must be on the City's pre-qualified bidders list to submit bids for this project. Contractors who want to be placed on the City's pre-qualified bidders list should contact the City of Panama City Purchasing Department, 519 E. 7<sup>th</sup> Street, Panama City, FL 32401 (telephone 850- 872-3070) to receive a pre-qualification application.

The completed pre-qualification package must be on file with the City or be delivered to the City within two business days of the **pre-bid conference which is scheduled for 11:00 a.m. CDST on March 15, 2011**, in the City Hall Conference Room, 9 Harrison Avenue, Panama City, Florida, 32401. Packages presented at the pre-bid conference or within two business days of the pre-bid conference will be evaluated and the contractor notified at least 7 days before bids are due.

For this project, bidders must be on the City's pre-qualified bidders list for the following work categories: "ASPHALTIC CONCRETE SURFACING".

Contractors must attach a copy of the pre-qualification letter to the outside of their bid.

The Certification with regard to previous contracts subject to E.O. Clause must be filled out and returned with bid documents. (form is included in HUD Provisions of this specification)

Only Contractors who are currently on the Florida DOT list of pre-approved contractors

for performing work of the type and volume involved in this contract will be eligible to bid on this work. No bid will be accepted from any contractor who is ineligible to perform work for Florida DOT. FDOT Paving certification must be attached to outside of bid envelope.

The person or affiliate who has been placed on the convicted vendor list following a conviction for a public entity crime may not submit a bid or a contract to provide any goods or services to a public entity, may not submit a bid on a contract on a public entity for the construction or repair of a public building or public work, may not submit bids on leases of real property to a public entity, may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant under a contract with any public entity, and may not transact business with any public entity in excess of the threshold amount provided in Section 287.017, for Category Two for a period of 36 months from the date of being placed on the convicted vendor list.

Contractor must ensure employees and applicants for employment are not discriminated against because of their race, color, religion, sex, or national origin.

The City of Panama City reserves the right to reject any one or all bids, or any part of any bid, to waive any informalities in any bid, and to award a contract deemed to be in the best interest of the City.

Bids may be held by the City for a period not to exceed ninety (90) days from the date of the bid opening for the purpose of reviewing the bids and investigating the qualifications of bidders, prior to awarding the contract.

All bids are to be logged in the Purchasing Office.

CITY OF PANAMA CITY  
Purchasing Department

*To run: Mar 4 & Mar 11*

*Billing, Inquiries, and Proof of Publication: City of Panama City, Engineering Department, ATTN: Julie Young, P.O. Box 1880, Panama City, FL 32402, 850-872-3015*

*P.O. #11-1994*

1. SCOPE OF THE PROJECT

The scope of each division of the project is stated in the specifications.

2. INTERPRETATION OF CONTRACT DOCUMENTS

Each bidder must thoroughly examine all contract documents and examine and judge for himself all matters relating to the location and character of the proposed project.

If the bidder should be in doubt as to the meaning of any of the contract documents, or is of the opinion that the plans and specifications contain errors or contradictions, or reflect omissions, he shall submit a written request to the Engineer for interpretation or clarification. Such request should be in the hands of the Engineer at least five (5) days before the date for the formal bid opening, in order that interpretation or clarification may be issued by the Engineer in the form of written addenda, mail or delivered to all prospective bidders. The issuance of a written addendum shall be the only official method whereby such an interpretation or clarification will be made.

Items shown on the Plans but not noted in the specifications and items noted in the specifications but not shown on the plans are to be considered as both shown on the plans and noted in the specifications. Any errors or omission in the specifications or on the plans, as to the standard of the work, shall not relieve the contractor of the obligation to furnish a satisfactory, first-class job in strict conformity with the best practice found in structures or in work of a similar type. The failure of the bidder to direct the attention of the Engineer to errors or discrepancies will not relieve the bidder, should he be awarded the contract, of the responsibility of performing the work to the satisfaction of the Engineer.

3. RESPONSIBILITY OF BIDDER TO INFORM HIMSELF AS TO ALL CONDITIONS RELATING TO THE PROJECT

The bidder, by and through the submission of his bid, agrees that he shall be held responsible for having theretofore examined the site, the location, and the route of all proposed work, and for having satisfied himself as to the character of the route, the location, surface, and underground obstructions, the nature of the ground, water table conditions, and all other physical characteristics pertaining to the project, in order that he may include in the prices bid, whether lump sums or unit prices, all costs pertaining to the work and thereby provide for the satisfactory completion thereof, including the removal, relocation, or replacement of any objects or obstruction which will be encountered in doing the proposed work.

4. CONFLICT WITH "GENERAL COVENANTS AND CONDITIONS"

If any portion of these instructions to bidders should be found or appear to be in conflict with provisions of the "General Covenants and Conditions", the provisions of the latter shall govern.

5. QUANTITIES IN PROPOSAL APPROXIMATE ONLY

If the proposal form contains unit price items, the quantities stated therein are approximate only and are intended to serve as a basis for the comparison of bids and to fix the approximate amount of the cost of the project. The city does not expressly agree or imply that the actual amount of the work done in the performance of the contract will correspond with the quantities in the proposal form; the amount of work done may be more or less than the said quantities and may be increased or decreased by the Engineer as circumstances may require. The increase or decrease of any quantity shall not be regarded as grounds for an increase in the unit price or in the time allowed for the completion of the work, except as provided in the contract documents.

6. PRICES BID

The price bid for each item shall be stated in both words and figures in the appropriate places in the proposal form. In the event there is a discrepancy between the price written in words and the price written in figures, the former shall govern. In case of error in the extension of prices, the unit price will govern.

The bidder's attention is directed to the fact that all materials and supplies necessary for the completion of this contract are subject to the Florida sales and use tax. The amount of all taxes shall be included by the bidder in the bid price and/or any adjustments of the contract price arising from changes in the work.

7. SUBMISSION OF BIDS

Each bid must be submitted on the prescribed proposal form, enclosed in a sealed envelope marked "**FY 2011 Street Paving Project**" must be filed with the Purchasing Director at or before the time at which the bids are to be publicly opened and read in accordance with the provisions of the advertisement for bids. Any bid received after such time will not be considered.

Sealed bid modifications will be accepted from the bidders prior to opening bids.

8. SIGNATURE OF BIDDER

The bidder must sign the proposal form in the space provided for the signature. If the bidder is an individual, the words, "doing business as \_\_\_\_\_" or "Sole Owner",

should appear beneath his signature. In the case of a partnership, the signature of at least one of the partners must follow the firm name and the words "Member of Firm" should be written beneath such signature. If the bidder is a corporation, the title of the officer signing the proposal in behalf of the corporation must be stated, and evidence of his authority to sign the proposal must be submitted. The bidder shall state in the proposal the name and address of each person interested therein.

#### 9. BID SECURITY

Each bid must be accompanied by a certified check or by a bid bond on the prescribed form, duly executed by the bidder as principal and having as surety thereon a surety company acceptable to the City and authorized to write such bid bond under the laws of the State of Florida, in an amount not less than five percent (5%) of the amount of the bid. The certified checks or bid bonds of all unsuccessful bidders, except the three lowest bidders, will be returned within five (5) days after the formal opening of the bids; the certified checks or bid bonds of the three lowest bidders will be returned within five days after the City of Panama City and the accepted bidder have executed the written contract, or if no such contract shall be executed within sixty days after the date of the opening of the bids, upon the demand of any bidder at any time thereafter, provided that he has not been notified of the acceptance of his bid. The attorney in fact or other officer who signs a bid bond for a surety company must file with such bond a certified copy of his power of attorney authorizing him to do so.

#### 10. QUALIFICATION OF BIDDER

Bidders must be on the City's pre-qualified bidders list to submit bids on construction projects with an estimated cost equal to or exceeding \$250,000. Contractors who want to be placed on the City's pre-qualified bidders list should contact the City of Panama City Purchasing Department, 519 E. 7<sup>th</sup> Street, Panama City, FL 32401 (telephone 850-872-3070) to receive a pre-qualification application. The completed pre-qualification package must be on file with the City or be delivered to the City within two business days of the pre-bid conference which will occur at least 14 days prior to the bid opening date of the project.

In order to aid the City in making an award of the Contract for projects estimated to cost less than \$250,000, the bidder shall submit with his proposal satisfactory proof of his qualifications to perform in a satisfactory manner and within the time specified in the proposal, all of the work covered by the contract documents. He shall submit, among other things, information and evidence with respect to the following:

- a. That he has a well-trained and competent organization which has done work of similar character and value;
- b. That he will have available to do the work at the proper time or times adequate equipment and facilities listing such equipment and facilities in such detail that they can be quickly and accurately checked;



- c. That he has ample repair parts and supplies to maintain all equipment and facilities properly and with a minimum of delay;
- d. If the bidder is a corporation, the names of all corporation officers and the name of the executive who will give his personal attention to the work;
- e. Detailed financial information relating to the resources of the bidder, if requested.
- f. The contractor, as soon as practicable after the award of the contract, shall furnish to the City Engineer a list of the names of the subcontractors proposed for the principal portions of the work.

#### 11. DISQUALIFICATION OF BIDDERS

Bidders may be disqualified for any or all of the following:

- a. Reasonable grounds for believing that a bidder is interested in more than one proposal will cause the rejection of all proposals in which such bidder is believed to be interested. Any or all proposals will be rejected if there is reason for believing that collusion exists among the bidders, and no participant in such collusion will be considered in future proposals for the same work.
- b. Failure to acknowledge addenda.
- c. Bids which are incomplete, unbalanced, conditional, or obscure.

#### 12. WITHDRAWAL OF BID

Any bid may be withdrawn prior to the time scheduled in the advertisement for bids for the opening thereof. A bid may also be withdrawn ninety (90) days after the date of the opening of bids, provided that the bidder has not been notified that his bid has been accepted.

#### 13. RIGHT TO ACCEPT OR REJECT BIDS

The City reserves the right to reject any one or all bids, or any part of any bid, to waive any informality in any bid, and to award a contract deemed to be in the best interest of the City. Bids which contain additions not requested, or irregularities of any kind, or which do not comply in every respect with the instructions to bidders, may be rejected at the option of the City.

14. AWARD OF CONTRACT

If bids are found to be acceptable by the City, a contract will be awarded to that responsible bidder whose evaluated bid is determined to be in the best interest of the City. Notice of acceptance of his proposal and award of contract to him will be given to the successful bidder by the City by posting a registered or certified letter to the address stated in the proposal form.

15. EXECUTION OF CONTRACT

The bidder to whom a contract is awarded will be required to execute, in three (3) counterparts, the prescribed contract form and contract bond form within ten (10) days from the date of notice to him that such forms are ready for execution.

16. LIQUIDATED DAMAGES FOR FAILURE TO ENTER INTO CONTRACT

The certified check or bid bond filed with and as a part of the proposal will be forfeited to the City as liquidated damages if the bidder to whom the contract is awarded shall fail to execute the appropriate contract documents within ten (10) days following written notice to him that such forms are ready for execution.

17. LICENSES AND PERMITS

The contractor shall secure all licenses and permits and shall comply with all applicable laws, regulations, and codes as required by Federal agencies and the State of Florida. The contractor must fully comply with all Federal, State, County, and Municipal ordinances and regulations in any manner affecting the prosecution of the work.

The schedule of required permits & fees is as follows:

**No permits required.**

18. WAGES AND SALARIES (See Division 2)

On federally-funded projects only, attention of the bidders is particularly called to the requirements concerning the payment of not less than the prevailing wage and salary rates specified in the contract documents and the conditions of employment with respect to certain categories and classifications of employees. The rates of pay set forth are the minimums to be paid during the life of the Contract. It is, therefore, the responsibility of bidders to inform themselves as to local labor conditions, such as the length of the work day and work week, overtime compensation, health and welfare contributions, labor supply, and prospective changes or adjustments of rates.

19. EQUAL EMPLOYMENT OPPORTUNITY (See Division 2)

On federally-funded projects only, attention of bidders is particularly called to the

requirement for ensuring that employees and applicants for employment are not discriminated against because of their race, color, religion, sex, or national origin.

If applicable State laws require separate bonds as security (1) for the faithful performance of the contract, and (2) for the payment of all services, labor, and materials, revise paragraph "b" in accordance with the statutory requirements of the particular State. These bonds shall be signed by a guaranty or surety company listed in the latest of the U.S. Treasury Circular 570, and the total penal sum shall be within the maximum specified for such company in said Circular 570.

## 20. PUBLIC ENTITY CRIMES

The person or affiliate who has been placed on the convicted vendor list following a conviction for a public entity crime may not submit a bid or a contract to provide any goods or services to a public entity, may not submit a bid on a contract on a public entity for the construction or repair of a public building or public work, may not submit bids on leases of real property to a public entity, may not be awarded or perform work as a contractor, supplier, subcontractor, or consultant under a contract with any public entity, and may not transact business with any public entity in excess of the threshold amount provided in Section 287.017, for Category Two for a period of 36 months from the date of being placed on the convicted vendor list.

PROPOSAL

**FY 2011 Street Paving Project**

DATED: \_\_\_\_\_

CITY OF PANAMA CITY, FLORIDA

Gentlemen:

The undersigned, as bidder, (therein used in the masculine singular, irrespective of actual gender and number) hereby declares that the only persons interested in this proposal are named herein, that no other person has any interest in this proposal or in the contract of which this proposal pertains, that this proposal is made without connection or arrangement with any other person, and that this proposal is in every respect fair, and is submitted in good faith and without collusion or fraud.

The bidder further declares that he has satisfied himself fully relative to all matters and conditions with respect to the work to which this proposal pertains.

The bidder proposes and agrees, if this proposal should be accepted, to execute all appropriate contract documents for the purpose of establishing a formal contractual relationship between himself and the City of Panama City, Florida.

The bidder proposes to construct the complete works for the total amount listed in the proposal, all in full and complete accordance with all terms and conditions set forth in and covered by the contract documents.

The bidder further proposes and agrees to begin the work with an adequate force and with sufficient equipment and facilities within ten (10) days of the date stated in the written Notice to Proceed issued and served upon him by the Engineer, and to complete paving in **90** consecutive calendar days, including normal weather days and delivery time for materials and equipment. Punch list items must be completed within **45** consecutive calendar days following completion of paving. Thermoplastic striping shall be completed within 45 consecutive calendar days following completion of paving. Applies to Add Alternate only. Adjustment of manholes/water valves should be within 7 days following paving. If the contractor chooses to begin work before the ten (10) days expire, then the start date becomes when work actually commences.

For the purpose of reimbursing the City for additional costs experienced by it and resulting from the failure of the contractor to complete the work within the prescribed time limits, it is understood that the reductions for liquidated damages which are specified in the General Covenants and Conditions will apply in the event the work is not completed within such time limits.

STREET PAVING  
GENERAL NOTES

1. The portion of this contract comprised of designated HUD streets shall be completed before beginning on the general fund streets.
2. The correcting of unacceptable pavement shall be done in accordance with Section 330-12.4, Florida DOT Standard Specifications for Road and Bridge Construction, current edition.
3. The contractor will be responsible for traffic control in accordance with the Florida DOT Manual on Traffic Control, more specifically defined in Section 27, Paragraph F, Maintenance of Traffic.
4. **Contractor will be responsible for clean-up of all construction materials and debris on a daily basis.**
5. Contractor will coordinate with the City Engineer, who will perform the inspection for the City and designate quantities to be used.
6. Notice will be given to the City Engineer **one week prior to beginning of work**, and a pre-paving conference be conducted with contractor, City Engineer, inspector, etc., to ensure cooperation of all agencies.
7. Density Control will be per Section 330-10.3, Florida DOT Standard Specifications for Road and Bridge Construction, current edition. Contractor will engage a City approved, independent FDOT Certified testing laboratory. See the supplementary conditions at the end of Section 14 for density pay reduction guidelines applicable to this contract.
8. Contractor will submit to the City Engineer all field and laboratory test results (on a daily basis) in accordance with attached specifications (Sections 6-8 and 10-14) to confirm project compliance.
9. **All manholes, storm drains, sanitary sewers, and water valves will be adjusted to grade by contractor in accordance Section 425-6.8, Florida DOT Standard Specifications for Road and Bridge Construction, current edition. See Section 14 of this specification for additional City requirements on adjustment of the above mentioned items.**
10. The quantity of resurfacing will be designated by the City Engineer and will depend on bids received and funding available.
11. Streets that are indicated to be milled shall be milled in accordance with Section 327, Florida DOT Standard Specifications for Road and Bridge Construction, current edition. **Streets will be milled an average depth of 3 inches, unless specified otherwise by the City Engineer or Inspector.** The edges shall be milled so the placement of the new pavement matches the edge of the existing concrete gutter line. Cross-slope of the milled surface will maintain a minimum 2% slope and match the existing surface where possible. In areas where milling exposes the base material, spot repairs will be made by the contractor to ensure the base material is compacted to 98% of maximum density prior to resurfacing. **Milled material from this project may be used to accomplish repairs where milling has exposed the base materials.** Unless shown as a line item in the bid schedule, no separate payment will be made for these spot repairs. **Where**

- spot repairs are included in the milling price, the Contractor's responsibility for such repairs shall not exceed 1% of the milled area, without additional compensation. Milled material will remain the property of the City.** The contractor will stockpile this material at the City's storage area on Redwood Avenue between 11<sup>th</sup> and 12<sup>th</sup> Street. Costs for any spot repairs of base materials and for collecting, transporting, and stockpiling milled material, shall be included as part of the Contractor's price for milling operations.
12. Special contract provisions apply to a portion of this paving project and are contained in Division 2 of the specification booklet.
  13. Certain streets require striping as indicated on attached table. All existing striping not included in the table will be accomplished by the City by other means and is not included in this contract. **Temporary striping is required for arrow, railroad, crosswalks and school legends, stop bars, and for skip and double yellow lines. The bid price for these elements of work shall include the cost of temporary striping and shall be accomplished the same day the resurfacing of each street is completed.** If the S-3 surface is not placed the same day as the leveling course is laid, the contractor will also provide temporary striping for the leveling course.
  14. MATERIALS: Leveling course to be SAHM (500# stability); thickness to be determined by on-site inspector, with a maximum of 90 pounds/S.Y. Surface course to be S-3 or Superpave 9.5 (Fine), approximately 135 pounds/S.Y. or as determined by on-site City inspector.
  15. Although the specifications require adherence to FDOT guidelines with respect to MOT during all milling and paving activities.
  16. **The City of Panama City requests that business/residential notification of milling and paving activities be made by the Contractor at least 48 hours prior to commencing work.**

<b>FY 2011 STREET RESURFACING SUMMARY</b>		
<b>STREET NAME</b>	<b>FROM</b>	<b>TO</b>
<b>WARD 1 – Gen Fund</b>		
E. 5 <sup>th</sup> Court*	Massaline Drive	Hamilton Ave
E. 5 <sup>th</sup> Street*	Massalina Drive	MLK
E. 4 <sup>th</sup> Court*	Massalina Drive	MLK
E. 2 <sup>nd</sup> Place	E. 2 <sup>nd</sup> Plaza	E. 2 <sup>nd</sup> Street
<b>WARD 2 – Gen Fund</b>		
Harrison Avenue*	Airport Road	19th Street
Mackenzie Avenue*	14 <sup>th</sup> Street	15 <sup>th</sup> Street
W. 9 <sup>th</sup> Street*	Jenks Avenue	Grace Avenue
Harmon Avenue*	Bus98	7 <sup>th</sup> Street
Cone Avenue*	Bus98	7th Street
<b>HUD</b>		
Flower Avenue*	17 <sup>th</sup> Street	18 <sup>th</sup> Street
Caroline Avenue*	15 <sup>th</sup> Street	17 <sup>th</sup> Street
Chandlee	15 <sup>th</sup> Street	Airport Road
E. 17 <sup>th</sup> Street	Michigan Avenue	Isabella Avenue
<b>WARD 3</b>		
Briarcliff Road*	State Avenue	State Avenue
Malone Drive*	Huntington Road	Rosemont
Gabriel Street	State Avenue	Dead End
Emory Drive*	W. 22 <sup>nd</sup> Street	Lindenwood Dr
Brenau Terrace*	Emory Drive	Lindenwood Dr
12 <sup>th</sup> Street*	Lisenby Avenue	Christel
<b>WARD 4</b>		
Palmetto Avenue*	W. 19 <sup>th</sup> Street	W. 19 <sup>th</sup> Court
Wainwright Avenue*	W. 19 <sup>th</sup> Street	W. 19 <sup>th</sup> Court
Brown Avenue*	W. 19 <sup>th</sup> Street	W. 19 <sup>th</sup> Court
W. 17 <sup>th</sup> Street*	US98	Beck Avenue
Calhoun Avenue*	17 <sup>th</sup> Street	19 <sup>th</sup> Street
W. 13 <sup>th</sup> Court	Arthur Avenue	Clay Avenue
W. 13 <sup>th</sup> Street	Arthur Avenue	Calhoun Avenue
W. 13 <sup>th</sup> Street	Hickory Avenue	Foster Avenue

- Indicates street to be milled

**BID PROPOSAL**

Bid proposal to include all construction plans with notes contained thereon and specification package. All work to be done in accordance with all contract documents.

**Project:      FY 2011 Street Paving (General Fund)**

<b>DESCRIPTION</b>	<b>QUANTITY</b>	<b>UNIT PRICE</b>	<b>TOTAL</b>
MOBILIZATION	1		
MILLING ASPHALT STREETS (Approx. 3" deep) or as directed	46,008 sy		
<b>RESURFACING</b>			
Leveling course, sand-asphalt hot mix	1,543 tons		
Surfacing S-3	3,637 tons		
Manhole adjustment	46 ea.		
Valve adjustment	3 ea.		
<b>THERMOPLASTIC STRIPING</b>			
12" white line*	156 l.f.		
4" white line*	120 l.f.		
24" white line *	370 l.f.		
Double yellow line *	2,957 l.f.		
Remove & Replace Speed Humps	3 ea.		
Traffic Loop	3 ea.		
Arrows*	8 ea.		
<b>TOTAL FY 2011 GENERAL FUND STREET PAVING BID</b>			

\* Bid price includes required temporary striping.

Total GENERAL FUND BASE BID in numbers \_\_\_\_\_



Project: FY 2011 Street Paving (Division 2 - HUD Funded)

DESCRIPTION	QUANTITY	UNIT PRICE	TOTAL
MOBILIZATION	1		
MILLING ASPHALT STREETS (Approx. 3" deep) or as directed	1,956 sy		
<b>RESURFACING</b>			
Leveling course, sand-asphalt hot mix	324 tons		
Surfacing S-3	752 tons		
Manhole adjustment	7 ea.		
Valve adjustment	2 ea.		
Double Yellow*	140 l.f.		
12" Crosswalk*	104 l.f.		
24" Stop Bar*	70 l.f.		
Remove & replace Speed Humps	2 ea.		
<b>TOTAL FY 2011 HUD STREET PAVING BID</b>			

\* Bid price includes required temporary striping.

Total HUD BASE BID in numbers \_\_\_\_\_

### SUMMARY TABULATION

PROJECT	BASE BID
Street Paving (Division 1 – General Fund)	
Street Paving (Division 2 - HUD Funded)	
<b>TOTAL BID FOR ALL PROJECTS</b>	

Total BASE BID in numbers: \_\_\_\_\_

Total BASE BID in words: \_\_\_\_\_

\_\_\_\_\_

The bidder further agrees that, in the event of his failure to execute the appropriate contract documents within ten (10) consecutive calendar days after his receipt of written notice of the award of the contract, the check or bid bond accompanying his bid, and the moneys payable thereon, shall become the property of and be retained and used by the City as liquidated damages; otherwise, the check or bid bond shall be returned by the City to the undersigned.

Attached hereto is a certified check on the \_\_\_\_\_ Bank of \_\_\_\_\_ or Bid Bond for the sum of \_\_\_\_\_ Dollars (\$ \_\_\_\_\_) made payable to the City of Panama City, Florida.

The list of parties interested in this proposal, the list of equipment references, and financial statement which are furnished to assist the City in making the award of contract are true and correct. (In the event the bidder is a corporation, there shall be attached hereto a certified copy of a resolution of the board of directors of the corporation authorizing the officer who signs the proposal and bid bond to do so in its behalf.)

BIDDER HEREBY ACKNOWLEDGES THAT THIS PROPOSAL INCORPORATES ALL CHANGES ISSUED BY ADDENDA PRIOR TO THE BID OPENING DATE AND THAT THE BIDDER HAS CHECKED WITH THE PANAMA CITY ENGINEERING DIVISION AT (850) 872-3015 TO ENSURE RECEIPT OF ALL ADDENDA.

\_\_\_\_\_  
Bidder (Name of Company)

By: \_\_\_\_\_

\_\_\_\_\_  
Title & Corporate Seal

ATTEST:

By: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
Business Address

Contact Person: \_\_\_\_\_ Telephone: \_\_\_\_\_  
Fax No.: \_\_\_\_\_  
Email: \_\_\_\_\_

CERTIFIED RESOLUTION

I, \_\_\_\_\_, the duly elected secretary of \_\_\_\_\_ (name of corporation), a corporation organized and existing under the laws of the State of \_\_\_\_\_, do hereby certify that the following resolution was unanimously adopted and/or passed by a quorum of the board of directors of the said corporation at a meeting held in accordance with the law and the by-laws of the said corporation on the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_:

"IT IS HEREBY RESOLVED that \_\_\_\_\_ (name), the duly elected \_\_\_\_\_ (title) of \_\_\_\_\_ (corporation name), is hereby authorized to execute and submit a proposal and bid bond to the City of Panama City, Florida, for a certain project entitled \_\_\_\_\_ and such other instruments in writing as may be necessary in behalf of the said corporation, and that the proposal, bid bond, and other such instruments signed by him shall be binding upon the said corporation as its own acts and deeds."

I further certify that the above resolution is in force and effect and has not been revised, revoked, or rescinded.

Given under my hand and the seal of the said corporation this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_.

By \_\_\_\_\_  
Secretary

\_\_\_\_\_  
Corporate Title

SEAL

Note: The above is suggested form of the type of corporate resolution desired. Such form need not be followed explicitly, but the certified resolution submitted must clearly show to the satisfaction of the City that the person signing the proposal and bid bond for the corporation has been properly empowered by the corporation to do so in its behalf.

BID BOND

STATE OF FLORIDA)  
COUNTY OF BAY) ss.:

KNOW ALL MEN BY THESE PRESENTS, that we, \_\_\_\_\_, as Principal, and \_\_\_\_\_, as Surety, are held and firmly bound unto the City of Panama City, Florida, in the penal sum of \_\_\_\_\_ Dollars (\$ \_\_\_\_\_), lawful money of the United States, for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, and successors, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH, that whereas the Principal has submitted the accompanying bid, dated \_\_\_\_\_, 20\_\_\_\_, for the **FY 2011 Street Paving Project**,

NOW THEREFORE,

- (a) If said bid shall be rejected, or in the alternate
- (b) If said bid shall be accepted and the Principal shall properly execute and deliver to said City the appropriate contract documents, including the contract form and contract bond form, and shall in all respects fulfill all terms and conditions attributable to the acceptance of said bid.

Then this obligation shall be void, otherwise, it shall remain in force and effect, it being expressly understood and agreed that the liability of the Surety for any and all claims hereunder shall in no event exceed the amount of this obligation as herein stated.

The Surety, for value received, hereby agrees that the obligations of the said Surety and its bond shall be in no way impaired or affected by any extension of time within which said City accept such bid; and said Surety does hereby waive notice of any such extension.

IN WITNESS WHEREOF, the obligated parties have executed this instrument under their several seals this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, the name and the corporate seal of each corporate party being hereto affixed and these presents being duly signed by its undersigned representative, pursuant to the authority of the governing body.

IN PRESENCE OF:

\_\_\_\_\_  
(Individual or Partnership Principal)

SEAL

\_\_\_\_\_  
(Business Address)

ATTEST:

\_\_\_\_\_  
(Secretary )

\_\_\_\_\_  
(Corporate Principal)\*

\_\_\_\_\_  
(Corporate Surety)\*

\*Impress Corporate Seal

## PERFORMANCE AND PAYMENT BOND

Performance Bond and Payment Bond shall be submitted on standard AIA Form A312.

## CONTRACT

THIS CONTRACT, made and entered into on the \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, by and between the City of Panama City, Florida, party of the first part (hereinafter sometimes called the "City"), and \_\_\_\_\_ party of the second part (hereinafter sometimes called "Contractor"):

### WITNESSETH

That the parties hereto, for and in consideration of the covenants and agreements hereinafter set forth, mutually agree as follows, to wit:

1. That the contractor shall furnish all labor, materials, and equipment and perform all work in the manner and form provided by the contract documents covering the project of the City known and identified as **FY2011 Street Paving Project** for the aggregate amount being \_\_\_\_\_.
2. That the contractor shall begin the work to be performed under this contract on a day to be specified in a written order issued by the City, and shall fully complete all work hereunder within the time or times stated in the proposal.
3. That the City shall pay to the Contractor for the faithful performance of this contract, in lawful money of the United States, and subject to additions and deductions as provided in the Contract Documents, the total amount of his bid as set forth above at the times and in the manner stated in the General Covenants and Conditions of the Contract Documents.
4. It is further mutually agreed that if at any time after the execution of this contract and contract bond, the City shall deem the surety upon such bond to be unsatisfactory, or if for any reason such bond shall become inadequate to cover the performance of the work, the contractor shall, at his own expense, within five (5) days after the receipt of notice from the City to do so, furnish an additional bond/bonds in such form and amount and with such surety or sureties as shall be satisfactory to the City. In such event, no further payment to the Contractor shall be deemed to be due under this contract until such new or additional security shall have been furnished in a manner and form satisfactory to the City.
5. The contract documents are hereby defined as the advertisement for bids, the instructions to bidders, the proposal, the bid bond (or certified check), and contract, the contract bond, the general covenants and conditions, the special conditions, the specifications, the plans, and any addenda which may be issued. The terms and conditions of said contract documents are incorporated herein by reference and made part hereof as though fully set forth herein. The contract documents are complementary, so that a recital in one is tantamount to a recital in all, and the contractor specifically acknowledges that he has read and understands all of said contract documents.

IN WITNESS WHEREOF, the parties hereto have executed this contract in three counterparts, each of which shall be deemed an original contract, all as of this day and year first hereinbefore written.\*

CITY OF PANAMA CITY, FLORIDA  
(Party of the first part)

BY \_\_\_\_\_  
(Mayor)

ATTEST \_\_\_\_\_  
(City Clerk)

CITY SEAL

---

\_\_\_\_\_  
(Party of the second part)

BY \_\_\_\_\_  
(Title) \_\_\_\_\_

WITNESS \_\_\_\_\_

\*In the event the contractor is a corporation, there shall be attached to each counterpart a certified copy of a resolution of the board of directors of the corporation authorizing the officer who signs the contract and contract bond to do so in its behalf.



## SECTION 4 - GENERAL COVENANTS AND CONDITIONS

### 1. DEFINITIONS

When used in the contract documents (hereinafter defined):

- a. The term "Contract" means the contract executed by the local public agency and the contractor, of which these GENERAL CONDITIONS, PARTS I AND II, form a part.
- b. The masculine pronoun shall include the feminine and neuter, and the singular shall include the plural;
- c. "And" shall also mean "or" and "or" shall also mean "and", wherever the context or purpose so requires;
- d. "Person" shall mean and include any individual, combination of individuals, partnership, society, association, joint stock company, corporation, estate, receiver, trustee, assignee, referee, or any other person acting in a fiduciary or representative capacity, whether appointed by a court or otherwise;
- e. "City" shall mean the City of Panama City, Florida.
- f. "Owner" shall mean the City of Panama City, Florida;
- g. "Engineer" shall mean the person duly appointed by the Owner to undertake the duties and power herein assigned to the Engineer, acting either directly or through duly authorized representatives;
- h. "Owner's Representative" shall mean the Engineer;
- i. "Contractor" shall mean the person whose bid has been accepted and who has entered into a formal contract with the City to construct the project bid upon;
- j. "Bidder" shall mean any person who submits a proposal for construction of the project described in the advertisement for bids;
- (k) "Subcontractor" shall mean any person engaged by the Contractor to supply labor, materials, or equipment for use in the fulfillment of the Project;
- (l) "Contract Documents" shall mean and include the following:
  - (1) Advertisements for Bids
  - (2) Instructions to Bidders

- (3) Proposal (on prescribed form)
  - (4) Bid Bond (subject to approval by the City)
  - (5) Contract (on prescribed form)
  - (6) Contract Bond (on prescribed form)
  - (7) General Covenants and Conditions (Parts I and II)
  - (8) Special Conditions
  - (9) Specifications
  - (10) Plans
- (m) "Project" shall mean and include all construction for which the Contractor is responsible under the Contract Documents;
  - (n) The term "Project Area" means the area within which are the specified Contract limits of the Improvements contemplated to be constructed in whole or in part under this Contract.
  - (o) "Domestic," when applied to materials, shall mean materials or products produced within the continental limits of the United States.
  - (p) The term "Drawings" means the drawings listed in the Schedule of Drawings.
  - (q) The term "Technical Specifications" means that part of the Contract Documents which describes, outlines, and stipulates the quality of materials to be furnished; the quality of workmanship required; and the methods to be used in carrying out the construction work to be performed under this Contract.
  - (r) The term "Secretary" means the Secretary of Housing & Urban Development, or other person who may be at the time acting in the capacity or authorized to perform the functions of such secretary, or the authorized representative thereof.

## 2. INTENT OF CONTRACT DOCUMENTS

The Advertisement for Bids, the Instructions to Bidders, the Proposal, the Bid Bond (or certified check), the Contract Bond, the General Covenants and Conditions, the Special Conditions, the Specifications, the Plans, and any Addenda which may be issued, constitute the Contract Documents. It is understood that the Contractor has, by personal examination and inquiry, if necessary, satisfied himself as to all local

conditions as to the meaning, requirements and reservations of the Contract Documents, for no deviation will be allowed from the Engineer's Interpretation thereof after the letting.

These Contract Documents are complementary, so that recital in one is tantamount to a recital in all.

### 3. PLANS AND SPECIFICATIONS

The Plans, the Specifications, and Addenda thereto, issued prior to receiving bids, describe the Project, and all materials, workmanship, and dimensions must be in strict accord with them.

In case of conflict between requirements shown on the Plans and provisions of the Specifications, the Specifications shall take precedence over the Plans. Dimensions, shown in figures on the Plans, shall govern in case of any discrepancy between them and scaled dimensions.

The Contractor shall not take advantage of any apparent error or omission which may be found in the Plans or the Specifications and the Engineer shall be entitled to make such corrections therein and such interpretations thereof as he may deem necessary for the fulfillment of their intent.

The Contractor will be supplied with five copies of the Plans, the Specifications, and addenda thereto, and is to preserve them and have at least one copy of them accessible on the work at all times.

### 4. ALTERATIONS IN PLANS AND SPECIFICATIONS

The right is reserved for the Engineer to make, from time to time, such alterations in the Plans and Specifications or in the character of the work as he may consider necessary or desirable to complete the Project to his satisfaction and consistent with the general intention of the Contract Documents. Notice of every such alteration shall be given in writing to the Contractor, and no such alteration shall be considered as constituting a waiver of any of the provisions of the Contract Documents, or as nullifying or invalidating any of such provisions. Should any such alteration result in an increase or a decrease in the quantity or the cost of work or materials described in the Proposal, the total amount payable under the contract will be accordingly modified. If alterations are thus made, the time for completion of the Contract will be correspondingly modified, if the Contractor so requests before commencing the work attributable to such alterations. It is understood that such alterations are not to embrace work already done or materials in transit or in process of construction.

## 5. AUTHORITY OF ENGINEER

The supervision of the execution of this Contract is vested in the Engineer, and his instructions shall be carried into effect promptly and efficiently.

The Engineer shall in all cases determine the amount, quality, fitness and acceptability of the work and materials to be paid for, and shall decide finally and conclusively all questions or differences of opinion that may arise as to the interpretation of the Plans and Specifications or the fulfillment of the terms of the Contract. In the event of such question or difference of opinion, the decision of the Engineer is to be a condition precedent to the Contractor's right to receive any money for the work or the materials to which the question or difference of opinion relates.

If the Contractor considers any work demanded of him to be outside the requirements of this Contract, or if he considers any decision or ruling of the Engineer to be unfair, he shall immediately, upon such work being demanded or such decision or ruling being made, ask for written instructions or decision, whereupon he shall proceed without delay to perform the work or conform to the decision or ruling; and unless the Contractor finds such instructions or decisions to be satisfactory, he shall within ten (10) days after the receipt thereof, file a written protest with the City Manager, stating clearly and in detail his objections and the reasons therefor. Unless the Contractor shall file such written protest with the City Manager within such ten day period, he shall be deemed to have waived all grounds for such protest and to have accepted the requirements, decision or ruling of the Engineer as just and reasonable and as being within the scope of the Contractor's obligations under the Contract Documents.

The Engineer is to have free access to the materials and work at all times, for laying out, measuring and inspecting the same, and the Contractor is to afford him all necessary facilities and assistance for so long.

## 6. AUTHORITY AND DUTIES OF INSPECTORS

Inspectors, employed by the Engineer or City, will be authorized to inspect all work and materials which are to become a part of the completed Project. Inspectors will have no authority to revoke, alter or waive any requirements of the Specifications or to make any changes in the Plans. Each Inspector will be authorized to call the attention of the Contractor to any failure of the work to conform to the Plans or the Specifications, and will have authority to suspend the work affected until any questions at issue can be referred to and decided by the Engineer. The Inspector will have no authority to delay the Contractor by failure to inspect the work and materials with reasonable promptness.

## 7. LANDS AND RIGHT-OF-WAY

Lands to be furnished by the City for construction operations, for roads, or for other purposes, will be specifically shown on the drawings or provided for in the

Specifications. Should the Contractor find it necessary to use any additional land for his construction operations or for other purposes during the construction of the work, he shall provide for the use of such lands at his own expense.

Rights-of-way for work to be done under the Contract will be provided by the City. Nothing herein contained, however, and nothing marked on the drawings, shall be interpreted as giving the Contractor exclusive occupancy of the territory provided. When two or more Contracts are being executed at one time on the same or adjacent land in such a manner that work on one contract may interfere with that on another, the Engineer will decide which Contractor shall cease work, and which shall continue, or whether the work of both Contracts shall progress at the same time, and in what manner. When the territory of one Contract is a necessary or convenient means of access for the execution of another Contract, the Engineer may grant to the Contractor so desiring such privilege of access to the territory as the Engineer shall deem to be appropriate, and no such decision shall be made on the basis of any claim for delay or damage, except as provided in Section II hereof.

#### 8. MATERIALS, LABOR, AND EQUIPMENT

The Contractor shall furnish all necessary tools and construction equipment and shall employ sufficient and competent personnel to do the work in an expeditious and acceptable manner, giving preference whenever practicable to residents of Panama City, Florida. In the event that the Engineer shall notify the Contractor in writing that any person employed is, in the opinion of the Engineer, incompetent or disorderly or uses threatening or abusive language, or is otherwise unsatisfactory, such person shall be discharged at once and shall not be employed thereafter on the work.

The Contractor shall furnish all materials used in the construction of the Project and all equipment becoming a part of the Project, unless such materials or equipment are specifically stated in the Specifications as being furnished by the City. In the latter case, only the cost of installation of such materials or equipment shall be included in the contract price.

Where the Plans and Specifications designate the product of a particular manufacturer, the product specified is suitable for the intended use, but unless otherwise provided, articles or products of similar characteristics may be offered for the approval of the Engineer. Approval of substitutions will be based on manufacturer's specifications and/or shop drawings.

#### 9. RESPONSIBILITY OF THE CONTRACTOR

The Contractor shall have at all times as his agent on the site of the work a competent Level 2 FDOT Certified superintendent capable of reading and thoroughly understanding the Plans and Specifications. The Superintendent shall have full

authority to supply promptly such materials, tools, plant equipment, and labor as may be required.

The Contractor shall be responsible for the good condition of the work or materials until formal release from his obligations under the terms of his contract. He shall bear all losses resulting to him on account of the amount or character of the work, or the character of the grounds, being different from what he anticipated, or on account of the weather or the elements. He shall place sufficient lights and danger signals on or near the work from sunset to sunrise; shall erect suitable railings or other protective devices about unfinished work, open trenches, embankments, or other obstructions; shall provide all necessary watchmen on the work by day or by night for the safety of the public; and shall take all necessary precautions for preventing accidents or injuries to persons or property in or about the work.

In the event that the Contractor shall enter into subcontracts for any portion of the Project, he shall incorporate in each such subcontract all provisions, terms and conditions applicable to the Project which constitute obligations to be assumed and effected by him under the Contract Documents. Subcontracts shall be entered into with only those subcontractors in the submitted list, unless otherwise authorized in writing by the Engineer.

The Contractor shall indemnify and save harmless forever, the City of Panama City, Florida, and its agents, from all charges or claims resulting from such accidents or injuries or from any act, omission, or neglect by himself or his employees, as well as from all claims for patent rights or fees, or from claims relating to labor or materials furnished for the work. The Contractor shall become defendant in every suit brought against the City for any such amount as it may determine to be required to pay the expenses and damages arising from any of said causes, or in case no money is due, the Contractor's surety shall be held until such suits, actions, or claims for injuries or damages shall have been settled, and suitable evidence to that effect furnished to the City.

The Contractor shall at all times conduct the work in such manner and in such sequence as will insure the least practicable local interference. He shall not open up work to the prejudice of work already started, and the Engineer may require the Contractor to finish a section on which work in progress before work is started on any additional section.

The Contractor shall arrange his work and dispose of his materials so as not to interfere with the operations of other contractors engaged upon adjacent work, shall joint his work to that of other contractors in a proper manner and in accordance with the spirit of the Plans and Specifications, and shall perform his work in the proper sequence in relation to that of other contractors, all as may be directed by the Engineer.

## 10. INFORMATION AND DRAWINGS TO BE FURNISHED BY THE CONTRACTOR

Before proceeding with the erection of his construction plant, including the settling or placing thereof, and the erection of other temporary structures, the Contractor shall furnish the Engineer with such information and drawings as the Engineer may require.

The Contractor shall furnish such cost breakdowns as required by the Engineer, including a detailed estimate giving a complete breakdown of the contract price and a breakdown of the cost of various portions of the work for use in preparing monthly estimates. The cost breakdowns shall be physical items, with bond, permit fees, insurance, overhead, and other general costs and profit prorated to each item. No payment will be made to the Contractor until these breakdowns are submitted in a form satisfactory to the Engineer.

The Contractor shall furnish for the review and approval of the Engineer, four (4) copies of shop drawings required by either the General or Detailed Specifications and Plans. Such drawings shall be of such character that they may be used as fabrication drawings. Two (2) copies of the drawings will be retained by the Engineer and two (2) will be returned to the Contractor with the Engineer's mark of approval thereon, or will be marked to indicate changes necessary to effect compliance with the Specifications. When drawings are approved by the Engineer, they shall be as binding as any of the Contract Documents. Any errors or omissions on the shop drawings shall not relieve the Contractor of his responsibility. He shall correct such errors or omissions including any necessary additions or alterations to construction, at his expense, upon notification by the Engineer.

## 11. COMPLIANCE AND APPLICABLE LAWS

The Contractor shall comply in every respect with all applicable laws, regulations, and building and construction codes of the Federal Government, the State of Florida, the County of Bay, the City of Panama City, and shall obtain all such occupational licenses and permits as shall be prescribed by law.

## 12. SCHEDULE, TIME AND PERFORMANCE AND LIQUIDATED DAMAGES

Immediately after the execution of the Contract and Contract Bond, the Contractor shall deliver to the Engineer, in a form satisfactory to him, a construction progress schedule showing dates of commencement and completion of each of the various subdivisions of the Project.

The Contractor shall begin the Project with an adequate force and sufficient equipment and facilities within ten (10) days of the date stated in the written Notice to proceed issued and served upon him by the Engineer. If the contractor chooses to begin work before the ten (10) days expire, then the start date becomes when work actually

commences. Thereafter, the Contractor shall prosecute the work diligently, without any avoidable interruption and at such rate and with such complement of labor, materials, and equipment as will complete the Project with the time stated in the Proposal. **No work, however, shall be done between the hours of 7:00 p.m. and 6:00 a.m., nor on Saturday or Sunday or City holidays, except such work as is necessary for the proper care and protection of the work already performed, or except in case of an emergency, in which event the permission of the Engineer to do such work shall be secured.**

Since time is of the essence of this Contract, in the event that the work to be done hereunder is not completed within the times hereinbefore specified (and such additional extension of time as the Engineer may have granted), the City will retain from the compensation otherwise to be paid to the Contractor the sum of **\$500.00 for each day** thereafter (Sundays and holidays included) that the work remains uncompleted, which sum shall represent the actual damages which the City will have sustained per day by failure of the Contractor to complete the work within said specified times, it being agreed that said sum is not a penalty but is the stipulated amount of damage sustained by the City in the event of such default by the Contractor. Liquidated damages shall also be incurred at **\$300.00 each day** upon Contractors failure to obtain Final Completion certification within 45 days of Substantial Completion date.

Should a delay in the work be caused by an act of God, war, strike, action of the City, or other cause beyond the control of the Contractor, he shall within five (5) calendar days of the commencement of the delay make a written claim for an extension in contract time. If, in the opinion of the Engineer, the claim is justified, an extension in contract time will be allowed equal to the length of the delay. The Engineer shall not consider delays caused by late delivery of equipment or material to be beyond the control of the Contractor and hence shall not allow an extension of time for them unless written evidence is furnished that they were caused by acts of God, war, strikes or action of the City.

13. INSURANCE TO BE CARRIED BY CONTRACTOR

The Contractor shall not begin work under the contract until after he has obtained all of the insurance herein described and such insurance has been approved by the City, nor shall the Contractor permit any subcontractor to begin work until after similar insurance to cover the subcontract has been obtained and approved.

The Contractor, and any of his subcontractors, shall, throughout the life of the Contract, procure and maintain Workers' Compensation insurance, and comply in every respect with the requirements of the statutes of the State of Florida relative to Workmen's Compensation Insurance. The contractor shall be responsible for compliance by every subcontractor with these requirements.

The Contractor shall procure and shall maintain during the life of the Contract:

(A) Commercial General Liability Insurance with the following limits:



- i. General Aggregate Limit (other than Products/Completed Operations) \$1,000,000.
- ii. Products/Completed Operations Aggregate Limit \$1,000,000.
- iii. Personal and Advertising Injury Limit \$500,000.
- iv. Each Occurrence Limit \$1,000,000.
- v. Fire Damage Limit \$50,000.
- vi. Medical Expense limit \$5,000.

No coverage found in the standard ISO commercial general liability form shall be excluded from insurance provided by the contractor or subcontractors.

(B) (Reserved)

(C) Commercial Automobile Liability Insurance with limits of \$500,000 if written on a combined single limit basis, or \$250/500/100,000 if written on split limit basis.

Each such policy of insurance shall name the City, as well as the Contractor, as the insured. The Contractor shall require each subcontractor to maintain such Workers' Compensation Insurance, Commercial General Liability Insurance, Commercial Automobile Insurance, and Completed Value Builder's Risk Insurance (if required in paragraph B above) to cover the work done under a subcontract.

The Contractor shall furnish the Engineer with satisfactory proof of insurance herein described.

#### 14. EXTRA WORK AND PAYMENT THEREFORE

The Contractor shall perform unforeseen work, for which there is no price included in the Proposal, wherever it is deemed necessary or desirable by the Engineer to complete satisfactorily the Project as contemplated, and such extra work shall be performed promptly in accordance with the Specifications and as directed by the Engineer; provided, however, that before any extra work is begun, a written order from the Engineer to do the work shall be given to the Contractor. No extra work will be paid for unless ordered in writing. Extra work and material will ordinarily be paid for in a lump sum or at unit prices agreed to in writing by the Engineer and the Contractor before the extra work is ordered.

The performance of any extra work or the furnishing of any extra material which, in the judgement of the Engineer, is of like character to and susceptible of classification under a unit price item of the Contract shall, if the order of the Engineer shall so provide, be paid for at the unit price bid for such item.

All extra work performed hereunder will be subject to all of the provisions of the Contract.

Whenever, in the judgement of the Engineer, such extra work or such extra material is

not of like character to and susceptible of classification under a unit price item of the Contract, and it is impracticable because of the nature of the work, or for any other reason, to fix the price before the extra work is issued, extra work and material will be paid for in the following manner:

- (a) For all labor, including a foreman in direct charge of the specified operations, the Contractor shall receive a sum equal to the current local rate of wages for every hour that the labor is actually engaged in such work, to which shall be added an amount equal to fifteen (15) percent of such sum, and the total thereof shall be full compensation to the Contractor for general supervision and for furnishing and repairing small tools and ordinary equipment used in doing the Extra work. In addition, the Contractor shall be paid the actual cost of social security taxes, unemployment insurance, workmen's compensation insurance and contractor's public liability, property damage and builder's risk insurance involved in such Extra Work, based on the actual wages paid to such labor.
- (b) For all materials used, the Contractor shall receive the actual cost of such materials, including freight charges as shown by original receipted bills, to which cost shall be added an amount equal to 10 percent thereof.
- (c) For any construction equipment or special equipment including fuel and lubricants therefor, required for the economical performance of Extra Work, the Engineer shall allow the Contractor a rental price, to be agreed upon in writing before such Work is begun, for every hour that such construction equipment or special equipment is actually operated on the work. Such hourly rental price shall not exceed 1/176 part of the monthly rate stated for such equipment in the latest edition of the "Compilation of Rental Rates for Construction Equipment" by Associated Equipment Distributors.

The Contractor's representative and the Inspector shall compare records of Extra Work done at the end of each day. Such records shall be made in duplicate upon a form provided for such purpose by the Inspector, and shall be signed by both the Inspector and the Contractor's representative, one copy being submitted to the Engineer and the other being retained by the Contractor.

All claims for Extra Work done shall be submitted by the Contractor upon certified statements, to which shall be attached the original receipted bills covering the costs of and freight charges on all materials used in such work, and such statements, accompanied by copies of the orders authorizing the performance of the work, shall be submitted to the Engineer for inclusion in the estimate of the month in which the work was actually done.

If required, the Contractor shall produce any books, vouchers, other records, or memoranda which will assist the Engineer in determining the true, necessary cost of work and materials to be paid for on a cost-plus basis.

15. OMITTED ITEMS AND PAYMENT THEREFORE

The City shall have the right to cancel those portions of the Contract relating to the construction of any item provided for therein. Such cancellation shall entitle the Contractor to payment of a fair and equitable amount covering all items of cost incurred by him prior to the date of cancellation or suspension of the work by order of the Engineer. The Contractor shall be allowed a profit percentage on the materials used and on construction work actually performed, at the same rates as provided for "Extra Work" but no allowance will be made for anticipated profits. Acceptable materials ordered by the Contractor or delivered on the work prior to the date of such cancellation or suspension shall be purchased from the Contractor by the City at actual cost and shall thereupon become the property of the City.

16. INSPECTING AND TESTING MATERIALS

The inspection and testing of materials and finished articles to be incorporated in the work shall be made by FDOT Certified bureaus, laboratories or agencies selected by the Contractor and approved by the Engineer, unless otherwise specifically provided for in the Specifications. The Contractor shall submit such samples, or such special or test pieces of materials, as the Engineer may require. The cost of the materials or finished articles which may become damaged or destroyed in making the necessary tests to determine whether or not specification requirements are met shall be borne by the Contractor. The Contractor shall not incorporate any material or finished article into the work until the results of the inspections or tests are known and he has been notified by the Engineer that the material or finished article is accepted. All materials must be of the specified quality and be equal to the approved sample, if a sample has been submitted. Materials or finished articles rejected by the Engineer shall be promptly removed from the site of the work. The City reserves the right to retain independent bureaus, laboratories or agencies to verify inspection and testing of materials.

17. DEFECTIVE WORK OR MATERIALS

If at any time before final acceptance of the Project defects shall be found in the work or materials, the Contractor shall correct such defects at his expense, forthwith removing and disposing of all defective or unsatisfactory work or materials and supplying others in accordance with the Plans and Specifications. Previous inspection of such work will not relieve the Contractor of the responsibility for good work or materials, although the defects may have been overlooked by the Engineer or may have been the result of damage from any cause. Neglect, thus, to make good defective or condemned work or materials shall be sufficient grounds for the Engineer to order the work discontinued and to have the defects completely remedied at the expense of the contractor. All materials are to be inspected before use and the contractor shall notify the Engineer in time to

enable him to inspect any inaccessible work or materials before being covered. The Contractor shall furnish necessary personnel and facilities for inspection of such work or materials after being covered, if so required. If the work or materials are then found to be defective, the cost of inspection shall be borne by the Contractor, otherwise by the City.

#### 18. UNAVAILABILITY OF MATERIALS

If the Contractor is unable to furnish or use any of the materials or equipment specified, because of any order by a governmental agency limiting the manufacture of use, or because of the supply situation in the general market for such material or equipment, the Contractor shall offer substitutes therefor. The substitutes shall be suitable for the purpose, considering the factors of quality, serviceability, appearance, and maintenance. No substitute shall be used until it has been approved by the Engineer.

No consideration will be given to the use of substitutes on account of market conditions unless the Contractor demonstrates that for the item in question, he placed his order and submitted shop drawings without delay, that he has shown due diligence in attempting to locate the item as specified, and that the unavailability is due to market conditions in general throughout that particular industry.

If substitutes are used in the work, the compensation to be paid the Contractor will be subject to review and adjustment.

#### 19. PROPERTY PROTECTION

Buildings, sidewalks, fences, shade trees, lawns and all other improvements shall be duly protected by the Contractor. Property obstructions, such as sewers, drains, water or gas pipes, conduits, railroads, poles, walls, posts, bridges, etc., shall be carefully protected from injury and shall not be displaced if avoidable.

If the construction of the Project shall render it necessary to move property, including privately owned public utility facilities located in public streets, highways or other public places, and all other types of property, the removal thereof shall be at the expense and risk of the Contractor. The Contractor is to obtain the consent of the owners or others in charge, and, before commencing, shall confer with them as to the best manner of protecting the interests involved.

Except as specifically provided in the Specifications, the Contractor shall not do any work that would affect any railway track, pipeline, telephone, telegraph, or electric transmission line, or other structure, nor enter upon the right-of-way or other lands appurtenant thereto, until notified by the Engineer that the City has secured authority therefore from the proper parties.

The Contractor shall not be entitled to any extension of time or any extra compensation

on account of any postponement, interference or delay except as provided in Section 12 hereof.

The City retains ownership of any materials encountered or being replaced under the contract and the Contractor, when so requested, shall carefully remove them and leave them neatly piled or stored at the site of the work for salvage by City forces, except when otherwise provided by the Specifications.

#### 20. USE OF EXPLOSIVES

No blasting will be done except upon approval by the Engineer and under his specific directions.

When the use of explosives is approved by the Engineer as necessary for the prosecution of the work, the Contractor shall use the utmost care so as not to endanger life or property, and, whenever directed, the number and size of the charges shall be reduced. All explosives shall be stored in a secure manner and all such storage places shall be clearly marked "DANGEROUS EXPLOSIVES" and shall be in care of competent watchmen.

#### 21. SANITARY PROVISION

The Contractor shall provide and maintain, at his own expense, in a sanitary condition, such accommodations for the use of his employees as is necessary to comply with the requirements and regulations of the State of Florida Department of Health and Rehabilitative Services or Bay County Health Department. He shall commit no public nuisance. The Contractor shall furnish an adequate supply of drinking water for his employees.

#### 22. CONTRACTOR RESPONSIBILITY REGARDING PAYROLLS AND ESTIMATES

Each week each prime contractor must submit to the Owner the certified weekly payrolls for his contract (this includes his subs). Contractors must study thoroughly and follow closely all labor standards requirements of the Contract Documents and make certain all requirements of the Contract are inserted into all his subcontracts and understood by all. Monthly estimates must be submitted to the Owner also according to Section 27 of the General Covenants and Conditions. Payroll records, including a copy of the payrolls of each subcontractor, will be maintained during the course of the work by the General Contractor. **No invoices for payment work will be accepted by the City if current certified payrolls have not been submitted.**

#### 23. CLEANING UP SITE OF WORK

As soon as the work in any one locality is completed, the accumulated rubbish or surplus materials thereat shall be promptly removed. This shall be performed on a daily

basis. The Contractor shall also restore in an acceptable manner all property, both public and private, which has been displaced or damaged during the prosecution of the work, and shall leave the site and vicinity unobstructed and in a neat and presentable condition. This shall include restoring displaced soil from sweeping operations.

In the event of delay exceeding two (2) days after written notice is given to the Contractor by the Engineer to remove such rubbish or materials, or to restore displaced or damaged property, the Engineer may employ such labor and equipment as he may deem necessary for the purpose, and the cost of such work, together with the cost of supervision, shall be charged to the Contractor and shall be deducted from any money due him on the monthly or final estimate. No contract shall be considered as having been completed until all rubbish and surplus materials have been removed and disposed of properly.

#### 24. ASSIGNMENT OF CONTRACT

No assignment of the Contract, or of any part thereof, or of any monies due or to become due thereunder, shall be made by the Contractor without the prior written approval of the City, which approval will be given only after the surety on the Contract bond has informed the City in writing that it has no objection to such assignment being made.

In the event that the Contractor shall undertake to assign all or any part of any monies due or to become due under the contract, the instrument of assignment shall contain a provision substantially to the effect that it is agreed that the right of the assignee in and to any of such monies shall be subject to the prior liens or claims of all persons for services rendered or materials supplied for the performance of all work embraced by the Contract.

#### 25. ANNULMENT OF CONTRACT BY CITY

If the Contractor shall fail to begin work under the Contract within the time specified, or shall fail to perform the work with sufficient workmen and equipment or with sufficient materials to insure the prompt completion of the work, or shall perform the work unsatisfactorily, or shall discontinue the prosecution of the work, or shall become insolvent or be declared a bankrupt, or shall commit any act of bankruptcy or insolvency, or shall make an assignment for the benefit of creditors or from any other cause whatsoever shall not carry on the work in a acceptable manner, the Engineer may give notice in writing to the Contractor and to his surety of such delay, neglect or default, specifying the conditions pertaining thereto and directing the Contractor to correct same. If the Contractor shall not correct such conditions with a period of five (5) days after receipt of such notice, the City shall upon written certificate from the Engineer reciting the facts of such delay, neglect, or default and the failure of the Contractor to comply with the directions given in such notice, have full power and authority, without violating the Contract, to take the prosecution of the work out of the hands of the

Contractor, to appropriate or use any and all materials or equipment on the ground as may be suitable and acceptable, to enter into an agreement with another contractor for the completion of the Project, or to use such other methods as, in the opinion of the City, shall be required for the completion of the Project in an acceptable manner. All costs and charges incurred by the City, together with all costs of completing the work under contract, shall be deducted from any monies due or which may become due to the Contractor. In the event that the expense so incurred by the City shall be less than the sum which would have been payable under the Contract if the work had been completed by the Contractor, the Contractor shall exceed the sum which would have been payable under the Contract, the Contractor and the surety shall be liable and shall pay to the City the amount of such excess.

## 26. SCOPE OF PAYMENT

The Contractor shall receive and accept the compensation as herein provided in full payment for furnishing all materials, labor, tools, and equipment, and for performing all work required to complete the Project under the Contract, and also in full payment for all loss or damage arising from the nature of the work or from the action of the elements, or from any unforeseen difficulties which may be encountered during the prosecution of the work until its final acceptance by the City.

Only net quantities of finished work will be measured and paid for.

For each of the items included and for which a unit price is stated in the Proposal, the aggregate amount to be paid therefor by the City at such unit price shall be the measured amount of such item incorporated in the completed Project by the Contractor and acceptable to the Engineer.

The unit prices stated in the Proposal include all costs and expenses for labor, equipment, materials, commission, transportation charges and expenses, patent fees and royalties, removing crossing or other obstructions, protecting or maintaining pipes, drains, culverts, railroad tracks, buildings, bridges, furnishing all stakes, batter boards and templates, common labor for staking out grades and lines and ordinary labor for handling materials during inspection, replacing any property disturbed, together with any and all other costs and expenses for performing and completing the work as specified.

It is mutually agreed that, due to latent field conditions which cannot be foreseen at the time of advertising for bids, adjustment of Plans to such field conditions will be necessary during construction, and therefore such changes in the Plans shall be recognized as constituting a normal and expected margin of adjustment, not unusual and not involving nor permitting any change or modification of unit prices, provided only that resulting overruns or underruns from the quantities stated in the Proposal do not exceed a reasonable percentage. Changes involving any major item in an amount not more than twenty-five (25) percent of the quantities listed in the Proposal shall be construed as constituting such a reasonable percentage, in which case payment will be

made for the revised quantities at the unit price bid in the Proposal. A major item is construed to be any item the contract price for which amounts to at least five (5) percent of the total contract price. Changes involving any minor item in an increased amount not more than two hundred (200) percent of the quantities listed in the Proposal shall also be construed as constituting such a reasonable percentage, in which case payment will be made for the revised quantities at the unit price bid in the Proposal. A minor item is construed to be any item the contract price for which amounts to less than five (5) percent of the total contract price.

## 27. PARTIAL AND FINAL PAYMENT

At the end of each calendar month, the Contractor shall certify and submit to the Engineer, an estimate of the amount and fair value of the work done, as a basis for partial payments therefore. **Such applications shall be submitted on standard AIA Document G702 (Application and Certificate for Payment).** When satisfactory progress has been made, and whenever the monthly estimate shows that the value of the work completed during the previous month exceeds \$1,000.00 in amount, the Engineer will issue a certificate that such work has been completed and the value thereof, and the City will then issue a voucher to the Contractor in the amount of ninety (90) percent of the value of the work completed as certified, less any sums that may be retained or deducted by the City under the terms of any of the Contract Documents. Payments on estimates of the calendar month may be expected on or about the 15th of the following month. The ten (10) percent which is deducted each month is reserved by the City as partial guaranty to it of the faithful execution of the Contract by the Contractor.

It is understood and agreed that no partial payment shall be made to the Contractor until the Contractor shall furnish to the Engineer either the original or a duly certified copy of his and each of his subcontractor's payrolls and satisfactory proof of payment of, or satisfactory releases therefor, of all bills for services, materials, tools, supplies, and subcontractors.

As a consideration for such payment of ninety (90) percent, the City shall have the right to enter upon and put into proper service, any or all parts of the work which may be in condition for use. No claim or charge is to be made by the Contractor for such use, nor is such use to be construed as an acceptance by the City of any part of the work so used.

Upon satisfactory completion of the work as determined by final inspection, and when the final estimate has been prepared and certified by the Engineer, he will submit to the City a final certificate stating that the work has been completed and the amount, based on the final estimate, remaining due to the Contractor. The City will then accept the work as fully completed and will, not later than sixty (60) days thereafter, pay the Contractor the entire sum so found due thereunder after deduction of all previous payments and all percentages and amounts to be kept and retained under provisions of



this Contract; provided however, and it is understood and agreed, that as a precedent to receiving final payment, the Contractor shall submit to the City a sworn affidavit that all bills for labor, service, materials, and subcontractors have been paid and that there are no suits pending in connection with the work done or labor and materials furnished under the Contract. All prior certificates and estimates, being approximate only, are subject to correction in the final estimate and payment. Contractor shall submit to the City a one (1) year warranty on total project.

28. NOTICE AND SERVICE THEREOF

All notices, demands, requests, instructions, approvals, and claims shall be in writing. Any notice to or demand upon the Contractor shall be sufficiently given if delivered to the office of the Contractor specified in the Proposal (or to such other office as the Contractor may from time to time designate to the Engineer in writing), or if deposited in the United States mail in a sealed, postage-prepaid envelope, or if delivered, with charges prepaid, to any telegraph company for transmission, in each case addressed to such office.

All notices or other papers required to be delivered by the Contractor to the City or to any of its representatives shall, unless otherwise specified in writing to the Contractor, be delivered to the office of the City Manager, City Hall, Panama City, Florida, and any notice to or demand upon the City shall be sufficiently given if delivered to the office of said City Manager, or if deposited in the United States mail in a sealed, postage-prepaid envelope, or delivered with charges prepaid to any telegraph company for transmission, in each case addressed to said City Manager.

Any such notice or demand shall be deemed to have been given or made as of the time of actual delivery, or in the case of mailing, when the same should have been received in due course of post, or in the case of telegrams, at the time of actual receipt thereof.

29. RECORD DRAWINGS (Reserved)

## SECTION 6

### STABILIZATION

#### 6.1 INTENT:

It is the intent of these specifications to provide supplemental information to the contents of the construction drawings on the quality of materials, execution, measurement, etc. These specifications are general in nature and may contain products and requirements which are not applicable to the project. Discrepancies between these specifications and the construction drawings, either imagined or real, shall be brought to the attention of the Owner's Engineer for clarification.

#### DESCRIPTION OF WORK

Extent of work is indicated on drawings and shall consist of the stabilizing of the pavement bed to provide a firm and unyielding subgrade/subbase, having the required bearing value specified.

Stabilizing includes but is not limited to:

- Preparation of stabilized subgrade for pavements.
- Preparation of stabilized subbase for pavements.

#### 6.2 DEFINITIONS

Subbase: A bed of material laid under a road or pavement base on existing grade.

Subgrade: The natural ground beneath a road or pavement base.

The terms subbase and subgrade may be used generically in certain instances to indicate the material beneath a road or pavement base without regard as to whether the material is naturally occurring or not. It is the intent of these specifications to make a distinction where a distinction is warranted. However, on the construction plans such a distinction may not be shown.

#### 6.3 RELATED WORK

- Section 8 - Earthwork
- Section 14 - Asphaltic Concrete

#### 6.4 QUALITY ASSURANCE

Codes and Standards: Perform all work in compliance with applicable requirements of

governing authorities having jurisdiction.

Comply with the provisions of the following codes and standards, except as otherwise shown or specified:

"Standard Specifications for Road and Bridge Construction", Florida Department of Transportation, latest edition. Herein specified or shown on the plans as "Section XXX, FDOT Standard Specifications".

Testing and Inspection: Contractor will engage soil testing service for quality control testing during stabilizing operations.

It will be the responsibility of the Contractor to coordinate all testing and inspections. The Contractor shall notify the Owner's Engineer, testing service and applicable agency inspectors 48 hours in advance of testing and inspections.

## 6.5 SUBMITTALS

Test Reports: Submit following applicable reports directly to Engineer from the testing services with copy to Contractor: Test reports on borrow material; field density test reports; optimum moisture-maximum density curves; gradation curves; bearing Test (LBR) for stabilized subbase/subgrade material.

## 6.6 JOB CONDITIONS

Site Information: Data on indicated subsurface conditions are not intended as representations or warranties of accuracy or continuity between soil borings. It is expressly understood that Owner will not be responsible for interpretations or conclusions drawn therefrom by Contractor. Data is made available for convenience of Contractor.

Additional test borings and other exploratory operations may be made by Contractor at no cost to Owner.

## 6.7 PART 2 - PRODUCTS

General: Unless noted otherwise on the plans, the type of material to be used for stabilization, Commercial or Local, shall be at the Contractor's option and no separate payment for materials will be made. Bearing value determinations will be made by the Limerock Bearing Ration Method (LBR) for Type B Stabilization in accordance with Section 160, FDOT Standard Specifications.

## 6.8 COMMERCIAL MATERIALS

Limerock and Limerock Overburden: Material shall contain a percentage of carbonates of calcium and magnesium of at least 70, and the plasticity, index shall not exceed 10. The gradation of both commercial limerock and limerock overburden shall be such that

97 percent of these materials will pass a one-inch sieve.

Crushed Shell: Crushed shell shall be mollusk shell (i.e. oysters, mussels, clams, cemented coquina, etc.). Steamed shell will not be permitted. The shell shall meet the following requirements.

As a minimum, 97 percent by weight of the total material shall pass a 3 ½ inches screen and at least 50 percent by weight of the total material shall be retained on the No. 4 sieve.

Not more than 20 percent by weight of the total material shall pass the No. 200 sieve. The determination of the percentage passing the No. 200 sieve shall be made by washing the material over the sieve.

In the event that the shell meets the above requirements without crushing, crushing will not be required.

## 6.9 LOCAL MATERIALS

Local materials used for stabilization may be high bearing-value soils or, if approved by the Owner's Geotechnical engineer, sand-clay material. The material passing the No. 40 mesh sieve shall have a liquid limit not greater than 30 and a plasticity index not greater than 10.

No Blending of materials to meet these requirements will be permitted unless authorized by the Owner's Geotechnical Engineer in writing. When blending is permitted the blended material shall be tested and approved prior to being placed.

## 6.10 PART 3 - EXECUTION

### GENERAL

Stabilization shall be in accordance with Section 160, FDOT Standard Specifications, for Type B Stabilization, unless noted otherwise.

Prior to the beginning of stabilization operations, the area to be stabilized shall have been constructed to an elevation such that upon completion of stabilizing operations the completed stabilized area will correspond to the lines, grades and cross sections shown in the plans.

The area shall be stabilized in the necessary number of courses corresponding with the equipment and methods being used to provide the required uniformity, particle size limitation, compaction and other desired results.

## 6.11 APPLICATION

When additive stabilization materials are required, the designated quantity shall be spread uniformly over the area to be stabilized.

Commercial Stabilization material shall be spread by the use of mechanical material spreaders except that where use of such equipment is not practicable other means of spreading may be used, but only upon written approval by the Owner's Geotechnical Engineer of the proposed alternative method.

## 6.12 MIXING

Mixing shall be done with rotary tillers, or other equipment meeting the approval of the Owner's Geotechnical Engineer. The area to be stabilized shall be thoroughly mixed throughout the entire depth and width of the stabilization limits.

The mixing operations, as specified, will be required regardless of whether the existing soil, or any select soils placed within the limits of the stabilized sections, have the required bearing value without the addition of stabilizing materials, unless an alternate is approved in writing by the Owner's Geotechnical Engineer.

## 6.13 MAXIMUM PARTICLE SIZE

At the completion of mixing, all particles of material within the limits of the stabilization area shall pass a 3 ½ inch ring. Any particles not meeting this requirement shall be removed from the stabilized area or shall be removed from the stabilized area or shall be broken down so as to meet this requirement.

## 6.14 COMPACTION

After mixing operations have been completed and requirements for bearing value, uniformity and particle size have been satisfied, the stabilized area shall be compacted to 98 percent AASHTO T-180, unless shown otherwise on plans. The materials shall be compacted at a moisture content permitting the specified compaction. If the moisture content of the material is improper for attaining the specified density, the moisture content shall be modified by wetting or drying until the proper moisture content for the specified compaction is reached.

## 6.15 FINISH GRADING

The completed stabilized area shall be shaped to conform with the finished lines, grades and cross-section indicated in the plans.

## 6.16 REQUIREMENTS FOR CONDITION OF COMPLETED SUBGRADE

After stabilization and compaction operations have been completed, the area shall be

firm and substantially unyielding, to the extent that it will support construction equipment and will have the specified bearing value.

All soft and yielding material, and material which will not compact readily, shall be removed and replaced with suitable material and the whole area brought to line and grade, with proper allowance for compaction.

#### 6.17 MAINTENANCE OF COMPLETED SUBGRADE/SUBBASE

The completed subgrade/subbase shall be maintained free from ruts, depressions and other damage. It shall be the responsibility of the contractor to maintain the required density until the subsequent base material is in place. Such responsibility shall include any repairs, replacement, etc., of curb, curb and gutter, sidewalk, etc., which may be required in order to re-compact the area in the event of underwash or other damage occurring to the previously compacted area. Any such work shall be provided by the contractor at no cost to the owner.

#### 6.18 BEARING VALUE REQUIREMENTS

Bearing value samples will be obtained and tested by the Contractor's Geotechnical Engineer. In the event the bearing value obtained is more than 5 points below the required value shown on the plans, additional stabilizing material shall be spread and mixed in accordance with these specifications. This reprocessing shall be done for the full width of the pavement and longitudinally for a distance of 50 feet beyond the limits of the area in which the bearing value is deficient, unless directed otherwise by the Owner's Geotechnical Engineer.

#### 6.19 PART 4 - MEASUREMENT AND PAYMENT

General: The contract unit price for the various items shall be compensation in full for furnishing all materials, labor, equipment, tools and incidentals necessary for completion in every detail in accordance with the plans and specifications. There will be no direct payment for clean-up and restoration of property.

Stabilized Subgrade/Subbase: Unless specifically shown as a separate line item, there will be no direct payment for stabilization. Full compensation for this work will be included in the contract price for earthwork when no stabilization line item is provided in the bid schedule.

END OF SECTION 6

## SECTION 7

### SITE PREPARATION

#### 7.1 INTENT:

It is the intent of these specifications to provide supplemental information to the contents of the construction drawings on the quality of materials, execution, measurement, etc. These specifications are general in nature and may contain products and requirements which are not applicable to the project. Discrepancies between these specifications and the construction drawings, either imagined or real, shall be brought to the attention of the Owner's Engineer for clarification.

#### 7.2 DESCRIPTION OF WORK:

Extent of work shall be as required to prepare site for installation and construction of the improvements shown on plans.

Site preparation includes, but is not limited to: Protection of existing trees; removal of trees and other vegetation; topsoil stripping; clearing and/or grubbing; removing above-grade improvements; removing below-grade improvements; disposal of all products and debris not required.

The Contractor shall, at all times, observe and comply with all federal, state, and local laws, ordinances, orders, decrees, and regulations.

#### 7.3 QUALITY ASSURANCE:

Codes and Standards: Perform all work in compliance with applicable requirements of governing authorities having jurisdiction.

Comply with the provisions of the following codes and standards, except as otherwise shown or specified:

"Standard Specifications for Road and Bridge Construction", Florida Department of Transportation, latest edition. Herein specified or shown on the plans as "Section XXX, FDOT Standard Specifications".

#### 7.4 JOB CONDITIONS:

Underground Utilities: The plans show certain features of topography and certain underground utilities, but they do not purport to show in complete detail all such lines or obstructions. Such topography and notes on the plans were inserted from records available and are for the Contractor's convenience only and shall not be used as a basis for claims of extra compensation. Whenever necessary to determine the location of existing pipes, valves, or other underground structures, the Contractor shall examine all

available records and shall make all explorations and excavations for such purpose. Any damage to existing facilities resulting from the Contractor's operations shall be immediately repaired by the Contractor at no cost to the Owner.

**Traffic:** Conduct operations to ensure minimum interference with roads, streets, walks, and other adjacent occupied or used facilities. Do not close or obstruct streets, walks, or other occupied or used facilities without permission from authorities having jurisdiction. Maintain traffic in accordance with Section 102, FDOT Standard Specifications.

**Protection of Existing Improvements:** The Contractor shall be responsible for the preservation of all existing improvements, public or private, on or adjacent to the site, except those items indicated for removal.

The Contractor shall protect from disturbance or damage all land monuments and property markers. The Contractor shall protect improvements on adjoining properties and on Owner's property. The Contractor shall restore damaged improvements to their original condition, as acceptable to parties having jurisdiction.

**Protection of Existing Trees and Vegetation:** Protect existing trees, and other vegetation indicated to remain in place, against unnecessary cutting, breaking, crushing, or skinning of roots, skinning and bruising of bark, smothering of trees by stockpiling construction materials or excavated materials within drip lines, excess foot or vehicular traffic, or parking of vehicles with drip line. Provide temporary guards to protect trees and vegetation to be to be left standing.

Water trees and other vegetation to remain within limits of contract work as required to maintain their health during course of construction operations.

Provide protection for roots over 1-1/2" diameter cut during construction operations. Coat cut faces with an emulsified asphalt or other acceptable coating formulated for use on damaged plant tissues. Temporarily cover exposed roots with wet burlap to prevent roots from drying out; cover with earth as soon as possible.

Repair or replace trees and vegetation indicated to remain, which are damaged by construction operation, in a manner acceptable to Owner's Engineer. Employ licensed arborist to repair damages to trees and shrubs.

**Improvements on Adjoining Property:** Authority for performing removal and alteration work on property adjoining Owner's property will be obtained by Owner prior to award of contract. Contractor shall obtain copy of authorization prior to beginning work.

Extent of work on adjacent property is indicated on Drawings.

The Contractor shall not enter upon private property for any purpose without first obtaining permission from the owners and lessees.



Salvageable Improvements: Carefully remove items indicated to be salvaged, and store at the direction of the Owner.

## 7.5 SITE CLEARING

General: Remove trees, shrubs, grass, and other vegetation, improvements, or obstructions interfering with installation of new construction. Removal shall be in accordance with Section 110, FDOT Standard Specifications.

Remove such items elsewhere on site or premises as specifically indicated. Removal includes digging out stumps and roots.

Carefully and cleanly cut roots and branches of trees indicated to be left standing, where such roots and branches obstruct new construction.

Topsoil: Topsoil is defined as friable clay loam surface soil found in a depth of not less than four inches. Satisfactory topsoil is reasonably free of subsoil, clay lumps, stones, and other objects over two inches in diameter, and without weeds, roots, and other objectionable material.

Strip topsoil to whatever depths encountered in a manner to prevent intermingling with underlying subsoil or other objectionable material.

Remove heavy growths of grass from areas before stripping.

Where trees are indicated to be left standing, stop topsoil stripping a sufficient distance to prevent damage to main root system.

If desired by the Owner, stockpile topsoil for reuse. Material shall be stockpiled in temporary storage piles in areas shown, or where directed. Construct storage piles to freely drain surface water. Cover storage piles if required to prevent wind-blown dust.

Clearing and or Grubbing: Clear site of trees, shrubs, and other vegetation, except for those indicated to be left standing.

Completely remove buildings, timber, brush, stumps, roots, rubbish, and debris, and all other obstructions resting on or protruding through the ground surface. Unless noted otherwise herein or on plans, extent of work shall be within the limits of the right-of-way.

In all areas where excavation is to be done and where the excavated material is to be used in the construction of roadway embankment or structures, and in all areas where roadway embankments or structures will be constructed, roots and other debris shall be removed to a depth of at least one foot below existing grade. The surface shall then be plowed to a depth of at least six inches, and all roots thereby exposed shall be removed to a depth of at least one foot.

Use only hand methods for grubbing inside drip line of trees indicated to be left standing.

Fill depressions caused by clearing and grubbing operations with satisfactory soil material, unless further excavation or earthwork is indicated.

Place fill material in horizontal layers not exceeding 6" loose depth and thoroughly compact to a density equal to adjacent original ground.

Removal of Improvements: Remove existing above-grade and below-grade improvements necessary to permit construction and other work as indicated.

Abandonment or removal of certain underground pipe or conduits may be shown on the drawings and is included under work of those sections. Removal of abandoned underground piping or conduit interfering with construction is included under this section.

The Contractor must obtain all necessary information in regard to existing utilities and shall give 48 hours notice to the proper authorities of any operation which might affect such property.

#### 7.6 DISPOSAL OF WASTE MATERIALS:

Burning on Owner's Property: Burning is not permitted on Owner's property.

Removal from Owner's Property: Remove waste materials and unsuitable and excess topsoil from Owner's property and dispose of off-site in legal manner.

#### 7.7 MEASUREMENT AND PAYMENT:

General: The contract unit price for the various items shall be compensation in full for furnishing all materials, labor, equipment, tools, and incidentals necessary for the installation of the item complete in every detail in accordance with the plans and specifications. There will be no direct payment for clean-up and restoration of property. Payment for the Work of this section may be by areal measure or lump sum as shown on the proposal.

Areal Payment: When payment is on an areal basis, the quantities to be paid for shall be the areal extent of the Work as calculated by the method coordinates, unless the Engineer determines that another method of calculation will provide a more accurate result. The Work in-place shall be measured by field survey and payment based on the calculations by the Engineer, unless otherwise specified herein. Payment shall only include Work to the lines and grades shown on the plans or directed by the Engineer. Quantities shown on the proposal form are the Engineer's estimate of the Work in-place. Differences in the actual measure of the material and the estimated measure of the material will not constitute a change in the scope of the Work or be a basis for claim by

the Contractor.

Lump Sum Payment: When payment is made on a lump sum basis, Engineer estimated in-place quantities of the Work may be provided on the proposal form for the benefit of the Contractor. Differences between actual quantities and estimated quantities will not be a basis for claim by the Contractor. It shall be the responsibility of the Contractor to familiarize himself with the scope of Work and necessary requirements thereto.

Clearing and/or Grubbing: The contract unit price shall be compensation in full for clearing and grubbing one acre. Measurement shall be the number of acres computed by the Engineer.

END OF SECTION 7

## SECTION 10 EROSION CONTROL AND ENVIRONMENTAL PROTECTION

### 10.1 INTENT

It is the intent of these specifications to provide supplemental information to the contents of the construction drawings on the quality of materials, execution, measurement, etc. These specifications are general in nature and may contain products and requirements which are not applicable to the project. Discrepancies between these specifications and the construction drawings, either imagined or real, shall be brought to the attention of the Owner's Engineer for clarification.

### 10.2 DESCRIPTION OF WORK

The work of this section consists of the necessary erosion control and environmental protection measures required to control erosion and provide environmental protection on the project and areas outside the limits of the project, so as to prevent pollution of water, detrimental effects to public or private property adjacent to the project, damage to work on the project, and to satisfy the specific or general conditions of applicable permits and regulations. The need for temporary erosion control and environmental protection shall be considered as an anticipated condition of construction and the Contractor's responsibility for providing the necessary solutions as part of these contract documents.

Erosion control work includes, but is not limited to, the following: (1) temporary erosion control, (2) Permanent erosion control.

Environmental protection work includes, but is not limited to, the following: (1) staked hay bales, (2) sediment control fence, (3) Sedimentation basins, (4) Turbidity barriers.

### 10.3 QUALITY ASSURANCE

Codes and Standards: Perform all work in compliance with applicable requirements of governing authorities having jurisdiction.

Comply with the provisions of the following codes and standards, except as otherwise shown or specified:

"Standard Specifications for Road and Bridge Construction", Florida Department of Transportation, latest edition. Herein specified or shown on the plans as "Section XXX, FDOT Standard Specifications".

"Roadway and Traffic Design Standards", Florida Department of Transportation, latest edition. Herein specified as "FDOT Standard Index No. XXX".

"American Society for Testing and Materials (ASTM) Publications" as follow:

- D 123-87 Standard Terminology Relating to Textiles
- D 1683-81 Failure in Sewn Seams of Woven Fabrics
- D 2487-83 Test Method for Classification of Soils for Engineering Purposes
- D 3786-80 Standard Test Method for Mullen Burst Strength
- D 3787-80 Bursting Strength of Knitted Goods - Constant-Rate-of-Traversal (CRT) Ball Burst
- D 4439-87 Standard Terminology for Geotextiles
- D 4533-85 Standard Test Method for Trapezoid Tearing Strength of Geotextiles
- D 4632-86 Standard Test Method for Breaking Load and Elongation of Geotextiles (Grab Method)

"Virginia Highway Department"

- VTM-51-79 Filtration Efficiency
- VTM-51-79 Slurry Flow Rate

**Certification:** The contractor shall be responsible for providing the required material certifications prior to construction. Failure to provide certification may result in rejection of the material and replacement at no cost to the Owner.

**Testing:** An independent testing and inspection service will not be required for the work of this section.

#### 10.4 SUBMITTALS

**Material Certificates:** Provide copies of materials certificates signed by material producer and Contractor, certifying that each material item complies with or exceeds specified requirements. When test requirements are specified, the contractor shall supply results performed by a certified testing laboratory.

#### 10.5 TEMPORARY EROSION CONTROL (VEGETATION AND COVERINGS)

**General:** Temporary erosion control features shall consist of, but not be limited to, temporary grassing, temporary sodding, temporary mulching, sandbagging, artificial coverings, berms, and baled hay or straw.

**Temporary Grassing:** Temporary grassing shall be as specified in Section 13 except as modified herein. Perennial grass seed may be omitted if permanent erosion control will be placed prior to death of annual grass.

**Temporary Sod:** Sod shall be as specified in Section 12.

**Temporary Mulch:** Mulch shall be as specified in Section 13.

**Sandbagging:** Sandbagging shall consist of furnishing and placing sandbags in

configurations, so as to control erosion and siltation.

**Artificial Coverings:** This work shall consist of furnishing and applying fiber mats, netting, plastic sheeting, or other approved covering to the earth surfaces.

**Baled Hay or Straw:** This work shall consist of construction of baled hay or straw dams to protect against downstream accumulations of silt. The baled hay or straw dams shall be constructed in accordance with the details shown in the construction drawings or, when details are not shown, in accordance with the FDOT Standard Index No. 102.

#### 10.6 TEMPORARY EROSION CONTROL (SILT FENCES AND TURBIDITY-) BARRIERS)

**General:** Temporary erosion control features shall consist of, but not be limited to, silt fences, floating turbidity barriers, and staked turbidity barriers. The work shall consist of furnishing, installing, maintaining, and removing temporary fences and barriers in accordance with the manufacturer's recommendations, these specifications, the details shown on the plans, or, when details are not shown, in accordance with the FDOT Standard Index No. 102 & 103. Turbidity barriers in waters of the state may be either floating or staked types or any combinations of types that will suit site conditions and meet erosion control and water quality requirements. The barrier type(s) will be at the Contractor's option unless otherwise specified in the plans.

**Silt Fence:** Silt fence or sediment control fence shall consist of a geotextile fabric attached to posts. The geotextile fabric shall be a woven or non-woven fabric as specified herein. Posts shall be a minimum length of five feet rough or surfaced four-inch by four-inch wood, three-inch minimum diameter wood or steel at least 1.33 pounds per linear foot. When called for, wire reinforcement shall be poultry mesh, a minimum height of 36 inches, 20 gauge wire minimum, with a mesh spacing of one inch. As an alternative, Type A fence conforming to Section 966, FDOT Standard Specifications, may be used.

**Staked Turbidity Barrier:** In addition to the requirements for a temporary silt fence contained herein, the fabric used for staked turbidity barrier shall have a double stitched hem at the top of the fabric into which has been sewn a braided nylon cord with a minimum diameter of 1/8 inch running the full length of that section of fabric. Supports for staked turbidity barriers shall be a minimum length of three feet seasoned two-inch by four-inch wood, 2-1/2 inch minimum diameter wood, or steel at least 1.33 pounds per linear foot.

**Floating Turbidity Barrier:** Floating turbidity barrier shall be Type I or Type II in accordance with the details shown in the construction drawings, or, when details are not shown, with the FDOT Standard Index No. 103. The type barrier used will be such as to minimize dispersion of turbid waters from the construction site. Alternate materials may be approved provided that compliance with applicable permit conditions and State water quality standards are maintained.

10.7 GEOTEXTILES

Filter Fabric: The geotextile fabric shall be a woven or non-woven fabric consisting of long-chain polymeric filaments or yarns such as polypropylene, polyethylene, polyester, polyamides, or polyvinyl chloride formed into a stable network such that the filaments or yarns retain their relative position to each other. The base plastic shall contain stabilizers and/or inhibitors to make the filaments resistant to deterioration from ultraviolet light, heat exposure, and commonly encountered chemicals. The edges of the fabric shall be selvaged or otherwise finished to prevent the outer yarn from pulling away from the fabric.

The fabric shall conform to the following physical requirements:

PROPERTIES TEST METHOD ACCEPTABLE VALUES

Seam Strength (min)	ASTM D 1683	120 lbs.
Mullen Burst Strength (min)	ASTM D 3786	200 psi
Puncture Strength (min)	ASTM D 3787	60 lbs.
Trapezoidal Tear Strength (min)	ASTM D 4533	50 lbs.
Grab Tensile Strength (min)	ASTM D 4632	120 lbs.
Elongation (max)	ASTM D 4632	25%
Filtration Efficiency (min)	VTM-51-79	75%
Slurry Flow Rate (min)	VTM-51-79	0.3 gpm/sf

Seams: The seams of the fabric shall be sewn with thread of a material meeting the chemical requirements for the fabric. The minimum seam strength shall comply with the property requirements contained herein.

Shipment and Storage: During shipment and periods of storage, the geotextile shall be protected from direct sunlight, ultra-violet rays, temperatures greater than 140 degrees Fahrenheit, mud, dirt, dust, and debris. Stockpiled materials shall be kept covered at all

times.

## 10.8 EXECUTION

General: The installation of temporary erosion control features shall be coordinated with the construction of the permanent erosion control features to the extent necessary to assure effective and continuous control of erosion and water pollution throughout the life of the contract.

The Contractor shall take sufficient precautions to prevent pollution of streams, canals, lakes, reservoirs, and other water impoundments, with fuels, oils, bitumens, calcium chloride, or other harmful materials. Also, he shall conduct and schedule his operations so as to avoid pollution or siltation of such streams, etc.

Except as necessary for construction, excavated material shall not be deposited in rivers, streams, canals, or impoundments, or in an position close enough thereto to be washed away by high water or runoff.

Where de-watering methods are used, the water shall be treated by one or more of the following methods prior to discharge off-site or into environmental areas: pumping into grassed swales or appropriate vegetated areas, sediment basins, or confined by an appropriate enclosure such as siltation curtains when other methods are not considered appropriate.

The Contractor shall not disturb lands or waters outside the limits of construction as staked, except as may be Found necessary and authorized by the Owner's Engineer.

The locations of and methods of operation in all detention areas, excavation and stockpile areas, and disposal areas shall meet the approval of the Owner's Engineer as being such that erosion during and after completion of the work will not likely result in detrimental conditions, siltations, or water pollution.

Limitation of Exposure or Erodible Earth: The Contractor shall limit the surface areas of unprotected erodible earth exposed by clearing and grubbing, excavation, or filling operations and shall provide immediate permanent or temporary erosion or pollution control measures to prevent contamination of any river, stream, lake, tidal water, reservoir, canal, or other impoundment or to prevent detrimental effects on property outside the project and damage to the project. The limitation of area in which excavation and filling operations may be underway shall be commensurate with the contractor's capability and progress in keeping the finish grading, grassing, sodding, and other such permanent erosion control measures current in accordance with the accepted schedule.

Under no conditions shall the surface area or erodible earth exposed by clearing and grubbing operations or by excavation and filling operations exceed one-half acre without specific prior approval by the Owner's Engineer. This limitation applies separately to



clearing and grubbing operations and excavation and filling operations.

The Owner's Engineer may increase or decrease the amount of surface area allowed to be exposed at any one time, on the basis of his analysis of conditions on the project.

Permanent erosion control features shall be incorporated into the project at the earliest practical time. Temporary erosion control features will be used to control erosion prior to the time it is practical to construct permanent control features or to provide immediate temporary control of erosion that develops during normal construction operations, but is not associated with permanent erosion control features on the project. In no case shall be exposure of erodible earth be for more than five days without erosion control features being implemented.

Temporary erosion control features may be authorized for use in controlling erosion in areas where stage construction or other conditions not under the control of the Contractor preclude completion of a section of work in a continuous manner and in areas where construction operations which must be performed subsequently will cause damage to permanent erosion control features constructed.

When the item of Topsoil or Muck Blanket is included in the contract, the rate of construction of these items may be limited by the availability of topsoil or muck from the normal grading operations. The existence of this condition will be considered as precluding completion of a section or roadway in a continuous manner, and use of temporary erosion control features will be used in areas so affected.

The Contractor shall schedule his operations such that the area of unprotected erodible earth exposed at any one time is not larger than the minimum area necessary for efficient construction operations, and the duration of exposed, uncompleted construction to the elements shall be as short as practicable.

Clearing and grubbing shall be so scheduled and performed that grading operations can follow immediately thereafter, and grading operations shall be so scheduled and performed that permanent erosion control features can follow immediate thereafter if conditions on the project permit.

#### 10.9 TEMPORARY EROSION CONTROL (VEGETATION AND COVERINGS)

General: Temporary vegetative erosion control features shall be installed in accordance with Section 13. Temporary coverings shall be installed in accordance with the manufacturer's recommendations.

#### 10.10 TEMPORARY EROSION CONTROL (SILT FENCES AND TURBIDITY BARRIERS)

Temporary Silt Fence: Temporary silt fence shall be erected at locations as shown on the plans or as approved by the Owner's Engineer. The filter fabric shall be reinforced

with wire fence, when called for, and the post spacings shall not exceed ten feet. The wire reinforcement shall be installed so that the filter fabric is on the upstream side of the fence, and both the wire fence and the filter fabric are on the upstream side of the posts. Posts shall be uniformly installed with approximately 20 degrees inclination toward the potential silt load (upstream) area. The silt fence shall be maintained in an effective condition at all times while in use.

Filter fabric shall be a minimum of 45 inches wide and shall be secured to the post or fence by suitable staples, tie wire, or hog rings in such a manner as to prevent tearing of the fabric. The bottom of the filter fabric shall be entrenched into the ground a minimum of eight inches to prevent water from flowing under the fence. Filter fabric shall be spliced together only at support posts with a minimum of six-inch overlap and securely sealed.

Staked Turbidity Barrier: Staked turbidity barrier shall be securely fastened to wood or steel supports which are spaced at maximum intervals of six feet and driven a minimum of 12 inches into the ground. A minimum of three supports shall be used. The bottom of the fabric shall be entrenched into the existing ground a minimum of eight inches. The staked turbidity barrier shall be a minimum of 15 inches in height and shall not exceed 18 inches in height.

The support line sewn in the top hem of the filter fabric shall be used at each post location to secure the fabric to the post at an appropriate height.

Staked turbidity barriers shall be installed across ditch lines and at temporary locations as shown on the plans or approved by the Owner's Engineer where continuous construction activities change the natural contour and drainage runoff.

Posts in staked turbidity barriers shall be installed in the vertical position unless otherwise directed by the Owner's Engineer.

Floating Turbidity Barrier: This work shall consist of the installation and removal of floating turbidity barriers to contain silt and other deleterious materials that may occur as the result of dredging, filling, or other construction activities in waters of the State. The type barrier used will be installed in accordance with the details contained in the plans, or, when details are not shown, in accordance with the FDOT Standard Index No. 103, or as approved by the Owner's Engineer. Alternate methods may be approved provided that compliance with applicable permit conditions and State water quality standards are maintained.

## 10.11 INSPECTION AND MAINTENANCE

General: The Contractor shall, at his expense, provide routine maintenance of permanent and temporary erosion control features until the project is completed and accepted. The Contractor shall inspect all temporary erosion control measures immediately after each rainfall and at least daily during prolonged rainfall. Any deficiencies shall be immediately corrected by the Contractor.

Silt Fences and Turbidity Barriers: The Contractor shall make a daily review of the location of silt fences and turbidity barriers to ensure that the silt fence or turbidity barriers are properly located for effectiveness and contain no breaches. Where deficiencies exist, additional silt fences or turbidity barriers shall be installed as directed. Sediment deposits shall be removed when the deposit reaches approximately one-half of the volume capacity of the temporary silt fence or turbidity barrier as directed. Any sediment deposits remaining in place after the temporary silt fence or turbidity barrier is no longer required shall be dressed to conform with the finished grade, prepared and finished as shown on the construction plans, or seeded in accordance with Section 13.

## 10.12 MEASUREMENT AND PAYMENT

General: No separate payment will be made for the work covered by this section except for specific pay items shown in the proposal form, and, therefore, all costs in connection with the work of this section shall be included in the contract price for the item or structure to which it pertains. Additional materials, labor, equipment, tools, and incidentals above and beyond the separate payments contained herein and the work shown on the drawings may be required to satisfy the work of this section. When shown on the proposal form, payment for the Work of this section may be by areal measure, linear measure, per unit, or lump sum as shown on the proposal.

Areal Payment: When payment is on an areal basis, the quantities to be paid for shall be the areal extent of Work as calculated by the method coordinates, unless the Engineer determines that another method of calculation will provide a more accurate result. The Work in-place shall be measured by field survey and payment based on the calculations by the Engineer, unless otherwise specified herein. Payment shall only include Work to the lines and grades shown on the plans or directed by the Engineer. Quantities shown on the proposal form are the Engineer's estimate of the Work in-place. Differences in the actual measure of the material and the estimated measure of the material will not constitute a change in the scope of the Work or be a basis for claim by the Contractor.

Linear Measure Payment: When payment is on a linear basis, the quantities to be paid for shall be the length of the Work as determined by measurement, unless the Engineer determines that another method of calculation will provide a more accurate result. The Work in-place shall be measured by field survey and payment based on the results, unless otherwise specified herein. Payment shall only include Work to the lines and grades shown on the plans or directed by the Engineer. Quantities shown on the proposal form are the Engineer's estimate of the Work in-place. Differences in the actual measure of the material and the estimated measure of the material will not constitute a change in the scope of the Work or be a basis for claim by the Contractor.

Lump Sum Payment: When payment is on a lump sum basis, Engineer estimated in-place quantities of the Work may be provided on the proposal form for the benefit of the Contractor. Differences between actual quantities and estimated quantities will not be a

basis for claim by the Contractor. It shall be the responsibility of the Contractor to familiarize himself with the scope of Work and necessary requirements thereto.

Artificial Coverings: The contract unit price shall be compensation in full for one square yard of material in place.

Silt Fence: The contract unit price shall be compensation in full for one linear foot of fence in place.

Staked Turbidity Barrier: The contract unit price shall be compensation in full for one linear foot of barrier in place.

Floating Turbidity Barrier: The contract unit price shall be compensation in full for one linear foot of barrier in place.

END OF SECTION 10

## SECTION 12

### SODDING

#### 12.1 INTENT

It is the intent of these specifications to provide supplemental information to the contents of the construction drawings on the quality of materials, execution, measurement, etc. These specifications are general in nature and may contain products and requirements which are not applicable to the project. Discrepancies between these specifications and the construction drawing, either imagined or real, shall be brought to the attention of the Owner's Engineer for clarification.

#### 12.2 DESCRIPTION OF WORK

Extent of work is shown on the drawings and consists of furnishing all plant, labor, equipment, and materials, and performing all operations in connection with sodding in accordance with these specifications and in conformity with the lines, grades, dimensions, and notes shown in the construction drawings.

The extent of the work is shown on the drawings.

Sodding includes, but is not limited to: Ground preparation, fertilization, sodding, watering.

#### 12.3 QUALITY ASSURANCE

Codes and Standards: Perform all work in compliance with applicable requirements of governing authorities having jurisdiction.

Testing: An independent testing and inspection service will not be required for the work of this section.

It will be the responsibility of the Contractor to coordinate all testing and inspections. The Contractor shall notify the Owner's Engineer, testing service and applicable agency inspectors 48 hours in advance of testing and inspections.

#### 12.4 PRODUCTS

Sod: Grass sod shall be Bermuda, Centipede or St. Augustine as shown on the plans, selected by Owner or to match existing grass and shall be well matted with grass roots. The sod shall be taken up in rectangles, preferably 12 inch by 24 inch, shall be a minimum of two inches in thickness and shall be live, fresh and uninjured at the time of

planting. It shall be reasonably free of weeds and other grasses and shall have a soil mat of sufficient thickness adhering firmly to the roots to withstand all necessary handling. The sod shall be planted as soon as possible after being dug and shall be shaded and kept moist until it is planted. Dumping from vehicles will not be permitted. Damaged sod will be rejected. Replanting shall be done within 48 hours after time of harvesting or sod shall be kept damp until planted.

## 12.5 CONSTRUCTION

General: The limits of sod shall be as shown on the drawings. Areas which are disturbed due to construction activities but which are not shown within the limits of sod shall be stabilized in accordance with this specification or other Division 2 specifications at no cost to the Owner. In these areas the Owner shall reserve the right to determine which method and materials shall be used for stabilization.

Preparation of Ground: The area over which the sod is to be planted shall be scarified or loosened to a suitable depth and then raked smooth and free from rocks or stones. Where the soil is sufficiently loose, the Engineer, at his discretion, may authorize the elimination of ground preparation. No subsequent operations shall be commenced until the Owner's Engineer has approved the condition of the prepared areas.

Fertilization: Fertilizer shall be spread at a rate per thousand square feet of area, in accordance with the following table.

5N-10P-5K: 30 LBS.	8N-8P-8K: 20 LBS.
6N-12P-2K: 25 LBS.	10N-6P-4K: 15 LBS.
7N- 7P-6K: 22 LBS.	10N-5P-5K: 15 LBS.

Fertilizer shall be mixed in the soil to a depth of at least two inches by discing or harrowing.

Sodding: Soft spots and inequalities in grade shall be corrected before starting sod work.

Planting shall not be started until the Engineer has approved the condition of the soil. Water soil before planting sod.

Lay sod without voids, tamp or roll. Broom screen topsoil over entire area. Sod shall be thoroughly watered. The surface shall be true to finished grade lines; even and firm at all points.

Place sod with staggered joints closely butted, tamped or rolled to an even surface to the required finished grade. Avoid continuous seam along line of water flow in swales. Place sod in rows at right angles to slope.

In areas with slopes steeper than 4:1, the Contractor shall use sod staples, wooden stakes or other means approved by the Owner's Engineer, to prevent movement of the sod during rainfall events.

Watering: The areas on which the sod is to be placed shall contain sufficient moisture, as determined by the Engineer, for optimum results. After being placed, the sod shall be kept in a moist condition to the full depth of the rooting zone for at least two weeks. Thereafter, the Contractor shall apply water as needed until the sod roots and starts to grow.

## 12.6 MAINTENANCE

The Contractor shall at his expense maintain the sodded areas in a satisfactory condition until final acceptance of the project. Such maintenance shall include repairing of any damaged areas and replacing areas in which the establishment of the grass stand does not appear to be developing satisfactorily.

Replanting or repair necessary due to the Contractor's negligence, carelessness or failure to provide routine maintenance shall be at the Contractor's expense. Replanting necessary due to factors determined to be beyond the control of the Contractor shall be paid for under the appropriate contract pay items.

## 12.7 GUARANTEE

The Contractor shall guarantee all sodding for a period of 90 days after the date of provisional acceptance. During the guarantee period, the Contractor shall replace at no cost to the Owner, any sod required under the Contract that dies or is not established 90 days after sodding if the causes for such defects are traced to negligence or poor workmanship by the Contractor.

Any sod missing or defective due to the Contractor's negligence shall be furnished or replaced in a manner satisfactory to the Engineer. In case of any doubt as to the condition and satisfactory establishment of the sod, the Engineer may allow the sod to remain through another 90 day establishment after which time the sod in question, if found to be dead or in an unhealthy or badly impaired condition, shall be replaced by the Contractor at no cost to the Owner.

## 12.8 TESTING AND INSPECTION REQUIREMENTS

Areas to receive sod will be subject to a visual inspection by the Owner's Engineer upon completion of ground preparation and prior to placement of sod.

Upon completion of sodding and prior to commencement of the guarantee period, the area will be subject to a visual inspection by the Owner's Engineer.

At the end of the guarantee period, final inspection of the sod will be made by the Engineer upon written notice requesting such inspection submitted by the Contractor at least three days before the anticipated inspection. All defects discovered shall be repaired or replaced by the Contractor before final acceptance.

## 12.9 MEASUREMENT AND PAYMENT

General: The contract unit price for the various items shall be compensation in full for furnishing all materials, labor, equipment, tools and incidentals necessary for the installation of the item complete in every detail in accordance with the plans and specifications. There will be no direct payment for clearing, grubbing, excavating, dewatering, bracing, backfilling, clean-up and restoration of property. Payment for the Work of this section may be by areal measure, or lump sum as shown on the proposal.

Areal Payment: When payment is on an areal basis the quantities to be paid for shall be the areal extent of Work as calculated by the method coordinates, unless the Engineer determines that another method of calculation will provide a more accurate result. The Work in-place shall be measured by field survey and payment based on the calculations by the Engineer, unless otherwise specified herein. Payment shall only include Work to the lines and grades shown on the plans or directed by the Engineer. Quantities shown on the proposal form are the Engineer's estimate of the Work in-place. Differences in the actual measure of the material and the estimated measure of the material will not constitute a change in the scope of the Work or be a basis for claim by the Contractor.

Lump Sum Payment: When payment is on a lump sum basis, Engineer estimated in-place quantities of the Work may be provided on the proposal form for the benefit of the Contractor. Differences between actual quantities and estimated quantities will not be a basis for claim by the Contractor. It shall be the responsibility of the Contractor to familiarize himself with the scope of Work and necessary requirements thereto.

Solid Sod: The contract unit price shall be compensation in full for one square yard of solid sod, complete and in place where specified.

END OF SECTION 12



## SECTION 13

### GRASSING (BY SEEDING)

#### 13.1 INTENT

It is the intent of these specifications to provide supplemental information to the contents of the construction drawings on the quality of materials, execution, measurement, etc. These specifications are general in nature and may contain products and requirements which are not applicable to the project. Discrepancies between these specifications and the construction drawings, either imagined or real, shall be brought to the attention of the Owner's Engineer for clarification.

#### 13.2 DESCRIPTION OF WORK

The extent of the work is shown on the drawings.

Seeding includes, but is not limited to: Ground preparation, fertilization, seeding, erosion control, rolling, watering.

#### 13.3 QUALITY ASSURANCE

Codes and Standards: Perform all work in compliance with applicable requirements of governing authorities having jurisdiction.

Testing and Inspection: Testing and inspection shall be performed by the Owner's Engineer.

It will be the responsibility of the Contractor to coordinate all testing and inspections. The Contractor shall notify the Owner's Engineer, testing service and applicable agency inspectors 48 hours in advance of testing and inspections.

#### 13.4 SUBMITTAL

The following shall be submitted to the Owner's Engineer for approval:

Proposed seed mixes.

Manufacturer's data and installation procedures on erosion control blanket.

#### 13.5 SEED

General: All seed shall meet the requirements of State Department of Agriculture and Consumer Services and all applicable State laws and shall be approved by the Engineer before being sown. The seed shall have been harvested from the previous year's crop. When a low percentage of grass seed or native seed germination causes the quality of

the seed to fall below the minimum pure live seed percentage as specified below, the Contractor may elect, subject to the approval of the Engineer, to increase the rate of application sufficiently to obtain the minimum germination rate specified. No payment will be made for the added seed.

Grass Seed: Each of the species or varieties of seed shall be furnished and delivered in separate labeled bags. During handling and storage, the seed shall be cared for in such a manner that it will be protected from damage by heat, moisture, rodents and other causes.

All permanent and temporary grass seed shall have been tested within a period of six months of the date of planting.

All permanent and temporary grass seed shall have a minimum percent of purity and germination as follows:

Argentine Bahia Grass Seed shall have a minimum pure seed content of 95% with a minimum germination of 80%.

Pensacola Bahia Grass Seed shall have a minimum pure seed content of 95% with a minimum active germination of 40% and a total germination of 80% including firm seed.

Bermuda Grass Seed shall be of common variety with a minimum pure seed content of 95% with a minimum germination of 85%.

Annual Type Rye Grass Seed shall have a minimum germination of 90%.

Millet Seed shall be of the Brown Top variety with a minimum pure seed content of 90% with a minimum germination of 85%.

### 13.6 MIXTURE

Grass seed shall be a mixture of 15 parts of rye or millet, depending on season, and 85 parts of Bahia or Bermuda, as shown on the plans, selected by Owner, or to match existing. The separate types of seed used shall be thoroughly dry mixed immediately before sowing. Seed which has become wet shall not be used. The Contractor may submit for approval by the Owner's Engineer alternative mix designs if so desired.

### 13.7 MULCH

Dry Mulch: The mulch material used shall normally be dry mulch. Dry mulch shall be straw or hay, consisting of oat, rye or wheat straw, or of pangola, peanut, coastal Bermuda or Bahia grass hay.

Only un-deteriorated mulch which can be readily cut into the soil shall be used.

Green Mulch: Green mulch shall consist of live coastal Bermuda, or other approved type of grass, and shall be free from weeds and obnoxious or undesirable grasses.

No green mulch which, in the Engineer's opinion, has been allowed to become sufficiently dry as to lose its growth producing benefits will be allowed to be used.

In the event that the subsequent stand of grass is found to be contaminated with weeds or other obnoxious or undesirable growth, and it can be determined that such growth was introduced with the green mulch, then the Contractor will be required to effectively eliminate such undesirable growth at his own expense.

### 13.8 EROSION CONTROL BLANKET

Erosion control blanket shall be "Curlex" as manufactured by American Excelsior, Type SC15 as manufactured by North American Green, or approved equal, unless noted otherwise on the plans.

### 13.9 COMMERCIAL FERTILIZER

Commercial fertilizers shall comply with the state fertilizer laws.

The numeral 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.

Type I fertilizer (as hereinafter specified) shall be used unless Type II fertilizer or another designation is specifically called for on the Drawings or authorized by the Engineer. Liquid fertilizer will not be permitted.

Type I Fertilizer: The chemical designation of this fertilizer shall be 12-8-8 with at least 50% of the nitrogen from a non-water-soluble organic source. The nitrogen source may be a urea-formaldehyde source provided it is not derived from a waste product of the plastic industry.

Type II Fertilizer: The chemical designation of this fertilizer shall be 12-12-8 with at least 50% of the nitrogen shall be from a urea-formaldehyde source and at least 50% of the phosphoric acid shall be from regular superphosphate.

### 13.10 WATER FOR GRASSING

The water used in the grassing operations may be obtained from any approved spring, pond, lake, stream or metered municipal water system. The water shall be free of excess and harmful chemicals, acids, alkalies or any substance which might be harmful to plant growth or obnoxious to traffic. Saltwater shall not be used.

### 13.11 EQUIPMENT

Fertilizer Spreader: The device for spreading fertilizer shall be capable of uniformly distributing the material at the specified rate.

Seed Spreader: The seed spreader shall be an approved mechanical hand spreader or other approved type of spreader.

Equipment for Cutting Mulch into Soil: The mulching equipment shall be capable of cutting the specified materials uniformly into the soil and to the required controlled depth. Harrows will not be allowed.

Rollers: A cultipacker, traffic roller or other suitable equipment will be required for rolling the grassed areas.

### 13.12 CONSTRUCTION

General: Fertilizing, seeding or mulching operations will not be permitted when wind velocities exceed 15 miles per hour. Seed shall be sown only when the soil is moist and in proper condition to induce growth. No seeding shall be done when the ground is unduly wet or otherwise not in a tillable condition.

Sequence of Operations: The several operations involved in the Work shall proceed in the following sequence: Fertilizing and preparation of the ground, seeding, erosion control and rolling. Erosion control shall consist of spreading and cutting in of mulch or application of erosion control blanket.

Preparation of Area to be Seeded: The ground to be seeded shall be prepared by disc harrowing and thoroughly pulverizing the soil reasonably smooth. It shall be reasonably free of large clods, roots and other material which will interfere with the Work and subsequent mowing and maintenance operations. No subsequent operations shall be commenced until the Owner's Engineer has approved the condition of the prepared areas.

Application of Fertilizer: The fertilizer shall be spread uniformly over the area to be seeded, at the rate of 500 to 600 pounds per acre. On steep slopes or other areas where machine spreading may not be practicable, the spreading may be done by hand. Immediately after the fertilizer is spread it shall be mixed with the soil to a depth of approximately four inches.

Seeding: While the soil is still loose and moist, the seed shall be scattered uniformly over the grassing area at a rate of 80 pounds per acre.

The seed shall be immediately mixed into the seed bed to a depth of one-half inch. The contractor may mix the fertilizer and seed into the seed bed in one operation.

When so directed by the Engineer, seed of an approved quick growing species of grass, such as rye, Italian rye, millet or other cereal grass, shall be spread at a rate of 30

pounds per acre in conjunction with the permanent type seed mixture.

**Mulching:** Approximately two inches, loose thickness, of the mulch material shall be applied uniformly over the seeded area, and the mulch material cut into the soil with the equipment specified so as to produce a loose mulched thickness of three inches to four inches. Care shall be exercised so the materials are not cut too deeply into the soil. When green mulch is used it shall be incorporated into the soil not later than two days after being harvested and no artificial watering of the mulch shall be done before it is applied.

**Erosion Control Blanket:** For slopes 4:1 or greater an erosion control blanket will be used in lieu of mulching unless noted otherwise on the plans or at the discretion of the Owner's Engineer. Blankets shall be laid and stapled in accordance with the manufacturer's recommendations.

**Rolling:** Immediately after completion of the seeding, the entire seeded and mulched area shall be rolled thoroughly with the equipment specified. At least two trips over the entire area will be required. For areas which will receive an erosion control blanket in lieu of mulch areas shall be rolled prior to installation of blanket.

**Watering:** The seeded areas shall be watered so as to provide optimum growth conditions for the establishment of the grass. In no case, however, shall the period of maintaining such moisture be less than two weeks after the planting.

### 13.13 MAINTENANCE

The Contractor shall at his expense maintain the planted areas in a satisfactory condition until final acceptance of the project. Such maintenance shall include the filling, leveling and repairing of any washed or eroded areas, as may be necessary. The Engineer, at any time, may require replanting of areas in which the establishment of the grass stand does not appear to be developing satisfactorily.

If a planted area must be replanted due to the Contractor's negligence, carelessness or failure to provide routine maintenance of such area, such replacement shall be at the Contractor's expense. If replanting is necessary due to factors determined to be beyond the control of the Contractor, payment for replacement will be made under the appropriate contract pay items.

### 13.14 GUARANTEE

The Contractor shall guarantee all seeded areas for a period of 90 days after the date of provisional acceptance. During the guarantee period, the Contractor shall replace at no cost to the Owner, any grass required under the Contract that dies or is not established 90 days after seeding, if the causes for such defects are traced to negligence or poor workmanship by the Contractor.

Any grass missing or defective due to the Contractor's negligence shall be furnished or replaced in a manner satisfactory to the engineer. In case of any doubt as to the condition and satisfactory establishment of the grass, the Engineer may allow the seeded area to remain through another 90 day establishment period, after which time the grass in question, if found to be dead or in an unhealthy or badly impaired condition, shall be replaced by the Contractor at not cost to the Owner.

### 13.15 TESTING AND INSPECTION REQUIREMENTS

Areas to receive seed will be subject to a visual inspection by the Owner's Engineer upon completion of ground preparation and prior to placement of seed and mulch or erosion control blanket.

Upon completion of the grassing and prior to commencement of the guarantee period, the area will be subject to a visual inspection by the Owner's Engineer.

At the end of the guarantee period, final inspection of the grassed area will be made by the Engineer upon written notice requesting such inspection submitted by the Contractor at least three days before the anticipated inspection. All defects discovered shall be repaired or replaced by the Contractor before final acceptance.

### 13.16 MEASUREMENT AND PAYMENT

General: The contract unit price for the various items shall be compensation in full for furnishing all materials, labor, equipment, tools and incidentals necessary for the installation of the item complete in every detail in accordance with the plans and specifications. There will be no direct payment for clearing, grubbing, excavating, dewatering, bracing, backfilling, clean-up and restoration of property. Payment for the Work of this section may be by areal measure, or lump sum as shown on the proposal.

Areal Payment: When payment is on an areal basis the quantities to be paid for shall be the areal extent of Work as calculated by the method coordinates, unless the Engineer determines that another method of calculation will provide a more accurate result. The Work in-place shall be measured by field survey and payment based on the calculations by the Engineer, unless otherwise specified herein. Payment shall only include Work to the lines and grades shown on the plans or directed by the Engineer. Quantities shown on the proposal form are the Engineer's estimate of the Work in-place. Differences in the actual measure of the material and the estimated measure of the material will not constitute a change in the scope of the Work or be a basis for claim by the Contractor.

Lump Sum Payment: When payment is on a lump sum basis, Engineer estimated in-place quantities of the Work may be provided on the proposal form for the benefit of the Contractor. Differences between actual quantities and estimated quantities will not be a basis for claim by the Contractor. It shall be the responsibility of the Contractor to familiarize himself with the scope of Work and necessary requirements thereto.

Seeding: The contract unit price shall be compensation in full for one acre of grassing for erosion control complete in place including ground preparation, fertilizing, seeding, watering and maintenance. Measurement will be made to the nearest tenth of an acre of the area actually grassed, except that grassing areas outside of the construction easement will be considered the responsibility of the Contractor and will not be measured for payment.

Mulching: The contract unit price shall be compensation in full for one acre of mulching complete in place including ground preparation and maintenance. Measurement will be made to the nearest tenth of an acre of the area actually mulched, except that mulching of areas outside of the construction easements will be considered the responsibility of the Contractor and will not be measured for payment.

Seeding and Mulching: The contract unit price shall be compensation in full for one acre of seed and mulch for erosion control complete in place including ground preparation, fertilizing, seeding, mulching, watering and maintenance. Measurement will be made to the nearest tenth of an acre of the area actually grassed, except that grassing areas outside of the construction easement will be considered the responsibility of the Contractor and will not be measured for payment.

Erosion Control Blanket: The contract unit price shall be compensation in full for one square yard of erosion control blanket complete in place where specified.

END OF SECTION 13

## SECTION 14

### ASPHALTIC CONCRETE PAVEMENT

#### 14.1 INTENT

It is the intent of these specifications to provide supplemental information to the contents of the construction drawings on the quality of materials, execution, measurement, etc. These specifications are general in nature and may contain products and requirements which are not applicable to the project. Discrepancies between these specifications and the construction drawings, either imagined or real, shall be brought to the attention of the Owner's Engineer for clarification.

#### 14.2 DESCRIPTION OF WORK

Extent of asphalt concrete paving work is shown on the drawings and includes construction of the base course.

Subbase is specified in earthwork section.

#### 14.3 QUALITY ASSURANCE

Codes and Standards: Perform excavating work in compliance with applicable requirements of governing authorities having jurisdiction.

Comply with the provisions of the following codes and standards, except as otherwise shown or specified.

"Standard Specifications for Road and Bridge Construction" Florida Department of Transportation, latest edition."

Testing and inspection: Contractor will engage independent FDOT Certified soil testing service for quality control testing during earthwork and asphaltic concrete pavement operations.

It will be the responsibility of the Contractor to coordinate all testing and inspections. The Contractor shall notify the Owner's Engineer, testing service and applicable agency inspectors 48 hours in advance of testing and inspections.



14.4 SUBMITTAL

Material Certificates: Provide copies of materials certificates signed by material producer and Contractor, certifying that each material item complies with or exceeds specified FDOT requirements (Sect. 901,902). Contractor shall employ, at his expense, an independent FDOT Certified testing laboratory approved by the City Engineer.

Test Reports-Paving: Submit the following reports directly to Engineer from the testing services with copy to Contractor:

Base Material: Bearing Test (LBR); Optimum Moisture - Maximum Density; Gradation and Atterberg Limits; Field Density and Thickness

Base Material (Asphalt Base Course): Marshall Stability; Field Density and Thickness

Asphalt: Material Quality; Bitumen Content and Gradation; Air Voids Percentage; Field Density and Thickness; Aggregate Certificate; Marshall Stability and Density. Reports are to be submitted directly to the City.

14.5 LIMEROCK BASE

General: Limerock material for use in the construction of base shall be in accordance with Section 911, FDOT Standard specifications. At the Contractor's opinion limerock of either the Miami or Ocala formation may be used, but limerock of only one formation may be used.

14.6 SAND-CLAY BASE

General: Sand-clay material for use in the construction of base shall be a mixture of sand and clay, free of trash, foreign matter and other deleterious material, and in accordance with Section 912, FDOT Standard Specifications with the following modifications and specific requirements. Upon authorization from the Owner's Geotechnical Engineer, a sand-clay material not in compliance with FDOT specifications may be used if such material has been used locally with success. The Owner's Geotechnical Engineer may increase the thickness of the base material if deficient from FDOT specifications at no additional cost to the Owner.

The material shall not contain lumps or aggregate of such nature or in sufficient quantity to prevent the obtaining of a smooth surface, free from pits and pockets. It shall not contain particles of aggregate which will not pass a one-inch sieve.

14.7 SAND-ASPHALT BASE

General: Sand-asphalt material for use in the construction of base shall be a hot mixture of aggregate and bituminous materials in accordance with Sections 280, and

335, FDOT Standard Specifications.

#### 14.8 SHELL

General: Shell material for use in the construction of base shall be in accordance with Section 913, FDOT Standard Specifications. At the discretion of the Owner's Geotechnical Engineer, coquina shell in accordance with Section 915, FDOT Standard Specifications, may be used.

#### 14.9 ASPHALT

Surface Course: Asphalt material for use in the construction of surface course shall be Type S- 3 Asphaltic Concrete in accordance with Section 331, FDOT Standard Specifications.

Prime Coat: The material used for prime coat may be any of the bituminous materials in accordance with Section 300, FDOT Standard Specifications.

Tack Coat: The material used for tack coat may be any of the bituminous materials in accordance with Section 300, FDOT Standard Specifications.

Herbicide Treatment: Commercial chemical for weed control registered by Environmental Protection Agency. Provide granular, liquid or wettable powder form.

Land Marking Paint: Final markings to be ReflectORIZED traffic paint in accordance with Section 710, FDOT Standard Specifications.

#### 14.10 ASPHALT-AGGREGATE MIXTURE

General: The bituminous mixture shall be composed of a combination of aggregate, mineral filler if required, and bituminous material. The aggregate fractions shall be sized, uniformly graded and combined in such proportions that the resulting mixture will meet the grading and physical properties of the job mix formula. The plant, methods, equipment and general construction shall meet the requirements of Sections 320 and 330, FDOT Standard Specifications.

Type S-3 Asphalt Concrete: The bituminous mixture shall be composed of a combination of aggregate, mineral filler if required, and bituminous material in such proportions as to produce a mixture having the following Marshall Properties: Stability = 1500 pounds; Flow (0.001 in.) - 8 to 13; Minimum VMA- 15.5% and Air Voids = 4% to 6%. The mixture shall be compacted to a density of not less than 95%.

Job Mix Formula: No bituminous mixture shall be produced until an FDOT approved job mix formula has been furnished to the Engineer. The formula shall indicate percentage of each sieve fraction of aggregate, percentage of bitumen, and temperature of

completed mixture when discharged from mixer. Test data showing that the materials as produced will meet the requirements of Table 331-2, Section 331, FDOT Standard Specifications may be required by the Engineer. It shall be the Contractor's responsibility to provide the necessary quality control to insure the bituminous mixture and construction will meet the approved job mix formula within the acceptance range as shown on the approved design mix.

#### 14.11 BASE

General: Before any base course material is placed, the Contractor shall prepare and condition the finished roadbed as specified in Earthwork section. No material shall be placed on a soft, muddy or frozen coarse. The thickness of the finished base shall be within ½ inch and the finished surface shall be within 1/4 inch of lines, grades and cross sections indicated in the plans. It shall be the responsibility of the Contractor to maintain the base in the required condition until the surface course is applied.

Sand-Clay Base: Sand-Clay Base shall be constructed in accordance with section 240, FDOT Standard Specifications with the following modifications and specific requirements. The base shall be compacted in layers not less than 4 inches and not more than six inches of compacted thickness. As soon as proper conditions are attained the material shall be compacted to a density of not less than 98% of the maximum density as determined by AASHTO T 180, unless noted otherwise on the drawings. The prime coat shall be applied only when the base meets the specified density requirements and the moisture content in the top half of the base does not exceed 90% of the optimum moisture for the base material. Moisture checks shall be made immediately prior to the application of the surface at locations designated by the Owner's Geotechnical Engineer.

Sand-Asphalt Base: Sand-Asphalt Base shall be constructed in accordance with Sections 280 and 330, FDOT Standard Specifications with the following modifications and specific requirements. The maximum compacted thickness of each layer shall not exceed 2 inches and the base shall be placed in layers of equal thickness. Placement of layers of uneven thickness will not be allowed. A tack coat will not be required between successive layers if placed on the same day and the initial layer has not been contaminated by sand, dust, etc.

Prime Coat: The surface to be primed shall be clean and the moisture content of the base shall not exceed 90% of the optimum moisture. The temperature of the material shall be between 100 degrees and 150 degrees Fahrenheit, which will insure uniform distribution. The material shall be applied by means of a pressure distributor at a rate of not less than 0.15 gallons per square yard for Sand-Clay and Shell bases. The primed base shall be covered by a light uniform application of sand or screening.

#### 14.12 BITUMINOUS SURFACE COURSE

General: The mixture shall be spread only when the air temperature is 40 degrees

Fahrenheit and there is no evidence of frozen base. The mixture shall be transported in tight vehicles previously cleaned of all foreign material and, if necessary, each load shall be covered. The inside surface of the truck bodies shall be thinly covered with soapy water of an approved emulsion containing not over 5% oil, and all excess shall be carefully drained prior to any mixture being placed therein. Prior to the laying of the mixture the surface of the base or pavement to be covered shall be cleaned of all loose and deleterious material. A tack coat applied with a pressure distributor at the rate of 0.02 or 0.08 gallons per square yard will be required on all existing pavements that are to be overlaid and bituminous successive layers of all asphalt mixes. A tack coat will be required on all existing pavements that are to be overlaid and bituminous successive layers of all asphalt mixes. A tack coat will be required on freshly primed bases and surface treatment only when so directed by the engineer. Upon arrival the mixture shall be dumped into an approved mechanical spreading and finishing machine equipped with automatic speed control of the ski or traveling string line type. The plus or minus 25 degrees Fahrenheit of the established mix temperature. The mixture shall be immediately spread and struck-off to the full width required and to such loose depth for each course that when the work is completed the specified thickness will be secured. An excess amount of mixture shall be carried ahead of the screen at all times and hand raking shall be done behind the machine as required. Placing shall begin along the centerline in consecutive strips having a minimum width of 10 feet, except when edge lanes in the direction of the major traffic flow. Compaction shall be accomplished using steel-wheel rollers and pneumatic-tired rollers. Rolling shall begin as soon after placing as mixture will bear rollers without undue displacement and shall continue following the procedures outlined in Section 330-10, FDOT Standard Specifications, until a density of specified percentage of laboratory compacted specimens of the same mixture is obtained. Placing of the mixture shall be as continuous as possible and the roller shall not pass over the unprotected end of the freshly laid mixture except when the spreading is to be discontinued long enough to permit the mixture to become chilled. When the spreading operation is thus interrupted, a transverse joint shall be constructed by cutting back on the previous run to expose the full depth of the mat. If the longitudinal edge of the placed mixture is rolled, the edge shall be trimmed back to expose an unsealed or granular vertical surface prior to constructing the adjacent strip. When fresh mixture is laid against the exposed edges of joints (trimmed or formed) it shall be placed in close contact with the exposed edge so that an even, well compacted joint will be produced after rolling. The Contractor shall be responsible for obtaining a smooth surface of uniform texture and compaction that does not deviate more than 3/16 inch when tested with a 15 foot rolling straightedge or more than 3/8 inch from the lines, grades and cross sections indicated on the plans.

**Adjusting Existing Structures:** Cut down or extend the existing manholes, catch basins, inlets, valve boxes, monument boxes, etc., within the limits of the proposed work, to meet the finished grade (flush) of the proposed pavement, or if outside of the proposed pavement area, to the finished grade designated on the plans for such structures. Use materials and constructions methods that meet FDOT requirements. Structures needing adjustments will be properly marked with adequate signaling devices

(per FDOT) until construction is complete. **Manhole covers and/or water valves will not be left exposed with more than 1/2 inch of grade difference between cover and asphalt surface elevation. Manholes should be lightly sprayed with diesel to prevent asphalt adherence prior to covering and a small divet can be left in the roadway to mark manhole location for future adjustment.**

Protection: After final rolling, do not permit vehicular traffic on pavement until it has cooled and hardened.

Erosion Control: Contractor shall stabilize edge of pavement by constructing and sodding shoulder in accordance with detail drawings applicable specification sections contained herein. Erosion control shall be constructed as soon after paving as practicable but not longer than five days.

#### 14.13 TESTING AND INSPECTION REQUIREMENTS

Base: Testing and inspection of the base, except bituminous base, shall include the following. The base shall have been accepted prior to placement of pavement unless waived by the Owner's Engineer.

Bearing Value: One limerock bearing ratio test shall be performed for each material source or as material changes. Test method shall be in accordance with FDOT requirements.

Maximum Density/Optimum Moisture Content: One test shall be performed in accordance with AASHTO T-180/ASTM D-1557 for each material source or as material changes.

Field Density and Thickness: One test and thickness measurement shall be performed for each 500 linear feet of roadway or 750 square yards of pavement with not less than three tests. Field density test shall be in accordance with AASHTO T-191/ASTM D-1556 (sand cone method) or AASHTO T-240/ASTM D-2937 (drive cylinder method).

Gradation and Atterberg Limits: One per material source or as material changes in accordance with AASHTO T-27, T-89, T-90/ASTM C-136, D-423, D-424.

Bituminous Base: Testing and inspection shall include the following:

Asphalt: Testing and inspection of the asphalt shall include the following:

Materials Quality: Quality requirements and frequency shall be as specified in Sections 330, 331, 916, FDOT Standard Specifications and in accordance with AASHTO T-164, T-30.

Bitumen Content and Gradation: One test per day in accordance with ASTM D-2172,

with results reported directly to the Engineer on a daily basis.

Field Density and Thickness: One test and thickness measurement shall be performed for each 500 linear feet of roadway or 750 square yards of pavement, with a minimum of two tests on each street paved. Tests shall be staggered left, right and on centerline. Testing locations should be coordinated with the Engineer prior to testing. Field density test shall be in accordance with ASTM D-2950 and the supplementary conditions at the end of this section.

Aggregate Certification: Certification from the aggregate supplier for each material to the requirements of Sections 901 and 902, FDOT Standard Specifications.

Marshall Stability and Density: One per day in accordance with ASTM D-1559, with results reported directly to the Engineer on a daily basis.

If material or construction must be re-tested due to improper materials or construction, re-testing shall be at no additional expense to the Owner.

#### 14.14 MEASUREMENT AND PAYMENT

General: The contract unit price for the various items shall be compensation in full for finishing all materials, labor, traffic marking, equipment, tools and incidentals necessary for the installation of the item complete in every detail in accordance with the plans and specifications. There will be no direct payment for clean-up and restoration of property. Payment for the Work of this section may be by areal measure or lump sum as shown on the proposal. **Invoices for payment will not be accepted for processing until delinquent payrolls and/or laboratory reports have been provided to the Engineer.**

Areal Payment: When payment is on an areal basis the quantities to be paid for shall be the areal extent of Work as calculated by the method coordinates, unless the Engineer determines that another method of calculation will provide a more accurate result. The Work in-place shall be measured by field survey and payment based on the calculations by the Engineer, unless otherwise specified herein. Payment shall only include Work to the lines and grades shown on the plans or directed by the Engineer. Quantities shown on the proposal form are the Engineer's estimate of the Work in-place. Differences in the actual measure of the material and the estimated measure of the material will not constitute a change in the scope of the Work or be a basis for claim by the Contractor.

Lump Sum Payment: When payment is on a lump sum basis, Engineer estimated in-place quantities of the Work may be provided on the proposal form for the benefit of the Contractor. Differences between actual quantities and estimated quantities will not be a basis for claim by the Contractor. It shall be the responsibility of the Contractor to familiarize himself with the scope of Work and necessary requirements thereto.

Compaction: There will be no direct payment for compaction. Full compensation for

this work will be included in the contract price for base and/or surface course.

**Base:** The contract unit price for the various types and thickness shall be compensation in full for one square yard. Measurement shall be the number of square yards, computed by the Engineer, to construct the base in accordance with the plans.

**Prime Coat:** There will be no direct payment for the prime coat. Full compensation for this work will be included in the contract unit price for base.

**Tack Coat:** There will be no direct payment for the tack coat. Full compensation for this work will be included in the contract unit price for base surface course.

**Bituminous Surface Course:** The contract unit price for the various types shall be compensation in full for one ton. Measurement shall be the number of tons, as measured on daily trip tickets, to construct the surface course in accordance with the plans.

#### 14.15 Supplementary Conditions

Although FDOT Specifications are to be followed throughout the duration of this Contract, this supplement is intended to supercede the Field Testing and Pay Reduction Guidelines as outlined in the current FDOT Specifications. The City will implement the following guidelines pertaining to Field Density Testing and Pay Reduction:

1. The total amount of material placed at the end of each day will be considered as one (1) LOT regardless of tonnage variations from the previous day's placement operation.
2. Field nuclear density testing (backscatter method) will be required at the end of each day's placement operations for that particular LOT. The testing will be performed by an independent FDOT certified laboratory pre-approved by the City.
3. A Control Strip shall be established during the first day of material placement. Results from coring of the Control Strip will be used against the backscatter results to correlate and establish the density variation, if any, between the gauge and the laboratory.
4. The frequency of density testing will be defined as one (1) density test per 500 linear feet of material placed throughout the LOT. All density tests are to be performed at locations designated by the Owner.
5. Upon completion of testing for each LOT, the test results are to be averaged and compared with the established minimum acceptance criteria of 96% of Mix Design. The acceptance criteria will be agreed upon and implemented during the Pre-Construction Meeting. When averaging tests results for the LOT, any result exceeding 100% shall be reduced to 100% for purposes of averaging.

6. In the event of test results for the LOT indicating percentages less than the minimum established criteria, the Pay Reduction Table shown below will be used to determine the applicable pay reduction for the entire LOT.

<u>Percent of Mix Design Density</u>	<u>Percent of Payment</u>
96.0 and above	100
95.0 to less than 96.0	95
94.0 to less than 95.0	90
Less than 94.0	75

In calculating the percentage, do not round off the final percentage.

7. The Pay Reduction as shown above only applies to the Field Density results as obtained through backscatter testing. Although coring for thickness and field density are not required for acceptance testing at this time, it is possible that in the event of discrepancies in nuclear testing, the Engineer may require additional tests to include coring for field density determination. The costs associated with the additional testing will be at the expense of the Contractor.

8. Any other pay reductions as determined by FDOT Specifications (i.e., gradation) will still apply to the Contract.

END OF SECTION 14



SECTION 27  
SPECIAL CONDITIONS

A. STREET RESURFACING

13. TRAFFIC MAINTENANCE: as a general rule, **a minimum of one (1) lane traffic must be maintained at all times and adequate safety precautions taken.** Any street closures will require a traffic plan submitted at least fourteen (14) days in advance of the proposed closure and approved by the City Engineer. If a detour is contemplated, the complete detour route must be indicated. Inclusive dates of the proposed closure must be firm, and if approved, Public Services Announcements must be run a minimum of 72 hours prior to closure and/or detouring.

Twenty-four (24) hours prior to closing the street to traffic, the appropriate media, police and emergency (rescue, fire, 911) agencies shall be notified by the Contractor.

Traffic control devices in accordance with the Manual on Traffic Control and Safe Practices shall be approved by the City Engineer prior to starting work. The devices shall be installed and maintained on a daily basis.

14. RESTORATION OF THE RIGHT-OF-WAY: Restoration of the right-of-way will be in accordance with the Panama City Construction Specifications. Immediately following the specified and required backfilling, compaction, base construction and paving, the final surface restoration shall be immediately commenced in accordance with the applicable detail. **This includes clean up of all excess asphalt deposited along gutters and in the ROW and restoration of soil deposits due to sweeping operations.**
15. Open cuts of traveled ways, paved or unpaved, of any size will require backfilling in 6" lifts and 98% compaction prior to repaving.
16. All exposed edges shall be raked down where necessary to produce a smooth transition following rolling and compaction of the edge.

B. RESTORATION OF SIDEWALKS, CONCRETE CURB, AND DRIVEWAYS

1. Repair of these items requires a saw cut made at a joint and all concrete within the area to be removed and replaced to a condition equal to or better than existing at the commencement of construction, with like material.
2. Asphaltic concrete shall be repaired or replaced by saw cutting the asphalt and base for the entire width and replacing the base and asphalt in

accordance with the open street cut requirements.

3. **All driveways and crosswalk access areas shall be properly raked and tied-in to establish a smooth transition. In the event residents complain about the transition, and the transition is deemed by the City as excessive, the Contractor will be required to rework the driveways in question at no additional charge to the Owner.**

C. DISTURBED TRAFFIC SIGNS

1. When traffic signs are located within the area of construction, the Contractor is required to notify the City traffic control division to arrange for removal and/or relocation. Costs incurred by the City for the removal, re-setting, or relocation of signs will be billed to the Contractor.

D. PAVEMENT MARKINGS

1. Contractors having construction within paved sections of roadway that disturb or destroy current pavement markings shall be required to replace said pavement markings with approved reflectorized temporary paint as indicated and to restore such markings to their original conditions. **Temporary striping and markings shall be placed on designated streets as indicated in the Paving List in the Proposal Portion of Section 3-Forms of this specification.**

E. INSPECTION

1. The Contractor shall notify the Panama City Engineering Division at least twenty-four (24) hours prior to beginning work. The Engineering Inspector will normally visit the site when the work is to start. The Inspector may check materials at this time.
2. Any and/or all items found not to be in compliance with this guide will be immediately corrected by the Contractor.

F. MAINTENANCE OF TRAFFIC

1. **Unless otherwise provided, all roads within the limits of construction shall be kept open to all traffic by the Contractor.** When approved by the city Engineer, traffic may be bypassed over an approved detour route. The Contractor shall keep the portion of the project being used by public traffic, whether it be through or local traffic in such condition that traffic will be adequately accommodated. He shall furnish, erect, and maintain barricades, warning signs, delineators, flagmen, or pilot cars in accordance with the Manual of Traffic Controls and Safe Practices for Street and Highway Construction, Maintenance and Utility Operations.

published by the Florida Department of Transportation where possible. When, by reason of physical constraints, the above standards are not applicable, then the contractor must take all necessary precautions to protect the motoring public. He shall also provide and maintain in a safe condition, temporary approaches or crossings and intersections with trails, roads, streets, businesses, parking lots, residences, garages, and farms. **It is the Contractor's responsibility to notify all residents and/or businesses to be affected by the paving operations at least 24 hours in advance.** The Contractor shall bear all expense of maintaining the traffic over the section of road undergoing construction and of constructing and maintaining such approaches, crossing, intersections, and other features as may be necessary. Materials stored at the site of the work shall be phased as to cause no obstruction to vehicular or pedestrian traffic. No roadway shall be closed or opened except by express permission of the City Engineer.

2. When a detour/diversion traffic route has been requested, no lane closure will be allowed prior to 9:00 A.M. or later than 3:00 P.M. without specific and individual approval. In the case of a two-way, two-lane road one lane traffic may be authorized during this period. In the case of a two-way, four-lane road, two-way, two-lane traffic will normally be required. Contractor shall provide Public Service Announcements at least 72 hours in advance of such detours, diversions or road closures as deemed necessary and approved by the Engineer.
3. Appropriate signage in conformance with the Manual on Traffic Control and Safe Practices will be required at all construction/installation sites within the road right-of-way.

#### G. RESTORATION AND CLEAN-UP

1. The Contractor shall insure the integrity of all monuments, section corners, and property markers is protected.
2. The Contractor shall be liable for all damage, injury or loss to persons or property of any character arising from or resulting from any act of commission, omission, neglect or misconduct in the performance of work by the Contractor his employees, or agents. The Contractor shall be further liable for damage, injury or loss of persons or property arising from or as a result of defective work or materials. **All claims made during the course of construction activities will be turned over to the Contractor for remediation.**
3. Where any work disturbs the area outside the roadway, the Contractor shall insure the area is completely restored in a manner acceptable to the

City. Unsodded areas shall be graded and then seeded and mulched in those areas where that is appropriate. The Contractor is responsible for establishing a dense stand of permanent type grass within a reasonable time in those areas where it is appropriate. Shrubbery that is removed or destroyed shall be replaced with equal types and sizes. Grassing and mulching operations are to begin immediately after construction/installation has been completed. All grass, trees and/or shrubbery damaged or disturbed during construction shall be replaced by the Contractor at his expense, as directed by the City Engineer. Any plantings by property owners shall be removed and replaced to the satisfaction of the City Engineer and property owner. All debris shall be removed by the contractor, at his expense, immediately upon completion of the paving operation for the day.

4. Existing utilities that are damaged, destroyed, or temporarily removed by the Contractor shall be replaced or repaired by the Contractor at the direction of the owner with no expense to the City or owner.
5. **The contractor shall insure that work site clean-up and property restoration follows construction/installation operations without delay (daily). In order to maintain an acceptable site, debris and waste material shall be removed from the site immediately.** Site maintenance, along with on-going clean-up and final property restoration, shall be subject to the direction and approval of the City Engineer. In such case that site maintenance is neglected, the City will make the necessary adjustments to remedy the situation utilizing City personnel and/or equipment and bill the Contractor accordingly.

#### H. CONSTRUCTION NOTES

1. Testing requirements shall be in accordance with the testing schedule contained within these specifications. Selection and contracting with FDOT certified testing firms shall be the responsibility of the Contractor, and it shall be the responsibility of the Contractor to coordinate and schedule all tests. Test results shall be reported on a daily basis directly to the City Engineer.
2. It shall be the responsibility of the contractor to coordinate and schedule the activities of the utility companies including, but no limited to, T.V., telephone, gas, power, water, sewer, etc. No additional compensation shall be provided for this service. Any damage caused by the utility company to the improvements of the Contractor shall be repaired in accordance with these contract documents. It shall be the responsibility of the Contractor to insure that repairs are performed either by the Contractor or the utility company at no cost to the owner.

3. **A mandatory, pre-construction conference shall be scheduled by the contractor with the City of Panama City.** The Contractor shall contact the City of Panama City's City Engineer for scheduling and shall notify the applicable parties by mail a minimum of seven (7) days prior to the meeting.
4. Copies of test reports for asphalt, subgrade, fill, and backfill under roadways shall be provided directly to the City of Panama City for review and approval. **It shall be the responsibility of the Contractor to coordinate testing and insure that all applicable tests have been performed.** Failure to obtain test results at any point of construction will require the removal of the improvement and replacement by the contractor. It should be noted the City of Panama City will require compaction testing in accordance with the testing schedule for backfill.

#### I. GENERAL NOTES

1. The exact location and elevation of existing structures, utilities, and piping shall be physically verified in the field by the contractor before construction begins. These drawings do not purport to show in complete detail all existing structures, utilities, or piping. The contractor shall examine all available records and make all explorations and excavations as required to determine the location of existing structures, utilities, and piping, whenever necessary. The owner reserves the right to change location of lines to avoid conflict with existing structures, utilities, or piping.
2. The contractor shall check plans for conflicts and discrepancies prior to construction. The contractor shall notify the owner or owner's engineer of any conflict before performing any work in the affected area.
3. The contractor is responsible for repairing any damage to existing facilities above or below ground that may occur as a result of work called for in these contract documents.
4. It shall be the responsibility of the contractor to learn, know, and comply with the regulations, ordinances, permit and inspection requirements of the various governmental agencies having jurisdiction. The contractor shall schedule the required inspections and approvals in accordance with the requirements of the specifications. The contractor shall notify the necessary agencies of construction commencement.
5. All specifications and documents referred to shall be of latest issue and shall be considered a part of these documents as though included.

6. Prior to commencing construction, contractor shall install any required silt fencing or baled hay barriers (FDOT index 102) for silt control. There will be no direct payment for this work. Cost shall be included in other items of work. Location shall be as shown on the plans or as directed in the field.
7. All existing concrete, asphalt, trees, stumps, and other deleterious material shall be removed from the site and disposed of in accordance with Florida Laws.
8. Where pavement is to be removed and replaced, as indicated on the plans or directed in the field, all existing markings and traffic loops shall also be replaced. There will be no direct payment for this work. Cost shall be included in related items of work.
9. Where it becomes necessary to temporarily remove, reposition, or support existing facilities, utility poles, etc., this work shall be performed at the contractor's expense and in accordance with requirements of the owner of the existing facility, utility pole, etc. The contractor shall give proper notice to the utilities.
10. The contractor shall physically examine the entire project site and inform himself fully in regard to all conditions pertaining to the place where the work is to be performed for purpose of determining his cost to perform the work. The contractor should pay special attention to areas involving clearing and grubbing, existing facilities removal and replacement, support on relocation, and work involved in wetland areas.
11. Any disturbed mail boxes or signs must be immediately reinstalled to existing or acceptable condition by the city at the contractor's expense.

J. PAVING, GRADING, AND EARTH WORK NOTES

1. Only Contractors who are currently on the Florida DOT list of pre-approved contractors for performing work of the type and volume involved in this contract will be eligible to bid on this work. Batch plant shall be FDOT Certified. No bid will be accepted from any contractor who is ineligible to perform work for Florida DOT. This shall include an FDOT Certified Superintendent or Foreman to be on-site during all paving operations.
2. No bid will be accepted from any contractor who is ineligible to perform work for Florida DOT. **Prior to award of contract, the responsible bidder whose evaluated bid is determined to be in the best interest of the City will be required to submit the following documents to the Panama City Engineering Department:**

- A. Proof of FDOT level 2 certification of proposed job superintendent or foreman**
- B. Proof of FDOT certification of asphalt plant**
- C. Proof of FDOT certification of laboratory technicians**
- D. Mix designs for SAHM, S-3 and SP9.5 (fine)**

3. Any deficiency in the quantity of material for filling depressions caused by settlement, shall be supplied by the contractor at no cost to the owner. This also applies to base course under paved streets.
4. Contractor shall clear and grub only those portions of the site necessary for construction. Clear and grub shall consist of the removal of all deleterious material including roots, topsoil, existing subgrade, etc.
5. All areas disturbed by construction activities shall be seeded, mulched, sodded, stabilized, or planted with other approved landscape material, within five (5) days after construction in that area.
6. Organic, unsuitable soils beneath the paved areas shall be removed and replaced with clean sand material of which not more than 15% by dry weight is finer than the number 200 mesh sieve. Fill material shall be free of organics, rubble, clay, or other deleterious matter.
7. If necessary, the pavement subgrade should be stabilized to an LBR of 50. Material for stabilization shall be either limerock, crushed shell, or other material approved by the engineer and the geotechnical engineer. Compaction of the subgrade shall be by a heavy vibratory roller (minimum static weight of five tons) with a minimum of 10 passes with a 20% overlap between passes. The vibratory roller should also be equipped with a variable frequency control to operate at the resonant frequency of the soils.
8. All waste material shall be disposed of off-site in accordance with applicable regulations. Disposal of waste material and debris shall be performed daily.
9. Contractor to provide 1/2" to 1" bituminous expansion joint material with sealer at abutment of concrete and other materials (buildings, other pored concrete, etc.) except asphalt.
10. All final pavement markings shall be made with reflectorized thermoplastic traffic paint in accordance with FDOT Roadway and Traffic Design Standard specifications 710 and 711.

11. Contractor shall trim, tack and match existing pavement at locations where new pavement abuts.
12. Testing requirements shall be in accordance with the testing schedule contained within these plans. Selection and contracting with the FDOT Certified testing firms shall be the responsibility of the contractor. Selected testing firms must be approved by the Engineer prior to beginning work under this contract. It shall be the responsibility of the contractor to coordinate and schedule all tests.
13. Acceptance testing for new pavement shall comply with Section 14.15 of this specification. In addition, at the Engineer's discretion, acceptance testing shall also consist of one pass of a standard 15-foot rolling straight edge operated while the pavement is still hot. All deficiencies in excess of 3/16 inch shall be corrected in accordance with FDOT standard specification 330.
14. At the option of the owner, the contractor shall flood all new pavement surfaces with water and inspect for ponding. All ponded areas shall be corrected in accordance with FDOT standard specification 330.
15. Any manhole rings and covers affected by milling operations shall be replaced by the contractor at no additional expense to the owner. If shorter rings are required (3" vs. 6"), rings shall be provided by the contractor.

END OF SECTION 27



## SECTION 37 TRAFFIC SIGNALS

### 37.1 INTENT

**The work covered by this Section includes furnishing and installing all equipment, materials, labor and all required operations in conjunction with the signalization work, complete and in strict accordance with these Specifications and all applicable Plans, and subject to the terms and conditions of the Contract.**

### 37.2 INTENT OF TRAFFIC SIGNAL PLANS AND SPECIFICATIONS

**The intent of the Plans and Specifications associated with this Contract is to provide a completed Project, which will function as intended and is ready for operation in accordance with the GENERAL CONDITIONS. Conformance with, and coordination of the Plans and Specifications (the latest editions) shall be in accordance with that set forth in the GENERAL CONDITIONS, the Manual on Uniform Traffic Control Devices (MUTCD), the National Electric Code (NEC), the International Municipal Signal Association (IMSA), the FDOT Standard Specifications for Road and Bridge Construction, the FDOT Roadway and Traffic Design Standards, the FDOT Minimum Specifications for Traffic Control Signal Devices (MSTCSD), and in the Technical Specifications (Section 37.7).**

It shall be the responsibility of the Contractor as part of this Work, through careful quality control and coordination with the Engineer, to avoid all right-of-way, easement, surveying benchmarks, above ground and/or below ground utility conflicts, etc., during construction.

The Contractor shall furnish and install new Traffic Signal materials and equipment (unless otherwise noted on the Plans), such as: ground rod assemblies, conduit, signal and interconnect cable, span wire assemblies, pull and junction boxes, electrical power service assemblies, prestressed concrete poles, mast arm pole assemblies, traffic signal assemblies, traffic signal auxiliaries, pedestrian signal and detector assemblies, inductive loop and detector assemblies, traffic controller and cabinet assemblies, etc., and all associated hardware needed to provide a complete installation as per the intentions of the Plans.

### 37.3 SUBMITTAL DATA

All materials and equipment, used in the installation of a traffic signal, must be submitted to the Engineer for approval prior to installation and meet the requirements of the FDOT Minimum Specifications for Traffic Control Signal Devices (MSTCSD) and be currently listed on the FDOT's Approved Products List.

The actual field installation shall reflect only the materials and equipment submitted and approved by the Engineer. Any work performed without an approved submittal, and considered not acceptable by the Engineer, shall be removed in accordance with the

GENERAL CONDITIONS and reworked at the Contractor's expense.

#### 37.4 WORK OF SUBCONTRACTORS

The Plans and Specifications shall govern all work. Where the installation involves using Subcontractors to do a portion of the work, it shall be the responsibility of the General Contractor to ensure that the Subcontractor is provided with a set of the Plans and Specifications. It is also the responsibility of the General Contractor to ensure that the Subcontractor installs only approved materials and equipment, and assumes full responsibility for the workmanship of the Subcontractor.

#### 37.5 WORK SPECIFIED UNDER OTHER SECTIONS

Traffic signal work specified under other Sections of these Specifications and/or on the Plans shall be in addition to that mentioned herein. Control of the work shall be in accordance with the GENERAL CONDITIONS.

#### 37.6 START-UP

Existing traffic signals that have been modified do not pertain to the following requirement:

When installation is complete, the traffic signals are to be placed in the flashing mode for a minimum of 48 hours. On the Monday following the 48 hour flashing period the contractor can place the traffic signals into full operation, but only after a complete and successful Start-Up inspection has been performed by qualified FDOT Traffic Operations personnel or City personnel with the City's Traffic Signal Division. The contractor shall notify the following personnel to arrange for the Start-Up inspection:

- FDOT District 3 Traffic Signal Inspector (if the traffic signal is within FDOT right-of-way)
- Consultant Engineering Firm (if applicable)
- City of Panama City Engineer
- City of Panama City Field Inspector
- City of Panama City Traffic Signal Supervisor

A new traffic signal installation can be placed into full operation on a Monday, Tuesday or Wednesday unless that day precedes a holiday. Once the traffic signal is placed into full operation it must function properly for a minimum of 48 hours without any interruptions or malfunctions. If the traffic signal cannot function properly for 48 hours continuously, the contractor must correct the problem within 12 hours (from notification of the malfunction), and then begin, and successfully complete, another 48 hour test period. After successful completion of the 48 hour test period, the contractor will have 90 days to correct any punch-list items that were noted at the Start-Up inspection. If after 90 days the contractor has not corrected all of the punch-list items, the contractor will begin assessing liquidated damages **of \$300 per day** until such time that all punch-

list items have been corrected. These liquidated damages would be separate from, and in addition to, any liquidated damages assessed as per the GENERAL CONDITIONS. When all punch-list items have been corrected and the traffic signal installation has passed all previously mentioned tests, Final Acceptance may be granted.

### 37.7 WARRANTY PERIOD

After a successful 48 hour test period, the contractor will be responsible for one (1) full year, for repairing or replacing at his own expense, any portion of the traffic signal installation that fails, or ceases to operate properly, due to defective equipment or poor workmanship.

### 37.8 TECHNICAL SPECIFICATIONS

#### GROUND ROD ASSEMBLIES:

- Ground rods are to be installed 6 inches below finished grade with a No. 6 AWG copper insulated (green) conductor (solid or stranded as applicable) bonded 18 inches below finished grade.
- A minimum of 20 feet of ground rods are to be installed, as an assembly or as an array, for all prestressed concrete poles or mast arm pole assemblies, pedestrian pedestals, electrical power services, controller cabinets and any metal pull box lids.
- Ground rods installed for the electrical power service, prestressed concrete poles or mast arm pole assembly with the electrical power service installed, or pole mounted cabinet with the electrical power service installed, shall attain a resistance-to-ground measurement of 25 ohms or less.
- Each 10 foot section of ground rod is to be tested in the presence of the City's Field Inspector with a null balanced earth ground megger utilizing the 3 point measuring technique.
- Additional ground rods will be required if a minimum of 25 ohms cannot be obtained on the grounding for the electrical power service, prestressed concrete poles or mast arm pole assembly with the electrical power service installed, or pole mounted cabinet with the electrical power service installed.
- Solid No. 6 AWG copper insulated (green) conductor is to be used for electrical or lightning protection ground from the system ground bussbar to the ground rod assembly, and from ground rod to ground rod (for an array). Solid or stranded No. 6 AWG copper insulated (green) conductor is to be used for all other applications.
- All bonds between the ground rod and the grounding conductors are to be exothermically welded.
- All separately grounded elements are to be bonded together to form an intersection grounding network.
- The unit price for grounding shall be paid in lump sum per intersection and shall be compensation in full for furnishing and installing all materials and equipment including labor, tools and incidentals necessary for completion in every detail in accordance with the plans and specifications.

## CONDUIT:

- All underground and underpavement conduit is to be Schedule 40 PVC, unless underpavement conduit is to be jack-n-bored or directional bored.
- Jack-n-Bore and Directional Bore Conduit is to be intermediate metal conduit which will be used as a sleeve for the PVC conduit, and to be installed at the depth specified for underground and underpavement conduits.

## CONDUIT (continued):

- All aboveground conduit and underground electrical service conduit is to be rigid galvanized conduit.
- Conduit sizes are to be 1 inch for the electrical power service conductors and ½ inch for the ground conductor (from the service disconnect to the cabinet), and a minimum of 2 inch for all other applications.
- Underground Conduit is to be installed to a depth so that the top of the conduit is 30 inches below the finished grade.
- Underpavement Conduit is to be installed to a depth so that the top of the conduit is 36 inches below the final pavement surface.
- Trenches saw-cut through pavement are to be back-filled with flowable fill.
- All underground conduit trenches to be properly back-filled, tamped and restored.
- Conduit stub-outs in pull boxes, bottom of prestressed concrete poles or mast arm pole assemblies, and cabinets are to be sealed with an approved moisture resistant sealant.
- Two spare conduits are to be installed for future use from the cabinet base to the nearest pull box, a pull wire installed the entire length with at least 24 inches of the pull wire accessible at each end of the conduits, and the ends of the conduits sealed with an approved moisture resistant duct sealant.
- The unit price for conduit shall be per linear foot and shall be compensation in full for furnishing and installing all materials and equipment including labor, tools and incidentals necessary for completion in every detail in accordance with the plans and specifications.

## SIGNAL AND INTERCONNECT CABLE:

- Signal cable is to be installed in continuous lengths from the controller cabinet to the traffic signals, pedestrian signals and/or pedestrian detectors without any splices.
- Interconnect cable is to be installed in continuous lengths from controller cabinet to controller cabinet without any splices.
- Underground interconnect cable shall be PE-39 (filled telephone cable with a separate support wire), and Aerial interconnect cable shall be PE-38 (telephone cable with an integral support wire).
- Provide 3 spare conductors for each signal cable used, and 2 spare conductors for each interconnect cable used.

- The spare conductors are to be properly labeled (as spares) in the cabinet and terminated at the cabinet ground bussbar.
- The unit price for signal cable shall be paid in lump sum per intersection and shall be compensation in full for furnishing and installing all materials and equipment including labor, tools and incidentals necessary for completion in every detail in accordance with the plans and specifications.
- The unit price for interconnect cable shall be per linear foot and shall be compensation in full for furnishing and installing all materials and equipment including labor, tools and incidentals necessary for completion in every detail in accordance with the plans and specifications.

#### SPAN WIRE ASSEMBLIES:

- Lashing wire shall be used to secure the signal cable and aerial interconnect cable for distances of 12 feet or greater, and locking cable ties are to be used otherwise.
- A fiberglass insulator is to be installed if any portion of the span wire assembly gets within 6 feet (vertically) of an overhead electrical power line.
- The span wire and messenger wires are to be properly bonded to the pole grounding system using a crimp type electrical connector.
- The unit price for span wire assemblies, including applicable fiberglass insulators, shall be paid in lump sum per intersection and shall be compensation in full for furnishing and installing all materials and equipment including labor, tools and incidentals necessary for completion in every detail in accordance with the plans and specifications.

#### PULL AND JUNCTION BOXES:

- Pull boxes are to be installed in such a manner that the box and lid will be flush with the existing or finished grade.
- Twelve (12) inches of crushed stone or pearock shall be installed, 6 inches inside the box and 6 inches under the box (to allow for proper drainage).
- The conduit stub-outs shall terminate 2 inches above the crushed stone or pearock, but low enough so the pull box lid will not rest on them, and shall be sealed with an approved moisture resistant duct sealant.
- Do not install signal cable or electrical power service cables in the same pull box with loop cables.
- All pull box lids are to be labeled with the type of application it is being used for (i.e.; TRAFFIC SIGNAL, ELECTRICAL, etc...)
- Metal pull box lids must be properly grounded.
- All pull box lids shall be locked down with an approved lockdown mechanism.
- Do not install pull boxes in an intersection radius, roadway or driveway, in the bottom of a ditch, or any area prone to flooding or vehicular traffic.
- The unit price for pull boxes shall be paid for as each, and shall be compensation in full for furnishing and installing all materials and equipment including labor, tools and

incidentals necessary for completion in every detail in accordance with the plans and specifications.

#### ELECTRICAL POWER SERVICE ASSEMBLY:

- If a meter base is required to be installed (as per the direction of the local power company) in addition to a service disconnect, it is to be installed at a height of 5 ½ feet above the finished grade to the center of the meter base.
- The service disconnect is to be installed at a height of 4 feet above the finish grade to the bottom of the disconnect.
- A lightning arrester (transient protection device) must be installed with the service disconnect.

#### ELECTRICAL POWER SERVICE ASSEMBLY (continued):

- All metal conduits installed for the meter base and service disconnects are to have appropriate grounding bushings and molded bushings installed prior to applying power to the electrical power service assemblies.
- The electrical power service assembly must be properly grounded.
- The unit price for the electrical power service assembly (including meter base if applicable) shall be paid for as each, and shall be compensation in full for furnishing and installing all materials and equipment including labor, tools and incidentals necessary for completion in every detail in accordance with the plans and specifications.

#### PRESTRESSED CONCRETE POLES:

- All future use conduit stub-outs are to be installed prior to concrete footer being poured.
- The concrete footer shall be Class I concrete.
- Any unused conduit entry holes are to be sealed with an approved epoxy grout.
- Any spalled areas on the prestressed concrete poles are to be repaired with an approved epoxy grout.
- Prestressed concrete poles must be properly grounded.
- The unit price for the prestressed concrete poles shall be paid for as each, and shall be compensation in full for furnishing and installing all materials and equipment including labor, tools and incidentals necessary for completion in every detail in accordance with the plans and specifications.

#### MAST ARM POLE ASSEMBLIES:

- All future use conduit stub-outs are to be installed prior to concrete footer being poured.

- The concrete for the pole drill shaft shall be Class IV concrete with a minimum 28-day compressive strength of 4000 psi.
- The grout for the grout pad shall have a minimum 28-day compressive strength of 5000 psi.
- All hardware and accessories are to be properly installed and match the type and color of the mast arm pole assembly, including: caps for the top of the mast arm pole and the end of the mast arm; top and bottom hand hole covers; base plate and anchor bolt covers, etc.
- Provide a ½ inch diameter weep hole, on the bottom of the arm, approximately 1 foot from the arm base plate.
- Mast arm pole assemblies must be properly grounded.
- The unit price for the mast arm pole assemblies shall be paid for as each, and shall be compensation in full for furnishing and installing all materials and equipment including labor, tools and incidentals necessary for completion in every detail in accordance with the plans and specifications.

#### TRAFFIC SIGNAL ASSEMBLIES:

- The traffic signals are to be installed on the messenger wire or mast arm as near as practical to the line of the driver's normal view.
- Position adjacent signal faces no closer than 8 feet apart measured horizontally, at 90 degrees to the traffic flow, between center of faces.
- The traffic signals shall be equipped with devices or means for positive locking with supporting hardware, which will prevent any rotation or misalignment because of strong winds or any objects which might come into contact with the traffic signal.
- Before placing the traffic signals into the flashing mode, for a new signalized intersection, ensure that all assemblies have been properly installed.
- Once the traffic signals are in the flashing mode ensure that the main-line direction flashes yellow and the side street flashes red.
- Where traffic signals are installed but not put into service or into the flashing mode by the end of the day, the signals are to be concealed using burlap bags or other approved covering by the Engineer.
- The vertical clearance of the traffic signals is to be not less than 17 ½ feet, and not more than 19 feet, above the crown of the roadway, and each signal is to be as near as practical to the same elevation as the most critical signal.
- The lamps are to be 135 watts and installed in the upright position.
- The traffic signals are to be sealed in such a manner to exclude dust and moisture.
- Two ¼ inch drain holes are to be installed in the bottom of each of the traffic signals.
- The unit price for vehicular signal assemblies shall be paid for as each, and shall be compensation in full for furnishing and installing all materials and equipment including labor, tools and incidentals necessary for completion in every detail in accordance with the plans and specifications.

#### TRAFFIC SIGNAL AUXILIARIES:

- All trunnions, brackets and suspensions required for assembling and mounting the traffic signals shall be entirely weather-tight.
- The traffic signals shall be equipped with devices or means for positive locking with supporting hardware, which will prevent any rotation or misalignment because of strong winds or any objects which might come into contact with the traffic signal.
- The overlapped connection of the tri-stud adjustable drop hangers shall use a minimum of 2 bolts with a minimum spacing of 2 inches between bolts.
- There will be no direct payment for the traffic signal auxiliaries. The cost shall be included with the unit price for the vehicular signal assemblies, which shall be compensation in full for furnishing and installing all materials and equipment including labor, tools and incidentals necessary for completion in every detail in accordance with the plans and specifications.

#### PEDESTRIAN SIGNAL and DETECTOR ASSEMBLIES:

- Mount the pedestrian signals with the bottom of the housing not less than 8 feet or more than 10 feet above the sidewalk level.

#### PEDESTRIAN SIGNAL and DETECTOR ASSEMBLIES (continued):

- Mount the center of the pedestrian detector at a height of 3 ½ to 4 feet above the sidewalk level.
- Only pedestrian detectors that are ADA (Americans With Disabilities Act) compliant, and currently listed on the *FDOT Approved Products List (APL) of Traffic Control Signal Devices*, will be accepted.
- Orient the pedestrian signals, detectors and signs to point in the same direction as the corresponding crosswalks.
- The pedestrian signals and detectors shall be installed in such a manner in which they are entirely weather-tight.
- All trunnions, brackets and suspensions required for assembling and mounting the pedestrian signals shall be entirely weather-tight.
- The pedestrian signals shall be equipped with devices or means for positive locking with supporting hardware, which will prevent any rotation or misalignment because of strong winds or any objects which might come into contact with the pedestrian signal.
- Where pedestrian signals and detectors are installed but not put into service by the end of the day, the signals and detectors are to be concealed using burlap bags or other approved covering by the Engineer.
- The pedestrian signals, detectors, and pedestals must be properly grounded.
- The unit price for the pedestrian signal shall be paid for as each, and shall be compensation in full for furnishing and installing all materials and equipment



including labor, tools and incidentals necessary for completion in every detail in accordance with the plans and specifications.

- The unit price for the pedestrian detector assembly and pedestrian sign shall be paid for as a single assembly, and shall be compensation in full for furnishing and installing all materials and equipment including labor, tools and incidentals necessary for completion in every detail in accordance with the plans and specifications.
- The unit price for pedestrian pedestals shall be paid for as each, and shall be compensation in full for furnishing and installing all materials and equipment including labor, tools and incidentals necessary for completion in every detail in accordance with the plans and specifications.

#### INDUCTIVE LOOP ASSEMBLIES and DETECTORS:

- Ensure that the loop saw cuts are laid-out to be installed at the correct distance from the (existing or future) stop bar locations.
- Loop saw cuts are to be completely cleaned of any dust, dirt, or other miscellaneous debris, and are to be at a uniform depth throughout the entire saw cut.
- The saw cuts are to be at a sufficient depth (not exceed 4 inches) so that the top conductor of loop wire or lead-in cable is a minimum of 1 inch below the final surface of the roadway.
- The width of the saw cut shall be sufficient enough to allow unforced placement of the loop conductors, but not more than the width of a penny.

#### INDUCTIVE LOOP ASSEMBLIES and DETECTORS (continued):

- A non-metallic hold down material (slightly wider than the saw cut) is to be placed on top of the conductors at minimum intervals of 12 inches throughout the entire saw cut, and is to be a minimum of  $\frac{3}{4}$  inch below the final surface of the roadway.
- If the loop twisted pair lead-in is to be greater than 75 feet from the cabinet, then it is to be spliced to shielded lead-in cable, in a pull box, and continue on to the cabinet. Splices will not be permitted in the roadway for any reason.
- There shall be only 1 loop twisted pair lead-in allowed per saw cut, and no more than 4 shielded lead-in cables allowed per saw cut.
- A minimum distance of 6 inches is to be maintained between each loop twisted pair lead-in saw cut.
- Loop twisted pairs and/or shielded lead-in cables shall not exit the roadway in a radius.
- The loop saw cuts are to be completely, and uniformly sealed with an approved loop sealant.
- After installation, the loops shall meet or exceed the Testing and Turn On Requirements of the *FDOT Standard Specifications for Road and Bridge Construction, Sections 660-6 and 660-7*, before Final Acceptance will be granted.

- Ensure that the loops are properly labeled and hooked up to the correct loop detectors in the cabinet.
- The unit price for inductive loop assemblies shall be paid for as each, and shall be compensation in full for furnishing and installing all materials and equipment including labor, tools and incidentals necessary for completion in every detail in accordance with the plans and specifications.
- The unit price for inductive loop detectors shall be paid for as each, and shall be compensation in full for furnishing and installing all materials and equipment including labor, tools and incidentals necessary for completion in every detail in accordance with the plans and specifications.

#### TRAFFIC CONTROLLER and CABINET ASSEMBLIES:

- Ensure that the proper number of conduit stub-outs are installed prior to pouring the cabinet's concrete base. NOTE: As a minimum, a separate conduit is required for the signal cables, loop conductors, electrical service conductors, and the grounding conductors. Two spare conduits are also required from the cabinet base to the nearest pull box.
- The conduit stub-outs are to be a minimum of 2 inches above the finished surface of the concrete base, and sealed with an approved moisture resistant duct sealant.
- Construct the base for the cabinet with Class I concrete.
- The cabinet base shall be level, free of honeycombs and as smooth as possible.
- Seal the joint between the bottom of the cabinet and the concrete base (inside and outside of the cabinet) with a clear silicone rubber sealant.
- A concrete service slab is required except in sidewalk or pavement areas or where the right-of-way is restricted.

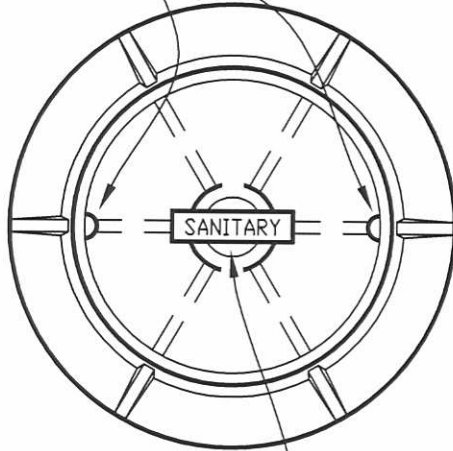
#### TRAFFIC CONTROLLER and CABINET ASSEMBLIES (continued):

- Pole mounted cabinets are to be installed with the bottom of the cabinet a minimum of 4 feet above the finished grade.
- Conduit entrance holes or other holes field drilled in pole mounted cabinets are to be reamed and free of burrs, and all conduit connections to the cabinet are to be made watertight by the use of a clear silicone rubber sealant.
- The traffic controller utilized shall be NEMA type, and of sufficient capacity to operate at the specified Signal Operating Plan (S.O.P.) for that location as shown on the plans.
- Cabinet Assemblies must be properly grounded.
- Keep the ground wire as short as possible from the cabinet ground bussbar to the ground rod assembly or array, and ensure that the ground wire is not in contact with any other part of the cabinet.
- Label spare circuits of the signal and interconnect cables and connect them to the cabinet ground bussbar.

- Neatly bundle and identify all field wiring cables in the cabinet.
- The unit price for the traffic controller and cabinet assembly shall be paid for as a single assembly, and shall be compensation in full for furnishing and installing all materials and equipment including labor, tools and incidentals necessary for completion in every detail in accordance with the plans and specifications.

END OF SECTION 37

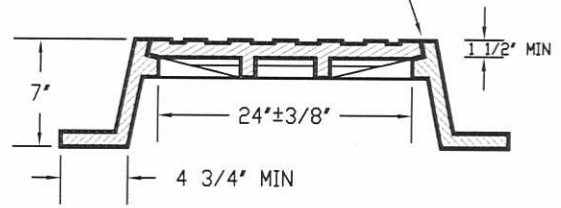
(2) NON-PENETRATING PICK HOLES



RAISED 1 1/2" LETTERS  
FLUSH WITH TOP OF COVER  
(SANITARY, STORMWATER, ETC.  
AS APPROPRIATE)

PLAN

MACHINED MATING SURFACES

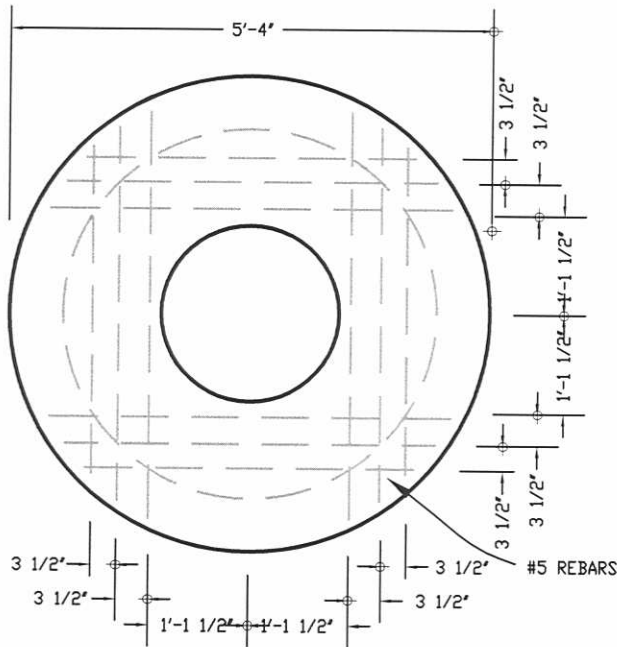


ELEVATION

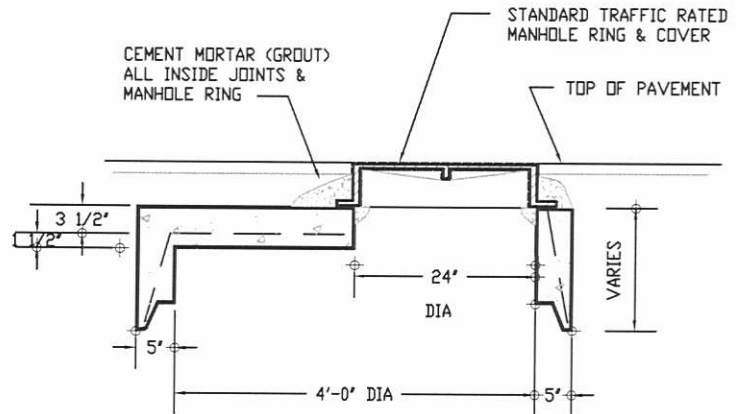
NOTE: THE PORTION OF THE FRAME AND COVER WHICH FORMS THE COVER SEAT SHALL BE MACHINED SO THAT NO ROCKING IS POSSIBLE.

## STANDARD FDOT TRAFFIC RATED MANHOLE FRAME AND COVER

(ANSI/ASTM A 48, CLASS 30 B)



PRE CAST TOP  
FOR MANHOLE



COVER DETAIL FOR  
PRE CAST MANHOLE

3" DIA. BRONZE DISC  
ANCHORED IN CONCRETE  
PAD STAMP AS REQUIRED

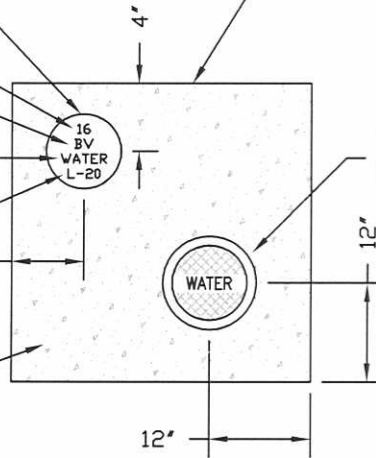
24" x 24" x 6"  
THICK CONCRETE  
PAD TYPICAL EACH  
VALVE BOX

SIZE OF VALVE  
TYPE OF VALVE

SERVICE

DIRECTION AND NUMBER  
OF TURNS TO OPEN

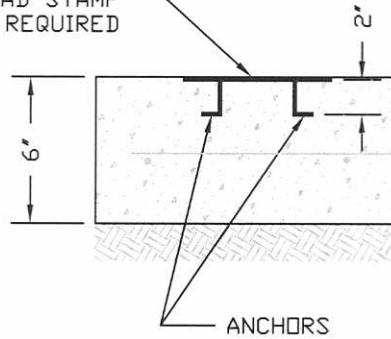
2,500 P.S.I.  
CONCRETE MIN.



VALVE BOX AND  
COVER (TYP.)

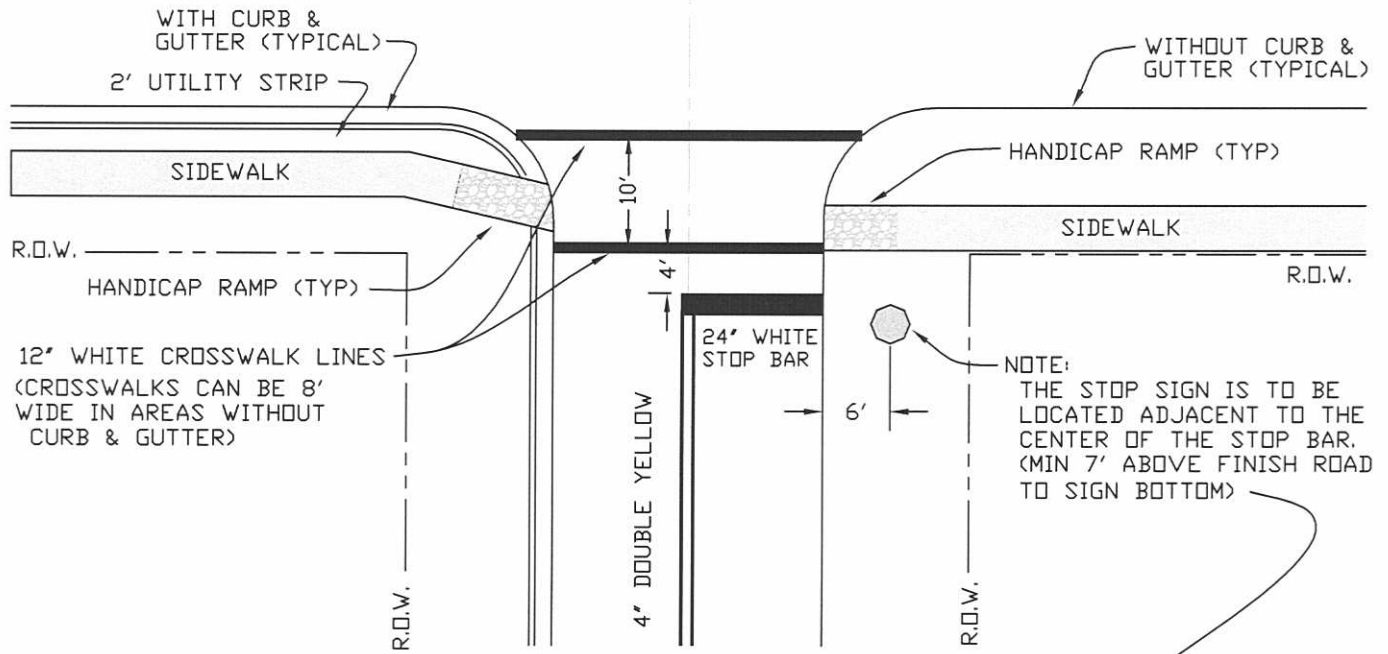
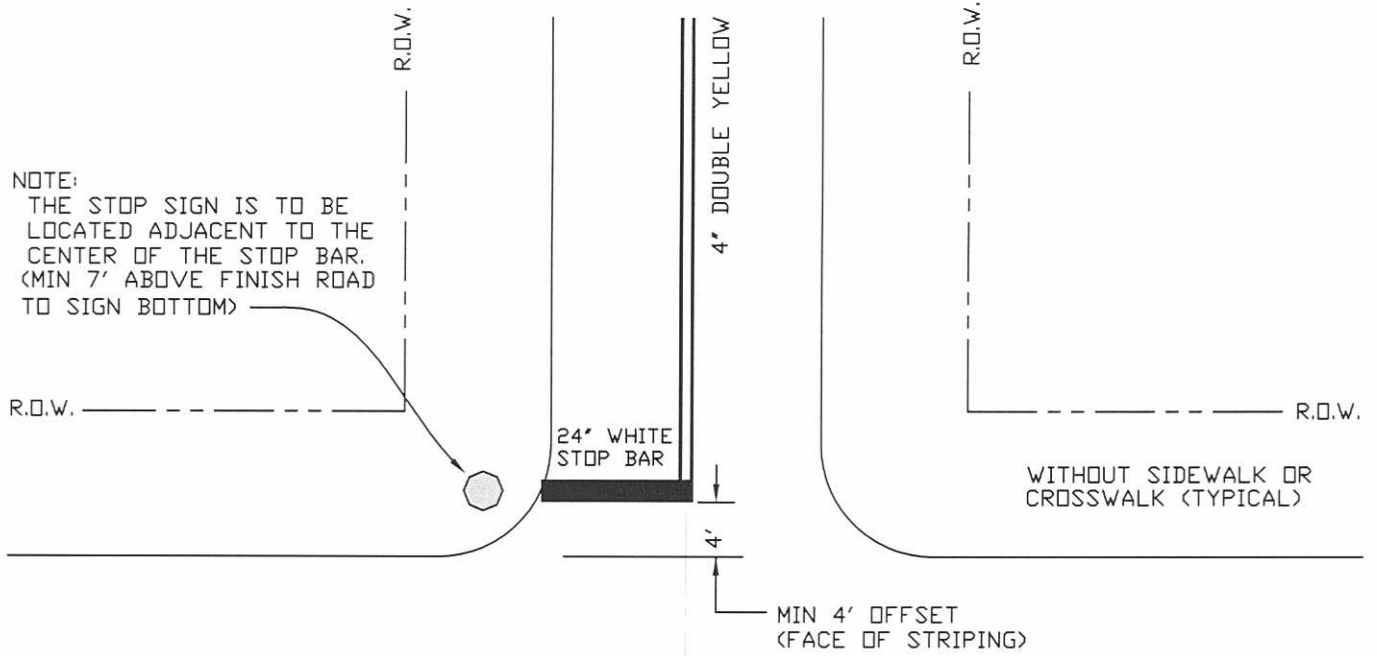
3" DIA. BRONZE  
DISC ANCHORED IN  
CONC. PAD STAMP  
AS REQUIRED

#3 @ 6" O.C.  
BOTH WAYS

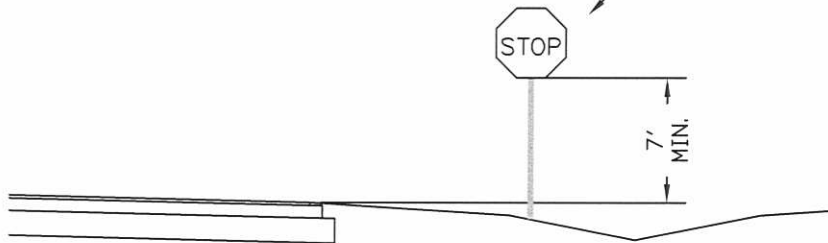


ANCHORS

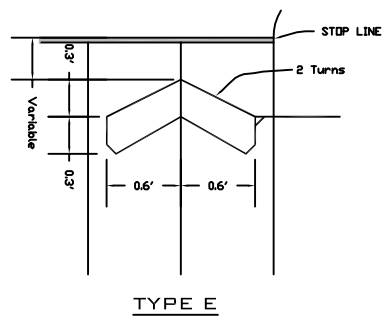
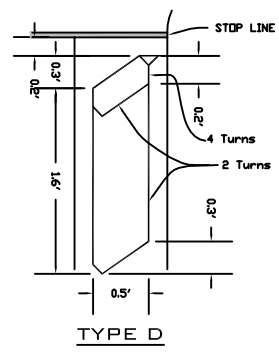
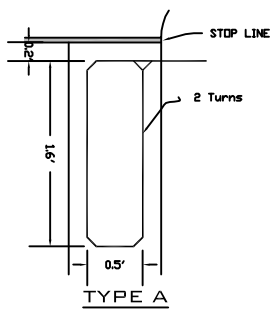
NOTE:  
THE STOP SIGN IS TO BE  
LOCATED ADJACENT TO THE  
CENTER OF THE STOP BAR,  
(MIN 7' ABOVE FINISH ROAD  
TO SIGN BOTTOM)



TYPICAL INTERSECTION DETAIL



NOTE:  
1. THIS DETAIL DOES NOT APPLY TO F.D.O.T. RIGHT-OF-WAYS.



NOTES:

1. THE "NUMBER OF TURNS" INDICATED AT THE SPECIFIED POINT ON THE LOOP REFERS TO THE NUMBER OF PASSES OF LOOP WIRES WHICH ARE PLACED IN THE SAW-CUT FORMING THE COMPLETE LOOP.
2. LOOP TYPES OR DETAILS NOT DRAWN TO SCALE.
3. LOOP TYPES ARE CENTERED IN A SINGLE LANE EXCEPT TYPE E WHICH IS CENTERED ON TWO LANES.
4. LEAD-IN MAY BE CONNECTED TO EITHER END OF LOOP.
5. THE LEADING EDGE OF LOOP TYPES A,C,D & F MAY EXTEND PAST THE STOP LINE A MAXIMUM OF 10 FEET. THE LENGTH OF THESE LOOPS MAY BE EXTENDED TO A MAXIMUM OF 60 FEET. EACH INTERSECTION SHOULD BE INDIVIDUALLY DESIGNED AND IF THE MODIFICATIONS NOTED ABOVE IS REQUIRED IT MUST BE NOTED OR DETAILED IN THE PLANS.
6. LOOP LEAD-IN WIRES SHOULD NOT BE INSTALLED IN THE SAME PULL BOX WITH SIGNAL POWER CABLE.
7. CUT AND INSTALL LOOPS AS SHOWN. ALL LEAD-IN WIRES TO BE PULLED TO PULL BOX (TO BE INSTALLED BY CITY). TEN FEET (10') EXTRA WIRE TO BE PROVIDED FOR EACH LEAD-IN AT PULL BOX. ALL LEAD-IN'S WILL BE LABELED AND LOOPS RESISTANCE TESTED IAW SECTION 660 FDOT SPECIFICATIONS FOR ROAD & BRIDGE CONSTRUCTION. CITY WILL MAKE CONNECTIONS INSIDE THE SIGNAL CABINET.

**DIVISION 2**

**HUD CONTRACT PROVISIONS**



# Supplementary Conditions of the Contract for Construction

U.S. Department of Housing and Urban Development  
Office of Housing  
Federal Housing Commissioner

OMB Approval No. 2502-0470  
(Expires 5/31/2010)

Public reporting burden for this collection of information is estimated to average 30 minutes per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. This information is required to obtain benefits and voluntary. HUD may not collect this information, and you are not required to complete this form, unless it displays a currently valid OMB control number.

This information collection is necessary to ensure that viable projects are developed. It is important to obtain information from applicants to assist HUD in determining if nonprofit organizations initially funded continue to have the financial and administrative capacity needed to develop a project and that the project design meets the needs of the residents. The Department will use this information to set forth the obligations of the contractor or subcontractor performing under the covered contract. This information is required in order to obtain benefits. This information is considered non-sensitive and no assurance of confidentiality is provided.

## Article 1 – Labor Standards

### Instructions

Whenever only FHA mortgage insurance is involved, use paragraph (A) and (C) of Article 1 – Labor Standards. Whenever any direct form of assistance (Section 8, Section 202/811 Capital Advance, grants etc.) is involved, use paragraphs (A) and (B) and (C) of Article 1 – Labor Standards.

### Applicability

The Project or Program to which the construction work covered by this contract pertains is being assisted or insured by the United States of America and the following Federal Labor Standards Provisions are included in this Contract or related instrument pursuant to the provisions applicable to such Federal assistance or insurance.

**A. 1. (I) Minimum Wages.** All laborers and mechanics employed or working upon the site of the work (or under the United States Housing Act of 1937 or under the Housing Act of 1949 in the construction or development of the project), will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR Part 3), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics. Contributions made or costs reasonably anticipated for bona fide fringe benefits under Section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of 29 CFR 5.5(a)(1)(iv); also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs, which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period.

Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR Part 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: Provided, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under 29 CFR Part 5.5(a)(1)(ii) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

(II) (a) Any class of laborers or mechanics which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. HUD shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:

(1) The work to be performed by the classification

requested is not performed by a classification in the wage determination; and

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

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

(b) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and HUD or its designee agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by HUD or its designee to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, D.C. 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise HUD or its designee or will notify HUD or its designee within the 30-day period that additional time is necessary. (Approved by the Office of Management and Budget under OMB control number 1215-0140.)

(c) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and HUD or its designee do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), HUD or its designee shall refer the questions, including the views of all interested parties and the recommendation of HUD or its designee, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise HUD or its designee or will notify HUD or its designee within the 30-day period that additional time is necessary. (Approved by the Office of Management and Budget under OMB Control Number 1215-0140.)

(d) The wage rate (including fringe benefits where appropriate) determined pursuant to subparagraphs A.1.(ii)(b) or (c) of this paragraph, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

(III) Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

(IV) If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, Provided, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program. (Approved by the Office of Management and Budget under OMB Control Number 1215-0140.)

**2. Withholding.** HUD or its designee shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld from the contractor under this contract or any other Federal contract with the

same prime contractor, or any other Federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee or helper, employed or working on the site of the work (or under the United States Housing Act of 1937 or under the Housing Act of 1949 in the construction or development of the project), all or part of the wages required by the contract, HUD or its designee may, after written notice to the contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased. HUD or its designee may, after written notice to the contractor, disburse such amounts withheld for and on account of the contractor or subcontractor to the respective employees to whom they are due. The Comptroller General shall make such disbursements in the case of direct Davis-Bacon Act contracts.

3. (I) **Payrolls and basic records.** Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work (or under the United States Housing Act of 1937, or under the Housing Act of 1949, in the construction or development of the project). Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in Section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in Section 1(b)(2)(B) of the Davis-Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs. (Approved by the Office of Management and Budget under OMB Control Numbers 1215-0140 and 1215-0017.)

(II) (a) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to HUD or its designee if the agency is a party to the contract, but if the agency is not such a party, the contractor will submit the payrolls to the applicant, sponsor, or owner, as the case may be, for transmission to HUD or its designee. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR Part 5.5(a)(3)(i). This information may be submitted in any form desired. Optional Form WH-347 is available for this purpose and may be purchased from the Superintendent of Documents (Federal Stock Number 029-005-00014-1), U.S. Government Printing Office, Washington, D.C. 20402. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. (Approved by the Office of Management and Budget under OMB Control Number 1215-0149.)

(b) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(1) That the payroll for the payroll period contains the information required to be maintained under 29 CFR Part 5.5(a)(3)(i) and that such information is correct and complete;

(2) That each laborer or mechanic (including each

helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in 29 CFR Part 3;

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

(c) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH-347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph A.3.(ii)(b) of this section.

(d) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under Section 1001 of Title 18 and Section 231 of Title 31 of the United States Code.

(III) The contractor or subcontractor shall make the records required under paragraph A.3.(i) of this section available for inspection, copying, or transcription by authorized representatives of HUD or its designee or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, HUD or its designee may, after written notice to the contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR Part 5.12.

4. (I) **Apprentices and Trainees. Apprentices.** Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Bureau of Apprenticeship and Training, or with a State Apprenticeship Agency recognized by the Bureau, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Bureau of Apprenticeship and Training or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice. The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed. Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination. In the event the Bureau

of Apprenticeship and Training, or a State Apprenticeship Agency recognized by the Bureau, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(ii) **Trainees.** Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration. The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration. Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman's hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(iii) **Equal employment opportunity.** The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR Part 30.

**5. Compliance with Copeland Act Requirements.** The contractor shall comply with the requirements of 29 CFR Part 3 which are incorporated by reference in this contract.

**6. Subcontracts.** The contractor or subcontractor will insert in any subcontracts the clauses contained in 29 CFR 5.5(a)(1) through (10) and such other clauses as HUD or its designee may be appropriate instructions require, and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR Part 5.5.

**7. Contract termination; debarment.** A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

**8. Compliance with Davis-Bacon and Related Act Requirements.** All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR Parts 1, 3, and 5 are herein incorporated by reference in this contract.

**9. Disputes concerning labor standards.** Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR Parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and HUD or its designee, the U.S. Department of Labor, or the employees or their representatives.

**10. (i) Certification of Eligibility.** By entering into this contract the contractor certifies neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm

ineligible to be awarded Government contracts by virtue of Section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1) or to be awarded HUD contracts or participate in HUD programs pursuant to 24 CFR Part 24.

(ii) No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of Section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1) or to be awarded HUD contracts or participate in HUD programs pursuant to 24 CFR Part 24.

(iii) The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001. Additionally, U.S. Criminal Code, Section 1010, Title 18, U.S.C., "Federal Housing Administration transactions", provides in part: "Whoever, for the purpose of . . . influencing in any way the action of such Administration . . . makes, utters or publishes any statement, knowing the same to be false . . . shall be fined not more than \$5,000 or imprisoned not more than two years, or both."

**B. Contract Work Hours and Safety Standards Act.** As used in this paragraph, the terms "laborers" and "mechanics" include watchmen and guards.

**1. Overtime requirements.** No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

**2. Violation; liability for unpaid wages, liquidated damages.** In the event of any violation of the clause set forth in subparagraph (1) of this paragraph, the contractor and any subcontractor responsible therefore shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in subparagraph (1) of this paragraph, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in subparagraph (1) of this paragraph.

**3. Withholding for unpaid wages and liquidated damages.** HUD or its designee shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other Federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for unpaid wages and liquidated damages as provided in the clause set forth in subparagraph (2) of this paragraph.

**4. Subcontracts.** The contractor or subcontractor shall insert in any subcontracts the clauses set forth in subparagraph (1) through (4) of this paragraph and also a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in subparagraphs (1) through (4) of this paragraph.

**C. The Contractor will be required to execute FHA Form No. 2403-A, Contractor's Prevailing Wage Certificate, as a condition precedent to insurance by the Federal Housing Administration of that certain mortgage loan, or an advance thereof, made or to be made by the mortgagee in connection with the construction of the project.**

## Article 2 – Equal Employment Opportunity

The applicant hereby agrees that it will incorporate or cause to be

incorporated into any contract for construction work, or modification thereof, as defined in the regulations of the Secretary of Labor at 41 CFR Chapter 60, which is paid for in whole or in part with funds obtained from the Federal Government or borrowed on the credit of the Federal Government pursuant to a grant, contract, loan insurance, or guarantee, or undertaken pursuant to any Federal program involving such grant, contract, loan, insurance, or guarantee, the following equal opportunity clause:

During the performance of this contract, the Contractor agrees as follows:

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

B. The Contractor will, in all solicitations or advertisements for employees placed by or on behalf of the Contractor state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex, or national origin.

C. The Contractor will send to each labor union or representative of workers with which it has a collective bargaining agreement or other contract or understanding a notice to be provided advising the said labor union or workers representatives of the Contractor's commitments hereunder, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.

D. The Contractor will comply with all provisions of Executive Order 11246 of September 24, 1965 and of the rules, regulations, and relevant orders of the Secretary of Labor.

E. The Contractor will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to its books, records, and accounts by the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.

F. In the event of the Contractor's noncompliance with the nondiscrimination clauses of this contract or with any of the said rules, regulations, or orders, this contract may be canceled, terminated, or suspended in whole or in part and the Contractor may be declared ineligible for further government contracts or federally assisted construction contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulations or order of the Secretary of Labor, or as otherwise provided by law.

G. The Contractor will include the portion of the sentence immediately preceding paragraph A and the provisions of paragraphs A through G in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to Section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The Contractor will take such action with respect to any subcontract or purchase order as the Secretary of Housing and Urban Development or the Secretary of Labor may direct as a means of enforcing such provisions, including sanctions for noncompliance. *Provided, however,* that in the event the Contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the Secretary of Housing and Urban Development or the Secretary of Labor, the Contractor may request the United States to enter into such litigation to protect the interests of the United States.

H. The applicant further agrees that it will be bound by the above equal opportunity clause with respect to its own employment practices when it participates in federally assisted construction work:

*Provided, That* if the applicant so participating is a State or local government, the above equal opportunity clause is not applicable to any agency, instrumentality or subdivision of such government which does not participate in work on or under the contract.

I. The applicant agrees that it will assist and cooperate actively with the administering agency and the Secretary of Labor in obtaining the compliance of contractors and subcontractors with the equal opportunity clause and the rules, regulations, and relevant orders of the Secretary of Labor, that it will furnish the administering agency and the Secretary of Labor such information as they may require for the supervision of such compliance, and that it will otherwise assist the administering agency in the discharge of the agency's primary responsibility for securing compliance.

J. The applicant further agrees that it will refrain from entering into any contract or contract modification subject to Executive Order 11246 of September 24, 1965, with a contractor debarred from, or who has not demonstrated eligibility for, Government contracts and federally assisted construction contracts pursuant to the Executive order and will carry out such sanctions and penalties for violation of the equal opportunity clause as may be imposed upon contractors and subcontractors by the administering agency or the Secretary of Labor pursuant to Part II, Subpart D of the Executive order. In addition, the applicant agrees that if it fails or refuses to comply with these undertakings, the administering agency may take any or all of the following actions: Cancel, terminate, or suspend in whole or in part this grant (contract, loan, insurance, guarantee); refrain from extending any further assistance to the applicant under the program with respect to which the failure or refund occurred until satisfactory assurance of future compliance has been received from such applicant; and refer the case to the Department of Justice for appropriate legal proceedings.

### **Article 3 – Equal Opportunity for Businesses and Lower Income Persons Located Within the Project Area**

(Applicable to Section 236 projects, where the estimated replacement cost of the project as determined by the Secretary of Housing and Urban Development exceeds \$500,000, and to all projects, including Section 236 regardless of estimated replacement cost, receiving rent supplement assistance under Title I, Section 101 of the Housing and Urban Development Act of 1965.)

A. The work to be performed under this contract is on a project assisted under a program providing direct Federal financial assistance from the Department of Housing and Urban Development and is subject to the requirements of Section 3 of the Housing and Urban Development Act of 1968, as amended, 12 U.S.C. 1701u. Section 3 requires that to the greatest extent feasible opportunities for training and employment be given lower income residents of the unit of local government or the metropolitan area (or nonmetropolitan county) as determined by the Secretary of Housing and Urban Development in which the projects located and contracts for work in connection with the project be awarded to business concerns which are located in, or owned in substantial part by persons residing in the same metropolitan area (or nonmetropolitan county) as the project.

### **Article 4 – Health and Safety**

A. No laborer or mechanic shall be required to work in surroundings or under working conditions which are unsanitary, hazardous, or dangerous to his health and safety as determined under construction safety and health standards promulgated by the Secretary of Labor by regulation.

B. The Contractor shall comply with all regulations issued by the Secretary of Labor pursuant to Title 29 Part 1926 (formerly part 1518) and failure to comply may result in imposition of sanctions pursuant to the Contract Work Hours and Safety Standards Act (Public Law 91-54, 83 Stat. 96).

C. The Contractor shall include the provisions of this Article in every subcontract so that such provisions will be binding on each subcontractor. The Contractor shall take such action with respect to any subcontract as the Secretary of Housing and Urban Development of the Secretary of Labor shall direct as a means of enforcing such provisions.



# UNITED STATES DEPARTMENT OF LABOR

## Employment Standards Administration

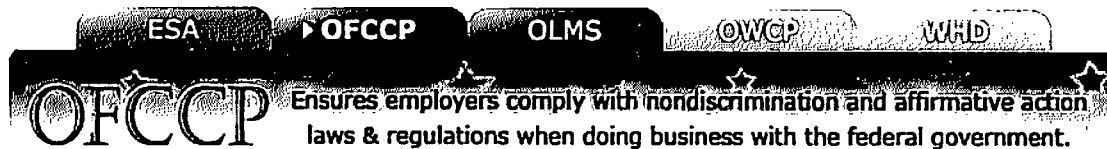
January 27, 2009

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

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

#### Part I — Nondiscrimination in Government Employment

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

#### Part II - Nondiscrimination in Employment by Government Contractors and Subcontractors

##### Subpart A - Duties of the Secretary of Labor

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

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

##### Subpart B - Contractors' Agreements

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

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

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

1/27/2009

U.S. Department of Labor - Employme...

- conspicuous places, available to employees and applicants for employment, notices to be provided by the contracting officer setting forth the provisions of this nondiscrimination clause.
2. The contractor will, in all solicitations or advancements for employees placed by or on behalf of the contractor, state that all qualified applicants will receive consideration for employment without regard to race, color, religion, sex or national origin.
  3. The contractor will send to each labor union or representative of workers with which he has a collective bargaining agreement or other contract or understanding, a notice, to be provided by the agency contracting officer, advising the labor union or workers' representative of the contractor's commitments under Section 202 of Executive Order No. 11246 of September 24, 1965, and shall post copies of the notice in conspicuous places available to employees and applicants for employment.
  4. The contractor will comply with afl provisions of Executive Order No. 11246 of Sept. 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor.
  5. The contractor will furnish all information and reports required by Executive Order No. 11246 of September 24, 1965, and by the rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the contracting agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.
  6. In the event of the contractor's noncompliance with the nondiscrimination clauses of this contract or with any of such rules, regulations, or orders, this contract may be cancelled, terminated, or suspended in whole or in part and the contractor may be declared ineligible for further Government contracts in accordance with procedures authorized in Executive Order No. 11246 of Sept. 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order No. 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.
  7. The contractor will include the provisions of paragraphs (1) through (7) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to Section 204 of Executive Order No. 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The contractor will take such action with respect to any subcontract or purchase order as may be directed by the Secretary of Labor as a means of enforcing such provisions including sanctions for noncompliance: Provided, however, that in the event the contractor becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction, the contractor may request the United States to enter into such litigation to protect the interests of the United States." [Sec. 202 amended by EO 11375 of Oct. 13, 1967, 32 FR 14303, 3 CFR, 1966-1970 Comp., p. 684, EO 12086 of Oct. 5, 1978, 43 FR 46501, 3 CFR, 1978 Comp., p. 230]

**SEC. 203.**

- a. Each contractor having a contract containing the provisions prescribed in Section 202 shall file, and shall cause each of his subcontractors to file, Compliance Reports with the contracting agency or the Secretary of Labor as may be directed. Compliance Reports shall be filed within such times and shall contain such information as to the practices, policies, programs, and employment policies, programs, and employment statistics of the contractor and each subcontractor, and shall be in such form, as the Secretary of Labor may prescribe.
- b. Bidders or prospective contractors or subcontractors may be required to state whether they have participated in any previous contract subject to the provisions of this Order, or any preceding similar Executive order, and in that event to submit, on behalf of themselves and their proposed subcontractors, Compliance Reports prior to or as an initial part of their bid or negotiation of a contract.
- c. Whenever the contractor or subcontractor has a collective bargaining agreement or other contract or understanding with a labor union or an agency referring workers

[dol.gov/esa/ofccp/regs/.../eo11246.htm](http://dol.gov/esa/ofccp/regs/.../eo11246.htm)

2/8

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

**SEC. 205.** The Secretary of Labor shall be responsible for securing compliance by all Government contractors and subcontractors with this Order and any implementing rules or

[dol.gov/esa/ofccp/regs/.../eo11246.htm](http://dol.gov/esa/ofccp/regs/.../eo11246.htm)

# NOTICE TO ALL EMPLOYEES



## Working on Federal or Federally Financed Construction Projects

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### MINIMUM WAGES

You must be paid not less than the wage rate in the schedule posted with this Notice for the kind of work you perform.

### OVERTIME

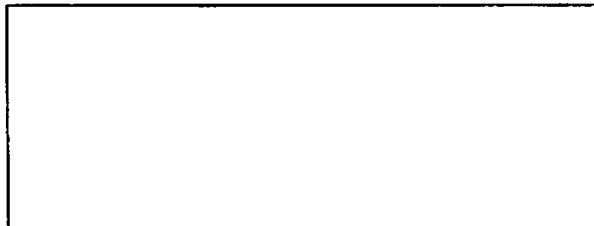
You must be paid not less than one and one-half times your basic rate of pay for all hours worked over 40 a week. There are some exceptions.

### APPRENTICES

Apprentice rates apply only to apprentices properly registered under approved Federal or State apprenticeship programs.

### PROPER PAY

If you do not receive proper pay, contact the Contracting Officer listed below:



or you may contact the nearest office of the Wage and Hour Division, U.S. Department of Labor. The Wage and Hour Division has offices in several hundred communities throughout the country. They are listed in the U.S. Government section of most telephone directories under:  
**U.S. Department of Labor**  
**Employment Standards Administration**



GENERAL DECISION: FL20100305 03/12/2010 FL305

Date: March 12, 2010

General Decision Number: FL20100305 03/12/2010

Superseded General Decision Number: FL20080305

State: Florida

Construction Type: Highway

County: Bay County in Florida.

HIGHWAY CONSTRUCTION PROJECTS

Modification Number	Publication Date
0	03/12/2010

SUFL2009-202 08/05/2009

	Rates	Fringes
CARPENTER.....	\$ 13.03	1.05
CEMENT MASON/CONCRETE FINISHER...	\$ 10.06	0.00
ELECTRICIAN.....	\$ 17.12	0.00
FORM WORKER.....	\$ 12.29	0.00
HIGHWAY/PARKING LOT STRIPING: Operator (Striping Machine).....	\$ 11.97	2.23
HIGHWAY/PARKING LOT STRIPING: Painter.....	\$ 13.31	0.00
IRONWORKER, REINFORCING.....	\$ 14.50	1.37
IRONWORKER, STRUCTURAL.....	\$ 16.75	3.88
LABORER: Asphalt Shoveler.....	\$ 10.70	0.00
LABORER: Common or General.....	\$ 8.30	0.00
LABORER: Flagger.....	\$ 10.10	3.37
LABORER: Grade Checker.....	\$ 10.50	0.55
LABORER: Landscape and Irrigation.....	\$ 8.77	0.00
LABORER: Luteman.....	\$ 10.32	0.00
LABORER: Mason Tender - Cement/Concrete.....	\$ 12.00	1.80



LABORER: Pipelayer.....	\$ 12.13	2.59
LABORER: Power Tool Operator (Hand Held Drills/Saws, Jackhammer and Power Saws.....)	\$ 11.23	1.96
OPERATOR: Asphalt Plant.....	\$ 12.20	0.00
OPERATOR: Asphalt Spreader.....	\$ 10.76	0.00
OPERATOR: Auger.....	\$ 19.40	0.44
OPERATOR: Backhoe Loader Combo.....	\$ 15.33	0.97
OPERATOR: Backhoe/Excavator.....	\$ 10.70	0.00
OPERATOR: Boom.....	\$ 16.61	0.00
OPERATOR: Bulldozer.....	\$ 14.18	2.56
OPERATOR: Crane.....	\$ 15.50	1.86
OPERATOR: Distributor.....	\$ 11.47	0.00
OPERATOR: Drill.....	\$ 13.00	1.59
OPERATOR: Grader/Blade.....	\$ 15.41	3.60
OPERATOR: Loader.....	\$ 9.66	0.00
OPERATOR: Mechanic.....	\$ 16.20	3.25
OPERATOR: Milling Machine.....	\$ 11.91	1.96
OPERATOR: Oiler.....	\$ 13.08	2.27
OPERATOR: Paver.....	\$ 9.78	0.00
OPERATOR: Piledriver.....	\$ 15.59	4.00
OPERATOR: Roller.....	\$ 8.82	0.00
OPERATOR: Scraper.....	\$ 10.70	1.60
OPERATOR: Screed.....	\$ 11.59	0.00
OPERATOR: Tractor.....	\$ 9.05	0.00
OPERATOR: Trencher.....	\$ 13.41	0.49
PAINTER: Spray and Steel.....	\$ 16.62	0.00
TRUCK DRIVER: Distributor.....	\$ 11.30	2.26
TRUCK DRIVER: Dump Truck.....	\$ 8.66	0.00

TRUCK DRIVER: Lowboy Truck.....	\$ 12.19	0.00
TRUCK DRIVER: Material Truck....	\$ 12.76	9.80
TRUCK DRIVER: Tractor Haul Truck.....	\$ 10.64	0.00
TRUCK DRIVER: Water Truck.....	\$ 10.50	0.00
TRUCK DRIVER: 10 Yard Haul Away.....	\$ 12.50	0.00

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WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

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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 (29 CFR 5.5(a)(1)(ii)).

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In the listing above, the "SU" designation means that rates listed under the identifier do not reflect collectively bargained wage and fringe benefit rates. Other designations indicate unions whose rates have been determined to be prevailing.

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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.

END OF GENERAL DECISION

