# MANATEE COUNTY GOVERNMENT
# INVITATION FOR BID

## IFB #09-3328-DS
## Road Building Materials & Services

Manatee County, a political subdivision of the State of Florida, (hereinafter "Manatee County" or the "County" or "Owner") will receive sealed bids from individuals, corporations, partnerships, and other legal entities organized under the laws of the State of Florida or authorized to conduct business in the State of Florida.

**NON- MANDATORY INFORMATION CONFERENCE**
In order to insure that all prospective bidders have sufficient information and understanding of the County's needs, an **Information Conference** will be held **September 8, 2009 at 2:00 PM** at the **Manatee County Public Works Department, Project Management Division, (Conference Rooms A and B) 1022 26th Avenue East, Bradenton, FL 34208.** All interested bidders are encouraged to attend.

**DEADLINE FOR CLARIFICATION REQUESTS: October 8, 2009 by 2:00 PM**

Reference Article A.03 of this Invitation For Bid.

**TIME AND DATE DUE: October 15, 2009 at 2:00 PM**

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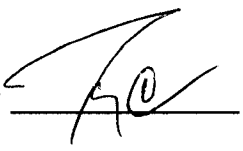
**Important Note: A prohibition of Lobbying has been enacted. Please review paragraph A.24 carefully to avoid violation and possible sanctions.**


**FOR INFORMATION CONTACT**
**Donna M. Stevens (941) 708-7528**
**Email: donna.stevens@mymanatee.org**


AUTHORIZED FOR RELEASE: 

# INFORMATION TO BIDDERS

A.01 OPENING LOCATION

These bids will be **publicly opened** at **Manatee County Purchasing, 1112 Manatee Avenue West, Suite 803, Bradenton, Florida 34205** in the presence of County officials at the time and date stated, or soon thereafter. All bidders or their representatives are invited to be present.

A.02 BID INFORMATION AND BID DOCUMENTS

**Bids and Proposals** on http://www.mymanatee.org Bid or Proposal documents and Notices of Source Selection related to those Bids or Proposals are available for download in a portable document format (.PDF) file on the Manatee County web page on the Purchasing tab under "Bids and Proposals." You may view and print these files using Adobe Acrobat software. A free copy of the Adobe software may be downloaded from the County's web site.

**Manatee County collaborates with the Manatee Chamber of Commerce** on distributing solicitations using the RFP Tool web page on the Chambers website: http://www.Manateechamber.com to post Bid and Proposal documents in a portable document format (.PDF) file. This step is in addition to the posting on Manatee County Government web pages.

Manatee County may also use an internet service provider to distribute Bids and Proposals. A link to that service http://www.DemandStar.com is provided on this website under the Tab "DemandStar". Participation in the DemandStar system is not a requirement for doing business with Manatee County.

Note: The County posts the Notice of Source Selection seven calendar days prior to the effective date of the award.

IT IS THE RESPONSIBILITY OF EACH VENDOR, PRIOR TO SUBMITTING THEIR BID OR PROPOSAL, TO CONTACT THE MANATEE COUNTY PURCHASING OFFICE (see contact information on front page of this document) TO DETERMINE IF ADDENDA WERE ISSUED AND TO MAKE SUCH ADDENDA A PART OF THEIR BID OR PROPOSAL.

**A public internet connection** is available during regular business hours in the lobby of the Purchasing Division. If you have any questions which cannot be answered by these sources, please contact the individual named on the front page of the Bid or Proposal.

A.03 DEADLINE FOR CLARIFICATION REQUESTS

For this Invitation for Bid, **October 8, 2009 at 2:00 pm** shall be the deadline to submit all inquiries, suggestions or requests in writing concerning interpretation, clarification or additional information pertaining to this Invitation for Bid.

This deadline has been established to maintain fair treatment for all potential bidders, while maintaining the expedited nature of the Economic Stimulus that the contracting of this work may achieve.

A.04 BID FORM DELIVERY REQUIREMENTS

Any bids received after the stated time and date will not be considered. It shall be the sole responsibility of the bidder to have their bid delivered to Manatee County Purchasing for receipt on or before the stated time and date. If a bid is sent by U.S. Mail, the bidder shall be responsible for its timely delivery to Purchasing. Bids delayed by mail shall not be considered, shall not be opened at the public opening, and arrangements shall be made for their return at the bidder's request and expense. Telegraphic bids and/or facsimile bids will not be considered.

A.05 CLARIFICATION & ADDENDA

Each bidder shall examine all Invitation for Bid documents and shall judge all matters relating to the adequacy and accuracy of such documents. Any inquiries, suggestions or requests concerning interpretation, clarification or additional information pertaining to the Invitation for Bid shall be made through the Manatee County Purchasing Office. The County shall not be responsible for oral interpretations given by any County employee, representative, or others. The issuance of a written addendum is the only official method whereby interpretation, clarification or additional information can be given.

If any addenda are issued to this Invitation for Bid, the County will Broadcast the addenda on the DemandStar distribution system to "Planholders" on this web service, and post the documents on the Purchasing Division's web page at http://www.mymanatee.org which may be accessed by clicking on the "Purchasing" button on the left side of the screen and then clicking on the "Bids and Proposals" button. It shall be the responsibility of each bidder, prior to submitting their bid, to contact Manatee County Purchasing (see contact on page 1) to determine if addenda were issued and to make such addenda a part of their bid. **Bidders must fully comply with the Bid Contract Documents, terms, and conditions.**

A.06 SEALED & MARKED

One original and two copies of your **signed bid** shall be submitted in one sealed package, clearly marked on the outside "**Sealed Bid #09-3328-DS Road Building Materials and Services** with your company name and addressed to:

Manatee County Purchasing
1112 Manatee Avenue West, Suite 803
Bradenton, Florida 34205

A.07 LEGAL NAME

Bids shall clearly indicate the legal name, address and telephone number of the bidder. Bids shall be signed above the typed or printed name and title of the signer. The signer must have the authority to bind the bidder to the submitted bid.

A.08 BID EXPENSES

All expenses for making bids to the County are to be borne by the bidder.

A.08 UNBALANCED BIDDING PROHIBITED

Manatee County recognizes that large and/or complex projects will often result in a variety of methods, sources and prices However where in the opinion of the County such variation does not appear to be justified, given bid specifications and industry and market conditions, the bid will be presumed to be unbalanced.

A.08 UNBALANCED BIDDING PROHIBITED (Continued)
Examples of unbalanced bids will include:

1. Bids showing omissions, alterations of form, additions not specified or required, conditional or unauthorized alternate bids.

2. Bids quoting prices that substantially deviate, either higher or lower, from those included in the bids of competitive bidders for the same line item unit costs.

3. Bids where the unit costs offered are in excess of or below reasonable cost analysis values.

In the event the County determines that a bid is presumed unbalanced, it will request the opportunity to, and reserves the right to, review all source quotes, bids, price lists, letters of intent, etc., which the bidder obtained and upon which the bidder relied upon to develop the bid. The County reserves the right to reject as non-responsive any presumptive unbalanced bids where the bidder is unable to demonstrate the validity and/or necessity of the unbalanced unit costs.

A.09 FRONT END LOADING OF BID PRICING PROHIBITED
Prices offered for performance and/or acquisition activities to occur early in the project schedule, such as: mobilization, clearing and grubbing; or maintenance of traffic, that are substantially higher than pricing of competitive bidders within the same portion of the project schedule, will be presumed to be front end loaded. Front end loaded bids could reasonably appear to be an attempt to obtain unjustified early payments creating a risk of insufficient incentive for the Contractor to complete the work or otherwise creating an appearance of an under-capitalized bidder.

In the event the County determines that a bid is presumed to be front end loaded, it will request the opportunity to, and reserves the right to, review all source quotes, bids, price lists, letters of intent, etc., which the bidder obtained and upon which the bidder relied upon to develop the pricing or acquisition timing for these bid items. The County reserves the right to reject as non-responsive any presumptive front end loaded bids where the bidder is unable to demonstrate the validity and/or necessity of the front end loaded costs.

A.10 IRREVOCABLE OFFER
Any bid may be withdrawn up until the date and time set for opening of the bid. Any bid not so withdrawn shall, upon opening, constitute an irrevocable offer for a period of 90 days to sell to Manatee County the goods and/or services set forth in the attached Contract Documents until one or more of the bids have been duly accepted by the County.

A.11 DISCLOSURE
Upon receipt, responses become "Public Records" and shall be subject to public disclosure consistent with Chapter 119, Florida Statutes. Section 119.071(1) (b) 1.a states that sealed bids shall be exempt from inspection or copying until such time as the County provides a notice of a decision or within 10 days after the date the bids are opened, whichever is earlier.

A.12 RESERVED RIGHTS

The County reserves the right to accept or reject any and/or all bids, to waive irregularities and technicalities, and to request resubmission. Also, the County reserves the right to accept all or any part of the bid and to increase or decrease quantities to meet additional or reduced requirements of the County. Any sole response received by the first submission date may or may not be rejected by the County depending on available competition and current needs of the County. For all items combined, the bid of the lowest responsive, responsible bidder will be accepted, unless all bids are rejected. The lowest responsible bidder shall mean that bidder who makes the lowest bid to sell goods and/or services of a quality which conforms closest to or most exceeds the quality of goods and/or services set forth in the attached Contract Documents or otherwise required by the County, and who is fit and capable to perform the bid as made.

To be responsive, a bidder shall submit a bid which conforms in all material respects to the requirements set forth in this Invitation For Bid.

To be a responsible bidder, the bidder shall have the capability in all respects to perform fully the contract requirements, and the tenacity, perseverance, experience, integrity, reliability, capacity, facilities, equipment, and credit which will assure good faith performance. Also, the County reserves the right to make such investigation as it deems necessary to determine the ability of any bidder to deliver the goods or service requested. Information the County deems necessary to make this determination shall be provided by the bidder. Such information may include, but shall not be limited to: current financial statements, verification of availability of equipment and personnel, and past performance records.

A.13 COLLUSION

By offering a submission to this Invitation For Bid, the bidder certifies that the bidder has not divulged, discussed or compared their bid with other bidders, and has not colluded with any other bidder or parties to this bid whatsoever. Also, bidder certifies, and in the case of a joint bid each party thereto certifies as to their own organization, that in connection with this bid:

a. any prices and/or cost data submitted have been arrived at independently, without consultation, communication, or agreement, for the purpose of restricting competition, as to any matter relating to such prices and or cost data, with any other bidder or with any competitor;
b. any prices and or cost data quoted for this bid have not been knowingly disclosed by the bidder and will not knowingly be disclosed by the bidder, prior to the scheduled opening, directly or indirectly to any other bidder or to any competitor;
c. no attempt has been made or will be made by the bidder to induce any other person or firm to submit or not to submit a bid for the purpose of restricting competition;
d. the only person or persons interested in this bid, principal or principals is/are named therein and that no person other than therein mentioned has any interest in this bid or in the contract to be entered into; and
e. no person or agency has been employed or retained to solicit or secure this contract upon an agreement or understanding or a commission, percentage, brokerage, or contingent fee excepting bona fide employees or established commercial agencies maintained by bidder for purpose of doing business.

A.14 APPLICABLE LAWS

Bidder or Proposer must be authorized to transact business in the State of Florida. All applicable laws and regulations of the State of Florida and ordinances and regulations of Manatee County will apply to any resulting agreement. Any involvement with any Manatee County procurement shall be in accordance with Manatee County Purchasing Code Ordinance 09-52, as amended. An actual or prospective Bidder or Proposer who is aggrieved in connection with the solicitation or award of a contract may protest to the Board of County Commissioners of Manatee County as required in the Manatee County Code of Laws.

A protest with respect to this Invitation For Bid or Request for Proposal shall be **submitted in writing prior to the scheduled opening date of this proposal, unless the aggrieved person did not know** and could not have been reasonably expected to have knowledge of the facts giving rise to such protest prior to the scheduled opening date of this proposal. The protest shall be submitted within seven calendar days after such aggrieved person knows or could have reasonably been expected to know the facts giving rise thereto.

A.15 CODE OF ETHICS

With respect to this proposal, if any Bidder or Proposer violates or is a party to a violation of the Code of Ethics of Manatee County per Manatee County Code of Laws and /or the State of Florida per Florida Statute Chapter 112, Part III, Code of Ethics or Public Officers and Employees, such Bidder or Proposer may be disqualified from performing the work described in this proposal or from furnishing the goods or services for which the proposal is submitted and shall be further disqualified from submitting any future bids or proposals for work or for goods or services for Manatee County.

The County anticipates that all statements made and materials submitted in a proposal will be truthful. If a bidder or proposer is determined to be untruthful in its proposal or any related presentation, such bidder or proposer may be disqualified from further consideration regarding this Invitation For Bid or Request for Proposal.

A.16 BID FORMS

Bids must be submitted on attached County forms, although additional pages may be attached. **Bidders must fully comply with all bid Contract Documents, terms, and conditions**. Failure to comply shall result in contract default, whereupon, the defaulting vendor shall be required to pay for any and all re-procurement costs, damages, and attorney fees as incurred by the County.

A.17 DISCOUNTS

Any and all discounts must be incorporated in the prices contained in the bid, and not shown separately. The prices as shown on the bid form shall be the price used in determining award(s).

A.18 TAXES

Manatee County is exempt from Federal Excise and State Sales Taxes (F.E.T. Exempt Cert. No. 59-78-0089K and FL Sales Tax Exempt Cert. No. 85-8012622206C-6); therefore, the bidder is prohibited from delineating a separate line item in his bid for any sales or service taxes. Nothing herein shall affect the bidder's normal tax liability.

A.19 MATHEMATICAL ERRORS

Bids submitted shall be based on the quantities stated on the Bid Form. Quantities shall be used for the comparison of Bids. Payment to the Contractor will be made based on the actual quantity of work completed and accepted at the date of payment request, in accordance with the terms of the contract.

In the event of multiplication/extension error(s), the unit price shall prevail. In the event of addition error(s), the extended totals shall prevail. All bids shall be reviewed mathematically and corrected, if necessary, using these standards prior to additional evaluation. Calculations shall be factored to the second decimal point.

A.20 DESCRIPTIVE INFORMATION

Unless otherwise specifically provided in the Contract Documents, all equipment, materials and articles incorporated in the work covered by this contract shall be new and of the most suitable grade for the purpose intended. Unless otherwise specifically provided in the Contract Documents, reference to any equipment, material, article or patented process, by trade name, brand name, make or catalog number, shall be regarded as establishing a standard of quality and shall not be construed as limiting competition.

A.21 PUBLIC CONTRACTING AND ENVIRONMENTAL CRIMES CERTIFICATION

In Accordance with the Manatee County Code of Laws, the award of County contracts to persons, business entities, or affiliates of business entities who have not submitted written certification to the County that they have been convicted of bribery, attempted bribery, collusion, restraints of trade, price fixing, and violations of certain environmental laws. A Non-Conviction Certification Form is attached for this purpose.

A.22 DRUG FREE WORK PLACE

The Manatee County Board of County Commissioners adopted a policy regarding Bidders maintaining a Drug Free Work Place, prohibiting the award of bids to any person or entity that has not submitted written certification to the County that it has complied with those requirements [Reference Resolution R-93-22, Manatee County Purchasing Policies, Section 4, E (1) (a)].
A Drug Free Work Place Certification Form is attached to this bid for this purpose.

A.23 PUBLIC ENTITY CRIMES

In accordance with Section 287.133, Florida Statutes, a 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 on a contract to provide any goods or services to a public entity, may not submit a bid on a contract with a public entity for the construction or repair of a public building or public work, may not submit bids on leases or 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 (as of 01/01/2005 is $25,000) for a period of 36 months from the date of being placed on the convicted vendor list.

A.24 AMERICAN DISABILITIES ACT

The Board of County Commissioners of Manatee County, Florida, does not discriminate upon the basis of any individual's disability status. This non-discrimination policy involves every aspect of the County's functions including one's access to, participation, employment, or treatment in its programs or activities. Anyone requiring reasonable accommodation for an **Information Conference** or **Bid Opening** should contact the person named on the first page of this Bid Document at least twenty-four (24) hours in advance of either activity.

A.25 LOBBYING

After the issuance of any Invitation For Bid or Request For Proposal, prospective bidders, proposers or any agent, representative or person acting at the request of such bidder or proposer shall not contact, communicate with or discuss any matter relating in any way to the Invitation for Bids or Request for Proposals with any officer, agent or employee of Manatee County other than the Purchasing Director or as directed in the Invitation for Bids or Request for Proposals.

This prohibition begins with the issuance of any Invitation for Bids, or Request for Proposals, and ends upon execution of the final contract or when the invitation or request has been cancelled. Violators of this prohibition shall be subject to sanctions as provided in the Manatee County Purchasing Code.

***The County reserves the right to amend or to add to the names listed as persons to contact. All amendments or additions to the names listed as persons to contact shall be issued by Purchasing, in writing.***

A.26 EQUAL EMPLOYMENT OPPORTUNITY CLAUSE

Manatee County, in accordance with the provisions of Title VI of the Civil Rights Act of 1964 and the Regulations of the Department of Commerce (15 CFR, Part 8) issued pursuant to such Act, hereby notifies all bidders that it will affirmatively ensure that in any contract entered into pursuant to this advertisement, minority business enterprises will be afforded full opportunity to submit bids in response to this advertisement and will not be discriminated against on the grounds of race, color or national origin in consideration for an award.

A.27 MBE/WBE

The State of Florida, **Office of Supplier Diversity** provides the certification process and the database for identifying certified MBE/WBE firms. This service may be directly accessed at: http://www.osd.dms.state.fl.us/iframe.htm

If you have any questions regarding this State service, please contact their office at (850) 487-0915.

**NOTE: ANY OR ALL STATEMENTS CONTAINED IN THE FOLLOWING SECTIONS SHALL HAVE PRECEDENCE: BASIS OF AWARD, TERMS AND CONDITIONS OF THE CONTRACT, OR CONTRACT DOCUMENTS WHICH VARY FROM THE INFORMATION TO BIDDERS.**

# BASIS OF AWARD

B.01 BASIS OF AWARD

**Multiple awards** shall be made to the responsive, responsible bidders accepting the terms and conditions of this Invitation for Bids and which meet the specifications herein.

**Selection of which awarded vendor(s) will receive an order** shall be determined by product availability and the lowest total offer per each Release Order based on the County's quantity estimate for each item multiplied by the bidder's unit price. Purchases shall be based upon the requirement of individual projects and shall be made on an "as required" basis. (NOTE: Blanket Purchase Orders shall be issued to all vendors for each item awarded; delivery/construction shall only be initiated by a valid Release Order Number.)

Award of items to be picked up by County (F.O.B. Vendor's Plant) shall be determined by the cost of material **plus** the hauling cost of the County (labor, equipment, and mileage).

It is the intent of the County to place orders with the lowest priced responsive, responsible bidder who can provide the service at the time needed. The County reserves the right to place orders with other vendors, in the event of an urgent, immediate need and the availability of material/service requested cannot be met by the lowest priced vendor at the time of need.

Bid Prices shall include costs for furnishing all labor, equipment and/or materials for the requirements listed herein in accordance with and in the manner set forth and described in the Bid document to the County's satisfaction.

Whenever two or more bids which are equal with respect to price, quality and service are received, a bid received from a local business shall be given preference in award. Whenever two or more bids which are equal with respect to price, quality and service are received, and both bids or neither of these bids are received from a local business, the award shall be determined by a chance drawing conducted by the purchasing office and open to the public.

Local business is defined as a business duly licensed and authorized to engage in the sale of goods and/or services to be procured, which has a place of business in Manatee County with full time employees at that location.

In evaluating bids, the County shall consider the qualifications of the bidders; and if required, may also consider the qualifications of the subcontractors, suppliers, and other persons and organizations proposed. County may also consider the operating costs, maintenance requirements, performance data and guarantees of major items of materials and equipment proposed for incorporation in the Work.

Whenever two or more bids are equal with respect to price, quality and service, the bid received from a local business shall be given preference in award. Whenever two or more bids which are equal with respect to price, quality and service are received, and both bids and neither of these bids are received from a local business, the award shall be determined by a chance drawing conducted by the Purchasing Office and open to the public.

B.01 BASIS OF AWARD (Continued)

Local business is defined as a business duly licensed and authorized to engage in the sale of goods and/or services to be procured, which has a place of business in Manatee County with full time employees at that location.

B.02 SIMILAR WORK BY OTHERS

Award of this contract to a particular vendor shall impose no obligation on the County to utilize that vendor for all work of this type which may develop during the period of this contract. **This is not an exclusive contract.** The County specifically reserves the right to concurrently contract with other companies for similar work if determined to be in the County's best interest.

B.03 QUALIFICATIONS OF BIDDERS

Each bidder must secure all licenses required (in accordance with Chapter 489 Florida Statutes) for the Work which is the subject of this bid; and, upon request, shall submit a true copy of all applicable licenses.

Companies who have been prequalified or certified by Florida Department of Transportation (FDOT) for categories listed under Rule 14-22.003(3), Florida Administration Code, Classification of Work, are automatically qualified to perform the same type of work for Manatee County. Bidders not prequalified or certified by the FDOT shall be required to demonstrate the minimum qualifications and experience required.

To demonstrate qualifications to perform the Work, each bidder must be prepared to submit within five days of County's request; written evidence such as financial data, previous experience, present commitments and other such data as may be requested. Bidder must be able to provide evidence of Bidder's qualification to do business in the state of Florida. Each bidder shall submit as a portion of their bid, a completed Contractor's Questionnaire included on page 29 of this Invitation for Bid.

A complete list of all subcontractors proposed for any portion of the Work may be requested of any Bidder deemed necessary by the Owner. Subcontracts shall be awarded only to those subcontractors considered satisfactory by the Owner.

## GENERAL TERMS AND CONDITIONS OF THE CONTRACT

C.01 CONTRACT FORMS

The agreement resulting from the acceptance of a bid shall be in the form of the agreement stated in this bid.

C.02 ASSIGNMENT OF CONTRACT

Contractor shall not assign, transfer, convey, sublet or otherwise dispose of this Contract or of his right, title, or interest therein, or his power to execute such Contract, or to assign any monies due or to become due there under to any other person, firm or corporation unless first obtaining the written consent of the County. The giving of such consent to a particular subcontractor assignment shall not dispense with the necessity of such consent to any further or other assignment.

C.03 COMPLETION OF WORK

The Work will be completed and ready for final inspection within the specified calendar days from the date the Contract Time commences to run.

C.04 LIQUIDATED DAMAGES

If the Contractor refuses or fails to prosecute the Work, or any separable part thereof, with such diligence as will hinder its completion within the time specified, the County may seek damages. The actual damages for delay will be impossible to determine and in lieu thereof, the Contractor shall pay to the Owner the sum of **$100.00** as fixed, agreed, and liquidated damages for each calendar day of the delay until the Work is finally accepted by the County and the Contractor and his Surety shall be liable for the amount thereof.

C.05 PAYMENT

Contractor may apply for partial payment on monthly estimates, based on the amount of Work done or completed in compliance with the provisions of the Contract. Contractor shall submit an application, on a form provided or approved by the County, of an approximate estimate of the proportionate value of the Work done, items and locations of the Work performed up to and including the last day of the period then ending. The County will then review said estimate and make any necessary revisions so that the estimate can receive approval for payment. If the Contractor and the County do not agree on the approximate estimate of the proportionate value of the Work done for any pay period, the determination of the County will be binding. The amount of said estimate after deducting any required retainage and all previous payments shall be due and payable to the Contractor within 20 days after the pay estimate has been approved by the County.

It is the Contractor's responsibility for the care of the materials. Any damage to or loss of said materials is the full responsibility of the Contractor. Any Periodical Pay Estimate signed by the Contractor shall be final as to the Contractor for any or all work covered by the Periodical Pay Estimate.

Any requests for payment of materials stored on site must be accompanied with a paid receipt. The Contractor warrants and guarantees that title to all work, materials and equipment covered by any application for payment, whether incorporated in the project or not, will pass to the County at the time of payment free and clear of all liens, claims, security interests and encumbrances (hereafter referred to as "Liens").

The Contractor agrees to furnish an affidavit stating that all laborers, material men, and subcontractors have been paid on the project for Work covered by the

C.05 PAYMENT (Continued)

application for payment and that a partial or complete release of lien, as may be necessary, be properly executed by the material men, laborers, subcontractors on the project for Work covered by the application for payment, sufficient to secure the County from any claim whatsoever arising out of the aforesaid Work.

When the Contractor has completed the Work in compliance with the terms of the Contract Documents, he shall notify the County in writing that the project is ready for final inspection. The County will then advise the Contractor as to the arrangements for final inspection and what Work, if any, is required to prepare the project or a portion thereof for final inspection. When the County determines the project or portion thereof is ready for final inspection, the County shall perform same. Upon completion of final inspection, the County will notify Contractor of all particulars in which this inspection reveals that the Work is incomplete or defective. Contractor shall immediately take such measures as are necessary to complete such Work or remedy such deficiencies. When all such errors have been corrected, a final re-inspection will be made. The process will be repeated until, in the opinion of the County, the project has been completed in compliance with the terms of the Contract Documents.

When final acceptance has been made by the County, the County will make final payment of the Contract amount, plus all approved additions, less approved deductions and previous payments made. The Contract will be considered complete when all work has been finished, the final inspection made, approved as-builts received, and the project finally accepted in writing by the County. The Contractor's responsibility shall then terminate except as otherwise stated.

C.06 RETAINAGE

**For projects requiring a performance bond a retainage** of 2.5% of the total contract amount shall be withheld from payments after 75% completion of the Work. Upon substantial completion, this retainage shall be reduced to 1% of the total contract amount plus such amount as the Owner may reasonably deem necessary to repair, replace, complete or correct any damaged, defective, incorrect or incomplete work. Upon final acceptance, the remaining retainage shall be included in the final payment.

**For construction projects under $100,000, retainage** of 10% of the total contract amount shall be withheld from all payments until 50% of the Work has been completed. After 50% completion, the retainage shall be reduced to 5% of the total contract amount, and one half of the previously withheld amount shall be paid to the Contractor. The remaining retainage shall be included in the final payment.

C.07 WARRANTY AND GUARANTEE PROVISIONS

All work, materials, and equipment furnished as defined herein shall be guaranteed and warranted by the contractor for a minimum period of **three (3) years,** unless otherwise specified, from final acceptance by the Owner to be free from defects due either to faulty materials or equipment or faulty workmanship.

All materials, equipment, and workmanship furnished and installed by the contractor is warranted and guaranteed by the contractor to be such as to meet the required standards and to accomplish the purposes and functions required standards and to accomplish the purposes and functions of the project as defined, detailed, and specified herein.

C.07 WARRANTY AND GUARANTEE PROVISIONS (Continued)

The Owner shall, following discovery thereof, promptly give written notice to the contractor of faulty materials, equipment, or workmanship within the period of the guarantee and the contractor shall promptly replace any part of the faulty equipment, material, or workmanship at his own cost. These warranty and guarantee provisions create no limitations on the Owner as to any claims or actions for breach of guaranty or breach of warranty that the Owner might have against parties other than the contractor, and do not constitute exclusive remedies of the Owner against the contractor.

C.08 ROYALTIES AND PATENTS

The contractor shall pay all royalties and license fees for equipment or processes in conjunction with the equipment and/or services being furnished. Contractor shall defend all suits or claims for infringement of any patent, trademark or copyright, and shall save the County harmless from loss on account thereof, including costs and attorney's fees.

C.09 AUTHORIZED PRODUCT REPRESENTATION

The contractor, by virtue of submitting the name and specifications of a manufacturer's product, will be required to furnish the named manufacturer's product. Failure to perform accordingly may, in the County's sole discretion, be deemed a breach of contract, and shall constitute grounds for the County's immediate termination of the contract

C.10 REGULATIONS

It shall be the responsibility of the bidder to assure compliance with any OSHA, EPA and/or other federal or state of Florida rules, regulations or other requirements, as each may apply.

C.11 CANCELLATION

Any failure of the contractor to furnish or perform the Work (including, but not limited to, commencement of the Work, failure to supply sufficient skilled workers or suitable materials or equipment) in accordance with the contract, the County may order the stop of the Work, or any portion thereof, until the cause for such order has been eliminated. If the contractor persistently fails to perform the Work in accordance with the contract, the County reserves the right to terminate the contract and select the next qualified bidder or re-advertise this procurement in part or in whole. The County reserves the right to cancel all or any undelivered or unexecuted portion of this contract with or without cause.

It is mutually understood and agreed that any award made as a result of this bid may be canceled by the vendor upon 90 days written notice by Certified Mail to the County. However, the County is hereby authorized to purchase, in accordance with the prices bid, any quantity of materials and/or services during this 90 day interim provided the County requests delivery during this period.

The County reserves the right to terminate a contract by giving 30 days written notice of intention to terminate if at any time the vendor fails to abide by or fulfill any of the terms and conditions of the contract. The County also reserves the right to terminate this contract for the convenience of the County, with or without cause

C.12 INDEMNIFICATION

The contractor covenants and agrees to indemnify and save harmless the County, its agents and employees, from and against all claims, suits, actions, damages, causes of action, or judgments arising out of the terms of the resulting agreement for any personal injury, loss of life, or damage to the property sustained as a result of the performance or non-performance of services or delivery of goods; from and against any orders, judgments, or decrees, which may be entered against the County, its agents or employees; and from and against all costs, attorney's fees, expenses and other liabilities incurred in the defense of any such claim, suit or action, and the investigation thereof. Nothing in the award, resulting agreement, contract or Purchase Order shall be deemed to affect the rights, privileges and immunities of the County as set forth in Florida Statute Section 768.28.

C.13 MANUALS, SCHEMATICS, HANDBOOKS

All manuals, schematics and handbooks shall be provided which are applicable to the equipment delivered. An operators manual, parts manual and technician manual must also be provided. Parts lists (manuals) must include OEM part numbers for items not manufactured by the bidder. Vendor shall furnish two (2) copies of each.

C.14 INSURANCE

The contractor will not commence work under a contract until all insurance under this section and such insurance coverage as might be required by the County has been obtained. The contractor shall obtain, and submit to Purchasing within 10 calendar days of request, at his expense, the following minimum amounts of insurance (inclusive of any amounts provided by an umbrella or excess policy):

a. Workers' Compensation/Employers' Liability

Part One – There shall be no maximum limit (other than as limited by the applicable statute) for liability imposed by Florida Workers' Compensation Act or any other coverage required by the contract documents which are customarily insured under Part One of the standard Workers' Compensation Policy.

Part Two – The minimum amount of coverage required by the contract documents which are customarily insured under Part Two of the standard Workers' Compensation Policy shall be:

| | |
|---|---|
| $100,000 | (Each Accident) |
| $500,000 | (Disease-Policy Limit) |
| $100,000 | (Disease-Each Employee) |

b. Commercial General Liability

The limits are to be applicable only to work performed under this contract and shall be those that would be provided with the attachment of the Amendment of Limits of Insurance (Designated Project or Premises) endorsement (ISO Form CG 25 03) a Commercial General Liability Policy with the following minimum limits.

| | |
|---|---|
| General Aggregate: | |
| Products/Completed Operations Aggregate | $1,000,000 |
| Personal and Advertising Injury | $300,000 |
| Each Occurrence | $300,000 |
| Fire Damage (Any One Fire) | $Nil |
| Medical Expense (Any One Person) | $Nil |

C.14 INSURANCE (Continued)

c. Business Auto Policy

| | |
|---|---|
| Each Occurrence Bodily Injury and Property Damage Liability Combined | $300,000 |
| Annual Aggregate (if applicable): | $1,000,000 |

d. Owners Protective Liability Coverage

The minimum OPC Policy limits per occurrence and, if subject to an aggregate, annual aggregate to be provided by the contractor shall be the same as the amounts shown above as the minimum per occurrence and general policy aggregate limits respectively required for the Commercial General Liability coverage. The limits afforded by the OPC Policy and any excess policies shall apply only to the Owner and the Owner's officials, officers, agents and employees and only to claims arising out of or in connection with the work under this contract.

e. Property Insurance

**If this contract includes** construction of or additions to above ground buildings or structures, contractor shall provide "**Builder's Risk**" insurance with the minimum amount of insurance to be 100% of the value of such addition(s), building(s), or structure(s).

f. Installation Floater

**If this contract does not include** construction of or additions to above ground building or structures, **but does involve** the installation of machinery or equipment, contractor shall provide an "**Installation Floater**" with the minimum amount of insurance to be 100% of the value of such addition(s), building(s), or structure(s).

g. Certificates of Insurance and Copies of Polices

Certificates of Insurance in triplicate evidencing the insurance coverage specified in the six above paragraphs a., b., c., d., e., and f., shall be filed with the Purchasing Director before operations are begun. The required certificates of insurance shall name the types of policy, policy number, date of expiration, amount of coverage, companies affording coverage, and also shall refer specifically to the bid number, project title and location of project. Insurance shall remain in force at least one year after completion and acceptance of the project by the County, in the amounts and types as stated herein, with coverage for all products and services completed under this contract.

**ADDITIONAL INSURED: The contractor shall name Manatee County as additional insured in each of the applicable policies.**

If the initial insurance expires prior to the completion of operations and/or services by the contractor, renewal certificates of insurance and required copies of policies shall be furnished by the contractor and delivered to the Purchasing Director thirty (30) days prior to the date of their expiration.

C.15 BID BOND/CERTIFIED CHECK

By offering a submission to this Invitation For Bid, the bidder agrees should the bidder's bid be accepted, to execute the form of contract and present the same to Manatee County for approval within 10 days after being notified of the awarding of the contract. The bidder further agrees that failure to execute and deliver said form of contract **within 10 days** will result in damages to Manatee County and as

C.15 BID BOND/CERTIFIED CHECK (Continued)

guarantee of payment of same a bid bond/certified check shall be enclosed within the submitted sealed bid in the amount of five (5%) percent of the total amount of the bid.

The bidder further agrees that in case the bidder fails to enter into a contract, as prescribed by Manatee County, the bid bond/certified check accompanying the bid shall be forfeited to Manatee County as agreed liquidated damages. If the County enters into a contract with a bidder, or if the County rejects any and/or all bids, accompanying bond will be promptly returned.

C.16 PERFORMANCE AND PAYMENT BONDS

The successful bidder shall furnish surety bonds as security for faithful performance of the contract awarded as a result of this bid, and for the payment of all persons performing labor and/or furnishing material in connection therewith. Surety of such bonds shall be in an amount equal to the bid award (100% each) and from a duly authorized and nationally recognized surety company, authorized to do business in Florida, satisfactory to this County. The attorney-in-fact who signs the bonds must file with the bonds a certificate and effective dated copy of power-of-attorney. (Reference Florida Statute 255.05)

Furnishing the performance and payment bonds shall be requisite to execution of a contract with the County. Said performance and payment bonds will remain in force for the duration of the contract with the premiums paid by the contractor. Failure of successful bidder to execute such contract and to supply the required bonds shall be just cause for annulment of the award.

The County may then contract with another acceptable bidder or re-advertise this Invitation For Bid. If another bidder is accepted, and notice given within 90 days after the opening of bids, this acceptance shall bind the bidder as though they were originally the successful bidder.

Failure of the County at any time, to require performance by the contractor of any provisions set out in the contract will in no way affect the right of the County, thereafter, to enforce the provisions. Bonds to remain in effect for one year after final payment becomes due. **The actual cost for this bond shall be reimbursed (per Release Order) to the vendor upon submittal of an original paid receipt to the County.**

C.17 QUANTITIES

Exact quantities of service to be procured under this contract cannot be determined at this time. Orders will be issued on an "as required basis"; this may include all or part of the quantities specified, or may result in additional quantities. The quantities listed are estimated and only given as a guideline for preparing your quote and should not be construed as representing actual quantities to be purchased.

C.18 WORK AUTHORIZATION

Any work authorized for procurement under this contract shall be on an "as required" basis at various locations within the County. The vendor is not authorized to proceed with, and will not be compensated for, any work that is not authorized by a valid Release Order Number issued by the County's Representative. All work shall be scheduled with the County's Representative.

C.18 WORK AUTHORIZATION (Continued)

The vendor shall be given a scope of work for each project and shall be required to visit the work site. The vendor's quote to the County for completing the work shall include the number of days to complete the work and the total price to complete the work, including the work items required in accordance with the attached Quote Form. The County reserves the right to disapprove the quote and shall have no obligation to issue a Release Order for the work.

If during performance of the Work, additional work is determined to be required, a written proposal must be provided to the County for approval before any additional work is performed.

C.19 DELIVERY

The primary goal of this contract is the speedy acquisition of repair services; vendor's responsiveness under the terms of this contract is paramount. Upon notification (verbal or written) of a need for services, the vendor shall acknowledge the request and shall be expected to prepare a quote for presentation to the County Representative and at a minimum provide temporary repairs within 24 hours from time of notification; emergency situation response time shall be within **four (4) hours**. The repair work shall be completed within seven (7) calendar days after County's acceptance of the quote (unless otherwise approved by the County). Failure to respond within the time specified may result in the work being performed by others and/or termination of this contract.

C.20 PRICES & TERM

Bidders shall bid unit prices, F.O.B. Destination, including all discounts in accordance with unit of quantity indicated on Bid Form. The prices bid shall be used for payment and shall be deemed to include payment in full for all transportation, labor, and equipment used in delivering all supplies and materials to the point of delivery.

C.21 PROJECT SCHEDULE

As Release Orders are issued under the Blanket Purchase Order for Road Building and Materials and Services, individual project schedules will need to be supplied by the vendor and approved by the County, for each project.

C22. NO DAMAGES FOR DELAY

No claim for damages or any claim other than for an extension of time shall be made or asserted against the County by reason of any delays. The Contractor shall not be entitled to an increase in the Total Contract Price or payment or compensation of any kind from the County or direct, indirect, consequential impact or other costs, expenses for damages, including but not limited to costs of acceleration or inefficiency arising because of delay, disruption, interference or hindrance from any cause whatsoever; provided, however, that this provision shall not preclude recovery or damages by the Contractor for hindrance or delays due solely to fraud, bad faith, or active interference on part of the County or its agents. Otherwise, the Contractor shall only be entitled to extensions of the Contract Time as the sole and exclusive remedy for such resulting delay, in accordance with and to the extent specifically provided above.

C.23 NO INTEREST

Any monies not paid by the County when claimed to be due to the Contractor under this Contract shall not be subject to interest including prejudgment interest. Any monies not paid by the County when claimed to be due to the Contractor for damages awarded in the case of construction delays shall not be subject to prejudgment interest.

C.24 CONSTRUCTION OF CONTRACT

This Contract and the rights and responsibilities hereunder shall not be construed more strongly against either party, regardless of the extent to which such party may have participated in the preparation hereof.

C.25 PAYMENT

Within forty-five (45) days after delivery by the vendor, acceptance by the County, and presentation of an appropriate invoice, the County shall pay the total amount due. Payment invoices must indicate both the Blanket Purchase Order number and the Release Order number.

C.26 AUTHORIZATION PRODUCT REPRESENTATION

The vendor, by virtue of submitting the name and specifications of a manufacturer's product, will be required to furnish the named manufacturer's product. The vendor's failure to perform accordingly may, in the County's sole discretion, be deemed a breach of contract, and shall constitute grounds for the County's immediate termination of the contract.

C.27 MATERIAL /SAFETY DATA SHEET

It shall be the responsibility of the awarded bidder(s) to submit, upon notification of award, a Material Safety Data Sheet (MSDS) for all toxic substances in accordance with Florida Statues Chapter 442, The Right To Know Law, which mandates on-site MSDS for all toxic substances appearing in the work place.

C.28 QUALITY GUARANTEE

If any product/service delivered does not meet performance representations or other quality assurance representations as published by manufacturers, producers or distributors of such products or the specifications listed in this bid, the vendor shall pick up the product from the County at no expense to the County. The County reserves the right to reject any or all materials if, in its judgment, the item reflects unsatisfactory workmanship or manufacturing or shipping damage. Also, the vendor shall refund to Manatee County any money which has been paid for same. The vendor will be responsible for attorney fees in the event the supplier defaults and court action is required.

C.29 REGUATIONS

It shall be the responsibility of the bidder to assure compliance with any OSHA, EPA and/or other Federal or State of Florida rules, regulations or other requirements, as each may apply.

C.30 ROYALTIES AND PATENTS

The vendor shall pay all royalties and license fees for equipment or processes in conjunction with the equipment and/or services he is furnishing. Vendor shall defend all suits or claims for infringement of any patent, trademark or copyright, and shall save the County harmless from loss on account thereof, including costs and attorney's fees.

C.31 RENEWAL

If not cancelled by the Vendor or the County, **this contract shall be automatically extended/renewed** beyond the first 12 month contract period for additional 12 month periods not to exceed total contract duration of 24 months providing there are no changes of prices, terms or conditions. Renewal prices may be adjusted only as permitted in paragraph C.32 Price Adjustments for renewal periods. **Written notice of intention not to renew must be submitted by the Vendor 90 days prior to the end of the first 12 month contract period.**

Should any Vendor choose not to renew the bid awarded, the County reserves the right to terminate the Contract with that Vendor and select the next qualified bidder, or re-advertise for those bid items, or solicit a new Invitation for Bid for all items (including multiple bid awards).

C.32 PRICE ADJUSTMENTS FOR RENEWAL PERIODS

Prices shall remain firm for the first twelve month base contract term. Requested price changes for the remaining terms may be adjusted in accordance with the Bureau of Labor Statistics Consumer Price Index (CPI-U), U.S.A. 1982-84 equals 100. The adjustment shall be calculated by dividing the Index on the anniversary date of the previous year's index and subtracting 1.00. If, on the anniversary date, the Index shows a change from the Index of the previous year, this percentage, not to exceed four (4%) percent annually, will be used to adjust the unit prices bid.

**Cost (per ton) of Liquid Asphalt shall be adjusted (beginning at time of award) according to the Commodity Asphalt Index effective the day of paving. Vendor shall submit a copy of the Index and formula used with pay request.**

All post award communications will be addressed to:

**County of Manatee County**

**Project Management Department**

**Attn: Mr. Brian Martineau, Project Mgr. Public Works**

**1022 26th Avenue East**

**Bradenton FL 34208**

**(941)-708-7450 ext. 7243**

The vendor's employees, engaged on a Manatee County project, shall be full time, regular personnel. **The use of short term temporary or casual day labor will not be accepted.**

## INSTRUCTIONS TO BIDDERS

The work shall be done in accordance with the Florida Department of Transportation Standard Specifications for Road and Bridge Construction, 2000 Edition.

D.01 SECURING OF DOCUMENTS

Complete individual copies of the bidding documents for the project and/or products can be obtained at the Manatee County Public Works Department located at: 1022 26th Avenue East, Bradenton, FL 34208: **941-708-7450**, **Extension 7349** between the hours of 8:00 AM and 4:00 PM Monday through Friday at no charge. Complete set of the Bidding Documents must be used in preparing bids. Neither Owner nor Engineer assumes any responsibility for errors and misinterpretations resulting from the use of incomplete sets of Bidding Documents.

D.02 SUBCONTRACTORS, SUPPLIERS AND OTHERS

The identity of subcontractors, suppliers, and other persons and organizations (including those who are to furnish the principal items of material and equipment) may be requested by the Owner for each bid item from any of the Bidders; and the Bidder shall respond within five days after the date of such request. Such list shall be accompanied by an experience statement with pertinent information regarding similar projects and other evidence of qualification for each such subcontractor, supplier, persons or organization if requested by Owner. If Owner, after due investigation, has reasonable objection to any proposed subcontractor, supplier, other person or organization, Owner may, before the Notice of Award is given, request the apparent successful Bidder to submit an acceptable substitute without an increase in Contract Price or Contract Time.

If apparent successful Bidder declines to make any such substitution, Owner may award the contract to the next lowest qualified Bidder that proposes to use acceptable subcontractors, suppliers, and other persons who Owner does not make written objection to Contractor shall not be required to employ any subcontractor, supplier, other person or organization who Contractor has reasonable objection to.

Subcontractors shall be bound by the terms and conditions of this contract insofar as it applies to their Work, but this shall not relieve the prime contractor from the full responsibility to the Owner for the proper completion of all Work to be executed under this contract.

**NOTE:** **Contractor shall supply a list providing a description of the work which shall be performed by the proposed subcontractors along with the names and locations of the subcontractors.**

D.03 PURPOSE

It is the intent of the County of Manatee to purchase on an as required basis, Road Building Materials and Services, which may consist of installation of new roads and a range of road repairs, at various job sites within Manatee County. It is the specific purpose of this bid to establish an annual contract for the required materials and services and to secure the cost and availability of the materials for procurement.

D.04 BLANKET ORDER

Blanket Purchase Order(s) shall be issued as a result of this bid. A Blanket Purchase Order number, when accompanied by a valid Release Order number provided by an authorized County department, will authorize purchases on an **"as required"** basis. (Note: The quantities shown on the Bid Form are estimates only. There is no guarantee that these quantities will be released).

A master agreement with subsequent individual orders shall be used, therefore for payment; each invoice must indicate the Blanket Purchase Order number followed by a valid Release Order number. The vendor is not authorized to proceed with, and will not be compensated for, any work that is not authorized by a valid Release Order Number issued by the County's Representative.

Quantities of purchases will vary depending on the authorized budget of each authorized County department. Bid items, package size, and unit prices shall be as itemized on the attachment to the Blanket Purchase Order. Make no shipments until a valid release order is provided.

D.05 QUANTITIES

Exact quantities of service to be procured under this contract cannot be determined at this time. Orders will be issued on an "as required basis"; this may include all or part of the quantities specified, or may result in additional quantities. The quantities listed are estimated and only given as a guideline for preparing your quote and should not be construed as representing actual quantities to be purchased.

D.06 TIMELINESS OF SERVICES

The primary goal of this contract is the speedy acquisition of construction services; vendor responsiveness under the terms of this contract is paramount. Upon notification, verbal or written, of a need for services, the vendor shall acknowledge the request and reply to the County within 24 hours. Failure to respond within the time specified above may result in the work being performed by others and/or termination of this contract.

D.07 EMERGENCY WORK

In the event of an emergency, as identified by the County, the vendor will be required to respond to the request within eight (8) hours and mobilize within 24 hours of notification, including weekends. Failure to meet this contract requirement may result in the work being performed by others and/or termination of this contract.

D.08 DEVELOPMENT OF PRICE PROPOSAL

The County will initiate a meeting with the vendor to review the scope of work; this may also include an on-site visit. The vendor shall then be required to prepare a detailed cost estimate using the unit prices bid. (The vendor's bid prices stated herein shall serve as the basis for establishing the value of the work to be performed.) This cost estimate shall include a vendor-developed and detailed statement of work and shop drawings/sketches for the work required. The vendor shall ensure that its proposal is complete using the applicable specifications and standards included herein. The detailed statement of work must be supported by all necessary documentation to indicate that adequate planning to accomplish the work has been performed. A schedule of completion of the work shall be included in the proposal, if the schedule is not provided to the vendor by the County. Costs for the aforementioned documentation shall be included in the vendor's bid prices and will not be paid separately by the County.

D.08 DEVELOPMENT OF PRICE PROPOSAL (Continued)

The vendor shall be expected to expeditiously prepare its proposal and in no event shall the proposal preparation time exceed **15 calendar days**. The vendor shall submit its proposal to the County, who will evaluate the proposal and, if approved, will issue a written notice to proceed with the work. The County reserves the right to disapprove the proposal. The County has no obligation to issue a notice to proceed for the work.

If additional quantities are required to complete the work, a "Revised" Release Order detailing the additional work will be issued. It shall be the vendor's responsibility to advise the County and obtain prior approval for additional quantities to be utilized beyond those specified in the Release Order.

D.09 NOTICE TO PROCEED

The vendor shall be required to mobilize to the work site to perform the work within ten days of the date of the notice to proceed. Once work begins, no suspension of operations or removal of equipment or materials necessary for the project completion shall be permitted without the County's permission. **Vendor shall notify all residents, businesses, and associations within the project limits 48 hours prior to the onset of construction.**

D.10 WORK HOURS

The normal hours of work to be considered by the bidder in preparing this bid shall be 7:00 A.M. to 7:00 P.M., Monday through Saturday, excluding national holidays.

D.11 OVERTIME WORK

Only work specified by the County as requiring overtime work hours will be subject to ***an overtime surcharge***. Any work done by the vendor during overtime hours, but not specified as required by the County will be considered normal hours and normal hourly rate(s) shall be applied. Overtime work shall be defined as that work performed on Sundays and national holidays and all work performed between the hours of 7:00 P.M. and 7:00 A.M. Bidders shall include a ***per day surcharge on the Bid Form that will include all equipment, materials, labor and (MOT) required to take all the necessary precautions for the protection of the work and the safety of the public.***

D.12 PERMITS/FEES/REGULATIONS

Vendor shall be required to give all necessary notices, obtain all permits and inspections, and pay all costs in connection with the Work. Vendor shall assure compliance with any OSHA, EPA, and/or federal, state, and local rules, regulations. Any conflicts between the specifications and code shall be brought to the attention of the County's representative and resolved before the Work is continued.

The vendor shall give all notices and comply with all laws bearing on the conduct of the work as drawn and specified. If the vendor observes that the drawings and specifications are at variance therewith, vendor shall promptly notify the County in writing, and any necessary changes shall be made. If the vendor performs any work contrary to such laws, ordinances, rules, and regulations and does not comply with the aforesaid procedure, vendor shall bear all cost incident to such violation.

D.13 LAYOUT OF WORK

The vendor, where required, shall set construction stakes and batter boards for establishing lines, position of structures, slopes, and other controlling points necessary for the proper prosecution of the work. The stakes, as set, will be checked and approved by the County before construction is commenced.

These stakes and marks shall constitute the field control by and in accord with which the vendor shall govern and execute the work. The vendor will be held responsible for the preservation of all stakes and marks; and, if for any reason any of the stakes or marks or batter boards become destroyed or disturbed, they will be immediately and accurately replaced by the vendor at no additional expense to the County.

D.14 WARNING SIGNS AND BARRICADES

The vendor shall provide adequate signs, barricades, flashing lights, flagmen and watchmen, and take all necessary precautions for the protection of the work and the safety of the public. Traffic control warning signs and barricades shall be in strict accordance with the provisions of the Florida Department of Transportation Manual on Traffic Controls and Safety Practices for Street and Highway Construction, Maintenance and Utility Operations (latest revision). All barricades and obstructions shall be protected at night by flashing signal lights which shall be of substantial construction and suitable for night visibility. Suitable warning signs shall be so placed and illuminated at night as to show in advance where construction, barricades, or detours exist. All work items are to include the cost of signing and traffic maintenance, **except** as related to shell and base preparation over 100' or overnight.

D.15 PUBLIC SAFETY AND CONVENIENCE

The vendor shall at all times so conduct his work as to insure the least possible obstruction to traffic and inconvenience to the general public and the residents in the vicinity of the work and to insure the protection of persons and property in a matter satisfactory to the County. No road or street shall be closed to the public except with the permission of the County and proper governmental authority. Fire hydrants on or adjacent to the work shall be kept accessible to fire-fighting equipment at all times. Temporary provisions shall be made by the vendor to insure the use of sidewalks and proper functioning of all gutters, sewer inlets, drainage ditches, and irrigation ditches. All public emergency agencies (i.e., fire, medical, police, etc.) shall be furnished a list of all street closing locations and durations at least 48 hours in advance of construction closing.

D.16 PROTECTION OF WORK, PERSONS, AND PROPERTY

The vendor shall continuously maintain adequate protection of all work from damage and shall protect all property from injury or loss arising in connection with the contract. Vendor shall make good any such damage, injury or loss, except such as may be directly due to error in contract documents. Vendor shall provide, protect, and maintain all passageways, guard fences, lights, and other facilities required by public authority or local conditions.

Vendor shall provide reasonable maintenance of traffic ways for the public and preservation of the continuation of the County's business taking into full consideration all local conditions. Vendor shall comply with Florida Department of Commerce Safety Regulations and any local safety regulations.

D.17 CLEAN UP

The vendor shall keep the construction site free of rubbish and waste materials and restore to their original condition those portions of the site not designated for alteration by the scope of work. Clean up and restoration shall be accomplished on a continuing basis throughout the contract period and in such a manner as to maintain a minimum of nuisance and interference to the general public and residents in the vicinity of the work. The vendor shall remove, when no longer needed, all temporary structures and equipment used in his operations. It is the intent of this specification that the construction areas and those other areas not designated for alteration by the scope of work be restored to their original condition or as nearly as possible.

D.18 TESTING

All inspections and testing required for this contract will be performed by an independent laboratory retained by the County. Vendor shall be responsible for all failed tests.

D.19 FLORIDA TRENCH SAFETY ACT

The vendor shall adhere to the requirements of the Florida Trench Safety Act, and O.S.H.A. Excavation Safety Standards 29 CFR 1926.650 Subpart P.

## MANATEE COUNTY LOCAL PREFERENCE LAW AND VENDOR REGISTRATION

E.01 Vendor Registration

All vendors are encouraged to register with Manatee County using the on-line "Vendor Registration" web page on www.mymanatee.org.

Enclosed are a copy of the current Manatee County law that details the County's Local Preference and the County's definition of a Local Business.

If you assert that your firm meets the stated definition of a Local Business, we ask that in addition to registering on the County's Web page, you fill out the attached "**Affidavit As To Local Business Form**" that is included in this section, have the completed document notarized, and mail the original to the following address: Manatee County Administration Center, 1112 Manatee Avenue West, Suite 803, Bradenton, FL 34205.

Your cooperation in registering your business with Manatee County will enhance our opportunities to identify sources for goods and services, plus identify Local Businesses. This information is used for soliciting quotations up to $250,000.00 and for competitive solicitations of larger purchases.

You will note that Manatee County collaborates with the Manatee Chamber of Commerce, posting bids on www.manateechamber.com as well as using the same vendor categories for registration.

Our staff can assist you with your registration as needed. Our office hours are 8:00 A.M. to 5:00 P.M., Monday through Friday on regular business days. Please call (941) 749-3014 if you wish to have a purchasing staff member assist you.

**Quick steps to registration:** **www.mymanatee.org**

A link to "Purchasing" is listed under "Quick Links" on page one of the County Web Site.

On the left hand side of the Purchasing Web page, click on "Vendor Registration".

This will bring up the Vendor Registration form for on-line input. Please note that the definition of a "Local Business" changed on March 17, 2009. The Web page will be updated to include the current Law which has been provided in this section of the bid.

Thank you for reviewing this information and considering registering your business with Manatee County. Registration is not mandatory; however, by taking the time to register, you are helping the County to provide timely notifications of quotation, bid and proposal opportunities to your business.

E.02 Section 2-26-6. Local preference, tie bids, **local business defined.**

a) Whenever a responsible local business bidder and a responsible non-local business bidder are found, upon the opening of bids, to have both submitted the lowest responsive bid, the bid of the local bidder shall be awarded the contract. Should more than one responsible local business bidder match the responsible non-local business bidder's lowest responsive bid, or should not responsible local business bidder match the lowest responsive bid but two or more responsible

E.02 Section 2-26-6. Local preference, tie bids, **local business defined** (Continued)

non-local business bidders submit lowest responsive bids for equal amounts, then the award of the contract shall be determined by a chance drawing, coin toss, or similar tie-breaking method conducted by the purchasing office and open to the public. Any bidders seeking to be recognized as local businesses for purposes of this local business preference provision may be required by the terms of the bid announcement to certify they meet the definition of local business set forth in this section, and to register as a local business with the county in the manner prescribed by the county to facilitate the county's ability to track the award of contracts to local businesses and to allow the county to provide future notifications to its local businesses concerning other bidding opportunities.

b) Nothing herein shall be deemed to prohibit the inclusion of requirements with respect to operating and maintaining a local place of business in any invitation for bids when the bidder's location materially affects the provisions of the services or supplies that are required by the invitation.

c) Local business is defined as a business legally authorized to engage in the sale of the goods and/or services to be procured, and which certifies within its bid that for at least six (6) months prior to the announcement of the solicitation of bids it has maintained a physical place of business in Manatee, Desoto, Hardee, Hillsborough, Pinellas or Sarasota County with at least one full-time employees at that location.

d) Each solicitation for bids made by the county shall contain terms expressly describing the local business preference policies of the county, and shall provide that by electing to submit a bid pursuant to a request for bids, all bidders are deemed to understand and agree to those policies.

e) For all contracts for architecture, professional engineering, or other professional services governed by Florida Statute § 287.055, the Consultants' Competitive Negotiation Act, the county shall include the local business status of a firm among the factors considered when selecting which firms are "most highly qualified." In determining which firm is the "most qualified" for purposes of negotiating a satisfactory contract, preference shall be given to a local business where all other relevant factors are equal.

f) Local preference shall not apply to the following categories of contracts:

1. Goods or services provided under a cooperative purchasing agreement or similar "piggyback" contract;

2. Contracts for professional services subject to Florida Statute § 287.055, the Consultants' Competitive Negotiation Act, except as provided for in subsection (e) above;

3. Purchases or contracts which are funded, in whole or in part, by a governmental or other funding entity, where the terms and conditions of receipt of the funds prohibit the preference;

4. Purchases or contracts made pursuant to a non-competitive award process, unless otherwise provided by this section;

5. Any bid announcement which specifically provides that the general local preference policies set forth in this section are suspended due to the unique nature of the goods or services sought, the existence of an emergency as found by either the county commission or county administrator, or where such suspension is, in the opinion of the county attorney, required by law.

g) To qualify for local preference under this section, **a local business must certify to the County that it:**

1. Has not within the five years prior to the bid announcement admitted guilt or been found guilty by any court or state or federal regulatory enforcement agency of violation of any criminal law, or a law or administrative regulation regarding fraud;

2. Is not currently subject to an unresolved citation or notice of violation of any Manatee County Code provision, except citations or notices which are the subject of a current legal appeal, as of the date of the bid announcement;

3. Is not delinquent in the payment of any fines, liens, assessments, fees or taxes to any governmental unit or taxing authority within Manatee County, except any such sums which are the subject of a current legal appeal.

Ref: Ordinance 09-21 and 09-23 **PASSED AND DULY ADOPTED** in open session, with a quorum present and voting, on the 17th day of March, 2009.

**MANATEE COUNTY GOVERNMENT**
**AFFIDAVIT AS TO LOCAL BUSINESS**
***(Complete and Initial Items B-F)***

A. Authorized Representative

I, [name] _____, am the [title] _____

and the duly authorized representative of: [name of business]_____
_____, and that I possess direct personal knowledge to make informed responses to these certifications and the legal authority to make this Affidavit on behalf of myself and the business for which I am acting; and by electing to submit a bid pursuant to this Invitation for Bids, shall be deemed to understand and agree to the local business preference policies of Manatee County; and that I have the direct knowledge to state that this firm complies with all of the following conditions to be considered to be a Local Business as required by the Manatee County Code of Law, Section 2-26-6.

B. Place of Business: I certify that the above business is legally authorized to engage in the sale of goods and/or services and has a physical place of business in Manatee, DeSoto, Hardee, Hillsborough, Pinellas or Sarasota County with at least one (1) fulltime employee at that location. The physical address of the location which meets the above criteria is:
_____ [Initial]_____

C. Business History: I certify that business operations began at the above physical address with at least one fulltime employee on [date] _____ [Initial] _____

D. Criminal Violations: I certify that within the past five years of the date of this Bid announcement, this business has not admitted guilt nor been found guilty by any court or local, state or federal regulatory enforcement agency of violation of any criminal law or administrative regulation regarding fraud. [Initial]_____

E. Citations or Code Violations: I certify that this business is not currently subject to any unresolved citation or notice of violation of any Manatee County Code provision, with the exception of citations or notices which are the subject of a legal current appeal within the date of this bid announcement. [Initial] _____

F. Fees and Taxes: I certify that within this business is not delinquent in the payment of fines, liens, assessments, fees or taxes to any governmental unit or taxing authority within Manatee County, with the exception of those which are the subject of a legal current appeal. [Initial]_____

*Each of the above certifications is required to meet the qualification of "Local Business" under Manatee County Code of Law, 2-26-6.*

Signature of Affiant_____

STATE OF FLORIDA
COUNTY OF_____

Sworn to (or affirmed) and subscribed before me this _____ day of _____, 20___, by (name of person making statement).

(Notary Seal) Signature of Notary:_____

Name of Notary (Typed or Printed)_____

Personally Known ____ OR Produced Identification ____ Type of Identification Produced _____

**Submit executed copy to Manatee County Purchasing, Suite 803, 1112 Manatee Avenue W., Bradenton, FL 34205**

## CONTRACTOR'S QUESTIONNAIRE

(Submit in Triplicate)

The Bidder warrants the truth and accuracy of all statements and answers herein contained. (Include additional sheets if necessary.)

THIS QUESTIONNAIRE MUST BE COMPLETED AND SUBMITTED WITH YOUR BID.

1. LICENSE # and COMPANY'S NAME: _____

   CO. PHYSICAL ADDRESS: _____

   TELEPHONE NUMBER: (___) _____ FAX (_____) _____

2. Bidding as an; ___; individual__ a partnership ___; a corporation___ a joint venture;

3. If a partnership: list names and addresses of partners; if a corporation: list names of officers, directors, shareholders, and state of incorporation; if joint venture: list names and address of ventures' and the same if any venturer is a corporation for each such corporation, partnership, or joint venture:

   _____

   _____

   _____

4. Your organization has been in business (under this firm's name) as a _____ for how many years? _____

5. Describe and give the date and owner of the last three government projects you've completed which are similar in cost, type, size, and nature as the one proposed (for a public entity). Include contact name and phone number:

   _____

   _____

   _____

6. Have you ever been assessed liquidated damages under a contract during the past five (5) years? If so, state when, where (contact name, address, and phone number) and why.

   _____

   _____

   _____

   _____

   _____

1. Have you ever failed to complete work awarded to you? If so, state when, where (contact name, address, phone number) and why?

   _____

   _____

8. Have you ever been debarred or prohibited from bidding on a governmental entity's construction project? If yes, name the entity and describe the circumstances:

_____

_____

_____

9. Name three individuals, governmental entities, or corporations for which you have performed similar work and to which you refer. Include contact name and phone number:

1._____

2. _____

3. _____

10. What specific steps have you taken to examine the physical conditions at or contiguous to the site, including but not limited to, the location of existing underground facilities?

_____

_____

_____

11. What specific physical conditions, including, but not limited to, the location of existing underground facilities have you found which will, in any manner, affect cost, progress, performance, or finishing of the work?

_____

_____

_____

12. Will you subcontract any part of this Work? If so, describe which major portion(s):

_____

_____

13. If any, list (with contract amount) WBE/MBE to be utilized:

_____

_____

14. What equipment do you own to accomplish this Work?

_____

_____

_____

15. What equipment will you purchase/rent for the Work? (Specify which)

_____

_____

_____

16. List the following in connection with the Surety which is providing the Bond(s):

Surety's Name: _____

Surety's Address: _____

Name, address and phone number of Surety's resident agent for service of process in Florida:

_____

_____

_____

Phone: (_____) _____

# SWORN STATEMENT
# THE FLORIDA TRENCH SAFETY ACT

THIS FORM MUST BE SIGNED IN THE PRESENCE OF A NOTARY PUBLIC OR BY AN OFFICER AUTHORIZED TO ADMINISTER OATHS.

1. This Sworn Statement is submitted with IFB No. **#09-3328-DS.**

2. This Sworn Statement is submitted by_____
whose business address is _____
and, if applicable, its Federal Employer Identification Number (FEIN) is_____.
If the entity has no FEIN, include the Social Security Number of the individual signing this sworn statement _____.

3. Name of individual signing this Sworn Statement is: _____,
Whose relationship to the above entity s_____.

4. The Trench Safety Standards that will be in effect during the construction of this project shall include, but are not limited to: Laws of Florida, Chapters 90-96, TRENCH SAFETY ACT, and OSHA RULES AND REGULATIONS 29 CFR 1926.650 Subpart P, effective October 1, 1990.

5. The undersigned assures that the entity will comply with the applicable Trench Safety Standards and agrees to indemnify and hold harmless the Owner and Engineer, and any of their agents or employees from any claims arising from the failure to comply with said standard.

6. The undersigned has appropriated the following costs for compliance with the applicable standards:

| | Trench Safety Measure (Description) | Units of Measure (LF, SY) | Unit Quantity | Unit Cost | Extended Cost |
|---|---|---|---|---|---|
| a. | _____ | _____ | _____ | $_____ | _____ |
| b. | _____ | _____ | _____ | $_____ | _____ |
| c. | _____ | _____ | _____ | $_____ | _____ |
| d. | _____ | _____ | _____ | $_____ | _____ |

7. The undersigned intends to comply with these standards by instituting the following procedures:
_____
_____
_____
_____

THE UNDERSIGNED, in submitting this Bid, represents that they have reviewed and considered all available geotechnical information and made such other investigations and tests as they may deem necessary to adequately design the trench safety system(s) to be utilized on this project.

_____
(AUTHORIZED SIGNATURE / TITLE)

SWORN to and subscribed before me this ___ day of _____, 20___.
(impress official seal)

_____
Notary Public, State of Florida
My commission expires:

**Drug Free Work Place Certification**

SWORN STATEMENT PURSUANT TO RESOLUTION R-93-22
DRUG FREE WORK PLACES

THIS FORM MUST BE SIGNED AND SWORN TO IN THE PRESENCE OF A NOTARY PUBLIC OR OTHER OFFICIAL AUTHORIZED TO ADMINISTER OATHS.

This sworn statement is submitted to the Manatee County Board of County Commissioner's by_____
[Print individual's name and title]
_____for _____

whose business address is _____

and (if applicable) its Federal Employer Identification Number (FEIN) is_____
(If the entity has no FEIN, include the Social Security Number of the individual signing this sworn statement:_____.

I understand that no person or entity shall be awarded or receive a county contract for public improvements, procurement of goods or services (including professional services) or a county lease, franchise, concession or management agreement, or shall receive a grant of county monies unless such person or entity has submitted a written certification to the County that it will provide a drug free work place by:

(1) providing a written statement to each employee notifying such employee that the unlawful manufacture, distribution, dispensation, possession or use of a controlled substance as defined by .893.02(4), Florida Statutes, as the same may be amended from time to time, in the person's or entity's work place is prohibited specifying the actions that will be taken against employees for violation of such prohibition. Such written statement shall inform employees about:

(i) the dangers of drug abuse in the work place;

(ii) the person's or entity's policy of maintaining a drug free environment at all its work places, including but not limited to all locations where employees perform any task relating to any portion of such contract, business transaction or grant;

(iii) any available drug counseling, rehabilitation, and employee assistance programs; and

(iv) the penalties that may be imposed upon employees for drug abuse violations.

2) Requiring the employee to sign a copy of such written statement to acknowledge his or her receipt of same and advice as to the specifics of such policy. Such person or entity shall retain the statements signed by its employees. Such person or entity shall also post in a prominent place at all of its work places a written statement of its policy containing the foregoing elements (i) through (iv).

(3) Notifying the employee in the statement required by subsection (1) that as a condition of employment the employee will:

(i) abide by the terms of the statement; and

(ii) notify the employer of any criminal drug statute conviction for a violation occurring in the work place no later than five (5) days after such a conviction.

(4) Notifying the County within ten (10) days after receiving notice under subsection (3) from an employee or otherwise receiving actual notice of such conviction.
(5) Imposing appropriate personnel action against such employee up to and including termination; or requiring such employee to satisfactorily participate in a drug abuse assistance or rehabilitation program approved for such purposes by a federal, state, or local health, law enforcement, or other appropriate agency.
(6) Making a good faith effort to continue to maintain a drug free work place through implementation of sections (1) through (5) stated above.

I UNDERSTAND THAT THE SUBMISSION OF THIS FORM TO THE CONTRACTING OFFICER FOR MANATEE COUNTY IS VALID THROUGH DECEMBER 31 OF THE CALENDAR YEAR IN WHICH IT IS FILED. I ALSO UNDERSTAND THAT ANY CONTRACT OR BUSINESS TRANSACTION SHALL PROVIDE FOR SUSPENSION OF PAYMENTS, OR TERMINATION, OR BOTH, IF THE CONTRACTING OFFICER OR THE COUNTY ADMINISTRATOR DETERMINES THAT:

(1) Such person or entity has made false certification.

(2) Such person or entity violates such certification by failing to carry out the requirements of sections (1), (2), (3), (4), (5), or (6) or Resolution R-01-36 Section 4, E (1) (a) or

(3) Such a number of employees of such person or entity have been convicted of violations occurring in the work place as to indicate that such person or entity has failed to make a good faith effort to provide a drug free work place as required by Resolution R-01-36 Section 4, E (1) (a).

_____
(Signature)

STATE OF FLORIDA
COUNTY OF_____

Sworn to and subscribed before me this _____ day of _____, 2009
By _____.

Personally known _____OR produced identification_____

_____ My commission expires_____
Notary Public Signature

[Print, type or stamp Commissioned name of Notary Public]

## PUBLIC CONTRACTING AND ENVIRONMENTAL CRIMES CERTIFICATION

SWORN STATEMENT PURSUANT TO ARTICLE 5,
MANATEE COUNTY PURCHASING CODE

THIS FORM MUST BE SIGNED AND SWORN TO IN THE PRESENCE OF A NOTARY PUBLIC OR OTHER OFFICIAL AUTHORIZED TO ADMINISTER OATHS.

This sworn statement is submitted to the Manatee County Board of County Commissioners by_____
[Print individual's name and title]

_____ For_____
[print name of entity submitting sworn statement]
Whose business is: _____

and (if applicable) its Federal Employer Identification Number (FEIN) s_____
If the entity has no FEIN, include the Social Security Number of the individual signing this sworn statement: _____

I understand that no person or entity shall be awarded or receive a county contract for public improvements, procurement of goods or services (including professional services) or a county lease, franchise, concession or management agreement, or shall receive a grant of county monies unless such person or entity has submitted a written certification to the County that it has not:

(1) been convicted of bribery or attempting to bribe a public officer or employee of Manatee County, the State of Florida, or any other public entity, including, but not limited to the Government of the United States, any state, or any local government authority in the United States, in that officer's or employee's official capacity; or

(2) been convicted of an agreement or collusion among bidders or prospective bidders in restraint of freedom of competition, by agreement to bid a fixed price, or otherwise; or

(3) been convicted of a violation of an environmental law that, in the sole opinion of the County's Purchasing Director, reflects negatively upon the ability of the person or entity to conduct business in a responsible manner; or

(4) made an admission of guilt of such conduct described in items (1), (2) or (3) above, which is a matter of record, but has not been prosecuted for such conduct, or has made an admission of guilt of such conduct, which is a matter of record, pursuant to formal prosecution. An admission of guilt shall be construed to include a plea of nolo contendere; or

(5) where an officer, official, agent or employee of a business entity has been convicted of or has admitted guilt to any of the crimes set forth above on behalf of such and entity and pursuant to the direction or authorization of an official thereof (including the person committing the offense, if he is an official of the business entity), the business shall be chargeable with the conduct herein above set forth. A business entity shall be chargeable with the conduct of an affiliated entity, whether wholly owned, partially owned, or one which has

common ownership or a common Board of Directors. For purposes of this Form, business entities are affiliated if, directly or indirectly, one business entity controls or has the power to control another business entity, or if an individual or group of individuals controls or has the power to control both entities. Indicia of control shall include, without limitation, interlocking management or ownership, identity of interests among family members, shared organization of a business entity following the ineligibility of a business entity under this Article, or using substantially the same management, ownership or principles as the ineligible entity.

Any person or entity who claims that this Article is inapplicable to him/her/it because a conviction or judgment has been reversed by a court of competent jurisdiction shall prove the same with documentation satisfactory to the County's Purchasing Director. Upon presentation of such satisfactory proof, the person or entity shall be allowed to contract with the County.

I UNDERSTAND THAT THE SUBMISSION OF THIS FORM TO THE CONTRACTING OFFICER FOR MANATEE COUNTY IS VALID THROUGH DECEMBER 31 OF THE CALENDAR YEAR IN WHICH IT IS FILED. I ALSO UNDERSTAND THAT ANY CONTRACT OR BUSINESS TRANSACTION SHALL PROVIDE FOR SUSPENSION OF PAYMENTS, OR TERMINATION, OR BOTH, IF THE CONTRACTING OFFICER OR THE COUNTY ADMINISTRATOR DETERMINES THAT **SUCH PERSON OR ENTITY HAS MADE FALSE CERTIFICATION.**

_____
[Signature]

STATE OF FLORIDA
COUNTY OF _____

Sworn to and subscribed before me this _____ day of _____, 2009 by _____.

Personally known _____ OR produced identification

_____
[Type of identification]

_____My commission expires

_____
Notary Public Signature

_____
[Print, type or stamp Commissioned name of Notary Public]

**Signatory Requirement** - In the case of a business entity other than a partnership or a corporation, this affidavit shall be executed by an authorized agent of the entity. In the case of a partnership, this affidavit shall be executed by the general partner(s). In the case of a corporation, this affidavit shall be executed by the corporate president.

# FORM OF AGREEMENT
# BETWEEN THE
# COUNTY OF MANATEE, FLORIDA
# AND THE CONTRACTOR AS IDENTIFIED BELOW
# ON THE BASIS OF A STIPULATED UNIT COST CONTRACT PRICE

THIS AGREEMENT is made and entered into by and between the COUNTY OF MANATEE, a political subdivision of the state of Florida, hereinafter referred to as the "OWNER" and _____, hereinafter referred to as the "CONTRACTOR," duly authorized to transact business in the state of Florida, with offices located at _____.

## Article 1. WORK

CONTRACTOR shall furnish all labor, materials, supplies, and other items required to complete the Work for IFB No. **IFB# 09-3328-DS ROAD BUILDING MATERIALS & SERVICES**, in strict accordance with Contract Documents and any duly authorized subsequent addenda thereto, all of which are made a part hereof.

## Article 2. ENGINEER

The County of Manatee, Project Management Department, is responsible as the OWNER and **XXXXXXXXXXX** hereinafter referred to as "ENGINEER," designed this project and is responsible for technical/engineering reviews and decisions. The ENGINEER is a member of the OWNER'S project management team which is collectively responsible in ensuring the Work is completed in accordance with the Contract Documents. All communications involving this project will be addressed to:

| | |
|---|---|
| County of Manatee | XXXXXXX |
| Public Works Department | Attn: XXXX |
| Attn: Brian Martineau | Engineer of Record |
| Public Works, Project Manager | |
| **IFB #09-3328-DS** | **IFB #09-3328-DS** |
| 1022 26th Avenue East | |
| Bradenton Florida 3420 | |
| Phone (941) 708-7450 ext. 7243 | Phone: |

Where the terms ENGINEER and/or OWNER are used in the Contract Documents, it shall mean the OWNER'S project management team.

## Article 3. CONTRACTOR'S REPRESENTATIONS

In order to induce OWNER to enter into this Agreement, CONTRACTOR makes the following representations:

3.1 CONTRACTOR has familiarized itself with the nature and extent of the Bid Documents, Work, site, locality and all local conditions and laws and regulations that in any manner may affect cost, progress, performance or furnishing of the Work.

3.2 CONTRACTOR has studied carefully all drawings of the physical conditions upon which CONTRACTOR is entitled to rely.

3.3 CONTRACTOR has obtained and carefully studied (or assumes responsibility for obtaining and carefully studying) all such examinations, investigations, explorations, tests, reports and studies which pertain to the physical conditions at or contiguous to the site or which otherwise may affect the cost, progress, performance or furnishing of the Work as CONTRACTOR considers necessary for the performance or furnishing of the Work at the Contract Price, within the Contract Time and in accordance with the other terms and conditions of the Bid Documents; and no additional examinations, investigations, explorations, tests, reports, studies or similar information or data are or will be required by CONTRACTOR for such purposes.

3.4 CONTRACTOR has reviewed and checked all information and data shown or indicated on the Bid Documents with respect to existing underground facilities at or contiguous to the site and assumes responsibility for the accurate location of said underground facilities. Any additional examinations, investigations, explorations, tests, reports, studies or similar information or data in respect of said underground facilities conducted by the CONTRACTOR will be done at the CONTRACTOR'S expense.

3.5 CONTRACTOR has correlated the results of all such observations, examinations, investigations, explorations, tests, reports and studies with the terms and conditions of the Bid.

3.6 CONTRACTOR has given OWNER written notice of all conflicts, errors or discrepancies that have been discovered in the Bid Documents and the written resolution thereof by OWNER is acceptable to CONTRACTOR.

3.7 CONTRACTOR shall schedule and perform the Work subject to OWNER'S approval and shall hold OWNER harmless from all liabilities incurred due to CONTRACTOR'S failure to coordinate with the OWNER.

**Article 4. CONTRACT DOCUMENTS**

The Contract Documents which comprise the entire Agreement between OWNER and CONTRACTOR concerning the Work consist of the following:

4.1 This Agreement and Bid Document **IFB #09-3328-DS ROAD BUILDING MATERIALS & SERVICES**

4.2 Performance and/or other Bonds and Insurance Certificate(s)

4.3 Drawings (not attached)

4.4 Addenda numbers _____ to _____, inclusive.

4.5 CONTRACTOR'S Bid Form and any other information submitted by Contractor prior to Notice of Award.

4.6 The following which may be delivered or issued after the effective date of the Agreement and are not attached hereto: all written Change Orders and other documents amending, modifying, or supplementing the Contract Documents.

4.7 The documents listed in paragraphs above are attached to this Agreement (except as noted otherwise above). There are no Contract Documents other than those listed above in this Article 4.

**Article 5. MISCELLANEOUS**

5.1 Terms used in this Agreement are defined in Article 1 of the General Conditions.

5.2 No assignment by a party hereto of any rights under or interest in the Contract Documents will be binding on another party hereto without the written consent of the party sought to be bound; and specifically but without limitation, monies that may become due and monies that are due may not be assigned without such consent (except to the extent that the effect of this restriction may be limited by law); and unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assignee from any duty or responsibility under the Contract Documents.

5.3 OWNER and CONTRACTOR each binds itself, its partners, successors, assigns and legal representatives to the other party hereto, its partners, successors, assigns and legal representatives in respect of all covenants, agreements and obligations contained in the Contract Documents.

The OWNER will pay, and the CONTRACTOR will accept in full consideration for the performance of the Work **(IFB #09-3328-DS Road Building Materials & Services)** subject to additions and deductions as provided therein, the sum of Dollars and _____ Cents ($_____) for Bid "____" based on Completion Time of ____ calendar days and the sum of **$100** as liquidated damages for each calendar day of delay.

_____

CONTRACTOR

BY: _____
Signature

_____
Type Name and Title of Signer

The foregoing instrument was acknowledged before me this ___ day of _____, 2009,

by _____, who is personally known to me or who

has produced _____ as identification.

(Impress official seal)_____
Notary Public, State of Florida

My commission expires: _____

APPROVED, with a quorum present and voting this __ day of _____,

2009.

ATTEST: R. B. SHORE
Clerk of the Circuit Court

_____:

COUNTY OF MANATEE, FLORIDA by its
Board of County Commissioners

BY: _____
Dr. Gwendolyn Brown
CHAIRMAN

# GENERAL CONDITIONS

## ARTICLE I - DEFINITIONS

Whenever used in the Bid Documents, the following terms have the meaning indicated which are applicable to both the singular and plural thereof:

Addendum - Written or graphic instruments issued prior to the opening of bids which clarify or change the bidding documents or the contract documents.

Agreement - The written Agreement between Owner and Contractor covering the Work to be performed; other contract documents are attached to the Agreement and made a part thereof as provided therein.

Written Amendment - A written amendment of the contract documents, signed by Owner and Contractor on or after the effective date of the Agreement and normally dealing with the non-engineering or non-technical rather than strictly work related aspects of the contract documents.

Application for Payment - The form accepted by Project Representative which is to be used by Contractor in requesting progress or final payments and which is to include such supporting documentation as is required by the contract documents.

Award - Acceptance of the bid from the person, firm, or corporation which in the Owner's sole and absolute judgment will under all circumstances best serve the public interest. Award shall be made by a majority vote of a quorum of Manatee County Board of County Commissioners in open session; or by the Purchasing Director in accordance with Ordinance 08-43, Manatee County Purchasing Ordinance.

Bid - The offer of the bidder submitted on the prescribed form setting forth the prices for the Work to be performed.

Bidder - One who submits a bid directly to the Owner, as distinct from a sub-bidder, who submits a bid to a Bidder.

Bidding Documents - Consists of the Invitation For Bid, which includes but is not limited to: the bid form, drawings, Contract Documents, terms and conditions, and the proposed contract documents (including all Addenda issued prior to receipt of bids); and becomes a part of the Agreement.

Bonds - Performance and payment bonds and other instruments of security.

Change Order - A document recommended by Project Representative which is signed by Contractor and Owner and authorizes an addition, deletion, or revision in the Work or an adjustment in the contract price or the contract time, issued on or after the effective date of the Agreement.

Compensable Delay - Any delay beyond the control and without the fault or negligence of the Contractor resulting from Owner-caused changes in the Work, differing site conditions, suspensions of the Work, or termination for convenience by Owner.

Contract Documents - The Agreement, Addenda (which pertain to the contract documents), Contractor's bid (including documentation accompanying the bid and any post-bid documentation submitted prior to the Notice of Award), the bonds, the specifications and the drawings, together with all amendments, modifications and supplements issued on or after the effective date of the Agreement.

Contract Price - The monies payable by Owner to Contractor under the contract documents as stated in the Agreement.

Contract Time - The number of days or the date stated in the Notice to Proceed for the completion of the Work.

Contractor - The person, firm or corporation with whom Owner has entered into an Agreement.

Days - All references to days are to be considered calendar days except as specified differently.

Defective - An adjective which when modifying the work refers to work that is unsatisfactory, faulty or deficient, or does not conform to the contract documents, or does not meet the requirements of any inspection, reference standard, test or approval referred to in the contract documents, or has been damaged prior to Project Representative's recommendation of final payment (unless responsibility for the protection thereof has been assumed by Owner).

Discretionary – Payment for all work that shall be made only at the Owner's discretion in order to satisfactorily complete the project in accordance with the Plans and Specifications.

Drawings - The drawings which show the character and scope of the Work to be performed and which have been prepared or approved by Engineer and are referred to in the bidding and contract documents.

Effective Date of the Agreement - The date indicated in the Agreement on which it becomes effective (date of execution).

Excusable Delay - Any delay beyond the control and without the negligence of the Contractor, the Owner, or any other contractor caused by events or circumstances such as, but not limited to, acts of God or of the public enemy, fires, floods, freight embargoes, acts of government other than Owner, or epidemics. Labor disputes and above average rainfall shall give rise only to excusable delays.

Float or Slack Time - The time available in the progress schedule during which an unexpected activity can be completed without delaying substantial completion of the Work.

Field Order - A written order issued by Project Representative which orders minor changes in the Work, but which does not involve a change in the contract price or the contract time.

Inexcusable Delay - Any delay caused by events or circumstances within the control of the Contractor, such as inadequate crewing, slow submittals, etc., which might have been avoided by the exercise of care, prudence, foresight, or diligence on the part of the Contractor.

Non-prejudicial Delay - Any delay impacting a portion of the Work within the available total float or slack time and not necessarily preventing completion of the Work within the contract time.

Notice of Award - The written notice to the successful bidder stating Award has been approved by the Board of County Commissioners; or by the Purchasing Director in accordance with Ordinance 08-43, Manatee County Purchasing Code.

Notice of Intent to Award - The written notice to the apparent low bidder stating Award has been recommended with final Award to be authorized by the Board of County Commissioners.

Notice to Proceed - Written notice by Owner (after execution of contract) to Contractor fixing the date on which the contract time will commence to run and on which Contractor shall start to perform (ten (10) days from date of such notice) Contractor's obligations under the contract documents.

Owner - Manatee County, Florida, Board of County Commissioners.

Preconstruction Conference - Prior to starting the Work, a meeting scheduled by Owner with Contractor to review the Work schedules, to establish procedures for handling shop drawings and other submissions, for processing periodical pay estimates, and such other matters as may be pertinent to the project.

Prejudicial Delay - Any excusable or compensable delay impacting the Work and exceeding the total float available in the progress schedule, thus preventing completion of the Work within the contract time unless the Work is accelerated.

Pre-operation Testing - All field inspections, installation checks, water tests, performance tests and necessary corrections required of Contractor to demonstrate that individual components of the work have been properly constructed and do operate in accordance with the contract documents for their intended purposes.

Project - The total construction of which the Work to be provided under the contract documents may be the whole or a part as indicated elsewhere in the contract documents.

Project Representative - The authorized representative of Owner who is assigned to the project or any part thereof.

Shop Drawings - All drawings, diagrams, illustrations, schedules and other data which are specifically prepared by or for Contractor to illustrate some portion of the Work and all illustrations, brochures, standard schedules, performance charts, instructions, diagrams and other information prepared by a supplier and submitted by Contractor to illustrate material or equipment for some portion of the Work.

Specifications - Those portions of the contract documents consisting of written technical descriptions of materials, equipment, construction systems, standards and workmanship as applied to the Work and certain administrative details applicable thereto.

Subcontractor - An individual or corporation having a direct contact with Contractor or with any other subcontractor for the performance of a part of the Work at the site. Such person or firm has contractual relations with the Contractor, not with the Owner.

Substantial Completion - The Work (or a specified part thereof) has progressed to the point when, in the opinion of the Engineer as evidenced by Engineer's definitive certificate of Substantial Completion, it is sufficiently complete in accordance with contract documents so that the work can be utilized for the purposes for which it is intended; or if there be no such certificate issued, when final payment is due.

Successful Bidder - The lowest qualified, responsible and responsive bidder to whom an award is made.

Supplier - A manufacturer, fabricator, supplier, distributor, materialman or vendor.

Underground Facilities - All pipelines, conduits, ducts, cables, wires, manholes, vaults, tanks, tunnels or other such facilities or attachments and any encasement containing such facilities which have been installed underground to furnish any of the following services or materials: electricity, gases, steam, liquid petroleum products, telephone or other communications, cable television, sewage and drainage removal, traffic or other control systems or water.

Unit Price Work - Work to be paid for on the basis of unit prices.

Work - The entire completed construction or the various separately identifiable parts thereof required to be furnished under the contract documents. Work is the result of performing services, furnishing labor and furnishing and incorporating materials and equipment into the construction, all as required by the contract documents.

Work Directive Change - A written directive to contractor, issued on or after the effective date of the Agreement and signed by Owner and recommended by Project Representative ordering an addition, deletion or revision in the Work, or responding to differing or unforeseen physical conditions under which the Work is to be performed or to emergencies. A work directive change may not change the contract price or the contract time; but is evidence that the parties expect that the change directed or documented by a work directive change will be incorporated in a subsequently issued change order following negotiations by the parties as to its effect, if any, on the contract price or contract time.

## ARTICLE 2 - PRELIMINARY MATTERS

Computation of Time: When time is referred to in the contract documents by days, it will be computed to exclude the first and include the last day of such period. If the last day of any such period falls on a Saturday or Sunday or legal holiday, such day will be omitted from the computation.

2.1 The Contractor must submit a proposed CPM (critical path method) schedule of the Work at the preconstruction conference. The purpose of this schedule is to enable the Owner to govern the Work, to protect the functions of the local government and its citizens and to aid in providing appropriate surveillance. The Owner shall have the right to reschedule work provided such rescheduling is in accord with the remainder of terms of the contract. The schedule shall show, as a minimum, the approximate dates on which each segment of the work is expected to be started and finished, the proposed traffic flows during each month, the anticipated earnings by the Contractor for each month and the approximate number of crews and equipment to be used. The Owner, after necessary rescheduling and obtaining additional information for specific purposes, shall review and approve the schedule. The

Contractor shall also forward to the Owner, as soon as practicable after the first day of each month, a summary report of the progress of the various parts of the work under the contract, in fabrication and in the field, stating the existing status, estimated time of completion and cause of delay, if any. Together with the summary report, the Contractor shall submit any necessary revisions to the original schedule for the Owner's review and approval. In addition, more detailed schedules may be required by the Owner for daily traffic control.

2.2 A Notice to Proceed may be given at any time within thirty (30) days after the effective date of the Agreement. The contract time will commence at the time specified in such notice. Contractor shall start to perform the Work on the date specified in the notice to proceed, but no work shall be done at the site prior to the date on which the contract time commences to run.

2.3 If at any time the materials and appliances to be used appear to the Owner as insufficient or improper for securing the quality of work required or the required rate of progress, the Owner may order the Contractor to increase his efficiency or to improve the character of his work and the Contractor shall conform to such an order. The failure of the Owner to demand any increase of such efficiency of any improvement shall not release the Contractor from his obligation to secure the quality of work or the rate of progress necessary to complete the Work within the limits imposed by the contract. The Owner may require the Contractor to remove from the Work such employees as the Owner deems incompetent, careless, insubordinate or otherwise objectionable, or whose continued employment on the Work is deemed to be contrary to the Owner's interest.

2.4 The Owner reserves the right to let other Contracts in connection with this Work. The Contractor shall afford other Contractors reasonable opportunity for the introduction and storage of their materials and execution of their Work, and promptly connect and coordinate the Work with theirs.

ARTICLE 3 - CONTRACT DOCUMENTS: INTENT, AMENDING, RE-USE

3.1 The contract documents comprise the entire Agreement between Owner and Contractor concerning the work. The contract documents are complementary; what is called for by one is as binding as if called for by all. The contract documents will be construed in accordance with the laws and ordinances of the State of Florida and the County of Manatee.

Should a conflict exist within the contract a document, the precedence in ascending order of authority is as follows: 1) Standard Printed Contract Documents, 2) Special Conditions, 3) General Conditions and 4) Drawings. Note: Computed dimensions shall govern over scaled dimensions.

3.2 It is the intent of the contract documents to describe a functionally complete project (or part thereof) to be constructed in accordance with the contract documents. Any work, materials or equipment that may reasonably be inferred from the contract documents as being required to produce the intended result will be supplied whether or not specifically called for. When words which have a well-known technical or trade meaning are used to describe work, materials, or equipment, such words shall be interpreted in accordance with that meaning. Reference to standard specifications, manuals or codes of any technical society, organization or association, or to the laws or regulations of any governmental authority, whether

such reference be specific or by implication, shall mean the latest standard specification, manual, code or laws or regulations in effect at the time of opening of bids, except as may be otherwise specifically stated. However, no provision of any referenced standard specification, manual or code (whether or not specifically incorporated by reference in the contract documents) shall be effective to change the duties and responsibilities of Owner, Contractor or Engineer, or any of their agents or employees from those set forth in the Contract Documents.

3.3 The contract documents may be amended to provide for additions, deletions and revisions in the Work or to modify the terms and conditions thereof in one or more of the following ways:

3.3.1 A Formal Written Amendment

3.3.2 A Change Order

3.3.3 A Work Directive Change

3.3.4 Administrative Contract Adjustment (ACA)

3.4 In addition, the requirements of the contract documents may be supplemented and minor variations and deviations in the Work may be authorized in one or more of the following ways:

3.4.1 A Field Order

3.4.2 Engineer's approval of a Shop Drawing or sample.

ARTICLE 4 - CONTRACTOR'S RESPONSIBILITIES

4.1 Contractor shall keep on the Work at all times during its progress a competent resident superintendent; who shall be the Contractor's representative at the site and shall have authority to act on behalf of Contractor. All communications given to the superintendent shall be as binding as if given to Contractor.

4.2 Contractor shall provide competent, suitable qualified personnel to survey and lay out the Work and perform construction as required by the contract documents. Contractor shall at all times maintain good discipline and order at the site. Except in connection with the safety or protection of persons or the Work or property at the site or adjacent thereto and except as otherwise indicated in the contract documents, all Work at the site shall be performed during regular working hours and Contractor will not permit overtime work or the performance of work on Saturday, Sunday or legal holiday without Owner's written consent given after prior notice to Engineer (at least 72 hours in advance).

4.2.1 Contractor shall pay for all additional engineering charges to the Owner for any overtime work which may be authorized. Such additional engineering charges shall be a subsidiary obligation of Contractor and no extra payment shall be made by Owner on account of such overtime work. At Owner's option, overtime costs may be deducted from Contractor's monthly payment request or Contractor's retainage prior to release of final payment.

4.3 Unless otherwise specified, Contractor shall furnish and assume full responsibility for all bonds, insurance, materials, equipment, labor, transportation, construction equipment and machinery, tools, appliances, fuel, power, light, heat, telephone, water, sanitary facilities, temporary facilities and all other facilities and incidentals necessary for the furnishing, performance, testing, start-up and completion of the Work.

4.4 All materials and equipment shall be of good quality and new, except as otherwise provided in the contract documents. If required by Engineer, Contractor shall furnish satisfactory evidence (including reports of required tests) as to the kind and quality of materials and equipment. All materials and equipment shall be applied, installed, connected, erected, used, cleaned and conditioned in accordance with the instruction of the applicable supplier except as otherwise provided in the contract documents.

4.5 Contractor shall be fully responsible to Owner for all acts and omissions of the subcontractors, suppliers and other persons and organizations performing or furnishing any of the Work under a direct or indirect contract with Contractor just as Contractor is responsible for Contractor's own acts and omissions. Nothing in the Contract Documents shall create any contractual relationship between Owner or Engineer and any such subcontractor, supplier or other person or organization, nor shall it create any obligation on the part of Owner to pay or to see to the payment of any monies due any such subcontractor, supplier or other person or organization.

4.6 Permits: Unless otherwise provided, Contractor shall obtain and pay for all construction permits and licenses. Owner shall assist Contractor, when necessary, in obtaining such permits and licenses. Contractor shall pay all governmental charges and inspection fees necessary for the prosecution of the Work.

4.7 During the progress of the Work, Contractor shall keep the premises free from accumulation of waste materials rubbish and other debris resulting from the Work. At the completion of the Work, Contractor shall remove all waste materials, rubbish and debris from and about the premises as well as all tools, appliances, construction equipment and machinery and surplus materials and shall leave the site clean and ready for occupancy by Owner. Contractor shall restore to original conditions all property not designated for alteration by the Contract Documents.

4.8 Contractor shall not load nor permit any part of any structure to be loaded in any manner that will endanger the structure, nor shall Contractor subject any part of the Work or adjacent property to stresses or pressures that will endanger it.

4.9 Safety and Protection: Contractor shall comply with the Florida Department of Commerce Safety Regulations and any local safety regulations. Contractor shall be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the Work. Contractor shall take all necessary precautions for the safety of and shall provide the necessary protection to prevent damage, injury or loss to:

4.9.1 all employees on the work and other persons and organizations who may be affected thereby;

4.9.2 all the work and materials and equipment to be incorporated therein, whether in storage on or off the site; and

4.9.3 other property at the site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadways, structures, utilities and underground facilities not designated for removal, relocation or replacement in the course of construction.

Contractor shall comply with all applicable laws and regulations of any public body having jurisdiction for the safety of persons or property or to protect them from damage, injury or loss; and shall erect and maintain all necessary safeguards for such safety and protection. Contractor shall provide and maintain all passageways, guard fences, lights and other facilities for the protection required by public authority or local conditions. Contractor shall provide reasonable maintenance of traffic way for the public and preservation of the Owner's business, taking into full consideration all local conditions. Contractor's duties and responsibilities for the safety and protection of the work shall continue until such time as all the work is completed.

4.10 Emergencies: In emergencies affecting the safety or protection of persons or the work or property at the site or adjacent thereto, Contractor, without special instruction or authorization from Engineer or Owner, is obligated to act to prevent threatened damage, injury or loss. Contractor shall give Owner prompt written notice if Contractor believes that any significant changes in the work or variations from the contract documents have been caused thereby. If Owner determines that a change in the contract documents is required because of the action taken in response to an emergency, a Work Directive Change or Change Order will be issued to document the consequences of the changes or variation.

4.11 For substitutes not included with the bid, but submitted after the effective date of the Agreement, Contractor shall make written application to Engineer for acceptance thereof, certifying that the proposed substitute will perform adequately the functions and achieve the results called for by the general design, be similar and of equal substance to that specified and be suited to the same use as that specified. The application will also contain an itemized estimate of all costs and delays or schedule impacts that will result directly or indirectly from review, acceptance and provisions of such substitute, including costs of redesign and claims of other contractors affected by the resulting change, all of which will be considered by the Engineer in evaluating the proposed substitute. Engineer may require Contractor to furnish at Contractor's expense, additional data about the proposed substitute. In rendering a decision, Owner/Engineer and Contractor shall have access to any available float time in the construction schedule. In the event that substitute materials or equipment not included as part of the bid, but proposed after the effective date of the agreement, are accepted and are less costly than the originally specified materials or equipment, then the net difference in cost shall be credited to the Owner and an appropriate change order executed.

4.11.1 If a specific means, method, technique, sequence of procedure of construction is indicated in or required by the contract documents, Contractor may furnish or utilize a substitute means, method, sequence, technique or procedure of construction acceptable to Engineer if Contractor submits sufficient information to allow Engineer to determine that the substitute proposed is equivalent to that indicated or required by the contract documents.

4.11.2 Engineer will be allowed a reasonable time within which to evaluate each proposed substitute. Engineer will be the sole judge of acceptability and no substitute will be ordered, installed or utilized without Engineer's prior written acceptance which will be evidenced by either a change order or an approved shop drawing. Owner may require Contractor to furnish at Contractor's expense a special performance guarantee or other surety with respect to any substitute.

4.11.3 Contractor shall reimburse Owner for the charges of Engineer and Engineer's Consultants for evaluating each proposed substitute submitted after the effective date of the Agreement and all costs resulting from any delays in the work while the substitute was undergoing review.

4.12 The Contractor shall furnish, free of charge, all labor, stakes, surveys, batter boards for structures, grade lines and other materials and supplies and shall set construction stakes and batter boards for establishing lines, position of structures, slopes and other controlling points necessary for the proper prosecution of the construction work. Where rights-of-way, easements, property lines or any other conditions which make the lay-out of the project or parts of the project critical are involved, the Contractor will employ a competent surveyor who is registered in the State of Florida for lay-out and staking. These stakes and marks shall constitute the field control by and in accord with which the Contractor shall govern and execute the work. The Contractor will be held responsible for the preservation of all stakes, marks and if for any reason any of the stakes or marks or batter boards become destroyed or disturbed, they will be immediately and accurately replaced by the Contractor.

4.13 The Contractor has, by careful examination, satisfied himself as to the nature and location of the work and all other matters which can in any way affect the work under this contract, including, but not limited to details pertaining to boring, as shown on the drawings, are not guaranteed to be more than a general indication of the materials likely to be found adjacent to holes bored at the site of the work, approximately at the locations indicated. The Contractor shall examine boring data, where available, and make his own interpretation of the subsoil investigations and other preliminary data, and shall base his bid on his own opinion of the conditions likely to be encountered. In no event shall an extension of time be considered for any conditions that existed at the time of bidding, nor shall the Contractor receive extra compensation for completion of the project as intended by the drawings and in keeping with the contact documents. No verbal agreement or conversation with any officer, agent or employee of the Owner, before or after the execution of this contract, shall affect or modify any of the terms or obligations herein contained.

4.14 If the Contractor, in the course of the work, finds that the drawings and/or Contract Documents cannot be followed, he shall immediately inform the Owner in writing, and the Owner shall promptly check the accuracy of the information. Any work done after such discovery, until any necessary changes are authorized, will be done at the Contractor's risk.

ARTICLE 5 - OWNER'S RESPONSIBILITIES

5.1 Owner shall furnish the data required of Owner under the contract documents promptly and shall make payments to the Contractor within a reasonable time (no more than 45 days) after the Work has been accepted by the County. The form of

all submittals, notices, change orders and other documents permitted or required to be used or transmitted under the contract documents shall be determined by the Owner/Engineer. Standard County forms shall be utilized.

5.2 The Owner shall provide the lands upon which the Work under this contract is to be done, except that the Contractor shall provide all necessary additional land required for the erection of temporary construction facilities and storage of his materials, together with right of access to same.

5.3 The Owner shall have the right to take possession of and use any completed portions of the work, although the time for completing the entire work or such portions may not have expired, but such taking possession and use shall not be deemed an acceptance of any work not completed in accordance with the Contract Documents.

ARTICLE 6 - CHANGES IN THE WORK

6.1 Without invalidating the Agreement and without notice to any surety, Owner may, at any time, order additions, deletions or revisions in the Work. These will be authorized by a written amendment, a change order, or a work directive change. Upon receipt of any such document, Contractor shall promptly proceed with the Work involved which will be performed under the applicable conditions of the contract documents (except as otherwise specifically provided).

6.2 Contractor shall not be entitled to an increase in the contract price or an extension of the contract time with respect to any Work performed that is not required by the contract documents as amended, modified and supplemented.

6.3 Owner and Contractor shall execute appropriate change orders (or written amendments) covering changes in the Work which are ordered by Owner, or which may be required because of acceptance of defective Work.

6.4 At any time Engineer may request a quotation from Contractor for a proposed change in the Work and within twenty-one (21) calendar days after receipt, Contractor shall submit a written and detailed proposal for an increase or decrease in the contract price or contract time for the proposed change. Engineer shall have 21 calendar days after receipt of the detailed proposal to respond in writing. The proposal shall include an itemized estimate of all costs and time for performance that will result directly or indirectly from the proposed change. Unless otherwise directed, itemized estimates shall be in sufficient detail to reasonably permit an analysis by Engineer of all material, labor, equipment, subcontracts, overhead costs and fees, and shall cover all Work involved in the change, whether such Work was deleted, added, changed or impacted. Notwithstanding the request for quotation, Contractor shall carry on the Work and maintain the progress schedule. Delays in the submittal of the written and detailed proposal will be considered non-prejudicial.

ARTICLE 7 - CHANGE OF CONTRACT PRICE

7.1 The contract price constitutes the total compensation (subject to authorized adjustments) payable to Contractor for performing the Work. All duties, responsibilities and obligations assigned to or undertaken by Contractor shall be at his expense without change in the contract price.

7.2 The contract price may only be changed by change order or by a written amendment. Any claim for an increase or decrease in the contract price shall be based on written notice delivered by the party making the claim to the other party. Notice of the amount of the claim with supporting data shall be delivered within ten (10) days from the beginning of such occurrence and shall be accompanied by claimant's written statement that the amount claimed covers all known amounts (direct, indirect and consequential) to which the claimant is entitled as a result of the occurrence of said event.

7.3 The value of any Work covered by a change order or of any claim for an increase or decrease in the contract price shall be determined in one of the following ways (at Owner's discretion):

7.3.1 Where the Work involved is covered by unit prices contained in the contract documents, cost will be determined by application of such unit prices to the quantities of the items involved.

7.3.2 By mutual acceptance of lump sum.

7.3.3 On the basis of the cost of the Work, plus a 20% Contractor's fee for overhead and profit. (Contractor shall submit an itemized cost breakdown together with supporting data.)

7.4 Either Owner or Contractor may make a claim for an adjustment in the contract price. The unit price of an item of unit price Work shall be subject to re-evaluation and adjustment under the following conditions:

7.4.1 If the total cost of a particular item of unit price Work amounts to 5% or more of the contract price and the variation in the quantity of the particular item of unit price Work performed by Contractor differs by more than 15% from the estimated quantity of such item indicated in the Agreement; and

7.4.2 If there is no corresponding adjustment with respect to any other item of Work; and

7.4.3 If a Contractor believes that it has incurred additional expense as a result thereof; or

7.4.4 If Owner believes that the quantity variation entitles it to an adjustment in the unit price; or

7.4.5 If the parties are unable to agree as to the effect of any such variations in the quantity of unit price Work performed.

ARTICLE 8 - CHANGE OF CONTRACT TIME

8.1 Contract time may only be changed by a change order or a written amendment. Any claim for an extension or shortening of the contract time shall be based on written notice delivered by the party making the claim to the other party. Notice of the extent of the claim with supporting data shall be delivered within fifteen (15) days from detection or beginning of such occurrence and shall be accompanied by the

claimant's written statement that the adjustment claimed is the entire adjustment to which the claimant has reason to believe it is entitled as a result of the occurrence of said event.

8.2 The contract time will be extended in an amount equal to time lost due to delays beyond the control of Contractor. Such delays shall include, but not be limited to, acts or neglect by Owner or others performing additional work; or to fires, floods, epidemics, abnormal weather conditions or acts of God.

8.3 All time limits stated in the contract documents are of the essence.

ARTICLE 9 - WARRANTY, TEST/INSPECTION, CORRECTION

9.1 Contractor warrants (for a minimum period of three years or as otherwise stated herein) and guarantees to Owner that all work will be in accordance with the contract documents and will not be defective; that Owner, representatives of Owner, governmental agencies with jurisdictional interests will have access to the work at reasonable time for their observation, inspecting and testing (Contractor shall give Engineer timely notice of readiness of the work for all required approvals and shall assume full responsibility, including costs, in obtaining required tests, inspections, and approval certifications and/or acceptance, unless otherwise stated by Owner).

9.2 If any work (including work of others) that is to be inspected, tested, or approved is covered without written concurrence of Engineer, it must, if requested by Engineer, be uncovered for observation. Such uncovering shall be at Contractor's expense unless Contractor has given Engineer timely notice of Contractor's intention to cover the same and Engineer has not acted with reasonable promptness in response to such notice. Neither observations by Engineer nor inspections, tests, or approvals by others shall relieve Contractor from Contractor's obligations to perform the work in accordance with the contract documents.

9.3 If the work is defective, or Contractor fails to supply sufficient skilled workers, or suitable materials or equipment, or fails to furnish or perform the work in such a way that the completed work will conform to the contract documents, Owner may order Contractor to stop the work, or any portion thereof and terminate payments to the Contractor until the cause for such order has been eliminated. Contractor shall bear all direct, indirect and consequential costs for satisfactory reconstruction or removal and replacement with non-defective work, including, but not limited to fees and charges of engineers, architects, attorneys and other professionals and any additional expenses experienced by Owner due to delays to other Contractors performing additional work and an appropriate deductive change order shall beissued. Contractor shall further bear the responsibility for maintaining schedule and shall not be entitled to an extension of the contract time and the recovery of delay damages due to correcting or removing defective work.

9.3.1 If Contractor fails within seven (7) days after written notice to correct defective work, or fails to perform the work in accordance with the contract documents, or fails to comply with any other provision of the contract documents, Owner may correct and remedy any such deficiency. To the extent necessary to complete corrective and remedial action, Owner may exclude Contractor from all or part of the site, take possession of all or part of the work, Contractor's tools, construction equipment and machinery at the site or for which Owner has paid

Contractor but which are stored elsewhere. All direct, indirect and consequential costs of Owner in exercising such rights and remedies will be charged against Contractor in an amount approved as to reasonableness by Engineer and a change order will be issued incorporating the necessary revisions.

9.3.2 If within three years after the date of completion or such longer period of time as may be prescribed by laws or regulations or by the terms of any applicable special guarantee required by the contract documents, any work is found to be defective, Contractor shall promptly, without cost to Owner and in accordance with Owner's written instructions, either correct such defective work or if it has been rejected by Owner, remove it from the site and replace it with non-defective work. If Contractor does not promptly comply with the terms of such instruction, Owner may have the defective work corrected/removed and all direct, indirect and consequential costs of such removal and replacement will be paid by Contractor.

ARTICLE 10 - SUSPENSION/TERMINATION OF WORK

10.1 Owner may, at any time and without cause, suspend the work or any portion thereof for a period of not more than ninety (90) days by written notice to Contractor, which will fix the date on which work will be resumed. Contractor shall be allowed an increase in the contract price or an extension of the contract time, or both, directly attributable to any suspension if Contractor makes an approved claim therefore.

10.2 Owner may terminate the contract if Contractor commences a voluntary case under any chapter of the Bankruptcy Code or any similar action by filing a petition under any other federal or state law relating to the bankruptcy or insolvency; if a petition is filed against the Contractor under any chapter of the Bankruptcy Code or similar relief under any other federal or state law; if Contractor persistently fails to perform the work in accordance with the contract documents; if Contractor disregards laws or regulations of any public body having jurisdiction or the Engineer; or otherwise violates in any substantial way any provisions of the contract.

10.2.1 Owner may, after giving Contractor (and the surety, if there is one) seven (7) days written notice and to the extent permitted by laws and regulations, terminate the services of Contractor; exclude Contractor from the site and take possession of the work and of all Contractor's tools, construction equipment and machinery at the site and use the same to the full extent they could be used (without liability to Contractor for trespass or conversion); incorporate in the work all materials and equipment stored at the site or for which owner has paid Contractor but which are stored elsewhere, and finish the work as Owner may deem expedient. In such case, Contractor shall not be entitled to receive any further payment beyond an amount equal to the value of material and equipment not incorporated in the work, but delivered and suitably stored, less the aggregate of payments previously made. If the direct and indirect costs of completing the work exceed the unpaid balance of the contract price, Contractor shall pay the difference to Owner. Such costs incurred by Owner shall be verified by Owner and incorporated in a change order; but in finishing the work, Owner shall not be required to obtain the lowest figure for the work performed. Contractor's

obligations to pay the difference between such costs and such unpaid balance shall survive termination of the Agreement.

10.3 If, through no act or fault of Contractor, the work is suspended for a period of more than ninety (90) days by Owner or under an order of court or other public authority, or Engineer fails to act on any application or fails to pay Contractor any sum finally determined to be due; then Contractor may, upon seven (7) days written notice to Owner terminate the Agreement and recover from Owner payment for all work executed, any expense sustained plus reasonable termination expenses. In lieu of terminating the Agreement, if Engineer has failed to act on any application of payment or Owner has failed to make any payment as aforesaid, Contractor may upon seven (7) days written notice to Owner stop the work until payment of all amounts then due.

ARTICLE 11 - CONTRACT CLAIMS

11.1 The rendering of a decision by Engineer with respect to any such claim, dispute or other matter (except any which have been waived by the making or acceptance of final payment) will be a condition precedent to any exercise by Owner or Contractor of such right or remedies as either may otherwise have under the contract documents or by laws or regulations in respect of any such claim, dispute or other matter. No action, either at law or at equity, shall be brought in connection with any such claim, dispute or other matter later than thirty (30) days after the date on which Owner/Engineer has rendered such written decision in respect thereof. Failure to bring an action within said thirty (30) day period shall result in Engineer's decision being final and binding on the Contractor. In no event may any such action be brought after the time at which instituting such proceedings would be otherwise barred by the applicable statute of limitations.

11.2 Before bringing any action in court pertaining to any claim, dispute or other matter in question(s) arising out of or relating to the contract documents or the breach thereof, or Engineer's final decision, except for claims which have been waived by the making and acceptance of final payment, the Contractor shall first submit written notice(s) of contract claims to the Purchasing Director for a decision; the Contractor may request a conference with the Purchasing Director. Claims include, without limitation, disputes arising under the contract and those based upon breach of contract, mistake, misrepresentation, or other cause for modification or revision. Contract claims shall use the process detailed in Section 2-26-63, Manatee County Purchase Code, Ordinance 08-43.

ARTICLE 12 - RESIDENT PROJECT REPRESENTATIVE - DUTIES, RESPONSIBILITIES

12.1 Resident Project Representative is Engineer/Owner's Agent, who will act as directed by and under the supervision of the Engineer, and who will confer with Owner/Engineer regarding his actions. Resident Project Representative's dealing in matters pertaining to the on-site work shall, in general, be only with the Owner/Engineer and Contractor and dealings with subcontractors shall only be through or with the full knowledge of Contractor.

12.2 Resident Project Representative will:

12.2.1 Review the progress schedule, schedule of shop drawing submissions and schedule of values prepared by Contractor and consult with Owner/Engineer concerning their acceptability.

12.2.2 Attend preconstruction conferences. Arrange a schedule of progress meetings and other job conferences as required in consultation with Owner/Engineer and notify those expected to attend in advance. Attend meetings and maintain and circulate copies of minutes thereof.

12.2.3 Serve as Owner/Engineer's liaison with Contractor, working principally through Contractor's superintendent and assist him in understanding the intent of the contract documents. As requested by Owner/Engineer, assist in obtaining additional details or information when required at the job site for proper execution of the Work.

12.2.4 Receive and record date of receipt of shop drawings and samples, receive samples which are furnished at the site by Contractor and notify Owner/Engineer of their availability for examination.

12.2.5 Advise Owner/Engineer and Contractor or his superintendent immediately of the commencement of any work requiring a shop drawing or sample submission if the submission has not been approved by the Owner/Engineer.

12.2.6 Conduct on-site observations of the work in progress to assist Owner/Engineer in determining if the work is proceeding in accordance with the contract documents and that completed work will conform to the contract documents.

12.2.7 Report to Owner/Engineer whenever he believes that any work is unsatisfactory, faulty or defective or does not conform to the contract documents, or does not meet the requirements of any inspections, tests or approvals required or if work has been damaged prior to final payment; and advise Owner/Engineer when he believes work should be corrected or rejected or should be uncovered of observation or requires special testing, inspection or approval.

12.2.8 Verify that tests, equipment and system start-ups and operating and maintenance instructions are conducted as required by the contract documents and in the presence of the required personnel, and that Contractor maintains adequate records thereof; observe, record and report to Engineer appropriate details relative to the test procedures and start-ups.

12.2.9 Accompany visiting inspectors representing public or other agencies having jurisdiction over the project; record the outcome of these inspections and report to Owner/Engineer.

12.2.10 Transmit to Contractor, Owner/Engineer's clarifications and interpretations of the contract documents.

12.2.11 Consider and evaluate Contractor's suggestions or modifications in drawings or Contract Documents and report them with recommendations to Owner/Engineer.

12.2.12 Maintain at the job site orderly files for correspondence, reports of job conferences, shop drawings and sample submissions, reproductions of original contract documents including all addenda, change orders, field orders, additional drawings issued subsequent to the execution of the contract, Owner/Engineer's clarifications and interpretations of the contract documents, progress reports and other project related documents.

12.2.13 Keep a diary or log book, recording hours on the job site, weather conditions, data relative to questions of extras or deductions; list of visiting officials and representatives or manufacturers, fabricators, suppliers and distributors; daily activities, decisions, observations in general and specific observations in more detail as in the case of observing test procedures. Send copies to Owner/Engineer.

12.2.14 Record names, addresses and telephone numbers of all Contractors, subcontractors and major suppliers of materials and equipment.

12.2.15 Furnish Owner/Engineer periodic reports as required of progress of the work and Contractor's compliance with the approved progress schedule and schedule of shop drawing submissions.

12.2.16 Consult with Owner/Engineer in advance of scheduling major tests, inspections or start of important phases of the work.

12.2.17 Report immediately the occurrence of any accident.

12.2.18 Review applications for payment with Contractor for compliance with the established procedure for their submission and forward them with recommendations to Owner/Engineer, noting particularly their relation to the schedule of values, work completed and materials and equipment delivered at the site but not incorporated in the work.

12.2.19 During the course of the work, verify that certificates, maintenance and operations manuals and other data required to be assembled and furnished by Contractor are applicable to the items actually installed, and deliver this material to Owner/Engineer for his review prior to final acceptance of the work.

12.2.20 Before Owner/Engineer issues a Certificate of Substantial Completion, submit to Contractor a list of observed items requiring completion or correction.

12.2.21 Conduct final inspection in the company of Owner/Engineer and Contractor and prepare a final list of items to be completed or corrected.

12.2.22 Verify that all items on final list have been completed or corrected and make recommendations to Owner/Engineer concerning acceptance.

12.3 Except upon written instructions of Owner/Engineer, Resident Project Representative.

12.3.1 Shall not authorize any deviation from the contract documents or approve any substitute materials or equipment;

12.3.2 Shall not exceed limitations on Owner/Engineer's authority as set forth in the contract documents;

12.3.3 Shall not undertake any of the responsibilities of Contractor, Subcontractors or Contractor's Superintendent, or expedite the work;

12.3.4 Shall not advise on or issue directions relative to any aspect of the means, methods, techniques, sequences or procedures of construction unless such is specifically called for in the contract documents;

12.3.5 Shall not advise on or issue directions as to safety precautions and programs in connection with the work;

12.3.6 Shall not authorize Owner to occupy the project in whole or in part; and

12.3.7 Shall not participate in specialized field or laboratory tests.

ARTICLE 13 - APPRENTICES

13.1 In accordance with the requirement of Section 446.011, Florida Statutes, the following requirements to safeguard the welfare of apprentices and trainees shall be a part of this contract, if applicable.

13.1.1 Contractor agrees to hire for the performance of the contract, a number of apprentices or trainees in each occupation which bears to the average number of the journeymen in that occupation to be employed in the performance of the contract, the ratio of at least one apprentice or trainee to every five journeymen.

13.1.2 Contractor agrees, when feasible to assure that 25% of such apprentices or trainees are in their first year of training, except when the number of apprentices or trainees to be hired is fewer than four.

13.1.3 Contractor agrees to submit, at three month intervals, to the Bureau of Apprenticeship of the Division of Labor, records of employment by trade of the number of apprentices or trainees employed; race of all apprentices; the number of apprentices or trainees in their first year of training; and total hours of work of all apprentices, trainees, and journeymen.

13.1.4 Contractor agrees to submit to the Bureau of Apprenticeship of the Division of Labor, at three month intervals, a statement describing steps taken toward making a diligent effort in the hiring of apprentices and trainees and containing a breakdown by craft of hours worked and wages paid for first year apprentices or trainees, other apprentices or trainees and journeymen.

NOTE: The form of all submittals, notices, change orders and other documents permitted or required to be used or transmitted under the Contract shall be determined by the County. Standard County forms shall be utilized.

# STANDARD SPECIFICATIONS

## ASPHALT REJUVENATING AGENT
## CONSTRUCTION SEAL

### ARTICLE I SCOPE

This work shall consist of furnishing all labor, equipment, and material, and in performing all operations necessary for the rejuvenation and in-depth sealing of asphaltic-concrete surface course by spray application of a cationic rejuvenating agent composed of petroleum oils and resins emulsified with water, complete, in accordance with the specifications, the applicable drawings and subject to the terms and conditions of the contract.

### ARTICLE II MATERIAL

The asphalt rejuvenating agent shall be composed of a petroleum resin oil base uniformly emulsified with water. Each bidder must submit with his bid a certified statement from asphalt rejuvenator manufacturer showing that the asphalt rejuvenating emulsion conforms to the following physical and chemical requirements.

### ARTICLE III SPECIFICATIONS

| | Test Method | | Requirements | |
|---|---|---|---|---|
| **Tests** | **ASTM** | **AASHTO** | **Min.** | **Max.** |
| Test on Emulsion: | | | | |
| Viscosity @ 25°C, SFS | D244 | T-59 | 15 | 40 |
| Residue, % W (1) | D244(Mod.) | T-59(Mod.) | 60 | 65 |
| Miscibility Test (2) | D244(Mod.) | T-59(Mod.) | No Coagulation | |
| Sieve Test, % W (3) | D244(Mod.) | T-59(Mod.) | | 0.1 |
| Particle Charge Test | D244 | T-59 | | Positive |
| Percent Light Transmittance (4) | GB | GB | 30 | |
| | | | | |
| Test on Residue from Distillation: | | | | |
| Flash Point, COC, °C | D-92 | T-48 | 196 | - |
| Viscosity @ 60°C, cSt | D-445 | - | 100 | 200 |
| Asphaltenes, %w | D-2006-70 | - | - | 1.00 |
| Maltene Dist. Ratio $\frac{PC + A_1 \ (5)}{S + A_2 \ (5)}$ | D-2006-70 | - | 0.3 | 0.6 |
| | | | | |
| PC/S Ratio | D-2006-70 | - | 0.5 | - |
| Saturated Hydrocarbons, S(5) | D-2006-70 | | 21 | 28 |

A. ASTM D-244 Modified Evaporation Test for percent of residue is made by heating 50 gram sample to 149°C (300°F) until foaming ceases, then cool immediately and calculate results.

B. Test procedure identical with ASTM D-244 except that 0.2 Normal Calcium Chloride solution shall be used in place of distilled water.

C. Test procedure identical with ASTM D-244 except that distilled water shall be used in place of two percent sodium oleate solution.

D. Test procedure is attached.

E. Chemical composition by ASTM Method D-592006-70:

| | |
|---|---|
| PC = Polar Compounds | $A_1$ = First Acidaffins |
| $A_2$ = Second Acidiaffins | S = Saturated Hydrocarbons |

The rejuvenating agent shall have a record of at least five years of satisfactory service as an asphalt rejuvenating agent and in-depth sealer; such satisfactory service being based on the capability of the material to significantly decrease the viscosity and increase penetration value of the asphalt binder in the pavement surface to depth of at least three eighths inch (3/8") and to seal the pavement in-depth to the intrusion of air and water.

The bidder should submit with his bid the manufacturer's certification that the material proposed for use is in compliance with the specification requirements; and previous use documentation and test data conclusively demonstrating that the rejuvenating agent has been used successfully for a period of five years by government agencies as to the required change in asphalt binder viscosity and penetration number. Testing data shall be submitted indicating such product performance. The product RECLAMITE, or approved equal, is acceptable for these requirements.

**ARTICLE IV** **PRODUCT STANDARDS AND ALTERNATES**

The name or (brand) named in this specification, whether or not the words **"or approved equal"** are used, shall be known as standard. The price bid shall be based on the standard specified herein. Should a bidder wish to submit a bid for an Alternate to the standard specified; bidder shall indicate "Alternate Bid" on the Bid Form and submit the following:

1. List the proposed Alternate on the Bid Form with the product name and price.

2. Furnish complete specifications and descriptive literature for the Alternate as well as a one-gallon sample of the material proposed for use. Such descriptive detailed information shall be complete and at least equal in detail to the specification requirements for the standard item for which the alternate is offered.

The Alternate will be given consideration by the Engineer. The vendor may furnish only those Alternate items included in his bid and approved by the Engineer prior to award of contract.

**PROCEDURE FOR DETERMINING PERCENT LIGHT TRANSMITTANCE OF EMULSIONS**

A. APPARATUS

1. Container may be glass, plastic or metal having a capacity of 6,000 ml.
2. Graduated cylinder, 1,000 ml, or greater.
3. Light transmittance measuring apparatus, such as Bausch and Lomb or Lumitron spectrophotometer.
4. Graduated pipette having 1 ml capacity to 0.01 ml accuracy.
5. Suction bulb for use with pipette.
6. Test tubes compatible with spectrophotometer, ¾ " x 6", Bausch and Lomb, Catalog #33-17-81, (B&L).

B. CALIBRATION OF SPECTROPHOTOMETER

1. Calibrate spectrophotometer as follows: (a) Set wavelength at 580 mu, (b) Allow spectrophotometer to warm-up thirty minutes, (c) Zero percent light transmittance (%LT) scale, (d) Rinse test tube three times with tap water and fill to top of circle marking on B&L test tube or approximately 2/3 full, (e) Place tube in spectrophotometer and set %LT scale at 100, and (f) Repeat steps (c) and (e) two times or until no further adjustments are necessary.
2. Calibrate the emulsion samples test tube as follows: (a) Rinse out test tube with tap water three times and fill to top of circle mark, (b) Calibrate spectrophotometer, (c) test tube may be used for the emulsion samples. If the %LT is not 100, repeat steps (a) through (c) with other test tubes until one is found with a reading of 100% LT.

C. PROCEDURE

1. Shake, stir or otherwise thoroughly mix emulsion to be tested. Place sample of emulsion in beaker and allow to stand one minute.
2. Place 2,000 ml tap water in container.
3. Suck 1.00 ml emulsion into pipette using suction bulb. Wipe off outside pipette.
4. Using suction bulb, blow emulsion into container.
5. Rinse pipette by sucking in diluted emulsion solution and blowing out. Continue until pipette is clean.
6. Clean pipette with soap or solvent and water. Rinse with acetone.
7. Stir diluted emulsion thoroughly.
8. Rinse out tube to be used with the diluted emulsion three times and fill to top of circle.
9. Calibrate spectrophotometer.
10. Place diluted emulsion sample tube in spectrophotometer, cover and read %LT to nearest integer.
11. Repeat steps 9 and 10 until three identical consecutive readings are achieved.
12. The elapsed time between addition of emulsion to dilution of water and final %LT reading should not exceed 5 minutes.

If no Alternate is indicated on the Bid Form, the vendor shall furnish the standard (brand) specified. Should the Alternate offered be found unacceptable by the Engineer based on the data submitted with the bid and/or no bid is entered on the Bid Form for the standard, then said bid will be considered non-responsive.

**ARTICLE V APPLICATION TEMPERATURE**

The temperature of the emulsion at the time of application shall be as recommended by the manufacturer.

**ARTICLE VI HANDLING OF ASPHALT REJUVENATING AGENT**

Contents in tank cars or storage tanks shall be circulated at least ten minutes before withdrawing any material for application. When loading the distributor, the asphalt rejuvenating agent concentrate shall be loaded first and then the required amount of water shall be added. The water shall be introduced into the distributor with enough force to cause agitation and thorough mixing of the two materials. To prevent foaming, the discharge end of the water hose or pipe which shall be used as a spreader shall be kept below the surface of the material in the distributor. It will be

cleaned of all of its asphalt materials and washed out to the extent that no discoloration of the emulsion may be perceptible. Cleanliness of the spreading equipment shall be subject to the approval and satisfaction of the Engineer.

The distributor for spreading the emulsion shall be self propelled, and shall have pneumatic tires. The distributor shall be designed and equipped to distribute the emulsion uniformly on variable widths of surface at readily determined and controlled rates from 0.05 to 0.5 gallons per square yard of surface, and with an allowable variation from any specified rate not to exceed 5 percent.

Distributor equipment shall include full circulation spray bars, pump, tachometer, volume measuring device and a hand hose attachment suitable for application of the emulsion manually to cover areas or patches inaccessible to the distributor. The distributor shall be equipped to circulate and agitate the emulsion within the tank.

A check of distributor rate and uniformity of distribution shall be made when directed by the Engineer.

## ARTICLE VII WEATHER LIMITATIONS

The emulsion shall be applied only when the existing surface to be treated is thoroughly dry and when the weather is clear and is not threatening to rain. The emulsion shall not be applied when the atmospheric temperature is below 40 degrees F.

## ARTICLE VIII APPLICATING EQUIPMENT

The distributor for spreading the emulsion shall be self-propelled, and shall have pneumatic tires. The distributor shall be designed and equipped to distribute the asphalt rejuvenating agent uniformly on variable widths of surface at readily determined and controlled rates from 0.05 to 0.5 gallons per square yard of surface, and with an allowable variation from any specified rate not to exceed 5 percent of the specified rate. The rate of application shall be computer controlled such that the selected rate of application remains constant at any variation in speed of the vehicle.

Distributor equipment shall include full circulation spray bars, volume measuring device and a hand hose attachment suitable for application of the emulsion manually to cover areas inaccessible to the distributor. The distributor shall be equipped to circulate and agitate the emulsion within the tank.

A check of distributor equipment as well as application rate accuracy and uniformity of distribution shall be made when directed by the Engineer.

The truck used for applying sand shall be equipped with a spreader that allows the sand to be uniformly distributed onto the pavement. The spreader shall be able to apply 1/2 pound to 3 pounds of sand per square yard in a single pass. The spreader shall be adjustable so as not to broadcast the sand onto driveways or tree lawns.

The sand to be used shall be free flowing, without any leaves, dirt, stones, etc. Any wet sand shall be rejected from the job site.

Any equipment that is not maintained in full working order, or is proven inadequate to obtain the results prescribed, shall be repaired or replaced at the direction of the Engineer.

## ARTICLE IX APPLICATION

The asphalt-rejuvenating agent shall be applied by a distributor truck at the temperature recommended by the manufacturer and at the pressure required for the proper distribution. The emulsion shall be so applied that uniform distribution is obtained at all points of the areas to be treated. Areas inadvertently missed shall receive additional treatment as may be required by hand sprayer application.

Application of asphalt rejuvenating agent shall be on one-half width of the pavement at a time. When the second half of the surface is treated, the distributor nozzle nearest the center of the road shall overlap the previous application by at least one-half the width of the nozzle spray. In any event the centerline construction joint of the pavement shall be treated in both application passes of the distributor truck.

Before spreading, the asphalt rejuvenating agent shall be blended with water at the rate of two (2) parts rejuvenating agent to one (1) part water, by volume or as specified by the manufacturer for conditions. The combined mixture of asphalt rejuvenating agent and water shall be spread at the rate of 0.05 to 0.10 gallons per square yard, or as approved by the Engineer following field testing.

Where more than one application is to be made, succeeding applications shall be made as soon as penetration of the preceding application has been completed and the Engineer grants approval for additional applications.

Grades or super elevations of surfaces that may cause excessive runoff, in the opinion of the Engineer, shall have the required amounts applied in two or more applications as directed.

After the rejuvenating emulsion has penetrated, a light coating of sand shall be applied to the surface in sufficient amount to protect the traveling public as required by the Engineer. The sand shall be swept and removed from the streets and properly disposed of at the Contractor's expense within 24 hours of application.

The Contractor shall furnish a quality inspection report showing the source, manufacturer, and the date shipped, for each load of asphalt rejuvenating agent. When directed by the Engineer, the Contractor shall take representative samples of material for testing.

The rejuvenating agent shall be applied by an experienced applicator of such material. The applicator shall have a minimum of three years experience in applying the product proposed for use. He should submit with his bid a list of the last five projects on which he applied said rejuvenator. He is to indicate the project date, number of square yards treated in each and the name and telephone number of the contact for each project.

## ARTICLE X STREET SWEEPING

The Contractor shall be responsible for sweeping and cleaning of the streets prior to, and after treatment.

Prior to treatment, the street will be cleaned of all standing water, dirt, leaves, foreign materials, etc. This work shall be accomplished by using a hand broom, power blower or other approved methods. If the hand cleaning of the pavement surface is not sufficient in the opinion of the Engineer, a self-propelled street sweeper shall be used to insure complete surface cleaning.

All sand used during the treatment must be removed no later than 24 hours after treatment of the street. This shall be accomplished by a combination of hand and mechanical sweeping. All turnouts, cul-de-sacs, etc. must be cleaned of any material to the satisfaction of the Engineer. Street sweeping will be included in the price bid per square yard for asphalt rejuvenating agent.

If, after sand is swept and in the opinion of the Engineer the condition exists on the roadway, the contractor must apply additional sand and sweep same no later than 24 hours following reapplication. No additional compensation will be allowed for reapplication and removal of sand.

## ARTICLE XI TRAFFIC

The Contractor shall schedule his operations and carry out the work in a manner to cause the least disturbance and/or interference with the normal flow of traffic over the areas to be treated. Treated portions of the pavement surfaces shall be kept closed and free from traffic until penetration, in the opinion of the Engineer, has become complete and the area is suitable for traffic.

When, in the opinion of the Engineer, traffic must be maintained at all times on a particular street, then the Contractor shall apply asphalt rejuvenating agent to one lane at a time. Traffic shall be maintained in the untreated lane until the traffic may be switched to the completed lane.

The Contractor shall be responsible for all traffic control and signage required to permit safe travel. The contractor shall notify the police and fire departments as to the streets that are to be treated each day.

If, in the opinion of the Engineer, proper signage is not being used, the Contractor shall stop all operations until safe signage and barricading is achieved.

The vendor shall notify each resident along roadways to be treated within 48 hours prior to commencement of the impending work. The form of notification shall be approved by the Engineer.

## ARTICLE XII METHOD OF MEASUREMENT

Construction sealing with rejuvenating agent will be measured by the square yard.

## ARTICLE XIII BASIS OF PAYMENT

The accepted quantities for construction sealing with asphalt rejuvenating agent, measured as provided for above, will be paid for at the contract unit price, per square yard, which shall be full compensation for furnishing all materials, equipment, labor, and incidentals to complete the work as specified.

## ARTICLE XIV REGULATORY COMPLIANCE

The vendor shall furnish applicable compliance with Florida Department of Environmental Regulation, Florida Department of Natural Resources, and U.S. Environmental Protection Agency rules and regulations.

**END OF SECTION**

# STANDARD SPECIFICATIONS

## SHELL BASE MATERIALS

### 913-1 GENERAL

913-1.1 COMPOSITION

Shell materials to be used for shell base or shell stabilized base, shall consist of naturally occurring deposits formed essentially of broken mollusk shell, corals and the skeletal remains of other marine invertebrates. Live or steamed shell, or man-made deposits as a by-product of the shellfish industry will not be permitted.

Sources of supply shall be approved by the County, with materials produced under the requirements of the FDOT Standard Operating Procedure for Evaluation, Approval and Control of Mineral Aggregate Sources, Limerock, Cemented Coquina and Shell Base Materials, except as noted herein.

913-1.2 DELETERIOUS SUBSTANCES

Shell materials shall be reasonably free of lumps of clay, organic matter, and other substances not defined which may possess undesirable characteristics. The material shall not contain silica sand in sufficient quantity to prevent bonding.

913-1.3 PHYSICAL AND CHEMICAL PROPERTIES

Shell materials shall meet the following physical and chemical requirements:

Limerock Bearing Ratio (FM 5-515)--The material shall have an LBR value of not less than 100. Material represented by any individual LBR value of less than 100 is unacceptable.

Plasticity (AASHTO T 089 and ASSHTO T 090)--That portion of the material passing the No. 40 sieve shall be non-plastic.

Carbonates (FM 5-514)--The minimum percentage of carbonates of calcium and magnesium shall be 50.

### 913-2 BANK-RUN SHELL

913-2.1 DEFINITION

Bank-Run Shell shall be defined as those shell materials meeting the requirements of 913-1 which are presently found as "dry land" deposits.

913-2.2 GRADATION REQUIREMENTS

Materials classified as Bank-Run Shell shall meet the following gradation requirements:

Passing 3 ½ -inch sieve.....97% (Maximum dimension not to exceed six-inch)
Passing No. 4 sieve.....Maximum 80%
Passing No. 200 sieve.....Maximum 20% (washed)

**END OF SECTION**

## STANDARD SPECIFICATIONS

## MATERIALS FOR SUBBASE STABILIZATION

Material designated for this use shall meet the FDOT specifications Section 914 as modified by FDOT or materials meeting Manatee County Specification for Supershell, Shell Base or North County Shell.

**SECTION I - AGGREGATE** - CRUSHED CONCRETE AGGREGATE BASE MATERIAL

Crushed concrete to be blended with shell, sand or rock to achieve the following sieve analysis:

**SIEVE ANALYSIS**

| U.S. Sieve Size | % Retained | % Passing |
|---|---|---|
| 3/4 | 7.75 | 92.25 |
| 1/2 | 17.15 | 82.85 |
| 3/8 | 23.90 | 76.10 |
| 4 | 35.15 | 64.85 |
| 10 | 44.10 | 55.90 |
| 40 | 63.00 | 37.00 |
| 60 | 71.50 | 28.50 |
| 100 | 83.30 | 16.70 |
| 200 | 93.10 | 6.90 |

Required Sieve Analysis +/= 20%

1. Concrete with reactive aggregates should not be used.
2. Concrete which has been contaminated by hazardous materials should not be used.
3. Minimum LBR is 100.

## SOIL CEMENT BASE/UPGRADED AGGREGATE CEMENT BASE

DESIGN MIX

300psi lab design at 7 days. The design shall be based on the soaked pill method. Cement content by weight must be a minimum of * (5%) by weight and a maximum of 8%. *At the Contractor's option, an upgraded aggregate may be substituted for native onsite materials. Examples of these aggregates are: 1) Shell; 2) Crushed Concrete; 3) Low Grade Lime Rock; 4) Shell Stabilizer. These materials shall have a minimum LBR of 90, prior to the addition of any cement. If one of the materials is accepted for use, a minimum of 2% of cement by weight can be used. Shell stabilizer shall have a minimum LBR of 75 and minimum cement content by weight of 5%.

PROJECT TEST SAMPLES

The pills cast from project operations must break at 200psi or higher at 7 days.
Cores may be taken at 14 days to provide additional information regarding a soil cement section. Core breaks below 150psi will not be acceptable. The location and number of cores taken will be at the discretion of the County. All cores shall be 6" in diameter. Subgrade to be a minimum of LBR 40 (unless otherwise noted).
All material shall be collected by the sack method.

CONSTRUCTION METHODS

Construction methods shall be in accordance with 2000 FDOT specifications, Section 270-4, and failure to conform may result in rejection of affected area regardless of test results. All remaining specifications shall refer to the 2000 FDOT specifications, Section 270.

**END OF SECTION**

# STANDARD SPECIFICATIONS

## GRASSING

Special Provisions for grassing on the right-of-way of Manatee County highways. Basic specification for this work is Florida Department of Transportation's Standard Specifications for Road and Bridge Construction - 2007.

SCOPE OF WORK

Furnish all labor, equipment and material required to grass by either regular or Hydro-Seeding and Hydro-Mulching shoulders, slopes and other designated areas. This includes all seed, fertilizer, mulch and water required for the slurry mix. Work shall include final preparation of the ground for seeding. Basis of payment shall be the square yards of completed work required and specified.

WATER

The quantity of water ordered at the specific time of its being applied will be paid for separately per thousand gallons actually applied. This in accordance with Paragraph 570-6.6 of the FDOT specifications.

The following water schedule should be planned in case rain does not provide the necessary moisture. One and one-half to two gallons per square yard shall be applied twice weekly for three weeks or until such time as the roots are well established. A wetting agent such as "Aqua Grow" shall be added.

FERTILIZER

Fertilizer may be either 12/8/8 or 10/10/10 as directed by the Engineer, depending on alkalinity of the soil. Initial applications shall be 400 pounds per acre and shall be applied in the Hydro-Mulch. A second application of water soluble 20/20/20 may be required; if so, it will be applied at the rate of 200 pounds per acre in the last application of water and will be paid separately per pound.

GRASS SEED

**Permanent Grass Seed:**

1. 40/100 pounds per acre - Pensacola Bahia
2. 10/20 pounds per acre - Bermuda

**Starter Grass Seed:**

| | |
|---|---|
| 1. May 1 through October 15 | - Millet 40 pounds per acre |
| 2. April, October 15 to November | - Millet 20 pounds<br>- Rye 20 pounds |
| 3. November 15 through March 31 | - Rye 40 pounds per acre |

MULCH

Cellulose fiber - 1000/1300 pounds per acre; soil binder 5 to 40 pounds acre may be added on steep slopes. Soil binder will be paid separately.

WARRANTY

Vendor will warranty grassing for a period of 90 days. At that time a 90% establishment of the guaranteed portion of the seed will be required.

PAYMENT ITEMS

1. Basic seeding, fertilizer and mulch ..... per square yard
2. Water for grassing ..... per one thousand gallons
3. Fertilizer (water soluble 20/20/20) ..... per pound
4. Soil binder ..... per pound
5. Pensacola Bahia ..... per pound
6. Bermuda ..... per pound
7. Millet ..... per pound
8 Rye ..... per pound

**END OF SECTION**

## STANDARD SPECIFICATIONS

## ASPHALTIC CONCRETE S-III

The specified material shall be in accordance with the 2000 Edition of the Florida Department of Transportation Standard Specification for Road & Bridge Construction, Section 334, Type S-III Asphaltic Concrete.

### 334-1 TYPE S-III ASPHALTIC CONCRETE (8/85) (FA 5-20-85)

334-1.1 DESCRIPTION

This section specifies the materials, the composition and physical test properties for Type S-III Asphaltic Concrete. This material contains no rubber.

All requirements of Section 320 for plant and equipment and of Section 330 for general construction requirements shall apply to this work.

Work will be accepted on a LOT to LOT basis in accordance with the applicable requirements of Sections 5, 6 and 9. The size of the LOT will be as specified in 331-5 for the bituminous mixture accepted at the plant and as stipulated in 330-10 and 330-12 for the material accepted on the roadway.

### 334-2 MATERIALS

334-2.1 GENERAL SPECIFICATIONS

The materials used shall conform to the requirements specified in Division III.

| | | |
|---|---|---|
| (1) | Asphalt Cement Viscosity Grade AS-20 or AC-30 | 916-1 |
| (2) | Mineral Filler | 917-1 and 917-2 |
| (3) | Coarse Aggregate | Section 901 |
| (4) | Fine Aggregate | Section 902 |

All materials shipped to the asphalt plant will be sampled at their destination.

### 334-3 GENERAL COMPOSITION OF MIXTURE

334-3.1 General: The bituminous mixture shall be composed of a combination of aggregate (coarse, fine or mixtures thereof), mineral filler, if required and bituminous material. The several 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 approved job mix formula. In addition, reclaimed asphalt pavement meeting the requirements of 331-2.2.4 may be utilized as a component of the mixture.

334-3.1 A minimum of 15 percent, by weight, of the total aggregate shall consist of screenings meeting the requirements of Section 902.

334-3.2 Grading Requirements: The job mix formula, as established by the vendor and approved by the Department, shall be within the design range specified in Table 334-1.

**TABLE 334-1**
**GRADATION DESIGN RANGE**

Percent by Weight Total Aggregate Passing Sieves

| Type | 1/2 | 3/8 | No. 4 | No. 10 | No. 40 | No. 80 | No. 200 |
|---|---|---|---|---|---|---|---|
| S-III | 100 | 88-98 | 60-90 | 40-70 | 20-45 | 10-30 | 2-6 |

334-3.3 Proportions of Silica Sand and Local Materials: Not more than 25 percent by weight of the total aggregate used shall be silica sand or local materials. The silica sand shall conform to all requirements of 902-2. The local materials shall meet the requirements of 902-6.

**334-4** FORMULA FOR JOB MIX

The job mix formula shall conform to the requirements of 331-4.3. In addition to these requirements, the job mix formula shall include test data showing that the material as produced will meet the requirements of Table 334-2.

**TABLE 334-2**
**MARSHALL DESIGN PROPERTIES**

| Mix Type | Minimum Marshall Stability (lbs) | Flow (0.01 in.) | Minimum VMA % | Air Voids % |
|---|---|---|---|---|
| S-III | 1000 | 8-16 | 15 | 3-7 |

The minimum effective asphalt content for Type S-III will be 5.5%.

**334-5** VENDOR'S QUALITY CONTROL

The Vendor shall provide the necessary control of the bitumous mixture and construction in accordance with the applicable provisions of 6-8.4 and 331-4.4.

**END OF SECTION**

# STANDARD SPECIFICATIONS

## EMULSIFIED ASPHALT & SLURRY SEAL SURFACES

SCOPE

The work covered by this specification includes the design, testing, construction, and quality control required for the proper application of an emulsified asphalt slurry seal surface (slurry seal).

DESCRIPTION

The slurry seal shall consist of a mixture of an approved emulsified asphalt, mineral aggregate, water and specified additives, proportioned, mixed and uniformly spread over a properly prepared surface as directed by the County. The completed slurry seal shall leave a homogenous mat, adhere firmly to prepared surface, and have a skid resistant surface texture throughout its service life.

A. APPLICABLE SPECIFICATIONS

1. GENERAL

The following specifications and test methods form a part of this specification.

| | | |
|---|---|---|
| AASHTO | - | American Association of State Highway and Transportation Officials |
| ASTM | - | American Society for Test and Materials |
| ISSA | - | International Slurry Seal Association |

2. AGGREGATE AND MINERAL FILLER

| | | |
|---|---|---|
| AASHTO T2 | ASTM D75 | Sampling Mineral Aggregates |
| AASHTO T27 | ASTM C136 | Sieve Analysis of Aggregates |
| AASHTO T11 | ASTM C117 | Materials Finer than No. 200 in Mineral Aggregate |
| AASHTO 176 | ASTM D2419 | Sand Equivalent Value of Soils and Fine Aggregate |
| AASHTO T84 | ASTM C128 | Specific Gravity and Absorption of Fine Aggregate |
| AASHTO T19 | ASTM C131 | Resistance to Abrasion of Small Sized Coarse Aggregate by use of the Los Angeles Machine |
| AASHTO T127 | ASTM C183 | Sampling Hydraulic Cement |
| AASHTO T37 | ASTM D546 | Sieve Analysis of Mineral Filler |
| AASHTO T104 | ASTM C88 | Soundness of Aggregates by Use of Sodium Sulfate or Magnesium Sulpnate |
| | ASTM D242 | Mineral Filler for Bituminous Paving Mixtures |

3. EMULSIFIED ASPHALT

| | | |
|---|---|---|
| AASHTO T40 | ASTM D140 | Sampling Bituminous |
| AASHTO T59 | ASTM D244 | Testing Emulsified Asphalt |
| AASHTO M140 | ASTM D977 | Specification for Emulsified Asphalt |
| AASHTO M208 | ASTM D2397 | Specification for Catonic Emulsified Asphalt |
| | ISSA T102 | Mixing, Setting and Water Resistance Test to identify "Quick-Set" Emulsified Asphalts |

4. SLURRY SEAL

| | |
|---|---|
| ISSA T101 | Guide for Sampling Slurry Mix for Extraction Test |
| ISSA T106 | Measurement of Slurry Seal Consistency |
| ISSA T109 | Test Method for Measurement of Excess Asphalt in Bituminous Mixtures by Use of a Loaded Wheel Tester |
| ISSA T111 | Outline Guide Design Procedure for Slurry Seal |
| ISSA T112 | Method to Estimate Slurry Seal Spread Rates and to Measure Pavement Macrotexture |
| ISSA T114 | Wet Stripping Test for Cured Slurry Seal Mixes |
| ISSA T115 | Determination of Slurry Seal Compatibility |
| ASTM D3910 | Design, Testing and Construction of Slurry Seal |
| ASTM D2172 | Quantitative Extraction of Bitumen for Bituminous Paving Mixtures |

B. MATERIALS

1. EMULSIFIED ASPHALT

The emulsified asphalt shall conform to Grade, SS-1-1h, CSS-1h, CQS-1h,Quick Set Mixing Grade. (ASTM D977, D2397, AASHTO M140 and M208). The cement mixing test is waived.

2. AGGREGATE

2.1 General: The mineral aggregate used shall be the type and grade specified for the particular use of the slurry seal. The aggregate shall be manufactured crushed stone such as granite, slag, limestone, or other high quality aggregates or a combination thereof. To assure the material is totally crushed, 100 percent of the parent aggregate will be larger than the largest stone in the gradation to be used. Smooth textured sands of less than 1.25% water absorption shall not exceed 50% kf the total aggregate blend.

2.2 Quality Test: When tested according to the following test normal aggregates shall meet the following requirements:

| Test | Quality | Spec. |
|---|---|---|
| AASHTO T176 or ASTM 2149 | Cleanness | 45 minutes |
| AASHTO T104 or ASTM C88 | Soundness | 15% max using $Na_2SO_4$ or 20% max using Mg $SO_4$ |
| AASHTO T96 or ASTM C131 | Hardness | 35% max |

2.3 Grading: When tested by AASHTO T27, ASTM C136 and ASTM C117, the aggregate (including mineral filler) shall meet the following gradation. (select one)

| Sieve Size | Type I Percent Passing | Type II Percent Passing |
|---|---|---|
| 3/8 (9.5 mm) | 100 | 100 |
| No. 4 (4.75 mm) | 100 | 98-100 |
| No. 8 (2.36 mm) | 98-100 | 65-90 |
| No. 16 (1.18 mm) | 65-90 | 45-70 |
| No. 30 (600 um) | 40-65 | 30-50 |
| No. 50 (300 um) | 25-42 | 18-30 |
| No. 100 (150 um) | 15-30 | 10-21 |
| No. 200 (75 um) | 10-20 | 5-15 |

3. MINERAL FILLER

Portland Cement, hydrated lime, limestone dust, fly ash or other approved filler meeting the requirements of ASTM D242 shall be used if required by the mix design. They shall be considered as part of the dry aggregate.

4. WATER

All water shall be potable and compatible with the slurry mix. Compatibility must be insured by the vendor.

5. ADDITIVES

Additives may be used to accelerate or retard the break-set of the slurry seal, or improve the resulting finished surface. The use of additives in the slurry mix (or individual materials) shall be made initially in quantities predetermined by the mix design with field adjustments if required, after approval by the County.

C. LABORATORY EVALUATION

1. GENERAL

Before work commences, the vendor shall submit a signed original of mix design covering the specific materials to be used on the project. This design must have been performed by a qualified laboratory. Previous lab reports covering the exact materials to be used may be accepted provided they were made during the calendar year. Once the materials are approved, no substitution will be permitted unless first tested and approved by the laboratory preparing the mix design.

2. LABORATORY REPORT

The laboratory report will show the results of tests performed on the individual materials, comparing their values to those required by this specification. The report will provide the following information on the slurry seal mixture.

| TEST PURPOSE | METHOD | SPEC |
|---|---|---|
| Slurry Seal Consistency | ISSA TB 106 | 2-3 cm |
| Excess Asphalt | ISSA TB 109 | 50-70 gms/sq ft |
| Quick Traffic systems(30 min) | ISSA TB 139 | 12 kg-cm min |
| Quick Traffic systems(60 min) | ISSA TB 139 | 20 kg-cm in |
| Wet Stripping Test | ISSA TB 114 | Pass |
| Compatibility | ISSA TB 115 | *Pass |
| Quick Set Emulsion | ISSA TB 102 | **Pass |
| Wet Track Abrasion | ISSA TB 100 | 75 gms/sq ft max |

* Mixing tests must pass at the maximum expected air temperature.

** Using job aggregate

The laboratory shall further report the quantitative effects of moisture content on the unit weight of the aggregate (bulking effect). The laboratory report must clearly show the proportions of aggregate, mineral filler (min. and max.), water (min. and max.), additive(s) (usage) and asphalt based on the dry aggregate weight.

D. EQUIPMENT

1. GENERAL

All equipment, tools and machines used in the performance of this work shall be maintained in satisfactory working order at all times.

2. SLURRY MIXING EQUIPMENT

The slurry seal mixing equipment shall be a continuous flow mixing unit, either an individual unit that returns to the stockpile for reloading or a continuous run unit that is resupplied on the job.

All units must have suitable means of accurately metering each individual material being fed into the mixer. All feeding mechanisms must be continuous feed and proportioning must remain constant at all times. The units shall be equipped with approved devices so that the machine can be accurately calibrated, and the quantities of materials used during any one period can be estimated. In the event these metering devices stop working, the slurry unit(s) will stop the application process until they are fixed. The mixer shall thoroughly blend all materials to form a homogeneous mass before leaving the mixer.

3. SLURRY SPREADING EQUIPMENT

The spreader box shall be equipped to prevent loss of slurry seal from all sides and with a flexible rear strike-off. It shall be capable of producing a uniform surface its full width. It shall have suitable means for side tracking to compensate for deviations in pavement geometry. Any type drag used shall be approved by the County and kept in a completely flexible condition at all times.

The box shall be kept clean and build-up of asphalt and aggregate shall not be permitted.

4. AUXILIARY EQUIPMENT
Suitable surface cleaning equipment, barricading equipment, hand tools and any support equipment should be provided as necessary to perform the work.

E. MACHINE CALIBRATION AND VERIFICATION

1. CALIBRATION
Each slurry mixing unit to be used in performance of the work shall be calibrated in the presence of the County prior to construction. Previous calibration documentation covering the exact materials to be used may be accepted provided they were made during the calendar year. The documentation shall include an individual calibration of each material at various settings, which can be related to the machine's metering device(s). No machine will be allowed to work on the project until the calibration has been completed and/or accepted.

2. VERIFICATION
Test strips will be made by each machine after calibration and prior to construction. Test strips shall be a portion of the project. Samples of the slurry seal will be taken and verification of rate of application will also be made. Upon failure of any of the tests, additional test strips, at no cost to the County, will be required until each unit is authorized to work. Any unit failing to pass the tests after the third trial, will not be permitted to work on the project. Test strips must be accepted or rejected within 24 hours after application.

F. COMPOSITION, RATE OF APPLICATION AND TOLERANCES
Tolerances for individual materials as well as the slurry mixture are as follows:

1. After the designed residual asphalt content is determined a plus or minus one percentage point variation will be permitted
2. The percent of aggregate passing each sieve shall not vary more than $\pm$ 4.0% from the job mix formula.
3. The percent of aggregate passing shall not go from the high end to the low of the specified range of any two successive sieves.
4. The slurry consistency shall not vary more than $\pm$ 0.5 cm from the job mix formula after field adjustments.

G. LIMITATIONS

1. WEATHER
The slurry seal shall not be applied if either the pavement or air temperature is below 55 degrees F (15 degrees C) and falling, but may be applied when both pavement and air temperature are above 45 degrees F (7 degrees C) and rising. No slurry seal shall be applied when there is danger that the finished product will freeze before 24 hours. The mixture shall not be applied when weather conditions prolong opening to traffic beyond a reasonable time.

2. OTHER
No slurry seal shall be applied before 7:30 a.m. and must be able to support traffic by 4:00 p.m.

H. NOTIFICATION AND TRAFFIC CONTROL

1. NOTIFICATION

All homeowners and businesses affected by the construction shall be notified 48 hours in advance of the surfacing. Notification shall be in written posting stating time and date that surfacing will take place. Should the work not occur on the specified day, new notification will be distributed when required.

2. TRAFFIC CONTROL

Suitable methods shall be used by the Vendor to protect the slurry seal from all types of vehicular traffic until the new surface will support traffic without damage. Opening to traffic does not constitute acceptance of the work. The County shall be notified of the methods to be used.

I. PREPARATION OF THE SURFACE

1. GENERAL

Immediately prior to applying the slurry seal, the surface shall be cleared of all loose material, silt spots, vegetation, oil spots and other objectionable material. Any standard cleaning method will be acceptable. If water is used, cracks will be allowed to dry thoroughly before slurry sealing. Manholes, valve boxes, drop inlets and other service entrances will be protected from the slurry seal by a suitable method. The County shall approve the surface preparation prior to sealing.

J. APPLICATION

1. GENERAL

The surface should be pre-wetted by fogging ahead of the slurry box when required by local conditions. Water used in pre-wetting the surface shall be applied such that the entire surface is damp with no apparent flowing water in front of the slurry box. The rate of application of the fog spray shall be adjusted during the day to suit temperatures, surface texture, humidity and dryness of the pavement surface.

The slurry mixture shall be of the desired consistency upon leaving the mixer and no additional materials shall be added. A sufficient amount of slurry shall be carried in all parts of the spreader at all times so that a complete coverage is obtained. Overloading of the spreader shall be avoided. No lumping, balling or unmixed aggregate shall be permitted.

No streaks, such as those caused by oversized aggregate, will be left in the finished surface. If excess oversize develops, the job will be stopped until the vendor proves to the County that the situation has been corrected.

2. JOINTS

No excessive buildup, uncovered areas or unsightly appearance shall be permitted on longitudinal or transverse joints. An excessive overlap will not be permitted on longitudinal joints. The vendor shall provide suitable width spreading equipment to produce minimum number of longitudinal joints throughout the project. When possible, longitudinal joints shall be placed on lane lines. Half passes and odd width passes will be used only in minimum

amounts. If half passes are used, they shall not be the last pass of any paved area.

3. MIX STABILITY

The slurry mixture shall possess sufficient stability so that premature breaking of the slurry seal in the spreader box does not occur. The mixture shall be homogeneous during and following mixing and spreading, it shall be free of excess water or emulsion and free of segregation of the emulsion and aggregate fines from the coarser aggregate.

4. HAND WORK

Areas which cannot be reached with the slurry seal machine shall be surfaced using hand squeegees to provide complete and uniform slurry seal coverage. The area to be hand-worked shall be lightly dampened prior to mix placement and the slurry worked immediately. Care shall be exercised to leave no unsightly appearance from handwork. The same type finish as applied by the spreader box shall be required. Handwork shall be completed during the machine applying process.

5. LINES

Care shall be taken to insure straight lines along curbs and shoulders. No runoff on these areas will be permitted. Lines at intersections will be kept straight to provide a good appearance.

6. CLEAN-UP

All areas, such as gutters and intersections, shall have the slurry seal removed as specified by the County. The vendor shall remove any debris associated with the performance of the work, on a daily basis.

K. QUALITY CONTROL

1. MATERIALS

The vendor will permit the County to take samples of the aggregate and asphalt emulsion used in the project at the County's discretion. Gradation and sand equivalent tests may be run on the aggregate and residual asphalt content tests on the emulsion. Test results will be compared to specifications. Tests will be run at the expense of the County. The County must notify the vendor immediately if any test fails to meet the specifications.

2. SLURRY SEAL

Samples of the slurry seal will be taken directly from the slurry unit(s). Consistency and residual asphalt content tests may be made on the samples and compared to the specifications. Tests will be run at the expense of the County. The County must notify the vendor immediately if any test fails to meet specifications. The County may use the recorders and measuring facilities of the slurry seal unit to determine application rates, asphalt emulsion content, mineral filler and additive(s) content for an individual load.

It is the responsibility of the vendor to check stockpile moisture content and to set the machine accordingly to account for aggregate bulking.

3. NON-COMPLIANCE

If any two successive tests fail on the stockpile material, the job shall be stopped. It is the responsibility of the vendor, at his own expense, to prove to the County that the conditions have been corrected. If any two successive tests on the mix from the same machine fail, the use of the machine shall be suspended. It will be the responsibility of the vendor, at his own expense to prove to the County that the problems have been corrected and that the machine is working properly.

4. PAYMENT

The slurry seal shall be measured and paid for by the unit area square yard on the work completed and accepted by the County. The price shall be full compensation for furnishing all materials and for all preparation, mixing and applying these materials, and for all labor, equipment, tools, test design, clean up and incidentals necessary to complete and warrant the job as specified herein.

**END OF SECTION**

## STANDARD SPECIFICATIONS

## BASE AND SURFACE CONSTRUCTION AND MATERIALS

*Note:* Super Pave Mixes SP 9.5 and SP 12.5 shall conform to Florida Department of Transportation Standard Specifications 2007 Edition.

### ASPHALTIC CONCRETE PAVING AND RESURFACING

A. Asphaltic concrete paving and base work shall conform to Florida Department of Transportation Standard Specifications 2007 Edition with the exception of all section pertaining to Type S which shall be Florida Department of Transportation Standard Specifications 2000 Edition.

B. Separate pay items for sweep, tack, spread, and compact for asphaltic-concrete are established for leveling courses and thin overlays 50#/sy to 99#/sy per course and for 100#/sy per course and greater.

C. A separate pay item for Maintenance of Traffic, including flaggers, shall conform to the Florida Department of Transportation's (F.D.O.T.'s) Roadway and Traffic Design Standards for Design, Construction, and Maintained Systems, most current edition, and the Federal Highway Administration's (F.H.W.A.'s) Manual on Uniform Traffic Control Devices (M.U.T.C.D.) for Streets and Highways, most current edition.

D. Unit price determination will be based upon total quantities per each Release Order.
Example: Two 50#/sy leveling courses, each course 300 tons
2 x 300 tons = 600 tons; pay at over 500 tons unit price.

E. Successive leveling or surface courses comprised of or to be placed on top of SAHM, Type II, or Type III mixes shall not be placed until the previous mat has cooled sufficiently to eliminate distortion and/or displacement of that mat.

F. Installation of asphaltic pavement base courses (SAHM, ABC, S-1) for road widening will be a separate pay item. Quantities for multiple courses will be combined for unit price determination for material, labor, and equipment.

G. All unit price determinations for materials, labor and equipment will be based upon total quantities for each release order for each vendor delivery zone. Mobilization will be paid as lump sum for each release order issued for each vendor delivery zone. Work areas within a 1/4 mile radius (which may not be directly connected) shall be billed at one mobilization cost.

H. Intersecting streets shall be pulled to the radius points at a minimum, unless specified by the pavement Engineer or his representative.

I. Herbicide to be applied to grass growing within the asphalt pavement areas prior to resurfacing.

J. Driveways along streets to be resurfaced shall be done on an as-required basis. If more than a 5-feet pull is required, the price for sweep, tack, spread, and compact will be paid under Patching item for Sweep, Tack, Spread & Compact.

K. Asphaltic-concrete material delivered to job site and sweep, tack, spread, and compact bid items will be combined to determine low aggregate job total for award on a Release Order basis. Where appropriate and where necessary, manhole and water valve adjustment bid items will be combined with the above items to determine low aggregate job total.

L. All home owners and businesses affected by the project shall be notified a minimum of two days in advance of the beginning of the project. The notification shall be in a form of written posting, stating the time and date that the surfacing will take place. Should the work not occur on the specified day, a new notification shall be distributed.

**PAVEMENT MILLING**

A. Furnish all necessary labor, equipment, and materials to cold-mill existing asphaltic-concrete surfaces to depths specified.

B. This item may be used to remove underlying base material after asphaltic-concrete is removed. If two or more passes are required to remove the designated material, the unit price based on total area (number of passes times surface area) will be applied to each pass.
**Example** / 3,000 sy surface area: First Pass - Remove 1 ¼" asphaltic-concrete; Second Pass- Remove 3" shell base. 2 passes times 3,000 sy = 6,000 sy. Pay Items: First Pass- 3,000 sy x unit price 1" - 2" average cut (5,001 - 10,000 sy); Second Pass - 3,000 sy x unit price over 2" average cut (5,001 - 10,000 sy)

C. The vendor shall be responsible for the removal/disposal of all excess materials and shall keep all drainage structures free of debris from the milling process.

D. Desired finish crown to be 5/16".

E. The vendor shall furnish all necessary signs, flag persons, etc. that are in keeping with good practice and/or as required by the County for traffic control.

F. The vendor shall be responsible to surface any milled surface within 48 hours of the milling process.

**G. The County will retain all materials produced from the milling process. Vendor shall haul such material to the County property per cost for Equipment Rental (Bid Form Section III).**

**END OF SECTION**

## STANDARD SPECIFICATIONS

## BASE AND SURFACE CONSTRUCTION AND MATERIALS

### MANHOLE AND WATER VALVE ADJUSTMENT
(to be bid as part of Bid Form Section IV)

A. Adjustment to manholes and water valves to be done after resurfacing has been completed. All such utility boxes to be located by County prior to paving. The asphalt crew shall remove all asphalt material to expose the lids per adjustment. After paving, the boxes will be dug out and raised to meet the proper finished grade of the road. A collar of 12" minimum width and 12" minimum thick Portland cement will be poured around water valves to the finished surface grades. Manholes:

1. Use 3/8" rock in concrete collars
2. Concrete collars should be 30" x 30" minimum overall
3. Use brick, concrete or iron rings to raise to grade
4. Grout inside of manhole and/or chimneys
5. Remove concrete, brick, grout or any other debris that has fallen into manhole during adjustment.
6. Manhole rings shall include a poly adjustment collar, Turner Riser or equivalent.

A combination of quantities (manholes and water valves) can be used to determine unit price for the total number of units. Example: 3 manholes + 4 water valves = 7 units to be paid under 6 - 10 units.

Where appropriate and when necessary, manhole and water valve adjustments will be combined with asphaltic-concrete and sweep, tack, spread, and compact bid items to determine low aggregate job total.

**END OF SECTION**

# STANDARD SPECIFICATIONS

## FIBERMAT

## ASPHALT RESURFACING TREATMENT

### SCOPE

The work covered by this specification includes furnishing all plant, labor, equipment, and materials in performing all operations required for proper application of an asphalt rejuvenation treatment known as Fibermat or approved equal.

### DESCRIPTION

The Fibermat shall consist of a mixture of an approved emulsified asphalt, mineral aggregate, water, manufactured fibers and latex; properly proportioned, mixed and uniformly spread over a properly prepared surface as directed by the County. The complete Fibermat or approved equal shall leave a homogeneous mat, adhere firmly to the prepared surface, and have a skid resistant surface texture.

### MATERIAL

A. EMULSIFIED ASPHALT

The emulsified asphalt shall conform to grade CQS-1H conionic type quick set as specified in ASTMD-2397.

B. AGGREGATE

Crushed granite, free from dust, dirt, clay, organic matter, and other deleterious aggregate shall have maximum ASTM C-311, Grading D, percentage of wear 35 (%) percent and shall meet ASTM D 1073 soundness requirement. Furnish ASTM C-128 specific gravity and absorption and ASTM 29 unit weight of aggregate.

C. MINERAL FILLERS

Portland Cement Type I or II as determined by ASTM C-150 or hydrated lime as determined by ASTM C-207 shall be used meeting requirements of ASTMD 242, if required by the mix design. They shall be considered as part of the dry aggregate.

D. FIBERS

Manufactured fibers shall be ¼" in length with a tensile strength of 50,000 to 75,000 pounds per square inch. The fiber material shall consist of 300 million individual fibers per pound of fiber material and each fiber shall be coated with a lubricant to facilitate distribution. The fiber material shall be compatible with cationic, anionic, and nonionic emulsions and flexible at low ambient temperatures.

Fiber Mixing: Fibers shall be .3 to .5 pounds to one ton of aggregate. The pugmill mixing time of all combined ingredients shall not exceed 5 seconds, when discharged on a continuous basis. The pugmill mixing chamber shall be a twin-shaft, 50 paddle mixing design.

E. RUBBER LATEX

Rubber latex shall have the ability to coat fabrics and elasticize and strengthen asphalt. The properties include strength extensibility, resilience, resistance to heat, oxygen, water, oil, ozone, and chemicals. Latex Mixing: For even dispersion of latex particles shall be 2% by weight of solids content.

F. WATER

Potable, with a maximum sulfate content of 1,000 parts per million (p/m).

**EQUIPMENT**

A. GENERAL

All equipment, tools, and machines used in performance of this work shall be maintained in satisfactory working order at all times.

B. FIBERMAT MIXING EQUIPMENT

The slurry mixing equipment shall be a continuous flow mixing unit that returns to the stockpile for reloading or a continuous run unit that is resupplied on the job site. All units must have suitable means of accurately metering each individual material being fed into the mixer. All feeding mechanisms must be continuous feed and proportioning must remain constant at all times. The units shall be equipped with approved devices so that the machine can be accurately calibrated, and the quantities of materials used during any one period can be estimated. In the event these metering devices stop working, the unit will stop the application process until they are fixed.

The mixer shall thoroughly blend all material to form a homogeneous mass before leaving the mixer.

Mixing of the fibers shall be performed on the slurry machine in a 60 gallon tank. Ingredients shall be a water mixing agent capable of keeping the fibers separated and wetting agent in suspension. The fiber shall stay in suspension if mixing process has stopped. Mixing shall be for a period of not less than 30 minutes and shall continue during Fibermat application.

The fiber solution shall be discharged into the mixing chamber by means of a pump and shall be capable of adjusting flow of fiber solution to meet mix design to insure proper proportioning. Flow of fiber solution shall be automatic at the start of Fibermat mixing process.

C. SLURRY SPREAD EQUIPMENT

The spreader box shall be equipped to prevent loss of Fibermat from all sides and with a flexible rear strike-off capable of producing a uniform surface its full width. It shall have suitable means for sides tracking to compensate for deviations in pavement geometry. The box shall be kept clean; build-up of asphalt and aggregate not permitted.

**MACHINE CALIBRATION AND VERIFICATION**

A. CALIBRATION

Each slurry mixing unit to be used shall be calibrated in the presence of the Engineer. Previous calibration documentation covering the exact materials to used may be accepted provided they were made during the calendar year. The documentation shall include an individual calibration of each material at various settings, which can be related to the machines metering device(s). No machine will be allowed to work on the project until calibration has been completed/accepted.

B. VERIFICATION

Test strip shall be made at a minimum 100 square yard test section of Fibermat in an area designated by the Engineer, using the same job mix equipment and methods to be used on the job. The trial application of the Fibermat work under this contract shall include the construction of a lane joint. Vendor shall demonstrate to the Engineer that the equipment is properly calibrated and in good working condition and that the job mix Fibermat can be applied without segregation, streaking or producing a brown appearance after curing. Samples of the Fibermat shall be taken and verification made as to mix consistency and proportioning, at no cost to the County. Verification of rate of application will also be made.

**COMPOSITION, RATE OF APPLICATION**

The percentage of each individual material shall be as required by the laboratory report. Adjustments may be required during construction, based on field conditions. The County will give final approval for all such adjustments. The Fibermats mixture shall be of proper consistency at all times so as to provide the amount of mixture required by the surface condition. Application rate as measured by the County shall be 15 Lbs/Sy (Kgs/Sgm) $\pm$ 15% based on dry aggregate weight.

**LIMITATIONS**

A. WEATHER LIMITATIONS

Apply the Fibermat when the existing pavement is clean and free of visible moisture, the pavement is above 45 degrees F and the minimum ambient temperature is 45 degrees F and rising. Measure pavement temperature by filling a crack of small drill hole in the pavement with water, allowing the water to stand for 15 minutes, then inserting a thermometer into the water and reading the temperature. Do not apply ASTM D J2397 cationic type emulsion if rain is forecast for the next four hours, or if ambient temperatures below 35 degrees F are forecast for the next 24 hours.

B. NOTIFICATION AND TRAFFIC CONTROL

The vendor shall notify all homeowners and businesses affected by the construction 48 hours in advance of the surfacing. This notifications shall be in a form approved by the County. Should the work not occur on the specified days, new notification will be required.

Traffic Control: Suitable methods shall be used by the vendor to protect the Fibermat surface from all types of vehicular traffic until the new surface will support the traffic without damage. Opening to traffic does not constitute acceptance of the work.

## PREPARATION OF THE SURFACE

Immediately prior to applying the Fibermat, the surface of the pavement shall be cleaned of all loose materials, silt spots, vegetation, oil spots, and other objectionable material. Any standard cleaning method will be acceptable. If water is used, cracks will be allowed to dry thoroughly before surfacing begins. Manholes, valve boxes, curb inlets and other service entrances will be protected from the surfacing by a suitable method.

## APPLICATION

A. GENERAL

The surface should be fog sprayed immediately ahead of the spreader; pre-wetting the pavement surface shall be applied such that the entire surface is dumped with no apparent flowing water in front of the spreader box. The rate of wetting shall be adjusted during the day to suit temperatures, surface texture, humidity, and dryness of pavement surface.

The Fibermat mixture shall be of desired consistency upon leaving the mixer and no additional material shall be added. A sufficient amount of Fibermat shall be carried in all parts of the spreader at all times so that complete coverage is obtained and overloading the spreader shall be avoided. No lumping, balling or on mixed aggregate shall be permitted. No streaks such as those caused by oversized aggregate will be left in the finished surface. If excess oversize develops, the job will be stopped until the vendor proves to the County that the situation has been corrected.

B. JOINTS

No excessive buildup, uncovered areas or unsightly appearance shall be permitted on longitudinal or transverse joints. An excessive overlap will not be permitted on the longitudinal joints. The vendor shall provide suitable width spreading equipment to produce a minimum number of longitudinal joints throughout the project. When possible, longitudinal joints shall be placed on lane lines. If half passes are used, they shall not be the last pass of any paved area.

C. MIX STABILITY

The slurry mixture shall possess sufficient stability so that premature breaking of the slurry mixture in the spreader box does not occur. The mixture shall be homogeneous during and following mixing and spreading. It shall be free of excess water or emulsion and free of segregation of the emulsion and aggregate fines from the coarser aggregate.

D. HAND WORK

Areas which cannot be reached with the slurry machine shall be surfaced using hand squeegees to provide complete and uniform coverage. The area to be hand worked shall be lightly dampened prior to mix placement and the slurry worked immediately. Care shall be exercised to leave no unsightly appearance from handwork. The same type finish as applied by the spreader box shall be required. Handwork shall be completed during the machine applying process.

E. LINES

Care shall be taken to insure straight lines along curbs and shoulders. No runoff on these areas will be permitted. Lines at intersections will be kept straight to provide a good appearance.

F. CLEAN-UP

All areas, such as manways, gutters and intersections, shall have the slurry seal removed as specified by the County. The vendor shall remove any debris associated with the performance of the work, on a daily basis.

**QUALITY CONTROL**

A. MATERIALS

The vendor will permit the County to take samples of the aggregate and asphalt emulsion used in the project at the County's discretion. Gradation and sand equivalent tests may be run on the aggregate and residual asphalt content test on the emulsion. Test results will be compared to specifications. Tests will be run at the expense of the County. The County must notify the vendor immediately if any test fails to meet the specifications.

B. FIBERMAT

Samples of the Fibermat will be taken directly from the slurry unit(s). Consistency and residual asphalt content test may be made on the samples and compared to the specifications. Tests will be run at the expense of the County. The County must notify the vendor immediately if any test fails to meet specifications.

The County may use the recorders and measuring facilities of the Fibermat unit to determine application rates, asphalt emulsion content, mineral filler and additive(s) content for individual load.

It is the responsibility of the vendor to check stockpile moisture content and to set the machine accordingly to account for aggregate bulking.

C. ASPHALT SLURRY MIX

ASTM D 3910 for conformity to the laboratory mix; ASTM D 2172 for residual asphalt. Variations from the approved laboratory mix shall not exceed the following tolerances; however, in no case shall the approved laboratory mix, with tolerances applied, fall outside the general limits for aggregate gradation and bituminous material specified herein.

| AGGREGATE SIZE | TOLERANCE PERCENT |
|---|---|
| No. 4 & No. 16 | plus or minus 6 |
| No. 30 & No. 50 | plus or minus 5 |
| No. 100 | plus or minus 4 |
| No. 200 | plus or minus 2 |
| Asphalt Cement | plus or minus 3 |
| Water Content | plus or minus 5 |

D. RESCREENING

Granite aggregate shall be rescreened when necessary to ensure no oversize rock in the mix. Rescreening device shall have a vibrator with ¼" square mesh.

E. EMULSIFIED ASPHALT

ASTM D 140. Sample immediately after site delivery and for each source change. Take additional samples from the Fibermat storage tanks when directed.

F. AGGREGATES
ASTM D 75. Take one initial sample from each stockpile and three samples for every 200 tons thereafter. Repeat sampling for each source change or when gradation variations exceed specified requirements. A sample shall consist of three random incremental samples mixed together to form a minimum composite sample of 50 pounds.

G. FIBERMAT MIX
ISSA 101. Take one sample at start of job and upon request from Engineer from the diverter of each machine after the Slurry machine has traveled a minimum of 100 feet.

**TESTING**

A. EMULSIFIED ASPHALT
ASTM D 244 for conformity to ASTM D977, ASTM D2397.

B. AGGREGATE
ASTM C 131 for Los Angeles abrasion: ASTM C128 specific gravity and absorption; ASTM C29 unit weight.

C. AGGREGATE AND MINERAL FILLER
ASTM C 136 for gradation; ASTM C 117 for material finer than No. 200 sieve; ASTM C 2419 for sand equivalent.

**END OF SECTION**

# STANDARD SPECIFICATIONS

## MICRO-SURFACING

### SCOPE

This work shall consist of a latex modified asphalt pavement course to fill ruts and or surfacing of existing paved surfaces.

### DESCRIPTION

The micro-surfacing shall be a mixture of cationic latex modified asphalt emulsion, mineral aggregate, mineral filling water and other additives, properly proportioned, mixed and spread on the paved surface in accordance with this specification, and as directed by the County.

### MATERIALS

A. BITUMINOUS MATERIALS

Latex-Modified Emulsion Asphalt. CSS-1H shall conform to ASTM D2397. Provide emulsified asphalt showing no separation after mixing and conforming to the manufacturer's requirements for natural latex modified asphalt emulsion. Cement mixing test is waived for the latex-material CSS-1H emulsified asphalt. A minimum softening point (Ring and Ball F) of 140° F is required when tested in accordance with AASHTO T53. A minimum viscosity absolute 60° C (140° F) of 8000 poise is required.

B. AGGREGATE

1. General: The material aggregate used shall be of the type and grade specified for micro-surfacing. The aggregate shall be manufactured crushed stone, such as granite. Slag, limestone, chat or other high quality aggregate or combination thereof.

2. Aggregate Physical Requirements: The aggregate including natural fines when tested by AASHTO methods T-11 or T-27 or ASTM C-117 or C-136 shall meet the gradation requirement specified in Table A.

**TABLE "A"**
**TOTAL % BY WEIGHT PASSING**

| SIZE | TYPE |
|---|---|
| 3/8" | 100 |
| #4 | 85-100 |
| #8 | 50-80 |
| #16 | 40-65 |
| #30 | 25-45 |
| #50 | 13-25 |
| #200 | 5-15 |

3. Deleterious Substances: To limit the permissible amount of clay like fines in an aggregate, a sand equivalent value of 65 or higher is required when tested by ASTM 2419 methods.

4. Soundness: The aggregate shall have a weight loss of not more than 15% when sodium sulfate test is used or 20% when magnesium sulfate test is used.

5. Hardness: The aggregate wear, from resistance to abrasion, shall be a maximum of 35% when using AASHTO T96 or ASTM C131 test methods.

6. Mineral filler shall be any recognized brand of Type I non-airentained Portland cement that is free of lumps. It may be accepted upon visual inspection. The amount of mineral filler needed shall be determined by the laboratory mix design and will be considered as part of the material gradation requirement.

7. Latex Modified: A 100% natural latex base modified along with emulsified shall be milled into the asphalt emulsion. Provide a modified capable of making an emulsion when combined with aggregate and mineral filler that can fill up to 1 ½ inch wheel ruts in one pass. Modified shall be capable of field regulation of the setting time and be suitable for nightline placement, when required.

8. Additives: These additives or any other materials that are added to the emulsion mix or to any of the component material to provide the specified quick-set properties. These additives shall be supplied by the emulsion manufacturer or a supplier authorized by the manufacturer as being compatible with the mixture.

**LABORATORY EVALUATION**

GENERAL

Before work commences the vendor shall submit a signed mix design covering the specific materials to be used on the project. This design shall be performed by a qualified laboratory. Once the materials are approved no substitution will be permitted unless first tested and approved by the laboratory preparing the mix design.

MIX DESIGN

The manufacturer of the latex modified emulsion will develop the job mix formula with approval of the Vendor and submit certified test results for the Engineers approval. Provide job mix formula for Type A. Compatibility of the aggregate and modified CSS-1H shall be verified by the mix design. The job mix formula for Type A and B shall provide a minimum Marshall stability of 1800 pounds and flow of 6 to 16 units when tested according to ASTM-D1559 modified to permit air drying of the mixture at 70 - 75° F for three (3) days before re-heating and placing the material in the test molds. Aggregate in the mixture shall represent material to be used on the project.

SPECIFICATION

Proportions for the job mix formula shall be within the following limits and approved by the Engineer.

Mineral Aggregate (lbs/sy dry wt.) ..... 15 - 50

Latex Emulsified Asphalt Residue by wt. of Aggregate ..... 5.5 - 8.0%

Latex Base Modified ..... As Required

Additive ..... As Required

Water ..... As Required

Mineral Filler ..... 1.5 ± 1.0% by wt. of dry aggregate depending on weather conditions

## QUALITY CONTROL

MATERIALS

The vendor will permit the County to take samples of aggregate and asphalt emulsion used for the project at the discretion of the Engineer. Test results will be compared to the specifications. Test will be run at the expense of the County. The County must notify the vendor immediately if any test fails to meet the specification.

Latex modified micro-surfacing samples of the material may be taken directly from the mixing unit(s). Consistency and residue asphalt content test may be made on the samples and compared to the specifications. Tests will be run at the County's expense. The County must notify the vendor immediately if any test fails to meet specifications. At the discretion of the Engineer, samples will be taken from the discharge chute, using a non-absorptive container, of sufficient size to obtain a sample from the entire cross section of the mixture being discharged. Submit the sample of the asphalt emulsion manufacturer to an approved laboratory to be analyzed for binder content and compliance with Table A. Furnish a mixture with overall project average binder content within the range specified for each type. The daily average binder content is to fall within plus or minus 1% of the job mix formula and be verified daily by meter reading of material control devices.

## CONSTRUCTION/PLACEMENT OF THE MICRO-SURFACE

WEATHER LIMITATIONS

The material shall be spread only when the atmospheric temperature is at least 50° F and rising, the weather is not foggy or rainy and there is no forecast of temperatures below 32° F within 24 hours from the time of placement of the mixture.

## NOTIFICATION AND TRAFFIC CONTROL

All residents affected by the construction shall be notified 48 hours in advance of the surfacing. Notification shall be in the form approved by the County.

## TRAFFIC CONTROL

Suitable methods shall be used by the vendor to protect the Micro-Surface from traffic until the new surface will support that traffic without damage.

## STOCKPILE

Precaution shall be taken to insure that stockpiles do not become contaminated. Stockpiling and loading methods shall be such as to permit ready identification of the aggregate and to minimize segregation. Sites for stockpiles shall be cleaned prior to storing materials. Aggregates shall not be removed from the stockpile within one (1) foot of the ground, until final clean-up of the work.

## APPLICATION

GENERAL

The surface should be pre-wetted by fogging ahead of the spreader box when required by local conditions. The rate of application of the fog spray shall be adjusted during the day to suit temperatures, surface texture, humidity and dryness of the pavement surface.

The modified mixture shall be of the desired consistency upon leaving the mixer and no additional materials shall be added. A sufficient amount of material shall be carried in all parts of the spreader at all times so that a complete coverage is obtained. Overloading of the spreader shall be avoided. No lumping, bailing, or unmixed aggregate shall be permitted.

No streaks, such as those caused by oversized aggregate, will be left in the finished surface. If excess oversized aggregate develops, the job will be stopped until the vendor proves to the County that the situation has been corrected.

A. Surface Preparation: The area to be surfaced shall be thoroughly cleaned of vegetation, loose aggregate and soil, particularly soil that is bound to the surface. Water used in pre-wetting the surface shall be applied by the mixing machine immediately ahead of the spreader box at a rate to dampen the surface without any free flowing water allowed. Manholes, valve boxes and other service entrances will be protected from the surfacing material.

B. Tack Coat: Shall be required on Portland cement concrete surfaces. Tack coat application rate shall be 0.05 gallon per square yard. This emulsified asphalt should be the SS or CSS grade.

JOINTS

No excessive buildup, uncovered areas or unsightly appearance shall be permitted on longitudinal or transverse joints. An excessive overlap will not be permitted on longitudinal joints. The vendor shall provide suitable width spreading equipment to produce minimum number of longitudinal joints throughout the project. When possible, longitudinal joints shall be placed on lane lines. Half passes and odd width passes will be used only in minimum amounts. If half passes are used, they shall not be the last pass of any paved area.

MIX STABILITY

The modified mixture shall possess sufficient stability so that premature breaking of the slurry mixture in the spreader box does not occur. The mixture shall be homogeneous during and following mixing and spreading, it shall be free of excess water or emulsion and free of segregation of the emulsion and aggregate fines from the coarser aggregate.

HAND WORK

Areas which cannot be reached with the mixing machine shall be surfaced using hand squeegees to provide complete and uniform coverage. The area to be hand worked shall be lightly dampened prior to mix placement. Care shall be exercised to leave no unsightly appearance from handwork. The same type finish as applied by the spreader box shall be required. Handwork shall be completed during the machine applying process.

LINES

Care shall be taken to insure straight lines along curbs and shoulders. No runoff on these areas will be permitted. Lines at intersections are to be kept straight to provide a good appearance.

**EQUIPMENT**

GENERAL

All equipment, tools and machines used in the performance of this work shall be maintained in satisfactory working condition at all times to ensure a high quality product.

MIXING EQUIPMENT

The material shall be mixed by a self propelled micro-surfacing mixing machine which shall be a continuous flow mixing unit able to accurately deliver and proportion the aggregate, emulsified asphalt mineral filler, control setting additive and water to a revolving multi-blade double shafted mixer and discharge the mixed product on a continuous flow basis. The machine shall have sufficient storage capacity for aggregate, emulsified asphalt, mineral filler, control setting additive and water to maintain an adequate supply to the proportioning controls. The machine may be equipped with self-loading devices which provide for the loading of materials while continuing to lay micro-surfacing, thereby minimizing joints.

Mixing machine shall be equipped with a water pressure system and nozzle type spray bar to provide a water spray ahead of and outside the spreader box when required.

Mineral filler feed shall be located so the proper amount of Portland cement is dropped on the aggregate before discharge into the mixer.

Truck-mounted machine with a positive, non-slipping aggregate delivery system and without the front feed, continuous loading feature may be used on project segments of less than 15,000 square yards or spot repair projects.

PROPORTIONING DEVICES

Individual volume or weight controls for proportioning each material to be added to the mix, i.e., aggregate, mineral filler, emulsified asphalt and water shall be provided and properly marked. These proportioning devices are usually revolution counters or similar devices and are used in material calibration and determining the materials output at any time.

EMULSIFIED PUMP

The emulsified asphalt pump shall be a heated positive displacement type pump.

SPREADING EQUIPMENT

Surfacing mixture shall be spread uniformly by means of a mechanical type spreader box attached to the mixer, equipped with paddles to agitate and spread the materials throughout the box. A front seal shall be provided to insure no loss of the mixture at the road contact point. The rear seal shall act as final strike-off and shall be adjustable. The mixture shall be spread to fill cracks and minor surface irregularities and leave a uniform skid resistant application of material on the surface. The spreader box and rear strike-off shall be so designed and operated that a uniform consistency is achieved to produce a free flow of material to the rear strike-off. The longitudinal joint where two passes join, shall be neat appearing, uniform, and lapped. All excess material shall be removed from the job site prior to opening the road. The spreader box shall have suitable means provided to side shift the box to compensate for variations in pavement geometry.

A sufficient amount of material shall be carried at all times in all parts of the spreader box to ensure complete coverage. No lumps or unmixed aggregate will be permitted in the finished surface.

Adjustments to the additive are permitted to provide a slower setting time when hand spreading is needed. If hand spreading is necessary, the mixture shall be poured in a small window along one edge of the surface to be covered and then spread uniformly by a hand squeegee or lute.

A smooth, neat seam shall be provided where two passes meet. Excess material shall be immediately removed from ends of each run.

**COMPACTION**

Rolling with pneumatic-tired roller shall be required after proper curing for sections of pavement not to be exposed to traffic. The roller shall be equipped with treaded tires with a tire pressure of 40 - 60 psi.

**OPENING TO TRAFFIC**

Traffic shall not be allowed on the surface course applications until the mix has set sufficiently and not until directed by the Engineer or one of his representatives.

**MEASUREMENT AND PAYMENT**

METHOD OF MEASUREMENT

The quantity under this item will be the number of square yards completed and accepted in place. The width of the pavement course will be the width shown on the plans or as otherwise directed by the Engineer.

The length will be measured along the center line of each roadway or ramp. The plan quantities as adjusted for changes and errors will be the method of measurement.

BASIS OF PAYMENT

The accepted quantities of latex modified emulsified asphalt pavement course will be paid for at the contract unit price per square yard which price and payment shall be full compensation for furnishing materials, equipment, labor, and tack coat, if required, and all incidentals necessary to complete this work.

| UNIT | DESCRIPTION |
|---|---|
| | Latex modified emulsified asphalt pavement course. |
| APPLICATION RATE | |
| Surface only<br>20 - 25 (Lbs/sy) | Leveling and Surfacing<br>25 - 30 (Lbs/sy) |

**END OF SECTION**

# STANDARD SPECIFICATIONS

## DUST-BINDER

SCOPE

This work shall consist of supplying and proper application of an approved dust control agent, over a properly prepared surface as directed by the County.

DESCRIPTION

A dust-binding emulsion, being free-flowing and stable consisting of 60 plus or minus 0.3 percent semi-liquid, resinous, petroleum bodies and 40 plus or minus 0.3 percent water with a suitable emulsifying agent - the petroleum resins having a flashpoint of 400 degrees Fahrenheit and a specific gravity of 1.02 plus or minus .02 at (60/60) and stable meaning that the "neat" emulsion will not break when stored in clean, closed containers at ordinary temperatures (not exposed to freezing or boiling) for a minimum of six (6) months. The emulsion shall be non-corrosive to metal containers. It shall be non-injurious to the growth of volunteer or seeded plants and grass. It also should have a high affinity for soils and aggregates of all types.

MATERIAL

**DUST CONTROL AGENT**

| | TEST METHOD | | REQUIREMENTS | |
|---|---|---|---|---|
| **TESTS** | **ASTM** | **AASHTO** | **MIN.** | **MAX.** |
| Particle Charge Test | D-244 | T-59 | | Positive |
| Residue %w[2] | D-244 | T-59 | 60 | 65 |
| Sieve Test, %w[1] | D-244 | T-59 | -- | 0.1 |
| Viscosity @ 25°C. SFS | D-244 | T-59 | 12 | 40 |
| Asphaltenes | D-2006-70 | ---- | <1 | |

[1]Test procedure identical with ASTM except that distilled water shall be used in place of 2%w sodium oleate solution.

[2]ASTM D-244 Evaporation Test for percent of residue is modified by heating 50 gram sample to 149°C (300°F) until dry.

**BASE**

| | TEST METHOD | | REQUIREMENTS | |
|---|---|---|---|---|
| **TESTS** | **ASTM** | **AASHTO** | **MIN.** | **MAX.** |
| AC | | | | 5 |
| Flash Point, COC, °C | D-92 | T-48 | 350 | 445 |
| Saturated Hydrocarbons, %w | | D-2006-70 | ----- | 20 |
| Specific Gravity | D-1298 | T-277 | --- | 1.000 - 1.040 |
| Viscosity @ 100°C cST | D-445 | ---- | 14 | 20 |

PREPARATION OF APPLICATION

Immediately prior to applying the dust-control agent, the surface shall be properly prepared, and wetted, so the dust-control agent will penetrate the surface when applied. All preparation of the surface will be performed by the County.

RATES OF APPLICATION

The emulsion shall be applied at the rate of three-quarters (3/4) gallon per square yard (depending on the porosity of the unpaved surface to be sprayed) of a 1:4 dilution (emulsion to water). When applying the diluted mixture to the soil, the spray bar shall be lowered to achieve proper penetration of one (1) inch.

PAYMENT

The price shall be full compensation for furnishing all material and applying the agent, and for all labor, and equipment necessary to complete the job as specified herein. Payment shall be measured and paid by the square yard of completed work.

**END OF SECTION**

## STANDARD SPECIFICATIONS

## HOT MIX IN-PLACE OIL INJECTION ASPHALT RECYCLING

This work shall consist of the preparation of an asphalt stabilized base course composed of a mixture of the existing bituminous concrete pavement and existing base course material. The manufacturing of the asphalt stabilized base course shall be done by in-place crushing and blending of the existing pavement and base materials. The pulverization, blending, and addition of asphaltic emulsion to the existing material results in an asphalt stabilized base course and shall be accomplished in accordance with these specifications.

In general, the vendor shall utilize equipment specifically manufactured to effectively pulverize, crush, mix, and blend the materials to be recycled. The equipment to be used must also have the capability of introducing an asphalt emulsion uniformly and accurately to the recycled materials. Vendor to furnish Asphalt Emulsion AE 200-H.

### CONSTRUCTION METHOD

The existing pavement and base material shall be crushed and blended to a depth specified by the Engineer and the gradation should be two (2) inches and under so that the entire mass of material shall be uniformly graded and the new asphalt stabilizer shall be uniformly dispersed throughout the processed material.

The vendor will be responsible for the safety of his equipment and personnel throughout the duration of the contract.

### TESTING

The County shall obtain the services of a certified testing laboratory to sample the existing pavement and base material to provide an acceptable design mix for the number of inches of base course, as specified by the Engineer, that meets the following requirements:

| | |
|---|---|
| Modified Marshall Stability | 1000 to 3100 |
| Layer Coefficient | .18 to .32 |
| Residual Asphalt Content (%) | 0 to 4 |

The County shall obtain the services of a certified testing laboratory to ensure base is compacted to not less than ninety-eight (98%) percent of the maximum dry density at optimum moisture content using a modified Proctor Test in accordance with ASTM 1557.

### METHOD OF MEASUREMENT

"Asphalt Stabilized Base Course" will be measured for payment by the square yard complete, in-place, and accepted by the Engineer.

### DESCRIPTION

This work shall consist of preparing the surface, heating, scarifying, remixing; applying rejuvenating agent and recompacting the pavement surface in accordance with the following specifications and details shown on the project plans.

**MATERIALS**

The asphalt rejuvenating agent shall be composed of a petroleum resin oil base uniformly emulsified with water. The material shall have a record of satisfactory service as an asphalt rejuvenating agent. Satisfactory service being based on the capability of the material to increase the ductility, penetration and durability of the asphalt binder in the recycled asphalt. Each shipment delivered to the project shall be accompanied by a letter of compliance from the manufacturer that certifies the material conforms to the following physical properties:

| Properties | Limits | ASTM Test Method |
|---|---|---|
| Viscosity @25°C, SFS | 20-145 | D-244 |
| Sieve Test, % by weight | 0.1 max. | D-244 (1) |
| Particle Charge Test | Positive | D-244 |
| Cement Mixing Test, % by weight | 1.80 max. | D-244 |
| Pumping Stability | (2) | |
| 5 day Settlement Test, % by weight | 4.77 max. | D-244 |
| Residue, % by weight | 53 min. | D-244 (3) |
| Viscosity @ 60°C CST (4) | 990-4100 | D-2170 |
| Maltene Distribution Ration (4) (5) | 0.7-1.1 | D-2006-70 |
| PC/S Ratio (4) (6) | 0.5 min. | D-2006-70 |
| Asphaltenes, % by weight (4) | 10.8 max. | D-2006-70 |

1. Distilled water shall be used in place of the sodium oleate solution.
2. Pumping stability is determined by charging 450 ml of emulsion into a one liter beaker and circulating the emulsion through a gear pump (Roper 29.B22621) having a 0.25 inch inlet and outlet. The emulsion passes if there is no significant oil separation after circulating for 10 minutes.
3. Heat the sample to 300 +/- 5F, until foaming ceases. Then cool the sample immediately and calculate the results.
4. Test is performed on the residue from the emulsion.
5. The ratio is (PC + A1) (S + A2) where:
   PC = polar compounds
   A1 = first acidaffins
   A2 = second acidaffins
   S = saturated hydrocarbons
6. PC = polar compounds and S = saturated hydrocarbons

**EQUIPMENT**

The equipment used for cleaning the pavement shall be capable of cleaning the pavement in accordance with this specification. The equipment used for heating, scarifying, and remixing shall be a self-contained, self-propelled unit designed for this purpose. The heating unit shall be of the radiant heat type, with sufficient capacity to heat the pavement material as necessary for efficient scarifying, remixing, and recompaction. Direct flame heating will not be permitted. The heating unit shall have shut-off controls clearly identified and easily operable both from the operator's station and from the ground. The shut-off control system shall be capable of reducing the heating element temperature from operating to near ambient in approximately 30 seconds. The machine shall have an adjustable, heated screed capable of placing the mixture to the required cross-section, profile and alignment in an acceptable, finished condition ready for compacting. Adequate provisions shall be made for the safety of persons in the vicinity of the equipment, and for preventing

damage to adjacent property and facilities, public or private. The scarifying unit shall be capable of loosening and remixing the heated pavement material to the specified depth in a uniform pattern and in condition for immediate recompaction.

The equipment used for applying the asphalt rejuvenating agent shall be attached to the heater scarifier machine so it is capable of applying the rejuvenating agent in front of the scarifier tooling. The asphalt shall then be scarified and mixed with the rejuvenating agent by means of rotating augers prior to the compaction process. The equipment shall apply the asphalt rejuvenating agent at the specified rate with uniform pressure over the required width of application. The rate of application shall be hydrostatically controlled and metered to maintain the specified application rate for changes in the operating speed of the heater scarifier. A meter shall be incorporated into the distribution system for recording the quantity of asphalt rejuvenating agent applied to the scarified pavement.

**COMPACTING MIXTURE**

A. PROVISIONS APPLICABLE TO ALL TYPES:

1. Equipment and Sequence:
For each paving or leveling train in operation, the vendor shall furnish a separate set of rollers with their operators. The following equipment, sequence and coverage are suggested for use based on past successful performance; however, when density is required, the vendor may select his own equipment, sequence and coverage of rolling to meet the minimum density requirement specified. Regardless of the rolling procedure used, the final rolling must be complete before the internal pavement temperature has dropped below 175° F.

(a) Seal rolling, using tandem steel rollers (vibratory or static) weighing 5 to 12 tons, following as close behind the spreader as is possible without pick-up, undue displacement or blistering of the material

Vibratory rollers shall be used in the static mode for layers of one inch or less in thickness.

(b) Rolling with self-propelled pneumatic-tired rollers, following as close behind the seal rolling as the mix will permit. The roller shall cover every portion of the surface with at least five passes.

(c) Final rolling with the 8 to 12 ton tandem steel roller, to be done after the seal rolling and pneumatic-tired rolling have been completed, but before the internal pavement temperature has dropped below 175 degrees F.

Once the vendor has selected the equipment and established the rolling procedures and these have been used for the control strip density determination, then the vendor must continue to use the same equipment and rolling procedures for all asphalt mix represented by the control strip. Changes in equipment or procedures will require a new control strip density determination. The Engineer must be notified prior to changing the rolling process.

When density is not required, as for all patching courses, leveling and intermediate courses less than one inch thick, overbuild courses of variable thicknesses (when the minimum thickness is less that one inch) and open-graded friction courses, the compaction will be applied in accordance with the standard specifications. The specified rolling procedures must be followed when density determinations will not be made.

When density is not required on those courses indicated in the foregoing paragraph; but the vendor wants to use other rollers, patterns or sequences than those specified, vendor may request approval from the County. Approval may be granted for leveling and intermediate courses 1/2 inch and thicker and overbuild courses when these courses are placed with a paving machine. Density requirements will be in accordance with the provisions of the first paragraph of 1.04.C (Density Control-Nuclear method), Table A and Table B. Approval for a change on patching course, variable thickness leveling courses place with motor graders and open-graded friction courses will not be granted.

2. Compaction at Crossovers, Intersections, Etc.:
When a separate paving machine is being used to pave the crossovers, the compaction of the crossovers may be done by one 8- to 10-ton tandem steel roller. If crossovers, intersections and acceleration and deceleration lanes are placed with the main run of paving, a traffic roller shall also be used in the compaction of these areas.

3. Rolling Procedures:
The initial rolling shall be longitudinal. Where the lane being placed is adjacent to a previously placed lane, the center joint shall be pinched or rolled, prior to the rolling of the rest of the lane.

Rolling shall proceed across the mat, overlapping the adjacent pass by at least six inches. The motion of the roller shall be slow enough to avoid displacement of the mixture, and any displacement shall be corrected at once by the use of rakes, and the addition of fresh mixture if required. Final rolling shall be continued until all roller marks are eliminated.

4. Speed of Rolling:
Rolling with the self-propelled, pneumatic-tired rollers shall proceed at a speed of 6 to 10 miles per hour. The area covered by each roller shall not be more than 4,000 square yards per hour; except that for Type S Asphaltic Concrete, this maximum rate of coverage shall be 3,000 square yards per hour.

5. Number of Pneumatic-Tired Rollers Required:
A sufficient number of self-propelled pneumatic-tired rollers shall be used to assure that the rolling of the surface for the required number of passes will not delay any other phase of the laying operation nor result in excessive cooling of the mixture before the rolling is complete. In the event that the rolling falls behind, the laying operation shall be discontinued until the rolling operations are sufficiently caught up.

6. Compaction of Areas Inaccessible to Rollers:
Areas which are inaccessible to a roller (such as areas adjacent to curbs, headers, gutters, bridges, manholes, etc.) shall be compacted by the use of hand tamps or other satisfactory means.

7. Rolling Patching and Leveling Courses:
Self-propelled pneumatic-tired rollers shall be used for the rolling of all patching and leveling courses. Where the initial leveling course is placed over broken concrete pavement, the pneumatic-tired roller shall weigh at least 15 tons. For Type S-III Asphaltic Concrete leveling courses, the use of a steel-wheeled roller, to supplement the traffic rollers, will be required. On other leveling courses, the use of a steel-wheeled roller will be required on all passes after the first.

8. Correcting Defects:
The rollers shall not be allowed to deposit gasoline, oil or grease onto the pavement, and any areas damaged by such deposits shall be removed and replaced as directed by the Engineer. While rolling is in progress, the surface shall be tested continuously and all discrepancies corrected to comply with the surface requirements. All drippings, fat or lean areas and defective construction of any description shall be removed and replaced. Depressions which develop before the completion of the rolling shall be remedied by loosening the mixture and adding new mixture to bring the depressions to a true surface. Should any depression remain after the final compaction has been obtained, the full depth of the mixture shall be removed and replaced with sufficient new mixture to form a true and even surface. All high spots, high joints and honeycomb shall be corrected as directed by the Engineer. Any mixture remaining unbonded after rolling shall be removed and replaced. Any mixture which becomes loose or broken, mixed or coated with dirt or in any way defective, prior to laying the wearing course shall be removed and replaced with fresh mixture which shall be immediately compacted to conform with the surrounding area.

9. Use of Traffic Roller on First Overbuild Course:
A self-propelled pneumatic-tired roller shall be used on the first overbuild course. Coverage shall be a minimum of five passes.

10. Use of Traffic Roller on first Structural Layer:
A self-propelled pneumatic-tired roller shall be used on the first structural layer placed on a milled surface. Coverage shall be a minimum of three passes.

B. PROVISIONS APPLICABLE TO SHOULDER PAVEMENT:
Shoulder pavements wider than three feet shall be compacted by the use of equipment of the type required for other asphaltic concrete pavements. Density determinations will be required on shoulder pavements wider than three feet when the thickness is one-inch or greater. These density determinations (including the control strip) will be separate from the pavement lane even when the pavement lane and shoulder are placed in the same pass. Density determinations will not be required on asphaltic concrete or sand-asphalt hot mix shoulders three feet or less in width. The compactive effort shall be done by the use of tandem steel rollers not exceeding 12 tons in weight. In restricted areas

other equipment that will effectively exert a compactive effort may be approved by the Engineer. The vendor shall state what equipment and compactive effort (coverage) is proposed to be used. This must be approved by the Engineer before the vendor starts the operation. Where sand-asphalt hot mix shoulders are constructed within the limits of curb and gutter, compaction shall be done by light weight rolling equipment, approved by the Engineer, which will not displace the previously constructed curb and gutter.

C. DENSITY CONTROL:

1. Density Control Nuclear Method:
The in-place density of each course of asphalt mix construction, with the exceptions of patching courses, leveling and intermediate courses less than one-inch thick or a specified spread rate less than 100 pounds per square yard, over build courses where the minimum thickness is less than one-inch, and open-graded friction courses, shall be determined by the use of the Nuclear Density Backscatter Method as specified by FM 1-T238 (Method B). The required density of a completed course shall be at least 98 percent of the average density of the control strip.

2. Control Strips:
One or more control strips shall be constructed for the purpose of determining the control strip density. A control strip shall be constructed at the beginning of asphalt construction and one thereafter for each successive course. Any change in the composition of the mix will require the construction of a new control strip. The Engineer may require an additional control strip when necessary to establish a new control strip density or conform the validity of the control strip density being used at that time. The vendor may request a confirmation of the control strip density also. The control strip must be constructed as a part of a normal day's run. The vendor will not be permitted to construct the control strip separately.

The length of the control strip shall be 300 feet, regardless of the width of the course being laid. When the control strip is to be constructed for the first day of asphalt construction or at the beginning of a new course, it shall be started between 500 and 1,000 feet from the beginning of the paving operation. The thickness of the control strip shall be the same as that specified for the course of which it is a part. The control strip will be constructed using the same mix, the same procedures as those used in laying the asphalt course of which the control strip is to become a part. Every control strip will remain in place and become a portion of the completed roadway.

When the compaction of the control strip has been completed, ten density determinations will be made at random locations within the control strip. No determinations will be made within one foot of any unsupported edge. The average of these ten determinations will be the Control Strip Density. For purposes of determining the percent of laboratory density, as required in Table A, a correction factor will be developed from cores or by direct transmission nuclear determination where applicable.

**TABLE A**

Roadway Requirements for Bituminous Concrete Mixes

| Mix Type | Density* | Minimum Control Strip Density(%) | Surface* Tolerance |
|---|---|---|---|
| S-I | X | 96 Lab. Dens. | X |
| S-II | X | 96 Lab. Dens. | X |
| S-III | X | 96 Lab. Dens. | X |
| Type II | X | 96 Lab. Dens. | X |
| Type III | X | 96 Lab. Dens. | X |
| SAHM | X | 96 Lab. Dens. | X |
| ABC-1 | X | 96 Lab. Dens. | ** |
| ABC-2 | X | 96 Lab. Dens. | ** |
| ABC-3 | X | 96 Lab. Dens. | ** |
| FC-1 | X | 96 Lab. Dens. | X |
| FC-2 | No Density Required | 96 Lab. Dens. | X |
| FC-4 | X | 96 Lab. Dens. | X |

*X - Denotes test is required

** - Shall meet the straightedge requirements of 200-7

3. LOTs:

For the purpose of acceptance and partial payment, each day's production will be divided into LOTs. The standard size of a LOT shall consist of 5,000 lineal feet of any pass made by the paving train regardless of the width of the pass or the thickness of the course. Pavers traveling in echelon will be considered as two separate passes. When at the end of a day's production or the completion of a given course or at the completion of the project, a partial LOT will be redefined to include this partial LOT and the evaluation of the LOT will be based on either six or seven sublot determinations. If the partial LOT contains three or four sublots with their appropriate test results, this partial LOT will be redefined to be a whole LOT and the evaluation of it will be based on the three or four sublot determinations.

For the standard size LOT (5,000 lineal feet), five density determinations - one for each sublot - will be made at random locations within the LOT, but not to be taken within one foot of any unsupported edge. The statically derived random number tables are furnished by the County. These will also be used for partial LOTs, for the vendor to receive full payment for density, the average density of a LOT will be a minimum of 98.0 percent of the control strip density. Once the average density of a LOT has been determined, the vendor will not be permitted to provide additional compaction to raise the average.

4. Acceptance:

The completed pavement will be accepted with respect to density on a LOT basis. Partial payment will be made for those LOTs that have an average density less than 98.0 percent of the Control Strip Density based on the following schedule:

**TABLE B - Payment Schedule for Density**

| Percent of Control Strip Density* | Percent of Payment |
|---|---|
| 98.0 and above | 100% |
| 97.0 to less than 98.0 | 95% |
| 96.0 to less than 97.0 | 90% |
| **Less than 96.0 | 75% |

*In calculating the percent of control strip density, **do not roundoff** the final percentage.

**If approved by the Engineer based on an engineering determination that the material is acceptable to remain in place, the vendor may accept the indicated partial pay, otherwise the County will require removal and replacement at no cost. The vendor has the option to remove and replace at no cost to the County at any time.

**JOINTS**

A. TRANSVERSE JOINTS:
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 laying operation is to be discontinued long enough to permit the mixture to become chilled. When the laying operation is interrupted, a transverse joint shall be constructed by cutting back on the previous run to expose the full depth of the mat.

B. LONGITUDINAL JOINTS:
For all layers of pavement except the leveling course, placing of each layer shall be accomplished to cause longitudinal construction joints to be offset 6 to 12 inches laterally between successive layers. The Engineer may waive this requirement where offsetting is not feasible due to the sequence of construction.

**END OF SECTION**

# STANDARD SPECIFICATIONS

## CHAIN LINK FENCING

GENERAL REQUIREMENTS

Securely anchor fencing plumb, true to line, complete with all necessary standard fittings specified and recommended by manufacturer.

Chain link fabric 72 inches minimum height, No. 9 gage galvanized steel wire. Fabric shall be woven in a 2 inch mesh. All materials shall be heavily galvanized after fabrication by hot-dip process. Secure certification from manufacturer that galvanizing was performed after fabrication. All posts (Schedule 40 pipe), rails, frames, rods, turnbuckles, reinforcing, fabric and hardware to be galvanized.

Conform to requirements of American Welding Society, "Specification for Iron and Steel Arc-Welding Electrodes". Electrodes shall be suitable for conditions of intended use. Make joint surfaces free from fins and tears and grind rough surfaces smooth.

Perform all excavation and backfilling required for setting of concrete post footings. Make all concrete work for post footings, etc., of 2500 psi concrete.

Acceptable manufacturers offering products which may be incorporated in the work include, but are not limited to: 1) Cyclone Fence; 2) Chain Link Fence Co.; and 3) Anchor Fence Co.

**END OF SECTION**

# STANDARD SPECIFICATIONS

## FULL DEPTH PAVEMENT RECLAMATION

### Portland Cement Stabilization

**DESCRIPTION**

This work shall consist of the preparation of a stabilized base course composed of a mixture of the existing bituminous concrete pavement and existing base course material. The manufacture of the stabilized base course shall be done by in-place pulverizing and blending of the existing pavement and base materials, and the introduction of additives if called for in the Special Conditions. The process which results in a stabilized base course, shall be accomplished in accordance with these specifications and conform to the lines and grades shown on the plans or as established by the Engineer.

The remaining base material and/or sub grade may be modified to properly accommodate the stabilized base material. Any modification of this nature, if required, such as but not limited to the excavation and replacement of unsuitable materials and shaping and fine grading the sub grade, will be accomplished under separate payment items. Any movement of the stabilized base material for these modifications is also to be accomplished under a separate payment item.

Existing asphalt pavement shall be pulverized by a method that does not damage the material below the plan depth as shown on the appropriate roadway section.

**MATERIALS**

**RAP:** RAP materials must meet all requirements specified in the Florida Department of Transportation Standard Specifications for Road and Bridge Construction (SSR&BC) 283-2, except that 98% of all material is required to pass through a 50 mm (2 inch) sieve.

**PORTLAND CEMENT:** Portland Cement shall be type I or II and conform to the latest standard requirements of ASTM C 150 and AASHTO M85, for the type specified.

**WATER:** The water for the base course shall be clean and free from sewage, oil, acid, strong alkalies, or vegetable matter and it shall be in sufficient supply for mixing and curing. Water of questionable quality shall be tested in accordance with the requirements of AASHTO T 26.

**SOIL:** The soil base to be reclaimed shall be evaluated by a professional geotechnical engineering laboratory to determine suitability in the stabilization process. The soil shall be free of roots, sod, weeds, and shall not contain gravel or stone retained on a 1-inch (25 mm) sieve, or more than 45% retained on a No. 4 (4.75 mm) sieve, as determined by ASTM C 136.

**LABORATORY SOIL TESTS and MIX DESIGN**

Prior to base course construction, a minimum of one (1) core sample must be taken for every 5,000 square yards of the roadway. Representative samples of the RAP material, underlying base material and virgin materials, where applicable, shall be supplied to a nationally accredited laboratory for preliminary testing to determine the optimum moisture content, type of bituminous material and proportions needed to successfully complete this project. Laboratory tests of material to be reclaimed and virgin materials for use as base shall be performed to determine compliance with 3-day and 7-day minimum compressive strength requirements of the mixture and the quantity of cement required in the mix. Test specimens containing various amounts of cement are to be compacted in accordance with ASTM D558, and the optimum moisture for each amount of cement is to be determined. Actual application quantities for the Portland cement will be derived from the mix design. The minimum compressive strength requirements of the mixture shall be determined by the engineer of record. The mix design and laboratory testing shall be performed by a geotechnical engineering laboratory and all reports sealed by a professional engineer.

CONSTRUCTION METHODS

**EQUIPMENT**

Equipment shall be used which will provide the full depth reclamation follows:

a. All reclaiming equipment to be used shall have the capability of introducing and metering additives uniformly and accurately. The Contractor shall ensure that positive displacement pumps accurately meter the planned amount of water and cement material and the reclaiming machine mixes it thoroughly with the RAP and soil materials. The pump shall be mechanically or electronically interlocked with the ground speed of the machine. The cement metering system and water metering system shall be capable of continuously monitoring (GPM) flow, and totaling the quantity of water and cement applied into the mixing chamber. Additives shall be uniformly distributed and mixed with the pulverized material, any existing underlying material as specified. Apply the cement by use of a mobile cement mixer trailer capable of mixing predetermined ratios of cement and water, or by means of cyclone, screw-type or pressure-manifold type distributors. The mixing operation may be accomplished by using either the same machine used for the pulverizing operation or a separate machine designed for in-place continuous mixing approved by the engineer.

b. The use of a spreader bar attached to the cement tanker is unacceptable.

c. Maintain all equipment in a satisfactory operational condition.

**WEATHER LIMITATIONS**

The soil-cement base shall not be mixed or placed while the atmospheric temperature is below 35 F (2 C) or when conditions indicate that the temperature may fall below 35 F (2 C) within 24 hours, or when the weather is foggy or rainy, or when the soil or sub grade is frozen.

**CONSTRUCTION METHOD**

The existing pavement and base material shall be pulverized and blended so the entire mass of material shall be uniformly graded and the cement and water shall be uniformly dispersed throughout the processed material.

The pulverized material shall conform to the following gradation:

| SIEVE SIZE | PERCENT PASSING |
|---|---|
| 2" | 98 - 100 |
| 1-1/2" | 95 |

Material gradation may vary due to local aggregates and conditions.

The reclaimed material, cement and water shall be combined in place to meet the requirements specified in such proportions that the reclaimed mixture is of acceptable composition and stability. Field adjustments shall be made as necessary to the recommended mix design under the guidance of a knowledgeable and competent technician to obtain a satisfactory reclaimed mixture of consistent composition and stability throughout the Project.

After the material has been processed, it shall be compacted to the lines, grades, and depth as shown on the plans and cross section. Water may be applied to ensure optimum moisture content at the time of mixing and compaction.

**COMPACTING RECLAIMED BASE**

The requirements for compaction shall include:

1. Commence rolling at the low side of the course, except leave 75 mm (3 in.), to 150 mm (6 in.) from any unsupported edge or edges unrolled initially to prevent distortion. Density readings shall be taken by Contractor's licensed nuclear gauge operator and witnessed by the Engineer/inspector. A control strip of not less than 500 feet shall be constructed to develop proper rolling/compaction patterns and methods to obtain desired density.

2. Roll with a self propelled pneumatic-tired roller (20-25 ton) and/or a double-drum vibratory roller (10 ton or larger).

3. The number, weight and type of rollers furnished shall be sufficient to obtain the required compaction of the reclaimed material. The field density of the compacted mixture shall be at least 95 percent of the maximum density of laboratory specimens prepared from samples of the cement-treated base material taken from the material in place. The specimens shall be compacted in accordance with ASTM D 558. The in-place field density shall be determined in accordance with ASTM D 2922.

4. Rollers shall move at a uniform speed that shall not exceed 8 km/hour (5 miles/hour). For static rollers, the drive drum normally shall be in the forward position or nearest to the paver. Vibratory rollers shall be operated at the speed, frequency and amplitude required to obtain the required density and prevent defects in the mat.

5. Whenever there is a change in the reclaimed material or compaction method, equipment or unacceptable results occur, a new control strip shall be constructed, tested and analyzed.

6. Any pavement shoving or other unacceptable displacement shall be corrected. The cause of the displacement shall be determined and corrective action taken immediately and before continuing rolling. Care shall be exercised in rolling the edges of the reclaimed mixture so the line and grade of the edge are maintained.

**CONSTRUCTION JOINTS**

At the end of each day's run, a transverse construction joint shall be formed by a header or by cutting back into the compacted material to form a true vertical face free of loose material. The protection provided for construction joints shall permit the placing, spreading, and compacting of base material without injury to the work previously laid. Where it is necessary to operate or turn any equipment on the completed base course, sufficient protection and cover shall be provided to prevent damage to the finished surface. A supply of mats or wooden planks shall be maintained and used as approved and directed by the Engineer.

**FINISHING**

Finishing operations shall be completed and the base course shall conform to the required lines, grades, and cross section. If necessary, the surface shall be lightly scarified to eliminate any imprints made by the compacting or shaping equipment. The surface shall then be recompacted to the required density.

**PROTECTION AND CURING**

After the base course has been finished as specified herein, it shall be protected against drying for a period of 5 to 7 days by the application of bituminous material or other acceptable methods. The curing method shall begin as soon as possible, but no later than 24 hours after the completion of finishing operations. The finished base course shall be kept moist continuously until the curing material is placed.

The bituminous material specified shall be uniformly applied to the surface of the completed base course at the rate of approximately 0.1 to 0.2 gallon per square yard (0.92 liter/square meter) with approved heating and distributing equipment. The exact rate and temperature of application to provide complete coverage without excessive runoff shall be as specified.

At the time the bituminous material is applied, the surface shall be dense, free of all loose and extraneous material, and shall contain sufficient moisture to prevent penetration of the bituminous material. Water shall be applied in sufficient quantity to fill the surface voids immediately before the bituminous curing material is applied.

The curing material shall be maintained and applied as needed by the Contractor during the 7-day protection period so that all of the soil-cement will be covered effectively during this period.

Finished portions of soil-cement that are used by equipment in constructing an adjoining section shall be protected to prevent equipment from marring or damaging the completed work.

When the air temperature may be expected to reach the freezing point, sufficient protection from freezing shall be given the soil-cement for 7 days after its construction and until it has hardened.

**THICKNESS**
The average thickness of the base constructed during one day shall be within 1/2 inch (12 mm) of the thickness shown on the plans, except that the thickness of any one point may be within 3/4 inch (19 mm) of that shown on the plans. Where the average thickness shown by the measurements made in one day's construction is not within the tolerance given, the Engineer shall evaluate the area and determine if, in his/her opinion, it shall be reconstructed at the Contractor's expense or the deficiency deducted from the total material in place.

**PREPARATION**
The area to be paved with hot mix asphalt shall be graded and shaped to conform to the grades and typical cross section shown on the plans. Any soft or yielding areas in the sub grade shall be removed and replaced with acceptable soil and compacted as specified.

*1)*

*2) SAMPLING AND TESTING METHODS*

**FIELD SAMPLING AND TESTING**
Presented in Table A are the materials sampling and testing procedures for Full Depth Reclamation. The sampling and testing methods referred to are either those of the American Society for Testing and Materials (ASTM) or the American Association of State Highway and Transportation Officials (AASHTO).

**TESTING SURFACE**
The finished surface of the reclaimed base course shall be checked with a template cut to the required cross slope and with a 15 ft. (4.572 m) straightedge laid parallel to the centerline of the roadway. All irregularities greater than 0.5 in. (13 mm) shall be corrected.

**TEST FOR DEPTH OF FINISHED BASE COURSE**
The depth of Reclaimed Bituminous Base Course shall be determined by measuring uncompacted reclaimed material immediately behind the screed in conjunction with measuring the milling depth prior to placement of reclaimed material. One depth measurement for each 1000 square yards of completed base course shall be made. Any section deficient by 0.5 in (12 mm) or more from the specified depth shall be removed and satisfactorily replaced by the contractor at no additional cost.

**WEATHER LIMITATIONS**
The recycled base course may be placed on the sub grade when the air temperature is at least 4C (40F) and rising, provided the sub grade upon which it is to be placed is not frozen or noticeably affected by frost.

## TABLE A

### Control Testing for Full Depth Reclamation Field Sampling and Testing

| Type of Testing | Purpose of Testing | Frequency | Sample Location & Size |
|---|---|---|---|
| RAP and Soil-Cement Base Gradation, 50 mm & 37.5mm | Specification Compliance with Maximum RAP Size | Each 3,000 Square Yards or Minimum of Once Per Day[1] | From hopper, minimum weight of 9.1 kg(20 lb)[2] |
| Moisture-Density Relations of Soil Cement Mixtures | Establish Target for Density Specification Compliance | Each 1,000 Square Yards or Minimum of Once per Day | Sample at point of each Nuclear Density Measurement, min. weight of 15 kg (33 lbs)[3] |
| Compressive Strength of Soil-Cement Cylinders[4] | Check on 3-Day Design Compressive Strength | Each 3,000 Square yards or Once Per Day[1] | From hopper, minimum weight of 15 kg (33 lbs) |
| Portland Cement, Type I or II | Check on Specification Compliance with ASTM C150 | Mill Certification Provided with each load | |
| In-Place Field Density[3] | To Determine Specification Compliance for Density | Each 1,000 Square yards[1] | Random locations after spreading and Compaction operations[6] |
| Moisture Added to RAP and soil-cement[5] | Adjustment of Water Content for Proper Mixing and Compacting/Correction of Nuclear Gauge Wet Density | Each 1,000 Square yards[1] | Reclaimed Lift Depth Sample at Point of each Nuclear Density Measurement minimum weight of 1.4kg (3lbs) |
| Quality of water to be used in concrete | Check on Specification Compliance with AASHTO T26 | Verify source of water and potable | |

**Table A Notes**

1. Additional sampling and testing may be required if major changes in RAP characteristics are observed, such as a much coarser or finer gradation or a noticeable difference in asphalt content, or when considerable variability is occurring in the field test results.
2. It is recommended that RAP sampling generally should be in accordance with ASTM D 979 or AASHTO T 168 procedures for Sampling Bituminous Paving Mixtures.
3. Target densities for reclaimed mix compaction are established by the laboratory compaction of specimens in accordance with ASTM D558. Due to the variability in thickness of some hot mix asphalt pavements to be reclaimed, an equal proportion of RAP throughout the reclaimed base course cannot be attained. Therefore, it is necessary to obtain sample for laboratory compaction at the point of each field density test location. The compacted field density is normally measured with a nuclear density/moisture gauge since it is generally not possible to obtain cores during construction. The procedure generally followed is in accordance with ASTM D 2922-Density of Soil and Soil Aggregates by Nuclear Methods-Direct Transmission Method. The density obtained will be a "wet density" as conversion to a true "dry density" by the gauge is not possible with these types of mixes. A more accurate dry density may be obtained by sampling the reclaimed mix at the nuclear gauge test location, determining the moisture content by drying and correcting the gauge wet density using the sample moisture content.
4. Compressive Strength shall be determined in accordance with ASTM D1633.
5. The moisture content can be determined with ASTM D 1461 or AASHTO T 110 for Moisture or Volatile Distillates in Bituminous Paving Mixtures. Also, the moisture content appears can be determined adequately by weighing and drying to a constant weight using a forced draft oven as for ASTM D 2216 or AASHTO T 265 or by microwave oven drying as for ASTM D 4643.
6. For each length or lot size quantity specified, materials sampling can be completed on a random basis using the procedures of ASTM D 3365 for Random Sampling of Construction Materials.

DOCUMENTATION

**DELIVERY TICKETS**

All delivery tickets and notes regarding any materials brought to the project site to complete this Contract must be given to the Engineer/Inspector upon delivery to the project site.

**METER READING**

Before the start and at the end of each day's work, the Engineer/Inspector representative must be permitted access to the mixing equipment in order to read the meter to verify the quantity of cement applied during the day's work.

**PREVIOUS PROJECT EXPERIENCE**

The contractor must provide references of five previous successfully completed projects in the State of Florida with the bid.

**PAYMENT**

| ITEM NO. | PAY ITEM | PAY UNIT |
|---|---|---|
| 1 | Preparation, pulverizing, shaping, compaction and finishing | SY |
| 2 | Additives, (cement) | TN |
| 3 | Imported Material | CY |
| 4 | Removal of Unsuitable Material | CY |

If a payment item is listed on the Bid Form for work required in this Technical Provision, the quantity to be paid for under this Technical Provision shall be as specified in the Bid Form including all items of work described herein, in the plans, and in the applicable Sections of the Florida Department of Transportation Standard Specifications for Road and Bridge Construction dated 2000. These items include but are not limited to preparatory work to begin construction, surface treatment, staking, shoulder repair, re-sodding disturbed areas, etc.

**END OF SECTION**

# STANDARD SPECIFICATIONS

# COLD RECYCLED BITUMINOUS BASE COURSE

## 334-1 Description

This work is the in-place construction of a Cold In-Place Recycled (CIR) Bituminous Pavement Layer and shall consist of pulverizing, crushing, and screening of the in- situ bituminous materials to the depth and width shown on the plans. An emulsified asphalt binder agent, water, and other additives, if required, will then be incorporated into the pulverized material and thoroughly mixed This material will then be spread and compacted in accordance with the plans and specifications and as directed by the engineer.

It is the intent of this contract to recycle 100% of the existing asphalt pavement. This will include, but is not limited to, all existing asphalt pavement adjacent to all concrete curbing, storm sewer inlets, manholes, sanitary sewer manholes, and all utility valve boxes. The existing asphalt pavement in the above-described locations must be included in the recycling process in order to construct a bituminous pavement layer uniform in thickness throughout 100% of the proposed area.

## 334-2 Materials

**334-2.1 Asphalt Emulsion** - The type of asphalt emulsion to be used shall be determined by the mixture design. Bituminous material shall conform to the applicable requirements of the *2007 FDOT Standard Specifications for Road and Bridge Construction, Section 916.* A representative from the asphalt emulsion supplier will be at the job site at the beginning of the project to monitor the characteristics and performance of the asphalt emulsion. Throughout the job, the representative will be available to monitor the project and make adjustments to the asphalt emulsion formulation as required.

**334-2.2 Cold Pulverized Material** - The cold pulverized recycled asphalt pavement (hereinafter referred to as RAP) material shall meet the following gradation requirement prior to the addition of the asphalt emulsion.

| ***3) STANDARD*** | | ***4) METRIC*** | |
|---|---|---|---|
| Sieve Size | %Passing | Sieve Size | %Passing |
| 1.25" | 100 | 31.5 mm | 100 |

*Note:* The compacted pavement layer shall be placed at a thickness of a minimum of two (2) times the nominal size of the crushed RAP or 2.5 inches, whichever is greater, and to a maximum of 5 inches.

**334-2.3 Mixture Design**

A preconstruction mix design(s) shall be submitted to the County Engineer by the CIR contractor using materials obtained directly from the project site prior to construction. Mix design formulations shall be conducted in accordance with the guidelines located in *Appendix 1- Mix Design Procedures for CIR.*. Permission to obtain materials from roadway must first be obtained from the County Engineer. All core holes must be immediately patched with cold patch. The mix design testing shall be conducted by an AASHTO Materials Reference Laboratory (AMRL) accredited laboratory. Based on RAP consistency throughout project limits, more than one mix design may be required. The mix design(s) shall be signed and sealed by a registered professional engineer and meet the Mix Design

Performance Criteria of *Table 1* and be approved by the County Engineer prior to construction.

| ***Table 1 – Mix Design Performance Criteria*** | | |
|---|---|---|
| *100 mm specimens shall be prepared in a Superpave Gyratory compactor. The mixture should meet the following criteria at the selected design asphalt emulsion content:* | | |
| ***Property*** | ***Criteria*** | ***Purpose*** |
| Compaction effort, Superpave Gyratory Compactor AASHTO T312 | 1.25° angle, 600 kPa stress, 30 gyrations | Density Indicator |
| Density, ASTM D2726 or equivalent | Report | Compaction Indicator |
| Gradation for Design Millings, ASTM C117 | Report | |
| *Marshall stability, ASTM D6926, D6927, 40°C | 1,250 lb min. | Stability Indicator |
| **Resistance of Compacted Bituminous Mixture to Moisture Induced Damage AASHTO T283 -Retained stability based on cured stability | 70 % min. | Ability to withstand moisture damage |
| Indirect Tensile Test, AASHTO T322, Modified in *Appendix 2* | See Note in *Appendix 2* | Cracking (Thermal) |
| Raveling Test of Cold-Mixed Bituminous Emulsion Samples ASTM D7196, Modified in Appendix 3, 10°C and 50% humidity | 2% max. | Raveling Resistance |
| ** Cured stability tested on compacted specimens after 60°C (140°F) curing to constant weight.* | | |
| ***Vacuum saturation of 55 to 75 percent, water bath 25°C 23 hours, last hour at 40°C water bath* | | |

**334-2.4 Other Additives** – If necessary, additives may be used to meet the requirements in Table 1. In the case that an additive is used, the type and allowable usage percentage must be described in the submitted design recommendation.

**334-2.5 Addition of Imported Crushed Reclaimed Asphalt Pavement (RAP) Material** If available, imported RAP material may be added at the discretion of the County Engineer if the RAP material meets the requirements in *Table 2*. The crushed RAP shall be free from vegetation and all other deleterious materials, including silt and clay balls. It shall meet the requirements for Deleterious Materials given in *Table 2*. The crushed RAP shall not exceed the maximum size requirement in Section 334-2.2 and when blended with the design millings, shall produce a product which meets the specifications given in *Table 1*.

| ***Table 2 - Imported Crushed RAP Criteria*** | | |
|---|---|---|
| ***Property*** | ***Method*** | ***Limit*** |
| Deleterious Materials: Clay Lumps and Friable Particles in Aggregate, % | ASTM C 142 or AASHTO T112 | 0.2% maximum |
| Maximum size and Distribution | ASTM C 136 or AASHTO T 27 | Section 334-2.2 |

**334-2.6 Additional Aggregate** - Based on the results of mix design testing or other requirements, the CIR contractor shall determine if additional aggregate ("add-rock") is required to comply with mix design performance criteria specified in *Table 1.* Any additional aggregate shall meet the criteria specified in *Table 3,* and it shall be graded to produce a pavement layer which meets the mix design performance criteria specified in *Table 1.*

| ***Table 3 - Additional Aggregate Criteria*** | | |
|---|---|---|
| ***Property*** | ***Method*** | ***Limit*** |
| Los Angeles abrasion value, % loss | AASHTO T96 | 40% maximum |
| Sand Equivalent,% | ASTM D2419 | 60% minimum |
| Maximum size and Distribution | ASTM C 136 or AASHTO T 27 | Section 334-2.2 |
| Water absorption % | AASHTO T 85 | 5% max.imum |

**334-3 Equipment**

Maintain all equipment in a satisfactory operating condition and in accordance with the *2007 FDOT Standard Specifications for Road and Bridge Construction, Section 100.*
The Cold In-Place Recycling shall be conducted with the equipment specified herein.

**334-3.1 Milling Machine** - A self-propelled cold milling machine that is capable of pulverizing the existing bituminous material in a single pass to the depth shown on the plans and to a minimum width of not less than 10 feet (3.05 m). The machine shall have automatic depth controls to maintain the cutting depth to within ± ¼ in (6 mm) of that shown on the plans, and shall have a positive means for controlling cross slope elevations. The use of a heating device to soften the pavement will not be permitted.

**334-3.2 Material Sizing Unit** - A material sizing unit having screening and crushing capabilities to reduce the pulverized bituminous material to the size required by Section 334-2.2 prior to mixing with asphalt emulsion. The screening and crushing unit shall have a closed circuit system capable of continuously returning oversized material to the crusher. All of the RAP (100%) shall be processed to the maximum size requirements as specified.

**334-3.3 Mixing Unit** - A mixing unit equipped with a belt scale for the continuous weighing of the pulverized and sized bituminous material and a coupled/interlocked computer controlled liquid metering device. The mixing unit shall be an on-board completely self-contained pugmill. The liquid metering device shall be capable of automatically adjusting the flow of asphalt emulsion to compensate for any variation in the weight of pulverized material coming into the mixer. The metering device shall deliver the amount of asphalt emulsion to within ± 0.2 percent of the required design amount by weight of pulverized bituminous material (for example, if the design requires 3.0 percent, the metering device shall maintain the emulsion amount between 2.8 percent and 3.2 percent). The asphalt emulsion pump should be of sufficient capacity to allow emulsion contents up to 3.5% by weight of pulverized bituminous material. Also, automatic digital readings will be displayed for both the flow rate and total amount of pulverized bituminous material and asphalt emulsion in appropriate units of weight and time.

**334-3.4 Pick-Up Machine** - A pick-up machine may be used for transferring the recycled material from the windrow to the receiving hopper of the bituminous paver. The pick-up machine shall be capable of removing the entire windrow down to the remaining underlying material.

**334-3.5 Bituminous Paver** - A self-propelled conventional bituminous paver having electronic grade and cross slope control for the screed shall be utilized. The equipment shall be of sufficient size and power to spread and lay the mixture in one smooth continuous pass to the specified section and according to the plans.

**334-3.6 Additive Metering Devices** - Any additives such as water, lime slurry, etc. added by the equipment in sections 3.1-3.6 at the mill head or mixing unit shall be controlled through liquid metering devices capable of automatically adjusting for the variation in the weight of the pulverized material going into the mixing unit. The metering devices shall be capable of delivering the amount of additive to within +/- 0.2 percent of the required design amount by weight of the pulverized bituminous material. A capability of adding up to 5% water by weight of the pulverized bituminous material, if necessary based on environmental and material requirements, is required. It will not be required to meter the water added at the milling machine to control dust in the screens, belts, or crusher/material sizing unit.

**334-3.7 Rollers** - All rollers shall be self-propelled. The number, weight and types of rollers shall be as necessary to obtain the required compaction. Employing at least one pneumatic-tired roller shall have a minimum gross operating weight of not less than 50,000 lbs. (22,600 kg) is recommended. Pneumatic rollers must have properly working scrapers and water spraying systems. In addition, employing at least one double drum vibratory steel-wheeled roller shall have a gross operating weight of not less than 20,000 lbs. (9,000 kg) and a width of 78 inches (1980 mm) is recommended. Double drum vibratory rollers must have properly working scrapers and water spraying systems.

**334-3.8 Power Broom** - A self-propelled power broom for removal of loose particles and other materials from the Recycled Pavement Layer surface shall be utilized. The broom shall have positive control on the downward pressure applied to the surface.

**334-4 Construction Methods**

**334-4.1 Removal of Vegetation** - Grass and other vegetation shall be removed from the edge of the existing pavement to prevent contamination of the pulverized bituminous material during the milling operation.

**334-4.2 Milling** - The existing pavement shall be milled to the required depth and width as indicated on the plans. Recycling shall be in a manner that does not disturb the underlying material in the existing roadway. The milling operation shall be conducted so that the amount of fines occurring along the vertical faces of the cut will not prevent bonding of the cold recycled materials. Use a small milling machine, if necessary, to mill longitudinally to the required depth as indicated on the plans along all curbs and gutters, utilities, inlets, around all manholes and any other structures not accessible or practical to be milled by the milling/mixing machine utilities. The millings produced by the small mill will be the same as the large mill and of equal gradation to produce a uniform recycled pavement layer. Inlets/Catch Basins must be covered during the milling and recycling operation to prevent milled material from entering the catch basin area where it could contaminate and/or block the storm water system.

**334-4.3 Processing** - The pulverized bituminous material shall be processed by screening and crushing to the required gradation specified in Section 334-2.2. When a paving fabric is encountered during the CIR operation, the Contractor shall make the necessary adjustments in equipment or operations so that at least ninety percent (90%) of the shredded fabric in the recycled material is no more that 5 $in^2$ (3200 $mm^2$). Additionally, no fabric piece shall have any dimension exceeding a length of 4 inches (100 mm). These

changes may include, but not be limited to, adjusting the milling rate and adding or removing screens in order to obtain a specification recycled material. The Contractor shall be required to waste material containing over-sized pieces of paving fabric as directed by the Engineer. When the Contractor is aware that paving fabric exists, such as indicated on the plans, the Contractor will not receive additional payment. However, if the Contractor is not made aware of the paving fabric, than the Contractor shall receive additional payment for any necessary adjustments in equipment and operations.

**334-4.4 Mixing** - The recycled material shall be produced through a mixing unit capable of processing the pulverized material, asphalt emulsion and any additives to a homogeneous mixture. The asphalt emulsion shall be incorporated into the pulverized bituminous material at the initial rate determined by the mix design(s) and approved by the Engineer.

**334-4.5 Spreading** - The material shall be spread using a self-propelled paver meeting the requirements of either paver in Sections 334-3.5 or 334-3.6. Heating of the paver screed will not be permitted. A pick-up machine may be used to transfer the windrowed material into the paver hopper if using a conventional paver as listed in Section 3.5. The pickup machine must be within 150 feet (45 m) of the mixing unit described in Section 334-4.4. The recycled material shall be spread in one continuous pass, without segregation and to the lines and grades established by the Engineer.

**334-4.6 Compaction** – Compaction of the recycled mix shall be completed to thickness requirements of Section 334-2.2. During initial construction, rolling patterns and sequences shall be established through the construction of a control strip, approximately 400 feet in length and produced with the CIR equipment within the pavement section, to determine procedures that result in optimum compaction. Passes with various combinations of rollers and relative increases in density with roller passes shall be evaluated. The number of passes that results in no further increase in wet density and achieves the degree of compaction specified in *Section 334-5.8* shall be selected as the rolling pattern and will establish a target wet density. Degree of compaction and wet density shall be measured using a nuclear moisture-density gauge in accordance with ASTM D2950, backscatter measurement mode.

Commence rolling once the emulsion has started to break. In all cases, the longitudinal joint must first be rolled followed by the rolling pattern established by the test strip. The selected rolling pattern shall be followed unless changes in the recycled mix or placement conditions occur and the established rolling pattern is causing damage to the mat or the required degree of compaction in unachievable. These circumstances require the establishment of new rolling patterns and sequences through the construction of a new control strip. Rolling should start no more than 30 minutes behind the paver. Finish rolling should be completed no more than one hour after milling is completed. The following is the recommended rolling procedure:

Employ rollers meeting the requirements of Section 334-3.7. The longitudinal joint shall first be rolled followed by the rolling pattern established by the test strip. The initial pass for the rolling pattern established by the test strip should begin on the low side and progress to the high side by overlapping of longitudinal passes parallel to the pavement centerline. Rollers shall be operated at speeds appropriate for the type of roller and necessary to obtain the required degree of compaction and prevent defects in the mat. Rolling shall be continued until no displacement is occurring or until the pneumatic roller(s) is (are) walking out of the mixture. Final rolling to eliminate pneumatic tire marks and to achieve density shall be done by double drum steel roller(s), either operating in a static or vibratory mode. Vibratory mode should only be operated at a speed, frequency and amplitude shown not to damage the

pavement. When possible, rolling shall not be started or stopped on uncompacted material but with rolling patterns established so that they begin or end on previously compacted material or the existing pavement.

**334-4.7 Return of Traffic -** After the completion of compaction of the recycled pavement layer, no traffic, including that of the contractor, shall be permitted on the completed recycled material for at least two (2) hours. After two hours rolling traffic may be permitted on the recycled material. This time may be adjusted by the Engineer to allow establishment of sufficient cure so traffic will not initiate raveling. After opening to traffic, the surface of the recycled pavement layer shall be maintained in a condition suitable for the safe movement of traffic. All loose particles that may develop on the pavement surface shall be removed by the CIR contractor by power brooming.

**334-4.8 Protection and Damage –** Protect the recycled pavement layer in accordance with the *2007 FDOT Standard Specifications for Road and Bridge Construction, Section 330-13.* Any damage to the completed Cold In Place Recycled bituminous material shall be repaired by the contractor prior to the placement of the hot mix asphalt concrete surface course, or other applicable surface treatment, and as directed by the Engineer. Damage unrelated to contractor construction procedures or quality of work, such as due to poor base conditions, shall be paid for under the pay item, "Recycled Material Patching."

**334-4.9 Finished Recycled Pavement Layer Smoothness -** The completed cold recycled pavement layer surface shall not vary more than ¼ in (6 mm) from the lower edge of a 10-foot (3-meter) straight edge placed on the surface parallel and transversely to the centerline at locations selected by the County Engineer. Irregularities exceeding the specified limit shall be corrected at the expense of the contractor by grinding/cold milling or leveling with cold or hot mix asphalt. The corrected areas shall be retested to determine compliance with smoothness.

**334-4.10 – Curing –** Prior to placing the hot mix asphalt concrete surface course, or other applicable surface treatment, the recycled pavement layer shall be allowed to cure until the moisture of the material is reduced to 2.0 percent or less, or until approval of the County Engineer. Under dry conditions, the Cold In-Place Recycled pavement layer should meet the moisture requirements within 48 hours.

**334-5 Quality Control**

**334-5.1 Contractor Responsibility -** The contractor shall be responsible for providing field and laboratory quality control testing of materials during construction. The County or its subconsultant may conduct sampling and testing whenever or as often as desired for verification purposes. The contractor shall acquire an adequate amount of material for each sample to be tested in the laboratory so that an ample amount of material is left over in case of the need for resolution testing. Resolution testing will be required and provided at the expense of the contractor if similar laboratory samples tested by the contractor and the County do not coincide within reasonable values as determined by the County Engineer. The resolution laboratory will be selected by the County and the testing results provided by this lab will be used for materials acceptance purposes. All materials testing laboratories shall be accredited by the AASHTO Materials Reference Laboratory (AMRL) or Construction Materials Engineering Council (CMEC). The contractor shall submit all documentation of field inspection and laboratory testing results required herein to the County Engineer prior to payment and upon request. Copies of all delivery tickets and notes regarding any materials brought to the project site shall be given to the County upon delivery to the project site. These tickets shall be signed by an approved representative of

the Contractor at the time of delivery.

**334-5.2 Crushed RAP Material Sizing** - A sample shall be obtained from the receiving hopper of the paver each ½ mile (0.8 km) before the addition of emulsion and screened using a 1.25 in. (31.5mm) sieve (or smaller sieve if required) to determine maximum particle size requirement compliance. Additionally, two gradations shall be performed at at approximately the middle and end of each day's production and in accordance with AASHTO T27 or ASTM C136 on the moist millings using the following sieves: 1.25 inch, 1.0 inch, ¾ inch, ½ inch, 3/8 inch, No.4, No.8, No.16, and No.30. The resulting gradations shall be compared to the mix design gradations to determine any necessary changes to emulsion content. Gradation results shall be shared with the County Engineer by the end of the following day. Sampling procedures shall be in accordance with ASTM D979 or AASHTO T168.

**334-5.3 Asphalt Emulsion** – The asphalt emulsion shall be received on the job site within the temperature ranges specified by the emulsion supplier. The emulsion supplier shall provide testing results for each shipment indicating the emulsion is in compliance with the criteria specified in *Table 4*. The County Engineer may require the contractor to obtain emulsion samples from each shipping trailer prior to unloading into the contractor's storage units for quality control testing if desired. The testing shall meet the following requirements:

| ***Table 4 – Emulsion Criteria*** | | |
|---|---|---|
| ***Property*** | ***Method*** | ***Limit*** |
| *Residue from distillation, % | ASTM D244 | 64.0 to 66.0 % |
| *Oil distillate by distillation, % | ASTM D244 | 0.5% maximum |
| Sieve Test, % | ASTM D244 | 0.1% maximum |
| **Residue Penetration, 25°C, dmm | ASTM D5 | -25 to +25% |
| **Modified ASTM D244 procedure – distillation temperature of 177°C with 20 minute hold.* | | |
| **To be determined during CIR design phase prior to emulsion formulation and manufacture for project. Penetration value range will be determined and submitted to the County Engineer for approval prior to project start* | | |

**334-5.4 Asphalt Emulsion Content and Yield** – Total emulsion quantity and yield shall be monitored and recorded daily and for each segment in which the target emulsion percentage is adjusted. This information shall be gathered from the calibrated emulsion metering device. Emulsion content adjustments shall be made appropriately when multiple and specific mix designs for different road segments of varying composition exist.

**334-5.5 Water Content and Yield** – Total water quantity and yield shall be monitored and recorded daily and for each segment in which the target water percentage is adjusted. This information shall be gathered from the water metering device. Water content adjustments shall be made appropriately when multiple and specific mix designs for different road segments of varying composition exist. Water content adjustments shall also be made based on mixture consistency, coating, and dispersion of the recycled materials.

**334-5.6 Mixture Testing** – At the discretion of the County Engineer and if the recycled pavement layer quality and workmanship seem suspect, the contractor may be required to sample, in accordance with ASTM D3665 and D979, the recycled mixture for determining compliance with design criteria specified in *Table 1*. If samples of the recycled asphalt pavement mixture are taken after the addition of additives and e emulsion, the specimens must be compacted within 15 minutes of sampling and tested as required in *Table 1*. If the

recycled mixture is sampled prior to the addition of additives and emulsion, the sample must immediately be transferred to air-tight plastic container to prohibit loss of moisture. Samples must be mixed in the laboratory with the field additives and emulsion within 24 hours and tested as required in *Table 1*.

**334-5.7 Depth of Pulverization (Milling)** - The depth shall be checked and recorded daily and every 1/8 mile (0.2 km).on both outside vertical faces of the cut. Measure depth by placing a rigid measuring device perpendicular to the bottom of the milled surface and near the vertical faces of the cut.

**334-5.8 Compacted Density** – Degree of compaction of the recycled pavement layer shall be monitored for compliance with target wet density established during the initial control strip construction. Wet density shall be determined every 1/4 mile (0.4 km) using a nuclear moisture-density gauge in accordance with ASTM D2950, backscatter measurement mode. Ensure that all nuclear gauges are operated by licensed individuals and have been calibrated within the last 12 months. The acceptable degree of compaction shall be 96 to 98 percent of target wet density. Care shall be taken not to over-roll the mat based on visual observations of check cracking or shoving. A new control strip and target density shall be established if the consistency of the material being recycled changes. The County Engineer shall be notified prior to the construction of a new control strip.

**334-5.9 Cross-Slope and Smoothness** - The recycled pavement layer cross slope shall be checked regularly during spreading. A cross-slope of 2 %, unless otherwise specified in the construction plans, shall be maintained through the length of the project. When the difference between the measured cross slope and designed cross slope exceeds +/- 0.2% for travel lanes and +/ 0.5% for shoulders, operations shall be stopped until corrective actions are taken to bring the cross slope into an acceptable range. The recycled pavement layer shall be checked for smoothness regularly behind the paver and after rolling. The smoothness shall not vary more than ¼ in (6 mm) from the lower edge of a 10-foot (3-meter) straight edge placed on the surface parallel and transversely to the centerline after rolling is completed. Correct all deficiencies in excess of ¼ in (6 mm) and retest to verify smoothness adequacy. It is recommended that the edge of the mat be rolled first and progress to the center or high side to prevent excessive edge sloughing.

| *Table 5 – Quality Control Testing and Inspection Criteria* | | |
|---|---|---|
| ***Property*** | ***Method*** | ***Limit*** |
| RAP Maximum Particle Size | ASTM C 136 or AASHTO T27 | Section 334-2.2 |
| RAP Particle Size Distribution | ASTM C 136 or AASHTO T27 | Determined by Mix Design(s) |
| Emulsion and Water Yield | Calibrated Metering Device | Determined by Mix Design(s) |
| *Mixture Testing | Table 1 | Table 1 |
| **Depth of Milling | Section 334-5.7 | Determined by Mix Design(s) |
| Compacted Density | ASTM D2950 | 96 to 98% of target density |
| Cross-Slope | FM 5-509 | 2% unless otherwise indicated |
| Smoothness | FM 5-509 | Maximum 0.25 in (6 mm) deviation from planeness |
| **Mixture Testing frequency shall be at the County Engineer's discretion* | | |
| ***Depth of Milling may need to be adjusted for localized unexpected pavement conditions* | | |

**334-6 Weather Limitations**

Cold In-Place recycling operations shall be completed when the atmospheric temperature measured in the shade and away from artificial heat is at least $50^0$ F (10°C). Also, the weather shall not be foggy or rainy. The weather forecast shall not call for freezing temperature within 48 hours after placement of any portion of the project.

**334-7 Measurement**

Cold In-Place Recycling (CIR) work will be measured by the square yard (or square meter) of the completed sections for the depth specified. The asphalt emulsion will be measured by the ton (or metric ton) or gallon (liter). Additional aggregate, additional reclaimed asphalt pavement (RAP) materials and other additives will be measured by the ton (or metric ton). Water used in this operation will not be paid for directly but shall be considered incidental to this bid item.

**334-8 Payment**

The work performed and materials furnished as detailed under Section 334 for "*COLD IN-PLACE RECYCLED BITUMINOUS MATERIAL*" will be paid for at the unit prices bid for the items outlined in *Table 6.* Cold In-Place Recycling (CIR) unit price shall be full compensation for; mobilization; the removal and processing of the existing pavement; for preparing, hauling, and placing all materials; for all freight involved; for all manipulations, including rolling and brooming; and for all labor, tools, equipment, quality control testing and incidentals necessary to complete the work. An emulsion content of 3% by weight of the milled bituminous material shall be used for bidding purposes prior to the completed design. The actual emulsion content will be adjusted based on the quantity necessary to meet the design criteria requirements in *Table 1.*

| Table 6 - "COLD IN-PLACE RECYCLED BITUMINOUS MATERIAL" Bid Items | | |
|---|---|---|
| **Bid Item Number** | **Bid Item Description** | **Unit** |
| 1 | Cold In-Place Recycling (CIR) | Square yard |
| 2 | Asphalt Emulsion | Gallons |
| 3 | Additional Aggregate | Ton |
| 4 | Additional Reclaimed Asphalt Pavement (RAP) | Ton |
| 5 | Additives | Ton |
| 6 | Temporary Traffic Stripping | LF |

## APPENDIX 1
**Mix Design Procedures for CIR (Cold In-place Recycling) Material**

2. **Sampling and Processing**
Prior to materials sampling in the roadway, obtain approval from the County Engineer. Obtain 6" minimum inside diameter cores from the areas to be recycled. If cores show significant differences in various areas, such as different type or thickness of layers between cores, then separate mix designs shall be performed for each of these pavement segments. It is recommended to take, at a minimum, one core for each 1000' per lane mile and where visual differences in the pavement are noticed. Immediately patch all core holes neatly with asphalt cold patch. Cores shall be cut in the laboratory to the depth specified for the CIR project. Cores shall be crushed in the laboratory. Perform a mix design using the medium gradation and a minimum of one of the fine or coarse gradations using the following recycled asphalt pavement millings criteria.

| | Fine | Medium | Coarse |
|---|---|---|---|
| 1.25" | 100 | 100 | 100 |
| 1.0" | 100 | 100 | 85-100 |
| ¾" | 95-100 | 85-96 | 75-92 |
| No. 4 | 55-75 | 40-55 | 30-45 |
| No. 30 | 15-35 | 4-14 | 1-7 |
| No. 200 | 1-7 | 0.6-3 | 0.1-3 |

The mix design shall be performed on these crushed millings. Gradation of the millings after crushing shall be determined by ASTM C117 and C136 (dried at no greater than 40°C)

Samples shall be prepared with a sample splitter. An alternative method is to dry, screen and recombine millings in the laboratory to target gradation. Suggested screens are 1/2 inch, 3/8 inch, No. 4, No. 8, No. 30, and pan.
Scalp oversize with a 1 inch screen when using 100 mm (3.94 inch) diameter compaction molds.

3. **Mixing**
Calculate the amount of RAP required to produce a 61.0 mm to 66.0 mm (2.4 to 2.6 inch) tall specimen by determining the maximum specific gravity of the RAP in accordance with ASTM D2041.

Number of specimens: 4 per emulsion content for a total of 6 for long-term stability and 6 for moisture testing for the 3 emulsion contents. Two specimens are required for Rice specific gravity; test at the highest emulsion content in the design and back calculate for the lower emulsion contents.

Recommended emulsion contents: 1.5%, 2.0%, 2.5%, 3.0%, 3.5%, 4.0%. Choose three emulsion contents that bracket the estimated recommended emulsion content.

Add moisture that is expected to be added at the milling head, typically 1.5 to 2.5 percent.

If any additives are in the mixture, introduce the additives in a similar manner that they will be added during field production.

Mixing of test specimens shall be performed with a mechanical bucket mixer. Mix the CIR RAP millings thoroughly with water first, then mix with emulsion. Mixing shall occur at ambient temperature. One specimen shall be mixed at a time. Mixing time with emulsion should not exceed 60 seconds.

4. **Compaction**
Specimens shall be compacted immediately after mixing. Place paper disks on the top and bottom of the specimen before compaction.

Specimens shall be compacted with a Superpave gyratory compactor (SGC) in a 100 mm mold at 1.25° angle, 600 kPa ram pressure, and 30 gyrations. The mold shall not be heated.

5. **Curing after compaction**
Extrude specimens from molds immediately after compaction. Carefully remove paper disks.

Place specimens in 60°C forced draft oven with ventilation on sides and top. Place each specimen in a small container to account for material loss from the specimens.

Specimens for maximum specific gravity determination should be dried to constant weight (less than 0.05% weight loss in 2 hours). Care should be taken not to over-dry the specimens.

Cure compacted specimens to constant weight but no more than 48 hours and no less than 16 hours. Constant weight is defined here as 0.05% change in weight in 2 hours. After curing, cool specimens at ambient temperature a minimum of 12 hours and a maximum of 24 hours.

6. **Measurements**
Determine bulk specific gravity (density) of each compacted (cured and cooled) specimen according to ASTM D2726.

Determine specimen heights according to ASTM D3549 or equivalent. Alternatively, the height can be obtained from the SGC readout.

Determine Rice (maximum theoretical) specific gravity, ASTM D2041, except as noted in Item 4 of this procedure, and do not break any agglomerates which will not easily reduce with a flexible spatula. Perform the supplemental dry-back procedure to adjust for uncoated particles.

Determine percent air voids in accordance with ASTM D3203 for each design emulsion content.

Determine corrected Marshall Stability by ASTM D1559 at 40°C after 2 hour temperature conditioning in a forced draft oven.

7. **Moisture Susceptibility**
   Perform same conditioning and volumetric measurements on moisture-conditioned specimens as on other specimens. Vacuum saturate to 55 to 75 percent, soak in a 25°C water bath for 23 hours, followed by a one hour soak at 40°C. Determine corrected Marshall Stability. The average moisture conditioned specimen strength divided by the average dry specimen strength is referred to as retained stability.

7. **Thermal Cracking** – see *Appendix 2*, **Raveling** – see Appendix 3

8. **Emulsion Content Selection**
   The properties of the specimens at design emulsion content shall meet the properties in Table 1.

9. **Report**
   The report shall contain the following minimum information: Gradation of RAP; amount and gradation of virgin aggregate or additional RAP, if any; recommended water content range as a percentage of dry RAP; optimum emulsion content as a percentage of dry RAP and corresponding density; air void percentage; absorbed water percentage; Marshall Stability and Retained Stability at design moisture and emulsion contents; Raveling percentage; and Thermal Cracking initiation temperature. Include the mix design emulsion designation, supplier name, plant location, and emulsion testing results detailed in *Table 4*.

**END OF SECTION**

# STANDARD SPECIFICATIONS

## HOT-IN-PLACE ASPHALT RECYCLING

## PART I

### 1.1 GENERAL

The Contractor shall furnish all labor, material, consumables, tools and equipment necessary to perform all operations for "hot-in-place" recycling of street asphalt, addition of a rejuvenating agent, and subsequent resurfacing of the street, at selected streets within Manatee County, on an as-needed basis. The list of street names and surfaces selected for application will be provided by the County after the bid award. Asphaltic concrete used to complete this work shall conform to the applicable Technical Specifications sections, unless otherwise modified herein. The quality of workmanship and materials used in restoration shall produce a surface equal to or better than the condition before the Work began.

### 1.2 SCOPE OF WORK

The essential portions of the proposed Work for the Project are summarized as follows: The Work consists of street cleaning and a single pass, single machine process of heating, scarifying, and reworking existing pavement, adding a recycling agent, redistributing the processed materials and placing an asphalt concrete surface course overlay of Type S-III asphalt concrete, at a rate of 110 pounds per square yard. Surface adjustment of manhole rings, as requested by the County, will be required. Striping, Markings and Restoration of vehicle detector loops will also be required.

The estimated quantities and Contract Pay Items are listed in the Proposal.

### 1.3 ESTIMATED QUANTITIES

The estimated quantities listed in the bid for the various Contract Pay Items shall be used for the purposes of comparing bids. Certain estimated quantities listed are greater than the quantities required to complete the Work. The greater quantities and quantities of work items not shown may be for contingent work; compensation for contingent work will be made if required and approved by the Engineer. The County reserves the right to vary the estimated quantities or to delete the Work and the corresponding Contract Pay Items from the Contract. The Contractor will be compensated for work actually performed as indicated in the Specifications or as authorized by the Engineer, all in accordance with the unit prices and lump sum prices contained in the bid. The bidder shall quote in the bid a unit or lump sum price for which he will perform the work for each bid item.

### 1.4 SAFEGUARDING SURVEY MARKS

The Contractor shall safeguard all existing property monuments, benchmarks, and other survey marks adjacent to and within the Project limits, and shall bear the cost of reestablishing them if disturbed or destroyed.

## 1.5 INSPECTION AUTHORITY

The Engineer has ultimate responsibility for contract administration and inspection for this bid. The Engineer may assign field inspection responsibilities to a Design Professional and/or County Inspector.

Each step of construction is subject to approval by the Engineer prior to proceeding with a subsequent step. During the progress of the Work and up to the date of the final acceptance, the Contractor shall, at all times, afford representatives of the City, the County, the State, the Department of Environmental Protection, the Department of Labor, or any other agency with jurisdiction, every reasonable, safe, and proper facility for observation of the Work done or being done at the site, and also the manufacture or preparation of materials and equipment at the place of such manufacture or preparation.

## 1.6 QUALIFICATIONS

The bidder shall have a minimum of three years experience in applying the product proposed for use in this specification. He must submit with his bid a list of five similar projects on which he worked. He shall indicate the project dates, number of square yards treated in each and the name and phone number of the official in charge of each project.

## 1.7 SUBMITTALS

The bidder must submit with his bid the manufacturer's certification that the material proposed for use is in compliance with the specification requirements. The bidder must submit with his bid previous use documentation and test data conclusively demonstrating that; the rejuvenating agent has been used successfully for a period of five years by government agencies such as Cities, Counties, etc; and that the asphalt rejuvenating agent has been proven to perform, as heretofore required, through field testing by government agencies as to the required change in the asphalt binder viscosity and penetration number. Testing data shall be submitted indicating such product performance on a sufficient number of projects, each being tested for a minimum period of three years to insure reasonable longevity of the treatment, as well as product consistency.

The Contractor shall submit shop drawings, and samples where specified for the following materials:

Equipment
Asphaltic Concrete Type S-III
Recycling Agent

The Contractor shall submit to the County in writing the proposed asphalt design mixes and sufficient samples for study and testing.

1.8 WARRANTY

The Contractor shall provide workmanship and labor warranty for a period of at least 12 months from the date of application. The material warranty shall be as offered by the manufacturer.

1.9 DELIVERY AND STORAGE

Contractor shall deliver materials in ample quantities to ensure the most speedy and uninterrupted progress of the Work to complete the Work within the allotted time. The Contractor shall also coordinate deliveries in order to avoid delay in, or impediment of, the progress of the Work of any related contractor. The Contractor shall provide space for storage of materials and equipment.

1.10 WORK SCHEDULE AND PROGRESS SCHEDULE

Normal working hours are 7:00 AM to 5:00 PM, Monday through Friday. Work on holidays, weekends, and evenings will be done if determined by the Engineer. The Contractor shall schedule his work so as to maintain at least a one-way traffic and shall provide effective dust control at all times. Two lane traffic shall be maintained whenever possible. No interruption of access to property shall be made unless prior arrangements acceptable to the occupant or owner of the property have been made by the Contractor in writing.

Contractor shall prepare and submit to the Engineer a **Progress Schedule** showing the order in which the Contractor proposes to carry out the Work, the start dates and the completion dates of the salient features of the Work. It shall clearly depict the order, inter-dependence, and duration of each activity. Any changes to the Progress Schedule shall be in writing, and shall be cleared by the Engineer in advance. If the Engineer orders a phase of construction to be stopped due to the Contractor's neglect to adhere to the sequence of operations or any other non-conformance of specifications, as outlined herein, the Stop Work Order shall not constitute a basis for an extension of time.

## PART II MATERIALS AND EQUIPMENT

2.0 GENERAL

A. All materials, appliances, and types of construction shall be in accordance with the F.D.O.T. Standard Specifications for Road and Bridge Construction, 2000 edition, and shall, in no event, be less than that necessary to conform to the requirements of any applicable State, County, Federal, laws, ordinances, and codes.

B. All materials and equipment to be incorporated into the Work shall be new, unused and correctly designed.

They shall be of standard first grade quality, produced by expert workmen, and be intended for the use for which they are offered. Materials or equipment which, in the opinion of the Engineer, are inferior or of a lower grade than indicated, specified, or required, will not be accepted.

C. For detailed specifications for Type S-III Asphaltic material, and Asphaltic Concrete Pavement, the Contractor shall consult F.D.O.T. Standard Specifications for Road and Bridge Construction, 2000 edition.

D. Only "Asbestos-Free" materials shall be incorporated into the Work, unless the Technical Specifications specifically call for otherwise. Material suspected of being Regulated Asbestos Containing Material (RACM), includes but is not limited to: thermal and acoustic insulation, joint compound, mastic, adhesive, vinyl floor tile and sheeting, ceiling tile, plaster, wall board, roofing felt, and shingle. Shop drawings for material or equipment suspected of being RACM shall list all contents, shall be noted "Asbestos-Free," and shall be screened by the Contractor prior to submittal to confirm that it is "Asbestos-Free." All materials delivered to the Project site shall have been approved through the shop drawing procedure and shall be in their original labeled and unopened containers.

E. In the event that asbestos-containing material installed by the Contractor is discovered either during construction, following completion of construction, or following acceptance of the Contract Work by the County and closeout of the Contract, it will be the responsibility of the Contractor to pay all costs incurred to remove and replace those materials, including repair or replacement of all adjacent materials which are affected by the abatement process.

## 2.1 EQUIPMENT

A. The machine used to recycle the existing pavement shall be designed and built for this specific purpose. The machine shall be capable of heating by infrared heat, scarifying to a minimum of one-inch depth, applying a recycling agent, reworking and redistribution of the existing asphalt concrete surface course (minimum ten-foot width), and a concurrent application of the final surface course of Type III material in a single machine operation. The machine shall have the capability of maintaining a recycled mat temperature of 225 degrees F throughout the repaving operation, including application of the final course.

B. The machine shall also be capable of reworking the material around manholes and other obstacles. The machine shall be equipped to add the recycling agent and mix the pavement material evenly, and shall be equipped with a leveling blade and screed for regrading the existing asphalt concrete surface course. The screed shall be a heated vibratory screed equipped with crown controls and be capable of adjustment to redistribute the existing asphalt concrete surface course in order to produce the desired longitudinal grade and transverse cross section.

C. The machine shall be on the site in operating condition sufficiently in advance of beginning of the surface-recycling project to allow full evaluation.

As required by the Engineer, the Contractor shall demonstrate that the machine he proposes to use will achieve the results specified.

## 2.2 ASPHALTIC CONCRETE PAVEMENT

Unless otherwise specified elsewhere, all asphalt concrete shall be Type S-III mix as specified in the F.D.O.T. Standard Specifications for Road and Bridge Construction, 2000 Edition. Asphalt concrete shall be placed and compacted to provide a minimum thickness as specified on the Plans. Samples of the material shall meet the quality requirements as specified in ASTM D979, to determine conformance to the approved design mix. Construction material and workmanship shall conform to the applicable requirements of DOT-SSRBC sections 320, 330, 331 and 332.

## 2.3 TYPE S-III ASPHALT CONCRETE

Type S-III asphalt concrete shall be used for an alternate for the final surface (no friction course specified), and, as the final layer of structural course only. The composition and physical test properties for Type S-III are described below.

| | |
|---|---|
| Minimum Marshall Stability (lbs) | 1500 |
| Flow (.01 in.) in % | 8-14 |
| Minimum VMA in % | 15 |
| Air Voids in % | 3-7 |
| Minimum Effective Asphalt Content | 5.5 |
| Percent by weight total aggregate passing sieves | --See Section 331(FDOT2000) |
| Asphalt Cement Viscosity Grade AC-20 | --See Section 916-1 |
| Mineral Filler | --See Section 917-1, 917-2 |
| Course Aggregate, Stone, Slag or Crushed Grave | --See Section 901 |
| Fine Aggregate | --See Section 902 |

The aggregate shall be clean and shall not contain any deleterious substances. Course or fine aggregate containing any appreciable amount of phosphate shall not be used.

## 2.4 RECYCLING AGENT

A. General

The recycling agent, or restorative agent, shall be an emulsified asphalt-recycling agent as approved by the County. These specifications establish the requirements and uses for recycling agents used in the repaving of asphaltic surfaced streets. Recycling agents are used to restore the plasticity to existing asphaltic paving. Either the agent is used independently an emulsified agent is used in conjunction with cationic emulsified asphalt.

B. Use of agent without addition of emulsified asphalt tightly or equal:

| | |
|---|---|
| Flash Point, CCC, Degrees C | 195 Min. Viscosity, mPa Sec |
| 100 Degrees C | 15-22 |
| 60 Degrees C | 90-180 |
| 38 Degrees C | 500-1500 |
| Refractive Index | 1.5460 Min. |
| Four Point, Degrees C | +27 Max. |
| Specific Gravity, 15.6115.6 Degrees C | 980-1.040 |
| Analine Point, Degrees C | 48 Max. |
| Molecular Analysis, Clay Gel, % | |
| Polar Compounds | 8 Min. |
| Aromatics | 65 Max. |
| Saturates | 27 Max. |
| Asphaltenes | .2 Max |

Note: mPa Sec = CentipoiseUse of agent in conjunction with Cationic emulsified asphalt AE30OR or equal:

| | |
|---|---|
| Viscosity, Saybolt Furol at 77 Deg F, Sec | 15-100 |
| Sieve Test, % | .10 Max |
| Miscibility | No coagulation |
| Particle Charge | Positive |
| Residue, % by weight (2) | 60 Min. |
| Tests on residue from Evaporation Test | |
| Flash Point, COC, Degrees F | 400 Min. |
| Viscosity at 140 Degrees F, cSt | 75-250 |
| Viscosity at 275 Degrees F, cSt | 7.0 Max |

C. Sampling and Testing:
The Contractor shall submit samples of the recycling agents along with samples of existing pavement to a competent laboratory, which will select a formulation suited for the Project, and determine the rate of application for the recycling agent that will provide the desired viscosity in the recycled pavement. The Engineer reserves the right to make changes in the recycling agent formulation and rate of application at any time throughout the construction duration.

## PART III EXECUTION

3.1 HOT-IN-PLACE ASPHALTIC RECYCLING

A. The existing pavement shall be removed to varying depths in a manner which will restore the pavement surface to a uniform longitudinal profile and cross slope of ¼ inch per foot. Minimum removal depth shall be 1 inch, or as directed by the Engineer.

B. Prior to recycling, the pavement shall be cleaned by the Contractor so as to be reasonably free from sand, dirt and other deleterious substances that would affect the quality of the recycled mix.

C. The entire width of pavement surface being processed in a single pass shall be uniformly heated in such a manner as to soften the existing pavement to the extent that it can be scarified in a manner that will result in a layer of uniformly loosened material without appreciable ridges of undistributed material which will provide sufficient scarified material to allow the pavement

surface to be restored to the shape specified. Spot leveling may be necessary as directed by the Engineer.

D. An approved recycling agent shall be applied to the scarified material, which then shall be distributed evenly over the width being processed so as to produce a uniform cross section. The exact amount of recycling agent will be determined by a competent laboratory and will generally range between 0.008 and 0.15 gallon per square yard as directed by the County.

E. Asphaltic Concrete used shall be Type S-III.

## 3.2 ADJUSTMENT OF EXISTING MANHOLE COVERS AND VALVE BOXES

The Contractor shall make vertical adjustments to existing manhole covers and valve boxes within or adjacent to all proposed construction. Covers and valve boxes shall be adjusted to elevations compatible to proposed roadway or parkway grades. The manhole covers and valve boxes, if needed, shall be supplied by the Contractor.

## 3.3 STREET RESURFACING WORK

A. The Contractor shall clean, to the satisfaction of the County, existing surfaces to be resurfaced and shall maintain said clean surfaces until completion of resurfacing work. Prior to the Contractor's sweeping-cleaning operations, the County Maintenance Department, if given a minimum of 48 hours notice by the Contractor, will schedule to scrape and pull the curb line where there are heavy accumulations of dirt and/or debris. The Contractor shall furnish and apply the tack coat prior to placing of the asphaltic concrete.

B. Where it becomes necessary, the Contractor will adjust manhole rings, as directed by the County. Manhole rings will be adjusted by the use of adjustment rings supplied by the Contractor. All such work shall be accomplished as ordered by the County.

C. At streets intersected by streets being resurfaced, resurfacing shall be feathered along the radii of all returns, so as to maintain the drainage pattern of the intersection, or at the direction of the Engineer.

## 3.4 FINISHED SURFACE

The finished surface shall have a reasonable uniform texture and shall be within ¼ inch of a true profile grade and shall have no deviation in excess of ¼ inch from a straight edge applied to the pavement perpendicular to the centerline. Areas varying from a true surface in excess of the above state tolerance may be accepted without correction if the Engineer determines that they were caused by pre-existing condition, which could not have reasonably been corrected. Any unsuitable texture or profile, as determined by the Engineer, shall be corrected by the Contractor at no additional compensation.

## 3.5 STRIPING AND MARKING SPECIFICATIONS

Consult the manual on Uniform Traffic Control Devices (MUTCD).

## 3.6 WORK IN PRIVATE PROPERTY AND RESIDENT NOTIFICATION

A. The Contractor shall distribute by hand, a typed notice to all residences and businesses on the street to be treated. The notice will be delivered no more than 24 hours prior to the treatment of the road. The notice will have a local phone number that residents may call to ask questions. The notice shall be of the door hanger type, which secures to the door handle of each dwelling. Unsecured notices will not be allowed. The Contractor shall also place the notice on the windshield of any parked cars on the street. Hand distribution of this notice will be considered incidental to the contract.

B. In the event that, in the opinion of the Contractor, obtaining a temporary construction easement outside the limits of the public right-of-way, of County-owned property, or of the easements obtained by the County is necessary or desirable, it shall be the sole responsibility of the Contractor to obtain such easement from the owner of the property. If such easement is obtained by the Contractor it shall contain provisions to hold the County harmless from any operations of the Contractor within the easement limits. The Contractor shall not conduct construction operations on private property outside the limits of the public right-of-way, of County-owned property, or of the easements obtained by the County unless a copy of the Temporary Construction Easement Agreement is filed with the Engineer.

C. Upon completion of Work in easements, the Contractor shall restore the property, including all fences or other structures disturbed by his operations, as nearly as possible to the condition in which he found it. No material shall be used or removed from private property without the approval of the Engineer.

## 3.7 TRAFFIC CONTROL

A. The work consists of maintaining traffic within the limits of the Project for the duration of the construction period, including any temporary suspensions of the Work. It shall include the construction and maintenance of any necessary detour facilities; the providing of necessary facilities for access to residences, businesses, etc., along the Project; the furnishing, installing, and maintaining of traffic control and safety devices during construction; the control of dust; and any other special requirements for safe and expeditious movement of traffic as may be called for on the Plans.

B. The term, "traffic control" shall include all of such facilities, devices, and operations as are required for the safety and convenience of the public as well as for minimizing public nuisance; all as specified.

C. The Contractor shall schedule his operations and carry out the work in a manner to cause the least disturbance and/or interference with the normal flow of traffic over the areas to be treated. Treated portions of the pavement surfaces shall be kept closed and free from traffic until penetration, in the opinion of the Engineer, has become complete and the area is suitable for traffic.

D. If for any reason, permanent traffic lines cannot be placed due to incomplete work, it shall be the Contractor's responsibility to place temporary traffic stripes prior to completing the day's operations.

E. When, in the opinion of the Engineer, traffic must be maintained at all times on a particular street, then the Contractor shall apply asphalt-rejuvenating agent to one lane at a time. Traffic shall be maintained in the untreated lane until the traffic may be switched to the completed lane.

F. The Contractor shall be responsible for all traffic control and signing required to permit safe travel. The Contractor shall notify the police and fire departments as to the streets that are to be treated each day.

G. If, in the opinion of the Engineer, proper signing is not being used, the Contractor shall stop all operations until safe signing and barricading is achieved.

3.8 UTILITIES

Prior to construction, the Contractor shall familiarize himself with the location of all existing utilities and facilities within the project sites, and work in close co-operation with the utility company, so as not to disturb, destroy or otherwise harm any existing infrastructure.

3.9 DAMAGES

Access to the work sites shall be over public streets and highways. Any damage to existing pavement surface and base or other surface improvements outside the Contract Pay Limits, that are attributable to the Contractor's activities, shall be restored to like-new condition by the Contractor at his own expense.

3.10 METHOD OF MEASUREMENT, BASIS OF PAYMENT

A. Mobilization:

The cost of required insurance, consideration for indemnification to the County and the Engineer, and any other pre-construction expenses necessary for the start of the Work, excluding the cost of construction materials, shall be included in the various unit prices bid. No separate payment will be made.

B. Traffic Control:

The Scope of Work consists of maintaining traffic for the duration of the construction period, including any temporary suspensions of the work details of which are mentioned in Section 3.11. Payment for traffic control shall be included in the various unit prices bid. No separate payment will be made.

C. Hot In-Place Asphalt Recycling:

Payment under this Pay Item provides for all costs for hot in-place asphalt recycling existing asphaltic concrete roadway, including but not limited to: cleaning the surface, scarifying, mixing the recycling agent, mixing the

concrete and redistributing the final mixture, rolling and compacting the placed mixture, and any temporary traffic control markings as required by the Engineer. The price quoted shall be on a per square yard basis.

D. Asphaltic Concrete Type S-III:

Payment under this Pay Item provides for all costs for furnishing and placing Type S-III asphaltic concrete for mixing into the recycled material, including but not limited to trucking to job site and placing in mixer. The price quoted shall be on a per ton basis.

E. Recycling Agent:

Payment under this Pay Item provides for all costs for furnishing the recycling agent to be mixed into the scarified material at a rate of .008 to 0.15 gallon per square yard, including but not limited to delivery to the job site and adding to the mix. The price quoted shall be on a per gallon basis.

F. Bid Items:

| PAY ITEM | PAY UNIT |
|---|---|
| Hot In-Place Asphalt Recycling | SY |
| Recycling Agent | GAL |
| Furnish and Place S-III Asphalt | TON |

**END OF SECTION**

# BID FORM ITEMS

## SECTION I - AGGREGATE

| | |
|---|---|
| I.1 | Crushed Stone #4 |
| I.2 | Crushed Stone #57 |
| I.3 | Coarse Aggregate 3/8" |
| I.4 | Coarse Masonry Sand |
| I.5 | Concrete Sand |
| I.6 | Fill Dirt (cubic yard) |
| I.7 | Fill Dirt (ton) |
| I.8 | Shell Base Bank Run Shell |
| I.9 | Shell Base Bank Run Shell @ < 16% Moisture Content |
| I.10 | Subbase Stabilization Materials |
| I.11 | Washed Shell ½" |
| I.12 | Washed Shell 1" |
| I.13 | Washed Shell 3" |
| I.14 | Shell Screenings TDS ½" |
| I.15 | Limerock |
| I.16 | Crushed Concrete Aggregate |
| I.17 | #7 Coarse Aggregate ½" |

## SECTION II - LIQUID ASPHALT

| | |
|---|---|
| II.1 | Asphalt Emulsion Type RS-1 |
| II.2 | Asphalt Emulsion Type RS-2 |
| II.3 | EPRS (Emulsion Prime Type RS) |

## BID FORM ITEMS

## SECTION III - PAVEMENT BASE CONSTRUCTION

| | |
|---|---|
| III.1 | Shape, Mix, and Compact Added Materials |
| III.2 | Place, Shape, and Compact Shell, Limerock or Crushed Concrete |
| III.3 | Prime & Mat |
| III.4 | Excavation (Dirt Removal) |
| III.5 | Clearing & Grubbing |
| III.6 | Final Dressing of Shoulders |
| III.7 | Traffic Maintenance Signs & Barricades |
| III.8 | Fill Dirt Placing |
| III.9 | Seeding |
| III.10 | Sodding - Bahia |
| III.11 | Sodding - St. Augustine |
| III.12 | Bermuda Sod |
| III.13 | Water |
| III.14 | Fertilizer |
| III.15 | Plant Mix Soil Cement |
| III.16 | Pavement Removal |
| III.17 | 6" Soil Cement Base - Plant Mix |
| III.18 | Spreading Dust Control Agent |
| III.19 | Dust Control Agent |
| III.20 | Base Reconstruction |
| III.21 | Motor Grader Rental |
| III.22 | Front End Loader Rental |
| III.23 | Dump Truck Rental |
| III.24 | Bulldozer Rental |
| III.25 | Bomag Mixer |
| III.26 | Track Hoe Excavator |
| III.27 | Erosion Control |
| III.28 | Top Soil |
| III.29 | Reworking and Shoulder Sodding |
| III.30 | Clipping of Shoulder and Cleanup |
| III.31 | Cold Mix in Place Asphalt Recycling |
| III.32 | Surveying |
| III.33 | Tree Removal |

## BID FORM ITEMS

## SECTION IV – BASE AND SURFACE CONSTRUCTION/MATERIAL

| | |
|---|---|
| IV.1 | Sand Asphalt Hot Mix 800# |
| IV.2 | Sand Asphalt Hot Mix 1200# |
| IV.3 | Lean Mix/Armor Coat |
| IV.4 | ABC Type I |
| IV.5 | ABC Type II |
| IV.6 | ABC Type III |
| IV.7 | FC-2 |
| IV.8 | FC-3 |
| IV.9 | FC-4 |
| IV.10 | EAM Cold Mix |
| IV.11 | AC Type S-I |
| IV.12 | AC Type S-III |
| IV.13 | AC Type II |
| IV.14 | AC Type III |
| IV.15 | Sweep, Tack, Spread, & Compact - 100#/SY+ |
| IV.16 | Sweep, Tack, Spread, & Compact - 50#/SY to 90#/SY |
| IV.17 | Sweep, Tack, Spread, & Compact - Road Widening |
| IV.18 | Sweep, Tack, Spread, & Compact - Parking Lots |
| IV.19 | Sweep, Tack, Spread, & Compact - Patching |
| IV.20 | Slurry Seal (with CSS-1H Grade) Type I |
| IV.21 | Slurry Seal (with CSS-1H) Type II |
| IV.22 | Slurry Seal (with Quick Set Grade) Type I |
| IV.23 | Slurry Seal (with Quick Set Grade) Type II |
| IV.24 | Asphalt Resurfacing Treatment (Fibermat) |
| IV.25 | Double Surface Treatment |
| IV.26 | Micro-Surfacing Only |
| IV.27 | Micro-Surfacing Leveling and Surfacing |
| IV.28 | Pavement Rejuvenators |
| IV.29 | Pavement Restorative Seal |
| IV.30 | Rejuvenating Agent Construction Seal |
| IV.31 | Rejuvenating Agent Restorative Seal |
| IV.32 | Lean Mix Spreading |
| IV.33 | Pavement Milling |
| IV.34 | Reclaimed Asphalt Credit |
| IV.35 | Reclaimed Non-Asphaltic Material Credit |
| IV.36 | Painted Traffic Markings |
| IV.37 | Painted Traffic Pavement Messages |

| | |
|---|---|
| IV.38 | Thermoplastic Traffic Stripes and Marking |
| IV.39 | Thermoplastic Pavement Messages |
| IV.40 | Reflective Pavement Markers Type 1 thru 5 |
| IV.41 | Remove Existing Pavement Markers |
| IV.42 | Removal of Existing Thermoplastic Marking |
| IV.43 | Utility/Intersection Repair |
| IV.44 | Rework Existing Asphaltic Concrete Pavement |
| IV.45 | Manhole Adjustment |
| IV.46 | Water Valve Adjustment |
| IV.47 | Mobilization |
| IV.48 | Inductive Loop Detectors |
| IV.49 | Maintenance of Traffic |
| IV.50 | Full Depth Pavement Reclamation |
| IV.51 | Cold Recycled Bituminous Base Course |
| IV.52 | Hot-In-Place Asphalt Recycling |
| IV.53 | Super Pave Mix 9.5 |
| IV.54 | Super Pave Mix 12.5 |
| IV.55 | Sweep, Tack, Spread and Compact Super Pave Mixes < #100 |
| IV.56 | Sweep, Tack, Spread and Compact Super Pave Mixes > #100 |
| IV.57 | FC 12.5 Mix |

## BID FORM ITEMS

## SECTION V - STORMWATER, WASTEWATER, AND WATER UTILITIES

| | |
|---|---|
| V.1 | Remove Storm Drain 12" - 18" Diameter |
| V.2 | Remove Storm Drain 24" - 48" Diameter |
| V.3 | Remove Storm Drain Over 48" Diameter |
| V.4 | Remove Mitered End |
| V.5 | Remove Headwall |
| V.6 | Install Storm Drain 15" Diameter |
| V.7 | Install Storm Drain 18" Diameter |
| V.8 | Install Storm Drain 24" Diameter |
| V.9 | Install Storm Drain 30" Diameter |
| V.10 | Install Storm Drain 36" Diameter |
| V.11 | Install Storm Drain 42" Diameter |
| V.12 | Install Storm Drain 48" Diameter |
| V.13 | Install Storm Drain 54" Diameter |
| V.14 | Install Storm Drain 60" Diameter |
| V.15 | Install Storm Drain 66" Diameter |
| V.16 | Install Storm Drain 72" Diameter |
| V.17 | Install Storm Drain 15" Diameter Mitered |
| V.18 | Install Storm Drain 18" Diameter Mitered |
| V.19 | Install Storm Drain 24" Diameter Mitered |
| V.20 | Install Storm Drain 30" Diameter Mitered |
| V.21 | Install Storm Drain 36" Diameter Mitered |
| V.22 | Install Storm Drain 42" Diameter Mitered |
| V.23 | Install Storm Drain 48" Diameter Mitered |
| V.24 | Alternate Manhole Adjustment |
| V.25 | MH and WV Adjustment as a part of Base Reconstruction |
| V.26 | Construct Catch Basin 4' 0" x 5' 4" |
| V.27 | Construct Catch Basin 5' 4" x 5' 4" |
| V.28 | Construct Catch Basin 6' 4" x 5' 4" |
| V.29 | P-5 Curb Inlet |
| V.30 | J-5 Curb Inlet |
| V.31 | J-6 Curb Inlet |
| V.32 | Type 5 Curb Inlet Lid |
| V.33 | Type 6 Curb Inlet Lid |
| V.34 | P-6 Curb Inlet |
| V.35 | Install 6" Underdrain |
| V.36 | Tie Underdrain into Existing Box |
| V.37 | Install 6" Underdrain Clean-out |

| | |
|---|---|
| V.38 | Install Concrete Collar |
| V.39 | Remove Concrete Collar |
| V.40 | Remove Box Inlet |
| V.41 | Remove concrete Drainage Structure |
| V.42 | Inlet Modification (One Side) |
| V.43 | Elliptical Pipe 12" x 18" |
| V.44 | Elliptical Pipe 14" x 23" |
| V.45 | Elliptical Pipe 19" x 30" |
| V.46 | Elliptical Pipe 24" x 38" |
| V.47 | Concrete Storm Drain (Elliptical 12" x 18") Mitered End |
| V.48 | Concrete Storm Drain (Elliptical 14" x 23") Mitered End |
| V.49 | Concrete Storm Drain (Elliptical 19" x 30") Mitered End |
| V.50 | Concrete Storm Drain (Elliptical 24" x 38") Mitered End |

## BID FORM ITEMS

## SECTION VI - CURB AND GUTTER, SIDEWALKS, AND DRIVEWAYS

| | |
|---|---|
| VI.1 | Miami Curb & Gutter |
| VI.2 | Type F Barrier Curb & Gutter |
| VI.3 | Modified Type F Curb |
| VI.4 | Type A Median Curb & Gutter |
| VI.5 | FDOT Headwalls |
| VI.6 | Type D Highback Curb |
| VI.7 | Type E Curb |
| VI.8 | Type A Valley Crossing |
| VI.9 | Type B Valley Crossing |
| VI.10 | Construct Sidewalk/Driveway |
| VI.11 | Miscellaneous Concrete Formed and Poured |
| VI.12 | Rebar |
| VI.13 | Remove Sidewalk/Driveway |
| VI.14 | Remove Curb & Gutter |
| VI.15 | Construct Asphalt Sidewalk/Driveway |
| VI.16 | Preparation for Curb & Gutter |
| VI.17 | Concrete Pumping |
| VI.18 | Truncated Domes |
| VI.19 | Standard Mail Box Relocation |
| VI.20 | Irrigation Capping |

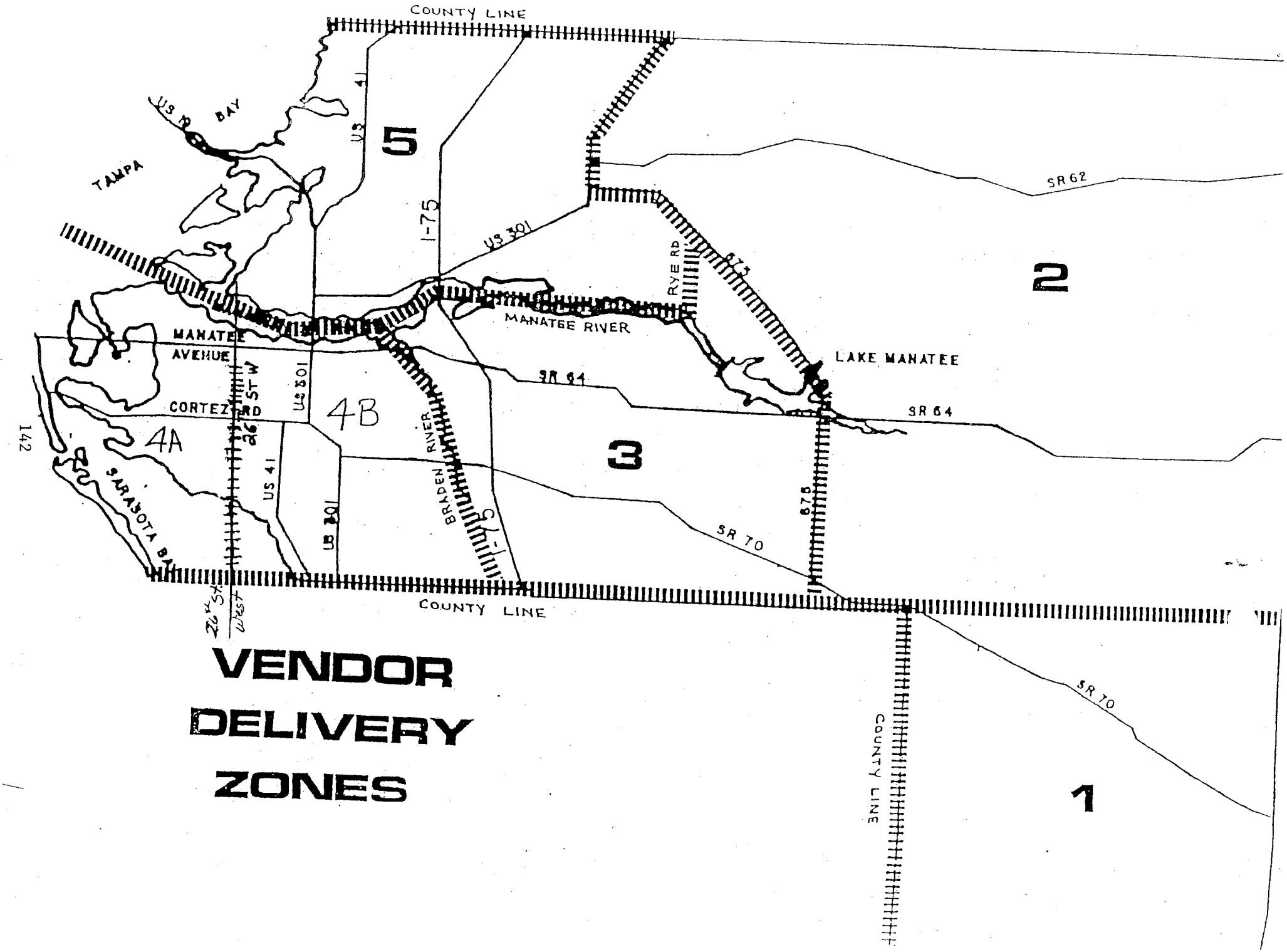
## BID FORM ITEMS

### SECTION VII - TRAFFIC CONTROL

| | |
|---|---|
| VII.1 | Traffic Control |
| VII.2 | Guardrail |
| VII.3 | Shop-Bent Panel |
| VII.4 | Special Post |
| VII.5 | Type IV Ends |

### SECTION VIII - FENCING

| | |
|---|---|
| VIII.1 | Chain Link Fence |
| VIII.2 | Gate |




# VENDOR DELIVERY ZONES

# BID FORM
## (Submit in Triplicate)

TO: Manatee County Purchasing
1112 Manatee Avenue West
Bradenton, Florida 34205

**RE: IFB #09-3328-DS Road Building Materials & Services**

**Overtime Surcharge shall be at the rate of $_____ per day.**

We, the undersigned, hereby declare that we have carefully reviewed the bid documents, and with full knowledge and understanding of the aforementioned herewith submit this bid, meeting each and every specification, term, and condition contained in the Invitation For Bids.

We understand that the bid technical specifications, terms, and conditions in their entirety shall be made a part of any agreement or contract between Manatee County and the successful bidder. Failure to comply shall result in contract default, whereupon, the defaulting contractor shall be required to pay for any and all re-procurement costs, damages, and attorney fees as incurred by the County.

**We understand that all the items listed on the following pages may or may not be used during this contract and my quoted price (for each item specified) shall establish a fixed lump sum for the work as required.**

Communications concerning this Bid shall be addressed as follows:

Person's Name: _____

Address: _____ Phone: _____

Date: _____ FL Contractor License# _____

Bidder is a WBE/MBE Vendor? _____ Certification # _____

FEIN NO.: _____

COMPANY'S NAME: _____

AUTHORIZED SIGNATURE(S): _____

Name and Title of Above Signer(s) _____

CO. MAILING ADDRESS: _____

_____

STATE OF INCORPORATION _____ (if applicable)

TELEPHONE: (____) _____ FAX: (_____) _____

Acknowledge Addendum Nos. ____ Dated: _____ Acknowledge Addendum Nos. _____ Dated____
Acknowledge Addendum Nos. ____ Dated: _____ Acknowledge Addendum Nos. _____ Dated____
Acknowledge Addendum Nos. ____ Dated: _____ Acknowledge Addendum Nos. _____ Dated____

## ROAD BUILDING MATERIALS SERVICES

**BID FORM**

(Submit in Triplicate)

## SECTION I - AGGREGATE

| I.1 | CRUSHED STONE #4 (1 1/2") | |
|---|---|---|
| LOCATION OF VENDOR'S PLANT: | | |
| DISTANCE OF VENDOR'S PLANT TO MANATEE COUNTY YARD: | | / MILES |
| PRICE F.O.B. VENDOR'S PLANT: | $ | / PER TON |
| PRICE VENDOR DELIVER TO MANATEE COUNTY YARD | $ | / PER TON |
| DELIVERY DAYS AFTER RECEIPT OF ORDER: | | / DAYS |
| **I.2** | **CRUSHED STONE #57** | |
| LOCATION OF VENDOR'S PLANT: | | |
| DISTANCE OF VENDOR'S PLANT TO MANATEE COUNTY YARD: | | / MILES |
| PRICE F.O.B. VENDOR'S PLANT: | $ | / PER TON |
| PRICE VENDOR DELIVER TO MANATEE COUNTY YARD | $ | / PER TON |
| DELIVERY DAYS AFTER RECEIPT OF ORDER: | | / DAYS |
| **I.3** | **COARSE AGGREGATE 3/8"** | |
| LOCATION OF VENDOR'S PLANT: | | |
| DISTANCE OF VENDOR'S PLANT TO MANATEE COUNTY YARD: | | / MILES |
| PRICE F.O.B. VENDOR'S PLANT: | $ | / PER TON |
| PRICE VENDOR DELIVER TO MANATEE COUNTY YARD | $ | / PER TON |
| DELIVERY DAYS AFTER RECEIPT OF ORDER: | | / DAYS |
| **I.4** | **COARSE MASONRY SAND** | |
| LOCATION OF VENDOR'S PLANT: | | |
| DISTANCE OF VENDOR'S PLANT TO MANATEE COUNTY YARD: | | / MILES |
| PRICE F.O.B. VENDOR'S PLANT: | $ | / PER TON |
| PRICE VENDOR DELIVER TO MANATEE COUNTY YARD | $ | / PER TON |
| DELIVERY DAYS AFTER RECEIPT OF ORDER: | | / DAYS |

## ROAD BUILDING MATERIALS SERVICES

**BID FORM**

(Submit in Triplicate)

## SECTION I - AGGREGATE

| I.5 | CONCRETE SAND | | |
|---|---|---|---|
| LOCATION OF VENDOR'S PLANT: | | | |
| DISTANCE OF VENDOR'S PLANT TO MANATEE COUNTY YARD: | | | / MILES |
| PRICE F.O.B. VENDOR'S PLANT: | | $ | / PER TON |
| PRICE VENDOR DELIVER TO MANATEE COUNTY YARD | | $ | / PER TON |
| DELIVERY DAYS AFTER RECEIPT OF ORDER: | | | / DAYS |

| I.6 | FILL DIRT (CUBIC YARD) | | |
|---|---|---|---|
| LOCATION OF VENDOR'S PLANT: | | | |
| PRICE F.O.B. VENDOR'S PLANT: | | $ | / PER CY |
| PRICE VENDOR DELIVER TO JOB SITE: | | | |
| ZONE 1 | 0 - 2,000 CY | $ | / PER CY |
| | OVER 2,000 CY | $ | / PER CY |
| ZONE 2 | 0 - 2,000 CY | $ | / PER CY |
| | OVER 2,000 CY | $ | / PER CY |
| ZONE 3 | 0 - 2,000 CY | $ | / PER CY |
| | OVER 2,000 CY | $ | / PER CY |
| ZONE 4A | 0 - 2,000 CY | $ | / PER CY |
| | OVER 2,000 CY | $ | / PER CY |
| ZONE 4B | 0 - 2,000 CY | $ | / PER CY |
| | OVER 2,000 CY | $ | / PER CY |
| ZONE 5 | 0 - 2,000 CY | $ | / PER CY |
| | OVER 2,000 CY | $ | / PER CY |
| DELIVERY DAYS AFTER RECEIPT OF ORDER: | | | / DAYS |

## SECTION I - AGGREGATE

| I.7 | FILL DIRT (TON) | |
|---|---|---|
| LOCATION OF VENDOR'S PLANT: | | |
| PRICE F.O.B. VENDOR'S PLANT: | | / PER TON |
| PRICE VENDOR DELIVER TO JOB SITE: | | |
| ZONE 1 | 0 - 2,000 TONS | $ / PER TON |
| | OVER 2,000 TONS | $ / PER TON |
| ZONE 2 | 0 - 2,000 TONS | $ / PER TON |
| | OVER 2,000 TONS | $ / PER TON |
| ZONE 3 | 0 - 2,000 TONS | $ / PER TON |
| | OVER 2,000 TONS | $ / PER TON |
| ZONE 4A | 0 - 2,000 TONS | $ / PER TON |
| | OVER 2,000 TONS | $ / PER TON |
| ZONE 4B | 0 - 2,000 TONS | $ / PER TON |
| | OVER 2,000 TONS | $ / PER TON |
| ZONE 5 | 0 - 2,000 TONS | $ / PER TON |
| | OVER 2,000 TONS | $ / PER TON |
| DELIVERY DAYS AFTER RECEIPT OF ORDER: | | / DAYS |

## ROAD BUILDING MATERIALS SERVICES
### BID FORM
(Submit in Triplicate)

## SECTION I - AGGREGATE

| I.8 | SHELL BASE BANK RUN SHELL | |
|---|---|---|
| LOCATION OF VENDOR'S PLANT: | | |
| DISTANCE OF VENDOR'S PLANT TO MANATEE COUNTY YARD: | | / MILES |
| PRICE F.O.B. VENDOR'S PLANT: | | $ / PER TON |
| PRICE VENDOR DELIVER TO MANATEE COUNTY YARD | | $ / PER TON |
| PRICE VENDOR DELIVER TO JOB SITE: | | |
| ZONE 1 | 0 - 500 TONS | $ / PER TON |
| | OVER 500 TONS | $ / PER TON |
| ZONE 2 | 0 - 500 TONS | $ / PER TON |
| | OVER 500 TONS | $ / PER TON |
| ZONE 3 | 0 - 500 TONS | $ / PER TON |
| | OVER 500 TONS | $ / PER TON |
| ZONE 4A | 0 - 500 TONS | $ / PER TON |
| | OVER 500 TONS | $ / PER TON |
| ZONE 4B | 0 - 500 TONS | $ / PER TON |
| | OVER 500 TONS | $ / PER TON |
| ZONE 5 | 0 - 500 TONS | $ / PER TON |
| | OVER 500 TONS | $ / PER TON |
| DELIVERY DAYS AFTER RECEIPT OF ORDER: | | / DAYS |

## SECTION I - AGGREGATE

| I.9 SHELL BASE BANK RUN SHELL @ < 16% MOISTURE CONTENT | | |
|---|---|---|
| LOCATION OF VENDOR'S PLANT: | | |
| DISTANCE OF VENDOR'S PLANT TO MANATEE COUNTY YARD: | | / MILES |
| PRICE F.O.B. VENDOR'S PLANT: | $ | / PER TON |
| PRICE VENDOR DELIVER TO MANATEE COUNTY YARD | $ | / PER TON |
| PRICE VENDOR DELIVER TO JOB SITE: | | |
| ZONE 1 0 - 500 TONS | $ | / PER TON |
| OVER 500 TONS | $ | / PER TON |
| ZONE 2 0 - 500 TONS | $ | / PER TON |
| OVER 500 TONS | $ | / PER TON |
| ZONE 3 0 - 500 TONS | $ | / PER TON |
| OVER 500 TONS | $ | / PER TON |
| ZONE 4A 0 - 500 TONS | $ | / PER TON |
| OVER 500 TONS | $ | / PER TON |
| ZONE 4B 0 - 500 TONS | $ | / PER TON |
| OVER 500 TONS | $ | / PER TON |
| ZONE 5 0 - 500 TONS | $ | / PER TON |
| OVER 500 TONS | $ | / PER TON |
| DELIVERY DAYS AFTER RECEIPT OF ORDER: | | / DAYS |

## ROAD BUILDING MATERIALS SERVICES

**BID FORM**

(Submit in Triplicate)

## SECTION I - AGGREGATE

| I.10 | SUBBASE STABILIZATION MATERIALS | | |
|---|---|---|---|
| LOCATION OF VENDOR'S PLANT: | | | |
| DISTANCE OF VENDOR'S PLANT TO MANATEE COUNTY YARD: | | | / MILES |
| PRICE F.O.B. VENDOR'S PLANT: | | $ | / PER TON |
| PRICE VENDOR DELIVER TO MANATEE COUNTY YARD | | $ | / PER TON |
| PRICE VENDOR DELIVER TO JOB SITE: | | | |
| ZONE 1 | 0 - 500 TONS | $ | / PER TON |
| | OVER 500 TONS | $ | / PER TON |
| ZONE 2 | 0 - 500 TONS | $ | / PER TON |
| | OVER 500 TONS | $ | / PER TON |
| ZONE 3 | 0 - 500 TONS | $ | / PER TON |
| | OVER 500 TONS | $ | / PER TON |
| ZONE 4A | 0 - 500 TONS | $ | / PER TON |
| | OVER 500 TONS | $ | / PER TON |
| ZONE 4B | 0 - 500 TONS | $ | / PER TON |
| | OVER 500 TONS | $ | / PER TON |
| ZONE 5 | 0 - 500 TONS | $ | / PER TON |
| | OVER 500 TONS | $ | / PER TON |
| DELIVERY DAYS AFTER RECEIPT OF ORDER: | | | / DAYS |

## ROAD BUILDING MATERIALS SERVICES
### BID FORM
(Submit in Triplicate)

## SECTION I - AGGREGATE

| I.11 | WASHED SHELL 1/2" | | |
|---|---|---|---|
| LOCATION OF VENDOR'S PLANT: | | | |
| DISTANCE OF VENDOR'S PLANT TO MANATEE COUNTY YARD: | | | / MILES |
| PRICE F.O.B. VENDOR'S PLANT: | | $ | / PER TON |
| PRICE VENDOR DELIVER TO MANATEE COUNTY YARD | | $ | / PER TON |
| PRICE VENDOR DELIVER TO JOB SITE: | | | |
| ZONE 1 | 0 - 500 TONS | $ | / PER TON |
| | OVER 500 TONS | $ | / PER TON |
| ZONE 2 | 0 - 500 TONS | $ | / PER TON |
| | OVER 500 TONS | $ | / PER TON |
| ZONE 3 | 0 - 500 TONS | $ | / PER TON |
| | OVER 500 TONS | $ | / PER TON |
| ZONE 4A | 0 - 500 TONS | $ | / PER TON |
| | OVER 500 TONS | $ | / PER TON |
| ZONE 4B | 0 - 500 TONS | $ | / PER TON |
| | OVER 500 TONS | $ | / PER TON |
| ZONE 5 | 0 - 500 TONS | $ | / PER TON |
| | OVER 500 TONS | $ | / PER TON |
| DELIVERY DAYS AFTER RECEIPT OF ORDER: | | | / DAYS |

## SECTION I - AGGREGATE

| I.12 | WASHED SHELL 1" | | |
|---|---|---|---|
| LOCATION OF VENDOR'S PLANT: | | | |
| DISTANCE OF VENDOR'S PLANT TO MANATEE COUNTY YARD: | | | / MILES |
| PRICE F.O.B. VENDOR'S PLANT: | | $ | / PER TON |
| PRICE VENDOR DELIVER TO MANATEE COUNTY YARD | | $ | / PER TON |
| PRICE VENDOR DELIVER TO JOB SITE: | | | |
| ZONE 1 | 0 - 500 TONS | $ | / PER TON |
| | OVER 500 TONS | $ | / PER TON |
| ZONE 2 | 0 - 500 TONS | $ | / PER TON |
| | OVER 500 TONS | $ | / PER TON |
| ZONE 3 | 0 - 500 TONS | $ | / PER TON |
| | OVER 500 TONS | $ | / PER TON |
| ZONE 4A | 0 - 500 TONS | $ | / PER TON |
| | OVER 500 TONS | $ | / PER TON |
| ZONE 4B | 0 - 500 TONS | $ | / PER TON |
| | OVER 500 TONS | $ | / PER TON |
| ZONE 5 | 0 - 500 TONS | $ | / PER TON |
| | OVER 500 TONS | $ | / PER TON |
| DELIVERY DAYS AFTER RECEIPT OF ORDER: | | | / DAYS |

## SECTION I - AGGREGATE

| I.13 | WASHED SHELL 3" | | |
|---|---|---|---|
| LOCATION OF VENDOR'S PLANT: | | | |
| DISTANCE OF VENDOR'S PLANT TO MANATEE COUNTY YARD: | | | / MILES |
| PRICE F.O.B. VENDOR'S PLANT: | | $ | / PER TON |
| PRICE VENDOR DELIVER TO MANATEE COUNTY YARD | | $ | / PER TON |
| PRICE VENDOR DELIVER TO JOB SITE: | | | |
| ZONE 1 | 0 - 500 TONS | $ | / PER TON |
| | OVER 500 TONS | $ | / PER TON |
| ZONE 2 | 0 - 500 TONS | $ | / PER TON |
| | OVER 500 TONS | $ | / PER TON |
| ZONE 3 | 0 - 500 TONS | $ | / PER TON |
| | OVER 500 TONS | $ | / PER TON |
| ZONE 4A | 0 - 500 TONS | $ | / PER TON |
| | OVER 500 TONS | $ | / PER TON |
| ZONE 4B | 0 - 500 TONS | $ | / PER TON |
| | OVER 500 TONS | $ | / PER TON |
| ZONE 5 | 0 - 500 TONS | $ | / PER TON |
| | OVER 500 TONS | $ | / PER TON |
| DELIVERY DAYS AFTER RECEIPT OF ORDER: | | | / DAYS |

## SECTION I - AGGREGATE

| I.14 | SHELL SCREENINGS TDS 1/2" | |
|---|---|---|
| LOCATION OF VENDOR'S PLANT: | | |
| DISTANCE OF VENDOR'S PLANT TO MANATEE COUNTY YARD: | | / MILES |
| PRICE F.O.B. VENDOR'S PLANT: | | $ / PER TON |
| PRICE VENDOR DELIVER TO MANATEE COUNTY YARD | | $ / PER TON |
| PRICE VENDOR DELIVER TO JOB SITE: | | |
| ZONE 1 | 0 - 500 TONS | $ / PER TON |
| | OVER 500 TONS | $ / PER TON |
| ZONE 2 | 0 - 500 TONS | $ / PER TON |
| | OVER 500 TONS | $ / PER TON |
| ZONE 3 | 0 - 500 TONS | $ / PER TON |
| | OVER 500 TONS | $ / PER TON |
| ZONE 4A | 0 - 500 TONS | $ / PER TON |
| | OVER 500 TONS | $ / PER TON |
| ZONE 4B | 0 - 500 TONS | $ / PER TON |
| | OVER 500 TONS | $ / PER TON |
| ZONE 5 | 0 - 500 TONS | $ / PER TON |
| | OVER 500 TONS | $ / PER TON |
| DELIVERY DAYS AFTER RECEIPT OF ORDER: | | / DAYS |

## ROAD BUILDING MATERIALS SERVICES
### BID FORM
(Submit in Triplicate)

## SECTION I - AGGREGATE

| I.15 | LIMEROCK BASE MATERIAL | | |
|---|---|---|---|
| LOCATION OF VENDOR'S PLANT: | | | |
| DISTANCE OF VENDOR'S PLANT TO MANATEE COUNTY YARD: | | | / MILES |
| PRICE F.O.B. VENDOR'S PLANT: | | $ | / PER TON |
| PRICE VENDOR DELIVER TO MANATEE COUNTY YARD | | $ | / PER TON |
| PRICE VENDOR DELIVER TO JOB SITE: | | | |
| ZONE 1 | 0 - 500 TONS | $ | / PER TON |
| | OVER 500 TONS | $ | / PER TON |
| ZONE 2 | 0 - 500 TONS | $ | / PER TON |
| | OVER 500 TONS | $ | / PER TON |
| ZONE 3 | 0 - 500 TONS | $ | / PER TON |
| | OVER 500 TONS | $ | / PER TON |
| ZONE 4A | 0 - 500 TONS | $ | / PER TON |
| | OVER 500 TONS | $ | / PER TON |
| ZONE 4B | 0 - 500 TONS | $ | / PER TON |
| | OVER 500 TONS | $ | / PER TON |
| ZONE 5 | 0 - 500 TONS | $ | / PER TON |
| | OVER 500 TONS | $ | / PER TON |
| DELIVERY DAYS AFTER RECEIPT OF ORDER: | | | / DAYS |

## ROAD BUILDING MATERIALS SERVICES

**BID FORM**

(Submit in Triplicate)

## SECTION I - AGGREGATE

| I.16 | CRUSHED CONCRETE AGGREGATE BASE MATERIALS | |
|---|---|---|
| LOCATION OF VENDOR'S PLANT: | | |
| DISTANCE OF VENDOR'S PLANT TO MANATEE COUNTY YARD: | | / MILES |
| PRICE F.O.B. VENDOR'S PLANT: | | $ / PER TON |
| PRICE VENDOR DELIVER TO MANATEE COUNTY YARD | | $ / PER TON |
| PRICE VENDOR DELIVER TO JOB SITE: | | |
| ZONE 1 | 0 - 500 TONS | $ / PER TON |
| | OVER 500 TONS | $ / PER TON |
| ZONE 2 | 0 - 500 TONS | $ / PER TON |
| | OVER 500 TONS | $ / PER TON |
| ZONE 3 | 0 - 500 TONS | $ / PER TON |
| | OVER 500 TONS | $ / PER TON |
| ZONE 4A | 0 - 500 TONS | $ / PER TON |
| | OVER 500 TONS | $ / PER TON |
| ZONE 4B | 0 - 500 TONS | $ / PER TON |
| | OVER 500 TONS | $ / PER TON |
| ZONE 5 | 0 - 500 TONS | $ / PER TON |
| | OVER 500 TONS | $ / PER TON |
| DELIVERY DAYS AFTER RECEIPT OF ORDER: | | / DAYS |

| I.17 | #7 COARSE AGGREGATE 1/2" | |
|---|---|---|
| LOCATION OF VENDOR'S PLANT: | | |
| DISTANCE OF VENDOR'S PLANT TO MANATEE COUNTY YARD: | | / MILES |
| PRICE F.O.B. VENDOR'S PLANT: | | $ / PER TON |
| PRICE VENDOR DELIVER TO MANATEE COUNTY YARD | | $ / PER TON |
| DELIVERY DAYS AFTER RECEIPT OF ORDER: | | / DAYS |

## ROAD BUILDING MATERIALS SERVICES

**BID FORM**

(Submit in Triplicate)

## SECTION II - LIQUID ASPHALT

| II.1 | ASPHALT EMULSION TYPE RS-1 | |
|---|---|---|
| LOCATION OF VENDOR'S PLANT: | | |
| DISTANCE OF VENDOR'S PLANT TO MANATEE COUNTY YARD: | | / MILES |
| PRICE F.O.B. VENDOR'S PLANT: | $ | **/ PER GAL** |
| PRICE VENDOR DELIVER TO MANATEE COUNTY YARD | $ | **/ PER GAL** |
| DELIVERY DAYS AFTER RECEIPT OF ORDER: | | / DAYS |
| **II.2** | **ASPHALT EMULSION TYPE RS-2** | |
| LOCATION OF VENDOR'S PLANT: | | |
| DISTANCE OF VENDOR'S PLANT TO MANATEE COUNTY YARD: | | / MILES |
| PRICE F.O.B. VENDOR'S PLANT: | $ | **/ PER GAL** |
| PRICE VENDOR DELIVER TO MANATEE COUNTY YARD | $ | **/ PER GAL** |
| DELIVERY DAYS AFTER RECEIPT OF ORDER: | | / DAYS |
| **II.3** | **EPRS (EMULSION PRIME TYPE RS) AS PER FLORIDA DOT SPECS. 916-5** | |
| LOCATION OF VENDOR'S PLANT: | | |
| DISTANCE OF VENDOR'S PLANT TO MANATEE COUNTY YARD: | | / MILES |
| PRICE F.O.B. VENDOR'S PLANT: | $ | **/ PER GAL** |
| PRICE VENDOR DELIVER TO MANATEE COUNTY YARD | $ | **/ PER GAL** |
| DELIVERY DAYS AFTER RECEIPT OF ORDER: | | / DAYS |

## ROAD BUILDING MATERIALS SERVICES
### BID FORM
(Submit in Triplicate)

## SECTION III - PAVEMENT BASE CONSTRUCTION

| III.1 | SHAPE, MIX AND COMPACT MATERIALS FOR SUB-GRADE STABILIZATION OR EXISTING BASE - Specification: F.D.O.T. Sections 200 thru 290 as applicable | | |
|---|---|---|---|
| 6" DEPTH | 0 - 2,000 SY | $ | / PER SY |
| | 2,001 - 10,000 SY | $ | / PER SY |
| | OVER 10,000 SY | $ | / PER SY |
| 8" DEPTH | 0 - 2,000 SY | $ | / PER SY |
| | 2,001 - 10,000 SY | $ | / PER SY |
| | OVER 10,000 SY | $ | / PER SY |
| 12" DEPTH | 0 - 2,000 SY | $ | / PER SY |
| | 2,001 - 10,000 SY | $ | / PER SY |
| | OVER 10,000 SY | $ | / PER SY |
| | DELIVERY DAYS AFTER RECEIPT OF ORDER: | | / DAYS |

| III.2 | PLACE, SHAPE, AND COMPACT SHELL, LIMEROCK, OR CRUSHED CONCRETE BASE - Specification: F.D.O.T. Sections 200 and 250 as applicable | | |
|---|---|---|---|
| 6" DEPTH | 0 - 2,000 SY | $ | / PER SY |
| | 2,001 - 10,000 SY | $ | / PER SY |
| | OVER 10,000 SY | $ | / PER SY |
| 8" DEPTH | 0 - 2,000 SY | $ | / PER SY |
| | 2,001 - 10,000 SY | $ | / PER SY |
| | OVER 10,000 SY | $ | / PER SY |
| 12" DEPTH | 0 - 2,000 SY | $ | / PER SY |
| | 2,001 - 10,000 SY | $ | / PER SY |
| | OVER 10,000 SY | $ | / PER SY |
| | DELIVERY DAYS AFTER RECEIPT OF ORDER: | | / DAYS |

## SECTION III - PAVEMENT BASE CONSTRUCTION

| | | | |
|---|---|---|---|
| III.3 | **PRIME AND MAT - Specification: Prime with 0.1 to 0.2 Gallons per square yard and mat (F.D.O.T. INDEX 300)** | | |
| | 0 - 500 SY | $ | / PER SY |
| | 501 - 1,000 SY | $ | / PER SY |
| | 1,001 - 2,500 SY | $ | / PER SY |
| | OVER 2,500 SY | $ | / PER SY |
| | DELIVERY DAYS AFTER RECEIPT OF ORDER: | | / DAYS |
| III.4 | **EXCAVATION (DIRT REMOVAL)** | | |
| | 0 - 200 CY | $ | / PER CY |
| | 201 - 2,000 CY | $ | / PER CY |
| | OVER 2,000 CY | $ | / PER CY |
| | DELIVERY DAYS AFTER RECEIPT OF ORDER: | | / DAYS |
| III.5 | **CLEARING & GRUBBING** | | |
| | 0 - 200 CY | $ | / PER SY |
| | 201 - 2,000 CY | $ | / PER SY |
| | OVER 2,000 CY | $ | / PER SY |
| | DELIVERY DAYS AFTER RECEIPT OF ORDER: | | / DAYS |
| III.6 | **FINAL DRESSING OF SHOULDERS (Labor and Equipment)** | | |
| | 0 - 200 CY | $ | / PER SY |
| | 201 - 2,000 CY | $ | / PER SY |
| | OVER 2,000 CY | $ | / PER SY |
| | DELIVERY DAYS AFTER RECEIPT OF ORDER: | | / DAYS |

## SECTION III - PAVEMENT BASE CONSTRUCTION

| III.7 | TRAFFIC MAINTENANCE SIGNS AND BARRICADES RENTAL | | |
|---|---|---|---|
| (A) | BARRICADES | | |
| | TYPE A (without light) | $ | / PER UNIT DAY |
| | TYPE II (without light) - 48" minimum length | $ | / PER UNIT DAY |
| | TYPE III (without light) - 72" minimum length | $ | / PER UNIT DAY |
| (B) | BARRICADE LIGHTS | | |
| | TYPE A - FLASHING | $ | / PER UNIT DAY |
| | TYPE B - STEADY BURN | $ | / PER UNIT DAY |
| (C) | TRAFFIC BARRELS - ORANGE PLASTIC WITH REFLECTIVE COLLARS | | |
| | 18" DIAMETER x 48" HIGH MINIMUM | $ | / PER UNIT DAY |
| (D) | TRAFFIC CONES - ORANGE PLASTIC WITH REFLECTIVE COLLARS | | |
| | 24" HIGH | $ | / PER UNIT DAY |
| | 36" HIGH | $ | / PER UNIT DAY |
| (E) | TRAFFIC SIGNS - REFLECTORIZED FACED WITH ENGINEERING GRADE OR BETTER MATERIAL. EXACT TYPE TO BE ORDERED TO FIT JOB SITE: | | |
| | 36" x 36" | $ | / PER UNIT DAY |
| | 48" x 48" | $ | / PER UNIT DAY |
| | 18" x 24" | $ | / PER UNIT DAY |
| | 60" x 30" | $ | / PER UNIT DAY |
| | 48" x 30" | $ | / PER UNIT DAY |
| (F) | ARROW BOARDS - SELF CONTAINED, TRAILER MOUNTED, 48"H x 60"W MINIMAL SIZE | | |
| | ARROW(S) ONLY | $ | / PER UNIT DAY |
| | VARIABLE MESSAGE | $ | / PER UNIT DAY |
| (G) | PRE-CAST CONCRETE TEMPORARY BARRIER WALL SECTIONS PER FLORIDA DOT INDEX NO. 415 | | |
| | PER SECTION - 12" MINIMUM LENGTH | $ | / PER UNIT DAY |
| | DELIVERY DAYS AFTER RECEIPT OF ORDER: | | / DAYS |

## SECTION III - PAVEMENT BASE CONSTRUCTION

| III.8 | FILL DIRT PLACING (PLACE, SHAPE, AND COMPACT FILL) | | |
|---|---|---|---|
| ZONE 1 | 0 - 200 CY | $ | / PER CY |
| | 201 - 2,000 CY | $ | / PER CY |
| | OVER 2,000 CY | $ | / PER CY |
| ZONE 2 | 0 - 200 CY | $ | / PER CY |
| | 201 - 2,000 CY | $ | / PER CY |
| | OVER 2,000 CY | $ | / PER CY |
| ZONE 3 | 0 - 200 CY | $ | / PER CY |
| | 201 - 2,000 CY | $ | / PER CY |
| | OVER 2,000 CY | $ | / PER CY |
| ZONE 4A | 0 - 200 CY | $ | / PER CY |
| | 201 - 2,000 CY | $ | / PER CY |
| | OVER 2,000 CY | $ | / PER CY |
| ZONE 4B | 0 - 200 CY | $ | / PER CY |
| | 201 - 2,000 CY | $ | / PER CY |
| | OVER 2,000 CY | $ | / PER CY |
| ZONE 5 | 0 - 200 CY | $ | / PER CY |
| | 201 - 2,000 CY | $ | / PER CY |
| | OVER 2,000 CY | $ | / PER CY |
| DELIVERY DAYS AFTER RECEIPT OF ORDER: | | | / DAYS |

## SECTION III - PAVEMENT BASE CONSTRUCTION

| III.9 | SEEDING (Water & Fertilizer are separate bid items) FDOT Section 570 | | |
|---|---|---|---|
| ZONE 1 | 0 - 500 SY | $ | / PER SY |
| | 501 - 5,000 SY | $ | / PER SY |
| | 5,001 - 12,000 SY | $ | / PER SY |
| | 12,001 - 22,000 SY | $ | / PER SY |
| | OVER 22,000 SY | $ | / PER SY |
| ZONE 2 | 0 - 500 SY | $ | / PER SY |
| | 501 - 5,000 SY | $ | / PER SY |
| | 5,001 - 12,000 SY | $ | / PER SY |
| | 12,001 - 22,000 SY | $ | / PER SY |
| | OVER 22,000 SY | $ | / PER SY |
| ZONE 3 | 0 - 500 SY | $ | / PER SY |
| | 501 - 5,000 SY | $ | / PER SY |
| | 5,001 - 12,000 SY | $ | / PER SY |
| | 12,001 - 22,000 SY | $ | / PER SY |
| | OVER 22,000 SY | $ | / PER SY |
| ZONE 4A | 0 - 500 SY | $ | / PER SY |
| | 501 - 5,000 SY | $ | / PER SY |
| | 5,001 - 12,000 SY | $ | / PER SY |
| | 12,001 - 22,000 SY | $ | / PER SY |
| | OVER 22,000 SY | $ | / PER SY |
| ZONE 4B | 0 - 500 SY | $ | / PER SY |
| | 501 - 5,000 SY | $ | / PER SY |
| | 5,001 - 12,000 SY | $ | / PER SY |
| | 12,001 - 22,000 SY | $ | / PER SY |
| | OVER 22,000 SY | $ | / PER SY |

## SECTION III - PAVEMENT BASE CONSTRUCTION

| III.9 | SEEDING (continued) | | |
|---|---|---|---|
| ZONE 5 | 0 - 500 SY | $ | / PER SY |
| | 501 - 5,000 SY | $ | / PER SY |
| | 5,001 - 12,000 SY | $ | / PER SY |
| | 12,001 - 22,000 SY | $ | / PER SY |
| | OVER 22,000 SY | $ | / PER SY |
| | DELIVERY DAYS AFTER RECEIPT OF ORDER: | | / DAYS |
| III.10 | SODDING - BAHIA (Water and Fertilizer are separate bid items) FDOT Section 575 | | |
| ZONE 1 | 0 - 50 SY | $ | / PER SY |
| | 51 - 500 SY | $ | / PER SY |
| | OVER 500 SY | $ | / PER SY |
| ZONE 2 | 0 - 50 SY | $ | / PER SY |
| | 51 - 500 SY | $ | / PER SY |
| | OVER 500 SY | $ | / PER SY |
| ZONE 3 | 0 - 50 SY | $ | / PER SY |
| | 51 - 500 SY | $ | / PER SY |
| | OVER 500 SY | $ | / PER SY |
| ZONE 4A | 0 - 50 SY | $ | / PER SY |
| | 51 - 500 SY | $ | / PER SY |
| | OVER 500 SY | $ | / PER SY |
| ZONE 4B | 0 - 50 SY | $ | / PER SY |
| | 51 - 500 SY | $ | / PER SY |
| | OVER 500 SY | $ | / PER SY |
| ZONE 5 | 0 - 50 SY | $ | / PER SY |
| | 51 - 500 SY | $ | / PER SY |
| | OVER 500 SY | $ | / PER SY |
| | DELIVERY DAYS AFTER RECEIPT OF ORDER: | | / DAYS |

## SECTION III - PAVEMENT BASE CONSTRUCTION

| III.11 | SODDING - ST. AUGUSTINE (Water and Fertilizer are separate bid items) FDOT Section 575 | | |
|---|---|---|---|
| ZONE 1 | 0 - 50 SY | $ | / PER SY |
| | 51 - 500 SY | $ | / PER SY |
| | OVER 500 SY | $ | / PER SY |
| ZONE 2 | 0 - 50 SY | $ | / PER SY |
| | 51 - 500 SY | $ | / PER SY |
| | OVER 500 SY | $ | / PER SY |
| ZONE 3 | 0 - 50 SY | $ | / PER SY |
| | 51 - 500 SY | $ | / PER SY |
| | OVER 500 SY | $ | / PER SY |
| ZONE 4A | 0 - 50 SY | $ | / PER SY |
| | 51 - 500 SY | $ | / PER SY |
| | OVER 500 SY | $ | / PER SY |
| ZONE 4B | 0 - 50 SY | $ | / PER SY |
| | 51 - 500 SY | $ | / PER SY |
| | OVER 500 SY | $ | / PER SY |
| ZONE 5 | 0 - 50 SY | $ | / PER SY |
| | 51 - 500 SY | $ | / PER SY |
| | OVER 500 SY | $ | / PER SY |
| DELIVERY DAYS AFTER RECEIPT OF ORDER: | | | / DAYS |

## SECTION III - PAVEMENT BASE CONSTRUCTION

| III.12 | SODDING - BERMUDA (Water and Fertilizer are separate bid items) FDOT Section 575 | | |
|---|---|---|---|
| ZONE 1 | 0 - 50 SY | $ | / PER SY |
| | 51 - 500 SY | $ | / PER SY |
| | OVER 500 SY | $ | / PER SY |
| ZONE 2 | 0 - 50 SY | $ | / PER SY |
| | 51 - 500 SY | $ | / PER SY |
| | OVER 500 SY | $ | / PER SY |
| ZONE 3 | 0 - 50 SY | $ | / PER SY |
| | 51 - 500 SY | $ | / PER SY |
| | OVER 500 SY | $ | / PER SY |
| ZONE 4A | 0 - 50 SY | $ | / PER SY |
| | 51 - 500 SY | $ | / PER SY |
| | OVER 500 SY | $ | / PER SY |
| ZONE 4B | 0 - 50 SY | $ | / PER SY |
| | 51 - 500 SY | $ | / PER SY |
| | OVER 500 SY | $ | / PER SY |
| ZONE 5 | 0 - 50 SY | $ | / PER SY |
| | 51 - 500 SY | $ | / PER SY |
| | OVER 500 SY | $ | / PER SY |
| | DELIVERY DAYS AFTER RECEIPT OF ORDER: | | / DAYS |
| III.13 | WATER FOR SEEDING AND SODDING | $ | / PER 250 GAL |
| | | $ | / PER 500 GAL |
| | | $ | / PER 1,000 GAL |
| III.14 | FERTILIZER FOR SEEDING AND SODDING | $ | / PER 1,000 LBS |

## SECTION III - PAVEMENT BASE CONSTRUCTION

| III.15 | PLANT MIX SOIL CEMENT - Manatee County Spec 403.0 | | |
|---|---|---|---|
| | LOCATION OF VENDOR'S PLANT: | | |
| | PRICE F.O.B. VENDOR'S PLANT: | $ | / PER TON |
| | PRICE VENDOR DELIVER TO: ZONE 1 | $ | / PER TON |
| | ZONE 2 | $ | / PER TON |
| | ZONE 3 | $ | / PER TON |
| | ZONE 4A | $ | / PER TON |
| | ZONE 4B | $ | / PER TON |
| | ZONE 5 | $ | / PER TON |
| | DELIVERY DAYS AFTER RECEIPT OF ORDER: | | / DAYS |
| III.16 | **PAVEMENT REMOVAL - Excavate and remove existing pavement surface, base and subgrade as applicable** | | |
| 4" DEPTH | 0 - 100 SY | $ | / PER SY |
| | 101 - 250 SY | $ | / PER SY |
| | 251 - 500 SY | $ | / PER SY |
| | OVER 500 SY | $ | / PER SY |
| 6" DEPTH | 0 - 100 SY | $ | / PER SY |
| | 101 - 250 SY | $ | / PER SY |
| | 251 - 500 SY | $ | / PER SY |
| | OVER 500 SY | $ | / PER SY |
| 8" DEPTH | 0 - 100 SY | $ | / PER SY |
| | 101 - 250 SY | $ | / PER SY |
| | 251 - 500 SY | $ | / PER SY |
| | OVER 500 SY | $ | / PER SY |
| | DELIVERY DAYS AFTER RECEIPT OF ORDER: | | / DAYS |

## SECTION III - PAVEMENT BASE CONSTRUCTION

| | | |
|---|---|---|
| **III.17** | **CEMENT TREATED AGGREGATE BASE - MANATEE COUNTY SPEC 403.3** | |
| LOCATION OF VENDOR'S PLANT: | | |
| PRICE F.O.B. VENDOR'S PLANT: | $ | / PER TON |
| PRICE VENDOR DELIVER TO: | | |
| ZONE 1 | $ | / PER TON |
| ZONE 2 | $ | / PER TON |
| ZONE 3 | $ | / PER TON |
| ZONE 4A | $ | / PER TON |
| ZONE 4B | $ | / PER TON |
| ZONE 5 | $ | / PER TON |
| DELIVERY DAYS AFTER RECEIPT OF ORDER: | | / DAYS |
| **III.18** | **DUST CONTROL AGENT (Prices to include mobilization, material, equipment & labor)** | |
| 0 - 15,000 SY | $ | / PER SY |
| 15,001 - 30,000 SY | $ | / PER SY |
| 30,001 - 45,000 SY | $ | / PER SY |
| DELIVERY DAYS AFTER RECEIPT OF ORDER: | | / DAYS |
| **III.19** | **DUST CONTROL AGENT (Price vendor deliver to Manatee County Yard)** | |
| MINIMUM 1,000 GALLONS | $ | / PER GAL |
| DELIVERY DAYS AFTER RECEIPT OF ORDER: | | / DAYS |

## ROAD BUILDING MATERIALS SERVICES
### BID FORM
(Submit in Triplicate)

## SECTION III - PAVEMENT BASE CONSTRUCTION

**III.20** **BASE RECONSTRUCTION - The existing surface & base shall be scarified and/or milled so as the maximum size material will pass a 2" screen. The material will then be mixed to produce a new monolithic base material; then spread across the full width of the road bed to a uniform depth 1' wider than the proposed Asphaltic Concrete Surface. The new base shall be compacted to 98% modified ASHTO T180. Density shall be determined using test strips & Density Control Nuclear Method.**

| | | |
|---|---|---|
| MOBILIZATION (LUMP SUM) | $ | / EACH |
| 1,000 - 5,000 SY | $ | / PER SY |
| OVER 5,000 SY | $ | / PER SY |
| DELIVERY DAYS AFTER RECEIPT OF ORDER: | | / DAYS |

**III.21 EQUIPMENT RENTAL - MOTOR GRADER (CAT 12 OR EQUIVALENT)**

| | | |
|---|---|---|
| WITH OPERATOR | $ | /PER HOUR |
| | $ | /PER WEEK |
| DELIVERY DAYS AFTER RECEIPT OF ORDER: | | / DAYS |

**III.22 EQUIPMENT RENTAL - FRONT END LOADER**

| | | |
|---|---|---|
| CAT 950 OR EQUIVALENT WITH 3/4 CY BUCKET | $ | /PER HOUR |
| WITH OPERATOR | $ | /PER WEEK |
| CAT 950 OR EQUIVALENT WITH 1 CY BUCKET | $ | /PER HOUR |
| WITH OPERATOR | $ | /PER WEEK |
| CAT 950 OR EQUIVALENT WITH 3 CY BUCKET | $ | /PER HOUR |
| WITH OPERATOR | $ | /PER WEEK |
| DELIVERY DAYS AFTER RECEIPT OF ORDER: | | / DAYS |

**III.23 EQUIPMENT RENTAL - DUMP TRUCK**

| | | |
|---|---|---|
| FORD LNT 8000 OR EQUIVALENT WITH 5 CY CAPACITY: | $ | /PER HOUR |
| WITH OPERATOR | $ | /PER WEEK |
| FORD LNT 8000 OR EQUIVALENT WITH 15 CY CAPACITY: | $ | /PER HOUR |
| WITH OPERATOR | $ | /PER WEEK |
| 23 YARD DUMP TRAILER WITH ROAD TRACTOR | $ | /PER HOUR |
| WITH OPERATOR | $ | /PER WEEK |
| DELIVERY DAYS AFTER RECEIPT OF ORDER: | | / DAYS |

## SECTION III - PAVEMENT BASE CONSTRUCTION

| III.24 | EQUIPMENT RENTAL - BULLDOZER | |
|---|---|---|
| | CAT D3 OR EQUIVALENT | $ /PER HOUR |
| | WITH OPERATOR | $ /PER WEEK |
| | CAT D6 OR EQUIVALENT | $ /PER HOUR |
| | WITH OPERATOR | $ /PER WEEK |
| | CAT D7 OR EQUIVALENT | $ /PER HOUR |
| | WITH OPERATOR | $ /PER WEEK |
| | CAT D8 OR EQUIVALENT | $ /PER HOUR |
| | WITH OPERATOR | $ /PER WEEK |
| | DELIVERY DAYS AFTER RECEIPT OF ORDER: | / DAYS |

| III.25 | EQUIPMENT RENTAL - ROTOR MIXER (BOMAG MPH 100 RECYCLER OR EQUIVALENT) | |
|---|---|---|
| | WITH OPERATOR | $ /PER HOUR |
| | | $ /PER WEEK |
| | WITHOUT OPERATOR | $ /PER HOUR |
| | | $ /PER WEEK |
| | DELIVERY DAYS AFTER RECEIPT OF ORDER: | / DAYS |

| III.26 | EQUIPMENT RENTAL - TRACK HOE EXCAVATOR | |
|---|---|---|
| | WITH OPERATOR | $ /PER HOUR |
| | | $ /PER WEEK |
| | WITHOUT OPERATOR | $ /PER HOUR |
| | | $ /PER WEEK |
| | DELIVERY DAYS AFTER RECEIPT OF ORDER: | / DAYS |

| III.27 | EROSION CONTROL PER F.D.O.T. SECTION 104 | |
|---|---|---|
| 310210 | BAILED HAY OR STRAW | $ **/ PER EACH** |
| 310211 | FLOATING SILT BARRIERS | $ / PER LF |
| 310205 | SAND BAGGING | $ / PER CY |
| 310213 | STAKED SILT FENCE | $ / PER LF |
| | DELIVERY DAYS AFTER RECEIPT OF ORDER: | / DAYS |

## SECTION III - PAVEMENT BASE CONSTRUCTION

| III.28 | TOP SOIL FOR F.D.O.T. 162-1 AND 162-2 | |
|---|---|---|
| | MUCK BLANKET | |
| | 0 - 200 SY | $ / PER SY |
| | 201 - 2,000 SY | $ / PER SY |
| | OVER 2,000 SY | $ / PER SY |
| | TOP SOIL | |
| | 0 - 200 SY | $ / PER SY |
| | 201 - 2,000 SY | $ / PER SY |
| | OVER 2,000 SY | $ / PER SY |
| | DELIVERY DAYS AFTER RECEIPT OF ORDER: | / DAYS |
| III.29 | REWORKING AND SHOULDER SODDING ON EXISTING FACILITIES, FDOT 2000 SECTION 577 (PRICE TO INCLUDE SOD) | |
| | REWORK SHOULDERS | $ / PER SY |
| | DELIVERY DAYS AFTER RECEIPT OF ORDER: | / DAYS |
| III.30 | CLIPPING OF SHOULDER AND CLEANUP | |
| | 0 - 200 LF | $ **/ PER LF** |
| | 201 - 2,000 LF | $ **/ PER LF** |
| | OVER 2,000 LF | $ **/ PER LF** |
| | DELIVERY DAYS AFTER RECEIPT OF ORDER: | / DAYS |
| III.31 | COLD MIX IN PLACE ASPHALT RECYCLING ASPHALT BASE STABILIZATION | |
| | LOCATION OF VENDOR'S PLANT: | |
| | OIL INJECTION EXISTING UNPAVED ROADS: | |
| | 0 - 5,000 SY | $ / PER SY |
| | 5,000 - 15,000 SY | $ / PER SY |
| | 15,000 - 30,000 SY | $ / PER SY |
| | 30,000 - 100,000 SY | $ / PER SY |
| | DELIVERY DAYS AFTER RECEIPT OF ORDER: | / DAYS |

## SECTION III - PAVEMENT BASE CONSTRUCTION

| | | | |
|---|---|---|---|
| **III.31** | **COLD MIX IN PLACE ASPHALT RECYCLING ASPHALT BASE STABILIZATION (continued)** | | |
| | BREAK ASPHALT ON 1ST PASS & OIL INJECT 2ND PASS 0 - 5,000 SY | $ | / PER SY |
| | 5,000 - 15,000 SY | $ | / PER SY |
| | 15,000 - 30,000 SY | $ | / PER SY |
| | 30,000 - 100,000 SY | $ | / PER SY |
| | DELIVERY DAYS AFTER RECEIPT OF ORDER: | | / DAYS |
| **III.32** | **SURVEYING - To be used with other Road Building Bid items when required** | | |
| | **HOURLY RATE** | $ | / PER HOUR |
| | DELIVERY DAYS AFTER RECEIPT OF ORDER: | | / DAYS |
| **III.33** | **TREE REMOVAL & DISPOSAL (To include removal and disposal of root system)** | | |
| ALL ZONES: | 2" - 4" | $ | / EACH |
| | 5" - 8" | $ | / EACH |
| | 9" - 12" | $ | / EACH |
| | 13" - 24" | $ | / EACH |
| | 25" - 36" | $ | / EACH |
| | OVER 36" | $ | / EACH |
| | DELIVERY DAYS AFTER RECEIPT OF ORDER: | | / DAYS |

## ROAD BUILDING MATERIALS SERVICES
### BID FORM
(Submit in Triplicate)

## SECTION IV - BASE AND SURFACE CONSTRUCTION/MATERIAL

| IV.1 | SAND ASPHALT HOT MIX - 800# STABILITY | | |
|---|---|---|---|
| | LOCATION OF VENDOR'S PLANT: | | |
| | PRICE F.O.B. VENDOR'S PLANT: | $ | / PER TON |
| | PRICE VENDOR DELIVER TO JOB SITE: | | |
| ZONE 1 | 0 - 500 TONS | $ | / PER TON |
| | OVER 500 TONS | $ | / PER TON |
| ZONE 2 | 0 - 500 TONS | $ | / PER TON |
| | OVER 500 TONS | $ | / PER TON |
| ZONE 3 | 0 - 500 TONS | $ | / PER TON |
| | OVER 500 TONS | $ | / PER TON |
| ZONE 4A | 0 - 500 TONS | $ | / PER TON |
| | OVER 500 TONS | $ | / PER TON |
| ZONE 4B | 0 - 500 TONS | $ | / PER TON |
| | OVER 500 TONS | $ | / PER TON |
| ZONE 5 | 0 - 500 TONS | $ | / PER TON |
| | OVER 500 TONS | $ | / PER TON |
| | DELIVERY DAYS AFTER RECEIPT OF ORDER: | | / DAYS |

## SECTION IV - BASE AND SURFACE CONSTRUCTION/MATERIAL

| IV.2 | SAND ASPHALT HOT MIX - 1200# STABILITY | |
|---|---|---|
| LOCATION OF VENDOR'S PLANT: | | |
| PRICE F.O.B. VENDOR'S PLANT: | | $ / PER TON |
| PRICE VENDOR DELIVER TO JOB SITE: | | |
| ZONE 1 | 0 - 500 TONS | $ / PER TON |
| | OVER 500 TONS | $ / PER TON |
| ZONE 2 | 0 - 500 TONS | $ / PER TON |
| | OVER 500 TONS | $ / PER TON |
| ZONE 3 | 0 - 500 TONS | $ / PER TON |
| | OVER 500 TONS | $ / PER TON |
| ZONE 4A | 0 - 500 TONS | $ / PER TON |
| | OVER 500 TONS | $ / PER TON |
| ZONE 4B | 0 - 500 TONS | $ / PER TON |
| | OVER 500 TONS | $ / PER TON |
| ZONE 5 | 0 - 500 TONS | $ / PER TON |
| | OVER 500 TONS | $ / PER TON |
| DELIVERY DAYS AFTER RECEIPT OF ORDER: | | / DAYS |

## SECTION IV - BASE AND SURFACE CONSTRUCTION/MATERIAL

| IV.3 | LEAN MIX / ARMOR COAT | | |
|---|---|---|---|
| | LOCATION OF VENDOR'S PLANT: | | |
| | PRICE F.O.B. VENDOR'S PLANT: | $ | / PER TON |
| | PRICE VENDOR DELIVER TO JOB SITE: | | |
| ZONE 1 | 0 - 100 TONS | $ | / PER TON |
| | OVER 100 TONS | $ | / PER TON |
| ZONE 2 | 0 - 100 TONS | $ | / PER TON |
| | OVER 100 TONS | $ | / PER TON |
| ZONE 3 | 0 - 100 TONS | $ | / PER TON |
| | OVER 100 TONS | $ | / PER TON |
| ZONE 4A | 0 - 500 TONS | $ | / PER TON |
| | OVER 500 TONS | $ | / PER TON |
| ZONE 4B | 0 - 500 TONS | $ | / PER TON |
| | OVER 500 TONS | $ | / PER TON |
| ZONE 5 | 0 - 500 TONS | $ | / PER TON |
| | OVER 500 TONS | $ | / PER TON |
| | DELIVERY DAYS AFTER RECEIPT OF ORDER: | | / DAYS |

## SECTION IV - BASE AND SURFACE CONSTRUCTION/MATERIAL

| IV.4 | ASPHALTIC BASE COURSE TYPE I | |
|---|---|---|
| LOCATION OF VENDOR'S PLANT: | | |
| PRICE F.O.B. VENDOR'S PLANT: | $ | / PER TON |
| PRICE VENDOR DELIVER TO JOB SITE: | | |
| ZONE 1 | 0 - 500 TONS | $ / PER TON |
| | OVER 500 TONS | $ / PER TON |
| ZONE 2 | 0 - 500 TONS | $ / PER TON |
| | OVER 500 TONS | $ / PER TON |
| ZONE 3 | 0 - 500 TONS | $ / PER TON |
| | OVER 500 TONS | $ / PER TON |
| ZONE 4A | 0 - 500 TONS | $ / PER TON |
| | OVER 500 TONS | $ / PER TON |
| ZONE 4B | 0 - 500 TONS | $ / PER TON |
| | OVER 500 TONS | $ / PER TON |
| ZONE 5 | 0 - 500 TONS | $ / PER TON |
| | OVER 500 TONS | $ / PER TON |
| DELIVERY DAYS AFTER RECEIPT OF ORDER: | | / DAYS |

## SECTION IV - BASE AND SURFACE CONSTRUCTION/MATERIAL

| IV.5 | ASPHALTIC BASE COURSE TYPE II | |
|---|---|---|
| | LOCATION OF VENDOR'S PLANT: | |
| | PRICE F.O.B. VENDOR'S PLANT: | $ / PER TON |
| | PRICE VENDOR DELIVER TO JOB SITE: | |
| ZONE 1 | 0 - 500 TONS | $ / PER TON |
| | OVER 500 TONS | $ / PER TON |
| ZONE 2 | 0 - 500 TONS | $ / PER TON |
| | OVER 500 TONS | $ / PER TON |
| ZONE 3 | 0 - 500 TONS | $ / PER TON |
| | OVER 500 TONS | $ / PER TON |
| ZONE 4A | 0 - 500 TONS | $ / PER TON |
| | OVER 500 TONS | $ / PER TON |
| ZONE 4B | 0 - 500 TONS | $ / PER TON |
| | OVER 500 TONS | $ / PER TON |
| ZONE 5 | 0 - 500 TONS | $ / PER TON |
| | OVER 500 TONS | $ / PER TON |
| | DELIVERY DAYS AFTER RECEIPT OF ORDER: | / DAYS |

## SECTION IV - BASE AND SURFACE CONSTRUCTION/MATERIAL

| IV.6 | ASPHALTIC BASE COURSE TYPE III | | |
|---|---|---|---|
| | LOCATION OF VENDOR'S PLANT: | | |
| | PRICE F.O.B. VENDOR'S PLANT: | $ | / PER TON |
| | PRICE VENDOR DELIVER TO JOB SITE: | | |
| ZONE 1 | 0 - 500 TONS | $ | / PER TON |
| | OVER 500 TONS | $ | / PER TON |
| ZONE 2 | 0 - 500 TONS | $ | / PER TON |
| | OVER 500 TONS | $ | / PER TON |
| ZONE 3 | 0 - 500 TONS | $ | / PER TON |
| | OVER 500 TONS | $ | / PER TON |
| ZONE 4A | 0 - 500 TONS | $ | / PER TON |
| | OVER 500 TONS | $ | / PER TON |
| ZONE 4B | 0 - 500 TONS | $ | / PER TON |
| | OVER 500 TONS | $ | / PER TON |
| ZONE 5 | 0 - 500 TONS | $ | / PER TON |
| | OVER 500 TONS | $ | / PER TON |
| | DELIVERY DAYS AFTER RECEIPT OF ORDER: | | / DAYS |

## ROAD BUILDING MATERIALS SERVICES

**BID FORM**

(Submit in Triplicate)

## SECTION IV - BASE AND SURFACE CONSTRUCTION/MATERIAL

| IV.7 | FRICTION COURSE TYPE FC-2 | |
|---|---|---|
| LOCATION OF VENDOR'S PLANT: | | |
| PRICE F.O.B. VENDOR'S PLANT: | | $ / PER TON |
| PRICE VENDOR DELIVER TO JOB SITE: | | |
| ZONE 1 | 0 - 500 TONS | $ / PER TON |
| | OVER 500 TONS | $ / PER TON |
| ZONE 2 | 0 - 500 TONS | $ / PER TON |
| | OVER 500 TONS | $ / PER TON |
| ZONE 3 | 0 - 500 TONS | $ / PER TON |
| | OVER 500 TONS | $ / PER TON |
| ZONE 4A | 0 - 500 TONS | $ / PER TON |
| | OVER 500 TONS | $ / PER TON |
| ZONE 4B | 0 - 500 TONS | $ / PER TON |
| | OVER 500 TONS | $ / PER TON |
| ZONE 5 | 0 - 500 TONS | $ / PER TON |
| | OVER 500 TONS | $ / PER TON |
| DELIVERY DAYS AFTER RECEIPT OF ORDER: | | / DAYS |

## SECTION IV - BASE AND SURFACE CONSTRUCTION/MATERIAL

| IV.8 | FRICTION COURSE TYPE FC-3 | |
|---|---|---|
| LOCATION OF VENDOR'S PLANT: | | |
| PRICE F.O.B. VENDOR'S PLANT: | | $ / PER TON |
| PRICE VENDOR DELIVER TO JOB SITE: | | |
| ZONE 1 | 0 - 500 TONS | $ / PER TON |
| | OVER 500 TONS | $ / PER TON |
| ZONE 2 | 0 - 500 TONS | $ / PER TON |
| | OVER 500 TONS | $ / PER TON |
| ZONE 3 | 0 - 500 TONS | $ / PER TON |
| | OVER 500 TONS | $ / PER TON |
| ZONE 4A | 0 - 500 TONS | $ / PER TON |
| | OVER 500 TONS | $ / PER TON |
| ZONE 4B | 0 - 500 TONS | $ / PER TON |
| | OVER 500 TONS | $ / PER TON |
| ZONE 5 | 0 - 500 TONS | $ / PER TON |
| | OVER 500 TONS | $ / PER TON |
| DELIVERY DAYS AFTER RECEIPT OF ORDER: | | / DAYS |

## SECTION IV - BASE AND SURFACE CONSTRUCTION/MATERIAL

| IV.9 | FRICTION COURSE TYPE FC-4 | | |
|---|---|---|---|
| | LOCATION OF VENDOR'S PLANT: | | |
| | PRICE F.O.B. VENDOR'S PLANT: | $ | / PER TON |
| | PRICE VENDOR DELIVER TO JOB SITE: | | |
| ZONE 1 | 0 - 500 TONS | $ | / PER TON |
| | OVER 500 TONS | $ | / PER TON |
| ZONE 2 | 0 - 500 TONS | $ | / PER TON |
| | OVER 500 TONS | $ | / PER TON |
| ZONE 3 | 0 - 500 TONS | $ | / PER TON |
| | OVER 500 TONS | $ | / PER TON |
| ZONE 4A | 0 - 500 TONS | $ | / PER TON |
| | OVER 500 TONS | $ | / PER TON |
| ZONE 4B | 0 - 500 TONS | $ | / PER TON |
| | OVER 500 TONS | $ | / PER TON |
| ZONE 5 | 0 - 500 TONS | $ | / PER TON |
| | OVER 500 TONS | $ | / PER TON |
| | DELIVERY DAYS AFTER RECEIPT OF ORDER: | | / DAYS |

| IV.10 | EAM COLD MIX | | |
|---|---|---|---|
| | LOCATION OF VENDOR'S PLANT: | | |
| | PRICE F.O.B. VENDOR'S PLANT: | $ | / PER TON |
| | DELIVERY DAYS AFTER RECEIPT OF ORDER: | | / DAYS |

## SECTION IV - BASE AND SURFACE CONSTRUCTION/MATERIAL

| IV.11 | ASPHALTIC CONCRETE TYPE S-1 | |
|---|---|---|
| LOCATION OF VENDOR'S PLANT: | | |
| PRICE F.O.B. VENDOR'S PLANT: | | / PER TON |
| PRICE VENDOR DELIVER TO JOB SITE: | | |
| ZONE 1 | 0 - 500 TONS | $ / PER TON |
| | OVER 500 TONS | $ / PER TON |
| ZONE 2 | 0 - 500 TONS | $ / PER TON |
| | OVER 500 TONS | $ / PER TON |
| ZONE 3 | 0 - 500 TONS | $ / PER TON |
| | OVER 500 TONS | $ / PER TON |
| ZONE 4A | 0 - 500 TONS | $ / PER TON |
| | OVER 500 TONS | $ / PER TON |
| ZONE 4B | 0 - 500 TONS | $ / PER TON |
| | OVER 500 TONS | $ / PER TON |
| ZONE 5 | 0 - 500 TONS | $ / PER TON |
| | OVER 500 TONS | $ / PER TON |
| DELIVERY DAYS AFTER RECEIPT OF ORDER: | | / DAYS |

## SECTION IV - BASE AND SURFACE CONSTRUCTION/MATERIAL

| IV.12 | ASPHALTIC CONCRETE TYPE S-111 | | |
|---|---|---|---|
| | LOCATION OF VENDOR'S PLANT: | | |
| | PRICE F.O.B. VENDOR'S PLANT: | | / PER TON |
| | PRICE VENDOR DELIVER TO JOB SITE: | | |
| ZONE 1 | 0 - 500 TONS | $ | / PER TON |
| | OVER 500 TONS | $ | / PER TON |
| ZONE 2 | 0 - 500 TONS | $ | / PER TON |
| | OVER 500 TONS | $ | / PER TON |
| ZONE 3 | 0 - 500 TONS | $ | / PER TON |
| | OVER 500 TONS | $ | / PER TON |
| ZONE 4A | 0 - 500 TONS | $ | / PER TON |
| | OVER 500 TONS | $ | / PER TON |
| ZONE 4B | 0 - 500 TONS | $ | / PER TON |
| | OVER 500 TONS | $ | / PER TON |
| ZONE 5 | 0 - 500 TONS | $ | / PER TON |
| | OVER 500 TONS | $ | / PER TON |
| | DELIVERY DAYS AFTER RECEIPT OF ORDER: | | / DAYS |

## SECTION IV - BASE AND SURFACE CONSTRUCTION/MATERIAL

| IV.13 | ASPHALTIC CONCRETE TYPE II | | |
|---|---|---|---|
| | LOCATION OF VENDOR'S PLANT: | | |
| | PRICE F.O.B. VENDOR'S PLANT: | | / PER TON |
| | PRICE VENDOR DELIVER TO JOB SITE: | | |
| ZONE 1 | 0 - 500 TONS | $ | / PER TON |
| | OVER 500 TONS | $ | / PER TON |
| ZONE 2 | 0 - 500 TONS | $ | / PER TON |
| | OVER 500 TONS | $ | / PER TON |
| ZONE 3 | 0 - 500 TONS | $ | / PER TON |
| | OVER 500 TONS | $ | / PER TON |
| ZONE 4A | 0 - 500 TONS | $ | / PER TON |
| | OVER 500 TONS | $ | / PER TON |
| ZONE 4B | 0 - 500 TONS | $ | / PER TON |
| | OVER 500 TONS | $ | / PER TON |
| ZONE 5 | 0 - 500 TONS | $ | / PER TON |
| | OVER 500 TONS | $ | / PER TON |
| | DELIVERY DAYS AFTER RECEIPT OF ORDER: | | / DAYS |

## SECTION IV - BASE AND SURFACE CONSTRUCTION/MATERIAL

| IV.14 | ASPHALTIC CONCRETE, TYPE III | | |
|---|---|---|---|
| | LOCATION OF VENDOR'S PLANT: | | |
| | PRICE F.O.B. VENDOR'S PLANT: | | / PER TON |
| | PRICE VENDOR DELIVER TO JOB SITE: | | |
| ZONE 1 | 0 - 500 TONS | $ | / PER TON |
| | OVER 500 TONS | $ | / PER TON |
| ZONE 2 | 0 - 500 TONS | $ | / PER TON |
| | OVER 500 TONS | $ | / PER TON |
| ZONE 3 | 0 - 500 TONS | $ | / PER TON |
| | OVER 500 TONS | $ | / PER TON |
| ZONE 4A | 0 - 500 TONS | $ | / PER TON |
| | OVER 500 TONS | $ | / PER TON |
| ZONE 4B | 0 - 500 TONS | $ | / PER TON |
| | OVER 500 TONS | $ | / PER TON |
| ZONE 5 | 0 - 500 TONS | $ | / PER TON |
| | OVER 500 TONS | $ | / PER TON |
| | DELIVERY DAYS AFTER RECEIPT OF ORDER: | | / DAYS |

| IV.15 | SWEEP, TACK, SPREAD AND COMPACT 100# / SY OR MORE | | |
|---|---|---|---|
| | 20 - 60 TONS | $ | / PER TON |
| | 61 - 100 TONS | $ | / PER TON |
| | 101 - 500 TONS | $ | / PER TON |
| | OVER 500 TONS | $ | / PER TON |
| | DELIVERY DAYS AFTER RECEIPT OF ORDER: | | / DAYS |

## ROAD BUILDING MATERIALS SERVICES
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## SECTION IV - BASE AND SURFACE CONSTRUCTION/MATERIAL

| IV.16 | SWEEP, TACK, SPREAD AND COMPACT 50#/SY TO 99#/SY | |
|---|---|---|
| | 0 - 50 TONS | $ / PER TON |
| | 50 - 200 TONS | $ / PER TON |
| | 201 - 500 TONS | $ / PER TON |
| | OVER 500 TONS | $ / PER TON |
| | DELIVERY DAYS AFTER RECEIPT OF ORDER: | / DAYS |
| **IV.17** | **SWEEP, TACK, SPREAD AND COMPACT ROAD WIDENING** | |
| | 0 - 50 TONS | $ / PER TON |
| | 50 - 200 TONS | $ / PER TON |
| | 201 - 500 TONS | $ / PER TON |
| | OVER 500 TONS | $ / PER TON |
| | DELIVERY DAYS AFTER RECEIPT OF ORDER: | / DAYS |
| **IV.18** | **SWEEP, TACK, SPREAD AND COMPACT PARKING LOTS** | |
| | 0 - 50 TONS | $ / PER TON |
| | 50 - 200 TONS | $ / PER TON |
| | 201 - 500 TONS | $ / PER TON |
| | OVER 500 TONS | $ / PER TON |
| | DELIVERY DAYS AFTER RECEIPT OF ORDER: | / DAYS |
| **IV.19** | **SWEEP, TACK, SPREAD AND COMPACT PATCHING** | |
| | 1 - 5 TONS | $ / PER TON |
| | 6 - 10 TONS | $ / PER TON |
| | 11 - 15 TONS | $ / PER TON |
| | 16 - 20 TONS | $ / PER TON |
| | 21 - 25 TONS | $ / PER TON |
| | 26 - 30 TONS | $ / PER TON |
| | OVER 30 TONS | $ / PER TON |
| | DELIVERY DAYS AFTER RECEIPT OF ORDER: | / DAYS |

## SECTION IV - BASE AND SURFACE CONSTRUCTION/MATERIAL

| | | | |
|---|---|---|---|
| **IV.20** | **SLURRY SEAL (with CSS-1H Grade) TYPE I - Price to include mobilization** | | |
| | LOCATION OF VENDOR'S PLANT: | | |
| | PRICE VENDOR DELIVER TO JOB SITE: | | |
| | 0 - 40,000 SY | $ | / PER SY |
| | 40,001 - 100,000 SY | $ | / PER SY |
| | OVER 100,000 SY | $ | / PER SY |
| | DELIVERY DAYS AFTER RECEIPT OF ORDER: | | / DAYS |
| **IV.21** | **SLURRY SEAL (with CSS-1H Grade) TYPE II - Price to include mobilization** | | |
| | LOCATION OF VENDOR'S PLANT: | | |
| | PRICE VENDOR DELIVER TO JOB SITE: | | |
| | 0 - 40,000 SY | $ | / PER SY |
| | 40,001 - 100,000 SY | $ | / PER SY |
| | OVER 100,000 SY | $ | / PER SY |
| | DELIVERY DAYS AFTER RECEIPT OF ORDER: | | / DAYS |
| **IV.22** | **SLURRY SEAL (with Quick Set Grade) TYPE I - Price to include mobilization** | | |
| | LOCATION OF VENDOR'S PLANT: | | |
| | PRICE VENDOR DELIVER TO JOB SITE: | | |
| | 0 - 40,000 SY | $ | / PER SY |
| | 40,001 - 100,000 SY | $ | / PER SY |
| | OVER 100,000 SY | $ | / PER SY |
| | DELIVERY DAYS AFTER RECEIPT OF ORDER: | | / DAYS |
| **IV.23** | **SLURRY SEAL (with Quick Set) TYPE II - Price to include mobilization** | | |
| | LOCATION OF VENDOR'S PLANT: | | |
| | PRICE VENDOR DELIVER TO JOB SITE: | | |
| | 0 - 40,000 SY | $ | / PER SY |
| | 40,001 - 100,000 SY | $ | / PER SY |
| | OVER 100,000 SY | $ | / PER SY |
| | DELIVERY DAYS AFTER RECEIPT OF ORDER: | | / DAYS |

## SECTION IV - BASE AND SURFACE CONSTRUCTION/MATERIAL

| | | | |
|---|---|---|---|
| **IV.24** | **ASPHALT RESURFACING TREATMENT (Fibermat) - All prices to include Materials, Labor, Equipment, Traffic Control and Mobilization** | | |
| | LOCATION OF VENDOR'S PLANT: | | |
| | PRICE VENDOR DELIVER TO JOB SITE: | | |
| | 0 - 40,000 SY | $ | / PER SY |
| | 40,001 - 100,000 SY | $ | / PER SY |
| | OVER 100,000 SY | $ | / PER SY |
| | DELIVERY DAYS AFTER RECEIPT OF ORDER: | | / DAYS |
| **IV.25** | **BITUMINOUS DOUBLE SURFACE TREATMENT Specification: FDOT Sections 310, 901 & 916** | | |
| | LOCATION OF VENDOR'S PLANT: | | |
| | PRICE VENDOR DELIVER TO JOB SITE: | | |
| ZONE 1 | 0 - 7,000 SY | $ | / PER SY |
| | 7,001 - 21,000 SY | $ | / PER SY |
| | 21,001 - 42,000 SY | $ | / PER SY |
| | OVER 42,000 SY | $ | / PER SY |
| ZONE 2 | 0 - 7,000 SY | $ | / PER SY |
| | 7,001 - 21,000 SY | $ | / PER SY |
| | 21,001 - 42,000 SY | $ | / PER SY |
| | OVER 42,000 SY | $ | / PER SY |
| ZONE 3 | 0 - 7,000 SY | $ | / PER SY |
| | 7,001 - 21,000 SY | $ | / PER SY |
| | 21,001 - 42,000 SY | $ | / PER SY |
| | OVER 42,000 SY | $ | / PER SY |

## SECTION IV - BASE AND SURFACE CONSTRUCTION/MATERIAL

| IV.25 | BITUMINOUS DOUBLE SURFACE TREATMENT (continued) | | |
|---|---|---|---|
| ZONE 4A | 0 - 7,000 SY | $ | / PER SY |
| | 7,001 - 21,000 SY | $ | / PER SY |
| | 21,001 - 42,000 SY | $ | / PER SY |
| | OVER 42,000 SY | $ | / PER SY |
| ZONE 4B | 0 - 7,000 SY | $ | / PER SY |
| | 7,001 - 21,000 SY | $ | / PER SY |
| | 21,001 - 42,000 SY | $ | / PER SY |
| | OVER 42,000 SY | $ | / PER SY |
| ZONE 5 | 0 - 7,000 SY | $ | / PER SY |
| | 7,001 - 21,000 SY | $ | / PER SY |
| | 21,001 - 42,000 SY | $ | / PER SY |
| | OVER 42,000 SY | $ | / PER SY |
| | DELIVERY DAYS AFTER RECEIPT OF ORDER: | | / DAYS |

| IV.26 | MICRO-SURFACING - Application for Surfacing only (Type A). All prices to include Materials, Labor, Equipment, Traffic Control and Mobilization | | |
|---|---|---|---|
| | LOCATION OF VENDOR'S PLANT: | | |
| | PRICE VENDOR DELIVER TO JOB SITE: 40,000 - 100,000 SY | $ | / PER SY |
| | OVER 100,000 SY | $ | / PER SY |
| | DELIVERY DAYS AFTER RECEIPT OF ORDER: | | / DAYS |

| IV.27 | MICRO-SURFACING - Application for Leveling and Surfacing (See Specs). All prices to include Materials, Labor, Equipment, Traffic Control and Mobilization | | |
|---|---|---|---|
| | LOCATION OF VENDOR'S PLANT: | | |
| | PRICE VENDOR DELIVER TO JOB SITE: 0 - 50,000 SY | $ | / PER SY |
| | 50,001 - 300,000 SY | $ | / PER SY |
| | OVER 300,000 SY | $ | / PER SY |
| | DELIVERY DAYS AFTER RECEIPT OF ORDER: | | / DAYS |

## SECTION IV - BASE AND SURFACE CONSTRUCTION/MATERIAL

| | | | |
|---|---|---|---|
| **IV.28** | **CONSTRUCTION SEALING OF ASPHALTIC CONCRETE SURFACE COURSES WITH AN ASPHALT REJUVENATING AGENT (See Standard Specifications)** | | |
| | LOCATION OF VENDOR'S PLANT: | | |
| | PRICE VENDOR DELIVER TO JOB SITE: 50,000 - 300,000 SY | $ | / PER SY |
| | OVER 300,000 SY | $ | / PER SY |
| | DELIVERY DAYS AFTER RECEIPT OF ORDER: | | / DAYS |
| **IV.29** | **RESTORATIVE SEALING OF ASPHALT PAVEMENT WITH ASPHALT REJUVENATIVE AGENT RESTRICTIVE SEAL (See Standard Specifications)** | | |
| | LOCATION OF VENDOR'S PLANT: | | |
| | PRICE VENDOR DELIVER TO JOB SITE: 50,000 - 300,000 SY | $ | / PER SY |
| | OVER 300,000 SY | $ | / PER SY |
| | DELIVERY DAYS AFTER RECEIPT OF ORDER: | | / DAYS |
| **IV.30** | **ASPHALT REJUVENATING AGENT - For Construction Seal (See Standard Specifications)** | | |
| | PRICE VENDOR DELIVER TO MANATEE COUNTY YARD | $ | / PER GAL |
| | DELIVERY DAYS AFTER RECEIPT OF ORDER: | | / DAYS |
| **IV.31** | **ASPHALT REJUVENATING EMULSION - For Construction Seal (See Standard Specifications)** | | |
| | PRICE VENDOR DELIVER TO MANATEE COUNTY YARD | $ | / PER GAL |
| | DELIVERY DAYS AFTER RECEIPT OF ORDER: | | / DAYS |

## ROAD BUILDING MATERIALS SERVICES

**BID FORM**

(Submit in Triplicate)

## SECTION IV - BASE AND SURFACE CONSTRUCTION/MATERIAL

| IV.32 | LEAN MIX SPREADING (Lean Mix material to be paid as separate item) | | |
|---|---|---|---|
| ZONE 1 | 8 - 32 TONS | $ | / PER TON |
| | 33 - 64 TONS | $ | / PER TON |
| | 65 - 100 TONS | $ | / PER TON |
| | OVER 100 TONS | $ | / PER TON |
| ZONE 2 | 8 - 32 TONS | $ | / PER TON |
| | 33 - 64 TONS | $ | / PER TON |
| | 65 - 100 TONS | $ | / PER TON |
| | OVER 100 TONS | $ | / PER TON |
| ZONE 3 | 8 - 32 TONS | $ | / PER TON |
| | 33 - 64 TONS | $ | / PER TON |
| | 65 - 100 TONS | $ | / PER TON |
| | OVER 100 TONS | $ | / PER TON |
| ZONE 4A | 8 - 32 TONS | $ | / PER TON |
| | 33 - 64 TONS | $ | / PER TON |
| | 65 - 100 TONS | $ | / PER TON |
| | OVER 100 TONS | $ | / PER TON |
| ZONE 4B | 8 - 32 TONS | $ | / PER TON |
| | 33 - 64 TONS | $ | / PER TON |
| | 65 - 100 TONS | $ | / PER TON |
| | OVER 100 TONS | $ | / PER TON |
| ZONE 5 | 8 - 32 TONS | $ | / PER TON |
| | 33 - 64 TONS | $ | / PER TON |
| | 65 - 100 TONS | $ | / PER TON |
| | OVER 100 TONS | $ | / PER TON |
| | DEMURRAGE (ALL ZONES) | $ | / PER HOUR |
| | DELIVERY DAYS AFTER RECEIPT OF ORDER: | | / DAYS |

## SECTION IV - BASE AND SURFACE CONSTRUCTION/MATERIAL

| IV.33 | PAVEMENT MILLING | |
|---|---|---|
| AVERAGE CUT 1" TO 2" | | |
| 0 - 2,000 SY | $ | / PER SY |
| 2,000 - 5,000 SY | $ | / PER SY |
| 5,001 - 10,000 SY | $ | / PER SY |
| OVER 10,000 SY | $ | / PER SY |
| AVERAGE CUT OVER 2" | | |
| 0 - 2,000 SY | $ | / PER SY |
| 2,000 - 5,000 SY | $ | / PER SY |
| 5,001 - 10,000 SY | $ | / PER SY |
| OVER 10,000 SY | $ | / PER SY |
| DELIVERY DAYS AFTER RECEIPT OF ORDER: | | / DAYS |

| IV.34 | RECLAIMED ASPHALT - CREDIT | |
|---|---|---|
| 0 - 500 TONS | $ | / PER TON |
| 501 - 1,000 TONS | $ | / PER TON |
| OVER 1,000 TONS | $ | / PER TON |
| DELIVERY DAYS AFTER RECEIPT OF ORDER: | | / DAYS |

| IV.35 | RECLAIMED NON-ASPHALTIC BASE MATERIAL - CREDIT | |
|---|---|---|
| 0 - 500 TONS | $ | / PER TON |
| 501 - 1,000 TONS | $ | / PER TON |
| OVER 1,000 TONS | $ | / PER TON |
| DELIVERY DAYS AFTER RECEIPT OF ORDER: | | / DAYS |

## SECTION IV - BASE AND SURFACE CONSTRUCTION/MATERIAL

| IV.36 | PAINTED TRAFFIC LINES & MARKINGS - Specification: FDOT Sections 710, 971-12, Index #17346 | | |
|---|---|---|---|
| | 6" SKIP TRAFFIC STRIPE | $ | /GROSS MILE |
| | 6" SOLID TRAFFIC STRIPE | $ | /NET MILE |
| | 6" SOLID TRAFFIC STRIPE | $ | /LINEAR FOOT |
| | 8" SOLID TRAFFIC STRIPE | $ | /NET MILE |
| | 8" SOLID TRAFFIC STRIPE | $ | /LINEAR FOOT |
| | STOP BARS - 24" WIDTH | $ | /LINEAR FOOT |
| | CROSSWALK - 12" WIDTH | $ | /LINEAR FOOT |
| | 18" SOLID WHITE TRAFFIC STRIPE | $ | /LINEAR FOOT |
| | DELIVERY DAYS AFTER RECEIPT OF ORDER: | $ | / DAYS |

| IV.37 | PAINTED TRAFFIC PAVEMENT MARKERS - Specification: FDOT 710, 971-12, Index #17346 | | |
|---|---|---|---|
| | (A) LEGEND | | |
| ALL WHITE: | LEFT - 19 SQUARE FEET | $ | / EACH |
| | RIGHT - 27 SQUARE FEET | $ | / EACH |
| | STOP - 22 SQUARE FEET | $ | / EACH |
| | ONLY - 22 SQUARE FEET | $ | / EACH |
| | MERGE - 36 SQUARE FEET | $ | / EACH |
| | SCHOOL - 33 SQUARE FEET | $ | / EACH |
| | BUS - 21 SQUARE FEET | $ | / EACH |
| | TURN - 25 SQUARE FEET | $ | / EACH |
| | RXR - 28 SQUARE FEET | $ | / EACH |
| | BIKE - 12 SQUARE FEET | $ | / EACH |

## SECTION IV - BASE AND SURFACE CONSTRUCTION/MATERIAL

| IV.37 | PAINTED TRAFFIC PAVEMENT MARKERS (continued) | | |
|---|---|---|---|
| | (B) ARROWS | | |
| ALL WHITE: | STRAIGHT - 12 SQUARE FEET | $ | / EACH |
| | LEFT - 16 SQUARE FEET | $ | / EACH |
| | RIGHT - 16 SQUARE FEET | $ | / EACH |
| | COMBINATION - 27 SQUARE FEET | $ | / EACH |
| | (C) SYMBOLS | | |
| ALL WHITE: | BICYCLIST - 3.9 SQUARE FEET | $ | / EACH |
| | DIAMOND - 6.5 SQUARE FEET | $ | / EACH |
| | HANDICAPPED - 5.0 SQUARE FEET | $ | / EACH |
| | DELIVERY DAYS AFTER RECEIPT OF ORDER: | | / DAYS |

| IV.38 | THERMOPLASTIC TRAFFIC STRIPES AND MARKINGS - Specs: FDOT Section 711, Index #17346 | |
|---|---|---|
| | 6" SKIP TRAFFIC STRIPE - THERMOPLASTIC | / GROSS MILE |
| | 6" SKIP TRAFFIC STRIPE - THERMOPLASTIC | / LINEAR FOOT |
| | 6" SOLID STRIPE - THERMOPLASTIC | / LINEAR FOOT |
| | 8" SOLID STRIPE - THERMOPLASTIC | / LINEAR FOOT |
| | 18" SOLID TRAFFIC STRIPE | / LINEAR FOOT |
| | 12" CROSSWALK - THERMOPLASTIC | / LINEAR FOOT |
| | 24" SOLID STOP BAR - THERMOPLASTIC | / LINEAR FOOT |
| | DELIVERY DAYS AFTER RECEIPT OF ORDER: | / DAYS |

## SECTION IV - BASE AND SURFACE CONSTRUCTION/MATERIAL

| IV.39 | THERMOPLASTIC TRAFFIC PAVEMENT MARKINGS - Specs: FDOT Section 711, 971-12, Index #17346 | | |
|---|---|---|---|
| | (A) LEGEND | | |
| ALL WHITE: | LEFT - 19 SQUARE FEET | $ | / EACH |
| | RIGHT - 27 SQUARE FEET | $ | / EACH |
| | STOP - 22 SQUARE FEET | $ | / EACH |
| | ONLY - 22 SQUARE FEET | $ | / EACH |
| | MERGE - 36 SQUARE FEET | $ | / EACH |
| | SCHOOL - 33 SQUARE FEET | $ | / EACH |
| | BUS - 21 SQUARE FEET | $ | / EACH |
| | TURN - 25 SQUARE FEET | $ | / EACH |
| | RXR - 28 SQUARE FEET | $ | / EACH |
| | BIKE - 12 SQUARE FEET | $ | / EACH |
| | (B) ARROWS | | |
| ALL WHITE: | STRAIGHT - 12 SQUARE FEET | $ | / EACH |
| | LEFT - 16 SQUARE FEET | $ | / EACH |
| | RIGHT - 16 SQUARE FEET | $ | / EACH |
| | COMBINATION - 27 SQUARE FEET | $ | / EACH |
| | (C) SYMBOLS | | |
| ALL WHITE: | BICYCLIST - 3.9 SQUARE FEET | $ | / EACH |
| | DIAMOND - 6.5 SQUARE FEET | $ | / EACH |
| | HANDICAPPED - 5.0 SQUARE FEET | $ | / EACH |
| | DELIVERY DAYS AFTER RECEIPT OF ORDER: | | / DAYS |

| IV.40 | REFLECTIVE PAVEMENT MARKERS TYPES 1 TO 5 (per FDOT Section 706-1) | | |
|---|---|---|---|
| | CLASS "A" MARKERS - FDOT SECTION 706-2.3.2: FURNISHED AND INSTALLED | $ | / EACH |
| | CLASS "B" MARKERS - FDOT SECTION 706-2.3.2 / 706-2.3.3(A): FURNISHED AND INSTALLED | $ | / EACH |
| | DELIVERY DAYS AFTER RECEIPT OF ORDER: | | / DAYS |

## SECTION IV - BASE AND SURFACE CONSTRUCTION/MATERIAL

| IV.41 | REMOVAL OF EXISTING RAISED PAVEMENT MARKERS | |
|---|---|---|
| EQUIPMENT, MATERIAL AND LABOR NECESSARY TO REMOVE, PICK UP AND DISPOSE OF MARKERS | $ | / EACH |
| DELIVERY DAYS AFTER RECEIPT OF ORDER: | | / DAYS |
| **IV.42** | **REMOVAL OF EXISTING THERMOPLASTIC MARKING** | |
| EQUIPMENT, MATERIAL AND LABOR NECESSARY TO REMOVE, PICK UP AND DISPOSE OF THERMOPLASTIC MARKING | $ | / LF |
| DELIVERY DAYS AFTER RECEIPT OF ORDER: | | / DAYS |
| **IV.43** | **UTILITY / INTERSECTION REPAIR** | |
| EQUIPMENT, MATERIAL AND LABOR NECESSARY TO REPAIR INTERSECTIONS AND UTILITY CUTS FROM EDGE OF PAVEMENT TO EDGE OF PAVEMENT BY MILLING AND RESURFACING WITH 100# OF S-III OR EQUIVALENT | $ | / TON |
| DELIVERY DAYS AFTER RECEIPT OF ORDER: | | / DAYS |
| **IV.44** | **REWORK EXISTING ASPHALTIC CONCRETE PAVEMENT** | |
| ALL LABOR, EQUIPMENT AND MATERIAL TO INDIRECT HEAT EXISTING ASPHALT PAVEMENT, SCARIFYING AND REJUVENATING AGENTS, RESHAPE AND COMPACT EXISTING ASPHALTIC CONCRETE: | | |
| 0 - 1,000 SF | $ | / PER SF |
| 1,001 - 5,000 SF | $ | / PER SF |
| OVER 5,000 SF | $ | / PER SF |
| STANDBY TIME AS NEEDED | | / PER HOUR |
| PER TON PRICE FOR TYPE III ASPHALTIC CONCRETE ADDED: | | / PER TON |
| DELIVERY DAYS AFTER RECEIPT OF ORDER: | | / DAYS |
| **IV.45** | **MANHOLE ADJUSTMENT** | |
| 1 - 5 UNITS | $ | / PER UNIT |
| 6 - 10 UNITS | $ | / PER UNIT |
| OVER 10 UNITS | $ | / PER UNIT |
| DELIVERY DAYS AFTER RECEIPT OF ORDER: | | / DAYS |

## SECTION IV - BASE AND SURFACE CONSTRUCTION/MATERIAL

| IV.46 | WATER VALVE ADJUSTMENT | |
|---|---|---|
| 1 - 5 UNITS | $ | / PER UNIT |
| 6 - 10 UNITS | $ | / PER UNIT |
| OVER 10 UNITS | $ | / PER UNIT |
| DELIVERY DAYS AFTER RECEIPT OF ORDER: | | / DAYS |

| IV.47 | **MOBILIZATION (Cost per Release Order) - Preparatory work and operations in mobilizing startup of project, including, but not limited to, operations necessary for the movement of personnel, equipment, supplies and inclidentals to the project site, and for the establishment of temporary sanitary and other facilities.** | |
|---|---|---|
| ZONE I | $ | / LUMP SUM |
| ZONE 2 | $ | / LUMP SUM |
| ZONE 3 | $ | / LUMP SUM |
| ZONE 4A | $ | / LUMP SUM |
| ZONE 4B | $ | / LUMP SUM |
| ZONE 5 | $ | / LUMP SUM |
| DELIVERY DAYS AFTER RECEIPT OF ORDER: | | / DAYS |

| IV.48 | INDUCTIVE LOOP DETECTORS - FDOT Section 660 | |
|---|---|---|
| TYPE "A" | $ | / EACH |
| TYPE "F" 6' x 20' | $ | / EACH |
| TYPE "F" 6' x 40' | $ | / EACH |
| DELIVERY DAYS AFTER RECEIPT OF ORDER: | | / DAYS |

## SECTION IV - BASE AND SURFACE CONSTRUCTION/MATERIAL

| | | |
|---|---|---|
| **IV.49** | **MAINTENANCE OF TRAFFIC** | |
| CREW COMPLETE (INCLUDES TRUCK, FOREMAN, TWO FLAGGERS) | $ | / DAY |
| FLAG PERSONNEL (INCLUDES TWO FLAGGERS ONLY) | $ | / DAY |
| ADDITIONAL FLAG PERSONNEL (ONE FLAGGER ONLY) | $ | / HOUR |
| LAW ENFORCEMENT PERSONNEL | $ | / HOUR |
| **IV.50** | **FULL DEPTH PAVEMENT RECLAMATION** | |
| PREPARATION, PULVERIZING, SHAPING, COMPACTION AND FILLING | $ | / SQ YD |
| ADDITIVES, (CEMENT) | $ | / TON |
| IMPORTED MATERIAL | $ | / CY |
| REMOVAL OF UNSUITABLE MATERIAL | $ | / CY |
| **IV.51** | **COLD RECYCLED BITUMINOUS BASE COURSE** | |
| BASE COURSE | $ | / SQ YD |
| EMULSIFIED ASPHALT | $ | / GALLON |
| 6" TEMPORARY TRAFFIC STRIPE (PAINT) IF NEEDED | $ | / LF |
| ADDITIONAL AGGREGATES | $ | / TON |
| ADDITIONAL (R.A.P.) | $ | / TON |
| ADDITIVES | $ | / TON |
| **IV.52** | **HOT-IN-PLACE ASPHALT RECYCLING** | |
| ASPHALT RECYCLING | $ | / SQ YD |
| RECYCLING AGENT | $ | / GALLON |
| FURNISH AND PLACE S-III ASPHALT | $ | / TON |

## SECTION IV - BASE AND SURFACE CONSTRUCTION/MATERIAL

| IV.53 | SUPER PAVE MIX 9.5 | | |
|---|---|---|---|
| LOCATION OF VENDOR'S PLANT: | | | |
| PRICE F.O.B. VENDOR'S PLANT: | | | / PER TON |
| PRICE VENDOR DELIVER TO JOB SITE: | | | |
| ZONE 1 | 0 - 500 TONS | $ | / PER TON |
| | OVER 500 TONS | $ | / PER TON |
| ZONE 2 | 0 - 500 TONS | $ | / PER TON |
| | OVER 500 TONS | $ | / PER TON |
| ZONE 3 | 0 - 500 TONS | $ | / PER TON |
| | OVER 500 TONS | $ | / PER TON |
| ZONE 4A | 0 - 500 TONS | $ | / PER TON |
| | OVER 500 TONS | $ | / PER TON |
| ZONE 4B | 0 - 500 TONS | $ | / PER TON |
| | OVER 500 TONS | $ | / PER TON |
| ZONE 5 | 0 - 500 TONS | $ | / PER TON |
| | OVER 500 TONS | $ | / PER TON |
| DELIVERY DAYS AFTER RECEIPT OF ORDER: | | | / DAYS |

## SECTION IV - BASE AND SURFACE CONSTRUCTION/MATERIAL

| IV.54 | SUPER PAVE MIX 12.5 | |
|---|---|---|
| LOCATION OF VENDOR'S PLANT: | | |
| PRICE F.O.B. VENDOR'S PLANT: | | / PER TON |
| PRICE VENDOR DELIVER TO JOB SITE: | | |
| ZONE 1 | 0 - 500 TONS | $ / PER TON |
| | OVER 500 TONS | $ / PER TON |
| ZONE 2 | 0 - 500 TONS | $ / PER TON |
| | OVER 500 TONS | $ / PER TON |
| ZONE 3 | 0 - 500 TONS | $ / PER TON |
| | OVER 500 TONS | $ / PER TON |
| ZONE 4A | 0 - 500 TONS | $ / PER TON |
| | OVER 500 TONS | $ / PER TON |
| ZONE 4B | 0 - 500 TONS | $ / PER TON |
| | OVER 500 TONS | $ / PER TON |
| ZONE 5 | 0 - 500 TONS | $ / PER TON |
| | OVER 500 TONS | $ / PER TON |
| DELIVERY DAYS AFTER RECEIPT OF ORDER: | | / DAYS |

## SECTION IV - BASE AND SURFACE CONSTRUCTION/MATERIAL

| IV.55 | SWEEP, TACK, SPREAD AND COMPACT SUPER PAVE MIXES < #100 | |
|---|---|---|
| | 0 - 50 TONS | $ / PER TON |
| | 50 - 200 TONS | $ / PER TON |
| | 201 - 500 TONS | $ / PER TON |
| | OVER 500 TONS | $ / PER TON |
| | DELIVERY DAYS AFTER RECEIPT OF ORDER: | / DAYS |
| **IV.56** | **SWEEP, TACK, SPREAD AND COMPACT SUPER PAVE MIXES > #100** | |
| | 0 - 50 TONS | $ / PER TON |
| | 50 - 200 TONS | $ / PER TON |
| | 201 - 500 TONS | $ / PER TON |
| | OVER 500 TONS | $ / PER TON |
| | DELIVERY DAYS AFTER RECEIPT OF ORDER: | / DAYS |

## SECTION IV: BASE & SURFACE CONSTRUCTION/MATERIAL

| IV.57 | FC 12.5 MIX | |
|---|---|---|
| LOCATION OF VENDOR'S PLANT: | | |
| PRICE F.O.B. VENDOR'S PLANT: | | / PER TON |
| PRICE VENDOR DELIVER TO JOB SITE: | | |
| ZONE 1 | 0 - 500 TONS | $ / PER TON |
| | OVER 500 TONS | $ / PER TON |
| ZONE 2 | 0 - 500 TONS | $ / PER TON |
| | OVER 500 TONS | $ / PER TON |
| ZONE 3 | 0 - 500 TONS | $ / PER TON |
| | OVER 500 TONS | $ / PER TON |
| ZONE 4A | 0 - 500 TONS | $ / PER TON |
| | OVER 500 TONS | $ / PER TON |
| ZONE 4B | 0 - 500 TONS | $ / PER TON |
| | OVER 500 TONS | $ / PER TON |
| ZONE 5 | 0 - 500 TONS | $ / PER TON |
| | OVER 500 TONS | $ / PER TON |
| DELIVERY DAYS AFTER RECEIPT OF ORDER: | | / DAYS |

## SECTION V: STORMWATER, WASTEWATER, & WATER UTILITIES

| | | | |
|---|---|---|---|
| **V.1** | **REMOVE STORM DRAIN 12" TO 18" DIAMETER** | | |
| | 0 - 100 LF | $ | / PER LF |
| | 101 - 250 LF | $ | / PER LF |
| | 251 - 500 LF | $ | / PER LF |
| | OVER 500 LF | $ | / PER LF |
| | DELIVERY DAYS AFTER RECEIPT OF ORDER: | | / DAYS |
| **V.2** | **REMOVE STORM DRAIN 24" TO 48" DIAMETER** | | |
| | 0 - 100 LF | $ | / PER LF |
| | 101 - 250 LF | $ | / PER LF |
| | 251 - 500 LF | $ | / PER LF |
| | OVER 500 LF | $ | / PER LF |
| | DELIVERY DAYS AFTER RECEIPT OF ORDER: | | / DAYS |
| **V.3** | **REMOVE STORM DRAIN OVER 48" DIAMETER** | | |
| | 0 - 100 LF | $ | / PER LF |
| | 101 - 250 LF | $ | / PER LF |
| | 251 - 500 LF | $ | / PER LF |
| | OVER 500 LF | $ | / PER LF |
| | DELIVERY DAYS AFTER RECEIPT OF ORDER: | | / DAYS |
| **V.4** | **REMOVE MITERED END** | | |
| | REMOVE MITERED END | $ | / EACH |
| **V.5** | **REMOVE HEADWALL** | | |
| | REMOVE HEADWALL | $ | / EACH |

## SECTION V: STORMWATER, WASTEWATER, & WATER UTILITIES

| V.6 | FURNISH AND INSTALL CONCRETE STORM DRAIN 15" DIAMETER | | |
|---|---|---|---|
| | WELLPOINTS (LUMP SUM) | $ | / PER DAY |
| | | $ | / PER WEEK |
| TO 4' DEPTH | 0 - 100 LF | $ | / PER LF |
| | 101 - 250 LF | $ | / PER LF |
| | 251 - 500 LF | $ | / PER LF |
| | OVER 500 LF | $ | / PER LF |
| 4' - 6' DEPTH | 0 - 100 LF | $ | / PER LF |
| | 101 - 250 LF | $ | / PER LF |
| | 251 - 500 LF | $ | / PER LF |
| | OVER 500 LF | $ | / PER LF |
| 6' - 8' DEPTH | 0 - 100 LF | $ | / PER LF |
| | 101 - 250 LF | $ | / PER LF |
| | 251 - 500 LF | $ | / PER LF |
| | OVER 500 LF | $ | / PER LF |
| 8' - 10' DEPTH | 0 - 100 LF | $ | / PER LF |
| | 101 - 250 LF | $ | / PER LF |
| | 251 - 500 LF | $ | / PER LF |
| | OVER 500 LF | $ | / PER LF |
| DELIVERY DAYS AFTER RECEIPT OF ORDER: | | | / DAYS |

## SECTION V: STORMWATER, WASTEWATER, & WATER UTILITIES

| V.7 | FURNISH AND INSTALL CONCRETE STORM DRAIN 18" DIAMETER | | |
|---|---|---|---|
| | WELLPOINTS (LUMP SUM) | $ | / PER DAY |
| | | $ | / PER WEEK |
| TO 4' DEPTH | 0 - 100 LF | $ | / PER LF |
| | 101 - 250 LF | $ | / PER LF |
| | 251 - 500 LF | $ | / PER LF |
| | OVER 500 LF | $ | / PER LF |
| 4' - 6' DEPTH | 0 - 100 LF | $ | / PER LF |
| | 101 - 250 LF | $ | / PER LF |
| | 251 - 500 LF | $ | / PER LF |
| | OVER 500 LF | $ | / PER LF |
| 6' - 8' DEPTH | 0 - 100 LF | $ | / PER LF |
| | 101 - 250 LF | $ | / PER LF |
| | 251 - 500 LF | $ | / PER LF |
| | OVER 500 LF | $ | / PER LF |
| 8' - 10' DEPTH | 0 - 100 LF | $ | / PER LF |
| | 101 - 250 LF | $ | / PER LF |
| | 251 - 500 LF | $ | / PER LF |
| | OVER 500 LF | $ | / PER LF |
| DELIVERY DAYS AFTER RECEIPT OF ORDER: | | | / DAYS |

## SECTION V: STORMWATER, WASTEWATER, & WATER UTILITIES

| V.8 | FURNISH AND INSTALL CONCRETE STORM DRAIN 24" DIAMETER | | |
|---|---|---|---|
| | WELLPOINTS (LUMP SUM) | $ | / PER DAY |
| | | $ | / PER WEEK |
| TO 4' DEPTH | 0 - 100 LF | $ | / PER LF |
| | 101 - 250 LF | $ | / PER LF |
| | 251 - 500 LF | $ | / PER LF |
| | OVER 500 LF | $ | / PER LF |
| 4' - 6' DEPTH | 0 - 100 LF | $ | / PER LF |
| | 101 - 250 LF | $ | / PER LF |
| | 251 - 500 LF | $ | / PER LF |
| | OVER 500 LF | $ | / PER LF |
| 6' - 8' DEPTH | 0 - 100 LF | $ | / PER LF |
| | 101 - 250 LF | $ | / PER LF |
| | 251 - 500 LF | $ | / PER LF |
| | OVER 500 LF | $ | / PER LF |
| 8' - 10' DEPTH | 0 - 100 LF | $ | / PER LF |
| | 101 - 250 LF | $ | / PER LF |
| | 251 - 500 LF | $ | / PER LF |
| | OVER 500 LF | $ | / PER LF |
| DELIVERY DAYS AFTER RECEIPT OF ORDER: | | | / DAYS |

## SECTION V: STORMWATER, WASTEWATER, & WATER UTILITIES

| V.9 | FURNISH/INSTALL CONCRETE STORM DRAIN 30" D | | |
|---|---|---|---|
| | WELLPOINTS (LUMP SUM) | $ | / PER DAY |
| | | $ | / PER WEEK |
| 4' - 6' DEPTH | 0 - 100 LF | $ | / PER LF |
| | 101 - 250 LF | $ | / PER LF |
| | 251 - 500 LF | $ | / PER LF |
| | OVER 500 LF | $ | / PER LF |
| 6' - 8' DEPTH | 0 - 100 LF | $ | / PER LF |
| | 101 - 250 LF | $ | / PER LF |
| | 251 - 500 LF | $ | / PER LF |
| | OVER 500 LF | $ | / PER LF |
| 8' - 10' DEPTH | 0 - 100 LF | $ | / PER LF |
| | 101 - 250 LF | $ | / PER LF |
| | 251 - 500 LF | $ | / PER LF |
| | OVER 500 LF | $ | / PER LF |
| | DELIVERY DAYS AFTER RECEIPT OF ORDER: | | / DAYS |

| V.10 | FURNISH/INSTALL CONCRETE STORM DRAIN 36" D | | |
|---|---|---|---|
| | WELLPOINTS (LUMP SUM) | $ | / PER DAY |
| | | $ | / PER WEEK |
| 4' - 6' DEPTH | 0 - 100 LF | $ | / PER LF |
| | 101 - 250 LF | | / PER LF |
| | 251 - 500 LF | | / PER LF |
| | OVER 500 LF | | / PER LF |

## SECTION V: STORMWATER, WASTEWATER, & WATER UTILITIES

| V.10 | FURNISH/INSTALL CONCRETE STORM DRAIN 36" D (continued) | | |
|---|---|---|---|
| 6' - 8' DEPTH | 0 - 100 LF | $ | / PER LF |
| | 101 - 250 LF | $ | / PER LF |
| | 251 - 500 LF | $ | / PER LF |
| | OVER 500 LF | $ | / PER LF |
| 8' - 10' DEPTH | 0 - 100 LF | $ | / PER LF |
| | 101 - 250 LF | $ | / PER LF |
| | 251 - 500 LF | $ | / PER LF |
| | OVER 500 LF | $ | / PER LF |
| 10' - 12' DEPTH | 0 - 100 LF | $ | / PER LF |
| | 101 - 250 LF | $ | / PER LF |
| | 251 - 500 LF | $ | / PER LF |
| | OVER 500 LF | $ | / PER LF |
| | DELIVERY DAYS AFTER RECEIPT OF ORDER: | | / DAYS |

| V.11 | FURNISH AND INSTALL CONCRETE STORM DRAIN 42" DIAMETER | | |
|---|---|---|---|
| | WELLPOINTS (LUMP SUM) | $ | / PER DAY |
| | | $ | / PER WEEK |
| 4' - 6' DEPTH | 0 - 100 LF | $ | / PER LF |
| | 101 - 250 LF | $ | / PER LF |
| | 251 - 500 LF | $ | / PER LF |
| | OVER 500 LF | $ | / PER LF |

## SECTION V: STORMWATER, WASTEWATER, & WATER UTILITIES

| V.11 | FURNISH AND INSTALL CONCRETE STORM DRAIN 42" DIAMETER (continued) | | |
|---|---|---|---|
| 6' - 8' DEPTH | 0 - 100 LF | $ | / PER LF |
| | 101 - 250 LF | $ | / PER LF |
| | 251 - 500 LF | $ | / PER LF |
| | OVER 500 LF | $ | / PER LF |
| 8' - 10' DEPTH | 0 - 100 LF | $ | / PER LF |
| | 101 - 250 LF | $ | / PER LF |
| | 251 - 500 LF | $ | / PER LF |
| | OVER 500 LF | $ | / PER LF |
| | DELIVERY DAYS AFTER RECEIPT OF ORDER: | | / DAYS |

| V.12 | FURNISH AND INSTALL CONCRETE STORM DRAIN 48" DIAMETER | | |
|---|---|---|---|
| | WELLPOINTS (LUMP SUM) | $ | / PER DAY |
| | | $ | / PER WEEK |
| 4' - 6' DEPTH | 0 - 100 LF | $ | / PER LF |
| | 101 - 250 LF | $ | / PER LF |
| | 251 - 500 LF | $ | / PER LF |
| | OVER 500 LF | $ | / PER LF |
| 6' - 8' DEPTH | 0 - 100 LF | $ | / PER LF |
| | 101 - 250 LF | $ | / PER LF |
| | 251 - 500 LF | $ | / PER LF |
| | OVER 500 LF | $ | / PER LF |
| 8' - 10' DEPTH | 0 - 100 LF | $ | / PER LF |
| | 101 - 250 LF | $ | / PER LF |
| | 251 - 500 LF | $ | / PER LF |
| | OVER 500 LF | $ | / PER LF |
| | DELIVERY DAYS AFTER RECEIPT OF ORDER: | | / DAYS |

## SECTION V: STORMWATER, WASTEWATER, & WATER UTILITIES

| V.13 | FURNISH AND INSTALL CONCRETE STORM DRAIN 54" DIAMETER | | |
|---|---|---|---|
| | WELLPOINTS (LUMP SUM) | $ | / PER DAY |
| | | $ | / PER WEEK |
| 6' - 8' DEPTH | 0 - 100 LF | $ | / PER LF |
| | 101 - 250 LF | $ | / PER LF |
| | 251 - 500 LF | $ | / PER LF |
| | OVER 500 LF | $ | / PER LF |
| 8' - 10' DEPTH | 0 - 100 LF | $ | / PER LF |
| | 101 - 250 LF | $ | / PER LF |
| | 251 - 500 LF | $ | / PER LF |
| | OVER 500 LF | $ | / PER LF |
| | DELIVERY DAYS AFTER RECEIPT OF ORDER: | | / DAYS |

| V.14 | FURNISH AND INSTALL CONCRETE STORM DRAIN 60" DIAMETER | | |
|---|---|---|---|
| | WELLPOINTS (LUMP SUM) | $ | / PER DAY |
| | | $ | / PER WEEK |
| 6' - 8' DEPTH | 0 - 100 LF | $ | / PER LF |
| | 101 - 250 LF | $ | / PER LF |
| | 251 - 500 LF | $ | / PER LF |
| | OVER 500 LF | $ | / PER LF |
| 8' - 10' DEPTH | 0 - 100 LF | $ | / PER LF |
| | 101 - 250 LF | $ | / PER LF |
| | 251 - 500 LF | $ | / PER LF |
| | OVER 500 LF | $ | / PER LF |
| | DELIVERY DAYS AFTER RECEIPT OF ORDER: | | / DAYS |

## SECTION V: STORMWATER, WASTEWATER, & WATER UTILITIES

| V.15 | FURNISH AND INSTALL CONCRETE STORM DRAIN 66" DIAMETER | | |
|---|---|---|---|
| | WELLPOINTS (LUMP SUM) | $ | / PER DAY |
| | | $ | / PER WEEK |
| 6' - 8' DEPTH | 0 - 100 LF | $ | / PER LF |
| | 101 - 250 LF | $ | / PER LF |
| | 251 - 500 LF | $ | / PER LF |
| | OVER 500 LF | $ | / PER LF |
| 8' - 10' DEPTH | 0 - 100 LF | $ | / PER LF |
| | 101 - 250 LF | $ | / PER LF |
| | 251 - 500 LF | $ | / PER LF |
| | OVER 500 LF | $ | / PER LF |
| | DELIVERY DAYS AFTER RECEIPT OF ORDER: | | / DAYS |

| V.16 | FURNISH AND INSTALL CONCRETE STORM DRAIN 72" DIAMETER | | |
|---|---|---|---|
| | WELLPOINTS (LUMP SUM) | $ | / PER DAY |
| | | $ | / PER WEEK |
| 6' - 8' DEPTH | 0 - 100 LF | $ | / PER LF |
| | 101 - 250 LF | $ | / PER LF |
| | 251 - 500 LF | $ | / PER LF |
| | OVER 500 LF | $ | / PER LF |
| 8' - 10' DEPTH | 0 - 100 LF | $ | / PER LF |
| | 101 - 250 LF | $ | / PER LF |
| | 251 - 500 LF | $ | / PER LF |
| | OVER 500 LF | $ | / PER LF |
| | DELIVERY DAYS AFTER RECEIPT OF ORDER: | | / DAYS |

## SECTION V: STORMWATER, WASTEWATER, & WATER UTILITIES

| | | |
|---|---|---|
| **V.17** | **FURNISH & INSTALL CONCRETE STORM DRAIN 15" DIAMETER MITERED END** | |
| FURNISH & INSTALL CONCRETE STORM DRAIN 15" DIAMETER MITERED | $ | / PER EACH |
| **V.18** | **FURNISH & INSTALL CONCRETE STORM DRAIN 18" DIAMETER MITERED END** | |
| FURNISH & INSTALL CONCRETE STORM DRAIN 18" DIAMETER MITERED | $ | / PER EACH |
| **V.19** | **FURNISH & INSTALL CONCRETE STORM DRAIN 24" DIAMETER MITERED END** | |
| FURNISH & INSTALL CONCRETE STORM DRAIN 24" DIAMETER MITERED | $ | / PER EACH |
| **V.20** | **FURNISH & INSTALL CONCRETE STORM DRAIN 30" DIAMETER MITERED END** | |
| FURNISH & INSTALL CONCRETE STORM DRAIN 30" DIAMETER MITERED | $ | / PER EACH |
| **V.21** | **FURNISH & INSTALL CONCRETE STORM DRAIN 36" DIAMETER MITERED END** | |
| FURNISH & INSTALL CONCRETE STORM DRAIN 36" DIAMETER MITERED | $ | / PER EACH |
| GRATING FOR MITERED END SECTION | $ | / PER EACH |
| **V.22** | **FURNISH & INSTALL CONCRETE STORM DRAIN 42" DIAMETER MITERED END** | |
| FURNISH & INSTALL CONCRETE STORM DRAIN 42" DIAMETER MITERED | $ | / PER EACH |
| GRATING FOR MITERED END SECTION | $ | / PER EACH |
| **V.23** | **FURNISH & INSTALL CONCRETE STORM DRAIN 48" DIAMETER MITERED END** | |
| FURNISH & INSTALL CONCRETE STORM DRAIN 48" DIAMETER MITERED | $ | / PER EACH |
| GRATING FOR MITERED END SECTION | $ | / PER EACH |
| **V.24** | **ALTERNATE MANHOLE ADJUSTMENT - Specification: Adjust manhole lid. Backfill with Type III Asphaltic Concrete. Heat, scarify and rework existing Asphaltic Concrete bordering cut and blend with new material. Composite mix to be shaped and compacted.** | |
| 1 - 5 UNITS | $ | / PER UNIT |
| 6 - 10 UNITS | $ | / PER UNIT |
| OVER 10 UNITS | $ | / PER UNIT |
| DELIVERY DAYS AFTER RECEIPT OF ORDER: | | / DAYS |

## SECTION V: STORMWATER, WASTEWATER, & WATER UTILITIES

| | | | |
|---|---|---|---|
| **V.25** | **MANHOLE AND WATER VALVE ADJUSTMENT AS A PART OF BASE RECONSTRUCTION** | | |
| MANHOLE ADJUSTMENT | | $ | / EACH |
| WATER VALVE ADJUSTMENT | | $ | / EACH |
| DELIVERY DAYS AFTER RECEIPT OF ORDER: | | | / DAYS |
| **V.26** | **CONSTRUCT CONCRETE BLOCK CATCH BASIN 4'0"x5'4" - Specification: Manatee County 202.1** | | |
| TO 4' HEIGHT | | $ | / EACH |
| 4'1" TO 6' HEIGHT | | $ | / EACH |
| 6'1" TO 8' HEIGHT | | $ | / EACH |
| DELIVERY DAYS AFTER RECEIPT OF ORDER: | | | / DAYS |
| **V.27** | **CONSTRUCT CONCRETE BLOCK CATCH BASIN 5'4"x5'4" - Specification: Manatee County 202.1** | | |
| TO 4' HEIGHT | | $ | / EACH |
| 4'1" TO 6' HEIGHT | | $ | / EACH |
| 6'1" TO 8' HEIGHT | | $ | / EACH |
| DELIVERY DAYS AFTER RECEIPT OF ORDER: | | | / DAYS |
| **V.28** | **CONSTRUCT CONCRETE BLOCK CATCH BASIN 6'4"x5'4"** | | |
| TO 4' HEIGHT | | $ | / EACH |
| 4'1" TO 6' HEIGHT | | $ | / EACH |
| 6'1" TO 8' HEIGHT | | $ | / EACH |
| DELIVERY DAYS AFTER RECEIPT OF ORDER: | | | / DAYS |
| **V.29** | **CONSTRUCT P-5 CURB INLET - Spec: FDOT Section 425** | | |
| CONSTRUCT P-5 CURB INLET | | $ | / EACH |
| DELIVERY DAYS AFTER RECEIPT OF ORDER: | | | / DAYS |
| **V.30** | **CONSTRUCT J-5 CURB INLET - Spec: FDOT Section 425** | | |
| CONSTRUCT J-5 CURB INLET | | $ | / EACH |
| DELIVERY DAYS AFTER RECEIPT OF ORDER: | | | / DAYS |

## SECTION V: STORMWATER, WASTEWATER, & WATER UTILITIES

| | | | |
|---|---|---|---|
| **V.31** | **CONSTRUCT J-6 CURB INLET - Spec: FDOT Section 425** | | |
| | CONSTRUCT J-6 CURB INLET | $ | / EACH |
| | DELIVERY DAYS AFTER RECEIPT OF ORDER: | | / DAYS |
| **V.32** | **CONSTRUCT TYPE 5 CURB INLET LID** | | |
| | CONSTRUCT TYPE 5 CURB INLET LID | $ | / EACH |
| | DELIVERY DAYS AFTER RECEIPT OF ORDER: | | / DAYS |
| **V.33** | **CONSTRUCT TYPE 6 CURB INLET LID** | | |
| | CONSTRUCT TYPE 6 CURB INLET LID | $ | / EACH |
| | DELIVERY DAYS AFTER RECEIPT OF ORDER: | | / DAYS |
| **V.34** | **CONSTRUCT P-6 CURB INLET** | | |
| | CONSTRUCT P-6 CURB INLET | $ | / EACH |
| | DELIVERY DAYS AFTER RECEIPT OF ORDER: | | / DAYS |
| **V.35** | **FURNISH & INSTALL 6" UNDERDRAIN (PIPE, SOCK, AGGREGATE)** | | |
| | 0 - 100 LF | $ | / LF |
| | 101 - 1,000 LF | $ | / LF |
| | OVER 1,000 LF | $ | / LF |
| | DELIVERY DAYS AFTER RECEIPT OF ORDER: | | / DAYS |
| **V.36** | **TIE UNDERDRAIN INTO EXISTING BOX** | | |
| | TIE UNDERDRAIN INTO EXISTING BOX | $ | / EACH |
| **V.37** | **FURNISH AND INSTALL 6" UNDERDRAIN CLEAN-OUT WITH CONCRETE PAD** | | |
| | FURNISH AND INSTALL 6" UNDERDRAIN CLEAN-OUT WITH CONCRETE PAD. | $ | / EACH |

## SECTION V: STORMWATER, WASTEWATER, & WATER UTILITIES

| V.38 | INSTALL CONCRETE COLLAR | |
|---|---|---|
| 15" PIPE OR EQUIVALENT<br>0 - 4' DEPTH | $ | / PER EACH |
| 4' - 8' DEPTH | $ | / PER EACH |
| 18" PIPE OR EQUIVALENT<br>0 - 4' DEPTH | $ | / PER EACH |
| 4' - 8' DEPTH | $ | / PER EACH |
| 24" PIPE OR EQUIVALENT<br>0 - 4' DEPTH | $ | / PER EACH |
| 4' - 8' DEPTH | $ | / PER EACH |
| 30" PIPE OR EQUIVALENT<br>0 - 4' DEPTH | $ | / PER EACH |
| 4' - 8' DEPTH | $ | / PER EACH |
| 36" PIPE OR EQUIVALENT<br>0 - 4' DEPTH | $ | / PER EACH |
| 4' - 8' DEPTH | $ | / PER EACH |
| 8' - 10' DEPTH | $ | / PER EACH |
| 42" PIPE OR EQUIVALENT<br>0 - 4' DEPTH | $ | / PER EACH |
| 4' - 8' DEPTH | $ | / PER EACH |
| 8' - 10' DEPTH | $ | / PER EACH |
| 48" PIPE OR EQUIVALENT<br>0 - 4' DEPTH | $ | / PER EACH |
| 4' - 8' DEPTH | $ | / PER EACH |
| 8' - 10' DEPTH | $ | / PER EACH |
| 54" PIPE OR EQUIVALENT<br>0 - 4' DEPTH | $ | / PER EACH |
| 4' - 8' DEPTH | $ | / PER EACH |
| 8' - 10' DEPTH | $ | / PER EACH |

## SECTION V: STORMWATER, WASTEWATER, & WATER UTILITIES

| V.38 INSTALL CONCRETE COLLAR (continued) | | |
|---|---|---|
| 60" PIPE OR EQUIVALENT<br>0 - 4' DEPTH | $ | / PER EACH |
| 4' - 8' DEPTH | $ | / PER EACH |
| 8' - 10' DEPTH | $ | / PER EACH |
| 66" PIPE OR EQUIVALENT<br>0 - 4' DEPTH | $ | / PER EACH |
| 4' - 8' DEPTH | $ | / PER EACH |
| 8' - 10' DEPTH | $ | / PER EACH |
| 72" PIPE OR EQUIVALENT<br>0 - 4' DEPTH | $ | / PER EACH |
| 4' - 8' DEPTH | $ | / PER EACH |
| 8' - 10' DEPTH | $ | / PER EACH |
| 84" PIPE OR EQUIVALENT<br>0 - 4' DEPTH | $ | / PER EACH |
| 4' - 8' DEPTH | $ | / PER EACH |
| 8' - 10' DEPTH | $ | / PER EACH |
| DELIVERY DAYS AFTER RECEIPT OF ORDER: | | / DAYS |
| **V.39 REMOVE CONCRETE COLLAR** | | |
| 15" PIPE OR EQUIVALENT<br>0 - 4' DEPTH | $ | / PER EACH |
| 4' - 8' DEPTH | $ | / PER EACH |
| 18" PIPE OR EQUIVALENT<br>0 - 4' DEPTH | $ | / PER EACH |
| 4' - 8' DEPTH | $ | / PER EACH |
| 24" PIPE OR EQUIVALENT<br>0 - 4' DEPTH | $ | / PER EACH |
| 4' - 8' DEPTH | $ | / PER EACH |

## SECTION V: STORMWATER, WASTEWATER, & WATER UTILITIES

| V.39 REMOVE CONCRETE COLLAR (continued) | |
|---|---|
| 30" PIPE OR EQUIVALENT<br>0 - 4' DEPTH | $ / PER EACH |
| 4' - 8' DEPTH | $ / PER EACH |
| 36" PIPE OR EQUIVALENT<br>0 - 4' DEPTH | $ / PER EACH |
| 4' - 8' DEPTH | $ / PER EACH |
| 8' - 10' DEPTH | $ / PER EACH |
| 42" PIPE OR EQUIVALENT<br>0 - 4' DEPTH | $ / PER EACH |
| 4' - 8' DEPTH | $ / PER EACH |
| 8' - 10' DEPTH | $ / PER EACH |
| 48" PIPE OR EQUIVALENT<br>0 - 4' DEPTH | $ / PER EACH |
| 4' - 8' DEPTH | $ / PER EACH |
| 8' - 10' DEPTH | $ / PER EACH |
| 54" PIPE OR EQUIVALENT<br>0 - 4' DEPTH | $ / PER EACH |
| 4' - 8' DEPTH | $ / PER EACH |
| 8' - 10' DEPTH | $ / PER EACH |
| 60" PIPE OR EQUIVALENT<br>0 - 4' DEPTH | $ / PER EACH |
| 4' - 8' DEPTH | $ / PER EACH |
| 8' - 10' DEPTH | $ / PER EACH |
| 66" PIPE OR EQUIVALENT<br>0 - 4' DEPTH | $ / PER EACH |
| 4' - 8' DEPTH | $ / PER EACH |
| 8' - 10' DEPTH | $ / PER EACH |

## SECTION V: STORMWATER, WASTEWATER, & WATER UTILITIES

| V.39 | REMOVE CONCRETE COLLAR (continued) | |
|---|---|---|
| 72" PIPE OR EQUIVALENT<br>0 - 4' DEPTH | $ | / PER EACH |
| 4' - 8' DEPTH | $ | / PER EACH |
| 8' - 10' DEPTH | $ | / PER EACH |
| 84" PIPE OR EQUIVALENT<br>0 - 4' DEPTH | $ | / PER EACH |
| 4' - 8' DEPTH | $ | / PER EACH |
| 8' - 10' DEPTH | $ | / PER EACH |
| DELIVERY DAYS AFTER RECEIPT OF ORDER: | | / DAYS |
| **V.40** | **REMOVE BOX INLET** | |
| 48" X 48" BOX | $ | / PER EACH |
| 64" X 64" BOX | $ | / PER EACH |
| DELIVERY DAYS AFTER RECEIPT OF ORDER: | | / DAYS |
| **V.41** | **REMOVE CONCRETE DRAINAGE STRUCTURE** | |
| REMOVAL OF DRAINAGE STRUCTURE | $ | / PER CY |
| DELIVERY DAYS AFTER RECEIPT OF ORDER: | | / DAYS |
| **V.42** | **INLET MODIFICATION (ONE SIDE)** | |
| MODIFY 48" BOX<br>0 - 4' DEPTH | $ | / PER EACH |
| 4' - 8' DEPTH | $ | / PER EACH |
| 8' - 10' DEPTH | $ | / PER EACH |
| MODIFY 64" BOX<br>0 - 4' DEPTH | $ | / PER EACH |
| 4' - 8' DEPTH | $ | / PER EACH |
| 8' - 10' DEPTH | $ | / PER EACH |
| DELIVERY DAYS AFTER RECEIPT OF ORDER: | | / DAYS |

## SECTION V: STORMWATER, WASTEWATER, & WATER UTILITIES

| V.43 | FURNISH AND INSTALL ELLIPTICAL PIPE 12" x 18" | | |
|---|---|---|---|
| | WELLPOINTS (LUMP SUM) | $ | / PER DAY |
| | | $ | / PER WEEK |
| TO 4' DEPTH | 0 - 100 LF | $ | / PER LF |
| | 101 - 250 LF | $ | / PER LF |
| | 251 - 500 LF | $ | / PER LF |
| | OVER 500 LF | $ | / PER LF |
| 4' - 6' DEPTH | 0 - 100 LF | $ | / PER LF |
| | 101 - 250 LF | $ | / PER LF |
| | 251 - 500 LF | $ | / PER LF |
| | OVER 500 LF | $ | / PER LF |
| 6' - 8' DEPTH | 0 - 100 LF | $ | / PER LF |
| | 101 - 250 LF | $ | / PER LF |
| | 251 - 500 LF | $ | / PER LF |
| | OVER 500 LF | $ | / PER LF |
| 8' - 10' DEPTH | 0 - 100 LF | $ | / PER LF |
| | 101 - 250 LF | $ | / PER LF |
| | 251 - 500 LF | $ | / PER LF |
| | OVER 500 LF | $ | / PER LF |
| | DELIVERY DAYS AFTER RECEIPT OF ORDER: | | / DAYS |

## SECTION V: STORMWATER, WASTEWATER, & WATER UTILITIES

| V.44 | FURNISH AND INSTALL ELLIPTICAL PIPE 14" X 23" | | |
|---|---|---|---|
| | WELLPOINTS (LUMP SUM) | $ | / PER DAY |
| | | $ | / PER WEEK |
| TO 4' DEPTH | 0 - 100 LF | $ | / PER LF |
| | 101 - 250 LF | $ | / PER LF |
| | 251 - 500 LF | $ | / PER LF |
| | OVER 500 LF | $ | / PER LF |
| 4' - 6' DEPTH | 0 - 100 LF | $ | / PER LF |
| | 101 - 250 LF | $ | / PER LF |
| | 251 - 500 LF | $ | / PER LF |
| | OVER 500 LF | $ | / PER LF |
| 6' - 8' DEPTH | 0 - 100 LF | $ | / PER LF |
| | 101 - 250 LF | $ | / PER LF |
| | 251 - 500 LF | $ | / PER LF |
| | OVER 500 LF | $ | / PER LF |
| 8' - 10' DEPTH | 0 - 100 LF | $ | / PER LF |
| | 101 - 250 LF | $ | / PER LF |
| | 251 - 500 LF | $ | / PER LF |
| | OVER 500 LF | $ | / PER LF |
| | DELIVERY DAYS AFTER RECEIPT OF ORDER: | | / DAYS |

## SECTION V: STORMWATER, WASTEWATER, & WATER UTILITIES

| V.45 | FURNISH AND INSTALL ELLIPTICAL PIPE 19" x 30" | | |
|---|---|---|---|
| | WELLPOINTS (LUMP SUM) | $ | / PER DAY |
| | | $ | / PER WEEK |
| TO 4' DEPTH | 0 - 100 LF | $ | / PER LF |
| | 101 - 250 LF | $ | / PER LF |
| | 251 - 500 LF | $ | / PER LF |
| | OVER 500 LF | $ | / PER LF |
| 4' - 6' DEPTH | 0 - 100 LF | $ | / PER LF |
| | 101 - 250 LF | $ | / PER LF |
| | 251 - 500 LF | $ | / PER LF |
| | OVER 500 LF | $ | / PER LF |
| 6' - 8' DEPTH | 0 - 100 LF | $ | / PER LF |
| | 101 - 250 LF | $ | / PER LF |
| | 251 - 500 LF | $ | / PER LF |
| | OVER 500 LF | $ | / PER LF |
| 8' - 10' DEPTH | 0 - 100 LF | $ | / PER LF |
| | 101 - 250 LF | $ | / PER LF |
| | 251 - 500 LF | $ | / PER LF |
| | OVER 500 LF | $ | / PER LF |
| | DELIVERY DAYS AFTER RECEIPT OF ORDER: | | / DAYS |

## SECTION V: STORMWATER, WASTEWATER, & WATER UTILITIES

| V.46 | FURNISH AND INSTALL ELLIPTICAL PIPE 24" x 38" | | |
|---|---|---|---|
| | WELLPOINTS (LUMP SUM) | $ | / PER DAY |
| | | $ | / PER WEEK |
| TO 4' DEPTH | 0 - 100 LF | $ | / PER LF |
| | 101 - 250 LF | $ | / PER LF |
| | 251 - 500 LF | $ | / PER LF |
| | OVER 500 LF | $ | / PER LF |
| 4' - 6' DEPTH | 0 - 100 LF | $ | / PER LF |
| | 101 - 250 LF | $ | / PER LF |
| | 251 - 500 LF | $ | / PER LF |
| | OVER 500 LF | $ | / PER LF |
| 6' - 8' DEPTH | 0 - 100 LF | $ | / PER LF |
| | 101 - 250 LF | $ | / PER LF |
| | 251 - 500 LF | $ | / PER LF |
| | OVER 500 LF | $ | / PER LF |
| 8' - 10' DEPTH | 0 - 100 LF | $ | / PER LF |
| | 101 - 250 LF | $ | / PER LF |
| | 251 - 500 LF | $ | / PER LF |
| | OVER 500 LF | $ | / PER LF |
| | DELIVERY DAYS AFTER RECEIPT OF ORDER: | | / DAYS |

## SECTION V: STORMWATER, WASTEWATER, & WATER UTILITIES

| | | |
|---|---|---|
| **V.47** | **FURNISH & INSTALL CONCRETE STORM DRAIN (ELLIPTICAL 12" x 18") MITERED END** | |
| FURNISH & INSTALL CONCRETE STORM DRAIN 12" DIAMETER MITERED | $ | / PER EACH |
| **V.48** | **FURNISH & INSTALL CONCRETE STORM DRAIN (ELLIPTICAL 14" x 23") MITERED END** | |
| FURNISH & INSTALL CONCRETE STORM DRAIN (ELLIPTICAL 14" x 23") MITERED END | $ | / PER EACH |
| **V.49** | **FURNISH & INSTALL CONCRETE STORM DRAIN (ELLIPTICAL 19" x 30") MITERED END** | |
| FURNISH & INSTALL CONCRETE STORM DRAIN (ELLIPTICAL 19" x 30") MITERED END | $ | / PER EACH |
| **V.50** | **FURNISH & INSTALL CONCRETE STORM DRAIN (ELLIPTICAL 24" x 38") MITERED END** | |
| FURNISH & INSTALL CONCRETE STORM DRAIN (ELLIPTICAL 24" x 38") MITERED END | $ | / PER EACH |
| GRATING FOR MITERED END SECTION | $ | / PER EACH |

## ROAD BUILDING MATERIALS SERVICES
### BID FORM
(Submit in Triplicate)

## SECTION VI - CURB AND GUTTER, SIDEWALKS AND DRIVEWAYS

| | | |
|---|---|---|
| **VI.1** | **MIAMI CURB AND GUTTER - Spec: Manatee County 201.1** | |
| 0 - 500 LF | $ | / PER LF |
| 501 - 2,000 LF | $ | / PER LF |
| OVER 2,000 LF | $ | / PER LF |
| DELIVERY DAYS AFTER RECEIPT OF ORDER: | | / DAYS |
| **VI.2** | **TYPE "F" BARRIER CURB AND GUTTER - Spec.: Manatee County 201.0 & 201.2** | |
| 0 - 500 LF | $ | / PER LF |
| 501 - 2,000 LF | $ | / PER LF |
| OVER 2,000 LF | $ | / PER LF |
| DELIVERY DAYS AFTER RECEIPT OF ORDER: | | / DAYS |
| **VI.3** | **MODIFIED TYPE "F" CURB** | |
| 0 - 500 LF | $ | / PER LF |
| 501 - 2,000 LF | $ | / PER LF |
| OVER 2,000 LF | $ | / PER LF |
| DELIVERY DAYS AFTER RECEIPT OF ORDER: | | / DAYS |
| **VI.4** | **TYPE "A" MEDIAN CURB AND GUTTER - Spec.: Manatee County 201.0 & 201.3** | |
| 0 - 500 LF | $ | / PER LF |
| 501 - 2,000 LF | $ | / PER LF |
| OVER 2,000 LF | $ | / PER LF |
| DELIVERY DAYS AFTER RECEIPT OF ORDER: | | / DAYS |
| **VI.5** | **FDOT HEADWALLS** | |
| ITEMS INCLUDE REBAR | $ | / PER CY |

## SECTION VI - CURB AND GUTTER, SIDEWALKS AND DRIVEWAYS

| | | |
|---|---|---|
| **VI.6** | **TYPE "D" HIGHBACK CURB - Spec.: Manatee County 201.0 and 201.4** | |
| 0 - 500 LF | $ | / PER LF |
| 501 - 2,000 LF | $ | / PER LF |
| OVER 2,000 LF | $ | / PER LF |
| DELIVERY DAYS AFTER RECEIPT OF ORDER: | | / DAYS |
| **VI.7** | **TYPE "E" CURB - FDOT INDEX 300** | |
| 0 - 500 LF | $ | / PER LF |
| 501 - 2,000 LF | $ | / PER LF |
| OVER 2,000 LF | $ | / PER LF |
| DELIVERY DAYS AFTER RECEIPT OF ORDER: | | / DAYS |
| **VI.8** | **TYPE "A" VALLEY CROSSING - Specification: Manatee County 201.6** | |
| TYPE "A" VALLEY CROSSING | $ | / PER LF |
| MIAMI CURB & GUTTER ON RADIUS | $ | / PER LF |
| REMOVE NECESSARY PAVEMENT, BASE, CURB & GUTTER TO INSTALL NEW VALLEY CROSSING | $ | / PER LF |
| DELIVERY DAYS AFTER RECEIPT OF ORDER: | | / DAYS |
| **VI.9** | **TYPE "B" VALLEY CROSSING - Spec: Manatee County 201.6** | |
| TYPE "B" VALLEY CROSSING | $ | / PER LF |
| MIAMI CURB & GUTTER ON RADIUS | $ | / PER LF |
| REMOVE NECESSARY PAVEMENT, BASE, CURB & GUTTER TO INSTALL NEW VALLEY CROSSING | $ | / PER LF |
| DELIVERY DAYS AFTER RECEIPT OF ORDER: | | / DAYS |

## SECTION VI - CURB AND GUTTER, SIDEWALKS AND DRIVEWAYS

| VI.10 | CONSTRUCT SIDEWALK / DRIVEWAY | |
|---|---|---|
| 2,500 PSI RANDOM x 4" | $ | / PER SY |
| 3,000 PSI RANDOM x 4" | $ | / PER SY |
| 2,500 PSI RANDOM x 4" WITH 6 x 6 #10 MESH | $ | / PER SY |
| 3,000 PSI RANDOM x 4" WITH 6 x 6 #10 MESH | $ | / PER SY |
| 2,500 PSI RANDOM x 6" | $ | / PER SY |
| 3,000 PSI RANDOM x 6" | $ | / PER SY |
| 2,500 PSI RANDOM x 6" WITH 6 x 6 #10 MESH | $ | / PER SY |
| 3,000 PSI RANDOM x 6" WITH 6 x 6 #10 MESH | $ | / PER SY |
| PREPARATION (GRADING, SHAPE, BASE PREPARATION TO INCLUDE 6" FILL AND/OR EXCAVATION | $ | / PER SY |
| ADDITIONAL FILL | $ | / PER CY |
| ADDITIONAL EXCAVATION | $ | / PER CY |
| DELIVERY DAYS AFTER RECEIPT OF ORDER: | | / DAYS |
| **VI.11** | **MISCELLANEOUS CONCRETE FORMED AND POURED** | |
| 3,000 PSI | $ | / PER CY |
| 4,000 PSI | $ | / PER CY |
| DELIVERY DAYS AFTER RECEIPT OF ORDER: | | / DAYS |
| **VI.12** | **REBAR** | |
| ITEMS TO BE USED WITH MISCELLANEOUS CONCRETE | $ | / PER LB |
| DELIVERY DAYS AFTER RECEIPT OF ORDER: | | / DAYS |

## SECTION VI - CURB AND GUTTER, SIDEWALKS AND DRIVEWAYS

| VI.13 | REMOVE CONCRETE SIDEWALK / DRIVEWAY (2500 PSI) | | |
|---|---|---|---|
| | 4" THICKNESS | | |
| | 0 - 100 SF | $ | / PER SF |
| | 101 - 250 SF | $ | / PER SF |
| | 251 - 500 SF | $ | / PER SF |
| | OVER 500 SF | $ | / PER SF |
| | 6" THICKNESS | | |
| | 0 - 100 SF | $ | / PER SF |
| | 101 - 250 SF | $ | / PER SF |
| | 251 - 500 SF | $ | / PER SF |
| | OVER 500 SF | $ | / PER SF |
| | DELIVERY DAYS AFTER RECEIPT OF ORDER: | | / DAYS |

| VI.14 | REMOVE CONCRETE CURB & GUTTER | | |
|---|---|---|---|
| | 0 - 100 SF | $ | / PER SF |
| | 101 - 250 SF | $ | / PER SF |
| | 251 - 500 SF | $ | / PER SF |
| | OVER 500 SF | $ | / PER SF |
| | DELIVERY DAYS AFTER RECEIPT OF ORDER: | | / DAYS |

| VI.15 | CONSTRUCT ASPHALT SIDEWALK / DRIVEWAY - Price to include excavation, asphalt material, labor and equipment | | |
|---|---|---|---|
| | SAND ASPHALT - HOT MIX - 1200# | | |
| | 4' x 4" | $ | / PER LF |
| | 5' x 4" | $ | / PER LF |
| | 6' x 4" | $ | / PER LF |
| | 8' x 4" | $ | / PER LF |
| | 4' x 6" | $ | / PER LF |
| | 5' x 6" | $ | / PER LF |
| | 6' x 6" | $ | / PER LF |
| | 8' x 6" | $ | / PER LF |

## SECTION VI - CURB AND GUTTER, SIDEWALKS AND DRIVEWAYS

| VI.15 | CONSTRUCT ASPHALT SIDEWALK / DRIVEWAY (continued) | | |
|---|---|---|---|
| | ASPHALTIC CONCRETE - TYPE III | | |
| | 4' x 4" | $ | / PER LF |
| | 5' x 4" | $ | / PER LF |
| | 6' x 4" | $ | / PER LF |
| | 8' x 4" | $ | / PER LF |
| | 4' x 6" | $ | / PER LF |
| | 5' x 6" | $ | / PER LF |
| | 6' x 6" | $ | / PER LF |
| | 8' x 6" | $ | / PER LF |
| | DELIVERY DAYS AFTER RECEIPT OF ORDER: | | / DAYS |
| VI.16 | PREPARATION FOR CURB & GUTTER | | |
| | PREPARATION +/- 6" | $ | / PER LF |
| | ADDITIONAL FILL | $ | / PER CY |
| | ADDITIONAL EXCAVATION | $ | / PER CY |
| | DELIVERY DAYS AFTER RECEIPT OF ORDER: | | / DAYS |
| VI.17 | CONCRETE PUMPING | | |
| | CONCRETE PUMPED | $ | / HOUR |
| | CONCRETE PUMPED | $ | / DAY |
| | DELIVERY DAYS AFTER RECEIPT OF ORDER: | | / DAYS |
| VI.18 | ADA TRUNCATED DOME | | |
| | FURNISH AND INSTALL | $ | / SQ FT |
| | DELIVERY DAYS AFTER RECEIPT OF ORDER: | | / DAYS |
| VI.19 | STANDARD MAIL BOX RELOCATE | $ | EACH |
| VI.20 | IRRIGATION CAP | $ | EACH |

## SECTION VII - TRAFFIC CONTROL

| | | | |
|---|---|---|---|
| **VII.1** | **TRAFFIC CONTROL (PER SITE) - Spec: FDOT Section 102-1** | | |
| | TRAFFIC CONTROL | $ | / PER LS |
| | DELIVERY DAYS AFTER RECEIPT OF ORDER: | | / DAYS |
| **VII.2** | **GUARDRAIL - Spec: FDOT 536-1 - Price Vendor Delivered & Installed per Job Site** | | |
| | 0 - 250 LF | $ | / PER LF |
| | OVER 251 LF | $ | / PER LF |
| | DELIVERY DAYS AFTER RECEIPT OF ORDER: | | / DAYS |
| **VII.3** | **SHOP - BENT PANELS - Specification: FDOT 536-2 - Price Vendor Delivered and Installed per Job Site** | | |
| | 0 - 12.5 LF | $ | / PER LF |
| | OVER 12.5 LF | $ | / PER LF |
| | DELIVERY DAYS AFTER RECEIPT OF ORDER: | | / DAYS |
| **VII.4** | **SPECIAL POST (MINIMUM 2 EACH) - Spec: FDOT Section 536-7 - Price Vendor Delivered and Installed per Job Site** | | |
| | 0 - 4 | $ | / PER EACH |
| | OVER 4 | $ | / PER EACH |
| | DELIVERY DAYS AFTER RECEIPT OF ORDER: | | / DAYS |
| **VII.5** | **TYPE IV ENDS (MIN. 2 EACH) Spec: FDOT 536-8 - Price Vendor Delivered and Installed per Job Site** | | |
| | 0 - 4 | $ | / PER EACH |
| | OVER 4 | $ | / PER EACH |
| | DELIVERY DAYS AFTER RECEIPT OF ORDER: | | / DAYS |

## SECTION VIII - FENCING

**FENCING - Includes furnishing all labor, materials, equipment and such miscellaneous items as necessary for complete installation of chain link fence system; fencing to be installed according to manufacturer's specifications, unless otherwise specified.**

| VIII.1 | CHAIN LINK FENCING | | |
|---|---|---|---|
| 4' HEIGHT | 0 - 100 LF | $ | / PER LF |
| | 101 - 500 LF | $ | / PER LF |
| | OVER 501 LF | $ | / PER LF |
| 6' HEIGHT | 0 - 100 LF | $ | / PER LF |
| | 101 - 500 LF | $ | / PER LF |
| | OVER 501 LF | $ | / PER LF |
| 8" HEIGHT | 0 - 100 LF | $ | / PER LF |
| | 101 - 500 LF | $ | / PER LF |
| | OVER 501 LF | $ | / PER LF |
| DELIVERY DAYS AFTER RECEIPT OF ORDER: | | | / DAYS |

| VIII.2 | GATES | | |
|---|---|---|---|
| 4' HEIGHT | 4' WIDE | $ | / PER EACH |
| | 8' WIDE | $ | / PER EACH |
| | 16' WIDE | $ | / PER EACH |
| 6' HEIGHT | 4' WIDE | $ | / PER EACH |
| | 8' WIDE | $ | / PER EACH |
| | 16' WIDE | $ | / PER EACH |
| 8" HEIGHT | 4' WIDE | $ | / PER EACH |
| | 8' WIDE | $ | / PER EACH |
| | 16' WIDE | $ | / PER EACH |
| DELIVERY DAYS AFTER RECEIPT OF ORDER: | | | / DAYS |

MULTIPLIER FOR OVERTIME WORK SHALL BE AT A RATE OF: / %