



Advertise Date: Friday, March 16, 2018

Lee County Board of County Commissioners  
DEPARTMENT OF PROCUREMENT MANAGEMENT

Invitation to Bid (B)  
DOT Construction Only

Solicitation No.: **B180187LAC**

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Solicitation Name: Corbett Road Improvements Diplomat Parkway to Littleton Road

Open Date/Time: Wednesday, April 18, 2018 Time: 2:30 PM

Location: Lee County Procurement Management  
1500 Monroe Street 4th Floor  
Fort Myers, FL 33901

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Procurement Contact: Lindsay Cepero Title Procurement Grants Supervisor

Phone: (239) 533-8881 Email: LCepero@leegov.com

Requesting Dept. Transportation

**Pre-Bid Conference:**

Type: NON-Mandatory

Date/Time: 3/27/2018 10:00 AM

Procurement: Public Works Building, 1500 Monroe St 4th Floor, Fort Myers, FL

Location: 33901

All solicitation documents are available for download at  
[www.leegov.com/procurement](http://www.leegov.com/procurement)



**LEE COUNTY**  
SOUTHWEST FLORIDA

Advertisement Date: 3/16/2018

**INTRODUCTION AND BACKGROUND**

**Notice to Bidder**

**Invitation to Bid # B180187LAC Corbett Improvements Diplomat Parkway to Littleton Road**

**Invitation to Bid (B) Construction**

Lee County, Florida, is requesting bids from qualified individuals/firms for

**B180187LAC, Corbett Improvements Diplomat Parkway to Littleton Road**

Then and there to be publicly opened and read aloud for the purpose of selecting a vendor to furnish all necessary labor, services, materials, equipment, tools, consumables, transportation, skills and incidentals required for Lee County, Florida, in conformance with the Solicitation Documents, which include technical Specifications and/or a Scope of Work.

Those individuals/firms interested in being considered for this Solicitation are instructed to submit, in accordance with the Specifications, their Bids, pertinent to this project prior to

**2:30 PM Wednesday, April 18, 2018**

to the office of the **Procurement Management Director, 1500 Monroe Street, 4<sup>th</sup> Floor, Fort Myers, Florida 33901.**

The Invitation to Bid shall be received in a sealed envelope, prior to the time scheduled to receive Bid(s), and shall be clearly marked with the Solicitation name, Solicitation number, Bidder name, and contact information as identified in these Solicitation Documents.

The Scope of Work/Specifications for this Solicitation is available from [www.leegov.com/procurement](http://www.leegov.com/procurement).

Bidders who obtain the Scope of Work/Specifications from sources other than [www.leegov.com/procurement](http://www.leegov.com/procurement) are cautioned that the Solicitation package may be incomplete. The County's official Bidders list, Addendum(s) and information must be obtained from [www.leegov.com/procurement](http://www.leegov.com/procurement). It is the Bidder's responsibility to check for posted information. The County may not accept incomplete Bids.

**A Non-Mandatory Pre-Bid Conference has been scheduled for the following time and location:**

**10:00 AM March 27, 2018 1500 Monroe St, 4<sup>th</sup> Floor, Fort Myers, FL 33901**

for the purpose of discussing the proposed project. Prospective Bidders are encouraged to attend. All prospective Bidders are encouraged to obtain and review plans, Specifications, and Scope of Work for this Bid before the pre-bid conference so that they may be prepared to discuss any question or concerns they have regarding this project. A site visit may follow the pre-bid conference. Questions regarding this Solicitation are to be directed, in writing, to the individual listed below using the email address listed below or faxed to (239) 485-8383 during normal working hours.

**Lindsay Cepero [LCepero@leegov.com](mailto:LCepero@leegov.com)**

Sincerely,

Mary G. Tucker, CPPO, FCCM, FCCN  
Procurement Management Director

\*[WWW.leegov.Com/Procurement](http://WWW.leegov.Com/Procurement) is the County's official posting site

**Terms and Conditions**  
**INVITATION TO BID (B)**  
**CONSTRUCTION**

1. DEFINITIONS. Additional definitions may be found in the Draft Construction Agreement attached hereto.
- 1.1. **Addendum/Addenda:** A written document used to modify the terms of a procurement instrument (such as an Invitation to Bid or Request for Proposals). An addendum is not to be confused with a contract “amendment.”
  - 1.2. **Approved Alternate:** Solicitation documents may make reference of specific manufacturer(s) or product(s). These references serve only as a recommendation and a guide to minimum quality and performance. The references are not intended to exclude Approved Alternatives of other manufacturer(s) or product(s).
  - 1.3. **Award:** The determination of a successful Bidder(s) in response to this Solicitation.
  - 1.4. **Bid/Proposal Package:** An offer specifically given to the County in response to an informal or competitive procurement invitation issued by the County. This is also referred to as a "Response.”
  - 1.5. **Bid Bond/Security:** Security in the form and amount required by the County pledging that the Bidder shall enter into a Contract with the County in accordance with the terms stated in its Bid.
  - 1.6. **Bidder:** Any individual, firm, partnership, joint venture, or corporation submitting a Bid for this project, acting directly or through an authorized representative.
  - 1.7. **County:** The Board of County Commissioners of Lee County, Florida, a political subdivision of the State of Florida, its successors and assigns.
  - 1.8. **Contract/Agreement:** The written contract between the County and a successful Bidder pursuant to this Solicitation, a draft copy of which is attached hereto.
  - 1.9. **Contract Documents:** The documents listed in Section 1 of the attached draft Agreement.
  - 1.10. **Department of Procurement Management:** Shall mean the Lee County Department of Procurement Management.
  - 1.11. **Due Date and Time/Opening:** The date and time upon which a Bid or Proposal shall be submitted to, and actually received by, the Lee County Department of Procurement Management. Only Bids or Proposals received prior to the established date and time shall be considered.
  - 1.12. **Liquidated Damages:** Damages, usually in the form of monetary payment, agreed to by the parties to a contract which are due and payable as damages in the event of a breach of all or part of such contract. Liquidated Damages may be applied on a daily basis for as long as the breach is in effect.
  - 1.13. **Local Bidder:** Any person, firm, partnership, company or corporation whose principal place of business, in the sole opinion of the County, is located within the boundaries of Lee County, Florida; or (b) any person, firm, partnership, company or corporation that has provided goods or services to Lee County on a regular basis for the preceding consecutive three (3) years, and that has the personnel, equipment and materials located within the boundaries of Lee County sufficient to constitute a present ability to perform the service or provide the goods; or (c) any person, firm, partnership, company or corporation that qualifies as a "local business" under the terms of the Collier County Local Vendor Preference Program on or after the date Lee and Collier County enter an agreement extending reciprocity under their respective local vendor preference programs to the firms eligible for those programs in the adjoining county; or (d) any person, firm, partnership, company or corporation that qualifies as a "local bidder" or similar term under the local bidder preference program of any county adjoining Lee County on or after the date Lee County and the adjoining county enter a reciprocity agreement that is substantially similar to any such agreement between Lee and Collier County.
  - 1.14. **Responsible Bidder:** A Bidder submitting a Response who has the capability in all respects to perform fully the Contract requirements and the experience, capacity, facilities, equipment, credit, sufficient qualified personnel, and having the integrity and reliability with a record of timely and acceptable past performance that will ensure good faith performance.
  - 1.15. **Responsive Bidder:** A Bidder submitting a Response that substantially conforms with all material respects to the requirements and criteria set forth in this Solicitation.
  - 1.16. **Solicitation/Solicitation Documents:** This document, its attachments, and any document hereinafter incorporated by reference.

- 1.17. Work:** All labor, materials, equipment and incidentals required to fully, finally and properly complete the construction project described herein and otherwise fully, finally and properly comply with all terms and conditions of the Contract Documents.
2. ORDER OF PRECEDENCE
    - 2.1. In resolving conflicts, errors, and discrepancies among the provisions of the Contract Documents, the order of precedence shall be as follows
      - 2.1.1. Florida State Law as applied to County Purchasing
      - 2.1.2. Lee County Procurement Management Manual
      - 2.1.3. Change Orders
      - 2.1.4. Contract/Agreement including amendments and Exhibits
      - 2.1.5. Field Directive Change Orders
      - 2.1.6. The Solicitation Documents, including any Addenda
3. RULES, REGULATIONS, LAWS, ORDINANCES AND LICENSES
    - 3.1. It shall be the responsibility of the Bidder to ensure compliance with all federal, state, or county codes, rules, regulations, or other requirements, as each may apply.
    - 3.2. **Local Business Tax Account:** As applicable, anyone providing merchandise or services to the public within the jurisdiction of Lee County must obtain a Lee County business tax account to operate unless specifically exempted.
    - 3.3. **License(s):** Bidder should provide, at the time of the opening of the Bid, licenses required for this product and/or service.
4. PREPARATION OF SUBMITTAL
    - 4.1. **Sealed Bid:** Submission must be in a sealed envelope/box, and the outside of the submission should be marked with the following information (Sealed Bid Label Form is attached for your use):
      - 4.1.1. “Sealed Bid”
      - 4.1.2. Bid number
      - 4.1.3. Bid title
      - 4.1.4. Bid due date
      - 4.1.5. Name of the Bidder submitting the Bid
      - 4.1.6. Bidder’s Contact e-mail and telephone number
    - 4.2. **Bid submission shall:**
      - 4.2.1. Provide two (2) hard copies. Mark one “Original,” one “Copy.”
      - 4.2.2. Provide one (1) electronic flash drive set of the entire submission documents.
      - 4.2.3. Provide that the electronic submission document is one single Adobe PDF file in the same order as the original hard copy.
      - 4.2.4. Limit the color and number of images to avoid unmanageable file sizes.
      - 4.2.5. Not lock files.
    - 4.3. **Submission Format:**
      - 4.3.1. **Required Forms:** complete and return **all** required forms. If the form is not applicable, please return with “Not Applicable” or “N/A” in large letters across the form.
      - 4.3.2. Failure to submit required or requested information may result in the Bidder being considered non-responsive.
      - 4.3.3. **Execution of Bid:** All documents must be signed by a corporate authorized representative, witnessed, and corporate and/or notary seals affixed, where applicable. All Bids shall be typed or printed in ink. The Bidder may not use erasable ink. All corrections made to the Bids shall be initialed.
      - 4.3.4. The County may request specific files be submitted in specialty format (i.e. Microsoft Excel, PowerPoint etc.). Vendor shall accommodate such specialty requests as stated or described herein. Should files not be provide in the format or quantity as requested Bidder may be deemed Non-Responsive and therefore ineligible for award.
      - 4.3.5. The submission should not contain links to other web pages.



**4.3.6.** Include any information requested by the County necessary to analyze your Bid, i.e., required submittals, literature, technical data, or financial statements.

**4.3.7.** Bid Security/Bond(s), as applicable.

**4.4. Preparation Cost:** The Bidder is solely responsible for any and all costs associated with responding to this Solicitation. No reimbursement shall be made for any costs associated with the preparation and submittal of any Bid, or for any travel and per diem costs that are incurred by any Bidder.

## 5. RESPONSES RECEIVED LATE

**5.1.** It shall be the Bidder's sole responsibility to deliver the Bid submission to the Lee County Department of Procurement Management prior to or on the time and date required. All references to date and time herein reference Lee County, FL local time.

**5.2.** Any Bids received after the stated time and date shall not be considered. Late Bids shall not be opened at the public opening.

**5.3.** The Lee County Department of Procurement Management shall not be responsible for delays caused by the method of delivery such as, but not limited to: internet, United States Postal Service, overnight express mail service(s), or delays caused by any other occurrence.

## 6. BIDDER REQUIREMENTS (unless otherwise noted)

**6.1. Responsive and Responsible Bidders:** Only Bids received from Responsive and Responsible Bidders shall be considered. The County reserves the right, before recommending any Award, to inspect the facilities and organization; or to take any other necessary action, such as background checks, to determine if the Bidder is satisfactorily able to perform, and reserves the right to reject submission packages where evidence submitted or investigation and evaluation indicates an inability for the Bidder to perform.

**6.1.1.** Additional sources may be utilized to determine credit worthiness and ability to perform.

**6.1.2.** Any Bidder or sub-contractor that will have access to County facilities or property may be required to be screened to a level that may include, but is not limited to fingerprinting and a statewide criminal background check. There may be fees associated with these procedures. These costs are the responsibility of the Bidder or sub-contractor.

**6.2. Past Performance:** A Bidder's past performance and prior dealings with Lee County (i.e., failure to meet specifications, poor workmanship, late delivery, etc.) may be reviewed. Poor or unacceptable past performance may result in Bidder disqualification.

## 7. PRE-BID CONFERENCE

**7.1.** A pre-bid conference will be held in the location, date, and time specified on the cover of this Solicitation. The cover will also note if the pre-bid conference is non-mandatory or mandatory. All prospective Bidders are encouraged to obtain and review the Solicitation Documents prior to the pre-bid conference so they may be prepared to discuss any questions or concerns they have concerning this project. All questions must be submitted formally in writing to the procurement staff noted on the first page of the Solicitation Documents. A formal response will be provided in the form of an Addendum (see "County Interpretation/Addendums" for additional information). If appropriate, a site visit may follow the pre-bid conference.

**7.2. Non-Mandatory:** Pre-bid conferences are generally non-mandatory, but it is highly recommended that prospective Bidders participate.

**7.3. Mandatory:** In the event a mandatory pre-bid conference is held, no Bids shall be considered by Bidders that fail to attend, and a Bid submitted by any such Bidder shall be considered **non-responsive**.

## 8. COUNTY INTERPRETATION/ADDENDUMS

**8.1.** Each Bidder shall examine the Solicitation 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 Bid shall be made **in writing, submitted at least eight (8) calendar days prior to the date when the Bid is due.**

**8.2.** Response(s) will be in the form of an Addendum posted on [www.leegov.com/procurement](http://www.leegov.com/procurement). It is solely the Bidder's responsibility to check the website for information. The Lee County Department of Procurement Management will send no notifications regarding postings associated with this solicitation.

- 8.3. All Addenda shall be incorporated into the Contract Documents.
- 8.4. The County shall not be responsible for oral interpretations given by any County employee, representative, agent, or other person. Interpretation of the meaning of the plans, Specifications or any other Contract Document, or for correction of any apparent ambiguity, inconsistency or error there in, shall be in writing. Issuance of a written Addendum by the County’s Department of Procurement Management is the only official method whereby interpretation, clarification or additional information may be given.
9. QUALITY GUARANTEE/WARRANTY (as applicable)
- 9.1. Bidder will guarantee their work without disclaimers, unless otherwise specifically approved by the County, for a minimum of twelve (12) months from the date of final completion.
- 9.2. Unless otherwise specifically provided in the specifications, all equipment and materials and articles incorporated in the work covered by this contract shall be new, unused and of the most suitable grade for the purpose intended. Refurbished parts or equipment are not acceptable unless otherwise specified in the specifications. All warranties will begin from the date of final completion.
- 9.3. Unless otherwise specifically provided in the specifications, the equipment must be warranted for twelve (12) months, shipping, parts and labor. Should the equipment be taken out of service for more than forty-eight (48) hours to have warranty work performed, a loaner machine of equal capability or better shall be provided for use until the repaired equipment is returned to service at no additional charge to the County.
- 9.4. If any product does not meet performance representation or other quality assurance representations as published by manufacturers, producers or distributors of such products or the specifications listed, 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. The vendor shall refund, to the County, any money which has been paid for same.
10. SUBSTITUTION(S)/APPROVED ALTERNATE(S)
- 10.1. Unless otherwise specifically provided in the Specifications, 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. If a Bidder wishes to make a substitution in the Specifications, the Bidder shall furnish to the County, **no later than ten (10) business days prior to the Bid opening date**, the name of the manufacturer, the model number, and other identifying data and information necessary to aid the County in evaluating the substitution. Such information is submitted through the Department of Procurement Management. Any such substitution shall be subject to County approval through the issuance of a written Addendum by the County’s Department of Procurement Management. Substitutions shall be approved only if determined by the County to be an **Approved Alternate** to the prescribed Specifications.
- 10.2. A Bid containing a substitution is subject to disqualification if the substitution is not approved by the County. Items Bid must be identified by brand name, number, manufacturer and model, and shall include full descriptive information, brochures, and appropriate attachments. Brand names are used for descriptive purposes only. An **Approved Alternate** product or service may be used.
11. ADDITIONS, REVISIONS AND DELETIONS
- 11.1. Additions, revisions, or deletions to the Terms and Conditions, specifications that change the intent of the solicitation will cause the solicitation to be non-responsive and the proposal will not be considered. The Procurement Management Director shall be the sole judge as to whether or not any addition, revision, or deletion changes the intent of the solicitation.
12. NEGOTIATED ITEMS
- 12.1. Any item not outlined in the Scope of Work/Specifications may be subject to negotiations between the County and the successful Bidder.
- 12.2. After Award of this Bid, the County reserves the right to add or delete items/services at prices to be negotiated at the time of addition or deletion.

13. CALCULATION ERRORS

- 13.1. In the event of multiplication/addition error(s), the unit price shall prevail and the corrected sum shall be considered the bid price. All Bids will be reviewed mathematically and corrected, if necessary, using these standards, prior to further evaluation.

14. CONFIDENTIALITY

- 14.1. Bidders should be aware that all submissions provided are generally considered public records subject to public disclosure upon conclusion of the Solicitation process, and shall **not** be afforded confidentiality, unless otherwise provided by law.
- 14.2. If information is submitted with a Bid that is deemed “confidential,” the Bidder must stamp those pages of the submission that are considered confidential. The Bidder must provide sufficient documentation demonstrating why such documents should be deemed confidential in accordance with Florida law.
- 14.3. Lee County **will not reveal engineering estimates or budget amounts for a project** unless required by grant funding or unless it is in the best interest of the County. Pursuant to § 337.168, F.S.: A document or electronic file revealing the official cost estimate of the department of a project is confidential and exempt from the provisions of § 119.07(1), F.S. until the Contract for the project has been executed or until the project is no longer under active consideration.

15. CONFLICT OF INTEREST

- 15.1. **Business Relationship Disclosure Requirement:** The Award hereunder is subject to the provisions of Chapter 112, F.S. All Bidders must disclose with their submission the name of any officer, director or agent who is also an officer or employee of Lee County or any of its agencies or a spouse or child of such officers or employees. Furthermore, all Bidders must disclose the name of any County officers, employees, or spouses or children thereof who own directly or indirectly, an interest of five percent (5%) or more in the Bidder’s firm or any of its branches.

16. ANTI-LOBBYING CLAUSE (Cone of Silence)

- 16.1. Upon the issuance of the Solicitation, prospective Bidders or any agent, representative or person acting at the request of said Bidder shall not have any contact, communicate with or discuss any matter relating in any way to the Solicitation with any commissioner, evaluation review committee, agent or employee of the County other than the Procurement Management Director or their designee. This prohibition begins with the issuance of any Solicitation, and ends upon issuance of the Notice of Intended Decision, the rejection of all responses, or the termination of this competitive procurement. **If it is determined that improper communications were conducted, the Bidder may be declared non-responsible.**

17. DRUG FREE WORKPLACE

- 17.1. The County encourages Drug Free Workplace programs.

18. DISADVANTAGED BUSINESS ENTERPRISE (DBE) and MINORITY-OWNED AND WOMEN-OWNED FIRMS (W/MBE)

- 18.1. The County encourages interested Disadvantaged Business Enterprise Bidder(s) (DBE), as defined and certified by the Florida Department of Transportation, as well as other minority-owned and women-owned firms, as defined and certified by the State of Florida Office of Supplier Diversity (W/MBE), to do business with the County and respond to this solicitation.

As described in the required forms, the Bidder is required to indicate whether they and/or any proposed sub-contractor(s) are DBEs and W/MBE. Lee County encourages the utilization and participation of DBEs and W/MBE in procurements, and evaluation proceedings will be conducted within the established guidelines regarding equal employment opportunity and nondiscriminatory action based upon the grounds of race, color, sex or national origin. Each bidder that intends to use subcontractors shall also use the State of Florida, and/or when deemed appropriate directories of DBE and W/MBE to solicit for subcontracting opportunities under a primary contract. Each bidder that intends to use subcontractors shall be responsible for documenting outreach activities in accordance with the competitive procurement document.

**19. ANTI-DISCRIMINATION/EQUAL EMPLOYMENT OPPORTUNITY**

- 19.1.** The Bidder agrees to comply, at its own expense, with all federal, state, and local laws and regulations, including federal, state and local laws, codes, statutes, ordinances, rules, regulations and requirements applicable to the Work, including but not limited to those dealing with taxation, workers’ compensation, equal employment and safety. Bidder acknowledges and agrees, in accordance with § 287.134, F.S., the Rehabilitation Act of 1973 as amended, the Americans with Disabilities Act of 1990 (ADA), and the ADA Amendments Act of 2008 (ADAAA), that in performing the Work hereunder, no person on the grounds of race, religion, color, age, sex, national origin, disability or marital status shall be excluded from participation in, denied the benefits of, or otherwise be subjected to discrimination.
- 19.2.** The Bidder shall not discriminate against any employee or applicant for employment because of race, religion, color, age, sex, national origin, disability or marital status. The Bidder shall make affirmative efforts to ensure that applicants are employed and that employees are treated during employment without regard to their race, religion, color, age, sex, national origin, disability or marital status.
- 19.3.** The Bidder shall include the provisions of this section in every sub-contract under this Contract to ensure its provisions will be binding upon each sub-contractor. The Bidder shall take such actions in respect to any sub-contractor, as the contracting agency may direct, as a means of enforcing such provisions, including sanctions for non-compliance.
- 19.4.** An entity or affiliate who has been placed on the State of Florida’s Discriminatory Vendor List (this list may be viewed by going to the Department of Management Services website at <http://www.dms.myflorida.com>) may not submit a Bid on a contract to provide 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 of real property to a public entity, may not award or perform work as a vendor, supplier, sub-contractor, or consultant under contract with any public entity, and may not transact business with any public entity.

**20. SUB-CONTRACTORS**

- 20.1.** The use of sub-contractors under this Solicitation requires prior written authorization from the County representative.

**21. PROJECT GUIDELINES (as applicable)**

- 21.1.** The County has established the following guidelines, criteria, goals, objectives, constraints, schedule, budget and or requirements which shall serve as a guide to the Bidder(s) in performing the Work provided for pursuant to this Contract:
  - 21.1.1.** No amount of Work is guaranteed upon the execution of a Contract.
  - 21.1.2.** Rates and all other negotiated expenses shall remain in effect throughout the duration of the Contract period inclusive of any renewals unless otherwise specified herein.
  - 21.1.3.** This Contract does not entitle any Bidder to exclusive rights to County contracts. The County reserves the right to perform any and all available required Work in-house or by any other means it so desires.
  - 21.1.4.** In reference to vehicle travel, mileage and man-hours spent in travel, time is considered incidental to the Work and not an extra compensable expense.
  - 21.1.5.** Lee County reserves the right to add or delete, at any time, any or all material, tasks or services associated with this Contract.
  - 21.1.6.** Any Single Large Project: The County, in its sole discretion, reserves the right to separately solicit any project that is outside the scope of this Solicitation, whether through size, complexity or the dollar value.
  - 21.1.7.** Background Check(s): The County is committed to maintaining a safe and secure environment. The following shall apply to the contractor, contractor employees, employees hired through a third party staffing vendor, subcontractors and any other staffing that may be working in or around a County Facility, School, Library and other locations as deemed necessary.  
Upon written request by Lee County Procurement Management, the contractor at its expense must conduct a background check for each of its employees, as well as for the employees of its subcontractors, who will provide services to the County or have access to the County computer systems, through either onsite or remote access. Contractor employees, for the purpose of this requirement, include such



temporary staff as office support, custodial service and any third party vendor. Background checks shall be conducted through the Florida Department of Law Enforcement and provided to Lee County Procurement Management Department at [procurement@leegov.com](mailto:procurement@leegov.com). Background checks must be conducted prior to commencement of said project(s).

## 22. TIEBREAKER

- 22.1. Whenever two or more Bids, which are equal with respect to price, quality and service, are received for procurement of commodities or contractual services, from Responsive and Responsible Bidders, the following steps shall be taken to establish the Award to the lowest Bidder. This method shall be used for all ties.
  - 22.1.1. **Step 1 - Local Bidder:** Between a Local Bidder, and a non-Local Bidder, a Contract Award, or the first opportunity to negotiate, as applicable, shall be made to the Local Bidder. **If local preference is prohibited by the funding source then step 2 will replace step 1.**
  - 22.1.2. **Step 2 - Drug Free Workplace:** At the conclusion of step 1, if all is equal, the Bidder with a Drug Free Workplace program shall be given preference over a Bidder with no Drug Free Workplace program. The Contract Award, or the first opportunity to negotiate, as applicable, shall be made to the Bidder with the Drug Free Workplace program.
  - 22.1.3. **Step 3 - Coin Flip:** At the conclusion of Step 1 and Step 2, if all is equal, the Contract Award, or the first opportunity to negotiate, as applicable, the final outcome shall be determined by the flip of a coin.
- 22.2. When the tie has been broken pursuant to the above procedures, the Contract Award, or the first opportunity to negotiate, as applicable, shall be furnished to the prevailing Bidder.
- 22.3. If an Award or negotiation is unsuccessful with the initial Bidder, Award or negotiations may commence with the next highest Bidder, utilizing the tiebreaker steps above to make the determination of next lowest Bidder, if necessary.

## 23. WITHDRAWAL OF BID

- 23.1. No Bid may be withdrawn for a period of **180 calendar days** after the scheduled time for receiving submissions. A Bid may be withdrawn prior to the Solicitation opening date and time. Withdrawal requests must be made in writing to the Procurement Management Director, who will approve or disapprove the request.
- 23.2. After submissions are opened, but prior to Award of the Contract by the County Commission, the Procurement Management Director may allow the withdrawal of a Bid because of the mistake of the Bidder in the preparation of the submission document. In such circumstance, the decision of the Procurement Management Director to allow the submission withdrawal, although discretionary, shall be based upon a finding that the Bidder, by clear and convincing evidence, has met each of the following four tests:
  - 23.2.1. The Bidder acted in good faith in submitting the Bid;
  - 23.2.2. The mistake in Bid preparation was of such magnitude that to enforce compliance by the Bidder would cause a severe hardship on the Bidder;
  - 23.2.3. The mistake was not the result of gross negligence or willful inattention by the Bidder; and
  - 23.2.4. The mistake was discovered and was communicated to the County prior to the County Commission having formally Awarded the Contract.

## 24. PROTEST RIGHTS

- 24.1. Any Bidder that has submitted a formal Response to Lee County, and who is adversely affected by an intended decision with respect to the Award, has the right to protest an intended decision posted by the County as part of the Solicitation process.
- 24.2. Notice of Intended Decision is posted on the Lee County Department of Procurement Management website ([www.leegov.com/procurement](http://www.leegov.com/procurement)). Bidders are solely responsible to check for information regarding the Solicitation.
- 24.3. Refer to the “Bid/Proposal Protest Procedure” section of the Lee County Contracts Manual for a complete description of the protest process and associated requirements. The manual is posted on the Lee County website or may be obtained by contacting the Procurement Management Director.

- 24.4. In order to preserve the right to protest, a written **“Notice Of Intent To File A Protest”** must be filed with the Lee County Procurement Management Director by 4:00 PM on the third working day after the decision affecting the Bidder’s rights is posted on the Lee County website.
    - 24.4.1. The notice shall clearly indicate all grounds being claimed for the protest.
    - 24.4.2. The notice must be physically received by the Procurement Management Director within the required time frame described above. No additional time will be granted for mailing.
  - 24.5. Following receipt of the Notice of Intent to File a Protest, a **“Protest Bond”** and **“Formal Written Protest”** must be filed **within ten (10) calendar days** after the date the *“Notice of Intent to File a Protest”* is received by the Procurement Management Director.
  - 24.6. **Failure to follow the protest procedures requirement within the time frames as prescribed herein and in the Lee County Contracts Manual shall constitute a waiver of the right to protest and shall bar any resulting claims.**
25. **AUTHORITY TO UTILIZE BY OTHER GOVERNMENT ENTITIES**
- 25.1. This procurement opportunity is also made available to any government entity. Pursuant to their own governing laws, and subject to the Agreement/Contract of the Bidder, other entities may be permitted to make purchases at the terms and conditions contained herein. The Lee County Board of County Commissioners shall not be financially responsible for the purchases of other entities from this Solicitation.
26. **CONTRACT ADMINISTRATION**
- 26.1. **Designated Contact:**
    - 26.1.1. The Awarded Bidder shall appoint a person(s) to act as a primary contact for all County departments. This person or their designee shall be readily available during normal working hours by phone or in person, and shall be knowledgeable of the terms and procedures involved.
    - 26.1.2. Lee County requires that the Awarded Bidder provide the name of a contact person(s) and phone number(s) which will afford Lee County access twenty-four (24) hours per day, 365 days per year, in the event of major breakdowns or natural disasters.
  - 26.2. **Basis of Award:**
    - 26.2.1. The County shall issue a Notice of Intended Decision to the lowest Responsive and Responsible Bidder who submits a Bid.
    - 26.2.2. In the event the lowest Responsive and Responsible Bid exceeds the architectural or engineering cost estimates or the amount of available funds, the County Administrator or designee may, when time or economic considerations preclude re-bidding of Work of a reduced scope, negotiate an adjustment of the Scope of Work with the lowest Responsive and Responsible Bidder, in order to bring the Bid within the amount of available funds.
    - 26.2.3. The County reserves the right to make Award(s) by individual item, group of items, all or none, or a combination thereof. The County reserves the right to reject any and all Bids or to waive any minor irregularity or technicality in the Bids received. Award shall be made to the lowest Responsive and Responsible Bidder(s) within the category chosen for basis of Award.
    - 26.2.4. The County reserves the right to Award to one or multiple Bidders at the discretion of the requesting authority and approval of the Procurement Management Director.
  - 26.3. **Contract:**
    - 26.3.1. The Awarded Bidder will be required to enter into the Contract with the County and will be required to perform the Work in accordance with the Contract terms and conditions. The draft Contract is attached to this Solicitation and incorporated herein by reference. The Contract may be viewed on-line at <http://www.leegov.com/procurement/forms>.
  - 26.4. **Records:**
    - 26.4.1. Retention: The Bidder shall maintain such financial records and other records as may be prescribed by Lee County or by applicable federal and state laws, rules and regulations. Unless otherwise stated in the Specifications, the Bidder shall retain these records for a period of ten (10) years after final payment, or until they are audited by Lee County, whichever event occurs first.
    - 26.4.2. Right to Audit/Disclosure: These records shall be made available during the term of the Contract as well as the retention period. These records shall be made readily available to County personnel with

reasonable notice and other persons in accordance with the Florida General Records Schedule. Awarded Bidder(s) are hereby informed of their requirement to comply with Chapter 119, F.S., specifically to:

- 26.4.2.1. Keep and maintain public records required by the County to perform the service.
- 26.4.2.2. Upon request from the County’s custodian of public records, provide the County with a copy of the requested records or allow the records to be inspected or copied within a reasonable time at a cost that does not exceed the cost provided or as otherwise provided by law.
- 26.4.2.3. Ensure that public records that are exempt or confidential and exempt from public records disclosure requirements are not disclosed except as authorized by law for the duration of the Contract term and following completion of the Contract if the contractor does not transfer the records to the County.
- 26.4.2.4. Upon completion of the Contract, transfer, at no cost, to the County all public records in possession of the Bidder or keep and maintain public records required by the County to perform the service. If the Bidder transfers all public records to the County upon completion of the Contract, the Bidder shall destroy any duplicate public records that are exempt or confidential and exempt from public records disclosure requirements. If the Bidder keeps and maintains public records upon completion of the Contract, the Bidder shall meet all applicable requirements for retaining public records. All records stored electronically must be provided to the County, upon request from the County’s custodian of public records, in a format that is compatible with the information technology systems of the County.

**26.4.3. Public Records: IF THE BIDDER HAS QUESTIONS REGARDING THE APPLICATION OF CHAPTER 119, FLORIDA STATUTES, TO THE BIDDER’S DUTY TO PROVIDE PUBLIC RECORDS RELATING TO THE CONTRACT, CONTACT THE CUSTODIAN OF PUBLIC RECORDS AT 239-533-2221, 2115 SECOND STREET, FORT MYERS, FL 33901, [publicrecords@leegov.com](mailto:publicrecords@leegov.com) or <http://www.leegov.com/publicrecords>.**

**26.4.4. Ownership:** It is understood and agreed that all documents, including detailed reports, plans, original tracings, specifications and all data prepared or obtained by the successful Bidder in connection with its services hereunder, including any documents bearing the professional seal of the successful Bidder, shall be delivered to and become the property of Lee County, prior to final payment to the successful Bidder or the termination of the Contract. This includes any electronic versions, such as CAD or other computer aided drafting programs.

**26.5. Termination:**

- 26.5.1. Termination of an Award or Contract entered into pursuant to this Solicitation shall be governed by the terms of such Contract and by the provisions of this section.
- 26.5.2. The Procurement Management Director may immediately terminate any Award resulting from this Solicitation for emergency purposes, as defined by the Lee County Procurement Manual.
- 26.5.3. Any Bidder who has voluntarily withdrawn from a Solicitation without the County’s mutual consent during the Contract period shall be barred from further County procurement for a **period of 180 calendar days**. The Bidder may apply to the Board for a waiver of this debarment. Such application for waiver of debarment must be coordinated with and processed by the Procurement Management Department.
- 26.5.4. For a Contract over \$1,000,000, the County reserves the right to terminate an award of such contract upon information or belief of any of the following, when, applicable:
  - 26.5.4.1. Bidder is found to have submitted a false certification as provided under § 287.135 (5), F.S.;

- 26.5.4.2. Bidder has been placed on the Scrutinized Companies with Activities in Sudan List or the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List (§ 215.473, F.S.);
- 26.5.4.3. Bidder has engaged in business operations in Cuba or Syria (§ 215.471, F.S.);
- 26.5.4.4. Bidder has been placed on the Scrutinized Companies that Boycott Israel List, or is engaged in a boycott of Israel (§ 215.4725, F.S.).
- 26.5.4.5. The County reserves the right to review, on a case-by-case basis, and waive this stipulation if it is deemed to be advantageous to the County.

## **26.6 Termination for Convenience:**

**26.6.1.** The County may terminate the entire Contract or any portion thereof, if the Director determines that a termination is in the County’s interest. The Director will deliver to the Contractor a Written Notice of Termination specifying the extent of termination and the effective date.

26.6.1.1. When the County terminates the entire Contract, or any portion thereof, before the Contractor completes all items of work in the Contract, the County will make payment for the actual number of units or items of work that the Contractor has completed, at the Contract unit price, and according to the formulas and provisions set forth in the contract documents for work partially completed, and such payments will constitute full and complete compensation for such work or items. No payment of any kind or amount will be made for items of work not started. The County will not consider any claim for loss of anticipated profits, or overhead of any kind (including home office and jobsite overhead or other indirect impacts) except as provided for within the contract documents for partially completed work.

26.6.1.2. The County will consider reimbursing the Contractor for actual cost of mobilization (when not otherwise included in the Contract) including moving equipment to the job where the volume of the work that the Contractor has completed is too small to compensate the Contractor for these expenses under the Contract unit prices.

26.6.1.3. The County may purchase at actual cost acceptable materials and supplies procured for the work, that the County has inspected, tested, and approved and that the Contractor has not incorporated in the work. Submit the proof of actual cost, as shown by receipted bills and actual cost records, at such points of delivery as the Director may designate.

26.6.1.4. Termination of a contract or a portion thereof, does not relieve the Contractor or the surety of its responsibilities for the completed portion of the contract or its obligations for and concerning any just claims arising out of the work performed.

26.6.1.5. All Contractor claims for additional payment, due to the County’s termination of the entire Contract or any portion thereof, must meet the requirements as stated within the contract documents.

## **27. WAIVER OF CLAIMS**

**27.1.** Once the Contract associated with this Solicitation expires, or final payment has been requested and made, the Awarded Bidder shall have waived any claims against the County concerning such Contract, except those previously made in writing and identified by the Awarded Bidder as unsettled at the time of the final application for payment.

## **28. LEE COUNTY PAYMENT PROCEDURES**

**28.1.** Unless otherwise noted, all Awarded Bidders are requested to mail an original invoice to:

**Lee County Finance Department  
Post Office Box 2238  
Fort Myers, FL 33902-2238**



- 28.2.** All invoices shall be paid as directed by the Lee County payment procedure, unless otherwise stated in the Contract or detailed Specifications for this project.
  - 28.3.** Lee County shall not be liable for requests for payment deriving from aid, assistance, or help by any individual, vendor, proposer, or Bidder for the preparation of these Specifications.
29. SAFETY DATA SHEETS (SDS) (as applicable)
- 29.1.** It is the Bidder’s responsibility to provide Lee County with Safety Data Sheets on Bid materials, as may apply to this procurement.
30. BOND/SURETY
- 30.1.** Bonding/Surety is required for construction projects over \$100,000.00 unless otherwise noted.
  - 30.2. Bid Bond/Security:** Each Bidder shall submit **not less than five percent (5%) of the proposed dollar amount** (including applicable Alternates) as Bid Bond/Security. One **ORIGINAL** Bid Bond/Security shall be submitted to the County with each Bid submission. The Bid Bond/Security of the Bidder will be retained until the Bidder and the County have entered into the Contract, whereupon the Bid Bond/Security may be returned. The Bid Bond/Security of a Bidder whom the County believes to have a reasonable chance of receiving the Award may be retained by the County until the effective date of the Contract, whereupon any Bid Bonds/Securities furnished by a Bidder may be returned. The following types of Bid Security shall be accepted:
    - 30.2.1.** **A Certified Check or a Cashier’s Check** in the amount of not less than five percent (5%) of the proposed dollar amount. Any Certified Check or Cashier’s Check submitted in lieu of a Bid Bond shall be drawn on a solvent bank or trust company, made payable to Lee County Board of County Commissioners and shall have all necessary documentary revenue stamps attached (if required by law); or
    - 30.2.2.** **A Bid Bond** may be submitted on a Lee County paper Bid Bond Form. Such Bid Bond must be signed by all required parties, must be in the amount of not less than five percent (5%) of the proposed dollar amount (including Alternate(s) as applicable), and shall accompany each submission. The Bid Bond shall be issued by a surety authorized to do business and in good standing with the Florida Department of State.
  - 30.3. Performance and Payment Bond:** As further described in the Contract, the successful Bidder shall provide Performance and Payment Bonds in the amount of one hundred percent (100%) of the total Awarded Contract amount within **seven (7) calendar days** after notification by the County of the approval to award the Contract, the costs of which are to be paid by the successful Bidder. Such Performance and Payment Bonds shall be in the form prescribed by the Exhibits to the attached Contract. The Performance and Payment Bonds shall be underwritten by a surety authorized to do business in the State of Florida and otherwise acceptable to the County; provided, however, the surety shall be rated as "A-" or better as reported in the most current Best’s Key Rating Guide, published by A.M. Best Company, Inc. The successful Bidder shall record the Performance and Payment Bond with the Lee County Clerk of Courts, at its sole expense, and provide the original, recorded bond document to the County.
  - 30.4.** A **Clean Irrevocable Letter of Credit or Cash Bond** may be accepted by the County in lieu of the Public Payment and Performance Bond.
  - 30.5. Personal Checks are not acceptable to Lee County as a Bid Security.**
31. INSURANCE (AS APPLICABLE)
- 31.1.** Insurance shall be provided by the Awarded Bidder pursuant to the Specifications provided herein and/or in the Contract. Prior to execution of the Contract, a certificate of insurance (COI) complying with the Solicitation Documents shall be provided by the Bidder.

End of Terms and Conditions Section

## INSURANCE GUIDE

<b>Major Insurance Requirements</b>
-------------------------------------

**Minimum Insurance Requirements:** *Risk Management in no way represents that the insurance required is sufficient or adequate to protect the Vendor’s interest or liabilities. The following are the required minimums the Vendor must maintain throughout the duration of this Contract. The County reserves the right to request additional documentation regarding insurance provided.*

- a. **Commercial General Liability** - Coverage shall apply to premises and/or operations, products and completed operations, independent contractors, and contractual liability exposures with minimum limits of:

\$1,000,000 per occurrence  
 \$2,000,000 general aggregate  
 \$1,000,000 products and completed operations  
 \$1,000,000 personal and advertising injury

- b. **Business Auto Liability** - The following Automobile Liability will be required and coverage shall apply to all owned, hired and non-owned vehicles use with minimum limits of:

\$1,000,000 combined single limit (CSL) or  
 \$500,000 bodily injury per person  
 \$1,000,000 bodily injury per accident  
 \$500,000 property damage per accident

- c. **Workers' Compensation** - Statutory benefits as defined by Chapter 440, Florida Statutes, encompassing all operations contemplated by this Contract or Agreement to apply to all owners, officers, and employees regardless of the number of employees. Workers’ Compensation exemptions may be accepted with written proof of the State of Florida’s approval of such exemption. Employers’ liability will have minimum limits of:

\$500,000 per accident  
 \$500,000 disease limit  
 \$500,000 disease – policy limit

\*The required minimum limit of liability shown in a. and b. may be provided in the form of “Excess Insurance” or “Commercial Umbrella Policies,” in which case, a “Following Form Endorsement” will be required on the “Excess Insurance Policy” or “Commercial Umbrella Policy.”

**Verification of Coverage:**

1. Coverage shall be in place prior to the commencement of any work and throughout the duration of the Contract. A certificate of insurance will be provided to the Risk Manager for review and approval. The certificate shall provide for the following:

- a. The certificate holder shall read as follows:

Lee County Board of County Commissioners  
 P.O. Box 398  
 Fort Myers, Florida 33902

b. “*Lee County, a political subdivision and Charter County of the State of Florida, its agents, employees, and public officials*” will be named as an "Additional Insured" on the General Liability policy, including Products and Completed Operations coverage.

**Special Requirements:**

1. An appropriate "Indemnification" clause shall be made a provision of the Contract.
2. If applicable, it is the responsibility of the general contractor to ensure that all subcontractors comply with all insurance requirements.

End of Insurance Guide Section

## SPECIAL CONDITIONS

These are conditions that are in relation to this Solicitation only and have not been included in the County’s standard Terms and Conditions or the Scope of Work and Specifications.

### 1. **TERM**

1.1 From the Notice to Proceed or the Purchase Order date, whichever applies: 210 calendar days to Final Acceptance.

### 2. **LIQUIDATED DAMAGES (CONSTRUCTION)**

2.1 In accordance with the terms set forth in the Agreement, should the Contractor fail to achieve final acceptance of the Work within the time period stated in the Agreement, the County shall be entitled to assess the amount set forth in Article 8-10 of Exhibit E Standard Specifications, as Liquidated Damages, but not as a penalty, for each calendar day thereafter until Final Acceptance is achieved.

### 3. **AWARD**

3.1 The basis of award shall be determined by the lowest *Project Total Bid* of the most responsive, responsible, and qualified Bidder meeting all bid specifications.

3.2 Bidders are required to bid on **ALL** base bid line items and **MUST** select to bid on all items under **EITHER** Alternate “A” or Alternate “B”.

**Bidders shall not provide pricing for both alternate categories. Should a Bidder provide pricing for both alternate categories their bid shall be deemed non-responsive and therefore ineligible for award.**

3.3 The County reserves the right to award to the contractor whose prices, in its sole judgment, are the most realistic in terms of provision of the best services and in the best interest of the County. Additionally, the County reserves the right to reject any and all bids at any time, unconditionally, and without cause.

3.4 The County reserves the right to reject any bids or portion of the bid with just cause, which shall include, but not be limited to an “unbalanced bid”, to the detriment of the County. An “unbalanced bid” shall include: excessive unit pricing, other unfair pricing for materials or labor, or a disproportionate allocation of cost to the County for the actual construction performed.

End of Special Conditions Section



## SCOPE OF WORK AND SPECIFICATIONS

### 1. GENERAL SCOPE OF WORK SUMMARY

- 1.1 Lee County Board of County Commissioners seeks to contract with a qualified Contractor to provide necessary services to complete the reconstruction of the existing roadway of Corbett Road from Diplomat Parkway to south of Littleton Road. Work includes the reconstruction and/or milling/paving of approximately 4,830 LF of existing roadway. Work also includes the construction of a two (2) foot stabilized shoulder on both sides of Corbett Road extending approximately 4,290 feet south of Army Reserve driveway connection on Corbett Road. The project also includes driveway harmonization, signing, pavement marking, maintenance of traffic, and installation/removal of erosion control measures.
- 1.2 The scope is further defined and detailed within Exhibits E-N found attached to the draft contract agreement affixed to this solicitation package as well as within the plans associated with this project. Bidder is responsible for reviewing all documentation associated with this project.

End of Scope of Work and Specifications Section

## SUPPLEMENTAL INFORMATION

None.

End of Supplemental Information Section

LEE COUNTY DOCUMENT MANAGEMENT FORM

For

**B180187LAC, Corbett Road Improvements Diplomat Parkway to Littleton Road**

These forms are required as indicated below and all required forms should be submitted with the Bidder’s/Proposer’s submission package. If it is determined that forms in this selection are not applicable to your company or solicitation they should be marked “N/A or Not Applicable” across the form in large letters and returned with your submission package. The original must be manually signed; digital signatures are not accepted.

FORM #	TITLE / DESCRIPTION	REQUIRED STATUS (Required, Not Required, If Applicable)	VENDOR CHECK-OFF
1	Solicitation Response Form	Required	
1a	Bid/Proposal Form	Required	
N/A	Business Relationship Disclosure Requirement	If Applicable	
2	Affidavit Certification Immigration Laws	Required	
3	Reference Survey <i>*(Requested after opening of lowest Bidder only)</i>	Required	
4	Negligence or Breach of Contract Disclosure Form	Required	
5	Affidavit - Principal Place of Business	Required	
6	Sub-Contractor List	Required	
7	Public Entity Crime Form	Required	
8	Trench Safety	Required	
9	Bid Bond	Required	
10	Minimum Qualifications Requirements	Required	
11	Signatory Authorization Affidavit	Required	
*	Proposal Label	Required	
<b>ADDITIONAL REQUIRED DOCUMENTS</b>			
NONE			

It is the Bidder’s/Proposer’s responsibility to review the submittal request in its entirety and ensure that all submittal requirements are included within their submission package. Failure to submit required forms may deem your company as non-responsive.

# FORMS DESCRIPTION & INSTRUCTIONS

## INVITATION TO BID

This table provides a brief list, description, and instructions regarding the standard requested forms that should be submitted with all bids or proposals. This is not intended to be an all-inclusive list of forms required for your submission, but rather a guide to assist in completion of the County's standard forms. Bidders/Proposers should utilize the Lee County Document Management Form for a complete list of all forms required for project submission.

<b>Form #</b>	<b>Title/Description</b>
<b>1</b>	<p><b><i>Solicitation Response Form</i></b></p> <p>All signatures must be by a corporate authorized representative, witnessed, and corporate and/or notary seal (as applicable.) The corporate or mailing address must match the company information as it is listed with the Florida Department of State Division of Corporations. Attach a copy of the web-page(s) from <a href="http://www.sunbiz.org">http://www.sunbiz.org</a> as certification of this required information. Sample attached for your reference. Verify that all Addenda and tax identification number have been provided.</p>
<b>1a</b>	<p><b><i>Bid/Proposal Form</i></b></p> <p>This form is used to provide itemization of project cost. A more detailed "schedule of values" may be requested by the County.</p>
<b>N/A</b>	<p><b><i>Business Relationship Disclosure Requirement</i></b></p> <p>Sections 112.313(3) and 112.313(7), F.S., prohibit certain business relationships on the part of public officers and employees, their spouses, and their children. If this <b>disclosure is applicable, the Bidder must request the form entitled "INTEREST IN COMPETITIVE BID FOR PUBLIC BUSINESS"</b> (Required by § 112.313(12)(b), F.S.) to be completed and <b>returned with the Solicitation Response</b>. <b>It is the Bidder's responsibility to request the form and disclose this relationship; failure to do so may result in being declared non-responsive.</b></p> <p>NOTICE: UNDER THE PROVISIONS OF § 112.317, F.S., A FAILURE TO MAKE ANY REQUIRED DISCLOSURE CONSTITUTES GROUNDS FOR, AND MAY BE PUNISHED BY, ONE OR MORE OF THE FOLLOWING: IMPEACHMENT, REMOVAL OR SUSPENSION FROM OFFICE OR EMPLOYMENT, DEMOTION, REDUCTION IN SALARY, REPRIMAND, OR A CIVIL PENALTY NOT TO EXCEED \$10,000.00.</p>
<b>2</b>	<p><b><i>Affidavit Certification Immigration Laws</i></b></p> <p>Submission of this form constitutes acknowledgement that the Bidder is in compliance in regard to all applicable immigration laws.</p>
<b>3</b>	<p><b><i>Reference Survey</i></b></p> <p>Provide this form to reference respondents. <b><u>For Bids, this form will be requested from the apparent low Bidder prior to the award. (not required to submit with bid)</u></b></p> <ol style="list-style-type: none"> <li>1. <b>Section 1:</b> Bidder/Proposer to complete with <u>reference respondent's</u> information prior to providing to them for their response. (This is <b>not</b> the Bidder/Proposer's information.)</li> <li>2. <b>Section 2:</b> Enter the name of the Bidder/Proposer; provide the project information in which the reference respondent is to provide a response.</li> <li>3. The <u>reference respondent</u> should complete "<b>Section 3.</b>"</li> <li>4. <b>Section 4:</b> The reference respondent to print and sign name</li> <li>5. <b>Reference responses</b> are to be provided upon request.</li> <li>6. Failure to obtain reference surveys may make your company non-responsive.</li> </ol>

- 4**      ***Negligence or Breach of Contract Disclosure Form***  
The form may be used to disclose negligence or breach of contract litigation that your company may have been a part of over the past ten (10) years. You may need to duplicate this form to list all history. If the Bidder has more than ten (10) lawsuits, you may narrow them to litigation of the company or subsidiary submitting the Solicitation Response. Include, at a minimum, litigation for similar projects completed in the State of Florida. Final outcome should include in whose favor the litigation was settled and whether a monetary amount was awarded. The settlement amount may remain anonymous.  
If you have **no litigation, enter “None” in the first “type of incident” block** of the form. Please do not write N/A on this form.
- 5**      ***Affidavit - Principal Place of Business***  
Certifies Bidder’s location information.
- 6**      ***Sub-Contractor List***  
To be completed and returned when sub-contractors are to be utilized and are known at the time of the submission.
- 7**      ***Public Entity Crime Form***  
Any person or affiliate, as defined by statute, 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 the County; may not submit a Bid on a contract with the County for the construction or repair of a public building or a public work; may not submit Bids or leases of real property to the County; may not be Awarded or perform Work as a contractor, supplier, subcontractor, or consultant under a contract with the County, and may not transact business with the County in excess of \$25,000.00 for a period of thirty-six (36) months from the date of being placed on the convicted vendor list.
- 8**      ***Trench Safety***  
Typically required in construction projects where trench excavations are in excess of 5 feet deep per Florida Trench Safety Act (90-96, Laws of Florida)
- 9**      ***Bid Bond***  
Guarantee to County that Bidder/Proposer will take on job if selected.
- 10**     ***Minimum Qualifications Requirements***  
States the minimum qualifications the Bidder/Proposer is required to meet in order to be considered for award or evaluation.
- 11**     ***Signatory Authorization Affidavit***  
Providing Authorization to individuals to execute legal documents on behalf of the Bidder/Proposer.
- \***      ***Bid/Proposal Label***  
Self-explanatory. Please affix to the outside of the sealed submission documents.
- \***      ***Include any licenses or certifications requested***  
Local Business Tax Account (as applicable) issued by City and/or County entity. This is necessary for all Florida vendors.

It is the Bidder’s responsibility to ensure the Solicitation Response is mailed or delivered in time to be received no later than the specified opening date and time. (If Solicitation is not received prior to the deadline, it cannot be considered or accepted)



LEE COUNTY PROCUREMENT MANAGEMENT
SOLICITATION RESPONSE FORM

Date Submitted: \_\_\_\_\_ Deadline Date: 4/18/2018

SOLICITATION IDENTIFICATION: B180187LAC

SOLICITATION NAME: Corbett Road Improvements Diplomat Parkway to Littleton Road

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

NAME & TITLE: (TYPED OR PRINTED) \_\_\_\_\_

BUSINESS ADDRESS: (PHYSICAL) \_\_\_\_\_

CORPORATE OR MAILING ADDRESS: \_\_\_\_\_

[ ] SAME AS PHYSICAL

ADDRESS MUST MATCH SUNBIZ.ORG

E-MAIL ADDRESS: \_\_\_\_\_

PHONE NUMBER: \_\_\_\_\_ FAX \_\_\_\_\_

NOTE REQUIREMENT: IT IS THE SOLE RESPONSIBILITY OF THE BIDDER/PROPOSER TO CHECK THE LEE COUNTY PROCUREMENT MANAGEMENT WEB SITE FOR ANY ADDENDA ISSUED FOR THIS PROJECT. THE COUNTY WILL POST ADDENDA TO THIS WEB PAGE, BUT WILL NOT NOTIFY.

By responding to this sealed Solicitation, the Bidder/Proposer makes all representations required by the instructions and further warrants and represents that: Bidder/Proposer has examined copies of all the Solicitation Documents and of the following Addenda:

No. \_\_\_\_\_ Dated: \_\_\_\_\_ No. \_\_\_\_\_ Dated: \_\_\_\_\_ No. \_\_\_\_\_ Dated: \_\_\_\_\_
No. \_\_\_\_\_ Dated: \_\_\_\_\_ No. \_\_\_\_\_ Dated: \_\_\_\_\_ No. \_\_\_\_\_ Dated: \_\_\_\_\_

Tax Payer Identification Number: \_\_\_\_\_

(1) Employer Identification Number -OR- (2) Social Security Number:

\*\* Lee County collects your social security number for tax reporting purposes only

Please submit a copy of your registration from the website www.sunbiz.org establishing your firm as authorized (including authorized representatives) to conduct business in the State of Florida, as provided by the Florida Department of State, Division of Corporations. (a sample is attached for your reference)

1 Collusion Statement: Lee County, Florida. The undersigned, as Bidder/Proposer, hereby declares that no person or other persons, other than the undersigned, are interested in this Solicitation as principal, and that this Solicitation is submitted without collusion with others; and that they have carefully read and examined the Specifications or Scope of Work, and with full knowledge of all conditions under which the services herein is contemplated must be furnished, hereby Bid and agree to furnish this service according to the requirements set out in the Solicitation Documents, Specifications or Scope of Work for said service for the prices as listed on the County provided price sheet or (CCNA) agree to negotiate prices in good faith if a contract is Awarded.

2 Scrutinized Companies Certification: Section 287.135, F.S, entitled "Prohibition against contracting with scrutinized companies" prohibits agencies from contracting with companies, for goods or services over \$1,000,000, that are on the Scrutinized Companies with Activities in Sudan List, the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List, Scrutinized Companies that Boycott Israel List, have been engaged in a boycott of Israel, or been engaged in business operations in Cuba or Syria. The County reserves the right to review, on a case-by-case basis, and waive this stipulation if it is deemed advantageous to the County.

As the person authorized to sign on behalf of Respondent, I hereby certify that the company identified above is in compliance with Section 287.135, F.S. I understand that submission of a false certification may subject company to contract termination, civil penalties, attorney's fees, and/or costs.



**Form#1 – Solicitation Form, Page 2**

**3 Business Relationship Disclosure Requirement:** Sections 112.313(3) and 112.313(7), F.S., prohibit certain business relationships on the part of public officers and employees, their spouses, and their children. See Part III, Chapter 112, F.S., and/or the brochure entitled "A Guide to the Sunshine Amendment and Code of Ethics for Public Officers, Candidates and Employees" for more details on these prohibitions. However, Section 112.313(12), F.S., provides certain limited exemptions to the above-referenced prohibitions, including one where the business is awarded under a system of sealed, competitive bidding; the public official has exerted no influence on bid negotiations or specifications; and where disclosure is made, prior to or at the time of the submission of the bid, of the official's or his/her spouse's or child's interest and the nature of the intended business. The Commission on Ethics has promulgated this form for such disclosure, if and when applicable to a public officer or employee.

**If this disclosure is applicable, the Bidder must request form "INTEREST IN COMPETITIVE BID FOR PUBLIC BUSINESS" (Required by 112.313(12)(b), F.S.) to be completed and returned with Solicitation Response. It is the Bidder/proposer's responsibility to disclose this relationship, failure to do so could result in being declared non-responsive.**

**Business Relationship Applicable (request form)**                       **Business Relationship NOT Applicable**

**4** Disadvantaged Business Enterprise (DBE) Bidder/proposer? If yes, please attach a current certificate.  Yes  No

**ALL SUBMISSIONS MUST BE EXECUTED BY AN AUTHORIZED AUTHORITY OF THE BIDDER/PROPOSER. WITNESSED AND SEALED (AS APPLICABLE)**

\_\_\_\_\_  
Company Name (Name printed or typed)



(Affix Corporate Seal, as applicable)

\_\_\_\_\_  
Authorized Representative Name (printed or typed)

\_\_\_\_\_  
Authorized Representative's Title (printed or typed)

\_\_\_\_\_  
Witnessed/Attested by: (Witness/Secretary name and title printed or typed)

\_\_\_\_\_  
Authorized Representative's Signature

\_\_\_\_\_  
Witness/Secretary Signature

Any blank spaces on the form(s), qualifying notes or exceptions, counter offers, lack of required submittals, or signatures, on County's form may result in the submission being declared non-responsive by the County.

**Detail by Entity Name**

**Florida Profit Corporation**

Bill's Widget Corporation

**Filing Information**

Document Number 655555  
FE/EIN Number 5111111111  
Date Filed 09/22/1980  
State FL  
Status ACTIVE  
Last Event AMENDED AND RESTATED ARTICLES  
Event Date Filed 07/25/2006  
Event Effective Date NONE

**Principal Address**

555 N Main Street  
Your Town, USA 99999  
Changed 02/11/2012

**Mailing Address**

555 N Main Street  
MYour Town, USA 99999  
Changed 02/11/2012

**Registered Agent Name & Address**

My Registered Agent  
111 Registration Road  
Registration, USA99999  
Name Changed: 12/14/2006  
Address Changed: 12/14/2006

**Officer/Director Detail**

**Name & Address**

Title P  
President, First  
555 AVENUE  
Anytown, USA99999

Title V  
President, Second  
555 AVENUE  
Anytown, USA99999

Sample Only



Lee County Procurement Management  
**BID/PROPOSAL FORM**

Company Name: \_\_\_\_\_

Solicitation # B180187LAC Solicitation Name Corbett Road Improvements Diplomat Parkway to Littleton Road

**This page serves as a header/placeholder only. Please refer to the Excel document provided with the solicitation for the complete Bid Schedule. The Excel document contains formulas for convenience, however it is the Contractor’s responsibility to verify all pricing and calculations are CORRECT. Lee County is not responsible for errors in formulas or calculations contained within Excel document(s).**

**REMINDERS:**

**In the event there is a discrepancy between the total quoted amount or the extended amounts and the unit prices quoted, the unit prices will prevail and the corrected sum will be considered the quoted price. Unit prices shall be rounded to the nearest whole penny.**

**The County will only accept bids submitted on bid forms provided by the County. Bids submitted on other forms, other than those provided by the County, will deem Bidder as non-responsive and ineligible for award.**

**Bidders may not adjust or modify data provided within the Bid Schedule. Bids received with modified data may deem the Bidder as non-responsive and ineligible for award.**

**PLEASE ENSURE you have provided a printed copy of the Bid Schedule with your hard copy submission packages and provided the excel version with your digital submission package.**

**Pricing shall be inclusive of all labor, equipment, supplies, overhead, profit, materials, and any other incidental costs required to perform and complete all work as specified herein.**

**Bidders are required to bid on ALL base bid line items and MUST select to bid on all items under EITHER Alternate “A” or Alternate “B”. Bidders shall not provide pricing for both alternate categories. Should a Bidder provide pricing for both alternate categories their bid shall be deemed non-responsive and therefore ineligible for award.**



LEE COUNTY  
S O U T H W E S T F L O R I D A

**AFFIDAVIT CERTIFICATION IMMIGRATION LAWS**

SOLICITATION NO.: B180187LAC SOLICITATION NAME: Corbett Road Improvements Diplomat Parkway to Littleton Road

LEE COUNTY WILL NOT INTENTIONALLY AWARD COUNTY CONTRACTS TO ANY CONTRACTOR WHO KNOWINGLY EMPLOYS UNAUTHORIZED ALIEN WORKERS, CONSTITUTING A VIOLATION OF THE EMPLOYMENT PROVISIONS CONTAINED IN 8 U.S.C. SECTION 1324 a(e) {SECTION 274A(e) OF THE IMMIGRATION AND NATIONALITY ACT (“INA”).

LEE COUNTY MAY CONSIDER THE EMPLOYMENT BY ANY CONTRACTOR OF UNAUTHORIZED ALIENS A VIOLATION OF SECTION 274A(e) OF THE INA. **SUCH VIOLATION BY THE RECIPIENT OF THE EMPLOYMENT PROVISIONS CONTAINED IN SECTION 274A(e) OF THE INA SHALL BE GROUNDS FOR UNILATERAL CANCELLATION OF THE CONTRACT BY LEE COUNTY.**

BIDDER/PROPOSER ATTESTS THAT THEY ARE FULLY COMPLIANT WITH ALL APPLICABLE IMMIGRATION LAWS (SPECIFICALLY TO THE 1986 IMMIGRATION ACT AND SUBSEQUENT AMENDMENTS).

Company Name: \_\_\_\_\_

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

STATE OF \_\_\_\_\_  
COUNTY OF \_\_\_\_\_

The foregoing instrument was signed and acknowledged before me this \_\_\_\_\_ day of \_\_\_\_\_  
20\_\_\_\_, by \_\_\_\_\_ who has produced

(Print or Type Name)  
\_\_\_\_\_ as identification.

(Type of Identification and Number)

\_\_\_\_\_  
Notary Public Signature

\_\_\_\_\_  
Printed Name of Notary Public

\_\_\_\_\_  
Notary Commission Number/Expiration

The signee of this Affidavit guarantees, as evidenced by the sworn affidavit required herein, the truth and accuracy of this affidavit to interrogatories hereinafter made. **LEE COUNTY RESERVES THE RIGHT TO REQUEST SUPPORTING DOCUMENTATION, AS EVIDENCE OF SERVICES PROVIDED, AT ANY TIME.**



Lee County Procurement Management

**REFERENCE SURVEY**

Solicitation # B180187LAC

Corbett Road Improvements Diplomat Parkway to Littleton Road

<b>Section 1</b>	Reference Respondent Information	<b>Please return completed form to:</b>	
<b>FROM:</b>	_____	<b>Bidder/Proposer:</b>	
<b>COMPANY:</b>	_____	<b>Due Date:</b>	
<b>PHONE #:</b>	_____	<b>Total # Pages: 1</b>	
<b>FAX #:</b>	_____	<b>Phone #: _____ Fax #: _____</b>	
<b>EMAIL:</b>	_____	<b>Bidder/Proposer E-Mail:</b>	

<b>Section 2</b>	Enter Bidder/Proposer Information , as applicable Similar Performed Project (Bidder/Proposer to enter details of a project performed for above reference respondent)		
Bidder/Proposer Name:	_____		
Reference Project Name:	Project Address:	Project Cost:	
_____	_____	_____	
Summarize Scope:			
_____			

**You as an individual or your company has been given as a reference on the project identified above. Please provide your responses in Section 3 below.**

<b>Section 3</b>		Indicate: "Yes" or "No"
1. Did this company have the proper resources and personnel by which to get the job done?		
2. Were any problems encountered with the company's work performance?		
3. Were any change orders or contract amendments issued, other than owner initiated?		
4. Was the job completed on time?		
5. Was the job completed within budget?		
6. On a scale of one to ten, ten being best, how would you rate the overall work performance, considering professionalism; final product; personnel; resources. Rate from 1 to 10. (10 being highest)		
7. If the opportunity were to present itself, would you rehire this company?		
8. Please provide any additional comments pertinent to this company and the work performed for you:		

**Section 4**

Reference Name (Print \_\_\_\_\_) Please submit non-Lee County employees as

Reference





**ALLEGED NEGLIGENCE OR BREACH OF CONTRACT  
DISCLOSURE FORM**

Please fill in the form below. Provide each incident in regard to alleged negligence or breach of contract that has occurred over the past 10 years. Please complete in chronological order with the most recent incident on starting on page 1.

**Company Name:** \_\_\_\_\_

<b>Type of Incident</b> <i>Alleged Negligence or Breach of Contract</i>	<b>Incident Date And Date Filed</b>	<b>Plaintiff</b> <i>(Who took action against your company)</i>	<b>Case Number</b>	<b>Court</b> <i>County/State</i>	<b>Project</b>	<b>Claim Reason</b> <i>(initial circumstances)</i>	<b>Final Outcome</b> <i>(who prevailed)</i>

Make as many copies of this sheet as necessary in order to **provide a ten (10) year history** of the requested information. If there is no action pending or action taken in the last ten (10) years, complete the **company name and write "NONE" in the first "Type of Incident" box** of this page and return with your submission package. This form should also include the primary partners listed in your submission. Do not include litigation with your company as the plaintiff. Final outcome should include who prevailed and what method of settlement was made. If a monetary settlement was made, the amount may remain anonymous. **Please do not modify this form (expansion of spacing allowed) or submit your own variation.**

Page Number: \_\_\_\_\_ Of \_\_\_\_\_ Total pages

Update the page number to reflect the current page and the total number of pages. Example: Page 3, of 5 total submitted pages of this form.



# LEE COUNTY

S O U T H W E S T F L O R I D A

## AFFIDAVIT PRINCIPAL PLACE OF BUSINESS

Instructions: Please complete all information that is applicable to your firm.

**Company Name:** \_\_\_\_\_

\_\_\_\_\_  
Printed name of authorized signer

\_\_\_\_\_  
Title

⇒ \_\_\_\_\_  
Authorized Signature

\_\_\_\_\_  
Date

The signee of this affidavit guarantees, as evidenced by the sworn affidavit required herein, the truth and accuracy of this affidavit to interrogatories hereinafter made. **LEE COUNTY RESERVES THE RIGHT TO REQUEST SUPPORTING DOCUMENTATION, AS EVIDENCE OF SERVICES PROVIDED, AT ANY TIME.**

Notary:

State of \_\_\_\_\_

County of \_\_\_\_\_

The foregoing instrument was signed and acknowledged before me this \_\_\_\_\_ day of \_\_\_\_\_

**20** \_\_\_\_\_ by \_\_\_\_\_ who has produced

\_\_\_\_\_ as identification (or personally known)  
Type of ID and number

⇒ \_\_\_\_\_  
Notary Public Signature

\_\_\_\_\_  
Notary Commission Number and expiration

1. Principal place of business is located within the boundaries of: \_\_\_\_\_ Lee County  
\_\_\_\_\_ Collier County  
\_\_\_\_\_ Non-Local

Local Business Tax License # \_\_\_\_\_

2. Address of Principal Place of Business: \_\_\_\_\_

3. Number of years at this location \_\_\_\_\_ years

4. Have you provided goods or services to Lee County on a regular basis within the past 3 consecutive years  
\_\_\_\_\_ Yes\* \_\_\_\_\_ No \*If yes, attach contractual history for past 3 consecutive years

5. Number of available employees for this Contract \_\_\_\_\_

6. Does your company have a Drug Free Workplace Policy \_\_\_\_\_ Yes \_\_\_\_\_ No



## Public Entity Crime Form

This form must be signed and sworn to in the presence of a notary public or other officer authorized to administer oaths.

1. This sworn statement is submitted to \_\_\_\_\_  
*(Print name of the public entity)*

by \_\_\_\_\_  
*(Print individual's name and title)*

for \_\_\_\_\_  
*(Print name of entity submitting sworn statement)*

whose business address is \_\_\_\_\_

(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: On the attached sheet.) Required as per IRS Form W-9.

2. I understand that a “public entity crime” as defined in Section 287.133(1) (g), Florida Statutes, means a violation of any state or federal law by a person with respect to and directly related to the transaction of business with any public entity or with an agency or political subdivision of any other state or with the United States, including but not limited to, a bid or contract for goods or services to be provided to any public entity or agency or political subdivision or any other state or of the United States, and involving antitrust, fraud, theft, bribery, collusion, racketeering, conspiracy, or material misrepresentation.

3. I understand that “convicted” or “conviction” as defined in Section 287.133(1) (b), Florida Statutes, means a finding of guilt or a conviction of a public entity crime, with or without an adjudication of guilt, in any federal or state trial court of record relating to charges brought by indictment or information after July 1, 1989, as a result of a jury verdict, nonjury trial, or entry of a plea of guilty or nolo contendere.

4. I understand that “affiliate” as defined in Section 287.133(1)(a), Florida Statutes, means:  
1. A predecessor or successor of a person convicted of a public entity crime:  
or:  
2. An entity under the control of any natural person who is active in the management of the entity and who has been convicted of a public entity crime. The term “affiliate” includes those offices, directors, executives, partners, shareholders, employees, members and agents who are active in the management of the affiliate. The ownership by one person of shares constituting a controlling interest in another person, or a pooling of equipment or income among persons when not fair market value under an arm’s length Agreement/Contract, shall be a facie case that one person controls another person. A person who knowingly enters into a joint venture with a person who has been convicted of a public entity crime in Florida during the preceding thirty-six (36) months shall be considered an affiliate.

5. I understand that a “person” as defined in Section 287.133(1) (c), Florida Statutes, means any natural person or entity organized under the laws of any state or of the United States with the legal power to enter a binding contract and which bids or applies to bid on contracts for the provision of goods or services let by a public entity, or which otherwise transacts or applies to transact business with a public entity. The term “person” includes those officers, directors, executives, partners, shareholders, employees, members, and agents who are active in management of the entity.

6. Based on information and belief, the statement which I have marked below is true in relation to the entity submitting those sworn statement. *(Please indicate which statement applies)*

\_\_\_\_\_ Neither the entity submitting this sworn statement, nor any officers, directors, executives, partners, shareholders, employees, members, and agents who are active in management of an entity nor affiliate of the entity have been charged with and convicted of a public entity crime subsequent to July 1, 1989.

*Public Entity Crime Form*

\_\_\_\_\_ The entity submitting this sworn statement, or one or more of the officers, directors, executives, partners, shareholders, employees, member, or agents who are active in management of the entity, or an affiliate of the entity have been charged with and convicted of a public entity crime subsequent to July 1, 1989.

\_\_\_\_\_ The entity submitting this sworn statement, or one or more of its officers, directors, executives, partners, shareholders, employees, member, or agents who are active in management of the entity, or an affiliate of the entity has been charged with and convicted of a public entity crime subsequent to July 1, 1989. However, there has been subsequent proceeding before a Hearing Officer of the State of Florida, Division of Administrative Hearing and the Final Order entered by the Hearing Officer determined that it was not in the public interest to place the entity submitting this sworn statement on the convicted vendor list. (Attach a copy of the final order)

I UNDERSTAND THAT THE SUBMISSION OF THIS FORM TO THE CONTRACTING OFFICER FOR THE PUBLIC ENTITY IDENTIFIED IN PARAGRAPH ONE ABOVE IS FOR THAT PUBLIC ENTITY ONLY AND THAT THIS FORM IS VALID THROUGH DECEMBER 31 OF THE CALENDAR YEAR IN WHICH IT IS FILED. I ALSO UNDERSTAND THAT I AM REQUIRED TO INFORM THE PUBLIC ENTITY PRIOR TO ENTERING INTO A CONTRACT IN EXCESS OF THE THRESHOLD AMOUNT PROVIDED IN SECTION 287.017, FLORIDA STATUTES, FOR CATEGORY TWO OR ANY CHANGE IN THE INFORMATION CONTAINED IN THIS FORM.

\_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Date)

STATE OF \_\_\_\_\_  
COUNTY OF \_\_\_\_\_

PERSONALLY APPEARED BEFORE ME, the undersigned authority, \_\_\_\_\_  
(Name of individual signing)

who, after first being sworn by me, affixed his/her signature in the space provided above on this \_\_\_\_\_ day  
of \_\_\_\_\_, 2\_\_\_\_.

\_\_\_\_\_  
(NOTARY PUBLIC)

My Commission Expires: \_\_\_\_\_



**Form#8: Trench Safety**

**TRENCH SAFETY**

Contractor/vendor acknowledges that included in the appropriate Solicitation items of the Solicitation and in the total Solicitation price are costs for complying with the Florida Trench Safety Act (90-96, Laws of Florida) effective October 1, 1990. The contractor/vendor further identifies the costs of such compliance to be summarized below:

	Trench Safety Measure (Description)	Units of Measure (LF, SF)	Unit (Quantity)	Unit Cost	Extended Cost
A.	_____	_____	_____	_____	_____
B.	_____	_____	_____	_____	_____
C.	_____	_____	_____	_____	_____
D.	_____	_____	_____	_____	_____
TOTAL \$ _____					

If applicable, the contractor/vendor certifies that all trench excavation done within its control in excess of five feet (5') in depth shall be in accordance with the Florida Department of Transportation's Special Provisions Article 125-1 and Sub-article 125-4.1 (TRENCH EXCAVATION SAFETY SYSTEM AND SHORING, SPECIAL-TRENCH EXCAVATION).

Failure to complete the above may result in the Solicitation being declared non-responsive.

\_\_\_\_\_  
*(Signature)*  
 \_\_\_\_\_  
*(Company Name)*

STATE OF \_\_\_\_\_  
 COUNTY OF \_\_\_\_\_

The foregoing instrument was acknowledged before me this \_\_\_\_ day of \_\_\_\_\_ by \_\_\_\_\_  
*(name and title of corporate officer)* of \_\_\_\_\_ *(name of corporation)*, a \_\_\_\_\_ *(state or place of incorporation)* corporation, on behalf of the corporation. He/she is personally known to me or has produced \_\_\_\_\_ *(type of identification)* as identification.

\_\_\_\_\_  
*(signature line for notary public)*  
 \_\_\_\_\_  
*(name of notary typed, printed or stamped)*  
 \_\_\_\_\_  
*(title or rank)*  
 \_\_\_\_\_  
*(serial number, if any)*

My commission expires:  
 \_\_\_\_\_

BID BOND

Complete EITHER Lee County Paper Bid Bond OR provide cashier's check

KNOW ALL MEN BY THESE PRESENTS, that we

\_\_\_\_\_ as Principal, and  
(BIDDER'S Name)

\_\_\_\_\_ a corporation licensed to do  
(Surety's Name)

business under the laws of the State of Florida as a Surety, are held and firmly bound unto LEE COUNTY BOARD OF COUNTY COMMISSIONERS, LEE COUNTY, FLORIDA, a political subdivision of the State of Florida,

in the SUM OF \_\_\_\_\_  
for the payment whereof, well and truly to be made, we bind ourselves, our heirs, successors, personal representatives and assigns, jointly and severally, firmly, by these presents.

SIGNED AND SEALED this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_

WHEREAS, said Principal is herewith submitting a Bid/Proposal for the project know as:

**B180187LAC, Corbett Road Improvements Diplomat Parkway to Littleton Road**

NOW, THEREFORE, the condition of the above obligation is such that if said Principal shall be Awarded the Contract upon said Bid/Proposal within the specified time and shall enter into a written Contract, satisfactory in form, provide an acceptable Public Performance and Payment Bond from a Surety acceptable to the County and provide other insurance as may be required to the County within seven (7) calendar days after the written Notice of Intent to Award date, or within such extended period as the County may grant, then this obligation shall be null and void; otherwise said Principal and Surety shall pay to said County in money the difference between the amount of the Bid of said Principal and the amount for which said County may legally contract with another party to perform said Work, if the latter amount be in excess of the former, together with any expenses and reasonable attorney's fees incurred by said County if suit be brought hereon, but in no event shall said Surety's liability exceed the penal sum hereof plus such expenses and attorney's fees. For purposes of unsuccessful bid protests filed by the Principal herein, this obligation shall bind the Surety to pay costs and damages associated with the bid protest or delays to the project upon a finding from the Board of County Commissioners for Lee County that the bid protest was frivolous and/or lacked merit. The liability of the Surety shall not exceed the penal sum of the bid bond.

Witness as to Principal: \_\_\_\_\_ (SEAL)  
(Principal)

\_\_\_\_\_  
(By) Printed Name

Witness as to Surety: \_\_\_\_\_ (SEAL)  
(Surety's Name)

\_\_\_\_\_  
(By-As Attorney-in-Fact, Surety)

Affix Corporate Seals and attach proper Power of Attorney for Surety.

Form 10: Minimum Qualifications Requirements



LEE COUNTY

SOUTHWEST FLORIDA

**MINIMUM QUALIFICATION REQUIREMENTS**

**FOR**

***B180187LAC, Corbett Road Improvements Diplomat Parkway to Littleton Road***

Bidder(s)/Proposer(s) must meet the minimum qualification requirements as specified in the following form to qualify for consideration of award. This form must be completed and returned with the proposal submittal along with any supporting documentation where requested and/or indicated herein.

The County reserves the right, in their sole judgment, to determine to its satisfaction whether the Bidder(s)/Proposer(s) has met the minimum qualification requirements as specified herein. The determination shall be based upon the examination of the Minimum Qualification Requirements form and associated supportive documentation (if any requested).

An affirmative determination shall be a prerequisite for award of the contract to the Bidder(s)/Proposer(s). A negative determination shall result in disqualification of the proposal, in which event the County shall exclude the proposal from the evaluation or consideration process and therefore deeming the Bidder(s)/Proposer(s) ineligible for award.

**1. CRITERIA 1 – Prime Contractor is FDOT Pre-Qualified Contractor:** The Prime Contractor must be FDOT pre-qualified under the Work Class of *10 - Flexible Paving* and have provided proof of certification at time of bid submission.

**Is your Firm FDOT Certified under the Work Class of *10 - Flexible Paving* and did you submit your FDOT Certification of Qualification?**

\_\_\_\_\_ **YES** \_\_\_\_\_ **NO**

If YES, provide details as requested below:

- Provide a copy of the FDOT prequalification notice, certification, or FDOT prequalified contractors listing database page with submission.
  - o Failure to provide evidence of FDOT certification may deem your firm as non-responsive.

\_\_\_\_\_  
Authorized Bidder/Proposer Signature

\_\_\_\_\_  
Date:

\_\_\_\_\_  
Authorized Bidder/Proposer Name (Print or Type)

Form 11 – Signatory Authorization Affidavit



Lee County Procurement Management Signatory Authorization Affidavit

Date: April 18, 2018 Solicitation No.: B180187LAC

Solicitation Name: Corbett Road Improvements Diplomat Parkway to Littleton Road

AUTHORIZATION: The following individuals are hereby authorized, as representatives of the Bidder/Proposer, identified below, to execute legally binding documents on behalf of the Bidder/Proposer. The signee of this Affidavit guarantees, as evidenced by the sworn affidavit required herein, the truth and accuracy of this affidavit to interrogatories hereinafter made. Lee County reserves the right to request supporting documentation, as evidence of services provided, at any time.

INSTRUCTIONS: This Authorization Affidavit shall only be executed by the following:

- Corporation: President
• LLC: Managing Member
• Sole Proprietor: Owner

Attach corporate designation documentation, if applicable.

Table with 2 columns: Authorized Signatory Name, Title. Three empty rows for entry.

By execution of this document, I hereby authorize the individuals shown above to execute legally binding documents on behalf of the Bidder/Proposer. I further acknowledge that it shall be my responsibility to provide an updated Signatory Authorization Affidavit upon any change in authorization to the Lee County Procurement Management Department, Attention: Procurement Management Director, 1500 Monroe Street, 4th Floor, Fort Myers, FL 33901.

Signature Title Date

STATE OF COUNTY OF

The foregoing instrument was signed and acknowledged before me this day of 20 who produced the following as identification

Notary Public Signature Printed Name of Notary Public Commission Number/Expiration

Page of \*Duplicate this page for additional names. An original signature is required on each page.

*Sealed Bid Label*

**Cut along the outer border and affix this label to your sealed solicitation envelope to identify it as a "Sealed Bid."**

<b>SEALED SOLICITATION DOCUMENTS • DO NOT OPEN</b>	
BID No.:	B180187LAC
BID TITLE:	Corbett Road Improvements Diplomat Parkway to Littleton Road
DATE DUE:	Wednesday, April 18, 2018
TIME DUE:	<b>Prior to: 2:30 PM</b>
SUBMITTED BY:	(Name of Company)
e-mail address	Telephone
<b>DELIVER TO:</b>	Lee County Procurement Management 1500 Monroe 4 <sup>th</sup> Floor Fort Myers FL 33901
<i>Note: submissions received after the time and date above will not be accepted.</i>	



Lee County Procurement Management  
1500 Monroe Street, 4<sup>th</sup> Floor  
Fort Myers, FL 33901  
(239) 533-8881  
[www.leegov.com/procurement](http://www.leegov.com/procurement)

**PLEASE PRINT CLEARLY**



## **DRAFT CONSTRUCTION AGREEMENT**

## CONSTRUCTION AGREEMENT

LEE COUNTY, a political subdivision of the State of Florida, by and through its Board of County Commissioners, situated at 2115 Second St., Fort Myers, FL 33901 (the "County"), hereby contracts with [Contractor's name **exactly** as it appears on Sunbiz] (the "Contractor") of [Contractor's primary business address] a [Contractor's state] contractor licensed to perform all Work in the State of Florida in connection with the County's Solicitation No. [Solicitation Number] (the "Project"), as said Work is set forth in the Plans and Specifications prepared by [Engineer of Record's name], the "Engineer of Record," and other Contract Documents hereafter specified (the "Work").

The County and the Contractor, for the consideration herein set forth, agree as follows:

### Section 1. Contract Documents.

A. The Contract Documents consist of this Agreement, the Exhibits described in Section 6 hereof, the legal advertisement, the instructions to bidders, the Proposal and Proposal Forms, the solicitation documents and any duly executed and issued addenda, the Contractor's proposal, Change Orders, Field Directive Change Orders, and amendments relating thereto. All of the foregoing Contract Documents are incorporated by reference and made a part of this Agreement (all of said documents including the Agreement sometimes being referred to herein as the "Contract Documents" or "Contract" and sometimes as the "Agreement"). A copy of the Contract Documents shall be maintained by Contractor at the Project Site at all times during the performance of the Work.

B. The Engineer of Record is the initial interpreter of the Contract Documents concerning design intent, but is not the judge between the County and the Contractor. The County reserves the right to make final decisions considering the Engineer of Record's recommendations or interpretations of the Contract Documents. The Engineer of Record does not have authority to obligate or commit the County to fund additional expenditures or approve extensions of time over the approved Contract Time or Amount. However, the Engineer of Record's interpretation as to the intent of her or his design shall be final and not subject to interpretation by the County's staff.

C. The Construction Engineering and Inspection Consultant ("CEI Consultant") is the initial interpreter of the Contract Documents in all matters not concerning design intent. The CEI Consultant shall administer, monitor, test, sample, and inspect the Construction of the Project to ensure that the Project is constructed in reasonable conformity with the plans, specifications, and special provisions of the Contract Documents and shall observe the Contractor's work to determine the progress and quality of work, identify discrepancies, report significant discrepancies to the County, and direct the Contractor to correct such observed discrepancies. The County reserves the right to make final decisions considering the CEI Consultant's recommendations or interpretations of the Contract Documents. The CEI Consultant may issue Field Directive

Change Orders to the Contractor, but the CEI Consultant does not have authority to change the scope of the Project, obligate or commit the County to fund additional expenditures, or approve extensions of time over the approved Contract Time or Amount. The CEI Consultant shall consult with the Engineer of Record regarding any questions concerning the intent of the Project design.

D. Any Work that may be reasonably inferred from the Plan and Specifications as being required to produce the intended result shall be supplied whether or not it is specifically called for. In case of any inconsistency or conflict among the provisions of the Contract Documents, the order of precedence shall be as follows: (1) Change Orders; (2) the Agreement, including amendments and Exhibits; (3) Field Directive Change Orders; (4) the solicitation documents, including any addenda. Exhibit E, Article 5-2 provides the order of precedence for Specifications, Plans, Special Provisions, Technical Special Provisions, and other Project specifications. The Contract Documents represent the entire and integrated Agreement between the parties hereto, and supersede prior negotiations, representations, or agreements, either written or oral.

E. Work, materials or equipment described in words which have a well-known technical or trade meaning, shall be deemed to refer to such recognized standards.

F. The County shall furnish to the Contractor Contract Documents in electronic form and PDF file format.

G. The Contractor agrees to bind specifically every Subcontractor to the applicable terms and conditions of the Contract Documents for the benefit of the County.

H. The Work to be provided by Contractor for the Project shall be under the general direction of the CEI Consultant, or their successor, who shall act as the County's representative during the term of this Agreement. If the County's representative is not a County employee, then County's representative is not authorized to issue changes to the Contract Amount, Contract Time, or Scope of Work without express approval by the County Director, County Manager, or Board of County Commissioners.

## Section 2. Scope of Work.

A. The Contractor agrees to furnish and pay for all management, supervision, financing, labor, materials, tools, transportation, fuel, supplies, utilities, equipment and services of every kind and type necessary to diligently, timely, and fully perform and complete in a good and workmanlike manner the Work required by this Agreement.

B. The Work shall be prosecuted and administered in accordance with the Standard Specifications attached hereto and incorporated herein as Exhibit E.

### Section 3. Contract Amount.

A. In consideration of the faithful performance by the Contractor of the covenants in this Contract to the full satisfaction and acceptance of the County, the County agrees to pay, or cause to be paid, to Contractor the following Contract Amount in accordance with the terms of this Agreement: \$[Contract amount in numbers] or in words: [Contract amount in words].

B. Measurement and payment provisions are provided in Division 1, Section 9 of the Standard Specifications attached hereto as Exhibit E.

### Section 4. Bonds.

A. The Contractor shall provide and maintain through the life of the Contract, including the warranty period, Performance and Payment Bonds, in the form prescribed in the Exhibits to the Agreement, in the amount of 100% of the Contract Amount, the costs of which are to be paid by Contractor. If the Contract is increased by a Change Order, it shall be the Contractor's responsibility to ensure that the Performance and Payment Bonds are amended accordingly and a copy of the amendment recorded by the Lee County Clerk of Court and forwarded to the County. The Performance and Payment Bonds shall be underwritten by a Surety authorized to do business in the State of Florida and otherwise acceptable to the County; provided, however, the Surety shall be rated as "A-" or better as to general policy holders rating as reported in the most current Best Key Rating Guide, published by A.M. Best Company, Inc.

B. Attorneys-in-Fact who sign Bonds for County projects must file with such Bond a certified copy of their Power of Attorney to sign such Bond. All agents of Surety companies must list their name, address, and telephone number on all Bonds. The life of all Bonds provided to the County shall extend twelve (12) months beyond the date of final payment and shall contain a waiver of alternation to the terms of the Contract, extensions of time and/or forbearance on the part of the County. The Surety must have fulfilled all of its obligations on all other Bonds previously provided to the County. The Surety must have a minimum underwriting limitation of \$5,000,000 published in the latest edition of the Federal Register for Federal Bonds (U.S. Dept. of Treasury).

C. If the Surety for any Bond furnished by Contractor is declared bankrupt, becomes insolvent, its right to do business is terminated in the State of Florida, or it ceases to meet the requirements imposed by the Contract Documents, the Contractor shall, within five (5) calendar days thereafter, substitute at Contractor's cost another Bond and Surety, both of which shall be subject to the County's approval.

D. If the Contractor cannot obtain another Bond and Surety within five (5) calendar days, the County may accept and the Contractor shall submit an irrevocable letter of credit drawn on a Lee County, Florida bank until the Bond and Surety can be obtained.

E. In case of default on the part of the Contractor, the County will charge against the Contract/Performance Bond all expenses for services incidental to ascertaining and collecting losses under the Contract/Performance Bond, including accounting, engineering, and legal services, together with any and all costs incurred in connection with renegotiation of the Contract.

F. The Surety shall indemnify and provide defense for the County when called upon to do so for all claims or suits against the County, by third parties, pertaining to Contractor payment or performance issues arising out of the Contract where the Contractor has failed to timely provide the County such defense. It is expressly understood that the monetary limitation on the extent of the indemnification shall be the approved Contract amount, which shall be the original Contract amount as may be modified by subsequent Supplemental Agreements.

G. The principal and Surety executing the Contract/Performance Bond shall be liable to the County in any civil action that might be instituted by the County or any officer of the County authorized in such cases, for triple any amount in money or property the County might lose, or be overcharged, or otherwise be defrauded of by any wrongful or criminal act of the Contractor, their agent or their employees.

#### Section 5. Contract Time and Liquidated Damages

A. Time is of the essence in the performance of the Work under this Agreement. The Commencement Date is established in the Notice to Proceed to be issued by the County, and the Contractor must begin the Work within the number of days specified by the Notice to Proceed. Written Notice to Proceed is contingent upon and will be done subsequent to the Contractor fully satisfying the County's stated insurance and Bond submittal requirements. No Work shall be performed at the Project Site prior to the Commencement Date. Any Work performed by the Contractor prior to the Commencement Date shall be at the sole risk of the Contractor. Final Acceptance of the Work shall be achieved within [The number of days specified in the Contractor's proposal in words and (number)] calendar days from the Commencement Date, and that time period shall be the Contract Time. The date of Final Acceptance of the Work (or designated portions thereof) is the date certified by the Director pursuant to Exhibit E, Article 5-11.

B. Prosecution and progress of the Work provisions are provided in Division 1, Section 8 of the Standard Specifications attached hereto as Exhibit E.

C. The County and the Contractor recognize that, since time is of the essence for this Agreement, the County will suffer financial loss if Final Acceptance of the Work is not achieved within the time specified above, as said time may be adjusted as provided for herein. Should the Contractor fail to achieve Final Acceptance of the Work within the time period noted above, the County shall be entitled to assess the amount set forth in Article 8-10 of the Standard Specifications, as Liquidated Damages, but not as a penalty,

for each calendar day thereafter until Final Acceptance is achieved. Final Acceptance of the Work shall be deemed to occur on the date the Director issues a written notice of Final Acceptance pursuant to the terms hereof. The Contractor hereby expressly waives and relinquishes any right which it may have to seek to characterize the above noted Liquidated Damages as a penalty, which the parties agree represents a fair and reasonable estimate of the County's actual damages at the time of contracting if the Contractor fails to achieve Final Acceptance of the Work in a timely manner.

D. When any period of time is referenced by days herein, it shall be computed to include the first day and last day of such period. All days shall mean calendar day and not business day.

E. Any agreed upon changes to the Contract Time must be accomplished by an approved, written Change Order in the form attached to this Agreement.

#### Section 6. Exhibits Incorporated.

The following documents are expressly agreed to be incorporated by reference and made a part of this Agreement:

- A. Legal Advertisement
- B. Invitation to Bid and all addenda, including the Project Plans
- C. Bid Form and Required Documents
- D. Public Construction Performance and Payment Bond
- E. Standard Specifications
- F. Insurance Requirements, including Certificates of Insurance
- G. Form of Release and Affidavit
- H. Change Order Form
- I. Supplemental Specifications
- J. Special Provisions
- K. Technical Special Provisions
- L. FDOT and Lee County Design Standards
- M. Developmental Specifications
- N. Other relevant forms

#### Section 7. Public Records.

A. In addition to other requirements provided herein, Contractor shall comply with public records laws embodied in Chapter 119, Florida Statutes, and specifically shall:

A.1. Keep and maintain public records required by the County in order to perform the Scope of Services identified herein.

A.2. Upon request from the County provide the County with any requested public records or allow the requested records to be inspected or copied within a reasonable time by the County.

A.3. Ensure that public records that are exempt or confidential and exempt from public records disclosure requirements are not disclosed except as authorized by law for the duration of the Agreement term and thereafter if the Contractor does not transfer all records to the County.

A.4. Transfer, at no cost, to County all public records in possession of the Contractor upon termination of this Agreement and destroy any duplicate public records that are exempt or confidential and exempt from public records disclosure requirements. All records stored electronically must be provided to the County, upon request from the County, in a format that is compatible with the information technology systems of the County. If the Contractor keeps and maintains public records upon the conclusion of this Agreement, the Contractor shall meet all applicable requirements for retaining public records that would apply to the County.

B. If Contractor does not comply with a public records request, the County shall treat that omission as a breach of this Agreement and enforce the Contract provisions accordingly. Additionally, if the Contractor fails to provide records when requested, the Contractor may be subject to penalties under Section 119.10, Florida Statutes, and reasonable costs of enforcement, including attorney fees.

**IF THE CONTRACTOR HAS QUESTIONS REGARDING THE APPLICATION OF CHAPTER 119, FLORIDA STATUTES, TO THE CONTRACTOR'S DUTY TO PROVIDE PUBLIC RECORDS RELATING TO THIS AGREEMENT, CONTACT THE CUSTODIAN OF PUBLIC RECORDS AT 239-533-2221, 2115 SECOND STREET, FORT MYERS, FL 33901, [publicrecords@leegov.com](mailto:publicrecords@leegov.com); <http://www.leegov.com/publicrecords>.**

Section 8. Audit.

A. Upon execution of the Contract, the County reserves the right to conduct an audit of the Contractor's records pertaining to the Project. The County or its representatives may conduct an audit, or audits, at any time prior to final payment, or thereafter pursuant to 5-12 of the Standard Specifications. The County may also require submittal of the records from either the Contractor or any subcontractor or material supplier. As the County deems necessary, records include all books of account, supporting documents, and papers pertaining to the cost of performance of the Work.

B. The Contractor must retain all records pertaining to the Contract for a period of not less than five (5) years from the date of the Director's final acceptance of the Project, unless a longer minimum period is otherwise specified. Upon request, make all such records available to the County or its representative(s). For the purpose of this section, records include but are not limited to all books of account, supporting documents, and papers that the County deems necessary to ensure compliance with the provisions of the Contract Documents.



C. If the Contractor fails to comply with these requirements, the County may disqualify or suspend the Contractor from bidding on or working as a subcontractor on future Contracts.

D. The Contractor must ensure that the subcontractors provide access to their records pertaining to the project upon request by the County.

#### Section 9. Indemnification and Insurance.

A. Contractor agrees to save harmless, indemnify, and defend or, at the option of the County, pay the cost of defense, the County and its representative from any and all claims, losses, penalties, demands, judgments, and costs of suit, including attorneys' fees and paralegals' fees, for any expense, damage or liability incurred by any of them, whether for personal injury, property damage, direct or consequential damages, or economic loss, arising directly or indirectly on account of or in connection with the Work performed by Contractor under this Agreement or by any person, firm or corporation to whom any portion of the Work is subcontracted by Contractor or resulting from the use by Contractor, or by any one for whom Contractor is legally liable, of any materials, tools, machinery or other property of the County. This provision is intended to apply even if the injury or damage is caused in whole or in part by any act, omission or default of the County or Engineer of Record or their consultants, agents, officers and employees. The County and Contractor agree the first \$100.00 of the Contract Amount paid by the County to Contractor shall be given as separate consideration for this indemnification, and any other indemnification of the County by Contractor provided for within the Contract Documents, the sufficiency of such separate consideration being acknowledged by Contractor by Contractor's execution of the Agreement. The Contractor's obligation under this provision shall not be limited in any way by the agreed upon Contract Amount as shown in this Contract or the Contractor's limit of, or lack of, sufficient insurance protection.

B. The Contractor guaranties the payment of all just claims for materials, supplies, tools, or labor and other just claims against him or any subcontractor, in connection with the Contract. The Department's final acceptance and payment does not release the Contractor's bond until all such claims are paid or released.

C. Contractor shall obtain and carry, at all times during its performance under the Contract Documents, insurance of the types and in the amounts set forth in the Insurance Requirements attached to this Agreement. All insurance policies shall be from responsible companies duly authorized to do business in the State of Florida and/or responsible risk retention group insurance companies which are registered with the State of Florida. Prior to execution of the Agreement, Contractor shall provide the County with properly executed Certificates of Insurance to evidence Contractor's compliance with the insurance requirements of the Contract Documents. Said Certificates of Insurance shall be on forms approved by the County. The Certificates of Insurance shall be personally, manually signed by the authorized representatives of the insurance company/companies shown on the Certificates of Insurance, with proof that they are authorized representatives

thereof. In addition, certified, true and exact copies of all insurance policies required hereunder shall be provided to the County, on a timely basis, when requested by the County.

D. The Certificates of Insurance and required insurance policies shall contain provisions that thirty (30) calendar days prior written notice by registered or certified mail shall be given to the County of any cancellation, intent not to renew, or reduction in the policies or coverages, except in the application of the aggregate limits provisions. In the event of a reduction in the aggregate limit of any policy, Contractor shall immediately take steps to have the aggregate limit reinstated to the full extent permitted under such policy.

E. To the extent multiple insurance coverage and/or County's self-insured retention may apply, any and all insurance coverage purchased by Contractor and its Subcontractors identifying the County as an additional named insured shall be primary. The acceptance by the County of any Certificate of Insurance does not constitute approval or agreement by the County that the insurance requirements have been satisfied or that the insurance policy shown on the Certificate of Insurance is in compliance with the requirements of the Contract Documents. No Work shall commence at the Project Site unless and until the required Certificates of Insurance are received by the County.

F. The Contractor will be fully responsible for all acts and omissions of his Subcontractors and of persons directly or indirectly employed by them and of persons for whose acts they may be liable to the same extent that they are employed by him. Nothing in the Contract Documents shall create any contractual relationship between any Subcontractor and the County. The County may, upon request, furnish to any Subcontractor, to the extent practicable, evidence of amounts paid to the Contractor on account of specific Work done.

G. Contractor shall require each of its Subcontractors to procure and maintain, until the completion of the Subcontractor's work, insurance of the types and to the limits specified in the Insurance Requirements attached to this Agreement, unless such insurance requirements for the Subcontractor are expressly waived in writing by the County. All liability insurance policies, other than professional liability, workers' compensation, employer's liability and business auto liability policies, obtained by Contractor to meet the requirements of the Contract Documents shall name the County and Engineer of Record as additional insureds. If any insurance provided pursuant to the Contract Documents expires prior to the completion of the Work, renewal Certificates of Insurance and, if requested by the County, certified, true copies of the renewal policies, shall be furnished by Contractor within thirty (30) calendar days prior to the date of expiration.

H. Should at any time the Contractor not maintain the insurance coverages required herein, the County may terminate the Agreement or at its sole discretion shall be authorized to purchase such coverages and charge the Contractor for such coverages purchased. The County shall be under no obligation to purchase such insurance, nor shall it be responsible for the coverages purchased or the insurance company or

companies used. The decision of the County to purchase such insurance coverages shall in no way be construed to be a waiver of any of its rights under the Contract Documents.

I. Contractor shall submit to Engineer of Record a copy of all accident reports arising out of any injuries to its employees or those of any firm or individual to whom it may have subcontracted a portion of the Work, or any personal injuries or property damages arising or alleged to have arisen on account of any Work by Contractor under the Contract Documents.

#### Section 10. Compliance with Laws and Regulations

A. Contractor agrees to comply, at its own expense, with all federal, state, and local Laws and Regulations, including federal, state and local laws, codes, statutes, ordinances, rules, regulations and requirements applicable to the Project, including but not limited to those dealing with taxation, workers' compensation, equal employment and safety. If Contractor observes that the Contract Documents are at variance therewith, it shall promptly notify the County and Engineer of Record in writing.

B. Legal Requirements and provisions concerning Laws and Regulations to be observed are provided in Division 1, Section 7 of the Standard Specifications attached hereto as Exhibit E.

#### Section 11. Warranty

A. Contractor shall obtain and assign to the County all express warranties given to Contractor or any Subcontractors by any materialmen supplying materials, equipment or fixtures to be incorporated into the Project.

B. Contractor warrants to the County that any materials and equipment furnished under the Contract Documents shall be new unless otherwise specified, and that all Work shall be of good quality, free from all defects and in conformance with the Contract Documents. Contractor further warrants to the County that all materials and equipment furnished under the Contract Documents shall be applied, installed, connected, erected, used, cleaned and conditioned in accordance with the instructions of the applicable manufacturers, fabricators, Suppliers or processors except as otherwise provided for in the Contract Documents. If, within one (1) year after Final Acceptance, any Work is found to be Defective or not in conformance with the Contract Documents, Contractor shall correct it promptly after receipt of written notice from the County. Contractor shall also be responsible for and pay for replacement or repair of adjacent materials or Work which may be damaged as a result of such replacement or repair. These warranties are in addition to those express or implied warranties to which the County is entitled as a matter of law.

C. The Contractor warrants and guarantees that title to all Work, materials and equipment covered by an application for progress payment, whether incorporated in the Project or not, will be passed to the County prior to the next application for progress

payment, free and clear of all liens, claims, security interest and encumbrances; and that no Work, materials or equipment covered by an Application for Payment will have been acquired by the Contractor or by any other person performing the Work at the site or furnishing materials and equipment for the Project subject to an agreement under which an interest therein or encumbrance thereon is retained by the seller or otherwise imposed by the Contractor or such other person.

Section 12. Notices.

A. All notices required or made pursuant to this Agreement by the Contractor to the County shall be in writing and delivered by hand or by United States Postal Service, first class mail, postage pre-paid, return receipt requested, or by courier, addressed to the following:

Roger Desjarlais  
Lee County Manager  
P.O. Box 398  
Fort Myers, FL 33902

With copies addressed to each of the following:

[County Project Manager Name], Project Manager, P.O. Box 398, Fort Myers, FL 33902

[County Procurement Director Name], Procurement Management Director, P.O. Box 398, Fort Myers, FL 33902

[County DOT Director Name], Department of Transportation Director, P.O. Box 398, Fort Myers, FL 33902

B. All notices required or made pursuant to this Agreement by the County to Contractor shall be made in writing and shall be delivered by hand or by United States Postal Service, first class mail, postage pre-paid, return receipt requested, or by courier, addressed to the following:

[Corporate Name of Contractor]

Attention: [Name of person with their title to whose attention the notice should be sent]

[Address (including city, state and zip)]

Telephone: [Telephone Number] Fax: [Fax Number]

C. Either party may change its above noted address by giving written notice to the other party in accordance with the requirements of this Section.

Section 13. Modification.

No modification or change to the Agreement shall be valid or binding upon the parties unless in writing and executed by the appropriate parties intended to be bound by it.

#### Section 14. Successors and Assigns.

Subject to other provisions hereof, the Agreement shall be binding upon and shall inure to the benefit of the successors and assigns of the parties to the Agreement.

#### Section 15. No Waiver.

The failure of the County to enforce, at any time or for any period of time, any one or more of the provisions of the Agreement shall not be construed to be, and shall not be, a waiver of any such provision or provisions or of its right thereafter to enforce each and every such provision.

#### Section 16. Federal Requirements

A. In the event this Project is funded in whole or in part from any granting agency or source, the specific terms, regulations and requirements governing the disbursement of those funds are incorporated by reference and made a part of the Contract Documents.

#### Section 17. Entire Agreement.

Each of the parties hereto agrees and represents that the Agreement comprises the full and entire agreement between the parties affecting the Work contemplated, and no other agreement or understanding of any nature concerning the same has been entered into or will be recognized, and that all negotiations, acts, Work performed, or payments made prior to the execution hereof shall be deemed merged in, integrated and superseded by the Agreement.

#### Section 18. Severability.

Should any provision of the Agreement be determined by a court to be unenforceable, such a determination shall not affect the validity or enforceability of any other section or part thereof.

IN WITNESS WHEREOF, the parties have executed this Agreement on the date(s) indicated below.

WITNESS:

**CONTRACTOR: [Contractor Name]**

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

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

Print Name: \_\_\_\_\_

Print Name: \_\_\_\_\_

Title: \_\_\_\_\_

Date: \_\_\_\_\_

**OWNER: LEE COUNTY**

BOARD OF COUNTY COMMISSIONERS  
OF LEE COUNTY, FLORIDA

BY: \_\_\_\_\_

CHAIR

DATE: \_\_\_\_\_

ATTEST:  
CLERK OF THE CIRCUIT COURT  
Linda Doggett, Clerk

BY: \_\_\_\_\_

APPROVED AS TO FORM FOR THE  
RELIANCE OF LEE COUNTY ONLY:

BY: \_\_\_\_\_  
OFFICE OF THE COUNTY ATTORNEY

**EXHIBIT A**  
**LEGAL ADVERTISEMENT**



**EXHIBIT B**  
**INVITATION TO BID**

[Include the entire bid package with all addenda, plans and drawings.]

**EXHIBIT C**  
**BID FORM AND REQUIRED DOCUMENTS**

[Include the Contractor's bid submission: the bid form and all the documents required by the solicitation.]

**EXHIBIT D**  
**PUBLIC CONSTRUCTION PERFORMANCE AND PAYMENT BOND**

By this bond, we [Name of Contractor], as **Principal**, and [Name of Surety], as **Surety**, are bound to **Lee County Board of County Commissioners**, a political subdivision of the State of Florida, herein called **Owner**, in the sum of [Total Contract Price], for payment of which we bind ourselves, our heirs, personal representatives, successors, and assigns, jointly and severally.

**THE CONDITION OF THIS BOND IS** that is that if Principal:

1. Performs this contract dated \_\_\_\_\_, 20\_\_\_, between Principal and Owner for construction of improvements known as [Name of Project] located at [Street Address or Legal Description], under Lee County Solicitation No. [Solicitation number], the contract being made a part of this bond by reference, at the times and in the manner prescribed in the contract; and
2. Promptly makes payments to all claimants, as defined in Section 255.05 (1), Florida Statutes, supplying Principal with labor, materials, or supplies, used directly or indirectly by Principal in the prosecution of the work provided for in the contract; and
3. Pays Owner all losses, damages, expenses, costs, and attorney's fees, including appellate proceedings, that Owner sustains because of a default by Principal under the contract; and
4. Performs the guarantee of all work and materials furnished under the contract for the time specified in the contract, then this bond is void; otherwise it remains in full force.

Any action instituted by a claimant under this bond for payment must be in accordance with the notice and time limitation provisions in Section 255.05(2), Florida Statutes.

Any changes in or under the contract documents and compliance or noncompliance with any formalities connected with the contract or the changes do not affect Surety's obligation under this bond.

	<b>OWNER</b>	<b>PRINCIPAL</b>	<b>SURETY</b>
<b>NAME</b>	Lee County Board of County Commissioners	[Name of Contractor]	[Name of Surety]
<b>ADDRESS</b>	2115 Second St. Fort Myers, FL 33901	[Principal Business Address of Contractor]	[Principal Business Address of Surety]
<b>PHONE NUMBER</b>	239-533-2221	[Principal Business Phone of Contractor]	[Principal Business Phone of Surety]

[The remainder of this page intentionally left blank.]

BOND NO. [Surety to enter bond #]

\_\_\_\_\_  
[Name of Contractor]

DATED THIS \_\_\_\_\_ DAY  
OF \_\_\_\_\_, 2\_\_\_\_\_

By: \_\_\_\_\_  
[Printed Name and Title of Signer]

STATE OF \_\_\_\_\_  
COUNTY OF \_\_\_\_\_

The foregoing instrument was acknowledged before me this \_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, by [name of person acknowledging].

\_\_\_\_\_  
Signature of Notary Public

(NOTARY SEAL)

[Name of Notary Typed, Printed, or Stamped]

Personally Known \_\_\_\_\_ OR Produced Identification \_\_\_\_\_  
Type of Identification Produced:

\_\_\_\_\_  
[Name of Surety]

DATED THIS \_\_\_\_\_ DAY  
OF \_\_\_\_\_, 2\_\_\_\_\_

By: \_\_\_\_\_  
[Printed Name] as Attorney in Fact

Address: \_\_\_\_\_

STATE OF \_\_\_\_\_  
COUNTY OF \_\_\_\_\_

The foregoing instrument was acknowledged before me this \_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, by [name of person acknowledging].

\_\_\_\_\_  
Signature of Notary Public

(NOTARY SEAL)

[Name of Notary Typed, Printed, or Stamped]

Personally Known \_\_\_\_\_ OR Produced Identification \_\_\_\_\_  
Type of Identification Produced:

**EXHIBIT E**  
**STANDARD SPECIFICATIONS**

The Standard Specifications comprise Divisions I, II and III as noted below:

1. Division I General Requirements and Covenants, Sections 1-9 as included herein.
2. Division II-Construction Details and Division III-Materials refer to the January, 2018 edition of the Florida Department of Transportation Standard Specifications for Road and Bridge Construction, available at the following link:

<http://www.fdot.gov/programmanagement/Implemented/SpecBooks/>

## **DIVISION I**

### **General Requirements and Covenants**

#### **SECTION 1**

#### **DEFINITIONS AND TERMS**

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

These Specifications are written to the bidder, prior to award of the Contract, and to the Contractor. Within Divisions I and II of the specifications, sentences that direct the Contractor to perform work are written in the active voice-imperative mood. These directions to the Contractor are written as commands. In the imperative mood, the subject “the bidder” or “the Contractor” is understood.

All other requirements to be performed by others, with the exception of the Method of Measurement and the Basis of Payment Articles, have been written in the active voice, but not in the imperative mood. Sentences written in the active voice identify the party responsible for performing the action. For example, “The Engineer will determine the density of the compacted material.” Certain requirements of the Contractor may also be written in the active voice, rather than active voice-imperative mood.

Division III of the Specifications (Materials) is written in the passive voice writing style.

##### **1-2 Abbreviations.**

The following abbreviations, when used in the Contract Documents, represent the full text shown.

<b>AAN</b>	American Association of Nurserymen, Inc.
<b>AASHTO</b>	American Association of State Highway and Transportation Officials
<b>ACI</b>	American Concrete Institute
<b>AGC</b>	The Associated General Contractors of America, Inc.
<b>AGMA</b>	American Gear Manufacturers Association
<b>AIA</b>	American Institute of Architects.
<b>AISI</b>	American Iron and Steel Institute
<b>ANSI</b>	American National Standards Institute, Inc.
<b>AREA</b>	American Railway Engineering Association
<b>ASCE</b>	American Society of Civil Engineers
<b>ASME</b>	American Society of Mechanical Engineers
<b>ASTM</b>	American Society for Testing and Materials
<b>AWG</b>	American Wire Gauge
<b>AWPA</b>	American Wood Preservers Association
<b>AWS</b>	American Welding Society
<b>AWWA</b>	American Water Works Association
<b>CRSI</b>	Concrete Reinforcing Steel Institute
<b>EASA</b>	Electrical Apparatus Service Association
<b>EPA</b>	Environmental Protection Agency of the United States Government
<b>FDOT</b>	Florida Department of Transportation
<b>FHWA</b>	Federal Highway Administration
<b>FSS</b>	Federal Specifications and Standards
<b>IEEE</b>	Institute of Electrical and Electronics Engineers
<b>IES</b>	Illuminating Engineering Society

<b>IPCEA</b>	Insulated Power Cable Engineers Association
<b>ISO</b>	International Organization for Standards
<b>MUTCD</b>	Manual on Uniform Traffic Control Devices
<b>NEC</b>	National Electrical Code
<b>NEMA</b>	National Electrical Manufacturers Association
<b>NFPA</b>	National Fire Protection Association
<b>NIST</b>	National Institute for Standards and Technology
<b>NOAA</b>	National Oceanic and Atmospheric Administration
<b>OSHA</b>	Occupational Safety and Health Administration
<b>SAE</b>	Society of Automotive Engineers
<b>SI</b>	International System of Units
<b>SSPC</b>	Society of Protective Coatings
<b>UL</b>	Underwriters' Laboratories

Each of the above abbreviations, when followed by a number or letter designation, or combination of numbers and letters, designates a specification, test method, or other code or recommendation of the particular authority or organization shown.

Use standards, specifications, test methods, or other codes as specified in the current edition at the time of the bid opening.

**1-3 Definitions.**

The following terms, when used in the Contract Documents, have the meaning described

**Advertisement.**

The public announcement, as required by law, inviting bids for work to be performed or materials to be furnished, usually issued as “Notice to Contractors,” or “Notice to Bidders.”

**Article.**

The numbered prime subdivision of a Section of these Specifications.

**Bidder.**

An individual, firm, or corporation submitting a proposal for the proposed work.

**Bridge.**

A structure, including supports, erected over a depression or over an obstruction such as water, highway or railway, or for elevated roadway, for carrying traffic or other moving loads, and having a length, measured along the center of the roadway, of more than 20 feet between the inside faces of end supports. A multiple-span box culvert is considered a bridge, where the length between the extreme ends of the openings exceeds 20 feet.

**Calendar day.**

Every day shown on the calendar, ending and beginning at midnight.

**Chair.**

The Chairman of the Lee County Board of County Commissioners.

**Change Order.**

See definition for Supplemental Agreement.



**Construction Engineering and Inspection (CEI) Consultant.**

The consultant contracted by the Department for professional services during the construction phase of the project, or a qualified person in the firm's employ authorized as his official representative. In the absence of such a contract, the duties of the CEI Consultant will be fulfilled by the Department Project Manager. The CEI Consultant is not authorized to issue change orders to the contract sum, contract time, or scope of work.

**Contract.**

The term "Contract" means the entire and integrated agreement between the parties thereunder and supersedes all prior negotiations, representations, or agreements, either written or oral. The Contract Documents form the Contract between the Department and the Contractor setting forth the obligations of the parties thereunder, including, but not limited to, the performance of the Work and the basis of payment.

**Contract Claim (Claim).**

A written demand submitted to the Department by the Contractor in compliance with 5-12.3 seeking additional monetary compensation, time, or other adjustments to the Contract, the entitlement or impact of which is disputed by the Department.

**Contract Documents.**

The term "Contract Documents" includes: this Agreement, the Exhibits described in Section 6 of the Agreement, the legal advertisement, the instructions to bidders, the Proposal and Proposal Forms, the solicitation documents and any duly executed and issued addenda, Change Orders, Field Directive Change Orders, and amendments relating thereto, all of which are to be treated as one instrument whether or not set forth at length in the form of contract.

**Contract Bond or Performance Bond.**

The security furnished by the Contractor and the surety as a guaranty that the Contractor shall fulfill the terms of the Contract and pay all legal debts pertaining to the construction of the project.

**Contract Letting.**

The date that the Department opened the bid proposals.

**Contract Time.**

The number of calendar days allowed for completion of the Contract work, including authorized time extensions.

**Contractor.**

The individual, firm, joint venture, or company contracting with the Department to perform the work.

**Contractor's Engineer of Record.**

A Professional Engineer registered in the State of Florida, other than the Engineer of Record or his subcontracted consultant, who undertakes the design and drawing of components of the permanent structure as part of a redesign or Cost Savings Initiative Proposal, or for repair designs and details of the permanent work. The Contractor's Engineer of Record may also serve as the Specialty Engineer.

The Contractor's Engineer of Record must be an employee of a pre-qualified firm. The firm shall be pre-qualified in accordance with the Rules of the Department of Transportation, Chapter 14-75. Any Corporation or Partnership offering engineering services must hold a Certificate of Authorization from the Florida Department of Business and Professional Regulation.

As an alternate to being an employee of a pre-qualified firm, the Contractor's Engineer of Record may be a Department-approved Specialty Engineer. For items of the permanent work declared by the State Construction Office to be "major" or "structural", the work performed by a Department-approved Specialty Engineer must be checked by another Department-approved Specialty Engineer. An individual Engineer may become a Department-approved Specialty Engineer if the individual meets the Professional Engineer experience requirements set forth within the individual work groups in Chapter 14-75, Rules of the Department of Transportation, Florida Administrative Code. Department-approved Specialty Engineers are listed on the State Construction Website. Department-approved Specialty Engineers will not be authorized to perform redesigns or Cost Savings Initiative Proposal designs of items fully detailed in the Plans.

**Controlling Work Items.**

The activity or work item on the critical path having the least amount of total float. The controlling item of work will also be referred to as a Critical Activity.

**County.**

The Board of County Commissioners of Lee County, Florida, as Owner.

**Culverts.**

Any structure not classified as a bridge that provides an opening under the roadway.

**Delay.**

Any unanticipated event, action, force or factor which extends the Contractor's time of performance of any controlling work item under the Contract. The term "delay" is intended to cover all such events, actions, forces or factors, whether styled "delay", "disruption", "interference", "impedance", "hindrance", or otherwise, which are beyond the control of and not caused by the Contractor, or the Contractor's subcontractors, materialmen, suppliers or other agents. This term does not include "extra work".

**Department.**

As used in Divisions II and III of the Standard Specifications, the Department shall mean the County.

**Department Project Manager.**

An employee of Lee County designated by the Director as the representative of the Board of County Commissioners in matters concerning the project. The Department Project Manager will act in the role of the CEI Consultant in the absence of a contract with a third party consultant. The Department Project Manager is not authorized to issue changes to the Contract Amount, Contract Time, or Scope of Work without the express approval by the Director, County Manager, and/or Board of County Commissioners as may be applicable.

**Developmental Specification.**

See definition for Specifications.

**Director.**

The Director of the Lee County Department of Transportation, acting directly or through duly authorized representatives; such representatives acting within the scope of the duties and authority assigned to them. Note: In order to avoid cumbersome and confusing repetition of expressions in these Specifications, it is provided that whenever anything is, or is to be done, if, as, or, when, or where "acceptable, accepted, approval, approved, authorized, condemned, considered necessary, contemplated, deemed necessary, designated, determined, directed, disapproved, established, given, indicated, insufficient, ordered, permitted, rejected, required, reserved, satisfactory, specified, sufficient, suitable, suspended, unacceptable, or unsatisfactory," it shall be

understood as if the expression were followed by the words “by the Director,” “to the Director,” or “of the Director.”

**Engineer.**

As used in Divisions II and III of the Standard Specifications, the Engineer shall mean the Director.

**Engineer of Record.**

The Professional Engineer or Engineering Firm registered in the State of Florida that develops the criteria and concept for the project, performs the analysis, and is responsible for the preparation of the Plans and Specifications. The Engineer of Record may be Departmental in-house staff or a consultant retained by the Department.

The Contractor shall not employ the Engineer of Record as the Contractor’s Engineer of Record or as a Specialty Engineer.

**Equipment.**

The machinery and equipment, together with the necessary supplies for upkeep and maintenance thereof, and all other tools and apparatus necessary for the construction and acceptable completion of the work.

**Extra Work.**

Any “work” which is required by the Director to be performed and which is not otherwise covered or included in the project by the existing Contract Documents, whether it be in the nature of additional work, altered work, deleted work, work due to differing site conditions, or otherwise. This term does not include a “delay”.

**Federal, State, and Local Rules and Regulations.**

The term “Federal, State and Local Rules and Regulations” includes: any and all Federal, State, and Local laws, bylaws, ordinances, rules, regulations, orders, permits, or decrees including environmental laws, rules, regulations, and permits.

**Field Directive Change Orders.**

A written order making a minor amendment to the Agreement, which is signed by the Contractor and approved in accordance with County policies and procedures. An amendment is minor if it does not change: (i) the scope of the Project, (ii) the Contract Amount, or (iii) the Contract Time.

All Field Directive Change Orders shall be summarized and approved as a Supplemental Agreement or Change Order prior to Project close-out.

**Financial Project Identification Number.**

If applicable, the Florida Department of Transportation Financial Project Identification Number (FPID).

**FDOT.**

The Florida Department of Transportation, an agency of the State of Florida.

**Highway, Street, or Road.**

A general term denoting a public way for purposes of vehicular travel, including the entire area within the right-of-way.

**Holidays.**

Days designated by the Lee County Board of County Commissioners as holidays.

**Inspector.**

An authorized representative of the Director, assigned to make official inspections of the materials furnished and of the work performed by the Contractor.

**Laboratory.**

The official testing laboratory used by the Department.

**Laws and Regulations .**

Any and all applicable laws rules, regulations, ordinances, codes and orders of any and all governmental bodies, agencies, authorities and courts having jurisdiction.

**Major Item of Work.**

Any item of work having an original Contract value in excess of 5% of the original Contract amount.

**Materials.**

Any substances to be incorporated in the work under the Contract.

**Median.**

The portion of a divided highway or street separating the traveled ways for traffic moving in opposite directions.

**Plans.**

The approved Plans, including reproductions thereof, showing the location, character, dimensions, and details of the work.

**Project.**

The entire undertaking of the County, identified by County as indicated in the Exhibits of the Contract, of which the Work to be provided under the Contract Documents may be the whole, or a part as may be indicated elsewhere in the Contract Documents.

**Project Number.**

The Lee County project number as listed in the Advertisement.

**Proposal (Bid, Bid Proposal).**

The offer of a bidder, on the prescribed form, to perform the work and to furnish the labor and materials at the prices quoted.

**Proposal Form.**

The official form on which the Department requires formal bids to be prepared and submitted for the work.

**Proposal Guaranty**

The security furnished by the bidder as guaranty that the bidder will enter into the Contract for the work if the Department accepts the proposal.

**Right-of-Way.**

The land that the Department has title to, or right of use, for the road and its structures and appurtenances, and for material pits furnished by the Department.

**Roadbed.**

The portion of the roadway occupied by the subgrade and shoulders.

**Roadway.**

The portion of a highway within the limits of construction.

**Secretary.**

As used in Divisions II and III of the Standard Specifications, the Secretary shall mean the Chair.

**Section.**

A numbered prime division of these Specifications.

**Site.**

The real property or other areas designated in the Contract Documents as being furnished by County for the performance of the Work, storage, or access.

**Special Event.**

Any event, including but not limited to, a festival, fair, run or race, motorcade, parade, civic activity, cultural activity, charity or fund drive, sporting event, or similar activity designated in the Contract Documents.

**Special Provisions.**

See definition for Specifications.

**Specialty Engineer.**

A Professional Engineer registered in the State of Florida, other than the Engineer of Record or his subcontracted consultant, who undertakes the design and drawing preparation of components, systems, or installation methods and equipment for specific temporary portions of the project work or for special items of the permanent works not fully detailed in the Plans and required to be furnished by the Contractor. The Specialty Engineer may also provide designs and details, repair designs and details, or perform Engineering Analyses for items of the permanent work declared by the State Construction Office to be “minor” or “non-structural”.

For items of work not specifically covered by the Rules of the Department of Transportation, a Specialty Engineer is qualified if he has the following qualifications:

1. Registration as a Professional Engineer in the State of Florida.
2. The education and experience necessary to perform the submitted design as required by the Florida Department of Business and Professional Regulation.

**Specifications.**

The directions, provisions, and requirements contained herein, together with all stipulations contained in the Contract Documents, setting out or relating to the method and manner of performing the work, or to the quantities and qualities of materials and labor to be furnished under the Contract.

Standard Specifications: Specifications for construction applicable to all Department Contracts containing adopted requirements, setting out or relating to the method or manner of performing work, or to the quantities and qualities of materials and labor. The Standard Specifications comprise three Divisions, as follows:

Division I: “Lee County Department of Transportation Division I General Requirements and Covenants” contained in the Contract Documents.

Division II and III: Divisions II and III of the “FDOT Standard Specifications for Road and Bridge Construction”, as otherwise amended herein. The applicable version is cited in the Special Provisions.

Supplemental Specifications: Approved additions and revisions to Divisions II and III of the Standard Specifications, applicable to all Department Contracts.

Special Provisions: Specific clauses adopted by the Department that add to or revise the Standard Specifications or supplemental specifications, setting forth conditions varying from or additional to the Standard Specifications applicable to a specific project.

Technical Special Provisions: Specifications, of a technical nature, prepared, signed, and sealed by an Engineer registered in the State of Florida that are made part of the Contract as an attachment to the Contract Documents.

**Standard Specifications.**

See definition for Specifications.

**State.**

State of Florida.

**Subarticle.**

A headed and numbered subdivision of an Article of a Section of these Specifications.

**Subgrade.**

The portion of the roadbed immediately below the base course or pavement, including below the curb and gutter, valley gutter, shoulder and driveway pavement. The subgrade limits ordinarily include those portions of the roadbed shown in the Plans to be constructed to a design bearing value or to be otherwise specially treated. Where no limits are shown in the Plans, the subgrade section extends to a depth of 12 inches below the bottom of the base or pavement and outward to 6 inches beyond the base, pavement, or curb and gutter.

**Substructure.**

All of that part of a bridge structure below the bridge seats, including the parapets, backwalls, and wingwalls of abutments.

**Superintendent.**

The Contractor's authorized representative in responsible charge of the work.

**Superstructure.**

The entire bridge structure above the substructure, including anchorage and anchor bolts, but excluding the parapets, backwalls, and wingwalls of abutments.

**Supplemental Agreement**

A written agreement between the Contractor and the Department, modifying the Contract within the limitations set forth in these Specifications, may also be referred to as a Change Order.

**Supplemental Specifications**

See definition for Specifications.

**Surety.**

The corporate body that is bound by the Contract Bond with and for the Contractor and responsible for the performance of the Contract and for payment of all legal debts pertaining thereto.

**Technical Special Provisions.**

See definition for Specifications.

**Traveled Way.**

The portion of the roadway providing for the movement of vehicles, exclusive of shoulders and auxiliary lanes.

**Unilateral Payment.**

A payment of money made to the Contractor by the Department for sums the Department determines to be due to the Contractor for work performed on the project, and whereby the Contractor by acceptance of such payment does not waive any rights the Contractor may otherwise have against the Department for payment of any additional sums the Contractor claims are due for the work.

**Work.**

All labor, materials and incidentals required to execute and complete the requirements of the Contract including superintendence, use of equipment and tools, and all services and responsibilities prescribed or implied.

**Work Order.**

A written agreement between the Contractor and the Department modifying the Contract within the limitations set forth in these Specifications. Funds for this agreement are drawn against the Initial Contingency Pay Item or a Contingency Supplemental Agreement.

**Working Day.**

Any calendar day on which the Contractor works or is expected to work in accordance with the approved work progress schedule.



## SECTION 2 PROPOSAL REQUIREMENTS AND CONDITIONS

### 2-1 Reserved

### 2-2 Reserved

### 2-3 Interpretation of Estimated Quantities.

**2-3.1 Lump Sum Contracts:** The Contractor is responsible for the determination of the quantities for those items constructed within the authorized plan limits or dimensions.

The County does not assume any responsibility for any incidental information in bid documents that may be construed as a quantity of work and/or materials.

**2-3.2 Contracts other than Lump Sum:** For those items constructed within authorized plan limits or dimensions, use the quantities shown in the Plans and in the Proposal Form as the basis of the bid. The County will also use these quantities for final payment as limited by the provisions for the individual items. For those items having variable final pay quantities that are dependent on actual field conditions, use and measurement, the quantities shown in the Plans and in the Proposal Form are approximate and provide only a basis for calculating the bid upon which the County will award the Contract. Where items are listed for payment as lump sum units and the Plans show estimates of component quantities, the County is responsible for the accuracy of those quantities limited to the provisions of 9-3.3. Where items are listed for payment as lump sum units and the Plans do not show estimates of component quantities, the Contractor is solely responsible for their own estimates of such quantities.

The County may increase, decrease, or omit the estimated quantities of work to be done or materials to be furnished.

### 2-4 Examination of Plans, Specifications, Special Provisions and Site of Work.

The Contractor is responsible for examining the Contract Documents and the site of the proposed Work carefully before submitting a Proposal for the Work contemplated. Contractor shall investigate the conditions to be encountered, as to the character, quality, and quantities of work to be performed and materials to be furnished, and as to the requirements of all Contract Documents.

The County does not guarantee the details pertaining to borings, as shown in the Plans, 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 their own interpretation of the subsoil investigations and other preliminary data, and shall base their bid solely on their own opinion of the conditions likely to be encountered.

The Contractor's submission of a Proposal is prima facie evidence that the Contractor has made an examination as described in this Article.

### 2-5 Reserved

### 2-6 Reserved

**2-7 Reserved**

**2-8 Reserved**

**2-9 Reserved**

**2-10 Reserved**

**2-11 Reserved**

**2-12 Material, Samples and Statement.**

The County may require that the Contractor furnish a statement of the origin, composition, and manufacture of any and all materials to be used in the construction of the work, together with samples that may be subjected to the tests provided for in these Specifications to determine the materials' quality and fitness for the work.

**SECTION 3**

**RESERVED**

## SECTION 4 SCOPE OF THE WORK

### 4-1 Intent of Contract.

The intent of the Contract is to provide for the construction and completion in every detail of the Work described in the Contract. Furnish all labor, materials, equipment, tools, transportation, and supplies required to complete the work in accordance with the Contract Documents.

### 4-2 Work not covered by Standard Specifications.

Proposed construction and any contractual requirements not covered by these Standard Specifications may be covered by Contract Plan notes or by Supplemental Specifications or Special Provisions for the Contract, and all requirements of such Supplemental Specifications or Special Provisions shall be considered as a part of these Specifications.

### 4-3 Alteration of Plans or of Character of Work.

**4-3.1 General:** The Director reserves the right to make, at any time prior to or during the progress of the work, such increases or decreases in quantities, whether a significant change or not, and such alterations in the details of construction, whether a substantial change or not, including but not limited to alterations in the grade or alignment of the road or structure or both, as may be found necessary or desirable by the Director. Such increases, decreases or alterations shall not constitute a breach of Contract, shall not invalidate the Contract, nor release the Surety from any liability arising out of this Contract or the Surety bond. Minor increases, decreases or alterations that do not change the scope of the Project, the Project cost, or the Contract Time may be initially authorized in a Field Directive Change Order. The Contractor agrees to perform the work, as altered, the same as if it had been a part of the original Contract. All Field Directive Change Orders shall be approved as a Supplemental Agreement pursuant to 4-3.4 prior to Project close-out.

The term “significant change” applies only when:

1. The Director determines that the character of the work as altered differs materially in kind or nature from that involved or included in the original proposed construction, or
2. A major item of work, as defined in 1-3, is increased in excess of 125% or decreased below 75% of the original Contract quantity. The County will apply any price adjustment for an increase in quantity only to that portion in excess of 125% of the original Contract item quantity in accordance with 4-3.2 below. In the case of a decrease below 75% the County will only apply a price adjustment for the additional costs that are a direct result of the reduction in quantity.

In (1) above, the determination by the Director shall be conclusive. If the determination is challenged by the Contractor in any proceeding, the Contractor must establish by clear and convincing proof that the determination by the Director was without any reasonable basis.

**4-3.2 Increase, Decrease or Alteration in the Work:** The Director reserves the right to make alterations in the character of the work which involve a substantial change in the nature of the design or in the type of construction or which materially increases or decreases the cost or time of performance. Such alteration shall not constitute a breach of Contract, shall not invalidate the Contract or release the Surety.

Notwithstanding that the Contractor shall have no formal right whatsoever to any extra compensation or time extension deemed due by the Contractor for any cause unless and until the Contractor follows the procedures set forth in 5-12.2 for preservation, presentation and resolution of the claim, the Contractor may at any time, after having otherwise timely submitted a

notice of intent to claim or preliminary time extension request pursuant to 5-12.2 and 8-7.3.2, submit to the County a request for equitable adjustment of compensation or time or other dispute resolution proposal. The Contractor shall in any request for equitable adjustment of compensation, time, or other dispute resolution proposal certify under oath and in writing, in accordance with the formalities required by Florida law, that the request is made in good faith, that any supportive data submitted is accurate and complete to the Contractor's best knowledge and belief, and that the amount of the request accurately reflects what the Contractor in good faith believes to be the County's responsibility. Such certification must be made by an officer or director of the Contractor with the authority to bind the Contractor. Any such certified statements of entitlement and costs shall be subject to the audit provisions set forth in 5-12.14. While the submittal or review of a duly certified request for equitable adjustment shall neither create, modify, nor activate any legal rights or obligations as to the Contractor or the County, the County will review the content of any duly certified request for equitable adjustment or other dispute resolution proposal, with any further action or inaction by the County thereafter being in its sole discretion. Any request for equitable adjustment that fails to fully comply with the certification requirements will not be reviewed by the County.

The monetary compensation provided for below constitutes full and complete payment for such additional work and the Contractor shall have no right to any additional monetary compensation for any direct or indirect costs or profit for any such additional work beyond that expressly provided below. The Contractor shall be entitled to a time extension only to the extent that the performance of any portion of the additional work is a controlling work item and the performance of such controlling work item actually extends completion of the project due to no fault of the Contractor. All time related costs for actual performance of such additional work are included in the compensation already provided below and any time extension entitlement hereunder will be without additional monetary compensation. The Contractor shall have no right to any monetary compensation or damages whatsoever for any direct or indirect delay to a controlling work item arising out of or in any way related to the circumstances leading up to or resulting from additional work (but not relating to the actual performance of the additional work, which is paid for as otherwise provided herein), except only as provided for under 5-12.6.2.1.

**4-3.2.1 Allowable Costs for Extra Work:** The Director may direct in writing that extra work be done and, at the Director's sole discretion, the Contractor will be paid pursuant to an agreed Supplemental Agreement or in the following manner:

1. Labor and Burden: The Contractor will receive payment for actual costs of direct labor and burden for the additional or unforeseen work. Labor includes foremen actually engaged in the work; and will not include project supervisory personnel nor necessary on-site clerical staff, except when the additional or unforeseen work is a controlling work item and the performance of such controlling work item actually extends completion of the project due to no fault of the Contractor. Compensation for project supervisory personnel, but in no case higher than a Project Manager's position, shall only be for the pro-rata time such supervisory personnel spent on the contract. In no case shall an officer or director of the Company, nor those persons who own more than 1% of the Company, be considered as project supervisory personnel, direct labor or foremen hereunder.

Payment for burden shall be limited solely to the following:

Table 4-3.2.1
---------------

Item	Rate
FICA	Rate established by Law
FUTA/SUTA	Rate established by Law
Medical Insurance	Actual
Holidays, Sick & Vacation benefits	Actual
Retirement benefits	Actual
Workers Compensation	Rates based on the National Council on Compensation Insurance basic rate tables adjusted by Contractor's actual experience modification factor in effect at the time of the additional work or unforeseen work.
Per Diem	Actual but not to exceed State of Florida's rate
Insurance*	Actual
*Compensation for Insurance is limited solely to General Liability Coverage and does not include any other insurance coverage (such as, but not limited to, Umbrella Coverage, Automobile Insurance, etc.).	

At the Pre-construction conference, certify to the Director the following:

- a. A listing of on-site clerical staff, supervisory personnel and their pro-rated time assigned to the contract,
- b. Actual Rate for items listed in Table 4-3.2.1,
- c. Existence of employee benefit plan for Holiday, Sick and Vacation benefits and a Retirement Plan, and,
- d. Payment of Per Diem is a company practice for instances when compensation for Per Diem is requested.

Such certification must be made by an officer or director of the Contractor with authority to bind the Contractor. Timely certification is a condition precedent to any right of the Contractor to recover compensations for such costs, and failure to timely submit the certification will constitute a full, complete, absolute and irrevocable waiver by the Contractor of any right to recover such costs. Any subsequent changes shall be certified to the Director as part of the cost proposal or seven calendar days in advance of performing such extra work.

2. Materials and Supplies: For materials accepted by the Director and used on the project, the Contractor will receive the actual cost of such materials incorporated into the work, including Contractor paid transportation charges (exclusive of equipment as hereinafter set forth). For supplies reasonably needed for performing the work, the Contractor will receive the actual cost of such supplies.

3. Equipment: For any machinery or special equipment (other than small tools), including fuel and lubricant, the Contractor will receive 100% of the "Rental Rate Blue Book" for the actual time that such equipment is in operation on the work, and 50% of the "Rental Rate Blue Book" for the time the equipment is directed to standby and remain on the project site, to be calculated as indicated below. The equipment rates will be based on the latest edition (as of the date the work to be performed begins) of the "Rental Rate Blue Book for Construction Equipment" or the "Rental Rate Blue Book for Older Construction Equipment," whichever is applicable, as published by Machinery Information Division of PRIMEDIA Information, Inc. (version current at the time of bid), using all instructions and adjustments contained therein and as modified below. On

all projects, the Director will adjust the rates using regional adjustments and Rate Adjustment Tables according to the instructions in the Blue Book.

Allowable Equipment Rates will be established as set out below:

- a. Allowable Hourly Equipment Rate = Monthly Rate/176 x Adjustment Factors x 100%.
- b. Allowable Hourly Operating Cost = Hourly Operating Cost x 100%.
- c. Allowable Rate Per Hour = Allowable Hourly Equipment Rate + Allowable Hourly Operating Cost.
- d. Standby Rate = Allowable Hourly Equipment Rate x 50%.

The Monthly Rate is The Basic Machine Rate Plus Any Attachments. Standby rates will apply when equipment is not in operation and is directed by the Director to standby at the project site when needed again to complete work and the cost of moving the equipment will exceed the accumulated standby cost. Standby rates will not apply on any day the equipment operates for eight or more hours. Standby payment will be limited to only that number of hours which, when added to the operating time for that day equals eight hours. Standby payment will not be made on days that are not normally considered work days on the project.

The County will allow for the cost of transporting the equipment to and from the location at which it will be used. If the equipment requires assembly or disassembly for transport, the County will pay for the time to perform this work at the rate for standby equipment.

Equipment may include vehicles utilized only by Labor, as defined above.

4. Indirect Costs, Expenses, and Profit: Compensation for all indirect costs, expenses, and profit of the Contractor, including but not limited to overhead of any kind, whether jobsite, field office, division office, regional office, home office, or otherwise, is expressly limited to the greater of either (a) or (b) below:

a. Solely a mark-up of 17.5% on the payments in (1) through (3), above.

1. Bond: The Contractor will receive compensation for any premium for acquiring a bond for such additional or unforeseen work at the original Contract bond rate paid by the Contractor. No compensation for bond premium will be allowed for additional or unforeseen work paid by the County via initial contingency pay item.

2. The Contractor will be allowed a markup of 10% on the first \$50,000 and a markup of 5% on any amount over \$50,000 on any subcontract directly related to the additional or unforeseen work. Any such subcontractor mark-up will be allowed only by the prime Contractor and a first tier subcontractor, and the Contractor must elect the markup for any eligible first tier subcontractor to do so.

b. Solely the formula set forth below and only as applied solely as to such number of calendar days of entitlement that are in excess of ten cumulative calendar days as defined below.

$$D = \frac{A \times C}{B}$$

Where A = Original Contract Amount  
B = Original Contract Time

$$C = 8\%$$

$$D = \text{Average Overhead Per Day}$$

Cumulative Calendar Days is defined as the combined total number of calendar days granted as time extensions due to either extra work, excluding overruns to existing contract items, that extend the duration of the project or delay of a controlling work item caused solely by the County, or the combined total number of calendar days for which a claim of entitlement to a time extension due to delay of a controlling work item caused solely by the County is otherwise ultimately determined to be in favor of the Contractor.

No compensation, whatsoever, will be paid to the Contractor for any jobsite overhead and other indirect impacts when the total number of calendar days granted for time extension due to delay of a controlling work item caused solely by the County is, or the total number of calendar days for which entitlement to a time extension due to delay of a controlling work item caused solely by the County is otherwise ultimately determined in favor of the Contractor to be, equal to or less than ten calendar days and the Contractor also fully assumes all monetary risk of any and all partial or single calendar day delay periods, due to delay of a controlling work item caused solely by the County, that when combined together are equal to or less than ten calendar days and regardless of whether monetary compensation is otherwise provided for hereunder for one or more calendar days of time extension entitlement for each calendar day exceeding ten calendar days. All calculations under this provision shall exclude weather days, Holidays, and Special Events.

Further, for (a) or (b) above, in the event there are concurrent delays to one or more controlling work items, one or more being caused by the County and one or more being caused by the Contractor, the Contractor shall be entitled to a time extension for each day that a controlling work item is delayed by the County but shall have no right to nor receive any monetary compensation for any indirect costs for any days of concurrent delay.

**4-3.2.2 Subcontracted Work:** Compensation for the additional or unforeseen work performed by a subcontractor shall be limited solely to that provided for in 4-3.2.1 (1), (2), (3) and (4)(a). In addition, the Contractor compensation is expressly limited to the greater of the total provided in either 4-3.2.1(4)(a) or (4)(b), except that the Average Overhead Per-Day calculation is as follows:

$$D_s = \frac{A_s \times C}{B}$$

Where  $A_s$  = Original Contract Amount minus Original Subcontract amounts(s)\*

$B$  = Original Contract Time

$C$  = 8%

$D_s$  = Average Overhead Per-Day

\* deduct Original Subcontract Amount(s) of subcontractor(s) performing the work

The subcontractor may receive compensation for any premium for acquiring a bond for the additional or unforeseen work; provided, however, that such payment for additional subcontractor bond will only be paid upon presentment to the County of clear and convincing proof



that the subcontractor has actually submitted and paid for separate bond premiums for such additional or unforeseen work in such amount and that the subcontractor was required by the Contractor to acquire a bond.

The Contractor shall require the subcontractor to submit a certification, in accordance with 4-3.2.1 (1), as part of the cost proposal and submit such to the Director. Such certification must be made by an officer or director of the subcontractor with authority to bind the subcontractor. Timely certification is a condition precedent to any right of the Contractor to recover compensation for such subcontractor costs, and failure to timely submit the certification will constitute a full, complete, absolute and irrevocable waiver by the Contractor of any right to recover such subcontractor costs.

**4-3.3 No Waiver of Contract:** Changes made by the Director will not be considered to waive any of the provisions of the Contract, nor may the Contractor make any claim for loss of anticipated profits because of the changes, or by reason of any variation between the approximate quantities and the quantities of work actually performed. All work shall be performed as directed by the Director and in accordance with the Contract Documents.

**4-3.4 Conditions Requiring a Supplemental Agreement or Unilateral Payment:** A Supplemental Agreement or Unilateral Payment will be used to clarify the Plans and Specifications of the Contract; to provide for unforeseen work, grade changes, or alterations in the Plans which could not reasonably have been contemplated or foreseen in the original Plans and Specifications; to change the limits of construction to meet field conditions; to provide a safe and functional connection to an existing pavement; to settle documented Contract claims; to make the project functionally operational in accordance with the intent of the original Contract and subsequent amendments thereto.

A Supplemental Agreement or Unilateral Payment may be used to expand the physical limits of the project only to the extent necessary to make the project functionally operational in accordance with the intent of the original Contract. The cost of any such agreement extending the physical limits of the project shall not exceed \$100,000 or 10% of the original Contract price, whichever is greater.

Except for Work included within a Field Directive Change Order, perform no work to be covered by a Supplemental Agreement or Unilateral Payment before written authorization is received from the Director. The Director's written authorization will set forth sufficient work information to allow the work to begin. The work activities, terms and conditions will be reduced to written Supplemental Agreement or Unilateral Payment form promptly thereafter. No payment will be made on a Supplemental Agreement or Unilateral Payment prior to the County's approval of the document.

**4-3.5 Extra Work:** Extra work authorized in writing by the Director will be paid in accordance with the formula in 4-3.2. Such payment will be the full extent of all monetary compensation entitlement due to the Contractor for such extra work. Any entitlement to a time extension due to extra work will be limited solely to that provided for in 4-3.2 for additional work.

**4-3.6 Connections to Existing Pavement, Drives and Walks:** Generally adhere to the limits of construction at the beginning and end of the project as detailed in the Plans. However, if the Director determines that it is necessary to extend the construction in order to make suitable connections to existing pavement, the Director will authorize such a change in writing.

For necessary connections to existing walks and drives that are not indicated in the Plans, the Director will submit direction regarding the proper connections in accordance with the Design Standards.

**4-3.7 Differing Site Conditions:** During the progress of the work, if subsurface or latent physical conditions are encountered at the site differing materially from those indicated in the Contract, or if unknown physical conditions of an unusual nature differing materially from those ordinarily encountered and generally recognized as inherent in the work provided for in the Contract are encountered at the site, the party discovering such conditions shall promptly notify the other party in writing of the specific differing conditions before the Contractor disturbs the conditions or performs the affected work.

Upon receipt of written notification of differing site conditions from the Contractor, the Director will investigate the conditions, and if it is determined that the conditions materially differ and cause an increase or decrease in the cost or time required for the performance of any work under the Contract, an adjustment will be made, excluding loss of anticipated profits, and the Contract will be modified in writing accordingly. The Director will notify the Contractor whether or not an adjustment of the Contract is warranted.

The Director will not allow a Contract adjustment for a differing site condition unless the Contractor has submitted the required written notice.

The Director will not allow a Contract adjustment under this clause for any effects caused to any other County or non-County projects on which the Contractor may be working.

**4-3.8 Changes Affecting Utilities:** The Contractor shall be responsible for identifying and assessing any potential impacts to a utility that may be caused by the changes proposed by the Contractor, and the Contractor shall at the time of making the request for a change notify the County in writing of any such potential impacts to utilities.

County approval of a Contractor proposed change does not relieve the Contractor of sole responsibility for all utility impacts, costs, delays or damages, whether direct or indirect, resulting from Contractor initiated changes in the design or construction activities from those in the original Contract Specifications, Design Plans (including Traffic Control Plans) or other Contract Documents and which effect a change in utility work different from that shown in the Utility Plans, joint project agreements or utility relocation schedules.

**4-3.9 Cost Savings Initiative Proposal:**

**4-3.9.1 Intent and Objective:**

1. This Subarticle applies to any cost reduction proposal (hereinafter referred to as a Proposal) that the Contractor initiates and develops for the purpose of refining the Contract to increase cost effectiveness or significantly improve the quality of the end result. County Potential Proposals will be discussed as an agenda item at the pre-construction meeting. This Subarticle does not, however, apply to any such proposal unless the Contractor identifies it at the time of its submission to the County as a proposal submitted pursuant to this Subarticle.

2. The County will consider Proposals that would result in net savings to the County by providing a decrease in the cost of the Contract. Proposals must result in savings without impairing essential functions and characteristics such as safety, service, life, reliability, economy of operation, ease of maintenance, aesthetics and necessary standard design features. However, nothing herein prohibits the Contractor from submitting Proposals when the required functions and characteristics can be combined, reduced or eliminated because they are nonessential or excessive. The County will not recognize the Contractor's correction of plan errors that result in a cost reduction, as a Proposal.

3. The County reserves the right to reject at its discretion any Proposal submitted that proposes a change in the design of the pavement system or that would require additional right-of-way. Pending the County's execution of a formal supplemental agreement

implementing an approved Proposal, the Contractor shall remain obligated to perform the work in accordance with the terms of the existing Contract. The County may grant time extensions to allow for the time required to develop and review a Proposal.

4. For potential Proposals not discussed at the Cost Savings Initiative Workshop, a mandatory concept meeting will be held for the Contractor and County to discuss the potential Proposal prior to development of the Proposal.

**4-3.9.2 Subcontractors:** The County encourages the Contractor to include the provisions of this Subarticle in Contracts with subcontractors and to encourage submission of Proposals from subcontractors. However, it is not mandatory to submit Proposals to the County or to accept or transmit subcontractor proposed Proposals to the County.

**4-3.9.3 Data Requirements:** As a minimum, submit the following information with each Proposal:

1. a description of the difference between the existing Contract requirement, including any time extension request, and the proposed change, and the comparative advantages and disadvantages.

2. separate detailed cost estimates for both the existing Contract requirement and the proposed change. Break down the cost estimates by pay item numbers indicating quantity increases or decreases and deleted pay items. Identify additional proposed work not covered by pay items within the Contract, by using pay item numbers in the Basis of Estimates Manual. In preparing the estimates, include overhead, profit, and bond within pay items in the Contract. Separate pay item(s) for the cost of overhead, profit, and bond will not be allowed.

3. an itemization of the changes, deletions or additions to plan details, plan sheets, design standards and Specifications that are required to implement the Proposal if the County adopts it. Submit preliminary plan drawings sufficient to describe the proposed changes.

4. engineering or other analysis in sufficient detail to identify and describe specific features of the Contract that must be changed if the County accepts the Proposal with a proposal as to how these changes can be accomplished and an assessment of their effect on other project elements. The County may require that engineering analyses be performed by a prequalified consultant in the applicable class of work. Support all design changes that result from the Proposal with drawings and computations signed and sealed by the Contractor's Engineer of Record. Written documentation or drawings will be submitted clearly delineating the responsibility of the Contractor's Engineer of Record.

5. the date by which the County must approve the Proposal to obtain the total estimated cost reduction during the remainder of the Contract, noting any effect on the Contract completion time or delivery schedule.

6. a revised project schedule that would be followed upon approval of the Proposal. This schedule would include submittal dates and review time for the County and Peer reviews.

**4-3.9.4 Processing Procedures:** Submit Proposals to the Director or his duly authorized representative. The County will process Proposals expeditiously; however, the County is not liable for any delay in acting upon a Proposal submitted pursuant to this Subarticle. The Contractor may withdraw, in whole or in part, a Proposal not accepted by the County within the period specified in the Proposal. The County is not liable for any Proposal development cost in the case where the County rejects or the Contractor withdraws a Proposal.

The Director is the sole judge of the acceptability of a Proposal and of the estimated net savings in construction costs from the adoption of all or any part of such proposal. In

determining the estimated net savings, the County reserves the right to disregard the Contract bid prices if, in the judgment of the Director, such prices do not represent a fair measure of the value of work to be performed or to be deleted.

Prior to approval, the Director may modify a Proposal, with the concurrence of the Contractor, to make it acceptable. If any modification increases or decreases the net savings resulting from the Proposal, the County will determine the Contractor's fair share upon the basis of the Proposal as modified and upon the final quantities. The County will compute the net savings by subtracting the revised total cost of all bid items affected by the Proposal from the total cost of the same bid items as represented in the original Contract.

Prior to approval of the Proposal that initiates the supplemental agreement, submit acceptable Contract-quality plan sheets revised to show all details consistent with the Proposal design.

**4-3.9.5 Computations for Change in Contract Cost of Performance:** If the Proposal is adopted, the Contractor's share of the net savings as defined hereinafter represents full compensation to the Contractor for the Proposal.

The County will not include its costs to process and implement a Proposal in the estimate. However, the County reserves the right, where it deems such action appropriate, to require the Contractor to pay the County's cost of investigating and implementing a Proposal as a condition of considering such proposal. When the County imposes such a condition, the Contractor shall accept this condition in writing, authorizing the County to deduct amounts payable to the County from any monies due or that may become due to the Contractor under the Contract.

**4-3.9.6 Conditions of Acceptance for Major Design Modifications of Category 2 Bridges:** A Proposal that proposes major design modifications of a category 2 bridge, as determined by the Director, shall have the following conditions of acceptance:

All bridge Plans relating to the Proposal shall undergo an independent peer review conducted by a single independent engineering firm referred to for the purposes of this article as the Independent Review Engineer who is not the originator of the Proposal design, and is pre-qualified by the County in accordance with Rule 14-75, Florida Administrative Code. The independent peer review is intended to be a comprehensive, thorough verification of the original work, giving assurance that the design is in compliance with all County requirements. The Independent Review Engineer's comments, along with the resolution of each comment, shall be submitted to the County. The Independent Review Engineer shall sign and seal the submittal cover letter stating that all comments have been adequately addressed and the design is in compliance with the County requirements. If there are any unresolved comments the Independent Review Engineer shall specifically list all unresolved issues in the signed and sealed cover letter.

The Contractor shall designate a primary engineer responsible for the Proposal design and as such will be designated as the Contractor's Engineer of Record for the Proposal design. The County reserves the right to require the Contractor's Engineer of Record to assume responsibility for design of the entire structure.

New designs and independent peer reviews shall be in compliance with all applicable County, FHWA and AASHTO criteria requirements including bridge load ratings.

**4-3.9.7 Sharing Arrangements:** If the County approves a Proposal, the Contractor shall receive 50% of the net reduction in the cost of performance of the Contract as determined by the final negotiated agreement between the Contractor and the County. The net reduction will be determined by subtracting from the savings of the construction costs the reasonable documented engineering costs incurred by the contractor to design and develop a Proposal. The reasonable

documented engineering costs will be paid by the County. Engineering costs will be based on the consultant's certified invoice and may include the costs of the Independent Review Engineer in 4-3.9.6. The total engineering costs to be subtracted from the savings to determine the net reduction will be limited to 25% of the construction savings and shall not include any markup by the Contractor or the costs for engineering services performed by the Contractor.

**4-3.9.8 Notice of Intellectual Property Interests and County's Future Rights to a**

**Proposal:**

**4-3.9.8.1 Notice of Intellectual Property Interests:** The Contractor's Proposal submittal shall identify with specificity any and all forms of intellectual property rights that either the Contractor or any officer, shareholder, employee, consultant, or affiliate, of the Contractor, or any other entity who contributed in any measure to the substance of the Contractor's Proposal development, have or may have that are in whole or in part implicated in the Proposal. Such required intellectual property rights notice includes, but is not limited to, disclosure of any issued patents, copyrights, or licenses; pending patent, copyright or license applications; and any intellectual property rights that though not yet issued, applied for or intended to be pursued, could nevertheless otherwise be subsequently the subject of patent, copyright or license protection by the Contractor or others in the future. This notice requirement does not extend to intellectual property rights as to stand-alone or integral components of the Proposal that are already on FDOT's Approved Product List (APL) or Design Standard Indexes, or are otherwise generally known in the industry as being subject to patent or copyright protection.

**4-3.9.8.2 County's Future Rights to a Proposal:** Notwithstanding 7-3 nor any other provision of the Standard Specifications, upon acceptance of a Proposal, the Contractor hereby grants to the County and its contractors (such grant being expressly limited solely to any and all existing or future County construction projects and any other County projects that are partially or wholly funded by or for the County) a royalty-free and perpetual license under all forms of intellectual property rights to manufacture, to use, to design, to construct, to disclose, to reproduce, to prepare and fully utilize derivative works, to distribute, display and publish, in whole or in part, and to permit others to do any of the above, and to otherwise in any manner and for any purpose whatsoever do anything reasonably necessary to fully utilize any and all aspects of such Proposal on any and all existing and future construction projects and any other County projects.

Contractor shall hold harmless, indemnify and defend the County and its contractors and others in privity therewith from and against any and all claims, liabilities, other obligations or losses, and reasonable expenses related thereto (including reasonable attorneys' fees), which are incurred or are suffered by any breach of the foregoing grants, and regardless of whether such intellectual property rights were or were not disclosed by the Contractor pursuant to 4-3.9.8.1, unless the County has by express written exception in the Proposal acceptance process specifically released the Contractor from such obligation to hold harmless, indemnify and defend as to one or more disclosed intellectual property rights.

**4-4 Unforeseeable Work.**

When the County requires work that is not covered by a price in the Contract and such work does not constitute a "Significant Change" as defined in 4-3.1, and the County finds that such work is essential to the satisfactory completion of the Contract within its intended scope, the County will make an adjustment to the Contract. The Director will determine the basis of payment for such an adjustment in a fair and equitable amount.

#### **4-5 Rights in and Use of Materials Found on the Site of the Work.**

**4-5.1 Ownership and Disposal of Existing Materials:** Take ownership and dispose of all materials that are not designated as the property of other parties, in both roadway and structures, found on the right-of-way, and all material in structures designated for removal. Such materials do not include earth or other excavated material required for the construction of the project. During construction, the Contractor may use materials from existing structures that are required to be removed and that are designated to remain the property of the County. Do not cut or otherwise damage such material during removal unless the Director gives permission to do so. Store material in an accessible location as the Director directs. The County is not responsible for the quality or quantity of any material salvaged.

**4-5.2 Ornamental Trees and Shrubs:** Take ownership of all ornamental trees or shrubs existing in the right-of-way that are required to be removed for the construction operations and which are not specifically designated in the Plans to be reset, or to be removed by others prior to the construction operations.

#### **4-6 Final Cleaning Up of Right-of-Way.**

Upon completion of the work, and before the County accepts the work and makes final payment, remove from the right-of-way and adjacent property all falsework, equipment, surplus and discarded materials, rubbish and temporary structures; restore in an acceptable manner all property, both public and private, that has been damaged during the prosecution of the work; and leave the waterways unobstructed and the roadway in a neat and presentable condition throughout the entire length of the work under Contract. Do not dispose of materials of any character, rubbish or equipment, on abutting property, with or without the consent of the property owners. The Director will allow the Contractor to temporarily store equipment, surplus materials, usable forms, etc., on a well-kept site owned or leased by the Contractor, adjacent to the project. However, do not place or store discarded equipment, materials, or rubbish on such a site.

Shape and dress areas adjacent to the project right-of-way that were used as plant sites, materials storage areas or equipment yards when they are no longer needed for such purposes. Restore these areas in accordance with 7-11.1 and 7-11.2. Grass these areas when the Director directs.

## SECTION 5 CONTROL OF THE WORK

### 5-1 Plans and Working Drawings.

**5-1.1 Contract Documents:** Have available a complete set of Contract Documents on the Site at all times.

**5-1.2 County Plans:** Plans consist of general drawings showing such details as are necessary to give a comprehensive idea of the construction contemplated. In general, roadway plans will show alignment, profile grades, typical cross-sections and general cross-sections. In general, structure plans will show in detail all dimensions of the work contemplated. When the structure plans do not show the dimensions in detail, they will show general features and such details as are necessary to give a comprehensive idea of the structure.

Grades shown are finished grades, and B.M. Datum is North American Vertical Datum 1988 (NAVD-1988), National Geodetic Vertical Datum of 1929 (NGVD-1929), or other datum as noted in the Plans.

**5-1.3 Alterations in Plans:** The County will issue, in writing, all authorized alterations affecting the requirements and information given on the approved Plans.

### 5-1.4 Shop Drawings:

#### 5-1.4.1. Definitions:

1. Shop Drawings: All working, shop and erection drawings, associated trade literature, calculations, schedules, manuals and similar documents submitted by the Contractor to define some portion of the project work. The type of work includes both permanent and temporary works as appropriate to the project.

2. Permanent Works: All the permanent structures and parts thereof required of the completed Contract.

3. Temporary Works: Any temporary construction work necessary for the construction of the permanent works. This includes but is not limited to bracing, falsework, formwork, scaffolding, shoring, temporary earthworks, sheeting, cofferdams, and special erection equipment.

4. Construction Affecting Public Safety: Construction that may jeopardize public safety such as structures spanning functioning vehicular roadways, pedestrian walkways, railroads, navigation channels of navigable waterways and walls or other structure foundations located in embankments immediately adjacent to functioning roadways. It does not apply to those areas of the site under the Contractor's control and outside the limits of normal public access.

5. Major and Unusual Structures: Bridges of complex geometry and/or complex design. Generally, this includes the following types of structures:

- a. Bridges with an individual span longer than 300 feet.
- b. Structurally continuous superstructures with spans over 150 feet.
- c. Steel box and plate girder bridges.
- d. Steel truss bridges.
- e. Concrete segmental and longitudinally post-tensioned continuous girder bridges.
- f. Cable stayed or suspension bridges.
- g. Arch bridges.
- h. Tunnels.

i. Movable bridges (specifically electrical and mechanical components).

j. Rehabilitation, widening, or lengthening of any of the above.

6. Special Erection Equipment includes launching gantries, beam and winch equipment, form travelers, stability towers, strong-backs, erection trusses, launching noses or similar items made purposely for construction of the structure. It does not apply to commonly available proprietary construction equipment such as cranes.

7. Falsework includes any temporary construction work used to support the permanent structure until it becomes self-supporting. Falsework includes steel or timber beams, girders, columns, piles and foundations, and any proprietary equipment including modular shoring frames, post shores, and adjustable horizontal shoring.

8. Formwork includes any structure or mold used to retain plastic or fluid concrete in its designated shape until it hardens. Formwork comprises common materials such as wood or metal sheets, battens, soldiers and walers, ties, proprietary forming systems such as stay-in-place metal forms, and proprietary supporting bolts, hangers and brackets. Formwork may be either permanent formwork requiring a shop drawing submittal such as stay-in-place metal or concrete forms, or may be temporary formwork which requires certification by the Specialty Engineer for Construction Affecting Public Safety and for Major and Unusual Structures.

9. Scaffolding is an elevated work platform used to support workmen, materials and equipment, but not intended to support the structure.

10. Shoring is a component of falsework such as horizontal, vertical or inclined support members. In this Section, this term is interchangeable with falsework.

11. Bracing is a temporary structural member(s) placed between beams, girders, piles columns, etc. to provide stability during construction activities.

12. Contractor Originated Designs: Items which the Contract Documents require the Contractor to design, detail and incorporate into the permanent works.

**5-1.4.2 Work Items Requiring Shop Drawings:** In general, the County requires shop drawings for items of work not fully detailed in the Plans which require additional drawings and coordination prior to constructing the item, including but not limited to:

1. Bridge components not fully detailed in the Plans, i.e. segments, steel girder details, post-tensioning details, handrails, etc.

2. Retaining Wall Systems

3. Precast Box Culverts

4. Non-standard structures and components for drainage, lighting, signalization and signing

5. Building structures

6. Non-standard crash cushions and other nonstructural items

7. Design and structural details furnished by the Contractor in compliance with the Contract

8. Temporary Works affecting public safety

Additional clarification for certain types of bridge structures is provided in 5-1.4.7. Other provisions of the Contract Documents may waive the requirement for submittals for certain items; i.e., items constructed from standard drawings or those complying with alternate details for prestressed members under Section 450. Review the Contract Documents to determine the submittals required.



**5-1.4.3 Schedule of Submittals:** Prepare and submit a schedule of submittals that identifies the work for which shop drawings apply. For each planned submittal, define the type, and approximate number of drawings or other documents that are included and the planned submittal date, considering the processing requirements herein. Submit the schedule of submittals to the CEI Consultant within 60 days of the start of the Contract, and prior to the submission of any shop drawings.

Coordinate subsequent submittals with construction schedules to allow sufficient time for review, approval, and re-submittal as necessary.

**5-1.4.4 Style, Numbering, and Material of Submittals:**

**5-1.4.4.1 Drawings:** Submit all shop drawings that are necessary to complete the structure in compliance with the design shown in the Plans. Prepare all shop drawings using the same units of measure as those used in the Contract Plans. Consecutively number each sheet in the submittal series, and indicate the total number in the series (i.e., 1 of 12, 2 of 12 . . . 12 of 12). Include on each sheet the following items as a minimum requirement: the complete Project Number, Financial Project Identification Number (if applicable), Bridge Number(s), drawing title and number, a title block showing the names of the fabricator or producer and the Contractor for which the work is being done, the initials of the person(s) responsible for the drawing, the date on which the drawing was prepared, the location of the item(s) within the project, the Contractor's approval stamp with date and initials, and, when applicable, the documents shall be signed and sealed by the Specialty Engineer or Contractor's Engineer of Record, as appropriate. A re-submittal will be requested when any of the required information is not included.

Shop drawings shall be submitted in Portable Document Format (PDF) files, formatted on 11 inch by 17 inch sheets.

**5-1.4.4.2 Other Documents:** Submit PDF files of other documents such as trade literature, catalogue information, calculations, and manuals formatted on sheets no larger than 11 inch by 17 inches. Clearly label and number each sheet in the submittal to indicate the total number of sheets in the series (i.e., 1 of 12, 2 of 12 . . . 12 of 12).

Prepare all documents using the same units of measure as the Contract Plans and include a Table of Contents cover sheet. List on the cover sheet the total number of pages and appendices, and include the complete Project Number, Financial Project Identification Number (if applicable), a title referencing the submittal item(s), the name of the firm and person(s) responsible for the preparation of the document, the Contractor's approval stamp with date and initials, and, when applicable, the documents shall be signed and sealed by the Specialty Engineer or Contractor's Engineer of Record, as appropriate.

Submit appropriately prepared and checked calculations and manuals that clearly outline the design criteria. Include on the internal sheets the complete Financial Project Identification Number and the initials of the person(s) responsible for preparing and checking the document.

Clearly label trade literature and catalogue information on the front cover with the title, Financial Project Identification Number, date and name of the firm and person(s) responsible for that document.

**5-1.4.5 Submittal Paths:**

**5-1.4.5.1 General:** Shop drawings are not required for prequalified items. For non-prequalified items, details of the submittal path and protocol to be followed will be established by the CEI Consultant and communicated at the preconstruction conference. Shop

drawing review will be performed by the Engineer of Record for the project feature associated with each submittal and communicated through the CEI Consultant. Shop drawing submittals shall include other information such as catalog data, procedure manuals, fabrication/welding procedures, and maintenance and operating procedures when required by the work. Submit material certifications and material tests to the CEI Consultant. The Contractor is responsible for checking and verifying any necessary field dimensions required in the development of shop drawings.

**5-1.4.5.2 Building Structures:** Submit working, shop and erection drawings, and all correspondence related to building structures to the CEI Consultant for review and approval.

**5-1.4.5.3 Contractor-Originated Design:** Submit shop drawings and applicable calculations to the CEI Consultant for review. The shop drawings and applicable calculations must be signed and sealed by the Specialty Engineer or the Contractor's Engineer of Record. Submit in accordance with the requirements of 5-1.4.5.1 through 5-1.4.5.3, as appropriate.

**5-1.4.5.4 Temporary Works:** For Construction Affecting Public Safety, submit to the CEI Consultant shop drawings and the applicable calculations for the design of special erection equipment, bracing, falsework, scaffolding, etc. The shop drawings and applicable calculations must be signed and sealed by the Specialty Engineer. Submit in accordance with the requirements of 5-1.4.5.1 through 5-1.4.5.3, as appropriate.

**5-1.4.5.5 Falsework Founded on Shallow Foundations:** When vertical displacement limits are provided in the Plans for falsework founded on shallow foundations such as spread footings and mats, submit to the CEI Consultant shop drawings and applicable calculations of the falsework system including subsurface conditions and settlement estimates. The shop drawings and applicable calculations must be signed and sealed by the Specialty Engineer. Submit in accordance with the requirements of 5-1.4.5.1 through 5-1.4.5.3, as appropriate.

**5-1.4.5.6 Formwork and Scaffolding:** The Contractor is solely responsible for the safe installation and use of all formwork and scaffolding. The County does not require any formwork or scaffolding submittals unless such work would be classified as Construction Affecting Public Safety. For formwork, scaffolding, or other temporary works affecting public safety; develop the required designs in accordance with the AASHTO Guide Design Specifications for Bridge Temporary Works, the AASHTO Construction Handbook for Bridge Temporary Works, and Chapter 11 of the Structures Design Guidelines (SDG) using wind loads specified in the SDG.

**5-1.4.5.7 Beam and Girder Temporary Bracing:** The Contractor is solely responsible for ensuring stability of beams and girders during all handling, storage, shipping and erection. Adequately brace beams and girders to resist wind, weight of forms and other temporary loads, especially those eccentric to the vertical axis of the products, considering actual beam geometry and support conditions during all stages of erection and deck construction. At a minimum, provide temporary bracing at each end of each beam or girder. Develop the required bracing designs in accordance with the AASHTO LRFD Bridge Design Specifications (LRFD) and Chapter 11 of the SDG using wind loads specified in the SDG. For information not included in the SDG or LRFD, refer to the AASHTO Guide Design Specifications for Bridge Temporary Works and the AASHTO Construction Handbook for Bridge Temporary Works.

For Construction Affecting Public Safety, when temporary bracing requirements are shown in the Plans, submit plans and calculations signed and sealed by a Specialty Engineer for the design of temporary bracing members and connections based on the forces shown in the Plans. In addition, submit a written certification that construction loads do not exceed the assumed loads shown in the Plans.

For Construction Affecting Public Safety, when temporary bracing requirements are not shown in the Plans or an alternate temporary bracing system is proposed, submit plans and calculations signed and sealed by a Specialty Engineer including the stability analysis and design of temporary bracing members and connections.

**5-1.4.5.8 Erection Plan:** Submit, for the Director's review, an Erection Plan that meets the specific requirements of Sections 450, 452 and 460 and this section. Refer to Index 600 for construction activities not permitted over traffic.

**5-1.4.5.9 Other Miscellaneous Design and Structural Details Furnished by the Contractor in Compliance with the Contract:** Submit to the CEI Consultant shop drawings and the applicable calculations. The shop drawings and applicable calculations must be signed and sealed by the Specialty Engineer. Submit in accordance with the requirements of 5-1.4.5.1 through 5-1.4.5.3, as appropriate.

**5-1.4.5.10 Project Shop Drawing Package:** Upon completion of the work, but prior to authorization of final payment, the Contractor shall furnish the Director one complete, indexed and cataloged PDF file containing all of the Contractors, Subcontractors, and manufacturers shop drawings and catalog data as finally checked and reviewed by the Director with all modifications accepted by the Director subsequent thereto, showing the work as actually completed.

#### **5-1.4.6 Processing of Shop Drawings:**

**5-1.4.6.1 Contractor Responsibility for Accuracy and Coordination of Shop Drawings:** Coordinate, schedule, and control all submittals, with a regard for the required priority, including those of the various subcontractors, suppliers, and engineers, to provide for an orderly and balanced distribution of the work.

Coordinate, review, date, stamp, approve and sign all shop drawings prepared by the Contractor or agents (subcontractor, fabricator, supplier, etc.) prior to submitting them to the CEI Consultant. Submittal of the drawings confirms verification of the work requirements, units of measurement, field measurements, construction criteria, sequence of assembly and erection, access and clearances, catalog numbers, and other similar data. Indicate on each series of drawings the specification section and sheet or drawing number of the Contract Plans to which the submission applies. Indicate on the shop drawings all deviations from the Contract drawings and itemize all deviations in the letter of transmittal. Likewise, whenever a submittal does not deviate from the Contract Plans, clearly state so in the submittal.

Schedule the submission of shop drawings to allow for a 45 day review period. The review period commences upon the CEI Consultant's receipt of the valid submittal or valid re-submittal and terminates upon the transmittal of the submittal back to the Contractor. A valid submittal includes all the minimum requirements outlined in 5-1.4.4.

Submit shop drawings to facilitate expeditious review. The Contractor is discouraged from transmitting voluminous submittals of shop drawings at one time. For submittals transmitted in this manner, allow for the additional review time that may result.

Only shop drawings distributed with the approval stamps are valid and all work that the Contractor performs in advance of approval will be at the Contractor's risk.

**5-1.4.6.2 Scope of Review by Engineer:** The Engineer of Record's review of the shop drawings is for conformity to the requirements of the Contract Documents and to the intent of the design. The Engineer of Record's review of shop drawings which include means, methods, techniques, sequences, and construction procedures are limited to the effects on the permanent works. The Engineer of Record's review of submittals which include means, methods, techniques, sequences, and construction procedures does not include an in-depth check for the ability to perform the work in a safe or efficient manner. Review by the Engineer of Record does not relieve the Contractor of responsibility for dimensional accuracy to ensure field fit and for conformity of the various components and details.

**5-1.4.6.3 Special Review by Engineer of Shop Drawings for Construction Affecting Public Safety:** For Construction Affecting Public Safety, the Engineer of Record, or other Engineer as the County appoints for this purpose, will make an independent review of all relevant shop drawings and similar documents. Do not proceed with construction of the permanent works until receiving the Engineer of Record's written approval. The review of these shop drawings is for overall structural adequacy of the item to support the imposed loads and does not include a check for economy, efficiency or ease of construction.

**5-1.4.7 Other Requirements for Shop Drawings for Bridges:**

**5-1.4.7.1 Shop Drawings for Structural Steel and Miscellaneous Metals:** Submit shop drawings for structural steel and miscellaneous metals. Shop drawings shall consist of working, shop, and erection drawings, welding procedures, and other working plans, showing details, dimensions, sizes of material, and other information necessary for the complete fabrication and erection of the metal work.

**5-1.4.7.2 Shop Drawings for Concrete Structures:** Submit shop drawings for concrete components that are not cast-in-place and are not otherwise exempted from submittal requirements. Also, submit shop drawings for all details that are required for the effective prosecution of the concrete work and are not included in the Contract Documents such as: special erection equipment, masonry layout diagrams, and diagrams for bending reinforcing steel, in addition to any details required for concrete components for the permanent work.

**5-1.4.7.3 Shop Drawings for Major and Unusual Structures:** In addition to any other requirements, within 60 days from the Notice to Proceed, submit information to the Director outlining the integration of the Major and Unusual Structure into the overall approach to the project. Where applicable to the project, include, but do not limit this information to:

1. The overall construction program for the duration of the Contract. Clearly show the Milestone dates. (For example, the need to open a structure by a certain time for traffic operations.)
2. The overall construction sequence. The order in which individual structures are to be built, the sequence in which individual spans of girders or cantilevers are erected, and the sequence in which spans are to be made continuous.
3. The general location of any physical obstacles to construction that might impose restraints or otherwise affect the construction, and an outline of how to deal with such obstacles while building the structure(s). (For example, obstacles might include road, rail and waterway clearances, temporary diversions, transmission lines, utilities, property, and the Contractor's own temporary works, such as haul roads, cofferdams, plant clearances and the like.)

4. The approximate location of any special lifting equipment in relation to the structure, including clearances required for the operation of the equipment. (For example, crane positions, operating radii and the like.)

5. The approximate location of any temporary falsework, and the conceptual outline of any special erection equipment. Provide the precise locations and details of attachments, fixing devices, loads, etc. in later detailed submittals.

6. An outline of the handling, transportation, and storage of fabricated components, such as girders or concrete segments. Provide the precise details in later detailed submittals.

7. Any other information pertinent to the proposed scheme or intended approach.

Clearly and concisely present the above information on as few drawings as possible in order to provide an overall, integrated summary of the intended approach to the project. The County will use these drawings for information, review planning, and to assess the Contractor's approach in relation to the intent of the original design. Submittal to and receipt by the Director does not constitute any County acceptance or approval of the proposals shown thereon. Include the details of such proposals on subsequent detailed shop drawing submittals. Submit timely revisions and re-submittals for all variations from these overall scheme proposals.

**5-1.4.8 Modifications for Construction:** Where the Director allows the Contractor to make modifications to the permanent works for the purposes of expediting the Contractor's chosen construction methods, the Contractor shall submit proposals to the Engineer of Record for review and approval prior to modifying the works. Submit proposals for minor modifications under the shop drawing process. Indicate on all drawings the deviations from the Contract Documents and itemize all deviations in the letter of transmittal. The County will require additional submittals and/or submittal under a Cost Savings Initiative Proposal for major modifications.

Minor modifications are those items that, in the opinion of the Director, do not significantly affect the quantity of measured work, or the integrity or maintainability of the structure or its components. (For example, adjusting concrete dimensions, substituting steel plate sizes, changing reinforcing bar size and spacing, etc., all within the acceptable limits of the design.)

Major modifications are any modifications that, in the opinion of the Director, significantly affect the quantity of measured work, or the integrity or maintainability of the structure or its' components. (For example, substituting alternative beam sizes and spacings, changing material strength or type, and the like.). Submit signed and sealed revised sheets to the Director for any such revisions to the Contract Plans prior to submitting shop drawings.

The Director's decision on the delineation between a minor and a major modification and the disposition of a proposal is final.

**5-1.4.9 Cost of Shop Drawings:** Include the cost of shop and working drawings submittal in the Contract prices for the work requiring the shop and working drawings. The County will not pay the Contractor additional compensation for such drawings.

#### **5-1.5 Certifications:**

**5-1.5.1 Special Erection Equipment:** Prior to its use, ensure that the Specialty Engineer personally inspects the special erection equipment and submits a written certification to the Director that the equipment has been fabricated in accordance with the submitted drawings and calculations. In addition, after assembly, ensure that the Specialty Engineer observes the

equipment in use and submits a written certification to the Director that such equipment is being used as intended and in accordance with the submitted drawings and calculations. In each case, the Specialty Engineer must sign and seal the letter of certification.

**5-1.5.2 Falsework and Shoring Requiring Shop Drawings:** After its erection or installation but prior to the application of any superimposed load, ensure that a Specialty Engineer or a designee inspects the falsework and certifies to the Director in writing that the falsework has been constructed in accordance with the materials and details shown on the submitted drawings and calculations. The letter of certification must be signed and sealed by the Specialty Engineer. Where so directed in the shop drawings, ensure all welds are performed by welders qualified under AWS D1.5 for the type of weld being performed.

**5-1.5.3 Temporary Formwork:** For Construction Affecting Public Safety and for Major and Unusual Structures, prior to the placement of any concrete, ensure that a Specialty Engineer or a designee inspects the formwork and submits a written certification to the Director that the formwork has been constructed to safely withstand the superimposed loads to which it will be subjected. The Specialty Engineer must sign and seal the letter of certification.

**5-1.5.4 Erection:** For Construction Affecting Public Safety, submit an erection plan signed and sealed by the Specialty Engineer to the Director at least four weeks prior to erection commencing. Include, as part of this submittal, signed and sealed calculations and details for any falsework, bracing or other connection supporting the structural elements shown in the erection plan. Unless otherwise specified in the Plans, erection plans are not required for simple span precast prestressed concrete girder bridges with spans of 170 feet or less.

At least two weeks prior to beginning erection, conduct a Pre-erection meeting to review details of the plan with the Specialty Engineer that signed and sealed the plan, and any Specialty Engineers that may inspect the work and the Director.

After erection of the elements, but prior to opening of the facility below the structure, ensure that a Specialty Engineer or a designee has inspected the erected member. Ensure that the Specialty Engineer has submitted a written certification to the Director that the structure has been erected in accordance with the signed and sealed erection plan.

For structures without temporary supports but with temporary girder bracing systems, perform, as a minimum, weekly inspections of the bracing until all the diaphragms and cross frames are in place. For structures with temporary supports, perform daily inspections until the temporary supports are no longer needed as indicated in the erection plans. Submit written documentation of the inspections to the Director within 24 hours of the inspection.

**5-1.6 Corrections for Construction Errors:** For work that the Contractor constructs incorrectly or does not meet the requirements of the Contract Documents, the Contractor has the prerogative to submit an acceptance proposal to the Director for review and disposition. The acceptance proposal shall describe the error or defect and either describe remedial action for its correction or propose a method for its acceptance. In either case, the acceptance proposal shall address structural integrity, aesthetics, maintainability, and the effect on Contract Time. The County will judge any such proposal for its effect on these criteria and also for its effect on Contract Administration.

When the Director judges that a proposal infringes on the structural integrity or maintainability of the structure, the Contractor's Engineer of Record will perform a technical assessment and submit it to the Director for approval. Do not take any corrective action without the Director's written approval.

Carry out all approved corrective construction measures at no expense to the County.

Notwithstanding any disposition of the compensation aspects of the defective work, the Director's decision on the technical merits of a proposal is final.

### **5-2 Coordination of Contract Documents.**

These Specifications, the Plans, Special Provisions, and all supplementary documents are integral parts of the Contract Documents; a requirement occurring in one is as binding as though occurring in all. All parts of the Contract Documents are complementary and describe and provide for a complete work. In addition to the work and materials specified in the Specifications as being included in any specific pay item, include in such pay items additional, incidental work, not specifically mentioned, when so shown in the Plans, or if indicated, or obvious and apparent, as being necessary for the proper completion of the work under such pay item and not stipulated as being covered under other pay items.

In cases of discrepancy, the governing order of the documents is as follows:

1. Special Provisions.
2. Technical Special Provisions.
3. Plans.
4. Design Standards.
5. Developmental Specifications.
6. Supplemental Specifications.
7. Standard Specifications.

Computed dimensions govern over scaled dimensions.

### **5-3 Conformity of Work with Contract Documents.**

Perform all work and furnish all materials in reasonably close conformity with the lines, grades, cross-sections, dimensions, and material requirements, including tolerances, as specified in the Contract Documents.

In the event that the Director finds that the Contractor has used material or produced a finished product that is not in reasonably close conformity with the Contract Documents, but that the Contractor has produced reasonably acceptable work, the Director will determine if the County will accept the work in place. In this event, the Director will document the basis of acceptance by Contract modification, which provides for an appropriate reduction in the Contract price for such work or materials included in the accepted work as deemed necessary to conform to the determination based on engineering judgment.

In the event that the Director finds that the Contractor has used material or produced a finished product that is not in reasonably close conformity with the Contract Documents, and that the Contractor has produced an inferior or unsatisfactory product, the Contractor shall remove and replace or otherwise correct the work or materials at no expense to the County.

For base and surface courses, the County will allow the finished grade to vary as much as 0.1 foot from the grade shown in the Plans, provided that the Contractor's work meets all templates and straightedge requirements and contains suitable transitions.

### **5-4 Errors or Omissions in Contract Documents.**

Do not take advantage of any apparent error or omission discovered in the Contract Documents, but immediately notify the Director in writing of such discovery. The Director will

then make such corrections and interpretations as necessary to reflect the actual spirit and intent of the Contract Documents.

#### **5-5 Authority of the Director.**

Perform all work to the satisfaction of the Director.

The Director will decide all questions, difficulties, and disputes, of whatever nature, that may arise relative to the interpretation of the Plans, construction, prosecution, and fulfillment of the Contract, and as to the character, quality, amount, and value of any work done, and materials furnished, under or by reason of the Contract.

#### **5-6 Authority and Duties of Director's Assistants.**

The Director may appoint such assistants and representatives as desired. These assistants and representatives are authorized to inspect all work done and all materials furnished. Such inspection may extend to all or any part of the work and to the manufacture, preparation, or fabrication of the materials to be used. Such assistants and representatives are not authorized to revoke, alter, or waive any requirement of these Specifications. Rather, they are authorized to call to the attention of the Contractor any failure of the work or materials to meet the Contract Documents, and have the authority to reject materials or suspend the work until any questions at issue can be referred to and decided by the Director. The Director will immediately submit written notification to the Contractor of any such suspension of the work, stating in detail the reasons for the suspension. The presence of the inspector or other assistant in no way lessens the responsibility of the Contractor.

#### **5-7 Engineering and Layout.**

**5-7.1 Control Points Furnished by the County:** The Director will provide control points at various locations along the project alignment (Begin Project, End Project, PIs, PTs, etc.) and bench marks along the line of the project to facilitate the proper layout of the work. Control points and bench marks provided by the engineer, if any, will be indicated in the Plans. Preserve all control points and bench marks that the County furnishes. Any points carelessly or willfully disturbed or destroyed shall be reset at the sole expense of the Contractor.

As an exception to the above, for projects where the Plans do not show a centerline or other survey control line for construction of the work (e.g., resurfacing, safety modifications, etc.) the Director may provide only points marking the beginning and ending of the project, and all exceptions.

Prior to commencing the work, the Contractor shall perform a quality control check of all horizontal and vertical control points provided by the County and carefully compare all lines depicted in the plans with existing lines and levels, and shall call any discrepancies to the attention of the Director for resolution. Upon resolution of any discrepancies, the Contractor shall submit a letter to the County accepting the control points and bench marks for use. In any event, the Contractor shall be responsible for the accuracy of the Work and shall make good any work performed in error, at no cost to the County. All construction surveying and layout work to be provided herein shall be coordinated with and subject to the approval of the Director.

**5-7.1.1 Third Party Survey Monumentation:** The Contractor is responsible for the protection and preservation of any third party survey monumentation (National Geodetic Survey points, property corners, etc.) located within the project limits. Any points carelessly or willfully disturbed or destroyed shall be reset at the sole expense of the Contractor. Any third party survey monumentation designated by the Director to be removed and re-established will be paid for at



the unit prices set forth in the Contract, or if no such item exists in accordance with Section 4-3.2.1.

**5-7.2 Furnishing of Stake Materials:** Furnish all stakes, templates, and other materials necessary for establishing and maintaining the lines and grades necessary for control and construction of the work.

**5-7.3 Layout of Work:** Utilizing the control points and bench marks furnished by the County and accepted by the Contractor in accordance with 5-7.1, establish all horizontal and vertical controls necessary to construct the work in conformity to the Contract Documents. Perform all calculations required, and set all stakes needed such as grade stakes, offset stakes, reference point stakes, slope stakes, and other reference marks or points necessary to provide lines and grades for construction of all roadway, bridge, and miscellaneous items.

When performing utility construction as part of the project, establish all horizontal and vertical controls necessary to carry out such work.

**5-7.4 Specific Staking Requirements:** When performing new base construction as part of the project, set stakes to establish lines and grades for subgrade, base, curb, and related items at intervals along the line of the work. If Automated Machine Guidance is utilized, set stakes as needed. If Automated Machine Guidance is not utilized, set stakes no greater than 50 feet on tangents and 25 feet on curves. Set grade stakes at locations that the Director directs to facilitate checking of subgrade, base, and pavement elevations in crossovers, intersections, and irregular shaped areas.

For bridge construction stakes and other control, set references at sufficiently frequent intervals to ensure construction of all components of a structure in accordance with the lines and grades shown in the Plans.

For projects where the Plans do not show a centerline or other survey control line for construction of the work (resurfacing, safety modifications, etc.), provide only such stakes as necessary for horizontal and vertical control of work items.

For resurfacing and resurfacing-widening type projects, establish horizontal controls adequate to ensure that the asphalt mix added matches with the existing pavement. In tangent sections, set horizontal control points at 100 foot intervals by an instrument survey. In curve sections, set horizontal control points at 25 foot intervals by locating and referencing the centerline of the existing pavement. Alternate intervals may be used on resurfacing projects with prior written approval of the Director.

Establish by an instrument survey, and mark on the surface of the finished pavement at 25 foot intervals, the points necessary for striping of the finished roadway. As an exception, for resurfacing and resurfacing/widening projects, establish these points in the same manner as used for horizontal control of paving operations. Mark the pavement with white paint. If performing striping, the Director may approve an alternate method for layout of striping provided that the Contractor achieves an alignment equal to or better than the alignment that would be achieved using an instrument survey.

For projects that include temporary or permanent striping of "no passing zones", provide the location and length of these zones as shown in the Plans, except projects where the vertical or horizontal alignment is new or altered from preconstruction alignment. For projects that consist of new or altered vertical or horizontal alignment, the County will provide the location and length of the "no passing zones" during construction. For these projects, submit written notification to the Director not less than 21 calendar days prior to beginning striping.

For all projects, set a station identification stake at each right-of-way line at 100 foot intervals and at all locations where a change in right-of-way width occurs, or as otherwise approved by the Director. Mark each of these stakes with painted numerals, of a size readable from the roadway, corresponding to the project station at which it is located. As an exception to the above, for projects where Plans do not show right-of-way lines, set station identification stakes at locations and intervals appropriate to the type of work being done. For resurfacing and resurfacing/widening projects, set station identification stakes at 200 foot intervals, or as otherwise approved by the Director.

**5-7.4.1 As-Built Drawings and Certified Surveys:** The Contractor shall maintain one record copy of all specifications, plans, addenda, and shop drawings on site and in good order, annotated in red to depict all changes made during construction and exact location of underground or otherwise concealed components of the project, and any modifications to material types from that specified in the bid plans and specifications (“red line documents”). All subsurface improvements shall be as-built prior to backfilling. As-built red line plans shall be maintained on 11-inch by 17-inch prints and red line annotations shall be completed in a neat draftsman-like manner.

As-built red lines shall include both authorized and unauthorized changes to all project features, including but not limited to: horizontal pavement dimensions; finished pavement grades; finish dimensions, elevations, and alignment of all storm sewer, drainage structures, ponds, water main, sanitary sewer, force main, service lines, conduit, wiring, traffic loops, and signal interconnects; signal poles; light poles; and signs.

Demonstrating proper maintenance of as-built drawings shall be a precedent to each progress payment. The Contractor shall make available to Director, at any time requested, as-built information through the date of the request. If the Director determines the as-built information is inaccurate, inadequate, or untimely payment may be withheld until such time that the Contractor cures any noted deficiencies.

Upon completion of all work, but prior to authorization of final payment, the Contractor shall deliver to the Director one complete set as-built red line documents and certified surveys providing verification of all as-built dimensions and grades for review and approval. The certified survey shall include, but not be limited to:

1. Level Circuit: the survey shall include a final bench mark level circuit indicating the accuracy of vertical closure.
2. Control structure bench marks: the Contractor shall establish and document the location and elevation of bench marks on or within 100-feet of each control structure constructed or modified as part of the project. Each control structure bench mark elevation shall be clearly and permanently indicated on the bench mark.
3. Cross-sections: as-built finished cross-sections shall be performed at intervals not exceeding 100 feet, extending from right-of-way to right-of-way, but also including temporary or permanent easements as may be applicable. Cross sections shall include all elevation break points, and shall include edge of pavement and centerlines for all pavements.
4. Discharge structures: structure identification number, type, locations (latitude and longitude), dimensions, and elevations of

- all, including weirs, bleeders, orifices, gates, pumps, pipes, and oil and grease skimmers.
5. Side bank and underdrain filters, or exfiltration trenches: locations, dimensions and elevations of all, including clean-outs, pipes, connections to control structures and points of discharge to receiving waters.
  6. Storage areas for treatment and attenuation: storage area identification number, dimensions, elevations, contours, or cross-sections of all, sufficient to determine stage-storage relationships of the storage area and the permanent pool depth and volume below the control elevation for normally wet systems.
  7. System grading: dimensions, elevations, contours, and final grades or cross-sections to determine contributing drainage areas, flow directions, and conveyance of runoff to the system discharge points.
  8. Conveyance: dimensions, elevations, contours, final grades or cross-sections of systems utilized to divert off-site runoff around or through the new system.
  9. Water levels: existing water elevations and the date recorded.
  10. South Florida Water Management District (SFWMD): as-built surveys shall conform to any additional requirements and special conditions listed in the SFWMD's Environmental Resource Permit and any applicable local permit(s).
  11. Bridge clearances: for projects under the authority of a U.S. Coast Guard bridge permit, as-built clearances as described in the U.S. Coast Guard Owner's Certification of Bridge Completion. For bridges spanning roadways, provide a full as-built clearance envelope across the full width of the lower roadway(s).
  12. Projects under the authority of a U.S. Army Corps of Engineers permit: as-built surveys shall satisfy all of the requirements and special conditions listed in the U.S. Army Corps of Engineers permit.

All as-built survey information shall be signed and sealed by a licensed Professional Surveyor and Mapper duly registered in the State of Florida. No direct payment will be made for the cost of preparing, maintaining, and furnishing as-built plans and surveys as specified in this Article, the costs thereof shall be included in other items of work.

**5-7.5 Personnel, Equipment, and Record Requirements:** Employ only competent personnel and use only suitable equipment in performing layout work. Do not engage the services of any person or persons in the employ of the County for performance of layout work. All construction surveying and layout work, including dimensions and elevations associated with as-builts, shall be completed under the responsible charge of a licensed Professional Surveyor and Mapper duly registered in the State of Florida.

Keep adequate field notes and records while performing as layout work. Make these field notes and records available for the Director's review as the work progresses, and submit to the Director at the time of completion of the project. The Director's inspection, checking, or acceptance of the Contractor's field notes or layout work does not relieve the

Contractor of his responsibility to achieve the lines, grades, and dimensions shown in the Contract Documents.

Prior to final acceptance of the project, mark, in a permanent manner on the surface of the completed work, all horizontal control points originally furnished by the County.

**5-7.6 Global Navigation Satellite Systems (GNSS) Work Plan:** If used, submit a comprehensive written GNSS Work Plan to the Director for County review and acceptance at the preconstruction conference or at least 30 days before starting work using GNSS. Update the plan as necessary during construction and notify the County of all changes. The GNSS Work Plan shall describe how GNSS enabled Automated Machine Guidance technology will be integrated into other technologies employed on the project. At a minimum, the GNSS Work Plan will include the following:

1. Designate which portions of the Contract will be done using GNSS enabled Automated Machine Guidance and which portions will be constructed using conventional survey methodology.

2. Describe the manufacturer, model, and software version of the GNSS equipment.

3. Provide information on the qualifications of Contractor staff. Include formal training and field experience. Designate a single staff person as the primary contact for GNSS technology issues.

4. Describe how project control will be established. Include a list and map showing control points enveloping the site.

5. Describe site calibration procedures. Include a map of the control points used for site calibration and control points used to validate the site calibration. Describe the frequency of site calibration and how site calibration will be documented. At a minimum, verify the site calibration twice daily.

6. Describe the Contractor's quality control procedures for verifying mechanical calibration and maintenance of construction and guidance equipment. Include the frequency and type of verification performed to ensure the constructed grades conform to the Contract Documents.

Keep on site and provide upon request, a copy of the project's most up-to-date GNSS Work Plan at the project site.

**5-7.7 Payment:** Include the cost of performing layout work as described above in the Contract unit prices for the various items of work that require layout.

## **5-8 Contractor's Supervision.**

**5-8.1 Prosecution of Work:** Give the work the constant attention necessary to ensure the scheduled progress, and cooperate fully with the Director and with other contractors at work in the vicinity.

**5-8.2 Contractor's Superintendent:** Maintain a competent superintendent at the site at all times while work is in progress to act as the Contractor's agent. Provide a superintendent who is a competent superintendent capable of properly interpreting the Contract Documents and is thoroughly experienced in the type of work being performed. Provide a superintendent with the full authority to receive instructions from the Director and to execute the orders or directions of the Director, including promptly supplying any materials, tools, equipment, labor, and incidentals that may be required. Provide such superintendence regardless of the amount of work sublet.

Provide a superintendent who speaks and understands English, and maintain at least one other responsible person who speaks and understands English, on the project during all working hours.

**5-8.3 Supervision for Emergencies:** Provide a responsible person, who speaks and understands English, and who is available at or reasonably near the worksite on a 24 hour basis, seven days a week. Designate this person as the point of contact for emergencies and in cases that require immediate action to maintain traffic or to resolve any other problem that might arise. Submit the phone numbers and names of personnel designated to be contacted in cases of emergencies, along with a description of the project location, to the Florida Highway Patrol and all other local law enforcement agencies.

## **5-9 General Inspection Requirements.**

**5-9.1 Cooperation by Contractor:** Do not perform work or furnish materials without obtaining inspection by the Director. Provide the Director with safe means of access to the work, so the Director can determine whether the work performed and materials used are in accordance with the requirements and intent of the Contract Documents. If the Director so requests at any time before final acceptance of the work, remove or uncover such portions of the finished work as directed. After examination, restore the uncovered portions of the work to the standard required by the Contract Documents. If the Director determines that the work so exposed or examined is unacceptable, perform the uncovering or removal, and the replacing of the covering or making good of the parts removed, at no expense to the County. However, if the Director determines that the work thus exposed or examined is acceptable, the County will pay for the uncovering or removing, and the replacing of the covering or making good of the parts removed in accordance with Section 4-4.

**5-9.2 Failure of Director to Reject Work During Construction:** If, during or prior to construction operations, the Director fails to reject defective work or materials, whether from lack of discovery of such defect or for any other reason, such initial failure to reject in no way prevents the later rejection when such defect is discovered, or obligates the County to final acceptance. The County is not responsible for losses suffered due to any necessary removals or repairs of such defects.

**5-9.3 Failure to Remove and Renew Defective Materials and Work:** If the Contractor fails or refuses to remove and renew any defective materials used or work performed, or to make any necessary repairs in an acceptable manner and in accordance with the requirements of the Contract within the time indicated in writing, the Director has the authority to repair, remove, or renew the unacceptable or defective materials or work as necessary, all at the Contractor's expense. The County will obtain payment for any expense it incurs in making these repairs, removals, or renewals, that the Contractor fails or refuses to make, by deducting such expenses from any moneys due or which may become due the Contractor, or by charging such amounts against the Contract bond.

**5-9.4 Inspection by Federal Government:** When the United States Government or the State of Florida pays a portion of the cost of construction, its representatives may inspect the construction work as they deem necessary. However, such inspection will in no way make the Federal Government or the State of Florida a party to the Contract.

## **5-10 Final Inspection.**

**5-10.1 Maintenance until Acceptance:** Maintain all Work until the Director has given final acceptance in accordance with 5-11.

**5-10.2 Inspection for Acceptance:** Upon submittal of written notification that all Contract Work, or all Contract Work on the portion of the Contract scheduled for acceptance, has been completed, the Director will make an inspection for acceptance. The inspection will be made within seven days of such notification. If the Director finds that all work has been satisfactorily completed, the County will consider such inspection as the final inspection. If any or all of the Work is found to be unsatisfactory, the Director will detail the remedial work required to achieve acceptance. Immediately perform such remedial work. Subsequent inspections will be made on the remedial work until the Director accepts all Work.

Upon satisfactory completion of the Work, the County will submit written notice of acceptance, either partial or final, to the Contractor.

Until final acceptance in accordance with 5-11, replace or repair any damage to the accepted Work. Payment of such work will be as provided in 7-14.

**5-10.3 Partial Acceptance:** At the Director's sole discretion, the Director may accept any portion of the Work under the provisions of 5-10.2.

**5-10.4 Conditional Acceptance:** The Director will not make, or consider requests for conditional acceptance of a project.

### **5-11 Final Acceptance.**

When, upon completion of the final construction inspection of the entire project, the Director determines that the Contractor has satisfactorily completed the work, the Director will submit written notice of final acceptance to the Contractor.

### **5-12 Claims by Contractor.**

**5-12.1 General:** When the Contractor deems that extra compensation or a time extension is due beyond that agreed to by the Director, whether due to delay, additional work, altered work, differing site conditions, breach of Contract, or for any other cause, the Contractor shall follow the procedures set forth herein for preservation, presentation and resolution of the claim.

Submission of timely notice of intent to file a claim, preliminary time extension request, time extension request, and the certified written claim, together with full and complete claim documentation, are each a condition precedent to the Contractor bringing any circuit court, arbitration, or other formal claims resolution proceeding against the County for the items and for the sums or time set forth in the Contractor's certified written claim. The failure to provide such notice of intent, preliminary time extension request, time extension request, certified written claim and full and complete claim documentation within the time required shall constitute a full, complete, absolute and irrevocable waiver by the Contractor of any right to additional compensation or a time extension for such claim.

#### **5-12.2 Notice of Claim:**

**5-12.2.1 Claims For Extra Work:** Where the Contractor deems that additional compensation or a time extension is due for work or materials not expressly provided for in the Contract or which is by written directive expressly ordered by the Director pursuant to 4-3, the Contractor shall submit written notification to the Director of the intention to make a claim for additional compensation before beginning the work on which the claim is based, and if seeking a time extension, the Contractor shall also submit a preliminary request for time extension pursuant to 8-7.3.2 within ten calendar days after commencement of a delay and a request for Contract Time extension pursuant to 8-7.3.2 within thirty calendar days after the elimination of the delay. If such written notification is not submitted and the Director is not afforded the opportunity for keeping strict account of actual labor, material, equipment, and time, the

Contractor waives the claim for additional compensation or a time extension. Such notice by the Contractor, and the fact that the Director has kept account of the labor, materials and equipment, and time, shall not in any way be construed as establishing the validity of the claim or method for computing any compensation or time extension for such claim. On projects with an original Contract amount of \$3,000,000 or less within 90 calendar days after final acceptance of the project in accordance with 5-11, and on projects with an original Contract amount greater than \$3,000,000 within 180 calendar days after final acceptance of the project in accordance with 5-11, the Contractor shall submit full and complete claim documentation as described in 5-12.3 and duly certified pursuant to 5-12.9. However, for any claim or part of a claim that pertains solely to final estimate quantities disputes the Contractor shall submit full and complete claim documentation as described in 5-12.3 and duly certified pursuant to 5-12.9, as to such final estimate claim dispute issues, within 90 or 180 calendar days, respectively, of the Contractor's receipt of the County's final estimate.

If the Contractor fails to submit a certificate of claim as described in 5-12.9, the County will so notify the Contractor in writing. The Contractor shall have ten calendar days from receipt of the notice to resubmit the claim documentation, without change, with a certificate of claim as described in 5-12.9, without regard to whether the resubmission is within the applicable 90 or 180 calendar day deadline for submission of full and complete claim documentation. Failure by the Contractor to comply with the ten calendar day notice shall constitute a waiver of the claim.

**5-12.2.2 Claims For Delay:** Where the Contractor deems that additional compensation or a time extension is due on account of delay, differing site conditions, breach of Contract, or any other cause other than for work or materials not expressly provided for in the Contract (Extra Work) or which is by written directive of the Director expressly ordered by the Director pursuant to 4-3, the Contractor shall submit a written notice of intent to the Director within ten days after commencement of a delay to a controlling work item expressly notifying the Director that the Contractor intends to seek additional compensation, and if seeking a time extension, the Contractor shall also submit a preliminary request for time extension pursuant to 8-7.3.2 within ten calendar days after commencement of a delay to a controlling work item, as to such delay and providing a reasonably complete description as to the cause and nature of the delay and the possible impacts to the Contractor's work by such delay, and a request for Contract Time extension pursuant to 8-7.3.2 within thirty calendar days after the elimination of the delay. On projects with an original Contract amount of \$3,000,000 or less within 90 calendar days after final acceptance of the project in accordance with 5-11, and on projects with an original Contract amount greater than \$3,000,000 within 180 calendar days after final acceptance of the project in accordance with 5-11, the Contractor shall submit full and complete documentation as described in 5-12.3 and duly certified pursuant to 5-12.9.

If the Contractor fails to submit a certificate of claim as described in 5-12.9, the County will so notify the Contractor in writing. The Contractor shall have ten calendar days from receipt of the notice to resubmit the claim documentation, without change, with a certificate of claim as described in 5-12.9, without regard to whether the resubmission is within the applicable 90 or 180 calendar day deadline for submission of full and complete claim documentation. Failure by the Contractor to comply with the ten calendar day notice shall constitute a waiver of the claim.

There shall be no Contractor entitlement to any monetary compensation or time extension for any delays or delay impacts, whatsoever, that are not to a controlling work

item, and then as to any such delay to a controlling work item entitlement to any monetary compensation or time extension shall only be to the extent such is otherwise provided for expressly under 4-3 or 5-12, except that in the instance of delay to a non-controlling item of work the Contractor may be compensated for the direct costs of idle labor or equipment only, at the rates set forth in 4-3.2.1(1) and (3), and then only to the extent the Contractor could not reasonably mitigate such idleness.

**5-12.3 Content of Written Claim:** As a condition precedent to the Contractor being entitled to additional compensation or a time extension under the Contract, for any claim, the Contractor shall submit a certified written claim to the County which will include for each individual claim, at a minimum, the following information:

1. A detailed factual statement of the claim providing all necessary dates, locations, and items of work affected and included in each claim;
2. The date or dates on which actions resulting in the claim occurred or conditions resulting in the claim became evident;
3. Identification of all pertinent documents and the substance of any material oral communications relating to such claim and the name of the persons making such material oral communications;
4. Identification of the provisions of the Contract which support the claim and a statement of the reasons why such provisions support the claim, or alternatively, the provisions of the Contract which allegedly have been breached and the actions constituting such breach;
5. A detailed compilation of the amount of additional compensation sought and a breakdown of the amount sought as follows:
  - a. documented additional job site labor expenses;
  - b. documented additional cost of materials and supplies;
  - c. a list of additional equipment costs claimed, including each piece of equipment and the rental rate claimed for each;
  - d. any other additional direct costs or damages and the documents in support thereof;
  - e. any additional indirect costs or damages and all documentation in support thereof.
6. A detailed compilation of the specific dates and the exact number of calendar days sought for a time extension, the basis for entitlement to time for each day, all documentation of the delay, and a breakout of the number of days claimed for each identified event, circumstance or occurrence.

Further, the Contractor shall be prohibited from amending either the bases of entitlement or the amount of any compensation or time stated for any and all issues claimed in the Contractor's written claim submitted hereunder, and any circuit court, arbitration, or other formal claims resolution proceeding shall be limited solely to the bases of entitlement and the amount of any compensation or time stated for any and all issues claimed in the Contractor's written claim submitted hereunder. This shall not, however, preclude a Contractor from withdrawing or reducing any of the bases of entitlement and the amount of any compensation or time stated for any and all issues claimed in the Contractor's written claim submitted hereunder at any time.

**5-12.4 Action on Claim:** The Director will respond in writing on projects with an original Contract amount of \$3,000,000 or less within 90 calendar days of receipt of a complete claim submitted by a Contractor in compliance with 5-12.3, and on projects with an original



Contract amount greater than \$3,000,000 within 120 calendar days of receipt of a complete claim submitted by a Contractor in compliance with 5-12.3. Failure by the Director to respond to a claim in writing within 90 or 120 days, respectively, after receipt of a complete claim submitted by the Contractor in compliance with 5-12.3 constitutes a denial of the claim by the Director. If the Director finds the claim or any part thereof to be valid, such partial or whole claim will be allowed and paid for to the extent deemed valid and any time extension granted, if applicable, as provided in the Contract. No circuit court proceedings on any claim, or a part thereof, may be filed until after final acceptance per 5-11 of all Contract work by the County or denial hereunder, whichever occurs last.

**5-12.5 Pre-Settlement and Pre-Judgment Interest:** Entitlement to any pre-settlement or pre-judgment interest on any claim amount determined to be valid subsequent to the County's receipt of a certified written claim in full compliance with 5-12.3, whether determined by a settlement or a final ruling in formal proceedings, the County shall pay to the Contractor simple interest calculated at the Prime Rate (as reported by the Wall Street Journal as the base rate on corporate loans posted by at least 75% of the nations 30 largest banks) as of the 60th calendar day following the County's receipt of a certified written claim in full compliance with 5-12.3, such interest to accrue beginning 60 calendar days following the County's receipt of a certified written claim in full compliance with 5-12.3 and ending on the date of final settlement or formal ruling.

**5-12.6 Compensation for Extra Work or Delay:**

**5-12.6.1 Compensation for Extra Work:** Notwithstanding anything to the contrary contained in the Contract Documents, the Contractor shall not be entitled to any compensation beyond that provided for in 4-3.2.

**5-12.6.2 Compensation for Delay:** Notwithstanding anything to the contrary contained in the Contract Documents, the additional compensation set forth in 5-12.6.2.1 shall be the Contractor's sole monetary remedy for any delay other than to perform extra work caused by the County unless the delay shall have been caused by acts constituting willful or intentional interference by the County with the Contractor's performance of the work and then only where such acts continue after Contractor's written notice to the County of such interference. The parties anticipate that delays may be caused by or arise from any number of events during the term of the Contract, including, but not limited to, work performed, work deleted, supplemental agreements, work orders, disruptions, differing site conditions, utility conflicts, design changes or defects, time extensions, extra work, right-of-way issues, permitting issues, actions of suppliers, subcontractors or other contractors, actions by third parties, suspensions of work by the Director pursuant to 8-6.1, shop drawing approval process delays, expansion of the physical limits of the project to make it functional, weather, weekends, holidays, special events, suspension of Contract Time, or other events, forces or factors sometimes experienced in construction work. Such delays or events and their potential impacts on the performance by the Contractor are specifically contemplated and acknowledged by the parties in entering into this Contract, and shall not be deemed to constitute willful or intentional interference with the Contractor's performance of the work without clear and convincing proof that they were the result of a deliberate act, without reasonable and good-faith basis, and specifically intended to disrupt the Contractor's performance.

**5-12.6.2.1 Compensation for Direct Costs, Indirect Costs, Expenses, and Profit thereon, of or from Delay:** For any delay claim, the Contractor shall be entitled to monetary compensation for the actual idle labor and equipment, and indirect costs, expenses, and

profit thereon, as provided for in 4-3.2.1(4) and solely for costs incurred beyond what reasonable mitigation thereof the Contractor could have undertaken.

**5-12.7 Mandatory Claim Records:** After submitting to the Director a notice of intent to file a claim for extra work or delay, the Contractor must keep daily records of all labor, material and equipment costs incurred for operations affected by the extra work or delay. These daily records must identify each operation affected by the extra work or delay and the specific locations where work is affected by the extra work or delay, as nearly as possible. The Director may also keep records of all labor, material and equipment used on the operations affected by the extra work or delay. The Contractor shall, once a notice of intent to claim has been timely filed, and not less than weekly thereafter as long as appropriate, submit the Contractor's daily records to the Director and be likewise entitled to receive the County's daily records. The daily records to be submitted hereunder shall be done at no cost to the recipient.

**5-12.8 Claims For Acceleration:** The County shall have no liability for any constructive acceleration of the work, nor shall the Contractor have any right to make any claim for constructive acceleration nor include the same as an element of any claim the Contractor may otherwise submit under this Contract. If the Director gives express written direction for the Contractor to accelerate its efforts, such written direction will set forth the prices and other pertinent information and will be reduced to a written Contract Document promptly. No payment will be made on a Supplemental Agreement for acceleration prior to the County's approval of the documents.

**5-12.9 Certificate of Claim:** When submitting any claim, the Contractor shall certify under oath and in writing, in accordance with the formalities required by Florida law, that the claim is made in good faith, that the supportive data are accurate and complete to the Contractor's best knowledge and belief, and that the amount of the claim accurately reflects what the Contractor in good faith believes to be the County's liability. Such certification must be made by an officer or director of the Contractor with the authority to bind the Contractor.

**5-12.10 Non-Recoverable Items:** The parties agree that for any claim the County will not have liability for the following items of damages or expense:

1. Loss of profit, incentives or bonuses;
2. Any claim for other than extra work or delay;
3. Consequential damages, including, but not limited to, loss of bonding capacity, loss of bidding opportunities, loss of credit standing, cost of financing, interest paid, loss of other work or insolvency;
4. Acceleration costs and expenses, except where the County has expressly and specifically directed the Contractor in writing "to accelerate at the County's expense"; nor
5. Attorney fees, claims preparation expenses and costs of litigation.

**5-12.11 Exclusive Remedies:** Notwithstanding any other provision of this Contract, the parties agree that the County shall have no liability to the Contractor for expenses, costs, or items of damages other than those which are specifically identified as payable under 5-12. In the event any legal action for additional compensation, whether on account of delay, acceleration, breach of contract, or otherwise, the Contractor agrees that the County's liability will be limited to those items which are specifically identified as payable in 5-12.

**5-12.12 Settlement Discussions:** The content of any discussions or meetings held between the County and the Contractor to settle or resolve any claims submitted by the Contractor against the County shall be inadmissible in any legal, equitable, or administrative proceedings brought by the Contractor against the County for payment of such claim.

**5-12.13 Personal Liability of Public Officials:** In carrying out any of the provisions of the Contract, Director or any of their respective employees or agents, there shall be no liability on behalf of any employee, officer or official of the County for which such individual is responsible, either personally or as officials or representatives of the County. It is understood that in all such matters such individuals act solely as agents and representatives of the County.

**5-12.14 Auditing of Claims:** All claims filed against the County shall be subject to audit at any time following the filing of the claim, whether or not such claim is part of a suit pending in the Courts of this State. The audit may be performed, at the County's sole discretion, by employees of the County or by any independent auditor appointed by the County, or both. The audit may begin after ten days written notice to the Contractor, subcontractor, or supplier. The Contractor, subcontractor, or supplier shall make a good faith effort to cooperate with the auditors. As a condition precedent to recovery on any claim, the Contractor, subcontractor, or supplier must retain sufficient records, and provide full and reasonable access to such records, to allow the County's auditors to verify the claim and failure to retain sufficient records of the claim or failure to provide full and reasonable access to such records shall constitute a waiver of that portion of such claim that cannot be verified and shall bar recovery thereunder. Further, and in addition to such audit access, upon the Contractor submitting a written claim, the County shall have the right to request and receive, and the Contractor shall have the affirmative obligation to submit to the County any and all documents in the possession of the Contractor or its subcontractors, materialmen or suppliers as may be deemed relevant by the County in its review of the basis, validity or value of the Contractor's claim.

Without limiting the generality of the foregoing, the Contractor shall upon written request of the County make available to the County's auditors, or upon the County's written request, submit at the County's expense, any or all of the following documents:

1. Daily time sheets and foreman's daily reports and diaries;
2. Insurance, welfare and benefits records;
3. Payroll register;
4. Earnings records;
5. Payroll tax return;
6. Material invoices, purchase orders, and all material and supply acquisition contracts;
7. Material cost distribution worksheet;
8. Equipment records (list of company owned, rented or other equipment used);
9. Vendor rental agreements and subcontractor invoices;
10. Subcontractor payment certificates;
11. Canceled checks for the project, including, payroll and vendors;
12. Job cost report;
13. Job payroll ledger;
14. General ledger, general journal, (if used) and all subsidiary ledgers and journals together with all supporting documentation pertinent to entries made in these ledgers and journals;
15. Cash disbursements journal;
16. Financial statements for all years reflecting the operations on this project;

17. Income tax returns for all years reflecting the operations on this project;

18. All documents which reflect the Contractor's actual profit and overhead during the years this Contract was being performed and for each of the five years prior to the commencement of this Contract;

19. All documents related to the preparation of the Contractor's bid including the final calculations on which the bid was based;

20. All documents which relate to each and every claim together with all documents which support the amount of damages as to each claim;

21. Worksheets used to prepare the claim establishing the cost components for items of the claim including, but not limited to, labor, benefits and insurance, materials, equipment, subcontractors, and all documents that establish which time periods and individuals were involved, and the hours and rates for such individuals.

**5-13 Recovery Rights, Subsequent to Final Payment.**

The County reserves the right, if it discovers an error in the partial or final estimates, or if it discovers that the Contractor performed defective work or used defective materials, after the final payment has been made, to claim and recover from the Contractor or his surety, or both, by process of law, such sums as may be sufficient to correct the error or make good the defects in the work and materials.

## SECTION 6 CONTROL OF MATERIALS

### 6-1 Acceptance Criteria.

**6-1.1 General:** Acceptance of materials is based on the following criteria. All requirements may not apply to all materials. Use only materials in the work that meet the requirements of these Specifications. The Director may inspect and test any material, at points of production, distribution and use.

**6-1.2 Sampling and Testing:** Use the FDOT's current sample identification and tracking system to provide related information and attach the information to each sample. Restore immediately any site from which material has been removed for sampling purposes to the pre-sampled condition with materials and construction methods used in the initial construction, at no additional cost to the County.

Ensure when a material is delivered to the location as described in the Contract Documents, there is enough material delivered to take samples, at no expense to the County.

**6-1.2.1 Pretest by Manufacturers:** Submit certified manufacturer's test results to the Director for qualification and use on County projects. Testing will be as specified in the Contract Documents. The County may require that manufacturers submit samples of materials for independent verification purposes.

**6-1.2.2 Point of Production Test:** Test the material during production as specified in the Contract Documents.

**6-1.2.3 Point of Distribution Test:** Test the material at Distribution facilities as specified in the Contract Documents.

**6-1.2.4 Point of Use Test:** Test the material immediately following placement as specified in the Specifications. After delivery to the project, the County may require the retesting of materials that have been tested and accepted at the source of supply, or may require the testing of materials that are to be accepted by manufacturer certification. The County may reject all materials that, when retested, do not meet the requirements of these Specifications.

### 6-1.3 Certification:

**6-1.3.1 Manufacturer Material Certification:** Submit material certifications for all materials to the Director for approval when required by the Specifications. Materials will not be considered for payment when not accompanied by a material certification. Sample material certification forms are available on FDOT's website at the following URL: [http://www.fdot.gov/materials/administration/resources/library/publications/certifications/sample\\_forms.shtml](http://www.fdot.gov/materials/administration/resources/library/publications/certifications/sample_forms.shtml) . Ensure that the material certification follows the format of the sample form, is submitted on the manufacturer's letterhead and is signed by a legally responsible person employed by the manufacturer.

**6-1.3.1.1 FDOT Approved Product List:** The FDOT Approved Products List (APL) is a database that provides assurance to Contractors, consultants, designers, and County personnel that specific products and materials are approved for use on County facilities. The County will limit the Contractor's use of products and materials that require use of APL items to those listed on the FDOT APL effective at the time of placement. Where the terms Qualified Products List (QPL) appear in the Contract Documents, they will be synonymous with Approved Product List (APL).

Manufacturers seeking to have a product evaluated for the FDOT APL must do so through coordination with FDOT. Information on the process may be obtained

on the FDOT website at the following URL:  
<http://www.fdot.gov/programmanagement/ProductEvaluation/Default.shtm>

**6-1.3.2 Contractor Installation Certification:** Submit installation certifications as required by the Contract Documents.

## **6-2 Applicable Documented Authorities Other Than Specifications.**

**6-2.1 General:** Details on individual materials are identified in various material specific Sections of the Specifications that may refer to other documented authorities for requirements. When specified, meet the requirements as defined in such references.

**6-2.2 Test Methods:** Methods of sampling and testing materials are in accordance with the Florida Methods (FM). If an FM does not exist for a particular test, perform the testing in accordance with the method specified in the Specification. When test methods or other standards are referenced in the Specifications without identification of the specific time of issuance, use the most current issuance, including interims or addendums thereto, at the time of bid opening.

**6-2.3 Construction Aggregates:** Aggregates used on County projects must be in accordance with Rule 14-103, FAC.

## **6-3 Storage of Materials and Samples.**

**6-3.1 Method of Storage:** Store materials in such a manner as to preserve their quality and fitness for the work, to facilitate prompt inspection, and to minimize noise impacts on sensitive receivers. More detailed specifications concerning the storage of specific materials are prescribed under the applicable Specifications. The County may reject improperly stored materials.

**6-3.2 Use of Right-of-Way for Storage:** If the Director allows, the Contractor may use a portion of the right-of-way for storage purposes and for placing the Contractor's plant and equipment. Use only the portion of the right-of-way that is outside the clear zone, which is the portion not required for public vehicular or pedestrian travel. When used, restore the right-of-way to pre-construction condition at no additional cost to the County or as specified in the Contract Documents. Provide any additional space required at no expense to the County.

**6-3.3 Responsibility for Stored Materials:** Accept responsibility for the protection of stored materials. The County is not liable for any loss of materials, by theft or otherwise, or for any damage to the stored materials.

**6-3.4 Storage Facilities for Samples:** Provide facilities for storage of samples as described in the Contract Documents and warranted by the test methods and Specifications.

## **6-4 Defective Materials.**

Materials not meeting the requirements of these Specifications will be considered defective. The Director will reject all such materials, whether in place or not. Remove all rejected material immediately from the site of the work and from storage areas, at no expense to the County.

Do not use material that has been rejected, until the Director has approved the material's use. Upon failure to comply promptly with any order of the Director made under the provisions of this Article, the Director has the authority to have the defective material removed and replaced by other forces and deduct the cost of removal and replacement from any moneys due or to become due the Contractor.

**6-4.1 Engineering Analysis:** As an exception to the above, within 30 calendar days of the termination of the LOT or rejection of the material, the Contractor may submit to the

Director a proposed Engineering Analysis Scope to determine the disposition of the material. The Engineering Analysis Scope must contain at a minimum:

1. Description of the defective materials.
2. Supporting information, testing or inspection reports with nonconformities, pictures, drawings, and accurately dimensioned deficiency maps as necessary. For cracked elements, provide drawings showing the location, average width, depth, length, and termination points of each crack along the surfaces. Provide the distance from each termination point to a fixed reference point on the component, such as beam end or edge of flange.
3. Proposed approach of investigation and analysis.
4. Name and credentials of the proposed Specialty Engineer or Contractor's Engineer of Record who will perform the engineering analysis.
5. Proposed testing laboratories, qualified in accordance with Section 105-7.

Upon approval of the Engineering Analysis Scope by the Director, the Specialty Engineer or Contractor's Engineer of Record may perform the engineering analysis as defined in the approved scope and submit a signed and sealed Engineering Analysis Report (EAR) to the Director. The EAR must contain at a minimum:

1. The approved Engineering Analysis Scope.
2. Any investigations performed and the associated results obtained.
3. Analysis and conclusion.
4. Proposed disposition of the material, addressing the performance and durability of the proposed action.

Provide as appropriate:

1. Written evidence of a previously approved comparable deficiency and its repair.
2. Documented research demonstrating the effectiveness of the proposed repair.
3. Engineering calculations.

A Specialty Engineer, who is an independent consultant, or the Contractor's Engineer of Record as stated within each individual Section shall perform any such analysis within 45 calendar days of the Director's approval of the Engineering Analysis Scope, complete and submit the EAR. The EAR must be signed and sealed by the Specialty Engineer or the Contractor's Engineer of Record that performed the engineering analysis. The Director will determine the final disposition of the material after review of the EAR. No additional monetary compensation or time extension will be granted for the impact of any such analysis or review.

6-5 Products and Source of Supply.

**6-5.1 Source of Supply—Convict Labor (Designated Federal-Aid Contracts Only):**

Do not use materials that were produced after July 1, 1991, by convict labor for Federal-aid highway construction projects unless the prison facility has been producing convict-made materials for Federal-aid highway construction projects before July 1, 1987.

Use materials that were produced prior to July 2, 1991, by convicts on Federal-aid highway construction projects free from the restrictions placed on the use of these materials by 23 U.S.C. 114. The County will limit the use of materials produced by convict labor for use in Federal-aid highway construction projects to:

1. Materials produced by convicts on parole, supervised release, or probation from a prison or,

2. Materials produced in a qualified prison facility.

The amount of such materials produced for Federal-aid highway construction during any 12-month period shall not exceed the amount produced in such facility for use in such construction during the 12-month period ending July 1, 1987.

**6-5.2 Source of Supply-Steel (Designated State or Federal-Aid Contracts Only):** Use steel and iron manufactured in the United States, in accordance with the Buy America provisions of 23 CFR 635.410, as amended. Ensure that all manufacturing processes for this material occur in the United States. As used in this specification, a manufacturing process is any process that modifies the chemical content, physical shape or size, or final finish of a product, beginning with the initial melting and continuing through the final shaping and coating. If a steel or iron product is taken outside the United States for any manufacturing process, it becomes foreign source material. When using steel or iron materials as a component of any manufactured product (e.g., concrete pipe, prestressed beams, corrugated steel pipe, etc.), these same provisions apply. Foreign steel and iron may be used when the total actual cost of such foreign materials does not exceed 0.1% of the total Contract amount or \$2,500, whichever is greater. These requirements are applicable to all steel and iron materials incorporated into the finished work, but are not applicable to steel and iron items that the Contractor uses but does not incorporate into the finished work. Submit a certification from the manufacturer of steel or iron, or any product containing steel or iron, stating that all steel or iron furnished or incorporated into the furnished product was produced and manufactured in the United States or a statement that the product was produced within the United States except for minimal quantities of foreign steel and iron valued at \$ (actual cost). Submit each such certification to the Director prior to incorporating the material or product into the project. Prior to the use of foreign steel or iron materials on a project, submit invoices to document the actual cost of such material, and obtain the Director's written approval prior to incorporating the material into the project

**6-5.3 Contaminated, Unfit, Hazardous, and Dangerous Materials:** Do not use any material that, after approval and/or placement, has in any way become unfit for use. Do not use materials containing any substance that has been determined to be hazardous by the State of Florida County of Environmental Protection or the U.S. Environmental Protection Agency (EPA). Provide workplaces free from serious recognized hazards and to comply with occupational safety and health standards, as determined by the U.S. County of Labor Occupational Safety and Health Administration (OSHA).



## SECTION 7 LEGAL REQUIREMENTS AND RESPONSIBILITY TO THE PUBLIC

### 7-1 Laws to be Observed.

**7-1.1 General:** Become familiar with and comply with all Laws and Regulations, including all Federal, State, and Local Rules and Regulations that control the action or operation of those engaged or employed in the work or that affect material used. Pay particular attention called to the safety regulations promulgated by the U.S. Department of Labor, Occupational Safety and Health Administration (OSHA). In addition, comply with Chapter 403, of the Florida Statutes, regarding control of air pollution. Direct special attention to that portion of Chapter 62-256, Rules of the Department of Environmental Protection, Florida Administrative Code, pertaining to open burning in land clearing operations. Where work or structures included in the Contract are in “Navigable Waters of the U.S.,” (reference 33 of the Code of Federal Regulations, Part 329); “Waters of the U.S.,” (reference 33 of the Code of Federal Regulations, Parts 323 and 328); or “Waters of the State,” (reference Part 4, Chapters 253 and 373 of the Florida Statutes and Section 62-340 of the Florida Administrative Code); comply with the regulatory provisions of Section 404 of the Federal Clean Water Act of 1977; Sections 9 and 10 of the Federal River and Harbor Act of 1899; Chapter 161 of the Florida Statutes; and any local authority having jurisdiction over such waters.

Obtain certification from the Construction Industry Licensing Board as required by Part I, Chapter 489, of the Florida Statutes, regardless of exemptions allowed by subsection 489.103, prior to removing underground pollutant storage tanks. Dispose of tanks and pollutants in accordance with the requirements and regulations of any Federal, State, or local, agency having jurisdiction.

Prior to building construction or renovation, submit current registrations or certifications issued by the Florida Construction Industry Licensing Board in accordance with Chapter 489, for the appropriate category of construction.

Corporations must be registered with the State of Florida, Department of State, Division of Corporations, and hold a current State Corporate Charter Number in accordance with Chapter 607, Florida Statutes.

The Contractor or the authorized subcontractor applying the roofing material must be licensed or be an approved dealer and applicator of the proposed roofing material.

Indemnify, defend, and save harmless the County and all of its officers, agents, and employees, in the amount of the Contract price, against all claims or liability arising from or based on the violation of any such Federal, State, and Local Rules and Regulations, whether by himself or his employees.

The Contractor shall comply with all environmental permits, including measures identified in the National Pollutant Discharge Elimination System (NPDES) Stormwater Pollution Prevention Plan and Sediment and Erosion Control Plan for the work. The Contractor’s attention is also directed to the applicable regulations of the South Florida Water Management District.

The Lee County Noise Control Ordinance is in effect regulating noise generated from construction activity associated with the project. The Contractor shall comply with the requirements therein.

The Contractor shall exert every reasonable and diligent effort to ensure that all labor employed by the Contractor and his subcontractors for work on the project work harmoniously and

compatibly with all labor used by other building and construction contractors now or hereafter on the site of the work covered by this Contract. Include this provision in all subcontracts, and require all subcontractors to include it in their subcontracts with others. However, do not interpret or enforce this provision so as to deny or abridge, on account of membership or non-membership in any labor union or labor organization, the right of any person to work as guaranteed by Article I, Section 6 of the Florida Constitution.

Comply with Chapter 556 of the Florida Statutes during the performance of excavation or demolition operations.

The Executive Order 11246 Electronic version, dated September 24, 1965 is posted on FDOT's website at the following URL address:

<http://www.fdot.gov/programmanagement/Implemented/URLinSpecs/Files/deo11246.pdf>

Take responsibility to obtain the information posted on this website up through five calendar days before the opening of bids and comply with the provisions contained in Executive Order 11246.

If the FDOT's website cannot be accessed, contact the FDOT's Specifications Office Web Coordinator at (850) 414-4101.

**7-1.2 Plant Quarantine Regulations:** The U.S. Department of Agriculture and the Florida Department of Agriculture and Consumer Services have issued quarantine regulations pertaining to control of the nematodes of citrus, Rule 5B-44, Florida Administrative Code, and other plant pests. Contact the local (or other available) representatives of the Animal and Plant Health Inspection Service of the U.S. Department of Agriculture, and the Division of Plant Industry of the Florida Department of Agriculture and Consumer Services to ascertain all current restrictions regarding plant pests that are imposed by these agencies. Keep advised of current quarantine boundary lines throughout the construction period.

These restrictions may affect operations in connection with such items as clearing and grubbing, earthwork, grassing and mulching, sodding, landscaping, and other items which might involve the movement of materials containing plant pests across quarantine lines.

Obtain quarantine regulations and related information from the following:

Animal and Plant Health Inspection Service  
U.S. Department of Agriculture  
3029 Lake Alfred Road  
Winter Haven, Florida 33881

Director, Division of Plant Industry  
Florida Department of Agriculture and Consumer Services  
Post Office Box 147100  
Gainesville, Florida 32614-7100

**7-1.3 Introduction or Release of Prohibited Aquatic Plants, Plant Pests, or Noxious Weeds:** Do not introduce or release prohibited aquatic plants, plant pests, or noxious weeds into the project limits as a result of clearing and grubbing, earthwork, grassing and mulching, sodding, landscaping, or other such activities. Immediately notify the Director upon discovery of all prohibited aquatic plants, plant pests, or noxious weeds within the project limits. Do not move prohibited aquatic plants, plant pests, or noxious weeds within the project limits or to locations outside of the project limits without the Director's permission. Maintain all borrow material brought onto the project site free of prohibited aquatic plants, plant pests, noxious weeds, and their

reproductive parts. Refer to Rule 16C-52 and Rule 5B-57, of the Florida Administrative Code for the definition of prohibited aquatic plants, plant pests, and noxious weeds.

**7-1.4 Compliance with Federal Endangered Species Act and other Wildlife Regulations:**

The Federal Endangered Species Act requires that the County investigate the potential impact to a threatened or endangered species prior to initiating an activity performed in conjunction with a road construction project. If the County's investigation determines that there is a potential impact to a protected, threatened or an endangered species, the County will conduct an evaluation to determine what measures may be necessary to mitigate such impact. When mitigation measures and/or special conditions are necessary, these measures and conditions will be addressed in the Contract Documents or in permits as identified in 7-2.1.

In addition, in cases where certain protected, threatened or endangered species are found or appear within close proximity to the project boundaries, the County has established guidelines that will apply when interaction with certain species occurs, absent of any special mitigation measures or permit conditions otherwise identified for the project.

These guidelines are posted at the following URL address: <http://www.fdot.gov/programmanagement/Implemented/URLinSpecs/files/endangeredwildlifeguidelines.pdf>.

Take responsibility to obtain this information and take all actions and precautions necessary to comply with the conditions of these guidelines during all project activities.

Prior to establishing any off-project activity in conjunction with a project, notify the Director of the proposed activity. Covered activities include but are not necessarily limited to borrow pits, concrete or asphalt plant sites, disposal sites, field offices, and material or equipment storage sites. Include in the notification the Project Number, Financial Project ID, a description of the activity, the location of the site by township, range, section, county, and city, a site location map including the access route, the name of the property owner, and a person to contact to arrange a site inspection. Submit this notification at least 30 days in advance of planned commencement of the off-site activity, to allow for the County to conduct an investigation without delaying job progress.

Do not perform any off-project activity without obtaining written clearance from the Director. In the event the County's investigation determines a potential impact to a protected, threatened or endangered species and mitigation measures or permits are necessary, coordinate with the appropriate resource agencies for clearance, obtain permits and perform mitigation measures as necessary. Immediately notify the Director in writing of the results of this coordination with the appropriate resource agencies. Additional compensation or time will not be allowed for permitting or mitigation, associated with Contractor initiated off-project activities. The Contractor shall maintain at the jobsite written proof of authorization for the use of any off-project property in conjunction with the project. All off-project properties shall be maintained in a neat and orderly fashion and then restored to the property owner's satisfaction upon terminating the use associated with the project.

**7-1.5 Occupational Safety and Health Requirements:** The Contractor shall take all precautions necessary for the protection of life, health, and general occupational welfare of all persons, including employees of both the Contractor and the County, until the Contractor has completed the work required under the Contract as provided in 5-10 and 5-11.

Comply at all times with applicable Federal, State, and local laws, provisions, and policies governing safety and health, including 29 CFR 1926, including all subsequent revisions and updates.

**7-1.6 Discovery of an Unmarked Human Burial:** When an unmarked human burial is discovered, immediately cease all activity that may disturb the unmarked human burial and notify the Director. Do not resume activity until specifically authorized by the Director.

**7-1.7 Insecticides, Herbicides and Fertilizers:**

**7-1.7.1 Insecticides and Herbicides:** Use products found on the following website, <http://state.ceris.purdue.edu/>, approved by the Florida Department of Agriculture and Consumer Services. The use of restricted products is prohibited. Do not use any products in the sulfonylurea family of chemicals. Herbicide application by broadcast spraying is not allowed.

Procure any necessary licenses, pay all charges and fees, and give all notices necessary for lawful performance of the work.

Ensure that all insecticides and herbicides are applied in accordance with Chapter 5E-9, Florida Administrative Code. Submit a copy of current certificates to the Director upon request.

Ensure that employees who work with herbicides comply with all applicable Federal, State, and local regulations.

Comply with all regulations and permits issued by any regulatory agency within whose jurisdiction work is being performed. Post all permit placards in a protected, conspicuous location at the work site.

Acquire any permits required for work performed on the rights-of-way within the jurisdiction of National Forests in Florida. Contact the Local National Forest Ranger District, or the United States Department of Agriculture (USDA) office for the proper permits and subsequent approval.

Acquire all permits required for aquatic plant control as outlined in Chapter 62C-20, Florida Administrative Code, Rules of the Florida Department of Environmental Protection. Contact the Regional Field Office of Bureau of Invasive Plant Management of the Florida Department of Environmental Protection for proper permits and subsequent approval. If application of synthetic organo-auxin herbicides is necessary, meet the requirements of Chapter 5E-2, Florida Administrative Code.

**7-1.7.2 Fertilizer:** Ensure that all employees applying fertilizer, possess a current Florida Department of Agriculture and Consumer Services Commercial Applicator license in accordance with Section 482.1562, F.S. Upon request, submit the current certificates to the Director.

**7-1.8 Compliance with Section 4(f) of the USDOT Act (Designated State or Federal-Aid Contracts Only):** Section 4(f) of the USDOT Act prohibits the U. S. Secretary of Transportation from approving a project which requires the use of publicly owned land of a public park, recreation area or a wildlife and waterfowl refuge, or of any historic site of national, state, or local significance unless there is no prudent or feasible alternative to using that land and the program or project includes all possible planning to minimize the harm to the site resulting from the use.

Before undertaking any off-project activity associated with any federally assisted undertaking, ensure that the proposed site does not represent a public park, recreation area, wildlife or waterfowl refuge, or a historic site (according to the results of the Cultural Resources Survey discussed in 120-6.2). If such a site is proposed, notify the Director and provide a description of the proposed off-site activity, Project Number, Financial Project ID, the location of the site by township, range, section, a county or city map showing the site location, including the access route and the name of the property. It is the Contractor's responsibility to submit justification for use of Section 4(f) property that is sufficient for the County, the Florida Department of Transportation and the Federal Highway Administration to make a Section 4(f) determination. Submit this notification

sufficiently in advance of planned commencement of the off-site activity to allow a reasonable time for the Director to conduct an investigation without delaying job progress. Do not begin any off-project activity without obtaining written clearance from the Director.

**7-1.9 Reserved.**

**7-2 Permits and Licenses.**

**7-2.1 General:** Pursuant to Section 218.80, Florida Statutes, the County will pay for all County permits and fees, including license fees, permit fees, impact fees or inspection fees applicable to the Work. Contractor is not responsible for paying for permits issued by the County wherein the Work is to be performed, but is responsible for acquiring all other permits. The County may require the Contractor to deliver internal budget transfer documents to applicable County agencies when the Contractor is acquiring permits. Except for permits procured by the County, as incorporated by Special Provision expanding this Subarticle, if any, the Contractor will procure all permits and licenses, pay all charges and fees, and give all notices necessary and incidental to the due and lawful prosecution of the work.

The County will also acquire any modifications or revisions to an original permit incorporated by Special Provision to this Subarticle when the Contractor requires such modifications or revisions to complete the construction operations specified in the Plans or Special Provisions and within the right-of-way limits.

Acquire all permits for work performed outside the right-of-way or easements for the project.

In carrying out the work in the Contract, when under the jurisdiction of any environmental regulatory agency, comply with all regulations issued by such agencies and with all general, special, and particular conditions relating to construction activities of all permits issued to the County as though such conditions were issued to the Contractor. Post all permit placards in a protected location at the worksite.

The Contractor shall be fully responsible for the execution and adherence to all directives, instructions, conditions, special conditions, and limiting conditions contained in permits specifically issued for the Work and which pertain to or affect the construction phase of this project, and shall be solely responsible for issuance of any Notices required thereby.

In case of a discrepancy between any permit condition and other Contract Documents, the more stringent condition shall prevail.

**7-2.2 Work or Structures in Navigable Waters of the U.S., Waters of the U.S., and Waters of the State:** In general, one or more governmental agencies will exercise regulatory authority over work or structures, including related construction operations, in all tidal areas (channelward of the mean high water lines on the Atlantic and Gulf Coast); in the ocean and gulf waters to the outer limits of the continental shelf; in all rivers, streams, and lakes to the ordinary high water line; in marshes and shallows that are periodically inundated and normally characterized by aquatic vegetation capable of growth and reproduction; in all artificially created channels and canals used for recreational, navigational, or other purposes that are connected to navigable waters; and in all tributaries of navigable waters up to their headwaters.

Whenever the work under or incidental to the Contract requires structures or dredge/fill/construction activities in “Navigable Waters of the U.S.,” “Waters of the U.S.,” and “Waters of the State,” the Federal, State, county, and local regulatory agencies may require the County to obtain a permit. For such dredge/fill /construction specified in the Plans to be

accomplished within the limits of the project, or for any dredge/fill/construction within the limits of County-furnished borrow areas, the County will procure the necessary permits prior to advertising for bids.

**7-2.3 Reserved.**

**7-3 Patented Devices, Materials and Processes.**

Include all royalties and costs arising from patents, trademarks, and copyrights, in any way involved in the work in the Contract price. Whenever using any design, device, material, or process covered by letters patent or copyright, obtain the right for such use by suitable legal agreement with the patentee or owner of the copyright. File a copy of such agreement with the Director. However, whether or not such agreement is made or filed as noted, the Contractor and the surety in all cases shall indemnify, defend, and save harmless, the County from all claims for infringement by reason of the use of any such patented design, device, material, or process on work under the Contract, and shall indemnify the County for all costs, expenses, and damages that it may be obliged to pay by reason of any such infringement, at any time during the prosecution or after the completion of the work.

**7-4 Right-of-Way Furnished by the County.**

Except as otherwise stipulated in these Specifications or as shown in the Plans, the County will furnish all rights-of-way necessary for the proper completion of the work at no expense to the Contractor.

Should County-furnished areas for obtaining borrow material, contain limerock material do not remove such material from the pit unless the Director gives specific approval.

Use of County owned right-of-way for the purpose of equipment or material storage, lay-down facilities, pre-cast material fabrication sites, batch plants for the production of asphalt, concrete or other construction related materials, or other similar activities, shall require advance written approval by the County prior to making use of said County owned right of way. Use of County owned right of way for these purposes is expressly limited to the storage of equipment and materials for the Project or production of materials or products for the Project. As a precedence to Final Acceptance of the project, any County owned right-of-way used by the Contractor shall be restored to the condition existing prior to construction, or as otherwise approved by the Director.

The County reserves the right to allow parties other than the Contractor, upon presentation of a duly authorized and satisfactory Lee County Department of Transportation Right-of-Way Permit, to perform work within the limits of construction. In all such instances, the Contractor will afford parties bearing such permits reasonable accommodation for the proper execution of the work described under the permit, including the right to store materials and equipment. All parties authorized to perform work within the right-of-way shall make, in an acceptable manner, all necessary repairs due to such work ordered by the Director and shall be subject to the conditions specified in Section 11-12 of the Lee County Administrative Code, as amended.

## 7-5 Reserved.

## 7-6 Sanitary Provisions.

The Contractor shall provide and maintain, in a neat and sanitary condition, such accommodations for the use of his employees as are necessary to comply with the requirements and regulations of the State and local boards of health. Commit no public nuisance.

## 7-7 Control of the Contractor's Equipment.

**7-7.1 Traffic Interference:** Do not allow equipment, while it is on or traversing a road or street, to unreasonably interfere with traffic.

**7-7.2 Overloaded Equipment:** Do not operate on any road, street or bridge including a County owned temporary bridge, any hauling unit or equipment loaded in excess of:

1. the maximum weights specified in the Florida Highway Patrol, Commercial Motor Vehicle Manual (Trucking Manual), or
2. lower weight limits legally established and posted for any section of road or bridge by FDOT, the County or other local authorities.

The governmental unit having jurisdiction over a particular road or bridge may provide exceptions by special permit under the provisions of 7-7.3.

This restriction applies to all roads and bridges inside and outside the Contract limits as long as these roads and bridges are open for public use. The Contractor may overload roads and bridges which are to be demolished after they are permanently closed to the public. The Contractor is responsible for all loss or damages resulting from equipment operated on a structure permanently closed to the public.

**7-7.3 Crossings:** Where it is necessary to cross an existing road or street, including specifically the existing traveled lanes of a divided highway within the limits of the project, obtain permits from the County, for crossing overloaded or oversized equipment. Cross existing roads or streets only at Director-designated points. The Director may require the Contractor to protect the pavement or Roadway at the crossing by using lumber, planks, or fill. Provide flagging and watchman service, or approved signal devices, for the protection of traffic at all such crossings, in accordance with an approved written plan for that activity. Movement of equipment around the project site must be in accordance with requirements of the Design Standards and not create an undue hazard to the traveling public or workers.

**7-7.4 Protection from Damage by Tractor-Type Equipment:** Take positive measures to ensure that tractor-type equipment does not damage the road. If any such damage should occur, repair it without delay, at no expense to the County and subject to the Director's approval.

**7-7.5 Contractor's Equipment on Bridge Structures:** The Contractor's Engineer of Record shall analyze the effect of imposed loads on bridge structures, within the limits of a construction contract, resulting from the following operations:

1. Overloaded Equipment as defined in 7-7.2:
  - a. Operating on or crossing over completed bridge structures.
  - b. Operating on or crossing over partially completed bridge structures.
2. Equipment within legal load limits:
  - a. Operating on or crossing over partially completed bridge structures.
3. Construction cranes:
  - a. Operating on completed bridge structures.
  - b. Operating on partially completed bridge structures.

Any pipe culvert(s) or box culvert(s) qualifying as a bridge under 1-3 is excluded from the requirements above.

A completed bridge structure is a bridge structure in which all elemental components comprising the load carrying assembly have been completed, assembled, and connected in their final position. The components to be considered shall also include any related members transferring load to any bridge structure.

The Contractor's Engineer of Record shall determine the effect that equipment loads have on the bridge structure and develop the procedures for using the loaded equipment without exceeding the structure's design load capacity.

Submit to the County for approval the design calculations, layout drawings, and erection drawings showing how the equipment is to be used so that the bridge structure will not be overstressed. The Contractor's Engineer of Record shall sign and seal the drawings and the cover sheet of the calculations for the County's Record Set.

**7-7.6 Posting of the Legal Gross Vehicular Weight:** Display the maximum legal gross weight, as specified in the Florida Uniform Traffic Code, in a permanent manner on each side of any dump truck or dump type tractor-trailer unit hauling embankment material, construction aggregates, road base material, or hot bituminous mixture to the project over any public road or street. Display the weight in a location clearly visible to the scale operator, in numbers that contrast in color with the background and that are readily visible and readable from a distance of 50 feet.

## **7-8 Structures over Navigable Waters.**

**7-8.1 Compliance with Federal and Other Regulations:** When working on structures in, adjacent to, or over, navigable waters, observe all regulations and instructions of Federal and other authorities having control over such waters. Do not obstruct navigation channels without permission from the proper authority, and provide and maintain navigation lights and signals in accordance with the Federal requirements for the protection of the structure, of false work, and of navigation.

When working on moveable bridges, requests for temporarily changing the operating requirements for the moveable bridge must be submitted in writing to the appropriate Coast Guard District Bridge Branch, 90 days before the start of any action.

For all other bridges, notify the appropriate Coast Guard District Bridge Branch, at least 60 days prior to the start of any operations including construction and 30 days prior to any channel operations, closures, or opening restrictions.

When work platforms are indicated in the permit for construction, submit work platform construction plans to the appropriate Coast Guard District for approval. Obtain approval prior to beginning construction on the platform.

**7-8.2 Maintenance of Channel:** Where the work includes the excavation of a channel or other underwater areas to a required section, maintain the section from shoaling or other encroachment until final acceptance of the project.

In the event of accidental blocking of the navigation channel, immediately notify the U.S. Coast Guard of the blockage and upon removal of the blockage.

## **7-9 Use of Explosives.**

When using explosives for the prosecution of the work, exercise the utmost care not to endanger life or property, including new work. The Contractor is responsible for all damage resulting from the use of explosives. Any use of explosives shall be subject to the prior written authorization of the Director.



Store all explosives in a secure manner in compliance with all laws and ordinances, and clearly mark all such storage places with the words: "DANGEROUS - EXPLOSIVES". Place such storage in the care of a competent watchman. Where no local laws or ordinances apply, provide storage satisfactory to the Director and, in general, not closer than 1,000 feet from the road or from any building, camping area, or place of human occupancy.

Notify each public utility company having structures in proximity to the site of the work of the intention to use explosives. Give such notice sufficiently in advance to enable the companies to take precautionary steps to protect their property from injury.

## **7-10 Forest Protection.**

**7-10.1 Compliance with State and Federal Regulations:** In carrying out work within or adjacent to State or National forests or parks, comply with all of the regulations of the State or Federal authority having jurisdiction, governing the protection of and the carrying out of work in forests or parks, and observe all sanitary laws and regulations with respect to the performance of work in these areas. Keep the areas in an orderly condition, dispose of all refuse, and obtain permits for the construction, installation, and maintenance of any construction camps, living quarters, stores, warehouses, sanitary facilities, and other structures; all in accordance with the requirements of the forest or park official.

**7-10.2 Prevention and Suppression of Forest Fires:** Take all reasonable precautions to prevent and suppress forest fires. Require employees and subcontractors, both independently and at the request of forest officials, to do all reasonably within their power to prevent and suppress forest fires. Assist in preventing and suppressing forest fires, and make every possible effort to notify a forest official at the earliest possible moment of the location and extent of all fires. Extinguish the fire if practicable.

## **7-11 Preservation of Existing Property.**

**7-11.1 General:** Preserve from damage all existing property within the project limits of or in any way affected by the Work, the removal or destruction of which is not specified in the Plans. This applies to, but is not limited to, public and private property, public and private utilities (except as modified by the provisions of 7-11.5), trees, shrubs, crops, sod, signs, monuments, fences, guardrail, pipe and underground structures, Intelligent Transportation Systems (ITS) facilities, traffic control signals and devices, highway lighting, and public highways (except natural wear and tear of highway resulting from legitimate use thereof by the Contractor).

County owned underground facility locations shown in the Plans are approximate. Unless otherwise shown in the Plans, County owned underground facilities will not be located by the County nor through notification to "Sunshine 811".

Whenever the Contractor's activities damage such existing property, immediately restore it to a condition equal to or better than that existing at the time such damage occurred, at no expense to the County. Temporary repairs may be used to immediately restore ITS facilities and traffic control signals and devices. Permanent repairs to ITS facilities and traffic control signals and devices shall be made within 90 days of any temporary repairs and prior to final acceptance of the project. Submit permanent ITS facility repair plans to the Director prior to beginning repair work.

Protect existing bridges during the entire construction period from damage caused by the Work. Immediately repair, at no expense to the County, all damage to existing bridges caused by the Work, prior to continuing the Work. The County will not require the Contractor to provide routine repairs or maintenance for such structures.

Direct special attention to the protection of all geodetic monuments, horizontal or vertical, and Public Land Survey Corners located within the project. If any geodetic monument or Public Land Survey Corner, located within the project, is at risk of being damaged or destroyed, immediately notify the Director. Locate and replace any damaged or destroyed geodetic monuments or Public Land Survey Corners under the direction of a Professional Surveyor and Mapper registered in the State of Florida.

Whenever the actions of a third party damage such existing property and is not otherwise due to any fault or activities of the Contractor, either restore it to a condition equal to or better than that existing at the time such damage occurred or provide access and coordinate with the County's maintenance Contractor in accordance with 8-4.4 as directed by the Director. The County will compensate the Contractor for the costs associated with the repairs for restoring the existing property in accordance with 4-4. Theft and vandalism are considered damage caused by a third party.

**7-11.2 Failure to Restore Damaged Existing Property:** In case of failure on the part of the Contractor to restore such property, bridge, road or street, or to make good such damage or injury, the Director may, upon 48 hours notice, proceed to repair, rebuild, or otherwise restore such property, road, or street as may be deemed necessary, and the County will deduct the cost thereof from any monies due or which may become due the Contractor under the Contract. Nothing in this clause prevents the Contractor from receiving proper compensation for the removal, damage, or replacement of any public or private property, not shown in the Plans, that is made necessary by alteration of grade or alignment. The Director will authorize such work, provided that the Contractor, or his employees or agents, have not, through their own fault, damaged such property.

**7-11.3 Contractor's Use of Streets and Roads:**

**7-11.3.1 Street and Road System:** When hauling materials or equipment to the project over roads and bridges on the State Highway System, State park road system, county road system, or city street system, and such use causes damage, immediately, at no expense to the County, repair such road or bridge to as good a condition as before the hauling began.

The County may modify the above requirement in accordance with any agreement the Contractor might make with the governmental unit having jurisdiction over a particular road or bridge, provided that the Contractor submits written evidence of such agreement to the Director.

**7-11.3.2 Reserved.**

**7-11.3.3 Within the Limits of a Construction Project:** The County will not allow the operation of equipment or hauling units of such weight as to cause damage to previously constructed elements of the project, including but not necessarily limited to bridges, drainage structures, base course, and pavement. Do not operate hauling units or equipment loaded in excess of the maximum weights specified in 7-7.2 on existing pavements that are to remain in place (including pavement being resurfaced), cement-treated subgrades and bases, concrete pavement, any course of asphalt pavement, and bridges. The Director may allow exceptions to these weight restrictions for movement of necessary equipment to and from its worksite, for hauling of offsite fabricated components to be incorporated into the project, and for crossings as specified in 7-7.3.

**7-11.4 Operations within Railroad Right-of-Way:**

**7-11.4.1 Notification to the Railroad Company:** Notify the superintendent of the railroad company, as shown in the Plans, and the Director at least 72 hours before beginning any operation within the limits of the railroad right-of-way; any operation requiring movement of

employees, trucks, or other equipment across the tracks of the railroad company at other than an established public crossing; and any other work that may affect railroad operations or property.

**7-11.4.2 Contractor's Responsibilities:** Comply with whatever requirements an authorized representative of the railroad company deems necessary in order to safeguard the railroad's property and operations. The Contractor is responsible for all damages, delays, or injuries and all suits, actions, or claims brought on account of damages or injuries resulting from the Contractor's operations within or adjacent to railroad company right-of-way.

**7-11.4.3 Watchman or Flagging Services:** The railroad company will furnish protective services (i.e., watchman or flagging services) to ensure the safety of railroad operations during certain periods of the project. The Contractor will reimburse the railroad company for the cost thereof. Schedule work that affects railroad operations so as to minimize the need for protective services by the railroad company.

#### **7-11.5 Utilities:**

**7-11.5.1 Arrangements for Protection or Adjustment:** Do not commence work at points where the construction operations are adjacent to utility facilities until all necessary arrangements have been made for removal, temporary removal, relocation, de-energizing, deactivation or adjustment with the utility facilities owner to protect against damage that might result in expense, loss, disruption of service, or other undue inconvenience to the public or to the owners. The Contractor is solely and directly responsible to the owners and operators of such properties for all damages, injuries, expenses, losses, inconveniences, or delays caused by the Contractor's operations.

Do not request utility removal, temporary removal, relocation, de-energizing, deactivation, or adjustment when work can be accomplished within the utility work schedules. In the event that removal, temporary removal, relocation, de-energizing, deactivation, or adjustment of a utility or a particular sequence of timing in the relocation of a utility is necessary and has not been addressed in a utility work schedule, the Director will determine the necessity for any such utility work. Coordinate such work as to cause the least impediment to the overall construction operations and utility service. The County is not responsible for utility removal, temporary removal, relocation, de-energizing, deactivation, or adjustment work where such work is determined not necessary by the Director or done solely for the benefit or convenience of the utility owner or its contractor, or the Contractor.

**7-11.5.2 Cooperation with Utility Owners:** Cooperate with the owners of all underground or overhead utility lines in their removal and rearrangement operations in order that these operations may progress in a reasonable manner, that duplication or rearrangement work may be reduced to a minimum, and that services rendered by the utility owners will not be unnecessarily interrupted.

In the event of interruption of water or other utility services as a result of accidental breakage, exposure, or lack of support, promptly notify the proper authority and cooperate with the authority in the prompt restoration of service. If water service is interrupted and the Contractor is performing the repair work, the Contractor shall work continuously until the service is restored. Do not begin work around fire hydrants until the local fire authority has approved provisions for continued service.

**7-11.5.3 Utility Adjustments:** Certain utility adjustments and reconstruction work may be underway during the progress of the Contract. Cooperate with the various utility construction crews who are maintaining utility service. Exercise due caution when working adjacent to relocated utilities. The Contractor shall repair all damage to the relocated utilities resulting from his operations

at no expense to the County. The requirements of 7-11.1 and 7-11.5.2 outline the Contractor's responsibility for protecting utility facilities. The County will include in the Contract the utility authorities who are scheduled to perform utility work on the project.

**7-11.5.4 Weekly Meetings:** Conduct weekly meetings on the job site with all the affected utility companies and the Director in attendance to coordinate project construction and utility relocation. Submit a list of all attendees one week in advance to the Director for approval.

Submit the approved Work Progress Schedule and Work Plan for the project, as specified in 8-3.2, to document the schedule and plan for road construction and utility adjustments.

When utility relocations no longer affect construction activities, the Contractor may discontinue the meetings with the Director's approval.

**7-12 Reserved.**

**7-13 Reserved.**

**7-13.1 Reserved.**

**7-13.2 Reserved.**

**7-13.3 Reserved.**

**7-13.4 Insurance for Protection of Utility Owners:** When the Contract involves work on or in the vicinity of utility-owned property or facilities, the utility shall be added along with the County as an Additional Insured on the policy/ies procured pursuant to subsection 7-13.2 above.

**7-14 Contractor's Responsibility for Work.**

The Contractor will take charge and custody of the Work, and take every necessary precaution against damage to the Work, by the action of the elements, third parties, or from any other cause whatsoever, until the County's final acceptance of the Work. The Contractor will rebuild, repair, restore, and make good all damage to any portion of the Work occasioned by any of the above causes before final acceptance of the Contract.

The County will have no obligation to pay any reimbursement for damage caused by the execution or nonexecution of the Work by the Contractor or its sub-contractors, or damage the Contractor was negligent in preventing.

The County may, at its sole discretion, reimburse the Contractor for the repair of damage to the Work not caused by a third party and due to unforeseeable causes beyond the control of and without the fault or negligence of the Contractor, including but not restricted to Acts of God, of the public enemy, or of governmental authorities.

**7-15 Opening Sections of Highway to Traffic.**

Whenever any bridge or section of roadway is in acceptable condition for travel, the Director may direct the Contractor to open it to traffic. The County's direction to open a bridge or roadway does not constitute an acceptance of the bridge or roadway, or any part thereof, or waive any Contract provisions. Perform all necessary repairs or renewals, on any section of the roadway or bridge thus opened to traffic under instructions from the Director, due to defective material or work or to any cause other than ordinary wear and tear, pending completion and the Director's acceptance of the roadway or bridge, or other work, at no expense to the County.

### **7-16 Wage Rates for Federal-Aid Projects (Designated Federal-Aid Contracts Only).**

For all projects that include Federal-aid participation, the Special Provisions contain requirements with regard to payment of predetermined minimum wages. Predetermined Wage Rate Decisions (U.S. County of Labor provided Wage Rate Tables) exist for Heavy, Highway, and Building Construction Projects.

### **7-17 Supplemental Agreements.**

Supplemental Agreements (Change Orders) shall be authorized in accordance with Procurement Policies adopted by the Lee County Board of County Commissioners.

### **7-18 Scales for Weighing Materials.**

**7-18.1 Applicable Regulations:** When determining the weight of material for payment, use scales meeting the requirements of Chapter 531 of Florida Statutes, pertaining to specifications, tolerances, and regulations, as administered by the Bureau of Weights and Measures of the Florida Department of Agriculture.

**7-18.2 Base for Scales:** Place such scales on a substantial horizontal base to provide adequate support and rigidity and to maintain the level of the scales.

**7-18.3 Protection and Maintenance:** Maintain all scale parts in proper condition as to level and vertical alignment, and fully protect them against contamination by dust, dirt, and other matter that might affect their operation.

### **7-19 Source of Forest Products.**

As required by Section 255.2575 of the Florida Statutes, where price, fitness and quality are equal, and when available, use only timber, timber piling, or other forest products that are produced and manufactured in the State of Florida. This provision does not apply to Federal-aid projects.

### **7-20 Regulations of Air Pollution from Asphalt Plants.**

**7-20.1 General:** Perform all work in accordance with all Federal, State, and local laws and regulations regarding air pollution and burning. In particular, pay attention to Chapters 62-210 and 62-256, Rules of the Department of Environmental Protection, Florida Administrative Code, and to any part of the State Implementation Plan applicable to the project. See also 110-9.2 regarding burning of debris.

**7-20.2 Dust Control:** Control dust during the storage and handling of dusty materials by wetting, covering, or other means as approved by the Director.

**7-20.3 Asphalt Material:** Use only emulsified asphalt, unless otherwise stated in the Plans and allowed by Chapter 62-210, Rules of the Department of Environmental Protection, Florida Administrative Code. Store and handle asphalt materials and components so as to minimize unnecessary release of hydrocarbon vapors.

**7-20.4 Asphalt Plants:** Operate and maintain asphalt plants in accordance with Chapter 62-210, Rules of the Department of Environmental Protection, Florida Administrative Code. Provide the plant site with a valid permit as required under Chapter 62-210 prior to start of work.

### **7-21 Dredging and Filling.**

Section 370.033 of the Florida Statutes, requires that all persons, who engage in certain dredge or fill activities in the State of Florida, obtain a certificate of registration from the Florida Department of Environmental Protection, Tallahassee, Florida 32301, and that they keep accurate

logs and records of all such activities for the protection and conservation of the natural resources. Obtain details as to the application of this law from the Department of Environmental Protection.

**7-22 Available Funds.**

All funds for payment by the County under this Contract are subject to the availability of an annual appropriation for this purpose by the County. In the event of nonappropriation of funds by the County for the work provided under this Contract, the County will terminate the Contract, without termination charge or other liability, on the last day of the then current fiscal year or when the appropriation made for the then-current year for the services covered by this Agreement has been expended, whichever event occurs first. If at any time funds are not appropriated for the continuance of this Agreement, cancellation shall be accepted by the Contractor upon 30 days prior written notice, but failure to give such notice shall be of no effect and the County shall not be obligated under this Contract beyond the date of termination.

**7-23 Contractor's Motor Vehicle Registration (Designated State Aid Projects Only).**

The Contractor shall provide the County with proof that all motor vehicles operated or caused to be operated by such Contractor are registered in compliance with Chapter 320 of the Florida Statutes. Submit such proof of registration in the form of a notarized affidavit to the County.

The County will not make payment to the Contractor until the required proof of registration is on file with the Department.

If the Contractor fails to register any motor vehicle that he operates in Florida, pursuant to Chapter 320 of the Florida Statutes, the Department may disqualify the Contractor from bidding, or the Department may suspend and revoke the Contractor's certificates of qualification.

**7-24 Disadvantaged Business Enterprise Program.**

The County encourages the inclusion of Disadvantage Business Enterprise (DBE) participants as defined and certified by FDOT. The Contractor shall submit to the County with the final payment documents a DBE Participation Certification, indicating all DBE Subcontractor(s) and amount(s) utilized for the project. If the Contractor did not utilize the DBE firm(s) listed on the Bid Proposal, a letter of justification shall be submitted along with the DBE Participation Certification.

**7-25 On-The-Job Training Requirements (Designated Federal Aid Contracts Only).**

As part of the Contractor's equal employment opportunity affirmative action program, training shall be provided as follows:

The Contractor shall provide On-The-Job Training aimed at developing full journeymen in the type of trade or job classification involved in the work. In the event the Contractor subcontracts a portion of the contract work, it shall determine how many, if any, of the trainees are to be trained by the subcontractor provided, that the Contractor shall retain the primary responsibility for meeting the training requirements imposed by this Section. Ensure that, when feasible, 25% of trainees in each occupation are in their first year of training. The Contractor shall incorporate the requirements of this Section into such subcontract.

The number of trainees will be estimated on the number of calendar days of the contract, the dollar value, and the scope of work to be performed. The trainee goal will be finalized at a Post-Preconstruction Trainee Evaluation Meeting and the goal will be distributed among the work classifications based on the following criteria:

1. Determine the number of trainees on Federal Aid Contract:

a. No trainees will be required for contracts with a Contract Time allowance of less than 275 calendar days.

b. If the Contract Time allowance is 275 calendar days or more, the number of trainees shall be established in accordance with the following chart:

Estimated Contract Amount	Trainees Required
\$2,000,000 or less	0
Over \$2,000,000 to \$4,000,000	2
Over \$4,000,000 to \$6,000,000	3
Over \$6,000,000 to \$12,000,000	5
Over \$12,000,000 to \$18,000,000	7
Over \$18,000,000 to \$24,000,000	9
Over \$24,000,000 to \$31,000,000	12
Over \$31,000,000 to \$37,000,000	13
Over \$37,000,000 to \$43,000,000	14
Over \$43,000,000 to \$49,000,000	15
Over \$49,000,000 to \$55,000,000	16
Over \$55,000,000 to \$62,000,000	17
Over \$62,000,000 to \$68,000,000	18
Over \$68,000,000 to \$74,000,000	19
Over \$74,000,000 to \$81,000,000	20
Over \$81,000,000 to \$87,000,000	21
Over \$87,000,000 to \$93,000,000	22
Over \$93,000,000 to \$99,000,000	23
Over \$99,000,000 to \$105,000,000	24
Over \$105,000,000 to \$112,000,000	25
Over \$112,000,000 to \$118,000,000	26
Over \$118,000,000 to \$124,000,000	27
Over \$124,000,000 to \$130,000,000	28
Over \$130,000,000 to *	
*One additional trainee per \$6,000,000 of estimated Construction Contract amount over \$130,000,000	

Further, if the Contractor or subcontractor requests to utilize banked trainees as discussed later in this Section, a Banking Certificate will be validated at this meeting allowing credit to the Contractor for previously banked trainees. Banked credits of prime Contractors working as Subcontractors may be accepted for credit. The Contractor’s Project Manager, the CEI Consultant and the Director will attend this meeting. Within ten days after the Post-Preconstruction Training Evaluation Meeting, the Contractor shall submit to the County for approval an On-The-Job Training Schedule indicating the number of trainees to be trained in each selected classification and the portion of the Contract Time during which training of each trainee is to take place. This schedule may be subject to change if any of the following occur:

1. When a start date on the approved On-The-Job Training Schedule has been missed by 14 or more days;

2. When there is a change in previously approved classifications; or
3. When replacement trainees are added due to voluntary or involuntary termination

The revised schedule will be resubmitted to and approved by the Director.

The following criteria will be used in determining whether or not the Contractor has complied with this Section as it relates to the number of trainees to be trained:

1. Credit will be allowed for each trainee that is both enrolled and satisfactorily completes training on this Contract. Credit for trainees, over the established number for this Contract, will be carried in a “bank” for the Contractor and credit will be allowed for those surplus trainees in subsequent, applicable projects. A “banked” trainee is described as an employee who has been trained on a project, over and above the established goal, and for which the Contractor desires to preserve credit for utilization on a subsequent project.

2. Credit will be allowed for each trainee that has been previously enrolled in the County’s approved training program on another contract and continues training in the same job classification and completes their training on a different contract.

3. Credit will be allowed for each trainee who, due to the amount of work available in their classification, is given the greatest practical amount of training on the contract regardless of whether or not the trainee completes training.

4. Credit will be allowed for any training position indicated in the approved On-The-Job Training Schedule, if the Contractor can demonstrate that a good faith effort to provide training in that classification was made.

5. No credit will be allowed for a trainee whose employment by the Contractor is involuntarily terminated unless the Contractor can clearly demonstrate good cause for this action.

Training and upgrading of minorities, women and economically disadvantaged persons toward journeyman status is a primary objective of this Section. Accordingly, the Contractor shall make every effort to enroll minority trainees and women (e.g., by conducting systematic and direct recruitment through public and private sources likely to yield minority and women trainees) to the extent such persons are available within a reasonable area of recruitment. If a non-minority male is enrolled into the On-The-Job Training Program, the On-The-Job Training Notification of Personnel Action Form notifying the District Contract Compliance Manager of such action shall be accompanied by a disadvantaged certification or a justification for such action acceptable to the County. The Contractor will be given an opportunity and will be responsible for demonstrating the steps that it has taken in pursuance thereof, prior to a determination as to whether the Contractor is in compliance with this Section. This training is not intended, and shall not be used, to discriminate against any applicant for training, whether a minority, woman or disadvantaged person.

No employee shall be employed as a trainee in any classification in which they have successfully completed a training course leading to journeyman status, or have been employed as a journeyman. The Contractor may satisfy this requirement by including appropriate questions in the employee application or by other suitable means. Regardless of the method used, the Contractor’s records should document the findings in each case.

The minimum length and type of training for each classification will be as established at the Post-Preconstruction Trainee Evaluation Meeting and approved by the County. Graduation to journeyman status will be based upon satisfactory completion of a Proficiency Demonstration set up at the completion of training and established for the specific training classification, completion of the minimum hours in a training classification range, and the employer’s satisfaction that the trainee does meet journeyman status in the classification of training. Upon reaching journeyman status, the following documentation must be forwarded to the Director:



1. Trainee Enrollment and Personnel Action Form
2. Proficiency Demonstration Verification Form indicating completion of each standard established for the classification signed by representatives of both the Contractor and the County.

The County and the Contractor shall establish a program that is tied to the scope of the work in the project and the length of operations providing it is reasonably calculated to meet the equal employment opportunity obligations of the Contractor and to qualify the average trainee for journeyman status in the classifications concerned, by at least, the minimum hours prescribed for a training classification. Furthermore, apprenticeship programs registered with the U.S. Department of Labor, Bureau of Apprenticeship and Training, or with a State apprenticeship agency recognized by the Bureau and training programs approved but not necessarily sponsored by the U.S. Department of Labor, Manpower Administration, Bureau of Apprenticeship and Training shall also be considered acceptable provided it is being administered in a manner consistent with the equal employment obligations of Federal Aid highway construction contract. Approval or acceptance of a training schedule shall be obtained from the County prior to commencing work on the classifications covered by the program.

A voluntary On-The-Job Training Program is available to a Contractor which has been awarded a state funded project. Through this program, the Contractor will have the option to train employees on state funded projects for “banked credit” as discussed previously in this provision, to be utilized on subsequent Federal Aid Projects where training is required. Those Contractors availing themselves of this opportunity to train personnel on state funded projects and bank trainee hours for credit shall comply with all training criteria set forth in this Section for Federal Aid Projects; voluntary banking may be denied by the County if staff is not available to monitor compliance with the training criteria.

It is the intention of these provisions that training is to be provided in the construction crafts rather than clerk-typists or secretarial type positions. Training is permissible in lower level management positions such as office engineers, estimators, etc., where the training is oriented toward construction applications. Training in the laborer classifications, except Common/General Laborer, may be permitted provided that significant and meaningful training is provided and approved by the Director.

When approved in advance by the Director, credit will be given for training of persons in excess of the number specified herein under the current contract or a Contractor will be allowed to bank trainees who have successfully completed a training program and may apply those trainees to a training requirement in subsequent project(s) upon approval of the Director. This credit will be given even though the Contractor may receive training program funds from other sources, provided such other source do not specifically prohibit the Contractor from receiving other form of compensation. Offsite training is permissible as long as the training is an integral part of an approved training program and does not compromise a significant part of the overall training. Credit for offsite training indicated above may only be made to the Contractor when it does one or more of the following and the trainees are concurrently employed on a Federal Aid Project:

1. Contributes to the cost of the training,
2. Provides the instruction to the trainee,
3. Pays the trainee’s wages during the offsite training period.

The Contractor shall compensate the trainee at no less than the laborer rate established in the Contract at the onset of training. The compensation rate will be increased to the journeyman’s wage

upon graduation from the training program for the remainder of the time the trainee works in the classification in which they were trained.

The Contractor shall furnish the trainee a copy of the program they will follow in providing the training. The Contractor shall provide each trainee with a certification showing the type and length of training satisfactorily completed. The Contractor shall enroll a trainee in one training classification at a time to completion before the trainee can be enrolled in another classification on the same project.

The Contractor shall maintain records to document the actual hours each trainee is engaged in training on work being performed as a part of this Contract.

The Contractor shall submit to the Director a copy of an On-The-Job Training Notification of Personnel Action form no later than seven days after the effective date of the action when the following actions occur: a trainee is transferred on the project, transferred from the project to continue training on another contract, completes training, is upgraded to journeyman status or voluntary terminates or is involuntary terminated from the project.

The Contractor shall furnish to the Director a copy of a Monthly Time Report for each trainee. The Monthly Time Report for each month shall be submitted no later than the tenth day of the subsequent month. The Monthly Time Report shall indicate the phases and sub-phases of the number of hours devoted to each proficiency.

Highway or Bridge Carpenter Helper, Mechanic Helper, Rodman/Chainman, and Timekeeper classifications will not be approved for the On-The-Job Training Program.

The number of trainees may be distributed among the work classifications on the basis of the Contractor's needs and the availability of journeymen in the various classifications within a reasonable area of recruitment.

The Contractor will have fulfilled the responsibilities of this Specification when acceptable training has been provided to the trainee as specified above.

#### **7-26 Cargo Preference Act – Use of United States-Flag Vessels (Designated State or Federal Aid Contracts Only).**

Pursuant to Title 46 CFR 381, the Contractor agrees

1. To utilize privately owned United States-flag commercial vessels to ship at least 50 percent of the gross tonnage (computed separately for dry bulk carriers, dry cargo liners, and tankers) involved, whenever shipping any equipment, material, or commodities pursuant to this Contract, to the extent such vessels are available at fair and reasonable rates for United States-flag commercial vessels.

2. To furnish within 20 days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated, 'on-board' commercial ocean bill-of-lading in English for each shipment of cargo described in paragraph 1 of this Article to both the Contracting Officer (through the prime contractor in the case of subcontractor bills-of-lading) and to the Division of National Cargo, Office of Market Development, Maritime Administration, Washington, DC 20590.

3. To insert the substance of the provisions of this clause in all subcontracts issued pursuant to this Contract.

## SECTION 8 PROSECUTION AND PROGRESS

### **8-1 Subletting or Assigning of Contracts.**

Do not, sell, transfer, assign or otherwise dispose of the Contract or Contracts or any portion thereof, or of the right, title, or interest therein, without prior written consent of the County. If the Contractor chooses to sublet any portion of the Contract, the Contractor must submit a written request to sublet work on Form 6-Subcontractor List contained in the Proposal.

The Contractor shall provide the Director a list of all proposed subcontractors and major material suppliers at the preconstruction conference. A revised list shall be distributed each time a modification thereto is made.

Execute all agreements to sublet work in writing and include all pertinent provisions and requirements of the Contract. All other agreements must be in writing and reference all applicable Contract provisions. Upon request, submit to the County a copy of the subcontract and agreement. The subletting of work does not relieve the Contractor or the surety of their respective liabilities under the Contract.

The County recognizes a subcontractor only in the capacity of an employee or agent of the Contractor, and the Director may require the Contractor to remove the subcontractor as in the case of an employee.

### **8-2 Reserved.**

### **8-3 Prosecution of Work.**

**8-3.1 Compliance with Time Requirements:** Commence work in accordance with the accepted working schedule and provide sufficient labor, materials and equipment to complete the work within the time limit(s) set forth in the proposal. Should the Contractor fail to furnish sufficient and suitable equipment, forces, and materials, as necessary to prosecute the work in accordance with the required schedule, the Director may withhold all estimates that are, or may become due, or suspend the work until the Contractor corrects such deficiencies.

**8-3.2 Submission of Working Schedule:** Within 21 calendar days after Contract award or at the preconstruction conference, whichever is earlier, submit to the Director a work progress schedule for the project. The Director will review and respond to the Contractor within 15 calendar days of receipt.

Provide a schedule that shows the various activities of work in sufficient detail to demonstrate a reasonable and workable plan to complete the project within the Contract Time. Show the order and interdependence of activities and the sequence for accomplishing the work. Describe all activities in sufficient detail so that the Director can readily identify the work and measure the progress on of each activity. Show each activity with a beginning work date, a duration, and an ending work date. Include activities for procurement, fabrication, and delivery of materials, plant, and equipment, and review time for shop drawings and submittals. Include milestone activities when milestones are required by the Contract Documents. In a project with more than one phase, adequately identify each phase and its completion date, and do not allow activities to span more than one phase.

Conduct sufficient liaison and provide sufficient information to indicate coordination activities with utility owners that have facilities within the limits of construction requiring adjustment.

Submit a working plan with the schedule, consisting of a concise written description of the construction plan.

The Director will return inadequate schedules to the Contractor for corrections. Resubmit a corrected schedule within 15 calendar days from the date of the Director's return transmittal.

Submit an updated Work Progress Schedule, for Director's acceptance, with each application for payment. The Director will review the updated schedule and respond within 7 calendar days of receipt.

By acceptance of the schedule, the Director does not endorse or otherwise certify the validity or accuracy of the activity durations or sequencing of activities. The Director will use the accepted schedule as the baseline against which to measure the progress.

If the Contractor fails to finalize either the initial or a revised schedule in the time specified, the Director will withhold all Contract payments until the Director accepts the schedule.

**8-3.3 Beginning Work:** Do not commence work under the Contract until after the County has issued a written Notice to Proceed. The Contract Time shall commence to run from the date specified in the Notice to Proceed. Issuance of the Notice to Proceed is contingent upon and will be done subsequent to the Contractor fully satisfying the County's stated insurance and bond submittal requirements. Until the Contractor receives the Department's Notice to Proceed, the Contractor is advised that the County will not be liable for any expenses which the Contractor may incur relative to the Contract before the written Notice to Proceed is issued.

**8-3.4 Provisions for Convenience of Public:** Schedule construction operations so as to minimize any inconvenience to adjacent businesses or residences. Where necessary, the Director may require the Contractor to first construct the work in any areas along the project where inconveniences caused by construction operations would present a more serious handicap. In such critical locations, where there is no assurance of continuous effective prosecution of the work once the construction operations are begun, the Director may require the Contractor to delay removal of the existing (usable) facilities.

**8-3.5 Preconstruction Conference:** County After the award of the Contract but prior to the issuance of the written Notice-to-Proceed, a conference will be held to establish lines of communication; procedures for handling shop drawings, requests for information, applications for payment, and other submissions; and to establish a working understanding between the parties as to the Contractor's project management responsibilities.

Present at the conference will be the Contractor and his subcontractors, utility companies, CEI Consultant and the Director. The time and place of this conference will be set by the Director. The Contractor shall be represented at the conference by a person duly authorized to speak on behalf of and represent the Contractor, together with all of the Contractor's supervisory personnel who will be assigned to the project. The Contractor shall submit the following minimum information to the Director for his review and approval on or prior to the date established for the pre-construction conference:

- a. Name of the Contractor's proposed project manager.
- b. Name of the Contractor's proposed full-time superintendent.
- c. Name of the Contractor's representative for implementing and maintaining the Maintenance of Traffic Plan during construction.
- d. Personnel qualifications as may be requested by the County.

- e. Listing/qualifications of the Contractor's proposed subcontractors.
- f. Project Schedule.
- g. Traffic Control Plan/Maintenance of Traffic Plan.
- h. Applicable quality control plan(s).
- i. Name/qualifications of Contractor's Registered Professional Surveyor and Mapper in responsible charge of project layout.
- j. Name/qualifications of Contractor's quality control technician.
- k. Schedule and plan for prevention, control and abatement of erosion and water pollution per Section 104-5 of the Standard Specifications.

**8-3.6 Progress Meetings:** The Contractor shall attend regular progress meetings with and between the County's field representatives and those of the Contractor, subcontractors, utility companies, CEI Consultant and other parties having an interest in the Contract. The progress meetings shall be hosted by the County and shall be held at locations to be mutually agreed upon by the County and the Contractor at no less than two week intervals. The purpose of such meetings shall include, but not to be limited to, discussing all general aspects of the project and specifically addressing problem areas, schedules, progress payments, etc. The CEI Consultant shall be responsible for the preparation and distribution of the minutes.

#### **8-4 Limitations of Operations.**

**8-4.1 Night Work:** During active nighttime operations, furnish, place and maintain lighting sufficient to permit proper workmanship and inspection. Use lighting with 5 ft-cd minimum intensity. Arrange the lighting to prevent interference with traffic or produce undue glare to property owners. Operate such lighting only during active nighttime construction activities. Provide a light meter to demonstrate that the minimum light intensity is being maintained.

Lighting may be accomplished by the use of portable floodlights, standard equipment lights, existing street lights, temporary street lights, or other lighting methods approved by the Director.

Submit a lighting plan at the Preconstruction Conference for review and acceptance by the Director. Submit the plan as a PDF file, in the same scale as the Contract Plans, and formatted on 11 inch by 17 inch sheets. Do not start night work prior to the Director's acceptance of the lighting plan.

During active nighttime operations, furnish, place and maintain variable message signs to alert approaching motorists of lighted construction zones ahead. Operate the variable message signs only during active construction activities.

Include compensation for lighting for night work in the Contract prices for the various items of the Contract. Take ownership of all lighting equipment for night work.

**8-4.1.1 Holiday and Weekend Work:** If work is authorized by the Director on holidays, weekends, or nights the Contractor shall notify the Director 72 hours in advance of the time and date on which the Contractor or any of his subcontractors propose to perform work during such time periods to afford the Director ample time to effectively schedule his inspection personnel in accordance with the Contractor's timetable.

**8-4.2 Sequence of Operations:** Do not open up work to the prejudice of work already started. The Director may require the Contractor to finish a section on which work is in progress before starting work on any additional section. Specific requirements pertaining to the sequence

of operations for constructing the project and maintaining traffic shall be included in the Contractor's work progress schedule.

**8-4.3 Interference with Traffic:** At all times conduct the work in such manner and in such sequence as to ensure the least practicable interference with traffic. Operate all vehicles and other equipment safely and without hindrance to the traveling public. Park all private vehicles outside the clear zone. Place materials stored along the roadway so as to cause no obstruction to the traveling public as possible.

Where existing pavement is to be widened and stabilizing is not required, prevent any open trench from remaining after working hours by scheduling operations to place the full thickness of widened base by the end of each day. Do not construct widening strips simultaneously on both sides of the road, except where separated by a distance of at least 1/4 mile along the road and where either the work of excavation has not been started or the base has been completed.

**8-4.4 Coordination with other Contractors:** Sequence the work and dispose of materials so as not to interfere with the operations of other Contractors engaged upon adjacent work; join the work to that of others in a proper manner, in accordance with the spirit of the Contract Documents; and perform the work in the proper sequence in relation to that of other contractors; all as may be directed by the Director.

Each contractor is responsible for any damage done by him or his agents to the work performed by another contractor.

**8-4.5 Drainage:** Conduct the operations and maintain the work in such condition to provide adequate drainage at all times. Do not obstruct existing functioning storm sewers, gutters, ditches, and other run-off facilities. Maintain all existing storm sewers, gutters, ditches, and other run-off facilities in an operable condition as necessary to provide adequate drainage at all times.

**8-4.6 Fire Hydrants:** Keep fire hydrants on or adjacent to the highway accessible to fire apparatus at all times, and do not place any material or obstruction within 15 feet of any fire hydrant.

**8-4.7 Protection of Structures:** Do not operate heavy equipment close enough to pipe headwalls or other structures to cause their displacement.

**8-4.8 Fencing:** Erect permanent fence as a first order of business on all projects that include fencing where the Director determines that the fencing is necessary to maintain the security of livestock on adjacent property, or for protection of pedestrians who are likely to gain access to the project from adjacent property.

**8-4.9 Contaminated Materials:** When the construction operations encounter or expose any abnormal condition that may indicate the presence of a contaminated material, discontinue such operations in the vicinity of the abnormal condition and notify the Director immediately. Be alert for the presence of tanks or barrels; discolored or stained earth, metal, wood, ground water; visible fumes; abnormal odors; excessively hot earth; smoke; or other conditions that appear abnormal as possible indicators of the presence of contaminated materials. Treat these conditions with extraordinary caution.

Make every effort to minimize the spread of any contaminated materials into uncontaminated areas.

Do not resume the construction operations in the vicinity of the abnormal conditions until so directed by the Director.

Dispose of the contaminated material in accordance with the requirements and regulations of any Local, State, or Federal agency having jurisdiction. Where the Contractor performs work necessary to dispose of contaminated material, and the Contract does not include pay items for disposal, the County will pay for this work as provided in 4-4.

The County agrees to hold harmless and indemnify the Contractor for damages when the Contractor discovers or encounters contaminated materials or pollutants during the performance of services for the County when the presence of such materials or pollutants were unknown or not reasonably discoverable. Such indemnification agreement is only effective if the Contractor immediately stops work and notifies the County of the contaminated material or pollutant problem.

Such indemnification agreement is not valid for damages resulting from the Contractor's willful, wanton, or intentional conduct or the operations of Contaminated and Hazardous Material Contractors.

### **8-5 Qualifications of Contractor's Personnel.**

Provide competent, careful, and reliable superintendents, foremen, and workmen. Provide workmen with sufficient skill and experience to properly perform the work assigned to them. Provide workmen engaged on special work, or skilled work, such as bituminous courses or mixtures, concrete bases, pavements, or structures, or in any trade, with sufficient experience in such work to perform it properly and satisfactorily and to operate the equipment involved. Provide workmen that shall make due and proper effort to execute the work in the manner prescribed in the Contract Documents, or the Director may take action as prescribed below.

The Contractor shall assign a full-time superintendent to routinely and constantly supervise, manage, plan, monitor, schedule, and control the construction operations on behalf of the Contractor. Trade workers will not be considered to be a full-time superintendent. The Contractor's superintendent shall be present on the project at all times when the Contractor's work crews, or work crews of other parties authorized by the Director, are engaged in any activity whatsoever associated with the project. Should the Contractor fail to comply with the above condition, the Director may, at his discretion, deduct from the Contractor's partial monthly payment estimate, the amount of \$250 per hour for each hour lacking adequate superintendence. This deduction is to account for the County's loss of adequate supervision, not as a penalty, but as liquidated damages for services not rendered.

It is prohibited as a conflict of interest for a Contractor to subcontract with a Consultant to perform Contractor Quality Control when the Consultant is under contract with the County to perform work on any project described in the Contractor's Contract with the County. Prior to approving a Consultant for Contractor Quality Control, the Contractor shall submit to the County a Certificate from the proposed Consultant certifying that no conflict of interest exists.

Whenever the Director determines that any person employed by the Contractor is incompetent, unfaithful, intemperate, disorderly, or insubordinate, the Director will provide written notice and the Contractor shall discharge the person from the work. Do not employ any discharged person on the project without the written consent of the Director. If the Contractor fails to remove such person or persons, the Director may withhold all estimates that are or may become due, or suspend the work until the Contractor complies with such orders. Protect, defend, indemnify, and hold the County, its agents, officials, and employees harmless from all claims, actions, or suite arising from such removal, discharge, or suspension of employees.

## **8-6 Temporary Suspension of Contractor's Operations.**

**8-6.1 Authority to Suspend Contractor's Operations:** The Director has the authority to suspend the Contractor's operations, wholly or in part. The Director will order such suspension in writing, giving in detail the reasons for the suspension. Contract Time will be charged during all suspensions of Contractor's operations. The County may grant an extension of Contract Time in accordance with 8-7.3.2 when determined appropriate in the County's sole judgment.

No additional compensation or time extension will be paid or granted to the Contractor when the operations are suspended for the following reasons:

1. The Contractor fails to comply with the Contract Documents.
2. The Contractor fails to carry out orders given by the Director.
3. The Contractor causes conditions considered unfavorable for continuing

the Work.

Immediately comply with any suspension order. Do not resume operations until authorized to do so by the Director in writing. Any operations performed by the Contractor, and otherwise constructed in conformance with the provisions of the Contract, after the issuance of the suspension order and prior to the Director's authorization to resume operations will be at no cost to the County. Further, failure to immediately comply with any suspension order will also constitute an act of default by the Contractor and is deemed sufficient basis in and of itself for the County to declare the Contractor in default, in accordance with 8-9, with the exception that the Contractor will not have ten calendar days to correct the conditions for which the suspension was ordered.

**8-6.1.1 State of Emergency:** The Director has the authority to suspend the Contractor's operations, wholly or in part, pursuant to a Governor's Declaration of a State of Emergency. The Director will order such suspension in writing, giving in detail the reasons for the suspension. Contract Time will be charged during all suspensions of Contractor's operations. The County, at its sole discretion, may grant an extension of Contract Time and reimburse the Contractor for specific costs associated with such suspension. Further, in such instances, the County's determination as to entitlement to either time or compensability will be final, unless the Contractor can prove by clear and convincing evidence to a Disputes Review Board that the County's determination was without any reasonable factual basis

**8-6.2 Prolonged Suspensions:** If the Director suspends the Contractor's operations for an indefinite period, store all materials in such manner that they will not obstruct or impede the traveling public unnecessarily or become damaged in any way. Take every reasonable precaution to prevent damage to or deterioration of the work performed. Provide suitable drainage of the roadway by opening ditches, shoulder drains, etc., and provide any temporary structures necessary for public travel through the project.

**8-6.3 Permission to Suspend Contractor's Operations:** Do not suspend operations or remove equipment or materials necessary for completing the work without obtaining the Director's written permission. Submit all requests for suspension of operations in writing to the Director, and identify specific dates to begin and end the suspension. The Contractor is not entitled to any additional compensation for suspension of operations during such periods.

**8-6.4 Suspension of Contractor's Operations - Holidays and Special Events:** Unless the Contractor submits a written request to work during one or more days of a Holiday or Special Event at least ten calendar days in advance of the beginning date of the Holiday or Special Event and receives written approval from the Director, the Contractor shall not work on the following days: Martin Luther King, Jr. Day; Memorial Day; the Saturday and Sunday immediately



preceding Memorial Day; Independence Day; Independence Day (Observed); Labor Day; the Friday, Saturday, and Sunday immediately preceding Labor Day; Veterans Day; Veterans Day (Observed); the Wednesday immediately preceding Thanksgiving Day; Thanksgiving Day; the Friday, Saturday and Sunday immediately following Thanksgiving Day; December 24 through January 2, inclusive; and Special Events noted in the Plans. Contract Time will be charged during these Holiday and Special Event periods. Contract Time will be adjusted in accordance with 8-7.3.2. The Contractor is not entitled to any additional compensation beyond any allowed Contract Time adjustment for suspension of operations during such Holiday and Special Event periods.

During such suspensions, remove all equipment and materials from the clear zone, except those required for the safety of the traveling public and retain sufficient personnel at the job site to properly meet the requirements of Sections 102 and 104. The Contractor is not entitled to any additional compensation for removal of equipment from clear zones or for compliance with Section 102 and Section 104 during such Holiday and Special Event periods.

## **8-7 Computation of Contract Time.**

**8-7.1 General:** Perform the contracted work fully, entirely, and in accordance with the Contract Documents within the Contract Time specified in the proposal, or as may be extended in accordance with the provisions herein below.

The County considers in the computation of the Contract Time the effect that utility relocation and adjustments have on job progress and the scheduling of construction operations required in order to adequately maintain traffic, as detailed in the Plans or as scheduled in the Special Provisions.

**8-7.2 Date of Beginning of Contract Time:** The date on which Contract Time begins is either the date on which the Contractor actually begins work, or the date for beginning the charging of Contract Time as set forth in the proposal; whichever is earlier.

### **8-7.3 Adjusting Contract Time:**

**8-7.3.1 Increased Work:** The County may grant an extension of Contract Time when it increases the Contract amount due to overruns in original Contract items, adds new work items, or provides for unforeseen work. The County will base the consideration for granting an extension of Contract Time on the extent that the time normally required to complete the additional designated work delays the Contract completion schedule.

**8-7.3.2 Contract Time Extensions:** The County may grant an extension of Contract Time when a controlling item of work is delayed by factors not reasonably anticipated or foreseeable at the time of bid. The County may allow such extension of time only for delays occurring during the Contract Time period or authorized extensions of the Contract Time period. When failure by the County to fulfill an obligation under the Contract results in delays to the controlling items of work, the County will consider such delays as a basis for granting a time extension to the Contract.

Whenever the Director suspends the Contractor's operations, as provided in 8-6, for reasons other than the fault of the Contractor, the Director will grant a time extension for any delay to a controlling item of work due to such suspension. The County will not grant time extensions to the Contract for delays due to the fault or negligence of the Contractor.

The County does not include an allowance for delays caused by the effects of inclement weather or suspension of Contractor's operations as defined in 8-6.4, in establishing Contract Time. The Director will continually monitor the effects of weather and, when found

justified, grant time extensions on either a bimonthly or monthly basis. The Director will not require the Contractor to submit a request for additional time due to the effects of weather.

The County will grant time extensions, on a day for day basis, for delays caused by the effects of rains or other inclement weather conditions, related adverse soil conditions or suspension of operations as defined in 8-6.4 that prevent the Contractor from productively performing controlling items of work resulting in:

1. The Contractor being unable to work at least 50% of the normal work day on pre-determined controlling work items; or

2. The Contractor must make major repairs to work damaged by weather, provided that the damage is not attributable to the Contractor's failure to perform or neglect; and provided that the Contractor was unable to work at least 50% of the normal workday on pre-determined controlling work items.

No additional compensation will be made for delays caused by the effects of inclement weather.

The County will consider the delays in delivery of materials or component equipment that affect progress on a controlling item of work as a basis for granting a time extension if such delays are beyond the control of the Contractor or supplier. Such delays may include an area-wide shortage, an industry-wide strike, or a natural disaster that affects all feasible sources of supply. In such cases, the Contractor shall submit substantiating letters from a representative number of manufacturers of such materials or equipment clearly confirming that the delays in delivery were the result of an area-wide shortage, an industry-wide strike, etc. No additional compensation will be made for delays caused by delivery of materials or component equipment.

The County will not consider requests for time extension due to delay in the delivery of custom manufactured equipment such as traffic signal equipment, highway lighting equipment, etc., unless the Contractor submits documentation that he placed the order for such equipment in a timely manner, the delay was caused by factors beyond the manufacturer's control, and the lack of such equipment caused a delay in progress on a controlling item of work. No additional compensation will be paid for delays caused by delivery of custom manufactured equipment.

The County will consider the effect of utility relocation and adjustment work on job progress as the basis for granting a time extension only if all the following criteria are met:

1. Delays are the result of either utility work that was not detailed in the Plans, or utility work that was detailed in the Plans but was not accomplished in reasonably close accordance with the schedule included in the Contract Documents.

2. Utility work actually affected progress toward completion of controlling work items.

3. The Contractor took all reasonable measures to minimize the effect of utility work on job progress, including cooperative scheduling of the Contractor's operations with the scheduled utility work at the preconstruction conference and providing adequate advance notification to utility companies as to the dates to coordinate their operations with the Contractor's operations to avoid delays.

As a condition precedent to an extension of Contract Time the Contractor must submit to the Director:

A preliminary request for an extension of Contract Time must be submitted in writing to the Director within ten calendar days after the commencement of a delay to a controlling item of work. If the Contractor fails to submit this required preliminary request for an extension of Contract Time, the Contractor fully, completely, absolutely and irrevocably waives any entitlement to an extension of Contract Time for that delay. In the case of a continuing delay only a single preliminary request for an extension of Contract Time will be required. Each such preliminary request for an extension of Contract Time shall include as a minimum the commencement date of the delay, the cause of the delay, and the controlling item of work affected by the delay.

Furthermore, the Contractor must submit to the Director a request for a Contract Time extension in writing within 30 days after the elimination of the delay to the controlling item of work identified in the preliminary request for an extension of Contract Time. Each request for a Contract Time extension shall include as a minimum all documentation that the Contractor wishes the County to consider related to the delay, and the exact number of days requested to be added to Contract Time. If the Contractor contends that the delay is compensable, then the Contractor shall also be required to submit with the request for a Contract Time extension a detailed cost analysis of the requested additional compensation. If the Contractor fails to submit this required request for a Contract Time extension, with or without a detailed cost analysis, depriving the Director of the timely opportunity to verify the delay and the costs of the delay, the Contractor waives any entitlement to an extension of Contract Time or additional compensation for the delay.

Upon timely receipt of the preliminary request of Contract Time from the Contractor, the Director will investigate the conditions, and if it is determined that a controlling item of work is being delayed for reasons beyond the control of the Contractor the Director will take appropriate action to mitigate the delay and the costs of the delay. Upon timely receipt of the request for a Contract Time extension the Director will further investigate the conditions, and if it is determined that there was an increase in the time or the cost of performance of the controlling item of work beyond the control of the Contractor, then an adjustment of Contract Time will be made, and a monetary adjustment will be made, excluding loss of anticipated profits, and the Contract will be modified in writing accordingly.

The existence of an accepted schedule, including any required update(s), as stated in 8-3.2, is a condition precedent to the Contractor having any right to the granting of an extension of Contract Time or any monetary compensation arising out of any delay. Contractor failure to have an accepted schedule, including any required update(s), for the period of potential impact, or in the event the currently accepted schedule and applicable updates do not accurately reflect the actual status of the project or fail to accurately show the true controlling or non-controlling work activities for the period of potential impact, will result in any entitlement determination as to time or money for such period of potential impact being limited solely to the County's analysis and identification of the actual controlling or non-controlling work activities. Further, in such instances, the County's determination as to entitlement as to either time or compensability will be final, unless the Contractor can prove by clear and convincing evidence to a Disputes Review Board that the County's determination was without any reasonable factual basis.

## 8-8 Reserved

### 8-9 Default and Termination of Contract.

**8-9.1 Determination of Default:** The following acts or omissions constitute acts of default and, except as to subparagraphs 9 and 11, the County will give notice, in writing, to the Contractor and his surety for any delay, neglect or default, if the Contractor:

1. fails to begin the work under the Contract within the time specified in the Notice to Proceed;
2. fails to perform the work with sufficient workmen and equipment or with sufficient materials to ensure prompt completion of the Contract;
3. performs the work unsuitably, or neglects or refuses to remove materials or to perform anew such work that the Director rejects as unacceptable and unsuitable;
4. discontinues the prosecution of the work, or fails to resume discontinued work within a reasonable time after the Director notifies the Contractor to do so;
5. becomes insolvent or is declared bankrupt, or files for reorganization under the bankruptcy code, or commits any act of bankruptcy or insolvency, either voluntarily or involuntarily;
6. allows any final judgment to stand against him unsatisfied for a period of ten calendar days;
7. makes an assignment for the benefit of creditors;
8. fails to comply with Contract requirements regarding minimum wage payments or EEO requirements;
9. fails to comply with the Director's written suspension of work order within the time allowed for compliance and which time is stated in that suspension of work order; or
10. for any other cause whatsoever, fails to carry on the work in an acceptable manner, or if the surety executing the bond, for any reasonable cause, becomes unsatisfactory in the opinion of the County.
11. fails to comply with 3-9.

For a notice based upon reasons stated in subparagraphs (1) through (8) and (10): if the Contractor, within a period of ten calendar days after receiving the notice described above, fails to correct the conditions of which complaint is made, the County will, upon written certificate from the Director of the fact of such delay, neglect, or default and the Contractor's failure to correct such conditions, have full power and authority, without violating the Contract, to take the prosecution of the work out of the hands of the Contractor and to declare the Contractor in default.

If the Contractor, after having received a prior notice described above for any reason stated in subparagraph (2), (3), (4), (5), (6) or (8), commits a second or subsequent act of default for any reason covered by the same subparagraph (2), (3), (4), (5), (6) or (8) as stated in the prior notice, and regardless whether the specific reason is the same, then, regardless of whether the Contractor has cured the deficiency stated in that prior notice, the County will, upon written certificate from the Director of the fact of such delay, neglect or default and the Contractor's failure to correct such conditions, have full power and authority, without any prior written notice to the Contractor and without violating the Contract, to take the prosecution of the work out of the hands of the Contractor and to declare the Contractor in default.

Regarding subparagraph (9), if the Contractor fails to comply with the Director's written suspension of work order within the time allowed for compliance and which time is stated in that suspension of work order, the County will, upon written certificate from the

Director of the fact of such delay and the Contractor's failure to correct that condition, have full power and authority, without violating the Contract, to immediately take the prosecution of the work out of the hands of the Contractor and to declare the Contractor in default.

Regarding subparagraph (11), if the Contractor fails to comply with 3-9, the County will have full power and authority, without violating the Contract, to immediately take the prosecution of the work out of the hands of the Contractor and to declare the Contractor in default.

The County has no liability for anticipated profits for unfinished work on a Contract that the County has determined to be in default.

Notwithstanding the above, the County shall have the right to declare the Contractor (or its "affiliate") in default and immediately terminate this Contract, without any prior notice to the Contractor, in the event the Contractor (or its "affiliate") is at any time "convicted" of a "contract crime," as these terms are defined in Section 337.165(1), Florida Statutes. The County's right to default the Contractor (or its "affiliate") for "conviction" of a "contract crime" shall extend to and is expressly applicable to any and all County Contracts that were either advertised for bid; for which requests for proposals or letters of interest were requested; for which an intent to award was posted or otherwise issued; or for which a Contract was entered into, after the date that the underlying or related criminal indictment, criminal information or other criminal charge was filed against the Contractor (or its "affiliate") that resulted in the "conviction." In the event the County terminates this Contract for this reason, the Contractor shall hereby forfeit any claims for additional compensation, extra time, or anticipated profits. The Contractor shall only be paid for any completed work up to the date of termination. Further, the Contractor shall be liable for any and all additional costs and expenses the County incurs in completing the Contract work after such termination.

**8-9.2 Termination of Contract for Convenience:** The County may terminate the entire Contract or any portion thereof, if the Director determines that a termination is in the County's interest. The Director will deliver to the Contractor a Written Notice of Termination specifying the extent of termination and the effective date.

When the County terminates the entire Contract, or any portion thereof, before the Contractor completes all items of work in the Contract, the County will make payment for the actual number of units or items of work that the Contractor has completed, at the Contract unit price, and according to the formulas and provisions set forth in 4-3.2 for items of work partially completed, and such payments will constitute full and complete compensation for such work or items. No payment of any kind or amount will be made for items of work not started. The County will not consider any claim for loss of anticipated profits, or overhead of any kind (including home office and jobsite overhead or other indirect impacts) except as provided in 4-3.2 for partially completed work.

The County will consider reimbursing the Contractor for actual cost of mobilization (when not otherwise included in the Contract) including moving equipment to the job where the volume of the work that the Contractor has completed is too small to compensate the Contractor for these expenses under the Contract unit prices.

The County may purchase at actual cost acceptable materials and supplies procured for the work, that the County has inspected, tested, and approved and that the Contractor has not incorporated in the work. Submit the proof of actual cost, as shown by receipted bills and actual cost records, at such points of delivery as the Director may designate.

Termination of a contract or a portion thereof, under the provisions of this Subarticle, does not relieve the Contractor or the surety of its responsibilities for the completed portion of the Contract or its obligations for and concerning any just claims arising out of the work performed.

All Contractor claims for additional payment, due to the County’s termination of the entire Contract or any portion thereof, must meet the requirements of 5-12.

**8-9.3 Completion of Work by County:** Upon declaration of default, the County will have full authority to appropriate or use any or all suitable and acceptable materials and equipment on the site and may enter into an agreement with others to complete the work under the Contract, or may use other methods to complete the work in an acceptable manner. The County will charge all costs that the County incurs because of the Contractor’s default, including the costs of completing the work under the Contract, against the Contractor. If the County incurs such costs in an amount that exceeds the sum that would have been payable under the Contract, then the Contractor and the surety shall be liable and shall pay the County the amount of the excess.

If, after the ten day notice period and prior to any action by the County to otherwise complete the work under the Contract, the Contractor establishes his intent to prosecute the work in accordance with the County’s requirements, then the County may allow the Contractor to resume the work, in which case the County will deduct from any monies due or that may become due under the Contract, any costs to the County incurred by the delay, or from any reason attributable to the delay.

**8-10 Liquidated Damages for Failure to Complete the Work.**

**8-10.1 Reserved.**

**8-10.2 Amount of Liquidated Damages:** Applicable liquidated damages are the amounts established in the following schedule:

Original Contract Amount	Daily Charge Per Calendar Day
\$50,000 and under.....	\$956
Over \$50,000 but less than \$250,000.....	\$964
\$250,000 but less than \$500,000.....	\$1,241
\$500,000 but less than \$2,500,000.....	\$1,665
\$2,500,000 but less than \$5,000,000.....	\$2,712
\$5,000,000 but less than \$10,000,000.....	\$3,447
\$10,000,000 but less than \$15,000,000.....	\$4,866
\$15,000,000 but less than \$20,000,000.....	\$5,818
\$20,000,000 and over.....	\$9,198 plus 0.00005 of any amount over \$20 million (Round to nearest whole dollar)

**8-10.3 Determination of Number of Days of Default:** For all contracts, regardless of whether the Contract Time is stipulated in calendar days or working days, the Director will count default days in calendar days.

**8-10.4 Conditions under which Liquidated Damages are Imposed:** If the Contractor or, in case of his default, the surety fails to complete the work within the time stipulated in the Contract, or within such extra time that the County may have granted then the Contractor or, in case of his default, the surety shall pay to the County, not as a penalty, but as liquidated damages, the amount so due as determined in 8-10.2.

**8-10.5 Right of Collection:** The County has the right to apply, as payment on such liquidated damages, any money the County owes the Contractor.

**8-10.6 Allowing Contractor to Finish Work:** The County does not waive its right to liquidated damages due under the Contract by allowing the Contractor to continue and to finish the work, or any part of it, after the expiration of the Contract Time.

**8-10.7 Completion of Work by County:** In the case of a default of the Contract and the completion of the work by the County, the Contractor and his surety are liable for the liquidated damages under the Contract, but the County will not charge liquidated damages for any delay in the final completion of the County's performance of the work due to any unreasonable action or delay on the part of the County.

**8-11 Release of Contractor's Responsibility.**

The County considers the Contract complete when the Contractor has completed all work and the County has accepted the work. The County will then release the Contractor from further obligation except as set forth in his bond, and except as provided in 5-13.

**8-12 Recovery of Damages Suffered by Third Parties.**

In addition to the damages provided for in 8-10.2 and pursuant to Section 337.18 of the Florida Statutes, when the Contractor fails to complete the work within the Contract Time the County may recover from the Contractor amounts that the County pays for damages suffered by third parties unless the failure to timely complete the work was caused by the County's act or omission.

## SECTION 9 MEASUREMENT AND PAYMENT

### 9-1 Measurement of Quantities.

**9-1.1 Measurement Standards:** The Director will measure all work completed under the Contract in accordance with the United States Standard Measures.

**9-1.2 Method of Measurements:** The Director will take all measurements horizontally or vertically.

#### 9-1.3 Determination of Pay Areas:

**9-1.3.1 Final Calculation:** When measuring items paid for on the basis of area of finished work, where the pay quantity is designated to be determined by calculation, the Director will use lengths and widths in the calculations based on the station to station dimensions shown in the Plans; the station to station dimensions actually constructed within the limits designated by the Director; or the final dimensions measured along the surface of the completed work within the neat lines shown in the Plans or designated by the Director. The Director will use the method or combination of methods of measurement that reflect, with reasonable accuracy, the actual surface area of the finished work as the Director determines.

**9-1.3.2 Plan Quantity:** When measuring items paid for on the basis of area of finished work, where the pay quantity is designated to be the plan quantity, the Director will determine the final pay quantity based on the plan quantity subject to the provisions of 9-3.2. Generally, the Director will calculate the plan quantity using lengths based on station to station dimensions and widths based on neat lines shown in the Plans.

**9-1.4 Construction Outside Authorized Limits:** The Director will not pay for surfaces constructed over a greater area than authorized, or for material that the Contractor has moved from outside of slope stakes and lines shown in the Plans, except where the Director provides written instruction for the Contractor to perform such work.

**9-1.5 Truck Requirements:** Provide all trucks with numbers and certify that all trucks used have a manufacturer's certification or permanent decal showing the truck capacity rounded to the nearest tenth of a cubic yard placed on both sides of the truck. This capacity will include the truck body only and any side boards added will not be included in the certified truck body capacity. Ensure the lettering and numbers are legible for identification purposes at all times.

**9-1.6 Ladders and Instrument Stands for Bridge Projects:** On bridge projects, in order to facilitate necessary measurements, provide substantial ladders to the tops of piers and bents, and place and move such ladders as the Director directs.

For bridge projects crossing water or marshy areas, supply fixed stands for instrument mounting and measurements, in accordance with the details stipulated in the Specifications for the project.

### 9-2 Scope of Payments.

**9-2.1 Items Included in Payment:** Accept the compensation as provided in the Contract as full payment for furnishing all materials and for performing all work contemplated and embraced under the Contract; also for all loss or damage arising out of the nature of the work or from the action of the elements, or from any unforeseen difficulties or obstructions which may arise or be encountered in the prosecution of the work until its final acceptance; also for all other costs incurred under the provisions of Division I.



For any item of work contained in the proposal, except as might be specifically provided otherwise in the basis of payment clause for the item, include in the Contract unit price (or lump sum price) for the pay item or items the cost of all labor, equipment, materials, tools and incidentals required for the complete item of work, including all requirements of the Section specifying such item of work, except as specifically excluded from such payments.

**9-2.1.1 Reserved**

**9-2.1.2 Bituminous Material:** Prepare a Contractor's Certification of Quantities, using the FDOT's current approved form for Superpave Asphalt Base, Turnout Construction (Asphalt), Asphalt Treated Permeable Base, Superpave Asphaltic Concrete, Miscellaneous Asphalt Pavement, Asphalt Concrete Friction Course, and Asphalt Rubber Membrane Interlayer pay items. Submit this certification to the Director no later than Twelve O'clock noon Monday after the estimate cut-off or as directed by the Director, based on the quantity of asphalt produced and accepted on the roadway per Contract. Ensure the certification includes the Project Number, Contract Number, Financial Project Identification (FPID) Number (if applicable), Certification Date and Number, the period the certification represents and the tons produced for each asphalt pay item.

On Contracts having an original Contract Time of more than 365 calendar days, or more than 5,000 tons of asphalt concrete, the County will adjust the bid unit price for bituminous material, excluding cutback and emulsified asphalt to reflect increases or decreases in the Asphalt Price Index (API) of bituminous material from that in effect during the month in which bids were received. The Contractor will not be given the option of accepting or rejecting this adjustment. Bituminous adjustments will be made only when the current API (CAPI) varies by more than 5% of the API prevailing in the month when bids were received (BAPI), and then only on the portion that exceeds 5%.

The County will determine the API for each month by averaging quotations in effect on the first day of the month at all terminals that could reasonably be expected to furnish bituminous material to projects in the State of Florida.

The API will be available on the Construction Office website before the 15<sup>th</sup> day of each month at the following URL: <http://www.fdot.gov/construction/fuel&Bit/Fuel&Bit.shtm>.

Payment on progress estimates will be adjusted to reflect adjustments in the prices for bituminous materials in accordance with the following:

$$\text{\$ Adjustment} = (\text{ID})(\text{Gallons})$$

Where ID = Index Difference = [CAPI - 0.95(BAPI)] when the API has decreased between the month of bid and month of this progress estimate.

Where ID = Index Difference = [CAPI - 1.05(BAPI)] when the API has increased between the month of bid and month of this progress estimate.

Payment will be made on the current progress estimate to reflect the index difference at the time work was performed.

For asphalt concrete items payable by the ton or square yard, the number of gallons will be determined assuming a mix design with 6.25% liquid asphalt weighing 8.58 pounds per gallon.

For asphalt concrete items payable by the cubic yard, the number of gallons will be determined assuming a mix design with 3% liquid asphalt weighing 8.58 pounds per gallon.

**9-2.2 Non-Duplication of Payment:** In cases where the basis of payment clause in these Specifications relating to any unit price in the bid schedule requires that the unit price cover and be considered compensation for certain work or material essential to the item, the County will not measure or pay for this same work or material under any other pay item that may appear elsewhere in these Specifications.

**9-3 Compensation for Altered Quantities.**

**9-3.1 General:** When alteration in Plans or quantities of work not requiring a supplemental agreement as hereinbefore provided for are offered and performed, the Contractor shall accept payment in full at Contract unit bid prices for the actual quantities of work done, and no allowance will be made for increased expense, loss of expected reimbursement, or loss of anticipated profits suffered or claimed by the Contractor, resulting either directly from such alterations, or indirectly from unbalanced allocation among the Contract items of overhead expense on the part of the bidder and subsequent loss of expected reimbursement therefore, or from any other cause.

Compensation for alterations in Plans or quantities of work requiring supplemental agreements shall be stipulated in such agreement, except when the Contractor proceeds with the work without change of price being agreed upon, the Contractor shall be paid for such increased or decreased quantities at the Contract unit prices bid in the Proposal for the items of work. If no Contract unit price is provided in the Contract, and the parties cannot agree as to a price for the work, the Contractor agrees to do the work in accordance with 4-3.2.

**9-3.2 Payment Based on Plan Quantity:**

**9-3.2.1 Error in Plan Quantity:** As used in this Article, the term “substantial error” is defined as the smaller of (1) or (2) below:

1. a difference between the original plan quantity and final quantity of more than 5%,
2. a change in quantity which causes a change in the amount payable of more than \$5,000.

On multiple job Contracts, changes made to an individual pay item due to substantial errors will be based on the entire Contract quantity for that pay item.

Where the pay quantity for any item is designated to be the original plan quantity, the County will revise such quantity only in the event that the County determines it is in substantial error. In general, the County will determine such revisions by final measurement, plan calculations, or both, as additions to or deductions from plan quantities.

In the event that either the County or the Contractor contends that the plan quantity for any item is in error and additional or less compensation is thereby due, the claimant shall submit, at their own expense, evidence of such in the form of acceptable and verifiable measurements or calculations. The County will not revise the plan quantity solely on the basis of a particular method of construction that the Contractor selects. For earthwork items, the claimant must note any differences in the original ground surfaces from that shown in the original Plan cross-sections that would result in a substantial error to the plan quantity, and must be properly documented by appropriate verifiable level notes, acceptable to both the Contractor and the County, prior to disturbance of the original ground surface by construction operations. The claimant shall support any claim based upon a substantial error for differences in the original ground surface by documentation as provided above.

**9-3.2.2 Authorized Changes in Limits of Work:** Where the County designates the pay quantity for any item to be the original plan quantity and authorizes a plan change which

results in an increase or decrease in the quantity of that item, the County will revise the plan quantity accordingly. In general, the County will determine such revisions by final measurement, plan calculations or both.

**9-3.2.3 Specified Adjustments to Pay Quantities:** Do not apply the limitations specified in 9-3.2.1 and 9-3.2.2 to the following:

1. Where these Specifications or Special Provisions provide that the County determines the pay quantity for an item on the basis of area of finished work adjusted in accordance with the ratio of measured thickness to nominal thickness.
2. Where these Specifications provide for a deduction due to test results falling outside of the allowable specified tolerances.
3. To payment for extra length fence posts, as specified in 550-6.3.

**9-3.3 Lump Sum Quantities:**

**9-3.3.1 Error in Lump Sum Quantity:** Where the County designates the pay quantity for an item to be a lump sum and the Plans show an estimated quantity, the County will adjust the lump sum compensation only in the event that either the Contractor submits satisfactory evidence or the County determines and furnishes satisfactory evidence that the lump sum quantity shown is in substantial error as defined in 9-3.2.1.

**9-3.3.2 Authorized Changes in Work:** Where the County designates the pay quantity for an item to be a lump sum and the Plans show an estimated quantity, the County will adjust compensation for that item proportionately when an authorized plan change is made which results in an increase or decrease in the quantity of that item. When the Plans do not show an estimated plan quantity or the applicable specifications do not provide adjustments for contingencies, the County will compensate for any authorized plan change resulting in an increase or decrease in the cost of acceptably completing the item by establishing a new unit price through a supplemental agreement as provided in 4-3.2.

**9-3.4 Deviation from Plan Dimensions:** If the Contractor fails to construct any item to Plan or to authorized dimensions within the specified tolerances, the Director, at his discretion will: require the Contractor to reconstruct the work to acceptable tolerances at no additional cost to the County; accept the work and provide the Contractor no pay; or accept the work and provide the Contractor a reduced final pay quantity or reduced unit price. The County will not make reductions to final pay quantities for those items designated to be paid on the basis of original plan quantity or a lump sum quantity under the provisions of this Article unless such reduction results in an aggregate monetary change per item of more than \$100, except that for earthwork items, the aggregate change must exceed \$5,000 or 5% of the original plan quantity, whichever is smaller. If, in the opinion of the Director, the Contractor has made a deliberate attempt to take advantage of the construction tolerances as defined in 120-12.1 to increase borrow excavation in fill sections or to decrease the required volume of roadway or lateral ditch excavation or embankment, the County will take appropriate measurements and will apply reductions in pay quantities. The County will not use the construction tolerance, as defined in 120-12.1, as a pay tolerance. The construction tolerance is not to be construed as defining a revised authorized template.

**9-4 Deleted Work.**

The County will have the right to cancel the portions of the Contract relating to the construction of any acceptable item therein, by making an adjustment in payment to the Contractor of a fair and equitable amount covering the value of all cancelled work less all items of cost incurred prior to the date that the Director cancels the work.

## **9-5 Partial Payments.**

**9-5.1 General:** The Director will make partial payments on monthly estimates based on the amount of work that the Contractor completes during the month (including delivery of certain materials, as specified herein below). The Director will make approximate monthly payments, and the County will correct all partial estimates and payments in the subsequent estimates and in the final estimate and payment.

The County will base the amount of such payments on the total value of the work that the Contractor has performed to the date of the estimate, based on the quantities completed and the Contract prices, less payments previously made and less any retainage withheld.

Contract amount is defined as the original Contract amount adjusted by approved supplemental agreements.

**9-5.1.1 Applications for Payment:** On or before the 25<sup>th</sup> day of each month, the Contractor shall submit six notarized copies of its monthly application for payment to the CEI Consultant for Work performed during the previous month. Each application for payment shall be accompanied by the certifications described in 9-5.6. The County shall not be required to make payment until and unless these certifications are furnished by the Contractor.

Invoices received after the 25<sup>th</sup> day of each month shall be considered for payment as part of the next month's application. Within ten calendar days of receipt of each application for payment, the CEI Consultant will either:

1. indicate his approval of the requested amount;
2. indicate his approval of only a portion of the requested payment, stating in writing his reasons therefore; or
3. return the application for payment to the Contractor indicating, in writing, the reason for refusing to approve payment and the action necessary to make the payment request proper.

In the event of a total denial and return of the application for payment by the CEI Consultant, the Contractor may make the necessary corrections and resubmit the application for payment. The County shall, within thirty calendar days after County approval of an application for payment, pay the Contractor the amounts so approved. Provided, however, in no event shall the County be obligated to pay any amount greater than that portion of the application for payment approved by the CEI Consultant. Monthly payments to the Contractor shall in no way imply or constitute approval or acceptance of Contractor's Work.

**9-5.1.2 Retainage:** The County shall initially retain ten percent of the gross amount of each monthly application for payment or ten percent of the portion thereof approved by the CEI Consultant for payment, whichever is less. After 50% of the Contract amount has been earned, the County will reduce the retainage to five percent of each subsequent progress payment. Such sums shall be accumulated and released to the Contractor with final payment.

For purposes of determining when 50% of the Contract amount has been earned, stored materials and mobilization costs will be excluded.

Retainage will be determined for each job on multiple job Contracts. The County will not accept Securities, Certificates of Deposit or letters of credit as a replacement for retainage. Amounts withheld will not be released until payment of the final estimate.

### **9-5.2 Reserved**

### **9-5.3 Withholding Payment:**

**9-5.3.1 Withholding Payment for Defective Work:** If the County discovers any defective work or material prior to the final acceptance, or if the County has a reasonable doubt as to the integrity of any part of the completed work prior to final acceptance, then the County will not allow payment for such defective or questioned work until the Contractor has remedied the defect and removed any causes of doubt.

**9-5.3.2 Withholding Payment for Failure to Comply:** The County will withhold progress payments from the Contractor if he fails to comply with any or all of the following, as applicable, within 60 days after beginning work:

1. Comply with and submit required documentation relating to prevailing wage rate provisions, Equal Employment Opportunity, On-The-Job Training, and Affirmative Action;
2. Comply with the requirement to report all necessary information, including actual payments to DBEs, all other subcontractors and major suppliers, through the Internet based Equal Opportunity Reporting System;
3. Comply with or make a good faith effort to ensure employment opportunity for minorities and females in accordance with the required contract provisions for Federal Aid Construction Contracts, and
4. Comply with or make a good faith effort to meet On-The-Job Training goals.

The County will withhold progress payments until the Contractor has satisfied the above conditions.

**9-5.3.3 Withholding Payment for Other Reasons:** The County may withhold any payments otherwise due Contractor under this Agreement or any other agreement between the County and the Contractor, to such extent as may be necessary in the County's opinion to protect it from loss as a result of:

1. Third party claims filed or reasonable evidence indicating probable filing of such claims;
2. Failure of the Contractor to make payment properly to Subcontractors or for labor, materials, or equipment;
3. Reasonable doubt that the Work can be completed for the unpaid balance of the Contract amount;
4. Reasonable indication that the Work will not be completed within the Contract Time;
5. Unsatisfactory prosecution of the Work by the Contractor;
6. Failure to provide accurate and current red line documents, as-built drawings, or certified surveys;
7. Any other material breach of the Contract Documents.

If these conditions are not remedied or removed, the County may, after three calendar days' written notice, rectify the same at Contractor's expense. The County also may offset against any sums due Contractor the amount of any liquidated or unliquidated obligations of Contractor to the County.

**9-5.4 Release of Retainage After Acceptance:** When the Contractor has furnished the County with all submittals required by the Contract, such as invoices, DBE Participation Certification, properly executed and notarized Release and Affidavit, duly executed Surety's consent to final payment, EEO reports, materials certifications, certification of materials procured, etc., (excluding Contractor's letter of acceptance of final amount due and Form 21-A

release) and the Director has determined that the measurement and computation of pay quantities is correct, the County may reduce the retainage to two percent of the Contract plus any amount that the County elects to deduct for defective work as provided in 9-5.3.

The County will not allow a semifinal estimate under the provisions of the above paragraphs unless the time elapsing between (1) acceptance of the project and receipt of all test reports, invoices, etc., and (2) submission of the final estimate to the Contractor for acceptance, exceeds or is expected to exceed 30 days.

The County may deduct from payment estimates any sums that the Contractor owes to the County on any account. Where more than one project or job (separate project number) is included in the Contract, the County will distribute the reduced retainage as provided in the first paragraph of this Subarticle to each separate project or job in the ratio that the Contract value of the work for the particular job bears to the total Contract amount.

**9-5.5 Partial Payments for Delivery of Certain Materials:**

**9-5.5.1 General:** The County will allow partial payments for new materials that will be permanently incorporated into the project and are stockpiled in approved locations in the project vicinity. Stockpile materials so that they will not be damaged by the elements and in a manner that identifies the project on which they are to be used.

The following conditions apply to all payments for stockpiled materials:

1. There must be reasonable assurance that the stockpiled material will be incorporated into the specific project on which partial payment is made.
2. The stockpiled material must be approved as meeting applicable specifications.
3. The total quantity for which partial payment is made shall not exceed the estimated total quantity required to complete the project.
4. The Contractor shall submit to the Director certified invoices to document the value of the materials received. The amount of the partial payment will be determined from invoices for the material up to the unit price in the Contract.
5. Delivery charges for materials delivered to the jobsite will be included in partial payments if properly documented.
6. Partial payments will not be made for materials which were stockpiled prior to award of the Contract for a project.

**9-5.5.2 Partial Payment Amounts:** The following partial payment restrictions apply:

1. Partial payments less than \$5,000 for any one month will not be processed.
2. Partial payments for structural steel and precast prestressed items will not exceed 85% of the bid price for the item. Partial payments for all other items will not exceed 75% of the bid price of the item in which the material is to be used.
3. Partial payment will not be made for aggregate and base course material received after paving or base construction operations begin except when a construction sequence designated by the County requires suspension of paving and base construction after the initial paving operations, partial payments will be reinstated until the paving and base construction resumes.

**9-5.5.3 Off Site Storage:** If the conditions of 9-5.5.1 are satisfied, partial payments will be allowed for materials stockpiled in approved in-state locations. Additionally,

partial payments for materials stockpiled in approved out-of-state locations will be allowed if the conditions of 9-5.5.1 and the following conditions are met:

1. Furnish the County a Materials Bond stating the supplier guarantees to furnish the material described in the Contract to the Contractor and County. Under this bond, the Obligor shall be the material supplier and the Obligees shall be the Contractor and the Lee County Board of County Commissioners. The bond shall be in the full dollar amount of the bid price for the materials described in the contract.

2. The following clauses must be added to the construction Contract between the Contractor and the supplier of the stockpiled materials:

“Notwithstanding anything to the contrary, <supplier> will be liable to the Contractor and Lee County, Florida County<supplier> default in the performance of this agreement.”

“Notwithstanding anything to the contrary, this agreement, and the performance bond issued pursuant to this agreement, does not alter, modify, or otherwise change the Contractor’s obligation to furnish the materials described in this agreement to Lee County, Florida County.”

3. The agreement between the Contractor and the supplier of the stockpiled materials must include provisions that the supplier will store the materials and that such materials are the property of the Contractor.

**9-5.6 Certification of Payment to Subcontractors:** The term “subcontractor,” as used herein, includes persons or firms furnishing materials or equipment incorporated into the work or stockpiled for which the County has made partial payment and firms working under equipment-rental agreements. The Contractor is required to pay all subcontractors for satisfactory performance of their Contracts before the County will make a further progress (partial) payment. The Contractor shall also return all retainage withheld to the subcontractors within 30 days after the subcontractor’s work is satisfactorily complete, as determined by the County. Prior to receipt of any progress (partial) payment, the prime contractor shall certify that all subcontractors having an interest in the Contract were paid for satisfactory performance of their Contracts and that the retainage is returned to subcontractors within 30 days after satisfactory completion of the subcontractor’s work. Submit this certification in the form designated by the County.

Within 30 days of the Contractor’s receipt of the final progress payment or any other payments thereafter, except the final payment, the Contractor shall pay all subcontractors and suppliers having an interest in the Contract for all work completed and materials furnished. The County will honor an exception to the above when the Contractor demonstrates good cause for not making any required payment and submits written notification of any such good cause to both the County and the affected subcontractors or suppliers within said 30 day period.

The Contractor shall indemnify and provide defense for the County when called upon to do so for all claims or suits against the County, by third parties, pertaining to Contractor payment or performance issues arising out of the Contract. It is expressly understood that the monetary limitation on the extent of the indemnification shall be the approved Contract amount, which shall be the original Contract amount as may be increased by subsequent Supplemental Agreements.

## **9-6 Record of Construction Materials.**

**9-6.1 General:** For all construction materials used in the construction of the project, (except materials exempted by 9-6.2), preserve for the County’s inspection the invoices and records of the materials for a period of three years from the date of completion of the project.

Apply this requirement when subcontractors purchase materials, and obtain the invoices and other materials records from the subcontractors. By providing the materials, the Contractor certifies that all invoices will be maintained for the required period.

**9-6.2 Non-Commercial Materials:** The provisions of 9-6.1 do not apply to materials generally classed as non-commercial, such as fill materials, local sand, sand-clay, or local materials used as stabilizer.

### **9-7 Disputed Amounts Due the Contractor.**

The County reserves the right to withhold from the final estimate any disputed amounts between the Contractor and the County. The County will release all other amounts due, as provided in 9-8.

### **9-8 Acceptance and Final Payment.**

**9-8.1 Acceptance and Final Payment Documents:** Whenever the Contractor has completely performed the work provided for under the Contract and the Director has performed a final inspection and made final acceptance (as provided in 5-10 and 5-11), and subject to the terms of 8-11, the Director will prepare a final estimate showing the value of the work as soon as the Director makes the necessary measurements and computations. The Director will correct all prior estimates and payments in the final estimate and payment. The County will pay the estimate, less any sums that the County may have deducted or retained under the provisions of the Contract, as soon as practicable after final acceptance of the work, along with all executed supplemental agreements received after final acceptance.

If the Contractor fails to furnish all required Contract Documents as listed in (1) through (9) below within 90 days of the County's offer of final payment or request for refund of overpayment, the County will not issue Acceptance and remaining retainage will continue to be withheld..

1. The Contractor has agreed in writing to accept the balance due or refund the overpayment, as determined by the County, as full settlement of his account under the Contract and of all claims in connection therewith, or the Contractor, has through the use of the Qualified Acceptance Letter, accepted the balance due or refunded the overpayment, as determined by the County, with the stipulation that his acceptance of such payment or the making of such refund does not constitute any bar, admission, or estoppel, or have any effect as to those payments in dispute or the subject of a pending claim between the Contractor and the County. To receive payment based on a Qualified Acceptance Letter, define in writing the dispute or pending claim with full particular of all items of all issues in dispute, including itemized amounts claimed for all particulars of all items, and submit it as part of the Qualified Acceptance Letter. The Contractor further agrees, by submitting a Qualified Acceptance Letter that any pending or future claim or suit is limited to those particulars, including the itemized amounts, defined in the original Qualified Acceptance Letter, and that he will commence with any such arbitration claim or suit within 820 calendar days from and after the time of final acceptance of the work and that his failure to file a formal claim within this period constitutes his full acceptance of the Director's final estimate and payment. The overpayment refund check from the Contractor, if required, will be considered a part of any Acceptance Letter executed.

2. The Contractor has properly maintained the project, as specified hereinbefore.

3. The Contractor has furnished a sworn affidavit to the effect that the Contractor has paid all bills and no suits are pending (other than those exceptions listed, if any)



in connection with work performed under the Contract and that the Contractor has not offered or made any gift or gratuity to, or made any financial transaction of any nature with, any employee of the County in the performance of the Contract. Include with the listed tort liability exceptions, if any, evidence of adequate insurance coverage as required in 7-13.

4. The surety on the Contract bond consents, by completion of their portion of the affidavit and surety release subsequent to the Contractor's completion of his portion, to final payment to the Contractor and agrees that the making of such payment does not relieve the surety of any of its obligations under the bond.

5. The Contractor has complied with and settled all requirements pertaining to any wage-rate provisions.

6. The Contractor has submitted all required mill tests and analysis reports to the Director.

7. The Contractor has furnished the Construction Compliance with Specifications and Plans Certification. Provide the Director with a notarized final certification of compliance with the requirements of Section 105 to accompany the final estimate. Certification must be on a form provided by the Director.

8. The Contractor has submitted and the County has accepted all as-built drawings and certified surveys.

9. The Contractor has furnished all required manufacturers' warranties to the Director.

#### **9-8.2 Reserved**

#### **9-9 Reserved**

#### **9-10 Offsetting Payments.**

1. After settlement or final adjudication of any claim of the County for work done pursuant to a construction contract with any party, the County may offset such amount from payments due for work done on any construction contract, excluding amounts owed to subcontractors, suppliers, and laborers, which it has with the party owing such amount if, upon demand, payment of the amount is not made within 60 days to the County.

2. Offsetting any amount pursuant to (1) above shall not be considered a breach of Contract by the County.

**EXHIBIT F**  
**INSURANCE REQUIREMENTS**

**CERTIFICATES OF INSURANCE**

(1) The Contractor shall obtain and maintain such insurance as will protect it from: (1) claims under workers' compensation laws, disability benefit laws, or other similar employee benefit laws; (2) claims for damages because of bodily injury, occupational sickness or disease or death of its employees including claims insured by usual personal injury liability coverage; (3) claims for damages because of bodily injury, sickness or disease, or death of any person other than its employees including claims insured by usual personal injury liability coverage; and (4) from claims for injury to or destruction of tangible property including loss of use resulting there from -- any or all of which claims may arise out of, or result from, the services, Work and operations carried out pursuant to and under the requirements of the Contract Documents, whether such services, Work and operations be by the Contractor, its employees, or by Subcontractor(s), or anyone employed by or under the supervision of any of them, or for whose acts any of them may be legally liable.

(2) This insurance shall be obtained and written for not less than the limits of liability specified hereinafter, or as required by law, whichever is greater.

(3) The Contractor shall require, and shall be responsible for ensuring throughout the time the Agreement is in effect, that any and all of its Subcontractors obtain and maintain until the completion of that Subcontractor's work, such of the insurance coverages described herein as are required by law to be provided on behalf of their employees and others.

(4) The Contractor shall obtain, have and maintain during the entire period of the Agreement insurance policies, which contain the following information and provisions:

- (A) The name and type of policy and coverages provided;
- (B) The amount or limit applicable to each coverage provided;
- (C) The date of expiration of coverage;
- (D) The designation of the County as an additional insured and a certificate holder (This requirement may be excepted for workers' compensation and professional liability Insurance);
- (E) The following clause must appear on the Certificate of Insurance:

Should any material change occur in any of the above described policies or should any of said policies be canceled before the expiration date thereof, the issuing company shall mail at least thirty (30) calendar days' written notice to the County.

(5) If the initial, or any subsequently issued Certificate of Insurance expires prior to the completion of the Work or termination of the Agreement, the Contractor shall furnish to the County, in triplicate, renewal or replacement Certificate(s) of Insurance not

later than thirty (30) calendar days prior to the date of their expiration. Failure of the Contractor to provide the County with such renewal certificate(s) shall be considered justification for the County to terminate the Agreement.

(6) Contractor shall include the County, the County's agents, officers and employees in the Contractor's General Liability and Automobile Liability policies as additional insureds.

(7) If the County has any objection to the coverage afforded by other provisions of the insurance required to be purchased and maintained by Contractor in accordance with the requirements of the Contract Documents on the basis of its not complying with the Contract Documents, the County shall notify Contractor in writing thereof within thirty (30) calendar days of the delivery of such certificates to the County. Contractor shall provide to the County such additional information with respect to its insurance as may be requested.

(8) The Contractor shall obtain and maintain the following insurance coverages as provided hereinbefore, and in the type, amounts and in conformance with the following minimum requirements:

[Insert the insurance requirements provided by Risk Management for this project.]

**EXHIBIT G**  
**RELEASE AND AFFIDAVIT**

COUNTY OF \_\_\_\_\_

STATE OF FLORIDA

Before me, the undersigned authority, personally appeared

\_\_\_\_\_,  
who after being duly sworn, deposes and says:

(1) In accordance with the Contract Documents and in consideration of \$\_\_\_\_\_ paid, \_\_\_\_\_ ("Contractor") releases and waives for itself and its subcontractors, materialmen, successors and assigns, all claims demands, damages, costs and expenses, whether in contract or in tort, against Lee County, Florida (the "County"), its Board of County Commissioners, employees and agents relating in any way to the performance of the Agreement between Contractor and the County, dated \_\_\_\_\_, \_\_\_\_\_, for the period from \_\_\_\_\_ to \_\_\_\_\_.

(2) Contractor certifies for itself and its subcontractors, materialmen, successors and assigns, that all charges for labor, materials, supplies, lands, licenses and other expenses for which the County might be sued or for which a lien or a demand against any Payment Bond might be filed, have been fully satisfied and paid.

(3) Contractor agrees to indemnify, defend and save harmless the County, its Board of County Commissioners, employees and agents from all demands or suits, actions, claims of liens or other charges filed or asserted against the County arising out of the performance by Contractor of the Work covered by this Release and Affidavit.

(4) This Release and Affidavit is given in connection with Contractor's [monthly/final] application for payment No.\_\_\_\_\_.

CONTRACTOR:

\_\_\_\_\_  
By: \_\_\_\_\_ (signature of the executive officer)

Its: \_\_\_\_\_ (title of the executive officer)

Date: \_\_\_\_\_

Witnesses

\_\_\_\_\_

[Corporate Seal]

STATE OF \_\_\_\_\_

COUNTY OF \_\_\_\_\_

The foregoing instrument was acknowledged before me this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_, by \_\_\_\_\_, as \_\_\_\_\_ of \_\_\_\_\_, a \_\_\_\_\_ corporation, on behalf of the corporation. He/she is personally known to me or has produced \_\_\_\_\_ as identification and did (did not) take an oath.

My Commission Expires: \_\_\_\_\_  
(Signature of Notary)

Name: \_\_\_\_\_  
(Legibly Printed)

(AFFIX OFFICIAL SEAL)

Notary Public, State of \_\_\_\_\_

Commission No.: \_\_\_\_\_

## EXHIBIT H CHANGE ORDER FORM



Lee County Construction Contract  
Change Order

**Print Form**

Number: \_\_\_\_\_

A Change Order requires approval by the Department Director for expenditures under \$50,000, approval by the County Manger for expenditures between \$50,000.01 and \$100,000, or approval by the Board of County Commissioners for expenditures over \$100,000

Contract / Project Name: \_\_\_\_\_

Contractor: \_\_\_\_\_

Contract #: \_\_\_\_\_ Project #: \_\_\_\_\_ Bid #: \_\_\_\_\_

Lee County Project Manager: \_\_\_\_\_

Fiscal Staff: \_\_\_\_\_ Date of Request: \_\_\_\_\_

Upon the completion and execution of this Change Order by both parties to the Contract, the Contractor is authorized to and shall proceed to make the following changes in the Contract Documents:  
*(If you need space other than what has been provided, please attach additional sheets.)*

Attachments: \_\_\_\_\_  
(List documents supporting change)

Description: \_\_\_\_\_

Purpose of Change Oder: \_\_\_\_\_

Change in Contract Price	Dollar Amount	Change in Contract Time	Calendar Days
Original Contract Price		Original Contract Time	
Previous Change Order No. _____		Net Change from Previous Change Orders	
Contract Price Prior to this Change Order		Contract Time Prior to this Change Order	
Net Increase (Decrease) of this Change Order		Net Increase (Decrease) of this Change Order	
Contract Price with All Approved Change Orders		Contract Time with All Approved Change Orders	

It is understood and agreed that the acceptance of this modification by the CONTRACTOR constitutes an accord and satisfaction, and represents payment in full (both time and money) for all costs arising out of, or incidental to, the above mentioned change.

\_\_\_\_\_  
Name of Contractor

\_\_\_\_\_  
Date Accepted

\_\_\_\_\_  
Contact Email Address

\_\_\_\_\_  
Contact Phone #

Lee County Board of County Commissioners  
2115 Second St. - Fort Myers, FL 33901  
PO Box 398 - Fort Myers, FL 33902-0398  
Main Phone: (239) 533-2111

Rev. 12/2015

**EXHIBIT I**  
**SUPPLEMENTAL SPECIFICATIONS**

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***I hereby certify that these Supplemental Specifications have been properly prepared by me, or under my responsible charge:***

<b>Supplemental Specification Section(s): 102, 430</b>	
<b>Signature:</b>	Edward F Tryka III 2018.02.02 16:33:26-05'00'
<b>Date:</b>	February 2nd, 2018
<b>Engineer of Record:</b>	Edward F. Tryka III
<b>Florida License No.:</b>	60284
<b>Firm Name:</b>	Agnoli Barber & Brundage, Inc.
<b>Firm Address:</b>	7400 Trail Blvd., Suite 200
<b>City, State, Zip Code:</b>	Naples, Florida 34108
<b>Cert. of Authorization No:</b>	LB 3664 and EB 3664



## **DIVISION I-GENERAL REQUIREMENTS AND COVENANTS**

RESERVED

## **DIVISION II-CONSTRUCTION DETAILS**

### **SECTION 102 – MAINTENANCE OF TRAFFIC (LCDOT 10/27/2017)**

Article 102-4: Delete Article 102-4 in its entirety and substitute the following:

The Contractor shall submit a complete Traffic Control Plan (TCP) to the Engineer for review and approval at the preconstruction meeting. Prepare the TCP in conformance with and in the form prescribed in the current version of the FDOT Plans Preparation Manual, FDOT Design Standards – Index 600 series and the MUTCD. Indicate in the plan a TCP for each phase of activities. Take responsibility for identifying and assessing any potential impacts to a utility that may be caused by the TCP, and notify the Department in writing of any such potential impacts to utilities. The TCP shall be signed and sealed by a professional engineer duly registered in the State of Florida.

Engineer's approval of the TCP does not relieve the Contractor of sole responsibility for all utility impacts, costs, delays or damages, whether direct or indirect, resulting from Contractor initiated changes in the design or construction activities from those depicted in the original Contract Documents, and which effect a change in utility work different from that shown in the utility plans, joint project agreements, interlocal agreements or utility relocation schedules.

The County reserves the right to reject any Traffic Control Plan. Obtain the Engineer's written approval before beginning work using a TCP. The Engineer's written approval is required for all modifications to the TCP. The Engineer will only allow changes to the TCP without proper documentation on an emergency basis.

Pedestrian and/or bicycle traffic must be safely and continuously maintained through, or around, work zones on highway or streets where pedestrian and bicyclists were permitted at the start of the project. The Contractor shall submit a plan for approval signed and sealed by a professional engineer duly licensed in the State of Florida for the safe passage of pedestrian and bicycle traffic prior to closure of any existing pedestrian facility. Facilities constructed to specifically provide access for pedestrians in or around work zones must be consistent with the current PROWAG. The plan shall detail the rerouting of users, duration of closure and proposed construction methods for any temporary facility. Payment for this work shall be included in price bid for Pay Item 102-1a -Maintenance of Pedestrian and Bicycle Traffic.

All costs for maintenance of traffic including preparation of Traffic Control Plan shall be included in the price bids for Pay Item 102-1 – Maintenance of Traffic, except as expressly provided for in other pay items in the contract.



Subarticle 102-9.15: Delete Subarticle 102-9.15 in its entirety and substitute the following:

Temporary Traffic Detection Technology – Maintain all existing actuated or traffic responsive mode signal operations for main and side street movements for the duration of the contract and restore any loss of detection within 12 hours. Video detection shall be installed at the beginning of the project before any loss of detection has occurred. The contractor shall furnish, install and operate video detection using technology approved by Lee DOT Traffic Division and as listed in Lee DOT Traffic plans specifications posted on the county website at [http://www.lee-county.com/publicworks/pdf/traffic/DOT\\_Plan\\_Specifications.pdf](http://www.lee-county.com/publicworks/pdf/traffic/DOT_Plan_Specifications.pdf).

**SECTION 331 - TYPE S ASPHALT CONCRETE, QUALITY ASSURANCE AND ACCEPTANCE PROCEDURES (LCDOT REV 12/06/2017)**

**331-1 Description.**

**331-1.1 General:** Construct a Type S Asphalt Concrete course (using the Quality Assurance acceptance system) using the type of mixture specified in the Contract, or when offered as alternates, as selected. If offered as alternates, meet the layer thickness criteria specified in 331-1.2. Type S mixes are identified as Type S-I, Type S-II, or Type S-III. The composition and physical test properties for all mixes including Type S Asphalt Concrete are shown in Tables 331-1 and 331-2. This Section establishes Acceptance Procedures for materials and work performed under Sections 290, 320, 330, 331, 334, and 337 of the July 2017 edition of the FDOT Standard Specifications for Road and Bridge Construction.

Where Type S Asphalt Concrete is specified in the Contract, if approved by the Engineer, the equivalent fine Type SP Asphalt Concrete mixture (Traffic Level C) meeting the requirements of Section 334 may be selected as an alternate at no additional cost to the Department. The equivalent mixes are as follows:

- Type S-I.....Type SP-12.5
- Type S-II .....Type SP-19.0
- Type S-III .....Type SP-9.5

Meet the requirements for the plant and equipment specified in Section 320. Meet the general construction requirements specified in Section 330.

Table 331-1 Bituminous Concrete Mixtures (Gradation Design Range)								
Type	Total Aggregate Passing Sieves <sup>1</sup>							
	3/4 inch	1/2 inch	3/8 inch	No. 4	No. 10	No. 40	No. 80	No. 200
S-I <sup>5</sup>	100	88-98	75-93	47-75	31-53	19-35	7-21	2-6
S-II <sup>2</sup>	83-98	71-87	62-78	47-63	33-49	19-35	9-18	2-6
S-III <sup>5</sup>		100	88-98	60-90	40-70	20-45	10-30	2-6

FC-3 <sup>5</sup>		100	88-98	60-90	40-70	20-45	10-30	2-6
<sup>1</sup> In inches or sieves. <sup>2</sup> 100% passing 1 1/4 inch sieve and 94 to 100% passing 1 inch sieve. <sup>3</sup> 100% passing 1 1/2 inch sieve. <sup>4</sup> The Engineer may increase the design range for the No. 10 sieve for lightweight aggregates. <sup>5</sup> The Engineer may retain up to 1% on the maximum sieve size.								

Table 331-2 Marshall Design Properties for Bituminous Concrete Mixes						
Mix Type	Minimum Marshall Stability (lbs.)	Flow** (0.01 in.)	Minimum VMA (%)	Air Voids (%)	Minimum Effective Asphalt Content (%)	VFA Voids Filled with Asphalt (%)
S-I	1,500*	8-13	14.5	4-5	***	65-75
S-II	1,500*	8-13	13.5	4-5	***	65-75
S-III	1,500*	8-13	15.5	4-6	***	65-75
FC-3	1,500	8-13	15.5	4-6	***	65-75
*The minimum Marshall Stability for Type S mixes used on limited access facilities (Interstate, Turnpike, and Expressways) shall be 1,800 lbs. **The maximum Flow value during production shall not exceed one point more than shown in the Table. ***The ratio of the percentage by weight of total aggregate passing the No. 200 sieve to the effective asphalt content expressed as a percentage by weight of total mix shall be in the range of 0.6 to 1.2.						

The Engineer will accept the work on a LOT to LOT basis in accordance with the applicable requirements of Sections 5 and 6. The size of the LOT will be as specified in 331-6 for the bituminous mixture produced at the plant and as stipulated in 331-7 for the material placed on the roadway.

**331-1.2 Layer Thicknesses:**

**331-1.2.1 Structural Layers:** The allowable layer thicknesses for Type S Asphalt Concrete mixtures used in structural and overbuild applications is as follows:

Type S-III.....3/4 to 1-1/4 inches

Type S-I.....1-1/4 to 2-1/2 inches

Type S-II.....2 to 2-3/4 inches

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

Type S-III- Limited to the final (top) structural layer, one layer only.

Type S-I- May not be used in the first layer of courses over 3-1/2 inches thick, nor in the first layer of courses over 2-3/4 inches thick on limited access facilities.

Type S-II – May not be used in the final (top) structural layer.

**331-1.2.2 Additional Requirements:** The following requirements also apply to Type S Asphaltic Concrete mixtures:

1. A minimum 1-1/2 inch initial lift is required over an Asphalt Rubber Membrane Interlayer (ARMI).
2. When construction includes the paving of adjacent shoulders ( $\leq 5$  feet wide), the layer thickness for the upper pavement layer and shoulder shall be the same and paved in a single pass, unless shown differently in the plans.
3. All overbuild layers shall be Type S asphalt concrete. Use the minimum and maximum layer thicknesses as specified in 331-1.2.1 unless shown differently in the plans.
4. On variable thickness overbuild layers, the minimum allowable thickness may be reduced by  $\frac{1}{2}$  inch, and the maximum allowable thickness may be increased  $\frac{1}{2}$  inch, unless shown differently in the plans. Other variations from these thicknesses shall be approved by the Engineer.

### 331-2 Materials

**331-2.1 General Requirements:** Meet the material requirements specified in Division III. Specific references are as follows:

Superpave PG Asphalt Binder or Recycling Agent.....916-1, 916-2

Mineral Filler.....917-1, 917-2

Coarse Aggregate, Stone, Slag or Crushed Gravel.....Section 901

Fine Aggregate.....Section 902

Asphalt concrete mixes containing crushed gravel as coarse aggregate component must show no potential for stripping during laboratory testing for mix design verification.

Crushed Reclaimed Portland Cement Concrete Pavement may be used as a coarse aggregate or screenings component subject to meeting all applicable specifications.

## **331-2.2 Specific Requirements:**

**331-2.2.1 Condition of Aggregate:** Use clean aggregate containing no deleterious substances. Do not use coarse or fine aggregate which contains more than 0.5% of phosphate.

**331-2.2.2 Fine Aggregate and Mineral Filler:** In laboratory tests, and for the purpose of proportioning the paving mixture, consider all material passing the No. 10 sieve and retained on the No. 200 sieve as fine aggregate, and the material passing the No. 200 sieve as mineral filler.

**331-2.2.3 Screenings:** Do not use any screenings in the combination of aggregates containing more than 15% of material passing the No. 200 sieve. When two screenings are blended to produce, the screening component of the aggregate one of such screenings may contain up to 18% of material passing the No. 200 sieve, as long as the combination of the two does not contain over 15% material passing the No. 200 sieve. Screenings may be washed to meet these requirements.

**331-2.2.4 Use of Reclaimed Asphalt Pavement (RAP):** Subject to certain requirements, Reclaimed Asphalt Pavement (RAP) may be used as a component material of the asphalt mixture. RAP may be used as a component material of the bituminous mixture subject to the following:

1. Assume responsibility for the design of asphalt mixes which incorporate RAP as a component part.
2. Do not allow RAP to exceed 60% by weight of total aggregates for Asphalt Base Courses nor more than 50% by weight of total aggregates for Structural and Leveling Courses. Do not use RAP in Friction Courses.
3. Mount a grizzly or grid with openings of a sufficient size to prevent clogging of the cold feed over the RAP cold bin. Use a grizzly or grid over the RAP cold bin, in-line roller crusher, screen, or other suitable means to prevent oversized RAP material from showing up in the completed recycled mixture. If oversized RAP material appears in the completed recycled mix, cease plant operations and take appropriate corrective action.
4. Ensure that the RAP material as stockpiled is reasonably uniform in characteristics and contains no aggregate particles which are soft or conglomerates of fines.
5. Ensure that the RAP has a minimum average asphalt content of 4% by weight of total mix.

The Department reserves the right to sample the stockpile in order that this requirement is met. When material milled from the project is used as a component of the asphalt mixture and a Composition of Existing Pavement is known, use the following procedures for obtaining representative samples for the mix design:

1. Cut ten 6 inch cores in area(s) approved by the Engineer. Fill the core holes immediately prior to opening to traffic.
2. Representative samples may also be obtained by milling the existing pavement to the full depth shown on the plans for pavement removal for a length of

approximately 200 feet. Immediately replace the pavement removed with the specified mix in the Contract.

3. Submit a request in writing to the Engineer for any variance from the above outlined methods of obtaining samples for mix designs.

When the RAP to be used as a component in a mix design is stockpiled from a previous DOT project and the Composition of Existing Pavement is known, design the mix and submit to the Department for verification.

When the composition of stockpiled RAP to be used as a component in a mix design is not known, design the mix as follows:

1. Submit a bag of RAP, composed of samples from several locations in the stockpile(s), to the Department at least four weeks prior to the planned start of mix design. The Engineer will run viscosities on the reclaimed asphalt pavement and furnish the information to the Contractor.
2. Run a minimum of six extraction gradation analyses of the RAP. Take the samples at random locations around the stockpile(s).
3. Request the Engineer to make a visual inspection of the stockpile(s) of RAP. Based on visual inspection, the Engineer will determine the suitability of the stockpiled materials.
4. When the proposed mix design is submitted to the Department for verification, submit the data from the extraction gradation analyses required above.

**331-2.2.5 Binder for Mixes with RAP:** Use a PG 67-22 where RAP is less than 20% by weight of total aggregate; use a PG 64-22 where RAP is 20% or greater but less than 30% by weight of total aggregate; use appropriate recycle agent where RAP is 30% or greater.

The Engineer reserves the right to change binder type and grade at design based on the characteristics of the RAP binder, and reserves the right to request reasonable changes during the production based on the requirements of 331-4.4.4.

**331-2.2.6 Use of Recycled Crushed Glass:** Recycled crushed glass maybe used as a component of the bituminous mixture subject to the following:

1. Consider the recycled crushed glass a local material and meet all requirements specified in 902-6.
2. The percentage of recycled crushed glass in any bituminous mixture does not exceed 15% of the total aggregate weight.
3. The asphalt binder used with mixtures containing recycled crushed glass contains 0.5% anti-stripping agent from an approved source. The addition of the specified amount of anti-stripping agent must be certified by the supplier.
4. Test bituminous mixtures containing recycled crushed glass in accordance with AASHTO T•283 as part of the mix design approval. The minimum tensile strength ratio must not be less than 80%. An increase in the amount of anti-stripping agent maybe necessary in order to meet this requirement.
5. Recycled crushed glass must not be used in friction course mixtures nor in structural course mixtures which are to be used as the final wearing course.

### **331-3 Permissible Variation for the Coarse Aggregate.**

Size and uniformly grade or combine the aggregate or aggregates shipped to the job in such proportions that the resulting mixture meets the grading requirements of the mix design.

### **331-4 General Composition of Mixture.**

**331-4.1 General:** Use a bituminous mixture composed of a combination of aggregate (coarse, fine or mixtures thereof), mineral filler, if required, and bituminous material. Ensure that not more than 20% by weight of the total aggregate used is silica sand or local materials as defined in Section 902. Consider the silica sand and local materials contained in any RAP material, if used in the mix, in this limitation. Size, grade and combine the several aggregate fractions in such proportions that the resulting mixture meets the grading and physical properties of the verified mix design.

RAP meeting the requirements of 331-2.2.4 may be approved as a substitution for a portion of the combination of aggregates, subject to all applicable specification requirements being met.

**331-4.2 Grading Requirements:** In all cases, use a mix design within the design ranges specified in Table 331-1.

#### **331-4.3 Mix Design:**

**331-4.3.1 General:** Prior to the production of any asphalt paving mixture, submit a mix design and representative samples of all component materials to the Department at least two weeks before the scheduled start of production. The Engineer will verify the mix design before use. Send a copy of the proposed mix design to the Engineer at the same time. (Open-graded mixes will be designed by the Engineer). Furnish the following information:

1. The specific project on which the mixture will be used.
2. The source and description of the materials to be used.
3. The gradation and approximate proportions of the raw materials as intended to be combined in the paving mixture. The gradation of the component materials shall be representative of the material at the time of use.
4. A single percentage of the combined mineral aggregate passing each specified sieve. Degradation of the aggregate due to processing (particularly No. 200) should be accounted for and identified for the applicable sieves.
5. A single percentage of asphalt by weight of total mix intended to be incorporated in the completed mixture, shown to the nearest 0.1%. For structural mixes (S-1, S-11 and S-111) establish the optimum asphalt content at a level corresponding to minimum of 4.5% air voids. For FC-3 mixes, establish optimum asphalt content at a level corresponding to a minimum of 5.0% air voids.
6. A single temperature at which the mixture is intended to be discharged from the plant.
7. The laboratory density of the asphalt mixture for all mixes except Open-Graded Friction Courses.
8. Evidence that the completed mixture will meet all specified physical requirements.
9. The name of the individual responsible for the Quality Control of the mixture during production

**331-4.3.2 Revision of Mix Design:** Submit all requests for revisions to approved mix designs, along with supporting documentation, in writing to the Engineer. In order to expedite the revision process, a verbal revision request or discussion of the possibility of a revision request maybe made, but must be followed up with a written request. The verified mix design will remain in effect until a change is authorized by the Engineer. In no case will the effective date of the revision be established earlier than the date of the first communication with the Engineer regarding the revision. Provide a new mix design for any change in source of aggregate.

**331-4.3.3 Resistance to Plastic Flow:** Include with the submitted mix design test data showing that the material as produced will meet the requirements specified in Table 331-2 when tested in accordance with FM 1-T 245. Further, determine the bulk specific gravity of the laboratory compacted bituminous mixture in accordance with FM 1-T 166.

Determine the percent of unfilled voids and the percent of aggregate voids filled with asphalt using the maximum specific gravity of the bituminous mixture and on the asphalt content of each group of specimens prepared from the same sample. Determine maximum specific gravity of the bituminous mixture by FM 1-T 209.

**331-4.3.4 Revocation of Mix Design:** The Engineer will consider any marked variations from original test data for a mix design or any evidence of inadequate field performance of a mix design as sufficient evidence that the properties of the mix design have changed, and the Engineer will no longer allow the use of the mix design.

#### **331-4.4 Contractor's Quality Control:**

**331-4.4.1 Personnel:** In accordance with the requirements of 331-8 provide the necessary quality control personnel. Ensure that the Quality Control Technician is certified by the CTQP process and possesses a valid certificate of qualification. When it becomes evident to the Department that the Quality Control Technician cannot perform as required by the position, the Department will revoke the certification and require replacement with a certified technician.

**331-4.4.2 Extraction Gradation Analysis:** Sample the bituminous mixture at the plant in accordance with FM 1-T 168. Determine the percent bitumen content of the mixture in accordance with FM 5-563, and determine the percent passing the standard sieves in accordance with FM 1-T 030. In the event the calibration factor for the mix exceeds 0.50%, conduct the extraction and gradation analysis in accordance with FM 5-544 and FM 5-545, respectively. Show all test results to the nearest 0.01. Carry all calculations to the nearest 0.001 and rounded to the nearest 0.01, in accordance with the Department's rules of rounding.

Run a minimum of one extraction gradation analysis of the mixture for each day's or part of a day's production and immediately following any change in the production process. Take the quality control sample of mixture for the extraction gradation analysis each day as soon as the plant operations have stabilized. Obtain the results in a timely manner (no later than the end of the day) so that adjustments can be made if necessary.

On initial use of a Type S or FC-3 mix design at a particular plant, as a minimum, run an additional extraction gradation analysis if more than 500 tons of mixture are produced on the first day of production. Extraction gradation analysis will not be required on the days when mix production is less than 100 tons. However, when mix production is less than 100 tons per day on successive days, run the test when the accumulative tonnage on such days exceeds 100 tons. Use the target gradation and asphalt content as shown on the mix design. Any changes in target will require a change in the mix design in accordance with 331-4.3.2.

If the percentage of bitumen deviates from the optimum asphalt content by more than 0.55% or the percentage passing any sieve falls outside the limits shown in Table 331-3, make the necessary correction. If the results for two consecutive tests deviate from the optimum asphalt content by more than 0.55% or exceeds the limits as shown in Table 331-3 for any sieve, stop the plant operations until the problem has been corrected. In addition, if the results of two consecutive tests show an amount greater than 99.0% passing the 1/2 inch sieve for Type S-1, an amount greater than 99.0% passing the 3/4 inch sieve for Type S-II, or an amount greater than 99.0% passing the 3/8 inch sieve for FC-3, stop the plant operation until the problem has been corrected.

Maintain control charts showing the results of the extraction gradation analysis

Table 331-3 Tolerances for Quality Control Tests (Extraction Gradation Analysis)	
Sieve Size	Percent Passing
1 inch	7
3/4 inch	7
1/2 inch	7

(bitumen content and sieve analysis).

**331-4.4.3 Plant Calibration:** At or before the start of mix production, perform a

Table 331-3 Tolerances for Quality Control Tests (Extraction Gradation Analysis)	
Sieve Size	Percent Passing
3/8 inch	7
No. 4	7
No. 10	5.5
No. 40	4.5
No. 80	3
No. 200	2

wash gradation on a set of hot bin samples for batch or continuous mix plants or belt cut for drum mix plants to verify calibration of the plant. When approved by the Engineer, extraction gradation analysis of the mix may be used to verify calibration of the plant. This extraction gradation analysis may also be used to fulfill the quality control requirements for the first day's production.

**331-4.4.4 Viscosity of Asphalt in Mixes Containing RAP:** When RAP is a component material, the viscosity of the asphalt material in the bituminous mixture, determined by the Engineer in accordance with ASTM D 2171, shall be  $6,000 \pm 2000$  poises. This determination will be made on samples obtained by the Department on a random basis at a frequency of approximately one per 2,000 tons of mix.

If the viscosity determined by the Contractor is out of the specified range, adjust the binder formulation or blend of RAP in the mix to bring the viscosity within tolerance.



### **331-5.1 Acceptance of the Mixture:**

The Department will approve all materials for acceptance through the Department's Acceptance Procedures specified herein. The Engineer is responsible for determining the acceptability of the construction and materials incorporated therein. The Contractor is responsible for the quality of construction and materials incorporated therein. The Contractor shall maintain effective quality control until final project acceptance. Accomplish all quality control sampling and testing on a random basis in accordance with the approved Quality Control Plan. The Department will perform all necessary sampling and testing for acceptance purposes on a random basis as specified herein, in addition to monitoring and observing the Contractor's quality control test procedures and results.

A LOT is defined as an isolated quantity of a specified material produced from a single source or operation, or it is a measured amount of specified construction produced by the same process. In order to change the process, thereby necessitating the termination of the current LOT and starting a new LOT, submit a written request, with justification, to the Engineer for approval. Obtain the Engineer's approval prior to making the process change.

Perform all quality control sampling and testing of materials in strict conformance with the Florida Method of Sampling and Testing as found in the Field Sampling and Testing Manual. The Department will perform all acceptance sampling and testing of materials in strict conformance with the Florida Method of Sampling and Testing as found in the Field Sampling and Testing Manual. This manual, developed and distributed by the FDOT Materials Office, contains the detailed sampling and testing procedures from AASHTO and ASTM as modified by the Department.

**331-5.1.1 Payment Based on Acceptance Results:** The Department will adjust the payment for each LOT of material, product, item of construction or completed construction based on acceptance test results in accordance with the requirements specified hereinafter in the applicable Sections.

**331-5.1.2 Resampling of LOTs:** The Department requires that LOTs of materials, products, items of construction or completed construction meet the requirements of these Specifications at the time of submission. The Department will not take check samples for acceptance purposes.

### **331-5.3 Defective Materials:**

**331-5.3.1 Acceptance or Rejection:** Following the application of the appropriate acceptance plan, the Engineer will make the final decision as to the acceptance, rejection or acceptance at an adjusted payment of the LOTs.

**331-5.3.2 Disposition of LOTs:** For nonconforming LOTs of materials, products, items of construction or complete construction that are not adaptable to correction by reworking, either remove and replace the nonconforming work, or accept no payment or an adjusted payment as stated in these Specifications, or, if not stated, as directed by the Engineer.

**331-5.4 General Basis of Adjusted Payment for Deficiencies:** When the Engineer determines that a deficiency exists, the Engineer will apply the applicable payment factor as shown in these Specifications to the entire LOT. When the Engineer determines that multiple deficiencies exist, the Engineer will apply an adjustment to the LOT of material that is identified by each deficiency. The Engineer will apply the adjustment for each deficiency separately as it occurs. The Engineer will not allow an adjustment to be affected by any other adjustment occurring for the same LOT. As an exception to the foregoing requirements, when there are two or more deficiencies in

the gradation acceptance tests (% pass No. 4 sieve, % pass No. 10 sieve, % pass No. 40 sieve, % pass No. 200 sieve) the Engineer will only apply the greater adjustment. The Engineer will express all reductions in payment in terms of equivalent pay items at no pay. When the item is measured by the ton, the Engineer will convert the LOT in the field, which is measured in feet, to equivalent tons and by using the average calculated spread for that LOT. When the pay item is measured by the square yard, the Engineer will convert the LOT at the production point, which is measured in tons, to equivalent square yards at the design thickness and by using the laboratory density as a conversion factor.

**331-6 Acceptance of the Mixture at the Plant:**

**331-6.1 General:** The Engineer will accept the bituminous mixture at the plant, with respect to gradation and asphalt content, on a LOT to LOT basis. The material will be tested for acceptance in accordance with the provisions of 331-5 and the following requirements. However, the Engineer will reject any load or loads of mixture which are unacceptable for reason of being excessively segregated, aggregates improperly coated, or of excessively high or low temperature for use in the work.

For initial use of a Type S or FC-3 mix design with a Florida limestone source north of the 28<sup>th</sup> parallel at a particular plant, limit the first day’s production to a maximum of 300 tons. Resume production upon notification of acceptable Marshall properties.

Each LOT will be defined (as selected by the Contractor prior to the start of the LOT) as either (1) 2,000 tons, with each LOT subdivided into four equal sublots of 500 tons each, or (2) 4,000 tons, with each LOT subdivided into four equal sublots of 1,000 tons each. As an exception to this, the initial LOT of all new mix designs shall be defined as 2,000 tons, subdivided into four equal sublots of 500 tons each. Before the beginning of a LOT, the Engineer will develop a random sampling plan for each subplot and direct the Contractor on sample points based on tonnage, for each subplot during construction.

A partial LOT may occur due to the following:

- (1) The completion of a given mix type or mix design on a project.
- (2) An approved LOT termination by the Engineer due to a change in process, extended delay in production, or change in mix design.
- (3) LOTS will be closed 30 calendar days after the start of the LOT. Time periods other than 30 calendar days may be used if agreed to by both the Engineer and the Contractor, but under no circumstances shall the LOT be left open longer than 60 days. On multiple project contacts, the LOT(s) of the asphalt plant will carry over from project to project.

**331-6.2 Acceptance Procedures:** Control all operations in the handling, preparation, and mixing of the asphalt mix so that the percent bitumen and the percent passing the No. 4, No. 10, No. 40 and No. 200 sieves will meet the approved job mix formula within the tolerance shown in Table 331-6.

Table 331-4 Tolerances for Acceptance Tests	
Characteristic	Tolerance*

Asphalt Content (Extraction)	±0.55%
Passing No. 4 sieve	±7.00%
Passing No. 10 sieve	±5.50%
Passing No. 40 sieve**	±4.50%
Passing No. 200 sieve	±2.00%
*Tolerances for sample size of n=1. See Table 331-7 for other sample sizes n=2 through n=6.	
**Applies only to FC-3.	

Acceptance of the mixture will be on the basis of test results on consecutive random samples from each subplot. One random sample will be taken from each subplot. The bituminous mixture will be sampled and tested at the plant as specified in 331-4.4.2. Complete all QC testing within one working day from the time the samples were obtained.

Calculations for the acceptance test results for bitumen content and gradation (percentages passing No. 4, No. 10, No. 40 and No. 200 sieves) will be shown to the nearest 0.01. Calculations for arithmetic averages will be carried to the nearest 0.001 and rounded to the nearest 0.01 in accordance with the Department's rules of rounding.

**334-6.2.1 Verification Testing:** In order to determine the validity of the Contractor's QC test results prior to their use in the Acceptance decision, the Engineer will run verification tests.

**334-6.2.2 Plant Testing:** At the completion of each LOT, the Engineer may test a minimum of one Verification split sample randomly selected from the LOT. Results of the testing and analysis for the LOT will be made available to the Contractor within one working day from the time the LOT is completed. Verification samples shall be reheated at the target roadway compaction temperature for 1-1/2 hours, plus or minus 5 minutes, reduced to the appropriate testing size, and conditioned and tested. In lieu of the 1-1/2 hours reheating procedure, the mixture may be reheated to within plus or minus 20°F of the roadway compaction temperature using a microwave oven. Stir the mixture as necessary during the reheating process to maintain temperature uniformity. Subsequently, condition and test the mixture.

If all of the specified mix characteristics compare favorably, then the LOT will be accepted, with payment based on the Contractor's QC test data for the LOT. If any of the results do not compare favorably, then the Resolution samples from the LOT will be sent to an Independent laboratory for testing.

**331-6.2.3 Plant Samples:** In the event of an unfavorable comparison between the Contractor's QC test results and the Engineer's Verification test results on any of the properties, the Independent laboratory will test all of the split samples from the LOT for only the property (or properties) in question. Resolution samples shall be reheated at the target roadway compaction temperature for 1-1/2 hours, plus or minus 5 minutes, reduced to the appropriate testing size, and conditioned and tested. In lieu of the 1-1/2 hours reheating procedure, the mixture may be reheated to within plus or minus 20°F of the roadway compaction temperature using a microwave oven. Stir the mixture as necessary during the reheating process to maintain temperature uniformity. Subsequently, condition and test the mixture.

**331-6.2.4 Independent Resolution Determination:** The Resolution test results

(for the property or properties in question) will be compared with the QC test results based on the between-laboratory precision. If the Resolution test results compare favorably with all of the QC results, then acceptance and payment for the LOT will be based on the QC results. If the Resolution test results do not compare favorably with all of the QC results, then acceptance and payment for the LOT will be based on the Resolution test data for the LOT. No additional time will be granted for the impacts of any such testing. In the event of an unfavorable comparison between the Resolution test results and QC test results, make the necessary adjustments to assure that future comparisons are favorable.

**331-6.2.5 Basis of Payment:** Price and payment will be full compensation for all the work specified under this Section (including the applicable requirements of Sections 320 and 330) for materials accepted in accordance with 331-4, 331-6, and 331-7. Based upon the quality of the material, a pay adjustment will be applied to the bid price of the material as determined on a LOT by LOT basis. The pay adjustment will be assessed by calculating a Pay Factor for the following individual quality characteristics: asphalt binder content, roadway density testing, and the percentage passing the No. 4, No. 10, No. 40 and No. 200. The pay adjustment will be computed by multiplying a Composite Pay Factor (CPF) for the LOT by the bid price per ton.

**331-6.2.5.1 Partial LOTs:** For Partial LOTs where no random sample is obtained due to insufficient tonnage, a CPF of 1.00 shall be applied.

**331-6.2.5.2 Pay Factors:** Pay Factors will be determined based on Table 331-5, using the average of the accumulated deviations from the target value (deviations are absolute values with no plus or minus signs.) The process will be considered out of control when the deviation of any individual test result from the mix design falls in the 80% pay factor for the “one test” column of Table 331-5. When this happens, the LOT will be automatically terminated and production stopped. The approval of the Engineer will be required prior to resuming production of the mix.

Acceptance of the LOT will then be determined in accordance with Table 331-5.

Table 331-5 Acceptance Schedule of Payment (Asphalt Plant Mix Characteristics)				
Average of Accumulated Deviations of the Acceptance Tests from the Mix Design.				
Pay Factor	1-Test	2-Tests	3-Tests	4-Tests
Asphalt Cement Content (Extraction -FM 5-544 or 5-563)				
1.00	0.00-0.55	0.00-0.43	0.00-0.38	0.00-0.35
0.95	0.56-0.65	0.44-0.50	0.39-0.44	0.36-0.40
0.90	0.66-0.75	0.51-0.57	0.45-0.50	0.41-0.45
0.80*	over 0.75	over 0.57	over 0.50	over 0.45
No. 4 sieve**				
1.00	0.00-7.00	0.00-5.24	0.00-4.46	0.00-4.00
0.98	7.01-8.00	5.25-5.95	4.47-5.04	4.01-4.50
0.95	8.01-9.00	5.96-6.66	5.05-5.62	4.51-5.00

0.80*	over 7.50	over 6.04	over 5.39	over 5.00
No. 200 sieve**				
1.00	0.00-2.00	0.00-1.71	0.00-1.58	0.00-1.50
0.95	2.01-2.40	1.72-1.99	1.59-1.81	1.51-1.70
0.90	2.41-2.80	2.00-2.27	1.82-2.04	1.71-1.90
0.80*	over 2.80	over 2.27	over 2.04	over 1.90
0.90	9.01-10.00	6.67-7.36	5.63-6.20	5.01-5.50
0.80*	over 10.00	over 7.36	over 6.20	over 5.50
No. 10 sieve**				
1.00	0.00-5.50	0.00-4.33	0.00-3.81	0.00-3.50
0.98	5.51-6.50	4.34-5.04	3.82-4.39	3.51-4.00
0.95	6.51-7.50	5.05-5.74	4.40-4.96	4.01-4.50

0.90	7.51-8.50	5.75-6.45	4.97-5.54	4.51-5.00
0.80*	over 8.50	over 6.45	over 5.54	over 5.00
No. 40 sieve**				
1.00	0.00-4.50	0.00-3.91	0.00-3.65	0.00-3.50
0.98	4.51-5.50	3.92-4.62	3.66-4.23	3.51-4.00
0.95	5.51-6.50	4.63-5.33	4.24-4.81	4.01-4.50
0.90	6.51-7.50	5.34-6.04	4.82-5.39	4.51-5.00

\*If approved by the Engineer based on an engineering determination that the material is acceptable to remain in place, the Contractor may accept the indicated partial pay. Otherwise, remove and replace the material at no cost to the Department on any item.

\*\*When there are two or more reduced payments for these items in one LOT of material, only the greatest reduction in payment will be applied. CAUTION: This rule applies only to these four gradation test results.

NOTES:

- (1) The No. 40 sieve applies to FC3.
- (2) Deviations are absolute values with no plus or minus signs.

### **331-6.3 Automatic Batch Plant Asphalt Cement Content: Acceptance determinations**

for asphalt content for mixtures produced by automatic batch plants will be determined per 334-5.1.1. Acceptance determinations for gradations (No. 4, No. 10, No. 40 and No. 200 sieves) will be based on the actual test results from extraction gradation analyses. Payment will be made based on the provisions of Table 331-5.

**331-6.4 Additional Tests:** The Engineer reserves the right to run any test at any time for informational purposes and for determining the effectiveness of the Contractor's quality control.

**331-6.4.1 Determination of Marshall and Volumetric Properties:** The Contractor will determine the Marshall and Volumetric Properties of the mix at a minimum frequency of one set per LOT, to determine whether or not the produced mix is meeting the specification requirements. The Department may sample and prepare test specimens and test the mix in accordance with FM 5-511 for Marshall stability and flow., FM 1-T 209 for maximum specific gravity, and FM 1-T 166 for density. Volumetric properties will be determined for Type S and FC-3 mixes only.

**331-6.4.2 Failing Marshall Properties:** When the average value of the specimens fails to meet specification requirements for stability or flow, the Engineer may stop the plant operations until all specification requirements can be met or until another verified mix design has been approved. Make revisions to a mix design in accordance with 331-4.3.2. If the Lab Density of the mix during production differs from the value shown on the verified mix design by more than  $2 \text{ lbs/ft}^3$  for two consecutive tests, the Engineer will revise the target value.

**331-6.4.3 Failing Volumetric Properties (Type S and FC-3 mixes only):** When the Engineer determines the air void content to be less than 3.0%, or greater than 6.5%, make appropriate adjustments to the mix. When the air void content is determined to be less than 2.5% or greater than 7.0% on any one test, or less than 3.0% on two consecutive tests, cease operations until the problem has been resolved.

**331-6.4.4 Resuming Production:** In the event that plant operations are stopped due to a failure to meet specification requirements, obtain the Engineer's approval before resuming production of the mix. Limit production to a maximum of 300 tons. At this time, the Marshall and volumetric properties of the mix will be verified. After the Marshall and volumetric properties are verified, full scale production of the mix may be resumed.

**331-6.5.5 Disposition of In-Place Material:** Any material in-place that is represented by the failing test results (low stability, high flow, or less than 2.5% air voids) will be evaluated by the Engineer to determine if removal and replacement is necessary. Remove and replace any in-place material, if required at no cost to the Department.

### **331-7 Acceptance of the Mixture at the Roadway**

**331-7.1 Density Control Nuclear Method:** Determine the in-place density of each course of asphalt mix construction using the Nuclear Density Backscatter Method as specified by FM 1-T 238 (Method B). For a completed course, obtain an average in-place LOT density of at least 98% of the valid control strip density. Do not perform density testing on patching courses, leveling and intermediate courses less than 1 inch thick (or a specified spread rate less than  $100 \text{ lb/ yd}^2$ ), overbuild courses where the minimum thickness is less than 1 inch, projects less than 1,000 feet, sections with variable width, or open-graded friction courses. Compact these courses, with the exception of open- graded friction courses in accordance with 330-7.

**331-7.2 Control Strips:** In order to determine the density of compacted asphalt mixtures for the purpose of acceptance, first establish a control strip. Construct one or more control strips for the purpose of determining the control strip density. Construct a control strip at the beginning of asphalt construction and one thereafter for each successive course. Construct a new control strip for any change in the

composition of the mix design, underlying pavement structure, compaction equipment, or procedures. The Engineer may require an additional control strip when the Engineer deems it necessary to establish a new control strip density or confirm the validity of the control strip density being used at that time. The Contractor may also request a confirmation of the control strip density. Construct the control strip as a part of a normal day's run.

Construct control strip 300 feet in length and of an adequately uniform width to maintain a consistent compactive effort throughout the section. When constructing the control strip, start it between 300 and 1,000 feet from the beginning of the paving operation. Construct a control strip of a thickness that is the same as that specified for the course of which it is part. Construct the control strip using the same mix, the same paving and rolling equipment, and the same procedures as those used in laying the asphalt course of which the control strip is to become a part. Leave every control strip in place to become a portion of the completed roadway.

In order to determine the acceptability of the control strip, make ten nuclear density determinations at random locations within the control strip after completing the compaction of the control strip. Do not make any determinations within 12 inches of any unsupported edge. Use the average of these ten determinations for the Control Strip Density. For purposes of determining the percent of laboratory density, as required in Table 331-6, the Engineer will develop a correction factor a four nuclear density locations from 6 inches diameter cores or by direct transmission nuclear determination where applicable. Cut the cores prior to opening the roadway to traffic. The Engineer will calculate the percent of lab density to the nearest 0.01% and round it to the nearest 0.1%. Should the percent of lab density in a control strip exceeds 99.0%, notify the Engineer immediately.

In the event that a control strip does not meet the minimum density requirements specified in Table 331-6, take appropriate corrective actions and construct a new control strip. If three consecutive control strips fail to meet specification requirements, the Engineer will limit production and placement of the mix to 800 to 1,000 feet, regardless of the thickness and width the Contractor is placing, until the Contractor obtains a passing control strip. Once the Contractor has obtained a passing control strip after a failing control strip (for the same mix layer, and project), the Department will use the passing control strip to accept all previously laid mix. In the event the Contractor does not obtain a passing control strip, and this particular mix, layer, etc., is completed on the project, the Engineer will evaluate density in

Table 331-6

Roadway Requirements for Bituminous Concrete Mixes			
Mix Type	Density	Minimum Control Strip Density* (% of Lab Density)	Surface Tolerance
S-I, S-II, S-III,	per 331-7	96	per 331-7.3
FC-3	per 331-7	96	per 331-7.3

\* The minimum control strip density requirement for shoulders is 95% of lab density.

accordance with FM 5-543.

**331-7.3 Surface Requirements:** Construct a smooth pavement with good surface texture and the proper cross-slope meeting the requirements per Table 331-7.

**331-7.4 Texture of the Finished Surface of Paving Layers:** Produce a finished surface

of uniform texture and compaction with no pulled, torn, raveled, crushed or loosened portions and free of segregation, bleeding, flushing, sand streaks, sand spots, or ripples.

**331-7.5 Cross Slope:** Construct a pavement surface with cross slopes in compliance with the requirements of the Contract Documents. Furnish a four-foot-long electronic level accurate to 1.1 degree, approved by the Engineer for the control of cross slope. Make this electronic level available at the jobsite at all times during paving operations.

**331-7.5.1 QC Calibration and Comparison:** Calibrate the electronic levels a minimum of once per day before paving operations begin, in accordance with manufacturer's instructions. Compare the QC level with the Verification level before paving operations begin, and at any time as directed. If the comparison between QC and Verification levels is within plus or minus 0.2%, QC level is considered to compare favorably and can be used for measurement and acceptance of cross-slopes. If the levels do not compare favorably, perform a second comparison using another calibrated electronic level (Department or Contractor) for resolution. If the resolution level compares favorably with the QC level, the QC level is considered to be verified. If the resolution level does not compare favorably with the QC level, discontinue the use of the QC electronic level and obtain another approved electronic level that meets the requirements of this specification. The Contractor assumes all risk associated with placing the pavement at the correct cross slope.

**331-7.5.2 Cross Slope Measurement:** Measure the cross slope of the compacted pavement surface by placing the level at the center of the lane and perpendicular to the roadway centerline. Record all measurements to the nearest 0.1% on an approved form and submit the data to the Engineer.

**331-7.5.2.1 Cross Slope Measurement Frequency:**

1. Tangent Sections: Measure the cross-slope at a minimum frequency of one measurement every 100 feet per lane. When the average absolute deviation is consistently within the acceptance tolerance in Table 331-7, upon the approval of the Engineer, the cross-slope measurements maybe reduced to one measurement every 200 feet.
2. Super elevated Sections: Measure the cross slope every 100 feet per lane within the length of the full super elevation. For curves where the length of full super elevation is less than 250 feet, measure the cross slope at the beginning point, midpoint, and ending point of the fully super elevated section. For transition sections, measure the cross slope at control points identified in the Plans, or if not shown in the Plans, at a control point at the location of 0.0% cross slope.

**331-7.5.2.2 Cross Slope Deviations and Corrections:** Calculate the absolute deviation of each cross-slope measurement and the average of the absolute deviations of ten consecutive cross slope measurements. The absolute deviation is the positive value of a deviation. In super elevated sections, when the number of measurements is less than ten, average the absolute deviation of all measurements.

If the average absolute deviation of any cross-slope measurement falls outside the acceptance tolerance shown in Table 331-7, stop the paving operation and make adjustments until the problem is resolved to the satisfaction of the Engineer.

Address in accordance with 337-7.5, all individual cross slope deviations outside the acceptance tolerances shown in Table 331-7. Complete all corrections before



placement of the final pavement surface layer. For pavement with multiple layers, the deficient areas for the structural course maybe left in place, if approved by the Engineer. For friction course layers, make corrections in accordance with 331-7.5.

Table 331-7 Cross Slope Acceptance Tolerance		
Roadway Feature	Individual Absolute Deviation	Average Absolute Deviation
Tangent section (including turn lanes)	0.4%	0.2%
Super elevated curve	0.4%	0.2%
Shoulder	0.5%	0.5%

The limits of deficient areas requiring correction maybe verified and adjusted with more accurate measurement methods, including survey instruments, upon approval of the Engineer and at no cost to the Department.

Should the Contractor wish to have any required corrections waived, submit a request to the Engineer for approval. The Engineer may waive the corrections at no reduction in payment if the deficiencies are sufficiently separated so as not to affect the pavement’s overall traffic safety, surface drainage, ride quality, or surface texture.

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

In the event the distance between two edges of deficient areas is less than 100 feet, the correction work shall include the area between the deficient areas.

**331-7.5.3 Verification:** The Engineer will verify the Contractor’s cross slope measurements by randomly taking a minimum of ten cross slope measurements per lane per mile in tangent sections, at control points in transition sections, and a minimum of three cross slope measurements in fully super elevated sections. The Engineer will measure the cross slope of the compacted pavement surface by placing the level at the center of the lane and perpendicular to the roadway centerline.

**331-7.5.3.1 Cross Slope Deviations and Corrections:** If the average absolute deviation or an individual cross slope deviation falls outside of the acceptance tolerance in Table 331-7, immediately make a comparison check at the QC test locations to verify the QC measurements in the section. If the comparisons are beyond the acceptable comparison tolerance in accordance with 331- 7.5.1, stop the paving operations until the issue is resolved to the satisfaction of the Engineer. Correct any cross slope not meeting the individual deviation acceptance tolerance in accordance with 331-7.7 at no cost to the Department. The Engineer reserves the right to check the pavement cross slope at any time by taking cross slope measurements at any location.

**331-7.6 Pavement Smoothness:** Construct a smooth pavement meeting the requirements of this Specification.

**331-7.6.1 General:** Furnish a 15-foot manual and a 15-foot rolling straightedge meeting the requirements of FM 5-509. Obtain a smooth surface on all pavement courses placed, and then straightedge all layers as required by this Specification.

**331-7.6.2 Test Method:** Perform all straightedge testing in accordance with FM 5- 509 in the outside wheel path of each lane. The Engineer may require additional testing at

other locations within the lane.

**331-1.6.3 Traffic Control:** Provide traffic control in accordance with Section 102 and the Design Standards, Index Nos. 607 or 619 during all testing. When traffic control cannot be provided in accordance with Index Nos. 607 or 619, submit an alternative Traffic Control Plan as specified in 102-4. Include the cost of this traffic control in the Contract bid prices for the asphalt items.

**331-7.6.4 Process Control Testing:** Assume full responsibility for controlling all paving operations and processes such that the requirements of these Specifications are met at all times.

**331-7.6.5 QC Testing:**

**331-7.6.5.1 General:** Straightedge the final Type S structural layer and friction course layer in accordance with 331-7.6.2, with the exception that if the method of acceptance is by laser profiler, then straight edging of the friction course layer is not required unless otherwise stated in the Specifications. If the project's method of acceptance is by laser profiler, areas not suitable for testing with the laser profiler will be tested and accepted by straight edging. Test all pavement lanes and ramps where the width is constant and document all deficiencies in excess of 3/16 inch on a form approved by the Engineer.

**331-7.6.5.2 Straightedge Exceptions:** Straightedge testing will not be required in the following areas: shoulders, intersections, tapers, crossovers, sidewalks, shared use paths, parking lots and similar areas, or in the following areas when they are less than 250 feet in length: turn lanes, acceleration/deceleration lanes and side streets. The limits of the intersection will be from stop bar to stop bar for both the mainline and side streets.

As an exception, in the event the Engineer identifies an objectionable surface irregularity in the above areas, straightedge and address all deficiencies in excess of 3/8 inch in accordance with 331-7.7.

The Engineer may waive straightedge requirements for transverse joints at the beginning and end of the project, at the beginning and end of bridge structures, at manholes, and at utility structures if the deficiencies are caused by factors beyond the control of the Contractor, as determined by the Engineer. In addition, the Engineer may also waive the straight edging requirements on ramps and super elevated sections where the geometrical orientation of the pavement results in an inaccurate measurement with the rolling straightedge.

**331-7.6.5.3 Intermediate Layers and Temporary Pavement:** When the design speed is 55 mph or greater and the intermediate Type S layer or temporary pavement is to be opened to traffic, if the Engineer identifies an objectionable surface irregularity, straightedge and address all deficiencies in excess of 3/8 inch within 72 hours of placement in accordance with 331-7.7.

**331-7.6.5.4 Final Type S Structural Layer:** Straightedge the final Type S structural layer in accordance with 331-7.6.2, either behind the final roller of the paving train or as a separate operation. Notify the Engineer of the location and time of straightedge testing a minimum of 48 hours before beginning testing. The Engineer will verify the straightedge testing by observing the QC straight edging operations. Address all deficiencies in excess of 3/16 inch in accordance with 331-7.7.

When the final structural course is to be opened to traffic and the design speed is 55 mph or greater, if any defect is 3/8 inch or greater, the Engineer may require deficiencies to be corrected within 72 hours after opening to traffic.

**331-7.6.5.5 Friction Course Layer:** Where required per 331-7.6.5.1, and

in areas noted in 331- 7.6.6.2 as not suitable for testing with the Laser Profiler, straightedge the friction course layer in accordance with 331-7.6.2, either behind the final roller of the paving train or as a separate operation upon completion of all paving operations. Notify the Engineer of the location and time of straightedge testing a minimum of 48 hours before beginning testing.

The Engineer will verify the straightedge testing by observing the QC straight edging operations. Address all deficiencies in excess of 3/16 inch in accordance with 331-7.7.

### **331-7.6.6 Acceptance:**

**331-7.6.6.1 Straightedge Acceptance:** For areas of roadways where the design speed is less than 55 miles per hour, and for areas of roadways where the design speed is greater than or equal to 55 miles per hour which are noted in 331-7.6.6.2 as not suitable for testing with the Laser Profiler, acceptance for pavement smoothness of the friction course will be based on verified QC measurements using the straightedge as required by 331- 7.6.5. The Engineer will verify the straightedge testing by observing the QC straight edging operations.

**331-7.6.6.2 Laser Acceptance:** For areas of high speed roadways where the design speed is equal to or greater than 55 miles per hour, acceptance testing for pavement smoothness of the friction course (for mainline traffic lanes only) may be based on the Laser Profiler. Ramps, acceleration and deceleration lanes, and other areas not suitable for testing with the Laser Profiler will be tested and accepted with the straightedge in accordance with 331-7.6.5.5 and 331-7.6.6.1.

### **331-7.7 Unacceptable Pavement:**

**331-7.7.1 Corrections:** Address all areas of unacceptable pavement at no cost to the Department. Retest all corrected areas and assure the requirements of these Specifications are met.

**331-7.7.1.1 Structural Layers:** Correct all deficiencies, as defined in the Specifications, in the Type S structural layers by removing and replacing the full depth of the layer, extending a minimum of 50 feet on both sides (where possible) of the defective area for the full width of the paving lane.

As an option, for high straightedge deficiencies only, mill the pavement surface the full lane width to a depth and length adequate to remove the deficiency. This option only applies if the structural layer is not the final surface layer.

**331-7.7.1.2 Friction Course:** Correct deficiencies in the friction course or final surface layer by removing and replacing the full depth of the layer, extending a minimum of 50 feet on both sides (where possible) of the defective area for the full width of the paving lane. As an exception, the Engineer may allow the Contractor to leave these areas in place if it is determined by the Engineer that the deficiency is not a significant detriment to the pavement quality. A reduction to the pay item quantity will be made in accordance with 331-7.7.2.

**331-7.7.2 Reduction in Pay Item Quantity:** When the Engineer elects to waive corrections, the Department will reduce the pay quantity for the pay item in question by the amount of material the Contractor would have removed and replaced had the correction been made. When the Pay Quantity is in tons, the Department will base the reduction on the volume of material the Contractor would have removed (the length by the lane width by layer thickness) multiplied by the maximum specific gravity of the mix as determined through the following equation:

$$\text{Quantity(tons)} = L \times W \times t \times Gmm \times 0.0024$$

Where:

L = Lane length (ft.)

W = Lane width (ft.)

t = Layer thickness (in.)

Gmm = Maximum specific gravity from verified mix design

For FC-3 friction course, the Department will base the reduction on the area the Contractor would have removed (the length by lane width) multiplied by a spread rate of 80 pounds per square yard as determined through the following equation:

$$\text{Quantity(tons)} = L \times W \times 0.0044$$

Where:

L = Lane length (ft.)

W = Lane width (ft.)

### **331-7 Protection of Finished Surface.**

Keep sections of newly compacted asphalt concrete, which are to be covered by additional courses, clean until the successive course is laid. Do not dump embankment or base material directly on the pavement. Dress shoulders before placing the final lift on adjacent pavement. Equip blade graders operating adjacent to the pavement during shoulder construction with a 2 inch by 8 inch or larger board, or other attachment providing essentially the same results, attached to their blades so it extends below the blade edge and protects the pavement surface from damage by the grader blade. To prevent rutting or other distortion, protect sections of newly finished dense-graded friction course and the last structural layer from traffic until the surface temperature has cooled below 160°F. The Contractor may use artificial methods to cool the pavement to expedite paving operations. The Department may direct the Contractor to use artificial cooling methods when maintenance of traffic requires opening the pavement to traffic at the earliest possible time.

### **331-8 Contractor Quality Control System**

**331-8.1 Quality Control Description:** The asphalt concrete supplier shall comply with Section 105 and maintain an approved Quality Control Program, as an alternate, the supplier shall submit a Quality Control Plan per these requirements. These Specifications establish minimum requirements and activities for a Contractor quality control system. These requirements pertain to the inspections and tests necessary to substantiate material and product conformance to Contract requirements and to all inspections and tests required by the Contract.

#### **331-8.2 Functions and Responsibilities:**

1. The Department. The Department will verify the Contractor's design mixes, inspect plants and monitor control of the operations to ensure conformance with these Specifications. At no time will the Engineer issue instructions to the Contractor or producer as to the setting of dials, gauges, scales and meters. However, the Department's representatives may question and warn the Contractor against the continuance of any operations or sequence of operations that obviously do not result in satisfactory compliance with the requirements of these Specifications.
2. The Contractor. Submit in writing the proposed Quality Control Plan for each asphalt plant for the Engineer's approval. Maintain the approved Quality Control Plan in effect for the plant to which it is assigned until the Engineer rejects it in writing. Include in the plan the sampling, testing, inspection and the anticipated frequencies of each to maintain process control.

### **331-8.3 Recommendations for a Contractor Quality Control Plan.**

#### **331-8.3.1 All Types of Plants:**

1. Stockpiles
  - a. Place materials in the correct stockpile.
  - b. Use good stockpiling techniques.
  - c. Inspect stockpiles for separation, contamination, segregation, etc.
2. Incoming Aggregate
  - a. Obtain gradations and bulk specific gravity (BSG) values from the aggregate supplier.
  - b. Determine gradation of all component materials.
  - c. Compare gradations and BSG to mix design.
3. Cold Bins
  - a. Calibrate the cold gate/feeder belt settings.
  - b. Observe operation of cold feed for uniformity.
4. Dryer
  - a. Observe pyrometer for aggregate temperature control.
  - b. Observe efficiency of the burner.
5. Hot Bins
  - a. Determine gradation of aggregates in each bin.
  - b. Determine theoretical combined grading.
6. Bituminous Mixture
  - a. Determine asphalt content.
  - b. Determine mix gradation.
  - c. Check mix temperature.
  - d. Verify modifier addition.

#### **331-8.3.2 Batch Plants:**

1. For batch weights, determine percent used and weight to be pulled from each bin to ensure compliance with the mix design.
2. Check mixing time.
3. Check operations of weigh bucket and scale

#### **331-8.3.3 Continuous Mix Plant:**

1. Determine gate calibration chart for each bin.
2. Determine gate settings for each bin to ensure compliance with the mix design.
3. Determine gallons [cubic meters] per revolution or gallons [cubic meters] per minute to ensure compliance with the mix design.

#### **331-8.3.4 Drum Mixer Plant:**

1. Calibrate the cold feed and prepare a calibration chart for each cold gate.
2. Develop information for the synchronization of the aggregate feed, reclaimed asphalt pavement (RAP) feed and the bituminous material feed.
3. Calibrate the weigh bridge on the changing conveyor.

The activities shown in Table 331-4 are the normal activities necessary to control the production of bituminous concrete at an acceptable quality level. The Department recognizes, however, that depending on the type of process or materials, some of the activities listed may not be necessary and, in other cases, additional activities may be required. The frequency of these activities will also vary with the process and the materials. When the process varies from the defined process average and variability targets, increase the frequency of these activities until the proper conditions are restored. Take one sample and test for every 1,000 tons [900 metric tons] of incoming aggregate (including RAP) as it is stockpiled. Test RAP material for extracted gradation and asphalt content.

Plot and keep up-to-date control charts for all quality control sampling and testing.

Provide control charts for the following:

- a. gradation of incoming aggregates
- b. gradation and asphalt content of RAP
- c. combined gradations of hot bins
- d. extracted asphalt content
- e. mix gradation
- f. gradation of cold feed (drum mixers)

Post all current control charts in the asphalt lab where they can be seen. Submit design mixes to the Engineer for verification prior to their use. Provide process control of all materials during handling, blending, mixing and placing operations.

**331-8.4 General Requirements:** Furnish and maintain a quality control system that provides reasonable assurance that all materials and products submitted to the Engineer for acceptance meet the Contract requirements. Perform, or have performed, the inspection and tests required to substantiate product conformance to Contract requirements, and also perform, or have performed, all inspections and tests otherwise required by the Contract. Keep a quality control technician, who has been certified by the Department as a Qualified Asphalt Plant Technician (Plant Level II), available at the asphalt plant at all times when producing asphalt mix for the Department. Place a person in responsible charge of the paving operations who is qualified by the Department as a Qualified Asphalt Paving Technician (Paving Level II). Document the quality control procedures, inspection and tests, and make that information available for review by the Engineer throughout the life of the Contract.

**331-8.5 Documentation:** Maintain adequate records of all inspections and tests. Record the nature and number of tests made, the number and type of deficiencies found, the quantities approved and rejected, and the nature of corrective action taken, as appropriate. The Department may review and approve all documentation procedures prior to the start of the work. The Department will take ownership of all charts and records documenting the Contractor's quality control tests and inspections upon completion of the work.

**331-8.6 Charts and Forms:** Record all conforming and nonconforming inspections and test results on approved forms and charts, and keep them up to date and complete and make them available at all times to the Engineer during the performance of the work. Prepare charts of test properties for the various materials and mixtures on forms that are in accordance with the applicable requirements of the Department. The Engineer will furnish a copy of each applicable chart and form. Provide a supply of the charts and forms from the copy furnished. Obtain the Engineer's approval of non-standard forms and charts prior to using them.

**331-8.7 Corrective Actions:** Take prompt action to correct any errors, equipment

malfunctions, process changes or other problems that result or could result in the submission of materials, products or completed construction that do not meet the requirements of these Specifications. When it becomes evident to the Department that the Contractor is not controlling his process and is making no effort to take corrective actions, the Department will require the Contractor to cease plant operations until such time as the Contractor can demonstrate that he can and is willing to control the process.

**331-8.8 Laboratories with Measuring and Testing Equipment:** Furnish a fully equipped asphalt laboratory (permanent or portable) at the production site, and meeting the following requirements:

1. Area – Provide an effective working area for the laboratory that is a minimum of 180 square feet. This area does not include the space for desks, chairs and file cabinets.
2. Lighting – Provide lighting in the lab adequate to illuminate all areas of work.
3. Temperature Control – Equip the lab with heating and air conditioning units that provide a satisfactory working environment.
4. Ventilation – Equip the lab with fume hoods and exhaust fans that will remove all hazardous fumes from within the laboratory in accordance with OSHA requirements.
5. Equipment and Supplies – Furnish the lab with the necessary sampling and testing equipment, and supplies, for performing Contractor quality control and Department acceptance sampling and testing. A detailed list of equipment and supplies required for each test is included in the Field Sampling and Testing Manual.

When running plants at a high production rate, furnish additional testing equipment as necessary to allow the completion of the Contractor's quality control tests and the Department's Acceptance tests within the specified time frame.

**331-8.9 Sampling and Testing:** Use the sampling and testing methods and procedures that the Department provides to determine quality conformance of the materials and products. The Department will use these same methods and procedures for its acceptance tests. Include the sampling for other material characteristics on a random basis and the plotting of the test results on control charts in the Quality Control Plan.

**331-8.9.1 Alternative Procedures:** The Contractor may use alternative sampling methods, procedures and inspection equipment when such procedures and equipment provide, as a minimum, the quality assurance required by the Contract Documents. Prior to applying such alternative procedures, describe them in a written proposal and demonstrate for the Engineer's approval that their effectiveness is equal to or better than the Contract requirements. In case of dispute as to whether certain proposed procedures provide equal assurance, use the procedures stipulated by the Contract Documents.

**331-8.10 Nonconforming Materials:** Establish and maintain an effective and positive system for controlling nonconforming materials, including procedures for identification, isolation and disposition. Reclaim or rework nonconforming materials in accordance with procedures acceptable to the Engineer. Discuss the details of this system at the preconstruction conference, and make these details a part of the record of the conference.

**331-8.11 Department Inspection at Subcontractor or Supplier Facilities:** The Department reserves the right to inspect materials not manufactured within the Contractor's facility.

The Department's inspection does not constitute acceptance and does not, in any way, replace the Contractor's inspection or otherwise relieve the Contractor of his responsibility to

furnish an acceptable material or product. When the Department inspects the subcontractor's or supplier's product, such inspection does not replace the Contractor's responsibility to inspect such subcontractor's or supplier's product.

**SECTION 331-9 ASPHALT CONCRETE FRICTION COURSE (LCDOT REV 12/06/2017)**

**331-9 Description.** Construct an asphalt concrete friction course. This Section specifies mixes designated as Friction Course 3(FC-3).

**331-9.1 Materials.**

**331-9.1.1 General Requirements:** Meet the plant and equipment requirements of Section 320, as modified herein. Meet the general construction requirements of Section 330, as modified herein. The Engineer will base continuing approval of material sources on field performance.

**331-9.1.2 Coarse Aggregate:** Meet the requirements of Section 901, and any additional requirements or modifications specified herein for the various mixtures.

**331-9.1.3 Fine Aggregate:** Meet the requirements of Section 902, and any additional requirements or modifications specified herein for the various mixtures.

**331-9.2 General Composition of Mixes.**

**331-9.2.1 General:** Use a bituminous mixture composed of aggregate (coarse, fine, or a mixture thereof). Size, uniformly grade and combine the aggregate fractions in such proportions that the resulting mix meets the requirements of this Section. The use of RAP material will not be permitted.

**331-9.3 Specific Component Requirements for FC-3 Mix:**

**331-9.3.1 Aggregates:** In addition to the requirements of Section 901, meet the following coarse aggregate requirements. Use either crushed gravel, crushed granite, crushed slag, or crushed limestone from the Oolitic formation. Aggregates other than those listed above may be used if approved by the Engineer.

In addition to the requirements of Section 902, meet the following fine aggregate requirements. Use crushed screenings or a combination of crushed screenings and local materials. Use crushed screenings composed of hard, durable particles resulting from crushing or processing the coarse aggregate as specified above. Screenings from other approved sources may be used provided that the total of these screenings along with silica sand or local materials does not exceed 40%. Ensure that not more than 20% by weight of the total aggregate used is silica sand or local materials defined in Section 902.

**331-9.3.2 FC-3:** Provide a mix design conforming to the requirements of 331-4.3. Submit data showing that the mix design meets the requirements of Table 331-2. Then, for production, substitute the asphalt binder at the optimum conventional binder content and show it as the optimum binder content on the verified mix design.

**331-9.4 Contractor's Quality Control.** Provide the necessary quality control of the friction course mix and construction in accordance with the applicable provisions of Section 330 and 331-4.4 for FC-3. After the mix design has been approved, furnish the material to meet the approved mix design in accordance with the provisions of 331-4.4.2 and Table 331-3 for FC-3. Calibrate the plant in accordance with 331-4.4.3 and Table 331-3.

The Engineer will monitor the spread rate periodically to ensure uniform thickness. Provide quality control procedures for daily monitoring and control of spread rate variability. If the spread rate varies by more than 5% of the spread rate, immediately make all



corrections necessary to bring the spread rate into the acceptable range.

**331-9.5 Acceptance of Mix.**

**331-9.5.1 Acceptance at the Plant:** The bituminous mix will be accepted at the plant with respect to gradation and asphalt content in accordance with the applicable requirements of 331-5 for FC-3, with the exception that the asphalt content of the mixture will be determined in accordance with FM 5-563, and the gradation will be determined in accordance with FM 1-T 030.

**331-9.5.2 Acceptance on the Roadway:** The FC-3 mix will be accepted on the roadway with respect to density in accordance with the applicable provisions of 331. The FC-3 mixture will be accepted on the roadway with respect to surface tolerance in accordance with the applicable provisions of 330-4.

**331-9.6 Temperature Requirements for FC-3:**

**331-9.6.1 Air Temperature at Laydown:** Spread the mixture only when the air temperature, taken in the shade away from artificial heat, is at or above 45°F.

**331-9.6.2 Temperature of the Mixture:** Heat and combine the asphalt binder and aggregate in a manner which will produce a mixture having a temperature, when discharged from the plant, of 310°F, or as directed by the Engineer. Meet the temperature tolerance requirements specified in Table 330-2.

**331-9.7 Spread Rate for FC-3:** The Engineer will set the spread rate within the range of 100-110 lb/yd<sup>2</sup>.

**331-9.8 Method of Measurement.**

The quantity to be paid for will be the weight, in tons [metric tons], as determined in accordance with 320-2 (including provisions for the automatic recordation system). The pay quantity will be based on the average spread rate for the project, limited to a maximum of 105% of the spread rate set by the Engineer.

**331-9.9 Basis of Payment.**

Price and payment will be full compensation for all the work specified under this Section, including the cost of the (asphalt cement, anti-stripping agent, blending, and handling), as well as fiber stabilizing additive and hydrated lime (if required). Payment will be made under: Item No. 337-7 – Asphaltic Concrete Friction Course per-ton.

**SECTION 430 – PIPE CULVERTS AND STORM SEWERS (LCDOT 10/27/2017)**

Article 430-3: Articles 430-3.1 and 430-3.2 are modified as follows:

Pipe material for storm sewer or cross drain installations under pavement shall consist of steel reinforced concrete pipe in accordance with Section 449 and shall be a minimum of Class III or HE-III.

**DIVISION III-MATERIALS**

RESERVED

**EXHIBIT J**  
**SPECIAL PROVISIONS**

**1. CONTRACT TIME**

Contractor shall perform the contracted work fully, entirely, and in accordance with the Contract Documents within the Contract Time specified herein. If the Contractor fails to complete the work within the time stipulated, liquidated damages will apply in accordance with Standard Specification Article 8-10 Liquidated Damages for Failure to Complete the Work.

It is the County's experience that this project site is affected by high water, standing water, and similar water scenarios year-round. As such, time extensions will NOT be granted for delays caused by high water, standing water, or equivalent weather/water related conditions on the job site. The Contractor is responsible for necessary dewatering activities in order to maintain the project schedule and avoid any such delays.

**Contract Time: 210 Calendar Days Commencement Date to Final Acceptance**

**2. PERMITS**

In accordance with Article 7-2 of Division I, permits and licenses procured by the County are listed below and attached hereto.

- a. None

**3. GEOTECHNICAL INFORMATION**

Certain subsurface explorations and/or testing were conducted by the County in the design of this Project. Reports summarizing this work are listed below and attached hereto. The attached information is NOT a part of the Contract Documents and is provided as a supplement for informational purposes only. The County is not responsible for the accuracy, completeness or usefulness thereof. The County makes no warranty, express or implied, for the data, interpretations or opinions contained therein. Any person or party that utilizes the attached information does so purely at its own risk, and the County disclaims any responsibility or liability for any user's reliance upon the information.

- a. Ardaman & Associates, Inc. - Preliminary Roadway Soil Survey Corbett Road – Diplomat Parkway East to Littleton Road Cape Coral, Florida – dated: March 13, 2017.

PRELIMINARY ROADWAY SOIL SURVEY  
CORBETT ROAD  
DIPLOMAT PARKWAY EAST TO LITTLETON ROAD  
CAPE CORAL, LEE COUNTY, FLORIDA



**Ardaman & Associates, Inc.**  
Geotechnical, Environmental and  
Materials Consultants

**OFFICES**

**Orlando**, 8008 S. Orange Avenue, Orlando, Florida 32809, Phone (407) 855-3860  
**Bartow**, 1525 Centennial Drive, Bartow, Florida 33830, Phone (863) 533-0858  
**Cocoa**, 1300 N. Cocoa Blvd., Cocoa, Florida 32922, Phone (321) 632-2503  
**Fort Myers, 9970 Bavaria Road, Fort Myers, Florida 33913, Phone (239) 768-6600**  
**Miami**, 2608 W. 84<sup>th</sup> Street, Hialeah, Florida 33016, Phone (305) 825-2683  
**Port St. Lucie**, 460 Concourse Place NW, Unit 1, Port St. Lucie, Florida 34986, Phone (772) 878-0072  
**Sarasota**, 78 Sarasota Center Blvd., Sarasota, Florida, Phone (941) 922-3526  
**Tallahassee**, 3175 West Tharpe Street, Tallahassee, Florida 32303, Phone (850) 576-6131  
**Tampa**, 3925 Coconut Palm Drive, Suite 115, Tampa, Florida 33619, Phone (813) 620-3389  
**West Palm Beach**, 2200 N. FL Mango Rd., Ste. 101, West Palm Bch., FL 33409, Phone (561)687-8200

**MEMBERS:**  
A.S.F.E.

American Concrete Institute  
American Society for Testing and Materials  
Florida Institute of Consulting Engineers



**Ardaman & Associates, Inc.**

Geotechnical, Environmental and  
Materials Consultants

Ardaman Project No. 17-33-4503  
March 13, 2017

**AGBOLI, BARBER & BRUNDAGE, INC.**

7400 Tamiami Trail North, Suite 200  
Naples, FL 34108

Attention: Mr. Ted Tryka, P.E.

**Subject: Preliminary Roadway Soil Survey**  
Corbett Road  
Diplomat Parkway East to Littleton Road  
Cape Coral, Lee County, Florida

Dear Mr. Tryka:

As requested, we have completed the Preliminary Roadway Soil Survey Report for the subject project. This report documents the results of our field and laboratory testing programs, and presents our engineering recommendations. It has been prepared for specific application to the Corbett Road project from Diplomat Parkway East to Littleton Road in Cape Coral, Lee County, Florida, in accordance with generally accepted geotechnical engineering practices. No other warranty, expressed or implied, is made. While the borings are representative of subsurface conditions at their respective locations and for their respective vertical reaches, local variations characteristic of the subsurface materials of the region are anticipated and may be encountered. The nature and extent of the variations between the borings may not become evident until construction

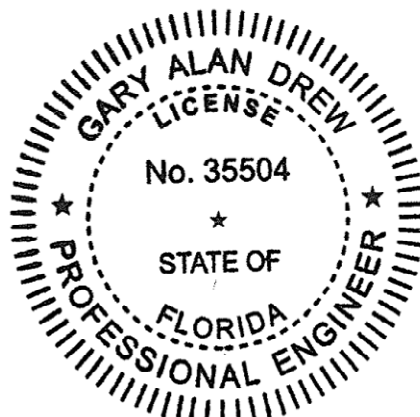
If you have any questions about this report, please contact the undersigned.

Very truly yours,

**Ardaman & Associates, Inc.**  
**Florida Certificate of Authorization**  
**No. 00005950**

Matthew R. Elmore, E.I.  
Project Engineer

MRE:GAD/egs



Gary A. Drew, P.E. No. 35504  
Vice President/Branch Manager

*This document has been digitally  
signed and sealed by:*

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considered signed and sealed.  
The signature must be verified on the  
electronic documents.*

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## **1.0 INTRODUCTION**

### **1.1 Site Location and Project Description**

Lee County is planning roadway improvements to the existing Corbett Road from Diplomat Parkway East to Littleton Road in Cape Coral, Lee County, Florida. Corbett Road exists as a two-lane paved road. The improvements will consist of roadway widening and pavement rehabilitation or reconstruction. Project stationing, as shown on the project plans prepared by Agnoli Barber & Brundage, Inc., starts at 200+00 and ends at Station 251+00. The project site is shown on an aerial photograph obtained from the Lee County Property Appraisers website presented as **Site Location Map (Figure 1)**.

### **1.2 Review of Soil Survey Maps**

The United States Department of Agriculture Natural Resources Conservation Services, **Soil Survey of Lee County, Florida** was reviewed for major shallow soil types within the project study area. The Soil Survey identified five major soil types within the area of interest and these are described in the following paragraphs.

**12—Felda fine sand.** This is a nearly level, poorly drained on broad, nearly level sloughs. Slopes range from 0 to 2 percent.

Typically, the surface layer is dark gray fine sand about 8 inches thick. The subsurface layer is light gray and light brownish gray fine sand about 14 inches thick. The subsoil is light grey loamy fine sand about 16 inches thick and is underlain by gray and light gray fine sand that extends to a depth of 80 inches or more.

In most years, under natural conditions, the seasonal high water table is within 10 inches of the surface for 2 to 4 months. For about 6 months, the water table is at a depth of 10 to 40 inches. It is more than 40 inches below the surface for about 2 months. The available water capacity of this soil is low in the surface and subsurface layers and medium in the subsoil. The permeability is rapid in the surface and subsurface layers, moderate or moderately rapid in the subsoil, and rapid in the substratum.

**33—Oldsmar sand.** This is a nearly level, poorly drained soil on low, broad flatwoods areas. Slopes range from 0 to 2 percent.

Typically, the surface layer is black sand about 3 inches thick. The subsurface layer is gray and light gray sand about 39 inches thick. The upper part of the subsoil is very dark gray sand about 5 inches thick. The lower part of the subsoil is yellowish brown and mixed light brownish gray and brown fine sandy loam about 11 inches thick. Pale brown sand extends to a depth of 80 inches or more.



In most years, under natural conditions, the seasonal high water table is at a depth of less than 10 inches for 1 to 3 months. It is at a depth of 10 to 40 inches for more than 6 months, and it recedes to a depth of more than 40 inches during extended dry periods. The available water capacity of this soil is low in the surface layer and medium in the subsoil. The permeability is rapid in the surface and subsurface layers, moderate in the upper part of the subsoil, and slow or very slow in the lower part of the subsoil.

**45—Copeland sandy loam, depressional.** This is a low, nearly level, very poorly drained soil in depressions. Slopes are less than 1 percent.

Typically, the surface layer is about 8 inches of very dark gray sandy loam. The subsoil is very dark gray sandy loam about 12 inches thick. It is underlain by 8 inches of light brownish gray sandy clay loam with soft calcium carbonate throughout. Fractured limestone bedrock is at a depth of 28 inches.

Under natural conditions, the seasonal high water table is about the surface for 3 to 6 months. It is 10 to 40 inches below the surface for 3 to 6 months. The available water capacity is medium. The permeability is rapid in the surface layer and moderate in the subsoil.

**50—Oldsmar fine sand, limestone substratum.** This is a nearly level, poorly drained soil in flatwoods. Slopes range from 0 to 2 percent.

Typically, the surface layer is dark gray fine sand about 8 inches thick. The subsurface layer is fine sand to a depth of 34 inches. The upper 14 inches is light brownish gray, and the lower 12 inches is white with grayish brown stains along root channels. The subsoil is about 26 inches thick. The upper 8 inches is dark reddish brown fine sand. The next 7 inches is dark brown fine sand with dark reddish brown fragments. The lower 1 inches is olive, black, and grayish stains along root channels. Hard, fractured limestone is at a depth of 60 inches.

In most years, under natural conditions, the seasonal high water table is within 10 inches of the surface for 2 to 4 months and 10 to 40 inches below the surface for more than 6 months. It recedes to more than 40 inches below the surface during extended dry periods. The available water capacity is low in the surface and subsurface layers and medium in the subsoil. Permeability is rapid in the surface and subsurface layers, moderately slow in the upper part of the subsoil, and slow or very slow in the lower part of the subsoil.

**74—Boca fine sand, slough.** This is a nearly level, poorly drained soil in sloughs. Slopes range from 0 to 1 percent.

Typically, the surface layer is grayish brown fine sand about 3 inches thick. The subsurface layer is light gray and very pale brown fine sand about 30 inches thick. The subsoil, about 5 inches thick, is gray sandy clay loam with yellowish brown and brownish yellow mottles. At a depth of about 38 inches is hard, fractured limestone bedrock with solution holes extending to 46 inches.

In most years, under natural conditions, the seasonal high water table is within 10 inches of the surface for 2 to 4 months. It is 10 to 40 inches below the surface for more than 4 months and recedes to a depth of more than 40 inches during extended dry periods. The available water capacity is low in the surface and subsurface layers and medium in the subsoil. Permeability is rapid in the surface and subsurface layers and moderate in the subsoil.

Note that no soil unit describes a muck layer. Additionally three of the five soil units describe weathered and unweathered bedrock at depths ranging from 28 to 60 inches below the natural ground surface.

A summary of the five soil units is presented below:

USDA Map Symbol And Soil Name	Soil Classification				pH	Seasonal High Water Table		Risk of Corrosion	
	Depth (inches)	USCS	AASHTO	Permeability (in./hr.)		Depth (feet)	Months	Uncoated Steel	Concrete
(12) Felda fine sand	0 – 22	SP, SP-SM	A-3	6.0 – 20	5.1 – 7.8	0 – 1.0	JUL – MAR	High	Moderate
	22 – 38	SM, SM-SC, SC	A-2-4, A-2-6	0.6 – 6.0	6.1 – 7.8				
	38 – 80	SP, SP-SM	A-3, A-2-4	6.0 – 20	6.1 – 8.4				
(33) Oldsmar sand	0 – 42	SP, SP-SM	A-3	6.0 – 20	3.6 – 7.3	0 – 1.0	JUN – FEB	Moderate	High
	42 – 47	SM, SP-SM	A-2-4, A-3	0.2 – 6.0	3.6 – 7.3				
	47 – 58	SM-SC, SC	A-2-4, A-2-6	<0.2	6.1 – 8.4				
	58 – 80	SM, SP-SM	A-2-4, A-3	0.2 – 6.0	6.1 – 8.4				
(45) Copeland sandy loam, depressional	0 – 8	SP-SM, SM	A-3, A-2-4	6.0 – 20	6.1 – 7.3	+2 – 1.0	JUL – APR	High	Low
	8 – 20	SM-SC, SC	A-2-4, A-2-6	0.6 – 2.0	7.4 – 8.4				
	20 – 28	SM, SM-SC	A-2-4	0.6 – 6.0	7.4 – 8.4				
	28	Weathered bedrock		---	---				
(50) Oldsmar fine sand, limestone substratum	0 – 34	SP, SP-SM	A-3, A-2-4	6.0 – 20	4.5 – 6.0	0 – 1.0	JUN - OCT	High	Low
	34 – 49	SP, SP-SM	A-3, A-2-4	0.2 – 0.6	4.5 – 5.5				
	49 – 60	SC, SM-SC	A-2, A-4, A-6	0.06 – 0.2	5.1 – 7.8				
	60	Unweathered bedrock		---	---				
(74) Boca fine sand, slough	0 – 3	SP-SM	A-3, A-2-4	6.0 – 20	5.6 – 7.3	0 – 1.0	JUN - OCT	High	Moderate
	3 – 33	SP-SM, SM	A-3, A-2-4	6.0 – 20	6.6 – 8.4				
	33 – 38	SC, SM-SC	A-2-4, A-4	0.6 – 2.0	6.6 – 8.4				
	38	Unweathered bedrock		---	---				





## **2.0 SCOPE OF SERVICES**

Our services for this project consisted of providing geotechnical engineering services in general accordance with the Florida Department of Transportation (FDOT) "Soils and Foundation Handbook 2016" and the scope of services as defined in the accepted proposal number 16-542 dated 8-NOV-16.

### **2.1 Purpose and Scope of Services**

The purpose of this report was to identify the subsurface conditions along in the project study area to develop design parameters and to make engineering recommendations in each of the following areas:

1. Soil stratigraphy at the boring locations. Development of a general soil profile within the project study area.
2. Assessment of the existing soil subgrade and groundwater conditions in the project study area for suitability of pavement support.
3. General location and description of the potential deleterious materials encountered in the borings that may interfere with construction progress or pavement performance, including existing fills or surficial organics.
4. Groundwater levels and seasonal high groundwater level estimates in the borings.

The scope of services from this Roadway Soil Survey project included the following

1. Conducted a general visual reconnaissance of the site.
2. Reviewed readily available published geologic information. Reviewed the "**Soil Survey of Lee County, Florida**" published by the United States Department of Agriculture (USDA) Soil Conservation Service (SCS).
3. Performed a roadway soil survey consisting of auger soil borings extending 4.5 to 5 feet deep below the existing ground section. The borings were generally performed on approximately 100-foot centers along the project alignment.
4. Visually examined and classified the sampled soils according to the American Association of State Highway and Transportation Officials (AASHTO) Soil Classification System.
5. Conducted a limited laboratory testing program consisting of gradation analyses, organic content tests and natural moisture content tests to assist in classification and determine selected soil properties.
6. Performed five Limerock Bearing Ratio (LBR) tests to assist in the pavement design.
7. Measured the groundwater levels in the borings.
8. Estimated normal seasonal high groundwater levels at each boring location.



9. Prepared this roadway soil survey report summarizing the field and laboratory testing program results, and the subsurface soil and groundwater condition encountered. Developed engineering recommendations for the design and construction of the embankment and pavement for the proposed roadway improvements.

### **3.0 FIELD EXPLORATION PROGRAM**

#### **3.1 Auger Borings**

The field exploration program for the Roadway Soil Survey consisted of performing a total of 53 auger borings. The borings were located on approximately 100-foot centers, typically 11 to 13 feet left and right of centerline of construction of Corbett Road. The locations of the individual borings are given on the **Report of Auger Boring Profile sheets Nos. 4 through 9** included in Section 8.0 of this report. The borings were located in the field by measuring from the centerline and/or edge of pavement along the project alignment. Station and offset information was provided by Agnoli, Barber & Brundage, Inc. All borings were referenced to the centerline of construction of Corbett Road. The coordinates shown on the boring profile sheets were obtained in the field using a hand-held WAAS enabled GPS unit and should be considered approximate.

Shallow hand auger borings were conducted using a hand-held bucket auger. The borings were advanced to a depth of 5 feet below the ground surface or auger refusal due to rock. The soil sampling was performed in general accordance with ASTM test designation D-1452 titled Practice for Soil Investigation and Sampling by Auger Borings. Representative portions of these soil samples were sealed in soil jars, labeled and transferred to our Fort Myers laboratory for classification and analysis.

The results of the auger borings are summarized on soil profiles presented as **Sheet Nos. 4 through 9**. The stratum numbers are shown on **Sheet No. 3 - Cross Section Soil Survey for the Design of Roads**.

#### **3.2 Muck Probes**

The review of the soil survey maps did not indicate any likely areas of muck; however, 1.5 to 2 feet of muck was encountered in three of the auger borings (A-31, A-32 and A-33) at depths ranging from 2.5 to 3 feet below the existing ground surface. Therefore, a delineation process was initiated that consisted of the performance of hand augers on 50-foot centers in each direction of the muck area along the alignment. The delineation borings are labeled A-31B (approximately 50 feet south of A-31) and A-33B (approximately 50 feet north of A-33). The delineation borings did not encounter muck material.



### 3.3 Bulk Sampling for LBR

Bulk samples of the surficial soils were obtained at five locations and returned to our laboratory for Limerock Bearing Ratio (LBR) tests. The samples were obtained at a depth of 12 inches below the existing ground surface. The LBR sample locations are stated on the test report sheets in **Appendix A**.

### 3.4 Measured Groundwater Levels

The groundwater level was measured in the boreholes after stabilization of the downhole water level on the same day that the holes were drilled. As shown on the soil profiles, more than half the borings did not encounter groundwater and where groundwater was encountered it was measured at depths ranging from 4.5 to 5 feet below the ground surface. Fluctuations in groundwater levels should be anticipated throughout the year primarily due to seasonal variations in rainfall and other factors that may vary from the time the borings were conducted.

## **4.0 LABORATORY TESTING PROGRAM**

### 4.1 Visual Examination, Natural Moisture Content, Organic Content, Sieve Analysis and Atterberg Limits

Representative soil samples obtained during the field exploration program were packaged and transferred to our laboratory for further visual examination and testing. Natural moisture content, organic content and sieve analysis tests were performed on selected soil samples to aid in soil classification. Sieve analysis tests were performed in accordance with AASHTO T-88. Natural moisture content tests were performed in accordance with AASHTO T265. Organic content tests were performed in accordance with AASHTO T-267.

The test results are summarized in graphical form on **Table 1**.

**Sheet No. 3 Cross Section Soil Survey for the Design of Roads** is a summary of all laboratory test data presented in table form corresponding to the generalized soil strata identified for this project. Soil descriptions were based on visual-manual procedures in accordance with local practice. Descriptions of these procedures are in **Appendix B**.

### 4.2 LBR Tests

A total of five LBR tests were performed on selected soil samples representing the surficial soils within the project study area. The location of the LBR sampling points are stated on the test report sheets relative to the station and offset of the centerline of construction for Corbett Road included in **Appendix A**. LBR Tests were performed in accordance with Florida Method of Tests for LBR's, Designation FM 5-515. The test results are also summarized on **Tables 3** and **4**.



## **5.0 GEOTECHNICAL RECOMMENDATIONS**

### **5.1 General Soil Stratigraphy**

The soils encountered within the project area are primarily sands (A-3) or thin strata of less than 15 percent non-plastic silty sands (A-2-4) from the ground surface to depths ranging from 3 to 5 feet below the existing ground surface. About half the borings encountered plastic clayey sands (A-2-6) and/or sandy clays (A-6) below the surficial sands as shallow as 3 feet, but typically about 4 feet below the existing ground surface. Three of borings encountered a 1.5 to 2 feet thick stratum of material defined as muck (A-8) at depths of 2.5 to 3 feet below the existing ground surface. Also, one boring encountered natural limestone (caprock) at 4.5 feet below the existing ground surface causing termination of the boring. The results of the roadway auger borings are presented on **Sheet nos. 4 through 9** in the form of soil profiles, along with the profile legend and other pertinent information such as measured groundwater levels and estimated seasonal high groundwater levels. Soil stratification is based on an examination of the recovered soil samples, the laboratory testing and interpretation of field boring logs by a geotechnical engineer. The actual transition between strata may be gradual. In some cases, small variations in properties, not considered pertinent to the engineering evaluation, may have been abbreviated for clarity. The profiles represent the conditions at the boring locations only, and variations may occur between the borings. In general, the auger borings performed within the project area encountered the following strata.

<b>Soil Stratum Descriptions and AASHTO Classifications</b>		
<b>Stratum</b>	<b>Soil Description</b>	<b>AASHTO Soil Classification</b>
1	Brown to dark brown and light gray to gray SAND	A-3/A-2-4
2	Brown and gray Clayey SAND/Sandy CLAY	A-2-6/A-6
3	Dark brown and black MUCK	A-8
4	Limestone	

### **5.2 On-Site Soil Suitability**

Based on the soil information obtained from the field exploration and laboratory testing program, and the engineering evaluations, a **Cross Section Soil Survey for Design of Roads** is presented as **Sheet No. 3**. Material use should be completed in accordance with FDOT Index Nos. 500 and 505. Materials directly beneath the base should be select materials. The following summarizes the generalized use of the soils and materials that will most likely be encountered during construction:

1. The material from Stratum 1 is Select (A-3/A-2-4) material and appears satisfactory for use in the embankment when utilized in accordance with Index 505.



2. The material from Stratum 2 is Plastic (A-2-6/A-6) material and shall be removed in accordance with Index 500. It may be placed above the existing water level (at the time of construction) to within 4 feet of the proposed base. It should be placed uniformly in the lower portion of the embankment for some distance along the project rather than full depth for short distances.
3. The material from Stratum 3 is Muck (A-8) material and shall not be used within the portion of the embankment inside the control line.
4. The material from Stratum 4 is natural limestone formation. Special tools and equipment will be required to excavate and/or dewater this material.

### 5.3 Caprock

The Soil Survey of Lee County, Florida identified the soil series **Copeland sandy loam, depressional (45)**, **Oldsmar fine sand, limestone substratum (50)** and **Boca fine sand, slough (74)** as having rock at shallow depths (28 to 60 inches below the surface). These soil series occur along alignment; however, the field exploration program encountered limestone in one boring (A-22) at a depth of 4.5 feet below the existing ground surface. Special equipment such as rock trenchers, hoe rams or hydraulic hammers will likely be needed to remove the caprock when excavating.

### 5.4 Limits of Unsuitable Materials

Existing soil conditions are generally satisfactory for support of the low embankments. We do not anticipate that removal of the existing soils is required for embankment stability. Although approximately half the borings encountered Plastic (A-2-6/A-6) materials, these materials were encountered at depths ranging from 3 to 5 feet below the existing ground surface and therefore is estimated to be deep enough within the soil profile that removal in accordance with Index 500 is not required. Additionally, Index 500 defines an organic material as any soil that has an average organic content greater than 5 percent or an individual organic content test result that exceed 7 percent. Per this index, three of the borings encountered muck (A-8) material, but marginally so as the organic content ranged from 4.4 to 5.4 percent and averaged 5.0 percent. As a result the removal of this material in accordance with Index 500 is not warranted. However, if this material is excavated it shall not be used within the portion of the embankment inside the control line.

### 5.5 Estimated Seasonal High Groundwater Level

Groundwater was not encountered in more than half the borings and where groundwater was encountered it was measured at depths ranging from 4.5 to 5 feet below the ground surface corresponding to elevations of approximately 7 to 9 feet NGVD29. The Lee County Soil Survey in our opinion reasonably predicts the seasonal high groundwater levels along the alignment when it states that levels are generally within 12 inches of the natural ground surface.



Based on the Lee County Soil Survey, soil stratigraphy and past experience with similar soil conditions seasonal high ground water levels ranged from 2 to 4 feet below the existing ground surface corresponding to elevations of 9.7 to 11.6 feet NGVD29, respectively. The seasonal high groundwater level estimates for each soil boring location are summarized in graphical form on **Table 2**.

### 5.6 Groundwater Control

Depending upon groundwater levels at the time of construction, some form of dewatering may be required to achieve the required compaction. Sump pumping from shallow excavations is typically effective for lowering the water table a few feet.

### 5.7 Design LBR

We obtained five samples of the surficial soils within the project area and performed LBR tests. The design LBR Value by using the  $\pm 2$  Percent of Optimum Method is 26 (**Table 4**). The design LBR Value by the 90% Method is 18 (**Table 3**).

It is our opinion the Design LBR value of 18 is a fair representation of the surficial soils along the alignment and we recommend using this value for pavement design.

The corresponding Resilient Modulus,  $M_R$ , is 7,000 psi from Table 5.1 of the FDOT Flexible Pavement Design Manual (Sept. 2016).

## **6.0 REPORT LIMITATIONS**

The evaluation and recommendations submitted in this report are preliminary and based upon the anticipated construction and the data obtained from the soil borings performed at the locations indicated and does not reflect any variations that may occur between these borings. If any variations become evident during the course of construction, a re-evaluation of the recommendations contained in this report will be necessary after we have had an opportunity to observe the characteristics of the conditions encountered. When final design plans and specifications are available, a general review by our office is made to check that the assumptions made in preparation of this report are correct and that the recommendations are properly interpreted and implemented.



## **7.0 TABLE(S)**

TABLE 1 – SUMMARY OF LAB TEST RESULTS

TABLE 2 – SUMMARY OF ESTIMATED SEASONAL HIGH GROUNDWATER LEVEL

TABLE 3 – 90% METHOD FOR DESIGN LBR

TABLE 4 -  $\pm$  2% OF OPTIMUM METHOD FOR DESIGN LBR



**TABLE 1**  
**SUMMARY OF LABORATORY TEST RESULTS**  
**ROADWAY SOIL SURVEY**  
**CORBETT ROAD**  
**FROM DIPLOMAT PARKWAY E TO LITTLEON ROAD**  
**CAPE CORAL, LEE COUNTY, FLORIDA**  
**ARDAMAN & ASSOCIATES PROJECT ID NO.: 17-33-4503**

STATION	OFFSET FROM C/L (Feet)	BORING NO.	DEPTH (Feet)	STRATUM NO.	Percent Passing U.S. STANDARD SIEVES									ATTERBERG LIMITS		MOISTURE CONTENT (%)	AASHTO CLASS.	ORGANIC CONTENT (%)
					3/4-in.	1/2-in.	3/8-in.	#4	#10	#40	#60	#100	#200	LL	PI			
204+76.54	25.34 Lt.	A-5	4	1					100	91.1	60.0	27.8	4.0	NP	NP	19.6	A-3	---
205+76.87	26.06 Lt.	A-6	4.5	1					100	91.7	59.7	28.8	7.1	NP	NP	26.4	A-3	---
208+78.21	13.06 Rt.	A-9	4.5	2		100	98.8	97.8	97.3	90.2	60.5	34.3	20.7	---	---	21.6	A-2-6	---
209+77.69	13.01 Rt.	A-10	4	1					100	91.4	59.6	27.9	4.3	NP	NP	20.3	A-3	3.0
215+75.35	12.27 Rt.	A-16	3	1					100	92.0	61.5	31.4	7.3	NP	NP	18.2	A-3	---
220+74.85	11.70 Lt.	A-21	2.5	1			100	99.8	99.6	19.0	8.4	3.0	1.4	NP	NP	3.7	A-3	---
230+19	12.7 Rt.	A-31B	3	1										---	---	16.4	A-2-4	3.9
230+69.17	12.12 Lt.	A-31	3	3										---	---	20.9	A-8	4.4
231+68.52	12.88 Rt.	A-32	2.5	3										---	---	24.4	A-8	5.4
231+68.52	12.88 Rt.	A-32	4.5	2				100	97.1	85.2	70.9	54.8	41.6	---	---	28.0	A-6	---
232+67.88	12.37 Lt.	A-33	3	3										---	---	24.5	A-8	5.3
233+18	12.5 Rt.	A-33B	3	1										---	---	19.4	A-2-4	2.7
239+77.02	12.68 Rt.	A-40	2.5	1					100	92.8	61.2	28.0	1.5	NP	NP	2.3	A-3	---
246+79.81	12.06 Lt.	A-47	4	1					100	93.2	62.8	27.6	10.4	NP	NP	8.8	A-2-4	---
248+82.83	15.95 Lt.	A-49	1	1		100	96.8	90.8	71.9	70.6	51.8	30.1	8.7	NP	NP	6.0	A-3	---



**TABLE 2**  
**SUMMARY OF SEASONAL HIGH GROUNDWATER LEVEL ESTIMATES**  
**ROADWAY SOIL SURVEY**  
**CORBETT ROAD**  
**FROM DIPLOMAT PARKWAY E TO LITTLEON ROAD**  
**CAPE CORAL, LEE COUNTY, FLORIDA**  
**ARDAMAN & ASSOCIATES PROJECT ID NO.: 17-33-4503**

Boring No. <sup>(1)</sup>	Boring Depth <sup>(3)</sup> (feet)	Date Recorded	Approximate Ground Elevation <sup>(2)</sup> (feet)	Measured Groundwater Table		USDA Soil Survey		Estimated SHGWT <sup>(5)</sup>	
				Depth <sup>(3)</sup> (feet)	Elevation (feet)	Map Symbol <sup>(6)</sup>	Estimated SHGWT <sup>(4)</sup> Depth <sup>(3)</sup> (feet)	Depth <sup>(3)</sup> (feet)	Elevation (feet)
A-1	5	31-JAN-16	12.39	5	7.39	33	0 – 1.0	2	10.39
A-2	5	31-JAN-16	12.51	5	7.51	33	0 – 1.0	2.5	10.01
A-3	5	31-JAN-16	12.86	4.5	8.36	33	0 – 1.0	2.5	10.36
A-4	5	31-JAN-16	12.65	5	7.65	33	0 – 1.0	2.5	10.15
A-5	5	31-JAN-16	12.76	5	7.76	33	0 – 1.0	2.5	10.26
A-6	5	31-JAN-16	12.86	5	7.86	50	0 – 1.0	2.5	10.36
A-7	5	31-JAN-16	13.06	5	8.06	50	0 – 1.0	2.5	10.56
A-8	5	31-JAN-16	13.23	5	8.23	50	0 – 1.0	3	10.23
A-9	5	31-JAN-16	12.76	5	7.76	50	0 – 1.0	2.5	10.26
A-10	5	31-JAN-16	12.83	4.5	8.33	50	0 – 1.0	2.5	10.33
A-11	5	31-JAN-16	13.16	5	8.16	50	0 – 1.0	2.5	10.66
A-12	5	31-JAN-16	12.85	5	7.85	50	0 – 1.0	2	10.85
A-13	5	31-JAN-16	12.90	5	7.90	50	0 – 1.0	2	10.90
A-14	5	31-JAN-16	13.22	5	8.22	50	0 – 1.0	2	11.22
A-15	5	31-JAN-16	13.48	4.5	8.98	50	0 – 1.0	2.5	10.98
A-16	5	31-JAN-16	13.31	4.5	8.81	50	0 – 1.0	2.5	10.81
A-17	5	31-JAN-16	13.47	5	8.47	50	0 – 1.0	3	10.47
A-18	5	31-JAN-16	13.34	5	8.34	50	0 – 1.0	2.5	10.84
A-19	5	31-JAN-16	13.80	5	8.80	50	0 – 1.0	2.5	11.30
A-20	5	31-JAN-16	13.81	5	8.81	50	0 – 1.0	2.5	11.31
A-21	5	31-JAN-16	13.95	5	8.95	50	0 – 1.0	3	10.95
A-22	4.5	31-JAN-16	13.72	GNE	---	50	0 – 1.0	2.5	11.22
A-23	5	31-JAN-16	14.46	GNE	---	50	0 – 1.0	3.5	10.96
A-24	5	31-JAN-16	13.72	GNE	---	50	0 – 1.0	3	10.72
A-25	5	31-JAN-16	14.30	5	9.30	50	0 – 1.0	3.5	10.80
A-26	5	31-JAN-16	13.77	5	8.77	50	0 – 1.0	2.5	11.27
A-27	5	31-JAN-16	13.91	5	8.91	50	0 – 1.0	3	10.91
A-28	5	3-FEB-17	13.56	GNE	---	50	0 – 1.0	2.5	11.06
A-29	5	3-FEB-17	13.58	GNE	---	50	0 – 1.0	2	11.58
A-30	5	3-FEB-17	13.42	GNE	---	74	0 – 1.0	2	11.42
A-31	5	3-FEB-17	12.84	GNE	---	45	+2 – 1.0	2	10.84

**TABLE 2: Continued**

Boring No. <sup>(1)</sup>	Boring Depth <sup>(3)</sup> (feet)	Date Recorded	Approximate Ground Elevation <sup>(2)</sup> (feet)	Measured Groundwater Table		USDA Soil Survey		Estimated SHGWT <sup>(5)</sup>	
				Depth <sup>(3)</sup> (feet)	Elevation (feet)	Map Symbol <sup>(6)</sup>	Estimated SHGWT <sup>(4)</sup> Depth <sup>(3)</sup> (feet)	Depth <sup>(3)</sup> (feet)	Elevation (feet)
A-31B	5	6-FEB-17	13.1	GNE	---	74	0 – 1.0	2	11.1
A-32	5	3-FEB-17	12.82	GNE	---	45	+2 – 1.0	2	10.82
A-33	5	3-FEB-17	12.86	GNE	---	45	+2 – 1.0	2	10.86
A-33B	5	6-FEB-17	13.4	5	8.4	74	0 – 1.0	2	11.4
A-34	5	3-FEB-17	13.90	GNE	---	74	0 – 1.0	2.5	11.40
A-35	5	3-FEB-17	13.72	GNE	---	33	0 – 1.0	2.5	11.22
A-36	5	3-FEB-17	14.42	GNE	---	33	0 – 1.0	3	11.42
A-37	5	3-FEB-17	13.23	GNE	---	12	0 – 1.0	2.5	10.73
A-38	5	3-FEB-17	14.88	GNE	---	12	0 – 1.0	4	10.88
A-39	5	3-FEB-17	14.07	GNE	---	50	0 – 1.0	3.5	10.57
A-40	5	3-FEB-17	14.86	GNE	---	12	0 – 1.0	3.5	11.36
A-41	5	3-FEB-17	13.72	GNE	---	12	0 – 1.0	3	10.72
A-42	5	3-FEB-17	13.73	GNE	---	12	0 – 1.0	3	10.73
A-43	5	3-FEB-17	13.91	GNE	---	12	0 – 1.0	3	10.91
A-44	5	3-FEB-17	13.36	GNE	---	50	0 – 1.0	3	10.36
A-45	5	3-FEB-17	13.60	GNE	---	50	0 – 1.0	3	10.60
A-46	5	3-FEB-17	13.15	GNE	---	50	0 – 1.0	3	10.15
A-47	5	3-FEB-17	13.28	GNE	---	50	0 – 1.0	3	10.28
A-48	5	3-FEB-17	13.54	GNE	---	50	0 – 1.0	3.5	10.04
A-49	5	3-FEB-17	13.42	GNE	---	50	0 – 1.0	3.5	9.92
A-50	5	3-FEB-17	12.66	GNE	---	50	0 – 1.0	3	9.66
A-51	5	3-FEB-17	13.78	GNE	---	50	0 – 1.0	4	9.78

(1) Boring locations shown on Report of Auger Borings sheets presented as **Figures 4 through 9**

(2) Elevation information provided by Agnoli, Barber & Brundage, Inc. (NGVD 29)

(3) Depth below existing grades at time of augering/drilling. GNE: Groundwater Not Encountered

(4) Seasonal high groundwater table depth reported in the Lee County, Florida USDA Soil Survey

(5) SHGWT: Seasonal high groundwater table estimated based on soil stratigraphy, measured groundwater level from the borings, the Lee County, Florida USDA Soil Survey information and past experience with similar soil conditions

(6) SCS Soil Type

12 – Felda fine sand

33 – Oldsmar sand

45 – Copeland sandy loam, depressional

50 – Oldsmar fine sand, limestone substratum

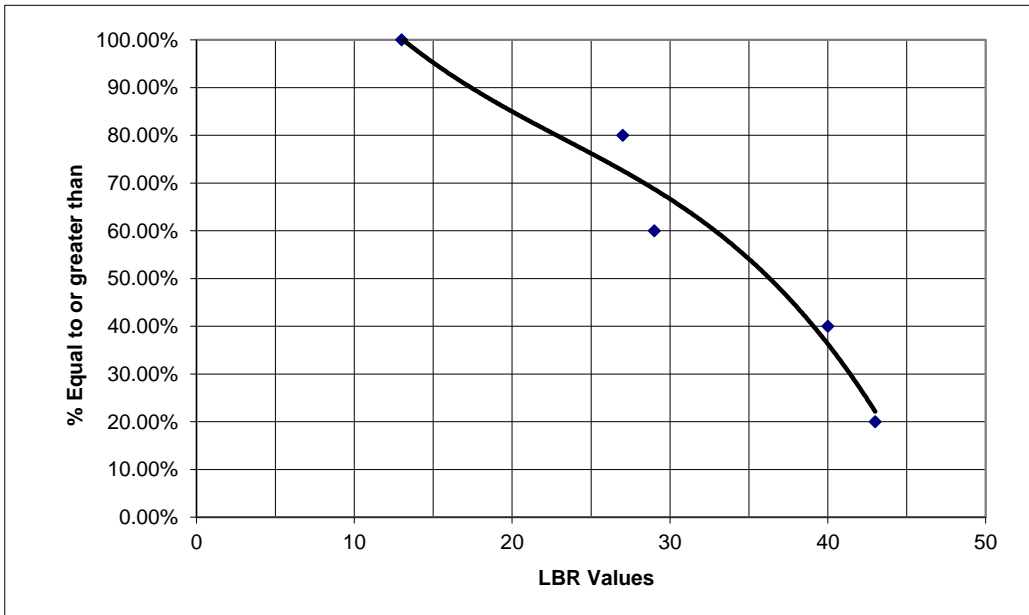
74 – Boca fine sand, slough

**TABLE 3  
90% METHOD FOR DESIGN LBR**

Ardaman file No.: 17-33-4503

Sample No.	Station	Maximum Dry Density (pcf)	Maximum LBR value	% Equal Or Greater Than
1	205+00	106.2	13	100.00%
2	215+00	100.5	43	20.00%
3	225+00	101.8	29	60.00%
4	235+00	104.4	40	40.00%
5	245+00	104.1	27	80.00%

Read off at 90%: 18  
Resilient Modulus (MR), psi: 7,000



**TABLE 4**  
**+/- 2% OF OPTIMUM METHOD FOR DESIGN LBR**

Ardaman file No.: 17-33-4503

Average      **26.2**  
Design LBR:      **26**  
Resilient Modulus (MR), psi :      **9,000**

Sample No.	Station	Maximum Dry Density (pcf)	Maximum LBR value	LBR at Moisture contents (of Optimum LBR)	
				-2%	+2%
1	205+00	106.2	13	12	11
2	215+00	100.5	43	39	39
3	225+00	101.8	29	23	26
4	235+00	104.4	40	37	30
5	245+00	104.1	27	23	22

Mean LBR Value:      **27**      **25.6**

**8.0 FIGURE(S)**

FIGURE 1 – SITE LOCATION MAP

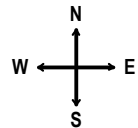
FIGURE 2 – SOIL SURVEY MAP

FIGURE 3 – ROADWAY SOIL SURVEY SHEET

FIGURES 4 THROUGH 9 – REPORT OF AUGER BORING PROFILES






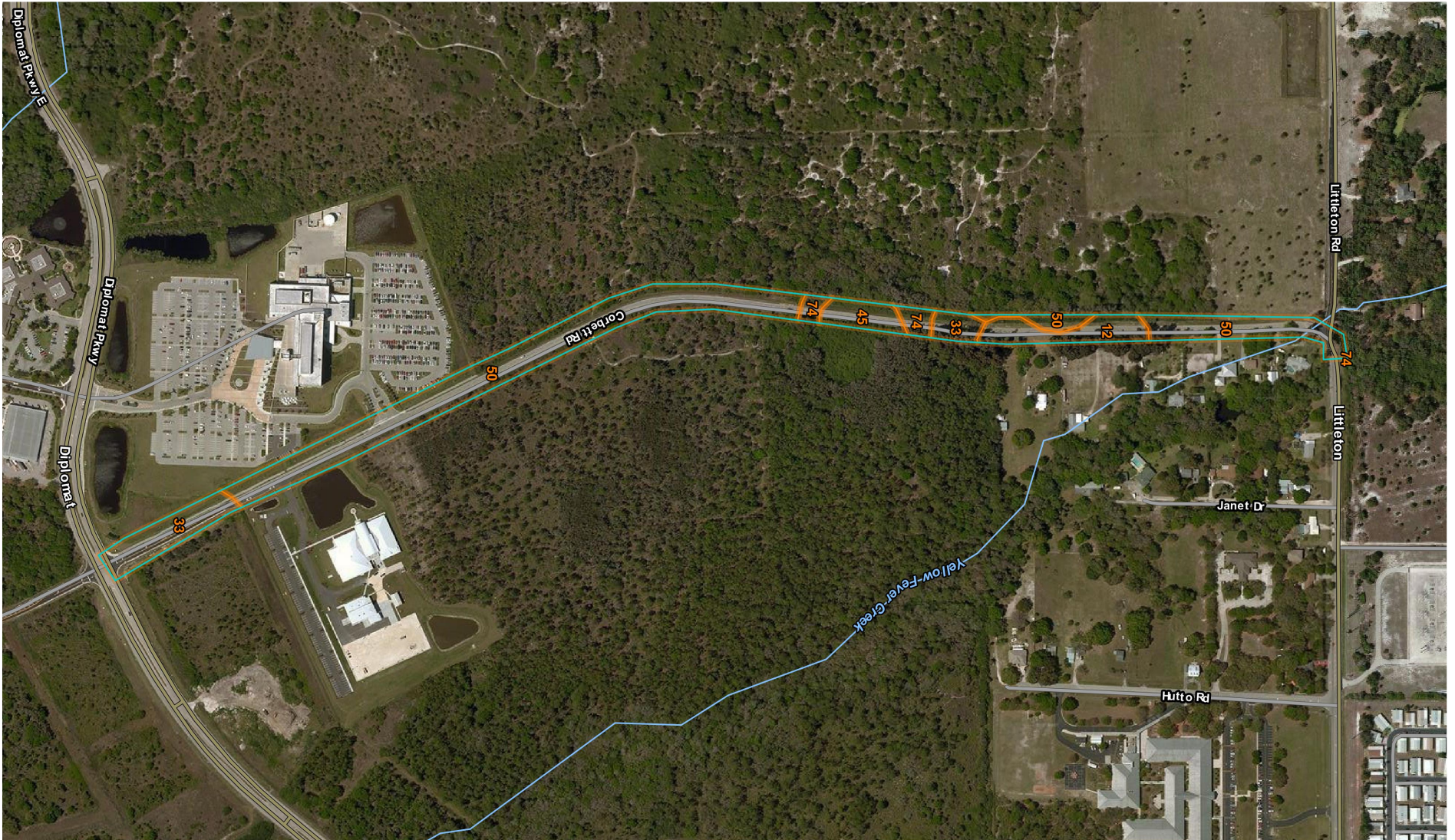


# FIGURE 1 SITE LOCATION MAP

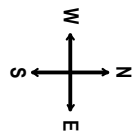
SOURCE: LEEPA.ORG

 <b>Ardaman &amp; Associates, Inc.</b> <b>Geotechnical, Environmental and Materials Consultants</b>		
Roadway Soil Survey Corbett Road Diplomat Pkwy. E. to Littleton Rd. Cape Coral, Lee County, FL		
Drawn By:	Checked By:	Date:
ME	GD	□□□□
File No.	Approved By:	Figure No.
□□□□□□	Gary Drew, P.E.	□






- 12 - Felda fine sand
- 33 - Oldsmar sand
- 45 - Copeland sandy loam, depressional
- 50 - Oldsmar fine sand, limestone substratum
- 74 - Boca fine sand



## FIGURE 2 SOIL SURVEY MAP

SOURCE: USDA.GOV

 <b>Ardaman &amp; Associates, Inc.</b> <b>Geotechnical, Environmental and Materials Consultants</b>		
Roadway Soil Survey Corbett Road Diplomat Pkwy. E. to Littleton Rd. Cape Coral, Lee County, FL		
Drawn By: ME	Checked By: GD	Date: <input type="text"/>
File No. <input type="text"/>	Approved By: Gary Drew, P.E.	Figure No. <input type="text"/>



**LEE COUNTY  
DEPARTMENT OF TRANSPORTATION  
MATERIALS AND RESEARCH**

DATE OF SURVEY: 1/31/17, 2/3/17, 2/6/17  
 SURVEY MADE BY: ARDAMAN & ASSOCIATES, INC.  
 SUBMITTED BY: GARY A. DREW, P.E.

ROAD: CORBETT ROAD  
 COUNTY: LEE  
 STATE: FLORIDA

FINANCIAL PROJECT ID NO.: \_\_\_\_\_  
 PROJECT NAME: CORBETT ROAD FROM DIPLOMAT PARKWAY E TO LITTLETON ROAD  
 CROSS SECTION SOIL SURVEY FOR THE DESIGN OF ROADS

SURVEY BEGINS STA. : 200+00.00 SURVEY ENDS STA. : 251+00.00

REFERENCE: CENTERLINE OF CONSTRUCTION CORBETT ROAD

STRATUM NO.	ORGANIC CONTENT		MOISTURE CONTENT		SIEVE ANALYSIS RESULTS PERCENT PASS (%)					ATTERBERG LIMITS (%)			DESCRIPTION	CORROSION TEST RESULTS					
	NO. OF TESTS	% ORGANIC	NO. OF TESTS	MOISTURE CONTENT	10 MESH	40 MESH	60 MESH	100 MESH	200 MESH	NO. OF TESTS	LIQUID LIMIT	PLASTIC INDEX		AASHTO GROUP	NO. OF TESTS	RESISTIVITY ohm-cm	CHLORIDE ppm	SULFATES ppm	pH
1	3	3-4	10	2-26	8	72-100	19-93	8-63	3-31	1-10	0	NP	NP	A-3/A-2-4					
2	0		2	22-28	2	97	85-90	61-71	34-55	21-41	0			A-2-6/A-6					
3	3	4-5	3	21-25	0						0			A-8					
4	0		0		0						0								

EMBANKMENT AND SUBGRADE MATERIAL

STRATA BOUNDARIES ARE APPROXIMATE. MAKE FINAL CHECK AFTER GRADING.

▽ - WATER TABLE ENCOUNTERED

▼ - ESTIMATED SEASONAL HIGH GROUNDWATER TABLE

GNE - GROUNDWATER NOT ENCOUNTERED

NP - NON PLASTIC

THE MATERIAL FROM STRATUM 1 IS SELECT (A-3/A-2-4) MATERIAL AND APPEARS SATISFACTORY FOR USE IN THE EMBANKMENT WHEN UTILIZED IN ACCORDANCE WITH INDEX 505.

THE MATERIAL FROM STRATUM 2 IS PLASTIC (A-2-6/A-6) MATERIAL AND SHALL BE REMOVED IN ACCORDANCE WITH INDEX 500. IT MAY BE PLACED ABOVE THE EXISTING WATER LEVEL (AT THE TIME OF CONSTRUCTION) TO WITHIN 4 FEET OF THE PROPOSED BASE. IT SHOULD BE PLACED UNIFORMLY IN THE LOWER PORTION OF THE EMBANKMENT FOR SOME DISTANCE ALONG THE PROJECT RATHER THAN FULL DEPTH FOR SHORT DISTANCES.

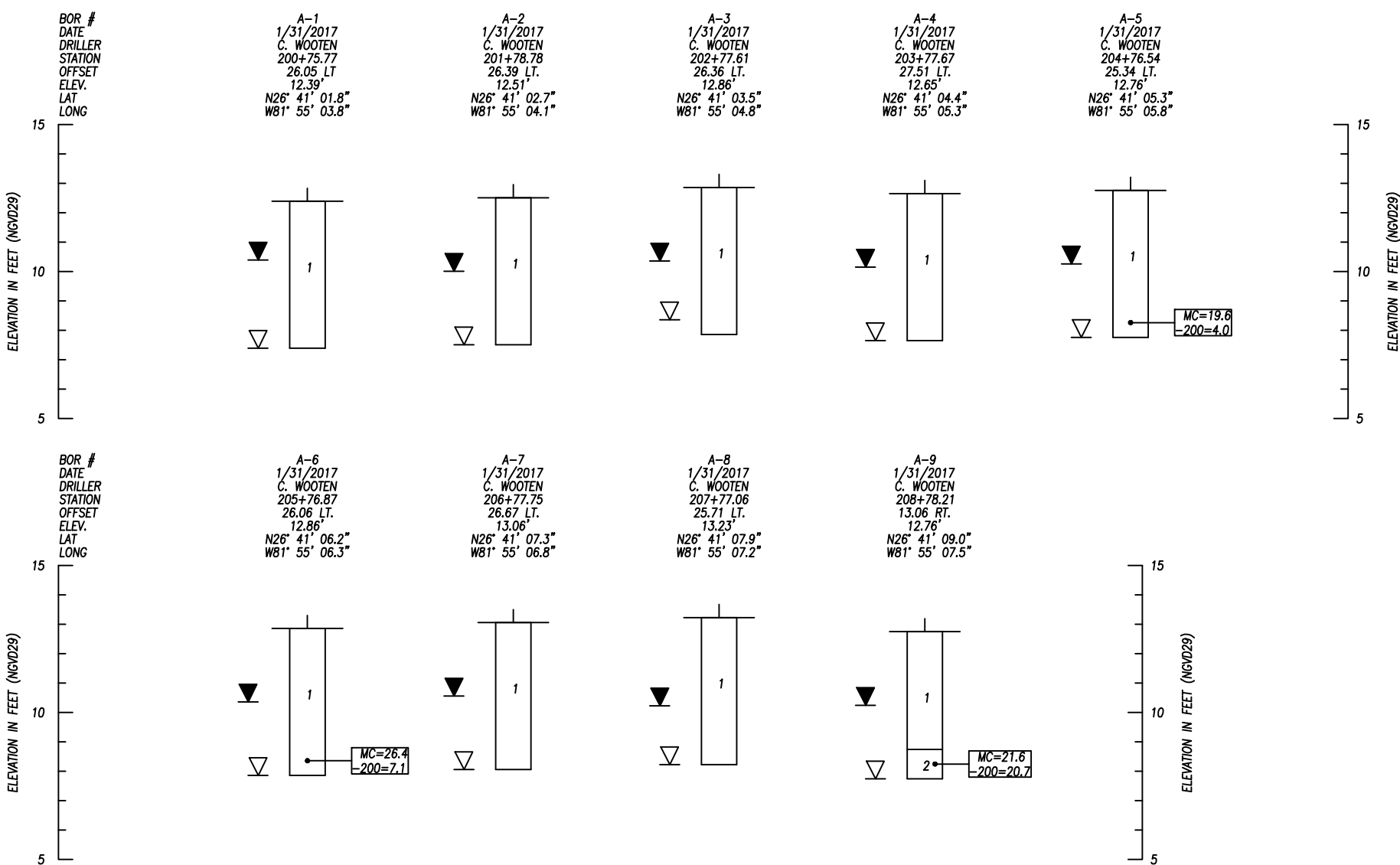
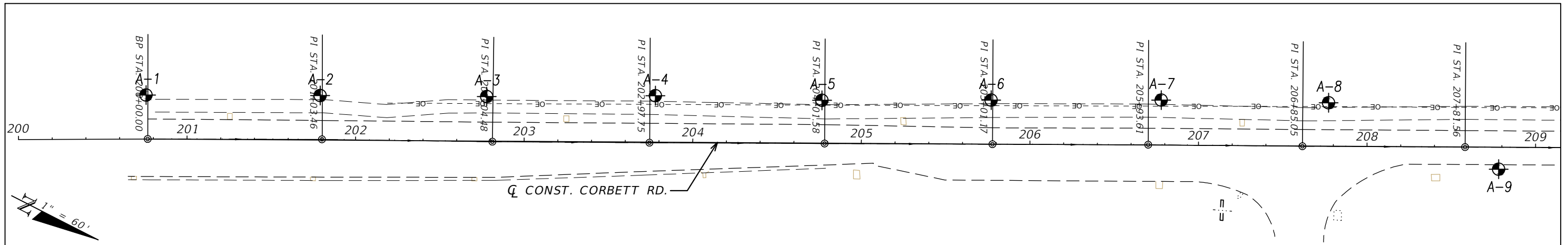
THE MATERIAL FROM STRATUM 3 IS MUCK (A-8) MATERIAL AND SHALL NOT BE USED WITHIN THE PORTION OF THE EMBANKMENT INSIDE THE CONTROL LINE.

THE MATERIAL FROM STRATUM 4 IS NATURAL LIMESTONE FORMATION. SPECIAL TOOLS AND EQUIPMENT WILL BE REQUIRED TO EXCAVATE AND/OR DEWATER THIS MATERIAL.

REVISIONS						ENGINEER OF RECORD: GARY A. DREW, P.E. #35504 ARDAMAN AND ASSOCIATES, INC. 9970 BAVARIA ROAD FORT MYERS, FLORIDA 33913 CERTIFICATE OF AUTHORIZATION 5950	DRAWN BY: AJD CHECKED BY: GAD DESIGNED BY: CHECKED BY:	LEE COUNTY DEPARTMENT OF TRANSPORTATION			SHEET TITLE:  <b>ROADWAY SOIL SURVEY</b>	REF. DWG. NO.
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION			ROAD NO.	COUNTY	FINANCIAL PROJECT ID		SHEET NO.

THE OFFICIAL RECORD OF THIS SHEET IS THE ELECTRONIC FILE DIGITALLY SIGNED AND SEALED UNDER RULE 61G15-23.004, F.A.C.





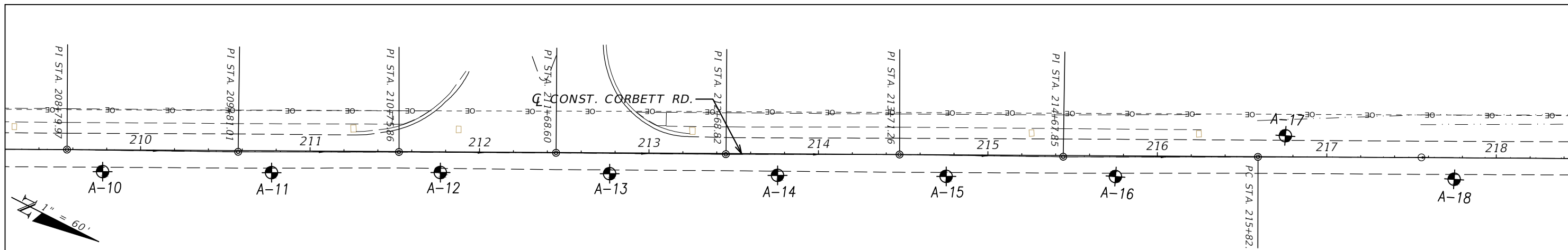
**LEGEND :**

- 1 Brown to dark brown and light gray to gray SAND (A-3/A-2-4)
- 2 Brown and gray Clayey SAND/Sandy CLAY (A-2-6/A-6)
- 3 Dark brown and black MUCK (A-8)
- 4 Limestone

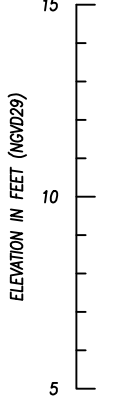
**NOTES :**  
 Weathered limestone/caprock was encountered within the borings. This material is rock and is located in shallow depths. Excavations into and/or through limestone/caprock will be difficult and will require non conventional construction techniques and specialized equipment. Limestone/caprock is porous and will be difficult to dewater.  
 Boring locations surveyed by others and Agnoli, Barber & Brundage, Inc. provided Ardaman with the location and elevation (NGVD29). Geographical GPS coordinate locations were determined using a 4 satellite minimum autonomous solution from a WAAS enabled hand held GPS unit. The boring logs represent subsurface conditions within the borehole at the time of drilling.  
 No warranty as to the subsurface condition, strata depth or soil consistency between or outside boring locations is expressed or implied by this drawing.

- $\nabla$  = Water Table existing at time of boring
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- A-3 = AASHTO Group symbol as determined by visual and laboratory testing

REVISIONS						ENGINEER OF RECORD:			DRAWN BY:			SHEET TITLE:			REF. DWG. NO.
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	GARY A. DREW, P.E. #35504 ARDAMAN AND ASSOCIATES, INC. 9970 BAVARIA ROAD FORT MYERS, FLORIDA 33913 CERTIFICATE OF AUTHORIZATION 5950			LEE COUNTY DEPARTMENT OF TRANSPORTATION			REPORT OF AUGER BORINGS			
									ROAD NO.			PROJECT NAME:			SHEET NO.
									COUNTY			CORBETT ROAD FROM DIPLOMAT PARKWAY E TO LITTLETON ROAD			4
									FINANCIAL PROJECT ID						
									LEE						



BOR #  
DATE  
DRILLER  
STATION  
OFFSET  
ELEV.  
LAT  
LONG



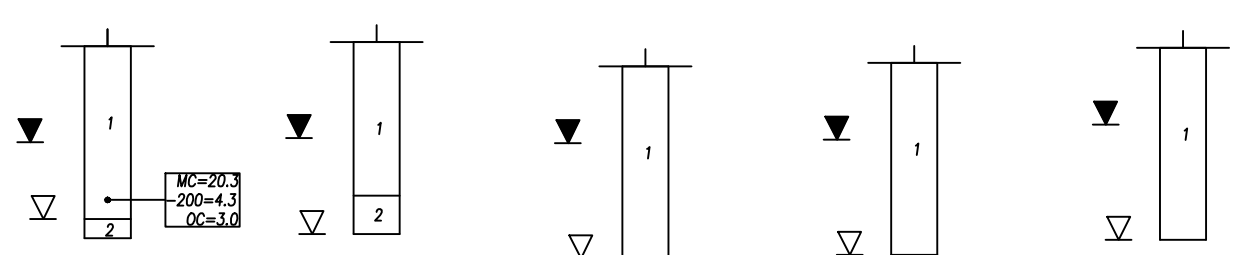
A-10  
1/31/2017  
C. WOOTEN  
209+77.69  
13.01 RT.  
12.83'  
N26° 41' 10.0"  
W81° 55' 07.8"

A-11  
1/31/2017  
C. WOOTEN  
210+77.39  
12.94 RT.  
13.16'  
N26° 41' 10.8"  
W81° 55' 08.3"

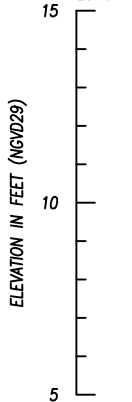
A-12  
1/31/2017  
C. WOOTEN  
211+77.06  
12.31 RT.  
12.85'  
N26° 41' 11.6"  
W81° 55' 08.8"

A-13  
1/31/2017  
C. WOOTEN  
212+76.89  
12.40 RT.  
12.90'  
N26° 41' 12.5"  
W81° 55' 09.4"

A-14  
1/31/2017  
C. WOOTEN  
213+75.95  
12.79 RT.  
13.22'  
N26° 41' 13.5"  
W81° 55' 09.7"



BOR #  
DATE  
DRILLER  
STATION  
OFFSET  
ELEV.  
LAT  
LONG

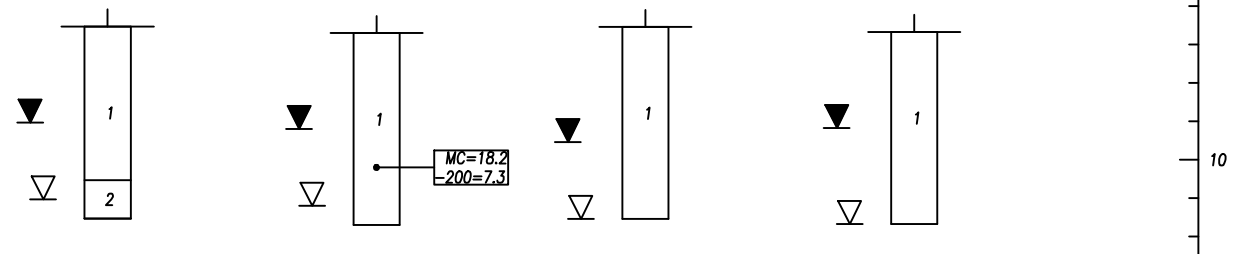


A-15  
1/31/2017  
C. WOOTEN  
214+75.52  
12.80 RT.  
13.48'  
N26° 41' 14.1"  
W81° 55' 10.2"

A-16  
1/31/2017  
C. WOOTEN  
215+75.35  
12.27 RT.  
13.31'  
N26° 41' 15.2"  
W81° 55' 10.8"

A-17  
1/31/2017  
C. WOOTEN  
216+75.48  
12.41 LT.  
13.47'  
N26° 41' 16.1"  
W81° 55' 11.5"

A-18  
1/31/2017  
C. WOOTEN  
217+75.23  
12.72 RT.  
13.34'  
N26° 41' 17.1"  
W81° 55' 11.9"



**LEGEND :**

- 1 Brown to dark brown and light gray to gray SAND (A-3/A-2-4)
- 2 Brown and gray Clayey SAND/Sandy CLAY (A-2-6/A-6)
- 3 Dark brown and black MUCK (A-8)
- 4 Limestone

**NOTES :**

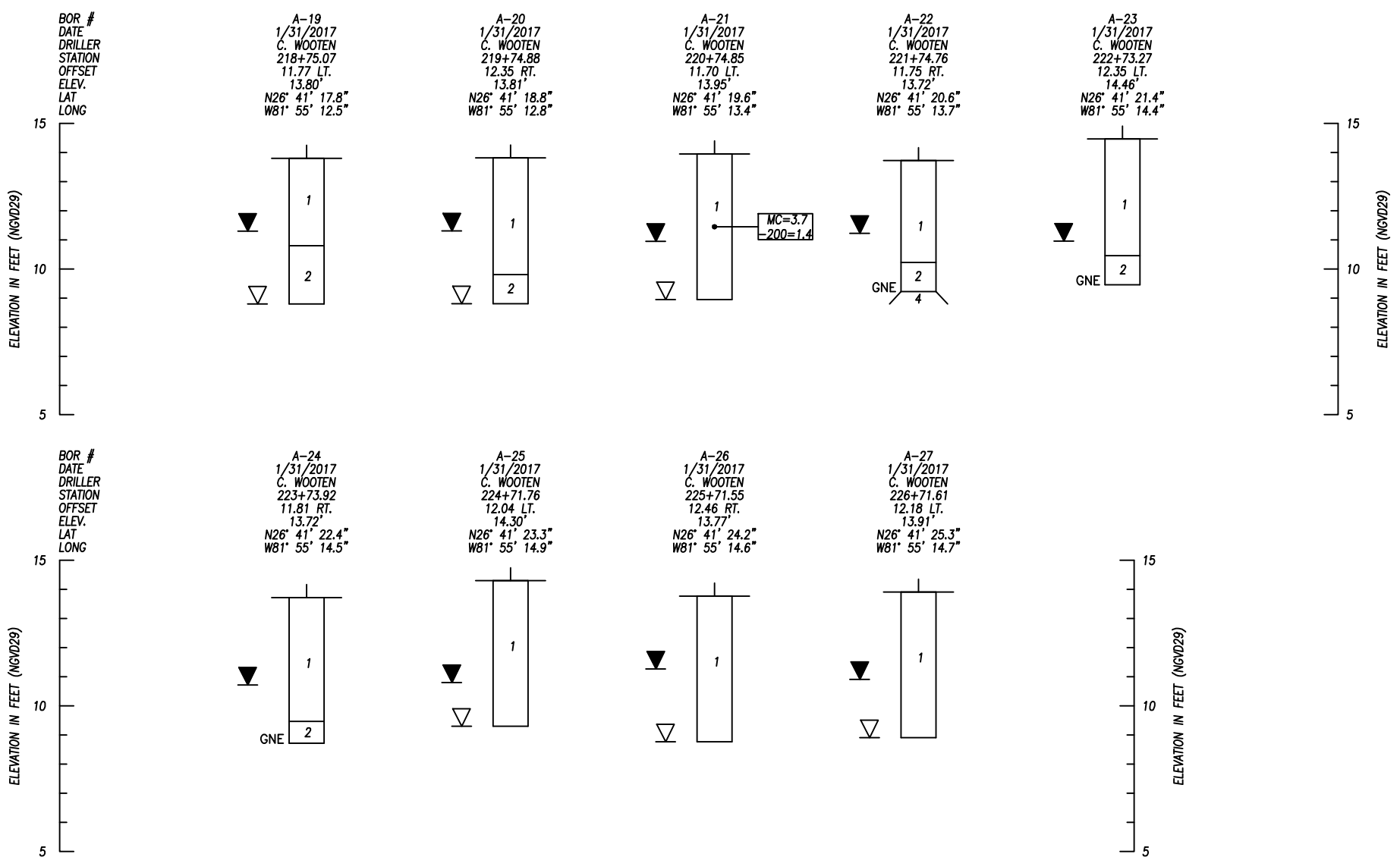
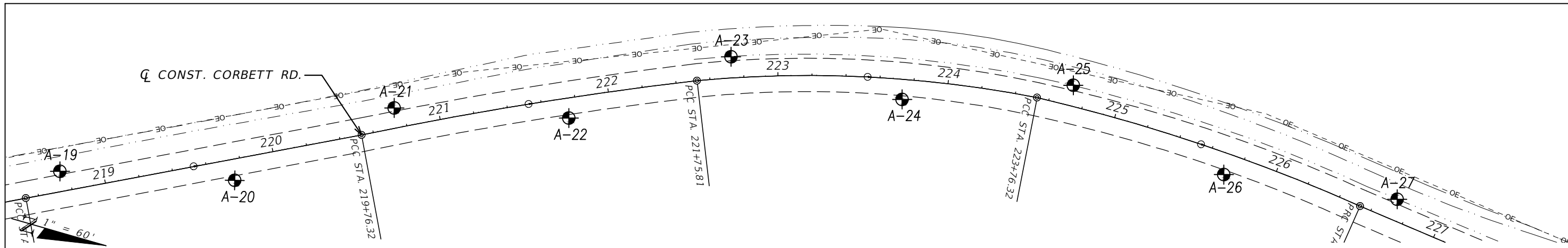
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REVISIONS						ENGINEER OF RECORD:			DRAWN BY:			SHEET TITLE:			REF. DWG. NO.
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	GARY A. DREW, P.E. #35504 ARDAMAN AND ASSOCIATES, INC. 9970 BAVARIA ROAD FORT MYERS, FLORIDA 33913 CERTIFICATE OF AUTHORIZATION 5950			LEE COUNTY DEPARTMENT OF TRANSPORTATION			REPORT OF AUGER BORINGS			
						DESIGNED BY:			ROAD NO.	COUNTY	FINANCIAL PROJECT ID	PROJECT NAME:			SHEET NO.
										LEE		CORBETT ROAD FROM DIPLOMAT PARKWAY E TO LITTLETON ROAD			5



**LEGEND :**

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**NOTES :**

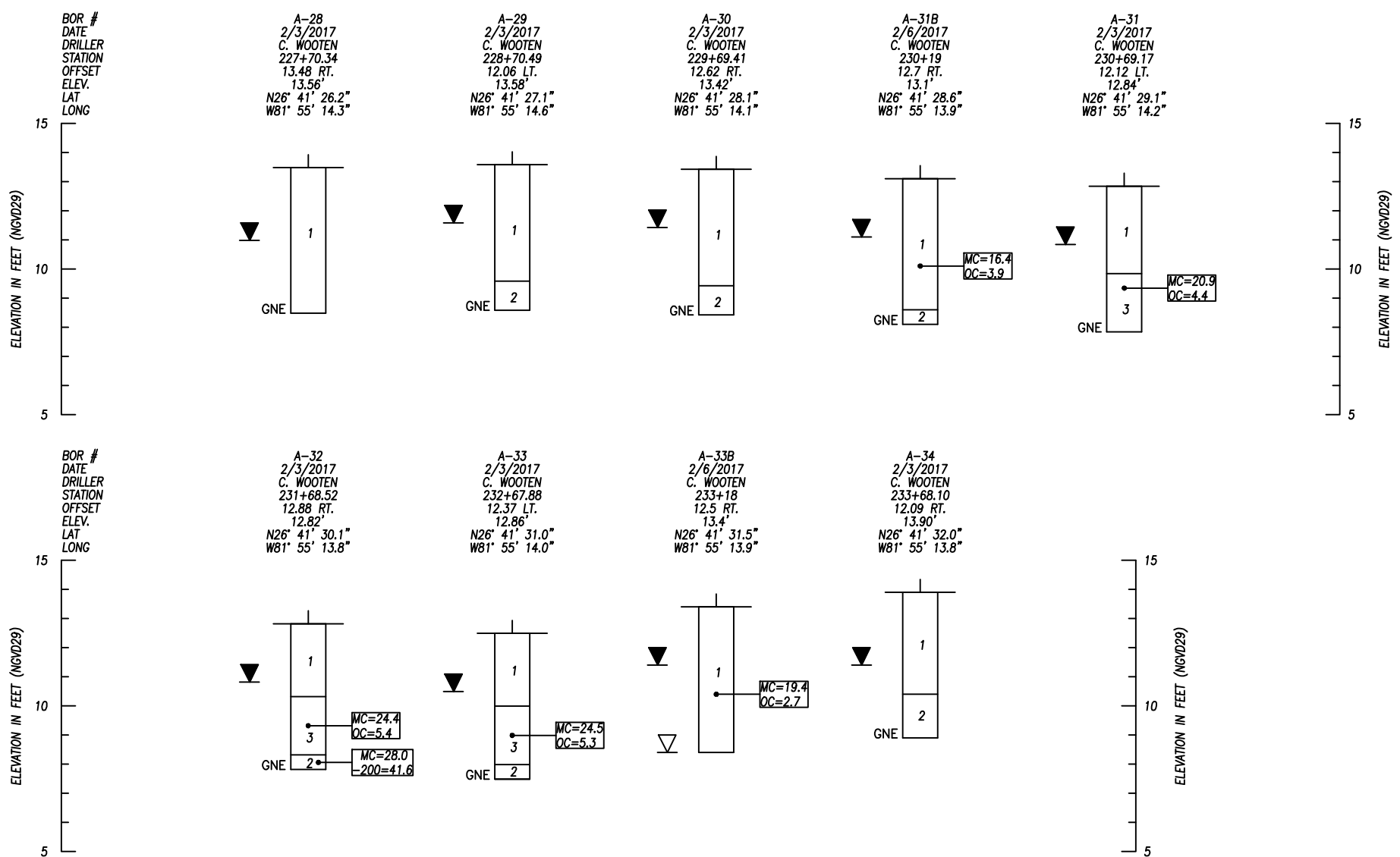
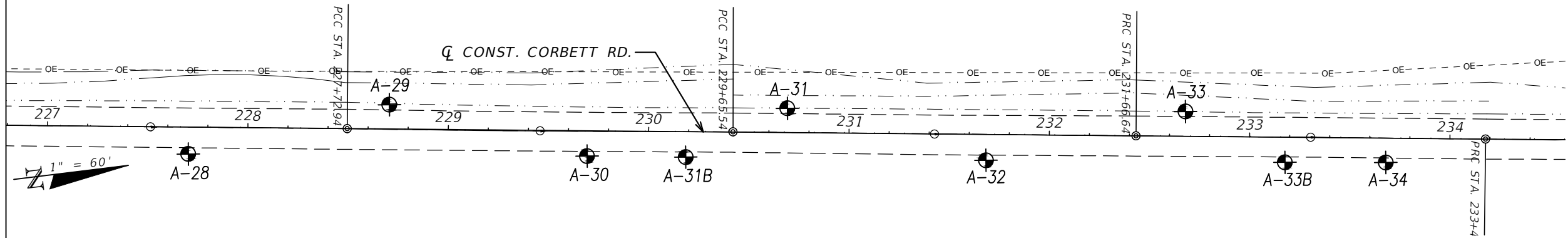
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REVISIONS						ENGINEER OF RECORD:			DRAWN BY:			SHEET TITLE:			REF. DWG. NO.
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION	GARY A. DREW, P.E. #35504 ARDAMAN AND ASSOCIATES, INC. 9970 BAVARIA ROAD FORT MYERS, FLORIDA 33913 CERTIFICATE OF AUTHORIZATION 5950			AJD			LEE COUNTY DEPARTMENT OF TRANSPORTATION			REPORT OF AUGER BORINGS
									CHECKED BY:			ROAD NO.	COUNTY	FINANCIAL PROJECT ID	PROJECT NAME:
									GAD	LEE	LEE	CORBETT ROAD FROM DIPLOMAT PARKWAY E TO LITTLETON ROAD			6



**LEGEND :**

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Weathered limestone/caprock was encountered within the borings. This material is rock and is located in shallow depths. Excavations into and/or through limestone/caprock will be difficult and will require non conventional construction techniques and specialized equipment. Limestone/caprock is porous and will be difficult to dewater.

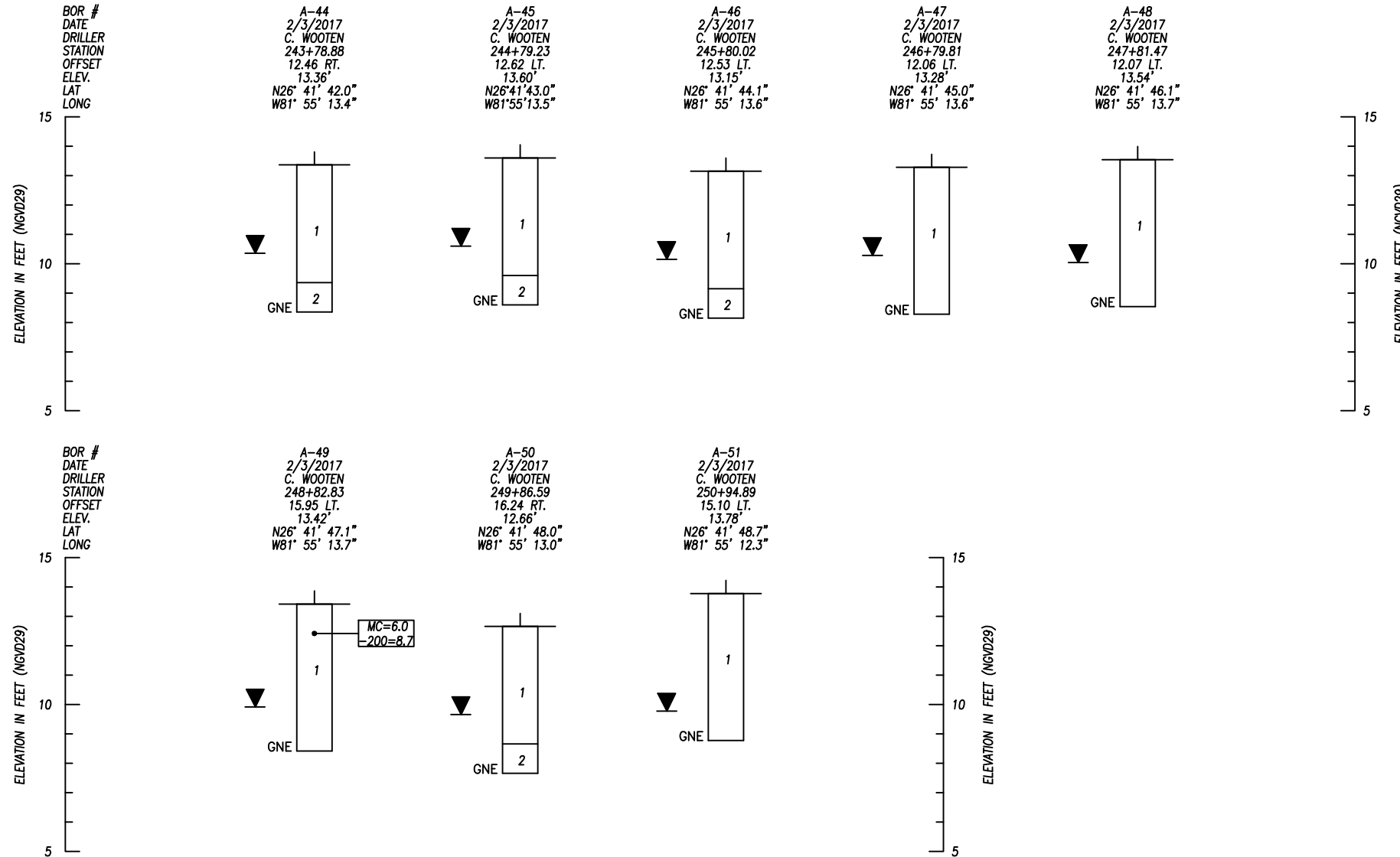
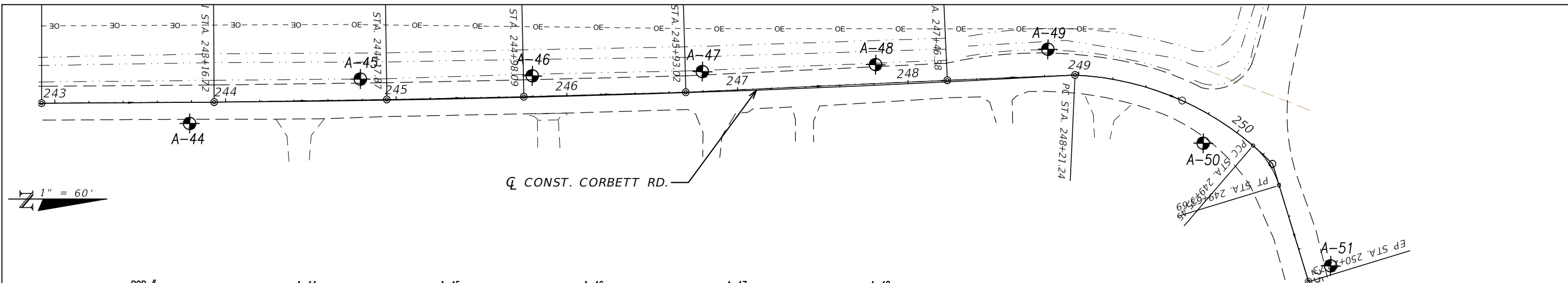
Boring locations surveyed by others and Agnoli, Barber & Brundage, Inc. provided Ardaman with the location and elevation (NGVD29). Geographical GPS coordinate locations were determined using a 4 satellite minimum autonomous solution from a WAAS enabled hand held GPS unit. The boring logs represent subsurface conditions within the borehole at the time of drilling.

No warranty as to the subsurface condition, strata depth or soil consistency between or outside boring locations is expressed or implied by this drawing.

- ▽ = Water Table existing at time of boring
- ▼ = Estimated seasonal high groundwater table
- ⊕ = Auger Boring Location
- 200 = Percent Passing the No. 200 Standard Sieve
- PI = Plasticity Index
- LL = Liquid Limit
- MC = Percent Moisture Content
- OC = Percent Organic Content
- A-3 = AASHTO Group symbol as determined by visual and laboratory testing

REVISIONS						ENGINEER OF RECORD: GARY A. DREW, P.E. #35504 ARDAMAN AND ASSOCIATES, INC. 9970 BAVARIA ROAD FORT MYERS, FLORIDA 33913 CERTIFICATE OF AUTHORIZATION 5950	DRAWN BY: AJD CHECKED BY: GAD DESIGNED BY: CHECKED BY:	LEE COUNTY DEPARTMENT OF TRANSPORTATION			SHEET TITLE:  REPORT OF AUGER BORINGS	REF. DWG. NO.
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION			ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
CORBETT ROAD FROM DIPLOMAT PARKWAY E TO LITTLETON ROAD											SHEET NO. 7	





- LEGEND :**
- 1 Brown to dark brown and light gray to gray SAND (A-3/A-2-4)
  - 2 Brown and gray Clayey SAND/Sandy CLAY (A-2-6/A-6)
  - 3 Dark brown and black MUCK (A-8)
  - 4 Limestone

**NOTES :**  
 Weathered limestone/caprock was encountered within the borings. This material is rock and is located in shallow depths. Excavations into and/or through limestone/caprock will be difficult and will require non conventional construction techniques and specialized equipment. Limestone/caprock is porous and will be difficult to dewater.

Boring locations surveyed by others and Agnoli, Barber & Brundage, Inc. provided Ardaman with the location and elevation (NGVD29). Geographical GPS coordinate locations were determined using a 4 satellite minimum autonomous solution from a WAAS enabled hand held GPS unit. The boring logs represent subsurface conditions within the borehole at the time of drilling.

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- ▽ = Water Table existing at time of boring
- ▼ = Estimated seasonal high groundwater table
- ⊕ = Auger Boring Location
- 200 = Percent Passing the No. 200 Standard Sieve
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- OC = Percent Organic Content
- A-3 = AASHTO Group symbol as determined by visual and laboratory testing

REVISIONS						<b>ENGINEER OF RECORD:</b> GARY A. DREW, P.E. #35504 ARDAMAN AND ASSOCIATES, INC. 9970 BAVARIA ROAD FORT MYERS, FLORIDA 33913 CERTIFICATE OF AUTHORIZATION 5950	DRAWN BY: AJD CHECKED BY: GAD DESIGNED BY:  CHECKED BY:	LEE COUNTY DEPARTMENT OF TRANSPORTATION			SHEET TITLE:  <b>REPORT OF AUGER BORINGS</b>	REF. DWG. NO.
DATE	BY	DESCRIPTION	DATE	BY	DESCRIPTION			ROAD NO.	COUNTY	FINANCIAL PROJECT ID		
							LEE			CORBETT ROAD FROM DIPLOMAT PARKWAY E TO LITTLETON ROAD	9	

**APPENDIX A**

LBR TEST REPORT SHEETS





# Ardaman & Associates, Inc.

9970 Bavaria Road  
Fort Myers, Florida 33913  
Phone (239)768-6600 Fax (239)768-0409  
Florida Certificate of Authorization No. 00005950



## REPORT OF LIMEROCK BEARING RATIO DESIGNATION FM 5-515

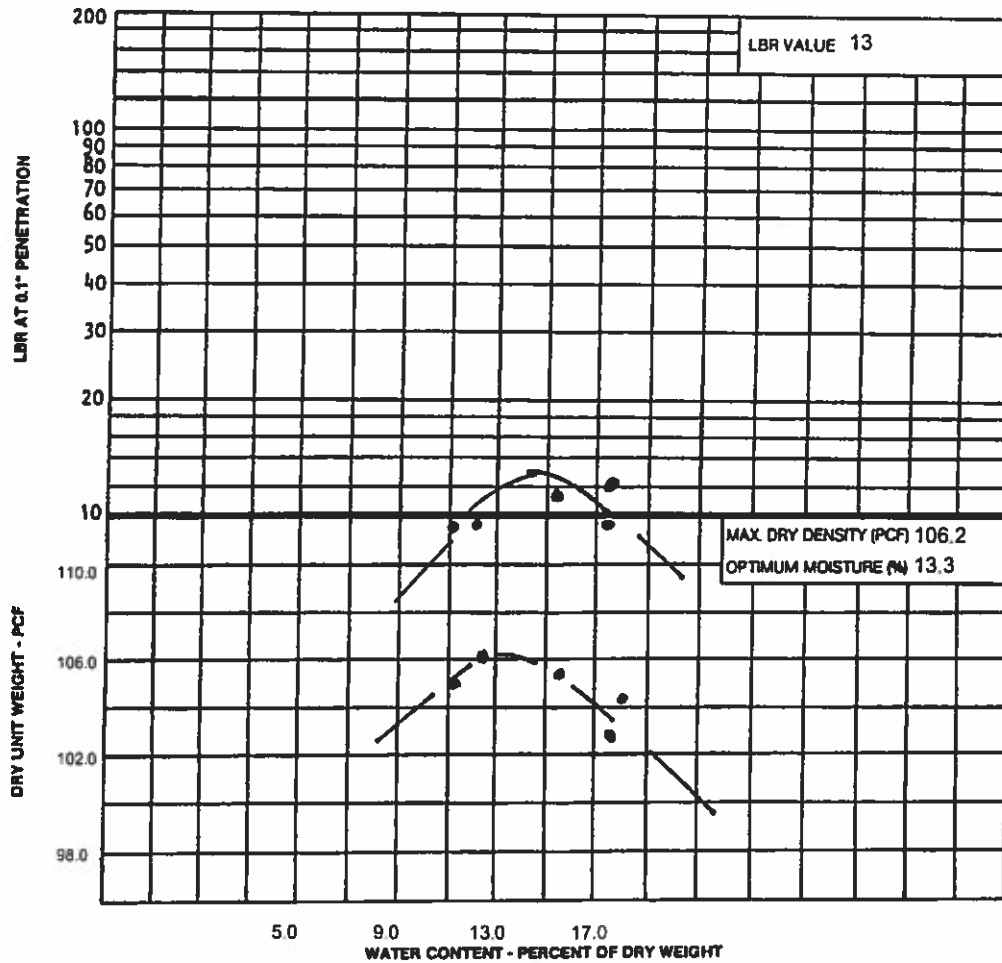
PROJECT: CORBETT ROAD  
FROM VETERAN'S HOSPITAL ENTRANCE TO LITTLETON ROAD  
CAPE CORAL, LEE COUNTY, FLORIDA

FILE NO: 17-33-4503

CLIMS #: N/A

REPORTED TO: AGNOLI, BARBER & BRUNDAGE, INC.  
7400 TAMiami TRAIL NORTH, SUITE 200  
NAPLES, FL 34108  
ATTENTION: MR. DAN BRUNDAGE, P.E.

COPIES: N/A



LBR

SAMPLE NO.: 1 SAMPLE LOCATION: STA. #205, OFFSET: 26' LT.

DESCRIPTION: DARK GRAYISH-BROWN SLIGHTLY SILTY FINE SAND, TRACE GRAVEL.

PROPOSED USE: EMBANKMENT

DATE SAMPLED: 8-FEB-2017 BY: C.W.

REMARKS:

GARY A. DREW, P.E., VICE PRESIDENT  
FL. LICENSE NO. 35504





# Ardaman & Associates, Inc.

9970 Bavaria Road  
Fort Myers, Florida 33913  
Phone (239)768-6600 Fax (239)768-0409  
Florida Certificate of Authorization No. 00005950



## REPORT OF SOIL CLASSIFICATION - ASTM D 2487

PROJECT: CORBETT ROAD  
FROM VETERAN'S HOSPITAL ENTRANCE TO LITTLETON ROAD  
CAPE CORAL, LEE COUNTY, FLORIDA

FILE NO: 17-33-4503

CLIMS #: N/A

REPORTED TO: AGNOLI, BARBER & BRUNDAGE, INC.  
7400 TAMiami TRAIL NORTH, SUITE 200  
NAPLES, FL 34108  
ATTENTION: MR. DAN BRUNDAGE, P.E.

COPIES: N/A

### SIEVE ANALYSIS - ASTM C 136

SIEVE SIZE	PERCENT RETAINED	PERCENT PASSING	SPECIFIED RANGE
3 1/2 inch			
3 inch			
1 inch	0.0	100.0	
3/4 inch	1.8	98.2	
1/2 inch	2.9	97.1	
3/8 inch	3.8	96.2	
No. 4	6.2	93.8	
No. 8			
No. 10	8.1	91.9	
No. 16			
No. 30			
No. 40	19.2	80.8	
No. 50			
No. 60	48.8	51.2	
No. 100	75.7	24.3	
No. 200	93.8	6.2	

### SOIL CHARACTERISTICS

LIQUID LIMIT: NP

PLASTICITY INDEX: NP  
ASTM D 4318

% ORGANIC CONTENT (L.O.I): ---  
ASTM D 2974

REMARKS:

CLASSIFICATION

TOTAL DRY WEIGHT 515.4 grams

SAMPLE NO.: 1 SAMPLE LOCATION: STA. #205, OFFSET: 26' LT.

UNIFIED CLASS.: \_\_\_\_\_ AASHTO CLASS.: A-3

DESCRIPTION: DARK GRAYISH-BROWN SLIGHTLY SILTY FINE SAND, TRACE GRAVEL.

PROPOSED USE: EMBANKMENT DATE SAMPLED: 8-FEB-2017 BY: C.W.

GARY A. DREW, P.E., VICE PRESIDENT  
FL. LICENSE NO. 35504



# Ardaman & Associates, Inc.

9970 Bavaria Road  
Fort Myers, Florida 33913  
Phone (239)768-6600 Fax (239)768-0409  
Florida Certificate of Authorization No. 00005950



## REPORT OF LIMEROCK BEARING RATIO DESIGNATION FM 5-515

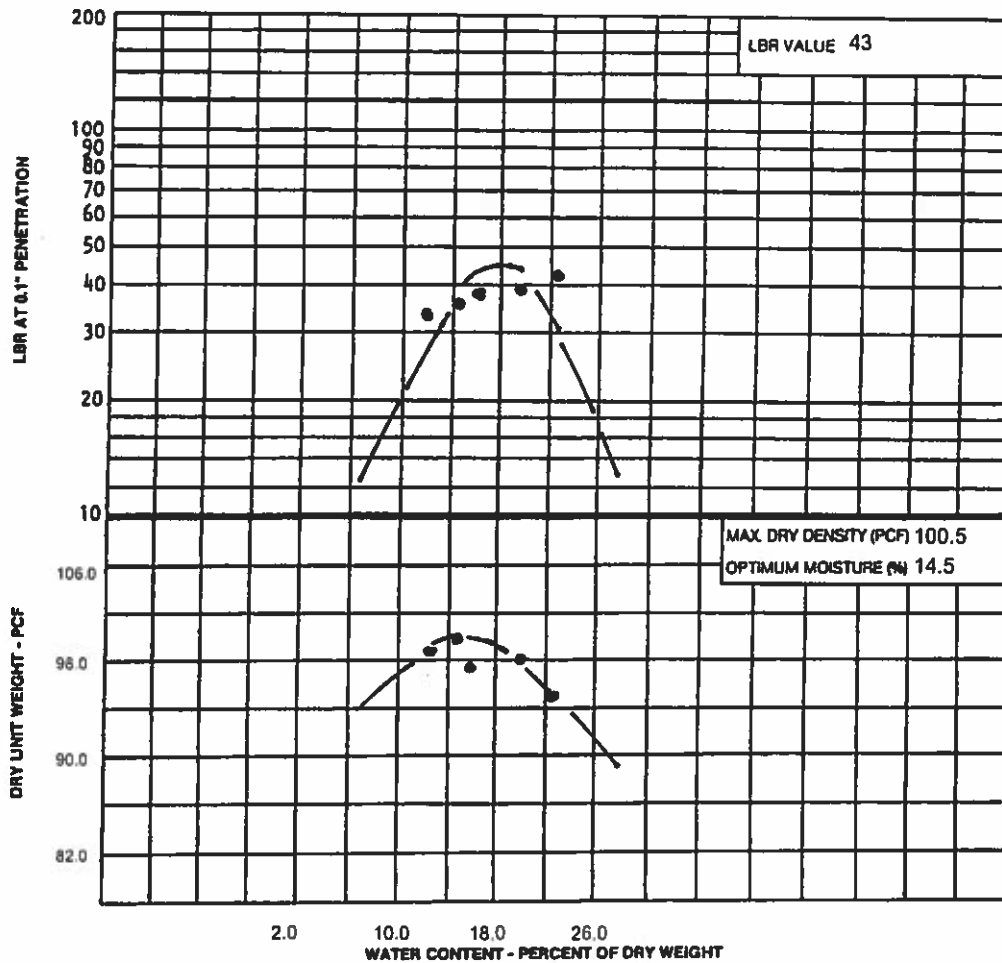
PROJECT: CORBETT ROAD  
FROM VETERAN'S HOSPITAL ENTRANCE TO LITTLETON ROAD  
CAPE CORAL, LEE COUNTY, FLORIDA

FILE NO: 17-33-4503

CLIMS #: N/A

REPORTED TO: AGNOLI, BARBER & BRUNDAGE, INC.  
7400 TAMiami TRAIL NORTH, SUITE 200  
NAPLES, FL 34108  
ATTENTION: MR. DAN BRUNDAGE, P.E.

COPIES: N/A



SAMPLE NO.: 2 SAMPLE LOCATION: STA. #215, OFFSET: 13' RT.

DESCRIPTION: LIGHT GRAYISH-BROWN FINE SAND.

PROPOSED USE: EMBANKMENT

DATE SAMPLED: 8-FEB-2017 BY: C.W.

REMARKS:

GARY A. DREW, P.E., VICE PRESIDENT  
FL. LICENSE NO. 35504



# Ardaman & Associates, Inc.

9970 Bavaria Road  
Fort Myers, Florida 33913  
Phone (239)768-6600 Fax (239)768-0409  
Florida Certificate of Authorization No. 00005950



## REPORT OF SOIL CLASSIFICATION - ASTM D 2487

PROJECT: CORBETT ROAD  
FROM VETERAN'S HOSPITAL ENTRANCE TO LITTLETON ROAD  
CAPE CORAL, LEE COUNTY, FLORIDA

FILE NO: 17-33-4503

CLIMS #: N/A

REPORTED TO: AGNOLI, BARBER & BRUNDAGE, INC.  
7400 TAMiami TRAIL NORTH, SUITE 200  
NAPLES, FL 34108  
ATTENTION: MR. DAN BRUNDAGE, P.E.

COPIES: N/A

### SIEVE ANALYSIS - ASTM C 136

SIEVE SIZE	PERCENT RETAINED	PERCENT PASSING	SPECIFIED RANGE
3 1/2 inch			
3 inch			
1 inch			
3/4 inch			
1/2 inch			
3/8 inch			
No. 4			
No. 8			
No. 10	0.0	100.0	
No. 16			
No. 30			
No. 40	8.2	91.8	
No. 50			
No. 60	41.1	58.9	
No. 100	72.8	27.2	
No. 200	97.9	2.1	

### SOIL CHARACTERISTICS

LIQUID LIMIT: NP

PLASTICITY INDEX: NP  
ASTM D 4318

% ORGANIC CONTENT (L.O.I): ---  
ASTM D 2974

REMARKS:

CLASSIFICATION

TOTAL DRY WEIGHT 290.2 grams

SAMPLE NO.: 2 SAMPLE LOCATION: STA. #215, OFFSET: 13' RT.

UNIFIED CLASS.: \_\_\_\_\_ AASHTO CLASS.: A-3

DESCRIPTION: LIGHT GRAYISH-BROWN FINE SAND.

PROPOSED USE: EMBANKMENT DATE SAMPLED: 8-FEB-2017 BY: C.W.

GARY A. DREW, P.E., VICE PRESIDENT  
FL. LICENSE NO. 35504



# Ardaman & Associates, Inc.

9970 Bavaria Road  
Fort Myers, Florida 33913  
Phone (239)768-6600 Fax (239)768-0409  
Florida Certificate of Authorization No. 00005950



## REPORT OF LIMEROCK BEARING RATIO DESIGNATION FM 5-515

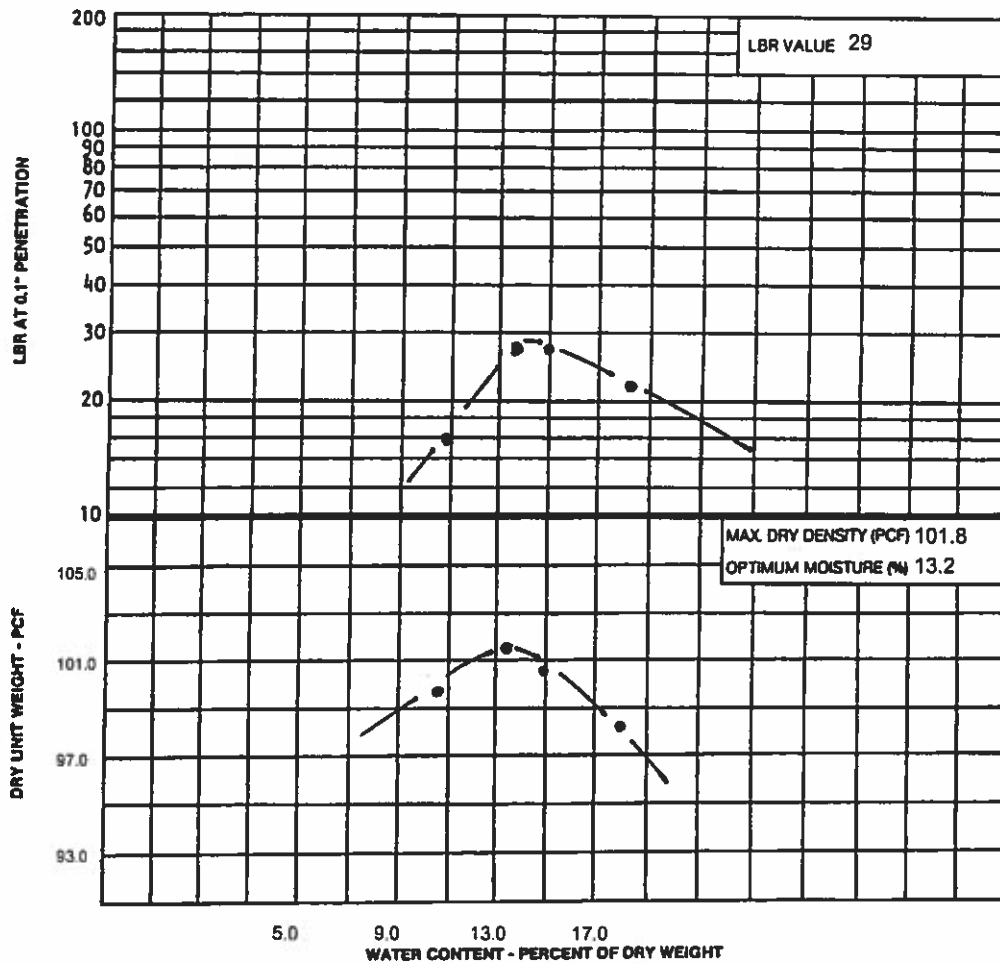
PROJECT: CORBETT ROAD  
FROM VETERAN'S HOSPITAL ENTRANCE TO LITTLETON ROAD  
CAPE CORAL, LEE COUNTY, FLORIDA

FILE NO: 17-33-4503

CLIMS #: N/A

REPORTED TO: AGNOLI, BARBER & BRUNDAGE, INC.  
7400 TAMiami TRAIL NORTH, SUITE 200  
NAPLES, FL 34108  
ATTENTION: MR. DAN BRUNDAGE, P.E.

COPIES: N/A



SAMPLE NO.: 3 SAMPLE LOCATION: STA. #225, OFFSET: 14' LT.

DESCRIPTION: FINE SAND.

PROPOSED USE: EMBANKMENT

DATE SAMPLED: 8-FEB-2017 BY: C.W.

REMARKS:

GARY A. DREW, P.E., VICE PRESIDENT  
FL. LICENSE NO. 35504



# Ardaman & Associates, Inc.

9970 Bavaria Road  
Fort Myers, Florida 33913  
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Florida Certificate of Authorization No. 00005950



## REPORT OF LIMEROCK BEARING RATIO DESIGNATION FM 5-515

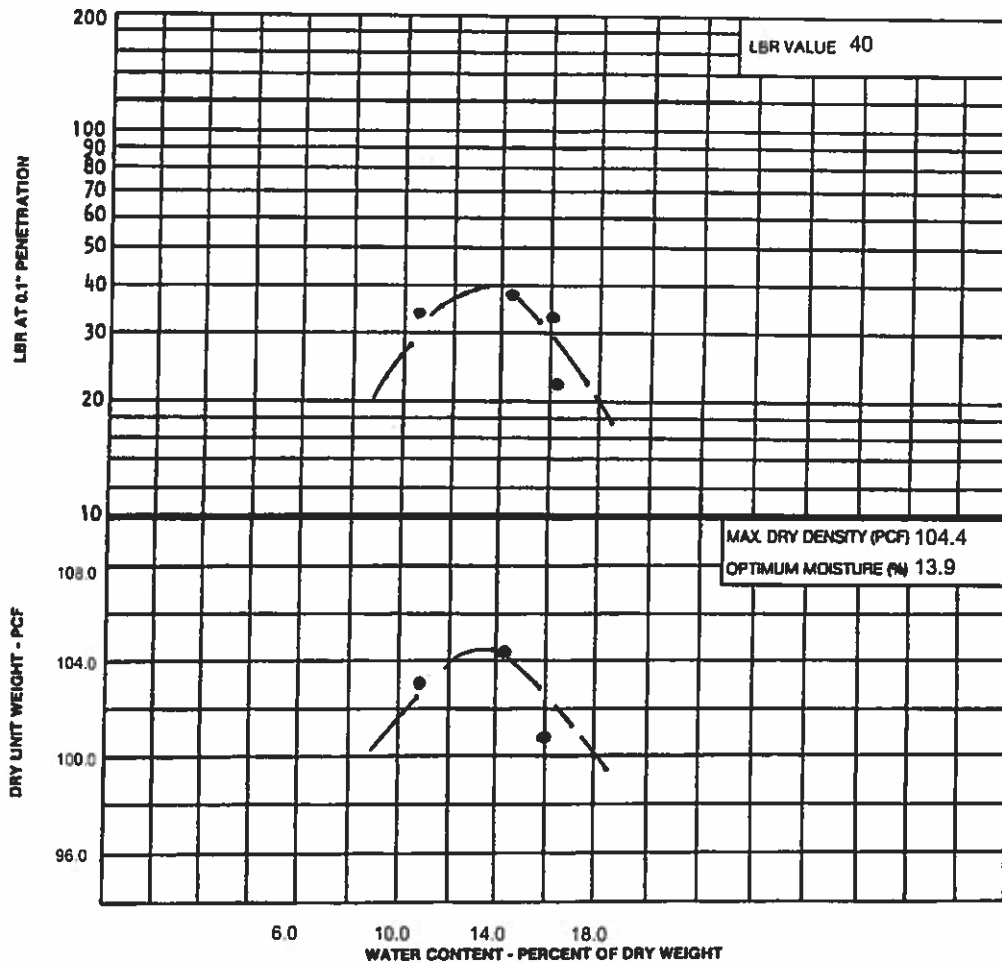
PROJECT: CORBETT ROAD  
FROM VETERAN'S HOSPITAL ENTRANCE TO LITTLETON ROAD  
CAPE CORAL, LEE COUNTY, FLORIDA

FILE NO: 17-33-4503

CLIMS #: N/A

REPORTED TO: AGNOLI, BARBER & BRUNDAGE, INC.  
7400 TAMiami TRAIL NORTH, SUITE 200  
NAPLES, FL 34108  
ATTENTION: MR. DAN BRUNDAGE, P.E.

COPIES: N/A



LBR

SAMPLE NO.: 4 SAMPLE LOCATION: STA. #235, OFFSET: 13' RT.

DESCRIPTION: FINE SAND.

PROPOSED USE: EMBANKMENT

DATE SAMPLED: 8-FEB-2017 BY: C.W.

REMARKS:

GARY A. DREW, P.E., VICE PRESIDENT  
FL. LICENSE NO. 35504



# Ardaman & Associates, Inc.

9970 Bavaria Road  
Fort Myers, Florida 33913  
Phone (239)768-6600 Fax (239)768-0409  
Florida Certificate of Authorization No. 00005950



## REPORT OF LIMEROCK BEARING RATIO DESIGNATION FM 5-515

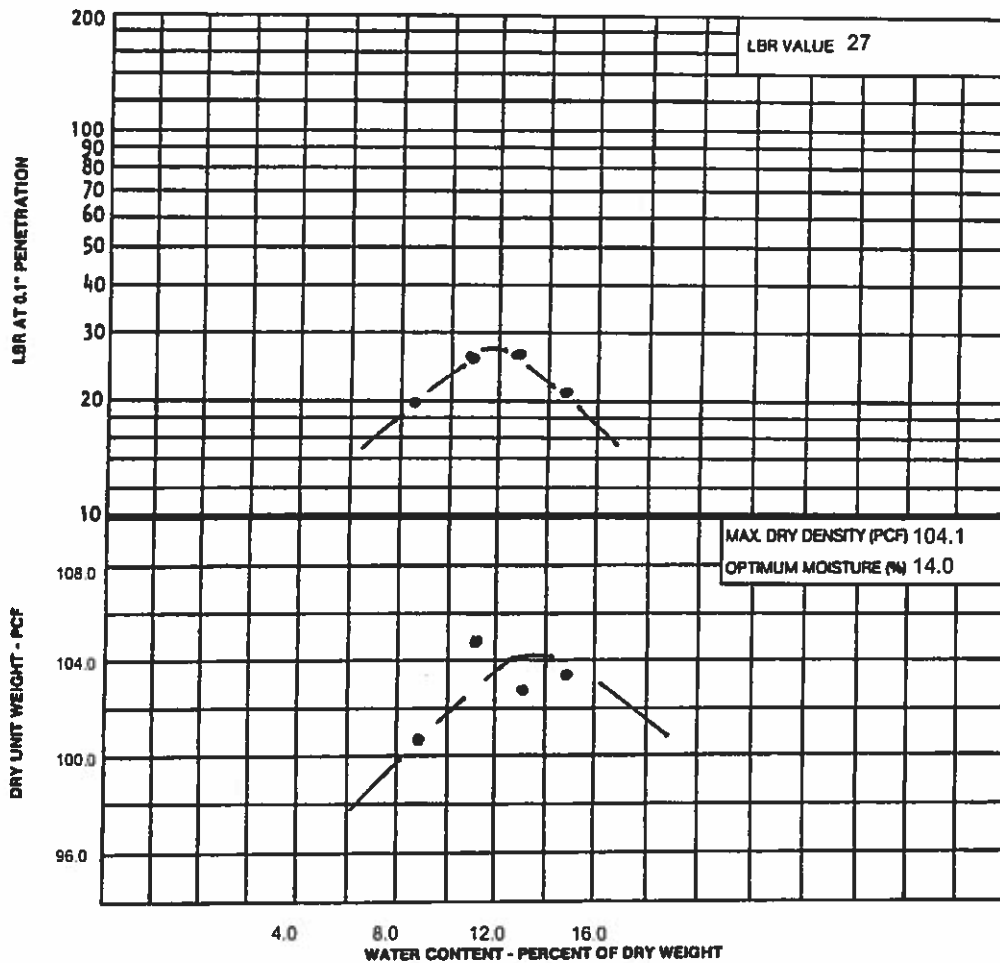
PROJECT: CORBETT ROAD  
FROM VETERAN'S HOSPITAL ENTRANCE TO LITTLETON ROAD  
CAPE CORAL, LEE COUNTY, FLORIDA

FILE NO: 17-33-4503

CLIMS #: N/A

REPORTED TO: AGNOLI, BARBER & BRUNDAGE, INC.  
7400 TAMiami TRAIL NORTH, SUITE 200  
NAPLES, FL 34108  
ATTENTION: MR. DAN BRUNDAGE, P.E.

COPIES: N/A



SAMPLE NO.: 5 SAMPLE LOCATION: STA. #245, OFFSET: 14' LT.

DESCRIPTION: FINE SAND.

PROPOSED USE: EMBANKMENT

DATE SAMPLED: 8-FEB-2017 BY: C.W.

REMARKS:

GARY A. DREW, P.E., VICE PRESIDENT  
FL. LICENSE NO. 35504

## APPENDIX B

### SAMPLING AND TESTING METHODS SOIL CLASSIFICATION (AASHTO)



## SOIL BORING, SAMPLING AND TESTING METHODS

### STANDARD PENETRATION TEST

The Standard Penetration Test (SPT) is a widely accepted method of in-situ testing of foundation soils (ASTM D-1586). A 2-foot (0.6 m) long, 2-inch (50 mm) O.D. split-barrel sampler attached to the end of a string of drilling rods is driven 18 inches (0.45 m) into the ground by successive blows of a 140-pound (63.5 Kg) hammer freely dropping 30 inches (0.76 m). The number of blows needed for each 6 inches (0.15 m) of penetration is recorded. The sum of the blows required for penetration of the second and third 6-inch (0.15 m) increments penetration constitutes the test result or N-value. After the test, the sampler is extracted from the ground and opened to allow visual description of the retained soil sample. The N-value has been empirically correlated with various soil properties allowing a conservative estimate of the behavior of soils under load. The following tables relate N-values to a qualitative description of soil density and, for cohesive soils, an approximate unconfined compressive strength (Qu):

Cohesionless Soils:	N-Value Safety Hammer	N-Value Auto Hammer	Description	Relative Density
	< 4	< 3	Very loose	0 - 15%
	4 - 10	3 - 8	Loose	15 - 35%
	10 - 30	8 - 24	Medium dense	35 - 65%
	30 - 50	24 - 40	Dense	65 - 85%
	> 50	> 40	Very dense	85 - 100%

Cohesive Soils:	N-Value Safety Hammer	N-Value Auto Hammer	Description	Unconfined Compressive Strength, Qu
	< 2	< 1	Very soft	< 0.25 tsf (25 kPa)
	2 - 4	1 - 3	Soft	0.25 - 0.50 tsf (25 - 50 kPa)
	4 - 8	3 - 6	Firm	0.50 - 1.0 tsf (50 - 100 kPa)
	8 - 15	6 - 12	Stiff	1.0 - 2.0 tsf (100 - 200 kPa)
	15 - 30	12 - 24	Very stiff	2.0 - 4.0 tsf (200 - 400 kPa)
	> 30	> 24	Hard	> 4.0 tsf (400 kPa)

The tests are usually performed at 5-foot (1.5 m) intervals. However, more frequent or continuous testing is done by our firm through depths where a more accurate definition of the soils is required. The test holes are advanced to the test elevations by rotary drilling with a cutting bit, using circulating fluid to remove the cuttings and hold the fine grains in suspension. The circulating fluid, which is bentonitic drilling mud, is also used to keep the hole open below the water table by maintaining an excess hydrostatic pressure inside the hole. In some soil deposits, particularly highly pervious ones, flush-coupled casing must be driven to just above the testing depth to keep the hole open and/or prevent the loss of circulating fluid. After completion of a test boring, the hole is kept open until a steady state groundwater level is recorded. The hole is then sealed by backfilling with neat cement.

Representative split-spoon samples from each sampling interval and from different strata are brought to our laboratory in air-tight jars for classification and testing, if necessary. Afterwards, the samples are discarded unless prior arrangements have been made.

### POWER AUGER BORINGS

Auger borings are used when a relatively large, continuous sampling of soil strata close to the ground surface is desired. A 4-inch (100 mm) diameter, continuous flight, helical auger with a cutting head at its end is screwed into the ground in 5-foot (1.5 m) sections. It is powered by the rotary drill rig. The sample is recovered by withdrawing the auger out of the ground without rotating it. The soil sample so obtained, is described and representative samples put in bags or jars and returned to the laboratory for classification and testing, if necessary.



## **HAND AUGER BORINGS**

Hand auger borings are used, if soil conditions are favorable, when the soil strata are to be determined within a shallow (approximately 5-foot [1.5 m]) depth or when access is not available to power drilling equipment. A 3-inch (75 mm) diameter hand bucket auger with a cutting head is simultaneously turned and pressed into the ground. The bucket auger is retrieved at approximately 6-inch (0.15 m) intervals and its contents emptied for inspection. Sometimes post-hole diggers are used, especially in the upper 3 feet (1 m) or so. The soil sample obtained is described and representative samples put in bags or jars and transported to the laboratory for classification and testing, if necessary.

## **UNDISTURBED SAMPLING**

Undisturbed sampling implies the recovery of soil samples in a state as close to their natural condition as possible. Complete preservation of in-situ conditions cannot be realized; however, with careful handling and proper sampling techniques, disturbance during sampling can be minimized for most geotechnical engineering purposes. Testing of undisturbed samples gives a more accurate estimate of in-situ behavior than is possible with disturbed samples.

Normally, we obtain undisturbed samples by pushing a 2.875-inch (73 mm) I.D., thin wall seamless steel tube 24 inches (0.6 m) into the soil with a single stroke of a hydraulic ram. The sampler, which is a Shelby tube, is 30 (0.8 m) inches long. After the sampler is retrieved, the ends are sealed in the field and it is transported to our laboratory for visual description and testing, as needed. Undisturbed sampling is noted on the boring logs as thus "U".

## **LABORATORY TEST METHODS**

Soil samples returned to our laboratory are looked at again by a geotechnical engineer or geotechnician to obtain more accurate descriptions of the soil strata. Laboratory testing is performed on selected samples as deemed necessary to aid in soil classification and to help define engineering properties of the soils. The test results are presented on the soil boring logs at the depths at which the respective sample was recovered, except that grain-size distributions or selected other test results may be presented on separate tables, figures or plates as discussed in this report, the results of which will be located in an Appendix. The soil descriptions shown on the logs are based upon visual-manual procedures in accordance with local practice. Soil classification is in general accordance with AASHTO M-145 or ASTM D-3282: The Classification of Soils and Soil Aggregate Mixtures for Highway Construction Purposes and is also based on visual-manual procedures. Following is a list of abbreviations that may appear in the Remarks column on the boring logs indicating additional laboratory testing was performed, the results of which will usually be located in an Appendix.

- DD:** Unit Weight/Classification of Undisturbed "Shelby Tube" samples
- PP:** Pocket Penetrometer reading on cohesive samples in tons per sq. ft. (tsf)
- k:** Hydraulic Conductivity
- Qu:** Unconfined Compression Strength; ASTM D-2166
- UU:** Unconsolidated-Undrained Triaxial Test; ASTM D 2850
- Consol:** One-Dimensional Consolidation test performed on subsample from undisturbed sample; ASTM D-2435

**THE PROJECT SOIL DESCRIPTION PROCEDURE FOR SOUTHWEST FLORIDA (1)**  
**For use with the AASHTO M-145 or ASTM D 3282 soil classification system only**  
**CLASSIFICATION OF SOILS AND SOIL-AGGREGATE MIXTURES FOR HIGHWAY**  
**CONSTRUCTION PURPOSES**

BROKEN ROCK/COBBLES/BOULDERS: >3" (75 mm)

GRAVEL/STONE: 3" (75 mm) to #10 (2 mm) sieve

Descriptive adjectives:

0 - 5%	--	no mention of gravel or stone in description
5 - 15%	--	trace
15 - 29%	--	some
30 - 49%	--	gravelly (shell, limerock, cemented sands)

SANDS

COARSE SAND: #10 (2 mm) to #40 (425  $\mu$ m)

FINE SAND: #40 (425  $\mu$ m) TO #200 (75  $\mu$ m)

Descriptive adjectives:

0 - 5%	--	no mention of sand in description
5 - 15%	--	trace
15 - 29%	--	some
30 - 49%	--	sandy

SILT/CLAY: < #200 (75  $\mu$ m) sieve

SILTY OR SILT: PI < 4

SILTY CLAYEY OR SILTY CLAY: 4  $\leq$  PI  $\leq$  10

CLAYEY OR CLAY: PI > 10

Descriptive adjectives:

< 5%	--	clean (no mention of silt or clay in description)
5 - 15%	--	slightly
16 - 35%	--	clayey, silty, or silty clayey
36 - 49%	--	very

ORGANIC SOILS/HIGHLY ORGANIC MATTER

<u>Organic Content</u>	<u>Descriptive adjectives</u>	<u>Classification</u>
0 - 2.5%	no mention of organics in description	See above
2.6 - 5%	slightly organic	See above
5 - 20%	organic	A-8
20 - 75%	highly organic or "Muck"	A-8
$\geq$ 75%	"Peat"	A-8

ROCK CLASSIFICATION

Hard Limestone or Caprock - N-values >50 bpf

Soft Weathered Limestone - N values <50 bpf

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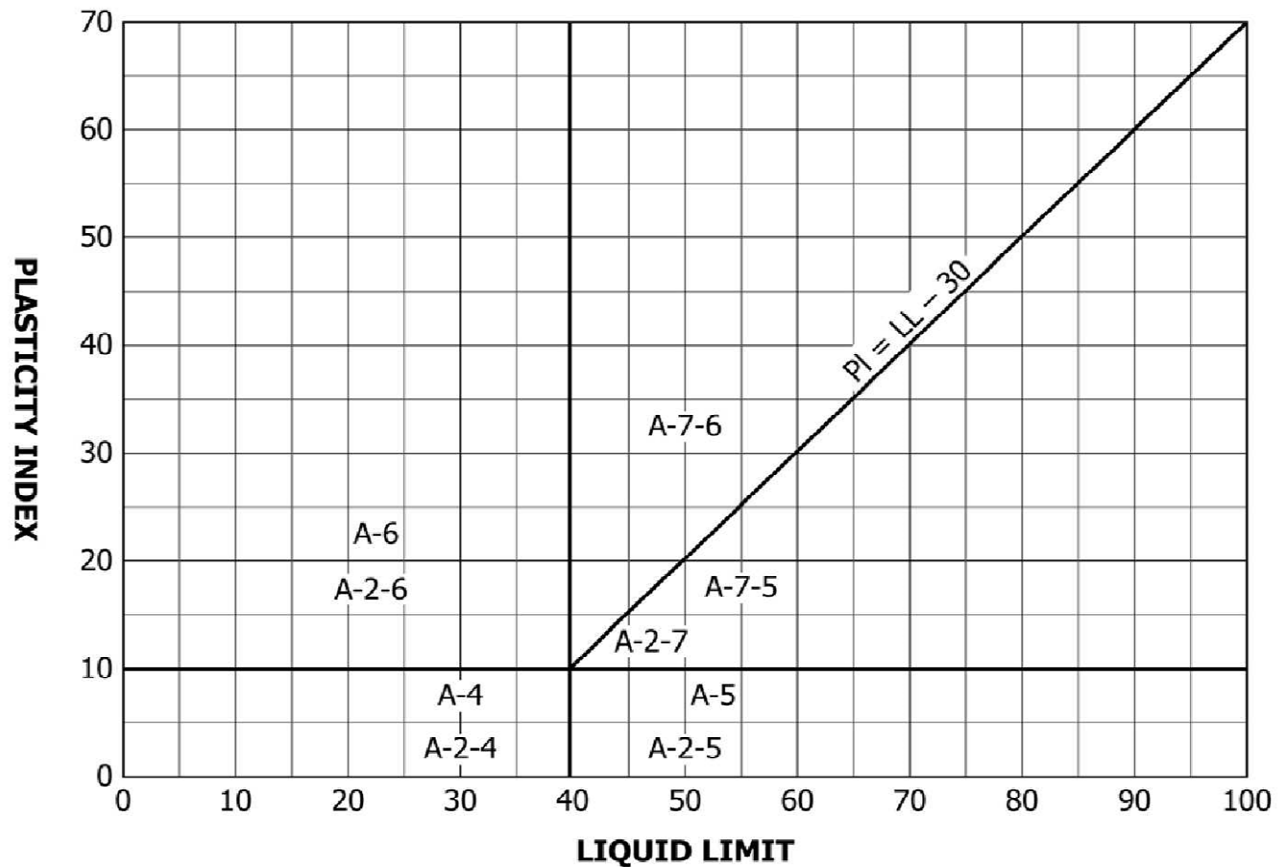
(1) This soil description procedure was developed specifically for projects in southwest Florida where the AASHTO soil classification is used because it is believed that the terminology will be better understood as a result of local practice. It is not intended to supplant other visual-manual classification procedures for description and identification of soils such as ASTM D2488. By Gary A. Drew, P.E. (Revised 2016)

## CLASSIFICATION OF SOILS AND SOIL-AGGREGATE MIXTURES FOR HIGHWAY CONSTRUCTION PURPOSES (AASHTO M145/ASTM D3282)

**TABLE 2 Classification of Soils and Soil-Aggregate Mixtures**

General Classification	Granular Materials (35 % or less passing No. 200 (75 μm))							Silt-Clay Materials (More than 35 % passing No. 200 (75 μm))			
	A-1		A-3	A-2				A-4	A-5	A-6	A-7
Group classification	A-1-a	A-1-b		A-2-4	A-2-5	A-2-6	A-2-7				
Sieve analysis, % passing:											
No. 10 (2.00 mm)	50 max	...	...	...	...	...	...	...	...	...	...
No. 40 (425 μm)	30 max	50 max	51 min	...	...	...	...	...	...	...	...
No. 200 (75 μm)	15 max	25 max	10 max	35 max	35 max	35 max	35 max	36 min	36 min	36 min	36 min
Characteristics of fraction passing No. 40 (425 μm):											
Liquid limit	...	...	...	40 max	41 min	40 max	41 min	40 max	41 min	40 max	41 min
Plasticity index	6 max	...	N.P.	10 max	10 max	11 min	11 min	10 max	10 max	11 min	11 min <sup>A</sup>
Usual types of significant constituent materials	Stone Fragments, Gravel and Sand		Fine Sand	Silty or Clayey Gravel and Sand				Silty Soils		Clayey Soils	
General rating as subgrade	Excellent to Good							Fair to Poor			

<sup>A</sup> Plasticity index of A-7-5 subgroup is equal to or less than LL minus 30. Plasticity index of A-7-6 subgroup is greater than LL minus 30 (see Fig. 1).  
 Reprinted with permission of American Association of State Highway and Transportation Officials.



NOTE 1—A-2 soils contain less than 35 % finer than 200 sieve.

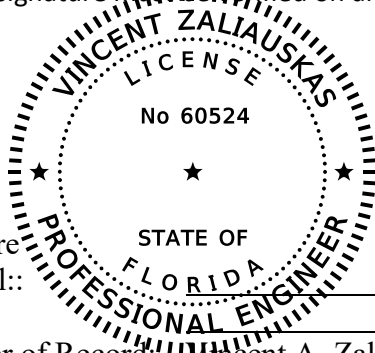
**FIG. 1 Liquid Limit and Plasticity Index Ranges for Silt-Clay Materials**

**EXHIBIT K**  
**TECHNICAL SPECIAL PROVISIONS**

SPECIFICATIONS FOR  
FULL DEPTH RECLAMATION  
LEE COUNTY  
DEPARTMENT OF TRANSPORTATION  
CORBETT ROAD RECONSTRUCTION  
12/08/2017

*I hereby certify that this specifications package has been properly prepared by me, or under my responsible charge, in accordance with procedures adopted by the Florida Department of Transportation.*

The official record of this package has been electronically signed and sealed using a Digital Signature as required by 61G15-23.004 F.A.C. Printed copies of this document are not considered signed and sealed and the signature must be verified on any electronic copies.



Signature \_\_\_\_\_  
and Seal:: \_\_\_\_\_  
Date: \_\_\_\_\_  
Engineer of Record: Vincent A. Zaliauskas, P.E.  
Fla. License No.: 60524  
Firm Name: HighSpans Engineering, Inc.  
Firm Address: 1500 Jackson Street, Suite 201  
City, State, Zipcode: Fort Myers, FL 33901  
Certificate of Authorization Number: 27559  
Page(s): K-1 thru K-7

The following new Section is added after Section 330:

## SECTION 332 FULL DEPTH RECLAMATION

### **332-1 Description.**

This work shall consist of the preparation of a base course constructed by in-place pulverizing and blending of the existing bituminous pavement and predetermined portion of the underlying base materials, and the introduction of asphalt emulsion or foamed asphalt, cement and other additives. Pulverize existing asphalt pavement and base material by a method that does not damage the material below the design depth as shown on the plans.

### **332-2 Materials.**

**332-2.1 Asphalt Emulsion:** If the mix design calls for stabilization with asphalt emulsion, utilize CSS-1h or CMS-2h, meeting the requirements of AASHTO M 208-01 (2009) and approved by the State Materials Office prior to use.

**332-2.2 Foamed Asphalt:** If the mix design calls for stabilization with foamed asphalt utilize an asphalt binder meeting the requirements of Section 916.

**332-2.3 Portland Cement:** Portland cement in either a dry or slurry form shall be added to the reclaimed mixture. Slurry made from Portland cement shall contain a minimum of 30% dry solids content. Cement used for full depth reclamation shall be Type I or II and comply with Section 921.

**332-2.4 Sampling, Certification, and Verification:** At any time during the project, the Engineer may sample and test the asphalt emulsion or asphalt binder delivered to the project to verify and determine compliance with specification requirements. Where these tests identify material outside specification requirements, the Engineer may require the supplier to cease shipment of the product. Further shipment of the product will remain suspended until the cause of the problem is evaluated and corrected by the supplier to the satisfaction of the Engineer.

**332-2.5 Water:** The water for the base course compaction and foaming additive (if used) shall meet the requirements of Section 923.

**332-2.6 Documents:** Provide copies of all materials delivery tickets to the Engineer upon materials delivery to the project site.

### **332-3 Mix Design.**

Prior to construction, obtain an adequate number of core samples to develop the mix design(s). Representative samples of the asphalt pavement material, underlying base material, and virgin materials, where applicable, shall be supplied to a nationally accredited laboratory for testing to determine the proportions of asphalt emulsion or foamed asphalt, cement and other additives, if necessary, needed to produce a mix design meeting the requirements of Table 332-1. The optimum binder content shall be the binder content that results in the highest wet Marshall stability while also having 70% retained Marshall stability compared to the dry Marshall stability and additionally has a minimum dry Marshall stability of 2500 pounds. Cement shall be used at a minimum dosage rate of 1.0 percent and a maximum dosage rate of 6.0 percent by dry weight of reclaimed material. Cement amounts greater than 6.0 percent will only be allowed if approved by the Engineer. The mix design shall be signed and sealed by a professional engineer duly registered in the state of FL and submitted to the Engineer prior to use for approval.

Table 332-1 Mix Design Criteria		
Test	Test Method Number	Criteria
Gradation of reclaimed material	AASHTO T 27-11	Report
Determination of optimum binder content		
Compaction effort at optimum fluids content. Marshall Compactor; 50 blows/side or Superpave Gyrotory Compactor, 100 mm diameter specimens, 30 gyrations. Density determination.	Asphalt Institute MS 14, Appendix F. ASTM D6926-10 AASHTO T 312-12 FM 1-T 166	Report
Marshall stability Cure at 60°C to constant weight. Test at 40°C.	ASTM D6927-06	2500 lbs. minimum Marshall stability
Resistance of compacted bituminous mixture to moisture induced damage. 55 to 75% vacuum saturation, water bath at 25°C for 23 hours, last hour in water bath at	AASHTO T 283-07 (2011) with modification of Marshall stability instead of tensile strength	70% minimum retained Marshall stability

### 332-4 Equipment.

**332-4.1 Road Reclaimer:** Utilize a road reclaimer specifically designed for pavement reclaiming and capable of pulverizing and mixing pavement, base materials, and subgrade soil to a depth of 16 inches. It shall have the capability of introducing and metering additives uniformly and accurately and have positive displacement pumps which can accurately meter the planned amount of asphalt emulsion or foamed asphalt into the mixture. The reclaiming machine shall mix the emulsified or foamed asphalt additive thoroughly with the RAP and soil materials. The pump shall be interlocked with the ground speed of the machine. The asphalt metering system and water metering system shall be capable of continuously monitoring flow and totaling the quantity of water and asphalt applied into the mixing chamber. Additives, if specified, shall be uniformly distributed and mixed with the pulverized material and any existing underlying material.

**332-4.2 Cement Spreader:** Ensure cement is spread uniformly and accurately during the reclamation process with a cement spreader. The cement spreader shall be equipped with a bag house and curtains. Cement will not be allowed to be spread with spreader bars from a tanker. Minimize the amount of airborne cement dust to the satisfaction of the Engineer and in accordance with Regulatory Requirements.

**332-4.3 Motor Grader:** Utilize a motor grader of sufficient size and horsepower to adequately rough grade the pulverized base and finish grade the mixed and compacted base. The equipment shall be in good working order free from leaks and capable of maintaining an accurate grade and cross-slope.

**332-4.4 Rollers:** Utilize rollers in good working order free from leaks and capable of compacting the mix to the requirements of this technical special provision.

**332-4.5 Additional equipment:** Utilize additional equipment as needed to complete the work in the contract.

**332-5 Construction.**

**332-5.1 Layout:** The Contractor will be responsible for the string lining and layout of the roadway prior to paving. Elevations of the existing roadway must be referenced at sufficient intervals to ensure the roadway elevation is constructed in accordance with the Contract Documents.

**332-5.2 Weather and Seasonal limitations:** Do not mix or place the base while the air temperature is below 40°F or when conditions indicate that the temperature may fall below 40°F within 24 hours. Do not mix or place the base when the weather is foggy or rainy or when the soil or subgrade is frozen.

**332-5.3 Widening:** When the existing base is to be widened, excavate the shoulder from the edge of the existing pavement to at least six inches beyond the planned new width of the base prior to pulverization. Maintain the bottom of the trench free of loose soil and vegetation.

Place approved base material (materials listed in current FDOT Standard Specifications for Road and Bridge Construction Section 285 as Selection of Base Option) onto the existing pavement so it can be mixed in with the existing pavement and base material during the pulverization operation to make a homogeneous base course across the entire width of the road, including the widening area. Correct all areas of irregular grade or deficient thickness and remove and replace material contaminated with soil, organic material, or debris.

**332-5.4 Additional Material:** When additional material is to be added to correct cross slope deficiencies or change elevation as directed by the Engineer, use approved base material (bases listed in current FDOT Standard Specifications for Road and Bridge Construction Section 285 as Selection of Base Option) placed on the roadway prior to the final pass for pulverization and mix uniformly with the existing material.

**332-5.5 Pulverization:** Pulverize and blend the existing pavement and base material to the depth required so that all of the material shall be uniformly graded in accordance with AASHTO T 27-11 to meet the requirements of Table 332-2.

Table 332-2 Gradation Requirements for Pulverized Material	
Sieve Size	Minimum Percent Passing
3 inches	100
2 inches	95
No. 4	55
No. 200*	5

\*For asphalt emulsion, the maximum allowable percent passing the No. 200 sieve is 20%.

Material gradation may vary due to local aggregates and conditions. A minimum of two passes of the reclaimer is required. Additional passes may be necessary to achieve the required gradation.

Introduce the asphalt emulsion or foamed asphalt into the mix through the reclaimer uniformly and accurately metered such that areas are of equal consistency and moisture content. Combine the reclaimed material, cement and additives in place to meet the requirements specified in such proportions that the reclaimed mixture is of acceptable composition and stability. Before the start and at the end of each day's work and at any time requested, permit the Engineer access to the mixing equipment in order to read the meter to verify the quantity of asphalt emulsion applied during the day's work. Make field

adjustments, as necessary, to the mix design under the guidance of a knowledgeable and competent technician or superintendent to obtain a satisfactory reclaimed mixture of consistent composition and stability throughout the project.

**332-5.6 Compaction:** After the material has been processed, compact the base course to the lines, grades, and depth required. Apply water as necessary to ensure optimum moisture content at the time of mixing and compaction.

Construct a control strip of not less than 500 feet to develop proper rolling/compaction patterns and methods to obtain the required density. Obtain five (5) density readings using a nuclear gauge in accordance with FM 1-T 238, while witnessed by the Engineer. Whenever there is a change in the reclaimed material, compaction method, equipment, mix design, or unacceptable results occur, construct a new control strip of the same length, as determined by the Engineer. Control strips failing to meet specification criteria may be required to be reworked, as determined by the Engineer. Acceptance of the control strips shall be obtained prior to continuance with production.

Furnish the proper number, weight and type of rollers to obtain the required compaction of the reclaimed material. Begin rolling at the low side of the course, except leave three to six inches from any unsupported edge or edges unrolled initially to prevent distortion. Compact the base course to a field dry density (i.e. corrected gauge wet density) of at least 96.0 percent of the maximum laboratory dry density.

Correct any reclaimed base shoving, rutting, or other unacceptable displacement. Take care in rolling the edges of the reclaimed mixture so the line and grade of the edges are maintained.

At the end of each day's production, construct a transverse joint formed by a header or by cutting back into the compacted material to form a true vertical face free of loose material. Protect construction joints so that the placing, spreading, and compacting of base material will not damage previous work. Where it is necessary to operate or turn any equipment on the completed base course, protect and cover the finished surface using mats or wood planks to prevent damage.

**332-5.7 Thickness:** Construct the base to a daily average thickness within 1/2 inch of the plan thickness. Individual measurements may deviate from the plan thickness by 3/4 inch. Measure the thickness while being witnessed by the Engineer. When the thickness is not within the tolerances given, the Engineer will evaluate the area and determine if it shall be reconstructed at the Contractor's expense or the deficiency deducted from the total material in place.

**332-5.8 Finishing:** After completing all base course operations, assure the base course conforms to the required lines, grades, and cross section. If necessary, lightly scarify the surface to eliminate any imprints made by equipment and then recompact the surface to the required density. When the posted speed is 55 mph or greater and the reclaimed base is to be opened to traffic, if the Engineer identifies an objectionable surface irregularity, straightedge and correct all deficiencies, 50 feet either side, in excess of 3/8 inch over 15 feet in length within 72 hours of placement to the full depth of the reclaimed base or as determined by the Engineer.

**332-5.9 Protection and Curing:** Protect and cure the completed base course by applying a prime coat at a rate of 0.10 to 0.15 gallons per square yard. Apply the prime coat after the completion of finishing operations but prior to opening to traffic. Keep the finished base course continuously moist until the prime coat is placed. At the time, the prime coat is applied, ensure the surface is dense, free of all loose and extraneous material, and contains



sufficient moisture to promote proper penetration of the bituminous material. Apply water in sufficient quantity to fill the surface voids immediately before the bituminous curing material is applied.

To prevent equipment from marring or damaging the completed work, protect finished portions of base used by equipment.

Do not allow traffic on the reclaimed base until it is assured the reclaimed base surface will not distort, shove, or ravel under the anticipated vehicular loading. Apply sand to primed surface and broom off excess sand to install temporary striping prior to opening to traffic.

### **332-6 Quality Control Testing.**

**332-6.1 Frequency:** Perform the following quality control tests at the prescribed frequency. Randomly determine sample locations in accordance with ASTM D 3665-12 or equivalent. Correct all deficiencies unless otherwise approved by the Engineer.

**Reclaimed material gradation:** Determine the percent passing the following sieve sizes: 3 inches, 2 inches, No. 4, and No. 200. Obtain a sample at a frequency of one sample per 3,000 SY. Meet the requirements of Table 332-2. If the requirements of Table 332-2 are not met, adjust the pulverization operation so that the resultant material will meet specification requirements or to the satisfaction of the Engineer.

**Moisture/density relationship of reclaimed base:** Establish a wet/dry density relationship for density specification compliance by obtaining a sample at the location of a nuclear density measurement, at a frequency of once per day. Determine the moisture content in accordance with FM 5-507, AASHTO T 110-03 (2011), AASHTO T 265-12, or ASTM D 4643-08.

**In-place field density:** Perform one nuclear density test per 1000 square yards. The dry field density of the compacted mixture shall be at least 96.0 percent of the maximum laboratory dry density established in the mix design process. No individual density test shall be lower than 92.0 percent of the maximum laboratory dry density. If one density test is below 92.0 percent or two consecutive density tests are below 96.0 percent of the maximum laboratory dry density, cease production and resolve the issue to the satisfaction of the Engineer before resuming production.

**Marshall stability:** Perform Marshall stability testing twice per day or once per day if less than 1500 square yards is reclaimed. Meet the requirements of Table 332-1. If the Marshall stability does not meet the requirements of Table 332-1, cease production and resolve the issue to the satisfaction of the Engineer before resuming production.

**Retained Marshall stability:** Perform retained Marshall stability testing twice per day or once per day if less than 1500 square yards is reclaimed. Meet the requirements of Table 332-1. If the retained Marshall stability does not meet the requirements of Table 332-1, cease production and resolve the issue to the satisfaction of the Engineer before resuming production.

**Depth of mixing:** Determine the depth of mixing at least once per 250 square yards. Meet the requirements of 332-5.7.

**Cross slope measurement:** Meet the requirements of Table 330-4.

Additional sampling and testing may be required if significant changes in the characteristics of the reclaimed material are observed, such as a much coarser or finer gradation or a noticeable difference in asphalt content, or when there is considerable variability in the field test results.

**332-7 Acceptance.**

Acceptance of the material will be based on providing documentation that component materials meet the requirements of 332-2 and by quality control test results meeting the requirements of 332-6.

**332-8 Contractor Qualification.**

The full depth reclamation Contractor will provide a list of similar projects with owner's contact information and project location in which a minimum of three projects of a minimum of 7,000 SY each of full depth reclamation has been constructed using either emulsion or cement stabilization within the past three years from the date of the submittal of bid. Include documentation that indicates the specification criteria of each project was met without considerable time delays or cost overruns.

**332-9 Method of Measurement**

Full depth reclamation will be measured by square yard as shown on the plans or approved by the Engineer.

**332-10 Basis of Payment.**

**General:** The full depth reclamation shall be paid for at the Contract unit price per square yard, completed and accepted. Such price and payment shall be full compensation for performing all full depth reclamation work as described in this Section.

Payment will be made under:

Item No. 332-1 Full Depth Reclamation, per square yard

**EXHIBIT L**  
**FDOT AND LEE COUNTY DESIGN STANDARDS**

The following design standards are expressly agreed to be incorporated by reference and made a part of this Agreement:

1. Florida Department of Transportation FY2017-18 Design Standards as published at the following link:

<http://www.fdot.gov/roadway/DesignStandards/Standards.shtm>

2. Lee County Department of Transportation Plan Specifications for Sign Installation, **March 2015** edition as published at the following link:

<http://www.leegov.com/dot/traffic/trafficsigninstallation>

3. Lee County Department of Transportation Plan Specifications for Signal & Street Lighting, April 15, 2014 edition as published at the following link:

<http://www.leegov.com/dot/traffic/trafficstandard>

4. Lee County Utilities Design Manual, the latest edition as published at the following link:

<http://www.leegov.com/utilities/design-manual>

In the event of discrepancies between the Lee County and FDOT design standards, Lee County Standards shall govern.

**EXHIBIT M**  
**DEVELOPMENTAL SPECIFICATIONS**

RESERVED

*I hereby certify that these Technical Special Provisions have been properly prepared by me, or under my responsible charge:*

<b>Technical Special Provision Section(s): XXX, XXX, XXX</b>		
<b>Signature:</b>		
<b>Date:</b>		
<b>Engineer of Record:</b>		
<b>Florida License No.:</b>		
<b>Firm Name:</b>		
<b>Firm Address:</b>		
<b>City, State, Zip Code:</b>		
<b>Cert. of Authorization No:</b>		

**EXHIBIT N**  
**OTHER RELEVANT FORMS**