DocuSign Envelope ID: 775FCF57-23C4-4678-829D-D68E47097C5B

ALACHUA COUNTY

ROAD AND BRIDGE CONSTRUCTION AGREEMENT FOR INVITATION TO BID NO. 23-947

PROJECT NO. 919-7903

AGREEMENT NO. 13726

CR 325 OVER CROSS CREEK BRIDGE REHABILITATION

WITH

E&D CONTRACTING SERVICES, INC.

DocuSign Envelope ID: 775FCF57-23C4-4678-829D-D68E47097C5B

ROAD AND BRIDGE CONSTRUCTION AGREEMENT NO. 13726 BETWEEN ALACHUA COUNTY AND E & D CONTRACTING SERVICES, INC FOR INVITATION TO BID NO. 23-947 – PROJECT NO. 919-7903 – FOR CR 325 OVER CROSS CREEK BRIDGE REHABILITATION

THIS AGREEMENT made and entered into upon execution, by and between E & D Contracting Services, Inc, a Foreign For Profit Corporation, whose principal business address is 2001 Mills B Lane Boulevard , Savannah, GA 31405 (hereinafter referred to as "Contractor"), and Alachua County, charter county and political subdivision of the State of Florida, by and through its Board of County Commissioners, (hereinafter referred to as "County") (collectively, the County and Contractor are hereinafter referred to as the "Parties").

WITNESSETH:

WHEREAS, the County issued Invitation to Bid No. 23-947 seeking the bids from road and bridge construction contractors to furnish all labor, materials, equipment and apparatus for the construction of repair and rehabilitation of Bridge No. 260027- CR 325 over Cross Creek*, in Alachua County, Florida*; and

WHEREAS, after evaluating and considering all timely responses to Invitation to Bid No. 23-947, the County identified the Contractor as the lowest price, responsive, responsible bidder; and

WHEREAS, the County desires to contract with the Contractor to provide the work described in Invitation to Bid No. 23-947 and the Contractor desires to perform such work for the County in accordance with the terms and conditions set forth herein.

NOW, THEREFORE, in consideration of the mutual promises and covenants contained herein, and other good and valuable consideration, the receipt and sufficiency of which is acknowledged by the Parties, the Parties hereby agree as follows:

1 **THE WORK.** That the Contractor shall furnish all labor, material, equipment, apparatus and services covered by **Exhibit 1**: *Non-Technical Specifications* attached hereto and incorporated by reference, **Exhibit 2**: *Technical Specifications* attached hereto and incorporated by reference, and **Exhibit 10**: *Alachua County Public Works Contract Plan, County Project ID 919-7903-FY19-260027, Alachua County CR 325 Over Cross Creek, Bridge 26027*, Plans dated 12/19/2019, for *Invitation to Bid No. 23-947, Project No: 919-7903, "CR 325 over Cross Creek Bridge Rehabilitation"* attached hereto and incorporated by reference, hereinafter collectively referred to as "Contract Documents and Specifications", which shall include all incidental and necessary work thereto (the "Work"). All Work shall be performed and completed in accordance with the Contract Documents and Specifications. The Contract Documents and Specifications are made part of this Agreement as set forth herein. The Contractor acknowledges that it has received the Contract Documents and Specifications are herein acknowledged by the Contractor.

2 **CONTRACT PRICE**.

2.1 The awarded Agreement consists of the Contract Amount of Four Hundred Seventy-Four Thousand, Seven Hundred Seventy Dollars and Zero Cents ($474,770.00) plus a Contingency of Twenty-Three Thousand, Seven Hundred Thirty-Eight Dollars and Fifty Cents ($23,738.50).

2.2 The Work includes both Lump Sum items and Unit Price items. For performing the Work, the Contractor shall be paid a sum that SHALL NOT EXCEED Four Hundred Seventy-Four Thousand, Seven Hundred Seventy Dollars and Zero Cents ($474,770.00) (the "Contract Amount"), unless a Change Order or Amendment is issued in accordance this Agreement. Invoices and payments shall be allocated as provided in the Schedule of Values, attached hereto and incorporated by reference as **Exhibit 8**. The Contractor shall invoice the County at the prices set forth in **Exhibit 8**, and the

County shall pay the Contractor only for the actual quantities of Work performed or materials furnished in accordance with this Agreement. The Parties agree that the Estimated Quantities set forth in **Exhibit 8** may be increased or decreased as provided in this Agreement without, in any way, changing or invalidating the any of the Unit or Lump Sum prices set forth in **Exhibit 8**.

2.3. The County shall establish a contingency fund in an amount that SHALL NOT EXCEED Twenty-Three Thousand, Seven Hundred Thirty-Eight Dollars and Fifty Cents ($23,738.50) (hereinafter, the "Contingency").

2.4. Contingency funds shall be used to cover costs that may result from incomplete design, increases to the Estimated Quantities, and unanticipated costs that arise during construction that are not identified by the Construction Documents and Specifications. Contractor shall not proceed with any portion of the Work which it intends to charge against the Contingency without first informing the County that it intends to request Contingency funds to perform that portion of the Work and obtaining County's express written authorization to proceed prior to commencing that portion of the Work.

2.5 The Contractor acknowledges and agrees that any Work which is to be charged against the Contingency that does not receive such prior written approval from the County shall be deemed to be part of Contractors Work compensated within the Contract Amount and not chargeable against the Contingency. The Owner reserves the right, at its sole discretion, to withhold its consent on Contingency expenditures. Further, any Contingency expenditure becomes part of the Contract Documents and is incorporated by reference herein. County approved, but unused Contingency remaining at the end of the job will be credited from the Contract Amount. Construction Manager has no entitlement to any portion of any unused Contingency.

3. **ALACHUA COUNTY MINIMUM WAGE**

3.1. If, as determined by County, the Services to be performed pursuant to this Agreement are 'Covered Services', as defined under the Alachua County Government Minimum Wage Ordinance ("Wage Ordinance"), then during the term of this Agreement and any renewals, Contractor shall pay its 'Covered Employees', as defined in the Wage Ordinance, no less than the Alachua County Government Minimum Wage ("Minimum Wage"), as may be amended by the County. Contractor will require the same of its subcontractors and subconsultants who provide the Services. If applicable to the Services, Contractor will certify this understanding, obligation, and commitment to County through a certification, a copy of which is attached hereto as **Exhibit 9**. Contractor will (a) post a copy of the Minimum Wage Rate in a prominent place of its principal place of business where it is easily seen by Covered Employees; (b) supply a copy to any Covered Employee upon request; (c) make any person submitting a bid for a subcontract for Covered Services aware of these requirements; and (d) include the necessary provisions in subcontracts to ensure compliance. The County shall not be deemed a necessary, or indispensable, party in any litigation between Contractor and subcontractor. At this time of execution of this Agreement, the prevailing Minimum Wage is as follows, which is subject to change during the term of this Agreement, and will be updated, and be applicable, without the necessary of amendment to this Agreement:

$16.00 per hour with qualifying health benefits amounting to at least $2.00 per hour	$18.00 per hour without health benefits

3.2. If applicable to the Services under this Agreement and to Contractor, the failure to comply with the provisions of the Wage Ordinance will be deemed a breach this Agreement and County is authorized to withhold payment of funds in accordance with Alachua County Code and Chapter 218, Florida Statutes.

4 **GENERAL CONDITIONS**

4.1 That it is agreed by both Parties hereto that progress payments and final payment for Work

performed will be made in accordance with the provisions as stipulated in the NTP and the Scope of Work/Technical Specification attached hereto and incorporated by reference as **Exhibit 2**. In case of conflict in payment terms, the terms in the NTP shall prevail.

4.2 It is agreed by both Parties hereto that five percent (5%) of the amount earned through each progress payment shall be withheld by the County. The retainage shall be paid to the Contractor pursuant to Section 4.3.

4.3 Within fifteen (15) days of obtaining Substantial Completion of the Work as defined herein, or if not defined upon reaching beneficial occupancy or use, the Contractor and County will develop a list (the "List") of items required to achieve final completion of the Work. Contractor will provide a first draft of the List within five (5) days of notice of Substantial Completion. The County will notify the Contractor of acceptance or of any changes requested within five (5) days of receipt of the draft List. The County shall deliver the final List to the Contractor no later than five (5) days after it has been developed as set forth above. The failure to include on the List any corrective work or pending items not yet completed does not alter, waive or release the Contractor of its responsibility to complete such corrective work, pending items, or any other Work pursuant to the Agreement. Upon completion of all items on the List, the Contractor may submit an application for Final Payment request for all remaining retainage withheld by the County. If a good faith dispute exists as to whether one or more items identified on the List have been completed pursuant to this Agreement, the County may continue to withhold an amount equal to 150 percent of the total cost to complete such items until the Contractor has rendered complete, satisfactory and acceptable such items. All items that require correction under the Agreement and that are identified after the preparation and delivery of the List remain the obligation of the Contractor.

4.4 If the County fails to develop the list in the time specified, the Contractor may request payment for all retainage held by the County, less any amounts withheld for incomplete or uncorrected Work. If the Contractor fails to cooperate with the County in developing The List, or obligations under The List, the County shall notify the Contractor in writing of its failure to cooperate in developing The List and the County shall not obligated to pay the retainage.

4.5 The County shall not be obligated to make payment to the Contractor for amounts that are the subject of, or release retainage related to, a good faith dispute or a claim brought pursuant to §255.05, Florida Statutes.

4.6 Once all items on The List have been completed, the Contractor may request the remaining retainage from the County. In cases of a dispute as to completion of an item on the List, the County may withhold an amount not to exceed 150% of the total cost to complete disputed items.

5 CONTRACT TIME AND DAMAGES

5.1 It is agreed by both Parties that **TIME IS OF THE ESSENCE** for the completion of the Work. The Contract Time shall begin as set forth within the issuance of a Notice to Proceed to the Contractor by the County. Contract Time for Substantial Completion is 60 Working Days, as defined in Contract Documents and Specifications, from the Contractor's receipt of the Notice to Proceed. Contract Time for Final Completion is 45 working days from the date the County delivers the final List to the Contractor as provided in section 4.3, above, unless extended in accordance with §218.735(7)(c), Florida Statutes.

5.2 Inasmuch as failure to complete the Work within the time herein fixed will result in substantial injury to the County and whereas damages arising from such failure cannot be calculated with any degree of certainty, it is hereby agreed that if such Work has not reached Substantial Completion as herein defined or within such further time, if any, as shall be allowed for such performance of Substantial Completion in accordance with the provisions of this Agreement, the Contractor shall pay the County as liquidated damages and not as a penalty the sum of One Thousand, Two Hundred Forty-One Dollars and Zero Cents ($1,241.00) per day for each and every working day after the date fixed for Substantial Completion.

5.3 Inasmuch as failure to complete the Work within the time herein fixed will result in substantial injury to the County and whereas damages arising from such failure cannot be calculated with any degree of certainty, it is hereby agreed that if such Work has not reached Final Completion as herein defined or within such further time, if any, as shall be allowed for such performance of Final Completion in accordance with the provisions of this Agreement, the Contractor shall pay the County as liquidated damages and not as a penalty the sum of Six Hundred Twenty Dollars and Zero Cents ($620.00) per day for each and every working day after the date fixed for Final Completion.

6 **PERFORMANCE AND PAYMENT BONDS**

6.1 Within ten (10) business days after signature of this Agreement by the Parties, Contractor shall provide Owner with Payment and Performance Bonds, in the forms prescribed as **Exhibits 3 & 4,** in the amount of 100% of the total sum of the Contract Amount, the costs of which are to be paid by the Contractor.

6.2 If the surety for any bond furnished by the 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 another bond and surety, both of which shall be subject to the minimum requirements noted above and County's approval.

6.3 In accordance with the requirements of §255.05(1)(a), Florida Statutes, the Contractor shall record a copy of the Performance and Payment Bonds in the Public Records of Alachua County, Florida, prior to performing any Work under this Agreement. The Contractor shall deliver a certified copy of the recorded Performance and Payment Bonds to the County at least five (5) days prior to performing any Work under this Agreement. The Contractor shall not perform any Work under this Agreement prior to recording said bonds. The timely delivery of the certified copy of the recorded Performance and Payment Bonds is a condition precedent to County's obligation to make any payments to the Contractor hereunder.

7 **NOTICES -** Except as otherwise provided in this Agreement any notice of default or termination from either party to the other party must be in writing and sent by certified mail, return receipt requested, or by personal delivery with receipt. All notices shall be deemed delivered two (2) business days after mailing, unless deliver is by personal delivery in which case delivery shall be deemed to occur upon actual receipt by the other party. For purposes of all notices, Contractor's and County representative are:

County:
Alachua County Public Works
5620 NW 120th Lane
Gainesville, FL 32653
Attn: Public Works Director
jlink@alachuacounty.us

Contractor:
E & D Contracting Services, Inc
2001 Mills B Lane Boulevard
Savannah, GA 31405mshepard@edcompanies.com

A copy of any notice, request or approval to the County must also be sent to:

J.K. "Jess" Irby, Esq.
Clerk of the Court

DocuSign Envelope ID: 775FCF57-23C4-4678-829D-D68E47097C5B

12 SE 1st Street
Gainesville, FL 32601
Attn: Finance and Accounting
dmw@alachuaclerk.org

And

Procurement Office
12 SE 1st Street, 3rd Floor
Gainesville, Florida 32601
Attn: Contracts
acpur@alachuacounty.us

8. **RELEASE OF CLAIMS**. It is agreed that when all Work contemplated by this Agreement has reached Final Completion and has been inspected and approved by the County, or the County's authorized representatives, the Contractor shall furnish to the County the Contractor's Final Affidavit in the form attached hereto as **Exhibit 5**, or other such release as provided for in §255.05, Florida Statutes, and agreed to by the County. Submission of the Contractor's invoice for final payment shall further constitute the Contractor's representation to the County that all obligations of the Contractor to others, including but not limited to its consultants, subcontractors, and suppliers, incurred in connection with the Work, have been paid in full and Contractor shall include executed and notarized Waivers of Right to Claim against the Payment Bond, in the form attached hereto as **Exhibit 6**, from all persons defined in §713.01, Florida Statutes, who furnished labor, services, or materials for the prosecution of the Work provided for in this Agreement, unless the Contractor provides the County with a written consent from the surety regarding the Work or the payment in question.

9. **GOVERNING ORDER OF DOCUMENTS**
   9.1 In cases of discrepancy, the governing order of the documents is as follows:
      9.1.1 Amendments and Change orders;
      9.1.2 This Agreement;
      9.1.3 Technical Specifications for Invitation to Bid No. 23-947 (**Exhibit 2**);
      9.1.4 Non-Technical Specifications for Invitation to Bid No. 23-947 (**Exhibit 1**);
      9.1.5 *Alachua County Public Works Contract Plan, County Project ID 919-7903-FY19-260027, Alachua County CR 325 Over Cross Creek, Bridge 26027*, Plans dated 12/19/2019, for Invitation to Bid No. 23-947 (**Exhibit 10**);
      9.1.6 Contractor's Invitation to Bid Submittal.

10. **INDEMNIFICATION**
   10.1. To the maximum extent permitted by Florida law, but subject to the monetary limitation that the extent of the Contractor's indemnification obligation shall not exceed One Million Dollars and Zero Cents ($1,000,000.00), the Contractor agrees to indemnify and hold harmless the County, and its officers and employees, from liabilities, damages, losses, and costs, including, but not limited to, reasonable attorneys' fees, to the extent caused by the negligence, recklessness, or intentionally wrongful conduct of the Contractor and other persons employed or utilized by the Contractor in the performance of the Agreement. Contractor agrees that indemnification of the County shall extend to any and all work performed by the Contractor, its subcontractors, employees, agents, servants or assigns.
   10.2. The Contractor's obligation to indemnify under this Article will survive the expiration or earlier termination of this Agreement until it is determined by final judgment that an action against the County or an indemnified party for the matter indemnified hereunder is fully and finally barred

by the applicable statute of limitations.

10.3. This obligation shall in no way be limited in any nature whatsoever by any limitation on the amount or type of Contractor's insurance coverage. This indemnification provision shall survive the termination of the Agreement between the County and the Contractor.

10.4. In any and all claims against the County or any of its agents or employees by any employee of the Contractor, any Subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, the indemnification obligation under this Article shall not be limited in any way by any limitation on the amount or type of damages, compensation or benefits payable by or for the Contractor or any Subcontractor under workers' compensation acts, disability benefit acts or employee benefit acts.

10.5. Nothing contained herein shall constitute a waiver by the County of sovereign immunity or the provisions or limits of liability of §768.28, Florida Statutes.

11. PUBLIC RECORDS In accordance with §119.0701, Florida Statutes, Contractor, *when acting on behalf of the County,* shall, as required by Florida law:

11.1. Keep and maintain public records required by the County to perform the Services.

11.2. 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 in Florida law or as otherwise provided by law.

11.3. 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 term of this Agreement and following completion of the Agreement if Contractor does not transfer the records to the County.

11.4. Upon completion of the Agreement, transfer, at no cost, to the County all public records in possession of Contractor or keep and maintain public records required by the County to perform the Services. If Contractor transfers all public records to the County upon completion of the Agreement, Contractor shall destroy any duplicate public records that are exempt or confidential and exempt from public records disclosure requirements. If Contractor keeps and maintains public records upon completion of the Agreement, Contractor 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 County's information technology systems.

IF CONTRACTOR HAS QUESTIONS REGARDING THE APPLICATION OF CHAPTER 119, FLORIDA STATUTES, TO CONTRACTOR'S DUTY TO PROVIDE PUBLIC RECORDS RELATING TO THIS CONTRACT, CONTACT THE COUNTY'S PUBLIC RECORDS CUSTODIAN AT publicrecordsrequest@alachuacounty.us OR (352) 264-6906 OR 12 SE 1ST STREET, GAINESVILLE, FL 32601.

11.5. If Contractor fails to comply with this section, Contractor will be deemed in default under this Agreement. The County may enforce as set forth in §119.0701, Florida Statutes. Contractor who fails to provide the public records in response to a request within a reasonable time may be subject to penalties imposed under §119.10, Florida Statute, and costs of enforcement, including fees, under §119.0701 and §119.12, Florida Statutes.

11.6. Contractor will take reasonable measures to protect, secure and maintain any data held by Contractor in an electronic form that is or contains exempt, confidential, personal information or protected information, as defined by Florida or federal law, related to or in connection with performance of the Services. If Contractor suspects or becomes aware of a security breach or

DocuSign Envelope ID: 775FCF57-23C4-4678-829D-D68E47097C5B

unauthorized access to such data by a third party, Contractor shall immediately notify the County in writing and will work, at Contractor's expense, to prevent or stop the data breach

12 **INSURANCE** Throughout the term of this Agreement, the Contractor shall provide insurance of the types and in the amounts set forth in **Exhibit 7.** The Contractor shall also require any subcontractors to provide insurance as set forth in **Exhibit 7.** A current copy of the Contractor Certificate of Insurance showing coverage of the types and in the amounts required is attached hereto as **Exhibit 7-A.**

13 **SEVERABILITY AND AMBIGUITY** It is understood and agreed by the Parties to this Agreement that if any of the provisions of the Agreement shall contravene or be invalid under the laws of the State of Florida, such contravention or invalidity shall not invalidate the entire Agreement, but it shall be construed as if not containing the particular provision or provisions held to be invalid, and the rights and obligations of the Parties shall be construed and enforced accordingly. In the event an ambiguity or question of intent or interpretation arises, this Agreement shall be construed as if jointly drafted by the Parties and no presumption, inference, or burden of proof shall arise favoring or disfavoring a Party by virtue or authorship of any or all of the Agreement's provisions. Each Party represents and agrees that it has had the opportunity to seek the advice of appropriate professions, including legal professionals, in the review and execution of this Agreement.

14 **AMENDMENT** This Agreement may be amended by mutual written agreement of the Parties hereto. Further, this Agreement, including without limitation all changes in the maximum indebtedness, scope of services, time of completion, and other material terms and conditions, may be changed only by such written amendment.

15 **INDEPENDENT CONTRACTOR** In the performance of this Agreement, the Contractor will be acting in the capacity of an independent Contractor, and not as an agent, employee, partner, joint venture, or associate of the County. The Contractor shall be solely responsible for the means, methods and techniques, sequences and procedures utilized by the Contractor in the full performance of this Agreement. Neither Contractor nor anyone employed by Contractor shall represent, act, purport to act, or to be deemed to be the agent, representative, employee or servant of the County.

16 **CHOICE OF LAW** The laws of the State of Florida shall govern this Agreement and the duties and obligations stated within this Agreement. Sole and exclusive venue for all actions arising under this Agreement shall be in Alachua County, Florida.

17 **COMPLETE AGREEMENT** This Agreement contains the sole and entire agreement between the County and the Contractor and supersedes any other written or oral agreements between them not incorporated herein.

18 **NON-WAIVER** The failure of any party to exercise any right in this Agreement will not waive such right in the event of any further default or non-compliance.

19 **SUCCESSORS AND ASSIGNS** The Contractor shall not assign its rights hereunder, excepting its right to payment, nor shall it delegate any of its duties hereunder without the written consent of the County. Subject to the provisions of the preceding sentence, each party hereto binds itself, its successors, assigns and legal representatives to the other and to the successors, assigns and legal representatives of such other party. Nothing herein shall be construed as creating any personal liability on the part of any officer or agent of the County, nor shall it be construed as giving any right or benefit hereunder to anyone other than the County or the Contractor.

20 **NO THIRD-PARTY BENEFICIARIES** Nothing contained herein shall create any relationship, contractual or otherwise, with, or any rights in favor of, any third party.

21 **MODIFICATIONS** This Agreement constitutes the entire agreement and understanding between

the Parties hereto, and it shall not be considered modified, altered, changed or amended in any respect unless in writing and signed by the Parties hereto.

22 **WAIVERS OF CLAIMS AND CONTINUING OBLIGATIONS**

22.1 The Contractor's obligations to perform the Work and complete the project in accordance with the Contract Documents shall be absolute. Neither approval of any progress, nor approval of final payment by the Alachua County Public Works Director, nor the issuance of a certificate of substantial completion, nor any payment by the Clerk of the Court to the Contractor under the Contract Documents, nor any use or occupancy of the project or any part thereof by the County, nor any act of acceptance by the County, nor any failure to do so, nor any correction of faulty or defective work by the County shall constitute an acceptance of Work not in accordance with the Contract Documents.

22.2 The acceptance of Final Payment by the Contractor shall constitute a waiver of all claims by the Contractor against the County, except those previously made in writing and unsettled at the time of Final Payment.

23 **DEFAULT AND TERMINATION**

23.1 The failure of the Contractor to comply with any provision of this Agreement will place the Contractor in default. Prior to terminating the Agreement, the County will notify the Contractor in writing. This notification will make specific reference to the provision which gave rise to the default. The County will give the Contractor seven (7) days to cure the default or develop a plan and timeline acceptable to the County to cure the default. The County Engineer is authorized to provide written notice of default on behalf of the County, and if the default situation is not corrected within the allotted time, the Department is authorized to provide final termination notice on behalf of the County to the Contractor.

23.2 The County may terminate the Agreement without cause by first providing at least thirty (30) days written notice to the Contractor prior to the termination date. The County Engineer is authorized to provide written notice of termination on behalf of the County.

23.3 If funds to finance this Agreement become unavailable, the County may terminate the Agreement with no less than twenty-four hours' notice in writing to the Contractor. The County will be the final authority as to the availability of funds. The County will pay the Contractor for all Work completed prior to any notice of termination.

23.4 If the Contractor is adjudged bankrupt, either voluntary or involuntary, the County may terminate the Agreement effective on the day and at the time the bankruptcy petition is filed and may proceed to provide service as previously outlined.

24 **COUNTY'S RIGHT TO TERMINATE**

24.1 If the Contractor is adjudged bankrupt or insolvent, or if he makes a general assignment for the benefit of his creditors, or if a trustee or receiver is appointed for the Contractor or for any of his property, or if he files a petition to take advantage of any debtors' act, or to reorganize under the bankruptcy or similar laws, or if he repeatedly fails to supply sufficient skilled workmen or suitable materials or equipment, or if he fails to make prompt payments to Subcontractors or for labor, materials, or equipment, or if he disregards laws, ordinances, rules, regulations or orders of any public body having jurisdiction, or if he disregards the authority of the County Engineer, or he otherwise violates any provisions of the Contract Documents, then the County may, without prejudice to any other right or remedy and after giving the Contractor and his surety seven (7) days written notice, terminate the Agreement and take possession of the project and of all materials, equipment, tools, construction equipment and machinery thereon owned by the Contractor, and finish the Work by whatever method he may deem expedient. In such case, the Contractor shall

not be entitled to receive any further payment until the Work is finished.

24.2 Where the Agreement has been so terminated by the County, said termination shall not affect any rights of the County against the Contractor then existing or which may thereafter accrue. Any retention or payment of monies by the County due the Contractor will not release the Contractor from liability.

24.3 Upon seven (7) days written notice to the Contractor, the County may, without cause and without prejudice to any other right or remedy, elect to abandon the project and terminate the Agreement. In such case, the Contractor shall be paid for all Work executed and any expense sustained plus a reasonable profit.

25 **WORKPLACE VIOLENCE** Employees of the Contractor are prohibited from committing any act of workplace violence. Violation may be grounds for termination. Workplace violence means the commission of any of the following acts by a Contractor's employee.

25.1 Battery: intentional offensive touching or application of force or violence to another.

25.2 Stalking: willfully, maliciously and repeatedly following or harassing another person.

26 **DUTIES AND OBLIGATIONS** The rights and remedies available hereunder, and, in particular without limitation, the warranties, guarantees and obligations imposed upon the Contractor by Agreement No. 13726 and the rights and remedies available to the County thereunder, shall be in addition to and not a limitation of any otherwise imposed or available law, by special guarantee or other provisions of the Contract Documents and Specifications.

27 **POLLUTION ABATEMENT** The Contractor shall comply with all Federal, State and Local laws and regulations controlling pollution of the environment. He shall take necessary precautions to prevent pollution of streams, lakes and ponds with fuels, oils, bitumens, chemicals and other harmful materials. He shall take necessary measures to minimize soil erosion.

28 **INJURY OR DAMAGE TO PEOPLE OR PROPERTY** Should the County or the Contractor suffer injury or damage to its person or property because of any error, omission or act of the other or of any of his employees or agents or others for whose acts he is legally liable, claim shall be made in writing to the other party within a reasonable time of the first observance of such injury or damage.

29 **HEALTH CONSIDERATIONS** 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. The Contractor shall commit no public nuisance.

30 **ELECTRONIC SIGNATURES** The Parties agree that an electronic version of this Agreement shall have the same legal effect and enforceability as a paper version. The Parties further agree that this Agreement, regardless of whether in electronic or paper form, may be executed by use of electronic signatures. Electronic signatures shall have the same legal effect and enforceability as manually written signatures. The County shall determine the means and methods by which electronic signatures may be used to execute this Agreement and shall provide the Contractor with instructions on how to use said method. Delivery of this Agreement or any other document contemplated hereby bearing an manually written or electronic signature by facsimile transmission (whether directly from one facsimile device to another by means of a dial-up connection or whether mediated by the worldwide web), by electronic mail in "portable document format" (".pdf") form, or by any other electronic means intended to preserve the original graphic and pictorial appearance of a document, will have the same effect as physical delivery of the paper document bearing an original or electronic signature.

31. **U.S. DEPARTMENT OF HOMELAND SECURITY E-VERIFY SYSTEM**

31.1. The Contractor shall utilize the U.S. Department of Homeland Security's E-Verify system to

DocuSign Envelope ID: 775FCF57-23C4-4678-829D-D68E47097C5B

verify the employment eligibility of all new employees hired by the Contractor during the term of the agreement. The E-Verify system is located at https://www.uscis.gov/e-verify.

31.2. The Contractor shall expressly require any subcontractors performing work or providing services pursuant to the County's agreement to utilize the U.S. Department of Homeland Security's E-Verify system to verify the employment eligibility of all new employees hired by the subcontractor during the term of the agreement. The E-Verify system is located at https://www.uscis.gov/e-verify.

THE REMAINDER OF THIS PAGE IS LEFT INTENTIONALLY BLANK

IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed for the uses and purposes therein expressed on the day and year first written below.

ALACHUA COUNTY, FLORIDA

By: _____
Anna Prizzia, Chair
Board of County Commissioners
Date: _____

ATTEST

_____
J.K. "Jess" Irby, Esq., Clerk
(SEAL)

APPROVED AS TO FORM

_____
Alachua County Attorney's Office

CONTRACTOR

By: DocuSigned by: Michael A Shepard 2946F53423BE407...

Print: Michael A Shepard

Title: Secretary

Date: 5/24/2023

IF THE CONTRACTOR IS NOT A NATURAL PERSON, PLEASE PROVIDE A CERTIFICATE OF INCUMBENCY AND AUTHORITY, OR A CORPORATE RESOLUTION, LISTING THOSE AUTHORIZED TO EXECUTE AGREEMENTS ON BEHALF OF YOUR ORGANIZATION. IF ARE A NATURAL PERSON, THEN YOUR SIGNATURE MUST BE NOTARIZED.

DocuSign Envelope ID: 775FCF57-23C4-4678-829D-D68E47097C5B

EXHIBIT 1: NON-TECHNICAL SPECIFICATIONS

Non-Technical Specifications

(General Terms & Conditions)

CR 325 over Cross Creek and CR 241 over Santa Fe River-

Bridge Rehabilitation Project

Project No. 919-7903-FY19-260027 & 919-7903-FY19-260086

DocuSign Envelope ID: 775FCF57-23C4-4678-829D-D68E47097C5B

1.0 DEFINITIONS

These definitions apply to this exhibit and any all-subsequent exhibits. Where the following terms or their pronouns occur herein, the intent and meaning shall be as follows:

1.1 AGREEMENT: The written document between the County and the Contractor covering the Work to be performed, including the Contractor's Bid and the Bonds.

1.2 BONDS: Bid, Performance and Payment Bonds and other instruments of security, furnished by the Contractor and his surety in accordance with the Contract Documents.

1.3 CHANGE ORDER: A written order to the Contractor, signed by the Board of County Commissioners or County Manager, authorizing an addition, deletion, or revision in the Work, or an adjustment in the Contract Amount, Contract Price or the Contract Time, issued after execution of the Agreement.

1.4 CONTINGENCY AMOUNT: The total monies established to efficiently and timely address any unknown or unanticipated conditions and pay factor adjustments. Contractor has no entitlement to any contingency amount without written notice from the County.

1.5 CONTRACT: The written agreement incorporating the bid submitted by the bidder and which is approved by the Board, or its designee, along with all documents covering the Work to be performed.

1.6 CONTRACT PRICE: The total monies payable to the Contractor plus the established contingency amount under the provisions of the Contract Documents.

1.7 CONTRACT DOCUMENTS: The Agreement, Specifications, Drawings, Addenda whether issued prior to the opening of bids or execution of the Contract and Modifications.

1.8 CONTRACT TIME: The number of days stated in the Agreement for the completion of the Work.

1.9 CONTRACTOR: The person, firm or corporation with whom the County has executed a contract for the performance of the Work, or his legally authorized representative.

1.10 COUNTY: Alachua County, Florida, through the Board of County Commissioners, or its authorized legal representative.

1.11 COUNTY ENGINEER: The Alachua County Engineer, acting directly or through duly authorized representatives; such representatives acting within the scope of the duties and authority assigned to them.

1.12 DIRECTOR: The Department Director, or his authorized representative, 5620 NW 120 Lane, Gainesville, Florida 32653, acting for the County.

1.13 DRAWINGS: The drawings and plans which show the character and scope of the Work to be performed and which have been prepared or approved by the Director and are referred to in the Contract Documents.

1.14 FIELD CHANGE ORDER: A written order to the Contractor signed by the Public Works Director or designee for modifications to the work that do not increase the Contract Price, that do not increase Contract Time and that do not increase the size (project limits), function (project type) or intended use of the work.

1.15 PROJECT REPRESENTATIVE: The authorized representative of the Director who is assigned to the project or any parts thereof.

1.16 RESPONSIBLE AGENT: The duly authorized representative of the Alachua County Board of County Commissioners or the Contractor during the contract period.

1.17 SHOP DRAWINGS: All Drawings, diagrams, illustrations, brochures, schedules and other data which are prepared by the Contractor, a Subcontractor, manufacturer, supplier or distributor and which illustrate the equipment, materials or some portion of the Work.

1.18 SPECIFICATIONS: The directions, provisions and requirements contained herein, together with all written Agreements made or to be made, setting out or relating to the method and manner of performing the Work, or to the quantities and qualities of materials

DocuSign Envelope ID: 775FCF57-23C4-4678-829D-D68E47097C5B

and labor to be furnished under the Contract.

1.19 SUBCONTRACTORS: Any person, firm or corporation, other than the Contractor, supplying labor, equipment or material for work at the site of the project.

1.20 WORK: Any and all obligations, duties and responsibilities necessary to the successful completion of the project assigned to or undertaken by the Contractor under the Contract Documents, including the furnishing of all labor, materials, equipment and other incidentals.

2.0 STARTING THE WORK

2.1 **Schedule**

Within ten (10) days after execution of the Agreement, the Contractor will submit to the County Engineer for approval an estimated progress schedule indicating the starting and completion dates of the various stages of the Work and a schedule of Shop Drawings submissions.

2.2 **Pre-Construction Conference**

Before starting Work, a conference will be held to review the above schedules and submittal package (See 2.5 Submittals), to establish procedures for handling Shop Drawings and other submissions, to establish procedures for processing applications for payment and to establish a working understanding between the Parties as to the project. Present at the conference will be the County Engineer, and/or his Project Representative, and the Contractor and utility company representatives.

2.3 **Notice to Proceed**

Upon execution and delivery of the Agreement, the County Engineer will give the Contractor a written Notice to Proceed stating date by which the Contractor must start the Work; but such date shall not be more than thirty (30) days after the date of execution and delivery of the Agreement. No work shall be done prior to receipt of the Notice to Proceed.

2.4 **Commencement of Time**

The Contract Time shall commence on the date when the Work is actually started but no later than the date provided in the Notice to Proceed.

2.5 **Submittals**

The Contractor's submittal package for the Pre-Construction meeting shall include: the Surveyor's License Confirmation on a form provided by the County, Maintenance of Traffic Plan, Erosion & Sedimentation Control Plan, and Stormwater Pollution Prevention Plan to be approved by the County prior to any construction activities along with any other requirements or permits as outlined in this document. All submittals must be approved by the County prior to implementation.

3.0 INTENT OF CONTRACT DOCUMENTS

3.1 It is the intent of the Specifications and Drawings to describe a complete project to be constructed in accordance with the Contract Documents.

3.2 The Contract Documents comprise the entire Agreement between the County and the Contractor. They may be amended only by approval of a Change Order or Field Change Order or Contract Amendment.

4.0 OWNERSHIP AND COPIES OF DOCUMENTS; RECORD DOCUMENTS

4.1 All Specifications, Drawings and copies thereof furnished by Alachua County shall remain the property of Alachua County. They shall not be used on another project, and with the exception of those sets of Contract Documents which have been signed in connection with the execution of the Agreement, shall be returned to the County on request upon completion of the project.

DocuSign Envelope ID: 775FCF57-23C4-4678-829D-D68E47097C5B

4.2 The County will furnish to the Contractor three (3) copies of the Drawings as are reasonably necessary for the execution of the Work. Additional copies will be furnished, upon request, at the cost of reproduction.

4.3 The Contractor will keep one record copy of all Specifications, Drawings, Addenda, Modifications, and Shop Drawings at the site in good order and annotated to show all changes made during the construction process. These shall be available to the Director and/or his Project Representatives.

5.0 WORK BY OTHERS

5.1 The County may perform additional work related to the project by itself, or the County may let other direct contracts therefore, which shall contain General Conditions similar to these. The Contractor shall afford the other Contractors who are Parties to such direct contracts (or the County if it is performing the additional work) reasonable opportunity for the introduction and storage of materials and equipment and the execution of work and shall properly connect and coordinate his work with theirs.

5.2 If any part of the Contractor's Work depends for proper execution or results upon the work of any such other Contractor (or the County), the Contractor will inspect and promptly report to the County Engineer in writing any defects or deficiencies in such work that render it unsuitable for such proper execution and results. His failure to so report shall constitute an acceptance of the other work as to be fit and proper for the relationship of his Work, except as to defects and deficiencies which may appear in the other work after the execution of his Work.

5.3 The Contractor will do all cutting, fitting and patching of his Work that may be required to make its several parts come together properly and fit it to receive or be received by such other work. The Contractor will not endanger any work of others by cutting, excavating or otherwise altering their work and will only cut or alter their work with the written consent of the County Engineer.

5.4 If the performance of additional work by other contractors or the County is not noted in the Contract Documents prior to the award of the contract, written notice thereof shall be given to the Contractor prior to starting any such additional work. Contractor work schedules shall be adjusted to allow for any necessary utility adjustments identified prior to start of work. If the Contractor believes that the performance of such additional work by the County or others involves him in additional expense or entitles him to an extension of the Contract Time, he may make a claim therefore as provided in **Exhibit 1, Non-Technical Specifications**, Paragraphs 15-17.

6.0 RESPONSIBLE AGENT

6.1 The Contractor shall designate and submit a responsible agent and alternate as necessary, for all dealings, communications, or notices or contracts between the County and the contractor.

6.2 The County Engineer will be the responsible agent for the County. Any notice or communication to or from the responsible agent shall be deemed to be a communication to the contractor.

6.3 A letter when addressed and sent by certified list mail to either part, at its business herein, will constitute notice required in this contract.

7.0 ACCIDENT PREVENTION

7.1 Precaution shall be exercised at all times for the protection of employees, other persons and property.

7.2 Contractor's employees shall report to their superintendent any hazardous conditions or

DocuSign Envelope ID: 775FCF57-23C4-4678-829D-D68E47097C5B

items in need of repair noted during the performance of work. Said superintendent shall thereupon notify the responsible agent or his designee of such conditions.

8.0 SUBCONTRACTS

8.1 The Contractor will not employ any Subcontractor (whether initially or as a substitute) against whom the County or the County Engineer may have reasonable objection, nor will the Contractor be required to employ any Subcontractor against whom he has reasonable objection. The Contractor will not make any substitution for any Subcontractor who has been accepted by the County and the County Engineer, prior to written concurrence by the County Engineer.

8.2 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 any of them may be liable to the same extent that he is responsible for the acts and omissions of persons directly employed by him. Nothing in the Contract Documents shall create any contractual relationship between any Subcontractor and the County or the County Engineer or any obligation on the part of the County or the County Engineer to pay or to see to the payment of any monies due any Subcontractor, except as may otherwise be required by law. The Director may furnish to any Subcontractor, to the extent practicable, evidence of amounts paid to the Contractor as compensation for specific Work performed.

8.3 The divisions and sections of the Specifications and the identifications of any Drawings shall not control the Contractor in dividing the Work among Subcontractors or delineating the Work to be performed by any trade.

8.4 The Contractor agrees to specifically bind every Subcontractor to all of the applicable terms and conditions of the Contract Documents. Every Subcontractor, by undertaking to perform any of the Work, will thereby automatically be deemed to be bound by such terms and conditions.

9.0 PHYSICAL AND SUBSURFACE CONDITIONS

9.1 The County Engineer will, upon request, furnish to the Contractor copies of all available boundary surveys and subsurface tests.

9.2 The Contractor will promptly notify the County Engineer in writing of any subsurface or latent physical conditions at the site differing materially from those indicated in the Contract Documents. The County Engineer will promptly investigate those conditions and determine if further surveys or subsurface tests are necessary. Promptly thereafter, the County Engineer will obtain the necessary additional surveys and tests and furnish copies to the Contractor. If the County Engineer finds that the results of such surveys or tests indicate subsurface or latent physical conditions differing significantly from those indicated in the Contract Documents, a Change Order shall be issued incorporating the necessary revisions.

10.0 COUNTY ENGINEER'S STATUS DURING CONSTRUCTION

10.1 The County Engineer shall be the County's representative during the construction period. All instructions of the County to the Contractor shall be issued through the County Engineer.

10.2 The County Engineer will make periodic visits to the site to observe the progress and quality of the executed Work and to determine, in general, if the Work is proceeding in accordance with the Contract Documents. He will not be required to make exhaustive or continuous on-site inspections to check the quality or quantity of the Work, nor will he be responsible for the construction means, methods, techniques, sequences, procedures or the safety precautions incident thereto. His efforts will be directed toward providing assurance

for the County that the completed project will conform to the requirements of the Contract Documents, but he will not be responsible for the Contractor's failure to perform the Work in accordance with the Contract Documents. On the basis of his on-site observations as an experienced and qualified design professional, he will keep the County informed of the progress of the Work and will endeavor to guard the County against defects and deficiencies in the Work of the Contractor.

10.3 The County Engineer will have authority to disapprove of or reject Work which is defective; i.e., it is unsatisfactory, faulty or defective, does not conform to the requirements of the Contract Documents or does not meet the requirements of any inspection, test or approval referred to in **Exhibit 1, Non-Technical Specifications,** Paragraph 12. He will also have authority to require special inspection or testing of the Work as provided in **Exhibit 1, Non-Technical Specifications,** Paragraph 14.3, whether or not the Work is fabricated, installed or completed.

10.4 Neither the County Engineer's authority to act under this **Exhibit 1, Non-Technical Specifications,** Paragraph 10 nor any decision made by him in good faith either to exercise or not exercise such authority shall give rise to any duty or responsibility of the County Engineer to the Contractor and Subcontractor, any of their agents or employees or any other person performing any of the Work.

11.0 COUNTY ENGINEER'S INTERPRETATIONS AND DECISIONS

11.1 The County Engineer will issue with reasonable promptness such written clarifications or interpretations (in the form of drawings or otherwise) as he may determine necessary for the proper execution of the Work. Such clarifications and interpretations are to be consistent with or reasonably inferable from the overall intent of the Contract Documents. If the Contractor believes that a written clarification and interpretation entitles him to an increase in the Contract Price, he may make a claim therefore as provided in **Exhibit 1, Non-Technical Specifications,** Paragraph 16.

11.2 The County Engineer will be the initial interpreter of the terms and conditions of the Contract Documents and the judge of the performance there under. In his capacity as interpreter and judge he will exercise his best efforts to insure faithful performance by both the County and the Contractor. He will not show partiality to either and shall not be liable for the result of any interpretation or decision rendered in good faith. Claims, disputes and other matters relating to the execution and progress of the Work or the interpretation of or performance under the Contract Documents shall be referred initially to the County Engineer for decisions, which he shall render in writing within a reasonable time.

12.0 TESTS AND INSPECTIONS

12.1 If the Contract Documents, laws, ordinances, rules, regulations or orders of any public authority having jurisdiction require any Work to specifically be inspected, tested or approved by someone other than the Contractor, the Contractor will give the County Engineer timely notice of readiness, therefore. The Contractor will furnish the County Engineer the required certificates of inspection, testing or approval. All such tests will be in accordance with the methods prescribed by the American Society for Testing and Materials, or such other applicable organization as may be required by law or the Contract Documents. If any such Work required to be inspected, tested or approved is covered up without written approval or consent of the County Engineer, it must, if directed by the County Engineer, be uncovered for observation at the Contractor's expense. The cost of all such inspections, tests and approvals shall be borne by the Contractor unless otherwise provided.

12.2 Any Work which fails to meet the requirements of any such test, inspection or approval

DocuSign Envelope ID: 775FCF57-23C4-4678-829D-D68E47097C5B

and any Work which meets the requirements of any such test or approval but does not meet the requirements of the Contract Documents shall be considered defective. Such defective Work may be rejected, corrected or accepted as provided in **Exhibit 1, Non-Technical Specifications,** Paragraph 19.

12.3 Neither observations by the County Engineer nor inspections, tests, or approvals by persons other than the Contractor shall relieve the Contractor from his obligations to perform the Work in accordance with the requirements of the Contract Documents.

13.0 CONTRACTOR'S SUPERVISION AND SUPERINTENDENCE

13.1 The Contractor will supervise and direct the Work efficiently and with his best skill and attention. He will be solely responsible for the means, methods, techniques, sequences and procedures of construction. Before undertaking the Work, he will carefully study and compare the Contract Documents and check and verify all figures shown thereon and all field measurements. He will at once report in writing to the County Engineer any conflict, error or discrepancy which he may discover. The Contractor will be responsible to see that the finished Work complies accurately with the Contract Documents.

13.2 The Contractor will keep on the Work, at all times during its progress, a resident superintendent satisfactory to the County Engineer. The superintendent shall not be replaced without the consent of the County Engineer, except under extraordinary circumstances. The superintendent will be the Contractor's representative at the site and shall have authority to act on behalf of the Contractor. All communications given to the superintendent shall be as binding as if given to the Contractor.

13.3 The Contractor will provide competent, suitably qualified personnel and perform construction as required by the Contract Documents. Survey and layout work shall be performed under direction of a Florida Registered Land Surveyor. Surveyor is required to sign, seal and return a form provided by the County. He will at all times maintain good discipline and order among his employees at the site.

13.4 The County Engineer will not be responsible for the acts or omissions of the Contractor, any Subcontractors, any of his or their agents or employees or any other persons performing any of the Work.

13.5 The Contractor shall have a responsible person or persons available on a 24-hour basis seven (7) days a week in order that contact can be made in emergencies and in cases where immediate action must be taken to maintain traffic or to overcome any other problem that might arise. The furnishing of a telephone number where such person or persons can be reached outside of normal working hours will constitute compliance with this provision.

14.0 ACCESS TO THE WORK: UNCOVERING FINISHED WORK

14.1 The County Engineer and his representatives and other representatives of the County will at all times have access to the Work. The Contractor will provide proper facilities for such access and observation of the Work and also for any inspection or testing thereof by others.

14.2 If any Work is covered contrary to the request of the County Engineer, it must, if requested by the County Engineer, be uncovered for his observation and replaced at the Contractor's expense.

14.3 If any Work has been covered which the County Engineer has not specifically requested to observe prior to its being covered, or if the County Engineer considers it necessary or advisable that covered Work be inspected or tested by others, the Contractor, at the Director's request, will uncover, expose or otherwise make available for observation, inspection or testing, that portion of Work in question, furnishing all necessary labor, material and equipment. If it is found that such Work is defective or does not meet the

DocuSign Envelope ID: 775FCF57-23C4-4678-829D-D68E47097C5B

requirements of the Contract Documents, the Contractor will bear all the expenses of such uncovering, exposure, observation, inspection and testing and of satisfactory reconstruction, including compensation for additional professional services. If, however, such Work is found to be non-defective and meets the requirements of the Contract Documents, the Contractor will be allowed an increase in the Contract Price or extension of the Contract Time directly attributable to such uncovering, exposure, observation, inspection, testing and reconstruction if he makes a claim therefore as provided in **Exhibit 1, Non-Technical Specifications,** Paragraph 16 and 17.

15.0 CHANGES IN THE CONTRACT WORK

15.1 Without invalidating the Agreement, the County may, at any time or from time to time, order additions, deletions, or revisions in the Work. These will be authorized by Change Order or Field Change Order as appropriate. Upon receipt of written authorization, the Contractor will proceed with the Work involved. All such Work shall be executed under the applicable conditions of the Contract Documents. If any changes in the Work cause an increase or decrease in the Contract Price, addition of Pay Items, or an extension or shortening of the Contract Time, an equitable adjustment will be made as provided in **Exhibit 1, Non-Technical Specifications,** Paragraphs 16 and 17.

15.2 The Public Works Director may authorize minor changes or alterations in the Work not involving extra cost and not inconsistent with the overall intent of the Contract Documents. These may be accomplished by a Field Change Order. If the Contractor believes that any minor change or alteration authorized by the Director entitles him to an increase in the Contract Price, he may make a claim therefore as provided in **Exhibit 1, Non-Technical Specifications,** Paragraph 16.

15.3 Additional work performed by the Contractor prior to written authorization will not automatically entitle him to additional compensation, an increase in the Contract Price, or an extension of the Contract Time.

15.4 It is the Contractor's responsibility to notify his surety of any changes affecting the general scope of the Work or change in the Contract Price, and the amount of the applicable Bonds shall be adjusted accordingly. The Contractor will furnish proof of such adjustment to the County.

16.0 CHANGE OF CONTRACT PRICE

16.1 The Contract Price constitutes the total compensation payable to the Contractor for performing the Work. All duties, responsibilities and obligations assigned to or undertaken by the Contractor shall be at his expense without change in the Contract Price. The Contract Price constitutes the total compensation payable to the Contractor for performing the Work plus any applicable Contingency Amount authorized in accordance with this Agreement.

16.2 The Contract Price may only be changed by a Change Order or Field Change Order. If the Contractor is entitled by the Contract Documents to make a claim for an increase in the Contract Price, his notice of intent to file a claim shall be in writing delivered to the County Engineer within ten (10) days of the occurrence of the event giving rise to the claim. The claim shall then be delivered to the County Engineer in writing within fifteen (15) days after the elimination of the event giving rise to the claim. Change orders and field change orders will be approved by the following procedure:

16.2.1 The Public Works Director or his designee may approve Field Change Orders that, either cumulatively or individually, increase the Contract Price up to the total amount of the contingency, provided that such Field Change Orders do not extend contract time or does not expand the size, function or intended use of the project contained in the contract documents.

DocuSign Envelope ID: 775FCF57-23C4-4678-829D-D68E47097C5B

16.2.2 The County Manager may approve Change Orders that, either cumulatively or individually, increase the Contract Price up to the total amount of the contingency; or Change Orders that, either cumulatively or individually, increase the Contract Price by ten percent of the original Contract Price or $100,000, whichever is less, provided that such Change Orders do not expand the size, function or intended use of the project contained in the contract documents.

16.2.3 The Board of County Commissioners has the sole authority to approve Change Orders that increase the Contract Price by more than ten percent of the original Contract Price or $100,000 or Change Orders that expand the size function or intended use of the project contained in the contract documents.

16.3 The value of any Work covered by a Change Order or Field Change Order, for any claim for an increase in the Contract Price, shall be determined in the following ways:

16.3.1 Where the Work involved is covered by unit prices contained in the Contract Documents, by application of unit prices to the quantities of the items involved.

16.3.2 Mutual acceptance of a lump sum or unit price.

16.3.3 Cost and a mutually acceptable fixed amount for overhead and profit.

16.3.4 If none of the above methods is agreed upon, the value shall be determined on the basis of costs and a percentage for overhead and profit. Costs shall only include labor (payroll, payroll taxes, fringe benefits, workman's compensation, etc.) materials, equipment, and other incidentals directly related to the Work involved. The maximum percentage which shall be allowed for the Contractor's combined overhead and profit, shall be as follows:

16.3.4.1 for all such Work done by his own organization, the Contractor may add up to 10% (ten percent) of his actual increase in cost; and

16.3.4.2 for all such Work done by Subcontractors, each Subcontractor may add up to 10% (ten percent) of his actual net increase in cost for combined overhead and profit; and the Contractor may add up to 5% (five percent) of the Subcontractor's total for his combined overhead and profit, provided that no overhead or profit shall be allowed on costs incurred in connection with premiums for public liability insurance or other special insurance directly related to such Work. In such case and also under paragraph 17.4.4.1, the Contractor will submit in a form prescribed by the Director an itemized cost breakdown together with supporting data

16.4 Pay factor adjustments shall be adjusted in accordance with details outlined in **Exhibit 2, Technical Specifications**.

17.0 CHANGE OF THE CONTRACT TIME

17.1 The Contract Time may be changed solely in a Change Order. If the Contractor is entitled by the Contract Documents to make a claim for an extension in the Contract Time, his notice of intent to file a claim shall be in writing delivered to the County Engineer within ten (10) days of the occurrence of the event giving rise to the claim. The claim shall then be delivered to the County Engineer in writing within fifteen (15) days after the elimination of the event giving rise to the claim. The County Manager may approve any extension in Contract Time. Contract Time shall not be extended for County designated holidays. Any change in the Contract Time resulting from any such claim shall be incorporated in a Change Order.

17.2 The Contract Time will be extended in an amount equal to time lost due to delays beyond the control of the Contractor, if he makes a claim therefore as provided in **Exhibit 1, Non-Technical Specifications,** Paragraph 17.1. Such delays shall only include acts of neglect by any separate contractor employed by the County, fires, floods, labor disputes,

epidemics, abnormal weather conditions, acts of God or other delays at the sole discretion of the County.

17.3 All time limits stated in the Contract Documents are of essence in the Agreement. The provisions of this **Exhibit 1, Non-Technical Specifications,** Paragraph 17 shall not exclude recovery for damages (including compensation for additional professional services) for delay by either party.

18.0 NEGLECTED WORK

18.1 If the Contractor should neglect to prosecute the Work in accordance with the Contract Documents, including any requirements of the progress schedule, after three (3) days written notice to the Contractor, the County Engineer may, without prejudice to any other remedy he may have, make good such deficiencies, and the cost thereof (including compensation for additional professional services) shall be charged against the Contractor. In this case a Change Order shall be issued incorporating the necessary revisions in the Contract Documents, including an appropriate reduction in the Contract Price. If the payments then or thereafter due the Contractor are not sufficient to cover such amount, the Contractor will pay the difference to the County.

19.0 WARRANTY AND GUARANTEE; CORRECTION, REMOVAL OR ACCEPTANCE OF DEFECTIVE WORK

19.1 The Contractor warrants and guarantees to the County and the County Engineer that all materials and equipment will be new unless otherwise specified; that all Work will be of good quality and free from faults or defects and in accordance with the requirements of the Contract Documents. All unsatisfactory Work, all faulty or defective Work and all Work not conforming to the requirements of the Contract Documents or of such inspections, tests or approvals shall be considered defective. Prompt notice of all defects shall be given to the Contractor. All defective Work, whether or not in place, may be rejected.

19.2 If required by either the Director or the County Engineer prior to approval of final payment, the Contractor will promptly, without cost to the County and as required by either the Director or the County Engineer, either correct any defective Work, whether or not fabricated, installed or completed, or, if the Work has been rejected by the County Engineer, remove it from the site and replace it with nondefective Work. If the Contractor does not correct such defective Work or remove and replace such rejected Work within a reasonable time, all as required by written notice from either the Director or the County Engineer, the County may have the deficiency corrected or the rejected Work removed and replaced. All direct or indirect cost of such correction or removal and replacement, including compensation for additional professional services, shall be paid by the Contractor, and an appropriate Change Order shall be issued deducting all such costs from the Contract Price. The Contractor will also bear the expenses of making good all Work of others destroyed or damaged by his correction, removal or replacement of his defective Work.

19.3 If, after the approval of final payment and prior to the expiration of one year after the date of substantial completion or such longer period of time as may be prescribed by law or by the terms of any applicable special guarantee required by the Contract Documents, any Work is found to be defective, the Contractor will promptly without cost to the County and in accordance with the County's written instructions either correct such defective Work, or, if it has been rejected by the County, remove it from the site and replace it with nondefective Work. If the Contractor does not promptly comply with the terms of such instructions, the County may have the defective Work corrected or the rejected Work removed and replaced, and all direct and indirect costs of such removal and replacement,

including compensation for additional professional services, will be paid by the Contractor.

19.4 If, instead of requiring correction or removal and replacement of defective Work, the County prefers to accept it, the County may do so. In such case, the appropriate reduction in the bid item amount shall be negotiated with the Contractor by the County Engineer with the appropriate reductions submitted in the application for final payment. In the event the appropriate reduction cannot be negotiated, the provisions of **Exhibit 1, Non-Technical Specifications,** Paragraph 16.3.4 shall prevail.

20.0 APPLICATIONS FOR PROGRESS PAYMENTS

20.1 Not more than once a month, the Contractor shall submit to the County Engineer for review the application for payment, covering the Work completed as of the date of the application. If payment is requested by the Contractor on the basis of materials and equipment not incorporated in the Work but delivered and suitably stored at the site or at another location agreed to in writing, the request for payment shall also be accompanied by such supporting data, satisfactory to the County Engineer, as will establish 100% of invoice cost. Such payment to the Contractor shall not exceed seventy-five percent (75%) of the Unit Bid Price. Materials missing or damaged, for which partial or total payment has been made, shall be replaced by the Contractor at his expense.

20.2 The Contractor warrants and guarantees that title to all Work, materials and equipment covered by an application for payment, whether incorporated in the project or not, will have passed to the County prior to the making of the application for payment, free and clear of all liens, claims, security interests and encumbrances (hereafter in these General Conditions referred to as "liens"). The Contractor further warrants and guarantees 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. Non-payment of subcontractors and suppliers will be referred to the Contractor's Surety for resolution.

20.3 The County Engineer will, within ten (10) days after Contractor submittal of each application for payment, indicate in writing his approval of payment, less any retainage as specified by contract, and present the application to the Clerk of the Court for payment. The Clerk of the Court will pay the Contractor the amount approved by the County Engineer in accordance with Florida's Prompt Payment Act.

21.0 APPROVAL OF PAYMENTS

21.1 The County Engineer's approval of any payment requested in an application for payment shall constitute a representation by him to the County, based on the County Engineer's on-site observations of the work in progress as an experienced and qualified design professional and on his review of the application for payment and the supporting data, that the Work has progressed to the point indicated; to the best of his knowledge, information and belief, that the quality of the Work is in accordance with the Contract Documents (subject to an evaluation of the Work as a functioning project upon substantial completion, to the results of any subsequent tests called for in the Contract Document and any qualifications stated in his approval); and that the Contractor is entitled to payment of the amount approved. However, by approving any such payment, the County Engineer shall not thereby be deemed to have represented that he made exhaustive or continuous on-site inspections to check the quality or the quantity of the Work; that he has reviewed the means, methods and techniques, sequences and procedures of construction; or that he has

DocuSign Envelope ID: 775FCF57-23C4-4678-829D-D68E47097C5B

made any examination to ascertain how or for what purpose the Contractor has used the monies paid or to be paid to him.

21.2 The County Engineer's approval of final payment shall constitute an additional representation by him to the County that the conditions precedent to the Contractor's being entitled to final payment, as set forth in **Exhibit 1, Non-Technical Specifications,** Paragraph 22.3, have been fulfilled.

21.3 The County Engineer may refuse to approve the whole or any part of any payment if, in his opinion, he is unable to make such representations to the County. He may also refuse to approve any such payment, or, because of subsequently discovered evidence or the results of subsequent inspections or tests, may nullify any such payment previously approved, to such extent as may be necessary in his opinion to protect the County from loss because:

21.3.1 The Work is defective.

21.3.2 Claims have been filed, or there is reasonable evidence indicating the probable filing thereof.

21.3.3 The Contract Price has been reduced.

21.3.4 The County has been required to correct defective Work or complete the Work in accordance with **Exhibit 1, Non-Technical Specifications,** Paragraph 18, or

21.3.5 Unsatisfactory prosecution of the Work, including failure to clean up as required by **Exhibit 1, Non-Technical Specifications,** Paragraph 23.

22.0 FINAL PAYMENT

22.1 Upon notification from the Contractor that the project is complete, the County Engineer will make a final inspection with the Contractor and will notify the Contractor in writing of any particulars in which this inspection reveals that the Work is defective. The Contractor shall immediately make such corrections as are necessary to remedy such defects.

22.2 After the Contractor has completed any such corrections to the satisfaction of the County Engineer and delivered all maintenance and operating instructions, schedules, guarantees, Bonds, certificates of inspection and other documents, all as required by the Contract Documents, he may receive final payment following the procedure for progress payments. The final application for payment shall be accompanied by the Contractor's Affidavit and Release of Lien and Subcontractor/Materialman Waiver and Release of Lien, utilizing forms provided by the County. Nothing in this section waives the rights of the Contractor under Section 255.05(11) F.S. The County Engineer will execute a Certificate of Completion and recommend final payment.

22.3 If, on the basis of his observation and review of the Work during construction, his final inspection and his review of the final application for payment, all as required by the Contract Documents, the County Engineer is satisfied that the Work has been completed and the Contractor has fulfilled all of his obligations under the Contract Documents, he will, within ten (10) days after Contractor concurrence of the final application for payment, indicate in writing his approval of payment and present the application to the Clerk of the Court for payment. The Clerk of the Court will pay the Contractor the amount approved by the County Engineer in accordance with Florida's Prompt Payment Act.

22.4 If after substantial completion of the Work, final completion thereof is materially delayed through no fault of the Contractor, and the County Engineer so confirms, the County shall, upon certification by the County Engineer, and without terminating the Agreement, make payment of the balance due for that portion of the work fully completed and accepted. If the remaining balance for Work not fully completed or corrected is less than the retainage stipulated in the Agreement, and if Bonds have been furnished, the written consent of the

DocuSign Envelope ID: 775FCF57-23C4-4678-829D-D68E47097C5B

surety to the payment of the balance due for that portion of the Work fully completed and accepted shall be submitted by the Contractor to the County Engineer prior to certification of such payment. Such payment shall be made under the terms and conditions governing final payment, except that it shall not constitute a waiver of claim.

23.0 CLEANING UP

23.1 The Contractor will keep the premises free from accumulations of waste materials, rubbish and other debris resulting from the Work, and, at the completion of the Work, he will remove all waste materials, rubbish and debris from and about the premises, as well as all tools, construction equipment and machinery and surplus materials, leaving the site clean and ready for occupancy by the County. The Contractor will restore to their original condition those portions of the site not designated for alteration by the Contract Documents.

24.0 COUNTY'S RIGHT TO STOP OR SUSPEND WORK

24.1 If the Work is defective, if the Contractor fails to supply sufficient skilled workmen or suitable materials or equipment or if the Contractor fails to make prompt payments to Subcontractors for labor, materials or equipment, the County may order the Contractor to stop the Work, or any portion thereof, until the cause for such order has been eliminated. The Contractor will be allowed no increase in Contract Price or extension of the Contract Time.

24.2 The County may, at any time and without cause, suspend the Work, at any portion thereof, for a period of not more than ninety (90) days by notice in writing to the Contractor, and shall determine the date on which the Work will be resumed. The Contractor will resume the work on the date so determined. The Contractor may be allowed an increase in the Contract Price or an extension of the Contract Time directly attributable to any suspension provided he makes a claim therefore as provided in **Exhibit 1, Non-Technical Specifications,** Paragraphs 16 and 17.

DocuSign Envelope ID: 775FCF57-23C4-4678-829D-D68E47097C5B

EXHIBIT 2 – Part 1

Technical Specifications

CR 325 over Cross Creek - Bridge Rehabilitation

Project No. 919-7903-FY19-260027

DocuSign Envelope ID: 775FCF57-23C4-4678-829D-D68E47097C5B

E-01 GENERAL

All described in these specifications supplement the work detailed in the construction drawings for County Project 919-7903 titled "CR 325 over Cross Creek -Bridge Rehabilitation," contained in Exhibit 10, prepared by HNTB Corporation and Alachua County Public Works. In the event any work conflicts with the aforementioned construction drawings and these Technical Specifications, the provision herein shall prevail.

All work shall be performed in accordance with the design plans and the FDOT Standard Specifications for Road and Bridge Construction, July 2019 edition, except as provided for in these "Technical Specifications." Deviation from these standards will be permitted only upon presentation of specific written authorization by the County.

Whenever, in the Florida Department of Transportation's Standard Specifications for Road and Bridge Construction, the following terms or their pronouns occur, they shall be defined as follows: Department of Transportation: Board of County Commissioners of Alachua County, Florida, or its duly authorized representative.

State Highway Engineer, State Transportation Engineer, District Engineer, Engineer of Materials and Tests, Engineer, Inspector: The Alachua County Engineer.

E-02 STANDARD DOCUMENTS

Construction shown on the Drawings shall conform to the technical portions of the:
Florida Department of Transportation Standard Specifications for Road and Bridge Construction, July 2019 edition, the Florida Greenbook, 2018 edition and the Americans with Disabilities Act Guidelines, except when otherwise indicated hereinafter and
The drawings reference Index Sheets and Standards which are the FDOT Standard Plans for Roadway and Bridge Construction, 2019-2020 edition.

References to Article Numbers, hereinafter, apply to the FDOT Standard Specifications for Road and Bridge Construction, July 2019 edition.

All traffic control devices and procedures shall conform to the FDOT and/or Federal Manual on Uniform Traffic Control Devices for Streets and Highways (MUTCD), 2009 edition

E-03 MODIFICATIONS TO THE FDOT STANDARD SPECIFICATIONS

All work on the roadway portion of this Contract shall conform to the applicable technical specifications of the Florida Department of Transportation Standard Specifications for Road and Bridge Construction, July 2018 edition, (Division II and III) and the current edition of Supplemental Specifications thereto, except as modified and supplemented hereinafter or in the "Technical Specifications" section. The following shall be interpreted as additions unless otherwise noted. References to Section numbers hereinafter apply to the FDOT Standard Specifications. In the event that any information contained hereinafter or in the "Technical Specifications" section conflict with the FDOT Standard Specifications, the provisions contained herein shall prevail.

SECTION 1 *DEFINITIONS AND TERMS*

1-3 Definitions:

Department
Shall be understood to be the County (Alachua County) or authorized representative of the County.

DocuSign Envelope ID: 775FCF57-23C4-4678-829D-D68E47097C5B

Holidays

To Holidays listed, add Christmas Eve Day.

Substantial Completion

Substantial completion has been attained when all asphalt, initial striping, structures, signage, and final stabilization have been constructed and the County has inspected and accepted the work.

Supplemental Agreement

This term shall be understood to be Change Order or Field Change Order.

Working Day

Saturdays, Sundays and County-designated holidays are not considered working days.
Unless prior approval is received from the County Engineer, work shall not be performed on these days.

SECTION 2 *PROPOSAL REQUIREMENTS AND CONDITIONS*

Delete this section.

SECTION 3 *AWARD AND EXECUTION OF CONTRACT*

Delete this section.

SECTION 4 *SCOPE OF THE WORK*

4-3.2.1 Allowable Costs for Extra Work

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; the Contractor shall provide documentation to the County demonstrating the bond rate paid in order to receive additional compensation for bond premiums. No compensation for bond premium will be allowed for additional or unforeseen work paid via initial contingency pay items.

4-5 Rights in and use of material found on the site of the work

All usable excess materials (pipe, vegetation, structures, earth, etc.) shall remain property of Alachua County and shall be stockpiled for removal by the County or delivered as specified in Exhibit 2, "Technical Specifications." Unusable, damaged or other excess materials, as designated by the County Engineer's representative, shall be disposed of by the Contractor.

All other items addressed in Section 4 of the specifications are deleted.

SECTION 6 *CONTROL OF MATERIALS*

Prior to ordering of materials, provide a material submittal for approval by the County for all materials & products that will be incorporated into the project. This shall include all materials included on the Approved Products List.

SECTION 7 *LEGAL REQUIREMENTS AND RESPONSIBILITY TO THE PUBLIC*

7-11.5.3 Utility Adjustments

DocuSign Envelope ID: 775FCF57-23C4-4678-829D-D68E47097C5B

Utility work which will be accomplished concurrently with this Contract will involve facilities owned by other agencies. Utility Schedules (Utility Relocation and/or Work Schedules) for these agencies are posted as part of the advertisement for this project on DemandStar. Take responsibility to obtain this information and comply with all requirements posted on the website up through seven calendar days before opening of bids. Contractor shall incorporate all posted schedules within their bid and work schedule.

7-13 Insurance

Delete this subsection.

7-14 Contractor's Responsibility for Work

This subsection is replaced with the following:

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 or from any other cause whatsoever, until the Department'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 Department will have no obligation to pay any reimbursement for damage caused by the execution or non-execution of the Work by the Contractor or its sub- contractors, or damage the Contractor was negligent in preventing.

For damage to installed material caused by third parties, the Contractor shall pursue recovery from the third party. The Department shall not reimburse the Contractor for repair costs due to damage, theft or vandalism to installed material caused by third parties. If the third party is unknown or the Contractor is unable to obtain recovery from the third party, the Contractor may pursue recovery through its Insurance Policy.

The Department may, at its 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.

7-22 Available Funds

Delete this subsection.

7-23 Contractor's Motor Vehicle Registration

Delete this subsection.

SECTION 8 *PROSECUTION AND PROGRESS*

8-1 Subletting or Assigning of Contracts

Provisions concerning subcontracts are contained in Exhibit 1.

8-6 Suspension of Contractor's Operations - Holidays and Special Events

A working day shall not be charged for such suspensions; working days not charged shall be denoted monthly on the pay application.

8-7.3 Adjusting Contract Time

Adjustments to contract time, excluding weather, will be in accordance with Exhibit 1. Language contained in 8-7.3 is applicable; in the case of discrepancies, the language in Exhibit 1 shall prevail. A working day shall not be charged for weather days; working days not charged shall be denoted monthly on the pay application.

DocuSign Envelope ID: 775FCF57-23C4-4678-829D-D68E47097C5B

8-8 Thru 8-11

Delete these subsections.

SECTION 9 *MEASUREMENT AND PAYMENT*

Delete this section except for Section 9-2.

9-2 Scope of Payments.
Measurement and payment of quantities shall be as measured once installed and accepted. Measurement shall be in the form of the applicable unit. Exceptions are materials stockpiled due to availability prior to need, for which 100% of invoice may be paid, not to exceed 75% of bid price for the installed and accepted material. Progress payments and final payments will be in accordance with Exhibit 1.

9-2.1.1 Fuels

Delete this subsection.

SECTION 102 *MAINTENANCE OF TRAFFIC*

102-5.1 Standards
Basic principles and minimum standards for all traffic maintenance activities will be in accordance with the current edition of the Index of Roadway and Traffic Design Standards and the Manual on Uniform Traffic Control Devices.

Develop and submit a maintenance of traffic plan in accordance with Exhibit 1. This item shall also include all temporary pavement markings and the placement of the workzone RPM's on all asphalt intermediate surfaces. RPM's, temporary and final, shall be placed prior to opening the roadway to traffic. This section shall include the usage of portable changeable messages signs (PCMS) for at least one week prior to the start of construction to alert motorist of pending construction and during construction to alert motorist of changes in the traffic patterns or signalization control. The section shall include maintenance of pedestrian and bicycle accessibility through the work zone in accordance with FDOT and ADA standards at all times. This section shall include an off-duty law enforcement officer anytime a flagman is required in a signalized intersection. This section shall include relocation of mailboxes as required for maintenance of postal service, the temporary relocation of signs for visibility for emergency responders and final relocation. It is the contractor's responsibility to replace any signs that are damaged during construction.

Access to all driveways shall be provided at all times unless a closure is coordinated with the property owner. Coordination for driveway access with the property owners shall be the responsibility of the contractor. The contractor shall provide and maintain temporary vehicle detection at all traffic signals; use of infrared detectors are prohibited. The contractor shall notify Alachua County Public Works at least two working days prior to any planned closures.

No lane closures will be permitted prior to 8:00 AM or after 5:00 PM. Traffic shall not be allowed to drive on a milled surface.

The contractor shall adhere to all requirements of this section and the approved MOT plan at all times. Any deficiency of this section shall be corrected within 24-hour notice from the County; in the sole opinion and discretion of the County, failure to do so may result in liquated damages in the amount equivalent to the final completion liquidated damages amount outlined in this solicitation for each and every calendar day the deficiency remains.

102-13 Basis of payment

DocuSign Envelope ID: 775FCF57-23C4-4678-829D-D68E47097C5B

All traffic control devices (including signs), warning devices and barriers shall be furnished and maintained by the Contractor. Cost of all devices necessary for conformance to the FDOT Standard Plans for Roadway and Bridge Construction Dated 2018-2019 and this section shall be included in lump sum bid item for Maintenance of Traffic, unless bid separately.

SECTION 104 *PREVENTION, CONTROL, AND ABATEMENT OF EROSION AND WATER POLLUTION*

This section shall include the installation, cost and maintenance of any materials to comply with construction drawings, the Stormwater Pollution Prevention Plan, the Erosion & Sedimentation Control Plan and any other regulations as required by law for any work done under this contract. This section shall include filing of a Notice of Intent with the Florida Department of Environmental Protection for stormwater discharge. Develop and submit Stormwater Pollution Prevention Plan and/or an Erosion & Sedimentation Control Plan in accordance with Exhibit 1 if the plan(s) are not included in the construction drawings.

104-10 Basis of Payment

The installation and maintenance of all items for conformance to this section shall be included LS bid item for prevention, control and abatement of erosion and water pollution unless bid separately.

SECTION 107 *LITTER REMOVAL AND MOWING*

The contractor shall perform litter removal, mowing and edging of the right-of-way as directed by the County Inspector

107-4 Basis of Payment

Payment for litter removal, mowing and edging shall be bid in mowing pay item per acre.

SECTION 110 *CLEARING AND GRUBBING*

The contractor shall clear and grub only those portions of the site necessary for construction. The contractor shall be responsible for disposing of all demolition materials in a safe and lawful manner. The contractor shall salvage to the County any item as determined by the County.

This section shall include the saw-cutting of existing driveways & sidewalks and any clearing within the limits of construction.

This section shall include trimming trees and vegetation to a height of 17.5 ft. above and 18 ft. beyond the edge of travel way, or a height of 17.5 ft. above and 4 ft. beyond the back of curb for curb and gutter sections. This section shall also include trimming trees and vegetation to a height of 8 ft. above the sidewalks/paths and 2 ft. beyond either side of the sidewalks/paths. The contractor shall notify the County Horticulturist 48 hours prior to any planned trimming operations. All tree trimming and root pruning shall be performed in accordance with ANSI A300 Standards.

110-7 Removal of Existing Concrete

Removal or relocation of pipe, pipe end treatments, drainage structures, fence and any other items noted in the plans or not noted in the plans not covered by other sections, within the limits of construction, shall be included in this section.

110-12 Basis of Payment

All work required under this section shall be bid in lump sum item for clearing & grubbing unless bid separately.

SECTION 120 *EXCAVATION AND EMBANKMENT*

DocuSign Envelope ID: 775FCF57-23C4-4678-829D-D68E47097C5B

This section shall include spreading, redistributing and compacting of any on-site materials as required by the plans and to the redistribution or removal onsite material required to attain the proposed grades as indicated on the plans. All excess material suitable materials shall remain property of the County. This section shall include the contractor's delivery of the excess suitable material to Alachua County Public Works Compound at 5620 NW 120th Lane Gainesville, FL.

120-4.1 Subsoil Excavation

This shall only be used as directed by the County Inspector or as required by the plans. Subsoil excavations shall occur to a depth of 24 inches below the bottom of the limerock base in accordance with Standard Plan Index 120-002 or as required by the plans.

120-6 Borrow

This shall only be used if approved by the County Inspector. Borrow material shall be supplied by the contractor from an approved, permitted source. Suitability of borrow material shall be approved by Alachua County prior to use.

120-8 Embankment Construction

Fill placed for roadway embankment or replacement of sub soil excavation shall be placed in a maximum of l2" lifts, and compacted to minimum density specified in the plans. Materials placed for stormwater management basin embankments shall be placed in maximum 12" lifts. Fill material placed over the top of the pipe shall be placed in maximum of 12" thick lifts

Placement and compaction of embankment shall be constructed to full width required, in sections not less than 300 feet in length or full length of the embankment.

120-9 Compaction of Embankments

Compaction of materials which will be over four (4) feet below the top of subgrades shall be compacted to 95% of the maximum density as determined by AASHTO T-180, Method D. Materials within four (4) feet of top of subgrades shall be compacted to 98% of AASHTO T-180, Method D.

Materials placed for stormwater management basin embankments shall be compacted to a minimum of 95% of maximum density as determined by AASHTO Method T-99.

120-10 Compaction of Embankments

A lift shall be considered any single layer spread and compacted, regardless of length and size prior to subsequent placement of fill material.

Upper four (4) feet of embankment including pipe trenches: Each lift shall be tested for minimum compaction required for subgrade, as specified on the plans. No less than one density verification for each 500 linear foot length of a single lift of embankment.

Embankment sections over four (4) feet in depth including pipe trenches: Material below the upper four (4) feet - a minimum of every other lift. No less than one density verification for each 500 linear feet of a tested lift.

Embankment for retention ponds: Every other 12" lift. No less than one density verification for each 500 linear foot length of a tested lift.

120-13 Method of Measurement

Delete this entire subsection with the exception of Section 120-13.3, "Borrow Excavation" and Section 120-13.6, "Subsoil Excavation." Borrow excavation shall represent all materials obtained from off-site areas necessary for construction to required line and grade. Measurements shall be by cubic yard, truck measured, delivered and placed. All other work included in this section shall be considered grading unless bid separately.

DocuSign Envelope ID: 775FCF57-23C4-4678-829D-D68E47097C5B

120-14 Basis of Payment

Compensation for all work required under this section, excluding borrow, shall be paid under the lump sum pay items for grading. Area noted in the plans for Subsoil Excavation shall be paid by LS; any other Subsoil Excavation required by the County shall be paid by the CY.

The following are the plan quantities and are for informational purposes only; contractor shall conduct plan take-offs to bid accordingly:

Description	Regular Excavation (CY)	Embankment (CY)	Subsoil Excavation (CY)
Roadway	**50**	**50**	**0**

SECTION 125 *EXCAVATION FOR STRUCTURES AND PIPE*

Density requirements shall be in accordance with the modification provided herein for Section 120. Exceptions provided for outside of roadway embankment still apply.

SECTION 160 *STABILIZING*

LBR Stabilization: After stabilization and mixing, sample to a depth of 12" minimum for each change of subgrade material, or each section of subgrade with differing amounts of added stabilizing material. Minimum of 2 tests per mile of roadway. No less than 2 determinations shall be made per project. Verify width and depth of stabilization every 200 foot.

Density: No less than one density determination per 500 feet of subgrade or one per each section of roadway between intersections or between intersections and ends of cul-de-sac roads. Density shall be as specified on design plans, utilizing the proctor sample as modified for the LBR testing. Subgrade densities performed solely for placement of curb shall not satisfy requirements for subgrade density verification prior to base material placement. Curb densities shall be performed at the same frequency as subgrade densities. Portions of subgrade not worked as a part of overall compactive effort or sections replaced as rework or repair, shall be tested for density and bearing value prior to placement of base rock.

160-4.1.4.3.1 Under-tolerances in Bearing Value Requirements

Where plans call for a minimum LBR value, under tolerance criteria is not applicable.

SECTION 200 *ROCK BASE*

Limerock shall be constructed to specified thickness and shall be compacted to 98% AASHTO T-180. No less than one density determination per 500 linear feet of base. Minimum of one density test between intersections or intersection and end of cul-de-sac roads. A minimum of 2 densities per project shall be performed.

200-9 Calculations for Average Thickness of Base

Delete this section.

200-10 Method of Measurement

Delete this section. Quantity to be paid for will be the as measured square yards of rock base with the minimum thickness, shaped to the required line, grade, and profile.

SECTION 285 *OPTIONAL BASE COURSE*

Limerock shall be constructed to specified thickness and shall be compacted to 98% AASHTO T-180. No less than one density determination per 500 linear feet of base. Minimum of one density

DocuSign Envelope ID: 775FCF57-23C4-4678-829D-D68E47097C5B

test between intersections or intersection and end of cul-de-sac roads. A minimum of 2 densities per project shall be performed.

285-7 Calculations for Average Thickness of Base
Delete this section.

285-8 Method of Measurement
Delete this section. Quantity to be paid for will be the as measured square yards of rock base with the minimum thickness, shaped to the required line, grade, and profile OR as noted in the bid tab.

SECTION 300 *PRIME AND TACK COATS FOR BASE COURSES*

300-10 Basis of Payment
Cost of priming will be included in the unit cost per square yard of limerock, asphalt base or structural asphalt. Cost of tack coats shall be included in the unit cost of asphaltic concrete to be placed.

SECTION 327 *MILLING OF EXISTING ASPHALT PAVEMENT*

327-1 Description
Mill material shall remain the property of Alachua County unless otherwise specified by the County Engineer in writing. This section shall include the contractor's delivery of the milled asphalt to Minnie Crown Pit on SW 63rd Blvd immediately south of Archer Road. Delivery shall be coordinated with the County Road Superintendent and Inspector.

SECTION 330 *HOT BITUMINOUS MIXTURES, GENERAL CONSTRUCTION REQUIREMENTS*

The Contractor shall furnish asphaltic concrete from a FDOT certified plant. The Contractor's quality control shall be implemented in accordance with Section 330 during the course of providing materials for the project.

SECTION 334 *SUPERPAVE ASPHALT CONCRETE*

Delete this section and replace with the following:

334-1 Description.
334-1.1 General
Construct a Hot Mix Asphalt (HMA) pavement based on the type of work specified in the Contract and the Asphalt Work Categories as defined below. Meet the applicable requirements for plants, equipment, and construction requirements as defined below. Use a HMA mix that meets the requirements of this specification

334-1.2 Asphalt Work Mix Categories
Construction of Hot Mix Asphalt Pavement will fall into one of the following work categories:
334-1.2.1 Asphalt Work Category 1: Includes the construction of bike paths and miscellaneous asphalt.
334-1.2.2 Asphalt Work Category 2: Includes the construction of new HMA turn lanes, paved shoulders and other non-mainline pavement locations.
334-1.2.3 Asphalt Work Category 3: Includes the construction of new mainline HMA pavement lanes, milling and resurfacing.

334-1.3 Mix Types

DocuSign Envelope ID: 775FCF57-23C4-4678-829D-D68E47097C5B

Use the appropriate HMA mix as shown in Table 334-1.

Table 334-1 HMA Mix Types			
Asphalt Work Category	Mix Types	Traffic Level	ESALs (millions)
1	Type SP-9.5	A	<0.3
2	Structural Mixes: Types SP-9.5 or SP-12.5 Friction Mixes: Types FC-9.5 or FC-12.5	B	0.3 to <3
3	Structural Mixes: Types SP-9.5 or SP-12.5 Friction Mixes: Types FC-9.5 or FC-12.5	C	≥3

A Type SP or FC mix one traffic level higher than the traffic level specified in the Contract may be substituted, at no additional cost (i.e. Traffic Level B may be substituted for Traffic Level A, etc.). Traffic levels are as defined in Section 334 of the Department's Standard Specifications for Road and Bridge Construction.

334-1.4 Gradation Classification
HMA mixes are classified as either coarse or fine, depending on the overall gradation of the mixture. Coarse and fine mixes are defined in 334-3.2.2. Use only fine mixes.

The equivalent AASHTO nominal maximum aggregate size Superpave mixes are as follows:
Type SP-9.5, FC-9.5 ..... 9.5 mm
Type SP-12.5, FC-12.5 ..... 12.5 mm

334-1.5 Thickness
The total pavement thickness of the HMA pavement will be based on a specified spread rate or plan thickness as shown in the Contract Documents. Before paving, propose a spread rate or thickness for each individual layer meeting the requirements of this specification, which when combined with other layers (as applicable) will equal the plan spread rate or thickness. When the total pavement thickness is specified as plan thickness, the plan thickness and individual layer thickness will be converted to spread rate using the following equation:

Spread rate (lbs/yd^2) = t x G_{mm} x 43.3

where: t = Thickness (in.) (Plan thickness or individual layer thickness)
G_{mm} = Maximum specific gravity from the mix design

For target purposes only, spread rate calculations shall be rounded to the nearest whole number.

334-1.5.1 Layer Thicknesses: Unless otherwise called for in the Contract Documents, the allowable layer thicknesses for HMA mixtures are as follows:
Type SP-9.5, FC-9.5 .....¾ – 1-1/2 inches
Type SP-12.5, FC-12.5 .....1 ½ – 2-1/2 inches

334-1.5.2 Additional Requirements: The following requirements also apply to HMA mixtures:

1. When construction includes the paving of adjacent shoulders (less than or equal to 5 feet wide), the layer thickness for the upper pavement layer and shoulder shall be the same and paved in a single pass, unless otherwise called for in the Contract Documents.

DocuSign Envelope ID: 775FCF57-23C4-4678-829D-D68E47097C5B

2. For overbuild layers, use the minimum and maximum layer thicknesses as specified above unless called for differently in the Contract Documents. On variable thickness overbuild layers, the minimum allowable thickness may be reduced by ½ inch, and the maximum allowable thickness may be increased by ½ inch, unless called for differently in the Contract Documents.

334-1.6 Weight of Mixture

The weight of the mixture shall be determined as provided in 320-2.2 of the Florida Department of Transportation (FDOT) specifications.

334-2 Materials.

334-2.1 Superpave Asphalt Binder

Unless specified elsewhere in the Contract or in 334-2.3.3, use a PG 67-22 asphalt binder from the FDOT's Qualified Products List (QPL). If the Contract calls for an alternative binder, meet the requirements of FDOT Specifications Section 336 or 916, as appropriate.

334-2.2 Aggregate

Use aggregate capable of producing a quality pavement.

For Type FC mixes, use an aggregate blend that consists of crushed granite, crushed Oolitic limestone, other crushed materials (as approved by FDOT for friction courses per Rule 14-103.005, Florida Administrative Code), or a combination of the above. Crushed limestone from the Oolitic formation may be used if it contains a minimum of 12% silica material as determined by FDOT Test Method FM 5-510 and FDOT grants approval of the source prior to its use. As an exception, mixes that contain a minimum of 60% crushed granite may either contain:

1. Up to 40% fine aggregate from other sources; or,
2. A combination of up to 20% RAP and the remaining fine aggregate from other sources.

A list of aggregates approved for use in friction courses may be available on the FDOT's State Materials Office website. The URL for obtaining this information, if available, is: ftp.dot.state.fl.us/fdot/smo/website/sources/frictioncourse.pdf .

334-2.3 Reclaimed Asphalt Pavement (RAP) Material

334-2.3.1 General requirements: RAP may be used as a component of the asphalt mixture, if approved by the Engineer. Usage of RAP is subject to the following requirements:

1. Limit the amount of RAP material used in the mix to a maximum of 50% by weight of total aggregate. When using a PG 76-22 (PMA), or PG 76-22 (ARB) asphalt binder, limit the amount of RAP material used in the mix to a maximum of 20% by weight of total aggregate. As an exception, amounts greater than 20% RAP by weight of total aggregate can be used if no more than 20% by weight of total asphalt binder comes from the RAP material.
2. Provide stockpiled RAP material that is reasonably consistent in characteristics and contains no aggregate particles which are soft or conglomerates of fines.
3. Provide RAP material having a minimum average asphalt content of 4.0% by weight of total mix. . As an exception, when using fractionated RAP, the minimum average asphalt binder content for the coarse portion of the RAP shall be 2.5% by weight of the coarse portion of the RAP. The coarse portion of the RAP shall be the portion of the RAP retained on the No. 4 sieve. The Engineer may sample the stockpile to verify that this requirement is met.
4. 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 recycle mixture. If oversized RAP material appears in the completed recycle mix, take the appropriate corrective action immediately. If the appropriate corrective actions are not immediately taken, stop plant operations.

334-2.3.2 Material Characterization: Assume responsibility for establishing the asphalt binder content, gradation, viscosity and bulk specific gravity (G_{sb}) of the RAP material based on a representative sampling of the material.

334-2.3.3 Asphalt Binder for Mixes with RAP: Select the appropriate asphalt binder grade

DocuSign Envelope ID: 775FCF57-23C4-4678-829D-D68E47097C5B

based on Table 334-2. The Engineer reserves the right to change the asphalt binder type and grade during production based on characteristics of the RAP asphalt binder.

Table 334-2 Asphalt Binder Grade for Mixes Containing RAP	
Percent RAP	Asphalt Binder Grade
< 20	PG 67-22
20 – 29	PG 58-22
≥ 30	PG 52-28

334-3 Composition of Mixture.

334-3.1 General

Compose the asphalt mixture using a combination of aggregates, mineral filler, if required, and asphalt binder material. Size, grade and combine the aggregate fractions to meet the grading and physical properties of the mix design. Aggregates from various sources may be combined.

334-3.2 Mix Design

334-3.2.1 General: The Contractor shall use a valid, currently approved FDOT Mix Design. Copies of approved mix design shall be provided by the Contractor and shall be approved by the County prior to use. Design the asphalt mixture in accordance with AASHTO R 35-09, except as noted herein. Submit the proposed mix design with supporting test data indicating compliance with all mix design criteria to the Engineer. Prior to the production of any asphalt mixture, obtain the Engineer's conditional approval of the mix design. If required by the Engineer, send representative samples of all component materials, including asphalt binder to a laboratory designated by the Engineer for verification.

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 at his discretion, the Engineer may no longer allow the use of the mix design.

334-3.2.2 Mixture Gradation Requirements: Combine the aggregates in proportions that will produce an asphalt mixture meeting all of the requirements defined in this specification and conform to the gradation requirements at design as defined in AASHTO M 323-12, Table 3. Aggregates from various sources may be combined.

334-3.2.2.1 Mixture Gradation Classification: Plot the combined mixture gradation on an FHWA 0.45 Power Gradation Chart. Include the Control Points from AASHTO M323-12, Table-3, as well as the Primary Control Sieve (PCS) Control Point from AASHTO M323-12, Table 4. Fine mixes are defined as having a gradation that passes above or through the primary control sieve control point. Use only fine mixes.

334-3.2.3 Gyratory Compaction: Compact the design mixture in accordance with AASHTO T312-12 with the following exceptions: use the number of gyrations at N_{design} as shown in Table 334-3.

Table 334-3 Gyratory Compaction Requirements	
Traffic Level	N_{design} Number of Gyrations
A	50
B	65
C	75

334-3.2.4 Design Criteria: Meet the requirements for nominal maximum aggregate size as defined in AASHTO M323-12, as well as for relative density, VMA, VFA, and dust-to-binder ratio as specified in AASHTO M323-12, Table 6. $N_{initial}$ and $N_{maximum}$ requirements are not applicable.

DocuSign Envelope ID: 775FCF57-23C4-4678-829D-D68E47097C5B

334-3.2.5 Moisture Susceptibility: Test 4-inch specimens in accordance with FM 1-T 283. Provide a mixture having a retained tensile strength ratio of at least 0.80 and a minimum tensile strength (unconditioned) of 100 psi. If necessary, add a liquid anti-stripping agent from the FDOT's Qualified Products List or hydrated lime in order to meet these criteria.

In lieu of moisture susceptibility testing, add a liquid anti-stripping agent from the FDOT's Qualified Products List. Add 0.5% liquid anti-stripping agent by weight of binder.

334-3.2.6 Additional Information: In addition to the requirements listed above, provide the following information on each mix design:

1. The design traffic level and the design number of gyrations (N_{design}).
2. The source and description of the materials to be used.
3. The FDOT source number and the FDOT product code of the aggregate components furnished from an FDOT approved source (if required).
4. The gradation and proportions of the raw materials as intended to be combined in the paving mixture. The gradation of the component materials shall be representative of the material at the time of use. Compensate for any change in aggregate gradation caused by handling and processing as necessary.
5. A single percentage of the combined mineral aggregate passing each specified sieve. Degradation of the aggregate due to processing (particularly material passing the No. 200 sieve) should be accounted for and identified.
6. The bulk specific gravity (G_{sb}) value for each individual aggregate and RAP component.
7. A single percentage of asphalt binder by weight of total mix intended to be incorporated in the completed mixture, shown to the nearest 0.1%.
8. A target temperature at which the mixture is to be discharged from the plant and a target roadway temperature. Do not exceed a target temperature of 330°F for modified asphalts and 315°F for unmodified asphalts.
9. Provide the physical properties achieved at four different asphalt binder contents. One shall be at the optimum asphalt content, and must conform to all specified physical requirements.
10. The name of the mix designer.
11. The ignition oven calibration factor.

334-4 Process Control

Assume full responsibility for controlling all operations and processes such that the requirements of these Specifications are met at all times. Perform any tests necessary at the plant and roadway to control the process.

334-5 General Construction Requirements

334-5.1 Weather Limitations

Do not transport asphalt mix from the plant to the roadway unless all weather conditions are suitable for the paving operations.

334-5.2 Limitations of Paving Operations

334-5.2.1 General: Spread the mixture only when the surface upon which it is to be placed has been previously prepared, is intact, firm, dry, clean, and the tack, with acceptable spread rate, is properly broken.

334-5.2.2 Air Temperature: Spread the mixture only when the air temperature in the shade and away from artificial heat meets the requirements of Table 334-4.

Table 334-4
Ambient Air Temperature Requirements for Paving

Layer Thickness or Asphalt Binder Type	Minimum Temperature (°F)
≤1 inch	50

DocuSign Envelope ID: 775FCF57-23C4-4678-829D-D68E47097C5B

Table 334-4 Ambient Air Temperature Requirements for Paving	
Layer Thickness or Asphalt Binder Type	Minimum Temperature (°F)
Any mixture > 1 inch containing a PG asphalt binder with a high temperature designation ≥ 76°C	45
Any mixture > 1 inch containing a PG asphalt binder with a high temperature designation < 76°C	40

334-5.3 Mix Temperature
Heat and combine the ingredients of the mix in such a manner as to produce a mixture with a temperature at the plant and at the roadway, within a range of plus or minus 30ºF from the target temperature as shown on the mix design. Reject all loads outside of this range.

334-5.4 Transportation of the Mixture
Transport the mix in trucks of tight construction, which prevents the loss of material and the excessive loss of heat and previously cleaned of all foreign material. After cleaning, thinly coat the inside surface of the truck bodies with soapy water or an asphalt release agent as needed to prevent the mixture from adhering to the beds. Do not allow excess liquid to pond in the truck body. Do not use a release agent that will contaminate, degrade, or alter the characteristics of the asphalt mix or is hazardous or detrimental to the environment. Petroleum derivatives (such as diesel fuel), solvents, and any product that dissolves asphalt are prohibited. Provide each truck with a tarpaulin or other waterproof cover mounted in such a manner that it can cover the entire load when required. When in place, overlap the waterproof cover on all sides so it can be tied down. Cover each load during cool and cloudy weather and at any time it appears rain is likely during transit with a tarpaulin or waterproof cover. Cover and tie down all loads of friction course mixtures.

334-5.5 Preparation of Surfaces Prior to Paving

334-5.5.1 Cleaning: Clean the surface of all loose and deleterious material by the use of power brooms or blowers, supplemented by hand brooming where necessary.

334-5.5.2 Patching and Leveling Courses: As shown in the plans, bring the existing surface to proper grade and cross-section by the application of patching or leveling courses.

334-5.5.3 Application over Surface Treatment: Where an asphalt mix is to be placed over a surface treatment, sweep and dispose of all loose material from the paving area.

334-5.5.4 Tack Coat: Use a rate of application as defined in Table 334-5. Control the rate of application to be within plus or minus 0.01 gal. per square yard of the target application rate. The target application rate may be adjusted by the Engineer to meet specific field conditions. Determine the rate of application as needed to control the operation. When using PG 52-28, multiply the target rate of application by 0.6.

Table 334-5 Tack Coat Application Rates		
Asphalt Mixture Type	Underlying Pavement Surface	Target Tack Rate (gal/yd^2)
Base Course, Structural Course, Dense Graded Friction Course	Newly Constructed Asphalt Layers	0.03 minimum
	Milled Surface or Oxidized and Cracked Pavement	0.06
	Concrete Pavement	0.08
Open Graded Friction Course	Newly Constructed Asphalt Layers	0.05
	Milled Surface	0.07

334-5.6 Placing Mixture

DocuSign Envelope ID: 775FCF57-23C4-4678-829D-D68E47097C5B

334-5.6.1 Alignment of Edges: With the exception of pavements placed adjacent to curb and gutter or other true edges, place all pavements by the stringline method to obtain an accurate, uniform alignment of the pavement edge. Control the unsupported pavement edge to ensure that it will not deviate more than plus or minus 1.5 inches from the stringline.
334-5.6.2 Rain and Surface Conditions: Immediately cease transportation of asphalt mixtures from the plant when rain begins at the roadway. Do not place asphalt mixtures while rain is falling, or when there is water on the surface to be covered. Once the rain has stopped and water has been removed from the tacked surface to the satisfaction of the Engineer and the temperature of the mixture caught in transit still meets the requirements as specified in 334-5.3, the Contractor may then place the mixture caught in transit.
334-5.6.3 Checking Depth of Layer**:** Check the depth of each layer at frequent intervals to ensure a uniform spread rate that will meet the requirements of the Contract.
334-5.6.4 Hand Spreading: In limited areas where the use of the spreader is impossible or impracticable, spread and finish the mixture by hand.
334-5.6.5 Spreading and Finishing: Upon arrival, dump the mixture in the approved paver, and immediately spread and strike-off the mixture to the full width required, and to such loose depth for each course that, when the work is completed, the required weight of mixture per square yard, or the specified thickness, is secured. Carry a uniform amount of mixture ahead of the screed at all times.
334-5.6.6 Thickness Control: Ensure the spread rate is within 10% of the target spread rate, as indicated in the Contract. When calculating the spread rate, use, at a minimum, an average of five truckloads of mix. When the average spread rate is beyond plus or minus 10% of the target spread rate, monitor the thickness of the pavement layer closely and adjust the construction operations.

If the Contractor fails to maintain an average spread rate within plus or minus 10% of the target spread rate for two consecutive days, the Engineer may elect to stop the construction operation at any time until the issue is resolved.

When the average spread rate for the total structural or friction course pavement thickness exceeds the target spread rate by ±50 lbs per sy for layers ≥ 2.5 inches or exceeds the target spread rate by ±25 lbs per sy for layers < 2.5 inches, address the unacceptable pavement in accordance with 334-5.10.4, unless an alternative approach is agreed upon by the Engineer.
334-5.6.7 Material Transfer Vehicle: For all final surfaces courses the contractor shall utilize a remixing material transfer vehicle (example: Roadtec MTV1000 or Terex CR662RM) to allow for continuous paving and remixing or asphalt materials.

334-5.7 Leveling Courses
334-5.7.1 Patching Depressions: Before spreading any leveling course, fill all depressions in the existing surface as shown in the plans.
334-5.7.2 Spreading Leveling Courses: Place all courses of leveling with an asphalt paver or by the use of two motor graders, one being equipped with a spreader box. Other types of leveling devices may be used upon approval by the Engineer.
334-5.7.3 Rate of Application: When using Type SP-9.5 (fine graded) for leveling, do not allow the average spread of a layer to be less than 50 pounds per square yard or more than 75 pounds per square yard. The quantity of mix for leveling shown in the plans represents the average for the entire project; however, the Contractor may vary the rate of application throughout the project as directed by the Engineer. When leveling in connection with base widening, the Engineer may require placing all the leveling mix prior to the widening operation.

334-5.8 Compaction
For each paving or leveling train in operation, furnish a separate set of rollers, with their operators.

When density testing for acceptance is required, select equipment, sequence, and coverage of rolling to meet the specified density requirement. Regardless of the rolling procedure used, complete the

DocuSign Envelope ID: 775FCF57-23C4-4678-829D-D68E47097C5B

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

When density testing for acceptance is not required, use a rolling pattern approved by the Engineer.

Use hand tamps or other satisfactory means to compact areas which are inaccessible to a roller, such as areas adjacent to curbs, headers, gutters, bridges, manholes, etc.

334-5.9 Joints

334-5.9.1 Transverse Joints: Construct smooth transverse joints, which are within 3/16 inch of a true longitudinal profile when measured with a 15-foot manual straightedge meeting the requirements of FDOT Test Method FM 5-509. These requirements are waived for transverse joints at the beginning and end of the project and at the beginning and end of bridge structures, if the deficiencies are caused by factors beyond the control of the Contractor such as no milling requirement, as determined by the Engineer. When smoothness requirements are waived, construct a reasonably smooth transitional joint.

334-5.9.2 Longitudinal Joints: For all layers of pavement except the leveling course, place each layer so that longitudinal construction joints are offset 6 to 12 inches laterally between successive layers. Do not construct longitudinal joints in the wheel paths. The Engineer may waive these requirements where offsetting is not feasible due to the sequence of construction.

334-5.10 Surface Requirements

Construct a smooth pavement with good surface texture and the proper cross slope.

334-5.10.1 Texture of the Finished Surface of Paving Layers: Produce a finished surface of uniform texture and compaction with no pulled, torn, raveled, crushed or loosened portions and free of segregation, bleeding, flushing, sand streaks, sand spots, or ripples. Correct any area of the surface that does not meet the foregoing requirements in accordance with 334-5.10.4.

In areas not defined to be a density testing exception per 334-6.4.1, obtain for the Engineer, three 6-inch diameter roadway cores at locations visually identified by the Engineer to be segregated. The Engineer will determine the density of each core in accordance with FDOT Test Method FM 1-T 166 and calculate the percent G_{mm} of the segregated area using the average G_{mb} of the roadway cores and the representative PC Gmm for the questionable material. If the average percent G_{mm} is less than 90.0, address the segregated area in accordance with 334-5.10.4.

334-5.10.2 Cross Slope: Construct a pavement surface with cross slopes in compliance with the requirements of the Contract Documents.

334-5.10.3 Pavement Smoothness: Construct a smooth pavement meeting the requirements of this Specification. Furnish a 15-foot manual and a 15-foot rolling straightedge meeting the requirements of FM 5-509.

334-5.10.3.1 Straightedge Testing:

334-5.10.3.1.1 Acceptance Testing: Using a rolling straightedge, test the final (top) layer of the pavement. Test all pavement lanes where the width is constant using a rolling straightedge and document all deficiencies on a form approved by the Engineer. Notify the Engineer of the location and time of all straightedge testing a minimum of 48 hours before beginning testing.

334-5.10.3.1.2 Final (Top) Pavement Layer: At the completion of all paving operations, straightedge the final (top) layer either behind the final roller of the paving train or as a separate operation. Address all deficiencies in excess of 3/16 inch in accordance with 334-5.10.4, unless waived by the Engineer. Retest all corrected areas.

334-5.10.3.1.3 Straightedge Exceptions: Straightedge testing will not be

required in the following areas: shoulders, intersections, tapers, crossovers, sidewalks, bicycle/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. In the event the Engineer identifies a surface irregularity in the above areas that is determined to be objectionable, straightedge and address all deficiencies in excess of 3/8 inch in accordance with 334-5.10.4.

334-5.10.4 Correcting Unacceptable Pavement: Correct deficiencies in the pavement layer by removing and replacing the full depth of the layer, extending a minimum of 50 feet on both sides of the defective area for the full width of the paving lane, at no additional cost. Alternatively, the engineer reserves the right to accept the deficient area at no pay or reduced pay.

334-6 Acceptance of the Mixture

334-6.1 General

Contractor Quality Control test results may be verified by the County by separate sample.

The asphalt mixture will be accepted based on the Asphalt Work Category as defined below:

1. Asphalt Work Category 1 – Certification by the Contractor as defined in 334-6.2.
2. Asphalt Work Category 2 – Certification and process control testing by the Contractor as defined in 334-6.3
3. Asphalt Work Category 3 – Process control testing by the Contractor and acceptance testing by the Engineer as defined in 334-6.4.

334-6.2 Certification by the Contractor

On Asphalt Work Category 1 construction, the Engineer will accept the mix on the basis of visual inspection. Submit a Notarized Certification of Specification Compliance letter on company letterhead to the Engineer stating that all material produced and placed on the project meets the requirements of the Specifications. The Engineer may run independent tests to determine the acceptability of the material.

334-6.3 Certification and Process Control Testing by the Contractor & County

On Asphalt Work Category 2 construction, submit a Notarized Certification of Specification Compliance letter on company letterhead to the Engineer stating that all material produced and placed on the project meets the requirements of the Specifications, along with supporting test data documenting all process control testing as described in 334-6.3.1. ***The contractor shall provide this information package within 5 (five) business days; if the package is not received within this time period, 10% of the asphalt placed shall not be paid for each and every calendar day the package is not submitted as liquidated damages.*** If required by the Contract, utilize an Independent Laboratory as approved by the Engineer for the process control testing. The mix will also require visual acceptance by the Engineer. In addition, the Engineer may run independent tests to determine the acceptability of the material. Material failing to meet these acceptance criteria will be addressed as directed by the Engineer such as but not limited to acceptance at reduced pay, delineation testing to determine the limits of the questionable material, removal and replacement at no cost to the County, or performing an Engineering analysis to determine the final disposition of the material. .

334-6.3.1 Process Control Sampling and Testing Requirements: Perform process control testing at a frequency of once per day. Obtain the samples in accordance with FDOT Method FM 1-T 168. Test the mixture at the plant for gradation (P_{-8} and P_{-200}) and asphalt binder content (P_b). The County shall measure the roadway density with 6-inch diameter roadway cores at a minimum frequency of once per 1,500 feet of pavement with a minimum of three cores per day. The Contractor shall be responsible for the cutting 6-inch diameter cores and providing them to the County.

Determine the asphalt binder content of the mixture in accordance with FDOT Method FM 5-563. Determine the gradation of the recovered aggregate in accordance with FM 1-T 030. Determine the roadway density in accordance with FM 1-T 166. The minimum

DocuSign Envelope ID: 775FCF57-23C4-4678-829D-D68E47097C5B

roadway density will be based on the percent of the maximum specific gravity (Gmm) from the approved mix design. If the Contractor or Engineer suspects that the mix design Gmm is no longer representative of the asphalt mixture being produced, then a new Gmm value will be determined from plant-produced mix with the approval of the Engineer. Roadway density testing will not be required in certain situations as described in 334-6.4.1. Assure that the asphalt binder content, gradation and density test results meet the criteria in Table 334-6.

Table 334-6
Process Control and Acceptance Values

Characteristic	Tolerance
Asphalt Binder Content (percent)	Target ± 0.55
Passing No. 8 Sieve (percent)	Target ± 6.00
Passing No. 200 Sieve (percent)	Target ± 2.00
Roadway Density (daily average)	Minimum 91.5% of Gmm
Roadway Density (any single core)	Minimum 88% of Gmm

334-6.4 Process Control Testing by the Contractor and Acceptance Testing by the Engineer
On Asphalt Work Category 3, perform process control testing as described in 334-6.3.1. In addition, the Engineer will accept the mixture at the plant with respect to gradation (P_{-8} and P_{-200}) and asphalt binder content (P_b). The mixture will be accepted on the roadway with respect to density. The Engineer will sample and test the material as described in 334-6.3.1. The Engineer will randomly obtain at least one set of samples per project; however the engineer may randomly obtain samples as his discretion. Assure that the asphalt content, gradation and density test results meet the criteria in Table 334-4. Material failing to meet these acceptance criteria will be addressed as directed by the Engineer such as but not limited to acceptance at reduced pay, delineation testing to determine the limits of the questionable material, removal and replacement at no cost to the County, or performing an Engineering analysis to determine the final disposition of the material.

334-6.4.1 Acceptance Testing Exceptions: When the total quantity of any mix type in the project is less than 500 tons, the Engineer will accept the mix on the basis of visual inspection. The Engineer may run independent tests to determine the acceptability of the material.

Density testing for acceptance will not be performed on widening strips or shoulders with a width of 5 feet or less, variable thickness overbuild courses, leveling courses, any asphalt layer placed on subgrade (regardless of type), miscellaneous asphalt pavement, bike/shared use paths, crossovers, or any course with a specified thickness less than 1 inch or a specified spread rate less than 100 lbs per square yard. Density testing for acceptance will not be performed on asphalt courses placed on bridge decks or approach slabs. In addition, density testing for acceptance will not be performed on the following areas when they are less than 1,000 feet continuous in length: turning lanes, acceleration lanes, deceleration lanes, shoulders, parallel parking lanes, or ramps. Density testing for acceptance will not be performed in intersections. The limits of the intersection will be from stop bar to stop bar for both the mainline and side streets. Compact these courses in accordance with a standard rolling procedure approved by the Engineer. In the event that the rolling procedure deviates from the approved procedure, placement of the mix will be stopped.

334-7 Method of Measurement
For the work specified under this Section, the quantity to be paid for the area placed and accepted in square yards or will be the weight of the mixture, in tons. No compensation is provided for asphalt beyond the specified thickness. Areas below the specified thickness shall be corrected at no cost to the County.

The bid price for the asphalt mix will include the cost of the liquid asphalt or the asphalt recycling agent and the tack coat application as specified in 334-5.5.4. There will be no separate payment for

DocuSign Envelope ID: 775FCF57-23C4-4678-829D-D68E47097C5B

the asphalt or unit price adjustment for binder material in the asphalt mix.

334-8 Basis of Payment

334-8.1 General

Price and payment will be full compensation for all the work specified under this Section (including the applicable requirements of Sections 320 and 330). No composite pay factor will be paid.

SECTION 337 *ASPHALT CONCRETE FRICTION COURSES*

337-2.2 Asphalt Binder

Use a PG 76-22 asphalt binder meeting the requirements of 916-1.

337-6.1 FC-9.5 and FC-12.5

Mixture acceptance shall meet the requirements of 334-6.

337-7.8 Material Transfer Vehicle

The contractor shall utilize a remixing material transfer vehicle (example: Roadtec MTV1000 or Terex CR662RM) to allow for continuous paving and remixing or asphalt materials.

337-12 Basis of Payment

337-12.1 General

No composite pay factor will be paid. Material acceptance shall meet the requirements of 334-6.

SECTION 346 *PORTLAND CEMENT CONCRETE*

Mix designs may be utilized that have current approval by FDOT for use in the appropriate application for the appropriate class of concrete. Copies of approved concrete mix design shall be provided by the Contractor and shall be approved by the County prior to use.

SECTION 347 *PORTLAND CEMENT CONCRETE – CLASS I (NONSTRUCTURAL)*

Delete current specification and insert 2004 specification as amended below:

347-1 Description:

The requirements of this Section are applicable to concrete designated as Class I (Nonstructural), hereinafter referred to as concrete. Use concrete composed of a mixture of portland cement, aggregates, and water, with or without chemical admixtures, slag, or pozzolanic materials. Deliver concrete to placement site in a freshly mixed, unhardened state. Ensure the concrete is placed and cured in a manner to ensure that the strength and durability of the concrete is maintained.

347-2 Materials

347-2.1 General: Certify that all materials used in concrete are from FDOT approved sources, and free from frozen or other detrimental matter. Meet the following requirements:

(a) Portland Cement ..... Section 921
(b) Fine Aggregate.....Section 902
(c) Coarse Aggregate ..... Section 901
(d) Water.....Section 923
(e) Chemical Admixtures.....Section 924
(f) Pozzolans and Slag ..... Section 929

347-2.2 Admixture Requirements: Chemical admixtures may be added at the dosage rates recommended by the manufacturer.

DocuSign Envelope ID: 775FCF57-23C4-4678-829D-D68E47097C5B

347-2.3 Substitution of Materials: Approved material sources may be substituted for similar materials indicated on the originally approved mix design. Use originally approved mix components and proportions, when unsatisfactory test results are obtained from the use of the substituted material(s).

347-2.4 Material Storage: Use a concrete production facility that meets the following requirements:

347-2.4.1 Cementitious Materials Storage: Provide a separate and clearly labeled weatherproof facility to store each brand or type of cementitious material without mixing or contamination. Provide a suitable, safe and convenient means of collecting cementitious material samples at each storage facility.

347-2.4.2 Aggregate Storage: Provide suitable bins, stockpiles or silos to store and identify aggregates without mixing, segregating or contaminating different grades or types of materials. Identify Department approved pit number and aggregate type/gradation. Handle the aggregates in a manner to minimize segregation and meet the specification requirements when recovered from storage. Continuously and uniformly sprinkle coarse aggregate with water, for 24 hours preceding introduction into the concrete mix. Maintain stored aggregates in a well-drained condition to minimize free water content. Provide access for the Engineer to sample the aggregates from the recovery side of the storage facility.

347-3 Production, Mixing and Delivery.

347-3.1 Concrete Production Requirements: Deliver concrete from a production facility that is certified by the National Ready-Mixed Concrete Association (NRMCA) or approved by FDOT and on the FDOT's approved plant list. Produce concrete utilizing equipment that is in good operating condition and operated in a manner to ensure a consistent product. Within two hours prior to each day's batching, ensure that the concrete production facility determines the free moisture for the coarse and fine aggregates. On concrete placements expected to exceed three hours, perform an additional moisture test approximately half way through the batching operations and adjust batch proportions accordingly.

Ensure that the calibration of the measuring devices of the concrete production facilities meets the requirements of Chapter 531 of the Florida Statutes. At least quarterly, ensure that all scales, meters and other weighing or measuring devices are checked for accuracy by a qualified representative of a scale company registered with the Bureau of Weights and Measures of the Florida Department of Agriculture. Have the accuracy of admixture measuring dispensers certified annually by the admixture supplier.

When Volumetric Mixers are used, deliver concrete in accordance with the requirements of Volumetric Mixer Manufactures Bureau (VMMB) and ensure that the vehicle has a VMMB registered rating plate.

Substitution of structural concrete in lieu of non-structural concrete may be used if approved by the Engineer. If structural concrete is used in lieu of non-structural concrete, obtain the concrete from a production facility meeting the requirements of Section 346. Acceptance is based on the requirements of Section 347.

347-3.2 Mixers: Ensure that mixers are capable of combining the components of concrete into a thoroughly mixed and uniform mass, free from balls or lumps of cementitious materials, and capable of discharging the concrete uniformly. Operate concrete mixers at speeds per the manufacturer's design. Do not exceed the manufacturer's rated capacity for the volume of mixed concrete in the mixer, mixing drum, or container.

347-3.3 Delivery: The maximum allowable mixing and agitation time of concrete is 120 minutes.

Water may be added at the job site before discharging concrete, provide the ratio values for water to cementitious materials and slump remain below the maximum allowable values specified in the approved mix design.

347-4 Control of Quality.

347-4.1 Concrete Mix Design: Before producing any concrete, submit the proposed mix design to the Engineer on a form provided by FDOT. Use only concrete mix designs meeting the following requirements and having prior approval of the Engineer.

Maximum water to cementitious materials ratio	0.55 lbs/lbs
Minimum 28-Day Compressive Strength	2,500 psi
Minimum Cementitious Materials Content	470 lbs/yd^3
Slump	0 to 6 inches

Materials may be adjusted provided that the theoretical yield requirement of the approved mix design is met. Show all required original approved design mix data and batch adjustments and substituted material on the Department concrete delivery ticket. The Engineer may disqualify any concrete production facility for non-compliance with Specification requirements.

347-4.2 Sampling and Testing: The Engineer may sample and test the concrete at his discretion to verify its quality.

347-4.3 Records: Maintain the following records for review for at least three years:

1. Approved concrete mix designs.
2. Materials source (delivery tickets, certifications, certified mill test reports).
3. A copy of the scale company or testing agency report showing the observed deviations from quantities checked during calibration of the scales and meters.
4. A copy of the documentation certifying the admixture weighing/measuring devices.
5. Recent NRMCA, VMMB or FDOT inspection records certifying plant can produce concrete and documentation showing that action has been taken to correct deficiencies noted during the inspections.

347-5 Certification and Acceptance.

347-5.1 General: Furnish a Delivery Ticket with each batch of concrete before unloading at the placement site. The County will provide the Delivery Ticket Form. The concrete producer may use an alternate form provided that it contains the required information. Record material quantities incorporated into the mix on the Delivery Ticket. Ensure that the Batcher responsible for production of the concrete, certifying that the batch was produced in accordance with specification requirements, signs the Delivery Ticket. Sign the Delivery Ticket certifying that the maximum specified water to cementitious materials ratio was not exceeded due to any jobsite adjustments to the batch, and that the batch was delivered and placed in accordance with specification requirements.

Acceptance by the County will be by Certification on the Delivery Ticket, as described herein, by the Batcher and the Contractor.

The Engineer will hold the Contractor responsible for rejecting loads of concrete that do not meet the minimum compressive strength requirements. Delineate and replace, at no cost to the County, all concrete that does not meet the 28-day compressive strength requirements or has any cracking greater than 1/4 inch in width or 1/4 inch in vertical displacement. Any spalling or flaking off of the surface layer that exposes the rough, pitted aggregate surface in excess of 10 square inches is to be removed and replaced in accordance with 347-5.2. Sidewalk, ditch pavement, slope pavement, Traffic Separator, or curb and gutter having any intersecting cracks visible in the dry concrete (regardless of size) will be removed and replaced in accordance with 347-5.2.

If any uncontrolled cracks appear during the life of the Contract unacceptable to the Engineer,

DocuSign Envelope ID: 775FCF57-23C4-4678-829D-D68E47097C5B

remove and replace the concrete in accordance with 347-5.2 at no expense to the County.

347-5.2 Remedial Action: Remedial action will be the removal and replacement of all concrete to the full depth and width. Sidewalk, Curb and Gutter, Ditch Pavement and Traffic Separator: Begin saw cutting 2 1/2 feet either side or above and below the crack or at the nearest joint, remove and replace the 5-foot section encompassing the crack.

Slope Pavement: Saw cut each scored joint above and below the crack and replace the entire section.

SECTION 400 *CONCRETE STRUCTURES*

400-1 Description:
This section shall include over-excavation and backfilling of materials as required by the detail noted in the plans and shall include the foundation preparation requirements per 400-011(Section 455 – D. Spread Footings for the construction of gravity walls including all dewatering requirements.

400-23 Basis of Payment:
Price and payment for all work included in this section shall be included in the unit cost of concrete for each of the various classes unless bid separately.

SECTION 425 *INLETS, MANHOLES AND JUNCTION BOXES*

The rear wall portion of inlet tops Type 1, 2, 3 and 4 may be brick, however, dowels to the top slab are required. Dowels shall be double row, as close to 9 inches on center as brick structure and pattern will allow.

For Type 5 and 6 inlets, the bent bar from the inlet back, continuous into the inlet top, may be constructed as a dowel of equal length to the front bar in the inlet back wall.

All inlet throat, invert, pipe cutting and grout work shall be completed prior to inlet top construction. Inlet top construction shall be completed prior to placement of asphalt.

425-8 Basis of Payment:
This section shall include all work and materials required to place, adjust and connect structures to pipes in-place as required by the plans.

SECTION 430 *PIPE CULVERTS*

This section includes all pipe, grates (when required), fasteners, reinforcement, connectors, anchors, concrete, sealants, jackets, coupling bands, and all work required to install the pipe and end treatments.

430-3 Type of Pipe to be Used
The pipe shall be concrete or suitable equivalent approved by the County Engineer unless otherwise specified in the plans.

430-11.1 New Pipe Installed by Excavation or Trenching
Quantities of pipe to be paid shall be as measured, in-place and accepted. Cost of pipe shall include any additional base material required for conformance to FDOT Index No. 205.

SECTION 440 *UNDERDRAINS*

Underdrain pipe shall be 6” schedule 40 PVC and this section shall include flush mounted cleanout

DocuSign Envelope ID: 775FCF57-23C4-4678-829D-D68E47097C5B

structures at each end of pipe run and every 250 ft.

SECTION 522 *CONCRETE SIDEWALK AND DRIVEWAYS*

Any and all final sidewalk in excess of a 2% cross slope, regardless of any interim phase inspection acceptance, shall be replaced at the contractor's expense. No tolerance in excess of 2% will be accepted.

All ADA ramps shall be constructed with 6" thick concrete. All 6" thick concrete (ramps, driveways, turnouts, etc.) shall require 6x6 WWM or 1.5 lbs polypropylene fiber mesh per CY.

SECTION 523 *PATTERNED PAVEMENT*

523-2 Materials
Use only FrictionPave Decorative Surfacing or TrafficPatterns on the Approved Products List.

SECTION 527 *DETECTABLE WARNINGS*

527-2 Materials
Detectable warning surfaces outside of FDOT right-of-way shall be clay or concrete red brick or a cast-in place or wet set tile on the FDOT APL list in red color. No post-applied materials are acceptable.

527-4 Method of Measurement
Detectable warning surfaces placed in newly constructed sidewalk/curb ramps outside of FDOT right-of-way will be paid by the square foot furnished, installed and accepted.

527-5 Basis of Payment
Pay Item – Detectable Warning Surface – SF

SECTION 528 *GUARDRAIL*

536-6 Basis of Payment
Shop bent panel and any special guardrail post required shall be included in the cost of the basic guardrail item unless items are bid separately.

SECTION 570 *PERFORMANCE TURF*

570-3.2 Seeding
The contractor shall furnish to the County Inspector, prior to placement of any seed, a certification from the Florida Department of Agriculture and Consumer Services Division of Plant Industries, stating that the seed is free of noxious weeds, including tropical soda apple. All seed materials shall be subject to inspection by the County Inspector prior to placement. Any sod with noxious weeds and grasses, including tropical soda apple, shall be rejected for use on the project.

570-3.3 Sod
Any portion of the existing right-of-way, including all easements, that is disturbed outside the limits of construction shall be sodded at the contractor's expense as directed by the County Inspector. The contractor shall furnish to the County Inspector, prior to placement of any sod, a certification from the Florida Department of Agriculture and Consumer Services Division of Plant Industries, stating that the sod is free of noxious weeds, including tropical soda apple. All sod materials shall be subject to inspection by the County Inspector prior to placement. Any sod with noxious weeds and grasses, including tropical soda apple, shall be rejected for use on the project.

DocuSign Envelope ID: 775FCF57-23C4-4678-829D-D68E47097C5B

Contractor may elect to use hydroseed in lieu of sod. Contractor shall be responsible to maintain erosion control on areas that are stabilized with hydroseed. The County shall not make payment for redressing of areas the contractor elects to place hydroseed due to erosion.

570-9 Basis of Payment

Payment for fertilizer, seed, and mulch will be by a single pay item for "seed and mulch." Applications of all items will be to appropriate standards applicable for the season. Cost of netting or soil to hold mulch on 3:1 or greater slopes shall be included in the bid item unit cost.

SECTION 580 *LANDSCAPING*

580-1 Description.

Furnish, install, establish and maintain landscaping as indicated in the Contract Documents.

The allowable Contract Time is two separate phases called Installation Period and Establishment Period. The Installation Period precedes the Establishment Period and is the allowable Contract Time minus the one-year Establishment Period.
Failure to complete the installation and establishment of the landscaping within allowable Contract Time will result in liquidated damages being assessed and withheld in accordance with the agreement and as contained in this section.

The one-year Establishment Period will begin when plants have been installed and accepted by the Engineer regardless of the duration of the time used for the Installation Period.

580-2 Materials.

580-2.1. Grade Standards and Conformity with Type and Species: Only use plant materials purchased from Florida commercial nursery stock that comply with all required inspection, grading standards, and plant regulations in accordance with the latest edition of the Florida Department of Agriculture's "Grades and Standards for Nursery Plants.

Unless otherwise specified, minimum grade for all plants is Florida No. 1. All plants must be the specified size and grade at the time of delivery to the site.

Use only plants that are true to type and species, free of fungal infection and disease, and ensure that the plants not specifically covered by Florida Department of Agriculture's "Grades and Standards for Nursery Plants" conform in type and species with the standards and designations in general acceptance by Florida nurseries. Submit a list of nurseries where plants are tagged, including contact information and location. The Engineer and Contractor may visit the nursery sites to inspect representative samples of plant material and lock tag the example plants. Prior to planting, provide the Engineer with a certification from the supplying nursery that all plant materials have been purchased from Florida commercial nursery stock.

A minimum of two plants of each species on each shipment must be shipped with tags stating the botanical nomenclature and common name of the plant. Should discrepancies arise between botanical nomenclature and common name, the botanical name will take precedence.

Root Ball Sizes for Field Grown Palms			
Palm Type	**Overall Height**	**Root Ball Radius from Trunk**	**Root Ball Depth**
Sabal Palm*	N/A	Per Florida Grades & Standards	Per Florida Grades & Standards
Coconut Palm	N/A	Per Florida Grades & Standards	Per Florida Grades & Standards
Queen Palm	N/A	24"	24"
All Other Field	< 15' OA	12"	18"

DocuSign Envelope ID: 775FCF57-23C4-4678-829D-D68E47097C5B

Grown Palms	15' – 25' OA	16"	24"
	26' – 30' OA	18"	30"
	30'	24"	36"

* Sabal palms (Sabal palmetto) specified as being "Regenerated Palms" as shown on the Plant Schedules shall be minimum Florida no. 1 grade unless noted otherwise. The root ball width shall be, at a minimum, equal to twice the diameter of the trunk as measured at the base. The root balls shall have new, regenerated, round-tipped roots that have emerged from the root initiation zone. Roots shall be whitish-yellow in color, have tapered ends and be present on all sides of the root ball.

To qualify as "Regenerate Palms," sabal palms shall have been placed in containers or be contained within "plastic fabric or film material", or approved equal, after field harvesting and during the root regeneration period. They shall have a minimum of three fully expanded new fronds that have not been pruned. Fully expanded new fronds shall meet the minimum requirements to be considered "excellent leaves", as defined by the glossary of terms in the latest edition of the Florida Department of Agriculture and Consumer Services Grades and Standards for Nursery Plants – Palms and Cycads.

580-2.2 Inspection and Transporting: Move nursery stock in accordance with all Federal and State regulations and accompany each shipment with the required inspection certificates. Submit inspection certificates to the Engineer.

580-2.3 Water: Meet the requirements of Section 983.

580-2.4 Mulch: Use of cypress mulch is prohibited.

580-2.5 Soil: Remove all unsuitable soil and debris to root ball depth. Replace soil meeting the requirements of Section 987.

580-3 Installation.

580-3.1 (Reserved)

580-3.2 Delivery: All plant materials must be available for inspection prior to planting.

580-3.3 Layout: The location of plants as shown in the Contract document, are approximate. At no cost to the Department adjust final locations when directed by the Engineer to accommodate unforeseen field conditions or to comply with safety setbacks and requirements.

Prior to commencing any excavation or planting, mark proposed mowing limits, planting beds and individual locations of trees and palms as shown in the Contract Documents. Notify the Engineer when marking is complete.

Make no changes to the layout, materials or any variations of plant materials from the Contract Documents without the Engineer's written approval.

580-3.4 Soil Drainage: All planting holes and beds must drain sufficiently prior to installing any plants. Immediately notify the Engineer of drainage or percolation problems before plant installation.

580-3.5 Planting: Meet the requirements of the Contract Documents.

580-3.6 Repair and Restoration: Repair and restore existing areas disturbed by installation, establishment or maintenance activities. Where new turf is required to restore and repair disturbed areas, meet the requirements of Section 570.

580-3.7 Disposal of Debris: Remove and dispose of all debris and excess material generated from the installation of plants at the end of each day's work and in compliance with all Federal, State and

DocuSign Envelope ID: 775FCF57-23C4-4678-829D-D68E47097C5B

Local laws and ordinances.

580-3.8 Reporting: Certify monthly on a form provided by the Department, "Landscape Monthly Inspection Form" that the plants have been installed and are being established and maintained in accordance with the Contract Documents.

580-3.9 Establishment Plan: Not less than 45 days prior to the scheduled completion of the installation, submit an Establishment Plan to the Engineer for review and comment. Installation will be considered complete only when the Establishment Plan has been accepted by the Engineer. Specifically describe the methods, activities, materials and schedule to achieve establishment and inspection of plants and incidental landscaping as described in 580-4. Acceptance of the Establishment Plan is not a release from responsibility for the overall establishment and maintenance of the landscape area as required in the Contract Documents. Perform any ancillary activities that may be required to adequately establish and maintain the plants and landscape area.

580-3.10 Installation Completion: To allow time for scheduling inspection of installation, provide the Engineer with no less than seven calendar days advance notice of completion of installation of all plants. Upon completion of installation of plants and incidental landscaping, certify on a form provided by the Department, "Contractor Certification of Installation" that the landscaping has been installed and is being established in accordance with the Contract Documents.

580-4 Establishment.

580-4.1 Establishment Period: The establishment period is defined as the entire one year after installation of all plants and incidental landscaping. The establishment period will begin upon acceptance by the Engineer of the Establishment Plan and the complete installation of the landscaping.

During the establishment period:

Keep all plants watered, fertilized, mulched, pruned, and staked and guyed as necessary to assure specified minimum grade of Florida No. 1 throughout the duration of the project construction period and establishment period.

Keep all plants pruned to maintain plant health, clear visibility of signs, traffic signals, safe sight distance at intersections and driveways, safe and operational horizontal and vertical clearance from roadways, sidewalks, utilities, light poles, traffic control signals and devices, toll equipment and facilities, mechanical equipment, fences, walls and drainage structures, and to provide unobstructed access. Pruning shall conform to ANSI A300 Part 1 Standards. Pruning shall be performed by an International Society of Arboriculture (ISA) Certified Arborist or person with documentation of equivalent or greater expertise. Prior to performing pruning activities provide proof of the individual's active arborist certification or other credential to the Engineer for approval.

Keep the landscape areas as defined in the plans, including individual plant locations and planting beds, free of litter, debris, excess material and undesirable vegetation.

Keep landscape bed edges correctly located and trimmed, and the mulch groomed and replenished as specified in the Contract Documents.

Operate and maintain all components of any irrigation system when installed as part of the Contract.

Remove staking and guying from all fully established plants unless otherwise directed by the Engineer.

Continue any mowing and litter pick up of the turf areas as depicted and specified in the Contract Documents.

DocuSign Envelope ID: 775FCF57-23C4-4678-829D-D68E47097C5B

580-4.2 Inspection and Reporting Requirements: During the establishment period, inspect and certify monthly on the Department's "Landscape Monthly Inspection Form" that the landscaping is being established per the Contract Documents.

During the establishment period, the Engineer will perform quarterly inspections to verify that the landscaping is being established per the Contract Documents.

580-5 Remedial Work.

Perform all necessary remedial work at no cost to the Department. Use replacement plants of the same species and planting medium as the plant being replaced and as specified in the Contract Documents. Replacement plant size must match the size of the adjacent grown-in plants of the same species and variety which may be larger than the initially installed size.

During the establishment period, the establishment time for replacement plants shall be the remaining establishment period or 90 days after date of replacement installation acceptance, whichever is greater.

Approval of remedial work does not relieve the Contractor from continuing responsibility under the provisions of this Section. At the end of the contract period when all contract requirements are met, the Engineer will release the Contractor from further remedial work.

580-6 Failure to Perform.

Upon receipt of the monthly inspection form or after inspection by the Engineer, a daily deduction of 0.274% per calendar day of the remaining establishment amount in 580-8.2 will be assessed and forfeited if full compliance with 580-4 is not achieved. The daily deduction will continue until full compliance is achieved to the Engineer's satisfaction.

Should the Contractor fail to timely and satisfactorily perform any remedial work associated with landscaping during the establishment period, the Department will reduce the payments scheduled during the establishment period by a deduction of 0.274% per calendar day of the remaining establishment amount in 580-8.2.

580-7 Method of Measurement.

580-8.1 Installation: The quantity to be paid will be the quantity of plants or trees installed.

580-8.2 Establishment: The quantity to be paid will be in equal monthly payments for plants or trees maintained during the establishment period.

580-8 Basis of Payment.

Price and payment will be full compensation for all work and materials specified in this Section including all ancillary work and materials necessary to meet the contract requirements. .

580-8.1 Payment during the Installation Period: Seventy-six percent of the bid amount will be paid during the installation period for work completed and accepted.

580-8.2 Payment during the Establishment Period: Up to twenty-four percent of the total contract amount will be paid in accordance with 580-7 during the establishment period Payment during the establishment period will be made in 12 equal monthly payments, less any deductions assessed in accordance with 580-6.

SECTION 660 ***VEHICLE DETECTION SYSTEM***

All loops shall be 30 ft in length unless otherwise noted in the plans.

DocuSign Envelope ID: 775FCF57-23C4-4678-829D-D68E47097C5B

SECTION 665 *PEDESTRIAN DETECTOR SYSTEM*

All detectors shall be Pelco Model SP-1090-FL unless otherwise noted in the plans.

SECTION 690 *REMOVAL OF EXISTING TRAFFIC SIGNAL EQUIPMENT*

Add 2013 Specification with the following addition as follows.

690-1 Description.

Remove existing traffic control signals and devices including electrical and electronic equipment, supporting hardware and structures, electrical wiring, conduit, and all other elements specified and required to clear the areas of concern for new installations.

When removing existing traffic signals and devices, salvage and protect all equipment and materials designated for removal in the Contract Documents.

690-2 Ownership.

The County retains ownership of the equipment removed unless otherwise stated in the plans. This section shall include the delivery of the equipment to the Alachua County Public Works Compound at 5620 NW 120th Lane or the City of Gainesville Public Works Compound at 405 NW 39th Avenue at the County's discretion. Delivery shall be coordinated with the County Inspector.

690-3 General Removal Operations.

Remove and salvage all equipment, appurtenances, and materials designated in the Plans to remain the property of the County or other owner.

Where the removals require excavation, backfill, compact, and level the excavated areas (unless to be used as areas for other installations) so as to form a smooth contour, uniform in density with adjacent ground areas.

Where the removal operations require the removal or disturbance of overlying pavement, curb, grass, or sidewalk, remove such pavement and subsequently replace it in kind (or equivalent).

Remove, handle, and transport electronic equipment to be removed with all due care. Correct any damage to such equipment caused by negligence at no expense to the County regardless of whether the damage occurs before or after removal of the equipment.

When removing all electronic equipment, also remove all attaching devices and all other devices and auxiliaries related to the electronic unit which the County does not require to remain in place for use with replacing equipment.

Perform all removals in such a manner as to not damage or disturb adjacent property, utilities, or other equipment.

When replacing existing functioning installations with new installations, do not remove the existing installations until the new installations are in place and operating or until temporary traffic control approved by the Engineer is in place.

Notify the proper authorities or the owners of affected adjacent installations at least 24 hours in advance of any removal operations which might endanger or otherwise affect the operations of their facilities.

When the Contract Documents indicate that owners (or others) will remove their own poles, carefully remove and handle all equipment from such poles prior to such removal of the poles.

DocuSign Envelope ID: 775FCF57-23C4-4678-829D-D68E47097C5B

690-4 Specific Removal Operations.

690-4.1 Removal of Poles: Remove direct burial, strain poles, steel strain poles, mast arm and monotube assemblies and associated foundations as specified in the Plans. Obtain the Engineer's approval for the removal process before beginning any removal work. These requirements do not apply to poles used for highway lighting, unless they are jointly used to support traffic control signals and devices, signal mast arm, or span wire assemblies.

Accomplish the removal process of each pole/foundation in such a manner as not to result in a safety hazard to motorists or adjacent property or damage to existing utilities. Ensure that all utilities have been located prior to removal.

When shallow pole removal is specified in the Plans, ensure the remaining pole/foundation and any protrusions, such as pole keys, dead men, guying apparatus, conduit, anchor bolts, or reinforcing steel, are removed to a minimum depth of 4 feet below existing grade.

When deep pole removal is specified in the Plans completely remove each pole including the foundation and all accessories or attachments, such as pole keys, dead men, guying apparatus, conduit, anchor bolts, and reinforcing steel.

Do not remove or disturb utility poles located within the right-of-way.

690-4.2 Removal of Signal Pedestal: Remove each signal pedestal and associated foundations as specified in the
Plans. Obtain the Engineer's approval for the removal process before beginning any removal work.

Accomplish the removal process of each pedestal/foundation in such a manner as not to result in a safety hazard to motorists, pedestrians or adjacent property or damage to existing utilities. Ensure that all utilities have been located prior to removal.

Completely remove each pedestal including the foundation and all accessories or attachments, such as pole keys, conduit, anchor bolts, and reinforcing steel.

690-4.3 Removal of Controllers and Cabinets: When removing controller assemblies, also remove the cabinet. For base mounted cabinets, completely remove the concrete base and technician pad.

Prior to removal, conduct an inventory of the cabinet and all cabinet contents, including identification of the model number and serial numbers of each item. Submit the inventory list to the Engineer for retention by the Department and provide a copy of the list to the equipment owner.

690-4.4 Removal of Signal Heads (Vehicular and Pedestrian): Remove all signal head assemblies and attachment hardware in such a manner as to avoid unnecessary damage.

690-4.5 Removal of Detectors (Vehicular and Pedestrian): Divide the removal of detector assemblies into the following categories:
(a) Vehicular detector assemblies: When the removal of vehicular detector assemblies is specified in the Contract Documents, remove the amplifier from the controller cabinet, the loop, and the lead-in wiring that is in the conduit and pull boxes.

When removing pressure type vehicular detector assemblies, remove the amplifier and the detector pad and its framework from the roadway pavement. After removing such detector assemblies, repair the roadway areas by backfilling and tamping with an approved asphalt concrete mix or concrete pavement mix so as to restore the roadway to the satisfaction of the Engineer.

When removing non-intrusive detectors that are not embedded in or under pavement, remove the roadside detector assembly, cabling, mounting hardware, and detector electronics in cabinet.

DocuSign Envelope ID: 775FCF57-23C4-4678-829D-D68E47097C5B

(b) Pedestrian detector assemblies: Include in the removal of pedestrian detector assemblies the removal of the push button detector, sign, and all mounting hardware, including the supporting post and foundation.

690-4.6 Removal of Mast Arms and Span Wires: Disconnect the mast arms and span wires carefully at the pole, and salvage all usable hardware and attachment devices as determined by the Engineer. Remove all devices supported by the mast arm or span wire (including wiring) prior to the removal of the mast arm or span wire.

For integrally installed mast arms and mast arm poles, remove the pole and mast arm combination as a unit after removing the devices supported by the mast arms.

690-4.7 Removal of Cabling and Conduit: After removing the conductor cable and conduit, carefully stub, or protect with other appropriate procedures, the remaining conductor cable and conduit at the point of removal.

If the removal of any cables and conduit requires excavation, restore disturbed areas compatible with adjacent ground areas.

690-5 Transporting and Storing Removed Equipment.

When the Contract Documents specify special handling, deliver equipment and materials that are not stipulated to be reused in the new installations to the locations designated in the Contract. When the Contract Documents note no special handling, stockpile or dispose of the removed materials as approved by the Engineer. The Engineer will determine ownership of removed equipment and will approve of the removal of any salvaged equipment from the project in advance.

Provide disposal areas, and dispose of removed concrete strain poles in such areas.

690-6 Method of Measurement.

690-6.1 General: The quantities to be paid for will be measured in accordance with the different work tasks required in this Section. The Contract unit price for each different work task as specified in the Contract Documents will include all labor and equipment required to remove the specified items specified by the pay item numbers.

690-6.2 Remove Poles:

690-6.2.1 Pole Removal Shallow: The quantity to be paid for will be the removal of each pole including the foundation and all accessories or attachments to a depth not less than 4 feet below existing grade.

690-6.2.2 Pole Removal Deep: The quantity to be paid for will be the complete removal of the pole and foundation including all accessories or attachments.

690-6.3 Remove Signal Pedestal: The quantity to be paid for will be the complete removal of each pedestal including the foundation and all accessories or attachments.

690-7 Basis of Payment.

Prices and payments will be full compensation for all work specified in this Section.

SECTION 700 *HIGHWAY SIGNING*

When the contractor has the option for sign post type, the sign post type shall be 2lb/ft U-Channel.

DocuSign Envelope ID: 775FCF57-23C4-4678-829D-D68E47097C5B

E-04 LAYING OUT THE WORK

The Contractor shall be responsible for establishing all lines and grades together with all reference points as required by the various trades for all work under this Contract. All required layout, both horizontal and vertical, shall be completed by a Land Surveyor, or by someone under the responsible charge of a Land Surveyor, who is registered in the State of Florida. Layout work may be completed by a party other than a registered Land Surveyor with approval from the County Engineer. Work completed via layout not performed by a registered Land Surveyor shall be verified by an "as-built" survey completed by a Land Surveyor, or by someone under responsible charge of a Land Surveyor, who is registered in the State of Florida. "As-built" work found to be out of compliance with the construction plans or specifications shall be removed and reconstructed at the Contractor's expense. The construction plans and right-of-way maps, if available, are at the Public Works Department for review. Survey control points disturbed or destroyed by the Contractor shall be replaced by the Contractor's Surveyor at the Contractor's expense. Survey monuments, markers or other survey control points, which will be removed by construction, shall be properly referenced to the right-of-way line prior to removal. Reference monumentation for all survey control shall be provided to the County upon project completion.

E-05 **TESTING**

All testing shall be performed by the County except for pre-qualification testing of materials required by the FDOT Specifications, and testing required at the Contractor's expense in accordance with Exhibit 1. All costs incurred for services of a County contracted independent testing laboratory for any failing tests shall be billed directly to the Contractor or deducted from contract payments.

E-06 PAY ITEM SPECIAL CONDITIONS & SPECIAL PAY ITEMS

Video Documentation
Provide a digital video recording of the pre-construction conditions throughout the project limits. Provide a digital photo log or video of project activities, with heavy emphasis on potential claim items/issues and on areas of real/potential public controversy. This work shall be paid under the bid item for mobilization.

Timber Cap Repair – Scab –
This item shall include all necessary equipment, tools, machinery, materials and labor to complete the repair as noted in the contract plans. Product information has been provided for Pacific Woodtech Treated LVL and Cleveland Teco Split Rings (see Exhibit 2 – Part 2 and Exhibit 2 – Part 3). Similar alternatives to these materials may be used with the approval of the engineer. Selected product(s) shall be installed according to manufacturer's recommendations.

Timber Cap Repair – Wrap –
This item shall include all necessary equipment, tools, machinery, materials and labor to complete the repair as noted in the contract plans. Product information has been provided for PileMedic QuakeWrap GU50C Laminate Wrap and PileMedic QuakeBond 320LV Epoxy Resin (see Exhibit 2 – Part 4 and Exhibit 2 – Part 5). Similar alternatives to these materials may be used with the approval of the engineer. Selected product(s) shall be installed according to manufacturer's recommendations.

Timber Cap Repair –
This item shall include all necessary equipment, tools, machinery, materials and labor to complete the repair as noted in the contract plans. Product information has been provided for PileMedic QuakeWrap GU50C Laminate Wrap and PileMedic QuakeBond 320LV Epoxy Resin (see Exhibit 2 – Part 4 and Exhibit 2 – Part 5). Similar alternatives to these materials may be used with the approval of the engineer. Selected product(s) shall be installed according to manufacturer's recommendations.

Restore Spalled Areas (Epoxy)

DocuSign Envelope ID: 775FCF57-23C4-4678-829D-D68E47097C5B

Quantities shown for this item are based on the assumptions noted in the Summary of Structure Quantities in the contract plans. The contractor is responsible for accurately reporting field quantities to the owner. Payment for quantities in excess of those shown in the contract plans will not be made without prior written approval of the owner.

Riprap – Preformed Revetment Mat

This item shall include all necessary equipment, tools, machinery, materials and labor to complete the repair as noted in the contract plans. Product information has been provided for Fabriform Fabric Revetment Mats (see Exhibit 2 – Part 6). Similar alternatives to these materials may be used with the approval of the engineer.

Paint and Thermoplastic Pay Items

Paint pay items are for initial (single) application of marking on the final surface; thermoplastic shall be placed 30 days thereafter.

DocuSign Envelope ID: 775FCF57-23C4-4678-829D-D68E47097C5B

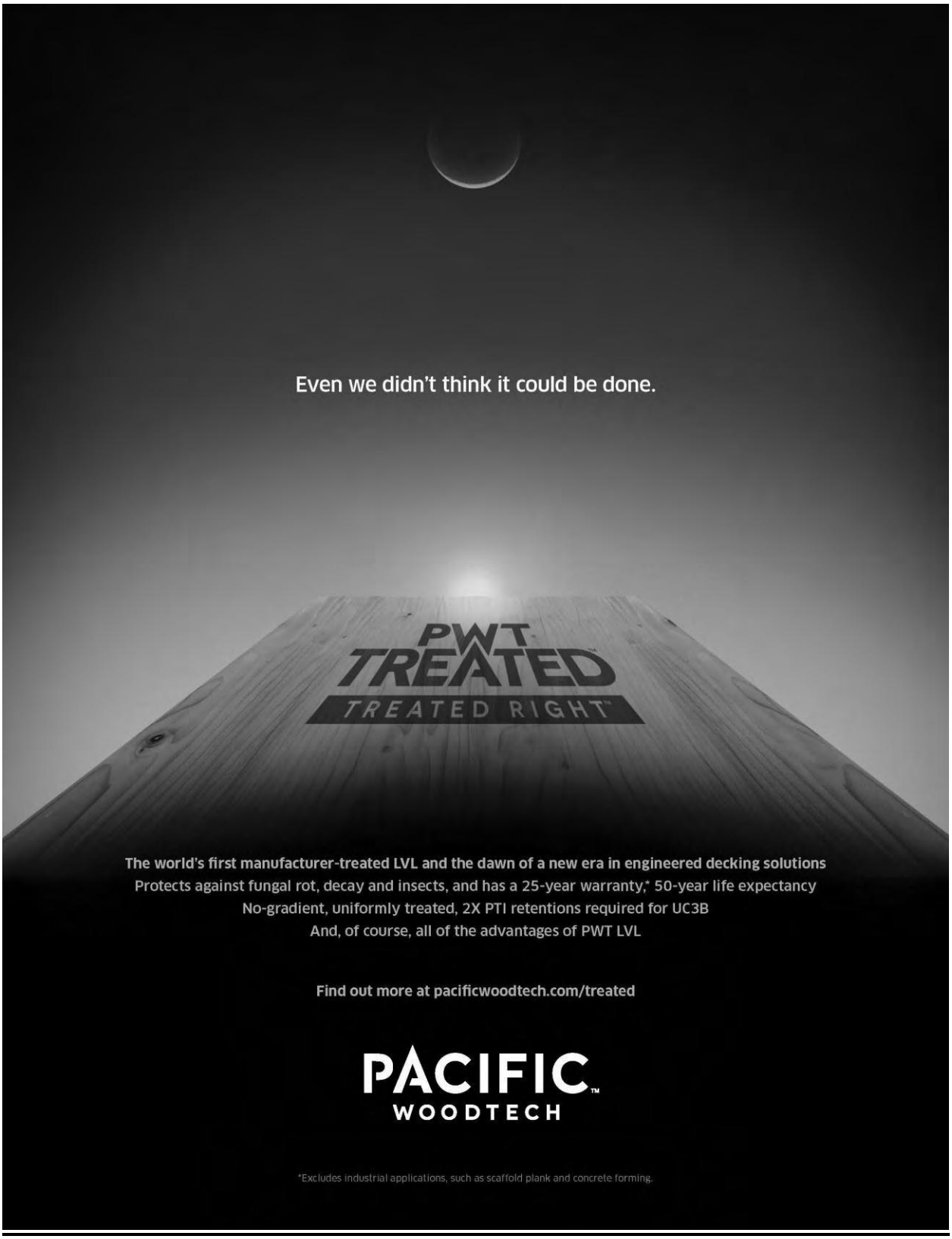
EXHIBIT 2 – PART 2

Material Specification for

Pacific Woodtech Treated LVL

CR 325 over Cross Creek – Bridge Rehabilitation
Project No. 919-7903-FY19-260027

DocuSign Envelope ID: 775FCF57-23C4-4678-829D-D68E47097C5B



DocuSign Envelope ID: 775FCF57-23C4-4678-829D-D68E47097C5B

PWT TREATED
TREATED RIGHT™

Product Highlights

- PWT is excited to add a one-of-a-kind innovative product to our portfolio.
- PWT Treated LVL will roll out this fall as the only manufacturer-treated LVL and will include a 25-year limited, transferable warranty.*
- PWT Treated LVL is protected against damage caused by fungal rot, decay and wood-destroying insects, including Formosan termites (interior or exterior usage).
- We use a proprietary treatment system and process, utilizing TRU-CORE® technology.

The Product

- PWT Treated LVL can be used in severe above-ground UC3B applications requiring UC4A treatment retentions per AWPA, including severe, critical and hard-to-replace above-ground uses, such as:
  - Deck substructures, exterior columns and sill plates.
- Treatment is added during the LVL manufacturing process, which fully penetrates throughout each veneer layer, offering complete protection from the inside out.
- No treatment gradient – and double (2X) the preservative retention required in various standards around the world.
- Additionally, envelope treated for best surface properties.
- No added VOCs.

Grade (no strength reduction after treatment)

2.0ETrue, 2800 Fb

Beam Sizes

3½" x	5½"	7¼"	9½"	11⅞"	14"	16"	18"
5¼" x	5½"	7¼"	9½"	11⅞"	14"	16"	18"
7" x	beams would be assembled in the field from 3½" LVL (generally small volume)						

Column Sizes

3½" x	3½"	5½"	7¼"
5¼" x		5½"	7¼"

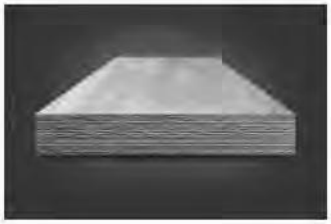
PWT will be introducing and supplying other treated sizes and products, such as:

- 1½ and 1¾ for framing and joist applications.
- Treated scaffold plank.

* Excludes industrial applications, such as scaffold plank and concrete forming.

Product Identification

- Product will have a muted olive tint
- Stamp: "PWT TREATED"
- Special PWT Treated LVL paper wrap



PACIFIC
WOODTECH
HISTORY BUILT. FUTURE BOUND.

1850 Park Lane | Burlington, WA 98233
TF 888.707.2285 | O 360.707.2200 | F 360.395.7003

www.pacificwoodtech.com

DocuSign Envelope ID: 775FCF57-23C4-4678-829D-D68E47097C5B

APA PRODUCT REPORT

www.apawood.org

Pacific Woodtech Preservative-Treated Laminated Veneer Lumber
Pacific Woodtech Corporation

PR-L329

Revised October 11, 2019

Products: Preservative-Treated Laminated Veneer Lumber
Pacific Woodtech Corporation, 1850 Park Lane, Burlington, Washington 98233
(360) 707-2200
www.pacificwoodtech.com

1. Basis of the product report:
   - 2018 and 2015 International Building Code (IBC): Sections 104.11 Alternative materials and 2303.1.10 Structural composite lumber
   - 2012 IBC: Section 104.11 Alternative materials and Section 2303.1.9 Structural composite lumber
   - 2018 and 2015 International Residential Code (IRC): Sections R104.11 Alternative materials, and R502.1.5, R602.1.5, and R802.1.4 Structural composite lumber
   - 2012 IRC: Sections R104.11 Alternative materials, and R502.1.7, R602.1.4, and R802.1.6 Structural composite lumber
   - ASTM D5456-14b, ASTM D5456-13, and ASTM D5456-09 recognized by the 2018 IBC and IRC, 2015 IBC and IRC, and 2012 IBC and IRC, respectively
   - APA Reports T99P-18, T99P-19, T99P-20, T2001P-52, T2001P-76, T2002P-31, T2003P-50, T2004P-1, T2006P-10, T2006P-88, T2008P-47, T2009P-45, T2011P-48, T2012P-32, T2015P-23, T2019P-43, and T2019P-52, and other qualification data

2. Product description:
   Pacific Woodtech preservative-treated laminated veneer lumber (LVL), designated as PWT TREATED LVL, is an LVL product pressed into billets that are approximately 48 inches in width, 3/4 to 3-1/2 inches in thickness, and up to approximately 66 feet in length. LVL billets are ripped into products that are 1-3/4 to 48 inches in depth. Products up to 7 inches in thickness may be fabricated by means of a secondary face-bonding process.

   PWT TREATED LVL is treated with Propiconazole Tebuconazole Imidacloprid (PTI) as part of the in-glueline treatment during the LVL manufacturing process for fungal decay and resistance to wood destroying insects, including Formosan termites, to a retention level equivalent to that specified in ICC-ES Evaluation Report ESR-3834 for the Use Categories UC1 through UC4A. PWT TREATED LVL shall be limited to the above ground applications including, but not limited to, structural members that are critical or hard to replace. The efficacy of the preservative treatment of the PWT TREATED LVL is outside the scope of this report and the APA certification program.

3. Design properties:
   The structural design provisions for wood construction provided in the building code are applicable to PWT TREATED LVL. Table 1 lists Allowable Stress Design reference values. Table 2 lists the equivalent specific gravities for connection design. Minimum fastener spacings when installed in the edge of a member are provided in Table 3. The allowable spans for PWT TREATED LVL shall be in accordance with the recommendations provided by the manufacturer (www.pacificwoodtech.com/treated).

   Service conditions are considered dry use where the environmental conditions (temperature and relative humidity) will result in an average equilibrium moisture content (EMC) of sawn lumber of less than 16%. Average EMC of 16% or greater is considered wet use conditions.

© 2019 APA - The Engineered Wood Association 9-18

DocuSign Envelope ID: 775FCF57-23C4-4678-829D-D68E47097C5B

4. Product Installation:
PWT TREATED LVL shall be installed in accordance with the recommendations provided by the manufacturer (see link above).

5. Fire-rated assemblies:
The provisions of IBC Section 721.6.3, Design of fire-resistant exposed wood members, shall be applicable to PWT TREATED LVL. Fire-rated assemblies shall be constructed in accordance with the recommendations provided by APA Design/Construction Guide: *Fire-Rated Systems*, Form W305 (www.apawood.org/resource-library) and the manufacturer (see link above).

6. Limitations:
   a) PWT TREATED LVL shall be designed in accordance with the code using the design properties specified in this report.
   b) The efficacy of the preservative treatment of the PWT TREATED LVL is outside the scope of this report and the APA certification program.
   c) PWT TREATED LVL is produced at the Pacific Woodtech Corporation manufacturing plant located in Burlington, Washington, under a quality control program audited by APA.
   d) This report is subject to re-examination in one year.

7. Identification:
PWT TREATED LVL is sold under the Pacific Woodtech brand. All products are identified by a label bearing the manufacturer's name (Pacific Woodtech) and/or trademark, the APA assigned plant number (1047), the LVL grade, the APA logo, this report number (PR-L329), and a means of identifying the date of manufacture.

© 2019 APA - The Engineered Wood Association

DocuSign Envelope ID: 775FCF57-23C4-4678-829D-D68E47097C5B

Table 1. Allowable Stress Design Reference Values for PWT TREATED LVL[a]

Grade	Service Conditions	E_{true}[b], 10^6 psi	Beam[c]			Plank[d]			Axial	
			F_b[e,g], psi	F_v, psi	$F_{c\perp}$, psi	F_b[f,g], psi	F_v, psi	$F_{c\perp}$, psi	F_t[h], psi	F_c[i], psi
$2.0E_{true}$	Dry Use	2.0	2800	285	850[j]	2800	150	650[k]	2100	2500
$2.0E_{true}$	Wet Use	1.4	1680	160	850[l]	1680	100	650[l]	1780	875

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 lbf = 4.448 N, 1 psi = 6.9 kPa

[a] Except for modulus of elasticity (E_{true}) and compression perpendicular to grain ($F_{c\perp}$), the tabulated values are permitted to be adjusted for duration of load, as provided in the code.

[b] Tabulated E_{true} values are the shear-free modulus of elasticity. Coefficient of variation of E_{true}, COV_E = 0.10. The deflection equation for a simple-span beam under uniform load is:

$$\delta = \frac{270\, w\, L^4}{E_{true}\, b\, h^3} + \frac{28.8\, w\, L^2}{E_{true}\, b\, h}$$

where:
δ = Estimated total deflection, inches
L = span, feet
b = beam width, inches
w = uniform load, plf
E_{true} = tabulated shear-free E, psi
h = beam depth, inches

[c] Beam values apply to members loaded and supported on faces showing the narrow edge of all veneers, typically the narrow faces of the member.

[d] Plank values apply to members loaded and supported on faces showing the face of one veneer, typically the wide faces of the member.

[e] Flexural stress, F_b, in the beam orientation is based on a reference depth of 12 inches. For other depths, multiply by a size factor of $(12/d)^{1/5}$, where d is the depth in inches. For depths less than 1-3/4 inches, multiply by 1.47.

[f] Flexural stress, F_b, in the plank orientation is based on a reference depth of 1-3/4 inches. For other depths, multiply by a size factor of $(1.75/d)^{1/3}$, where d is the depth in inches. For depths less than 1-3/4 inches, use the tabulated value.

[g] Flexural stress, F_b, values are permitted to be increased by 4 percent for repetitive members, as provided in the code.

[h] Tensile stress parallel to grain, F_t, is based on a reference gage length of 4 feet. For longer lengths, multiply by a length factor of $(4/L)^{1/10}$, where L is the length in feet.

[i] Compressive stress parallel to grain, F_c.

[j] Tabulated compressive stress perpendicular to grain ($F_{c\perp}$) value in the beam orientation is based on the average stress at the 0.04-in. deformation in accordance with ASTM D5456.

[k] Tabulated $F_{c\perp}$ value in the plank orientation is based on the average stress at the proportional limit or 0.04-in. deformation, whichever is less, in accordance with ASTM D5456.

[l] Deformation up to 1/8 inch could occur at the tabulated compressive stress perpendicular to grain in wet use conditions.

© 2019 APA - The Engineered Wood Association

DocuSign Envelope ID: 775FCF57-23C4-4678-829D-D68E47097C5B

Table 2. Equivalent Specific Gravity for Connection Design for PWT TREATED LVL

Connection Type	Face[a]	Edge[b]
Nail – Withdrawal	0.50	0.47
Nail – Lateral	0.50	0.50
Bolt – Lateral	0.50	NA[c]

[a] Face: member faces showing the face of one veneer, typically the wide faces of the member.
[b] Edge: member faces showing the narrow edge of all veneers, typically the narrow faces of the member.
[c] Not available.

Table 3. Minimum Spacing for Fasteners Installed into Edge of PWT TREATED LVL

LVL Dimensions	Fastener[a]	Minimum Spacing (inches)
Minimum 3/4-inch thick and 3-1/2-inch deep	8d Nail	3
	10d Nail	4
	12d Nail	4
	16d Nail	NP[b]
	14 Gage Staple	4
Minimum 1-1/4-inch thick and 3-1/2-inch deep	10d Nail	4
	12d Nail	4
	16d Nail	6[c]
	14 Gage Staple	4

For SI: 1 inch = 25.4 mm

[a] Nails are either common or box nails.
[b] Not permitted.
[c] Permitted to be 4 inches when nailing through bottom wall plate and sheathing (maximum 1-3/8 inches of penetration).

APA – The Engineered Wood Association is an approved national standards developer accredited by American National Standards Institute (ANSI). APA publishes ANSI standards and Voluntary Product Standards for wood structural panels and engineered wood products. APA is an accredited certification body under ISO/IEC 17065 by Standards Council of Canada (SCC), an accredited inspection agency under ISO/IEC 17020 by International Code Council (ICC) International Accreditation Service (IAS), and an accredited testing organization under ISO/IEC 17025 by IAS. APA is also an approved Product Certification Agency, Testing Laboratory, Quality Assurance Entity, and Validation Entity by the State of Florida, and an approved testing laboratory by City of Los Angeles.

APA – THE ENGINEERED WOOD ASSOCIATION
HEADQUARTERS
7011 So. 19th St. • Tacoma, Washington 98466
Phone: (253) 565-6600 • Fax: (253) 565-7265 • Internet Address: www.apawood.org

PRODUCT SUPPORT HELP DESK
(253) 620-7400 • *E-mail Address:* help@apawood.org

DISCLAIMER

APA Product Report® is a trademark of *APA – The Engineered Wood Association*, Tacoma, Washington. The information contained herein is based on the product evaluation in accordance with the references noted in this report. Neither APA, nor its members make any warranty, expressed or implied, or assume any legal liability or responsibility for the use, application of, and/or reference to opinions, findings, conclusions, or recommendations included in this report. Consult your local jurisdiction or design professional to assure compliance with code, construction, and performance requirements. Because APA has no control over quality of workmanship or the conditions under which engineered wood products are used, it cannot accept responsibility for product performance or designs as actually constructed.

DocuSign Envelope ID: 775FCF57-23C4-4678-829D-D68E47097C5B

EXHIBIT 2 – PART 3

Material Specification for

Cleveland Teco Split Rings

CR 325 over Cross Creek – Bridge Rehabilitation
Project No. 919-7903-FY19-260027

DocuSign Envelope ID: 775FCF57-23C4-4678-829D-D68E47097C5B

CLEVELAND

DESIGN MANUAL FOR TECO TIMBER CONNECTORS

In conjunction with the load and spacing charts in this manual, to follow other applicable design provisions in the **NATIONAL DESIGN SPECIFICATION**, i.e., bending members-shear, stresses in members at joints, number of fastenings, timber connector joints.

NOTE: Load and spacing charts are the same for both TECO and Cleveland Steel Specialty (CSS) Ring and Shear Plate Connectors. The 2-5/8" diameter TECO Shear Plate is no longer in production. The 4" diameter TECO and CSS Shear Plates are duplicates. Since cross-sections of TECO and CSS Rings are different, the proper installation tool must be used. CSS continues to produce both ring configurations.

DocuSign Envelope ID: 775FCF57-23C4-4678-829D-D68E47097C5B

DESCRIPTION OF CONNECTORS

CHOICE OF SIZES AND TYPES OF TECO CONNECTORS

The following is offered as a guide for the selection of size and type of connector or connectors to be used in a design and to point out the respective advantages of using the different sizes and types under varying conditions.

The **TECO WEDGE-FIT SPLIT RING** — TECO WEDGE-FIT 2½" and 4" split rings are placed in precut conforming grooves made with TECO WEDGE-FIT grooving tools. The tongue and groove "split" in the ring permits simultaneous bearing of the inner surface of the ring against the core left in grooving and the outer face of the ring against the outer wall of the groove. The special wedge shape of the ring section provides maximum tolerance for easy insertion but a tight-fitting joint when the ring is fully seated in the conforming groove.

TECO WEDGE-FIT split rings are the most efficient mechanical devices used for joints in timber construction. The 2½" split rings are widely used in trussed rafter construction in spans up to 50'-0" and in all wood framing involving lumber of 2" nominal dimension. The 4" split rings are used in heavy beam and girder construction, towers, bridges and moderate and long span roof trusses, generally in members 3" or more in nominal thickness. TECO WEDGE-FIT grooving tools are precision-made, high-speed woodworking tools, designed for power operation only.

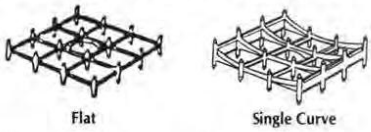
The **SHEAR PLATE** — The shear plate is intended primarily

Front Back
Malleable Iron

for wood-to-steel connections or for wood-to-wood connections in demountable structures when used in pairs. They are placed in precut daps and are completely embedded in the timber when in position, being flush with the surface of the timber. In some cases where field connections of pre-assembled sections are to take place, two shear plates used in place of a split ring will enable the members to slide easily into position greatly reducing the labor required for the connection. Shear plates are used to attach columns to footings through steel straps, in connection with steel gusset plates, for transferring loads from steel heel straps in bowstring trusses and for other steel-to-wood connections in timber structures. Their advantage as regards use in demountable structures lies in the fact that they may be installed in the respective members directly after fabrication and may be held in place by nails. There is no danger of their being lost. The lack of projections enables members to slide by one another without interference and since they are not repeatedly installed and removed, there is no wear around the bolt hole or grooves.

As to choice of size, the 2⅝" shear plate compares with the 2½" split ring and the 4" shear plate with the 4" split ring.

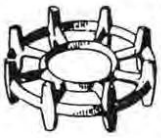
The **TECO SPIKE GRID** — The TECO spike grids are specially



Flat Single Curve

designed for use with piles and poles in trestle construction, piers and wharves, and in transmission lines. The single curve grid joins a curved pole or pile surface and a flat sawn timber and the flat grid joins two flat sawn timbers. The grids are installed by pressure similar to the toothed rings.

The **TECO CIRCULAR GRID** — The TECO circular grid is used between the top of a pile and the cap to prevent lateral movement. It is usually installed for this purpose with several light blows from the pile driver hammer.



The TECO circular grid is also used in trestle and other heavy timber construction in much the same manner as the flat and single curve grids. It is also used as a tie spacer.

GENERAL — It is generally advisable to use the same size connector and the same size bolt throughout a design. This simplifies the fabrication procedure, lessens the chance of a fabrication error and leads to greater economy. It is also advisable not to specify lumber of a higher grade than is required.

The loads, spacing and other design data published herein are based on the use of TECO timber connectors installed with TECO tools. Therefore, when using these data, TECO products should be specified to protect the integrity of the design.

Cleveland rings and shear plates have the same allowable load values as comparable TECO products. However, the proper tool for each type must be specified.

DocuSign Envelope ID: 775FCF57-23C4-4678-829D-D68E47097C5B

FACTORS AFFECTING DESIGN DATA — SPACINGS, DISTANCES, LOADS

ANGLE OF LOAD TO GRAIN

The angle of load to grain is the angle between the resultant load exerted by the connector acting on the member and the longitudinal axis of the member. See figure #1.

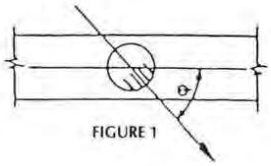


FIGURE 1

ANGLE OF AXIS TO GRAIN

The angle of axis to grain is the angle of connector axis formed by a line joining the centers of two adjacent connectors located in the same face of a member in a joint and the longitudinal axis of the member. See figure #2.

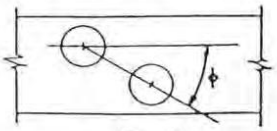


FIGURE 2

USE OF DATA AND CHARTS

General — This book has been arranged with two facing pages devoted to each size of each type of the major connectors. On the left hand page are the load chart and size data as well as required increases or decreases for various conditions and on the right hand page are the spacing, end distance and edge distance charts. One page is given to the spike grids and one page to the clamping plates. The last four pages have information on camber, truss weights, galvanizing, net section, properties of sections and recommended references.

LOAD CHARTS — The load charts show the allowable normal loads for one connector unit and bolt in single shear. The connector unit consists of one split ring or toothed ring, a pair of shear plates, or a single shear plate used with a steel sideplate.

The charts are broken vertically into the three species groups. Select the group from page 4 according to the species of lumber specified and use the portion of the chart applying to this group. Within each group there are several curves, each representing a thickness of lumber and the number of loaded faces. Use the curve conforming to the condition existing in the joint. Each curve is plotted according to the Hankinson Formula with load in pounds and angle of load to grain as the variables. Select the proper angle at bottom or top of chart, proceed vertically to the selected curve and proceed horizontally to read the allowable normal load. Lumber thicknesses less than those shown on the load data charts for the corresponding number of loaded faces are not recommended.

For more than one connector unit, multiply the connector load by the number of units.

CONNECTOR DATA — The data given cover dimensions of the connectors, minimum lumber sizes, recommended bolt and bolt hole diameters, recommended washer sizes and similar self explanatory information.

Lag screws of the same diameter as the recommended bolt sizes may be used instead of bolts in accordance with provisions set forth in the "National Design Specification for Wood Construction.

CONNECTOR SPECIFICATIONS — The design data and other information in the publication are based on the use of standard TECO connectors and tools. It is recommended that the specifications be closely followed to insure the use of products for which the data were prepared.

ADJUSTMENTS FOR LOADING DURATIONS — The allowable connector loads given on the charts are for loadings of normal duration. Normal duration of loading contemplates the joint being fully loaded for approximately ten years, either continuously or cumulatively, by the maximum allowable normal design load shown on the charts and/or that 90% of this load is applied throughout the remainder of the life of the structure. Factors are given with the data on each connector which, applied to the load values in the charts, give the allowable loads for other durations of loading from those of impact character to those applied permanently.

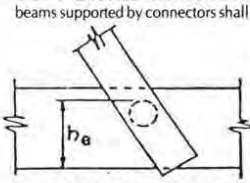
Permanent loading, for which a factor of 90% is given, contemplates the connector will be fully loaded to that percentage of the normal design values on the chart applied permanently or for many years.

Information on design with combinations of loads of different durations is given in National Design Specification for Stress-Grade Lumber and its Fastenings, National Forest Products Association, current edition.

DECREASES FOR MOISTURE CONTENT CONDITION — **The expected condition of lumber when fabricated and used should be determined and the required decreases if necessary made in accordance with the tabulated data with each connector.**

DESIGN OF ECCENTRIC JOINTS AND OF BEAMS SUPPORTED BY FASTENINGS — Eccentric connector joints and beams supported by connectors shall be designed so that H in the following formula does not exceed the allowable unit stresses in horizontal shear

$$H = \frac{V}{bh_e}$$



in which h_e (with connectors) = the depth of the member less the distance from the unloaded edge of the member to the nearest edge of the nearest connector.

MAXIMUM PERMISSIBLE LOADS ON SHEAR PLATES — Due to the type of test failure, there are limits beyond which shear plates should not be loaded. These limits vary with the bolt size. These limits are given with the shear plate data.

SPACING CHARTS — Spacing is the distance between centers of connectors measured along a line joining their centers. "R" in figure #4 is the spacing between the rings shown.

On the right hand page of the data for each connector, is the spacing chart. Each chart has five parabolic curves representing recommended spacing for full load at the particular angle of load to grain noted on the curve. For intermediate angles of load, straight line interpolation may be used. If the spacing for full load is desired, select the proper angle of load to grain curve and find where it intersects the radial lines representing angle of axis to grain, the distance from that point to the lower left hand corner is the spacing. It is probably more convenient, however, in laying out this spacing to use the parallel to grain and perpendicular to grain components or measurements of the spacing. The parallel to grain component may be read at the bottom of the chart by projecting downward from the point on the curve. The perpendicular component of the spacing may be read at the left hand side of the chart by projecting horizontally from the point on the curve.

The sixth curve on the chart is a quarter-circle. This curve represents the spacing for 50% of full load for any angle of load to grain and also the minimum spacing permissible. For percentages between 50% and 100% of full load for an angle of load to grain interpolate radially on a straight line between the 50% curve and the curve corresponding to the proper angle of load to grain.

Reductions in load for edge distance and end distance are not additive to spacing reductions but are coincident.

DocuSign Envelope ID: 775FCF57-23C4-4678-829D-D68E47097C5B

FACTORS AFFECTING DESIGN DATA—SPACINGS, DISTANCES, LOADS

USE OF DATA AND CHARTS *(continued)*

END DISTANCE CHARTS — End distance is the distance measured parallel to grain from the center of a connector to the square cut end of the member. If the end of the member is not square cut, the end distance shall be taken as the distance from any point on the center half of the connector diameter drawn perpendicular to the center line of the piece to the nearest point on the end of the member measured parallel to grain. The distance measured perpendicular to the end cut to the center of the connector shall never be less than the required edge distance. Figure #5 demonstrates end distance measurement (A).

END DISTANCE

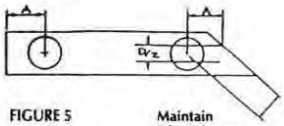


FIGURE 5 Maintain Edge Distance

On the same page with the spacing chart, the end distance chart will be found. This chart is divided into two sections, depending on whether the member is in tension or compression. If in tension, project vertically on the chart from the end distance to the curve, then horizontally to get the percentage of full load allowable. This process can be reversed of course by going from percent of full load required to spacing required. In compression there is an additional variable of angle of load to grain. The operation is the same except the curve for the proper angle of load to grain should be used. For intermediate angles interpolate between the curves on a straight line. On some of the charts the curves are cut off at the right hand side of the chart. The end distance dimension marking this cut off is the minimum permissible and gives full load for an angle of load to grain of zero degrees.

Reductions in load for edge distance or spacing are not additive to end distance reductions but are coincident.

EDGE DISTANCE CHARTS — Edge distance is the distance from the edge of the member to the center of the connector closest to the edge of the member measured perpendicular to the edge. The loaded edge distance is the edge distance measured from the edge toward which the load induced by the connector acts. The unloaded edge distance is the edge distance measured from the edge away from which the load induced by the connector acts. Figure #4 shows a typical measurement of edge distance with "B" being the unloaded edge distance and "C" the loaded edge distance.

EDGE DISTANCE AND SPACING

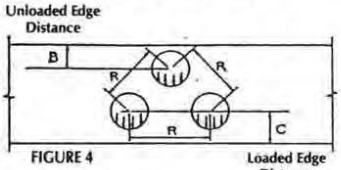


FIGURE 4 Loaded Edge Distance

On the same page with the spacing and end distance charts, the edge distance chart will be found. For unloaded edge distance the standard and minimum edge distance is the dimension at the right hand edge of the chart. For loaded edge distance there is a variation according to angle of load to grain. Select the proper curve for the desired angle and then a given edge distance projected vertically to the curve and then horizontally to the side will give the percentage of full load allowable. The upper right hand corner represents the standard and minimum loaded edge distance for zero degrees angle of load to grain. For intermediate angles, interpolate on a straight line.

INTER-RELATIONSHIP OF THICKNESS, DISTANCE AND SPACING — Loads reduced because of thickness (see tabulated loads) do not permit any reduction of edge distance, and distance or spacing without further reduction of load and conversely loads reduced for edge distance, end distance or spacing do not permit reduction of thickness.

When allowable load is reduced due to reduced edge distance, end distance or spacing, the reduced allowable load for each shall be determined separately and the lowest allowable load so determined for any one connector shall apply to this and all other connectors resisting a common force in a joint. Such load reductions are not comulative. Conversely if the allowable load is reduced because of a reduced distance or spacing, the other distances or spacings may be reduced to those resulting in the same reduced allowable load.

CAMBER CHART — The camber chart on page 25 will give an empirical value for recommended camber for the average truss. The bowstring truss using a glued laminated upper chord requires less camber than other types because of the absence of splices. The value for camber read from the chart is the amount the lower chord should be raised at the center of the span.

To use the chart, determine the values for L (span) and H (depth of truss at center) and multiply to get L_2/H. Then using this value at the left hand side proceed horizontally to the proper curve. Then project vertically to the bottom of the chart and read the camber. For special cases where detailed deformation data is required, write the Timber Engineering Company stating the conditions involved and special recommendations will be made.

EFFECT ON CONNECTOR LOADS OF GRADE OF LUMBER AND SPECIES — The various commercial stress grades of lumber are affected by characteristics which have no effect on the strength values of connectors. Therefore, no variation in connector loads is permissible for variations in assigned stresses to lumber.

Connector loads do vary depending on the species of lumber with which they are used. The species have been classified in groups A, B, and C. Loads for species not listed may be obtained on request from the Timber Engineering Company.

CONNECTOR LOAD GROUPING OF SPECIES WHEN STRUCTURALLY GRADED

CONNECTOR LOAD GROUPING

GROUP A — SPECIES	GROUP B — SPECIES	GROUP C — SPECIES
Douglas fir (dense)	Douglas fir (coast region)	Cypress, southern and tidewater red
Oak, red and white	Larch, western	Hemlock, West Coast
Pine, southern (dense)	Pine, southern	Pine, Norway
		Redwood

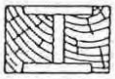
DocuSign Envelope ID: 775FCF57-23C4-4678-829D-D68E47097C5B

NET SECTION — TENSION OR COMPRESSION

NET SECTION — TENSION OR COMPRESSION

The net section of a timber in a connector joint is usually adequate to transmit the full strength of the timber which can be developed outside of the joint when the lower grades of lumber are used. However ever, it may be desirable to check the strength of the net section of timbers when they are of the minimum size recommended herein for a given connector, particularly if a high stress-grade of lumber is used.

The critical or "net" section of a timber in a joint, which will generally pass through the center line of a bolt and connector, occurs at the plane of maximum stress. The next cross section at the plane is equal to the full cross-sectional area of the timber minus the projected area of that portion of the connectors within the member and that portion of the bolt hole, not within the connector projected area, located at this plane.



Shaded Area Shows Net Cross Section of Timber

Due to wood being able to support loads of short-time duration greatly in excess of permanently applied loads, computation of the required net section involves consideration of the different types and amounts of loadings.

The net cross-sectional area in square inches required at the critical section may be determined by multiplying the total load in pounds, which is transferred through the critical section of the member, by the appropriate constant given in the table. Conversely, the total working load capacity in pounds of a given net area may be determined by dividing the net area in square inches by the appropriate constant.

CONSTANTS FOR USE IN DETERMINING REQUIRED NET SECTION IN SQUARE INCHES

Type of Loading	Thickness of Wood Member in Inches	Constants for Each Connector Load Group		
		Group A	Group B	Group C
Normal	4" or less over 4"	.00043 .00054	.00050 .00063	.00061 .00077
Permanent	4" or less over 4"	.00048 .00059	.00055 .00069	.00067 .00083
Snow	4" or less over 4"	.00037 .00047	.00044 .00054	.00053 .00067
Wind or Earthquake	4" or less over 4"	.00032 .00040	.00038 .00047	.00045 .00057

*The above constasts, computed from basic recommendations of the Forest Products Laboratory, are based on a permissible stress at the net section equal to the basic stress for clear wood in compression parallel to grain.

The above recommendations assume that a knot approaching the maximum size allowed for the grade will not occur at, or within one-half the connector diameter of the plane of the critical section. Unless the specifications and fabrication control provide that knots will not occur at the joint, stresses in the net section shall not exceed 87.5% of the allowable extreme fiber in bending stress for the grade used.

SPECIFICATION WHEN GALVANIZING IS REQUIRED

The galvanizing specifications for all types of timber connectors shall conform to current A.S.T.M. Specifications A123 or A153.

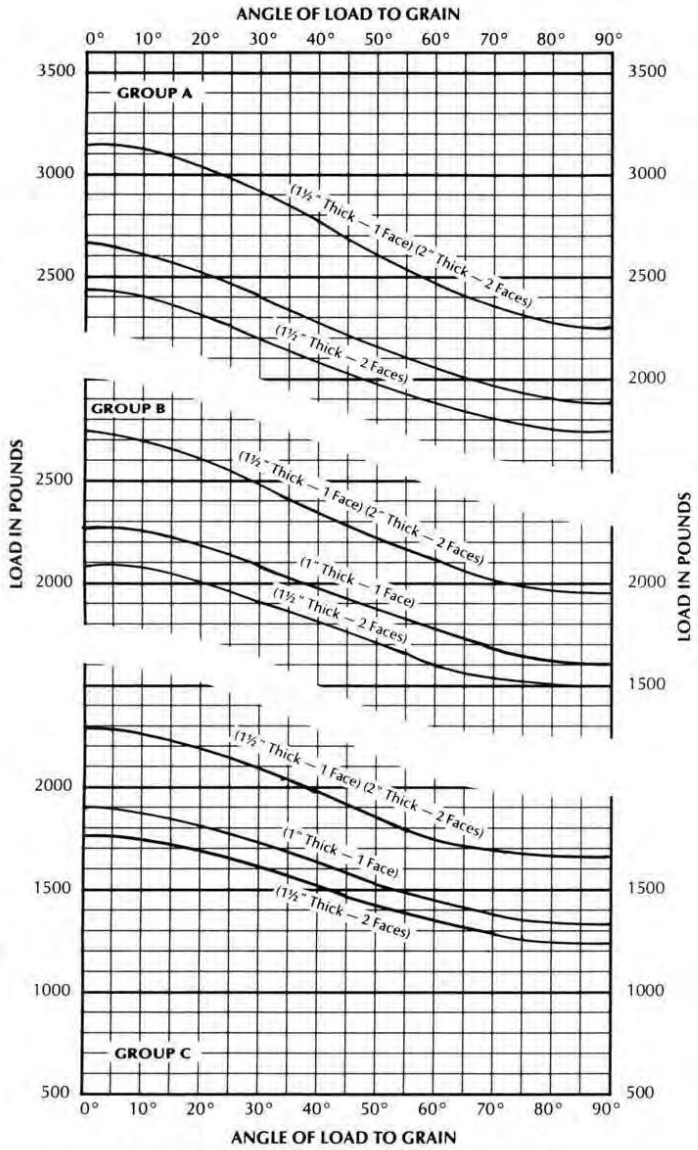
1. Zinc used in the bath shall be at least equal to "Prime Western".
2. The weight of the zinc coating per square foot of actual surfaces shall average not less than 2.0 oz. and no individual specimen shall show less than 1.8 oz., weight to be determined by stripping an entire piece by A. 8. T.M. Standard Method A 90-39.
3. The zinc coating shall be adherent, smooth, continuous and thorough, except that uncoated spots on the tongue and groove surfaces in contact will not be cause for rejection. It shall be free from imperfections such as bumps, blisters, gritty areas, uncoated spots, acid and black spots, dross and flux.
4. When visual inspection and testing with ½ lb. hammer is not conclusive, tests shall be made by the Preece method, in which case the minimum thickness of coating shall withstand at least seven 1-minute dips.
5. Test samples may be selected from deliveries at random and will be tested by the purchaser and at purchaser's expense.

PROJECTED AREA OF CONNECTORS AND BOLTS (For Use In Determining Net Sections)

Connectors		Bolt Diam.	Placement of Connectors	Total Projected Area in Square Inches of Connectors & Bolts in Lumber Thickness of				
No.	Size			1½"	2½"	3½"	5½"	7½"
SPLIT RINGS		½	One Face	1.71	2.27	2.84	3.89	5.02
1	2½	½	Two Faces	2.60	3.16	3.73	4.78	5.91
2	4	¾	One Face	3.01	3.86	4.64	6.16	7.79
		¾	Two Faces	4.85	5.66	6.47	8.00	9.62
SHEAR PLATES		¾	One Face	2.00	2.81	3.62	4.14	6.77
1	2⅝	¾	Two Faces	2.81	2.68	4.43	5.96	7.58
1	2⅝ LG	¾	One Face	1.87	2.68	3.50	5.02	6.65
		¾	Two Faces	2.56	3.38	4.19	5.71	7.34
2	4	¾	One Face	3.24	4.05	4.87	6.39	8.01
		¾	Two Faces	—	6.11	6.93	8.45	10.07
2-A	4	⅞	One Face	3.33	4.27	5.21	6.97	8.84
		⅞	Two Faces	—	6.25	7.19	8.95	10.82

DocuSign Envelope ID: 775FCF57-23C4-4678-829D-D68E47097C5B

2½" TECO SPLIT RINGS



LOAD CHART FOR NORMAL LOADING ONE 2½" SPLIT RING AND BOLT IN SINGLE SHEAR

2½" SPLIT RING DATA

Split Ring — Dimensions	
Inside Diameter at center when closed	2½"
Inside diameter at center when installed	2.54"
Thickness of ring at center	0.163"
Thickness of ring at edge	0.123"
Depth	¾"
Lumber, Minimum dimensions allowed	
Width	3½"
Thickness, rings in one face	1"
Thickness, rings opposite in both faces	1½"
Bolt, diameter	½"
Bolt hole, diameter	9/16"
Projected Area for portion of one ring within a member, square inches	1.10
Washers, minimum	
Round, Cast or Malleable Iron, diameter	2⅛"
Square Plate	
Length of Side	2"
Thickness	⅛"
(For trussed rafters and similar light construction standard wrought washers may be used.)	

SPLIT RING SPECIFICATIONS

Split rings shall be TECO split rings as manufactured by CSS, Cleveland, OH. Split rings shall be manufactured from hot rolled S. A. E. — 1010 carbon steel. Each ring shall form a closed true circle with the principal axis of the cross section of the ring metal parallel to the geometric axis of the ring. The ring shall fit snugly in the prepared groove. The metal section of each ring shall be beveled from the central portion toward the edges to a thickness less than that at mid-section. It shall be cut through in one place in its circumference to form a tongue and slot.

PERCENTAGES FOR DURATION OF MAXIMUM LOAD

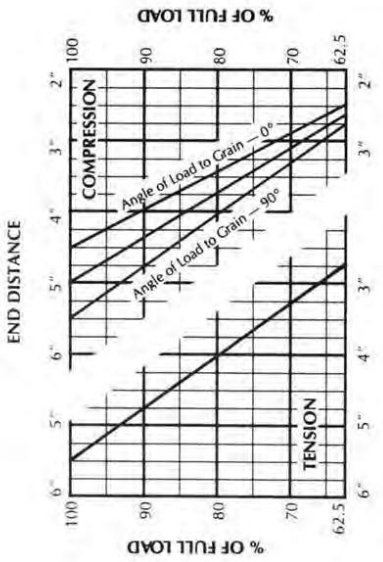
Two Months Loading, as for snow	115%
Seven Days Loading	125%
Wind or Earthquake Loading	133⅓%
Impact Loading	200%
Permanent Loading	90%

DECREASES FOR MOISTURE CONTENT CONDITIONS

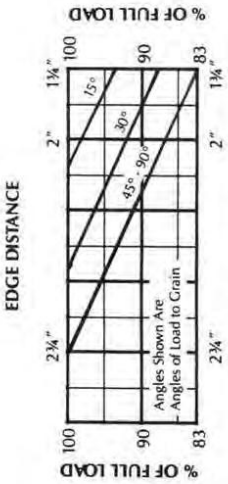
Condition when Fabricated	Seasoned	Unseasoned	Unseasoned
Condition when Used	Seasoned	Seasoned	Unseasoned or Wet
Split Rings	0%	20%	33%

DocuSign Envelope ID: 775FCF57-23C4-4678-829D-D68E47097C5B

2½" TECO SPLIT RINGS

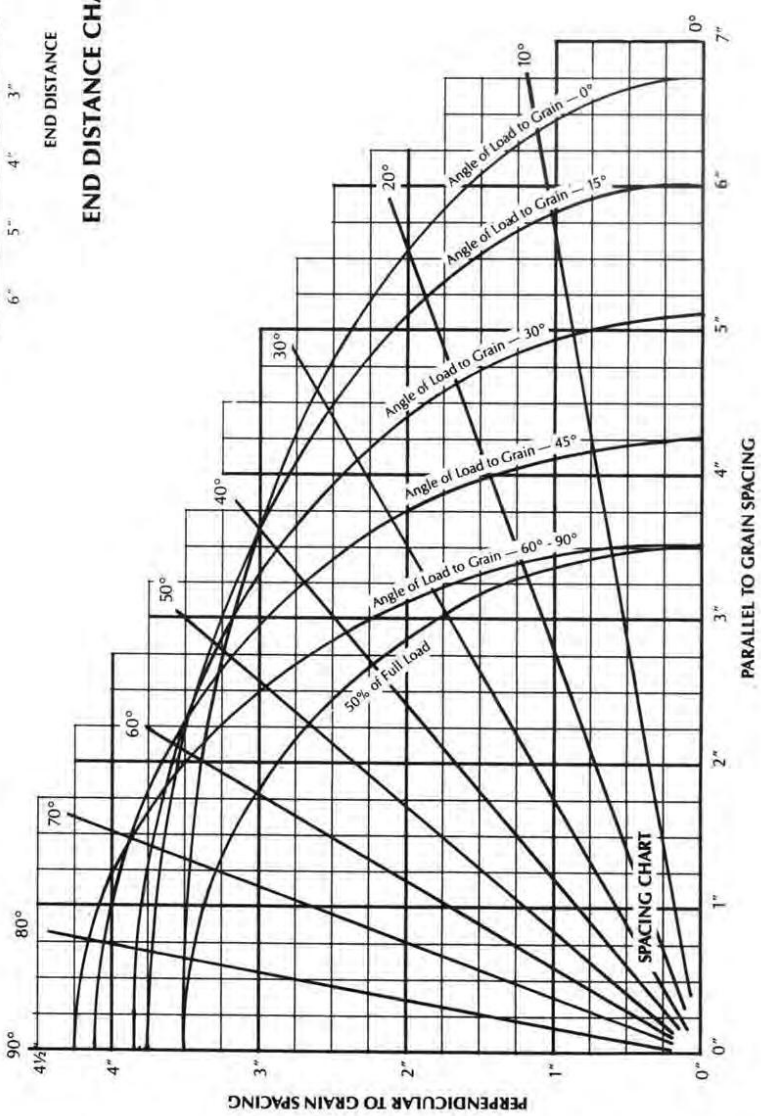


END DISTANCE CHART



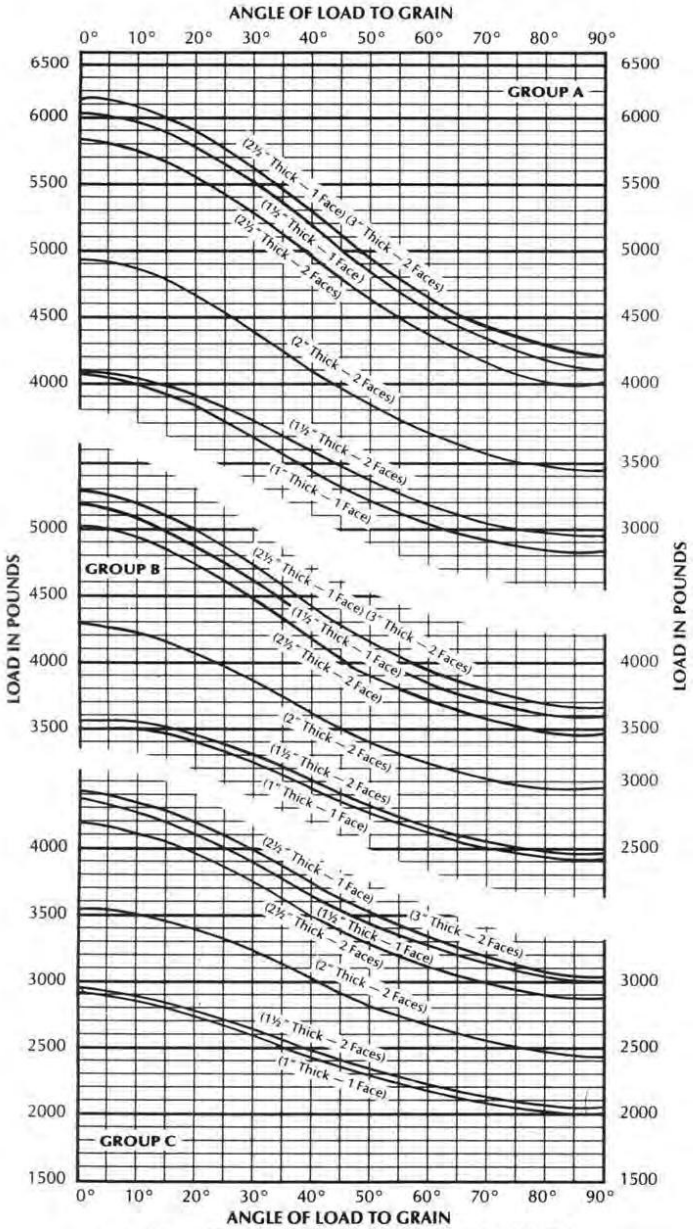
EDGE DISTANCE CHART

DO NOT USE THESE CHARTS BEFORE READING PAGE 3



DocuSign Envelope ID: 775FCF57-23C4-4678-829D-D68E47097C5B

4" TECO SPLIT RINGS



LOAD CHART FOR NORMAL LOADING
ONE 4" SHEAR-PLATE UNIT AND BOLT IN SINGLE SHEAR

4" SPLIT RING DATA

Split Ring — Dimensions	
Inside Diameter at center when closed	4"
Inside diameter at center when installed	4.06"
Thickness of ring at center	0.193"
Thickness of ring at edge	0.133"
Depth	1"
Lumber, Minimum dimensions allowed	
Width	5½"
Thickness, rings in one face	1"
Thickness, rings opposite in both faces	1½"
Bolt, diameter	¾"
Bolt hole, diameter	13/16"
Projected Area for portion of one ring within a member, square inches	2.24
Washers, minimum	
Round, Cast or Malleable Iron, diameter	3"
Square Plate	
Length of Side	3"
Thickness	5/16"
(For trussed rafters and similar light construction standard wrought washers may be used.)	

SPLIT RING SPECIFICATIONS

Split rings shall be TECO split rings as manufactured by CSS, Cleveland, OH. Split rings shall be manufactured from hot rolled S. A. E. — 1010 carbon steel. Each ring shall form a closed true circle with the principal axis of the cross section of the ring metal parallel to the geometric axis of the ring. The ring shall fit snugly in the prepared groove. The metal section of each ring shall be beveled from the central portion toward the edges to a thickness less than that at mid-section. It shall be cut through in one place in its circumference to form a tongue and slot.

PERCENTAGES FOR DURATION OF MAXIMUM LOAD

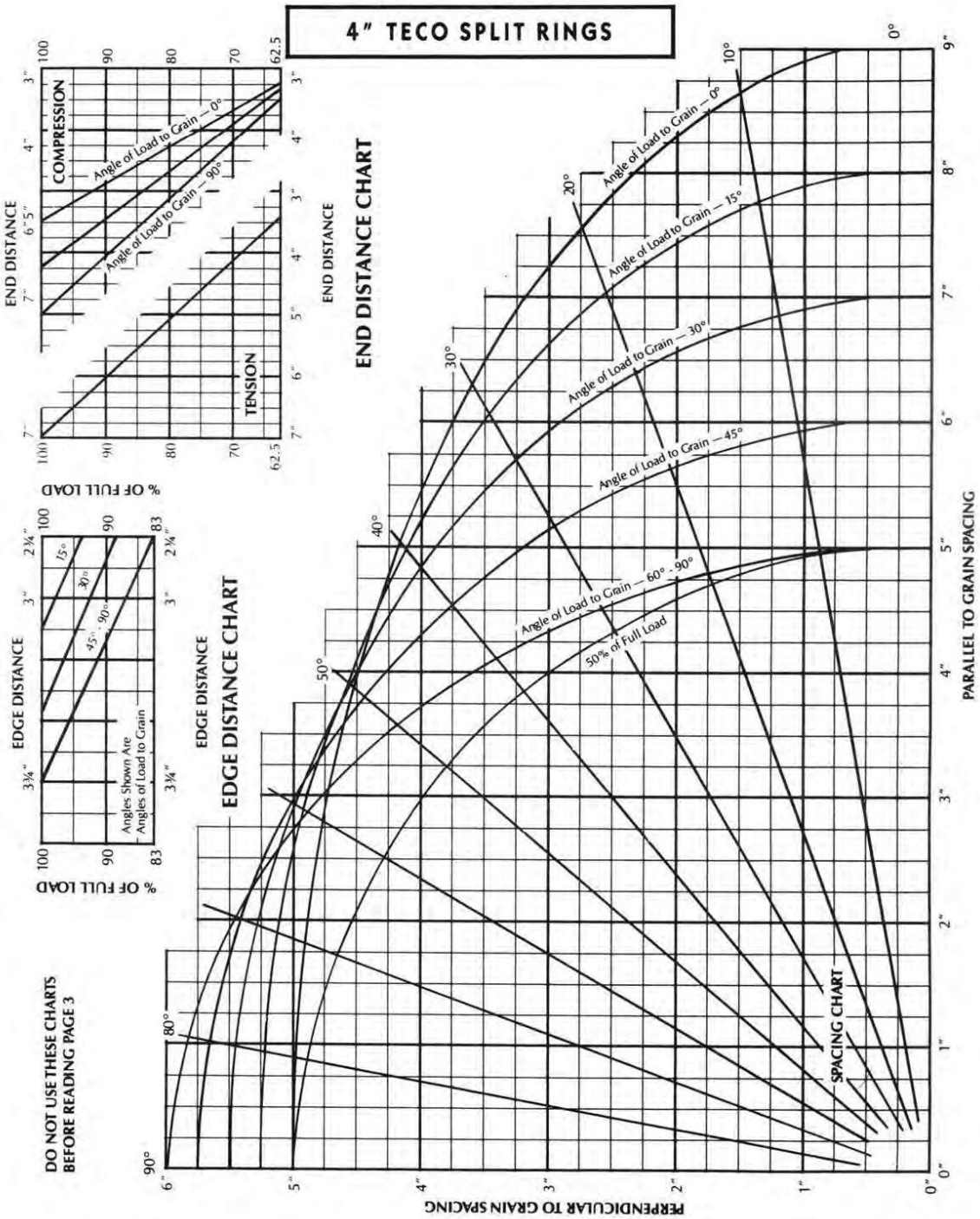
Two Months Loading, as for snow	115%
Seven Days Loading	125%
Wind or Earthquake Loading	133⅓%
Impact Loading	200%
Permanent Loading	90%

DECREASES FOR MOISTURE CONTENT CONDITIONS

Condition when Fabricated	Seasoned	Unseasoned	Unseasoned
Condition when Used	Seasoned	Seasoned	Unseasoned or Wet
Split Rings	0%	20%	33%

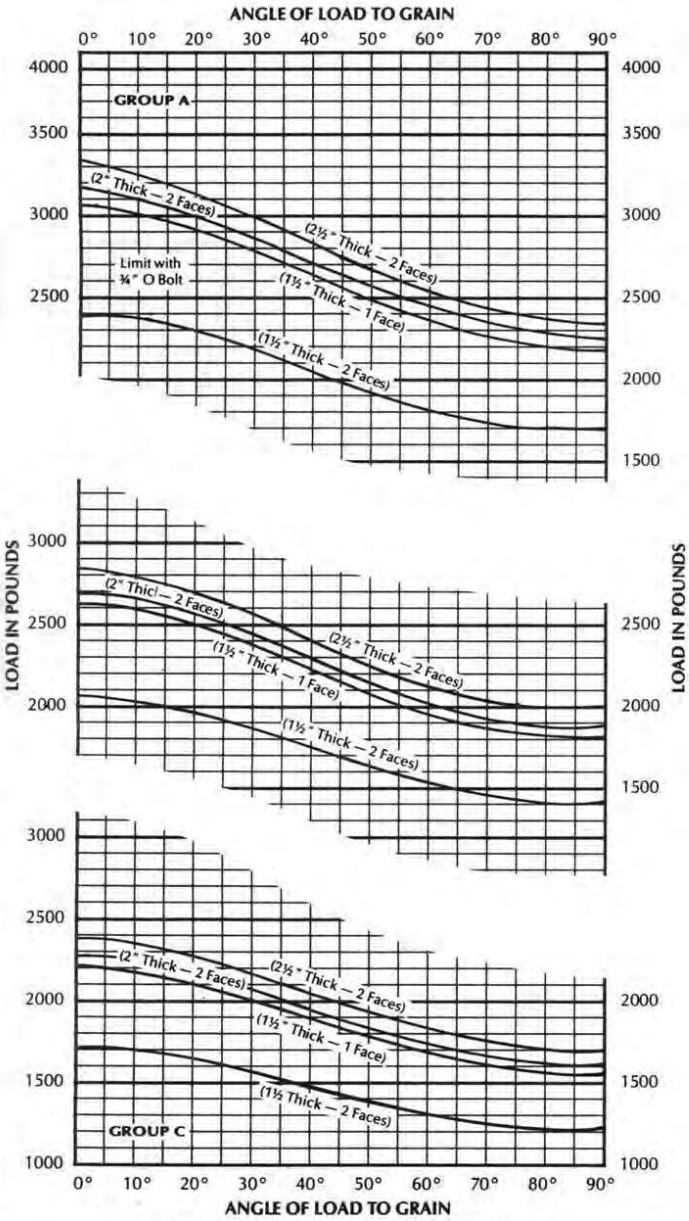
DocuSign Envelope ID: 775FCF57-23C4-4678-829D-D68E47097C5B

4" TECO SPLIT RINGS



DocuSign Envelope ID: 775FCF57-23C4-4678-829D-D68E47097C5B

2⅝" TECO SHEAR PLATES



LOAD CHART FOR NORMAL LOADING
ONE 2⅝" SHEAR-PLATE UNIT AND BOLT IN SINGLE SHEAR

2⅝" SHEAR PLATE DATA

Shear Plates, Dimensions		
Material	Pressed Steel	
	Reg.	Lt. Ga.
Diameter of plate	2.62"	2.62"
Diameter of bolt hole	.81"	.81"
Depth of plate	.42"	.35"
Lumber, Minimum Dimensions		
Face, width	3½"	3½"
Thickness, plates in one face only	1½"	1½"
Thickness, plates opposite in both faces	1½"	1½"
Steel Shapes or Straps (Thickness required when used with shear plates) Thickness of steel side plates shall be determined in accordance with A.I.S.C. recommendations.		
Hole, diameter in steel straps or shapes	13/16"	13/16"
Bolt, diameter	⅝"	¾"
Bolt Hole, diameter in timber	13/16"	13/16"
Washers, standard, timber to timber connections only		
Round, cast or malleable iron, dia.	3"	3"
Square Plate		
Length of side	3"	3"
Thickness	¼"	¼"
(For trussed rafters and other light structures standard wrought washers may be used.)		
Projected Area, for one shear plate, square inches	1.18	1.00

SHEAR PLATE SPECIFICATIONS

Shear plates shall be CSS shear plates as manufactured by CSS, Cleveland, OH. Malleable Iron Types — Malleable iron shear plates shall be manufactured according to current A. S. T. M. Standard Specifications A 47, Grade 32510, for malleable iron castings. Each casting shall consist of a perforated round plate with a flange around the edge extending at right angles to the face of the plate and projecting from one face only, the plate portion having a central bolt hole reamed to size with an integral hub concentric to the bolt hole and extending from the same face as the flange.

PERCENTAGES FOR DURATION OF MAXIMUM LOAD

Two Months Loading, as for snow	*115%
Seven Days Loading	*125%
Wind or Earthquake Loading	*133⅓%
Impact Loading	*200%
Permanent Loading	90%

*Do not exceed limitations for maximum allowable loads for shear plates given elsewhere on this page.

DECREASES FOR MOISTURE CONTENT CONDITIONS

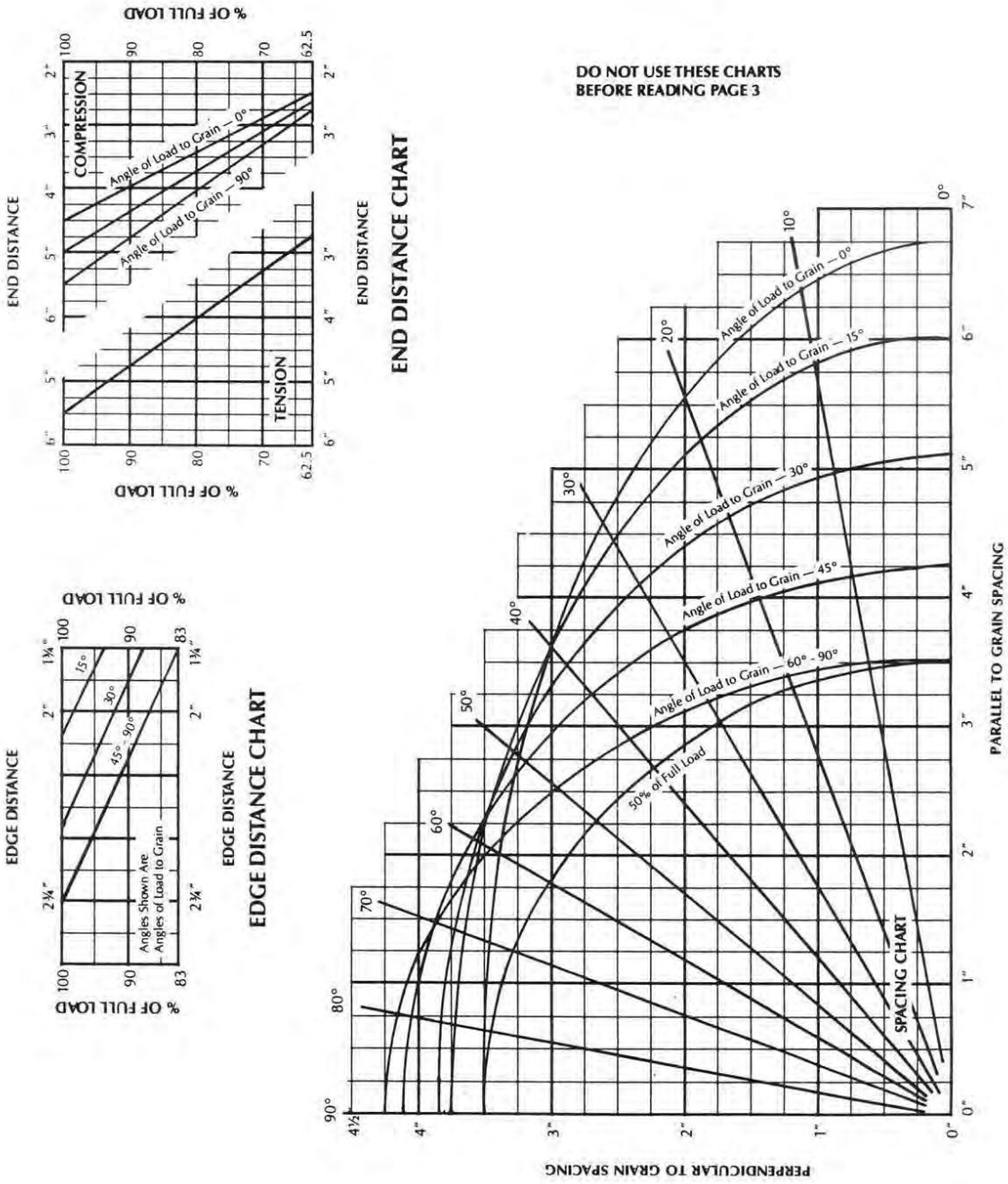
Condition when Fabricated	Seasoned	Unseasoned	Unseasoned
Condition when Used	Seasoned	Seasoned	Unseasoned or Wet
Shear Plates	0%	20%	33%

MAXIMUM PERMISSIBLE LOADS ON SHEAR PLATES

The allowable loads for all loadings except wind shall not exceed 2900 lbs. for 2⅝" shear plates with ¾" bolts. The allowable wind load shall not exceed 3870 lbs. If bolt threads bear on the shear plate, reduce the preceding values by one-ninth.

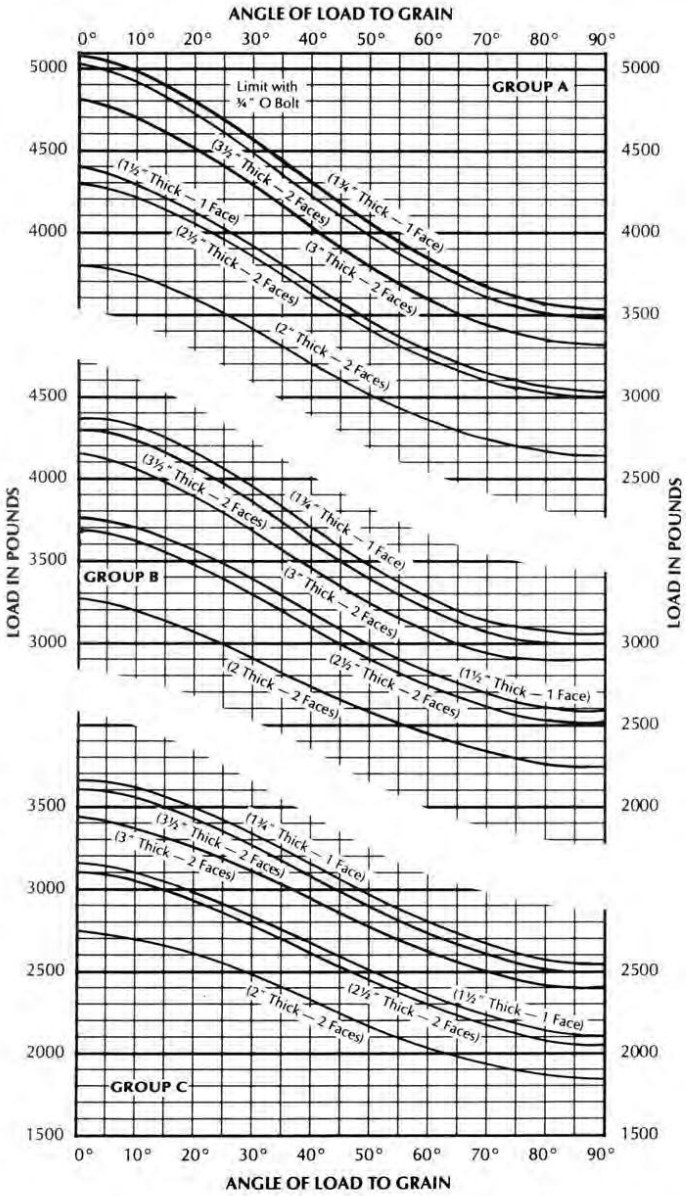
DocuSign Envelope ID: 775FCF57-23C4-4678-829D-D68E47097C5B

2⅝" TECO SHEAR PLATES



DocuSign Envelope ID: 775FCF57-23C4-4678-829D-D68E47097C5B

4" TECO SHEAR PLATES (WOOD-TO-WOOD)



LOAD CHART FOR NORMAL LOADING ONE 4" SHEAR-PLATE UNIT AND BOLT IN SINGLE SHEAR

4" SHEAR PLATE DATA

Shear Plates, Dimensions	Melleable Iron	Melleable Iron
Material	4.03"	4.03"
Diameter of plate	4.03"	4.03"
Diameter of bolt hole	.81"	.94"
Depth of plate	.64"	.64"
Lumber, Minimum Dimensions		
Face, width	5½"	5½"
Thickness, plates in one face only	1½"	1½"
Bolt, diameter	¾"	⅞"
Bolt Hole, diameter in timber	13/16"	15/16"
Washers, standard, timber to timber connections only		
Round, cast or malleable iron, dia.	3"	3½"
Square Plate		
Length of side	3"	3"
Thickness	¼"	¼"
(For trussed rafters and other light structures standard wrought washers may be used.)		
Projected Area, for one shear plate, square inches	2.58	2.58

SHEAR PLATE SPECIFICATIONS

Shear plates shall be TECO shear plates as manufactured by CSS, Cleveland, OH. Malleable Iron Types — Malleable iron shear plates shall be manufactured according to current A. S. T. M. Standard Specifications A 47, Grade 32510, for malleable iron castings. Each casting shall consist of a perforated round plate with a flange around the edge extending at right angles to the face of the plate and projecting from one face only, the plate portion having a central bolt hole reamed to size with an integral hub concentric to the bolt hole and extending from the same face as the flange.

PERCENTAGES FOR DURATION OF MAXIMUM LOAD

Two Months Loading, as for snow	*115%
Seven Days Loading	*125%
Wind or Earthquake Loading	*133⅓%
Impact Loading	*200%
Permanent Loading	90%

*Do not exceed limitations for maximum allowable loads for shear plates given elsewhere on this page.

DECREASES FOR MOISTURE CONTENT CONDITIONS

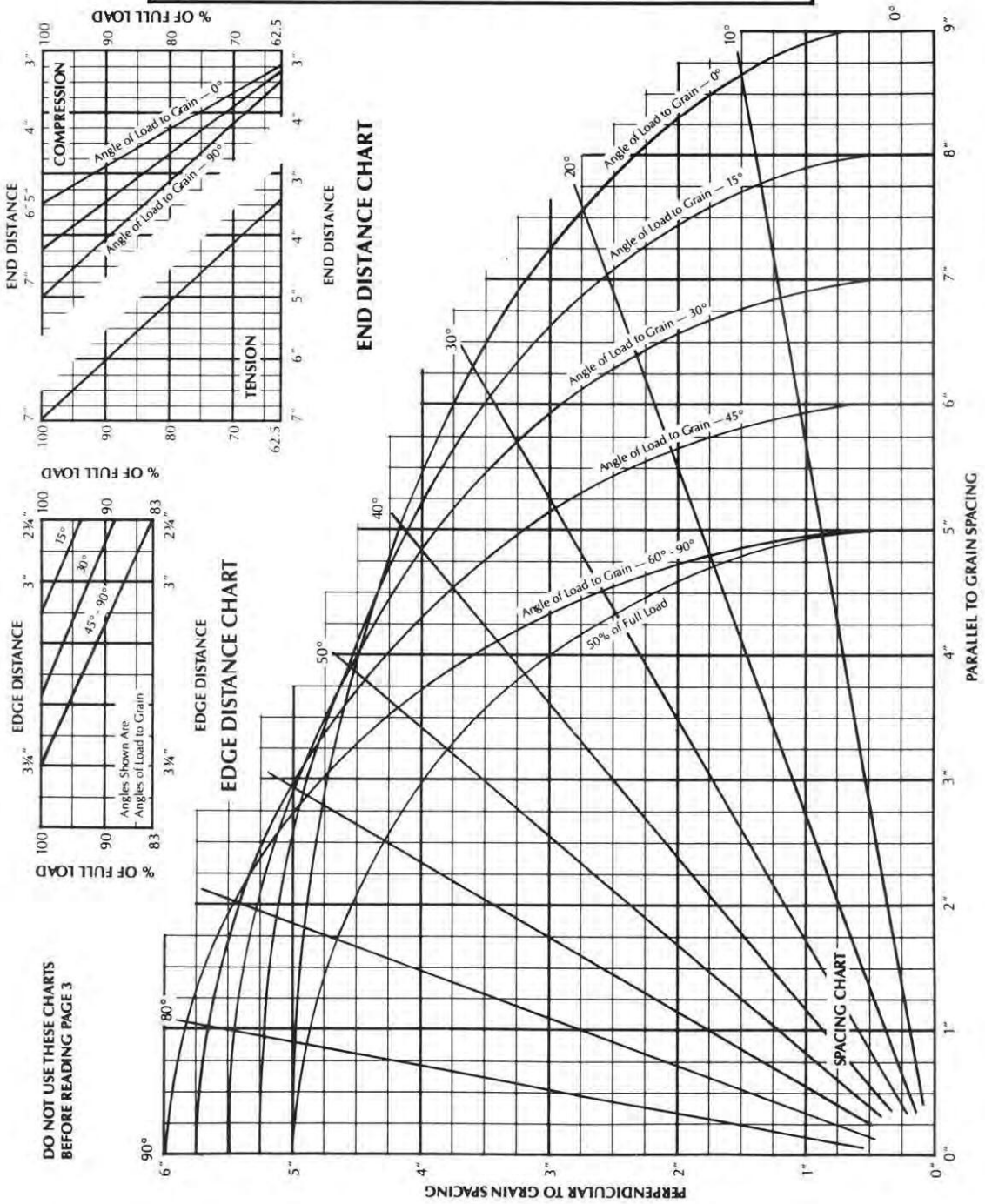
Condition when Fabricated	Seasoned	Unseasoned	Unseasoned
Condition when Used	Seasoned	Seasoned	Unseasoned or Wet
Shear Plates	0%	20%	33%

MAXIMUM PERMISSIBLE LOADS ON SHEAR PLATES

The allowable loads for all loadings except wind shall not exceed 4970 lbs. for 4" shear plates with ¾" bolts and 6760 lbs. for 4" shear plates with ⅞" bolts. The allowable wind load shall not exceed 6630 lbs. when used with a ¾" bolt and 9020 lbs. when used with a ⅞" bolt. If bolt threads bear on the shear plate, reduce the preceding values by one-ninth.

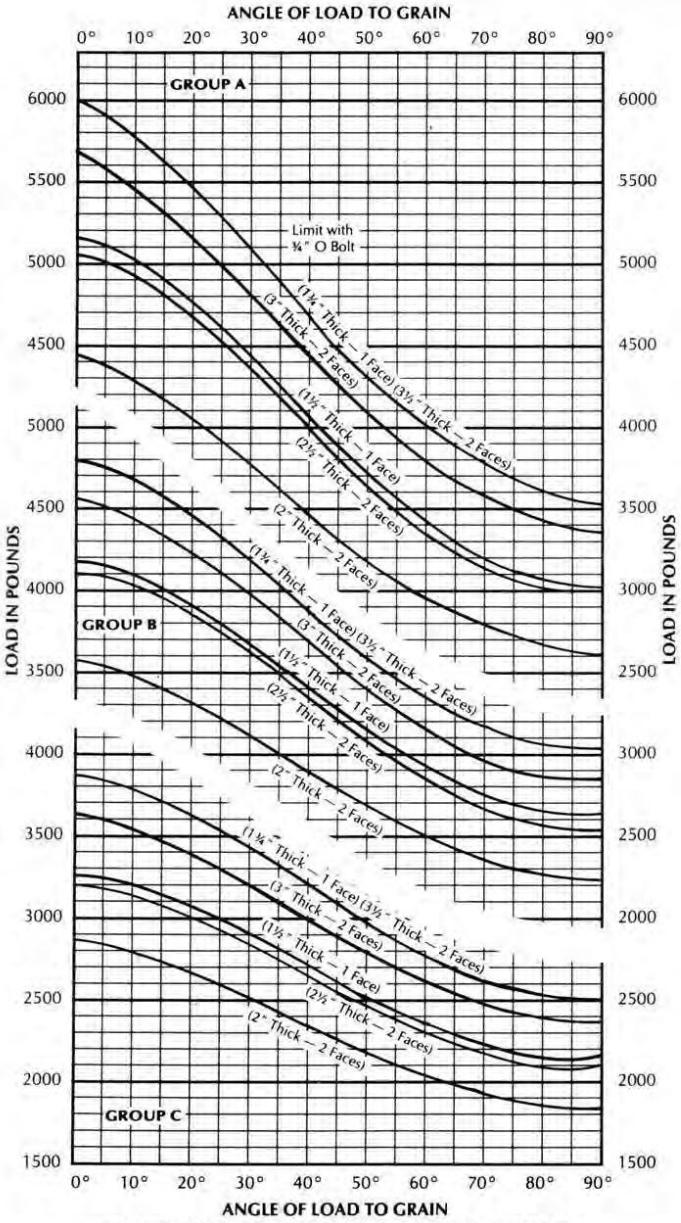
DocuSign Envelope ID: 775FCF57-23C4-4678-829D-D68E47097C5B

4" TECO SHEAR PLATES (WOOD-TO-WOOD)



DocuSign Envelope ID: 775FCF57-23C4-4678-829D-D68E47097C5B

4" TECO SHEAR PLATES (WOOD-TO-STEEL)



LOAD CHART FOR NORMAL LOADING
ONE 4" SHEAR-PLATE UNIT AND BOLT IN SINGLE SHEAR

4" SHEAR PLATE DATA

Shear Plates, Dimensions		
Material	Melleable Iron	Melleable Iron
Diameter of plate	4.03"	4.03"
Diameter of bolt hole	.81"	.94"
Depth of plate	.64"	.64"
Lumber, Minimum Dimensions		
Face, width	5½"	5½"
Thickness, plates in one face only	1½"	1½"
Steel Shapes or Straps (Thickness required when used with shear plates) Thickness of steel side plates shall be determined in accordance with A.I.S.C. recommendations.		
Hole, diameter in steel straps or shapes	13/16"	15/16"
Bolt, diameter	¾"	⅞"
Bolt Hole, diameter in timber	13/16"	15/16"
Projected Area, for one shear plate, square inches	2.58	2.58

SHEAR PLATE SPECIFICATIONS

Shear plates shall be TECO shear plates as manufactured by CSS, Cleveland, OH. Malleable Iron Types — Malleable iron shear plates shall be manufactured according to current A. S. T. M. Standard Specifications A 47, Grade 32510, for malleable iron castings. Each casting shall consist of a perforated round plate with a flange around the edge extending at right angles to the face of the plate and projecting from one face only, the plate portion having a central bolt hole reamed to size with an integral hub concentric to the bolt hole and extending from the same face as the flange.

PERCENTAGES FOR DURATION OF MAXIMUM LOAD

Two Months Loading, as for snow	*115%
Seven Days Loading	*125%
Wind or Earthquake Loading	*133⅓%
Impact Loading	*200%
Permanent Loading	90%

*Do not exceed limitations for maximum allowable loads for shear plates given elsewhere on this page.

DECREASES FOR MOISTURE CONTENT CONDITIONS

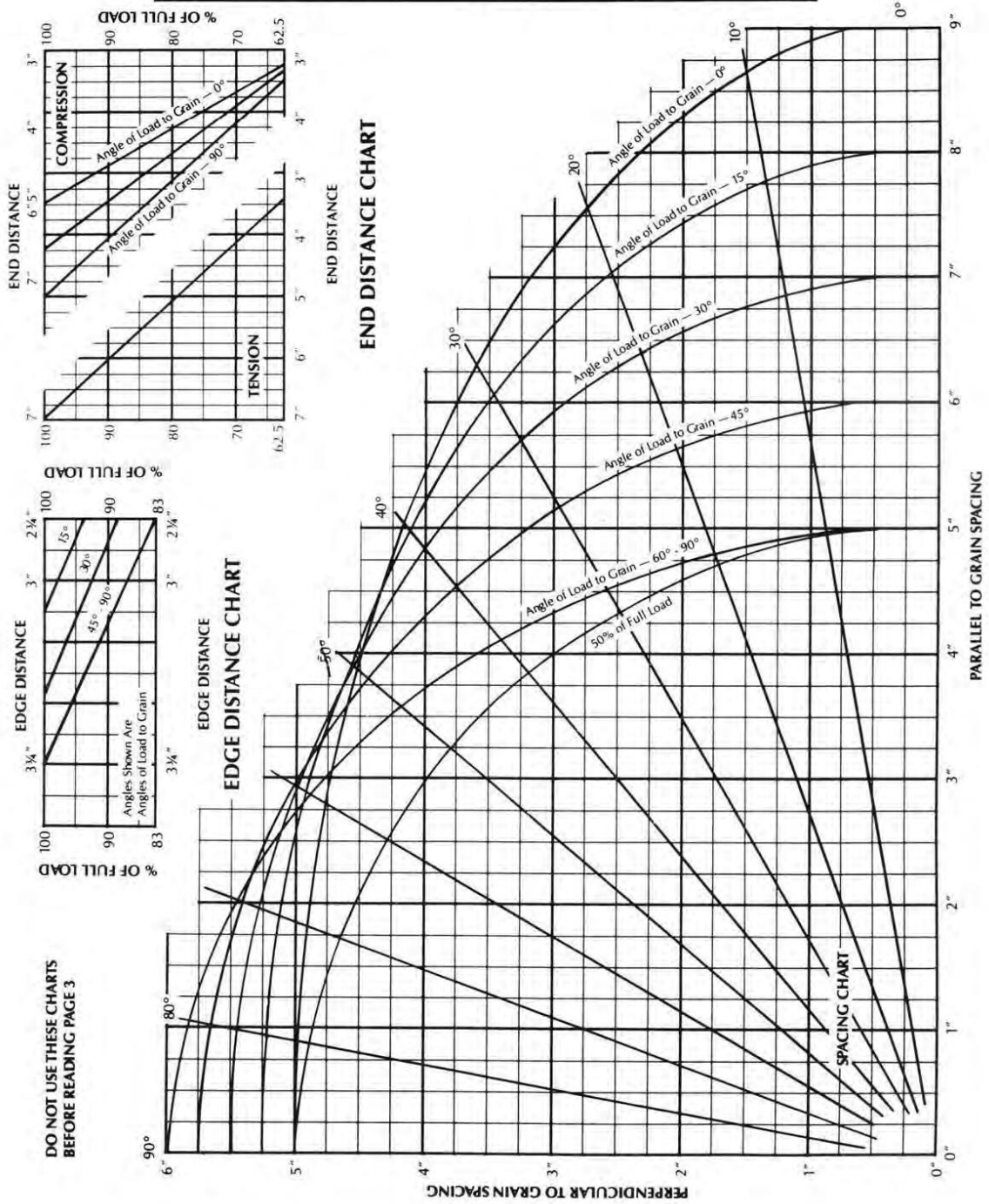
Condition when Fabricated	Seasoned	Unseasoned	Unseasoned
Condition when Used	Seasoned	Seasoned	Unseasoned or Wet
Shear Plates	0%	20%	33%

MAXIMUM PERMISSIBLE LOADS ON SHEAR PLATES

The allowable loads for all loadings except wind shall not exceed 4970 lbs. for 4" shear plates with ¼" bolts and 6760 lbs. for 4" shear plates with ⅞" bolts. The allowable wind load shall not exceed 6630 lbs. when used with a ¼" bolt and 9020 lbs. when used with a ⅞" bolt. If bolt threads bear on the shear plate, reduce the preceding values by one-ninth.

DocuSign Envelope ID: 775FCF57-23C4-4678-829D-D68E47097C5B

4" TECO SHEAR PLATES (WOOD-TO-STEEL)



DocuSign Envelope ID: 775FCF57-23C4-4678-829D-D68E47097C5B

TECO SPIKE-GRIDS

TECO SPIKE-GRIDS

TECO SPIKE-GRID			
Type	Flat	Single Curve	Circular
Size, square	4⅛"	4⅛"	3¼"
Total depth of grids, maximum	1"	1.38"	1.20"
Diameter of bolt hole	1.06"	1.06"	1.33"
Weight, per 100 grids, lbs.	50	75	26
LUMBER DIMENSIONS, minimum recommended for installation of flat grids			
Face, width	5½"	5½"	5½"
Thickness			
Grids one face only	1½"	1½"	1½"
Grids opposite in both faces	2½"		2½"
Minimum diameter of pile for curved grids		10"	
BOLT, diameter	¾" or 1"	¾" or 1"	¾" or 1"
BOLT HOLE, diameter in timber	13/16" or 1 1/16"	13/16" or 1 1/16"	13/16" or 1 1/16"
WASHERS			
Round, cast or malleable iron	Standard Size for Bolt Diameter Used.		
Square plate	3"x3"x⅜" Punched for Bolt Diameter Used.		
SPACING OF GRIDS, minimum, center to center			
0°-30° angle of load to grain			
Spacing parallel to grain	7"	7"	7"
Spacing perpendicular to grain	5½"	5½"	5½"
30°-90° angle of load to grain			
Spacing parallel or perpendicular to grain	5½"	5½"	5½"
END DISTANCES, center of grid to end of piece (tension or compression members)			
Standard	7"	7"	7"
Minimum, reduce loads 15%	5"	5"	5"
EDGE DISTANCES, center of grid to edge of piece			
Load applied at any angle to grain			
Standard	3⅝"	3⅝"	3⅝"
Minimum, reduce loads 15%	2¾"	2¾"	2¾"
PROJECTED AREA for portion of one grid within member, square inches	2.06	2.06	1.95

SPIKE-GRID SPECIFICATIONS

Spike-grids shall be TECO spike-grids as manufactured by CSS, Cleveland, OH. Spike-grid timber connectors shall be manufactured according to current A. S. T. M. Standard Specifications A47, Grade 32510, for malleable iron castings. They shall consist of rows of opposing spikes which are held in place by fillets. Fillets for the flat and circular grid in cross section shall be diamond shaped. Fillets for the single curve grids shall be increased in depth to allow for curvature.

WIND AND EARTHQUAKE LOADS

For wind or earthquake loads alone or a combination of wind or earthquake with dead or live loads or both, the safe loads on spike-grids may be taken as 120% of the Design Loads provided the resulting size and number of connectors is not less than required for the dead and live loads alone.

IMPACT

When using Design Loads, the load on a spike-grid due to a force producing impact shall be taken as 115% of the sum of the force as a static load and the load due to its impact.

LOADS IN RELATION TO DISTANCES AND SPACINGS

Standard Design Loads are for standard distances and spacings. Standard and minimum distances and spacings with load reduction factors are given in the table. Loads for end and edge distances and spacings intermediate of standard and minimum may be determined by interpolation.

DESIGN LOADS* FOR ONE SPIKE-GRID AND BOLT IN SINGLE SHEAR

GROUP A			GROUP B			GROUP C		
Type of Grid	Bolt Diameter	Allowable Load	Type of Grid	Bolt Diameter	Allowable Load	Type of Grid	Bolt Diameter	Allowable Load
FLAT	¾"	3900#	FLAT	¾"	3500#	FLAT	¾"	3000#
	1"	4200#		1"	3800#		1"	3300#
SINGLE CURVE	¾"	4200#	SINGLE CURVE	¾"	3800#	SINGLE CURVE	¾"	3200#
	1"	4500#		1"	4100#		1"	3500#
CIRCULAR	¾"	3500#	CIRCULAR	¾"	3100#	CIRCULAR	¾"	2600#
	1"	3800#		1"	3400#		1"	2900#

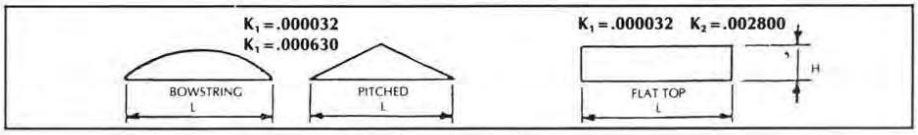
*Allowable loads on spike-grids same for all angles of load to grain.

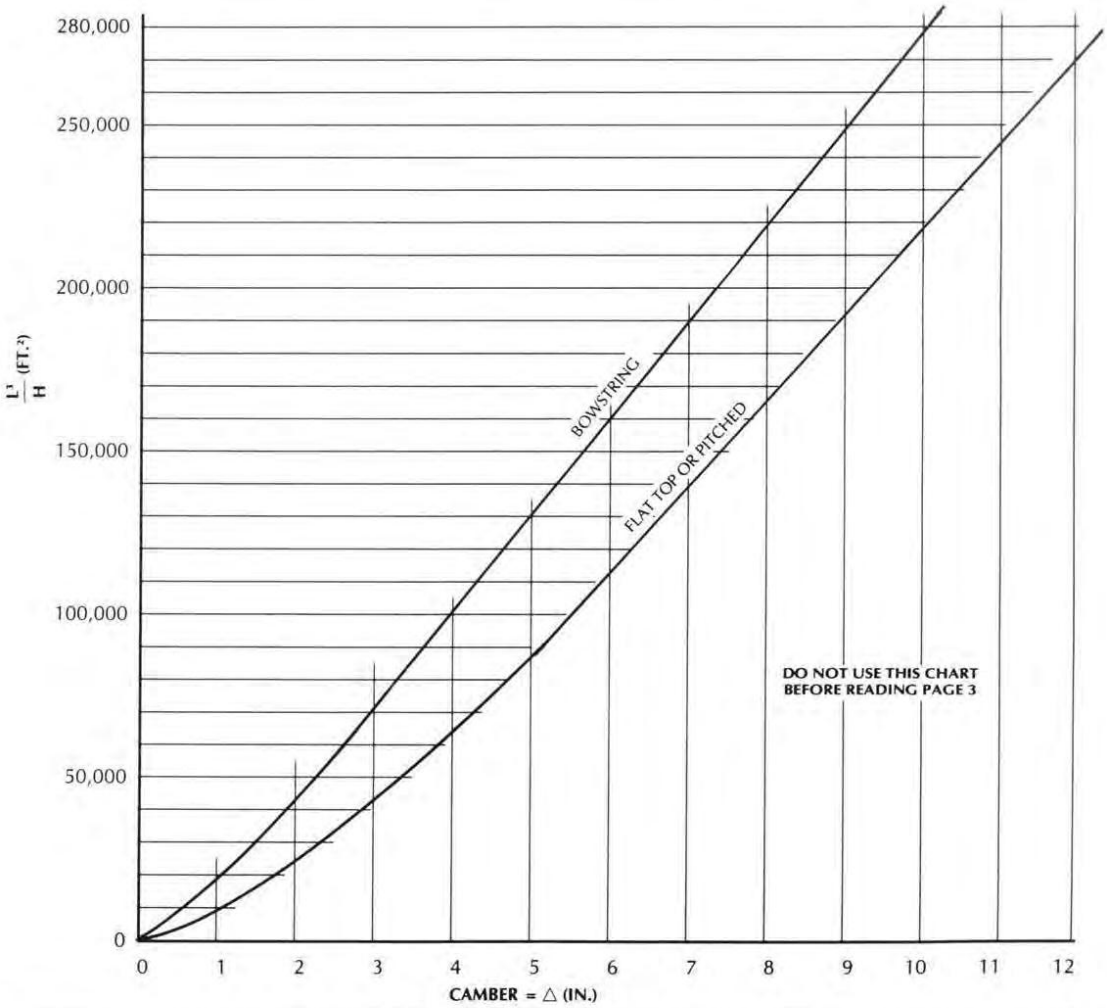
DocuSign Envelope ID: 775FCF57-23C4-4678-829D-D68E47097C5B

TECO CAMBER CHART

CAMBER FOR FULL-LOAD DEFLECTION

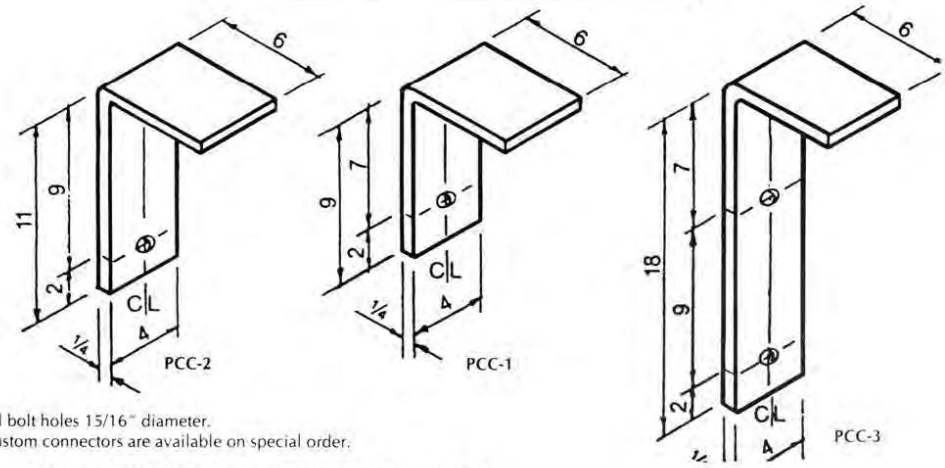
FORMULA — $\triangle = K_1 \frac{L^3}{H} + K_2 \frac{L^2}{H}$





DocuSign Envelope ID: 775FCF57-23C4-4678-829D-D68E47097C5B

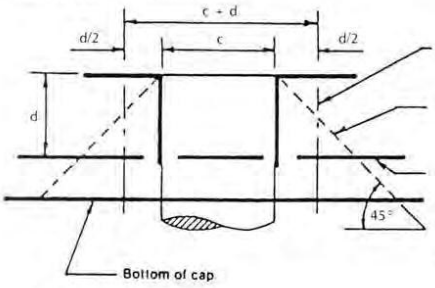
PILE CAP CONNECTORS



All bolt holes 15/16" diameter.
Custom connectors are available on special order.

SUGGESTED CONCRETE DESIGN PROCEDURES

Analysis by the Portland Cement Association for the development of connector design value in pullout strenth in concrete cap.

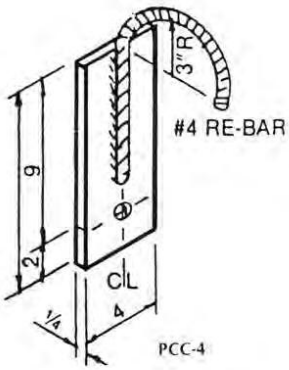


Critical section assumed by ACI code, section 1207.

Plane of failure assumed when cone is pulled out of concrete.

Bottom re-bars in concrete cap.

NOTE: In addition to shear in plain concrete, stirrups or other re-inforcing may be used to develop pull-out strength.



EXAMPLE: Given:

V = 9,214# (allowable uplift load for 2 connector plates or pile)

d = 7½" c = 10½"

$b_o = \pi\ (c + d)\ ½$
$= 3.14 \times 18 \times 0.5 = 28.2"$

$V_c = \dfrac{V}{b_o d}$ = unit shear stress in concrete

V = total load

d = depth to reinforcing steel

c = pile diameter

Solve:

$V_c = \dfrac{V}{b_o d} = \dfrac{9{,}214}{28.2 \times 7.5} = 43.6$ psi

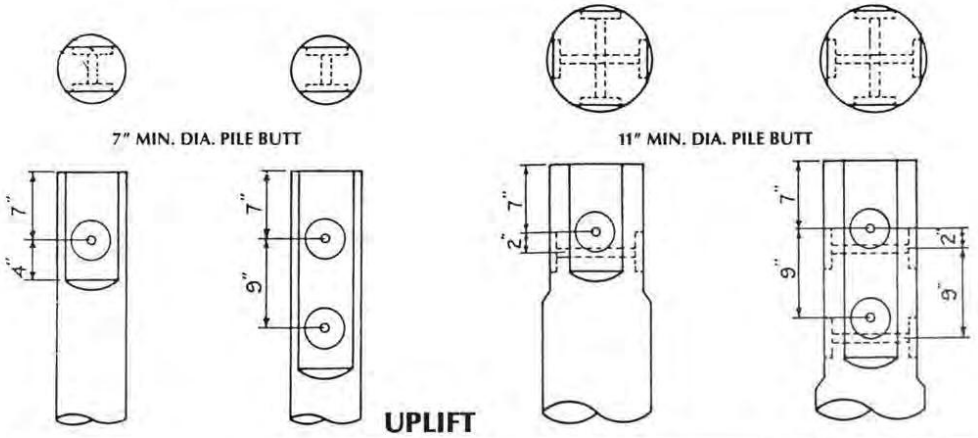
V_c allowable for concrete = 100 psi.

$b_o = \pi\ (c + d)$ = circumference at critical section

NOTE ABOUT b_o: Where only two plates are used, b_o might be assumed to be equivalent to one half a full circumference, or some other fraction thereof. The quantity b_o should be established through experience and engineering judgment.

DocuSign Envelope ID: 775FCF57-23C4-4678-829D-D68E47097C5B

SHEAR PLATE DESIGN SUGGESTIONS



SHEAR PLATE DESIGN LOADS (7/8 O BOLT)			
2 Shear Plates	4 Shear Plates (Vertical)	4 Shear Plates (Transverse)	8 Shear Plates
Group "B" Wet Use 7,716 lbs.	Group "C" Wet Use 15,432 lbs.	Group "B" Wet Use 15,432 lbs.	Group "B" Wet Use 30,864 lbs.
Group "C" Wet Use 6,430 lbs.	Group "C" Wet Use 12,860 lbs.	Group "C" Wet Use 12,860 lbs.	Group "C" Wet Use 25,720 lbs.
Group "B" Dry Use 9,214 lbs.	Group "B" Dry Use 18,428 lbs.	Group "B" Dry Use 18,428 lbs.	Group "B" Dry Use 36,856 lbs.
Group "C" Dry Use 7,678 lbs.	Group "C" Dry Use 15,356 lbs.	Group "C" Dry Use 15,356 lbs.	Group "C" Dry Use 30,712 lbs.

DESIGN NOTES:

1. Tabular values are intended as a guide, and should be checked by the design engineer for conformance with current edition of N.D.S.*.
2. A 33⅓% Duration of Load increase is included.
3. Typical Group "B" species include Douglas Fir-Larch and Southern Yellow Pine.
4. Typical Group "C" species include Hem-Fir and Spruce-Pine-Fir.
5. Applicable load adjustment factors are: Load Duration, Wet Service, Temperature, Group Action, Geometry, Penetration and Metal Side Plates.
6. Shear plates are 4" diameter, SP4S.
7. Slab cuts should be parallel, plumb, and a minimum of 5½" in width.
8. Shear plate daps to be made with Tool 304S.

*"National Design Specification for Wood Construction" published by American Forest & Paper Association, Washington, D.C.

DocuSign Envelope ID: 775FCF57-23C4-4678-829D-D68E47097C5B

CLEVELAND *Steel Specialty Company*
26001 Richmond Road
Bedford Heights, Ohio 44146
(800) 251-8351
(216) 464-9400 (216) 464-9404 FAX

REVISED 1997
Copyright, TECO (Timber Engineering Co.) 1973
Copyright, Canada, TECO (Timber Engineering Co.) 1973
All rights reserved

DocuSign Envelope ID: 775FCF57-23C4-4678-829D-D68E47097C5B

EXHIBIT 2 – PART 4

Material Specification for

PileMedic QuakeWrap GU50C Laminate Wrap

CR 325 over Cross Creek – Bridge Rehabilitation
Project No. 919-7903-FY19-260027

DocuSign Envelope ID: 775FCF57-23C4-4678-829D-D68E47097C5B

QuakeWrap® GU50C

Description

QuakeWrap® GU50C is a high-strength unidirectional pultruded laminate constructed with carbon fibers. The CFRP laminates are bonded to the substrate using QuakeBond™ 220UR (Universal Resin). The laminates are ideal for strengthening concrete, wood, and steel structures.

Uses

- Increased live load capacity in buildings and bridges, floors, roofs, etc.
- Seismic retrofit of structural elements such as columns, unreinforced masonry walls, etc.
- Repair of large diameter pipes to achieve strengthening and water-proofing.
- Repair of damaged structural system: new openings in floors, removal of existing walls, etc.
- Correction of design or construction errors: misplaced reinforcing bars, insufficient structural depth.

Advantages

- Very strong and lightweight laminates ideal for confined spaces.
- Used for flexure and shear strengthening.
- High modulus of elasticity.
- Fully compatible and excellent adhesion to QuakeBond™ resins.
- Non-corrosive.
- Light weight does not alter mass & dynamic loads on structure.
- Alkali resistant.
- Thin sections can be easily crossed and overlapped.

Fiber & Laminate Properties

	US Units	SI Units
Fiber Properties:		
Tensile Strength	710 ksi	4,900 MPa
Tensile Modulus	33,400 ksi	230,000 MPa
Ultimate Elongation	2.1%	2.1%
Density	0.065 lb/in^3	1.8 g/cm^3
Laminate Properties:		
Density	0.047 lb/in^3	1.3 g/cm^3
Tensile Strength	400 ksi	2,750 MPa
Tensile Modulus	24,000 ksi	165,500 MPa
Ultimate Elongation	1.7%	1.7%
Breaking Force	18,800 lb/in.	3,300 N/mm
Ply Thickness	0.0472 in.	1.20 mm

Coverage

Application requires QuakeBond™ 220UR at a rate of 1 gallon per 65 feet (1 liter per 5.2 m) of laminate.

Packaging

- Rolls: 4 in x 500 ft (101.6 mm x 152.4 m). Smaller quantities can also be accommodated.
- The laminates can be easily cut in the field to desired length.

Surface Preparation

Surface must be clean and sound; it may be dry or damp, but must be free of standing water and frost. Remove dust, laitance, grease, curing compounds, disintegrated materials and other bond inhibiting materials from the surface. Existing uneven surfaces of the substrate must be verified after surface preparation by random pull-off testing (ACI 503R) at the discretion of the engineer. Minimum tensile strength of 200 psi (1.4 MPa) with substrate failure is required.

Blast Clean, short-blast, scarify or use other approved mechanical means to clean the substrate surface. Any sharp edges (i.e. fins, form-marks, etc.) must be ground smooth and flush.

Application

- Wipe GU50C with appropriate cleaner (e.g. acetone or MEK) using clean cloth.
- Apply QuakeBond™ 220UR onto the substrate with a trowel or spatula to a nominal thickness per QuakeBond™ 220UR PDS. A notched trowel may be used for this application.
- Apply QuakeBond™ 220UR to the cleaned surface of GU50C to a thickness of 50 mil (1.3mm).
- Within the open time of the epoxy, considering ambient temperature, place the coated GU50C on top of the substrate and press firmly.
- Use a hard rubber roller and press the laminate into the epoxy until the adhesive is forced out on both sides.
- Remove excess epoxy; final epoxy thickness should not exceed 1/8 in (3 mm).
- The bonded GU50C laminates should not be disturbed for 24 hours.

Installation of QuakeWrap® products must be performed only by specially trained and approved contractors.

Laminates can be cut to appropriate length using a commercial quality heavy duty shears. Care must be taken to support both sides of the laminate to avoid splintering. Since dull or worn cutting tools can damage, weaken or fray the fiber, their use should be avoided.

The Infrastructure Innovators

QuakeWrap.com

QuakeWrap, Inc.
6840 S. Tucson Blvd.
Tucson, AZ 85756
1-866-782-5397

QuakeWrap, Inc. warrants this product for one year from date of installation to be free from manufacturing defects and to meet the technical properties on the current technical data sheet if used as directed within shelf life. User determines suitability of product for intended use and assumes all risks. Buyer's sole remedy shall be limited to the purchase price or replacement of product exclusive of labor or cost of labor. NO OTHER WARRANTIES EXPRESS OR IMPLIED SHALL APPLY INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. QUAKEWRAP, INC. SHALL NOT BE LIABLE UNDER ANY LEGAL THEORY FOR SPECIAL OR CONSEQUENTIAL DAMAGES.

DocuSign Envelope ID: 775FCF57-23C4-4678-829D-D68E47097C5B

QuakeWrap® GU50C

Cleanup
Dispose of waste in accordance with local disposal regulation. Cured materials can only be removed mechanically. See QuakeBond™ 220UR SDS for information on resin cleanup.

Shelf Life & Storage
Shelf life is unlimited in proper storage conditions. Store in dry conditions at 46°-95°F (7°-35°C).

Caution
QuakeWrap® GU50C is non-reactive and fully cured. They do not require a Material Safety Data Sheet (MSDS). However, caution must be used when handling since fine carbon dust may be present on the surface. Gloves must therefore be worn to protect against skin irritation. Caution must also be used when cutting the laminates to protect against airborne carbon dust generated by the cutting procedure. Use of an appropriate, properly fitted NIOSH approved respirator is recommended.

Limitations
Design calculations must be made and certified by an independent licensed professional engineer.

First Aid
Appropriate Personal Protective Equipment (PPE) should be worn at all times when handling product. Consult SDS for more information.

Certificate of Compliance
Material Safety Data Sheet (SDS) will be supplied upon request and is included with each shipment.

The Infrastructure Innovators

QuakeWrap.com

QuakeWrap, Inc.
6840 S. Tucson Blvd.
Tucson, AZ 85756
1-866-782-5397

QuakeWrap, Inc. warrants this product for one year from date of installation to be free from manufacturing defects and to meet the technical properties on the current technical data sheet if used as directed within shelf life. User determines suitability of product for intended use and assumes all risks. Buyer's sole remedy shall be limited to the purchase price or replacement of product exclusive of labor or cost of labor. NO OTHER WARRANTIES EXPRESS OR IMPLIED SHALL APPLY INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. QUAKEWRAP, INC. SHALL NOT BE LIABLE UNDER ANY LEGAL THEORY FOR SPECIAL OR CONSEQUENTIAL DAMAGES.

DocuSign Envelope ID: 775FCF57-23C4-4678-829D-D68E47097C5B

EXHIBIT 2 – PART 5

Material Specification for

PileMedic QuakeBond 320LV Epoxy Resin

CR 325 over Cross Creek – Bridge Rehabilitation
Project No. 919-7903-FY19-260027

DocuSign Envelope ID: 775FCF57-23C4-4678-829D-D68E47097C5B

QuakeWrap

QuakeBond™ 320LV

Description

QuakeBond™ 320LV (Low Viscosity Resin) is a two-component, high strength, low viscosity structural epoxy. The low viscosity makes this an ideal product for gravity feed or patching. It can be used as a liquid binder for sand, aggregate or other mineral fillers to form cost-effective material to fill the annular space around piles when PileMedic™ laminates are used. The resin cures underwater, making it suitable for repair of submerged piles. The high compressive and tensile strength of this epoxy provide structural strength for the pile or pole in repairs using PileMedic™ laminates. QuakeBond™ 320LV can be used in repair of concrete, masonry, and wood structures. The Resin also provides excellent durability and chemical resistance. QuakeBond™ 320LV is a 100% solids formulation with low toxicity and low odor during the cure.

Uses

- Filing the annular space created between the PileMedic™ and concrete or timber pile or pole being repaired for both above-water and submerged conditions
- As a binder mixed with sand and small-size aggregates to form a resin-based grout to fill larger annular spaces in repair of piles and poles using PileMedic™.
- Filling cracks in concrete by injection or gravity feed.
- Crack repairs in masonry, wood and concrete structure members.
- A moisture barrier (water-proofing) system in conjunction with PileMedic™ laminates.

Advantages

- High strength, high modulus, low-viscosity structural adhesive.
- Moisture tolerant-it curves under water.
- Fully compatible and excellent adhesion to PileMedic™ carbon or glass laminates.
- Convenient easy mix ratio, 2:1 by volume.
- 100% solids, VOC free and Butyl Glycidyl Ether (BGE) free.
- Nearly odor-free.

Epoxy Properties

Color –Both Parts "A" and "B"		Amber
Viscosity Mixed at 77° F	(ASTM D-2196)	780 cps
Working time at 77° F (25° C)		20 Minutes
Gel Time (Pot Life)		30 Minutes
Weight (Mixed) lb./gallon		9.21
Density (Mixed) kg/liter		1.11
Tensile Strength	(ASTM D-638)	7,900 psi (54.5 MPa)
Compressive Strength	(ASTM D-695)	11,200 psi (77.2 MPa)
Elongation @ Break	(ASTM D-638)	4.8%
Adhesion to Concrete		>800 psi (5.5 MPa); 100% failure in concrete
Hardness, Shore D	(ASTM D-2240)	86

Coverage

Apply as a filler material to fill voids in concrete, masonry, and timber structures. Application rate varies greatly based on the porosity and the volume of voids or annular spaces present. For wider annular spaces, the epoxy can easily be mixed with clean silica sand and pea gravel (3/8 inch and under) for improved yield.

Packaging

Each component is supplied in either 5-gallon (19L) containers or 55-gallon (208L) drums, resulting in 15-gallon kits. Ships DOT non-regulated.

Application Equipment

Metering or dispensing equipment with ratio capabilities of 2:1 and viscosity range of 100-5000 cps.

Surface Preparation

Surfaces must be entirely free of oil, grease, dirt, detergent, surface water, laitance, curing compounds, coatings or other contaminants that may interfere with adhesion.

Mixing

Mix 2 parts resin "A" to 1-part hardener "B" by volume into a clean container. Mix thoroughly for 3 minutes using a paddle at low speed (400-600 rpm) to avoid air entrainment. Mix only the quantities that can be used within pot life. REMEMBER- you will have less working time at higher temperatures. DO NOT THIN; solvents will prevent proper cure. If desired, silica sand and well-grained pea gravel (3/8 inch and under) can be added up to a maximum of 70 pounds sand and gravel per gallon of QuakeBond™ 320LV.

5-gallon kit: Pour Part B Hardener in Part A Resin. Hand mix for 3 minutes, scraping sides and bottom of container to ensure complete mixing.

55-gallon kit: Pour Part B Hardener in Part A Resin. Mix for 3 minutes using a Jiffy mixer head and a mechanical drill. To ensure complete mixing, scrape sides and bottom of container and continue mixing for an additional 1 to 2 minutes. DO NOT HAND MIX.

The Infrastructure Innovators

QuakeWrap.com

QuakeWrap, Inc.
6840 S. Tucson Blvd.
Tucson, AZ 85756
1-866-782-5397

QuakeWrap, Inc. warrants this product for one year from date of installation to be free from manufacturing defects and to meet the technical properties on the current technical data sheet if used as directed within shelf life. User determines suitability of product for intended use and assumes all risks. Buyer's sole remedy shall be limited to the purchase price or replacement of product exclusive of labor or cost of labor. NO OTHER WARRANTIES EXPRESS OR IMPLIED SHALL APPLY INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. QUAKEWRAP, INC. SHALL NOT BE LIABLE UNDER ANY LEGAL THEORY FOR SPECIAL OR CONSEQUENTIAL DAMAGES.

DocuSign Envelope ID: 775FCF57-23C4-4678-829D-D68E47097C5B

QuakeWrap

QuakeBond™ 320LV

Application
Properly mixed QuakeBond™ 320LV can be used to fill the annular space between PileMedic™ jackets and the pile or pole being repaired. When introduced at the bottom of the annular space, the high density of the resin pushes the entrapped water to the top. The resin can be thickened with clean silica sand and pea gravel (3/8 inch and under) for filling larger annular spaces. All epoxy components shall be preconditioned to be a temperature between 65°F (17°C) and 85°F (29°C) prior to the time of mixing.

Shelf Life & Storage
Shelf Life is 2 years in original, unopened and properly stored containers. Store at 55°-100°F (13°-38°C).

Limitations
Minimum application temperature of the epoxy is 45°F (7°C). DO NOT THIN the epoxy with solvents. This is NOT a crack injection resin. Never install to a thickness greater than ½" without the presence of aggregate.

Safety Precautions
Avoid inhalation of vapors. Forced local exhaust is recommended to effectively minimize exposure. NIOSH approved, organic vapor respirators and forced exhaust are recommended in confined areas, or when conditions may cause high vapor concentrations. Do not weld on, burn, or touch any epoxy materials as this will cause release of hazardous vapors. Consult MSDS for detailed information.

Cleanup
Uncured materials can be removed with approved solvent or warm soapy water. Cured materials can only be removed mechanically.

First Aid
Appropriate Personal Protective Equipment (PPE) should be worn at all times when handling product. Consult SDS for more information.

Certificate of Compliance
Safety Data Sheet (SDS) will be supplied upon request and is included with each shipment.

The Infrastructure Innovators

QuakeWrap.com

QuakeWrap, Inc.
6840 S. Tucson Blvd.
Tucson, AZ 85756
1-866-782-5397

QuakeWrap, Inc. warrants this product for one year from date of installation to be free from manufacturing defects and to meet the technical properties on the current technical data sheet if used as directed within shelf life. User determines suitability of product for intended use and assumes all risks. Buyer's sole remedy shall be limited to the purchase price or replacement of product exclusive of labor or cost of labor. NO OTHER WARRANTIES EXPRESS OR IMPLIED SHALL APPLY INCLUDING ANY WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. QUAKEWRAP, INC. SHALL NOT BE LIABLE UNDER ANY LEGAL THEORY FOR SPECIAL OR CONSEQUENTIAL DAMAGES.

DocuSign Envelope ID: 775FCF57-23C4-4678-829D-D68E47097C5B

EXHIBIT 2 – PART 6

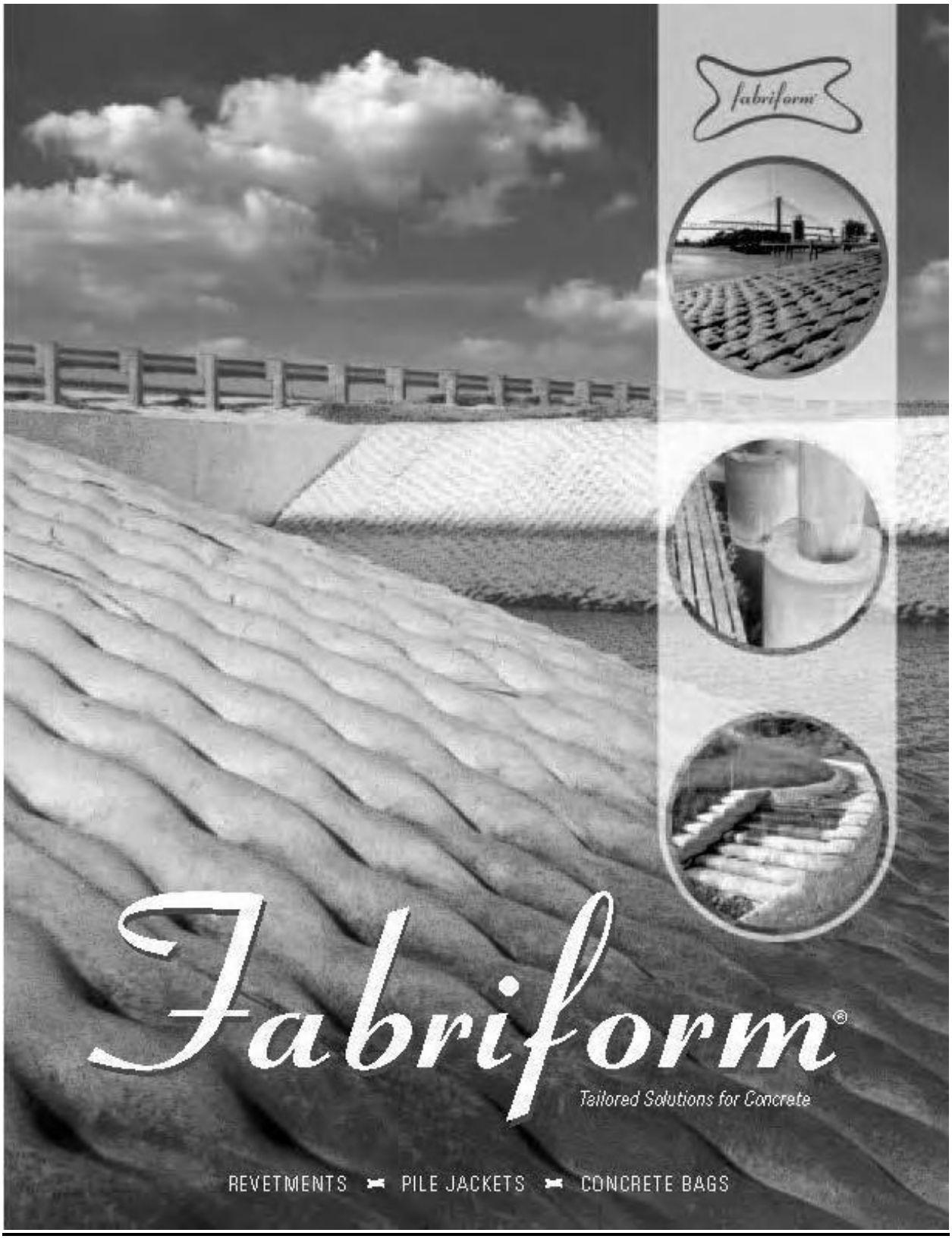
Material Specification for

Fabriform Preformed Revetment Mat

CR 325 over Cross Creek and CR 241 over Santa Fe River – Bridge Rehabilitation

Project Nos. 919-7903-FY19-260027 & 919-7903-FY19-260086

DocuSign Envelope ID: 775FCF57-23C4-4678-829D-D68E47097C5B



DocuSign Envelope ID: 775FCF57-23C4-4678-829D-D68E47097C5B

WHAT IS FABRIC–FORMED CONCRETE?

Fabric-formed concrete is the result of pumping a highly fluid concrete mix into specially woven fabric "envelopes." This method of erosion-control allows for fast, economical construction of revetments, landfill containment systems, holding ponds, bridge scour repair, bridge or dock piling reinforcement and countless other applications.

This innovative technique utilizes fabric woven of high tenacity nylon yarn into a variety of forms including mats, pile jackets and bags. At the work site, the custom-made forms are positioned and sewn together with hand-held sewing machines. They are then pumped with fine aggregate concrete and allowed to cure.

Fabric-formed concrete eliminates the need for time-consuming wooden forms. Plus, fabric forms have the unique advantage of allowing the concrete to be pumped and cured below the water line — making site preparation much easier. Labor and material costs are reduced due to simpler installation and more efficient use of concrete. This efficiency makes fabric-formed concrete "budget-friendly" by design.

In addition to economical advantages, fabric-formed concrete is the smart choice for erosion control because of its high versatility, durability and effectiveness. Worldwide, there are millions of square feet of fabric-formed concrete in place.

WHY CHOOSE FABRIFORM?

Fabriform® is the original fabric-formed concrete system. The Fabriform system was developed and patented by Construction Techniques in the mid-1960's. Forty years later, Construction Techniques continues to manufacture Fabriform to the highest standards of quality.

Not all fabric is created equal. The Fabriform system utilizes double-layer, *high-tenacity nylon* fabric, specially woven for optimum strength, stability, adhesion and filtering characteristics. These qualities are necessary to withstand pumping pressure during installation and to ensure resistance to the strong alkalis present in concrete.

In addition to quality, Fabriform is a great value because it is manufactured "in-house." That is, Construction Techniques operates the mill that weaves and assembles the various styles of Fabriform. This not only ensures quality control, it helps control costs — making high-quality Fabriform highly competitive.

As the patent-holder of Fabriform, a pioneer in fabric-formed concrete systems, Construction Techniques is the most experienced and trusted name in the industry. With over 100 years of combined experience in the sale, manufacture and service of Fabriform products, the staff of Construction Techniques is well-prepared to advise you on your next project. Allow us to put our experience to work for you.

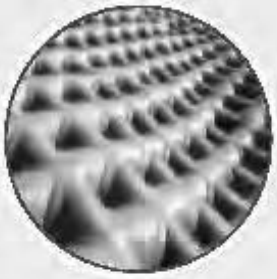
DocuSign Envelope ID: 775FCF57-23C4-4678-829D-D68E47097C5B

THREE FABRIC STYLES FOR REVETMENTS:

Filterpoint

For maximum attenuation of hydraulic energy and relief of hydrostatic uplift.

Filterpoint revetments are characterized by aesthetically appealing cobbled surfaces. Woven filterpoints (5", 8" or 10" centers when cast-in-place) between cobbles relieve hydrostatic uplift pressure and each revetment exhibits a high coefficient of hydraulic friction. The majority of erosion control applications utilize the 8" (200mm) filterpoint revetment. The light 5" (130mm) filterpoint style fabric is available for constructing thinner revetments in less demanding areas such as the shorelines for small ponds and drainage ditches. The 10" (250mm) filterpoint provides a heavy duty mat when severe abrasion is anticipated or additional weight is advisable.



Unimat

For minimum hydraulic friction and maximum impermeability.

Unimat revetments are characterized by a slightly dimpled surface. These revetments exhibit a relatively low coefficient of hydraulic friction. Permeability approximates that of high quality concrete paving. Unimat style fabric for construction of 3" (75mm), 4" (100mm) and 6" (150mm) thick revetments is carried in inventory. Fabric for other revetments from 8" (200mm), 10" (250mm) and 12" (300mm) thickness is available on special order. Criteria for selection of unimat revetment is the same as that employed in determining the thickness of concrete paving.

Articulating Block

For slopes subject to severe underscour or consolidation.

AB revetments consist of rectangular concrete blocks cast in place in a staggered pattern and can be linked together by reinforcing cables inserted between the two layers of fabric prior to mortar injection. Cables allow the revetment to articulate with changing soil and water conditions. AB style fabrics for construction of an average 4" (100mm), 6" (150mm) and 8" (200mm) thickness are carried in inventory. If required, nylon rope cables in sizes to meet design requirements are installed in the assembled panels.

All Fabriform® fabrics are manufactured with 100% continuous multifilament, high-tenacity nylon for stability and resistance to the strong alkalis present in concrete and are woven such that at least 50% by weight consists of textured fibers for optimum filtering characteristics and adhesion to mortar.

DocuSign Envelope ID: 775FCF57-23C4-4678-829D-D68E47097C5B

Concrete Bags

Fabric forms to solve tough concrete forming problems.

Fabriform Concrete Bags are the most versatile concrete forming system available. Retaining Walls, Spillways, Pipe Saddles or void/cavity forms on any volume are just a few of the applications for Concrete Bags. Construction Techniques custom tailors all Bags to accommodate required dimensions. As with all Fabriform processes, Concrete Bags can be cast underwater as well as in the dry.

Pile Jackets

Zippered fabric forms for marine pile repair.

Fabriform Pile Jackets are a strong lightweight concrete form used in marine pile rehabilitation. Jackets are custom assembled to project requirements to fit any length and size of steel, timber or concrete piles. Pile jackets lower production costs in three ways: 1) Preassembled, no form fabrication required, 2) Easy to handle, requires no lifting equipment and 3) Forms bleed excess mixing water. A lower water/cement ratio provides exceptional concrete durability.

CONTACT INFORMATION

With over *700 years* of combined experience in the sale, manufacture and service of Fabriform products, the staff of Construction Techniques is well-prepared to advise you on your next project. Allow us to put our experience to work for you. For more information, contact us today or visit our website.

ADDRESS	15887 Snow Road, Suite 100	TELEPHONE	216.267.7310 / 800.563.5047
	P.O. Box 42067	FACSIMILE	216.267.9310
	Cleveland, Ohio 44142, USA	EMAIL	bjakers@fabriform1.com
		WEBSITE	www.fabriform1.com

a product of Construction Techniques INCORPORATED

© 2003 Construction Techniques, Inc. The Fabriform name and logo are registered trademarks of Construction Techniques, Inc. All rights reserved.

EXHIBIT 3: PAYMENT BOND FORM

CONTRACTOR (PRINCIPAL)
COMPANY (LEGAL NAME):
PRINCIPAL BUSINESS ADDRESS (No PO Box):
TELEPHONE NUMBER:
SURETY
COMPANY (LEGAL NAME):
PRINCIPAL BUSINESS ADDRESS (No PO Box):
TELEPHONE NUMBER:
OWNER (OBLIGEE)
NAME: Alachua County Board of County Commissioners
PRINCIPAL BUSINESS ADDRESS: 12 S.E. First Street, Gainesville, Florida 32601
TELEPHONE NUMBER: 352-374-5204
CONTRACT DETAILS
CONTRACT NO.:
DATE EXECUTED:
AMOUNT:
GENERAL DESCRIPTION:
STREET ADDRESS OF PROJECT:
PO NO., RFP, OR INVITATION TO BID NO.:
BOND
BOND NUMBER:
DATE:
AMOUNT:

KNOW ALL MEN BY THESE PRESENTS:

That Principal, hereinafter called Contractor, and Surety, as identified above, are bound to Alachua County, Florida, as Obligee, and hereinafter called the County, in the amount identified above, for the payment whereof Contractor and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally.

This payment bond is executed pursuant to §255.05, Florida Statutes, and claimants must comply with the notice and time limitations of §255.05(2) and §255.05(10), Florida Statutes.

WHEREAS, Contractor has by written Contract entered into a Contract, identified above, with Alachua County, which Contract Documents are by reference made part hereof, and for the purposes of this Bond are hereafter referred to as the "Contract."

THE CONDITION OF THIS BOND is that if Contractor promptly makes payments to all persons defined in §713.01, Florida Statutes, who furnish labor, materials and supplies used directly or indirectly by Contractor in the performance of the Contract; then CONTRACTOR'S OBLIGATION SHALL BE VOID; OTHERWISE, IT SHALL REMAIN IN FULL FORCE AND EFFECT.

The surety hereby waives notice of and agrees that any changes in or under the Contract and compliance or noncompliance with any formalities connected with the Contract or the changes do not affect surety's obligation under this bond.

The provisions of this bond are subject to the notice and time limitations of §255.05(2) and §255.05(10). In no event will the Surety be liable in the aggregate to claimants for more than the penal

DocuSign Envelope ID: 775FCF57-23C4-4678-829D-D68E47097C5B

sum of this Payment Bond, regardless of the number of suits that may be filed by claimants.

Signed and sealed this_____day of_____, 20_____.

CONTRACTOR (PRINCIPAL)

Signed, sealed and delivered in the presence of:

_____ _____

_____ By:_____

Witnesses as to Contractor
Name:_____
Title:_____
STATE OF _____
COUNTY OF _____
Sworn to (or affirmed) and subscribed before me by means of ☐ physical presence or ☐ online notarization, this day of _____, 20____, by _____.

_____
Signature of Notary Public

_____
Printed Name of Notary Public

Personally Known OR Produced Identification
Type of Identification Produced:_____

SURETY
SIGNATURE: _____
SEAL
PRINTED NAME AND TITLE: ATTORNEY IN FACT

DocuSign Envelope ID: 775FCF57-23C4-4678-829D-D68E47097C5B

EXHIBIT 4: PERFORMANCE BOND FORM

CONTRACTOR (PRINCIPAL)
COMPANY (LEGAL NAME):
PRINCIPAL BUSINESS ADDRESS (No PO Box):
TELEPHONE NUMBER:
SURETY
COMPANY (LEGAL NAME):
PRINCIPAL BUSINESS ADDRESS (No PO Box):
TELEPHONE NUMBER:
OWNER (OBLIGEE)
NAME: Alachua County Board of County Commissioners
PRINCIPAL BUSINESS ADDRESS: 12 S.E. First Street, Gainesville, Florida 32601
TELEPHONE NUMBER: 352-374-5204
CONTRACT DETAILS
CONTRACT NO.:
DATE EXECUTED:
AMOUNT:
GENERAL DESCRIPTION:
STREET ADDRESS OF PROJECT:
PO NO., RFP, OR INVITATION TO BID NO.:
BOND
BOND NUMBER:
DATE:
AMOUNT:

KNOW ALL MEN BY THESE PRESENTS:

That Principal, hereinafter called Contractor, and Surety, as identified above, are bound to Alachua County, Florida, as Obligee, and hereinafter called the County, in the amount identified above, for the payment whereof Contractor and Surety bind themselves, their heirs, executors, administrators, successors and assigns, jointly and severally.

WHEREAS, Contractor has by written Contract entered into a Contract, identified above, with County, which Contract Documents are by reference made a part hereof, and for the purposes of this Bond are hereafter referred to as the "Contract";

THE CONDITION OF THIS BOND is that if Contractor:

1. performs the Contract between Contractor and County, at the times and in the manner prescribed in the Contract; and
2. pays County all losses, damages, including liquidated damages and damages caused by delay, expenses, costs and attorney's fees including appellate proceedings, that County sustains as a result of default by Contractor under the Contract; and
3. 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 AND EFFECT.

Whenever Contractor shall be, and is declared by County to be, in default under the Contract, and County having performed County's obligations there under, the Surety may promptly remedy the default, or shall promptly:

1. complete the Contract in accordance with its terms and conditions; or

DocuSign Envelope ID: 775FCF57-23C4-4678-829D-D68E47097C5B

2. obtain a bid or bids for completing the Contract in accordance with its terms and conditions, and upon determination by Surety of the lowest responsible bidder, or, if County elects, upon determination by County and Surety jointly of the lowest responsible bidder, arrange for a Contract between such Bidder and County, and make available as work progresses sufficient funds, paid to County, to pay the cost of completion and other costs and damages for which the Surety may be liable hereunder.

No right of action shall accrue on this bond to or for the use of any person of corporation other than County named herein.

The Surety, for value received, hereby stipulates and agrees that no changes, extensions of time, alterations or additions to the terms of the Contract or other Work to be performed hereunder, or the specifications referred to therein shall in any way affect its obligations under this bond, and it does hereby waive notice of any such changes, extensions of time, alterations or additions to the terms of the Contract or to Work or to the specifications.

This instrument shall be construed in all respects as a common law bond. It is expressly understood that the time provisions and statute of limitations under §255.05, Florida Statutes, shall not apply to this bond.

In no event will the Surety be liable in the aggregate to Obligee for more than the penal sum of this Performance Bond regardless of the number of suits that may be filed by Obligee.

Signed and sealed this_____day of_____, 20_____.

CONTRACTOR (PRINCIPAL)

Signed, sealed and delivered in the presence of:

_____ By:_____

Witnesses as to Contractor Name:_____ Title:_____

STATE OF _____

COUNTY OF _____

Sworn to (or affirmed) and subscribed before me by means of ☐ physical presence or ☐ online notarization, this day of _____, 20____, by _____.

_____

Signature of Notary Public

_____

Printed Name of Notary Public

Personally Known OR Produced Identification

Type of Identification Produced:_____

SURETY

SIGNATURE: _____

SEAL

PRINTED NAME AND TITLE:

_____

DocuSign Envelope ID: 775FCF57-23C4-4678-829D-D68E47097C5B

EXHIBIT 5: CONTRACTOR'S FINAL PAYMENT AFFIDAVIT FORM

STATE OF _____
COUNTY OF _____

Before me, the undersigned authority, personally appeared _____, who after being duly sworn, deposes and says:

(1) He or she is the (title) _____, of _____, which does business in the State of Florida, hereinafter referred to as the "Contractor."
(2) Contractor, pursuant to that certain Contract No. 13726 ("Contract") with Alachua County, a charter county and political subdivision of the State of Florida, hereinafter referred to as the "Owner," has furnished or caused to be furnished labor, materials, and services for *Invitation to Bid No. 23-947; Project No. 919-7903, CR 325 over Cross Creek Bridge Rehabilitation, Contract No. 13726*, as more particularly set forth in said Contract.
(3) This affidavit is executed by the Contractor in accordance with §713.06 of the Florida Statutes for the purposes of obtaining final payment from the Owner in the amount of $_____.
(4) Contractor certifies, represents and warrants that it has paid all persons defined in §713.01, Florida Statutes, who furnished labor, services, or materials for the prosecution of the Work provided for in the Contract ("Claimants"), all amounts owed them from any previous payments received by Contractor from the Owner and has not withheld any such amounts.
(5) Contractor certifies, represents and warrants that all Work to be performed under the Contract has been fully completed, and all Claimants have been paid in full.
(6) In accordance with the Contract Documents and in consideration of $_____ paid, Contractor releases and waives for itself and all Claimants, including their successors and assigns, all claims demands, damages, costs and expenses, whether in contract or in tort, against Owner relating in any way to the performance of the Contract.
(7) Contractor certifies, represents and warrants for itself and its subcontractors, materialmen, successors and assigns, that all charges for labor, materials, supplies, lands, licenses and other expenses for which Owner might be sued or for which a lien or a demand against any payment bond might be filed, have been fully satisfied and paid.
(8) Contractor agrees to indemnify, defend and save harmless Owner from all demands or suits, actions, claims of liens or other charges filed or asserted against Owner arising out of the performance by Contractor of the Work covered by the Contract.

Contractor:

By:

_____

Its: _____

_____ Date:_____
Witnesses

[Corporate Seal]

STATE OF _____

DocuSign Envelope ID: 775FCF57-23C4-4678-829D-D68E47097C5B

DocuSign Envelope ID: 775FCF57-23C4-4678-829D-D68E47097C5B

EXHIBIT 6: FINAL PAYMENT BOND WAIVER FORM

WAIVER OF RIGHT TO CLAIM AGAINST THE PAYMENT BOND (FINAL PAYMENT)

OWNER: Alachua County, a charter county and political subdivision of the State of Florida

CONTRACTOR:

PROJECT: Contract No. 13726 ("Contract") for labor, materials, and services for *Invitation to Bid No. 23-947; Project No. 919-7903, CR 325 over Cross Creek Bridge Rehabilitation*.

The undersigned Claimant, for itself and its successors and assigns, and in consideration of the final payment made in the amount of $_____, hereby waives and releases its right to claim against the payment bond, and further waives, releases and discharges the Owner and Contractor from any and all claims, demands, obligations, damages, actions, and causes of action, direct or indirect, in law or in equity, for labor, services or materials furnished through _____(insert date) to_____, on the job of **Alachua County**, a charter county and political subdivision of the State of Florida, for improvements associated with the above referenced Project.

DATED ON _____.

Claimant:_____

By: _____
(Name)
Title:_____
(Print Title)

STATE OF _____
COUNTY OF _____
Sworn to (or affirmed) and subscribed before me by means of ☐ physical presence or ☐ online notarization, this day of _____, 20____, by _____.

_____
Signature of Notary Public

_____
Printed Name of Notary Public

Personally Known OR Produced Identification
Type of Identification Produced:_____

DocuSign Envelope ID: 775FCF57-23C4-4678-829D-D68E47097C5B

EXHIBIT 7: INSURANCE

TYPE "A" INSURANCE REQUIREMENTS
"ARTISAN CONTRACTORS / SERVICE CONTACTS"

The Contractor shall procure and maintain for the duration of this contract insurance against claims for injuries to persons or damages to property, which may arise from or in connection with the performance of the Work hereunder by the contractor/vendor, his agents, representatives, employees or subcontractors.

COMMERCIAL GENERAL LIABILITY

Coverage must be afforded under a per occurrence form policy for limits not less than $1,000,000 General Aggregate, $1,000,0000 Products / Completed Operations Aggregate, $1,000,000 Personal and Advertising Injury Liability, $1,000,000 each Occurrence, $50,000 Fire Damage Liability and $5,000 Medical Expense.

AUTOMOBILE LIABILITY

Coverage must be afforded including coverage for all Owned vehicles, Hired and Non-Owned vehicles for Bodily Injury and Property Damage of not less than $1,000,000 combined single limit each accident.

WORKERS COMPENSATION AND EMPLOYER'S LIABILITY

Coverage to apply for all employees at STATUTORY Limits in compliance with applicable state and federal laws; if any operations are to be undertaken on or about navigable waters, coverage must be included for the USA Longshoremen & Harbor Workers Act.

Employer's Liability limits for not less than $100,000 each accident; $500,000 disease policy limit and $100,000 disease each employee must be included.

BUILDER'S RISK / INSTALLATION FLOATERS (when applicable)

When this Agreement includes the construction of and/or the addition to a permanent structure or building; including the installation of machinery and/or equipment, the following insurance coverage must be afforded:

Coverage Form: Completed Value, All Risk in an amount equal to 100% of the value upon completion or value of equipment to be installed.

When applicable: Waiver of Occupancy Clause or Cessation of Insurance clause. Flood Insurance as available under the National Flood Insurance Program.

EMPLOYEE FIDELITY COVERAGE (only applicable to vendors whose employees handle funds)

Employee Dishonesty coverage must be afforded for not less than $500,000 Blanket all employees ISO Form

OTHER INSURANCE PROVISIONS

The policies are to contain, or be endorsed to contain, the following provisions:

DocuSign Envelope ID: 775FCF57-23C4-4678-829D-D68E47097C5B

I Commercial General Liability and Automobile Liability Coverages

a. The Alachua County Board of County Commissioners, its officials, employees and volunteers are to be covered as an Additional Insured as respects: Liability arising out of activities performed by or on behalf of the Contractor/Vendor; to include Products and/or Completed Operations of the Contractor/Vendor; Automobiles owned, leased, hired or borrowed by the Contractor.

b. The Contractor's insurance coverage shall be considered primary insurance as respects the County, its officials, employees and volunteers. Any insurance or self-insurance maintained by the County, its officials, employees or volunteers shall be excess of Contractor/Vendor's insurance and shall be non-contributory.

II All Coverages

The Contractor/Vendor shall provide a Certificate of Insurance to the County with a thirty (30) day notice of cancellation. The certificate shall indicate if cover is provided under a "claims made" or "per occurrence" form. If any cover is provided under claims made from the certificate will show a retroactive date, which should be the same date of the contract (original if contact is renewed) or prior.

SUBCONTRACTORS

The Contractor/Vendor shall be responsible for all subcontractors working on their behalf as a condition of this Contract. All subcontractors of the Contractor/Vendor shall be subject to the same coverage requirements stated herein.

CERTIFICATE HOLDER: Alachua County Board of County Commissioners

MAIL, EMAIL or FAX CERTIFICATES

EXHIBIT 7-A: CERTIFICATE OF INSURANCE

ACORD®

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY): 5/17/2023

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER
Sterling Seacrest Pritchard, Inc.
1001 Whitaker St
Savannah GA 31401

License#: 70726

CONTACT NAME: Alex Paradowski
PHONE (A/C, No, Ext): 912-544-1900 FAX (A/C, No): 912-544-1901
E-MAIL ADDRESS: aparadowski@sspins.com

INSURER(S) AFFORDING COVERAGE	NAIC #
INSURER A : Selective Insurance Co of South Carolina	19259
INSURER B : Ascot Specialty Insurance Company	
INSURER C :	
INSURER D :	
INSURER E :	
INSURER F :	

INSURED
E & D Coatings, Inc.
E & D Contracting, Inc.
2001 Mills B Lane Blvd
Savannah GA 31405

E&DCOAT-01

COVERAGES **CERTIFICATE NUMBER:** 1003806397 **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
B	X COMMERCIAL GENERAL LIABILITY	Y	Y	ESGL2310002010-01	3/30/2023	3/30/2024	EACH OCCURRENCE	$ 1,000,000
	CLAIMS-MADE X OCCUR						DAMAGE TO RENTED PREMISES (Ea occurrence)	$ 300,000
	X BI/PD Ded:$2,500						MED EXP (Any one person)	$ 5,000
							PERSONAL & ADV INJURY	$ 1,000,000
	GEN'L AGGREGATE LIMIT APPLIES PER:						GENERAL AGGREGATE	$ 2,000,000
	POLICY X PRO-JECT LOC						PRODUCTS - COMP/OP AGG	$ 2,000,000
	OTHER:							$
A	AUTOMOBILE LIABILITY	Y	Y	S 2582258-00	3/30/2023	3/30/2024	COMBINED SINGLE LIMIT (Ea accident)	$ 1,000,000
	X ANY AUTO						BODILY INJURY (Per person)	$
	ALL OWNED AUTOS / SCHEDULED AUTOS						BODILY INJURY (Per accident)	$
	X HIRED AUTOS / X NON-OWNED AUTOS						PROPERTY DAMAGE (Per accident)	$
								$
E	X UMBRELLA LIAB X OCCUR			ESXS2310002011-01	3/30/2023	3/30/2024	EACH OCCURRENCE	$ 5,000,000
	EXCESS LIAB CLAIMS-MADE						AGGREGATE	$ 5,000,000
	DED X RETENTION $ 0							$
	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY						PER STATUTE / OTH-ER	
	ANY PROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? Y / N	N / A					E.L. EACH ACCIDENT	$
	(Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below						E.L. DISEASE - EA EMPLOYEE	$
							E.L. DISEASE - POLICY LIMIT	$
A	Leased/Rented Equipment			S 2582258-00	3/30/2023	3/30/2024	Max Limit	300,000

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)
Project: CR 325 OVER CROSS CREEK BRIDGE REHABILITATION

See forms Attached
CG2001 04/13 Primary and Noncontributory-Other Insurance Condition
CG2010 04/13 Additional Insured-Owners, Lessees or Contractors -Scheduled Person or Organization
CG2037 04/13 Additional Insured-Owners, Lessees or Contractors -Completed Operations
CG2404 05/09 Waiver of Transfer of Rights- Name: As agreed to by written contract or agreement
CG2034 07/04 Add'l Insured-Lessor of Leased Equipment - automatic Status when Required
See Attached...

CERTIFICATE HOLDER

Alachua County Board of County Commissioners
12 SE 1st St
Gainesville FL 32601

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE

© 1988-2014 ACORD CORPORATION. All rights reserved.

ACORD 25 (2014/01) The ACORD name and logo are registered marks of ACORD

AGENCY CUSTOMER ID: E&DCOAT-01

LOC #:

ADDITIONAL REMARKS SCHEDULE

AGENCY		NAMED INSURED
Sterling Seacrest Pritchard, Inc.		E & D Coatings, Inc. E & D Contracting, Inc. 2001 Mills B Lane Blvd Savannah GA 31405
POLICY NUMBER		
CARRIER	NAIC CODE	EFFECTIVE DATE:

ADDITIONAL REMARKS

THIS ADDITIONAL REMARKS FORM IS A SCHEDULE TO ACORD FORM,

FORM NUMBER: 25 **FORM TITLE:** CERTIFICATE OF LIABILITY INSURANCE

CA7809 11/17 ElitePac Commercial Automobile Extension

The Alachua County Board of County Commissioners, its officials, employees and volunteers are to be covered as an Additional Insured as respects: Liability arising out of activities performed by or on behalf of the Contractor/Vendor; to include Products and/or Completed Operations of the Contractor/Vendor; Automobiles owned, leased, hired or borrowed by the Contractor. The Contractor's insurance coverage shall be considered primary insurance as respects the County, its officials, employees and volunteers. Any insurance or self-insurance maintained by the County, its officials, employees or volunteers shall be excess of Contractor/Vendor's insurance and shall be noncontributory.

© 2008 ACORD CORPORATION. All rights reserved.

The ACORD name and logo are registered marks of ACORD

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

ADDITIONAL INSURED – LESSOR OF LEASED EQUIPMENT – AUTOMATIC STATUS WHEN REQUIRED IN LEASE AGREEMENT WITH YOU

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

A. Who Is An Insured (Section II) is amended to include as an additional insured any person or organization from whom you lease equipment when you and such person or organization have agreed in writing in a contract or agreement that such person or organization be added as an additional insured on your policy. Such person or organization is an insured only with respect to liability for "bodily injury", "property damage" or "personal and advertising injury" caused, in whole or in part, by your maintenance, operation or use of equipment leased to you by such person or organization.

A person's or organization's status as an additional insured under this endorsement ends when their contract or agreement with you for such leased equipment ends.

B. With respect to the insurance afforded to these additional insureds, this insurance does not apply to any "occurrence" which takes place after the equipment lease expires.

 © ISO Properties, Inc., 2004

ElitePac®
Commercial Automobile Extension

COMMERCIAL AUTO
CA 78 09 11 17

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

This endorsement modifies insurance provided under the following:

BUSINESS AUTO COVERAGE FORM

With respect to coverage provided by this endorsement, the provisions of the Business Auto Coverage Form apply unless modified by the endorsement.

AMENDMENTS TO SECTION II - LIABILITY COVERAGE

A. If this policy provides Auto Liability coverage for Owned Autos, the following extensions are applicable accordingly:

NEWLY ACQUIRED OR FORMED ORGANIZATIONS

The following is added to **SECTION II, A.1. - Who Is An Insured:**

Any organization you newly acquire or form, other than a partnership, joint venture or limited liability company over which you maintain ownership or majority interest, will qualify as a Named Insured if there is no similar insurance available to that organization. However:

1. Coverage under this provision is afforded only until the 180th day after you acquire or form the organization or the end of the policy period, whichever is earlier;

2. Coverage does not apply to "bodily injury" or "property damage" resulting from an "accident" that occurred before you acquired or formed the organization.

No person or organization is an "insured" with respect to the conduct of any current or past partnership, joint venture or limited liability company that is not shown as a Named Insured in the Declarations.

EXPENSES FOR BAIL BONDS AND LOSS OF EARNINGS

Paragraphs **(2)** and **(4)** of **SECTION II, A.2.a. - Supplementary Payments** are deleted in their entirety and replaced with the following:

(2) Up to the Limit of Insurance shown on the ElitePac Schedule for the cost of bail bonds (including bonds for related traffic law violations) required because of an "accident" covered under this policy. We do not have to furnish these bonds.

(4) All reasonable expenses incurred by the "insured" at our request. This includes actual loss of earnings because of time off from work, which we will pay up to the Limit of Insurance shown on the ElitePac Schedule.

EMPLOYEE INDEMNIFICATION AND EMPLOYER'S LIABILITY AMENDMENT

The following is added to **SECTION II, B.4. - Exclusions:**

This exclusion does not apply to a "volunteer worker" who is not entitled to workers compensation, disability or unemployment compensation benefits.

FELLOW EMPLOYEE COVERAGE

The **Fellow Employee** Exclusion, **SECTION II, B.5. -** is deleted in its entirety.

CARE, CUSTODY OR CONTROL AMENDMENT

The following is added to **SECTION II, B.6. - Exclusions:**

This exclusion does not apply to property owned by anyone other than an "insured", subject to the following:

1. The most we will pay under this exception for any one "accident" is the Limit of Insurance stated in the ElitePac Schedule; and

2. A per "accident" deductible as stated in the ElitePac Schedule applies to this exception.

B. If this policy provides Auto Liability coverage for Owned Autos or Non-Owned Autos, the following extension is applicable accordingly:

LIMITED LIABILITY COMPANIES

The following is added to **SECTION II, A.1. - Who Is An Insured:**

If you are a limited liability company, your members and managers are "insureds" while using a covered "auto" you don't own, hire or borrow during the course of their duties for you.

BLANKET ADDITIONAL INSUREDS - As Required By Contract

The following is added to **SECTION II, A.1. - Who Is An Insured:**

Copyright, 2017 Selective Insurance Company of America. All rights reserved.
Includes copyrighted material of Insurance Services Office, Inc., with its permission.

Any person or organization whom you have agreed in a written contract, written agreement or written permit that such person or organization be added as an additional "insured" on your policy. Such person or organization is an additional "insured" only with respect to liability for "bodily injury" or "property damage" caused, in whole or in part, by your ownership, maintenance or use of a covered "auto". This coverage shall be primary and non-contributory with respect to the additional "insured". This provision only applies if:

1. It is required in the written contract, written agreement or written permit identified in this section;
2. It is permitted by law; and
3. The written contract or written agreement has been executed (executed means signed by a named insured) or written permit issued prior to the "bodily injury" or "property damage".

C. If this policy provides Auto Liability coverage for Non-Owned Autos, the following extension is applicable accordingly:

EMPLOYEES AS INSUREDS

If this policy provides Auto Liability coverage for Non-Owned Autos, the following is added to **SECTION II, A.1. - Who Is An Insured:**

Any "employee" of yours is an "insured" while using a covered "auto" you don't own, hire or borrow in your business or your personal affairs.

An "employee" of yours is an "insured" while operating an "auto" hired or rented under a contract or agreement in that "employee's" name with your permission, while performing duties related to the conduct of your business.

AMENDMENTS TO SECTION III - PHYSICAL DAMAGE COVERAGE

If this policy provides Comprehensive, Specified Causes of Loss or Collision coverage, the following extensions are applicable for those "autos" for which Comprehensive, Specified Causes of Loss or Collision coverage is purchased:

TOWING AND LABOR

SECTION III, A.2. - Towing is deleted in its entirety and replaced with the following:

We will pay all reasonable towing and labor costs up to the maximum Limit of Insurance shown on the ElitePac Schedule per tow each time a covered "Private Passenger Auto", "Social Service Van or Bus" or "Light Truck" is disabled and up to the maximum Limit of Insurance per tow each time a covered "Medium Truck", "Heavy Truck" or "Extra Heavy Truck" is disabled.

For labor charges to be eligible for reimbursement the labor must be performed at the place of disablement.

This coverage extension does not apply to Emergency Services Organizations and Governmental Entities.

GLASS BREAKAGE DEDUCTIBLE

The following is added to **SECTION III, A.3. - Glass Breakage - Hitting A Bird Or Animal - Falling Objects or Missiles:**

If damaged glass is repaired rather than replaced, no deductible will apply for such repair. This extension does not apply to Emergency Services Organizations and Governmental Entities.

ADDITIONAL TRANSPORTATION EXPENSES SECTION III, A.4.a. - Transportation Expenses is deleted in its entirety and replaced with the following:

We will pay up to the maximum Limit of Insurance shown on the ElitePac Schedule for temporary transportation expenses that you incur because of any "loss" to a covered "auto", but only if the covered "auto" carries the coverages and meets the requirements described in **1.** or **2.** below:

1. We will pay temporary transportation expenses for total theft of a covered "auto". We will only pay for such expenses incurred during the period beginning 24 hours after the theft and ending, regardless of the policy's expiration, when the covered "auto" is returned to use or we pay for its "loss".
2. For "loss" other than total theft of a covered "auto" under Comprehensive or Specified Causes of Loss Coverage, or for any "loss" under Collision Coverage to a covered "auto", we will only pay for those temporary transportation expenses incurred during the policy period beginning 24 hours after the "loss" and ending, regardless of the policy's expiration, with the lesser of the number of days reasonably required to repair or replace the covered "auto" or 30 days.

   Paragraph **2.** of this extension does not apply while there are spare or reserve "autos" available to you for your operations.

This coverage extension does not apply to Emergency Services Organizations and Governmental Entities.

HIRED AUTO PHYSICAL DAMAGE COVERAGE

The following is added to **SECTION III, A.4. - Coverage Extensions:**

Physical Damage coverage is hereby extended to apply to Physical Damage "loss" to "autos" leased, hired, rented or borrowed without a driver. We will provide coverage equal to the broadest coverage available to any covered "auto" shown in the Declarations. But, the most we will pay for "loss" to each "auto" under this coverage extension is the lesser of:

Copyright, 2017 Selective Insurance Company of America. All rights reserved.
Includes copyrighted material of Insurance Services Office, Inc., with its permission.

1. The Limit of Insurance stated in the ElitePac Schedule; or
2. The actual cash value of the damaged or stolen property as of the time of the "loss"; or
3. The actual cost of repairing or replacing the damaged or stolen property with other property of like kind and quality. A part is of like kind and quality when it is of equal or better condition than the pre-accident part. We will use the original equipment from the manufacturer when:
   - **(a)** The operational safety of the vehicle might otherwise be impaired;
   - **(b)** Reasonable and diligent efforts to locate the appropriate rebuilt, aftermarket or used part have been unsuccessful; or
   - **(c)** A new original equipment part of like kind and quality is available and will result in the lowest overall repair cost.

For each leased, hired, rented or borrowed "auto" our obligation to pay "losses" will be reduced by a deductible equal to the highest deductible applicable to any owned "auto" for that coverage. No deductible will be applied to "losses" caused by fire or lightning.

SECTION IV, B.5. Other Insurance Condition, Paragraph **5.b.** is deleted in its entirety and replaced by the following:

For Hired Auto Physical Damage Coverage, the following are deemed to be covered "autos'" you own:

1. Any covered "auto" you lease, hire, rent, or borrow; and
2. Any covered "auto" hired or rented by your "employee" under a contract or agreement in that "employee's" name, with your permission, while performing duties related to the conduct of your business.

However, any "auto" that is leased, hired, rented or borrowed with a driver is not a covered "auto".

This coverage extension does not apply to Emergency Services Organizations and Governmental Entities.

HIRED AUTO LOSS OF USE COVERAGE

The following is added to **SECTION III, A.4. - Coverage Extensions:**

We will pay expenses for which you are legally responsible to pay up to the Limit of Insurance shown on the ElitePac Schedule per "accident" for loss of use of a leased, hired, rented or borrowed "auto" if it results from an "accident".

This coverage extension does not apply to Emergency Services Organizations, Governmental Entities, and Schools.

AUTO LOAN/LEASE GAP COVERAGE (Not Applicable in New York)

The following is added to **SECTION III, A.4. - Coverage Extensions:**

In the event of a total "loss" to a covered "auto" we will pay any unpaid amount due on the lease or loan for a covered "auto", less:

1. The amount paid under the Physical Damage Coverage Section of the policy; and
2. Any:
   - **a.** Overdue lease/loan payments at the time of "loss";
   - **b.** Financial penalties imposed under a lease for excessive use, abnormal wear and tear, high mileage or similar charges;
   - **c.** Security deposits not refunded by the lessor or financial institution;
   - **d.** Costs for extended warranties, credit life, health, accident, or disability insurance purchased with the loan or lease; and
   - **e.** Carry-over balances from previous leases or loans.

You are responsible for the deductible applicable to the "loss" for the covered "auto".

PERSONAL EFFECTS

The following is added to **SECTION III, A.4. - Coverage Extensions:**

If this policy provides Comprehensive Coverage for a covered "auto" you own and that covered "auto" is stolen, we will pay up to the Limit of Insurance shown on the ElitePac Schedule, without application of a deductible, for lost personal effects that were in the covered "auto" at the time of theft. Personal effects do not include jewelry, tools, money, or securities. This coverage is excess over any other collectible insurance.

AIRBAG COVERAGE

The following is added to **SECTION III, B.3.a. - Exclusions:**

Mechanical breakdown does not include the accidental discharge of an airbag.

This coverage extension does not apply to Emergency Services Organizations and Governmental Entities.

EXPANDED AUDIO, VISUAL, AND DATA ELECTRONIC EQUIPMENT COVERAGE

SECTION III, B.4. - Exclusions

This exclusion does not apply to the following:

1. Global positioning systems;
2. "Telematic devices"; or
3. Electronic equipment that reproduces, receives or transmits visual or data signals and accessories used with such equipment, provided such equipment is:

Copyright, 2017 Selective Insurance Company of America. All rights reserved.
Includes copyrighted material of Insurance Services Office, Inc., with its permission.

a. Permanently installed in or upon the covered "auto" at the time of the "loss";

b. Removable from a housing unit that is permanently installed in the covered "auto" at the time of the "loss";

c. Designed to be solely operated by use of power from the "auto's" electrical system; or

d. Designed to be used solely in or upon the covered "auto".

For each covered "loss" to such equipment, a deductible of $50 shall apply, unless the deductible otherwise applicable to such equipment is less than $50, at which point the lower deductible, if any, will apply.

COMPREHENSIVE DEDUCTIBLE - LOCATION TRACKING DEVICE

The following is added to **SECTION III, D. - Deductible:**

Any Comprehensive Coverage Deductible shown in the Declarations will be reduced by 50% for any "loss" caused by theft if the covered "auto" is equipped with a location tracking device and that device was the sole method used to recover the "auto".

PHYSICAL DAMAGE LIMIT OF INSURANCE

SECTION III, C. - Limit Of Insurance is deleted in its entirety and replaced with the following:

The most we will pay for a "loss" in any one "accident" is the lesser of:

1. The actual cash value of the damaged or stolen property as of the time of the "loss"; or

2. The cost of repairing or replacing the damaged or stolen property with other property of like kind and quality.

This coverage extension does not apply to Emergency Services Organizations and Governmental Entities.

AMENDMENTS TO SECTION IV - BUSINESS AUTO CONDITIONS

DUTIES IN THE EVENT OF ACCIDENT, CLAIM, SUIT OR LOSS

The following is added to **SECTION IV, A.2.a. - Duties In The Event Of Accident, Claim, Suit Or Loss:**

The notice requirements for reporting "accident" claim, "suit" or "loss" information to us, including provisions related to the subsequent investigation of such "accident", claim, "suit" or "loss" do not apply until the "accident", claim, "suit" or "loss" is known to:

1. You, if you are an individual;

2. A partner, if you are a partnership;

3. An executive officer or insurance manager, if you are a corporation;

4. Your members, managers or insurance manager, if you are a limited liability company;

5. Your elected or appointed officials, trustees, board members or your insurance manager, if you are an organization other than a partnership, joint venture or limited liability company.

But, this section does not amend the provisions relating to notification of police or protection or examination of the property that was subject to the "loss".

WAIVER OF SUBROGATION

SECTION IV, A.5. - Transfer Of Rights Of Recovery Against Others To Us is deleted in its entirety and replaced with the following:

We waive any right of recovery we may have against any person or organization because of payments we make for "bodily injury" or "property damage" resulting from the ownership, maintenance or use of a covered "auto" but only when you have assumed liability for such "bodily injury" or "property damage" in an "insured contract". In all other circumstances, if a person or organization to or for whom we make payment under this Coverage Form has rights to recover damages from another, those rights are transferred to us.

MULTIPLE DEDUCTIBLES

The following is added to **SECTION IV, A. - Loss Conditions:**

If a "loss" from one event involves two or more covered "autos" and coverage under Comprehensive or Specified Causes of Loss applies, only the highest applicable deductible will be applied.

CONCEALMENT, MISREPRESENTATION OR FRAUD

The following is added to **SECTION IV, B.2. - Concealment, Misrepresentation Or Fraud:**

If you should unintentionally fail to disclose any existing hazards in your representations to us prior to the inception date of the policy or during the policy period in connection with any newly discovered hazards, we will not deny coverage under this Coverage Form based upon such failure.

POLICY PERIOD, COVERAGE TERRITORY

SECTION IV, B.7. - Policy Period, Coverage Territory is deleted in its entirety and replaced with the following:

Under this Coverage Form, we cover "accidents" and "losses" occurring:

a. During the policy period shown in the Declarations; and

b. Within the "Coverage Territory".

Copyright, 2017 Selective Insurance Company of America. All rights reserved.
Includes copyrighted material of Insurance Services Office, Inc., with its permission.

We also cover “loss” to or “accidents” involving a covered “auto” while being transported between any of these places.

TWO OR MORE COVERAGE FORMS OR POLICIES ISSUED BY US - DEDUCTIBLES

The following is added to **SECTION IV, B.8. - Two Or More Coverage Forms Or Policies Issued By Us:**

If a “loss” covered under this Coverage Form also involves a “loss” to other property resulting from the same “accident” that is covered under this policy or another policy issued by us or any member company of ours, only the highest applicable deductible will be applied.

AMENDMENTS TO SECTION V - DEFINITIONS

BODILY INJURY INCLUDING MENTAL ANGUISH (Not Applicable in New York)

The definition of bodily injury is deleted in its entirety and replaced by the following:

“Bodily injury” means bodily injury, sickness, or disease sustained by a person, including death resulting from any of these. “Bodily injury” includes mental anguish resulting from bodily injury, sickness or disease sustained by a person.

ADDITIONS TO SECTION V - DEFINITIONS

COVERAGE TERRITORY

“Coverage Territory” means:

1. The United States of America (including its territories and possessions), Canada and Puerto Rico; and
2. Anywhere in the world, except for any country or jurisdiction that is subject to trade or other economic sanction or embargo by the United States of America, if a covered “auto” is leased, hired, rented, or borrowed without a driver for a period of 30 days or less, and the insured’s responsibility to pay “damages” is determined in a “suit” on the merits in and under the substantive law of the United States of America (including its territories and possessions), Puerto Rico, or Canada, or in a settlement we agree to.

If we are prevented by law, or otherwise, from defending the “insured” in a “suit” brought in a location described in Paragraph **2.** above, the insured will conduct a defense of that “suit”. We will reimburse the “insured” for the reasonable and necessary expenses incurred for the defense of any such “suit” seeking damages to which this insurance applies, and that we would have paid had we been able to exercise our right and duty to defend.

EXTRA HEAVY TRUCK

“Extra Heavy Truck” means a truck with a gross vehicle weight rating of 45,001 pounds or more.

HEAVY TRUCK

“Heavy Truck” means a truck with a gross vehicle weight rating of 20,001 pounds to 45,000 pounds.

LIGHT TRUCK

“Light Truck” means a truck with a gross vehicle weight rating of 10,000 pounds or less.

MEDIUM TRUCK

“Medium Truck” means a truck with a gross vehicle weight rating of 10,001 pounds to 20,000 pounds.

PRIVATE PASSENGER AUTO

“Private Passenger Auto” means a four-wheel “auto” of the private passenger or station wagon type. A pickup, panel truck or van not used for business is included within the definition of a “private passenger auto”.

SOCIAL SERVICE VAN OR BUS

“Social Service Van or Bus” means a van or bus used by a government entity, civic, charitable or social service organization to provide transportation to clients incidental to the social services sponsored by the organization, including special trips and outings.

TELEMATIC DEVICE

“Telematic Device” includes devices designed for the collection and dissemination of data for the purpose of monitoring vehicle and/or driver performance. This includes Global Positioning System technology, wireless safety communications and automatic driving assistance systems, all integrated with computers and mobile communications technology in automotive navigation systems.

VOLUNTEER WORKER

“Volunteer worker” means a person who performs business duties for you, for no financial or other compensation.

Copyright, 2017 Selective Insurance Company of America. All rights reserved.
Includes copyrighted material of Insurance Services Office, Inc., with its permission.

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

PRIMARY AND NONCONTRIBUTORY – OTHER INSURANCE CONDITION

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART
PRODUCTS/COMPLETED OPERATIONS LIABILITY COVERAGE PART

The following is added to the **Other Insurance** Condition and supersedes any provision to the contrary:

Primary And Noncontributory Insurance

This insurance is primary to and will not seek contribution from any other insurance available to an additional insured under your policy provided that:

(1) The additional insured is a Named Insured under such other insurance; and

(2) You have agreed in writing in a contract or agreement that this insurance would be primary and would not seek contribution from any other insurance available to the additional insured.

© Insurance Services Office, Inc., 2012

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

ADDITIONAL INSURED – OWNERS, LESSEES OR CONTRACTORS – SCHEDULED PERSON OR ORGANIZATION

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART

SCHEDULE

Name Of Additional Insured Person(s) Or Organization(s)	Location(s) Of Covered Operations
As required by written contract signed by both parties prior to loss	All locations
Information required to complete this Schedule, if not shown above, will be shown in the Declarations.	

A. Section II – Who Is An Insured is amended to include as an additional insured the person(s) or organization(s) shown in the Schedule, but only with respect to liability for "bodily injury", "property damage" or "personal and advertising injury" caused, in whole or in part, by:

1. Your acts or omissions; or

2. The acts or omissions of those acting on your behalf;

in the performance of your ongoing operations for the additional insured(s) at the location(s) designated above.

However:

1. The insurance afforded to such additional insured only applies to the extent permitted by law; and

2. If coverage provided to the additional insured isrequired by a contract or agreement, the insurance afforded to such additional insured will not be broader than that which you are required by the contract or agreement to provide for such additional insured.

B. With respect to the insurance afforded to these additional insureds, the following additional exclusions apply:

This insurance does not apply to "bodily injury" or "property damage" occurring after:

1. All work, including materials, parts or equipment furnished in connection with such work, on the project (other than service, maintenance or repairs) to be performed by or on behalf of the additional insured(s) at the location of the covered operations has been completed; or

2.That portion of "your work" out of which the injury or damage arises has been put to its intended use by any person or organization other than another contractor or subcontractor engaged in performing operations for a principal as a part of the same project.

C. With respect to the insurance afforded to these additional insureds, the following is added to **Section III – Limits Of Insurance:**

If coverage provided to the additional insured is required by a contract or agreement, the most we will pay on behalf of the additional insured is the amount of insurance:

1. Required by the contract or agreement; or

2. Available under the applicable Limits of Insurance shown in the Declarations;

whichever is less.

This endorsement shall not increase the applicable Limits of Insurance shown in the Declarations.

© Insurance Services Office, Inc., 2012

THIS ENDORSEMENT CHANGES THE POLICY. PLEASE READ IT CAREFULLY.

ADDITIONAL INSURED – OWNERS, LESSEES OR CONTRACTORS – COMPLETED OPERATIONS

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART
PRODUCTS/COMPLETED OPERATIONS LIABILITY COVERAGE PART

SCHEDULE

Name Of Additional Insured Person(s) Or Organization(s)	Location And Description Of Completed Operations
As required by written contract signed by both parties prior to loss	All locations
Information required to complete this Schedule, if not shown above, will be shown in the Declarations.	

A. **Section II – Who Is An Insured** is amended to include as an additional insured the person(s) or organization(s) shown in the Schedule, but only with respect to liability for "bodily injury" or "property damage" caused, in whole or in part, by "your work" at the location designated and described in the Schedule of this endorsement performed for that additional insured and included in the "products-completed operations hazard".

However:

1. The insurance afforded to such additional insured only applies to the extent permitted by law; and

2. If coverage provided to the additional insured is required by a contract or agreement, the insurance afforded to such additional insured will not be broader than that which you are required by the contract or agreement to provide for such additional insured.

B. With respect to the insurance afforded to these additional insureds, the following is added to **Section III – Limits Of Insurance:**

If coverage provided to the additional insured is required by a contract or agreement, the most we will pay on behalf of the additional insured is the amount of insurance:

1. Required by the contract or agreement; or

2. Available under the applicable Limits of Insurance shown in the Declarations;

whichever is less.

This endorsement shall not increase the applicable Limits of Insurance shown in the Declarations.

© Insurance Services Office, Inc., 2012

WAIVER OF TRANSFER OF RIGHTS OF RECOVERY AGAINST OTHERS TO US

This endorsement modifies insurance provided under the following:

COMMERCIAL GENERAL LIABILITY COVERAGE PART
PRODUCTS/COMPLETED OPERATIONS LIABILITY COVERAGE PART

SCHEDULE

Name Of Person Or Organization: As required by written contract signed by both parties prior to loss
Information required to complete this Schedule, if not shown above, will be shown in the Declarations.

The following is added to Paragraph **8. Transfer Of Rights Of Recovery Against Others To Us** of **Section IV – Conditions:**

We waive any right of recovery we may have against the person or organization shown in the Schedule above because of payments we make for injury or damage arising out of your ongoing operations or "your work" done under a contract with that person or organization and included in the "products-completed operations hazard". This waiver applies only to the person or organization shown in the Schedule above.

 © Insurance Services Office, Inc., 2008

CERTIFICATE OF LIABILITY INSURANCE

DATE (MM/DD/YYYY): 05/17/2023

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER
Bouchard Insurance for WBS - TG
PO Box 6090
Clearwater, FL 33758-6090

CONTACT NAME: Todd George
PHONE (A/C, No, Ext): (866) 293-3600 ext. 623
FAX (A/C, No):
E-MAIL ADDRESS:

INSURER(S) AFFORDING COVERAGE	NAIC #
INSURER A : American Zurich Insurance Company	40142
INSURER B :	
INSURER C :	
INSURER D :	
INSURER E :	
INSURER F :	

INSURED
Workforce Business Services, Inc. Alt. Emp: E & D Contracting Services Inc
1401 Manatee Ave. West Ste 600
Bradenton, FL 34205-6708

COVERAGES **CERTIFICATE NUMBER:** 22FL079961777 **REVISION NUMBER:**

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS	
	COMMERCIAL GENERAL LIABILITY						EACH OCCURRENCE	$
	CLAIMS-MADE / OCCUR						DAMAGE TO RENTED PREMISES (Ea occurrence)	$
							MED EXP (Any one person)	$
							PERSONAL & ADV INJURY	$
	GEN'L AGGREGATE LIMIT APPLIES PER:						GENERAL AGGREGATE	$
	POLICY / PRO-JECT / LOC						PRODUCTS - COMP/OP AGG	$
	OTHER:							$
	AUTOMOBILE LIABILITY						COMBINED SINGLE LIMIT (Ea accident)	$
	ANY AUTO						BODILY INJURY (Per person)	$
	OWNED AUTOS ONLY / SCHEDULED AUTOS						BODILY INJURY (Per accident)	$
	HIRED AUTOS ONLY / NON-OWNED AUTOS ONLY						PROPERTY DAMAGE (Per accident)	$
								$
	UMBRELLA LIAB / OCCUR						EACH OCCURRENCE	$
	EXCESS LIAB / CLAIMS-MADE						AGGREGATE	$
	DED / RETENTION $							$
A	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANYPROPRIETOR/PARTNER/EXECUTIVE OFFICER/MEMBER EXCLUDED? Y / N (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below	N / A	X	WC 90-00-818-12	12/31/2022	12/31/2023	X PER STATUTE / OTH-ER	
							E.L. EACH ACCIDENT	$ 1,000,000
							E.L. DISEASE - EA EMPLOYEE	$ 1,000,000
							E.L. DISEASE - POLICY LIMIT	$ 1,000,000
				Location Coverage Period:	12/31/2022	12/31/2023	**Client#** 053449-FL	

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)

Coverage is provided for only those co-employees of, but not subcontractors to:
E & D Contracting Services Inc
NO FIXED ADDRESS
Tallahassee, FL 32301

#13727
CR241 Over Santa Fe River Bridge Rehabilitation Bridge No 260086-CR241 over Santa Fe River

Endorsements: Waiver of Subrogation, 30 days written cancel notice (10 days for non payment of premium)

CERTIFICATE HOLDER

Alachua County Board of County Commissioners
10 SW 2nd Ave
Gainesville, FL 32601

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE
Todd George

© 1988-2015 ACORD CORPORATION. All rights reserved.

The ACORD name and logo are registered marks of ACORD

WAIVER OF OUR RIGHT TO RECOVER FROM OTHERS ENDORSEMENT

We have the right to recover our payments from anyone liable for an injury covered by this policy. We will not enforce our right against the person or organization named in the Schedule. (This agreement applies only to the extent that you perform work under a written contract that requires you to obtain this agreement from us.)

This agreement shall not operate directly or indirectly to benefit anyone not named in the Schedule.

Schedule

IN FAVOR OF:

Alachua County Board of County Commissioners
10 SW 2nd Ave
Gainesville, FL 32601

WORK PERFORMED BY CO-EMPLOYEES OF:

E & D Contracting Services Inc
NO FIXED ADDRESS
Tallahassee, FL 32301

ON THE FOLLOWING PROJECT:

#13727
CR241 Over Santa Fe River Bridge Rehabilitation Bridge No 260086-CR241 over Santa Fe River

FEE FOR THIS WAIVER IS:

Premium will be waived

This endorsement changes the policy to which it is attached and is effective on the date issued unless otherwise stated.

(The information below is required only when this endorsement is issued subsequent to preparation of the policy.)

Endorsement Effective: 12/31/2022 Policy No: WC 90-00-818-12 Endorsement No:

Insured: Workforce Business Services, Inc. Alt. Emp: E & D Contracting Services Inc Premium: $

Insurance Company: American Zurich Insurance Company Countersigned By:

Authorized Representative

Copyright 1983 National Council on Compensation Insurance.

DocuSign Envelope ID: 775FCF57-23C4-4678-829D-D68E47097C5B

EXHIBIT 8: BID SCHEDULE/ SCHEDULE OF VALUES

Alachua County, Florida

Procurement

Theodore "TJ" White, Jr. CPPB, Procurement Manager

County Administration Building, Gainesville, FL 32601

PROPOSAL DOCUMENT REPORT

ITB No. ITB 23-947

CR 325 over Cross Creek and CR 241 over Santa Fe River-Bridge Rehabilitation - Project # 919-7903-FY19-260027 & 919-7903-FY19-260086

RESPONSE DEADLINE: April 12, 2023 at 2:00 pm

Report Generated: Tuesday, May 16, 2023

E&D CONTRACTING SERVICES, INC Proposal

CONTACT INFORMATION

Company:
E&D CONTRACTING SERVICES, INC

Email:
mshepard@edcompanies.com

Contact:
MIKE SHEPARD

Address:
2001 Mills B Lane Blvd
Savannah, GA 31405

Phone:
N/A

Website:
www.edcservicesinc.com

Submission Date:
Apr 12, 2023 1:58 PM

DocuSign Envelope ID: 775FCF57-23C4-4678-829D-D68E47097C5B

PRICE TABLES

PROJECT NO 919-7903-FY19 -260027- CR 325 OVER CROSS CREEK

Line Item	Description	Quantity	Unit of Measure	Unit Cost	Total
22	MOBILIZATION	1	LS	$22,000.00	$22,000.00
23	MAINTENANCE OF TRAFFIC	1	LS	$45,000.00	$45,000.00
24	PREVENTION, CONTROL & ABATEMENT OF EROSION & WATER POLLUTION	1	LS	$15,000.00	$15,000.00
25	SEDIMENT BARRIER	600	LF	$10.00	$6,000.00
26	FLOATING TURBIDITY BARRIER	500	LF	$25.00	$12,500.00
27	STAKED TURBIDITY BARRIER	300	LF	$15.00	$4,500.00
28	CLEARING & GRUBBING	1	LS	$46,800.00	$46,800.00
29	SELECTIVE CLEARING & GRUBBING	1	LS	$40,500.00	$40,500.00
30	MOWING	0.5	AC	$18,000.00	$9,000.00
31	TIMBER CAP REPAIR-SCAB	40	LF	$1,133.00	$45,320.00
32	TIMBER CAP REPAIR- WRAP	25	SF	$1,040.00	$26,000.00
33	TIMBER CAP REPAIR	40	SF	$500.00	$20,000.00
34	REMOVAL OF EXISTING BRIDGE JOINT	150	LF	$48.00	$7,200.00
35	CLEANING AND COATING OF CONCRETE SURFACE, CLASS V	2,750	SF	$4.00	$11,000.00
36	CLEANING OF CONCRETE SURFACE	2,500	SF	$3.50	$8,750.00

DocuSign Envelope ID: 775FCF57-23C4-4678-829D-D68E47097C5B

Line Item	Description	Quantity	Unit of Measure	Unit Cost	Total
37	RESTORE SPALLED AREAS (EPOXY)	15	CF	$2,800.00	$42,000.00
38	CRACKS INJECT & SEAL -STRUCTURES REHAB	150	LF	$155.00	$23,250.00
39	PENETRATE SEALER- CRACK REPAIR	5	GA	$500.00	$2,500.00
40	BRIDGE DECK EXPANSION JOINT (REHAB-REPLACED) (POURED JOINT WITH BACKER ROD)	150	LF	$100.00	$15,000.00
41	RIPRAP-PREFORMED REVETMENT MAT	150	SY	$333.00	$49,950.00
42	PERFORMANCE TURF (SOD)	1,500	SY	$15.00	$22,500.00
TOTAL					**$474,770.00**

DocuSign Envelope ID: 775FCF57-23C4-4678-829D-D68E47097C5B

EXHIBIT 9: CERTIFICATION OF MEETING ALACHUA COUNTY WAGE ORDINANCE

The undersigned certifies that all employees, contracted and subcontracted, completing services as part of this Agreement are paid, and will continue to be paid, in accordance with Chapter 22, Article XII of the Alachua County Code of Ordinance ("Wage Ordinance").

E & D Contracting Services, Inc
2001 Mills B Lane Boulevard
Savannah, GA 31405
mshepard@edcompanies.com

Project Description: ***#13726 – CR 325 over Cross Creek – Bridge Rehabilitation****;* repair and rehabilitation of Bridge No. 260027- CR 325 over Cross Creek

CONTRACTOR

By: DocuSigned by: Michael A Shepard 2946F53423BE407...

Print: Michael A Shepard

Title: Secretary

Date: 5/24/2023

INCORPORATED OR ARE OTHERWISE NOT A NATURAL PERSON, PLEASE PROVIDE A CERTIFICATE OF INCUMBENCY AND AUTHORITY, OR A CORPORATE RESOLUTION, LISTING THOSE AUTHORIZED TO EXECUTE AGREEMENTS. IF A NATURAL PERSON, THEN YOUR SIGNATURE SHOULD BE NOTARIZED.

DocuSign Envelope ID: 775FCF57-23C4-4678-829D-D68E47097C5B

EXHIBIT 10: CONSTRUCTION PLANS

Alachua County Public Works Contract Plan, County Project ID 919-7903-FY19-260027, Alachua County CR 325 Over Cross Creek, Bridge 26027, Plans dated 12/19/2019, are exempt pursuant to Section 119.071(3)(b)(1) until this Agreement is executed by County.

DocuSign Envelope ID: 775FCF57-23C4-4678-829D-D68E47097C5B

E&D Contracting Services, Inc

(Insert Name of Corporation)

CORPORATE RESOLUTION GRANTING SIGNING AUTHORITY AND AUTHORITY TO CONDUCT BUSINESS

The Board of Directors ("Directors") of E&D Contracting Services, Inc (insert name of company), a GA (insert state of incorporation) corporation (the "Corporation"), at a duly and properly held meeting on the 18th day of May, 20 23, did hereby consent to, adopt, ratify, confirm and approve the following recitals and resolutions:

WHEREAS, the Corporation is a duly formed, validly existing corporation in good standing under the laws of the State of GA and is authorized to do business in the State of Florida; and

WHEREAS, the Corporation desires to grant certain persons the authority to execute and enter into contracts and conduct business on behalf of the Corporation.

NOW, THEREFORE, BE IT RESOLVED, that any of the following officers and employees of the Corporation listed below are hereby authorized and empowered, acting alone, to sign, execute and deliver any and all contracts and documents on behalf of the Corporation, and to do and take such other actions, including but not limited to the approval and execution of contracts, purchase orders, amendments, change orders, invoices, and applications for payment, as in his or her judgment may be necessary, appropriate or desirable, in connection with or related to any bids, proposals, or contracts to, for or with to Alachua County, a charter

DS MAS

DocuSign Envelope ID: 775FCF57-23C4-4678-829D-D68E47097C5B

county and political subdivision of the State of Florida:

NAME	TITLE
Ginger H Dees	President
James E Dees	Vice-President
Michael Shepard	Secretary

BE IT RESOLVED THAT, these resolutions shall continue in full force and effect, and may be relied upon by Alachua County, until express written notice of their rescission or modification has been received by the Purchasing Manager of Alachua County. Any revocation, modification or replacement of these resolutions must be accompanied by documentation satisfactory to the Purchasing Manager of Alachua County, establishing the authority for the changes.

IN WITNESS WHEREOF, I have executed my name as Secretary and have hereunto affixed the corporate seal of the above-named Corporation this 22nd day of May, 20 23, and do hereby certify that the foregoing is a true record of a resolution duly adopted at a meeting of the Board of Directors of the Corporation and that said meeting was held in accordance with state law and the Bylaws of the Corporation, and that the resolution is now in full force and effect without modification or rescission.

(Corporate Seal)

Secretary of the Corporation

DocuSigned by:

By: Michael A Shepard

2946F53423BE407...

Michael Shepard

(Print Secretary's Name)

DocuSign

Certificate Of Completion

Envelope Id: 775FCF5723C44678829DD68E47097C5B
Status: Completed
Subject: Complete with DocuSign: #13726 - CR 325 over Cross Creek Bridge Rehabilitation with Alachua County
Source Envelope:
Document Pages: 113
Signatures: 3
Envelope Originator:
Certificate Pages: 5
Initials: 1
Michelle Guidry
AutoNav: Enabled
mguidry@alachuacounty.us
EnvelopeId Stamping: Enabled
IP Address: 163.120.80.69
Time Zone: (UTC-05:00) Eastern Time (US & Canada)

Record Tracking

Status: Original
5/17/2023 9:35:36 AM
Holder: Michelle Guidry
mguidry@alachuacounty.us
Location: DocuSign
Security Appliance Status: Connected
Pool: StateLocal
Storage Appliance Status: Connected
Pool: Alachua County
Location: DocuSign

Signer Events	Signature	Timestamp
Michael A Shepard MShepard@edcompanies.com Secretary E&D Contracting Services, Inc Security Level: Email, Account Authentication (None)	DocuSigned by: Michael A Shepard 2946F53423BE407...	Sent: 5/17/2023 9:42:18 AM Viewed: 5/17/2023 10:17:51 AM Signed: 5/24/2023 1:29:01 PM
Electronic Record and Signature Disclosure: Accepted: 5/24/2023 1:26:28 PM ID: 2b5c29f8-89ce-42c4-a10a-aef277b425e3	Signature Adoption: Pre-selected Style Using IP Address: 96.87.21.193	

In Person Signer Events	Signature	Timestamp

Editor Delivery Events	Status	Timestamp

Agent Delivery Events	Status	Timestamp

Intermediary Delivery Events	Status	Timestamp

Certified Delivery Events	Status	Timestamp

Carbon Copy Events	Status	Timestamp
Thomas (Jon) Rouse trouse@alachuacounty.us Contracts Supervisor Alachua County Board of County Commissioners Security Level: Email, Account Authentication (None)	COPIED	Sent: 5/24/2023 1:29:06 PM
Electronic Record and Signature Disclosure: Not Offered via DocuSign		

Witness Events	Signature	Timestamp

Notary Events	Signature	Timestamp

Envelope Summary Events	Status	Timestamps
Envelope Sent	Hashed/Encrypted	5/17/2023 9:42:18 AM
Certified Delivered	Security Checked	5/17/2023 10:17:51 AM
Signing Complete	Security Checked	5/24/2023 1:29:01 PM

Envelope Summary Events	Status	Timestamps
Completed	Security Checked	5/24/2023 1:29:06 PM

Payment Events	Status	Timestamps

Electronic Record and Signature Disclosure

ELECTRONIC RECORD AND SIGNATURE DISCLOSURE

From time to time, Alachua County (we, us or Company) may be required by law to provide to you certain written notices or disclosures. Described below are the terms and conditions for providing to you such notices and disclosures electronically through the DocuSign system. Please read the information below carefully and thoroughly, and if you can access this information electronically to your satisfaction and agree to this Electronic Record and Signature Disclosure (ERSD), please confirm your agreement by selecting the check-box next to 'I agree to use electronic records and signatures' before clicking 'CONTINUE' within the DocuSign system.

Getting paper copies

At any time, you may request from us a paper copy of any record provided or made available electronically to you by us. You will have the ability to download and print documents we send to you through the DocuSign system during and immediately after the signing session and, if you elect to create a DocuSign account, you may access the documents for a limited period of time (usually 30 days) after such documents are first sent to you. After such time, if you wish for us to send you paper copies of any such documents from our office to you, you will be charged a $0.00 per-page fee. You may request delivery of such paper copies from us by following the procedure described below.

Withdrawing your consent

If you decide to receive notices and disclosures from us electronically, you may at any time change your mind and tell us that thereafter you want to receive required notices and disclosures only in paper format. How you must inform us of your decision to receive future notices and disclosure in paper format and withdraw your consent to receive notices and disclosures electronically is described below.

Consequences of changing your mind

If you elect to receive required notices and disclosures only in paper format, it will slow the speed at which we can complete certain steps in transactions with you and delivering services to you because we will need first to send the required notices or disclosures to you in paper format, and then wait until we receive back from you your acknowledgment of your receipt of such paper notices or disclosures. Further, you will no longer be able to use the DocuSign system to receive required notices and consents electronically from us or to sign electronically documents from us.

All notices and disclosures will be sent to you electronically

Unless you tell us otherwise in accordance with the procedures described herein, we will provide electronically to you through the DocuSign system all required notices, disclosures, authorizations, acknowledgements, and other documents that are required to be provided or made available to you during the course of our relationship with you. To reduce the chance of you inadvertently not receiving any notice or disclosure, we prefer to provide all of the required notices and disclosures to you by the same method and to the same address that you have given us. Thus, you can receive all the disclosures and notices electronically or in paper format through the paper mail delivery system. If you do not agree with this process, please let us know as described below. Please also see the paragraph immediately above that describes the consequences of your electing not to receive delivery of the notices and disclosures electronically from us.

How to contact Alachua County:

You may contact us to let us know of your changes as to how we may contact you electronically, to request paper copies of certain information from us, and to withdraw your prior consent to receive notices and disclosures electronically as follows:
To contact us by email send messages to: mguidry@alachuacounty.us

To advise Alachua County of your new email address

To let us know of a change in your email address where we should send notices and disclosures electronically to you, you must send an email message to us at mguidry@alachuacounty.us and in the body of such request you must state: your previous email address, your new email address. We do not require any other information from you to change your email address.

If you created a DocuSign account, you may update it with your new email address through your account preferences.

To request paper copies from Alachua County

To request delivery from us of paper copies of the notices and disclosures previously provided by us to you electronically, you must send us an email to mguidry@alachuacounty.us and in the body of such request you must state your email address, full name, mailing address, and telephone number. We will bill you for any fees at that time, if any.

To withdraw your consent with Alachua County

To inform us that you no longer wish to receive future notices and disclosures in electronic format you may:

i. decline to sign a document from within your signing session, and on the subsequent page, select the check-box indicating you wish to withdraw your consent, or you may;

ii. send us an email to mguidry@alachuacounty.us and in the body of such request you must state your email, full name, mailing address, and telephone number. We do not need any other information from you to withdraw consent.. The consequences of your withdrawing consent for online documents will be that transactions may take a longer time to process..

Required hardware and software

The minimum system requirements for using the DocuSign system may change over time. The current system requirements are found here: https://support.docusign.com/guides/signer-guide-signing-system-requirements.

Acknowledging your access and consent to receive and sign documents electronically

To confirm to us that you can access this information electronically, which will be similar to other electronic notices and disclosures that we will provide to you, please confirm that you have read this ERSD, and (i) that you are able to print on paper or electronically save this ERSD for your future reference and access; or (ii) that you are able to email this ERSD to an email address where you will be able to print on paper or save it for your future reference and access. Further, if you consent to receiving notices and disclosures exclusively in electronic format as described herein, then select the check-box next to 'I agree to use electronic records and signatures' before clicking 'CONTINUE' within the DocuSign system.

By selecting the check-box next to 'I agree to use electronic records and signatures', you confirm that:

- You can access and read this Electronic Record and Signature Disclosure; and
- You can print on paper this Electronic Record and Signature Disclosure, or save or send this Electronic Record and Disclosure to a location where you can print it, for future reference and access; and
- Until or unless you notify Alachua County as described above, you consent to receive exclusively through electronic means all notices, disclosures, authorizations, acknowledgements, and other documents that are required to be provided or made available to you by Alachua County during the course of your relationship with Alachua County.