

CONTRACT, LEASE, AGREEMENT CONTROL FORM

Date: 12/06/2023

Contract/Lease Control #: C24-3928-AP

Procurement#: ITB AP 46-23

Contract/Lease Type: CONTRACT - AGREEMENT

Award To/Lessee: GUM CREEK FARMS, INC.

Owner/Lessor: OKALOOSA COUNTY

Effective Date: 12/05/2023

Expiration Date: 165 DAYS FROM NTP

Description of: CEW SOUTH APRON REHABILITATION

Department: AP

Department Monitor: STAGE

Monitor's Telephone #: 850-651-7160

Monitor's FAX # or E-mail: TSTAGE@MYOKALOOSA.COM

Closed: _____

CC: BCC RECORDS



[Department of State](#) / [Division of Corporations](#) / [Search Records](#) / [Search by Entity Name](#) /

Detail by Entity Name

Florida Profit Corporation
GUM CREEK FARMS, INC.

Filing Information

Document Number	V33010
FEI/EIN Number	59-3122167
Date Filed	04/28/1992
State	FL
Status	ACTIVE
Last Event	REINSTATEMENT
Event Date Filed	11/17/2017

Principal Address

1097 HWY 83 NORTH

Title Secretary, Treasurer

Bell, Jennifer S.
 1071 Bell Rd.
 DeFuniak Springs, FL 32433

Annual Reports

Report Year	Filed Date
2021	02/08/2021
2022	02/01/2022
2023	02/11/2023

Document Images

02/11/2023 -- ANNUAL REPORT	View image in PDF format
02/01/2022 -- ANNUAL REPORT	View image in PDF format
02/08/2021 -- ANNUAL REPORT	View image in PDF format
01/23/2020 -- ANNUAL REPORT	View image in PDF format
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11/17/2017 -- REINSTATEMENT	View image in PDF format
02/29/2016 -- ANNUAL REPORT	View image in PDF format
03/30/2015 -- ANNUAL REPORT	View image in PDF format
04/22/2014 -- ANNUAL REPORT	View image in PDF format
01/14/2013 -- ANNUAL REPORT	View image in PDF format
02/23/2012 -- ANNUAL REPORT	View image in PDF format
02/15/2011 -- ANNUAL REPORT	View image in PDF format
01/12/2010 -- ANNUAL REPORT	View image in PDF format
05/05/2009 -- ANNUAL REPORT	View image in PDF format
02/20/2008 -- ANNUAL REPORT	View image in PDF format
03/14/2007 -- ANNUAL REPORT	View image in PDF format
02/28/2006 -- ANNUAL REPORT	View image in PDF format
01/14/2005 -- ANNUAL REPORT	View image in PDF format
07/15/2004 -- ANNUAL REPORT	View image in PDF format
05/01/2003 -- ANNUAL REPORT	View image in PDF format
03/05/2002 -- ANNUAL REPORT	View image in PDF format
01/29/2001 -- ANNUAL REPORT	View image in PDF format
05/22/2000 -- ANNUAL REPORT	View image in PDF format
11/08/1999 -- REINSTATEMENT	View image in PDF format
04/28/1998 -- ANNUAL REPORT	View image in PDF format
01/22/1997 -- ANNUAL REPORT	View image in PDF format
04/23/1996 -- ANNUAL REPORT	View image in PDF format
05/10/1995 -- ANNUAL REPORT	View image in PDF format



Board of County Commissioners

Purchasing Department

State of Florida

Date: September 22, 2023

OKALOOSA COUNTY PURCHASING DEPARTMENT
NOTICE OF INTENT TO AWARD
ITB AP 46-23

CEW South Apron Rehabilitation

Okaloosa County would like to thank all businesses, which submitted bids for CEW South Apron Rehabilitation for Okaloosa County Airport. (ITB AP 46-23)

After in-depth examination of all responses in accordance with the County's Purchasing Manual, the County announces its intent to award the contract/purchase order to the following:

Gum Creek Farms, Inc.
1097 Highway 83
DeFuniak Springs, FL 32433

This Notice of Intent does NOT constitute the formation of a contract/purchase order between Okaloosa County and the apparent successful bidder/respondent. The County reserves the right to enter into negotiations with the successful bidder/respondent in order to finalize contract terms and conditions. No agreement is entered into between the County and any parties until a contract is approved and fully executed.

Any person/entity desiring to file a procurement protest must meet all the standards and criteria in accordance with Section 31 of the Okaloosa County Purchasing Manual. Failure to file a protest within the time prescribed in Section 31.02 of the Okaloosa County Purchasing Manual, shall constitute a waiver of protest proceedings.

Respectfully,

DeRita
Mason

Purchasing Manager

Digitally signed by
DeRita Mason
Date: 2023.09.21
12:47:49 -05'00'

**PROCUREMENT/CONTRACT/LEASE
INTERNAL COORDINATION SHEET**

Procurement/Contract/Lease Number: TBD C24-3928-AP Tracking Number: 4982-24
Procurement/Contractor/Lessee Name: Gum Creek Farms, INC. Grant Funded: YES ___ NO X
Purpose: South Apron Rehabilitation
Date/Term: 1165 days from NTP 1. GREATER THAN \$100,000
Department #: 742143 2. GREATER THAN \$50,000
Account #: 563490 3. \$50,000 OR LESS
Amount: *1,930,713.50
Department: AP Dept. Monitor Name: STAGE

Purchasing Review

Procurement or Contract/Lease requirements are met: [Signature] Date: 10/4/23
Purchasing Manager or designee: _____ DeRita Mason, Erin Poole, Amber Hammonds

2CFR Compliance Review (if required)

Approved as written: _____ Grant Name: _____
Not federal funds Date: _____
Grants Coordinator: _____ Suzanne Ulloa

Risk Management Review

Approved as written: _____ Date: 10/5/23
see attached email
Risk Manager or designee: _____

County Attorney Review

Approved as written: _____ Date: 10/6/23
see attached email
County Attorney: _____ Lynn Hoshihara, Kerry Parsons or Designee

Department Funding Review

Approved as written: _____ Date: _____

IT Review (if applicable)

Approved as written: _____ Date: _____

Erin Poole

From: Odessa Cooper-Pool
Sent: Thursday, October 5, 2023 10:10 AM
To: Erin Poole
Subject: RE: Gum Creek Farms Agreement Review and Approval
Attachments: Gum Creek Farms.docx

Hello Erin,

The contract for Gum Creek Farms has been reviewed and is approved by Risk Management for insurance purposes.

Thank you,

Odessa Cooper-Pool

Public Records & Contracts Specialist |Risk Management
Okaloosa County BCC
302 N. Wilson Street, Crestview, FL 32536
Office: 1-850-689-4111



"And, when you want something, all the universe conspires in helping you to achieve it."— Paulo Coelho, *The Alchemist*

Please note: Due to Florida's very broad public records laws, most written communications to or from County employees regarding County business are public records, available to the public and media upon request. Therefore, this written e-mail communication, including your e-mail address, may be subject to public disclosure.

From: Erin Poole <epoole@myokaloosa.com>
Sent: Thursday, October 5, 2023 6:04 AM
To: Odessa Cooper-Pool <ocooperpool@myokaloosa.com>
Cc: Jacqueline Matichuk <jmatichuk@myokaloosa.com>
Subject: Gum Creek Farms Agreement Review and Approval
Importance: High

Please see attached for review/approval of contract from ITB AP 46-23 South Apron Rehab.

Thank you,

Erin Poole

Contracts & Lease Coordinator
Okaloosa County Purchasing Department
5479A Old Bethel Road
Crestview, FL 32536
Phone: 850.689.5960 ext 6972 Fax: 850.689.5970
Email: epoole@myokaloosa.com



SAVE THE DATE! Registration is now open
for the Professional Golf Classic
at the PGA and PGA for Professionals Golf Course
Northwest of Orlando
Registration is now open
for the Professional Golf Classic
at the PGA and PGA for Professionals Golf Course
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Erin Poole

From: Parsons, Kerry <KParsons@ngn-tally.com>
Sent: Friday, October 6, 2023 10:14 AM
To: Erin Poole
Cc: Lynn Hoshihara
Subject: RE: Gum Creek Farms, Inc. Agreement Review/Approval

Looks good. This is approved for legal purposes.

Kerry A. Parsons, Esq.

**Nabors
Giblin &
Nickerson**
ATTORNEYS AT LAW

1500 Mahan Dr. Ste. 200
Tallahassee, FL 32308
T. (850) 224-4070
Kparsons@ngn-tally.com

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From: Erin Poole <epoole@myokaloosa.com>
Sent: Friday, October 6, 2023 11:05 AM
To: Parsons, Kerry <KParsons@ngn-tally.com>
Cc: lhoshihara@myokaloosa.com
Subject: RE: Gum Creek Farms, Inc. Agreement Review/Approval

Please see if this is correct. Thank you for all your help.

Thank you,

Erin Poole

Contracts & Lease Coordinator
Okaloosa County Purchasing Department
5479A Old Bethel Road
Crestview, FL 32536
Phone: 850.689.5960 ext 6972 Fax: 850.689.5970
Email: epoole@myokaloosa.com



SAVE THE DATE! Registration is now OPEN!
Pars for Procurement Golf Classic
CGCC Annual Pars for Procurement Golf Classic
November 17, 2023
Blackwater Golf Club
4927 Anloch Road
Crestview, FL 32536



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From: Parsons, Kerry <KParsons@ngn-tally.com>
Sent: Friday, October 6, 2023 9:53 AM
To: Erin Poole <epoole@myokaloosa.com>
Cc: Lynn Hoshihara <lhoshihara@myokaloosa.com>
Subject: RE: Gum Creek Farms, Inc. Agreement Review/Approval

Attachment C -E still need to be mentioned in the body of the contract somewhere. You could create a new paragraph that states that all of the following attachments then list them are incorporated herein.

Kerry A. Parsons, Esq.
**Nabors
Giblin &
Nickerson**
ATTORNEYS AT LAW
1500 Mahan Dr. Ste. 200
Tallahassee, FL 32308
T. (850) 224-4070
Kparsons@ngn-tally.com

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From: Erin Poole <epoole@myokaloosa.com>
Sent: Friday, October 6, 2023 10:48 AM
To: Parsons, Kerry <KParsons@ngn-tally.com>
Cc: lhoshihara@myokaloosa.com
Subject: RE: Gum Creek Farms, Inc. Agreement Review/Approval

Please see the updated for review/approval.

Thank you,

Erin Poole
Contracts & Lease Coordinator
Okaloosa County Purchasing Department
5479A Old Bethel Road
Crestview, FL 32536
Phone: 850.689.5960 ext 6972 Fax: 850.689.5970
Email: epoole@myokaloosa.com

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Pars for Procurement Golf Classic
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From: Parsons, Kerry <KParsons@ngn-tally.com>
Sent: Friday, October 6, 2023 9:19 AM
To: Erin Poole <epoole@myokaloosa.com>
Cc: Lynn Hoshihara <lhoshihara@myokaloosa.com>
Subject: RE: Gum Creek Farms, Inc. Agreement Review/Approval

Attached are my comments and revisions.

Kerry A. Parsons, Esq.



1500 Mahan Dr. Ste. 200
Tallahassee, FL 32308
T. (850) 224-4070
kparsons@ngn-tally.com

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From: Erin Poole <epoole@myokaloosa.com>
Sent: Friday, October 6, 2023 9:39 AM
To: lhoshihara@myokaloosa.com
Cc: Parsons, Kerry <KParsons@ngn-tally.com>
Subject: FW: Gum Creek Farms, Inc. Agreement Review/Approval
Importance: High

Just checking on the status of this Agreement review as the AP wants to put it on the next agenda meeting.

Thank you,

Erin Poole

Contracts & Lease Coordinator
Okaloosa County Purchasing Department
5479A Old Bethel Road
Crestview, FL 32536
Phone: 850.689.5960 ext 6972 Fax: 850.689.5970
Email: epoole@myokaloosa.com



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Pars for Procurement Golf Classic
CGCC Annual Pars for Procurement Golf Classic
November 17, 2023
Blackwater Golf Club
4927 Antioch Road
Crestview, FL 32536



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From: Erin Poole
Sent: Thursday, October 5, 2023 6:03 AM
To: Lynn Hoshihara <lhoshihara@myokaloosa.com>; Kerry Parsons <kparsons@ngn-tally.com>
Subject: Gum Creek Farms, Inc. Agreement Review/Approval
Importance: High

Please see attached for review and approval for the contract awarded for ITB AP 46-23 South Apron Rehab.

Thank you,

Erin Poole
Contracts & Lease Coordinator
Okaloosa County Purchasing Department
5479A Old Bethel Road
Crestview, FL 32536
Phone: 850.689.5960 ext 6972 Fax: 850.689.5970
Email: epoole@myokaloosa.com



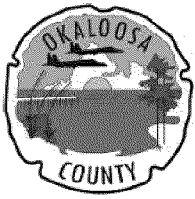
SAVE THE DATE! Republic of New York
New York Department of State
OGC, Andrew P. ...
New York State
New York State
Crestview, FL 32536
BLACKWATER
RECEIVED

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BOARD OF COUNTY COMMISSIONERS AGENDA REQUEST

DATE: December 5, 2023
TO: Honorable Chairman and Distinguished Members of the Board
FROM: Tracy Stage
SUBJECT: Award ITB 46-23 Contract CEW South Apron Rehab to Gum Creek Farms, Inc. \$1,930,713
DEPARTMENT: Airport
BCC DISTRICT: 1

STATEMENT OF ISSUE: The Airports Department requests the Board of County Commissioners award the construction contract for ITB 46-23, CEW South Apron Rehabilitation at the Bob Sikes Airport to the low responsive bidder, Gum Creek Farms, Inc. in the amount of \$1,930,713.50.

BACKGROUND: The South Apron Rehab at the Bob Sikes Airport (ITB 46-23) was advertised on May 30, 2023 with a bid opening on June 28, 2023. Two bids were received and both were deemed responsive. Gum Creek Farms, Inc. was the lowest responsive bidder for every bid line item. An invitation to award for the project went out on September 22, 2023. The basis of award for the contract will be the base bid plus additive alternate 1. For this scope of work Gum Creek Farms was 16% lower than the other bid received. They were also lower on all other alternates by 33.5% or \$2.47M less than the second bidder for the total project scope.

The Airports Department has been working with the FAA to increase eligible funding for remaining phases utilizing allocated Airport Infrastructure Grant (AIG) dollars enacted in the 2021 Bipartisan Infrastructure Law (BIL). In order to access these funds a ramp utilization study was accomplished and a report provided to the FAA Area District Office (ADO), which was approved. The Airport has since submitted a grant application for the BIL funds as well as a pre-application for non-primary entitlement funds, equating to roughly \$2.7M for the remaining phases of the project. Once the additional grant funds become available, the Airport will look to award additional alternates through the change order process to meet the growing needs of tenants and aircraft use on the south ramp at CEW. Currently the FAA does not expect a grant offer until late January 2024 at the earliest, and therefore awarding the current scope requested in this agenda item is prudent to not excessively delay the bid hold period further in fairness to the contractor and to execute FDOT grant funds prior to expiration in July 2024.

The base bid (Phase 1) will include a full rehabilitation of the southernmost portion of the apron, including removal and replacement of pavement for Taxilane J and approximately 370 x 250-foot of the apron. Additive Alternate 1 (Phase 2) will remove and replace the pavement adjacent to the base bid area to include approximately 440 x 250 feet of pavement and 110 LF of failed concrete pavement along Taxilane L. Taxilanes J and L both serve general aviation hangars, while the south ramp serves all local and transient general aviation traffic.

The construction period for the project is 165 days to achieve substantial completion and 195

days total contract time to achieve final completion from the notice to proceed. This timeline considers work for both phases and awarding now will allow grant time lines to be met.

This project will be funded through the following sources: FDOT Grant G1X18, with the potential for FAA funds for remaining phases/alternates once approved. The FDOT funds are split 80%

FUNDING SOURCE, (If Applicable): Local Match funds have been previously budgeted for utilizing Airport funds, as needed. A portion of the FDOT funds have been utilized for project design and bid phase services to date.

Funding Source	Grant	Local Match	Total
FDOT G1X18	\$1,544,570.80	\$386,142.70	\$1,930,713.50

Items attached to this Agenda Request:

- Gum Creek Farms, Inc. Contract
- Recommendation of Award Letter


FUNDING SOURCE, (If Applicable):

- Department #742143
- Account #563490

OPTIONS: Approve/Disapprove

RECOMMENDATIONS: Approval of the construction contract award for the Rehabilitation of the South Apron at the Bob Sikes Airport to the lowest responsive bidder, Gum Creek Farms, Inc. in the amount of \$1,930,713.50, and authorize the Chairman to sign the contract.

RECOMMENDED BY:


Tracy Stage, Airport Director 11/16/2023

APPROVED BY:


John Hofstad, County Administrator 11/29/2023

CONTRACT: C24-3928-AP
 Gum Creek Farms, Inc.
 CEW South Apron Rehabilitation
 EXPIRES: 165 Days from NTP

Okaloosa County
 Contract

**AGREEMENT BETWEEN OKALOOSA COUNTY,
 FLORIDA AND GUM CREEK FARMS, INC.,
 CONTRACT NO. C24-3928-AP**

This agreement made and entered into this 5th day of December, 2023, by and between the **Okaloosa County Board of County Commissioners** a political subdivision of the State of Florida, (hereinafter referred to as the "County" or "Owner"), with a mailing address of 1250 N. Eglin Parkway, Suite 100, Shalimar, Florida, 32579, and **Gum Creek Farms, Inc.** (the "Contractor"), a domestic for Profit Corporation authorized to do business in the State of Florida, whose address is 1097 Highway 83, DeFuniak Springs FL 32433, whose Federal I.D. # is 59-3122167 regarding the "CEW South Apron Rehabilitation" project.

RECITALS:

WHEREAS, the County is in need of a contractor to provide CEW South Apron Rehabilitation ("Services"); and

WHEREAS, pursuant to the Okaloosa County Purchasing Manual, the County obtained sealed bids from contractors to perform these Services. A copy of the Contractor's proposal is included in Attachment "B"; and

WHEREAS, Contractor is a certified and insured entity with the necessary experience to provide the desired Services; and

WHEREAS, the County wishes to enter into this Agreement with the Contractor to provide the Services to the County for the amount listed on Attachment "B" attached hereto and made a part of the agreement.

NOW, THEREFORE, in consideration of the sum of the mutual promises and covenants contained herein, as well as other good and valuable consideration not specifically mentioned, the parties agree as follows:

1. **Recitals and Attachments.** The Recitals set forth above are hereby incorporated into this Agreement and made part hereof for reference:

The following documents are attached to this Agreement and are incorporated herein.

Attachment "A" – Contract Documents;
 Attachment "B" – Vendor's Proposal;
 Attachment "C" – Insurance Requirements;
 Attachment "D" – Title VI list of pertinent nondiscrimination acts and authorities;
 Attachment "E" – Vendors on Scrutinizes List Form.

2. The Contractor, for and in consideration of the payments hereinafter specified as **one million nine hundred thirty thousand seven hundred thirteen dollars and fifty cents (\$1,930,713.50)** and agreed to be made by the Owner, hereby covenants and agrees to furnish and deliver all materials required, to do and perform all the work and labor, in a satisfactory and workmanlike manner, required to complete the Project substantially within **165 calendar days** from Notice to Proceed, subject to any extension of time that may be granted by the Okaloosa

County Board of County Commissioners, in strict and entire conformity with the Plans (labeled construction), Project Manual Specifications with appendices labeled construction documents, Construction Safety Phasing Plan (CSPP) and other Contract documents, on file at the office of Airport Director of the Okaloosa County Board of County Commissioners, 5479A Old Bethel Rd., Crestview, FL 32536, which are duly approved by the Owner and which said Plans, Project Manual Specifications and other Contract documents, attached hereto as **Attachment A** are hereby made part of this Contract as fully and with the same effects as if the same had been set forth at length in the body of this Contract.

3. The Contractor agrees to make payment of all proper charges for labor and materials required in the aforementioned work, and to defend, indemnify and save harmless the Owner and Okaloosa County, Florida and all its officers and agents against and from all suits and costs of every kind and description, and from all damages to which the said Owner or any of their officers, agents or servants may be put, by reason of injury or death to persons or injury to property of other resulting from the performance of said work, or through the negligence of the Contractor, or through any improper or defective machinery, implements or appliances used by the Contractor in the aforesaid work, or through any act of omission on the part of the Contractor, or his or her agent or agents, employees or servants.
4. The Owner hereby agrees to pay to the Contractor for the said work, when fully completed, the total sum of **one million nine hundred thirty thousand seven hundred thirteen dollars and fifty cents (\$1,930,713.50)** (the said sum being the total of the Contractor's bid, a copy of which is attached hereto as **Attachment B** and made a part hereof for all purposes), subject to such additions and deductions as may be provided for in the Contract Documents. In the event the bid contains multiple pay items, it is understood that the amount to be paid shall be the total based on the unit price, together with lump sum prices, contained in said bid, for the work actually completed.
5. Payments on accounts will be made as provided for in the Contract Documents.
6. The Contractor shall submit bills for fees or other compensation for services or expenses in detail sufficient for a proper pre-audit and post audit thereof.
7. The Owner may unilaterally cancel this Contract and the goods and services thereunder in the event that the Contractor fails and refuses to allow public access to all documents, papers, letters, or other material subject to the provisions of Chapter 119, Florida Statutes, made or received by the Contractor in conjunction with this Contract.
8. Partial payments will be made to the Contractor at least once each month as the work progresses. Said payments will be based upon estimates, prepared by the RPR, of the value of the work performed and materials complete and in place, in accordance with the contract, plans, and specifications. Such partial payments may also include the delivered actual cost of those materials stockpiled and stored in accordance with paragraph 90-07, Payment for Materials on Hand, a copy of which is attached hereto as **Attachment A** and made a part hereof for all purposes. No partial payment will be made when the amount due to the Contractor since the last estimate amounts to less than five hundred dollars. **The retainage shall be 5%**. It is understood and agreed that the Contractor shall not be entitled to demand or receive partial payment based on quantities of work in excess of those provided in the proposal or covered by approved change orders or

supplemental agreements, except when such excess quantities have been determined by the RPR to be a part of the final quantity for the item of work in question. No partial payment shall bind the Owner to the acceptance of any materials or work in place as to quality or quantity. All partial payments are subject to correction at the time of final payment as provided in paragraph 90-09, Acceptance and Final Payment, a copy of which is attached hereto as **Attachment A** and made a part hereof for all purposes. The Contractor shall deliver to the Owner a complete release of all claims for labor and material arising out of this contract before the final payment is made. If any subcontractor or supplier fails to furnish such a release in full, the Contractor may furnish a bond or other collateral satisfactory to the Owner to indemnify the Owner against any potential lien or other such claim. The bond or collateral shall include all costs, expenses, and attorney fees the Owner may be compelled to pay in discharging any such lien or claim.

9. For each calendar day or working day, as specified in the contract, that any work remains uncompleted after the contract time (including all extensions and adjustments as provided in paragraph 80-07, Determination and Extension of Contract Time), a copy of which is attached hereto as **Attachment A** and made a part hereof for all purposes, the sum of **one thousand nine hundred and twenty four dollars (\$1,924) per calendar day** specified in the contract and proposal as liquidated damages (LD) will be deducted from any money due or to become due the Contractor or their own surety. Such deducted sums shall not be deducted as a penalty but shall be considered as liquidation of a reasonable portion of damages including but not limited to additional engineering services that will be incurred by the Owner should the Contractor fail to complete the work in the time provided in their contract. The maximum construction time allowed for Substantial Completion will be the sum of the time allowed for individual schedules but not more than 523 days. Permitting the Contractor to continue and finish the work or any part of it after the time fixed for its completion, or after the date to which the time for completion may have been extended, will in no way operate as a waiver on the part of the Owner of any of its rights under the contract.
10. Any unit of provision of goods and services must be approved in writing by the Owner or its agent prior to payment.
11. This Agreement shall be effective when both parties have signed the contract. The contract start time will begin from issuance of Notice to Proceed. The work of construction shall be substantially complete including all work included in all Bid Schedule within 165 calendar days, subject to any extension of time that may be granted by the Okaloosa County Board of County Commissioners.
12. The Contractor shall provide a payment and performance bond (the "Bond") to the Owner meeting the requirements of §255.05, Florida Statutes, in the sum of **\$1,930,713.50** and shall cause the Bond to be recorded with the Notice of Commencement in the Public Records of Okaloosa County, Florida.
13. This Contract shall be subordinate to any rule, regulation, order or law of the United States of America, the State of Florida or Okaloosa County, Florida.
14. Both parties agree that any referenced to "arbitration" or requirement for "arbitration" within the General Conditions attached as part of Attachment "A" hereto and incorporated herein, shall be void, and any disputes must be resolved either through informal mediation, mediation or a court of law not arbitration.

15. The Owner will use its best efforts to obtain the approval of the State of Florida Department of Transportation and the FAA to this contract. If the Owner determines that the same requires modifications in order to qualify for funding for the Project, the Contractor shall consent or the Owner shall have the right to terminate the Contract.
16. The Contractor and its employees shall promptly observe and comply with then applicable provisions of all Federal, State and local laws, rules and regulations which govern or apply to the goods and services rendered by Contractor hereunder, or to the wages paid by Contractor to its employees. Contractor shall require all of its subcontractors to comply with the provisions of this paragraph. Contractor shall procure and keep in force during the term of this contract all necessary licenses, registrations, certificates, permits and other authorizations as are required by law in order for Contractor to render its services hereunder. Contractor shall require all of its subcontractors to comply with the provisions of this paragraph.
17. All remedies provided in this Contract shall be deemed cumulative and additional and not in lieu of or exclusive of each other or of any other remedy available to any party at law or in equity. In the event one party shall prevail in any action (including appellate proceedings), at law or in equity arising hereunder, the losing party will pay all costs, expense, reasonable attorneys' fees and all other actual and reasonable expenses incurred in the defense and/or prosecution of any legal or arbitration proceedings, including, but not limited to, those for paralegal, investigative and legal support services and actual fees charged by expert witnesses for testimony and analysis, incurred by the prevailing party referable thereto.
18. Contractor represents and warrants unto Owner that no officer, employee or agent of Owner has any interest, either directly or indirectly, in the business of Contractor to be conducted hereunder. Contractor further represents and warrants to Owner that it has not employed or retained any company or person, other than a bona fide employee working solely for Contractor, to solicit or secure this Contract, that it has not paid or agreed to pay any person, company, corporation, individual or firm, other than a bona fide employee working solely for Contractor, any fee, commission, percentage, gift, or any other consideration contingent upon or resulting from the award or making of this Contract, and that it has not agreed, as an express or implied condition for obtaining this Contract, to employ or retain the services of any firm or person in connection with carrying out this Contract. Contractor assures that it will insert the above provision in each of its subcontractor agreements relating to the services to be performed hereunder.
19. Contractor for itself, its successors in interest and assigns, as a part of the consideration hereof, does hereby covenant and agree that (1) in the furnishing of services to Owner hereunder, no person on the grounds of race, color or national origin shall be excluded from participation in, denied the benefits of, or otherwise be subjected to discrimination, and (2) Contractor shall comply with all other requirements imposed by or pursuant to Title 49, Code of Federal Regulations, Department of Transportation, Subtitle A, Office of the Secretary, Part 21, Nondiscrimination in Federally-assisted programs of the Department of Transportation – effectuation of Title VII of the Civil Rights Act of 1964, as said Regulations may be amended. Should Contractor authorize another person, with Owner's prior written consent, to provide services to Owner hereunder, Contractor shall obtain from such person a written agreement pursuant to which such person

shall, with respect to the services which he or she is authorized to provide, undertake for such person the obligations contained in this section. Contractor shall furnish an original agreement to Owner.

Contractor will provide all information and reports required by said Regulations, or by directives issued pursuant thereto, and shall permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by Owner, the Federal Aviation Administration, the Comptroller General of the United States or any of their duly authorized representatives and the State of Florida Department of Transportation to be pertinent to ascertain whether there has been compliance with said Regulations and directives. Where any information required of Contractor is in the exclusive possession of another who fails or refused to furnish this information, Contractor shall so certify to the Owner, Federal Aviation Administration the Comptroller General of the United States or any of their duly authorized representatives and the State of Florida Department of Transportation, as appropriate, and shall set forth what efforts it has made to obtain the information. Contractor shall remain obligated under this paragraph until the expiration of five (5) years after the termination of the Contract. In the event of breach of any of the above nondiscrimination covenants, Owner shall have the right to impose such contract sanctions as it or Federal Aviation Administration the Comptroller General of the United States or any of their duly authorized representatives and the State of Florida Department of Transportation or other applicable government entity may determine to be appropriate, including withholding payments to Contractor under this Contract or canceling, terminating, or suspending this Contract in whole or in part. The rights granted to Owner by the foregoing sentence shall not be effective until the procedures of Title 49, Code of Federal Regulations, Part 21 are followed and completed, including exercise or expiration of appeal rights.

Further, Contractor assures that it will undertake an affirmative action program as required by 14 CFR Part 152, Subpart E, to ensure that no person shall on the grounds of race, religion, creed, color, national origin or sex be excluded from participating in any employment activities covered in 14 CFR Part 152, Subpart E. Such activities shall include, but not be limited to, the following: Employment, upgrading, demotion or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. Contractor assures that no person shall be excluded on these grounds from participating in or receiving the services of any program or activity covered by this subpart. Contractor assures that it shall not discriminate on the grounds of race, color, religion, sex or national origin in the selection or retention of subcontractors. Contractor assures that it will require that its covered subcontractors provide assurances to Contractor that they similarly require assurances from their subcontractors, as required by CFR Part 152, Subpart E, to the same effect.

Owner may, from time to time, adopt additional or amended and nondiscrimination provisions concerning the furnishing of services to the Airport, and Contractor agrees that it will adopt any such requirements as a part of this Contract.

20. Policy. It is the policy of the Owner and the United States or State of Florida Department of Transportation that disadvantaged business enterprises, as defined in the Owner's Disadvantaged Business Enterprises ("DBE") Participation Policy for services as defined in 49 CFR Part 26 shall have equal opportunity to

participate in the performance of services contracts awarded by the Owner, including, but not limited to, contracts financed in whole or in part with federal or State funds under this Contract. Consequently, the requirements of the Owner's DBE Participation Policy apply to this Contract.

Contract Assurance. The contractor or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the recipient deems appropriate.

Prompt Payment. The prime contractor agrees to pay each subcontractor under this prime contract for satisfactory performance of its contract no later than fourteen (14) days from the receipt of each payment the prime contractor receives from Okaloosa County Board of County Commissioners. The prime contractor further agrees to return retainage payments to each subcontractor within fourteen (14) days after the subcontractor's work is satisfactorily completed. Any delay or postponement of payment from the above referenced time frame may occur only for good cause following written approval of the Okaloosa County Board of County Commissioners. Okaloosa County Board of County Commissioners shall have the right to terminate the services of any obligor who fails to make prompt payment to any obligee. This clause applies to both DBE and non-DBE subcontractors.

DBE Obligation. The Contractor agrees to ensure that DBE/MWBE firms shall have the maximum opportunity to participate in the performance of contracts for subcontractor services, including, but not limited to, those projects financed in whole or in part with federal or state funds provided under this Contract. In this regard, the Contractor and all subcontractors shall take all necessary and reasonable steps in accordance with the Owner's DBE/MWBE Participation Policies to ensure that DBE/MWBE firms have the maximum opportunity to compete for and perform contracts. The Contractor and any subcontractors shall not discriminate on the basis of race, color, national origin, or sex in the award and performance of Owner contracts.

21. Government Agencies which are not Parties. Neither the Federal Aviation Administration nor the Florida Department of Transportation has nor will they incur any obligations to Contractor under this Contract.
22. Headings. The headings of the sections of this Contract are for the purpose of convenience only and shall not be deemed to expand or limit the provisions contained in such sections.
23. Entire Agreement. This Contract, including all Contract documents, constitute the entire agreement between the parties and shall supersede and replace all prior agreements or understandings, written or oral, relating to the matters set forth herein.
24. Amendment. This Contract shall not be amended or modified other than in writing signed by the parties hereto. Notwithstanding the foregoing, any Amendments that are not being paid for, in whole or in part, with funds granted by the United States or State of Florida Department of Transportation need not be approved by them.

25. Validity. The validity, interpretation, construction and effect of this Contract shall be in accordance with and be governed by the laws of the State of Florida. In the event any provision hereof shall be finally determined to be unenforceable, or invalid, such unenforceability or invalidity shall not affect the remaining provisions of this Contract which shall remain in full force and effect.
26. Public Entity Crimes. Pursuant to Section 287.133(2)(a), Florida Statutes, a Contractor who has been placed on the convicted vendor list following a conviction for a public entity crime may not submit a bid on contract to provide services for a public entity, may not be awarded a Contract and may not transact business with a public entity for services, the value of which exceeds \$15,000.00 for a period of 36 months from the date of being placed on the convicted vendor list. Contractor hereby represents that it does not fall within the class of persons identified in the previous sentence such that Contractor would be precluded from entering this Contract.
27. All Construction Contracts over \$2,000.

Davis-Bacon Requirements.

1. Minimum Wages

(i) All laborers and mechanics employed or working upon the site of the work will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by the Secretary of Labor under the Copeland Act (29 CFR Part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalent thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph (1)(iv) of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR Part 5.5(a)(4). Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: *Provided*, that the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classification and wage rates conformed under (1)(ii) of this section) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors

at the site of the work in a prominent and accessible place where it can easily be seen by the workers.

(ii)(A) The contracting officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:

(1) The work to be performed by the classification requested is not performed by a classification in the wage determination; and

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

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

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

(C) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

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

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

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

2. Withholding.

The Federal Aviation Administration or the sponsor shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld from the contractor under this contract or any other Federal contract with the same prime contractor, or any other Federally-assisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of work, all or part of the wages required by the contract, the Federal Aviation Administration may, after written notice to the contractor, sponsor, applicant, or owner, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

3. Payrolls and Basic Records.

(i) Payrolls and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of five (5) years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in section 1(b)(2)(B) of the Davis-Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual costs incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

(ii)(A) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the Federal Aviation Administration if the agency is a party to the contract, but if the agency is not such a party, the contractor will submit the payrolls to the applicant, sponsor, or owner, as the case may be, for transmission to the Federal Aviation Administration. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead, the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Division Web site at <http://www.dol.gov/esa/whd/forms/wh347instr.htm> or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the Federal Aviation Administration if the agency is a party to the contract, but if the agency is not such a party, the contractor will submit them to the applicant, sponsor, or owner, as the case may be, for transmission to the Federal Aviation Administration, the contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the sponsoring government agency (or the applicant, sponsor, or owner).

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

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

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

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

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

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

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

4. Apprentices and Trainees.

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

provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination. In the event the Bureau of Apprenticeship and Training, or a State Apprenticeship Agency recognized by the Bureau, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

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

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

5. Compliance with Copeland Act Requirements.

The contractor shall comply with the requirements of 29 CFR Part 3, which are incorporated by reference in this contract.

6. Subcontracts.

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

7. Contract Termination: Debarment.

A breach of the contract clauses in paragraph 1 through 10 of this section may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

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

9. Disputes Concerning Labor Standards.

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

10. Certification of Eligibility.

(i) By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

(ii) No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

(iii) The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

26 Copeland "Anti-Kickback" Act. Contractor must comply with the requirements of the Copeland "Anti-Kickback" Act (18 U.S.C. 874 and 40 U.S.C. 3145), as supplemented by Department of Labor regulation 29 CFR part 3. Contractor and subcontractors are prohibited from inducing, by any means, any person employed on the project to give up any part of the compensation to which the employee is entitled. The Contractor and each Subcontractor must submit to the Owner, a weekly statement on the wages paid to each employee

performing on covered work during the prior week. Owner must report any violations of the Act to the Federal Aviation Administration.

27. Contract Workhours and Safety Standards Act Requirements.

This Provision applies to all contracts and lower tier contracts that exceed \$100,000, and employ laborers, mechanics, watchmen and guards.

1. Overtime Requirements.

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

2. Violation; Liability for Unpaid Wages; Liquidated Damages.

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

3. Withholding for Unpaid Wages and Liquidated Damages.

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

4. Subcontractors.

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

28. Breach of Contract Terms – Sanctions (All Contracts).

Any violation or breach of the terms of this Contract of the part of the Contractor or subcontractors may result in the suspension or termination of this Contract or such other action that may be necessary to enforce the rights of the parties of this agreement.

Owner will provide Contractor written notice that describes the nature of the breach and corrective actions the Contractor must undertake in order to avoid termination of the contract. Owner reserves the right to withhold payment to Contractor until such time the Contractor corrects the breach or the Owner elects to terminate the contract. The Owner's notice will identify a specific date by which the Contractor must correct the breach. Owner may proceed with termination of the contract if the Contractor fails to correct the breach by deadline indicated in the Owner's notice.

The duties and obligations imposed by the contract documents and the rights and remedies available thereunder are in addition to, and not a limitation of, any duties, obligations, rights and remedies otherwise imposed or available by law.

29. Rights to Inventions (All Contracts).

All rights to inventions and materials generated under this contract are subject to regulations issued by the FAA and the Owner of the Federal grant under which this contract is executed. Information regarding these rights is available from FAA and the Owner.

30. Trade Restriction Certification.

By submission of an offer, the Offeror certifies that with respect to this solicitation and any resultant contract, the Offeror –

- a. is not owned or controlled by one or more citizens of a foreign country included in the list of countries that discriminate against U.S. firms as published by the Office of the United States Trade Representative (U.S.T.R.);
- b. has not knowingly entered into any contract or subcontract for this project with a person that is a citizen or national of a foreign country included on the list of countries that discriminate against U.S. firms as published by the U.S.T.R; and

- c. has not entered into any subcontract for any product to be used on the Federal on the project that is produced in a foreign country included on the list of countries that discriminate against U.S. firms published by the U.S.T.R.

This certification concerns a matter within the jurisdiction of an agency of the United States of America and the making of a false, fictitious, or fraudulent certification may render the maker subject to prosecution under Title 18, United States Code, Section 1001.

The Offeror/Contractor must provide immediate written notice to the Owner if the Offeror/Contractor learns that its certification or that of a subcontractor was erroneous when submitted or has become erroneous by reason of changed circumstances. The Contractor must require subcontractors provide immediate written notice to the Contractor if at any time it learns that its certification was erroneous by reason of changed circumstances.

Unless the restrictions of this clause are waived by the Secretary of Transportation in accordance with 49 CFR 30.17, no contract shall be awarded to an Offeror or subcontractor:

- a. who is owned or controlled by one or more citizens or nationals of a foreign country included on the list of countries that discriminate against U.S. firms published by the U.S.T.R. or
- b. whose subcontractors are owned or controlled by one or more citizens or nationals of a foreign country on such U.S.T.R. list or
- c. who incorporates in the public works project any product of a foreign country on such U.S.T.R. list;

Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render, in good faith, the certification required by this provision. The knowledge and information of a contractor is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

The Offeror agrees that, if awarded a contract resulting from this solicitation, it will incorporate this provision for certification without modification in all lower tier subcontracts. The contractor may rely on the certification of a prospective subcontractor that it is not a firm from a foreign country included on the list of countries that discriminate against U.S. firms as published by U.S.T.R, unless the Offeror has knowledge that the certification is erroneous.

This certification is a material representation of fact upon which reliance was placed when making an award. If it is later determined that the Contractor or subcontractor knowingly rendered an erroneous certification, the Federal Aviation Administration may direct through the Owner cancellation of the contract or subcontract for default at no cost to the Owner or the FAA.

31. Termination of Contract (All Contracts in Excess of \$10,000)

- a. The Owner may terminate this contract in whole or in part at any time by providing written notice to the Contractor. Such action may be without cause and without prejudice to any other right or remedy of Owner. Upon receipt of a written notice of termination, except as explicitly directed by the Owner, the Contractor shall immediately proceed with the following obligations regardless of any delay in determining or adjusting amounts due under this clause:
 1. Contractor must immediately discontinue work as specified in the written notice.
 2. Terminate all subcontracts to the extent they relate to the work terminated under the notice.
 3. Discontinue orders for materials and services except as directed by the written notice.
 4. Deliver to the owner all fabricated and partially fabricated parts, completed and partially completed work, supplies, equipment and materials acquired prior to termination of the work and as directed in the written notice.
 5. Complete performance of the work not terminated by the notice.
 6. Take action as directed by the owner to protect and preserve property and work related to this contract that Owner will take possession.

Owner agrees to pay Contractor for:

- a. Completed and acceptable work executed and accordance with the contract documents prior to the effective date of termination;
- b. Documented expenses sustained prior to the effective date of termination in performing work and furnishing labor, materials, or equipment as required by the contract documents in connection with uncompleted work;
- c. Reasonable and substantiated claims, cost and damages incurred in settlement of terminated contracts with subcontractors and suppliers; and
- d. Reasonable and substantiated expenses to the contractor directly attributable to Owner's termination action
- e. If the termination is due to failure to fulfill the contractor's obligations, the Owner may take over the work and prosecute the same to completion by contract or otherwise. In such case, the Contractor shall be liable to the Owner for any additional cost occasioned to the Sponsor (Owner) thereby.

Owner will not pay Contractor for loss of anticipated profits or revenue or other economic loss arising out of or resulting from the Owner's termination action.

The rights and remedies this clause provides are in addition to any other rights and remedies provided by law or under this contract.

Termination for Default:

Section 80-09 of FAA Advisory Circular 150/5370-10 establishes conditions, rights and remedies associated with Owner termination of this contract due default of the Contractor.

32. Suspension and Debarment Requirements for all Contracts over \$25,000 (and for all Contracts for Auditing Services Regardless of the Amount).

The bidder/offeror certifies, by submission of this proposal or acceptance of this contract that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal department or agency. It further agrees by submitting this proposal that it will include this clause without modification in all lower tier transaction, solicitations, proposals, contracts, and subcontracts. Where the bidder/offeror/contractor or any lower tier participant is unable to certify to this statement, it shall attach an explanation to this solicitation/proposal.

33. Veteran's Preference (All Construction Contracts).

In the employment of labor (except in executive, administrative, and supervisory positions), the contractor and all sub-tier contractors must give preference to covered veterans as defined within Title 49 United States code Section 47112. Covered Veterans include Vietnam-era, Persian Gulf, Afghanistan-Iraq war veterans, disabled veterans, and small business concerns (as defined by 15 U.S.C. 632) owned and controlled by disabled Veterans. This preference only applies when they are covered Veterans readily available and qualified to perform the work to which the employment relates.

34. Notwithstanding anything to the contrary in the Contract Documents, an extension in the Contract Time, to the extent permitted under the Contract Documents, shall be the sole remedy of the Contractor for any (i) delay in the commencement, prosecution or completion of the Work, (ii) hindrance or obstruction in the performance of the Work, (iii) loss of productivity, or (iv) other similar claims (collectively referred to as "Delay") whether or not such Delay is foreseeable, unless the Delay is caused by acts of the Owner constituting active interference with the Contractor's performance of the Work, and only to the extent such acts continue after the Contractor furnishes the Owner with notice of such interference. In no event shall the contractor be entitled to any compensation or recovery of any damage in connection with any Delay, including, without limitation, consequential damages, lost opportunity costs, impact damages or other similar remuneration. The Owner's exercise of any of its rights or remedies under the Contract Documents (including, without limitation, ordering changes in the Work, or directing suspension, rescheduling or correction of the Work), regardless of the extent or frequency of Owner's exercise of such rights or remedies, shall not be construed as active interference with the Contractor's performance of the Work.

35. Texting When Driving.

In accordance with Executive Order 13513, "Federal Leadership on Reducing Text Messaging While Driving" (10/1/2009) and DOT order 3902.10 "Text Messaging While Driving" (12/30/2009), FAA encourages recipients to Federal grant funds to adopt and enforce safety policies that decrease crashes by distracted drivers, including policies to ban text messaging while driving when performing work related to a grant or sub-grant.

The Contractor must promote policies and initiatives for employees and other work personnel that decrease crashes by distracted drivers, including policies to ban text messaging while driving. The Contractor must include these policies in each third-party subcontract exceeding \$3,500 and involve driving a motor vehicle in performance of work activities associated with this project.

36. Employment Eligibility (Using E-Verify). Agency/Vendors/Contractors.

Contractors and subcontractors performing work or providing services pursuant to this contract shall utilize the U.S. Department of Homeland Security's E-Verify system to verify the employment eligibility of all new employees hired by the contractor or subcontractor during the contract term.

IN WITNESS WHEREOF, the Owner and Contractor hereto have executed this Contract on the day and date first above written in three counterparts, each deemed an original contract.

Signed, Sealed & Delivered in the
Presence of:

(Owner)



By: [Signature]
Robert A. "Trey" Goodwin III

Title: Chairman, Board of County Commissioners

As to Owner

Attest:
By: [Signature]

Title: JD Peacock II, Clerk of Court

As to Contractor



(Contractor)

By: [Signature]

Title: President

Attest
By: [Signature]

Title: [Signature]

Contractor shall indicate whether
Corporation, Partnership, Company or Individual
(Circle one)

The person signing shall, in his own handwriting, sign the principal's name, his own name, and his title.

Where the person signing for a corporation is other than the President or Vice President, he must by affidavit, as contained herein, show his authority to bind the corporation.

Attachment "A"

Contract Documents

GENERAL CONDITIONS

ARTICLE 1 – DEFINITIONS

Wherever used in these General Conditions or in the other Contract Documents the following terms have the meanings indicated which are applicable to both the singular and plural thereof:

- 1.0.1 *AASHTO – The American Association of State Highway and Transportation Officials, the successor association AASHTO.*
- 1.0.2 *ACCESS ROAD – The right-of-way, the roadway and all improvements constructed thereon connecting the airport to a public highway.*
- 1.1. **Addenda** – Written or graphic instruments issued prior to the opening of Bids which clarify, correct or change the Project Requirements or the Contract Documents.
 - 1.1.1 *ADVERTISEMENT – A public announcement, as required by local law, inviting bids for work to be performed and materials to be furnished.*
- 1.2. **Agreement** – The written contract between Owner and Contractor covering the Work to be performed; other Contract Documents are attached to the Agreement and made a part thereof as provided therein.
 - 1.2.1 *AIP – The Airport Improvement Program, a grant-in-aid program, administered by the Federal Aviation Administration.*
 - 1.2.2 *AIR OPERATIONS AREA – For the purpose of these specifications, the term air operations area shall mean any area of the airport used or intended to be used for the landing, takeoff, or surface maneuvering of aircraft. An air operation area shall include such paved or unpaved areas that are used or intended to be used for the unobstructed movement of aircraft in addition to its associated runway, taxiway, or apron.*
 - 1.2.3 *AIRPORT – Airport means the area of land or water which is used or intended to be used for the landing and takeoff of aircraft, and includes its buildings and facilities, if any.*
- 1.3. **Application for Payment** – The form accepted by Engineer which is to be used by Contractor in requesting progress or final payments and which is to be accompanied by such supporting documentation as is required by the Contract Documents.
- 1.4. **Asbestos** – Any material that contains more than one percent asbestos and is friable or is releasing asbestos fibers into the air above current action levels established by the United States Occupational Safety and Health Administration.
 - 1.4.1 *ASTM – The American Society for Testing and Materials.*
 - 1.4.2 *AWARD – The acceptance, by the Owner, of the successful contractor's proposal.*
- 1.5. **Bid** – The offer or proposal of the contractor submitted on the prescribed form setting forth the prices for the Work to be performed.

- 1.5.1 *CONTRACTOR* – Any individual, partnership, firm, or corporation, acting directly or through a duly authorized representative, who submits a proposal for the work contemplated.
- 1.6. **Project Documents** – The advertisement or invitation to Bid, instructions to contractors, the Bid Form, and the proposed Contract Documents (including all Addenda issued prior to receipt of Bids).
- 1.7. **Project Requirements** – The advertisement or invitation to Bid, instructions to contractors, and the Bid Form.
- 1.7.1 *BUILDING AREA* – An area on the airport to be used, considered, or intended to be used for airport buildings, or other facilities or rights-of-way together with all airport buildings and facilities located thereon.
- 1.8. **Bonds** – Performance and Payment bonds and other instruments of security.
- 1.8.1 *CALENDAR DAY* – Every day shown on the calendar.
- 1.8.2 *CERTIFICATES OF COMPLIANCES* – Written statements by the manufacturer stating the material furnished is in conformance with the Specifications.
- 1.9. **Change Order** – A document recommended by Engineer, which is signed by Contractor and Owner and authorizes an addition, deletion or revision in the Work, or an adjustment in the Contract Price or the Contract Times, issued on or after the Effective Date of the Agreement. *The work covered by a change order shall be within the scope of the contract.*
- 1.10. **Contract Documents** – The Agreement, Addenda (which pertain to the Contract Documents), Contractor's Bid (including documentation accompanying the Bid and any post Bid documentation submitted prior to the Notice of Award) when attached as an exhibit to the Agreement, the Notice to Proceed, the Bonds, these General Conditions, the Supplementary Conditions, the Specifications and the Drawings as the same are more specifically identified in the Agreement, together with all Written Amendments, Change Orders, Work Change Directives, Field Orders and Engineer's written interpretations and clarifications issued pursuant to paragraphs 3.5, 3.6.1, and 3.6.3 on or after the Effective Date of the Agreement. Shop Drawing submittals approved pursuant to paragraphs 6.26 and 6.27 and the reports and drawings referred to in paragraphs 4.2.1.1 and 4.2.2.2 are not Contract Documents.
- 1.11. **Contract Price** – The money payable by Owner to Contractor for completion of the Work in accordance with the Contract Documents as stated in the Agreement (subject to the provisions of paragraph 11.9.1 in the case of Unit Price Work).
- 1.12. **Contract Times** – The numbers of days or the dates stated in the Agreement: (i) to achieve Substantial Completion, and (ii) to complete the Work so that it is ready for final payment as evidenced by Engineer's written recommendation of final payment in accordance with paragraph 14.13.
- 1.12.1 *CONTRACT ITEM (PAY ITEM)* – A specific unit of work for which a price is provided in the Contract.
- 1.13. **Contractor** – The person, firm or corporation with whom Owner has entered into the Agreement.

- 1.14. **Defective** – An adjective which when modifying the word Work refers to Work that is unsatisfactory, faulty or deficient, in that it does not conform to the Contract Documents, or does not meet the requirements of any inspection, reference standard, test or approval referred to in the Contract Documents, or has been damaged prior to Engineer's recommendation of final payment (unless responsibility for the protection thereof has been assumed by Owner at Substantial Completion in accordance with paragraph 14.8 or 14.10).
- 1.14.1 *DRAINAGE SYSTEM – The system of pipes, ditches, and structures by which surface or subsurface waters are collected and conducted from the airport area.*
- 1.15. **Drawings** – The drawings which show the scope, extent, and character of the Work to be furnished and performed by Contractor and which have been prepared or approved by Engineer and are referred to in the Contract Documents. Shop drawings are not Drawings as so defined.
- 1.16. **Effective Date of the Agreement** – The date indicated in the Agreement on which it becomes effective, but if no such date is indicated it means the date on which the Agreement is signed and delivered by the last of the two parties to sign and deliver.
- 1.17. **Engineer** – The person, firm, or corporation named as such in the Agreement.
- 1.18. **Engineer's Consultant** – A person, firm, or corporation having a contract with Engineer to furnish services as Engineer's independent professional associate or consultant with respect to the Project and who is identified as such in the Supplementary Conditions. *The following list of independent professional associates and consultants are considered the Engineer's consultant for this Construction Contract: AVCON, Inc.*
- 1.18.1 *EQUIPMENT – All machinery, together with the necessary supplies for upkeep and maintenance, and also all tools and apparatus necessary for the proper construction and acceptable completion of the work.*
- 1.18.2 *EXTRA WORK – An item of work not provided for in the awarded contract as previously modified by change order or supplemental agreement, but which if found by the Engineer to be necessary to complete the work within the intended scope of the contract as previously modified.*
- 1.18.3 *FAA – The Federal Aviation Administration of the U.S. Department of Transportation. When used to designate a person, FAA shall mean the Administrator or his duly authorized representative.*
- 1.18.4 *FEDERAL SPECIFICATIONS – The Federal Specifications and Standards, and supplements, amendments, and indices thereto are prepared and issued by the General Services Administration of the Federal Government. They may be obtained from the Specifications Activity, Printed Materials Supply Division, Building 197, Naval Weapons Plant, Washington, D.C. 20407.*
- 1.19. **Field Order** – A written order issued by Engineer which orders minor changes in the Work in accordance with paragraph 9.5 but which does not involve a change in the Contract Price or the Contract Times.
- 1.20. **General Requirements** – Sections of Division 1 of the Specifications.
- 1.21. **Hazardous Waste** – The term Hazardous Waste shall have the meaning provided in Section 1004 of the Solid Waste Disposal Act (42 USC Section 6903) as amended from time to time.

- 1.22. 1.21.1 *INSPECTOR* – An authorized representative of the Engineer assigned to make all necessary inspections and/or tests of the work performed or being performed, or of the materials furnished or being furnished by the Contractor.
- 1.21.2 *INTENTION OF TERMS* – Whenever, in these specifications or on the plans, the words, "directed," "required," "permitted," "ordered," "designated," "prescribed," or words of the like import are used, it shall be understood that the direction, requirement, permission, order, designation, or prescription of the Engineer is intended; and similarly, the words "approved," "acceptable," "Satisfactory," or words of like import, shall mean approved by, or acceptable to, or satisfactory to the Engineer, subject in each case to the final determination of the Owner.
- 1.21.3 *LABORATORY* – The official testing laboratories of the Owner or such other laboratories as may be designated by the Engineer.
- 1.22. **Laws and Regulations; Laws or Regulations** – Any and all applicable laws, rules, regulations, ordinances, codes and orders of any and all governmental bodies, agencies, authorities and courts having jurisdiction.
- 1.23. **Liens** – Liens, charges, security interests, or encumbrances upon real property or personal property.
- 1.23.1 *LIGHTING* – A system of fixtures providing or controlling the light sources used on or near the airport or within the airport buildings. The field lighting includes all luminous signals, markers, floodlights, and illuminating devices used on or near the airport or to aid in the operation of aircraft landing at, taking off from, or taxiing on the airport surface.
- 1.23.2 *MAJOR AND MINOR CONTRACT ITEMS* – A major contract item shall be any item that is listed in the proposal, the total cost of which is equal to or greater than 25 percent of the total amount of the award contract. All other items shall be considered minor contract items.
- 1.23.3 *MATERIALS* – Any substance specified for use in the construction of the Contract work.
- 1.23.4 *MIL SPECIFICATIONS* – The Military Specifications and Standard, and indices thereto, that are prepared and issued by the Department of Defense.
- 1.24. **Milestone** – A principal event specified in the Contract Documents relating to an intermediate completion date or time prior to Substantial Completion of all the Work.
- 1.25. **Notice of Award** – The written notice by Owner to the apparent successful contractor stating that upon compliance by the apparent successful contractor with the conditions precedent enumerated therein, within the time specified, Owner will sign and deliver the Agreement.
- 1.26. **Notice to Proceed** – A written notice given by Owner to Contractor (with a copy to Engineer) fixing the date on which the Contract Times will commence to run and on which Contractor shall start to perform Contractor's obligations under the Contract Documents.
- 1.26.1 *FDOT* – The Florida State Department of Transportation. When used to designate a person, FDOT shall mean the commissioner or his duly authorized representative.

- 1.27. **Owner** – The public body or authority, corporation, association, firm, or person with whom Contractor has entered into the Agreement and for whom the Work is to be provided.
- 1.28. **Partial Utilization** – Use by Owner of a substantially completed part of the Work for the purpose for which it is intended (or a related purpose) prior to Substantial Completion of all the Work.
- 1.28.1 *PAVEMENT – The combined surface course, base course, and subbase course, if any, considered as a single unit.*
- 1.28.2 *PAYMENT BOND – The approved form of security furnished by the Contractor and his/her surety as a guaranty that he will pay in full all bills and accounts for materials and labor used in the construction of the work.*
- 1.29. **PCBs** – Polychlorinated biphenyls.
- 1.29.1 *PERFORMANCE BOND – The approved form of security furnished by the Contractor and his/her surety as a guaranty that the Contractor will complete the work in accordance with the terms of the contract.*
- 1.30. **Petroleum** – Petroleum, including crude oil or any fraction thereof which is liquid at standard conditions of temperature and pressure (60 degrees Fahrenheit and 14.7 pounds per square inch absolute), such as oil, petroleum, fuel oil, oil sludge, oil refuse, gasoline, kerosene, and oil mixed with other non-Hazardous Wastes and crude oils.
- 1.30.1 *PLANS – The official drawings or exact reproductions which show the location, character, dimensions, and details of the airport and the work to be done and which are to be considered as a part of the contract, supplementary to the specifications.*
- 1.31. **Project** – The total construction of which the Work to be provided under the Contract Documents may be the whole, or a part as indicated elsewhere in the Contract Documents.
- 1.31.1 *PROPOSAL – (See Bid).*
- 1.32. **Radioactive Material** – Source, special nuclear, or byproduct material as defined by the Atomic Energy Act of 1954 (42 USC Section 2011 et seq.) as amended from time to time.
- 1.33. **Resident Project Representative** - The authorized representative of Engineer who may be assigned to the site or any part thereof.
- 1.33.1 *RUNWAY – The area on the airport prepared for the landing and takeoff of aircraft.*
- 1.34. **Samples** – Physical examples of materials, equipment, or workmanship that are representative of some portion of the Work and which establish the standards by which such portion of the Work will be judged.
- 1.35. **Shop Drawings** – All drawings, diagrams, illustrations, schedules, and other data or information which are specifically prepared or assembled by or for Contractor and submitted by Contractor to illustrate some portion of the Work.

- 1.35.1 **SPECIAL PROVISIONS** – The specific clauses setting forth conditions or requirements peculiar to the project under consideration, covering work or materials involved in the proposal and estimate, which are not thoroughly or satisfactorily stipulated in these specifications.
- 1.36. **Specifications** – Those portions of the Contract Documents consisting of written technical descriptions of materials, equipment, construction systems, standards, and workmanship as applied to the Work and certain administrative details applicable thereto.
- 1.36.1 **SPONSOR** – *For AIP Contracts, the term Sponsor shall have the meaning as the term Owner.*
- 1.36.2 **STRUCTURES** – *Airport facilities such as bridges; culverts; catch basins; inlets; retaining walls; cribbing; storm and sanitary sewer lines; water lines; underdrains; electrical ducts, manholes, handholes, lighting fixtures and bases; transformers; flexible and rigid pavements; navigational aids; buildings; vaults; and, other manmade features of the airport that may be encountered in the work and not otherwise classified herein.*
- 1.37. **Subcontractor** – An individual, firm, or corporation having a direct contract with Contractor or with any other Subcontractor for performance of a part of the Work at the site.
- 1.37.1 **SUBGRADE** – *The soil which forms the pavement foundation.*
- 1.37.2 **SUPERINTENDENT** – *The Contractor's executive representative who is present on the work during progress, authorized to receive and fulfill instruction from the Engineer, and who shall supervise and direct the construction.*
- 1.38. **Substantial Completion** – The Work (or a specified part thereof) has progressed to the point where, in the opinion of Engineer as evidenced by Engineer's definitive certificate of Substantial Completion, it is sufficiently complete, in accordance with the Contract Documents, so that the Work (or specified part) can be utilized for the purposes for which it is intended; or if no such certificate is issued, when the Work is complete and ready for final payment as evidenced by Engineer's written recommendation of final payment in accordance with paragraph 14.13. The terms "substantially complete" and "substantially completed" as applied to all or part of the Work refer to Substantial Completion thereof.
- 1.38.1 **SUPPLEMENTAL AGREEMENT** – *A written agreement between the Contractor and the Owner covering: (1) work that would increase or decrease the total amount of the awarded contract, or any major contract item, by more than 25 percent, such increased or decreased work being within the scope of the originally awarded contract; or (2) work that is not within the scope of the originally awarded contract.*
- 1.39. **Supplementary Conditions** – The part of the Contract Documents which amends or supplements these General Conditions.
- 1.40. **Supplier** – A manufacturer, fabricator, supplier, distributor, materialman, or vendor having direct contract with Contractor or with any Subcontractor to furnish materials or equipment to be incorporated in the Work by Contractor or any Subcontractor.
- 1.40.1 **SURETY** – *The corporation, partnership, or individual, other than the Contractor, executing payment or performance bonds which are furnished to the Owner by the Contractor.*

- 1.40.2 *TAXIWAY* – For the purpose of this document, the term taxiway means the portion of the air operations area of an airport that has been designated by competent airport authority for movement of aircraft to and from the airport's runways or aircraft parking areas.
- 1.41. **Underground Facilities** – All pipelines, conduits, ducts, cables, wires, manholes, vaults, tanks, tunnels, or other such facilities or attachments, and any encasements containing such facilities which have been installed underground to furnish any of the following services or materials: electricity, gases, steam, liquid petroleum products, telephone, or other communications, cable television, sewage and drainage removal, traffic or other control systems or water.
- 1.42. **Unit Price Work** – Work to be paid for on the basis of unit prices.
- 1.43. **Work** – The entire completed construction or the various separately identifiable parts thereof required to be furnished under the Contract Documents. Work includes and is the result of performing or furnishing labor and furnishings and incorporating materials and equipment into the construction, and performing or furnishing services and furnishing documents, all as required by the Contract Documents.
- 1.44. **Work Change Directive** - A written directive to Contractor, issued on or after the Effective Date of the Agreement and signed by Owner and recommended by Engineer, ordering an addition, deletion, or revision in the Work, or responding to differing or unforeseen physical conditions under which the Work is to be performed as provided in paragraph 4.2 or 4.3 or to emergencies under paragraph 6.23. A Work Change Directive will not change the Contract Price or the Contract Times, but is evidence that the parties expect that the change directed or documented by a Work Change Directive will be incorporated in a subsequently issued Change Order following negotiations by the parties as to its effect, if any, on the Contract Price or Contract Times as provided in paragraph 10.2.
- 1.44.1 *WORKING DAY* – A working day shall be any day other than a legal holiday, Saturday, or Sunday on which the normal working forces of the Contractor may proceed with regular work for at least 6 hours toward completion of the Contract. Unless work is suspended for causes beyond the Contractor's control, Saturdays, Sundays and holidays on which the Contractor's forces engage in regular work, requiring the presence of an inspector, will be considered as working days.
- 1.44.2 *WORK PERIOD* – A work period shall consist of any designated block of time on which the normal working forces of the Contractor may proceed with regular work for at least 5 hours toward completion of the contract. Unless work is suspended for causes beyond the Contractor's control, work occurring on any day, regardless of it being a weekend or holiday, which requires an Inspector, will be considered a work period. Work periods are limited to between 7:00 a.m. and 5:00 p.m. local time Monday through Friday. Weekend work will not be permitted unless contractor obtains written permission from Owner.
- 1.45. **Written Amendment** – A written amendment of the Contract Documents, signed by Owner and Contractor on or after the Effective Date of the Agreement and normally dealing with the nonengineering or nontechnical rather than strictly construction-related aspects of the Contract Documents.

ARTICLE 2 – PRELIMINARY MATTERS

Delivery of Bonds:

- 2.1. When Contractor delivers the executed Agreements to Owner, Contractor shall also deliver to Owner such Bonds as Contractor may be required to furnish in accordance with paragraph 5.1.

Copies of Documents:

- 2.2. Owner shall furnish to Contractor up to five copies (unless otherwise specified in the Supplementary Conditions) of the Contract Documents as are reasonably necessary for the execution of the Work. Additional copies will be furnished, upon request, at the cost of reproduction.

Commencement of Contract Times; Notice to Proceed:

- 2.3. The Contract Times will commence to run on the thirtieth day after the Effective Date of the Agreement, or, if a Notice to Proceed is given, on the day indicated in the Notice to Proceed. A Notice to Proceed may be given at any time within thirty days after the Effective Date of the Agreement. In no event will the Contract Time commence to run later than the *one hundred twentieth (120th)* day after the day of Bid opening or the *ninetieth (90th)* day after the Effective Date of the Agreement, whichever date is earlier.

Starting the Work:

- 2.4. Contractor shall start to perform the Work on the date when the Contract Times commence to run, but no Work shall be done at the site prior to the date on which the Contract Times commence to run.

Before Starting Construction:

- 2.5. Before undertaking each part of the Work, Contractor shall carefully study and compare the Contract Documents and check and verify pertinent figures shown thereon and all applicable field measurements. Contractor shall promptly report in writing to Engineer any conflict, error, ambiguity or discrepancy which Contractor may discover and shall obtain a written interpretation or clarification from Engineer before proceeding with any Work affected thereby; however, Contractor shall not be liable to Owner or Engineer for failure to report any conflict, error, ambiguity or discrepancy in the Contract Documents, unless Contractor knew or reasonably should have known thereof.
- 2.6. Within ten days after the Construction Notice to Proceed contractor shall submit to Engineer for review:
- 2.6.1. a preliminary progress schedule indicating the times (numbers of days or dates) for starting and completing the various stages of the Work, including any Milestones specified in the Contract Documents;
- 2.6.2. a preliminary schedule of Shop Drawings and Sample submittals which will list each required submittal and the times for submitting, reviewing and processing such submittal;
- 2.6.3. a preliminary schedule of values for all of the Work which will include quantities and prices of items aggregating the Contract Price and will subdivide the Work into component parts in sufficient detail to serve as the basis for progress payments during construction. Such prices will include and appropriate amount of overhead and profit applicable to each item of Work.

2.7. Before any Work at the site is started, Contractor and Owner shall each deliver to the other, with copies to each additional insured identified in the Supplementary Conditions, certificates of insurance (and other evidence of insurance which either of them or any additional insured may reasonably request) which Contractor and Owner respectively are required to purchase and maintain in accordance with paragraphs 5.4, 5.6, and 5.7.

Preconstruction Conference:

2.8. Within twenty (20) days *prior to Construction Notice to Proceed*, but before any Work at the site is started, a conference attended by Contractor, Engineer and others as appropriate will be held to establish a working understanding among the parties as to the Work and to discuss the schedules referred to in paragraph 2.6, procedures for handling Shop Drawings, and other submittals, processing Applications for Payment and maintaining required records.

Initially Acceptable Schedules:

2.9. Unless otherwise provided in the Contract Documents, at least ten days before submission of the first Application for Payment a conference attended by Contractor, Engineer, and others as appropriate will be held to review for acceptability to Engineer as provided below the schedules submitted in accordance with paragraph 2.6. Contractor shall have an additional ten days to make corrections and adjustments and to complete and resubmit the schedules. No progress payment shall be made to Contractor until the schedules are submitted to and acceptable to Engineer as provided below. The progress schedule will be acceptable to Engineer as providing an orderly progression of the Work to completion within any specified Milestones and the Contract Times, but such acceptance will neither impose on Engineer responsibility for the sequencing, scheduling, or progress of Work nor interfere with or relieve Contractor from Contractor's full responsibility therefore, Contractor's schedule of Shop Drawing and Sample submissions will be acceptable to Engineer as providing a workable arrangement for reviewing and processing the required submittals. Contractor's schedule of values will be acceptable to Engineer as to form and substance.

ARTICLE 3 – CONTRACT DOCUMENTS: INTENT, AMENDING, REUSE

Intent:

3.1. The Contract Documents comprise the entire agreement between Owner and Contractor concerning the Work. The Contract Documents are complementary: what is called for by one is as binding as if called for by all. The Contract Documents will be construed in accordance with the law of the place of the Project.

3.2. It is the intent of the Contract Documents to describe a functionally complete Project (or part thereof) to be constructed in accordance with the Contract Documents. Any Work, materials, or equipment that may reasonably be inferred from the Contract Documents or from prevailing custom or trade usage as being required to produce the intended result will be furnished and performed whether or not specifically called for. When words or phrases, which have a well-known technical or construction industry or trade meaning are used to describe Work, materials, or equipment, such words or phrases shall be interpreted in accordance with the meaning. Clarifications and interpretations of the Contract Documents shall be issued by Engineer as provided in paragraph 9.4.

3.3. Reference to Standards and Specifications of Technical Societies: Reporting and Resolving Discrepancies:

3.3.1. Reference to standards, specifications, manuals or codes of any technical society, organization, or association, or to the Laws or Regulations of any governmental authority, whether such reference be specific or by implication, shall mean the latest standard, specification, manual, code or Laws or

Regulations in effect at the time of opening of Bids (or, on the Effective Date of the Agreement if there were no Bids), except as may be otherwise specifically stated in the Contract Documents.

3.3.2. If, during the performance of the Work, Contractor discovers any conflict, error, ambiguity, or discrepancy within the Contract Documents or between the Contract Documents and any provision of any such Law or Regulation applicable to the performance of the Work or of any such standard, specification, manual, or code or of any instruction of any Supplier referred to in paragraph 6.5., Contractor shall report it to Engineer in writing at once, and, Contractor shall not proceed with the Work affected thereby (except in an emergency as authorized by paragraph 6.23) until an amendment or supplement to the Contract Documents has been issued by one of the methods indicated in paragraph 3.5 or 3.6; provide, however, that Contractor shall not be liable to Owner or Engineer for failure to report any such conflict, error, ambiguity or discrepancy unless Contractor knew or reasonably should have known thereof.

3.3.3. Except as otherwise specifically stated in the Contract Documents or as may be provided by amendment or supplement thereto issued by one of the methods indicated in paragraph 3.5 or 3.6, the provisions of the Contract Documents shall take precedence in resolving any conflict, error, ambiguity, or discrepancy between the provisions of the Contract Documents and:

3.3.3.1. the provisions of any such standard, specification, manual, code, or instruction (whether or not specifically incorporated by reference in the Contract Documents): or

3.3.3.2. the provisions of any such Laws or Regulations applicable to the performance of the Work (unless such an interpretation of the provisions of the Contract Documents would result in violation of such Law or Regulation).

No provision of any such standard, specification, manual, code, or instruction shall be effective to change the duties and responsibilities of Owner, Contractor, or Engineer, or any of their subcontractors, consultants, agents, or employees from those set forth in the Contract Documents, nor shall it be effective to assign to Owner, Engineer, or any of Engineer's Consultants, agents, or employees any duty or authority to supervise or direct the furnishing or performance of the Work or any duty or authority to undertake responsibility inconsistent with the provisions of paragraph 9.13 or any other provision of the Contract Documents.

3.3.4. Whenever the plans or specifications are in conflict, resolution of such conflict shall be in the following order of precedence subject to agreement by Engineer:

- Contract Agreement
- Addenda, with those of later date having precedence over those of earlier dates
- Bid Documents
- Supplementary Conditions
- General Conditions
- Construction Drawings
- Technical Specifications
- FAA General Provisions

Florida DOT Standard Specifications

In case of our inconsistency within the Contract Drawings, the order of procedure is as follows:

- Schedules
- Specific Details
- Typical Details
- Construction Drawings

3.4. Whenever in the Contract Documents the terms "as ordered," "as directed," "as required," "as allowed," "as approved" or terms of like effect or import are used, or the adjectives "reasonable," "suitable," "acceptable," "proper," or "satisfactory" or adjectives of like effect or import are used to describe a requirement, direction, review or judgment of Engineer as to the Work, it is intended that such requirement, direction, review, or judgment will be solely to evaluate, in general, the completed Work for compliance with the requirements of and information in the Contract Documents and conformance with the design concept of the completed Project as a functioning whole as shown or indicated in the Contract Documents (unless there is a specific statement indicating otherwise). The use of any such term or adjective shall not be effective to assign to Engineer any duty or authority to supervise or direct the furnishing or performance of the Work or any duty or authority to undertake responsibility contrary to the provisions of paragraph 9.13 or any other provision of the Contract Documents.

Amending and Supplementing Contract Documents:

3.5. The Contract Documents may be amended to provide for additions, deletions, and revisions in the Work or to modify the terms and conditions thereof in one or more of the following ways:

- 3.5.1. a formal Written Amendment.
- 3.5.2. a Change Order (pursuant to paragraph 10.4) or
- 3.5.3. a Work Change Directive (pursuant to paragraph 10.1).

3.6. In addition, the requirements of the Contract Documents may be supplemented and minor variations, and deviations of the Work may be authorized, in one or more of the following ways:

- 3.6.1. a Field Order (pursuant to paragraph 9.5).
- 3.6.2. Engineer's approval of a Shop Drawing or Sample (pursuant to paragraphs 6.26 and 6.27), or
- 3.6.3. Engineer's written interpretation or clarification (pursuant to paragraph 9.4).

Reuse of Documents:

3.7. Contractor and any Subcontractor or Supplier or other person or organization performing or furnishing any of the Work under a direct or indirect contract with Owner (i) shall not have or acquire any title to or ownership rights in any of the Drawings, Specifications, or other documents (or copies of any thereof) prepared by or bearing the seal of Engineer or Engineer's Consultant, and (ii) shall not reuse any of such Drawings, Specifications, other documents, or copies on extensions of the Project or any other project without written consent of Owner and Engineer and specific written verification or adaptation by Engineer.

ARTICLE 4 – AVAILABILITY OF LANDS: SUBSURFACE AND PHYSICAL CONDITIONS; REFERENCE POINTS

Availability of Lands:

4.1. Owner shall furnish, as indicated in the Contract Documents, the lands upon which the Work is to be performed, rights-of-way and easements for access thereto, and such other lands which are designated for the use of Contractor. Upon reasonable written request, Owner shall furnish Contractor with a correct statement of record legal title and legal description of the lands upon which the Work is to be performed and Owner's interest therein as necessary for giving notice of or filing a mechanic's lien against such lands in accordance with applicable Laws and Regulations. Owner shall identify any encumbrances or restrictions not of general application but specifically related to use of lands so furnished with which Contractor will have to comply in performing the Work. Easements for permanent structures or permanent in existing facilities will be obtained and paid for by Owner, unless otherwise provided in the Contract Documents. If Contractor and Owner are unable to agree on entitlement to or the amount or extent of any adjustments in the Contract Price or the Contract Times as a result of any delay in Owner's furnishing these lands, rights-of-way or easements. Contractor may make a claim therefore as provided in Articles 11 and 12. Contractor shall provide for all additional lands and access thereto that may be required for temporary construction facilities or storage of materials and equipment.

4.2. SubSurface and Physical Conditions:

4.2.1. **Reports and Drawings:** Reference is made to the *Information Available to Contractors* for identification of:

4.2.1.1. **Subsurface Conditions:** Those reports of explorations and tests of subsurface conditions at or contiguous to the site that have been utilized by Engineer in preparing the Contract Documents; and

4.2.1.2. **Physical Conditions:** Those drawings of physical conditions in or relating to existing surface or subsurface structures at or contiguous to the site (except Underground Facilities) that have been utilized by Engineer in preparing the Contract Documents.

4.2.2. **Limited Reliance by Contractor Authorized; Technical Data:** Contractor may rely upon the general accuracy of the "technical data" contained in such reports and drawings, but such reports and drawings are not Contract Documents. Such "technical data" is identified in the *Information Available to Contractors*. Except for such reliance on such "technical data," Contractor may not rely upon or make any claim against Owner, Engineer, or any of Engineer's Consultants with respect to:

4.2.2.1. the completeness of such reports and drawings for Contractor's purposes, including, but not limited to, any aspects of the means, methods, techniques, sequences and procedures of construction to be employed by Contractor and safety precautions and programs incident thereto, or

4.2.2.2. other data, interpretations, opinions, and information contained in such reports or shown or indicated in such drawings, or

4.2.2.3. any Contractor interpretation of or conclusion drawn from any "technical data" or any such data, interpretations, opinions, or information.

4.2.3. **Notice of Differing Subsurface or Physical Conditions:** If Contractor believes that any subsurface or physical condition at or contiguous to the site that is uncovered or revealed either:

4.2.3.1. is of such a nature as to establish that any "technical data" on which Contractor is entitled to rely as provided in paragraphs 4.2.1 and 4.2.2 is materially inaccurate, or

4.2.3.2. is of such a nature as to require a change in the Contract Documents, or

4.2.3.3. differs materially from that shown or indicated in the Contract Documents, or

4.2.3.4. is of an unusual nature, and differs materially from conditions ordinarily encountered and generally recognized as inherent in work of the character provided for in the Contract Documents; then Contractor shall, promptly, but in no event later than fifteen (15) days, after becoming aware thereof and before further disturbing conditions affected thereby or performing any Work in connection therewith (except in an emergency as permitted by paragraph 6.23), notify Owner and Engineer in writing about such condition. Contractor shall not further disturb such conditions or perform any Work in connection therewith (except as aforesaid) until receipt of written order to do so.

4.2.4. **Engineer's Review:** Engineer will promptly review the pertinent conditions, determine the necessity of Owner's obtaining additional exploration or tests with respect thereto and advise Owner in writing (with a copy to Contractor) of Engineer's findings and conclusions.

4.2.5. **Possible Contract Documents Change:** If Engineer concludes that a change in the Contract Documents is required as a result of a condition that meets one or more of the categories in paragraph 4.2.3., a Work Change Directive or a Change Order will be issued as provided in Article 10 to reflect and document the consequences of such change.

4.2.6. **Possible Price and Times Adjustments:** An equitable adjustment in the Contract Price or in the Contract Times, or both, will be allowed to the extent that the existence of such uncovered or revealed condition causes an increase or decrease in Contractor's cost of, or time required for performance of the Work; subject, however, to the following:

4.2.6.1. such condition must meet any one or more of the categories described in paragraphs 4.2.3.1 through 4.2.3.4. inclusive;

4.2.6.2. a change in the Contract Documents pursuant to paragraph 4.2.5 will not be an automatic authorization of nor a condition precedent to entitlement to any such adjustment:

4.2.6.3. with respect to Work that is paid for on a Unit Price Basis, any adjustment in Contract price will be subject to the provisions of paragraphs 9.10 and 11.9; and

4.2.6.4. Contractor shall not be entitled to any adjustment in the Contract Price or Times if;

4.2.6.4.1. Contractor knew of the existence of such conditions at the time Contractor made a final commitment to Owner in respect of Contract Price and Contract Times by the submission of a bid or becoming bound under a contract: or

4.2.6.4.2. the existence of such condition could reasonably have been discovered or revealed as a result of any examination, investigation, exploration, test, or study of the site and contiguous areas

required by the Project Requirements or Contract Documents to be conducted by or for Contractor prior to Contractor's making such final commitment; or

4.2.6.4.3. Contractor failed to give the written notice within the time and as required by paragraph 4.2.3.

If Owner and Contractor are unable to agree on entitlement to or as to the amount or length of any such equitable adjustment in the Contract Price or Contract Times, a claim may be made therefore as provided in Articles 11 and 12. However, Owner, Engineer, and Engineer's Consultants shall not be liable to Contractor for any claims, costs, losses, or damages sustained by Contractor on or in connection with any other project or anticipated project.

4.3. Physical Conditions – Underground Facilities:

4.3.1. **Shown or Indicated:** The information and data shown or indicated in the Contract Documents with respect to existing Underground Facilities at or contiguous to the site is based on information and data furnished to Owner or Engineer by the owners of such Underground Facilities or by others. Unless it is otherwise expressly provided in the *Information Available to Contractors*:

4.3.1.1. Owner and Engineer shall not be responsible for the accuracy or completeness of any such information or data; and

4.3.1.2. The cost of all of the following will be included in the Contract Price and Contractor shall have full responsibility for: (i) reviewing and checking all such information and data, (ii) locating all Underground Facilities shown or indicated in the Contract Documents, (iii) coordination of the Work with the owners of such Underground Facilities during construction, and (iv) the safety and protection of all such Underground Facilities as provided in paragraph 6.20 and repairing any damage thereto resulting from the Work.

4.3.2. **Not Shown or Indicated:** If an Underground Facility is uncovered or revealed at or contiguous to the site which was not shown or indicated in the Contract Documents. Contractor shall, promptly after becoming aware thereof and before further disturbing conditions affected thereby or performing any Work in connection therewith (except in an emergency as required by paragraph 6.23), identify the owner of such Underground Facility and give written notice to that owner and to Owner and Engineer. Engineer will promptly review the Underground Facility and determine the extent, if any, to which a change is required in the Contract Documents to reflect and document the consequences of the existence of the Underground Facility. If Engineer concludes that a change in the Contract Documents is required, a Work Change Directive or a Change Order will be issued as provided in Article 10 to reflect and document such consequences. During such time, Contractor shall be responsible for the safety and protection of such Underground Facility as provided in paragraph 6.20. Contractor shall be allowed an increase in the Contract Price or an extension of the Contract Times, or both, to the extent that they are attributable to the existence of any Underground Facility that was not shown or indicated in the Contract Documents and that Contractor did not know of and could not reasonably have been expected to be aware of or to have anticipated. If Owner and Contractor are unable to agree on entitlement to or the amount or length of any such adjustment in Contract Price or Contract Times, Contractor may make a claim, therefore, as provided in Articles 11 and 12. However, Owner, Engineer, and Engineer's Consultants shall not be liable to Contractor for any claims, costs, losses or damages incurred or sustained by Contractor on or in connection with any other project or anticipated project.

Reference Points:

4.4. Owner shall provide engineering surveys to establish reference points for construction which in Engineer's judgment are necessary to enable Contractor to proceed with the Work. Contractor shall be responsible for laying out the Work, shall protect and preserve the established reference points and shall make no changes or relocations without the prior written approval of Owner, Contractor shall report to Engineer whenever any reference point is lost or destroyed or requires relocation because of necessary changes in grades or locations, and shall be responsible for the accurate replacement or relocation of such reference points by professionally qualified personnel.

4.5. Asbestos, PCBs, Petroleum, Hazardous Waste or Radioactive Material:

4.5.1. Owner shall be responsible for any Asbestos, PCBs, Petroleum, Hazardous Waste, or Radioactive Material uncovered or revealed at the site which was not shown or indicated in Drawings or Specifications or identified in the Contract Documents to be within the scope of the Work and which may present a substantial danger to persons or property exposed thereto in connection with the Work at the site. Owner shall not be responsible for any such materials brought to the site by Contractor, Subcontractor, Suppliers, or anyone else for whom Contractor is responsible.

4.5.2. Contractor shall immediately: (i) stop all Work in connection with such hazardous condition and in any area affected thereby (except in an emergency as required by paragraph 6.23), and (ii) notify Owner and Engineer (and thereafter confirm such notice in writing). Owner shall promptly consult with Engineer concerning the necessity for Owner to retain a qualified expert to evaluate such hazardous condition to take corrective action, if any. Contractor shall not be required to resume Work in connection with such hazardous condition or in any such affected area until after Owner has obtained any required permits related thereto and delivered to Contractor special written notice: (i) specifying that such condition and any affected area is or has been rendered safe for the resumption of Work, or (ii) specifying any special conditions under which such Work may be resumed safely. If Owner and Contractor cannot agree as to entitlement to or the amount or extent of an adjustment, if any, in Contract Price or Contract Times as a result of such Work stoppage or such special conditions under which Work is agreed by Contractor to be resumed, either party may make a claim therefore as provided in Articles 11 and 12.

4.5.3. If after receipt of such special written notice Contractor does not agree to resume such Work based on a reasonable belief it is unsafe, or does not agree to resume such Work under such special conditions, then Owner may order such portion of the Work that is in connection with such hazardous condition or in such affected area to be deleted from the Work. If Owner and Contractor cannot agree as to entitlement to or the amount or extent of an adjustment, if any, in Contract Price or Contract Times as a result of deleting such portion of the Work, then either party may make a claim therefore as provided in Articles 11 and 12. Owner may have such deleted portion of the Work performed by Owner's own forces or others in accordance with Article 7.

4.5.4. To the fullest extent permitted by Laws and Regulations, Owner shall indemnify and hold harmless Contractor, Subcontractors, Engineer, Engineer's Consultants and the officers, directors, employees, agents, other consultants and subcontractors of each and any of them from and against all claims, costs, losses, and damages arising out of or resulting from such hazardous condition, provided that: (i) any such claim, cost, loss, or damage is attributable to bodily injury, sickness, disease, or death, or to injury to or destruction of tangible property (other than the Work itself), including the loss of use resulting therefrom, and (ii) nothing

in this subparagraph 4.5.4. shall obligate Owner to indemnify any person or entity from and against the consequences of that person's or entity's own negligence.

4.5.5. The provisions of paragraphs 4.2 and 4.3 are not intended to apply to Asbestos, PCBs, Petroleum, Hazardous Waste or Radioactive Material uncovered or revealed at the site.

ARTICLE 5 – BONDS AND INSURANCE

Performance, Payment, and Other Bonds:

5.1. Contractor shall furnish Performance and Payment Bonds, each in an amount at least equal to the Contract Price as security for the faithful performance and payment of all Contractor's obligations under the Contract Documents. These Bonds shall remain in effect at least until one year after the date when final payment becomes due, except as provided otherwise by Laws or Regulations or by the Contract Documents. Contractor shall also furnish such other Bonds as are required by the Supplementary Conditions. All Bonds shall be in the form prescribed by the Contract Documents except as provided otherwise by Laws or Regulations, and shall be executed by such sureties as are named in the current list of "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies" as published in Circular 570 (amended) by the Audit Staff. Bureau of Government Financial Operations, U.S. Treasury Department. All Bonds signed by an agent must be accompanied by a certified copy of such agent's authority to act.

5.2. If the surety on any Bond furnished by Contractor is declared a bankrupt or becomes insolvent or its right to do business is terminated in any state where any part of the Project is located or it ceases to meet the requirements of paragraph 5.1. Contractor shall within ten days thereafter substitute another bond and surety, both of which must be acceptable to Owner.

5.3. Licensed Sureties and Insurers; Certificates of Insurance:

5.3.1. All Bonds and insurance required by the Contract Documents to be purchased and maintained by Owner or Contractor shall be obtained from surety or insurance companies that are duly licensed or authorized in the jurisdiction in which the Project is located to issue Bonds or insurance policies for the limits and coverages so required. Such surety and insurance companies shall also meet such additional requirements and qualifications as may be provided in the Supplementary Conditions.

5.3.2. Contractor shall deliver to Owner, with copies to each additional insured identified in the Supplementary Conditions, certificates of insurance (and other evidence of insurance requested by Owner or any other additional insured) which Contractor is required to purchase and maintain in accordance with paragraph 5.4.

Contractor's Liability Insurance:

5.4. Contractor shall purchase and maintain such liability and other insurance as is appropriate for the Work being performed and furnished and as will provide protection from claims set forth below which may arise out of or result from Contractor's performance and furnishing of the Work and Contractor's other obligations under the Contract Documents, whether it is to be performed or furnished by Contractor, any Subcontractor or Supplier, or by anyone directly or indirectly employed by any of them to perform or furnish any of the Work, or by anyone for whose acts any of them may be liable:

- 5.4.1. claims under workers' compensation, disability benefits and other similar employee benefit acts;
- 5.4.2. claims for damages because of bodily injury, occupational sickness or disease, or death of Contractor's employees;
- 5.4.3. claims for damages because of bodily injury, sickness or disease, or death of any person other than Contractor's employees;
- 5.4.4. claims for damages insured by customary personal injury liability coverage which are sustained: (i) by any person as a result of an offense directly or indirectly related to the employment of such person by Contractor, or by any other person for any other reason;
- 5.4.5. claims for damages, other than to the Work itself, because of injury to or destruction of tangible property wherever located, including loss of use resulting therefrom; and
- 5.4.6. claims for damages because of bodily injury or death of any person or property damage arising out of the ownership, maintenance or use of any motor vehicle.

The policies of insurance so required by this paragraph 5.4 to be purchased and maintained shall:

- 5.4.7. with respect to insurance required by paragraphs 5.4.3 through 5.4.6 inclusive, include as additional insureds (subject to any customary exclusion in respect of professional liability) Owner, Engineer, Engineer's Consultants and any other persons or entities identified in the Supplementary Conditions, all of whom shall be listed as additional insureds, and include coverage for the respective officers and employees of all such additional insureds;
- 5.4.8. include the specific coverages and be written for not less than the limits of liability provided in the Supplementary Conditions or required by Laws or Regulations, whichever is greater;

5.4.8.1 Contractor's Liability Insurance and the Owner's Protective Liability Insurance specified above shall be provided in not less than the following amount:

a. Injury or death to more than one person or single occurrence	\$1,000,000
b. On and Off Premises Operations Liability	\$1,000,000
c. Explosion and Collapse Hazard	\$1,000,000
d. Underground Hazard	\$1,000,000
e. Completed Operations and Products Liability	\$1,000,000
f. Property damage in account of all occurrences	\$1,000,000
g. Independent Contractors Liability	\$1,000,000
h. Personal Injury Liability Insurance	\$1,000,000

Contractor's Vehicle Insurance as follows:

1. Injury or death to one person	\$1,000,000
2. Injury or death to more than one person or a single occurrence	\$1,000,000
3. Property Damage	\$1,000,000
4. Business Auto Liability, Including all owned, non owned and hired vehicles	\$1,000,000

An Umbrella Policy may be used to meet the above limits.

All policies shall be drawn to cover a period of not less than one (1) year from the date of issue.

5.4.10. include contractual liability insurance covering Contractor's indemnity obligations under paragraphs 6.12, 6.16, and 6.31 through 6.33;

5.4.11. contain a provision or endorsement that the coverage afforded will not be cancelled, materially changed or renewal refused until at least thirty days prior written notice has been given to Owner and Contractor and to each other additional insured identified in the Supplementary Conditions to whom a certificate of insurance has been issued (and the certificates of insurance furnished by the Contractor pursuant to paragraph 5.3.2 will so provide);

5.4.12. remain in effect at least until final payment and at all times thereafter when Contractor may be correcting, removing or replacing **defective** Work in accordance with paragraph 13.12; and

5.4.13. with respect to completed operations insurance, and any insurance coverage written on an occurrence basis, remain in effect for at least two years after final payment (and Contractor shall furnish Owner and each other additional insured identified in the Supplementary Conditions to whom a certificate of insurance has been issued evidence satisfactory to Owner and any such additional insured of continuation of such insurance at final payment and one year thereafter).

Owner's Liability Insurance:

5.5. In addition to the insurance required to be provided by Contractor under paragraph 5.4, Owner, at Owner's option, may purchase and maintain at Owner's expense Owner's own liability insurance as will protect Owner against claims which may arise from operations under the Contract Documents. Any liability insurance carried by Owner is excess and non-contributory to any and all other coverage whether collectable or not.

Property Insurance:

5.6 *Contractor shall purchase and maintain property insurance upon the Work at the site in amount of the full replacement cost thereof (subject to such deductible amounts as may be provided in these Supplementary Conditions or required by Laws and Regulations). This insurance shall:*

5.6.1 *include the interests of Owner, Contractor, Subcontractors, Engineer, Engineer's Consultants and any other persons or entities identified in the Supplementary Conditions each of whom is deemed to have an insurable interest an shall be listed as an insured or additional insured;*

5.6.2 *include expenses incurred in the repair or replacement of any insured property (including but not limited to fees and charges of engineers and architects);*

5.6.3 *cover materials and equipment in transit for incorporation in the Work or stored at the site or at another location that was agreed to in writing by Owner prior to being incorporated in the Work, provided that such materials and equipment have been included in an Application for Payment recommended by Engineer; and*

5.6.4 be maintained in effect until final payment is made unless otherwise agreed to in writing by Owner, Contractor, and Engineer with thirty days written notice to each other additional insured to whom a certificate of insurance has been issued.

5.7. NOT USED

5.8. NOT USED

5.9. Owner shall not be responsible for purchasing and maintaining any property insurance to protect the interests of Contractor, Subcontractors or others in the Work to the extent of any deductible amounts that are identified in the Supplementary Conditions. The risk of loss within such identified deductible amount, will be borne by Contractor, Subcontractor, or others suffering any such loss and if any of them wishes property insurance coverage within the limits of such amounts, each may purchase and maintain it at the purchaser's own expense.

5.10. NOT USED

5.11. NOT USED

Receipt and Application of Insurance Proceeds:

5.12. Any insureds loss under the policies of insurance required by paragraphs 5.6 and 5.7 will be adjusted with Owner and made payable to Owner as fiduciary for the insureds, as their interests may appear, subject to the requirements of any applicable mortgage clause and of paragraph 5.13. Owner shall deposit in a separate account any money so received, and shall distribute it in accordance with such agreement as the parties in interest may reach. If no other special agreement is reached, the damaged Work shall be repaired or replaced, the moneys so received applied on account thereof and the Work and the cost thereof covered by an appropriate Change Order or Written Amendment.

5.13. Owner as fiduciary shall have power to adjust and settle any loss with the insurers unless one of the parties in interest shall object in writing within fifteen days after the occurrence of loss to Owner's exercise of this power. If such objection be made, Owner as fiduciary shall make settlement with the insurers in accordance with such agreement as the parties in interest may reach. If no such agreement among the parties in interest is reached, Owner as fiduciary shall adjust and settle the loss with the insurers and, if required in writing by any party in interest, Owner as fiduciary shall give bond for the proper performance of such duties.

Acceptance of Bonds and Insurance; Option to Replace:

5.14. If either party (Owner or Contractor) has any objection to the coverage afforded by or other provisions of the Bonds or insurance required to be purchased and maintained by the other party in accordance with Article 5 on the basis of non-conformance with the Contract Documents, the objecting party shall so notify the other party in writing within ten days after receipt of the certificates (or other evidence requested) required by paragraph 2.7. Owner and Contractor shall each provide to the other such additional information in respect of insurance provided as the other may reasonably request. If either party does not purchase or maintain all of the Bonds and insurance required of such party by the Contract Documents, such party shall notify the other party in writing of such failure to purchase prior to the start of the Work, or of such failure to maintain prior to any change in the required coverage. Without prejudice to any other right or remedy, the other party may elect to obtain equivalent Bonds or insurance to protect such

other party's interests at the expense of the party who was required to provide such coverage, and a Change Order shall be issued to adjust the Contract Price accordingly.

Partial Utilization – Property Insurance:

5.15. If Owner finds it necessary to occupy or use a portion or portions of the Work prior to Substantial Completion of all the Work, such use or occupancy may be accomplished in accordance with paragraph 14.10; provided that no such use or occupancy shall commence before the insurers providing the property insurance have acknowledged notice thereof and in writing effected any changes in coverage necessitated thereby. The insurers providing the property insurance shall consent by endorsement on the policy or policies, but the property insurance shall not be cancelled or permitted to lapse on account of any such partial use or occupancy.

ARTICLE 6 – CONTRACTOR'S RESPONSIBILITIES

Supervision and Superintendence:

6.1. Contractor shall supervise, inspect and direct the Work competently and efficiently, devoting such attention thereto and applying such skills and expertise as may be necessary to perform the Work in accordance with the Contract Documents. Contractor shall be solely responsible for the means, methods, techniques, sequences and procedures of construction, but Contractor shall not be responsible for the negligence of others in the design or specification of a specific means, method, technique, sequence or procedure of construction which is shown or indicated in and expressly required by the Contract Documents. Contractor shall be responsible to see that the completed Work complies accurately with the Contract Documents.

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

Labor, Materials and Equipment:

6.3. Contractor shall provide competent, suitably qualified personnel to survey, lay out and construct the Work as required by the Contract Documents. Contractor shall at all times maintain good discipline and order at the site. Except as otherwise required for the safety or protection of persons or the Work or property at the site or adjacent thereto, and except as otherwise indicated in the Contract Documents, all Work at the site shall be performed during regular working hours and Contractor will not permit overtime work or the performance of Work on Saturday, Sunday or any legal holiday without Owner's written consent given after prior written notice to Engineer.

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

6.5. All materials and equipment shall be of good quality and new, except as otherwise provided in the Contract Documents. All warranties and guarantees specifically called for by the Specifications shall expressly run to the benefit of Owner. If required by Engineer, Contractor shall furnish satisfactory evidence (including reports of required tests) as to the kind and quality of materials and equipment. All materials and equipment shall be applied, installed, connected, erected, used, cleaned and conditioned in accordance with instructions of the applicable Supplier, except as otherwise provided in the Contract Documents.

Progress Schedule:

6.6. Contractor shall adhere to the progress schedule established in accordance with paragraph 2.9 as it may be adjusted from time to time as provided below:

6.6.1. Contractor shall submit to Engineer for acceptance (to the extent indicated in paragraph 2.9) proposed adjustments in the progress schedule that will not change the Contract Times (or Milestones). Such adjustments will conform generally to the progress schedule then in effect and additionally will comply with any provisions of the General Requirements applicable thereto.

6.6.2. Proposed adjustments in the progress schedule that will change the Contract Times (or Milestones) shall be submitted in accordance with the requirements of paragraph 12.1. Such adjustments may only be made by a Change Order or Written Amendment in accordance with Article 12.

6.7. Substitutes and "Or-Equal" Items:

6.7.1. Whenever an item of material or equipment is specified or described in the Contract Documents by using the name of a proprietary item or the name of a particular Supplier, the specification or description is intended to establish the type, function and quality required. Unless the specification or description contains or is followed by words reading that no like, equivalent or "or-equal" item or no substitution is permitted, other items of material or equipment or material or equipment of other Suppliers may be accepted by Engineer under the following circumstances:

6.7.1.1. "Or-Equal": If in Engineer's sole discretion an item of material or equipment proposed by Contractor is functionally equal to that named and sufficiently similar so that no change in related Work will be required, it may be considered by Engineer as an "or-equal" item, in which case review and approval of the proposed item may, in Engineer's sole discretion, be accomplished without compliance with some or all of the requirements for acceptance of proposed substitute items.

6.7.1.2. Substitute Items: If in Engineer's sole discretion an item of material or equipment proposed by Contractor does not qualify as an "or-equal" item under subparagraph 6.7.1.1, it will be considered a proposed substitute item. Contractor shall submit sufficient information as provided below to allow Engineer to determine that the item of material or equipment proposed is essentially equivalent to that named and an acceptable substitute therefore. The procedure for review by the Engineer will include the following as supplemented in the General Requirements and as Engineer may decide is appropriate under the circumstances. Requests for review of proposed substitute items of material or equipment will not be accepted by Engineer from anyone other than Contractor. If Contractor wishes to furnish or use a substitute item of material or equipment, Contractor shall first make written application to Engineer for acceptance thereof, certifying that the proposed substitute will perform adequately the functions and achieve the results called for by the general design, be similar in substance to that specified and be suited to the same use as that specified. The application will state the extent, if any, to which the evaluation and acceptance of the proposed substitute will prejudice Contractor's achievement of Substantial Completion on time, whether or not acceptance of

the substitute for use in the Work will require a change in any of the Contract Documents (or in the provisions of any other direct contract with Owner for work on the Project) to adapt the design to the proposed substitute and whether or not incorporation or use of the substitute in connection with the Work is subject to payment of any license fee or royalty. All variations of the proposed substitute from that specified will be identified in the application and available maintenance, repair and replacement service will be indicated. The application will also contain an itemized estimate of all costs or credits that will result directly or indirectly from acceptance of such substitute, including costs of redesign and claims of other contractors affected by the resulting change, all of which will be considered by Engineer in evaluating the proposed substitute. Engineer may require Contractor to furnish additional data about the proposed substitute.

6.7.1.3. Contractor's Expense: All data to be provided by Contractor in support of any proposed "or-equal" or substitute item will be at Contractor's expense.

6.7.2. Substitute Construction Methods or Procedures: If a specific means, method, technique, sequence or procedure of construction is shown or indicated in an expressly required by the Contract Documents, Contractor may furnish or utilize a substitute means, method, technique, sequence or procedure of construction acceptable to Engineer. Contractor shall submit sufficient information to allow Engineer, in Engineer's sole discretion, to determine that the substitute proposed is equivalent to that expressly called for by the Contract Documents. The procedure for review by Engineer will be similar to that provided in subparagraph 6.7.1.2.

6.7.3. Engineer's Evaluation: Engineer will be allowed a reasonable time within which to evaluate each proposal or submittal made pursuant to paragraphs 6.7.1.2 and 6.7.2. Engineer will be the sole judge of acceptability. No "or-equal" or substitute will be ordered, installed or utilized without Engineer's prior written acceptance which will be evidenced by either a Change Order or an approved Shop Drawing. Owner may require Contractor to furnish at Contractor's expense a special performance guarantee or other surety with respect to any "or-equal" or substitute. Engineer will record time required by Engineer and Engineer's Consultants in evaluating substitutes proposed or submitted by Contractor pursuant to paragraphs 6.7.1.2 and 6.7.2 and in making changes in the Contract Documents (or in the provisions of any other direct contract with Owner for work on the Project) occasioned thereby. Whether or not Engineer accepts a substitute item so proposed or submitted by Contractor, Contractor shall reimburse Owner for the changes of Engineer and Engineer's Consultants for evaluating each such proposed substitute item.

6.8. Concerning Subcontractors, Suppliers and Others:

The Contractor shall submit a list of Subcontractors and major Material Suppliers for the Owner's approval within (24) hours after Bid Opening. Such list shall be accompanied by an experience statement with pertinent information as to similar projects and other evidence of qualifications from each such Subcontractor, person and organization requested by Owner. If Owner, after due investigation has reasonable objections to any proposed Subcontractor, other person or organization, the Owner may before giving the Notice of Award request the apparent successful Contractor to submit an acceptable Subcontractor without an increase in Bid Price. If the apparent successful Contractor declines to make any such substitution, the Contract shall not be awarded to such Contractor, but his declining to make any such substitution will not constitute grounds for sacrificing his Bid Security. Any Subcontractor, other person or organization so listed and to whom Owner does not make written objection prior to the giving of the Notice of Award will be deemed acceptable to Owner.

6.8.1. Contractor shall not employ any Subcontractor, Supplier or other person or organization (including those acceptable to Owner and Engineer as indicated in paragraph 6.8.2), whether initially or as a substitute, against whom Owner or Engineer may have reasonable objection. Contractor shall not be required to employ any subcontractor, Supplier or other person or organization to furnish or perform any of the Work against whom Contractor has reasonable objection.

6.8.2. If the Supplementary Conditions require the identity of certain Subcontractors, Suppliers or other persons or organizations (including those who are to furnish the principal items of materials or equipment) to be submitted to Owner in advance of the specified date prior to the Effective Date of the Agreement for acceptance by Owner and Engineer, and if Contractor has submitted a list thereof in accordance with the Supplementary Conditions, Owner's or Engineer's acceptance (either in writing or by failing to make written objection thereto by the date indicated for acceptance or objection in the project documents or the Contract Documents) of any such Subcontractor, Supplier or other person or organization so identified may be revoked on the basis of reasonable objection after due investigation, in which case Contractor shall submit an acceptable substitute, the Contract Price will be adjusted by the difference in the cost occasioned by such substitution and an appropriate Change Order will be issued or Written Amendment signed. No acceptance by Owner or Engineer of any such Subcontractor, Supplier or other person or organization shall constitute a waiver of any right of Owner or Engineer to reject **defective** Work.

6.9.1. Contractor shall be fully responsible to Owner and Engineer for all acts and omissions of the Subcontractors, Suppliers and other persons and organizations performing or furnishing any of the Work under a direct or indirect contract with Contractor just as Contractor is responsible for Contractor's own acts and omissions. Nothing in the Contract Documents shall create for the benefit of any such Subcontractor, Supplier, or other person or organization any contractual relationship between Owner or Engineer and any such Subcontractor, Supplier or other person or organization, nor shall it create any obligation on the part of Owner or Engineer to pay or to see to the payment of any moneys due any such Subcontractor, Supplier or other person or organization except as may otherwise be required by Laws and Regulations.

6.9.2. Contractor shall be solely responsible for scheduling and coordinating the Work of Subcontractors, Suppliers and other persons and organizations performing or furnishing any of the Work under a direct or indirect contract with Contractor. Contractor shall require all Subcontractors, Suppliers and such other persons and organizations performing or furnishing any of the Work to communicate with the Engineer through Contractor.

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

6.11. All Work performed by Contractor by a Subcontractor or Supplier will be pursuant to an appropriate agreement between Contractor and the Subcontractor or Supplier which specifically binds the Subcontractor or Supplier to the applicable terms and conditions of the Contract Documents for the benefit of Owner and Engineer. Whenever any such agreement is with a Subcontractor or Supplier who is listed as an additional insured on the property insurance provided in paragraph 5.6. or 5.7. the agreement between the Contractor and the Subcontractor or Supplier will contain provisions whereby the Subcontractor or Supplier waives all rights against Owner, Contractor, Engineer, Engineer's Consultants and all other additional insureds for all losses and damages caused by, arising out of or resulting from any of the perils covered by such policies and

any other property insurance applicable to the Work. If the insurers on any such policies require separate waiver forms to be signed by any Subcontractor or Supplier, Contractor will obtain the same.

Patent Fees and Royalties:

6.12. Contractor shall pay all license fees and royalties and assume all costs incident to the use in the performance of the Work or the incorporation in the Work of any invention, design, process, product or device which is the subject of patent rights or copyrights held by others. If a particular invention, design, process, product or device is specified in the Contract Documents for use in the performance of the Work and if to the actual knowledge of Owner or Engineer its use is subject to patent rights or copyrights calling for the payment of any license fee or royalty to others, the existence of such rights shall be disclosed by Owner in the Contract Documents. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner, Engineer, Engineer's Consultants and the officers, directors, employees, agents and other consultants of each and any of them from and against all claims, costs, losses and damages arising out of or resulting from any infringement of patent rights or copyrights incident to the use in the performance of the Work or resulting from the incorporation in the Work of any invention, design, process, product or device not specified in the Contract Documents.

Permits:

6.13. Unless otherwise provided in the Supplementary Conditions, Contractor shall obtain and pay for all construction permits and licenses. Owner shall assist Contractor, when necessary, in obtaining such permits and licenses. Contractor shall pay all governmental charges and inspection fees necessary for the prosecution of the Work, which are applicable at the time of opening of Bids, or, if there are no Bids, on the Effective Date of the Agreement. Contractor shall pay all charges of utility owners for connections to the Work, and Owner shall pay all charges of such utility owners for capital costs related thereto such as plant investment fees.

6.14 Laws and Regulations:

6.14.1. Contractor shall give all notices and comply with all Laws and Regulations applicable to furnishing and performance of the Work. Except where otherwise expressly required by applicable Laws and Regulations, neither Owner nor Engineer shall be responsible for monitoring Contractor's compliance with any Laws or Regulations.

6.14.2. If Contractor performs any Work knowing or having reason to know that it is contrary to Laws or Regulations, Contractor shall bear all claims, costs, losses and damages caused by, arising out of or resulting therefrom: however, it shall not be Contractor's primary responsibility to make certain that the Specifications and Drawings are in accordance with Laws and Regulations, but this shall not relieve Contractor or Contractor's obligations under paragraph 3.3.2.

Taxes:

6.15. Contractor shall pay all sales, consumer, use and other similar taxes required to be paid by Contractor in accordance with the Laws and Regulations of the place of the Project which are applicable during the performance of the Work.

Use of Premises:

6.16. Contractor shall confine construction equipment, the storage of materials and equipment and the operations of workers to the site and land and areas identified in and permitted by the Contract Documents, rights-of-way, permits and easements, and shall not unreasonably encumber the premises with construction equipment or other materials or equipment. Contractor shall assume full responsibility for any damage to any such land or area, or to the owner or occupant thereof or of any adjacent land or areas, resulting from the performance of the Work. Should any claim be made by any such owner or occupant because of the performance of the Work, Contractor shall promptly settle with such other party by negotiation or otherwise resolve the claim by arbitration or other dispute resolution proceeding or at law. Contractor shall, to the fullest extent permitted by Laws and Regulations, indemnify and hold harmless Owner, Engineer, Engineer's Consultant and anyone directly or indirectly employed by any of them from and against all claims costs, losses and damages arising out of or resulting from any claim or action, legal or equitable, brought by any such owner or occupant against Owner, Engineer or any other party indemnified hereunder to the extent caused by or based upon Contractor's performance of the Work.

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

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

Record Documents:

6.19. Contractor shall maintain in a safe place at the site one record copy of all Drawings, Specifications, Addenda, Written Amendments, Change Orders, Work Change Directives, Field Orders and written interpretations and clarifications (issued pursuant to paragraph 9.4) in good order and annotated to show all changes made during construction. These record documents together with all approved Samples and a counterpart of all approved Shop Drawings will be available to Engineer for reference. Upon completion of the Work, these record documents, Samples and Shop Drawings will be delivered to Engineer for Owner.

Safety and Protection:

6.20. Contractor shall be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the Work. Contractor shall take all necessary precautions for the safety of, and shall provide the necessary protection to prevent damage, injury or loss to:

6.20.1. all persons on the Work site or who may be affected by the Work;

6.20.2. all the Work and materials and equipment to be incorporated therein, whether in storage on or off the site; and

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

Contractor shall comply with all applicable Laws and Regulations of any public body having jurisdiction for safety of persons or property or to protect them from damage, injury or loss; and shall erect and maintain all necessary safeguards for such safety and protection. Contractor shall notify owners of adjacent property and of Underground Facilities and utility owners when prosecution of the Work may affect them, and shall cooperate with them in the protection, removal, relocation and replacement of their property. All damage, injury or loss to any property referred to in paragraph 6.20.2. or 6.20.3. caused, directly or indirectly, in whole or in part, by Contractor, any Subcontractor, Supplier or any other person or organization directly or indirectly employed by any of them to perform or furnish any of the Work or anyone for whose acts any of them may be liable, shall be remedied by Contractor (except damage or loss attributable to the fault of Drawings or Specifications or to the acts or omissions of Owner or Engineer or Engineer's Consultant or anyone employed by any of them or anyone for whose acts any of them may be liable, and not attributable, directly or indirectly, in whole or in part, to the fault or negligence of Contractor or any Subcontractor, Supplier or other person or organization directly or indirectly employed by any of them). Contractor's duties and responsibilities for safety and for protection of the Work shall continue until such time as all the Work is completed and Engineer has issued a notice to Owner and Contractor in accordance with paragraph 14.13. that the Work is acceptable (except as otherwise expressly provided in connection with Substantial Completion).

Safety Representative:

6.21. Contractor shall designate a qualified and experienced safety representative at the site whose duties and responsibilities shall be the prevention of accidents and the maintaining and supervising of safety precautions and programs.

Hazard Communication Programs:

6.22. Contractor shall be responsible for coordinating any exchange of material safety data sheets or other hazard communication information required to be made available to or exchanged between or among employers at the site in accordance with Laws or Regulations.

Emergencies:

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

6.24. Shop Drawings and Samples:

6.24.1. Contractor shall submit Shop Drawings to Engineer for review and approval in accordance with the accepted schedule of Shop Drawings and Sample submittals (see paragraph 2.9.). All submittals will be identified as Engineer may require and in the number of copies specified in the General Requirements. The

data shown on the Shop Drawings will be complete with respect to quantities, dimensions, specified performance and design criteria, materials and similar data to shown Engineer the materials and equipment Contractor proposes to provide and to enable Engineer to review the information for the limited purposes required by paragraph 6.26.

6.24.2. Contractor shall also submit Samples to Engineer for review and approval in accordance with said accepted schedule of Shop Drawings and Sample submittals. Each Sample will be identified clearly as to material, Supplier, pertinent data such as catalog numbers and the use for which intended and otherwise as Engineer may require to enable Engineer to review the submittal for the limited purposes required by paragraph 6.26. The numbers of each Sample to be submitted will be as specified in the Specifications.

6.25. Submittal Procedures:

6.25.1. Before submitting each Shop Drawing or Sample, Contractor shall have determined and verified:

6.25.1.1 all field measurements, quantities, dimensions, specified performance criteria, installation requirements, materials, catalog numbers and similar information with respect thereto,

6.25.1.2. all materials with respect to intended use, fabrication, shipping, handling storage, assembly and installation pertaining to the performance of the Work, and

6.25.1.3. all information relative to Contractor's sole responsibilities in respect of means, methods, techniques, sequences and procedures of construction and safety precautions and programs incident thereto.

Contractor shall also have reviewed and coordinated each Shop Drawing or Sample with other Shop Drawings and Samples and with the requirements of the Work and the Contract Documents.

6.25.2 Each submittal will bear a stamp or specific written indication that Contractor has satisfied Contractor's obligations under the Contract Documents with respect to Contractor's review and approval of that submittal.

6.25.3. At the time of each submission, Contractor shall give Engineer specific written notice of such variations, if any, that the Shop Drawing or Sample submitted may have from the requirements of the Contract Documents, such notice to be in a written communication separate from the submittal; and, in addition, shall cause a specific notation to be made on each Shop Drawing and Sample submitted to Engineer for review and approval of each such variation.

6.26. Engineer will review and approve Shop Drawings and Samples in accordance with the schedule of Shop Drawings and Sample submittals accepted by Engineer as required by paragraph 2.9. Engineer's review and approval will be only to determine if the items covered by the submittals will, after installation or incorporation in the Work, conform to the information given in the Contract Documents and be compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents. Engineer's review and approval will not extend to means, methods, techniques, sequences or procedures of construction (except where a particular means, method, technique, sequence or procedure of construction is specifically and expressly called for by the Contract Documents) or to safety precautions or programs incident thereto. The review and approval of a separate item as such will not indicate approval of the assembly in which the item functions. Contractor shall make corrections required by Engineer, and shall return the required number of corrected copies of Shop Drawings and submit as required new Samples for

review and approval. Contractor shall direct specific attention in writing to revisions other than the corrections called for by Engineer on previous submittals.

6.27. Engineer's review and approval of Shop Drawings or Samples shall not relieve Contractor from responsibility for any variation from the requirements of the Contract Documents unless Contractor has in writing called Engineer's attention to each such variation at the time of submission as required by paragraph 6.25.3 and Engineer has given written approval of each such variation by specific written notation thereof incorporated in or accompanying Shop Drawing or Sample approval; nor will any approval by Engineer relieve Contractor from responsibility for complying with the requirements of paragraph 6.25.1.

6.28. Where a Shop Drawing or Sample is required by the Contract Documents or the schedule of Shop Drawings and Sample submissions accepted by Engineer as required by paragraph 2.9, any related Work performed prior to Engineer's review and approval of the pertinent submittal will be at the sole expense and responsibility of Contractor.

Continuing the Work:

6.29. Contractor shall carry on the Work and adhere to the progress schedule during all disputes or disagreements with Owner. No Work shall be delayed or postponed pending resolution of any disputes or disagreements, except as permitted by paragraph 15.5 or as Owner and Contractor may otherwise agree in writing.

6.30. Contractor's General Warranty and Guarantee:

6.30.1. Contractor warrants and guarantees to Owner, Engineer and Engineer's Consultants that all Work will be in accordance with the Contract Documents and will not be defective. Contractor's warranty and guarantee hereunder excludes defects or damage caused by:

6.30.1.1. abuse, modification or improper maintenance or operation by persons other than Contractor, Subcontractors or Suppliers; or

6.30.1.2. normal wear and tear under normal usage.

6.30.2. Contractor's obligation to perform and complete the Work in accordance with the Contract Documents shall be absolute. None of the following will constitute an acceptance of Work that is not in accordance with the Contract Documents or a release of Contractor's obligation to perform the Work in accordance with the Contract Documents:

6.30.2.1. observations by Engineer;

6.30.2.2. recommendation of any progress or final payment by Engineer;

6.30.2.3. the issuance of a certificate of Substantial Completion or any payment by Owner to Contractor under the Contract Documents;

6.30.2.4. use or occupancy of the Work or any part thereof by Owner;

6.30.2.5. any acceptance by Owner or any failure to do so;

6.30.2.6. any review and approval of Shop Drawing or Sample submittal or the issuance of a notice of acceptability by Engineer pursuant to paragraph 14.13;

6.30.2.7. any inspection, test or approval by others; or

6.30.2.8. any correction of **defective** Work by Owner.

Indemnification:

6.31. To the fullest extent permitted by Laws and Regulations. Contractor shall indemnify and hold harmless the Florida Department of Transportation, Okaloosa County, Engineer, Engineer's Consultants and the officers, directors, employees, agents and other consultants of each and any of them from and against all claims, costs, losses and damages (including but not limited to all fees and charges of engineers, architects, attorneys and other professionals and all court or arbitration or other dispute resolution costs) caused by, arising out of or resulting from the performance of the Work, provided that any such claim, cost, loss or damage: (i) is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the Work itself), including the loss of use resulting therefrom, and (ii) is caused in whole or in part by any negligent act or omission of Contractor, any Subcontractor, any Supplier, any person or organization directly or indirectly employed by any of them to perform or furnish any of the Work or anyone for whose acts any of them may be liable, regardless of whether or not caused in part by any negligence or omission of a person or entity indemnified hereunder or whether liability is imposed upon such indemnified party by Laws and Regulations regardless of the negligence of any such person or entity.

6.32. In any and all claims against Owner or Engineer or any of their respective consultants, agents, officers, directors or employees by any employee (or the survivor or personal representative of such employee) of Contractor, any Subcontractor, any Supplier, any person or organization directly or indirectly employed by any of them to perform or furnish any of the Work, or anyone for whose acts any of them may be liable, the indemnification obligation under paragraph 6.31 shall not be limited in any way by any limitation on the amount or type of damages, compensation or benefits payable by or for Contractor or any such Subcontractor, Supplier or other person or organization under workers' compensation acts, disability benefit acts or other employee benefit acts.

6.33. The indemnification obligations of Contractor under paragraph 6.31 shall not extend to the liability of Engineer and Engineer's Consultants, officers, directors, employees or agents caused by the professional negligence, errors or omissions of any of them.

Survival of Obligations:

6.34. All representations, indemnifications, warranties and guarantees made in, required by or given in accordance with the Contract Documents, as well as all continuing obligations indicated in the Contract Documents, will survive final payment, completion and acceptance of the Work and termination or completion of the Agreement.

ARTICLE 7 – OTHER WORK

Related Work at Site:

7.1. Owner may perform other work related to the Project at the site by Owner's own forces, or let other direct contracts therefore which shall contain General Conditions similar to these, or have other work performed by utility owners. If the fact that such other work is to be performed was not noted in the Contract Documents, then; (i) written notice thereof will be given to Contractor prior to starting any such

other work, and (ii) Contractor may make a claim therefore as provided in Articles 11 and 12 if Contractor believes that such performance will involve additional expense to Contractor or requires additional time and the parties are unable to agree as to the amount or extent thereof.

7.2. Contractor shall afford each other contractor who is a party to such a direct contract and each utility owner (and Owner if Owner is performing the additional work with Owner's employees) proper and safe access to the site and a reasonable opportunity for the introduction and storage of materials and equipment and the execution of such other work and shall properly connect and coordinate the Work with theirs. Unless otherwise provided in the Contract Documents. Contractor shall do all cutting, fitting, and patching of the Work that may be required to make its several parts come together properly and integrate with such other work. Contractor shall 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 Engineer and the others whose work will be affected. The duties and responsibilities of Contractor under this paragraph are for the benefit of such utility owners and other contractors to the extent that there are comparable provisions for the benefit of Contractor in said direct contracts between Owner and such utility owners and other contractors.

7.3. If the proper execution or results of any part of Contractor's Work depends upon work performed by others under this Article 7. Contractor shall inspect such other work and promptly report to Engineer in writing any delays, defects or deficiencies in such other work that render it unavailable or unsuitable for the proper execution and results of Contractor's Work. Contractor's failure so to report will constitute an acceptance of such other work as fit and proper for integration with Contractor's Work except for latent or non-apparent defects and deficiencies in such other work.

Coordination:

7.4. If Owner contracts with others for the performance of other work on the Project at the site, the following will be set forth in Supplementary Conditions:

7.4.1. the person, firm or corporation who will have authority and responsibility for coordination of the activities among the various prime contractors will be identified;

7.4.2. the specific matters to be covered by such authority and responsibility will be itemized: and

7.4.3. the extent of such authority and responsibilities will be provided.

Unless otherwise provided in the Supplementary Conditions, Owner shall have sole authority and responsibility in respect of such coordination.

ARTICLE 8 – OWNER'S RESPONSIBILITIES

8.1. Except as otherwise provided in these General Conditions, Owner shall issue all communications to Contractor through Engineer.

8.2. In case of termination of the employment of Engineer, Owner shall appoint an engineer, whose status under the Contract Documents shall be that of the former Engineer.

8.3. Owner shall furnish the data required of Owner under the Contract Documents promptly and shall make payments to Contractor promptly when they are due as provided in paragraphs 14.4 and 14.13.

8.4. Owner's duties in respect of providing lands and easements and providing engineering surveys to establish reference points are set forth in paragraphs 4.1 and 4.4. Paragraph 4.2 refers to Owner's identifying and making available to Contractor copies of reports of explorations and tests of subsurface conditions at the site and drawings of physical conditions in existing structures at or contiguous to the site that have been utilized by Engineer in preparing the Contract Documents.

8.5. Owner's responsibilities in respect of purchasing and maintaining liability and property insurance are set forth in paragraphs 5.5 through 5.10.

8.6. Owner is obligated to execute Change Orders as indicated in paragraph 10.4.

8.7. Owner's responsibility in respect of certain inspections, tests and approvals is set forth in paragraph 13.4.

8.8. In connection with Owner's right to stop Work or suspend Work, see paragraphs 13.10 and 15.1. Paragraph 15.2 deals with Owner's right to terminate services of Contractor under certain circumstances.

8.9. The Owner shall not supervise, direct or have control or authority over, nor be responsible for, Contractor's means, methods, techniques, sequences or procedures of construction or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the furnishing or performance of the Work. Owner will not be responsible for Contractor's failure to perform or furnish the Work in accordance with the Contract Documents.

8.10. Owner's responsibility in respect of undisclosed Asbestos, PCBs, Petroleum, Hazardous Waste or Radioactive Materials uncovered or revealed at the site is set forth in paragraph 4.5.

8.11. If and to the extent Owner has agreed to furnish Contractor reasonable evidence that financial arrangements have been made to satisfy Owner's obligations under the Contract Documents, Owner's responsibility in respect thereof will be as set forth in the Supplementary Conditions.

ARTICLE 9 – ENGINEER'S STATUS DURING CONSTRUCTION

Owner's Representative:

9.1. Engineer will be Owner's representative during the construction period. The duties and responsibilities and the limitations of authority of Engineer as Owner's representative during construction are set forth in the Contract Documents and shall not be extended without written consent of Owner and Engineer.

Visits to Site:

9.2. Engineer will make visits to the site at intervals appropriate to the various stages of construction as Engineer deems necessary in order to observe as an experienced and qualified design professional the progress that has been made and the quality of the various aspects of Contractor's executed Work. Based on information obtained during such visits and observations, Engineer will endeavor for the benefit of Owner to determine, in general, if the Work is proceeding in accordance with the Contract Documents. Engineer will not be required to make exhaustive or continuous on-site inspections to check the quality or quantity of the Work. Engineer's efforts will be directed toward providing for Owner a greater degree of

confidence that the completed Work will conform generally to the Contract Documents. On the basis of such visits and on-site observations, Engineer will keep Owner informed of the progress of the Work and will endeavor to guard Owner against defective Work. Engineer's visits and on-site observations are subject to all the limitations on Engineer's authority and responsibility set forth in paragraph 9.13, and particularly, but without limitation, during or as a result of Engineer's on-site visits or observations of Contractor's Work Engineer will not supervise, direct, control or have authority over or be responsible for Contractor's means, methods, techniques, sequences or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the furnishing or performance of the Work.

Project Representative:

9.3. If Owner and Engineer agree, Engineer will furnish a Resident Project Representative to assist Engineer in providing more continuous observation of the Work. The responsibilities and authority and limitations thereon of any such Resident Project Representative and assistants will be as provided in paragraph 9.13 and in the Supplementary Conditions. If Owner designates another representative or agent to represent Owner at the site who is not Engineer's Consultant, agent or employee, the responsibilities and authority and limitations thereon of such other person will be as provided in the Supplementary Conditions.

9.3.1 Engineer may furnish a Resident Project Representative, assistants and other field staff as needed, to assist Owner in observing performance of the Work. The Resident Project Representative is to observe and inspect, in the Owner's interest, the materials furnished and the work done as the work progresses in order to insure full and complete compliance with the contract and to verify quantities of work completed.

9.3.2 Owner may also designate one of its employees to represent Owner for these purposes.

9.3.3 Engineer, Resident Project Representative, Owner and all such other persons referred to shall have unrestricted access to all parts of the Work. Contractor shall cooperate by supplying necessary facilities and assistance required by above persons to carry out their work of observation and inspection.

9.3.4 It is not the function of the Engineer, Resident Project Representative or Owner to supervise or direct the manner in which the work to be done under this Contract is carried on or conducted. The Engineer, Resident Project Representative or Owner is not responsible for construction means, methods, techniques, sequences or procedures, or for safety precautions and programs in connection with the work, and they will not be responsible for the Contractor's failure to carry out the work in accordance with the Contract Documents. Nevertheless, Contractor agrees that any method or procedure, which in the opinion of the Engineer or Owner does not achieve the required results or quality of the work specified, shall be discontinued immediately upon the order of the Engineer.

9.3.5 All communications between Contractor and Engineer or Contractor and Owner are to be through the Resident Project Representative.

9.3.6 Duties and Responsibilities of Resident Project Representative (RPR):

1) RPR will act as directed by and under the supervision of Engineer and/or Owner, and will confer with Engineer and Owner regarding RPR's actions. RPR's dealings in matters pertaining to the on-site work shall in general be with Engineer and Contractor keeping Owner advised as necessary.

RPR's dealings with subcontractors shall only be through or with the full knowledge and approval of Contractor.

- 2) Review progress schedule, schedule of Shop Drawing submittals and schedule of values prepared by Contractor and consult with Engineer and Owner concerning acceptability.*
- 3) Attend meetings with Contractor, such as pre-construction conferences, progress meetings, job conferences and other project-related meetings, and prepare and circulate copies of minutes thereof.*
- 4) Serve as Engineer's and Owner's liaison with Contractor, working principally through Contractor's superintendent and assist in understanding the intent of the Contract Documents.*
- 5) Advise Engineer, Owner and Contractor of the commencement of any Work requiring a Shop Drawing or sample if the submittal has not been approved by Engineer.*
- 6) Conduct on-site observations of the Work in progress to assist Engineer and Owner in determining if the Work is in general proceeding in accordance with the Contract Documents. Report to Engineer and Owner whenever RPR believes that any Work is unsatisfactory, faulty or defective or does not conform to the Contract Documents, or has been damaged, or does not meet the requirements of any inspection, test or approval required to be made; and advise Engineer and Owner of Work that RPR believes should be corrected or rejected or should be uncovered for observation, or requires special testing, inspection or approval.*
- 7) Report to Engineer and Owner when clarifications and interpretations of the Contract Documents are needed and transmit to Contractor clarifications and interpretations as issued by Engineer.*
- 8) Consider and evaluate Contractor's suggestions for modifications in Drawings or Specifications and report with RPR's recommendations to Engineer and Owner. Transmit to Contractor decisions as issued by Engineer and/or Owner.*
- 9) Maintain orderly files for correspondence, reports of job conferences, Shop Drawings and samples, reproductions of original Contract Documents including all Work Directive Changes, Addenda, Change Orders, Field Orders, additional Drawings issued subsequent to the execution of the Contract, Engineer's clarifications and interpretations of the Contract Documents, progress reports, and other Project related documents.*
- 10) Keep a diary or log book, recording Contractor hours on the job site, weather conditions, data relative to questions of Work Directive Changes, Change Orders or Changed conditions, list of job site visitors, daily activities, decisions, observations in general, and specific observations in more detail as in the case of observing test procedures; and send copies to Engineer and Owner.*
- 11) Record names, addresses and telephone numbers of all Contractors, subcontractors and major suppliers of materials and equipment.*
- 12) Furnish Engineer and Owner periodic reports as required of progress of the Work and of Contractor's compliance with the progress schedule and schedule of Shop Drawing and sample submittals.*

- 13) *Draft proposed Change Orders and Work Directive Changes, obtaining backup material from Contractor and recommend to Engineer and Owner Change Orders, Work Directive Changes, and Field Orders.*
- 14) *Report immediately to Engineer and Owner upon the occurrence of any accident.*
- 15) *Review applications for payment with Contractor for compliance with the established procedure for their submission and forward with recommendations to Engineer, noting particularly the relationship of the payment requested to the schedule of values, Work completed and materials and equipment delivered at the site but not incorporated in the Work.*
- 16) *During the course of the Work, verify that certificates, maintenance and operation manuals and other data required to be assembled and furnished by Contractor are applicable to the items actually installed and in accordance with the Contract Documents, and have this material delivered to Engineer for review and forwarding to Owner prior to final payment for the work.*
- 17) *Before Engineer issues a Certificate of Substantial Completion, submit to Contractor a list of observed items requiring completion or correction.*
- 18) *Conduct final inspection in the company of Engineer, Owner and Contractor and prepare a final list of items to be completed or corrected.*
- 19) *Observe that all items on final list have been completed or corrected and make recommendations to Engineer and Owner concerning acceptance.*

9.3.7 *Limitations of Authority of Resident Project Representative (RPR):*

- 1) *Shall not authorize any deviation from the Contract Documents or substitution of materials or equipment, unless authorized by Engineer or Owner.*
- 2) *Shall not exceed limitations of Engineer's authority as set forth in the Contract Documents.*
- 3) *Shall not undertake any of the responsibilities of Contractor, subcontractors or Contractor's superintendent.*
- 4) *Shall not advise on, issue directions relative to or assume control over any aspect of the means, methods, techniques, sequences or procedures of construction unless such advice or directions are specifically required by the Contract Documents.*
- 5) *Shall not advise on, issue directions regarding or assume control over safety precautions and programs in connection with the Work.*
- 6) *Shall not accept Shop Drawing or sample submittals from anyone other than Contractor.*

9.3.8 *The Engineer and or Owner shall have the authority to reject any work, or materials, or any part thereof, which does not in his opinion conform to the plans, drawings, specifications and contract, and it shall be permissible for him to do so at any time during the progress of the work and until its acceptance.*

No material of any kind shall be used upon the work until it has been inspected and accepted by the Engineer. All materials rejected shall be removed immediately from the work and not again offered for inspection. Any materials or workmanship found at any time to be defective or not of the quality or character required by the plans and specifications shall be remedied at once regardless of previous inspection.

Such inspection shall not relieve the Contractor from any obligation to perform said work strictly in accordance with the plans and specifications and work not so constructed shall be removed and made good by the Contractor at his own expense, and free from all expense to the Owner whenever so ordered by the Owner without reference to any previous oversight or error in inspection.

Clarifications and Interpretations:

9.4. Engineer will issue with reasonable promptness such written clarifications or interpretations of the requirements of the Contract Documents (in the form of Drawings or otherwise) as Engineer may determine necessary, which shall be consistent with the intent of and reasonably inferable from Contract Documents. Such written clarifications and interpretations will be binding on Owner and Contractor. If Owner or Contractor believes that a written clarification or interpretation justifies an adjustment in the Contract Price or the Contract Times and the parties are unable to agree to the amount or extent thereof, if any, Owner or Contractor may make a written claim therefore as provided in Article 11 or Article 12.

Authorized Variations in Work:

9.5. Engineer may authorize minor variations in the Work from the requirements of the Contract Documents which do not involve an adjustment in the Contract Price or the Contract Times and are compatible with the design concept of the completed Project as a functioning whole as indicated by the Contract Documents. These may be accomplished by a Field Order and will be binding on Owner and also on Contractor who shall perform the Work involved promptly. If Owner or Contractor believes that a Field Order justifies an adjustment in the Contract Price or the Contract Times and the parties are unable to agree as to the amount or extent thereof, Owner or Contractor may make a written claim therefore as provided in Article 11 or 12.

Rejecting Defective Work:

9.6. Engineer will have authority to disapprove or reject Work which Engineer believes to be defective, or that Engineer believes will not produce a complete Project that conforms to the Contract Documents or that will prejudice the integrity of the design concept of the completed Project as a functioning whole as indicated by the Contract Documents. Engineer will also have authority to require special inspection or testing of the Work as provided in paragraph 13.9, whether or not the Work is fabricated, installed or completed.

Shop Drawings, Change Orders and Payments:

9.7. In connection with Engineer's authority as to Shop Drawings and Samples, see paragraphs 6.24 through 6.28 inclusive.

9.8. In connection with Engineer's authority as to Change Orders, see Articles 10,11, and 12.

9.9. In connection with Engineer's authority as to Applications for Payment, see Article 14.

Determinations for Unit Prices:

9.10. Engineer will determine the actual quantities and classifications of Unit Price Work performed by Contractor. Engineer will review with Contractor the Engineer's preliminary determinations on such matters before rendering a written decision thereon (by recommendation of an Application for Payment or otherwise). Engineer's written decision thereon will be final and binding upon Owner and Contractor, unless, within ten days after the date of any such decision, either Owner or Contractor delivers to the other and to Engineer written notice of intention to appeal from Engineer's decision and, a formal proceeding is instituted by the appealing party in a forum of competent jurisdiction to exercise such rights or remedies as the appealing party may have with respect to Engineer's decision, unless otherwise agreed in writing by Owner and Contractor. Such appeal will not be subject to procedures of paragraph 9.11.

Decisions on Disputes:

9.11. Engineer will be the initial interpreter of the requirements of the Contract Documents and judge of the acceptability of the Work there under. Claims, disputes and other matters relating to the acceptability of the Work or the interpretation of the requirements of the Contract Documents pertaining to the performance and furnishing of the Work and Claims under Articles 11 and 12 in respect of changes in the Contract Price or Contract Times will be referred initially to Engineer in writing with a request for a formal decision in accordance with this paragraph. Written notice of each such claim, dispute or other matter will be delivered by the claimant to Engineer and the other party to the Agreement promptly, but in no event later than fifteen (15) days, after the start of the occurrence or event giving rise thereto, and written supporting data will be submitted to Engineer and the other party within forty-five (45) days after the start of such occurrence or event unless Engineer allows an additional period of time for the submission of additional or more accurate data in support of such claim, dispute or other matter. The opposing party shall submit any response to Engineer and the claimant within thirty days after receipt of the claimant's last submittal (unless Engineer allows additional time). Engineer will render a formal decision in writing within thirty days after receipt of the opposing party's submittal, if any, in accordance with this paragraph. Engineer's written decision on such claim, dispute or other matter will be final and binding upon Owner and Contractor unless: a written notice of intention to appeal from Engineer's written decision is delivered by Owner or Contractor to the other and to Engineer within thirty days after the date of such decision and a formal proceeding is instituted by the appealing party in a forum of competent jurisdiction to exercise such rights or remedies as the appealing party may have with respect to such claim, dispute or other matter in accordance with applicable Laws and Regulations within sixty days of the date of such decision, unless otherwise agreed in writing by Owner and Contractor.

9.12. When functioning as interpreter and judge under paragraphs 9.10 and 9.11, Engineer will not show partiality to Owner or Contractor and will not be liable in connection with any interpretation or decision rendered in good faith in such capacity. The rendering of a decision by Engineer pursuant to paragraphs 9.10 or 9.11 with respect to any such claim, dispute or other matter (except any which have been waived by the making or acceptance of final payment as provided in paragraph 14.15) will be a condition precedent to any exercise by Owner or Contractor of such rights or remedies as either may otherwise have under the Contract Documents or by Laws or Regulations in respect of any such claim, dispute or other matter.

9.13. Limitations on Engineer's Authority and Responsibilities:

9.13.1. Neither Engineer's authority or responsibility under this Article 9 or under any other provision of the Contract Documents nor any decision made by Engineer in good faith either to exercise or not exercise such authority or responsibility or the undertaking, exercise or performance of any authority or responsibility by Engineer shall create, impose or give rise to any duty owed by Engineer to Contractor,

any Subcontractor, and Supplier, any other person or organization, or to any surety for employee or agent of any of them.

9.13.2. Engineer will not supervise, direct, control or have authority over or be responsible for Contractor's means, methods, techniques, sequences or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the furnishing or performance of the Work. Engineer will not be responsible for Contractor's failure to perform or furnish the Work in accordance with the Contract Documents.

9.13.3. Engineer will not be responsible for the acts or omissions of Contractor or of any Subcontractor, any Supplier, or of any other person or organization performing or furnishing any of the Work.

9.13.4. Engineer's review of the final Application for Payment and accompanying documentation and all maintenance and operating instructions, schedules, guarantees, bonds and certificates of inspection, tests, and approvals and Other documentation required to be delivered by paragraph 4.12 will only be to determine generally that their content complies with the requirements of, and in the case of, certificates of inspections, tests and approvals that the results certified indicate compliance with the Contract Documents.

9.13.5. the limitations upon authority and responsibility set forth in this paragraph 9.13 shall also apply to Engineer's Consultants, Resident Project Representative and assistants.

ARTICLE 10 – CHANGES IN THE WORK

10.1. Without invalidating the Agreement and without notice to any surety, Owner may, at any time or from time to time, order additions, deletions or revisions in the Work. Such additions, deletions or revisions will be authorized by a Written Amendment, a Change Order, or a Work Change Directive. Upon receipt of any such document, Contractor shall promptly proceed with the Work involved which will be performed under the applicable conditions of the Contract Documents (except as otherwise specifically provided).

10.2. If Owner and Contractor are unable to agree as to the extent, if any, of an adjustment in the Contract Price or an adjustment of the Contract Times that should be allowed as a result of a Work Change Directive, a claim may be made therefore as provided in Article 11 or Article 12.

10.3. Contractor shall not be entitled to an increase in the Contract Price or an extension of the Contract Times with respect to any Work performed that is not required by the Contract Documents as amended, modified and supplemented as provided in paragraphs 3.5 and 3.6 except in the case of an emergency as provided in paragraph 6.23 or in the case of uncovering Work as provided in paragraph 13.9.

10.4. Owner and Contractor shall execute appropriate Change Orders recommended by Engineer covering:

10.4.1. changes in the Work which are (i) ordered by Owner pursuant to paragraph 10.1, (ii) required because of acceptance of defective Work under paragraph 13.13 or correcting defective Work under paragraph 13.14, or (iii) agreed to by the parties;

10.4.2. changes in the Contract Price or Contract Times which are agreed to by the parties; and

10.4.3. changes in the Contract Price or Contract Times which embody the substance of any written decision rendered by Engineer pursuant to paragraph 9.11;

Provided that, in lieu of executing any such Change Order, an appeal may be taken from any such decision in accordance with the provisions of the Contract Documents and applicable Laws and Regulations, but during any such appeal, Contractor shall carry on the Work and adhere to the progress schedule as provided in paragraph 6.29.

10.5. If notice of any change affecting the general scope of the Work or the provisions of the Contract Documents (including, but not limited to, Contract Price or Contract Times) is required by the provisions of any Bond to be given to a surety, the giving of any such notice will be Contractor's responsibility, and the amount of each applicable Bond will be adjusted accordingly.

ARTICLE 11 – CHANGE OF CONTRACT PRICE

11.1. The Contract Price constitutes the total compensation (subject to authorized adjustments) payable to Contractor for performing the Work. All duties, responsibilities and obligations assigned to or undertaken by Contractor shall be at Contractor's expense without change in the Contract Price.

11.2. The Contract Price may only be changed by a Change Order. Any claim for an adjustment in the Contract Price shall be based on written notice delivered by the party making the claim to the other party and to Engineer promptly (but in no event later than ten days) after the start of the occurrence or event giving rise to the claim and stating the general nature of the claim. Notice of the amount of the claim with supporting data shall be delivered within thirty days after the start of such occurrence or event (unless Engineer allows additional time for claimant to submit additional or more accurate data in support of the claim) and shall be accompanied by claimant's written statement that the adjustment claimed covers all known amounts to which the claimant is entitled as a result of said occurrence or event. All claims for adjustment in the Contract Price shall be determined by Engineer in accordance with paragraph 9.11 if Owner and Contractor cannot otherwise agree on the amount involved. No claim for an adjustment in the Contract Price will be valid if not submitted in accordance with this paragraph 11.2.

11.3 The value of any Work covered by a Change Order or of any claim for an adjustment in the Contract Price will be determined as follows:

11.3.1. where the Work involved is covered by unit prices contained in the Contract Documents, by application of such unit prices to the quantities of the items involved (subject to the provisions of paragraphs 11.9.1. through 11.9.3. inclusive);

11.3.2. where the Work involved is not covered by unit prices contained in the Contract Documents, by a mutually agreed lump sum (which may include an allowance for overhead and profit not necessarily in accordance with paragraph 11.6.2):

11.3.3. where the Work involved is not covered by unit prices contained in the Contract Documents and agreement to a lump sum is not reached under paragraph 11.3.2, on the basis of the Cost of the Work (determined as provided in paragraphs 11.4 and 11.5) plus a Contractor's fee for overhead and profit (determined as provided in paragraph 11.6).

Cost of the Work Covered by a Change Order:

11.4. The term Cost of the Work means the sum of all costs necessarily incurred and paid by Contractor in the proper performance of the Work. Except as otherwise may be agreed to in writing by Owner, such costs shall be in amounts no higher than those prevailing in the locality of the Project, shall include only the following items and shall not include any of the costs itemized in paragraph 11.5.

11.4.1. Payroll costs for employees in the direct employ of Contractor in the performance of the Work under schedules of job classifications agreed upon by Owner and Contractor. Such employees shall include without limitation superintendents, foremen and other personnel employed full-time at the site. Payroll costs for employees not employed full-time on the Work shall be apportioned on the basis of their time spent on the Work. Payroll costs shall include, but not be limited to, salaries and wages plus the cost of fringe benefits which shall include social security contributions, unemployment, excise and payroll taxes, workers' compensation, health and retirement benefits, bonuses, sick leave, vacation and holiday pay applicable thereto. The expenses of performing Work after regular working hours, on Saturday, Sunday or legal holidays, shall be included in the above to the extent authorized by Owner.

11.4.2. Cost of all materials and equipment furnished and incorporated in the Work, including costs of transportation and storage thereof, and Suppliers' field services required in connection therewith. All cash discounts shall accrue to Contractor unless Owner deposits funds with Contractor with which to make payments, in which case the cash discounts shall accrue to Owner. All trade discounts, rebates and refunds and returns from sale of surplus materials and equipment shall accrue to Owner, and Contractor shall make provisions so that they may be obtained.

11.4.3. Payments made by Contractor to the Subcontractors for Work performed or furnished by Subcontractors. If required by Owner, Contractor shall obtain competitive bids from subcontractors acceptable to Owner and Contractor and shall deliver such bids to Owner who will then determine, with the advice of Engineer, which bids, if any, will be accepted. If any subcontract provides that the Subcontractor is to be paid on the basis of Cost of the Work Plus a fee, the Subcontractor's Cost of the Work and fee shall be determined in the same manner as Contractor's Cost of the Work and fee as provided in paragraphs 11.4, 11.5, 11.6 and 11.7. All subcontracts shall be subject to the other provisions of the Contract Documents insofar as applicable.

11.4.4. Costs of special consultants (including but not limited to engineers, architects, testing laboratories, surveyors, attorneys and accountants) employed for services specifically related to the Work.

11.4.5. Supplemental costs including the following:

11.4.5.1. The proportion of necessary transportation, travel and subsistence expenses of Contractor's employees incurred in discharge of duties connected with the Work.

11.4.5.2. Cost, including transportation and maintenance, of all materials, supplies, equipment, machinery, appliances, office and temporary facilities at the site and hand tools not owned by the workers, which are consumed in the performance of the Work, and cost less market value of such items used but not consumed which remain the property of Contractor.

11.4.5.3. Rentals of all construction equipment and machinery and the parts thereof whether rented from Contractor or others in accordance with rental agreements approved by Owner with the advice of Engineer, and the costs of transportation, loading, unloading, installation, dismantling and removal thereof – all in accordance with the terms of said rental agreements. The rental of any such equipment, machinery or parts shall cease when the use thereof is no longer necessary for the Work.

11.4.5.4. Sales, consumer, use or similar taxes related to the work, and for which Contractor is liable, imposed by Laws and Regulations.

11.4.5.5. Deposits lost for causes other than negligence of Contractor, any Subcontractor or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, and royalty payments and fees for permits and licenses.

11.4.5.6. Losses and damages (and related expenses) caused by damage to the Work, not compensated by insurance or otherwise, sustained by Contractor in connection with the performance and furnishing of the Work (except losses and damages within the deductible amounts of property insurance established by Owner in accordance with paragraph 5.9), provided they have resulted from causes other than the negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable. Such losses shall include settlements made with the written consent and approval of Owner. No such losses, damages and expenses shall be included in the Cost of the Work for the purpose of determining Contractor's fee. If, however, any such loss or damage requires reconstruction and Contractor is placed in charge thereof, Contractor is placed in charge thereof, Contractor shall be paid for services a fee proportionate to that stated in paragraph 11.6.2.

11.4.5.7. The cost of utilities, fuel and sanitary facilities at the site.

11.4.5.8. Minor expenses such as telegrams, long distance telephone calls, telephone service at the site, expressage and similar petty cash items in connection with the Work.

11.4.5.9. Cost of premiums for additional Bonds and insurance required because of changes in the Work.

11.5. The term Cost of the Work Covered by a Change Order shall not include any of the following:

11.5.1. Payroll costs and other compensation of Contractor's officers, executives, principals (of partnership and sole proprietorships), general managers, engineers, architects, estimators, attorneys, auditors, accountants, purchasing and contracting agents, expeditors, timekeepers, clerks and other personnel employed by Contractor whether at the site or in Contractor's principal or a branch office for general administration of the Work and not specifically included in the agreed upon schedule of job classifications referred to in paragraph 11.4.1 or specifically covered by paragraph 11.4.4 – all of which are to be considered administrative costs covered by the Contractor's fee.

11.5.2. Expenses of Contractor's principal and branch offices other than Contractor's office at the site.

11.5.3. Any part of Contractor's capital expenses, including interest on Contractor's capital employed for the Work and charges against Contractor for delinquent payments.

11.5.4. Cost of premiums for all Bonds and for all insurance whether or not Contractor is required by the Contract Documents to purchase and maintain the same (except for the cost of premiums covered by subparagraph 11.4.5.9 above).

11.5.5. Costs due to the negligence of Contractor, any Subcontractor, or anyone directly or indirectly employed by any of them or for whose acts any of them may be liable, including but not limited to, the

correction of **defective** Work, disposal of materials or equipment wrongly supplied and making good any damage to property.

Other overhead or general expense costs of any kind and the costs of any item not specifically and expressly included in paragraph 11.4.

11.6. The Contractor's fee allowed to Contractor for overhead and profit shall be determined as follows:

11.6.1. a mutually acceptable fixed fee; or

11.6.2. if a fixed fee is not agreed upon, then a fee based on the following percentages of the various portions of the Cost of the Work:

11.6.2.1. for costs incurred under paragraphs 11.4.1 and 11.4.2, the Contractor's fee shall be ten percent;

11.6.2.2. for costs incurred under paragraph 11.4.3, the Contractor's fee shall be five percent.

11.6.2.3. where one or more tiers of subcontracts are on the basis of Cost of the Work plus a fee and no fixed fee is agreed upon, the intent of paragraphs 11.4.1, 11.4.2, 11.4.3 and 11.6.2 is that the Subcontractor who actually performs or furnishes the Work, at whatever tier, will be paid a fee of ten percent of the costs incurred by such Subcontractor under paragraphs 11.4.1 and 11.4.2 and that any higher tier Subcontractor and Contractor will each be paid a fee of five percent of the amount paid to the next lower tier Subcontractor:

11.6.2.4. no fee shall be payable on the basis of costs itemized under paragraphs 11.4.4, 11.4.5 and 11.5;

11.6.2.5. the amount of credit to be allowed by Contractor to Owner for any change which results in a net decrease in cost will be the amount of the actual net decrease in cost plus a deduction in Contractor's fee by an amount equal to five percent of such net decrease; and

11.6.2.6. when both additions and credits are involved in any one change, the adjustment in Contractor's fee shall be computed on the basis of the net change in accordance with paragraphs 11.6.2.1 through 11.6.2.5, inclusive.

11.7. Whenever the cost of any work is to be determined pursuant to paragraphs 11.4 and 11.5, Contractor

will establish and maintain records thereof in accordance with generally accepted accounting practices and submit in form acceptable to Engineer an itemized cost breakdown together with supporting data.

Cash Allowances:

11.8. NOT USED

11.9. Unit Price Work:

11.9.1. Where the Contract Documents provide that all or part of the Work is to be Unit Price Work, initially the Contract Price will be deemed to include for all Unit Price Work an amount equal to the sum

of the established unit price for each separately identified item of Unit Price Work times the estimated quantity of each item as indicated in the Agreement. The estimated quantities of items of Unit Price Work are not guaranteed and are solely for the purpose of comparison of Bids and determining an initial Contract Price. Determinations of the actual quantities and classifications of Unit Price Work performed by Contractor will be made by Engineer in accordance with paragraph 9.10.

11.9.2. Each unit price will be deemed to include an amount considered by Contractor to be adequate to cover Contractor's overhead and profit for each separately identified item.

11.9.3. Owner or Contractor may make a claim for an adjustment in the Contract Price in accordance with Article 11 if:

11.9.3.1. the quantity of any item of Unit Price Work performed by Contractor differs materially and significantly from the estimated quantity of such item indicated in the Agreement; and

11.9.3.2. there is no corresponding adjustment with respect to any other item of Work; and

11.9.3.3. if Contractor believes that Contractor is entitled to an increase in Contract Price as a result of having incurred additional expense or Owner believes that Owner is entitled to a decrease in Contract Price and the parties are unable to agree as to the amount of any such increase or decrease.

ARTICLE 12 – CHANGE OF CONTRACT TIMES

12.1. The Contract Times (or Milestones) may only be changed by a Change Order or a Written Amendment. Any claim for an adjustment of the Contract Times (or Milestones) shall be based on written notice delivered by the party making the claim to the other party and to Engineer promptly (but in no event later than thirty days) after the occurrence of the event giving rise to the claim and stating the general nature of the claim. Notice of the extent of the claim with supporting data shall be delivered within sixty days after such occurrence (unless Engineer allows an additional period of time to ascertain more accurate data in support of the claim) and shall be accompanied by the claimant's written statement that the adjustment claimed is the entire adjustment to which the claimant has reason to believe it is entitled as a result of the occurrence of said event. All claims for adjustment in the Contract Times (or Milestones) shall be determined by Engineer in accordance with paragraph 9.11 if Owner and Contractor cannot otherwise agree. No claim for an adjustment in the Contract Times (or Milestones) will be valid if not submitted in accordance with the requirements of this paragraph 12.1.

12.2. All time limits stated in the Contract Documents are of the essence of the Agreement.

12.3. Where Contractor is prevented from completing any part of the Work within the Contract Times (or Milestones) due to delay beyond the control of Contractor, the Contract Times (or Milestones) will be extended in an amount equal to the time lost due to such delay if a claim is made therefore as provided in paragraph 12.1. Delays beyond the control of Contractor shall include, but not be limited to, acts or neglect by Owner, acts or neglect of utility owners or other contractors performing other work as contemplated by Article 7, fires, floods, epidemics, abnormal weather conditions or acts of God. Delays attributable to and within the control of a Subcontractor or Supplier shall be deemed to be delays within the control of Contractor.

12.4. Should Contractor be obstructed or delayed in the prosecution of or completion of the Work as a result of unforeseeable causes beyond the control of Contractor, and not due to its fault or neglect,

including but not restricted to acts of God or of the public enemy, acts of government, fires, floods, epidemics, quarantine regulation, strikes or lockouts, Contractor shall notify the Owner in writing within forty-eight (48) hours after the commencement of such delay, stating the cause or causes thereof, or be deemed to have waived any right which Contractor may have had to request a time extension.

12.5. No interruption, interference, inefficiency, suspension or delay in the commencement or progress of the Work from any cause whatever, including those for which the Owner may be responsible, in whole or in part, shall relieve Contractor of his duty to perform or give rise to any right to damages or additional compensation from the Owner. Contractor expressly acknowledges and agrees that it shall receive no damages for delay. Contractor's sole remedy, if any, against the Owner will be the right to seek an extension to the Contract Time; provided, however, the granting of any such time extension shall not be a condition precedent to the aforementioned "No Damage For Delay" provision. This paragraph shall expressly apply to claims for early completion, as well as to claims based on late completion.

ARTICLE 13 – TESTS AND INSPECTION: CORRECTION, REMOVAL OR ACCEPTANCE OF DEFECTIVE WORK

13.1. **Notice of Defects:** Prompt notice of all defective Work of which Owner or Engineer have actual knowledge will be given to Contractor. All defective Work may be rejected, corrected or accepted as provided in this Article 13.

Access to Work:

13.2. Owner, Engineer, Engineer's Consultants, other representatives and personnel of Owner, independent testing laboratories and governmental agencies with jurisdictional interests will have access to the Work at reasonable times for their observation, inspecting and testing. Contractor shall provide them proper and safe conditions for such access and advise them of Contractor's site safety procedures and programs so that they may comply therewith as applicable.

Tests and Inspections:

13.3. Contractor shall give Engineer timely notice of readiness of the Work for all required inspections, tests or approvals, and shall cooperate with inspection and testing personnel to facilitate required inspections or tests.

13.4. Contractor shall employ and pay for services of an independent testing laboratory to perform all Quality Control inspections, test or approvals required by the contract documents. Contractor shall allow the Engineer access to all work done in the project for Acceptance Testing by the owner. This testing will be in addition to Quality Control Testing required by the Contractor. Owner shall arrange and pay all costs associated with Acceptance Testing done by an independent testing laboratory of the Owners choosing except:

13.4.1. for inspections, tests or approvals covered by paragraph 13.5 below.

13.4.2. that costs incurred in connection with tests or inspections conducted pursuant to paragraph 13.9 below shall be paid as provided in said paragraph 13.9; and

13.4.3. as otherwise specifically provided in the Contract Documents.

13.4.4. Owner shall perform the following test as part of quality assurance / acceptance testing:

All material testing included in the Bidding Documents.

All other required testing is to be completed by the contractor as part of the contractor's quality control procedures and submittals. This section shall take precedence over all other sections that describe testing requirements.

13.5. If Laws or Regulations of any public body having jurisdiction require any Work (or part thereof) specifically to be inspected, tested or approved by an employee or other representative of such public body, Contractor shall assume full responsibility for arranging and obtaining such inspections, tests or approvals, pay all costs in connection therewith, and furnish Engineer the required certificates of inspection, or approval. Contractor shall also be responsible for arranging and obtaining and shall pay all costs in connection with any inspections, tests or approvals required for Owner's and Engineer's acceptance of materials or equipment to be incorporated in the Work, or of materials, mix designs, or equipment submitted for approval prior to Contractor's purchase thereof for incorporation in the Work. Quality Control Testing of materials and equipment shall be the responsibility of the Contractor who shall pay all costs associated with the required testing. Contractor shall provide the Engineer adequate advance notice of intended tests to allow the Engineer to be present during the Testing.

13.6. If any Work (or the work of others) that is to be inspected, tested or approved is covered by Contractor without written concurrence of Engineer, it must, if requested by Engineer, be uncovered for observation.

13.7. Uncovering Work as provided in paragraph 13.6 shall be at Contractor's expense unless Contractor has given Engineer timely notice of Contractor's intention to cover the same and Engineer has not acted with reasonable promptness in response to such notice.

Uncovering Work:

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

13.9. If Engineer considers it necessary or advisable that covered Work be observed by Engineer or inspected or tested by others, Contractor, at Engineer's request, shall uncover, expose or otherwise make available for observation, inspection or testing as Engineer may require that portion of the Work in question, furnishing all necessary labor, material and equipment. If it is found that such Work is defective, Contractor shall pay all claims, costs, losses and damages caused by, arising out of or resulting from such uncovering, exposure, observation, inspection and testing and of satisfactory replacement or reconstruction (including but not limited to all costs of repair or replacement of work of others; and Owner shall be entitled to an appropriate decrease in the Contract Price, and, if the parties are unable to agree as to the amount thereof, may make a claim therefore as provided in Article 11. If, however, such Work is not found to be defective, Contractor shall be allowed an increase in the Contract Price or an extension of the Contract Times (or Milestones), or both, directly attributable to such uncovering, exposure, observation, inspection, testing, replacement and reconstruction; and, if the parties are unable to agree as to the amount or extent therefore, Contractor may make a claim therefore as provided in Articles 11 and 12.

Owner May Stop the Work:

13.10. If the Work is defective, or Contractor fails to supply sufficient skilled workers or suitable materials or equipment, or fails to furnish or perform the Work in such a way that the completed Work will conform to the Contract Documents, Owner may order Contractor to stop the Work, or any portion thereof, until the cause for such order has been eliminated; however, this right of Owner to stop the Work shall not give rise

to any duty on the part of Owner to exercise this right for the benefit of Contractor or any surety or other party.

Correction or Removal of Defective Work:

13.11. If required by Engineer, Contractor shall promptly, as directed, either correct all defective Work, whether or not fabricated, installed or completed, or, if the Work has been rejected by Engineer, remove it from the site and replace it with Work that is not defective. Contractor shall pay all claims, costs, losses and damages caused by or resulting from such correction or removal (including but not limited to all costs of repair or replacement of work of others).

13.12. Correction Period:

13.12.1. If within one year after the date of Substantial Completion or such longer period of time as may be prescribed by Laws or Regulations or by the terms of any applicable special guarantee required by the Contract Documents or by any specific provision of the Contract Documents, any Work is found to be defective, Contractor shall promptly, without cost to Owner and in accordance with Owner's written instruction: (i) correct such defective Work, or, if it has been rejected by Owner, remove it from the site and replace it with Work that is not defective, and (ii) satisfactorily correct or remove and replace any damage to other Work or the work of others resulting therefrom. If Contractor does not promptly comply with the terms of such instructions, or in any emergency where delay would cause serious risk of loss or damage, Owner may have the defective Work corrected or the rejected Work removed and replaced, and all claims, costs, losses and damages caused by or resulting from such removal and replacement (including but not limited to all costs of repair or replacement of work of others) will be paid by Contractor.

13.12.2. In special circumstances where a particular item of equipment is placed in continuous service before Substantial Completion of all the Work, the correction period for that item may start to run from an earlier date if so provided in the Specifications or by Written Amendment.

13.12.3. Where defective Work (and damage to other Work resulting therefrom) has been corrected, removed or replaced under this paragraph 13.12, the correction period hereunder with respect to such Work will be extended for an additional period of one year after such correction or removal and replacement has been satisfactorily completed.

Acceptance of Defective Work:

13.13. If, instead of requiring correction or removal and replacement of defective Work, Owner (and, prior to Engineer's recommendation of final payment, also Engineer) prefers to accept it, Owner may do so. Contractor shall pay all claims, costs, losses and damages attributable to Owner's evaluation of and determination to accept such defective Work (such costs to be approved by Engineer as to reasonableness). If any such acceptance occurs prior to Engineer's recommendation of final payment, a Change Order will be issued incorporating the necessary revisions in the Contract Documents with respect to the Work; and Owner shall be entitled to an appropriate decrease in the Contract Price, and, if the parties are unable to agree as to the amount thereof, Owner may make a claim therefore as provided in Article 11. If the acceptance occurs after such recommendation, an appropriate amount will be paid by Contractor to Owner.

Owner May Correct Defective Work:

13.14. If Contractor fails within a reasonable time after written notice from Engineer to correct defective Work or to remove and replace rejected Work as required by Engineer in accordance with paragraph 13.11, or if Contractor fails to perform the Work in accordance with the Contract Documents, or if Contractor fails to comply with any other provision of the Contract Documents, Owner may, after seven days' written notice to Contractor, correct and remedy any such deficiency. In exercising the rights and remedies under this paragraph Owner shall proceed expeditiously. In connection with such corrective and remedial action, Owner may exclude Contractor from all or part of the site, take possession of all or part of the Work, and suspend Contractor's services related thereto, take possession of Contractor's tools, appliances, construction equipment and machinery at the site and incorporate in the Work all materials and equipment stored at the site or for which Owner has paid Contractor but which are stored elsewhere. Contractor shall allow Owner, Owner's representative, agents and employees, Owner's other contractors and Engineer and Engineer's Consultants access to the site to enable Owner to exercise the rights and remedies under this paragraph. All claims, costs, losses and damages incurred or sustained by Owner in exercising such rights and remedies will be charged against Contractor and a Change Order will be issued incorporating the necessary revisions in the Contract Documents with respect to the Work; and Owner shall be entitled to an appropriate decrease in the Contract Price, and, if the parties are unable to agree as to the amount thereof, Owner may make a claim therefore as provided in Article 11. Such claims, costs, losses and damages will include but not be limited to all costs of repair or replacement of work of others destroyed or damaged by correction, removal or replacement of Contractor's defective Work. Contractor shall not be allowed an extension of the Contract Times (or Milestones) because of any delay in the performance of the Work attributable to the exercise by Owner of Owner's rights and remedies hereunder.

ARTICLE 14 – PAYMENTS TO CONTRACTOR AND COMPLETION

Schedule of Values:

14.1. The schedule of values established as provided in paragraph 2.9 will serve as the basis for progress payments and will be incorporated into a form of Application for Payment acceptable to Engineer. Progress payments on account of Unit Price Work will be based on the number of units completed.

Application for Progress Payment:

14.2. At least ten days before the date established for each progress payment (but not more often than once a month), Contractor shall submit to Engineer for review an Application for Payment filled out and signed by Contractor covering the Work completed as of the date of the Application and accompanied by such supporting documentation as is required by the Contract Documents. If payment is requested 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 Application for Payment shall also be accompanied by a bill of sale, invoice or other documentation warranting that Owner has received the materials and equipment free and clear of all Liens and evidence that the materials and equipment are covered by appropriate property insurance and other arrangements to protect Owner's interest therein, all of which will be satisfactory to Owner. The amount of retainage with respect to progress payments will be as stipulated in the Agreement.

Contractor's Warranty of Title:

14.3. Contractor warrants and guarantees that title to all Work, materials and equipment covered by any Application for Payment, whether incorporated in the Project or not, will pass to Owner no later than the time of payment free and clear of all Liens.

Review of Applications for Progress Payment:

14.4. Engineer will, within ~~ten~~ *fifteen (15)* days after receipt of each Application for Payment, either indicate in writing a recommendation of payment and present the Application to Owner, or return the Application to Contractor indicating in writing Engineer's reasons for refusing to recommend payment. In the latter case, Contractor may make the necessary corrections and resubmit the Application. ~~Ten~~ *Thirty (30)* days after presentation of the Application for Payment to Owner with Engineer's recommendation, the amount recommended will (subject to the provisions of the last sentence of paragraph 14.7) become due and when due will be paid by Owner to Contractor.

14.5. Engineer's recommendation of any payment requested in an Application for Payment will constitute a representation by Engineer to Owner, based on Engineer's on-site observations of the executed Work as an experienced and qualified design professional and on Engineer's review of the Application for Payment and the accompanying data and schedules, that to the best of Engineer's knowledge, information and belief:

14.5.1. the Work has progressed to the point indicated.

14.5.2. the quality of the Work is generally in accordance with the Contract Documents (subject to an evaluation of the Work as a functioning whole prior to or upon Substantial Completion, to the results of any subsequent tests called for in the Contract Documents, to a final determination of quantities and classifications for Unit Price Work under paragraph 9.10, and to any other qualifications stated in the recommendation), and

14.5.3. the conditions precedent to Contractor's being entitled to such payment appear to have been fulfilled in so far as it is Engineer's responsibility to observe the Work.

However, by recommending any such payment Engineer will not thereby be deemed to have represented that: (i) exhaustive or continuous on-site inspections have been made to check the quality or the quantity of the Work beyond the responsibilities specifically assigned to Engineer in the Contract Documents or (ii) that there may not be other matters or issues between the parties that might entitle Contractor to be paid additionally by Owner or entitle Owner to withhold payment to Contractor.

14.6. Engineer's recommendation of any payment, including final payment, shall not mean that Engineer is responsible for Contractor's means, methods, techniques, sequences or procedures of construction, or the safety precautions and programs incident thereto, or for any failure of Contractor to comply with Laws and Regulations applicable to the furnishing or performance of Work, or for any failure of Contractor to perform or furnish Work in accordance with the Contract Documents.

14.7. Engineer may refuse to recommend the whole or any part of any payment if, in Engineer's opinion, it would be incorrect to make the representations to Owner referred to in paragraph 14.5. Engineer may also refuse to recommend any such payment, or, because of subsequently discovered evidence or the results of subsequent inspections or tests, nullify any such payment previously recommended, to such extent as may be necessary in Engineer's opinion to protect Owner from loss because:

14.7.1. the Work is defective, or completed Work has been damaged requiring correction or replacement.

14.7.2. the Contract Price has been reduced by Written Amendment or Change Order.

14.7.3. Owner has been required to correct defective Work or complete Work in accordance with paragraph 13.14. or

14.7.4. Engineer has actual knowledge of the occurrence of any of the events enumerated in paragraphs 15.2.1 through 15.2.4 inclusive.

Owner may refuse to make payment of the full amount recommended by Engineer because:

14.7.5. claims have been made against Owner on account of Contractors performance or furnishing of the Work.

14.7.6. Liens have been filed in connection with the Work, except where Contractor has delivered a specific Bond satisfactory to Owner to secure the satisfaction and discharge of such Liens,

14.7.7. there are other items entitling Owner to a set-off against the amount recommended, or

14.7.8. Owner has actual knowledge of the occurrence of any of the events enumerated in paragraphs 14.7.1 through 14.7.3 or paragraphs 15.2.1 through 15.2.4 inclusive;

but Owner must give Contractor immediate written notice (with a copy to Engineer) stating the reasons for such action and promptly pay Contractor the amount so withheld, or any adjustment thereto agreed to by Owner and Contractor, when Contractor corrects to Owner's satisfaction the reasons for such action.

Substantial Completion:

14.8. When Contractor considers the entire Work ready for its intended use Contractor shall notify Owner and Engineer in writing that the entire Work is substantially complete (except for items specifically listed by Contractor as incomplete) and request that Engineer issue a certificate of Substantial Completion. Within a reasonable time thereafter, Owner, Contractor and Engineer shall make an inspection of the Work to determine the status of completion. If Engineer does not consider the Work substantially complete, Engineer will notify Contractor in writing giving the reasons therefore. If Engineer considers the Work substantially complete, Engineer will prepare and deliver to Owner a tentative certificate of Substantial Completion which shall fix the date of Substantial Completion. There shall be attached to the certificate a tentative list of items to be completed or corrected before final payment. Owner shall have seven days after receipt of the tentative certificate during which to make written objection to Engineer as to any provisions of the certificate or attached list. If, after considering such objections, Engineer concludes that the Work is not substantially complete, Engineer will within fourteen days after submission of the tentative certificate to Owner notify Contractor in writing, stating the reasons therefore. If, after consideration of Owner's objections, Engineer considers the Work substantially complete, Engineer will within said fourteen days execute and deliver to Owner and Contractor a definitive certificate of Substantial Completion (with a revised tentative list of items to be completed or corrected) reflecting such changes from the tentative certificate as Engineer believes justified after consideration of any objections from Owner. At the time of delivery of the tentative certificate of Substantial Completion Engineer will deliver to Owner and Contractor a written recommendation as to division of responsibilities pending final payment between Owner and Contractor with respect to security, operation, safety, maintenance, heat, utilities, insurance and warranties and guarantees. Unless Owner and Contractor agree otherwise in writing and so inform Engineer in writing prior to Engineer's issuing the definitive certificate of Substantial Completion, Engineer's aforesaid recommendation will be binding on Owner and Contractor until final payment.

14.9. Owner shall have the right to exclude Contractor from the Work after the date of Substantial Completion, but Owner shall allow Contractor reasonable access to complete or correct items on the tentative list.

Partial Utilization:

14.10. Use by Owner at Owner's option of any substantially completed part of the Work which: (i) has specifically been identified in the Contract Documents, or (ii) Owner, Engineer and Contractor agree constitutes a separately functioning and usable part of the Work that can be used by Owner for its intended purpose without significant interference with Contractor's performance of the remainder of the Work, may be accomplished prior to Substantial Completion of all the Work subject to the following:

14.10.1. Owner at any time may request Contractor in writing to permit Owner to use any such part of the Work which Owner believes to be ready for its intended use and substantially complete. If Contractor agrees that such part of the Work is substantially complete, Contractor will certify to Owner and Engineer that such part of the Work is substantially complete and request Engineer to issue a certificate of Substantial Completion for that part of the Work. Contractor at any time may notify Owner and Engineer in writing that Contractor considers any such part of the Work ready for its intended use and substantially complete and request Engineer to issue a certificate of Substantial Completion for that part of the Work. Within a reasonable time after either such request, Owner, Contractor and Engineer shall make an inspection of that part of the Work to determine its status of completion. If Engineer does not consider that part of the Work to be substantially complete, Engineer will notify Owner and Contractor in writing giving the reasons therefore. If Engineer considers that part of the Work to be substantially complete, the provisions of paragraphs 14.8 and 14.9 will apply with respect to certification of Substantial Completion of that part of the Work and the division of responsibility in respect thereof and access thereto.

14.10.2. No occupancy or separate operation of part of the Work will be accomplished prior to compliance with the requirements of paragraph 5.15 in respect of property insurance.

Owner may at any time request Contractor in writing to permit Owner to take over operation of any such part of the work although it is not substantially complete. A copy of such request will be sent to Engineer and within a reasonable time thereafter Owner, Contractor, and Engineer shall make an inspection of that part of the Work to determine its status of completion and will prepare a list of the items remaining to be completed or corrected thereon before final payment. If Contractor does not object in writing to Owner and Engineer that such part of the Work is not ready for separate operation by Owner, Engineer will finalize the list if items to be completed or corrected and will deliver such lists to Owner and Contractor together with a written recommendation as to the division of responsibilities pending final payment between Owner and Contractor with respect to security, operation, safety, maintenance, utilities, insurance, warranties and guarantees for that part of the Work which will become binding upon Owner and Contractor at the time when Owner takes over such operation (unless they shall have otherwise agreed in writing and so informed Engineer). During such operation and prior to Substantial Completion of such part of the Work, Owner shall allow Contractor reasonable access to complete or correct items on said list and to complete other related Work.

Final Inspection:

14.11. Upon written notice from Contractor that the entire Work or an agreed portion thereof is complete, Engineer will make a final inspection with Owner and Contractor and will notify Contractor in writing of all

particulars in which this inspection reveals that the Work is incomplete or **defective**. Contractor shall immediately take such measures as are necessary to complete such Work or remedy such deficiencies.

Final Application for Payment:

14.12. After Contractor has completed all such corrections to the satisfaction of Engineer and delivered in accordance with the Contract Documents all maintenance and operating instructions, schedules, guarantees, Bonds, certificates or other evidence of insurance required by paragraph 5.4, certificates of inspection, marked-up record documents (as provided in paragraph 6.19) and other documents, Contractor may make application for final payment following the procedure for progress payments. The final Application for Payment shall be accompanied (except as previously delivered) by:

(i) consent of the surety, if any, to final payment.

(ii) complete and legally effective releases or waivers (satisfactory to Owner) of all Liens arising out of or filed in connection with the Work. In lieu of such releases or waivers of Liens and as approved by Owner, Contractor may furnish receipts or releases in full and an affidavit of Contractor that: (i) the releases and receipts include all labor, services, material and equipment for which a Lien could be filed, and (ii) all payrolls, material and equipment bills and other indebtedness connected with the Work for which Owner or Owner's property might in any way be responsible have been paid or otherwise satisfied. If any Subcontractor or Supplier fails to furnish such a release or receipt in full, Contractor may furnish a Bond or other collateral satisfactory to Owner to indemnify Owner against any Lien.

(iii) certification from surety that payment and performance bond shall remain in effect one (1) year following final payment.

(iv) contractor's advertisement of completion – advertisement for a period of four (4) successive weeks in the newspaper or largest circulation published within the county where the work is performed.

(v) certification from insurance company that any insurance coverage written on a claims-made basis, remain in effect for at least two (2) years following final payment.

Final Payment and Acceptance:

14.13. If, on the basis of Engineer's observation of the Work during construction and final inspection, and Engineer's review of the final application for Payment and accompanying documentation as required by the Contract Documents, Engineer is satisfied that the Work has been completed and Contractor's other obligations under the Contract Documents have been fulfilled, Engineer will, within ten days after receipt of the final Application for Payment, indicate in writing Engineer's recommendation of payment and present the Application to Owner for payment. At the same time Engineer will also give written notice to Owner and Contractor that the Work is acceptable subject to the provisions of paragraph 14.15. Otherwise, Engineer will return the Application to Contractor, indicating in writing the reasons for refusing to recommend final payment, in which case Contractor shall make the necessary corrections and resubmit the Application. Thirty days after the presentation to Owner of the Application and accompanying documentation, in appropriate form and substance and with Engineer's recommendation and notice of acceptability, the amount recommended by Engineer will become due and will be paid by Owner to Contractor

14.14. If, through no fault of Contractor, final completion of the Work is significantly delayed and if Engineer so confirms, Owner shall, upon receipt of Contractor's final Application for Payment and recom-

mentation of 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 to be held by Owner for Work not fully completed or corrected is less than the retainage stipulated in the Agreement, and if Bonds have been furnished as required in paragraph 5.1, the written consent of the surety to the payment of the balance due for that portion of the Work fully completed and accepted shall be submitted by Contractor to Engineer with the Application for such payment. Such payment shall be made under the terms and conditions governing final payment, except that it shall not constitute a waiver of claims.

Waiver of Claims:

14.15. The making and acceptance of final payment will constitute:

14.15.1. a waiver of all claims by Owner against Contractor, except claims arising from unsettled Liens, from **defective** Work appearing after final inspection pursuant to paragraph 14.11, from failure to comply with the Contract Documents or the terms of any special guarantees specified therein, or from Contractor's continuing obligations under the Contract Documents; and

14.15.12. a waiver of all claims by Contractor against Owner other than those previously made in writing and still unsettled.

ARTICLE 15 – SUSPENSION OF WORK AND TERMINATION

Owner May Suspend Work:

15.1. At any time and without cause, Owner may suspend the Work or any portion thereof for a period of not more than ninety days by notice in writing to Contractor and Engineer which will fix the date on which Work will be resumed. Contractor shall resume the Work on the date so fixed. Contractor shall be allowed an adjustment in the Contract Price or an extension of the Contract Times, or both, directly attributable to any such suspension if Contractor makes an approved claim therefore as provided in Articles 11 and 12.

Owner May Terminate:

15.2. Upon the occurrence of any one or more of the following events:

15.2.1. if Contractor persistently fails to perform the Work in accordance with the Contract Documents (including, but not limited to, failure to supply sufficient skilled workers or suitable materials or equipment or failure to adhere to the progress schedule established under paragraph 2.9 as adjusted from time to time pursuant to paragraph 6.6);

15.2.2. if Contractor disregards Laws or Regulations of any public body having jurisdiction;

15.2.3. if Contractor disregards the authority of Engineer; or

15.2.4. if Contractor otherwise violates in any substantial way any provisions of the Contract Documents;

15.2.5. *if Contractor commences a voluntary case under any chapter of the Bankruptcy Code (Title 11, United States Code), as now or hereafter in effect, or if Contractor takes any equivalent or similar action*

by filing a petition or otherwise under any other federal or state law in effect at such time relating to the bankruptcy or insolvency;

15.2.6 if a petition is filed against Contractor under any chapter of the Bankruptcy Code (Title 11, United States Code), as now or hereafter in effect at the time of filing, or if a petition is filed seeking any such equivalent or similar relief against Contractor under any other federal or state law in effect at the time relating to bankruptcy or insolvency;

15.2.7 if Contractor makes a general assignment for the benefit of creditors;

15.2.8 if a trustee, receiver, custodian, or agent of Contractor is appointed under applicable law or under contract, whose appointment or authority to take charge of property of Contractor is for the purpose of enforcing a Lien against such property or for the purpose of general administration of such property for the benefit of Contractor's creditors;

15.2.9 if Contractor admits in writing an inability to pay its debts generally as they become due.

Owner may, after giving Contractor (and the surety, if any,) seven days' written notice and to the extent permitted by Laws and Regulations, terminate the services of Contractor, exclude Contractor from the site and take possession of the Work and of all Contractor's tools, appliances, construction equipment and machinery at the site and use the same to the full extent they could be used by Contractor (without liability to Contractor for trespass or conversion), incorporate in the Work all materials and equipment stored at the site or for which Owner has paid Contractor but which are stored elsewhere, and finish the Work as Owner may deem expedient. In such case Contractor shall not be entitled to receive any further payment until the Work is finished. If the unpaid balance of the Contract Price exceeds all claims, costs, losses and damages sustained by Owner arising out of or resulting from completing the Work such excess will be paid to Contractor. If such claims, costs, losses and damages exceed such unpaid balance, Contractor shall pay the difference to Owner. Such claims, costs, losses and damages incurred by Owner will be reviewed by Engineer as to their reasonableness and when so approved by Engineer incorporated in a Change Order, provided that when exercising any rights or remedies under this paragraph Owner shall not be required to obtain the lowest price for the Work performed.

15.3. Where Contractor's services have been so terminated by Owner, the termination will not affect any rights or remedies of Owner against Contractor then existing or which may thereafter accrue. Any retention or payment of moneys due Contractor by Owner will not release Contractor from liability.

15.4. Upon seven days' written notice to Contractor and Engineer, Owner may, without cause and without prejudice to any other right or remedy of Owner, elect to terminate the Agreement. In such case, Contractor shall be paid (without duplication of any items):

15.4.1. for completed and acceptable Work executed in accordance with the Contract Documents prior to the effective date of termination, including fair and reasonable sums for overhead and profit on such Work;

15.4.2. for expenses sustained prior to the effective date of termination in performing services and furnishing labor, materials or equipment as required by the Contract Documents in connection with uncompleted Work, plus fair and reasonable sums for overhead and profit on such expenses;

15.4.3. for all claims, costs, losses and damages incurred in settlement of terminated contracts with Subcontractors, Suppliers and other; and

15.4.4. for reasonable expenses directly attributable to termination.

Contractor shall not be paid on account of loss of anticipated profits or revenue or other economic loss arising out of or resulting from such termination.

Contractor May Stop Work or Terminate:

15.5. If, through no act or fault of Contractor, the Work is suspended for a period of more than ninety days by Owner or under an order of court or other public authority, or Engineer fails to act on any Application for Payment within thirty days after it is submitted or Owner fails for thirty days to pay Contractor any sum finally determined to be due, then Contractor may, upon seven days' written notice to Owner and Engineer, and provided Owner or Engineer do not remedy such suspension or failure within that time, terminate the Agreement and recover from Owner payment on the same terms as provided in paragraph 15.4. In lieu of terminating the Agreement and without prejudice to any other right or remedy, if Engineer has failed to act on an Application for Payment within thirty days after it is submitted, or Owner has failed for thirty days to pay Contractor any sum finally determined to be due, Contractor may upon seven day's written notice to Owner and Engineer stop the Work until payment of all such amounts due Contractor, including interest thereon. The provisions of this paragraph 15.5 are not intended to preclude Contractor from making claim under Articles 11 and 12 for an increase in Contract Price or Contract Times or otherwise for expenses or damage directly attributable to Contractor's stopping Work as permitted by this paragraph.

ARTICLE 16 – MISCELLANEOUS

Giving Notice:

16.1. Whenever any provision of the Contract Documents requires the giving of written notice, it will be deemed to have been validly given if delivered in person to the individual or to a member of the firm or to an officer of the corporation for whom it is intended, or if delivered at or sent by registered or certified mail, postage prepaid, to the last business address known to the giver of the notice.

16.2 Computation of Times:

16.2.1. When any period of time is referred to in the Contract Documents by days, it will be computed to exclude the first and include the last day of such period. If the last day of any such period falls on a Saturday or Sunday or on a day made a legal holiday by the law of the applicable jurisdiction, such day will be omitted from the computation.

16.2.2. A calendar day of twenty-four hours measured from midnight to the next midnight will constitute a day.

Notice of Claim:

16.3. Should Owner or Contractor suffer injury or damage to person or property because of any error, omission or act of the other part or of any of the other party's employees or agents or others for whose acts the other party is legally liable, claim will be made in writing to the other party promptly, but in no event

later than fifteen (15) days of the first observance of such injury or damage. The provisions of this paragraph 17.3 shall not be construed as a substitute for or a waiver of the provisions of any applicable statute of limitations or repose.

Cumulative Remedies:

16.4. The duties and obligations imposed by these General Conditions and the rights and remedies available hereunder to the parties hereto, and, in particular but without limitation, the warranties, guarantees and obligations imposed upon Contractor by paragraphs 6.12, 6.16, 6.30, 6.31, 6.32, 13.1, 13.12, 13.14, 14.3 and 15.2 and all of the rights and remedies available to Owner and Engineer thereunder, are in addition to, and are not to be construed in any way as a limitation of, any rights and remedies available to any or all of them which are otherwise imposed or available by Laws or Regulations, by special warranty or guarantee or by other provisions of the Contract Documents, and the provisions of this paragraph will be as effective as if repeated specifically in the Contract Documents in connection with each particular duty, obligation, right and remedy to which they apply.

Professional Fees and Court Costs Included:

16.5. Whenever reference is made to "claims, costs, losses and damages," it shall include in each case, but not be limited to, all fees and charges of engineers, architects, attorneys and other professionals and all court or other dispute resolution costs.

Labor Records and Schedules:

16.6 *The Department of Jurisdiction on such public work shall require all Contractors and Subcontractors to keep the following records on the site of the public work project on which such Contractors, and Subcontractors are engaged:*

16.6.1 *Record of hours worked by each worker, laborer, and mechanic on each day.*

16.6.2 *Record of days worked each week by each worker, laborer, and mechanic.*

16.6.3 *Schedule of occupation or occupations at which each worker, laborer, and mechanic on the project is employed during each workday and week.*

16.6.4 *Schedule of hourly wage rates and supplements paid to each worker, laborer, and mechanic for each occupation.*

Wage Schedules:

16.7 *Pursuant to Sections 220.3 and 220-d of the Labor Law, each laborer, worker, or mechanic employed by the Contractor, Subcontractor, or other person shall be paid not less than the prevailing rate of wages for a legal day's work and shall be provided supplements not less than the prevailing supplements as determined by the Industrial Commissioner.*

The Contractor and every Subcontractor shall post in a prominent and accessible place on the site of the work a legible statement of all wage rates and supplements as specified in the Contract to be paid or provided, as the case may be, for the various classes of mechanics, workers, and laborers employed on the work.

The Owner does not represent or warrant that the accompanying schedule of wage rates and supplements with the classification of workers, mechanics, and laborers, as required by Section 220 of the Labor Law, is complete, and it reserves the right to revise such schedule when required. If any occupation is not mentioned in the schedule of wage rates and supplements it shall be requested from the Industrial Commissioner, by the Contractor through the Engineer and such schedules, shall, upon notice to the Contractor, become and be a part of the wage and supplement schedules embodied in the Contract.

Also included is the Federal Wage Rate Determination. Laborers, workmen, and mechanics employed on the work done in performance of said Contract shall be paid not less than the rate of wages listed thereon for the trade or occupation of such laborer, etc.

GENERAL PROVISIONS

SECTION 10 DEFINITION OF TERMS

When the following terms are used in these specifications, in the contract, or in any documents or other instruments pertaining to construction where these specifications govern, the intent and meaning shall be defined as follows:

Paragraph Number	Term	Definition
10-01	AASHTO	The American Association of State Highway and Transportation Officials.
10-02	Access Road	The right-of-way, the roadway and all improvements constructed thereon connecting the airport to a public roadway.
10-03	Advertisement	A public announcement, as required by local law, inviting bids for work to be performed and materials to be furnished.
10-04	Airport	Airport means an area of land or water which is used or intended to be used for the landing and takeoff of aircraft; an appurtenant area used or intended to be used for airport buildings or other airport facilities or rights of way; airport buildings and facilities located in any of these areas, and a heliport.
10-05	Airport Improvement Program (AIP)	A grant-in-aid program, administered by the Federal Aviation Administration (FAA).
10-06	Air Operations Area (AOA)	The term air operations area (AOA) shall mean any area of the airport used or intended to be used for the landing, takeoff, or surface maneuvering of aircraft. An air operation area shall include such paved or unpaved areas that are used or intended to be used for the unobstructed movement of aircraft in addition to its associated runway, taxiway, or apron.
10-07	Apron	Area where aircraft are parked, unloaded or loaded, fueled and/or serviced.
10-08	ASTM International (ASTM)	Formerly known as the American Society for Testing and Materials (ASTM).
10-09	Award	The Owner's notice to the successful bidder of the acceptance of the submitted bid.
10-10	Bidder	Any individual, partnership, firm, or corporation, acting directly or through a duly authorized representative, who submits a proposal for the work contemplated.
10-11	Building Area	An area on the airport to be used, considered, or intended to be used for airport buildings or other airport facilities or rights-of-way together with all airport buildings and facilities located thereon.
10-12	Calendar Day	Every day shown on the calendar.

Paragraph Number	Term	Definition
10-13	Certificate of Analysis (COA)	The COA is the manufacturer's Certificate of Compliance (COC) including all applicable test results required by the specifications.
10-14	Certificate of Compliance (COC)	The manufacturer's certification stating that materials or assemblies furnished fully comply with the requirements of the contract. The certificate shall be signed by the manufacturer's authorized representative.
10-15	Change Order	A written order to the Contractor covering changes in the plans, specifications, or proposal quantities and establishing the basis of payment and contract time adjustment, if any, for work within the scope of the contract and necessary to complete the project.
10-16	Contract	A written agreement between the Owner and the Contractor that establishes the obligations of the parties including but not limited to performance of work, furnishing of labor, equipment and materials and the basis of payment. The awarded contract includes but may not be limited to: Advertisement, Contract form, Proposal, Performance bond, payment bond, General provisions, certifications and representations, Technical Specifications, Plans, Supplemental Provisions, standards incorporated by reference and issued addenda.
10-17	Contract Item (Pay Item)	A specific unit of work for which a price is provided in the contract.
10-18	Contract Time	The number of calendar days or working days, stated in the proposal, allowed for completion of the contract, including authorized time extensions. If a calendar date of completion is stated in the proposal, in lieu of a number of calendar or working days, the contract shall be completed by that date.
10-19	Contractor	The individual, partnership, firm, or corporation primarily liable for the acceptable performance of the work contracted and for the payment of all legal debts pertaining to the work who acts directly or through lawful agents or employees to complete the contract work.
10-20	Contractors Quality Control (QC) Facilities	The Contractor's QC facilities in accordance with the Contractor Quality Control Program (CQCP).
10-21	Contractor Quality Control Program (CQCP)	Details the methods and procedures that will be taken to assure that all materials and completed construction required by the contract conform to contract plans, technical specifications and other requirements, whether manufactured by the

Paragraph Number	Term	Definition
		Contractor, or procured from subcontractors or vendors.
10-22	Control Strip	A demonstration by the Contractor that the materials, equipment, and construction processes results in a product meeting the requirements of the specification.
10-23	Construction Safety and Phasing Plan (CSPP)	The overall plan for safety and phasing of a construction project developed by the airport operator, or developed by the airport operator's consultant and approved by the airport operator. It is included in the invitation for bids and becomes part of the project specifications.
10-24	Drainage System	The system of pipes, ditches, and structures by which surface or subsurface waters are collected and conducted from the airport area.
10-25	Engineer	The individual, partnership, firm, or corporation duly authorized by the Owner to be responsible for engineering, inspection, and/or observation of the contract work and acting directly or through an authorized representative.
10-26	Equipment	All machinery, together with the necessary supplies for upkeep and maintenance; and all tools and apparatus necessary for the proper construction and acceptable completion of the work.
10-27	Extra Work	An item of work not provided for in the awarded contract as previously modified by change order or supplemental agreement, but which is found by the Owner's Engineer or Resident Project Representative (RPR) to be necessary to complete the work within the intended scope of the contract as previously modified.
10-28	FAA	The Federal Aviation Administration. When used to designate a person, FAA shall mean the Administrator or their duly authorized representative.
10-29	Federal Specifications	The federal specifications and standards, commercial item descriptions, and supplements, amendments, and indices prepared and issued by the General Services Administration.
10-30	Force Account	<p>a. Contract Force Account - A method of payment that addresses extra work performed by the Contractor on a time and material basis.</p> <p>b. Owner Force Account - Work performed for the project by the Owner's employees.</p>
10-31	Intention of Terms	Whenever, in these specifications or on the plans, the words "directed," "required," "permitted," "ordered," "designated," "prescribed," or words of like import are used, it shall be understood that the direction,

Paragraph Number	Term	Definition
		<p>requirement, permission, order, designation, or prescription of the Engineer and/or Resident Project Representative (RPR) is intended; and similarly, the words “approved,” “acceptable,” “satisfactory,” or words of like import, shall mean approved by, or acceptable to, or satisfactory to the Engineer and/or RPR, subject in each case to the final determination of the Owner.</p> <p>Any reference to a specific requirement of a numbered paragraph of the contract specifications or a cited standard shall be interpreted to include all general requirements of the entire section, specification item, or cited standard that may be pertinent to such specific reference.</p>
10-32	Lighting	A system of fixtures providing or controlling the light sources used on or near the airport or within the airport buildings. The field lighting includes all luminous signals, markers, floodlights, and illuminating devices used on or near the airport or to aid in the operation of aircraft landing at, taking off from, or taxiing on the airport surface.
10-33	Major and Minor Contract Items	A major contract item shall be any item that is listed in the proposal, the total cost of which is equal to or greater than 20% of the total amount of the award contract. All other items shall be considered minor contract items.
10-34	Materials	Any substance specified for use in the construction of the contract work.
10-35	Modification of Standards (MOS)	Any deviation from standard specifications applicable to material and construction methods in accordance with FAA Order 5300.1.
10-36	Notice to Proceed (NTP)	A written notice to the Contractor to begin the actual contract work on a previously agreed to date. If applicable, the Notice to Proceed shall state the date on which the contract time begins.
10-37	Owner	The term “Owner” shall mean the party of the first part or the contracting agency signatory to the contract. Where the term “Owner” is capitalized in this document, it shall mean airport Sponsor only. The Owner for this project is Okaloosa County Board of County Commissioners .
10-38	Passenger Facility Charge (PFC)	Per 14 Code of Federal Regulations (CFR) Part 158 and 49 United States Code (USC) § 40117, a PFC is a charge imposed by a public agency on passengers enplaned at a commercial service airport it controls.
10-39	Pavement Structure	The combined surface course, base course(s), and subbase course(s), if any, considered as a single unit.

Paragraph Number	Term	Definition
10-40	Payment bond	The approved form of security furnished by the Contractor and their own surety as a guaranty that the Contractor will pay in full all bills and accounts for materials and labor used in the construction of the work.
10-41	Performance bond	The approved form of security furnished by the Contractor and their own surety as a guaranty that the Contractor will complete the work in accordance with the terms of the contract.
10-42	Plans	The official drawings or exact reproductions which show the location, character, dimensions and details of the airport and the work to be done and which are to be considered as a part of the contract, supplementary to the specifications. Plans may also be referred to as 'contract drawings.'
10-43	Project	The agreed scope of work for accomplishing specific airport development with respect to a particular airport.
10-44	Proposal	The written offer of the bidder (when submitted on the approved proposal form) to perform the contemplated work and furnish the necessary materials in accordance with the provisions of the plans and specifications.
10-45	Proposal guaranty	The security furnished with a proposal to guarantee that the bidder will enter into a contract if their own proposal is accepted by the Owner.
10-46	Quality Assurance (QA)	Owner's responsibility to assure that construction work completed complies with specifications for payment.
10-47	Quality Control (QC)	Contractor's responsibility to control material(s) and construction processes to complete construction in accordance with project specifications.
10-48	Quality Assurance (QA) Inspector	An authorized representative of the Engineer and/or Resident Project Representative (RPR) assigned to make all necessary inspections, observations, tests, and/or observation of tests of the work performed or being performed, or of the materials furnished or being furnished by the Contractor.
10-49	Quality Assurance (QA) Laboratory	The official quality assurance testing laboratories of the Owner or such other laboratories as may be designated by the Engineer or RPR. May also be referred to as Engineer's, Owner's, or QA Laboratory.
10-50	Resident Project Representative (RPR)	The individual, partnership, firm, or corporation duly authorized by the Owner to be responsible for all necessary inspections, observations, tests, and/or observations of tests of the contract work performed or being performed, or of the materials furnished or

Paragraph Number	Term	Definition
		being furnished by the Contractor, and acting directly or through an authorized representative.
10-51	Runway	The area on the airport prepared for the landing and takeoff of aircraft.
10-52	Runway Safety Area (RSA)	A defined surface surrounding the runway prepared or suitable for reducing the risk of damage to aircraft. See the construction safety and phasing plan (CSPP) for limits of the RSA.
10-53	Safety Plan Compliance Document (SPCD)	Details how the Contractor will comply with the CSPP.
10-54	Specifications	A part of the contract containing the written directions and requirements for completing the contract work. Standards for specifying materials or testing which are cited in the contract specifications by reference shall have the same force and effect as if included in the contract physically.
10-55	Sponsor	A Sponsor is defined in 49 USC § 47102(24) as a public agency that submits to the FAA for an AIP grant; or a private Owner of a public-use airport that submits to the FAA an application for an AIP grant for the airport.
10-56	Structures	Airport facilities such as bridges; culverts; catch basins, inlets, retaining walls, cribbing; storm and sanitary sewer lines; water lines; underdrains; electrical ducts, manholes, handholes, lighting fixtures and bases; transformers; navigational aids; buildings; vaults; and, other manmade features of the airport that may be encountered in the work and not otherwise classified herein.
10-57	Subgrade	The soil that forms the pavement foundation.
10-58	Superintendent	The Contractor's executive representative who is present on the work during progress, authorized to receive and fulfill instructions from the RPR, and who shall supervise and direct the construction.
10-59	Supplemental Agreement	A written agreement between the Contractor and the Owner that establishes the basis of payment and contract time adjustment, if any, for the work affected by the supplemental agreement. A supplemental agreement is required if: (1) in scope work would increase or decrease the total amount of the awarded contract by more than 25%; (2) in scope work would increase or decrease the total of any major contract item by more than 25%; (3) work that is not within the scope of the originally awarded contract; or (4) adding or deleting of a major contract item.

Paragraph Number	Term	Definition
10-60	Surety	The corporation, partnership, or individual, other than the Contractor, executing payment or performance bonds that are furnished to the Owner by the Contractor.
10-61	Taxilane	A taxiway designed for low speed movement of aircraft between aircraft parking areas and terminal areas.
10-62	Taxiway	The portion of the air operations area of an airport that has been designated by competent airport authority for movement of aircraft to and from the airport's runways, aircraft parking areas, and terminal areas.
10-63	Taxiway/Taxilane Safety Area (TSA)	A defined surface alongside the taxiway prepared or suitable for reducing the risk of damage to an aircraft. See the construction safety and phasing plan (CSPP) for limits of the TSA.
10-64	Work	The furnishing of all labor, materials, tools, equipment, and incidentals necessary or convenient to the Contractor's performance of all duties and obligations imposed by the contract, plans, and specifications.
10-65	Working day	A working day shall be any day other than a legal holiday, Saturday, or Sunday on which the normal working forces of the Contractor may proceed with regular work for at least six (6) hours toward completion of the contract. When work is suspended for causes beyond the Contractor's control, it will not be counted as a working day. Saturdays, Sundays and holidays on which the Contractor's forces engage in regular work will be considered as working days.
10-66	Owner Defined terms	None

END OF SECTION 10

SECTION 20 PROPOSAL REQUIREMENTS AND CONDITIONS

20-02 QUALIFICATION OF BIDDERS. Each bidder shall submit evidence of competency and evidence of financial responsibility to perform the work to the Owner at the time of bid opening.

Evidence of competency, unless otherwise specified, shall consist of statements covering the bidder's past experience on similar work, and a list of equipment and a list of key personnel that would be available for the work.

Each bidder shall furnish the Owner satisfactory evidence of their financial responsibility. Evidence of financial responsibility, unless otherwise specified, shall consist of a confidential statement or report of the bidder's financial resources and liabilities as of the last calendar year or the bidder's last fiscal year. Such statements or reports shall be certified by a public accountant. At the time of submitting such financial statements or reports, the bidder shall further certify whether their financial responsibility is approximately the same as stated or reported by the public accountant. If the bidder's financial responsibility has changed, the bidder shall qualify the public accountant's statement or report to reflect the bidder's true financial condition at the time such qualified statement or report is submitted to the Owner.

Unless otherwise specified, a bidder may submit evidence that they are prequalified with the State Highway Division and are on the current "bidder's list" of the state in which the proposed work is located. Evidence of State Highway Division prequalification may be submitted as evidence of financial responsibility in lieu of the certified statements or reports specified above.

20-03 CONTENTS OF PROPOSAL FORMS. The Owner's proposal forms state the location and description of the proposed construction; the place, date, and time of opening of the proposals; and the estimated quantities of the various items of work to be performed and materials to be furnished for which unit bid prices are asked. The proposal form states the time in which the work must be completed, and the amount of the proposal guaranty that must accompany the proposal. The Owner will accept only those Proposals properly executed on physical forms or electronic forms provided by the Owner. Bidder actions that may cause the Owner to deem a proposal irregular are given in paragraph 20-09 *Irregular proposals*.

Mobilization is limited to 10 percent of the total project cost.

20-04 ISSUANCE OF PROPOSAL FORMS. The Owner reserves the right to refuse to issue a proposal form to a prospective bidder if the bidder is in default for any of the following reasons:

- a. Failure to comply with any prequalification regulations of the Owner, if such regulations are cited, or otherwise included, in the proposal as a requirement for bidding.
- b. Failure to pay, or satisfactorily settle, all bills due for labor and materials on former contracts in force with the Owner at the time the Owner issues the proposal to a prospective bidder.
- c. Documented record of Contractor default under previous contracts with the Owner.
- d. Documented record of unsatisfactory work on previous contracts with the Owner.

20-05 INTERPRETATION OF ESTIMATED PROPOSAL QUANTITIES. An estimate of quantities of work to be done and materials to be furnished under these specifications is given in the proposal. It is the result of careful calculations and is believed to be correct. It is given only as a basis for comparison of proposals and the award of the contract. The Owner does not expressly, or by implication, agree that the actual quantities involved will correspond exactly therewith; nor shall the bidder plead misunderstanding or deception because of such estimates of quantities, or of the character, location, or other conditions pertaining to the work. Payment to the Contractor will be made only for the actual quantities of work performed or materials furnished in accordance with the plans and specifications. It is understood that the quantities may be increased or decreased as provided in the Section 40, paragraph 40-02, Alteration of Work and Quantities, without in any way invalidating the unit bid prices.

20-06 EXAMINATION OF PLANS, SPECIFICATIONS, AND SITE. The bidder is expected to carefully examine the site of the proposed work, the proposal, plans, specifications, and contract forms. Bidders shall satisfy themselves to the character, quality, and quantities of work to be performed, materials to be furnished, and to the requirements of the proposed contract. The submission of a proposal shall be prima facie evidence that the bidder has made such examination and is satisfied to the conditions to be encountered in performing the work and the requirements of the proposed contract, plans, and specifications.

20-07 PREPARATION OF PROPOSAL. The bidder shall submit their proposal on the forms furnished by the Owner. All blank spaces in the proposal forms, unless explicitly stated otherwise, must be correctly filled in where indicated for each and every item for which a quantity is given. The bidder shall state the price (written in ink or typed) both in words and numerals which they propose for each pay item furnished in the proposal. In case of conflict between words and numerals, the words, unless obviously incorrect, shall govern.

The bidder shall correctly sign the proposal in ink. If the proposal is made by an individual, their name and post office address must be shown. If made by a partnership, the name and post office address of each member of the partnership must be shown. If made by a corporation, the person signing the proposal shall give the name of the state where the corporation was chartered and the name, titles, and business address of the president, secretary, and the treasurer. Anyone signing a proposal as an agent shall file evidence of their authority to do so and that the signature is binding upon the firm or corporation.

20-08 RESPONSIVE AND RESPONSIBLE BIDDER. A responsive bid conforms to all significant terms and conditions contained in the Owner's invitation for bid. It is the Owner's responsibility to decide if the exceptions taken by a bidder to the solicitation are material or not and the extent of deviation it is willing to accept.

A responsible bidder has the ability to perform successfully under the terms and conditions of a proposed procurement, as defined in 2 CFR § 200.318(h). This includes such matters as Contractor integrity, compliance with public policy, record of past performance, and financial and technical resources.

20-09 IRREGULAR PROPOSALS. Proposals shall be considered irregular for the following reasons:

- a. If the proposal is on a form other than that furnished by the Owner, or if the Owner's form is altered, or if any part of the proposal form is detached.
- b. If there are unauthorized additions, conditional or alternate pay items, or irregularities of any kind that make the proposal incomplete, indefinite, or otherwise ambiguous.
- c. If the proposal does not contain a unit price for each pay item listed in the proposal, except in the case of authorized alternate pay items, for which the bidder is not required to furnish a unit price.
- d. If the proposal contains unit prices that are obviously unbalanced.
- e. If the proposal is not accompanied by the proposal guaranty specified by the Owner.
- f. If the applicable Disadvantaged Business Enterprise information is incomplete.

The Owner reserves the right to reject any irregular proposal and the right to waive technicalities if such waiver is in the best interest of the Owner and conforms to local laws and ordinances pertaining to the letting of construction contracts.

20-10 BID GUARANTEE. Each separate proposal shall be accompanied by a bid bond, certified check, or other specified acceptable collateral, in the amount specified in the proposal form. Such bond, check, or collateral, shall be made payable to the Owner.

20-11 DELIVERY OF PROPOSAL. Each proposal submitted shall be placed in a sealed envelope plainly marked with the project number, location of airport, and name and business address of the bidder on the outside. When sent by mail, preferably registered, the sealed proposal, marked as indicated above, should be enclosed in an additional envelope. No proposal will be considered unless received at the place specified in the advertisement or as modified by Addendum before the time specified for opening all bids. Proposals received after the bid opening time shall be returned to the bidder unopened.

20-12 WITHDRAWAL OR REVISION OF PROPOSALS. A bidder may withdraw or revise (by withdrawal of one proposal and submission of another) a proposal provided that the bidder's request for withdrawal is received by the Owner in writing before the time specified for opening bids. Revised proposals must be received at the place specified in the advertisement before the time specified for opening all bids.

20-13 PUBLIC OPENING OF PROPOSALS. Proposals shall be opened, and read, publicly at the time and place specified in the advertisement. Bidders, their authorized agents, and other interested persons are invited to attend. Proposals that have been withdrawn (by written or telegraphic request) or received after the time specified for opening bids shall be returned to the bidder unopened.

20-14 DISQUALIFICATION OF BIDDERS. A bidder shall be considered disqualified for any of the following reasons:

- a. Submitting more than one proposal from the same partnership, firm, or corporation under the same or different name.

b. Evidence of collusion among bidders. Bidders participating in such collusion shall be disqualified as bidders for any future work of the Owner until any such participating bidder has been reinstated by the Owner as a qualified bidder.

c. If the bidder is considered to be in "default" for any reason specified in paragraph 20-04, *Issuance of Proposal Forms*, of this section.

20-15 Discrepancies and Omissions. A Bidder who discovers discrepancies or omissions with the project bid documents shall immediately notify the Owner's Engineer of the matter. A bidder that has doubt as to the true meaning of a project requirement may submit to the Owner's Engineer a written request for interpretation no later than 14 days prior to bid opening.

Any interpretation of the project bid documents by the Owner's Engineer will be by written addendum issued by the Owner. The Owner will not consider any instructions, clarifications or interpretations of the bidding documents in any manner other than written addendum.

END OF SECTION 20

SECTION 30 AWARD AND EXECUTION OF CONTRACT

30-01 CONSIDERATION OF PROPOSALS. After the proposals are publicly opened and read, they will be compared on the basis of the summation of the products obtained by multiplying the estimated quantities shown in the proposal by the unit bid prices. If a bidder's proposal contains a discrepancy between unit bid prices written in words and unit bid prices written in numbers, the unit bid price written in words shall govern.

Until the award of a contract is made, the Owner reserves the right to reject a bidder's proposal for any of the following reasons:

- a. If the proposal is irregular as specified in Section 20, paragraph 20-09, *Irregular Proposals*.
- b. If the bidder is disqualified for any of the reasons specified Section 20, paragraph 20-14, *Disqualification of Bidders*.

In addition, until the award of a contract is made, the Owner reserves the right to reject any or all proposals, waive technicalities, if such waiver is in the best interest of the Owner and is in conformance with applicable state and local laws or regulations pertaining to the letting of construction contracts; advertise for new proposals; or proceed with the work otherwise. All such actions shall promote the Owner's best interests.

30-02 AWARD OF CONTRACT. The award of a contract, if it is to be awarded, shall be made within 120 calendar days of the date specified for publicly opening proposals, unless otherwise specified herein.

If the Owner elects to proceed with an award of contract, the Owner will make award to the responsible bidder whose bid, conforming with all the material terms and conditions of the bid documents, is the lowest in price.

30-03 CANCELLATION OF AWARD. The Owner reserves the right to cancel the award without liability to the bidder, except return of proposal guaranty, at any time before a contract has been fully executed by all parties and is approved by the Owner in accordance with paragraph 30-07 *Approval of Contract*.

30-04 RETURN OF PROPOSAL GUARANTY. All proposal guaranties, except those of the two lowest bidders, will be returned immediately after the Owner has made a comparison of bids as specified in the paragraph 30-01, *Consideration of Proposals*. Proposal guaranties of the two lowest bidders will be retained by the Owner until such time as an award is made, at which time, the unsuccessful bidder's proposal guaranty will be returned. The successful bidder's proposal guaranty will be returned as soon as the Owner receives the contract bonds as specified in paragraph 30-05, *Requirements of Contract Bonds*.

30-05 REQUIREMENTS OF CONTRACT BONDS. At the time of the execution of the contract, the successful bidder shall furnish the Owner a surety bond or bonds that have been fully executed by the bidder and the surety guaranteeing the performance of the work and the payment of all legal debts that may be incurred by reason of the Contractor's performance of the work. The surety and the form of the bond or bonds shall be acceptable to the Owner. Unless otherwise

specified in this subsection, the surety bond or bonds shall be in a sum equal to the full amount of the contract.

30-06 EXECUTION OF CONTRACT. The successful bidder shall sign (execute) the necessary agreements for entering into the contract and return the signed contract to the Owner, along with the fully executed surety bond or bonds specified in paragraph 30-05, *Requirements of Contract Bonds*, of this section, within 15 calendar days from the date mailed or otherwise delivered to the successful bidder.

30-07 APPROVAL OF CONTRACT. Upon receipt of the contract and contract bond or bonds that have been executed by the successful bidder, the Owner shall complete the execution of the contract in accordance with local laws or ordinances, and return the fully executed contract to the Contractor. Delivery of the fully executed contract to the Contractor shall constitute the Owner's approval to be bound by the successful bidder's proposal and the terms of the contract.

30-08 FAILURE TO EXECUTE CONTRACT. Failure of the successful bidder to execute the contract and furnish an acceptable surety bond or bonds within the period specified in paragraph 30-06, *Execution of Contract*, of this section shall be just cause for cancellation of the award and forfeiture of the proposal guaranty, not as a penalty, but as liquidated damages to the Owner.

END OF SECTION 30

SECTION 40 SCOPE OF WORK

40-01 INTENT OF CONTRACT. The intent of the contract is to provide for construction and completion, in every detail, of the work described. It is further intended that the Contractor shall furnish all labor, materials, equipment, tools, transportation, and supplies required to complete the work in accordance with the plans, specifications, and terms of the contract.

40-02 ALTERATION OF WORK AND QUANTITIES. The Owner reserves the right to make such changes in quantities and work as may be necessary or desirable to complete, in a satisfactory manner, the original intended work. Unless otherwise specified in the Contract, the Owner's Engineer or RPR shall be and is hereby authorized to make, in writing, such in-scope alterations in the work and variation of quantities as may be necessary to complete the work, provided such action does not represent a significant change in the character of the work.

For purpose of this section, a significant change in character of work means: any change that is outside the current contract scope of work; any change (increase or decrease) in the total contract cost by more than 25%; or any change in the total cost of a major contract item by more than 25%.

Work alterations and quantity variances that do not meet the definition of significant change in character of work shall not invalidate the contract nor release the surety. Contractor agrees to accept payment for such work alterations and quantity variances in accordance with Section 90, paragraph 90-03, *Compensation for Altered Quantities*.

Should the value of altered work or quantity variance meet the criteria for significant change in character of work, such altered work and quantity variance shall be covered by a supplemental agreement. Supplemental agreements shall also require consent of the Contractor's surety and separate performance and payment bonds. If the Owner and the Contractor are unable to agree on a unit adjustment for any contract item that requires a supplemental agreement, the Owner reserves the right to terminate the contract with respect to the item and make other arrangements for its completion.

40-03 OMITTED ITEMS. The Owner, the Owner's Engineer or the RPR may provide written notice to the Contractor to omit from the work any contract item that does not meet the definition of major contract item. Major contract items may be omitted by a supplemental agreement. Such omission of contract items shall not invalidate any other contract provision or requirement.

Should a contract item be omitted or otherwise ordered to be non-performed, the Contractor shall be paid for all work performed toward completion of such item prior to the date of the order to omit such item. Payment for work performed shall be in accordance with Section 90, paragraph 90-04, *Payment for Omitted Items*.

40-04 EXTRA WORK. Should acceptable completion of the contract require the Contractor to perform an item of work not provided for in the awarded contract as previously modified by change order or supplemental agreement, Owner may issue a Change Order to cover the necessary extra work. Change orders for extra work shall contain agreed unit prices for performing the change order work in accordance with the requirements specified in the order, and shall contain any

adjustment to the contract time that, in the RPR's opinion, is necessary for completion of the extra work.

When determined by the RPR to be in the Owner's best interest, the RPR may order the Contractor to proceed with extra work as provided in Section 90, paragraph 90-05, *Payment for Extra Work*. Extra work that is necessary for acceptable completion of the project, but is not within the general scope of the work covered by the original contract shall be covered by a supplemental agreement as defined in Section 10, paragraph 10-59, *Supplemental Agreement*.

If extra work is essential to maintaining the project critical path, RPR may order the Contractor to commence the extra work under a Time and Material contract method. Once sufficient detail is available to establish the level of effort necessary for the extra work, the Owner shall initiate a change order or supplemental agreement to cover the extra work.

Any claim for payment of extra work that is not covered by written agreement (change order or supplemental agreement) shall be rejected by the Owner.

40-05 MAINTENANCE OF TRAFFIC. It is the explicit intention of the contract that the safety of aircraft, as well as the Contractor's equipment and personnel, is the most important consideration. The Contractor shall maintain traffic in the manner detailed in the Construction Safety and Phasing Plan (CSPP).

a. It is understood and agreed that the Contractor shall provide for the free and unobstructed movement of aircraft in the air operations areas (AOAs) of the airport with respect to their own operations and the operations of all subcontractors as specified in Section 80, paragraph 80-04, *Limitation of Operations*. It is further understood and agreed that the Contractor shall provide for the uninterrupted operation of visual and electronic signals (including power supplies thereto) used in the guidance of aircraft while operating to, from, and upon the airport as specified in Section 70, paragraph 70-15, *Contractor's Responsibility for Utility Service and Facilities of Others*.

b. With respect to their own operations and the operations of all subcontractors, the Contractor shall provide marking, lighting, and other acceptable means of identifying personnel, equipment, vehicles, storage areas, and any work area or condition that may be hazardous to the operation of aircraft, fire-rescue equipment, or maintenance vehicles at the airport in accordance with the construction safety and phasing plan (CSPP) and the safety plan compliance document (SPCD).

c. When the contract requires the maintenance of an existing road, street, or highway during the Contractor's performance of work that is otherwise provided for in the contract, plans, and specifications, the Contractor shall keep the road, street, or highway open to all traffic and shall provide maintenance as may be required to accommodate traffic. The Contractor, at their expense, shall be responsible for the repair to equal or better than preconstruction conditions of any damage caused by the Contractor's equipment and personnel. The Contractor shall furnish, erect, and maintain barricades, warning signs, flag person, and other traffic control devices in reasonable conformity with the Manual on Uniform Traffic Control Devices (MUTCD) (<http://mutcd.fhwa.dot.gov/>), unless otherwise specified. The Contractor shall also construct and maintain in a safe condition any temporary connections necessary for ingress to and egress from abutting property or intersecting roads, streets or highways. Unless otherwise specified herein,

the Contractor will not be required to furnish snow removal for such existing road, street, or highway.

40-06 REMOVAL OF EXISTING STRUCTURES. All existing structures encountered within the established lines, grades, or grading sections shall be removed by the Contractor, unless such existing structures are otherwise specified to be relocated, adjusted up or down, salvaged, abandoned in place, reused in the work or to remain in place. The cost of removing such existing structures shall not be measured or paid for directly, but shall be included in the various contract items.

Should the Contractor encounter an existing structure (above or below ground) in the work for which the disposition is not indicated on the plans, the Resident Project Representative (RPR) shall be notified prior to disturbing such structure. The disposition of existing structures so encountered shall be immediately determined by the RPR in accordance with the provisions of the contract.

Except as provided in Section 40, paragraph 40-07, *Rights in and Use of Materials Found in the Work*, it is intended that all existing materials or structures that may be encountered (within the lines, grades, or grading sections established for completion of the work) shall be used in the work as otherwise provided for in the contract and shall remain the property of the Owner when so used in the work.

40-07 RIGHTS IN AND USE OF MATERIALS FOUND IN THE WORK. Should the Contractor encounter any material such as (but not restricted to) sand, stone, gravel, slag, or concrete slabs within the established lines, grades, or grading sections, the use of which is intended by the terms of the contract to be embankment, the Contractor may at their own option either:

- a. Use such material in another contract item, providing such use is approved by the RPR and is in conformance with the contract specifications applicable to such use; or,
- b. Remove such material from the site, upon written approval of the RPR; or
- c. Use such material for the Contractor's own temporary construction on site; or,
- d. Use such material as intended by the terms of the contract.

Should the Contractor wish to exercise option a., b., or c., the Contractor shall request the RPR's approval in advance of such use.

Should the RPR approve the Contractor's request to exercise option a., b., or c., the Contractor shall be paid for the excavation or removal of such material at the applicable contract price. The Contractor shall replace, at their expense, such removed or excavated material with an agreed equal volume of material that is acceptable for use in constructing embankment, backfills, or otherwise to the extent that such replacement material is needed to complete the contract work. The Contractor shall not be charged for use of such material used in the work or removed from the site.

Should the RPR approve the Contractor's exercise of option a., the Contractor shall be paid, at the applicable contract price, for furnishing and installing such material in accordance with requirements of the contract item in which the material is used.

It is understood and agreed that the Contractor shall make no claim for delays by reason of their own exercise of option a., b., or c.

The Contractor shall not excavate, remove, or otherwise disturb any material, structure, or part of a structure which is located outside the lines, grades, or grading sections established for the work, except where such excavation or removal is provided for in the contract, plans, or specifications.

40-08 FINAL CLEANUP. Upon completion of the work and before acceptance and final payment will be made, the Contractor shall remove from the site all machinery, equipment, surplus and discarded materials, rubbish, temporary structures, and stumps or portions of trees. The Contractor shall cut all brush and woods within the limits indicated and shall leave the site in a neat and presentable condition. Material cleared from the site and deposited on adjacent property will not be considered as having been disposed of satisfactorily, unless the Contractor has obtained the written permission of the property Owner.

END OF SECTION 40

SECTION 50 CONTROL OF WORK

50-01 AUTHORITY OF THE RESIDENT PROJECT REPRESENTATIVE (RPR). The RPR has final authority regarding the interpretation of project specification requirements. The RPR shall determine acceptability of the quality of materials furnished, method of performance of work performed, and the manner and rate of performance of the work. The RPR does not have the authority to accept work that does not conform to specification requirements.

50-02 CONFORMITY WITH PLANS AND SPECIFICATIONS. All work and all materials furnished shall be in reasonably close conformity with the lines, grades, grading sections, cross-sections, dimensions, material requirements, and testing requirements that are specified (including specified tolerances) in the contract, plans, or specifications.

If the RPR finds the materials furnished, work performed, or the finished product not within reasonably close conformity with the plans and specifications, but that the portion of the work affected will, in their opinion, result in a finished product having a level of safety, economy, durability, and workmanship acceptable to the Owner, the RPR will advise the Owner of their determination that the affected work be accepted and remain in place. The RPR will document the determination and recommend to the Owner a basis of acceptance that will provide for an adjustment in the contract price for the affected portion of the work. Changes in the contract price must be covered by contract change order or supplemental agreement as applicable.

If the RPR finds the materials furnished, work performed, or the finished product are not in reasonably close conformity with the plans and specifications and have resulted in an unacceptable finished product, the affected work or materials shall be removed and replaced or otherwise corrected by and at the expense of the Contractor in accordance with the RPR's written orders.

The term "reasonably close conformity" shall not be construed as waiving the Contractor's responsibility to complete the work in accordance with the contract, plans, and specifications. The term shall not be construed as waiving the RPR's responsibility to insist on strict compliance with the requirements of the contract, plans, and specifications during the Contractor's execution of the work, when, in the RPR's opinion, such compliance is essential to provide an acceptable finished portion of the work.

The term "reasonably close conformity" is also intended to provide the RPR with the authority, after consultation with the Sponsor and FAA, to use sound engineering judgment in their determinations to accept work that is not in strict conformity, but will provide a finished product equal to or better than that required by the requirements of the contract, plans and specifications.

The RPR will not be responsible for the Contractor's means, methods, techniques, sequences, or procedures of construction or the safety precautions incident thereto.

50-03 COORDINATION OF CONTRACT, PLANS, AND SPECIFICATIONS. The contract, plans, specifications, and all referenced standards cited are essential parts of the contract requirements. If electronic files are provided and used on the project and there is a conflict between the electronic files and hard copy plans, the hard copy plans shall govern. A requirement occurring in one is as binding as though occurring in all. They are intended to be complementary and to describe and provide for a complete work. In case of discrepancy, calculated dimensions will

govern over scaled dimensions; contract technical specifications shall govern over contract general provisions, plans, cited standards for materials or testing, and cited advisory circulars (ACs); contract general provisions shall govern over plans, cited standards for materials or testing, and cited ACs; plans shall govern over cited standards for materials or testing and cited ACs. If any paragraphs contained in the Special Provisions conflict with General Provisions or Technical Specifications, the Special Provisions shall govern.

From time to time, discrepancies within cited testing standards occur due to the timing of the change, edits, and/or replacement of the standards. If the Contractor discovers any apparent discrepancy within standard test methods, the Contractor shall immediately ask the RPR for an interpretation and decision, and such decision shall be final.

The Contractor shall not take advantage of any apparent error or omission on the plans or specifications. In the event the Contractor discovers any apparent error or discrepancy, Contractor shall immediately notify the Owner or the designated representative in writing requesting their written interpretation and decision.

50-05 COOPERATION OF CONTRACTOR. The Contractor shall be supplied with five hard copies or an electronic PDF of the plans and specifications. The Contractor shall have available on the construction site at all times one hardcopy each of the plans and specifications. Additional hard copies of plans and specifications may be obtained by the Contractor for the cost of reproduction.

The Contractor shall give constant attention to the work to facilitate the progress thereof, and shall cooperate with the RPR and their inspectors and with other Contractors in every way possible. The Contractor shall have a competent superintendent on the work at all times who is fully authorized as their agent on the work. The superintendent shall be capable of reading and thoroughly understanding the plans and specifications and shall receive and fulfill instructions from the RPR or their authorized representative.

50-06 COOPERATION BETWEEN CONTRACTORS. The Owner reserves the right to contract for and perform other or additional work on or near the work covered by this contract.

When separate contracts are let within the limits of any one project, each Contractor shall conduct the work not to interfere with or hinder the progress of completion of the work being performed by other Contractors. Contractors working on the same project shall cooperate with each other as directed.

Each Contractor involved shall assume all liability, financial or otherwise, in connection with their own contract and shall protect and hold harmless the Owner from any and all damages or claims that may arise because of inconvenience, delays, or loss experienced because of the presence and operations of other Contractors working within the limits of the same project.

The Contractor shall arrange their work and shall place and dispose of the materials being used to not interfere with the operations of the other Contractors within the limits of the same project. The Contractor shall join their work with that of the others in an acceptable manner and shall perform it in proper sequence to that of the others.

50-07 CONSTRUCTION LAYOUT AND STAKES. The Engineer/RPR shall establish necessary horizontal and vertical control. The establishment of Survey Control and/or reestablishment of

survey control shall be by a State Licensed Land Surveyor. Contractor is responsible for preserving integrity of horizontal and vertical controls established by Engineer/RPR. In case of negligence on the part of the Contractor or their employees, resulting in the destruction of any horizontal and vertical control, the resulting costs will be deducted as a liquidated damage against the Contractor.

Prior to the start of construction, the Contractor will check all control points for horizontal and vertical accuracy and certify in writing to the RPR that the Contractor concurs with survey control established for the project. All lines, grades and measurements from control points necessary for the proper execution and control of the work on this project will be provided to the RPR. The Contractor is responsible to establish all layout required for the construction of the project.

Copies of survey notes will be provided to the RPR for each area of construction and for each placement of material as specified to allow the RPR to make periodic checks for conformance with plan grades, alignments and grade tolerances required by the applicable material specifications. Surveys will be provided to the RPR prior to commencing work items that cover or disturb the survey staking. Survey(s) and notes shall be provided in the following format(s): .doc.

Laser, GPS, String line, or other automatic control shall be checked with temporary control as necessary. In the case of error, on the part of the Contractor, their surveyor, employees or subcontractors, resulting in established grades, alignment or grade tolerances that do not concur with those specified or shown on the plans, the Contractor is solely responsible for correction, removal, replacement and all associated costs at no additional cost to the Owner.

No direct payment will be made, unless otherwise specified in contract documents, for this labor, materials, or other expenses. The cost shall be included in the price of the bid for the various items of the Contract.

50-08 AUTHORITY AND DUTIES OF QUALITY ASSURANCE (QA) INSPECTORS. QA inspectors shall be authorized to inspect all work done and all material furnished. Such QA inspection may extend to all or any part of the work and to the preparation, fabrication, or manufacture of the materials to be used. QA inspectors are not authorized to revoke, alter, or waive any provision of the contract. QA inspectors are not authorized to issue instructions contrary to the plans and specifications or to act as foreman for the Contractor.

QA Inspectors are authorized to notify the Contractor or their representatives of any failure of the work or materials to conform to the requirements of the contract, plans, or specifications and to reject such nonconforming materials in question until such issues can be referred to the RPR for a decision.

50-09 INSPECTION OF THE WORK. All materials and each part or detail of the work shall be subject to inspection. The RPR shall be allowed access to all parts of the work and shall be furnished with such information and assistance by the Contractor as is required to make a complete and detailed inspection.

If the RPR requests it, the Contractor, at any time before acceptance of the work, shall remove or uncover such portions of the finished work as may be directed. After examination, the Contractor shall restore said portions of the work to the standard required by the specifications. Should the work thus exposed or examined prove acceptable, the uncovering, or removing, and the replacing of the covering or making good of the parts removed will be paid for as extra work; but should the

work so exposed or examined prove unacceptable, the uncovering, or removing, and the replacing of the covering or making good of the parts removed will be at the Contractor's expense.

Provide advance written notice to the RPR of work the Contractor plans to perform each week and each day. Any work done or materials used without written notice and allowing opportunity for inspection by the RPR may be ordered removed and replaced at the Contractor's expense.

Should the contract work include relocation, adjustment, or any other modification to existing facilities, not the property of the (contract) Owner, authorized representatives of the Owners of such facilities shall have the right to inspect such work. Such inspection shall in no sense make any facility owner a party to the contract, and shall in no way interfere with the rights of the parties to this contract.

50-10 REMOVAL OF UNACCEPTABLE AND UNAUTHORIZED WORK. All work that does not conform to the requirements of the contract, plans, and specifications will be considered unacceptable, unless otherwise determined acceptable by the RPR as provided in paragraph 50-02, *Conformity with Plans and Specifications*.

Unacceptable work, whether the result of poor workmanship, use of defective materials, damage through carelessness, or any other cause found to exist prior to the final acceptance of the work, shall be removed immediately and replaced in an acceptable manner in accordance with the provisions of Section 70, paragraph 70-14, *Contractor's Responsibility for Work*.

No removal work made under provision of this paragraph shall be done without lines and grades having been established by the RPR. Work done contrary to the instructions of the RPR, work done beyond the lines shown on the plans or as established by the RPR, except as herein specified, or any extra work done without authority, will be considered as unauthorized and will not be paid for under the provisions of the contract. Work so done may be ordered removed or replaced at the Contractor's expense.

Upon failure on the part of the Contractor to comply with any order of the RPR made under the provisions of this subsection, the RPR will have authority to cause unacceptable work to be remedied or removed and replaced; and unauthorized work to be removed and recover the resulting costs as a liquidated damage against the Contractor.

50-11 LOAD RESTRICTIONS. The Contractor shall comply with all legal load restrictions in the hauling of materials on public roads beyond the limits of the work. A special permit will not relieve the Contractor of liability for damage that may result from the moving of material or equipment.

The operation of equipment of such weight or so loaded as to cause damage to structures or to any other type of construction will not be permitted. Hauling of materials over the base course or surface course under construction shall be limited as directed. No loads will be permitted on a concrete pavement, base, or structure before the expiration of the curing period. The Contractor, at their own expense, shall be responsible for the repair to equal or better than preconstruction conditions of any damage caused by the Contractor's equipment and personnel.

50-12 MAINTENANCE DURING CONSTRUCTION. The Contractor shall maintain the work during construction and until the work is accepted. Maintenance shall constitute continuous and effective work prosecuted day by day, with adequate equipment and forces so that the work is maintained in satisfactory condition at all times.

In the case of a contract for the placing of a course upon a course or subgrade previously constructed, the Contractor shall maintain the previous course or subgrade during all construction operations.

All costs of maintenance work during construction and before the project is accepted shall be included in the unit prices bid on the various contract items, and the Contractor will not be paid an additional amount for such work.

50-13 FAILURE TO MAINTAIN THE WORK. Should the Contractor at any time fail to maintain the work as provided in paragraph 50-12, *Maintenance during Construction*, the RPR shall immediately notify the Contractor of such noncompliance. Such notification shall specify a reasonable time within which the Contractor shall be required to remedy such unsatisfactory maintenance condition. The time specified will give due consideration to the exigency that exists.

Should the Contractor fail to respond to the RPR's notification, the Owner may suspend any work necessary for the Owner to correct such unsatisfactory maintenance condition, depending on the exigency that exists. Any maintenance cost incurred by the Owner, shall be recovered as a liquidated damage against the Contractor.

50-14 PARTIAL ACCEPTANCE. If at any time during the execution of the project the Contractor substantially completes a usable unit or portion of the work, the occupancy of which will benefit the Owner, the Contractor may request the RPR to make final inspection of that unit. If the RPR finds upon inspection that the unit has been satisfactorily completed in compliance with the contract, the RPR may accept it as being complete, and the Contractor may be relieved of further responsibility for that unit. Such partial acceptance and beneficial occupancy by the Owner shall not void or alter any provision of the contract.

50-15 FINAL ACCEPTANCE. Upon due notice from the Contractor of presumptive completion of the entire project, the RPR and Owner will make an inspection. If all construction provided for and contemplated by the contract is found to be complete in accordance with the contract, plans, and specifications, such inspection shall constitute the final inspection. The RPR shall notify the Contractor in writing of final acceptance as of the date of the final inspection.

If, however, the inspection discloses any work, in whole or in part, as being unsatisfactory, the RPR will notify the Contractor and the Contractor shall correct the unsatisfactory work. Upon correction of the work, another inspection will be made which shall constitute the final inspection, provided the work has been satisfactorily completed. In such event, the RPR will make the final acceptance and notify the Contractor in writing of this acceptance as of the date of final inspection.

50-16 CLAIMS FOR ADJUSTMENT AND DISPUTES. If for any reason the Contractor deems that additional compensation is due for work or materials not clearly provided for in the contract, plans, or specifications or previously authorized as extra work, the Contractor shall notify the RPR in writing of their intention to claim such additional compensation before the Contractor begins the work on which the Contractor bases the claim. If such notification is not given or the RPR is not afforded proper opportunity by the Contractor for keeping strict account of actual cost as required, then the Contractor hereby agrees to waive any claim for such additional compensation. Such notice by the Contractor and the fact that the RPR has kept account of the cost of the work shall not in any way be construed as proving or substantiating the validity of the claim. When the work on which the claim for additional compensation is based has been completed, the Contractor

shall, within 10 calendar days, submit a written claim to the RPR who will present it to the Owner for consideration in accordance with local laws or ordinances.

Nothing in this subsection shall be construed as a waiver of the Contractor's right to dispute final payment based on differences in measurements or computations.

The provisions of this paragraph will apply only to contracts awarded to the lowest bidder pursuant to competitive bidding.

On projects with original contract amounts in excess of \$100,000, the Contractor may submit to the RPR, in writing, proposals for modifying the plans, specifications or other requirements of the contract for the sole purpose of reducing the cost of construction. The value engineering cost proposal shall not impair, in any manner, the essential functions or characteristics of the project, including but not limited to service life, economy of operation, ease of maintenance, desired appearance, design and safety standards. This provision shall not apply unless the proposal submitted is specifically identified by the Contractor as being presented for consideration as a value engineering proposal.

Not eligible for value engineering cost proposals are changes in the basic design of a pavement type, runway and taxiway lighting, visual aids, hydraulic capacity of drainage facilities, or changes in grade or alignment that reduce the geometric standards of the project.

As a minimum, the following information shall be submitted by the Contractor with each proposal:

- a. A description of both existing contract requirements for performing the work and the proposed changes, with a discussion of the comparative advantages and disadvantages of each.
- b. An itemization of the contract requirements that must be changed if the proposal is adopted.
- c. A detailed estimate of the cost of performing the work under the existing contract and under the proposed changes.
- d. A statement of the time by which a change order adopting the proposal must be issued.
- e. A statement of the effect adoption of the proposal will have on the time for completion of the contract.
- f. The contract items of work affected by the proposed changes, including any quantity variation attributable to them.

The Contractor may withdraw, in whole or in part, any value engineering cost proposal not accepted by the RPR, within the period specified in the proposal. The provisions of this subsection shall not be construed to require the RPR to consider any value engineering cost proposal that may be submitted.

The Contractor shall continue to perform the work in accordance with the requirements of the contract until a change order incorporating the value engineering cost proposal has been issued. If a change order has not been issued by the date upon which the Contractor's value engineering cost proposal specifies that a decision should be made, or such other date as the Contractor may

subsequently have requested in writing, such value engineering cost proposal shall be deemed rejected.

The RPR shall be the sole judge of the acceptability of a value engineering cost proposal and of the estimated net savings from the adoption of all or any part of such proposal. In determining the estimated net savings, the RPR may disregard the contract bid prices if, in the RPR's judgment such prices do not represent a fair measure of the value of the work to be performed or deleted.

END OF SECTION 50

SECTION 60 CONTROL OF MATERIALS

60-01 SOURCE OF SUPPLY AND QUALITY REQUIREMENTS. The materials used in the work shall conform to the requirements of the contract, plans, and specifications. Unless otherwise specified, such materials that are manufactured or processed shall be new (as compared to used or reprocessed).

In order to expedite the inspection and testing of materials, the Contractor shall furnish documentation to the RPR as to the origin, composition, and manufacture of all materials to be used in the work. Documentation shall be furnished promptly after execution of the contract but, in all cases, prior to delivery of such materials.

At the RPR's option, materials may be approved at the source of supply before delivery. If it is found after trial that sources of supply for previously approved materials do not produce specified products, the Contractor shall furnish materials from other sources.

The Contractor shall furnish airport lighting equipment that meets the requirements of the specifications; and is listed in AC 150/5345-53, *Airport Lighting Equipment Certification Program and Addendum*, that is in effect on the date of advertisement.

60-02 SAMPLES, TESTS, AND CITED SPECIFICATIONS. All materials used in the work shall be inspected, tested, and approved by the RPR before incorporation in the work unless otherwise designated. Any work in which untested materials are used without approval or written permission of the RPR shall be performed at the Contractor's risk. Materials found to be unacceptable and unauthorized will not be paid for and, if directed by the RPR, shall be removed at the Contractor's expense.

Unless otherwise designated, quality assurance tests will be made by and at the expense of the Owner in accordance with the cited standard methods of ASTM, American Association of State Highway and Transportation Officials (AASHTO), federal specifications, Commercial Item Descriptions, and all other cited methods, which are current on the date of advertisement for bids.

The testing organizations performing on-site quality assurance field tests shall have copies of all referenced standards on the construction site for use by all technicians and other personnel. Unless otherwise designated, samples for quality assurance will be taken by a qualified representative of the RPR. All materials being used are subject to inspection, test, or rejection at any time prior to or during incorporation into the work. Copies of all tests will be furnished to the Contractor's representative at their request after review and approval of the RPR.

A copy of all Contractor QC test data shall be provided to the RPR daily, along with printed reports, in an approved format, on a weekly basis. After completion of the project, and prior to final payment, the Contractor shall submit a final report to the RPR showing all test data reports, plus an analysis of all results showing ranges, averages, and corrective action taken on all failing tests.

60-03 CERTIFICATION OF COMPLIANCE/ANALYSIS (COC/COA). The RPR may permit the use, prior to sampling and testing, of certain materials or assemblies when accompanied by manufacturer's COC stating that such materials or assemblies fully comply with the requirements of the contract. The certificate shall be signed by the manufacturer. Each lot of such materials or assemblies delivered to the work must be accompanied by a certificate of compliance in which

the lot is clearly identified. The COA is the manufacturer's COC and includes all applicable test results.

Materials or assemblies used on the basis of certificates of compliance may be sampled and tested at any time and if found not to be in conformity with contract requirements will be subject to rejection whether in place or not.

The form and distribution of certificates of compliance shall be as approved by the RPR.

When a material or assembly is specified by "brand name or equal" and the Contractor elects to furnish the specified "or equal," the Contractor shall be required to furnish the manufacturer's certificate of compliance for each lot of such material or assembly delivered to the work. Such certificate of compliance shall clearly identify each lot delivered and shall certify as to:

- a. Conformance to the specified performance, testing, quality or dimensional requirements; and,
- b. Suitability of the material or assembly for the use intended in the contract work.

The RPR shall be the sole judge as to whether the proposed "or equal" is suitable for use in the work.

The RPR reserves the right to refuse permission for use of materials or assemblies on the basis of certificates of compliance.

60-04 PLANT INSPECTION. The RPR or their authorized representative may inspect, at its source, any specified material or assembly to be used in the work. Manufacturing plants may be inspected from time to time for the purpose of determining compliance with specified manufacturing methods or materials to be used in the work and to obtain samples required for acceptance of the material or assembly.

Should the RPR conduct plant inspections, the following conditions shall exist:

- a. The RPR shall have the cooperation and assistance of the Contractor and the producer with whom the Contractor has contracted for materials.
- b. The RPR shall have full entry at all reasonable times to such parts of the plant that concern the manufacture or production of the materials being furnished.
- c. If required by the RPR, the Contractor shall arrange for adequate office or working space that may be reasonably needed for conducting plant inspections. Place office or working space in a convenient location with respect to the plant.

It is understood and agreed that the Owner shall have the right to retest any material that has been tested and approved at the source of supply after it has been delivered to the site. The RPR shall have the right to reject only material which, when retested, does not meet the requirements of the contract, plans, or specifications.

60-05 ENGINEER/ RESIDENT PROJECT REPRESENTATIVE (RPR) FIELD OFFICE. None.

60-06 STORAGE OF MATERIALS. Materials shall be stored to assure the preservation of their quality and fitness for the work. Stored materials, even though approved before storage, may again be inspected prior to their use in the work. Stored materials shall be located to facilitate their prompt inspection. The Contractor shall coordinate the storage of all materials with the RPR. Materials to be stored on airport property shall not create an obstruction to air navigation nor shall they interfere with the free and unobstructed movement of aircraft. Unless otherwise shown on the plans and/or CSPP, the storage of materials and the location of the Contractor's plant and parked equipment or vehicles shall be as directed by the RPR. Private property shall not be used for storage purposes without written permission of the Owner or lessee of such property. The Contractor shall make all arrangements and bear all expenses for the storage of materials on private property. Upon request, the Contractor shall furnish the RPR a copy of the property Owner's permission.

All storage sites on private or airport property shall be restored to their original condition by the Contractor at their expense, except as otherwise agreed to (in writing) by the Owner or lessee of the property.

60-07 UNACCEPTABLE MATERIALS. Any material or assembly that does not conform to the requirements of the contract, plans, or specifications shall be considered unacceptable and shall be rejected. The Contractor shall remove any rejected material or assembly from the site of the work, unless otherwise instructed by the RPR.

Rejected material or assembly, the defects of which have been corrected by the Contractor, shall not be returned to the site of the work until such time as the RPR has approved its use in the work.

60-08 OWNER FURNISHED MATERIALS. The Contractor shall furnish all materials required to complete the work, except those specified, if any, to be furnished by the Owner. Owner-furnished materials shall be made available to the Contractor at the location specified.

All costs of handling, transportation from the specified location to the site of work, storage, and installing Owner-furnished materials shall be included in the unit price bid for the contract item in which such Owner-furnished material is used.

After any Owner-furnished material has been delivered to the location specified, the Contractor shall be responsible for any demurrage, damage, loss, or other deficiencies that may occur during the Contractor's handling, storage, or use of such Owner-furnished material. The Owner will deduct from any monies due or to become due the Contractor any cost incurred by the Owner in making good such loss due to the Contractor's handling, storage, or use of Owner-furnished materials.

END OF SECTION 60

SECTION 70 LEGAL REGULATIONS AND RESPONSIBILITY TO PUBLIC

70-01 LAWS TO BE OBSERVED. The Contractor shall keep fully informed of all federal and state laws, all local laws, ordinances, and regulations and all orders and decrees of bodies or tribunals having any jurisdiction or authority, which in any manner affect those engaged or employed on the work, or which in any way affect the conduct of the work. The Contractor shall at all times observe and comply with all such laws, ordinances, regulations, orders, and decrees; and shall protect and indemnify the Owner and all their officers, agents, or servants against any claim or liability arising from or based on the violation of any such law, ordinance, regulation, order, or decree, whether by the Contractor or the Contractor's employees.

70-02 PERMITS, LICENSES, AND TAXES. The Contractor shall procure all permits and licenses, pay all charges, fees, and taxes, and give all notices necessary and incidental to the due and lawful execution of the work.

70-03 PATENTED DEVICES, MATERIALS, AND PROCESSES. If the Contractor is required or desires to use any design, device, material, or process covered by letters of patent or copyright, the Contractor shall provide for such use by suitable legal agreement with the Patentee or Owner. The Contractor and the surety shall indemnify and hold harmless the Owner, any third party, or political subdivision from any and all claims for infringement by reason of the use of any such patented design, device, material or process, or any trademark or copyright, and shall indemnify the Owner for any costs, expenses, and damages which it may be obliged to pay by reason of an infringement, at any time during the execution or after the completion of the work.

70-04 RESTORATION OF SURFACES DISTURBED BY OTHERS. The Owner reserves the right to authorize the construction, reconstruction, or maintenance of any public or private utility service, FAA or National Oceanic and Atmospheric Administration (NOAA) facility, or a utility service of another government agency at any time during the progress of the work.

Except as listed above, the Contractor shall not permit any individual, firm, or corporation to excavate or otherwise disturb such utility services or facilities located within the limits of the work without the written permission of the RPR.

Should the Owner of public or private utility service, FAA, or NOAA facility, or a utility service of another government agency be authorized to construct, reconstruct, or maintain such utility service or facility during the progress of the work, the Contractor shall cooperate with such Owners by arranging and performing the work in this contract to facilitate such construction, reconstruction or maintenance by others whether or not such work by others is listed above. When ordered as extra work by the RPR, the Contractor shall make all necessary repairs to the work which are due to such authorized work by others, unless otherwise provided for in the contract, plans, or specifications. It is understood and agreed that the Contractor shall not be entitled to make any claim for damages due to such authorized work by others or for any delay to the work resulting from such authorized work.

70-05 FEDERAL PARTICIPATION. The United States Government has agreed to reimburse the Owner for some portion of the contract costs. The contract work is subject to the inspection and approval of duly authorized representatives of the FAA Administrator. No requirement of this contract shall be construed as making the United States a party to the contract nor will any such requirement interfere, in any way, with the rights of either party to the contract.

70-06 SANITARY, HEALTH, AND SAFETY PROVISIONS. The Contractor's worksite and facilities shall comply with applicable federal, state, and local requirements for health, safety and sanitary provisions.

70-07 PUBLIC CONVENIENCE AND SAFETY. The Contractor shall control their operations and those of their subcontractors and all suppliers, to assure the least inconvenience to the traveling public. Under all circumstances, safety shall be the most important consideration.

The Contractor shall maintain the free and unobstructed movement of aircraft and vehicular traffic with respect to their own operations and those of their own subcontractors and all suppliers in accordance with Section 40, paragraph 40-05, *Maintenance of Traffic*, and shall limit such operations for the convenience and safety of the traveling public as specified in Section 80, paragraph 80-04, *Limitation of Operations*.

The Contractor shall remove or control debris and rubbish resulting from its work operations at frequent intervals, and upon the order of the RPR. If the RPR determines the existence of Contractor debris in the work site represents a hazard to airport operations and the Contractor is unable to respond in a prompt and reasonable manner, the RPR reserves the right to assign the task of debris removal to a third party and recover the resulting costs as a liquidated damage against the Contractor.

70-08 CONSTRUCTION SAFETY AND PHASING PLAN (CSPP). The Contractor shall complete the work in accordance with the approved Construction Safety and Phasing Plan (CSPP) developed in accordance with AC 150/5370-2, Operational Safety on Airports During Construction.

70-09 USE OF EXPLOSIVES. The use of explosives is not permitted on this project.

All explosives shall be stored in a secure manner in compliance with all laws and ordinances, and all such storage places shall be clearly marked. Where no local laws or ordinances apply, storage shall be provided satisfactory to the RPR and, in general, not closer than 1,000 feet (300 m) from the work or from any building, road, or other place of human occupancy.

The Contractor shall notify each property Owner and public utility company having structures or facilities in proximity to the site of the work of their intention to use explosives. Such notice shall be given sufficiently in advance to enable them to take such steps as they may deem necessary to protect their property from injury.

70-10 PROTECTION AND RESTORATION OF PROPERTY AND LANDSCAPE. The Contractor shall be responsible for the preservation of all public and private property, and shall protect carefully from disturbance or damage all land monuments and property markers until the Engineer/RPR has witnessed or otherwise referenced their location and shall not move them until directed.

The Contractor shall be responsible for all damage or injury to property of any character, during the execution of the work, resulting from any act, omission, neglect, or misconduct in manner or method of executing the work, or at any time due to defective work or materials, and said responsibility shall not be released until the project has been completed and accepted.

When or where any direct or indirect damage or injury is done to public or private property by or on account of any act, omission, neglect, or misconduct in the execution of the work, or in consequence of the non-execution thereof by the Contractor, the Contractor shall restore, at their expense, such property to a condition similar or equal to that existing before such damage or injury was done, by repairing, or otherwise restoring as may be directed, or the Contractor shall make good such damage or injury in an acceptable manner.

70-11 RESPONSIBILITY FOR DAMAGE CLAIMS. The Contractor shall indemnify and hold harmless the Engineer/RPR and the Owner and their officers, agents, and employees from all suits, actions, or claims, of any character, brought because of any injuries or damage received or sustained by any person, persons, or property on account of the operations of the Contractor; or on account of or in consequence of any neglect in safeguarding the work; or through use of unacceptable materials in constructing the work; or because of any act or omission, neglect, or misconduct of said Contractor; or because of any claims or amounts recovered from any infringements of patent, trademark, or copyright; or from any claims or amounts arising or recovered under the "Workmen's Compensation Act," or any other law, ordinance, order, or decree. Money due the Contractor under and by virtue of their own contract considered necessary by the Owner for such purpose may be retained for the use of the Owner or, in case no money is due, their own surety may be held until such suits, actions, or claims for injuries or damages shall have been settled and suitable evidence to that effect furnished to the Owner, except that money due the Contractor will not be withheld when the Contractor produces satisfactory evidence that he or she is adequately protected by public liability and property damage insurance.

70-12 THIRD PARTY BENEFICIARY CLAUSE. It is specifically agreed between the parties executing the contract that it is not intended by any of the provisions of any part of the contract to create for the public or any member thereof, a third-party beneficiary or to authorize anyone not a party to the contract to maintain a suit for personal injuries or property damage pursuant to the terms or provisions of the contract.

70-13 OPENING SECTIONS OF THE WORK TO TRAFFIC. If it is necessary for the Contractor to complete portions of the contract work for the beneficial occupancy of the Owner prior to completion of the entire contract, such "phasing" of the work must be specified below and indicated on the approved Construction Safety and Phasing Plan (CSPP) and the project plans. When so specified, the Contractor shall complete such portions of the work on or before the date specified or as otherwise specified.

Upon completion of any portion of work listed above, such portion shall be accepted by the Owner in accordance with Section 50, paragraph 50-14, *Partial Acceptance*.

No portion of the work may be opened by the Contractor until directed by the Owner in writing. Should it become necessary to open a portion of the work to traffic on a temporary or intermittent basis, such openings shall be made when, in the opinion of the RPR, such portion of the work is in an acceptable condition to support the intended traffic. Temporary or intermittent openings are considered to be inherent in the work and shall not constitute either acceptance of the portion of the work so opened or a waiver of any provision of the contract. Any damage to the portion of the work so opened that is not attributable to traffic which is permitted by the Owner shall be repaired by the Contractor at their expense.

The Contractor shall make their own estimate of the inherent difficulties involved in completing the work under the conditions herein described and shall not claim any added compensation by reason of delay or increased cost due to opening a portion of the contract work.

The Contractor must conform to safety standards contained AC 150/5370-2 and the approved CSPP.

Contractor shall refer to the plans, specifications, and the approved CSPP to identify barricade requirements, temporary and/or permanent markings, airfield lighting, guidance signs and other safety requirements prior to opening up sections of work to traffic.

70-14 CONTRACTOR'S RESPONSIBILITY FOR WORK. Until the RPR's final written acceptance of the entire completed work, excepting only those portions of the work accepted in accordance with Section 50, paragraph 50-14, *Partial Acceptance*, the Contractor shall have the charge and care thereof and shall take every precaution against injury or damage to any part due to the action of the elements or from any other cause, whether arising from the execution or from the non-execution of the work. The Contractor shall rebuild, repair, restore, and make good all injuries or damages to any portion of the work occasioned by any of the above causes before final acceptance and shall bear the expense thereof except damage to the work 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 such as earthquake, tidal wave, tornado, hurricane or other cataclysmic phenomenon of nature, or acts of the public enemy or of government authorities.

If the work is suspended for any cause whatever, the Contractor shall be responsible for the work and shall take such precautions necessary to prevent damage to the work. The Contractor shall provide for normal drainage and shall erect necessary temporary structures, signs, or other facilities at their own expense. During such period of suspension of work, the Contractor shall properly and continuously maintain in an acceptable growing condition all living material in newly established planting, seeding, and sodding furnished under the contract, and shall take adequate precautions to protect new tree growth and other important vegetative growth against injury.

70-15 CONTRACTOR'S RESPONSIBILITY FOR UTILITY SERVICE AND FACILITIES OF OTHERS. As provided in paragraph 70-04, *Restoration of Surfaces Disturbed by Others*, the Contractor shall cooperate with the owner of any public or private utility service, FAA or NOAA, or a utility service of another government agency that may be authorized by the Owner to construct, reconstruct or maintain such utility services or facilities during the progress of the work. In addition, the Contractor shall control their operations to prevent the unscheduled interruption of such utility services and facilities.

To the extent that such public or private utility services, FAA, or NOAA facilities, or utility services of another governmental agency are known to exist within the limits of the contract work, the approximate locations have been indicated on the plans and/or in the contract documents.

It is understood and agreed that the Owner does not guarantee the accuracy or the completeness of the location information relating to existing utility services, facilities, or structures that may be shown on the plans or encountered in the work. Any inaccuracy or omission in such information shall not relieve the Contractor of the responsibility to protect such existing features from damage or unscheduled interruption of service.

It is further understood and agreed that the Contractor shall, upon execution of the contract, notify the Owners of all utility services or other facilities of their plan of operations. Such notification shall be in writing addressed to "The Person to Contact" as provided in this paragraph and paragraph 70-04, *Restoration of Surfaces Disturbed By Others*. A copy of each notification shall be given to the RPR.

In addition to the general written notification provided, it shall be the responsibility of the Contractor to keep such individual Owners advised of changes in their plan of operations that would affect such Owners.

Prior to beginning the work in the general vicinity of an existing utility service or facility, the Contractor shall again notify each such Owner of their plan of operation. If, in the Contractor's opinion, the Owner's assistance is needed to locate the utility service or facility or the presence of a representative of the Owner is desirable to observe the work, such advice should be included in the notification. Such notification shall be given by the most expeditious means to reach the utility owner's "Person to Contact" no later than two normal business days prior to the Contractor's commencement of operations in such general vicinity. The Contractor shall furnish a written summary of the notification to the RPR.

The Contractor's failure to give the two days' notice shall be cause for the Owner to suspend the Contractor's operations in the general vicinity of a utility service or facility.

Where the outside limits of an underground utility service have been located and staked on the ground, the Contractor shall be required to use hand excavation methods within 3 feet (1 m) of such outside limits at such points as may be required to ensure protection from damage due to the Contractor's operations.

Should the Contractor damage or interrupt the operation of a utility service or facility by accident or otherwise, the Contractor shall immediately notify the proper authority and the RPR and shall take all reasonable measures to prevent further damage or interruption of service. The Contractor, in such events, shall cooperate with the utility service or facility owner and the RPR continuously until such damage has been repaired and service restored to the satisfaction of the utility or facility owner.

The Contractor shall bear all costs of damage and restoration of service to any utility service or facility due to their operations whether due to negligence or accident. The Owner reserves the right to deduct such costs from any monies due or which may become due the Contractor, or their own surety.

70-16 FURNISHING RIGHTS-OF-WAY. The Owner will be responsible for furnishing all rights-of-way upon which the work is to be constructed in advance of the Contractor's operations.

70-17 PERSONAL LIABILITY OF PUBLIC OFFICIALS. In carrying out any of the contract provisions or in exercising any power or authority granted by this contract, there shall be no liability upon the Engineer, RPR, their authorized representatives, or any officials of the Owner either personally or as an official of the Owner. It is understood that in such matters they act solely as agents and representatives of the Owner.

70-18 NO WAIVER OF LEGAL RIGHTS. Upon completion of the work, the Owner will expeditiously make final inspection and notify the Contractor of final acceptance. Such final

acceptance, however, shall not preclude or stop the Owner from correcting any measurement, estimate, or certificate made before or after completion of the work, nor shall the Owner be precluded or stopped from recovering from the Contractor or their surety, or both, such overpayment as may be sustained, or by failure on the part of the Contractor to fulfill their obligations under the contract. A waiver on the part of the Owner of any breach of any part of the contract shall not be held to be a waiver of any other or subsequent breach.

The Contractor, without prejudice to the terms of the contract, shall be liable to the Owner for latent defects, fraud, or such gross mistakes as may amount to fraud, or as regards the Owner's rights under any warranty or guaranty.

70-19 ENVIRONMENTAL PROTECTION. The Contractor shall comply with all federal, state, and local laws and regulations controlling pollution of the environment. The Contractor shall take necessary precautions to prevent pollution of streams, lakes, ponds, and reservoirs with fuels, oils, asphalts, chemicals, or other harmful materials and to prevent pollution of the atmosphere from particulate and gaseous matter.

70-20 ARCHAEOLOGICAL AND HISTORICAL FINDINGS. Unless otherwise specified in this subsection, the Contractor is advised that the site of the work is not within any property, district, or site, and does not contain any building, structure, or object listed in the current National Register of Historic Places published by the United States Department of Interior.

Should the Contractor encounter, during their operations, any building, part of a building, structure, or object that is incongruous with its surroundings, the Contractor shall immediately cease operations in that location and notify the RPR. The RPR will immediately investigate the Contractor's finding and the Owner will direct the Contractor to either resume operations or to suspend operations as directed.

Should the Owner order suspension of the Contractor's operations in order to protect an archaeological or historical finding, or order the Contractor to perform extra work, such shall be covered by an appropriate contract change order or supplemental agreement as provided in Section 40, paragraph 40-04, *Extra Work*, and Section 90, paragraph 90-05, *Payment for Extra Work*. If appropriate, the contract change order or supplemental agreement shall include an extension of contract time in accordance with Section 80, paragraph 80-07, *Determination and Extension of Contract Time*.

70-21 INSURANCE REQUIREMENTS. Insert local insurance requirements for the project.

CONTRACTOR'S INSURANCE

1. The Contractor shall not commence any work in connection with this Agreement until he has obtained all required insurance and such insurance has been approved by the Okaloosa County Risk Manager or designee.
2. All insurance policies shall be with insurers authorized to do business in the State of Florida.
3. All insurance shall include the interest of all entities named and their respective officials, employees & volunteers of each and all other interests as may be reasonably required by Okaloosa County. The coverage afforded the Additional Insured under this policy shall be primary insurance. The County shall be primary on all insurance with the exception of Commercial General Liability, where the

Florida Department of Transportation shall be primary and Okaloosa County listed as secondary. If the Additional Insured have other insurance that is applicable to the loss, such other insurance shall be on an excess or contingent basis. The amount of the company's liability under this policy shall not be reduced by the existence of such other insurance.

4. Where applicable, the County shall be shown as an Additional Insured with a Waiver of Subrogation on the Certificate of Insurance.
5. The County shall retain the right to reject all insurance policies that do not meet the requirement of this Agreement. Further, the County reserves the right to change these insurance requirements with 60-day notice to the Contractor.
6. The County reserves the right at any time to require the Contractor to provide copies of any insurance policies to document the insurance coverage specified in this Agreement.
7. The designation of Contractor shall include any associated or subsidiary company which is involved and is a part of the contract and such, if any associated or subsidiary company involved in the project must be named in the Workers' Compensation coverage.
8. Any exclusions or provisions in the insurance maintained by the Contractor that excludes coverage for work contemplated in this agreement shall be deemed unacceptable and shall be considered breach of contract.

WORKERS' COMPENSATION INSURANCE

1. The Contractor shall secure and maintain during the life of this Agreement Workers' Compensation insurance for all of his employees employed for the project or any site connected with the work, including supervision, administration or management, of this project and in case any work is sublet, with the approval of the County, the Contractor shall require the Subcontractor similarly to provide Workers' Compensation insurance for all employees employed at the site of the project, and such evidence of insurance shall be furnished to the County not less than ten (10) days prior to the commencement of any and all sub-contractual Agreements which have been approved by the County.
2. Contractor must be in compliance with all applicable State and Federal workers' compensation laws, including the U.S. Longshore Harbor Workers' Act or Jones Act, if applicable.
3. No class of employee, including the Contractor himself, shall be excluded from the Workers' Compensation insurance coverage. The Workers' Compensation insurance shall also include Employer's Liability coverage.

BUSINESS AUTOMOBILE LIABILITY

Coverage must be afforded for all Owned, Hired, Scheduled, and Non-Owned vehicles for Bodily Injury and Property Damage in an amount not less than \$1,000,000 combined single limit each accident. If the contractor does not own vehicles, the contractor shall maintain coverage for Hired & Non-Owned Auto Liability, which may be satisfied by way of endorsement to the Commercial

General Liability policy or separate Business Auto Policy. Contractor must maintain this insurance coverage throughout the life of this Agreement.

COMMERCIAL GENERAL LIABILITY INSURANCE

1. The Contractor shall carry other Commercial General Liability insurance against all other Bodily Injury, Property Damage and Personal and Advertising Injury exposures. The Contractor shall cause, or cause its contractor(s) or consultant(s) to cause, the Florida Department of Transportation to be made an Additional Insured as to such insurance. Such coverage shall be on an "occurrence" basis and shall include Products/Completed Operations coverage. The coverage afforded to the Department as an Additional Insured shall be primary as to any other available insurance and shall not be more restrictive than the coverage afforded to the Named Insured. In the case of Commercial General Liability ONLY, The County of Okaloosa shall be named secondary. The limits of coverage shall not be less than \$1,000,000 for each occurrence and not less than a \$5,000,000 annual general aggregate, inclusive of amounts provided by an umbrella or excess policy. The limits of coverage described herein shall apply fully to the work or operations performed under the Agreement, and may not be shared with or diminished by claims unrelated to the Agreement. The policy/ies and coverage described herein may be subject to a deductible and such deductibles shall be paid by the Named Insured.
2. All liability insurance (other than Professional Liability) shall be written on an occurrence basis and shall not be written on a claims-made basis. If the insurance is issued with an aggregate limit of liability, the aggregate limit of liability shall apply only to the locations included in this Agreement. If, as the result of any claims or other reasons, the available limits of insurance reduce to less than those stated in the Limits of Liability, the Contractor shall notify the County representative in writing. The Contractor shall purchase additional liability insurance to maintain the requirements established in this Agreement. Umbrella or Excess Liability insurance can be purchased to meet the Limits of Liability specified in this Agreement.
3. Commercial General Liability coverage shall include the following:
 - 1.) Premises & Operations Liability
 - 2.) Bodily Injury and Property Damage Liability
 - 3.) Independent Contractors Liability
 - 4.) Contractual Liability
 - 5.) Products and Completed Operations Liability
4. Contractor shall agree to keep in continuous force Commercial General Liability coverage for the length of the contract.

LIMITS OF LIABILITY

The insurance required shall be written for not less than the following, or greater if required by law and shall include Employer's liability with limits as prescribed in this contract:

LIMIT

1. Worker's Compensation

- | | | |
|-----|---------------------------------|--|
| 1.) | State | Statutory |
| 2.) | Employer's Liability | \$500,000 each accident |
| 2. | Business Automobile | \$3M each accident
(A combined single limit) |
| 3. | Commercial General Liability | \$5M each occurrence
for Bodily Injury & Property
Damage |
| | | \$5M each occurrence
Products and completed
operations |
| 4. | Personal and Advertising Injury | \$1M each occurrence |

END OF SECTION 70

SECTION 80 EXECUTION AND PROGRESS

80-01 SUBLETTING OF CONTRACT. The Owner will not recognize any subcontractor on the work. The Contractor shall at all times when work is in progress be represented either in person, by a qualified superintendent, or by other designated, qualified representative who is duly authorized to receive and execute orders of the Resident Project Representative (RPR).

The Contractor shall perform, with his organization, an amount of work equal to at least 25% percent of the total contract cost.

Should the Contractor elect to assign their contract, said assignment shall be concurred in by the surety, shall be presented for the consideration and approval of the Owner, and shall be consummated only on the written approval of the Owner.

The Contractor shall provide copies of all subcontracts to the RPR 14 days prior to being utilized on the project. As a minimum, the information shall include the following:

- Subcontractor's legal company name.
- Subcontractor's legal company address, including County name.
- Principal contact person's name, telephone and fax number.
- Complete narrative description, and dollar value of the work to be performed by the subcontractor.
- Copies of required insurance certificates in accordance with the specifications.
- Minority/ non-minority status.

80-02 NOTICE TO PROCEED (NTP). The Owners notice to proceed will state the date on which contract time commences. The Contractor is expected to commence project operations within 10 days of the NTP date. The Contractor shall notify the RPR at least 24 hours in advance of the time contract operations begins. The Contractor shall not commence any actual operations prior to the date on which the notice to proceed is issued by the Owner.

80-03 EXECUTION AND PROGRESS. Unless otherwise specified, the Contractor shall submit their coordinated construction schedule showing all work activities for the RPR's review and acceptance at least 10 days prior to the start of work. The Contractor's progress schedule, once accepted by the RPR, will represent the Contractor's baseline plan to accomplish the project in accordance with the terms and conditions of the Contract. The RPR will compare actual Contractor progress against the baseline schedule to determine that status of the Contractor's performance. The Contractor shall provide sufficient materials, equipment, and labor to guarantee the completion of the project in accordance with the plans and specifications within the time set forth in the proposal.

If the Contractor falls significantly behind the submitted schedule, the Contractor shall, upon the RPR's request, submit a revised schedule for completion of the work within the contract time and modify their operations to provide such additional materials, equipment, and labor necessary to meet the revised schedule. Should the execution of the work be discontinued for any reason, the Contractor shall notify the RPR at least 24 hours in advance of resuming operations.

The Contractor shall not commence any actual construction prior to the date on which the NTP is issued by the Owner.

The project schedule shall be prepared as a network diagram in Critical Path Method (CPM), Program Evaluation and Review Technique (PERT), or other format, or as otherwise specified. It shall include information on the sequence of work activities, milestone dates, and activity duration. The schedule shall show all work items identified in the project proposal for each work area and shall include the project start date and end date.

The Contractor shall maintain the work schedule and provide an update and analysis of the progress schedule on a twice monthly basis, or as otherwise specified in the contract. Submission of the work schedule shall not relieve the Contractor of overall responsibility for scheduling, sequencing, and coordinating all work to comply with the requirements of the contract.

80-04 LIMITATION OF OPERATIONS. The Contractor shall control their operations and the operations of their subcontractors and all suppliers to provide for the free and unobstructed movement of aircraft in the air operations areas (AOA) of the airport.

When the work requires the Contractor to conduct their operations within an AOA of the airport, the work shall be coordinated with airport operations (through the RPR) at least 48 hours prior to commencement of such work. The Contractor shall not close an AOA until so authorized by the RPR and until the necessary temporary marking, signage and associated lighting is in place as provided in Section 70, paragraph 70-08, *Construction Safety and Phasing Plan (CSPP)*.

When the contract work requires the Contractor to work within an AOA of the airport on an intermittent basis (intermittent opening and closing of the AOA), the Contractor shall maintain constant communications as specified; immediately obey all instructions to vacate the AOA; and immediately obey all instructions to resume work in such AOA. Failure to maintain the specified communications or to obey instructions shall be cause for suspension of the Contractor's operations in the AOA until satisfactory conditions are provided. The areas of the AOA identified in the Construction Safety Phasing Plan (CSPP) and as listed below, cannot be closed to operating aircraft to permit the Contractor's operations on a continuous basis and will therefore be closed to aircraft operations intermittently as follows:

The Contractor shall be required to conform to safety standards contained in AC 150/5370-2, Operational Safety on Airports During Construction and the approved CSPP.

80-04.1 OPERATIONAL SAFETY ON AIRPORT DURING CONSTRUCTION. All Contractors' operations shall be conducted in accordance with the approved project Construction Safety and Phasing Plan (CSPP) and the Safety Plan Compliance Document (SPCD) and the provisions set forth within the current version of AC 150/5370-2, Operational Safety on Airports During Construction. The CSPP included within the contract documents conveys minimum requirements for operational safety on the airport during construction activities. The Contractor shall prepare and submit a SPCD that details how it proposes to comply with the requirements presented within the CSPP.

The Contractor shall implement all necessary safety plan measures prior to commencement of any work activity. The Contractor shall conduct routine checks to assure compliance with the safety plan measures.

The Contractor is responsible to the Owner for the conduct of all subcontractors it employs on the project. The Contractor shall assure that all subcontractors are made aware of the requirements of the CSPP and SPCD and that they implement and maintain all necessary measures.

No deviation or modifications may be made to the approved CSPP and SPCD unless approved in writing by the Owner. The necessary coordination actions to review Contractor proposed modifications to an approved CSPP or approved SPCD can require a significant amount of time.

80-05 CHARACTER OF WORKERS, METHODS, AND EQUIPMENT. The Contractor shall, at all times, employ sufficient labor and equipment for prosecuting the work to full completion in the manner and time required by the contract, plans, and specifications.

All workers shall have sufficient skill and experience to perform properly the work assigned to them. Workers engaged in special work or skilled work shall have sufficient experience in such work and in the operation of the equipment required to perform the work satisfactorily.

Any person employed by the Contractor or by any subcontractor who violates any operational regulations or operational safety requirements and, in the opinion of the RPR, does not perform his work in a proper and skillful manner or is intemperate or disorderly shall, at the written request of the RPR, be removed immediately by the Contractor or subcontractor employing such person, and shall not be employed again in any portion of the work without approval of the RPR.

Should the Contractor fail to remove such person or persons, or fail to furnish suitable and sufficient personnel for the proper execution of the work, the RPR may suspend the work by written notice until compliance with such orders.

All equipment that is proposed to be used on the work shall be of sufficient size and in such mechanical condition as to meet requirements of the work and to produce a satisfactory quality of work. Equipment used on any portion of the work shall not cause injury to previously completed work, adjacent property, or existing airport facilities due to its use.

When the methods and equipment to be used by the Contractor in accomplishing the work are not prescribed in the contract, the Contractor is free to use any methods or equipment that will accomplish the work in conformity with the requirements of the contract, plans, and specifications.

When the contract specifies the use of certain methods and equipment, such methods and equipment shall be used unless otherwise authorized by the RPR. If the Contractor desires to use a method or type of equipment other than specified in the contract, the Contractor may request authority from the RPR to do so. The request shall be in writing and shall include a full description of the methods and equipment proposed and of the reasons for desiring to make the change. If approval is given, it will be on the condition that the Contractor will be fully responsible for producing work in conformity with contract requirements. If, after trial use of the substituted methods or equipment, the RPR determines that the work produced does not meet contract requirements, the Contractor shall discontinue the use of the substitute method or equipment and shall complete the remaining work with the specified methods and equipment. The Contractor shall remove any deficient work and replace it with work of specified quality, or take such other corrective action as the RPR may direct. No change will be made in basis of payment for the contract items involved nor in contract time as a result of authorizing a change in methods or equipment under this paragraph.

80-06 TEMPORARY SUSPENSION OF THE WORK. The Owner shall have the authority to suspend the work wholly, or in part, for such period or periods the Owner may deem necessary, due to unsuitable weather, or other conditions considered unfavorable for the execution of the work, or for such time necessary due to the failure on the part of the Contractor to carry out orders given or perform any or all provisions of the contract.

In the event that the Contractor is ordered by the Owner, in writing, to suspend work for some unforeseen cause not otherwise provided for in the contract and over which the Contractor has no control, the Contractor may be reimbursed for actual money expended on the work during the period of shutdown. No allowance will be made for anticipated profits. The period of shutdown shall be computed from the effective date of the written order to suspend work to the effective date of the written order to resume the work. Claims for such compensation shall be filed with the RPR within the time period stated in the RPR's order to resume work. The Contractor shall submit with their own claim information substantiating the amount shown on the claim. The RPR will forward the Contractor's claim to the Owner for consideration in accordance with local laws or ordinances. No provision of this article shall be construed as entitling the Contractor to compensation for delays due to inclement weather or for any other delay provided for in the contract, plans, or specifications.

If it becomes necessary to suspend work for an indefinite period, the Contractor shall store all materials in such manner that they will not become an obstruction nor become damaged in any way. The Contractor shall take every precaution to prevent damage or deterioration of the work performed and provide for normal drainage of the work. The Contractor shall erect temporary structures where necessary to provide for traffic on, to, or from the airport.

80-07 DETERMINATION AND EXTENSION OF CONTRACT TIME. The number of calendar days shall be stated in the proposal and contract and shall be known as the Contract Time.

If the contract time requires extension for reasons beyond the Contractor's control, it shall be adjusted as follows:

CONTRACT TIME BASED ON CALENDAR DAYS. Contract Time based on calendar days shall consist of the number of calendar days stated in the contract counting from the effective date of the Notice to Proceed and including all Saturdays, Sundays, holidays, and non-work days. All calendar days elapsing between the effective dates of the Owner's orders to suspend and resume all work, due to causes not the fault of the Contractor, shall be excluded.

At the time of final payment, the contract time shall be increased in the same proportion as the cost of the actually completed quantities bears to the cost of the originally estimated quantities in the proposal. Such increase in the contract time shall not consider either cost of work or the extension of contract time that has been covered by a change order or supplemental agreement. Charges against the contract time will cease as of the date of final acceptance.

80-08 FAILURE TO COMPLETE ON TIME. For each calendar day or working day, as specified in the contract, that any work remains uncompleted after the contract time (including all extensions and adjustments as provided in paragraph 80-07, *Determination and Extension of Contract Time*) the sum specified in the contract and proposal as liquidated damages (LD) will be deducted from any money due or to become due the Contractor or their own surety. Such deducted sums shall not be deducted as a penalty but shall be considered as liquidation of a reasonable portion of

damages including but not limited to additional engineering services that will be incurred by the Owner should the Contractor fail to complete the work in the time provided in their contract.

Schedule	Liquidated Damages Cost	Allowed Construction Time
Substantial Completion	\$1,500/day	523 days from NTP
Final Completion	\$1,500/day	553 days from NTP

The maximum construction time allowed for Substantial Completion will be the sum of the time allowed for individual schedules but not more than 523 days. Permitting the Contractor to continue and finish the work or any part of it after the time fixed for its completion, or after the date to which the time for completion may have been extended, will in no way operate as a waiver on the part of the Owner of any of its rights under the contract.

80-09 DEFAULT AND TERMINATION OF CONTRACT. The Contractor shall be considered in default of their contract and such default will be considered as cause for the Owner to terminate the contract for any of the following reasons, if the Contractor:

- a. Fails to begin the work under the contract within the time specified in the Notice to Proceed, or
- b. Fails to perform the work or fails to provide sufficient workers, equipment and/or materials to assure completion of work in accordance with the terms of the contract, or
- c. Performs the work unsuitably or neglects or refuses to remove materials or to perform anew such work as may be rejected as unacceptable and unsuitable, or
- d. Discontinues the execution of the work, or
- e. Fails to resume work which has been discontinued within a reasonable time after notice to do so, or
- f. Becomes insolvent or is declared bankrupt, or commits any act of bankruptcy or insolvency, or
- g. Allows any final judgment to stand against the Contractor unsatisfied for a period of 10 days, or
- h. Makes an assignment for the benefit of creditors, or
- i. For any other cause whatsoever, fails to carry on the work in an acceptable manner.

Should the Owner consider the Contractor in default of the contract for any reason above, the Owner shall immediately give written notice to the Contractor and the Contractor's surety as to the reasons for considering the Contractor in default and the Owner's intentions to terminate the contract.

If the Contractor or surety, within a period of 10 days after such notice, does not proceed in accordance therewith, then the Owner will, upon written notification from the RPR of the facts of such delay, neglect, or default and the Contractor's failure to comply with such notice, have full power and authority without violating the contract, to take the execution of the work out of the

hands of the Contractor. The Owner may appropriate or use any or all materials and equipment that have been mobilized for use in the work and are acceptable and may enter into an agreement for the completion of said contract according to the terms and provisions thereof, or use such other methods as in the opinion of the RPR will be required for the completion of said contract in an acceptable manner.

All costs and charges incurred by the Owner, together with the cost of completing the work under contract, will be deducted from any monies due or which may become due the Contractor. If such expense exceeds the sum which would have been payable under the contract, then the Contractor and the surety shall be liable and shall pay to the Owner the amount of such excess.

80-10 TERMINATION FOR NATIONAL EMERGENCIES. The Owner shall terminate the contract or portion thereof by written notice when the Contractor is prevented from proceeding with the construction contract as a direct result of an Executive Order of the President with respect to the execution of war or in the interest of national defense.

When the contract, or any portion thereof, is terminated before completion of all items of work in the contract, payment will be made for the actual number of units or items of work completed at the contract price or as mutually agreed for items of work partially completed or not started. No claims or loss of anticipated profits shall be considered.

Reimbursement for organization of the work, and other overhead expenses, (when not otherwise included in the contract) and moving equipment and materials to and from the job will be considered, the intent being that an equitable settlement will be made with the Contractor.

Acceptable materials, obtained or ordered by the Contractor for the work and that are not incorporated in the work shall, at the option of the Contractor, be purchased from the Contractor at actual cost as shown by receipted bills and actual cost records at such points of delivery as may be designated by the RPR.

Termination of the contract or a portion thereof shall neither relieve the Contractor of their responsibilities for the completed work nor shall it relieve their surety of its obligation for and concerning any just claim arising out of the work performed.

80-11 WORK AREA, STORAGE AREA AND SEQUENCE OF OPERATIONS. The Contractor shall obtain approval from the RPR prior to beginning any work in all areas of the airport. No operating runway, taxiway, or air operations area (AOA) shall be crossed, entered, or obstructed while it is operational. The Contractor shall plan and coordinate work in accordance with the approved CSPP and SPCD.

END OF SECTION 80

SECTION 90 MEASUREMENT AND PAYMENT

90-01 MEASUREMENT OF QUANTITIES. All work completed under the contract will be measured by the RPR, or their authorized representatives, using United States Customary Units of Measurement.

The method of measurement and computations to be used in determination of quantities of material furnished and of work performed under the contract will be those methods generally recognized as conforming to good engineering practice.

Unless otherwise specified, longitudinal measurements for area computations will be made horizontally, and no deductions will be made for individual fixtures (or leave-outs) having an area of 9 square feet (0.8 square meters) or less. Unless otherwise specified, transverse measurements for area computations will be the neat dimensions shown on the plans or ordered in writing by the RPR.

Unless otherwise specified, all contract items which are measured by the linear foot such as electrical ducts, conduits, pipe culverts, underdrains, and similar items shall be measured parallel to the base or foundation upon which such items are placed.

The term "lump sum" when used as an item of payment will mean complete payment for the work described in the contract. When a complete structure or structural unit (in effect, "lump sum" work) is specified as the unit of measurement, the unit will be construed to include all necessary fittings and accessories.

When requested by the Contractor and approved by the RPR in writing, material specified to be measured by the cubic yard (cubic meter) may be weighed, and such weights will be converted to cubic yards (cubic meters) for payment purposes. Factors for conversion from weight measurement to volume measurement will be determined by the RPR and shall be agreed to by the Contractor before such method of measurement of pay quantities is used.

Measurement and Payment Terms

Term	Description
Excavation and Embankment Volume	In computing volumes of excavation, the average end area method will be used unless otherwise specified.
Measurement and Proportion by Weight	The term "ton" will mean the short ton consisting of 2,000 pounds (907 kg) avoirdupois. All materials that are measured or proportioned by weights shall be weighed on accurate, independently certified scales by competent, qualified personnel at locations designated by the RPR. If material is shipped by rail, the car weight may be accepted provided that only the actual weight of material is paid for. However, car weights will not be acceptable for material to be passed through mixing plants. Trucks used to haul material being paid for by weight shall be weighed empty

Term	Description
	daily at such times as the RPR directs, and each truck shall bear a plainly legible identification mark.
Measurement by Volume	Materials to be measured by volume in the hauling vehicle shall be hauled in approved vehicles and measured therein at the point of delivery. Vehicles for this purpose may be of any size or type acceptable for the materials hauled, provided that the body is of such shape that the actual contents may be readily and accurately determined. All vehicles shall be loaded to at least their water level capacity, and all loads shall be leveled when the vehicles arrive at the point of delivery.
Asphalt Material	Asphalt materials will be measured by the gallon (liter) or ton (kg). When measured by volume, such volumes will be measured at 60°F (16°C) or will be corrected to the volume at 60°F (16°C) using ASTM D1250 for asphalts. Net certified scale weights or weights based on certified volumes in the case of rail shipments will be used as a basis of measurement, subject to correction when asphalt material has been lost from the car or the distributor, wasted, or otherwise not incorporated in the work. When asphalt materials are shipped by truck or transport, net certified weights by volume, subject to correction for loss or foaming, will be used for computing quantities.
Cement	Cement will be measured by the ton (kg) or hundredweight (km).
Structure	Structures will be measured according to neat lines shown on the plans or as altered to fit field conditions.
Timber	Timber will be measured by the thousand feet board measure (MFBM) actually incorporated in the structure. Measurement will be based on nominal widths and thicknesses and the extreme length of each piece.
Plates and Sheets	The thickness of plates and galvanized sheet used in the manufacture of corrugated metal pipe, metal plate pipe culverts and arches, and metal cribbing will be specified and measured in decimal fraction of inch.
Miscellaneous Items	When standard manufactured items are specified such as fence, wire, plates, rolled shapes, pipe conduit, etc., and these items are identified by gauge, unit weight, section dimensions, etc., such identification will be considered to be nominal weights or dimensions. Unless more stringently controlled by tolerances in cited specifications, manufacturing tolerances established by the industries involved will be accepted.
Scales	Scales must be tested for accuracy and serviced before use. Scales for weighing materials which are required to be proportioned or measured and paid for by weight shall be furnished, erected, and maintained by the Contractor, or be certified permanently installed commercial scales. Platform scales shall be installed and maintained with the platform level and rigid bulkheads at each end.

Term	Description
	<p>Scales shall be accurate within 0.5% of the correct weight throughout the range of use. The Contractor shall have the scales checked under the observation of the RPR before beginning work and at such other times as requested. The intervals shall be uniform in spacing throughout the graduated or marked length of the beam or dial and shall not exceed 0.1% of the nominal rated capacity of the scale, but not less than one pound (454 grams). The use of spring balances will not be permitted.</p> <p>In the event inspection reveals the scales have been “overweighing” (indicating more than correct weight) they will be immediately adjusted. All materials received subsequent to the last previous correct weighting-accuracy test will be reduced by the percentage of error in excess of 0.5%.</p> <p>In the event inspection reveals the scales have been under-weighing (indicating less than correct weight), they shall be immediately adjusted. No additional payment to the Contractor will be allowed for materials previously weighed and recorded.</p> <p>Beams, dials, platforms, and other scale equipment shall be so arranged that the operator and the RPR can safely and conveniently view them.</p> <p>Scale installations shall have available ten standard 50-pound (2.3 km) weights for testing the weighing equipment or suitable weights and devices for other approved equipment.</p> <p>All costs in connection with furnishing, installing, certifying, testing, and maintaining scales; for furnishing check weights and scale house; and for all other items specified in this subsection, for the weighing of materials for proportioning or payment, shall be included in the unit contract prices for the various items of the project.</p>
Rental Equipment	<p>Rental of equipment will be measured by time in hours of actual working time and necessary traveling time of the equipment within the limits of the work. Special equipment ordered in connection with extra work will be measured as agreed in the change order or supplemental agreement authorizing such work as provided in paragraph 90-05 <i>Payment for Extra Work</i>.</p>
Pay Quantities	<p>When the estimated quantities for a specific portion of the work are designated as the pay quantities in the contract, they shall be the final quantities for which payment for such specific portion of the work will be made, unless the dimensions of said portions of the work shown on the plans are revised by the RPR. If revised dimensions result in an increase or decrease in the quantities of such work, the final quantities for payment will be revised in the amount represented by the authorized changes in the dimensions.</p>

90-02 SCOPE OF PAYMENT. The Contractor shall receive and accept compensation provided for in the contract as full payment for furnishing all materials, for performing all work under the

contract in a complete and acceptable manner, and for all risk, loss, damage, or expense of whatever character arising out of the nature of the work or the execution thereof, subject to the provisions of Section 70, paragraph 70-18, *No Waiver of Legal Rights*.

When the "basis of payment" subsection of a technical specification requires that the contract price (price bid) include compensation for certain work or material essential to the item, this same work or material will not also be measured for payment under any other contract item which may appear elsewhere in the contract, plans, or specifications.

90-03 COMPENSATION FOR ALTERED QUANTITIES. When the accepted quantities of work vary from the quantities in the proposal, the Contractor shall accept as payment in full, so far as contract items are concerned, payment at the original contract price for the accepted quantities of work actually completed and accepted. No allowance, except as provided for in Section 40, paragraph 40-02, *Alteration of Work and Quantities*, will be made for any increased expense, loss of expected reimbursement, or loss of anticipated profits suffered or claimed by the Contractor which results directly from such alterations or indirectly from their own unbalanced allocation of overhead and profit among the contract items, or from any other cause.

90-04 PAYMENT FOR OMITTED ITEMS. As specified in Section 40, paragraph 40-03, *Omitted Items*, the RPR shall have the right to omit from the work (order nonperformance) any contract item, except major contract items, in the best interest of the Owner.

Should the RPR omit or order nonperformance of a contract item or portion of such item from the work, the Contractor shall accept payment in full at the contract prices for any work actually completed and acceptable prior to the RPR's order to omit or non-perform such contract item.

Acceptable materials ordered by the Contractor or delivered on the work prior to the date of the RPR's order will be paid for at the actual cost to the Contractor and shall thereupon become the property of the Owner.

In addition to the reimbursement hereinbefore provided, the Contractor shall be reimbursed for all actual costs incurred for the purpose of performing the omitted contract item prior to the date of the RPR's order. Such additional costs incurred by the Contractor must be directly related to the deleted contract item and shall be supported by certified statements by the Contractor as to the nature the amount of such costs.

90-05 PAYMENT FOR EXTRA WORK. Extra work, performed in accordance with Section 40, paragraph 40-04, *Extra Work*, will be paid for at the contract prices or agreed prices specified in the change order or supplemental agreement authorizing the extra work.

90-06 PARTIAL PAYMENTS. Partial payments will be made to the Contractor at least once each month as the work progresses. Said payments will be based upon estimates, prepared by the RPR, of the value of the work performed and materials complete and in place, in accordance with the contract, plans, and specifications. Such partial payments may also include the delivered actual cost of those materials stockpiled and stored in accordance with paragraph 90-07, *Payment for Materials on Hand*. No partial payment will be made when the amount due to the Contractor since the last estimate amounts to less than five hundred dollars.

The retainage shall be 5%.

It is understood and agreed that the Contractor shall not be entitled to demand or receive partial payment based on quantities of work in excess of those provided in the proposal or covered by approved change orders or supplemental agreements, except when such excess quantities have been determined by the RPR to be a part of the final quantity for the item of work in question.

No partial payment shall bind the Owner to the acceptance of any materials or work in place as to quality or quantity. All partial payments are subject to correction at the time of final payment as provided in paragraph 90-09, *Acceptance and Final Payment*.

The Contractor shall deliver to the Owner a complete release of all claims for labor and material arising out of this contract before the final payment is made. If any subcontractor or supplier fails to furnish such a release in full, the Contractor may furnish a bond or other collateral satisfactory to the Owner to indemnify the Owner against any potential lien or other such claim. The bond or collateral shall include all costs, expenses, and attorney fees the Owner may be compelled to pay in discharging any such lien or claim.

90-07 PAYMENT FOR MATERIALS ON HAND. Partial payments may be made to the extent of the delivered cost of materials to be incorporated in the work, provided that such materials meet the requirements of the contract, plans, and specifications and are delivered to acceptable sites on the airport property or at other sites in the vicinity that are acceptable to the Owner. Such delivered costs of stored or stockpiled materials may be included in the next partial payment after the following conditions are met:

- a. The material has been stored or stockpiled in a manner acceptable to the RPR at or on an approved site.
- b. The Contractor has furnished the RPR with acceptable evidence of the quantity and quality of such stored or stockpiled materials.
- c. The Contractor has furnished the RPR with satisfactory evidence that the material and transportation costs have been paid.
- d. The Contractor has furnished the Owner legal title (free of liens or encumbrances of any kind) to the material stored or stockpiled.
- e. The Contractor has furnished the Owner evidence that the material stored or stockpiled is insured against loss by damage to or disappearance of such materials at any time prior to use in the work.

It is understood and agreed that the transfer of title and the Owner's payment for such stored or stockpiled materials shall in no way relieve the Contractor of their responsibility for furnishing and placing such materials in accordance with the requirements of the contract, plans, and specifications.

In no case will the amount of partial payments for materials on hand exceed the contract price for such materials or the contract price for the contract item in which the material is intended to be used.

No partial payment will be made for stored or stockpiled living or perishable plant materials.

The Contractor shall bear all costs associated with the partial payment of stored or stockpiled materials in accordance with the provisions of this paragraph.

90-08 PAYMENT OF WITHHELD FUNDS. At the Contractor's option, if an Owner withholds retainage in accordance with the methods described in paragraph 90-06 *Partial Payments*, the Contractor may request that the Owner deposit the retainage into an escrow account. The Owner's deposit of retainage into an escrow account is subject to the following conditions:

a. The Contractor shall bear all expenses of establishing and maintaining an escrow account and escrow agreement acceptable to the Owner.

b. The Contractor shall deposit to and maintain in such escrow only those securities or bank certificates of deposit as are acceptable to the Owner and having a value not less than the retainage that would otherwise be withheld from partial payment.

c. The Contractor shall enter into an escrow agreement satisfactory to the Owner.

d. The Contractor shall obtain the written consent of the surety to such agreement.

90-09 ACCEPTANCE AND FINAL PAYMENT. When the contract work has been accepted in accordance with the requirements of Section 50, paragraph 50-15, *Final Acceptance*, the RPR will prepare the final estimate of the items of work actually performed. The Contractor shall approve the RPR's final estimate or advise the RPR of the Contractor's objections to the final estimate which are based on disputes in measurements or computations of the final quantities to be paid under the contract as amended by change order or supplemental agreement. The Contractor and the RPR shall resolve all disputes (if any) in the measurement and computation of final quantities to be paid within 30 calendar days of the Contractor's receipt of the RPR's final estimate. If, after such 30-day period, a dispute still exists, the Contractor may approve the RPR's estimate under protest of the quantities in dispute, and such disputed quantities shall be considered by the Owner as a claim in accordance with Section 50, paragraph 50-16, *Claims for Adjustment and Disputes*.

After the Contractor has approved, or approved under protest, the RPR's final estimate, and after the RPR's receipt of the project closeout documentation required in paragraph 90-11, *Contractor Final Project Documentation*, final payment will be processed based on the entire sum, or the undisputed sum in case of approval under protest, determined to be due the Contractor less all previous payments and all amounts to be deducted under the provisions of the contract. All prior partial estimates and payments shall be subject to correction in the final estimate and payment.

If the Contractor has filed a claim for additional compensation under the provisions of Section 50, paragraph 50-16, *Claims for Adjustments and Disputes*, or under the provisions of this paragraph, such claims will be considered by the Owner in accordance with local laws or ordinances. Upon final adjudication of such claims, any additional payment determined to be due the Contractor will be paid pursuant to a supplemental final estimate.

90-10 CONSTRUCTION WARRANTY.

a. In addition to any other warranties in this contract, the Contractor warrants that work performed under this contract conforms to the contract requirements and is free of any defect in

equipment, material, workmanship, or design furnished, or performed by the Contractor or any subcontractor or supplier at any tier.

b. This warranty shall continue for a period of one year from the date of final acceptance of the work, except as noted. If the Owner takes possession of any part of the work before final acceptance, this warranty shall continue for a period of one year from the date the Owner takes possession. However, this will not relieve the Contractor from corrective items required by the final acceptance of the project work. Light Emitting Diode emitting diode (LED) light fixtures with the exception of obstruction lighting, must be warranted by the manufacturer for a minimum of four (4) years after date of installation inclusive of all electronics.

c. The Contractor shall remedy at the Contractor's expense any failure to conform, or any defect. In addition, the Contractor shall remedy at the Contractor's expense any damage to Owner real or personal property, when that damage is the result of the Contractor's failure to conform to contract requirements; or any defect of equipment, material, workmanship, or design furnished by the Contractor.

d. The Contractor shall restore any work damaged in fulfilling the terms and conditions of this clause. The Contractor's warranty with respect to work repaired or replaced will run for one year from the date of repair or replacement.

e. The Owner will notify the Contractor, in writing, within seven (7) days after the discovery of any failure, defect, or damage.

f. If the Contractor fails to remedy any failure, defect, or damage within 14 days after receipt of notice, the Owner shall have the right to replace, repair, or otherwise remedy the failure, defect, or damage at the Contractor's expense.

g. With respect to all warranties, express or implied, from subcontractors, manufacturers, or suppliers for work performed and materials furnished under this contract, the Contractor shall: (1) Obtain all warranties that would be given in normal commercial practice; (2) Require all warranties to be executed, in writing, for the benefit of the Owner, as directed by the Owner, and (3) Enforce all warranties for the benefit of the Owner.

h. This warranty shall not limit the Owner's rights with respect to latent defects, gross mistakes, or fraud.

90-11 CONTRACTOR FINAL PROJECT DOCUMENTATION. Approval of final payment to the Contractor is contingent upon completion and submittal of the items listed below. The final payment will not be approved until the RPR approves the Contractor's final submittal. The Contractor shall:

a. Provide two (2) copies of all manufacturers warranties specified for materials, equipment, and installations.

b. Provide weekly payroll records (not previously received) from the general Contractor and all subcontractors.

c. Complete final cleanup in accordance with Section 40, paragraph 40-08, *Final Cleanup*.

- d. Complete all punch list items identified during the Final Inspection.
- e. Provide complete release of all claims for labor and material arising out of the Contract.
- f. Provide a certified statement signed by the subcontractors, indicating actual amounts paid to the Disadvantaged Business Enterprise (DBE) subcontractors and/or suppliers associated with the project.
- g. When applicable per state requirements, return copies of sales tax completion forms.
- h. Manufacturer's certifications for all items incorporated in the work.
- i. All required record drawings, as-built drawings or as-constructed drawings.
- j. Project Operation and Maintenance (O&M) Manual(s).
- k. Security for Construction Warranty.
- l. Equipment commissioning documentation submitted, if required.

END OF SECTION 90

**SPECIAL
PROVISIONS**

SPECIAL PROVISIONS

SECTION 1

PROJECT INFORMATION

I. GENERAL STATEMENT

The Special Provisions are a supplement to the General Provisions. These Special Provisions shall not amend, supersede or void those documents, except as specifically set forth herein.

II. DESCRIPTION OF WORK

1. The intent and meaning of the Contract Documents is that the Contractor, under the terms of the Contract, shall take all actions necessary and required to provide all labor, plant, materials, supplies, equipment, transportation, facilities, and appurtenances which are indicated or implied by each Drawing and each Section of the Specifications, all of which are collectively necessary and required for the construction of the described Project.

2. The location of the project is on the Bob Sikes Airport.

The work consists of CEW South Apron Rehabilitation.

3. The Contractor acknowledges that he has examined and thoroughly familiarized himself with all existing conditions including all applicable laws, codes, and ordinances, rules and regulations that will affect this work. The Contractor further acknowledges that he has visited the site, examined the grounds and all existing utilities and roads; that he has investigated and satisfied himself as to conditions affecting the work including, but not restricted to, those bearing upon transportation, disposal, handling and storage of materials, the character of equipment and facilities needed preliminary to and during prosecution of the work.

4. Construction Certification. The Contractor hereby certifies, with respect to a construction-related project, that all specifications will comply with applicable federal, state, local, and professional standards, as well as Federal Aviation Administration (FAA) Advisory Circulars (AC's) and FAA issued waivers thereto, including but not limited to, the following:

(a) **Federal Requirements**

- FAA AC 70/7460-1, Obstruction Marking and Lighting
- FAA AC 150/5300-13, Airport Design
- FAA AC 150/5370-2, Operational Safety on Airports During Construction
- FAA AC 150/5370-10, Standards for Specifying Construction of Airports

(b) **Local Government Requirements**

- Local Building Codes
- Local Zoning Codes

(c) **Department Requirements**

- Manual of Uniform Minimum Standards for Design, Construction and Maintenance for Streets and Highways (Commonly Referred to as the "Florida Green Book")
- Manual on Uniform Traffic Control Devices
- Section 14-60.007, FAC, Airfield Standards for Licensed Airports
- Standard Specifications for Construction of General Aviation Airports
- Design Guidelines & Minimum Standard Requirements for T-Hangar Project

III. PROJECT DURATION AND LIQUIDATED DAMAGES

1. All segments and phases of the Project shall be complete within the limits established in Paragraph 2 below at which time the Project shall be acceptable in accordance with Section 50-15 of the General Provisions. Partial acceptance, per Section 50-14 of the General Provisions, of certain parts of the Project area is integral to the Project's construction plan as is the opening of certain sections of the work to traffic as provided for in Section 70-13 of the General Provisions.
2. The contractor agrees that if awarded the contract, the work of construction shall be started not later than 10 days after receipt by the Contractor of the Notice to Proceed and shall substantially complete all work included in all Bid Schedules within 165 calendar days, subject to any extension of time that may be granted by the Okaloosa County Board of County Commissioners. See Notice to Bidders and the Phasing Plans for further information regarding project time, should all Bid Schedules not be awarded. Failure to complete the work within the time period allowed shall subject the Contractor to a penalty of LIQUIDATED DAMAGES, as identified in Special Provision No. 13.

These liquidated damages will be applied when the closures are due to the Contractor's negligence or any other reasons due to the Contractor's activities.

3. The Contractor is advised that no determination of additional time due to weather will be made until the end of the Contract so as to evaluate the weather conditions for the entire time frame.
4. In the event the Contractor or any of its subcontractors is delayed in the commencement, prosecution, or completion of its performance under the Contract of any milestone or phase for which liquidated damages is stipulated by any cause whatsoever, including any act, omission, neglect or fault of the Owner, Engineer, or of anyone employed by them, or by any damage caused by fire or other casualty, or by unusually severe weather or by any extraordinary conditions arising out of war or governmental actions, or by any other cause all beyond the control and without the fault or neglect of the Contractor, except as expressly provided elsewhere in the Contract Documents, then the Contractor shall be entitled to an extension of time on a day for day basis, but shall not be entitled to any damages for delay. Such extensions of time shall postpone the beginning of the time period for payment of liquidated damages by the Contractor for an equivalent time which shall be the sole remedy of the Contractor, but they and the events producing them shall not be grounds for claims by the Contractor in damages or for additional costs, expenses, overhead or profit or other compensation.

5. The Contractor shall follow the procedure set forth in Section 80-07 of the General Provisions of the Contract Documents to notify the Owner of delays and to qualify for extensions of time. Failure to notify the Owner in a timely manner shall be reason to disallow any extension of time.

IV. CONSTRUCTION FUNDS

The funds allocated for the performance of the Project work are believed adequate. There is reserved the right to limit the work, either by the elimination of items or a reduction in quantities, to stay within limits of funds available for project proposed, and to increase the quantities in order to perform the maximum amount of work within limits of available funds for the project.

V. CONSTRUCTION/AS BUILT DRAWINGS AND SPECIFICATIONS

The Engineer will furnish the Contractor five (5) sets of general Drawings and Specifications. Contractor and/or subcontractors under his direction shall record on one set of white prints each and every change that is made from general Drawings at the time it is made. These drawings shall be turned over to the Engineer upon completion of the Project.

VI. DEFINITIONS

The following definitions specific to this Project are provided:

Airport - Bob Sikes Airport

Contract - The Contract shall include but is not limited to the following in addition to those items listed in Paragraph 10-13 of the General Provisions.

Instructions to Bidders
Special Provisions
Insurance Certificates
Letters of Instruction
Supplemental Agreements

Owner - Okaloosa County Board of County Commissioners

Engineer - AVCON, INC.

Project - CEW South Apron Rehabilitation

Proposal Guaranty - This term refers to the Proposal Bond and is used synonymously.

Bid Guaranty - This term refers to the Proposal Bond and is used synonymously.

VII. TERMS

Any of the terms he/him/himself/his may be interpreted as feminine or neuter and vice versa, all as the sense may require.

VIII. MONETARY UNITS

All references to monetary units are in U.S. dollars.

IX. CONTRACTOR'S COST ACCOUNTING SYSTEM

The Contractor shall maintain an acceptable cost accounting system. The Owner, the FAA and the Comptroller General of the United States shall have access to any books, documents, paper, and records including payroll records and associated basic data of the Contractor which are directly pertinent to the specific Contract for the purposes of making an audit, examination, excerpts, and transcriptions. The Contractor shall maintain all required records for five (5) years after the Owner makes final payment and all other pending matters are closed.

X. PROHIBITION OF HAZARDOUS WORKING CONDITIONS

It is a condition of this Contract, and shall be made a condition of each subcontract entered into pursuant to this Contract, that the Contractor and any subcontractor shall not require any laborer or mechanic employed in performance of the Contract to work in surroundings or under working conditions which are unsatisfactory, hazardous, or dangerous to his health or safety, as determined under Construction Safety and Health Standards Title 29, CFR, Part 1518, 36FR7340, promulgated by the U.S. Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act, 82 Sta. 96.

XI. SHOP DRAWINGS

The Contractor is responsible for the preparation of detailed shop drawings necessary for the fabrication, erection and construction of all parts of the work in conformity with the Contract documents. Copies of shop drawings shall be submitted to the Engineer for approval in accordance with the procedures herein described. "Shop Drawings", wherever referred to, shall be defined as drawings, diagrams, illustrations, schedules, catalog cuts, performance charts, brochures, and other data prepared by the Contractor or any subcontractor, manufacturer, supplier or distributor, which illustrate how specific portions of the work shall be fabricated and/or installed.

Where it is difficult to provide shop drawing transparencies such as for "catalog cuts", "brochures" or "photographs", the Contractor shall submit a minimum of 6 copies of such "cuts", "brochures" or "photographs". Additional copies shall be supplied when required by the Engineer.

All submissions of shop drawings; brochures and catalog cuts shall be accompanied by a transmittal letter listing the Drawings submitted by number and title.

Each reproducible shop drawing shall contain title block with the following information provided:

1. Number and title of drawing, including Contract number;
2. Date of drawing or revisions;
3. Name of Contractor or subcontractor submitting drawings;
4. Project number;
5. Specification section title and number;
6. Space above the title block for Engineer's approval stamp;
7. Submission number (whether first, second, third, etc.)

Each shop drawing shall have listed on it all Contract references, drawing numbers, plus shop drawing numbers on related work by other subcontractors, if available.

Non-reproducible shop drawings shall be submitted with a cover sheet containing all of the information required on reproducible shop drawings.

Shop drawings shall be complete in every detail, including a location plan relating the work to space identification and column numbers. Materials, gauges, method of fastening, size and spacing of fastenings, connection with other work, cutting, fitting, drilling, and any and all other necessary information as per usual trade practice or as required for any specific purpose must be clearly shown.

The Contractor shall check and approve all shop drawings to make sure that they conform to the Plans, Specifications, and other Contract requirements, and correct the drawings found to be inaccurate or otherwise in error. The Contractor shall verify all field dimensions and criteria and shall be responsible for the coordination of work by all subcontractors.

Shop drawings, at the time of submission, shall bear the signature of the Contractor's checker, date and stamp of approval for submission to the Engineer as evidence that such drawings and/or details have been reviewed, checked and approved by the Contractor. Drawings submitted without such stamp of approval will be returned to the Contractor unapproved and will require resubmission. In such event, it will be deemed that the Contractor has not complied with the requirements of this subsection and shall bear the risks of delays as if no drawings or details had been submitted. Both sepias and prints must bear the Contractor's stamp.

The Contractor, by approving and submitting shop drawings, represents that he has determined and verified all field measurements and quantities, field construction criteria, materials, catalog numbers, and similar data, and that he has reviewed and coordinated the information in the shop drawings with the requirements of the work and the Contract documents.

At the time of submission, the Contractor shall inform the Engineer in writing of any deviation in the shop drawings or samples from the requirements of the Contract documents.

The Engineer will review up to two shop drawing submittals for any item. Any reviews required in excess of two will be at the expense of the Contractor.

The Engineer will review and approve shop drawings and samples with reasonable promptness so as to minimize delay, but only for conformance with the design concept of the Contract and with the information given in the Contract documents. The Engineer's approval of a separate item shall not indicate approval of an assembly in which the item functions. The Engineer will return the shop drawings transparency/sepia to the Contractor for his use and distribution.

The Engineer's approval of shop drawings or samples shall not relieve the Contractor of responsibility for any deviation from the requirements of the Contract documents unless the Contractor has informed the Engineer in writing of such deviation at the time of submission and the Engineer has given written approval to the specific deviation, nor shall the Engineer's approval relieve the Contractor from responsibility for errors or omissions in the shop drawings or samples.

No materials shall be ordered and no portion of the work requiring shop drawings or sample submission shall be commenced until the submission has been approved by the Engineer. All such materials and portions of work shall be in accordance with approved shop drawings and samples.

The Contractor shall, when requested by the Engineer in writing, submit additional shop drawings to those required by the technical specifications or special provisions.

Prior to final acceptance of the work, the Contractor shall deliver to the Engineer three (3) copies of all approved shop drawings incorporating all notations made on the approved submittal.

The Contractor shall deliver to the Engineer three (3) complete sets of all maintenance manuals, parts list, operating instructions and other necessary documents required for all installed materials, equipment, or machinery. Such documents shall be furnished concurrently with the installations of the respective materials, equipment or machinery. All shop drawings submitted by the Contractor and approved by the Engineer become part of the Contract documents.

XII. FORCE ACCOUNT WORK

In the absence of agreement regarding a claim for extra or force account work, the allowance for overhead and profit shall be determined by the Engineer, not to exceed together a total of 10% of expended labor, equipment and materials exclusive of subcontract costs. Subcontract costs for force account work must be approved by the Engineer and will be marked up by the Contractor no more than 5% unless otherwise approved by the Engineer.

XIII. CALCULATION OF UNIT PRICE FOR SUPPLEMENTAL AGREEMENT DUE TO ALTERATION OF WORK

Not used.

END OF SPECIAL PROVISION SECTION 1

SPECIAL PROVISIONS

SECTION 2

GENERAL CONSTRUCTION REQUIREMENTS

I. PROTECTION OF CABLES, CONTROLS, NAVAIDS, AND NATIONAL WEATHER SERVICE (NWS) FACILITIES

1. The Contractor is hereby informed that there are installed on the airport, FAA NAVAIDS, including, without limitation, ASR, UHF, and VHF receivers and transmitters, National Weather Service (NWS) facilities, and other electric power cables serving other facilities. Such NAVAIDS, National Weather Service (NWS), and other facilities and electric cables must be fully protected during the entire construction time. Work under this Contract can be accomplished in the vicinity of these facilities and cables only at approved periods of time, which approval is subject to withdrawal at any time because of changes in the weather, emergency conditions on the existing airfield areas, anticipation of emergency conditions, and for any other reason as determined by the Engineers acting under the orders and instructions of the Owner and/or the designated FAA representative. Any instructions to this Contractor to clear any given area, at any time, by the Engineer, the Airport Management, or the FAA Control Tower (by radio or other means) shall be immediately executed. Construction work will be recommended in the cleared area only when the proper authorities issue additional instructions.
2. Power and control cables leading to and from any FAA NAVAIDS, National Weather Service (NWS), and other Okaloosa County Board of County Commissioners facilities shall be marked in the field by the Engineer for the information of the Contractor, before any work in their general vicinity may be started. Thereafter, through the entire time of this construction, the cables shall be protected from any possible damage, including crossing with unauthorized equipment, etc. All known facilities and buried cables, and the approximate location thereof in the construction area, are shown on the plans. Before the Contractor begins any work or operations in the vicinity of underground cables, hand digging will be used to clearly expose such cables/ducts to assure their location and depth.
3. These Special Provisions intend to make perfectly clear the need for protection of FAA NAVAIDS, National Weather Service (NWS), and other Okaloosa County Board of County Commissioners facilities and cables by this Contractor at all times.
4. The Contractor shall immediately repair, with identical material by skilled workmen, any underground cables serving FAA NAVAIDS, National Weather Service (NWS), and other Okaloosa County Board of County Commissioners facilities that are damaged by his workmen, equipment, or work. Prior approval of the FAA must be obtained for the materials, workmen, time of day or night, and method of repairs for any temporary or permanent repairs the Contractor proposes to make to any FAA NAVAIDS, National Weather Service (NWS) facilities, or other cables and controls serving such NAVAIDS and facilities damaged by the Contractor. Prior approval of the Engineer or of the representative designated by the Owner must be obtained for

the materials, workmen, time of day or night, and method of repairs for any temporary or permanent repairs the Contractor proposes to make to any other Airport facilities and cables damaged by this Contractor.

5. The Contractor acknowledges and agrees that the Owner will incur damages, costs, and expenses (hereinafter referred to collectively as "damages"), in kind and in amount, that would be difficult to ascertain or calculate, in the event that the Contractor cuts, burns, impairs destroys, or otherwise causes damage to cables, controls, lights, fixtures, transmitters, NAVAIDs, or weather monitoring devices (hereinafter referred to collectively as "facilities"). The Contractor acknowledges and agrees that not having these facilities will result in the curtailment or interruption of airport operations, the financial effects of which cannot be fully assessed or determined. The Contractor acknowledges and agrees that the unexpected loss of such facilities would not only adversely affect airport operations, but also would adversely affect the reputation and relationship of the Owner and the Okaloosa County Board of County Commissioners within the industry, and with regulators and the public at large.

Accordingly, if the Contractor cuts, burns, impairs, destroys or otherwise damages such facilities and causes the curtailment or interruption of airport operations then, in addition to the obligation of the Contractor to immediately repair all such facilities damaged by the Contractor as set forth in this Section, the Contractor shall also be assessed the sum of Five Thousand Dollars (\$5,000.00) per hour for each hour or portion thereof that airport operations are curtailed or interrupted. At the discretion of the Owner, the amount of such liquidated damages that are assessed by the Owner against the Contractor may be deducted from, or set off against, any payment due to the Contractor under this or any other contract the Contractor has with the Owner. Such sum shall be considered as liquidated damages and not as a penalty. The parties acknowledge and agree that Five Thousand Dollars (\$5,000.00) per hour for each hour or portion thereof that airport operations are curtailed or interrupted is a fair and reasonable amount to assess as liquidated damages under the Contract. Contractor hereby waives and shall be deemed to be estopped to assert any challenge to the reasonability, fairness and assessment of liquidated damages under this Section and expressly agrees that such amount is not a penalty.

II. PROTECTION OF UTILITIES

1. The Contractor shall be responsible for the safety, protection, maintenance, and final restoration to all surface and subsurface utilities (together with all parts and appurtenances thereof). Utilities, as referred to in this section, shall be understood to mean public utilities and other privately owned utilities.
2. The Contractor shall not proceed with his work until he has made diligent inquiry at the offices of the utility companies or other owners involved, of the nature and scope of the project, and of his operations that may affect their facilities. The Contractor shall notify the Engineer of his operations affecting utilities at the same time the utility companies are notified.

3. Before the Contractor begins any work or operations in the vicinity of subsurface structures, he shall carefully, by hand digging, locate such utility ducts, direct buried cables or structures and conduct his operations so as to avoid any damage to them.
4. The Contractor shall permit the owners of utilities, and personnel engaged by them, access to the site of the work at all times in order to protect or relocate their facilities, and he shall cooperate with them in performing this work.
5. The Contractor shall maintain, at no expense to the Owner, all access roads in a condition suitable for use by the Owner's normal equipment.
6. The Contractor shall be responsible for the continuity of service of all overhead, surface, and subsurface utilities affected by his operations, and shall maintain them in a safe and satisfactory operating condition. The Engineer shall be notified at the time of all contacts with any utility company or other owner to ensure proper coordination between Contractor, Engineer, and utility company.
7. The Contractor shall carry out his work carefully and skillfully, and shall support and secure utility structures so as to avoid damage to them. He shall not move any utility structures without the Owner's written consent, and at the completion of the work, their condition shall be as safe and permanent as before.
8. The Contractor shall, at his own expense, make good any direct or indirect damage that may be done in the course of construction to any utility structure or property through or by reason of the prosecution of the work. The liability of the Contractor under this covenant is absolute and is not dependent upon any questions of negligence on his part, or on the part of his agent, servants, employees, subcontractors, or suppliers, and the neglect of the Owner or the Engineer to direct the Contractor to take any particular precaution or to refrain from doing any particular thing shall not excuse the Contractor of any such damage in any case.
9. When utility structures, facilities, or equipment are damaged by the Contractor, he shall notify their owners, who may cause the damage to be repaired at the Contractor's expense. If the cost thereof were not paid by the Contractor within 30 days after repairs have been completed, the Owner may retain an amount sufficient to cover the cost from any monies due or that may become due the Contractor under the contract.
10. It is understood and agreed that the Contractor has considered in his bid all of the permanent and temporary utility appurtenances in their present or relocated positions and that no additional compensation will be allowed for normal delays, inconvenience, or damage sustained by him due to any interference from the said utility appurtenances or the operation of moving them.
11. It is anticipated that the various utilities, as indicated on the Plans, may be encountered by the Contractor while performing his operations under this Contract, and which will remain in active service as indicated on the Plans.

III. CONSTRUCTION UTILITIES

The Contractor shall make whatever arrangements may be necessary for water, electricity, or other facilities needed for construction work under the Contract, and shall pay all costs involved in obtaining such facilities, including meters, temporary lines, permits, etc. Water will be provided at no cost at an existing Airport supply point but must be metered. Temporary lines must be run at such locations and in such a manner as to meet the approval of the Engineer. After temporary lines have served their purpose, they shall be promptly removed by the Contractor and all the areas (ground or pavement surfaces) shall be restored to its original condition at no additional cost to the Owner.

IV. PRESENT DOCUMENTS GOVERN

The Contractor shall, in no case, claim a waiver of any specification requirement on the basis of previous approval of material or workmanship on other jobs of like nature or what might be considered "standard" for materials or workmanship in any particular location. The contract documents for this job shall govern the work.

V. STORING MATERIALS

Unless otherwise arranged by the Contractor, buildings of the Owner shall not be used for storage or job office purposes. Open or exposed space for storage of material and construction of temporary job facilities will be allocated to the Contractor by the Owner. The Contractor, at his own expense, shall provide any temporary structures, such as rooms, bins, sheds, etc., as may be required for his purposes.

VI. SHORING

All permanent and temporary shoring, anchoring, and bracing required by the nature of this work, in order to make all parts absolutely stable and rigid, shall be provided, even when such shoring, anchoring, and bracing are not explicitly called for. The Contractor will be held strictly accountable for any damage on the premises resulting from failures to provide it, due to lack of proper judgment or for any other cause. Shoring shall conform to the Occupation Safety and Health Standards of the U.S. Department of Labor.

VII. DUST CONTROL

It is the intent of these Specifications that the Contractor will, by watering, chemicals, vegetation, or other means, prevent the occurrence of dust which will be objectionable to the residents of the area or violate existing laws or regulations or cause hazards to air traffic. At any time that dust, caused by the construction, becomes excessive, in the opinion of the Resident Project Representative, due to inadequate control measures by the Contractor, the Resident Project Representative shall order the Contractor to suspend all activities causing the problem until adequate measures are instigated.

VIII. PROTECTION OF EXISTING FACILITIES

All existing facilities will be carefully protected by the Contractor. Any facilities damaged by the Contractor will be repaired immediately and restored to original condition. All facilities and pavement surfaces to remain exposed shall be protected from asphalt and paint spray by suitable means. These and any other above-ground facilities shall be cleaned, if asphalt or paint is deposited on them, to the satisfaction of the Engineer.

IX. HAUL ROADS

Haul roads shall be governed by the following:

At all crossing points with any FAA, National Weather Service (NWS), or other cable facilities, suitable protection shall be placed over the cable while construction is in progress. All costs associated with protection of cable facilities will be incidental to haul roads. In general, the Contractor shall confine equipment and hauling to the areas under construction.

Where haul roads cross open taxiways, taxilanes, aprons, etc., aircraft traffic must be given the right-of-way, and all equipment must stop a minimum of 100 feet from the edge of the taxiway, etc. while aircraft are moving through the work area in question. In these areas, no soil will be placed on the pavement; however, the area where crossing will be allowed will be clearly defined, and the Contractor will be required to confine his equipment to these areas. The pavement will be maintained free of mud, dirt and debris and in good condition at all time. Cleaning of pavements shall be considered incidental to mobilization.

All haul along or crossing state roads shall be accomplished in accordance with State of Florida Department of Highway standards and shall be coordinated and accomplished by the Contractor. The Contractor will assure that signing of highway access (such as "Trucks Entering Highway") is in accordance with the Uniform Traffic Control Devices for Streets and Highways U. S. Government. No direct measurement or payment will be made for the construction, restoration, or repair to haul roads.

The Contractor shall restore all grassed areas used for haul roads to their original condition, including the establishment of turf where required.

X. MEASUREMENT AND PAYMENT

No separate measurement or payment for the above requirements shall be made.

END OF SPECIAL PROVISION NO. 2

SPECIAL PROVISIONS

SECTION 4

SAFETY AND SECURITY REQUIREMENTS

I. SAFETY

1. General

The Contractor shall prepare a project specific Safety and Security Plan for the Owner's review and approval. This plan shall conform to the criteria documents, and to other requirements deemed necessary for construction on Airport property. Construction may not commence until this plan has been approved by the Owner.

The Contractor shall acquaint his supervisors and employees with the activity and operations that are inherent to an active air carrier airport; and shall conduct his construction activities to conform to all routine and emergency air traffic requirements and guidelines on safety as specified in this section of the specification. The applicable safety provisions of FAA Advisory Circular 150/5370-2F, 150/5200-18 Airport Safety Self Inspection, 150/5210-5C Painting, Marking & Lighting of Vehicles Used on Airport, applicable FAA Southern Region Orders, and Airport Rules and Regulations prevail throughout this construction contract. The FAA Advisory Circulars are available and may be obtained from the FAA Website or local ADO.

This information shall be used by the Contractor as guidance in implementing and administering his own safety program during the life of this Contract. The requirements stated herein are a minimum. Not all of the specific references may pertain to this Contract.

2. Construction Activity and Aircraft Movements

During the time the Contractor is performing the work under this Contract, existing terminal aprons, taxiways, and runways at the Airport will remain in use by aircraft, except as provided herein. To the extent feasible and convenient, in the opinion of the Owner and to the extent permitted by the Federal Aviation Administration, the access by aircraft of runways and use of taxiways adjacent to areas where the Contractor is working will be routed as to reduce disturbance to the Contractor's operations. Aircraft operations, unless otherwise specified in the Contract Specifications, shall always have priority over any and all of the Contractor's operations, and the Contractor shall not allow his employees, subcontractors, material suppliers, or any other persons over whom he has control to enter or remain upon or allow any plant or materials to be brought or to remain upon any part of the Airport which, in the opinion of the Owner, would be a hazardous location. Should aprons, runways, or taxiways be required for use by aircraft, and should the Owner deem the Contractor to be too close to the portion used by aircraft for safety, he may, in his sole discretion, order the Contractor to suspend his operations;

remove his personnel, plant, equipment, and materials to a safe distance; and stand by until the runway and taxiways are no longer required for use by aircraft.

The Contractor shall not allow his/her employees, subcontractors, material suppliers, or any other persons under the Contractor's control to cross any active runway or taxiway without an escort by authorized Airport personnel. The Contractor will be subject to a fine of up to Eleven Thousand Dollars (\$11,000) per occurrence for any unauthorized crossing of an active runway or taxiway by any such person under the Contractor's control. Any breach of security requirements shall be subject to a fine of up to Eleven Thousand Dollars (\$11,000). Okaloosa County Board of County Commissioners has the right to enforce the fine, regardless of whether TSA prosecutes.

A portion of the work area under this Project is contained within the Aircraft Operations Area (AOA) and therefore, these areas of work are considered critical areas. Work will be performed in the proximity of and directly adjacent to active runways and taxiways, therefore, the Contractor shall become familiar with the Obstacle Free Areas and Safety Areas associated with active areas of the Airport.

3. Additional Safety Requirements

The Contractor will adhere to the following requirements when working in close proximity to aircraft:

- a. Brief each equipment and vehicle operator to thoroughly acquaint him with the absolute necessity of exercising discretion and proper judgment while in the vicinity to aircraft operations.
- b. Assist the Engineer and the Airport Security Personnel in monitoring the conduct of each vehicle and equipment operator.
- c. Require all operators to maintain a safe and reasonable speed and to utilize equipment strictly in accordance with prevailing weather conditions.
- d. At the direction of the Engineer, dismiss from the project any person operating unauthorized vehicles or equipment in an unauthorized area, or operating vehicles or equipment in a reckless and unreasonable manner.
- e. Shall not allow trash or debris to accumulate in his work or operations area. Extreme caution will be taken to keep all trash and debris from taxiways, runways, and apron areas. Trash and debris shall be cleaned-up/removed from the work area, twice daily.
- f. Shall not allow his vehicles or equipment to be operated within 120 feet of the centerline of an active taxiway or within 200 feet of the centerline of an active runway, unless they are using a designated haul route or have the express consent of the Engineer.
- g. Immediately cease and remove his operations from any operations or work area at any time he is instructed to do so by the Engineer, the FAA Control

Tower, or by the Airport Staff. These instructions will be issued by radio or other means, if appropriate. The Contractor will not allow his operations to return to the area until he has received permission to do so by the Engineer.

- h. Shall provide, erect, and maintain all necessary barricades, signs, danger signals, and lights for the protection of the work and the safety of the public for both land and air traffic. Obstructions shall be illuminated as required by the Engineer.
- i. Tall but relatively low visibility units such as cranes, drills and the like must have appropriate obstruction lighting mounted and operational in accordance with FAA Advisory Circular 70/7460-1.

4. Marking of Required Clearances

The Contractor shall establish and install a system for marking and delineating the limits of required clearances adjacent to active taxiways, other operational surfaces, and NAVAIDS during the process of construction under this contract utilizing extruded polymer safety or snow fence materials, and or lighted barricades as shown on the plans or as directed by the Engineer. The system shall be easily distinguishable during both day and night time work. A detailed plan of materials and procedures the Contractor proposes to use will be submitted to the Engineer for approval prior to the start of any work under the Contract. Any deviations from the plan must be requested and approved by the Engineer. The Engineer may request changes to the established plan whenever it is necessary for the protection of Airport operations. The approved system of marking and delineation shall be installed, maintained, and protected at all times.

- 5. If a concrete batch plant on the Airport is required by the Contractor and allowed by the Airport, it shall be obstruction lighted in accordance with FAA Advisory Circular AC 70/7460-1, and so placed as to be out of runway and taxiway obstacle free zones and avoid penetrations of any FAR Part 77 surface. The maximum height of any batch plant component shall be 40 feet above ground level.

II. AOA CLOSURES

- 1. In order to permit construction, aprons may be closed to aircraft operations during periods when weather or other conditions do not require its use by aircraft, upon advance written application by the Contractor to the Owner or Engineer on a form to be provided by the Owner.

III. SECURITY

- 1. The Contractor's access to the primary Project work areas and Air Operations Area (AOA) shall be via the haul roads and gates as shown on the Plans.
- 2. If designated haul routes for the Project are anticipated to cross active taxiways, the Contractor shall provide flagmen at each crossing location. All vehicles shall stop before crossing the active taxiways and wait until the flagman "waves" them across.

Flagmen shall be equipped with orange vests and orange/white flags. During hours of low visibility, the flagmen shall also have temporary lights for visibility.

The Contractor shall be responsible for coordinating any escorts with the Airport Operations Department, phone number 850-826-0001.

3. The Contractor shall be responsible for the security of his equipment and materials.
4. All employees of the Contractor or subcontractors requiring access to the construction site are required to be supplied with identification badges approved and furnished by the Airport to be visibly worn at all times. In order to maintain security requirements, the Airport will issue badges to the Contractor's and subcontractor's personnel and all suppliers requiring access.
 - a. The Airport Operations Department shall maintain an up-to-date record, supplied by the Contractor, of all permanent badge holders showing name, address, sex, height, weight, eye color, social security and badge number. The Contractor will be required to furnish this information to the Airport upon request. The Contractor is required to submit all employees and subcontractor employees for criminal history background checks. These checks are initiated with electronic fingerprints forwarded to the FBI. Any individuals that fail the criminal history background checks will not be badged, nor allowed on the project site.
 - b. Compliance by the Contractor shall be accomplished in the form of a letter to the Airport, accompanied by forms furnished by the Airport, which states their understanding and compliance along with the names and social security numbers of all employees. Failure to comply with the above will be grounds for stopping work on the particular project until compliance is established.
 - c. All employees who are issued permanent badges must undergo an Airport-approved security training course prior to badging. Such training will be provided by the Airport and takes approximately 1½ hours to complete.
 - d. Costs for each individual permanent badge is **\$100.00**. If a badge is lost, the Contractor will be required to pay an additional **\$100.00** for a new badge. In the event a Contractor's employee loses a second badge, Airport Operations reserves the right not to issue another badge to that employee.
 - e. ~~The contractor is required to obtain a US Custom Bond in the amount of no less than \$25,000.00.~~ **Not required for this project.**
 - f. The following outline represents badging deposits and reduction in deposit return due to unreturned badges.
5. It is intended that the Contractor shall comply with all requirements of the Airport Security Plan and with security requirements specified herein. The Contractor shall designate to the Engineer in writing the name of his "Contractor Security Officer" (C.S.O.). The C.S.O. shall represent the Contractor on the security requirements for

the contract. The C.S.O. shall be responsible for briefing all Contractor personnel on these requirements. All new Contractor employees shall be briefed on these requirements prior to working in the construction area.

6. The C.S.O. will be responsible for all safety precautions prior to the commencement of the work. The C.S.O. shall provide the Engineer an outline of a proposed accident and fire protection plans for all work contemplated under the Contract and conduct at least one safety meeting each month for each shift and require the attendance of all supervisors at such meetings. Copies of the minutes of safety meetings shall be kept on file in the Contractor's field office and be available upon demand by the Engineer.
7. The Contractor through the C.S.O. shall establish and maintain a list of Contractor and subcontractor vehicles authorized to operate on the site. Vehicles delivering materials to the construction site shall be escorted at all times. The C.S.O. will require each vehicle to display a large company sign on both sides of vehicle and furnish Airport Police and Operations, through the Engineer, with a list of these vehicles. A current list of companies authorized to enter and conduct work on the Airport shall be maintained with the gate guard at the entrance gate. Contractor employee's personal vehicles shall be restricted to the Contractor's staging area and are not allowed on the airfield at any time.
8. Maximum construction traffic speed on all Airport property shall be 35 mph unless posted otherwise. No vehicle shall exceed 15 mph on the parking ramp and apron area.
9. No personnel, equipment or vehicles will be permitted to travel across existing turf, except within the Contract limits as shown on the Drawings. Under no circumstances will Contractor personnel, equipment or vehicles travel outside the circumscribed work areas and Construction limits.
10. The Contractor shall arrange for employee parking at a location approved by the Engineer and Airport Authority.
11. Insurance requirements provided for in the project specifications (Special Provisions, Section 3) will be appropriate to meet the needs as indicated above. Each person or vehicle entering the Security Area displaying the Contractor's identification or under his escort will carry the full coverage of his liability and property damage.
12. No propane or kerosene type heaters will be permitted on Airport property.
13. The OSHA Confined Space Requirements shall be adhered to when working on this Project.
14. The OSHA lockout/tagout procedures for electrical work shall be adhered to when working on this Project.

15. Audio / Visual recording devices (including photo cameras and equipment) are not authorized on the job site unless specifically pre-approved in writing by the Authority.

END OF SPECIAL PROVISION NO. 4

SPECIAL PROVISIONS

SECTION 5

SCHEDULE, SEQUENCE OF OPERATIONS, REPORTS AND MEETINGS

I. SCHEDULE - GENERAL PROVISIONS

The Contractor shall be required to work within the time periods approved by the Owner and Engineer. The Contractor shall maintain adequate supervision for the proper execution and control of any night work required. Night work will be undertaken only with the advance written permission of the Engineer and the Airport Authority.

1. Progress of Work

The work shall be started within 10 days after receipt of the Notice to Proceed from the owner, and the work shall be executed with such progress as may be required to prevent any delay to other contractors or to the general completion of the project. The work shall be executed at such times and in or on such parts of the project, and with such forces, materials, and equipment to assure completion of the work in the time established by the contract.

2. Preconstruction Conference

A preconstruction conference shall be held as soon as possible after award of contract and before work is started. The conference will be held at a location selected by the Owner. The conference shall be attended by:

Contractor's Office Representative

Contractor's General Superintendent

Contractor's Major Subcontractors and Major Suppliers

Owner's Representatives

Engineer's Representatives including the Resident Project Representative

Regulatory Agency Representatives

3. Overall Schedule

A construction schedule shall be developed by the Contractor in accordance with General Provision Section 100 and provided to the Engineer on both hard copy and back-up on CD- ROM no later than the date of the scheduled Preconstruction Conference. The schedule will be reviewed and possibly modified at this meeting as required. The schedule should be developed to assure completion of the project in time allotted for the project. In addition, the Contractor shall submit a projected monthly cash flow analysis for the Project.

The Engineer utilizes Microsoft Project. Should the Contractor choose to submit the schedule in any format other than this, he/she must first get the approval of the Engineer.

The schedule presented should reflect the necessary opening and closing of the runways, taxiways, and other movement areas, as provided for in the Plans. The Contractor should control his work force in a manner consistent with the schedule, but when events require the schedule to be modified, the Contractor will react promptly and provide a revised schedule to the Engineer for approval. When, in the opinion of the Engineer, the Contractor is deviating from the schedule, the Engineer may require the Contractor to submit a revised schedule. The schedule should be reviewed at least weekly with the Engineer to assure that it is current.

If the Contractor persistently refuses or fails to recover lost time, to the extent that it becomes apparent that the Project shall not be completed within the Contract Time, the Owner may take such actions to terminate the Contract for default on the part of the Contractor, or to assign portions of the Work to other Contractors. Any additional costs associated with this will be borne by original Contractor.

II. SEQUENCE OF OPERATIONS

The sequence of operations shall be developed by the Contractor to minimize disruption of any airport operations that need to utilize the project area. The Contractor's sequence of operations shall include, but not necessarily be limited to, the following:

1. The furnishing of all required material, equipment and applicable methods of construction submittals. Submission shall include the procedures and sequencing of each of the work items.
2. Establishment of proper grade controls and horizontal layout for proper identification.
3. General site cleanups, repair of any damaged haul or access roads, and restoration of the staging area.

As previously stated, openings and closings of runways, taxiways, and other movement areas must conform to the sequence provided in the plans or the alternate must be approved by the Engineer and Owner. A Phasing Plan has been included in the Construction Drawings, and it must be followed by the Contractor during construction. It is imperative that each phase be completed in the order shown in the plans.

III. PROGRESS REPORTS/MEETINGS

Once daily, at a time designated by the Owner, a jobsite meeting will be held at which time the overall schedule will be reviewed. Immediately prior to the meeting, the Contractor shall obtain from his subcontractors the necessary information to update the overall schedule to reflect progress to date. The updated schedule shall be available weekly for review. The schedule shall be submitted on a CD-ROM. This CD will have a back-up of the updated

schedule. Four hard copies of the updated schedule shall also be submitted. Update meetings will be held as necessary as determined by the Owner. During the update meeting:

1. Activities started or completed during the update period will be reviewed and evaluated.
2. Remaining duration for underway activities will be reviewed and evaluated.
3. Critical activities not yet begun, and selected other activities will be discussed.
4. Change Order impacts and any proposed changes to the network logic may be presented and discussed/reviewed.

Predicated upon the results of the Owner's review of submissions of revised/updated schedule and schedule reports, the Contractor may be required to revise/update the network diagram and schedule reports at a greater frequency than was previously defined. Conditions, under which a more frequent revision/update to the network diagram and schedule reports will be required, are as follows:

- a. When a delay in completion of any work item or sequence of work items results in an indicated extension of the project completion by seven (7) calendar days.
- b. When delays are encountered which make replanning or rescheduling of the work necessary.
- c. When the schedule does not represent the actual prosecution and progress of the project.

Whenever revised or updated scheduling documents are submitted to the Engineer, they shall be accompanied by a written narrative report. The narrative report shall include a description of the amount of progress during the reporting period in terms of completed activities in the plan currently in effect, a description of problem areas, current and anticipated delay factors and their estimated impact on performance of other activities and completion dates, an explanation of any revisions made to the schedule, and an explanation of corrective action taken or proposed. This report shall address each aspect of work covered by the overall schedule.

The Owner may require the Contractor to add to their plant, equipment, or construction forces, as well as increase the working hours, if operations fall behind schedule at any time during the construction period.

All Contractors conducting operations in the project area shall plan, schedule, and coordinate their construction operations and activities in a manner that will facilitate the simultaneous progress of the work under all Contracts.

END OF SPECIAL PROVISION NO. 5

SPECIAL PROVISIONS

SECTION 6

PROJECT CLOSEOUT

I. SUBSTANTIAL COMPLETION

1. Preliminary Procedures: Before requesting inspection for certification of Substantial Completion, complete the following:
 - a. In the Application for Payment that coincides with, or first follows, the date Substantial Completion is claimed, show 100 percent completion for the portion of the Work claimed as substantially complete. Include supporting documentation for completion as indicated in these Contract Documents and a statement showing an accounting of changes to the Contract Sum.

If 100 percent completion cannot be shown, include a list of incomplete items, the value of incomplete construction, and reasons the Work is not complete.
 - b. Advise Owner of pending insurance change-over requirements.
 - c. Submit specific warranties, workmanship bonds, maintenance agreements, final certifications and similar documents.
 - d. Obtain and submit releases enabling the Owner unrestricted use of the Work and access to services and utilities; include occupancy permits, operating certificates and similar releases.
 - e. Submit record drawings, maintenance manuals, final project photographs, damage or settlement survey, property survey, and similar final record information.
 - f. Deliver tools, spare parts, extra stock, and similar items.
 - g. Make final change-over of permanent locks and transmit keys to the Owner. Advise the Owner's personnel of change-over in security provisions.
 - h. Complete start-up testing of systems, and instruction of the Owner's operating and maintenance personnel. Discontinue or change over and remove temporary facilities from the site, along with construction tools, mock-ups, and similar elements.
 - i. Complete final clean up requirements.
2. Inspection Procedures: On receipt of a request for inspection, and notification that the work is substantially complete, the Owner will either proceed with inspection or

advise the Contractor of unfilled requirements. The Owner will prepare the Certificate of Substantial Completion following inspection, or advise the Contractor of construction that must be completed or corrected before the certificate will be issued.

- a. The Owner will repeat inspection when requested and assured that the Work has been substantially completed.
- b. Results of the completed inspection will form the basis of requirements for final acceptance.

II. FINAL ACCEPTANCE

1. Preliminary Procedures: Before requesting final inspection for certification of final acceptance and final payment, complete the following:
 - a. Submit the final payment request with releases and supporting documentation not previously submitted and accepted. Include certificates of insurance for products and completed operations where required. Also, include Contractor's affidavit of Payment of Debts and Claims.
 - b. Submit a certified copy of the Owner's inspection punch-list of items to be completed or corrected, stating that each item has been completed or otherwise resolved for acceptance, and the punch-list has been endorsed and dated by the Owner.
 - c. Submit final meter readings for utilities, a measured record of stored fuel, and similar data as of the date of Substantial Completion, or when the Owner took possession of and responsibility for corresponding elements of the Work.
 - d. Submit final lien wavers from all subcontractors and suppliers.
 - e. Submit consent of surety to final payment.
 - f. Submit a final liquidated damages settlement statement.
 - g. Submit evidence of final, continuing insurance coverage complying with insurance requirements.
 - h. Submit Contractor Affidavit.
2. Reinspection Procedure: The Owner will reinspect the Work upon receipt of notice that the Work, including inspection list items from earlier inspections, has been completed, except items whose completion has been delayed because of circumstances acceptable to the Owner.
 - a. Upon completion of reinspection, the Owner will prepare a certificate of final acceptance, or advise the Contractor of Work that is incomplete or of obligations that have not been fulfilled but are required for final acceptance.
 - b. If necessary, reinspection will be repeated.

III. RECORD DOCUMENT SUBMITTALS

1. General: Do not use record documents for construction purposes; protect from deterioration and loss in a secure, fire-resistive location; provide access to record documents for the Owner's reference during normal working hours.
2. Record Drawings: Maintain a clean, undamaged set of blue or black line white-prints of Contract Drawings and Shop Drawings. Mark the set to show the actual installation where the installation varies from the Work as originally shown. Mark whichever drawing is most capable of showing conditions fully and accurately; where Shop Drawings are used, record a cross-reference at the corresponding location on the Contract Drawings. Give particular attention to concealed elements that would be difficult to measure and record at a later date.
 - a. Mark record sets with red erasable pencil; use other colors to distinguish between variations in separate categories of the Work.
 - b. Mark new information that is important to the Owner, but was not shown on Contract Drawings or Shop Drawings.
 - c. Note related Change Order numbers where applicable.
 - d. Organize record drawing sheets into manageable sets, bind with durable paper cover sheets, and print suitable titles, dates and other identification on the cover of each set.
3. Record Specifications: Maintain one complete copy of the Project Manual, including addenda, and one copy of other written construction documents such as Change Orders and modifications issued in printed form during construction. Mark these documents to show variations in actual Work performed in comparison with the text of the Specifications and modifications. Give particular attention to substitutions, selection of options and similar information on elements that are concealed or cannot otherwise be readily discerned later by direct observation. Note related record drawing information and Product Data.
 - a. Upon completion of the Work, submit record Specifications to the Owner for the Owner's records.
4. Record Product Data: Maintain one copy of each Product Data submittal. Mark these documents to show variations in actual Work performed in comparison with information submitted. Include variations in products delivered to the site, and from the manufacturer's installation instructions and recommendations. Give particular attention to concealed products and portions of the Work which cannot otherwise be readily discerned later by direct observation. Note related Change Orders and mark-up of record drawings and Specifications.
 - a. Upon completion of mark-up, submit complete set of record Product Data to the Owner for the Owner's records.
5. Miscellaneous Record Submittals: Refer to other Specification Sections for requirements of miscellaneous record-keeping and submittals in connection with

actual performance of the Work. Immediately prior to the date or dates of Substantial Completion, complete miscellaneous records and place in good order, properly identified and bound or filed, ready for continued use and reference. Submit to the Owner for the Owner's records.

END OF SPECIAL PROVISION NO. 6

SPECIAL PROVISIONS

SECTION 7

WARRANTIES AND BONDS

I. SUMMARY

- A. This Section specifies general administrative and procedural requirements for warranties and bonds required by the Contract Documents, including manufacturer's standard warranties on products and special warranties.
 - 1. Refer to the General Conditions for terms of the Contractor's special warranty of workmanship and materials.
 - 2. General closeout requirements are included in Section 6 "Project Closeout."
 - 3. Certifications and other commitments and agreements for continuing services to Owner are specified elsewhere in the Contract Documents.
- B. Disclaimers and Limitations: Manufacturer's disclaimers and limitations on product warranties do not relieve the Contractor of the warranty on the Work that incorporates the products, nor does it relieve suppliers, manufacturers, and subcontractors required to countersign special warranties with the Contractor.

II. DEFINITIONS

- A. Standard Product Warranties are preprinted written warranties published by individual manufacturers for particular products and are specifically endorsed by the manufacturer to the Owner.
- B. Special Warranties are written warranties required by or incorporated in the Contract Documents, either to extend time limits provided by standard warranties or to provide greater rights for the Owner.

III. WARRANTY REQUIREMENTS

- A. Related Damages and Losses: When correcting warranted Work that has failed, remove and replace other Work that has been damaged as a result of such failure or that must be removed and replaced to provide access for correction of warranted Work.
- B. Reinstatement of Warranty: When Work covered by a warranty has failed and been corrected by replacement or rebuilding, reinstate the warranty by written endorsement. The reinstated warranty shall be equal to the original warranty with an equitable adjustment for depreciation.
- C. Replacement Cost: Upon determination that Work covered by a warranty has failed, replace or rebuild the Work to an acceptable condition complying with requirements

of Contract Documents. The Contractor is responsible for the cost of replacing or rebuilding defective Work regardless of whether the Owner has benefited from use of the Work through a portion of its anticipated useful service life.

- D. Owner's Recourse: Written warranties made to the Owner are in addition to implied warranties, and shall not limit the duties, obligations, rights and remedies otherwise available under the law, nor shall warranty periods be interpreted as limitations on time in which the Owner can enforce such other duties, obligations, rights, or remedies.
 - 1. Rejection of Warranties: The Owner reserves the right to reject warranties and to limit selections to products with warranties not in conflict with requirements of the Contract Documents.
- E. The Owner reserves the right to refuse to accept Work for the Project where a special warranty, certification, or similar commitment is required on such Work or part of the Work, until evidence is presented that entities required to countersign such commitments are willing to do so.

IV. SUBMITTALS

- A. Submit written warranties to the Owner prior to the date certified for Substantial Completion. If the Engineer's Certificate of Substantial Completion designates a commencement date for warranties other than the date of Substantial Completion for the Work, or a designated portion of the Work, submit written warranties upon request of the Owner.
 - 1. When a designated portion of the Work is completed and occupied or used by the Owner, by separate agreement with the Contractor during the construction period, submit properly executed warranties to the Owner within fifteen days of completion of that designated portion of the Work.
- B. When a special warranty is required to be executed by the Contractor, or the Contractor and a subcontractor, supplier or manufacturer, prepare a written document that contains appropriate terms and identification, ready for execution by the required parties. Submit a draft to the Owner for approval prior to final execution.
- C. Form of Submittal: At Final Completion compile two copies of each required warranty and bond properly executed by the Contractor, or by the Contractor, subcontractor, supplier, or manufacturer. Organize the warranty documents into an orderly sequence based on the table of contents of the Project Manual.
- D. Bind warranties and bonds in heavy-duty, commercial quality, durable 3-ring vinyl covered loose-leaf binders, thickness as necessary to accommodate contents, and sized to receive 8-1/2" by 11" paper.
 - 1. Provide heavy paper dividers with celluloid covered tabs for each separate warranty. Mark the tab to identify the product or installation. Provide a

typed description of the product or installation, including the name of the product, and the name, address and telephone number of the installer.

2. Identify each binder on the front and the spine with the typed or printed title "WARRANTIES AND BONDS, the Project title or name, and the name of the Contractor.
3. When operating and maintenance manuals are required for warranted construction, provide additional copies of each required warranty, as necessary, for inclusion in each required manual.

END OF SPECIAL PROVISION NO. 7

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SPECIAL PROVISION

SECTION 10

WELDING

I. GENERAL

Welding shall be performed in accordance with Structural Welding Code, AWS D1.1 latest edition.

Welding operators shall be qualified on a 1" plate test in the 3G and 4G positions in accordance with AWS D1.1.

100% of all welds shall be inspected by the Contractor's Superintendent or Engineer approved designee. Each weld shall be photographed (close up within 12" of weld) with a digital camera (2 megapixel color minimum).

The weld inspector shall maintain a log by photograph number indicating date, time, location by fixture number, acceptance or rejection and inspectors signature. The inspector shall maintain an updated hard copy of the photos and log at the jobsite. The hard copy shall not be more than three days behind actual work progress. The inspector shall turn over to the Engineer an electronic copy of the log and photos at the end of each week. The O&M Manuals shall include a color copy of each of the photographs and the log for 100% of the welds.

Visual inspection of all welds shall consist of the following:

1. Distortion
2. Weld size
3. Weld profile
4. Weld dimensions
5. Excessive weld reinforcement
6. Porosity
7. Slag inclusions
8. Incomplete fusion
9. Inadequate joint preparation
10. Undercut
11. Surface or other irregularity

If the welder operator should have greater than a 5% rejection rate the welder operator shall be replaced.

II. MEASUREMENT AND PAYMENT

No separate measurement or payment for the above requirements shall be made. All costs necessary to cover these items and services shall be considered incidental to the respective pay item of which it is a component part.

END OF SPECIAL PROVISION NO. 10

SPECIAL PROVISIONS

SECTION 11

TEMPORARY FACILITIES

I. GENERAL DEFINITIONS

1. This section specifies certain minimum temporary facilities to be provided regardless of methods and means selected for performance of the work but not by way of limitation and not assured for compliance with governing regulations. Use of alternate temporary facilities may be permitted subject to the Engineer's and Owner's approval and acceptance.
2. **Costs:** Except as otherwise indicated, costs associated with temporary facilities are the Contractor's. Temporary facilities remain the property and responsibility of the Contractor.
3. **Dust Control:** Adequate measures shall be taken to prevent the transfer of dust to other areas of the airport complex. The Contractor shall comply with the requirements of the NPDES permit.
4. **Noise Control:** Where work is being conducted in or adjacent to occupied areas, the Contractor shall make every effort to keep construction noise to a minimum.
5. **Fire Protection:** In addition to temporary water service for construction and the placing of permanent fire protection facilities in operating condition at earliest feasible date, provide fire extinguishers of types and sizes recommended by NFPA or any other governing authority or agency.

Provide Type A extinguishers in field offices and for similar exposures, Type ABC in construction areas. Locate extinguishers near each entrance. Prohibit smoking except in marked, non-hazardous areas. Smoking in existing premises is prohibited.

6. **Environmental Protection:** Review exposure to possible environmental problems with the Engineer and Owner. Establish procedures and discipline among trades men and provide needed facilities, which will protect against environmental problems (pollution of air, water and soil, excessive noise and similar problems). The Contractor shall comply with the requirements of the NPDES permit.

II. TEMPORARY PROTECTION

Provide facilities and services as necessary to effectively protect project from losses and persons from injury during the course of construction.

The existing utilities shall not be modified for use by the Contractor. Do not interrupt existing services serving occupied or used facilities except when authorized in writing by the Owner. Provide temporary services during interruptions to existing utilities as acceptable to the Owner.

The Contractor shall furnish electrical and water utilities as required and provide temporary power, telephone and system connections where required by the Owner to continue operation of existing equipment or systems during construction.

III. TEMPORARY STAGING/STORAGE AREAS

1. The Contractor may provide a trailer or prototype building field office for his own use. The location of the field office or building must be approved by the Engineer and Owner. All costs for connection to utilities shall be paid for by the Contractor. Water, electric and telephone will be available on site.

Equipment not in use during construction, nights and/or holidays shall be parked in areas designated by the Engineer and Owner. Construction workers' private vehicles shall be parked within these areas.

The Contractor may provide one 8' x 4' x 3/4" exterior grade plywood sign, properly supported, with bottom 6'0" above grade. Engage professional sign painter to apply graphics and lettering as indicated or approved by the Engineer. The placement of the sign shall be approved by the Owner. **NO OTHER SIGNS ARE PERMITTED.**

2. During construction, the Contractor shall maintain these areas in a neat condition.

The Contractor's vehicles, equipment and materials shall be stored in the areas designated by the Engineer. Upon completion of the work, the staging and storage areas shall be cleaned up and returned to their original condition to the satisfaction of the Owner. Remove all construction fencing and barricades from the project site. No special payment will be made for clean-up and restoration of the storage area.

Personal vehicles will not be permitted beyond the Contractor's parking area. Drivers of vehicles being operated beyond this area shall be subject to loss of permission to enter the construction site.

3. If additional storage areas are needed, the Contractor may request it from the Engineer. The request will be reviewed on the basis of what is to be stored and the area needed. The Contractor shall provide any necessary fencing and/or security.

IV. TEMPORARY CONSTRUCTION FACILITIES

1. De-watering: Maintain construction work free of water accumulation. Do not endanger the work or adjacent properties.
2. Miscellaneous Facilities: Provide miscellaneous facilities as needed including ladders, runways, shoring, scaffolding, railing, bracing, barriers, closures, platforms, temporary partitions and similar items. **Remove all temporary facilities prior to Final Acceptance.**

V. TEMPORARY SUPPORT FACILITIES

1. General: Provide facilities and services as may be needed to properly support the primary construction process and meet governing regulations.
2. Drinking Water: Provide either pipe-connected potable water fountains or electric cooled bottled water fountains or insulated potable water containers in work areas spaced so that personnel at the site will travel no more than 300 feet.
3. Toilets: Furnish adequate temporary sanitary facilities within the Contractor's staging and storage areas located on the drawings for the use of workmen during the entire period of construction. Temporary facilities shall be furnished at a minimum ratio of one toilet for each 25 workmen or as required by local governing code, whichever is greater. The toilets shall be portable, chemical type or water-borne type connected to an approved existing sanitary sewer.

Toilets shall be placed or installed in conformity with local governing code requirements and shall be enclosed in a weather-tight, fly-proof building with a self-closing door. The building shall be tied down to prevent overturning by wind. Provide standard, roll-type toilet paper holder and a supply of standard, roll-type toilet tissue.

The premises shall be thoroughly disinfected at least twice each week. Provide means for locking the door from the outside and keep locked at all times except during hours that workmen are at the project site.

VI. TEMPORARY UTILITY SERVICES

1. The Contractor shall coordinate the requirements for temporary utilities with the Owner and shall install at the Contractor's expense all necessary utilities in a safe, acceptable manner. Should leaks, breaks, etc. occur during installation or use, the Contractor shall immediately notify the appropriate utility personnel and promptly repair the utility so as to keep disruption of service to a minimum.
2. The Contractor shall provide temporary wiring if required. All wiring shall meet all safety requirements of the National Electrical Code, Florida Department of Commerce, Bureau of Workmen's' Compensation or local requirements. In addition, all wire shall be so sized that it is not overloaded according to the National Electrical Code and all wire used shall be fused ~~be fused~~ **the required NEC overcurrent protection** to adequately protect that wire according to the Code referred to.
3. The Contractor shall provide all temporary lines and connections from existing sources of water as required for the work. The Contractor is responsible for proper drainage of water used.
4. The Contractor shall furnish all temporary wiring, piping connections and other apparatus that is needed to operate the utilities and shall remove all evidence of same when work is complete.

5. The Contractor is responsible for obtaining and paying for all utilities that he requires at the project site.

VII. STAGING, STOCKPILE AND SPOIL AREAS

The staging area(s) depicted on the plans shall be used to house the Contractor's and Engineer's offices and to store all idle equipment, supplies and construction materials (other than bulk materials such as aggregate, sand and soil).

The Contractor may erect and maintain throughout the life of this contract, at his expense, a six-foot high fence of chain link fabric around the perimeter of each staging area used. He may also install vehicle and pedestrian gates as necessary to provide adequate ingress/egress.

Additionally, the perimeter of any staging area which abuts an active operation pavement shall be marked with yellow flashing barricades no more than 50 feet apart.

Upon completion of all work, remove all construction fencing and barricades from the project site.

The Contractor's vehicles, equipment and materials shall be stored in the area designated on the plans. Upon completion of the work, the storage area shall be cleaned up and returned to its original condition to the satisfaction of the Owner.

Personal vehicles will not be permitted beyond the Contractor's employee parking area. Drivers of vehicles being operated in the secure area shall be subject to loss of permission to enter the construction site.

Equipment not in use during construction, nights and/or holidays will be parked in the Contractor's staging area. Exceptions will only be approved by the Engineer when absolutely necessary.

Stockpile areas shall be used to store all bulk materials needed for the project and may or may not be fenced at the Contractor's option. However, yellow flashing barricades shall be installed where potential conflicts with air or ground vehicular traffic might occur.

Separate stockpiles shall be created for the project construction. Separate stockpiles shall be created for structural soil and topsoil. Stockpiles shall not penetrate the FAR Part 77 imaginary surfaces. Stockpiles of asphalt millings shall be as shown on the plans.

All other waste material, including, but not limited to, concrete rubble and debris, shall be removed from the Airport at the Contractor's expense, unless otherwise directed by the Engineer.

All asphalt millings shall be transported to the two locations on airport property shown on the plans, unless otherwise directed by the Engineer.

All stripping materials to be re-used as top soil shall be stockpiled on airport property as directed by the Engineer.

All other materials shall be disposed of off airport property with the exception of limerock should the Owner request it.

All materials determined by the Engineer to be unsuitable for disposal on airport property shall be hauled off airport property and disposed of in a manner satisfactory to the Engineer.

All costs for hauling and disposal of unsuitable material shall be considered incidental to the costs bid for the work in this project and shall be at no additional cost to the Owner.

The Contractor shall provide all necessary temporary environmental controls as directed by the Engineer (including, but not limited to: hay bales, siltation fence, etc.) to protect the environment from erosion of the stockpile areas. The Contractor shall comply with the requirements of the NPDES permit.

VII. MEASUREMENT AND PAYMENT

No separate measurement or payment for the above requirements shall be made.

END OF SPECIAL PROVISION NO. 11

SPECIAL PROVISIONS

SECTION 14

CONTRACTOR'S WORK WEEK

1. The project's standard work week shall consist of five (5) days per week, ten (10) hours per day. Work hours for Day work and Night work shall be per the Construction Phasing Plans.
2. Should the Contractor work more than this standard work week and cause the Resident Project Representative's (RPR) or the Engineer's time to exceed the hours above, the Contractor shall be responsible for reimbursing the Authority for all costs incurred by the RPR for the additional time required of the RPR. The RPR's and Engineers time will be billed to the Contractor at the rate of \$105/hour.
3. **No separate measurement or payment for the above requirements shall be made.**

END OF SPECIAL PROVISION NO. 14

SPECIAL PROVISIONS

SECTION 16

LOCAL PERMIT AND INSPECTION FEES

1. In accordance with Florida Statutes, section 218.80, the following pages of this Special Provision contain permit and inspection fee information and schedules for the Okaloosa County Building Department.
2. The Contractor shall be responsible for all non-exempt construction permits and fees (including but not limited to Okaloosa County Building Department, etc.), inspection fees and disposal fees associated with this project and shall include the cost for same in his lump sum bid.
3. No separate measurement or payment for the above requirements shall be made.

END OF SPECIAL PROVISION NO. 16

SPECIAL PROVISIONS

SECTION NO. 17

WARRANTIES AND GUARANTEES

I. GENERAL

Contractor shall warrant all items, materials and workmanship completed as a part of this contract which shall be free from failure due to defects in workmanship and material for **One (1) YEAR FROM THE DATE OF FINAL ACCEPTANCE.**

Lamps and other consumable items (consumable shall be determined by the Engineer) shall be warranted to be free from failure due to defects in workmanship and material for two (2) months from the date of Final Acceptance.

The time stated in this Special Provision shall have precedence over any lesser times that may be included in the Contract Documents.

If during the two years following Final Acceptance any component fails to perform, the Contractor shall replace such failed component or assembly within 48 hours. If a long lead time is required for obtaining the failed component the Contractor shall make every effort to ensure the airport remains fully operational. Upon replacement, the Contractor shall warrant such items, materials, and workmanship for **One (1) YEAR FROM THE DATE OF FINAL ACCEPTANCE.**

II. MEASUREMENT AND PAYMENT

No separate measurement or payment for the above requirements shall be made. All costs necessary to cover these items and services shall be considered incidental to the respective pay item of which it is a component part.

END OF SPECIAL PROVISION NO. 17

SPECIAL PROVISIONS

SECTION NO. 19

BASIS OF AWARD AND AWARD OF ADDITIONAL SCHEDULES

1. It is the intent of the Owner to award a single contract for all work shown on the documents. The apparent low bid shall be determined on the basis of the Total Bid Amount.

END OF SPECIAL PROVISION NO 19

TECHNICAL SPECIFICATIONS

**SECTION C-100
CONTRACTOR QUALITY CONTROL PROGRAM (CQCP)**

100-1.1 GENERAL. Quality is more than test results. Quality is the combination of proper materials, testing, workmanship, equipment, inspection, and documentation of the project. Establishing and maintaining a culture of quality is key to achieving a quality project. The Contractor shall establish, provide, and maintain an effective Contractor Quality Control Program (CQCP) that details the methods and procedures that will be taken to assure that all materials and completed construction required by this contract conform to contract plans, technical specifications and other requirements, whether manufactured by the Contractor, or procured from subcontractors or vendors. Although guidelines are established and certain minimum requirements are specified here and elsewhere in the contract technical specifications, the Contractor shall assume full responsibility for accomplishing the stated purpose.

The Contractor shall establish a CQCP that will:

- a. Provide qualified personnel to develop and implement the CQCP.
- b. Provide for the production of acceptable quality materials.
- c. Provide sufficient information to assure that the specification requirements can be met.
- d. Document the CQCP process.

The Contractor shall not begin any construction or production of materials to be incorporated into the completed work until the CQCP has been reviewed and approved by the Resident Project Representative (RPR). No partial payment will be made for materials subject to specific quality control (QC) requirements until the CQCP has been reviewed and approved.

The QC requirements contained in this section and elsewhere in the contract technical specifications are in addition to and separate from the quality assurance (QA) testing requirements. QA testing requirements are the responsibility of the RPR or Contractor as specified in the specifications.

A Quality Control (QC)/Quality Assurance (QA) workshop with the Engineer, Resident Project Representative (RPR), Contractor, subcontractors, testing laboratories, and Owner's representative must be held prior to start of construction. The QC/QA workshop will be facilitated by the Contractor. The Contractor shall coordinate with the Airport and the RPR on time and location of the QC/QA workshop. Items to be addressed, at a minimum, will include:

- a. Review of the CQCP including submittals, QC Testing, Action & Suspension Limits for Production, Corrective Action Plans, Distribution of QC reports, and Control Charts.
- b. Discussion of the QA program.
- c. Discussion of the QC and QA Organization and authority including coordination and information exchange between QC and QA.
- d. Establish regular meetings to discuss control of materials, methods and testing.

- e. Establishment of the overall QC culture.

100-1.2 DESCRIPTION OF PROGRAM.

a. General description. The Contractor shall establish a CQCP to perform QC inspection and testing of all items of work required by the technical specifications, including those performed by subcontractors. The CQCP shall ensure conformance to applicable specifications and plans with respect to materials, off-site fabrication, workmanship, construction, finish, and functional performance. The CQCP shall be effective for control of all construction work performed under this Contract and shall specifically include surveillance and tests required by the technical specifications, in addition to other requirements of this section and any other activities deemed necessary by the Contractor to establish an effective level of QC.

b. Contractor Quality Control Program (CQCP). The Contractor shall describe the CQCP in a written document that shall be reviewed and approved by the RPR prior to the start of any production, construction, or off-site fabrication. The written CQCP shall be submitted to the RPR for review and approval at least 14 calendar days before the CQCP Workshop. The Contractor's CQCP and QC testing laboratory must be approved in writing by the RPR prior to the Notice to Proceed (NTP).

The CQCP shall be organized to address, as a minimum, the following:

1. QC organization and resumes of key staff
2. Project progress schedule
3. Submittals schedule
4. Inspection requirements
5. QC testing plan
6. Documentation of QC activities and distribution of QC reports
7. Requirements for corrective action when QC and/or QA acceptance criteria are not met
8. Material quality and construction means and methods. Address all elements applicable to the project that affect the quality of the pavement structure including subgrade, subbase, base, and surface course. Some elements that must be addressed include, but is not limited to mix design, aggregate grading, stockpile management, mixing and transporting, placing and finishing, quality control testing and inspection, smoothness, laydown plan, equipment, and temperature management plan.

The Contractor must add any additional elements to the CQCP that is necessary to adequately control all production and/or construction processes required by this contract.

100-1.3 CQCP ORGANIZATION. The CQCP shall be implemented by the establishment of a QC organization. An organizational chart shall be developed to show all QC personnel, their authority,

and how these personnel integrate with other management/production and construction functions and personnel.

The organizational chart shall identify all QC staff by name and function, and shall indicate the total staff required to implement all elements of the CQCP, including inspection and testing for each item of work. If necessary, different technicians can be used for specific inspection and testing functions for different items of work. If an outside organization or independent testing laboratory is used for implementation of all or part of the CQCP, the personnel assigned shall be subject to the qualification requirements of paragraphs 100-03a and 100-03b. The organizational chart shall indicate which personnel are Contractor employees and which are provided by an outside organization.

The QC organization shall, as a minimum, consist of the following personnel:

a. Program Administrator. The Contractor Quality Control Program Administrator (CQCPA) must be a full-time on-site employee of the Contractor, or a consultant engaged by the Contractor. The CQCPA must have a minimum of five (5) years of experience in QC pavement construction with prior QC experience on a project of comparable size and scope as the contract.

Included in the five (5) years of paving/QC experience, the CQCPA must meet at least one of the following requirements:

(1) Professional Engineer with one (1) year of airport paving experience.

(2) Engineer-in-training with two (2) years of airport paving experience.

(3) National Institute for Certification in Engineering Technologies (NICET) Civil Engineering Technology Level IV with three (3) years of airport paving experience.

(4) An individual with four (4) years of airport paving experience, with a Bachelor of Science Degree in Civil Engineering, Civil Engineering Technology or Construction.

The CQCPA must have full authority to institute any and all actions necessary for the successful implementation of the CQCP to ensure compliance with the contract plans and technical specifications. The CQCPA authority must include the ability to immediately stop production until materials and/or processes are in compliance with contract specifications. The CQCPA must report directly to a principal officer of the construction firm. The CQCPA may supervise the Quality Control Program on more than one project provided that person can be at the job site within two (2) hours after being notified of a problem.

b. QC technicians. A sufficient number of QC technicians necessary to adequately implement the CQCP must be provided. These personnel must be either Engineers, engineering technicians, or experienced craftsman with qualifications in the appropriate field equivalent to NICET Level II in Civil Engineering Technology or higher, and shall have a minimum of two (2) years of experience in their area of expertise.

The QC technicians must report directly to the CQCPA and shall perform the following functions:

(1) Inspection of all materials, construction, plant, and equipment for conformance to the technical specifications, and as required by paragraph 100-6.

(2) Performance of all QC tests as required by the technical specifications and paragraph 100-8.

(3) Performance of tests for the RPR when required by the technical specifications.

Certification at an equivalent level of qualification and experience by a state or nationally recognized organization will be acceptable in lieu of NICET certification.

c. Staffing levels. The Contractor shall provide sufficient qualified QC personnel to monitor each work activity at all times. Where material is being produced in a plant for incorporation into the work, separate plant and field technicians shall be provided at each plant and field placement location. The scheduling and coordinating of all inspection and testing must match the type and pace of work activity. The CQCP shall state where different technicians will be required for different work elements.

100-1.4 PROJECT PROGRESS SCHEDULE. Critical QC activities must be shown on the project schedule as required by Section 80, paragraph 80-03, *Execution and Progress*.

100-1.5 SUBMITTALS SCHEDULE. The Contractor shall submit a detailed listing of all submittals (for example, mix designs, material certifications) and shop drawings required by the technical specifications. The listing can be developed in a spreadsheet format and shall include as a minimum:

- a. Specification item number
- b. Item description
- c. Description of submittal
- d. Specification paragraph requiring submittal
- e. Scheduled date of submittal

100-1.6 INSPECTION REQUIREMENTS. QC inspection functions shall be organized to provide inspections for all definable features of work, as detailed below. All inspections shall be documented by the Contractor as specified by paragraph 100-9.

Inspections shall be performed as needed to ensure continuing compliance with contract requirements until completion of the particular feature of work. Inspections shall include the following minimum requirements:

a. During plant operation for material production, QC test results and periodic inspections shall be used to ensure the quality of aggregates and other mix components, and to adjust and control mix proportioning to meet the approved mix design and other requirements of the technical specifications. All equipment used in proportioning and mixing shall be inspected to ensure its proper operating condition. The CQCP shall detail how these and other QC functions will be accomplished and used.

b. During field operations, QC test results and periodic inspections shall be used to ensure the quality of all materials and workmanship. All equipment used in placing, finishing, and compacting shall be inspected to ensure its proper operating condition and to ensure that all such operations are in conformance to the technical specifications and are within the plan dimensions, lines, grades, and tolerances specified. The CQCP shall document how these and other QC functions will be accomplished and used.

100-1.7 CONTRACTOR QC TESTING FACILITY.

a. For projects that include Item P-401, Item P-403, and Item P-404, the Contractor shall ensure facilities, including all necessary equipment, materials, and current reference standards, are provided that meet requirements in the following paragraphs of ASTM D3666, *Standard Specification for Minimum Requirements for Agencies Testing and Inspecting Road and Paving Materials*:

- 8.1.3 Equipment Calibration and Checks;
- 8.1.9 Equipment Calibration, Standardization, and Check Records;
- 8.1.12 Test Methods and Procedures

b. For projects that include P-501, the Contractor shall ensure facilities, including all necessary equipment, materials, and current reference standards, are provided that meet requirements in the following paragraphs of ASTM C1077, *Standard Practice for Agencies Testing Concrete and Concrete Aggregates for Use in Construction and Criteria for Testing Agency Evaluation*:

- 7 Test Methods and Procedures
- 8 Facilities, Equipment, and Supplemental Procedures

100-1.8 QC TESTING PLAN. As a part of the overall CQCP, the Contractor shall implement a QC testing plan, as required by the technical specifications. The testing plan shall include the minimum tests and test frequencies required by each technical specification Item, as well as any additional QC tests that the Contractor deems necessary to adequately control production and/or construction processes.

The QC testing plan can be developed in a spreadsheet fashion and shall, as a minimum, include the following:

- a. Specification item number (e.g., P-401)
- b. Item description (e.g., Hot Mix Asphalt Pavements)
- c. Test type (e.g., gradation, grade, asphalt content)
- d. Test standard (e.g., ASTM or American Association of State Highway and Transportation Officials (AASHTO) test number, as applicable)
- e. Test frequency (e.g., as required by technical specifications or minimum frequency when requirements are not stated)

- f. Responsibility (e.g., plant technician)
- g. Control requirements (e.g., target, permissible deviations)

The QC testing plan shall contain a statistically-based procedure of random sampling for acquiring test samples in accordance with ASTM D3665. The RPR shall be provided the opportunity to witness QC sampling and testing.

All QC test results shall be documented by the Contractor as required by paragraph 100-9.

100-1.9 DOCUMENTATION. The Contractor shall maintain current QC records of all inspections and tests performed. These records shall include factual evidence that the required QC inspections or tests have been performed, including type and number of inspections or tests involved; results of inspections or tests; nature of defects, deviations, causes for rejection, etc.; proposed remedial action; and corrective actions taken.

These records must cover both conforming and defective or deficient features, and must include a statement that all supplies and materials incorporated in the work are in full compliance with the terms of the contract. Legible copies of these records shall be furnished to the RPR daily. The records shall cover all work placed subsequent to the previously furnished records and shall be verified and signed by the CQCPA.

Contractor QC records required for the contract shall include, but are not necessarily limited to, the following records:

a. Daily inspection reports. Each Contractor QC technician shall maintain a daily log of all inspections performed for both Contractor and subcontractor operations. These technician's daily reports shall provide factual evidence that continuous QC inspections have been performed and shall, as a minimum, include the following:

- (1) Technical specification item number and description
- (2) Compliance with approved submittals
- (3) Proper storage of materials and equipment
- (4) Proper operation of all equipment
- (5) Adherence to plans and technical specifications
- (6) Summary of any necessary corrective actions
- (7) Safety inspection.

The daily inspection reports shall identify all QC inspections and QC tests conducted, results of inspections, location and nature of defects found, causes for rejection, and remedial or corrective actions taken or proposed.

The daily inspection reports shall be signed by the responsible QC technician and the CQCPA. The RPR shall be provided at least one copy of each daily inspection report on the work day

following the day of record. When QC inspection and test results are recorded and transmitted electronically, the results must be archived.

b. Daily test reports. The Contractor shall be responsible for establishing a system that will record all QC test results. Daily test reports shall document the following information:

- (1) Technical specification item number and description
- (2) Test designation
- (3) Location
- (4) Date of test
- (5) Control requirements
- (6) Test results
- (7) Causes for rejection
- (8) Recommended remedial actions
- (9) Retests

Test results from each day's work period shall be submitted to the RPR prior to the start of the next day's work period. When required by the technical specifications, the Contractor shall maintain statistical QC charts. When QC daily test results are recorded and transmitted electronically, the results must be archived.

100-1.10 CORRECTIVE ACTION REQUIREMENTS. The CQCP shall indicate the appropriate action to be taken when a process is deemed, or believed, to be out of control (out of tolerance) and detail what action will be taken to bring the process into control. The requirements for corrective action shall include both general requirements for operation of the CQCP as a whole, and for individual items of work contained in the technical specifications.

The CQCP shall detail how the results of QC inspections and tests will be used for determining the need for corrective action and shall contain clear rules to gauge when a process is out of control and the type of correction to be taken to regain process control.

When applicable or required by the technical specifications, the Contractor shall establish and use statistical QC charts for individual QC tests. The requirements for corrective action shall be linked to the control charts.

100-1.11 INSPECTION AND/OR OBSERVATIONS BY THE RPR. All items of material and equipment are subject to inspection and/or observation by the RPR at the point of production, manufacture or shipment to determine if the Contractor, producer, manufacturer or shipper maintains an adequate QC system in conformance with the requirements detailed here and the applicable technical specifications and plans. In addition, all items of materials, equipment and

work in place shall be subject to inspection and/or observation by the RPR at the site for the same purpose.

Inspection and/or observations by the RPR does not relieve the Contractor of performing QC inspections of either on-site or off-site Contractor's or subcontractor's work.

100-1.12 NONCOMPLIANCE.

a. The Resident Project Representative (RPR) will provide written notice to the Contractor of any noncompliance with their CQCP. After receipt of such notice, the Contractor must take corrective action.

b. When QC activities do not comply with either the CQCP or the contract provisions or when the Contractor fails to properly operate and maintain an effective CQCP, and no effective corrective actions have been taken after notification of non-compliance, the RPR will recommend the Owner take the following actions:

(1) Order the Contractor to replace ineffective or unqualified QC personnel or subcontractors and/or

(2) Order the Contractor to stop operations until appropriate corrective actions are taken.

METHOD OF MEASUREMENT

100-2.1 BASIS OF MEASUREMENT AND PAYMENT. The CQCP will be paid as a lump sum with the following schedule of partial payments:

a. With first pay request, 25% with approval of CQCP and completion of the Quality Control (QC)/Quality Assurance (QA) workshop.

b. When 25% or more of the original contract is earned, an additional 25%.

c. When 50% or more of the original contract is earned, an additional 20%.

d. When 75% or more of the original contract is earned, an additional 20%

e. After final inspection and acceptance of project, the final 10%.

BASIS OF PAYMENT

100-3.1 PAYMENT WILL BE MADE UNDER:

Item C-100-1 Contractor Quality Control Program (CQCP) – per Lump Sum (LS)

REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

National Institute for Certification in Engineering Technologies (NICET)

ASTM International (ASTM)

ASTM C1077	Standard Practice for Agencies Testing Concrete and Concrete Aggregates for Use in Construction and Criteria for Testing Agency Evaluation
ASTM D3665	Standard Practice for Random Sampling of Construction Materials
ASTM D3666	Standard Specification for Minimum Requirements for Agencies Testing and Inspecting Road and Paving Materials

END OF SECTION C-100

SECTION C-102
TEMPORARY AIR AND WATER POLLUTION, SOIL EROSION, AND SILTATION CONTROL

PART 1 - DESCRIPTION

1.1. This item shall consist of temporary control measures as shown on the plans or as ordered by the Resident Project Representative (RPR) during the life of a contract to control pollution of air and water, soil erosion, and siltation through the use of silt fences, berms, dikes, dams, sediment basins, fiber mats, gravel, mulches, grasses, slope drains, and other erosion control devices or methods.

Temporary erosion control shall be in accordance with the approved erosion control plan; the approved Construction Safety and Phasing Plan (CSPP) and AC 150/5370-2, *Operational Safety on Airports During Construction*. The temporary erosion control measures contained herein shall be coordinated with the permanent erosion control measures specified as part of this contract to the extent practical to assure economical, effective, and continuous erosion control throughout the construction period.

Temporary control may include work outside the construction limits such as borrow pit operations, equipment and material storage sites, waste areas, and temporary plant sites.

Temporary control measures shall be designed, installed and maintained to minimize the creation of wildlife attractants that have the potential to attract hazardous wildlife on or near public-use airports.

PART 2 - MATERIALS

- 2.1 **GRASS.** Grass that will not compete with the grasses sown later for permanent cover per Item T-901 shall be a quick-growing species (such as ryegrass, Italian ryegrass, or cereal grasses) suitable to the area providing a temporary cover. Selected grass species shall not create a wildlife attractant.
- 2.2 **MULCHES.** Mulches may be hay, straw, fiber mats, netting, bark, wood chips, or other suitable material reasonably clean and free of noxious weeds and deleterious materials per Item T-908. Mulches shall not create a wildlife attractant.
- 2.3 **FERTILIZER.** Fertilizer shall be a standard commercial grade and shall conform to all federal and state regulations and to the standards of the Association of Official Agricultural Chemists.
- 2.4 **SLOPE DRAINS.** Slope drains may be constructed of pipe, fiber mats, rubble, concrete, asphalt, or other materials that will adequately control erosion.
- 2.5 **SILT FENCE.** Silt fence shall consist of polymeric filaments which are formed into a stable network such that filaments retain their relative positions. Synthetic filter fabric shall contain

ultraviolet ray inhibitors and stabilizers to provide a minimum of six months of expected usable construction life. Silt fence shall meet the requirements of ASTM D6461.

- 2.6 OTHER.** All other materials shall meet commercial grade standards and shall be approved by the RPR before being incorporated into the project.

PART 3 - CONSTRUCTION REQUIREMENTS

- 3.1 GENERAL.** In the event of conflict between these requirements and pollution control laws, rules, or regulations of other federal, state, or local agencies, the more restrictive laws, rules, or regulations shall apply.

The RPR shall be responsible for assuring compliance to the extent that construction practices, construction operations, and construction work are involved.

- 3.2 SCHEDULE.** Prior to the start of construction, the Contractor shall submit schedules in accordance with the approved Construction Safety and Phasing Plan (CSPP) and the plans for accomplishment of temporary and permanent erosion control work for clearing and grubbing; grading; construction; paving; and structures at watercourses. The Contractor shall also submit a proposed method of erosion and dust control on haul roads and borrow pits and a plan for disposal of waste materials. Work shall not be started until the erosion control schedules and methods of operation for the applicable construction have been accepted by the RPR.

- 3.3 CONSTRUCTION DETAILS.** The Contractor will be required to incorporate all permanent erosion control features into the project at the earliest practicable time as outlined in the plans and approved CSPP. Except where future construction operations will damage slopes, the Contractor shall perform the permanent seeding and mulching and other specified slope protection work in stages, as soon as substantial areas of exposed slopes can be made available. Temporary erosion and pollution control measures will be used to correct conditions that develop during construction that were not foreseen during the design stage; that are needed prior to installation of permanent control features; or that are needed temporarily to control erosion that develops during normal construction practices, but are not associated with permanent control features on the project.

Where erosion may be a problem, schedule and perform clearing and grubbing operations so that grading operations and permanent erosion control features can follow immediately if project conditions permit. Temporary erosion control measures are required if permanent measures cannot immediately follow grading operations. The RPR shall limit the area of clearing and grubbing, excavation, borrow, and embankment operations in progress, commensurate with the Contractor's capability and progress in keeping the finish grading, mulching, seeding, and other such permanent control measures current with the accepted schedule. If seasonal limitations make such coordination unrealistic, temporary erosion control measures shall be taken immediately to the extent feasible and justified as directed by the RPR.

The Contractor shall provide immediate permanent or temporary pollution control measures to minimize contamination of adjacent streams or other watercourses, lakes, ponds, or other areas of water impoundment as directed by the RPR. If temporary erosion and pollution control measures are required due to the Contractor's negligence, carelessness, or failure to install permanent controls as a part of the work as scheduled or directed by the RPR, the work shall be performed by the Contractor and the cost shall be incidental to this item.

The RPR may increase or decrease the area of erodible earth material that can be exposed at any time based on an analysis of project conditions.

The erosion control features installed by the Contractor shall be maintained by the Contractor during the construction period.

Provide temporary structures whenever construction equipment must cross watercourses at frequent intervals. Pollutants such as fuels, lubricants, bitumen, raw sewage, wash water from concrete mixing operations, and other harmful materials shall not be discharged into any waterways, impoundments or into natural or manmade channels.

- 3.4 INSTALLATION, MAINTENANCE AND REMOVAL OF SILT FENCE.** Silt fences shall extend a minimum of 16 inches (41 cm) and a maximum of 34 inches (86 cm) above the ground surface. Posts shall be set no more than 10 feet (3 m) on center. Filter fabric shall be cut from a continuous roll to the length required minimizing joints where possible. When joints are necessary, the fabric shall be spliced at a support post with a minimum 12-inch (300-mm) overlap and securely sealed. A trench shall be excavated approximately 4 inches (100 mm) deep by 4 inches (100 mm) wide on the upslope side of the silt fence. The trench shall be backfilled and the soil compacted over the silt fence fabric. The Contractor shall remove and dispose of silt that accumulates during construction and prior to establishment of permanent erosion control. The fence shall be maintained in good working condition until permanent erosion control is established. Silt fence shall be removed upon approval of the RPR.

PART 4 - METHOD OF MEASUREMENT

- 4.1** Temporary erosion and pollution control work required will be performed as scheduled or directed by the RPR. Completed and accepted work will be measured as follows:
- a.** Temporary seeding and mulching will be measured by the square yard (square meter).
 - b.** Temporary slope drains will be measured by the linear foot (meter).
 - c.** Temporary benches, dikes, dams, and sediment basins will be measured by the cubic yard (cubic meter) of excavation performed, including necessary cleaning of sediment basins, and the cubic yard (cubic meter) of embankment placed as directed by the RPR.

d. All fertilizing will be measured by the ton (kg).

e. Installation and removal of silt fence will be measured by Lump Sum.

- 4.2** Control work performed for protection of construction areas outside the construction limits, such as borrow and waste areas, haul roads, equipment and material storage sites, and temporary plant sites, will not be measured and paid for directly but shall be considered as a subsidiary obligation of the Contractor.

PART 5 - BASIS OF PAYMENT

- 5.1** Accepted quantities of temporary water pollution, soil erosion, and siltation control work ordered by the RPR and measured as provided in paragraph 102-4.1 will be paid for under:

Item C-102-1 Erosion and Pollution Control - per Lump Sum (LS)

Where other directed work falls within the specifications for a work item that has a contract price, the units of work shall be measured and paid for at the contract unit price bid for the various items.

Temporary control features not covered by contract items that are ordered by the RPR will be paid for in accordance with Section 90, paragraph 90-05 *Payment for Extra Work*.

REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

Advisory Circulars (AC)

AC 150/5200-33 *Hazardous Wildlife Attractants on or Near Airports*

AC 150/5370-2 *Operational Safety on Airports During Construction*

ASTM International (ASTM)

ASTM D6461 *Standard Specification for Silt Fence Materials*

United States Department of Agriculture (USDA)

FAA/USDA Wildlife Hazard Management at Airports, A Manual for Airport Personnel

END OF ITEM C-102

**SECTION C-105
MOBILIZATION**

PART 1 DESCRIPTION

- 1.1 This item of work shall consist of, but is not limited to, work and operations necessary for the movement of personnel, equipment, material and supplies to and from the project site for work on the project except as provided in the contract as separate pay items.
- 1.2 **MOBILIZATION LIMIT.** Mobilization shall be limited to 10 percent of the total project cost.
- 1.3 **POSTED NOTICES.** Prior to commencement of construction activities, the Contractor must post the following documents in a prominent and accessible place where they may be easily viewed by all employees of the prime Contractor and by all employees of subcontractors engaged by the prime Contractor: Equal Employment Opportunity (EEO) Poster "Equal Employment Opportunity is the Law" in accordance with the Office of Federal Contract Compliance Programs Executive Order 11246, as amended; Davis Bacon Wage Poster (WH 1321) - DOL "Notice to All Employees" Poster; and Applicable Davis-Bacon Wage Rate Determination. These notices must remain posted until final acceptance of the work by the Owner.
- 1.4 **ENGINEER/RPR FIELD OFFICE.** An Engineer/RPR field office is not required.

PART 2 METHOD OF MEASUREMENT

- 2.1 **BASIS OF MEASUREMENT AND PAYMENT.** Based upon the contract lump sum price for "Mobilization" partial payments will be allowed as follows:
 - a. With first pay request, 25%.
 - b. When 25% or more of the original contract is earned, an additional 25%.
 - c. When 50% or more of the original contract is earned, an additional 40%.
 - d. After Final Inspection, Staging area clean-up and delivery of all Project Closeout materials as required by Section 90, paragraph 90-11, *Contractor Final Project Documentation*, the final 10%.

BASIS OF PAYMENT

105-3.1 PAYMENT WILL BE MADE UNDER:

Item C-105-1 Mobilization

REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

Office of Federal Contract Compliance Programs (OFCCP)

Executive Order 11246, as amended

EEOC-P/E-1 – Equal Employment Opportunity is the Law Poster

United States Department of Labor, Wage and Hour Division (WHD)

WH 1321 – Employee Rights under the Davis-Bacon Act Poster

END OF SECTION C-105

ITEM C-106
SAFETY, SECURITY AND MAINTENANCE OF TRAFFIC

PART 1 DESCRIPTION

- 1.1** The work of this item shall consist of all labor, material, equipment, work and operations necessary for Maintenance of Traffic both on, and off airport property. Such items include barricades, signage, pavement sweepers, flagmen, radio operators, worker and personnel transportation and security, etc., as required by the Drawings, these specifications, and State and local laws and regulations. Paramount in this item is that aircraft shall have the Right-of-Way at all times. The Contractor shall include all measures required to maintain the safe and orderly movement of Air Operations Area (AOA) traffic in and around the construction areas as shown on the Plans and as described in the Contract documents. The AOA is defined as all areas, used or intended to be used for aircraft operations including active runways, aprons, taxiways and taxilanes. Maintenance of Traffic off airport property shall be in accordance with the FDOT Standard Specifications for Road and Bridge Construction, the FDOT Standard Index Drawings, and the Manual of Uniform Traffic Control Devices (MUTCD), most current editions.
- 1.2** **GENERAL.** This Section covers the Contractor's responsibilities for maintaining the optimum level of safety and the operating efficiency of the airport during construction. These responsibilities are based on criteria contained in the latest edition of Federal Aviation Administration Advisory Circulars 150/5370-2 "Operational Safety on Airports During Construction", and 150/5300-13, "Airport Design". The Contractor shall be responsible for all activities under his control, as specified in the above referenced Advisory Circulars, and in other referenced documents.
- 1.3** **CONSTRUCTION ACTIVITIES.** Construction activity, personnel, equipment, or materials shall not be permitted within 250 feet of an active runway, 85.5 feet of the centerline of an active taxiway and/or taxilane, unless otherwise shown on the Plans or directed by the Owner or Project Manager.
- The Contractor may work within these minimum construction setbacks when the minimums are reduced or providing the runway, taxiway, or taxilane is closed and closure has been authorized by the Owner and Airfield Operations.
- 1.4** **MARKING AND LIGHTING OF CONSTRUCTION AREAS.** The Contractor shall install lighting, marking, and marking removal, lighted barricades, and other measures as shown on the plans, described in the Specifications, or directed by the Owner or Project Manager, to delineate access routes, closed areas, and hazardous areas during construction.
- 1.5** **LOOSE MATERIAL AND DEBRIS.** Loose materials shall be removed from the Project Limits on a daily basis to prevent dispersion into active portions of the AOA. The Contractor shall exercise care in the transportation of materials within the AOA to ensure that no material is tracked or spilled onto the AOA. Materials tracked or spilled in these areas shall be removed immediately. When hauling, loading, grading, or when any of the Contractor's activities are likely to cause the deposit of loose materials in the AOA

or aircraft parking areas, it shall be immediately removed using powered vacuum sweepers which shall continuously patrol the affected areas. The vacuum sweepers shall be supplemented by power brooms with nylon bristles, hand sweepers, loaders, and trucks as necessary. Power brooms and sweepers shall not contain metal bristles.

- 1.6 **STOCKPILED MATERIALS.** At no times shall materials be stockpiled within the Project Limits or the AOA; all materials that are not to be re-used shall be removed directly from the Project Limits or the AOA and hauled to a legal dump site off airport property.
- 1.7 **VEHICLES AND MOBILE EQUIPMENT.** All Contractor vehicles and mobile equipment operating in the AOA shall meet requirements of the Contract requirements.
- 1.8 **RADIO COMMUNICATION. *Not Used.***
- 1.9 **PORTABLE LIGHTED RUNWAY CLOSURE MARKERS (RCM). *Not Used.***
- 1.10 **CLOSURES.** When the Contractor's operations require the closure of any portion of a apron the Contractor shall notify the Owner not less than 72 hours prior to need. No closures may occur without prior permission from the Owner and Airfield Operations.
- 1.11 **LIGHTED BARRICADES AND TEMPORARY PAVEMENT MARKINGS.** Temporary pavement markings, lighted barricades and other measures shall be provided, installed, relocated, and maintained on a 24-hour basis by the Contractor to delineate construction areas available to the Contractor and limits of aircraft operational areas.

On a daily basis, the Contractor shall verify that the temporary lighted barricades are in proper operating condition. Any necessary maintenance repairs shall be performed immediately by the Contractor. The proposed layout of lighted barricades and other measures for each construction area are shown on the Plans. The actual field installation of lighted barricades, and other measures and attendant operational procedures shall be inspected by the Owner, and any necessary changes or modifications will be promptly implemented by the Contractor as directed at no additional cost to the Contract. The revised installation will be re-inspected and approved by the Owner and Airfield Operations before the Contractor may commence any construction or any other work which revises operational procedures in each affected area.

- 1.12 **OPERATIONS SAFETY INSPECTION.** The entire work site shall be inspected daily and more frequently if construction activities have potential to accumulate debris on AOA pavements. Special inspections shall be conducted for each work area prior to return to service for aircraft operation. The purpose of these inspections is to ascertain that areas returned to aircraft service are in satisfactory condition and that the overall work site and its activities are within the safety criteria set forth in these Contract Documents and as set forth in the FAA Advisory Circulars. Inspections shall be conducted jointly by representatives of the Contractor, Airfield Operations, and the Owner. These inspections shall cover the several safety items noted in and referred by in this Section.

Any violations of the Safety Criteria found during these inspections shall be rectified immediately. If a violation cannot be corrected on an immediate basis by the Contractor, he shall immediately notify the Owner. No area shall be approved for aircraft operations while it is in violation unless specifically authorized in writing by Airfield Operations and

the Owner.

- 1.13 OPERATIONAL EMERGENCIES.** During periods of severe weather conditions or other operational emergencies, Airfield Operations or the Owner may direct the Contractor to relinquish areas under construction and to prepare the areas for the severe weather or aircraft operations. In this event, the Owner will so direct the Contractor to evacuate the area and the Owner will specify the limits of the area to be evacuated, the term of evacuation, and the conditions governing the restoration work necessary to prepare the area for aircraft operations. The Contractor shall promptly and fully comply with the Owner's directive. Should the directive entail extra work under the Contract, as determined by the Owner, the Contractor will be reimbursed for such extra work in accordance with the General Conditions of this Contract. Should the directive entail a delay in the completion of the Contract or any defined subdivision of the contract, as determined by the Owner, the Contractor may be granted an extension of time in accordance with the provisions of General Conditions of this Contract.
- 1.14 PROTECTION OF FAA FACILITIES.** In areas where Contractor vehicles and equipment cross over FAA facilities, Contractor to install steel plates to protect underlying utilities from damage as described in the electrical specifications and drawings.
- 1.15 CONSTRUCTION SAFETY AND PHASING PLANS (CSPP) AND SAFETY PLAN COMPLIANCE DOCUMENT (SPCD).** The Contractor shall review the attached CSPP provided as the Appendix 1 to this specification. The CSPP has been developed for this project and is mandated by FAA AC 150/5370-2 "Operational Safety on Airports During Construction" (Latest Edition) for any projects funded buy the Airport Improvement Plan (AIP) or the Passenger Facility Charge (PFC) Program when located on a Part 139 Airport. All FAA revisions to the CSPP have been incorporated in the attached CSPP.

PART 2 MATERIALS AND CONSTRUCTION METHODS

- 2.1 DEACTIVATION OF AIRFIELD LIGHTS, SIGNS AND MARKINGS. *Not Used.***
- 2.2 LIGHTED BARRICADES.** The Contractor shall install and maintain lighted low-profile barricades at the locations shown on the plans, in accordance to the plan details, and as directed by the Owner. Lighted low-profile barricades shall be inspected daily and repaired or replaced immediately when damaged or not functioning. These lighted barricades shall be incidental to the pay item for Maintenance of Traffic.
- 2.3 HAUL ROUTES.** The Contractor shall stabilize existing areas that are to be used for haul routes utilizing Contractor provided materials at locations shown on the plan and as approved by the Owner. All haul routes shall be maintained throughout the construction period and shall be restored to original or better than original condition at the completion of the project. Contractor shall water and maintain haul route as directed by Owner to minimize dust.

PART 3 METHOD OF MEASUREMENT

3.1 No separate payment will be made for this lump sum item.

PART 4 BASIS OF PAYMENT

4.1 **GENERAL.** Payment will be made under the following item:

C-106-1 Safety, Security, and Maintenance of Traffic (Lump Sum)

END OF ITEM C-106

**ITEM P-101
PREPARATION/REMOVAL OF EXISTING PAVEMENTS**

DESCRIPTION

101-1 This item shall consist of preparation of existing pavement surfaces for overlay, surface treatments, removal of existing pavement, and other miscellaneous items. The work shall be accomplished in accordance with these specifications and the applicable plans.

EQUIPMENT AND MATERIALS

101-2 All equipment and materials shall be specified here and in the following paragraphs or approved by the Resident Project Representative (RPR). The equipment shall not cause damage to the pavement to remain in place.

CONSTRUCTION

101-3.1 REMOVAL OF EXISTING PAVEMENT.

The Contractor's removal operation shall be controlled to not damage adjacent pavement structure, and base material, cables, utility ducts, pipelines, or drainage structures which are to remain under the pavement.

a. Concrete pavement removal. Full depth saw cuts shall be made perpendicular to the slab surface. The Contractor shall saw through the full depth of the slab including any dowels at the joint, removing the pavement and installing new dowels as shown on the plans and per the specifications. Where the perimeter of the removal limits is not located on the joint and there are no dowels present, the perimeter shall be saw cut the full depth of the pavement. The pavement inside the saw cut shall be removed by methods which will not cause distress in the pavement which is to remain in place. If the material is to be wasted on the airport site, it shall be reduced to a maximum size of 1 inch. Concrete slabs that are damaged by under breaking shall be repaired or removed and replaced as directed by the RPR.

The edge of existing concrete pavement against which new pavement abuts shall be protected from damage at all times. Spall and underbreak repair shall be in accordance with the plans. Any underlaying material that is to remain in place, shall be recompact and/or replaced as shown on the plans. Adjacent areas damaged during repair shall be repaired or replaced at the Contractor's expense.

b. Asphalt pavement removal. Asphalt pavement to be removed shall be cut to the full depth of the asphalt pavement around the perimeter of the area to be removed.

c. Repair or removal of Base, Subbase, and/or Subgrade. All failed material including surface, base course, subbase course, and subgrade shall be removed and repaired as shown on the plans or as directed by the RPR. Materials and methods of construction shall comply with the applicable sections of these specifications. Any damage caused by Contractor's removal process shall be repaired at the Contractor's expense.

101-3.2 PREPARATION OF JOINTS AND CRACKS PRIOR TO OVERLAY/SURFACE TREATMENT. Remove all vegetation and debris from cracks to a minimum depth of 1 inch (25 mm). If extensive vegetation exists, treat the specific area with a concentrated solution of a water-based herbicide approved by the RPR. Fill all cracks greater than 1/4 inch (6 mm) wide) with a crack sealant per ASTM D6690. The crack sealant, preparation, and application shall be compatible with the surface treatment/overlay to be used. To minimize contamination of the asphalt with the crack sealant, underfill the crack sealant a minimum of 1/8 inch (3 mm), not to exceed 1/4 inch (6 mm). Any excess joint or crack sealer shall be removed from the pavement surface.

Wider cracks (over 1-1/2 inch wide (38 mm)), along with soft or sunken spots, indicate that the pavement or the pavement base should be repaired or replaced as stated below.

Cracks and joints may be filled with a mixture of emulsified asphalt and aggregate. The aggregate shall consist of limestone, volcanic ash, sand, or other material that will cure to form a hard substance. The combined gradation shall be as shown in the following table.

Gradation

Sieve Size	Percent Passing
No. 4 (4.75 mm)	100
No. 8 (2.36 mm)	90-100
No. 16 (1.18 mm)	65-90
No. 30 (600 µm)	40-60
No. 50 (300 µm)	25-42
No. 100 (150 µm)	15-30
No. 200 (75 µm)	10-20

Up to 3% cement can be added to accelerate the set time. The mixture shall not contain more than 20% natural sand without approval in writing from the RPR.

The proportions of asphalt emulsion and aggregate shall be determined in the field and may be varied to facilitate construction requirements. Normally, these proportions will be approximately one part asphalt emulsion to five parts aggregate by volume. The material shall be poured or placed into the joints or cracks and compacted to form a voidless mass. The joint or crack shall be filled to within +0 to -1/8 inches (+0 to -3 mm) of the surface. Any material spilled outside the width of the joint shall be removed from the pavement surface prior to constructing the overlay. Where concrete overlays are to be constructed, only the excess joint material on the pavement

101-3.3 REMOVAL OF FOREIGN SUBSTANCES/CONTAMINATES PRIOR TO OVERLAY. Removal of foreign substances/contaminates from existing pavement that will affect the bond of the new treatment shall consist of removal of rubber, fuel spills, oil, crack sealer, at least 90% of paint, and other foreign substances from the surface of the pavement. Areas that require removal are designated on the plans and as directed by the RPR in the field during construction.

Chemicals, high-pressure water, heater scarifier (asphaltic concrete only), cold milling, rotary grinding, or sandblasting may be used. If chemicals are used, they shall comply with the state's environmental protection regulations. Removal methods used shall not cause major damage to

the pavement, or to any structure or utility within or adjacent to the work area. Major damage is defined as changing the properties of the pavement, removal of asphalt causing the aggregate to ravel, or removing pavement over 1/8 inch (3 mm) deep. If it is deemed by the RPR that damage to the existing pavement is caused by operational error, such as permitting the application method to dwell in one location for too long, the Contractor shall repair the damaged area without compensation and as directed by the RPR.

Removal of foreign substances shall not proceed until approved by the RPR. Water used for high-pressure water equipment shall be provided by the Contractor at the Contractor's expense. No material shall be deposited on the pavement shoulders. All wastes shall be disposed of in areas indicated in this specification or shown on the plans.

101-3.4 CONCRETE SPALL OR FAILED ASPHALTIC CONCRETE PAVEMENT REPAIR.

a. Repair of concrete spalls in areas to be overlaid with asphalt. The Contractor shall repair all spalled concrete as shown on the plans or as directed by the RPR. The perimeter of the repair shall be saw cut a minimum of 2 inches (50 mm) outside the affected area and 2 inches (50 mm) deep. The deteriorated material shall be removed to a depth where the existing material is firm or cannot be easily removed with a geologist pick. The removed area shall be filled with asphalt mixture with aggregate sized appropriately for the depth of the patch. The material shall be compacted with equipment approved by the RPR until the material is dense and no movement or marks are visible. The material shall not be placed in lifts over 4 inches (100 mm) in depth. This method of repair applies only to pavement to be overlaid.

b. Asphalt pavement repair. The Contractor shall repair all spalled concrete as shown on the plans or as directed by the RPR. The failed areas shall be removed as specified in paragraph 101-3.1b. All failed material including surface, base course, subbase course, and subgrade shall be removed. Materials and methods of construction shall comply with the applicable sections of these specifications.

101-3.5 COLD MILLING. Milling shall be performed with a power-operated milling machine or grinder, capable of producing a uniform finished surface. The milling machine or grinder shall operate without tearing or gouging the underlying surface. The milling machine or grinder shall be equipped with grade and slope controls, and a positive means of dust control. All millings shall be removed and disposed off Airport property. If the Contractor mills or grinds deeper or wider than the plans specify, the Contractor shall replace the material removed with new material at the Contractor's Expense.

a. Patching. The milling machine shall be capable of cutting a vertical edge without chipping or spalling the edges of the remaining pavement and it shall have a positive method of controlling the depth of cut. The RPR shall layout the area to be milled with a straightedge in increments of 1-foot (30 cm) widths. The area to be milled shall cover only the failed area. Any excessive area that is milled because the Contractor doesn't have the appropriate milling machine, or areas that are damaged because of his negligence, shall be repaired by the Contractor at the Contractor's Expense.

b. Profiling, grade correction, or surface correction. The milling machine shall have a minimum width of 7 feet (2 m) and it shall be equipped with electronic grade control devices that will cut the surface to the grade specified. The tolerances shall be maintained within +0 inch and -1/4 inch (+0 mm and -6mm) of the specified grade. The machine must cut vertical edges and

have a positive method of dust control. The machine must have the ability to remove the millings or cuttings from the pavement and load them into a truck. All millings shall be removed and disposed of off the airport.

c. Clean-up. The Contractor shall sweep the milled surface daily and immediately after the milling until all residual materials are removed from the pavement surface. Prior to paving, the Contractor shall wet down the milled pavement and thoroughly sweep and/or blow the surface to remove loose residual material. Waste materials shall be collected and removed from the pavement surface and adjacent areas by sweeping or vacuuming. Waste materials shall be removed and disposed off Airport property.

101-3.6. PREPARATION OF ASPHALT PAVEMENT SURFACES PRIOR TO SURFACE TREATMENT. Existing asphalt pavements to be treated with a surface treatment shall be prepared as follows:

a. Patch asphalt pavement surfaces that have been softened by petroleum derivatives or have failed due to any other cause. Remove damaged pavement to the full depth of the damage and replace with new asphalt pavement similar to that of the existing pavement in accordance with paragraph 101-3.4b.

b. Repair joints and cracks in accordance with paragraph 101-3.2.

c. Remove oil or grease that has not penetrated the asphalt pavement by scrubbing with a detergent and washing thoroughly with clean water. After cleaning, treat these areas with an oil spot primer.

d. Clean pavement surface immediately prior to placing the surface treatment so that it is free of dust, dirt, grease, vegetation, oil or any type of objectionable surface film.

101-3.7 MAINTENANCE. The Contractor shall perform all maintenance work necessary to keep the pavement in a satisfactory condition until the full section is complete and accepted by the RPR. The surface shall be kept clean and free from foreign material. The pavement shall be properly drained at all times. If cleaning is necessary or if the pavement becomes disturbed, any work repairs necessary shall be performed at the Contractor's expense.

101-3.8 PREPARATION OF JOINTS IN RIGID PAVEMENT PRIOR TO RESEALING. Prior to application of sealant material, clean and dry the joints of all scale, dirt, dust, old sealant, curing compound, moisture and other foreign matter. The Contractor shall demonstrate, in the presence of the RPR, that the method used cleans the joint and does not damage the joint.

101-3.8.1 Removal of Existing Joint Sealant. All existing joint sealants will be removed by plowing or use of hand tools. Any remaining sealant and or debris will be removed by use of wire brushes or other tools as necessary. Resaw joints removing no more than 1/16 inch (2 mm) from each joint face. Immediately after sawing, flush out joint with water and other tools as necessary to completely remove the slurry.

101-3.8.2 Cleaning prior to sealing. Immediately before sealing, joints shall be cleaned by removing any remaining laitance and other foreign material. Allow sufficient time to dry out joints prior to sealing. Joint surfaces will be surface-dry prior to installation of sealant.

101-3.8.3 Joint sealant. Joint material and installation will be in accordance with Item P-605.

101-3.9 PREPARATION OF CRACKS IN FLEXIBLE PAVEMENT PRIOR TO SEALING. Prior to application of sealant material, clean and dry the joints of all scale, dirt, dust, old sealant, curing compound, moisture and other foreign matter. The Contractor shall demonstrate, in the presence of the RPR, that the method used cleans the cracks and does not damage the pavement.

101-3.9.1 Preparation of Crack. Widen crack with random crack saw by removing a minimum of 1/16 inch (2 mm) from each side of crack. Immediately before sealing, cracks will be blown out with a hot air lance combined with oil and water-free compressed air.

101-3.9.2 Removal of Existing Crack Sealant. Existing sealants will be removed by random crack saw. Following sawing any remaining debris will be removed by use of a hot lance combined with oil and water-free compressed air.

101-3.9.3 Crack Sealant. Crack sealant material and installation will be in accordance with Item P-605.

101-3.9.4 Removal of Pipe and other Buried Structures.

a. Removal of Existing Pipe Material. Remove the types of pipe as indicated on the plans. The pipe material shall be legally disposed of off-site in a timely manner following removal. Trenches shall be backfilled with material equal to or better in quality than adjacent embankment. Trenches under paved areas must be compacted to 95% of ASTM D1557.

b. Removal of Inlets/Manholes. Where indicated on the plans or as directed by the RPR, inlets and/or manholes shall be removed and legally disposed of off-site in a timely fashion after removal. Excavations after removal shall be backfilled with material equal or better in quality than adjacent embankment. When under paved areas must be compacted to 95% of ASTM D1557, when outside of paved areas must be compacted to 95% of ASTM D698.

METHOD OF MEASUREMENT

101-4.1 LUMP SUM. No separate measurement for payment will be made. The work covered by this section shall be considered as a subsidiary obligation of the Contractor and covered under the other contract items.

101-4.1 PAVEMENT REMOVAL. The unit of measurement for pavement removal shall be the number of square yards (square meters) removed by the Contractor. Any pavement removed outside the limits of removal because the pavement was damaged by negligence on the part of the Contractor shall not be included in the measurement for payment. No direct measurement or payment shall be made for saw cutting. Saw cutting shall be incidental to pavement removal. Dowel bar installation shall be incidental to pavement removal.

101-4.2 JOINT AND CRACK REPAIR. The unit of measurement for joint and crack repair shall be the linear foot (meter) of joint.

101-4.3 REMOVAL OF FOREIGN SUBSTANCES/CONTAMINATES. The unit of measurement for foreign Substances/contaminates removal shall be the square foot (meter).

101-4.4 SPALLED AND FAILED ASPHALT PAVEMENT REPAIR. The unit of measure for failed asphalt pavement repair shall be square foot (square meter).

101-4.5 CONCRETE SPALL REPAIR. The unit of measure for concrete spall repair shall be the number of square feet (square meter). The location and average depth of the patch shall be determined and agreed upon by the RPR and the Contractor.

101-4.6 COLD MILLING. Not used.

101-4.7 REMOVAL OF PIPE AND OTHER BURIED STRUCTURES. No separate measurement for payment will be made. The work covered by this section shall be considered as a subsidiary obligation of the Contractor and covered under the other contract items.

BASIS OF PAYMENT

101-5.1 PAYMENT. Payment shall be made at contract unit price for the unit of measurement as specified above. This price shall be full compensation for furnishing all materials and for all preparation, hauling, and placing of the material and for all labor, equipment, tools, and incidentals necessary to complete this item.

Item P-101-1	Pavement Removal – Complete Asphalt Removal (2”) - per Square Yard (SY)
Item P-101-2	Pavement Removal – Complete Asphalt Removal (4”) - per Square Yard (SY)
Item P-101-3	Pavement Removal – Complete Asphalt Removal (8”) - per Square Yard (SY)
Item P-101-4	Concrete Pavement Removal - per Square Yard (SY)
Item P-101-5	Miscellaneous Demolition – per Lump Sum (LS)
Item P-101-6	Tie-Down Removal – per Each (EA)
Item P-101-7	Concrete Foundation Demolition – per Each (EA)

REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

Advisory Circulars (AC)

AC 150/5380-6 Guidelines and Procedures for Maintenance of Airport Pavements.

ASTM International (ASTM)

ASTM D6690 Standard Specification for Joint and Crack Sealants, Hot Applied,
for Concrete and Asphalt Pavements

END OF ITEM P-101

**ITEM P-152
EXCAVATION, SUBGRADE, AND EMBANKMENT**

DESCRIPTION

152-1.1 This item covers excavation, disposal, placement, and compaction of all materials within the limits of the work required to construct safety areas, runways, taxiways, aprons, and intermediate areas as well as other areas for drainage, building construction, parking, or other purposes in accordance with these specifications and in conformity to the dimensions and typical sections shown on the plans.

152-1.2 CLASSIFICATION. All material excavated shall be classified as defined below:

a. Unclassified excavation. Unclassified excavation shall consist of the excavation and disposal of all material, regardless of its nature.

152-1.3 UNSUITABLE EXCAVATION. Unsuitable material shall be disposed in designated waste areas as shown on the plans. Materials containing vegetable or organic matter, such as muck, peat, organic silt, or sod shall be considered unsuitable for use in embankment construction. Material suitable for topsoil may be used on the embankment slope when approved by the RPR.

CONSTRUCTION METHODS

152-2.1 GENERAL. Before beginning excavation, grading, and embankment operations in any area, the area shall be cleared or cleared and grubbed in accordance with Item P-151.

The suitability of material to be placed in embankments shall be subject to approval by the RPR. All unsuitable material shall be disposed of in waste areas as shown on the plans. All waste areas shall be graded to allow positive drainage of the area and adjacent areas. The surface elevation of waste areas shall be specified on the plans or approved by the RPR.

When the Contractor's excavating operations encounter artifacts of historical or archaeological significance, the operations shall be temporarily discontinued and the RPR notified per Section 70, paragraph 70-20. At the direction of the RPR, the Contractor shall excavate the site in such a manner as to preserve the artifacts encountered and allow for their removal. Such excavation will be paid for as extra work.

Areas outside the limits of the pavement areas where the top layer of soil has become compacted by hauling or other Contractor activities shall be scarified and disked to a depth of 4 inches (100 mm), to loosen and pulverize the soil. Stones or rock fragments larger than 4 inches (100 mm) in their greatest dimension will not be permitted in the top 6 inches (150 mm) of the subgrade.

If it is necessary to interrupt existing surface drainage, sewers or under-drainage, conduits, utilities, or similar underground structures, the Contractor shall be responsible for and shall take all necessary precautions to preserve them or provide temporary services. When such facilities are encountered, the Contractor shall notify the RPR, who shall arrange for their removal if necessary. The Contractor, at their own expense, shall satisfactorily repair or pay the cost of all

damage to such facilities or structures that may result from any of the Contractor's operations during the period of the contract.

a. Blasting. Blasting shall not be allowed.

152-2.2 EXCAVATION. No excavation shall be started until the work has been staked out by the Contractor and the RPR has obtained from the Contractor, the survey notes of the elevations and measurements of the ground surface. The Contractor and RPR shall agree that the original ground lines shown on the original topographic mapping are accurate, or agree to any adjustments made to the original ground lines.

All areas to be excavated shall be stripped of vegetation and topsoil. Topsoil shall be stockpiled for future use in areas designated on the plans or by the RPR. All suitable excavated material shall be used in the formation of embankment, subgrade, or other purposes as shown on the plans. All unsuitable material shall be disposed of as shown on the plans.

The grade shall be maintained so that the surface is well drained at all times.

When the volume of the excavation exceeds that required to construct the embankments to the grades as indicated on the plans, the excess shall be used to grade the areas of ultimate development or disposed as directed by the RPR. When the volume of excavation is not sufficient for constructing the embankments to the grades indicated, the deficiency shall be obtained from borrow areas.

a. Selective grading. When selective grading is indicated on the plans, the more suitable material designated by the RPR shall be used in constructing the embankment or in capping the pavement subgrade. If, at the time of excavation, it is not possible to place this material in its final location, it shall be stockpiled in approved areas until it can be placed. The more suitable material shall then be placed and compacted as specified. Selective grading shall be considered incidental to the work involved. The cost of stockpiling and placing the material shall be included in the various pay items of work involved.

b. Undercutting. Rock, shale, hardpan, loose rock, boulders, or other material unsatisfactory for safety areas, subgrades, roads, shoulders, or any areas intended for turf shall be excavated to a minimum depth of 12 inches (300 mm) below the subgrade or to the depth specified by the RPR. Muck, peat, matted roots, or other yielding material, unsatisfactory for subgrade foundation, shall be removed to the depth specified. Unsuitable materials shall be disposed off the airport. The cost is incidental to this item. The excavated area shall be backfilled with suitable material obtained from the grading operations or borrow areas and compacted to specified densities. The necessary backfill will constitute a part of the embankment. Where rock cuts are made, backfill with select material. Any pockets created in the rock surface shall be drained in accordance with

c. Over-break. Over-break, including slides, is that portion of any material displaced or loosened beyond the finished work as planned or authorized by the RPR. All over-break shall be graded or removed by the Contractor and disposed of as directed by the RPR. The RPR shall determine if the displacement of such material was unavoidable and their own decision shall be final. Payment will not be made for the removal and disposal of over-break that the RPR determines as avoidable. Unavoidable over-break will be classified as "Unclassified Excavation."

d. Removal of utilities. Not used.

152-2.3 BORROW EXCAVATION. Borrow areas are not required.

152-2.4 DRAINAGE EXCAVATION. Drainage excavation shall consist of excavating drainage ditches including intercepting, inlet, or outlet ditches; or other types as shown on the plans. The work shall be performed in sequence with the other construction. Ditches shall be constructed prior to starting adjacent excavation operations. All satisfactory material shall be placed in embankment fills; unsuitable material shall be placed in designated waste areas or as directed by the RPR. All necessary work shall be performed true to final line, elevation, and cross-section. The Contractor shall maintain ditches constructed on the project to the required cross-section and shall keep them free of debris or obstructions until the project is accepted.

152-2.5 PREPARATION OF CUT AREAS OR AREAS WHERE EXISTING PAVEMENT HAS BEEN REMOVED. In those areas on which a subbase or base course is to be placed, the top 12 inches (300 mm) of subgrade shall be compacted to not less than 100 % of maximum density for non-cohesive soils, and 95% of maximum density for cohesive soils as determined by ASTM D1557. As used in this specification, "non-cohesive" shall mean those soils having a plasticity index (PI) of less than 3 as determined by ASTM D4318.

152-2.6 PREPARATION OF EMBANKMENT AREA. All sod and vegetative matter shall be removed from the surface upon which the embankment is to be placed. The cleared surface shall be broken up by plowing or scarifying to a minimum depth of 6 inches (150 mm) and shall then be compacted per paragraph 152-2.10.

Sloped surfaces steeper than one (1) vertical to four (4) horizontal shall be plowed, stepped, benched, or broken up so that the fill material will bond with the existing material. When the subgrade is part fill and part excavation or natural ground, the excavated or natural ground portion shall be scarified to a depth of 12 inches (300 mm) and compacted as specified for the adjacent

No direct payment shall be made for the work performed under this section. The necessary clearing and grubbing and the quantity of excavation removed will be paid for under the respective items of work.

152-2.7 CONTROL STRIP. The first half-day of construction of subgrade and/or embankment shall be considered as a control strip for the Contractor to demonstrate, in the presence of the RPR, that the materials, equipment, and construction processes meet the requirements of this specification. The sequence and manner of rolling necessary to obtain specified density requirements shall be determined. The maximum compacted thickness may be increased to a maximum of 12 inches (300 mm) upon the Contractor's demonstration that approved equipment and operations will uniformly compact the lift to the specified density. The RPR must witness this demonstration and approve the lift thickness prior to full production.

Control strips that do not meet specification requirements shall be reworked, re-compacted, or removed and replaced at the Contractor's expense. Full operations shall not begin until the control strip has been accepted by the RPR. The Contractor shall use the same equipment, materials, and construction methods for the remainder of construction, unless adjustments made by the Contractor are approved in advance by the RPR.

152-2.8 FORMATION OF EMBANKMENTS. The material shall be constructed in lifts as established in the control strip, but not less than 6 inches (150 mm) nor more than 12 inches (300 mm) of compacted thickness.

When more than one lift is required to establish the layer thickness shown on the plans, the construction procedure described here shall apply to each lift. No lift shall be covered by subsequent lifts until tests verify that compaction requirements have been met. The Contractor shall rework, re-compact and retest any material placed which does not meet the specifications.

The lifts shall be placed, to produce a soil structure as shown on the typical cross-section or as directed by the RPR. Materials such as brush, hedge, roots, stumps, grass and other organic matter, shall not be incorporated or buried in the embankment.

Earthwork operations shall be suspended at any time when satisfactory results cannot be obtained due to rain, freezing, or other unsatisfactory weather conditions in the field. Frozen material shall not be placed in the embankment nor shall embankment be placed upon frozen material. Material shall not be placed on surfaces that are muddy, frozen, or contain frost. The Contractor shall drag, blade, or slope the embankment to provide surface drainage at all times.

The material in each lift shall be within $\pm 2\%$ of optimum moisture content before rolling to obtain the prescribed compaction. The material shall be moistened or aerated as necessary to achieve a uniform moisture content throughout the lift. Natural drying may be accelerated by blending in dry material or manipulation alone to increase the rate of evaporation.

The Contractor shall make the necessary corrections and adjustments in methods, materials or moisture content to achieve the specified embankment density.

The RPR will take samples of excavated materials which will be used in embankment for testing and develop a Moisture-Density Relations of Soils Report (Proctor) in accordance with ASTM D 1557. A new Proctor shall be developed for each soil type based on visual classification.

Density tests will be taken by the RPR for every 3,000 square yards of compacted embankment for each lift which is required to be compacted, or other appropriate frequencies as determined by the RPR.

If the material has greater than 30% retained on the 3/4-inch (19.0 mm) sieve, follow AASHTO T-180 Annex Correction of maximum dry density and optimum moisture for oversized particles.

Rolling operations shall be continued until the embankment is compacted to not less than 100% of maximum density for non-cohesive soils, and 95% of maximum density for cohesive soils as determined by ASTM D1557. Under all areas to be paved, the embankments shall be compacted to a depth of 12 inches and to a density of not less than 100% percent of the maximum density as determined by ASTM D1557. As used in this specification, "non-cohesive" shall mean those soils having a plasticity index (PI) of less than 3 as determined by ASTM D4318.

On all areas outside of the pavement areas, no compaction will be required on the top 4 inches which shall be prepared for a seedbed in accordance with Item T-901.

The in-place field density shall be determined in accordance with ASTM D1556 Procedure A, the direct transmission method, and ASTM D6938 shall be used to determine the moisture content of the material. The machine shall be calibrated in accordance with ASTM D6938. The RPR shall perform all density tests. Contractor's laboratory shall perform all density tests in the RPR's presence and provide the test results upon completion to the RPR for acceptance. If the specified density is not attained, the area represented by the test or as designated by the RPR shall be

reworked and/or re-compacted and additional random tests made. This procedure shall be followed until the specified density is reached.

Compaction areas shall be kept separate, and no lift shall be covered by another lift until the proper density is obtained.

During construction of the embankment, the Contractor shall route all construction equipment evenly over the entire width of the embankment as each lift is placed. Lift placement shall begin in the deepest portion of the embankment fill. As placement progresses, the lifts shall be constructed approximately parallel to the finished pavement grade line.

When rock, concrete pavement, asphalt pavement, and other embankment material are excavated at approximately the same time as the subgrade, the material shall be incorporated into the outer portion of the embankment and the subgrade material shall be incorporated under the future paved areas. Stones, fragmentary rock, and recycled pavement larger than 4 inches (100 mm) in their greatest dimensions will not be allowed in the top 12 inches (300 mm) of the subgrade. Rockfill shall be brought up in lifts as specified or as directed by the RPR and the finer material shall be used to fill the voids forming a dense, compact mass. Rock, cement concrete pavement, asphalt pavement, and other embankment material shall not be disposed of except at places and in the manner designated on the plans or by the RPR.

When the excavated material consists predominantly of rock fragments of such size that the material cannot be placed in lifts of the prescribed thickness without crushing, pulverizing or further breaking down the pieces, such material may be placed in the embankment as directed in lifts not exceeding 2 feet (60 cm) in thickness. Each lift shall be leveled and smoothed with suitable equipment by distribution of spalls and finer fragments of rock. The lift shall not be constructed above an elevation 4 feet (1.2 m) below the finished subgrade.

There will be no separate measurement of payment for compacted embankment. All costs incidental to placing in lifts, compacting, discing, watering, mixing, sloping, and other operations necessary for construction of embankments will be included in the contract price for excavation, borrow, or other items.

152-2.9 PROOF ROLLING. The purpose of proof rolling the subgrade is to identify any weak areas in the subgrade and not for compaction of the subgrade. After compaction is completed, the subgrade area shall be proof rolled with a 20 ton (18.1 metric ton 80/100/150 psi (0.551 MPa/0.689 MPa/1.034 MPa). Apply a minimum of 5 passes coverage, or as specified by the RPR, under pavement areas. A coverage is defined as the application of one tire print over the designated area. Soft areas of subgrade that deflect more than 1 inch (25 mm) or show permanent deformation greater than 1 inch (25 mm) shall be removed and replaced with suitable material or reworked to conform to the moisture content and compaction requirements in accordance with these specifications. Removal and replacement of soft areas is incidental to this item.

152-2.10 COMPACTION REQUIREMENTS. The subgrade under areas to be paved shall be compacted to a depth of 12 inches (300 mm) and to a density of not less than 100 percent of the maximum dry density as determined by ASTM D1557. The subgrade in areas outside the limits of the pavement areas shall be compacted to a depth of 12 inches (300 mm) and to a density of not less than 95 percent of the maximum density as determined by ASTM D698.

The material to be compacted shall be within $\pm 2\%$ of optimum moisture content before being rolled to obtain the prescribed compaction (except for expansive soils). When the material has greater than 30 percent retained on the $\frac{3}{4}$ inch (19.0 mm) sieve, follow the methods in ASTM D1557. Tests for moisture content and compaction will be taken at a minimum of 3,000 S.Y. of subgrade. All quality assurance testing shall be done by the Contractor. The Contractor's laboratory in the presence of the RPR, and density test results shall be furnished upon completion.

The in-place field density shall be determined in accordance with ASTM D1556 using Procedure A, the direct transmission method, and ASTM D6938 shall be used to determine the moisture content of the material. The machine shall be calibrated in accordance with ASTM D6938 within 12 months prior to its use on this contract. The gage shall be field standardized daily.

Maximum density refers to maximum dry density at optimum moisture content unless otherwise specified.

If the specified density is not attained, the entire lot shall be reworked and/or re-compacted and additional random tests made. This procedure shall be followed until the specified density is reached.

All cut-and-fill slopes shall be uniformly dressed to the slope, cross-section, and alignment shown on the plans or as directed by the RPR and the finished subgrade shall be maintained.

152-2.11 FINISHING AND PROTECTION OF SUBGRADE. Finishing and protection of the subgrade is incidental to this item. Grading and compacting of the subgrade shall be performed so that it will drain readily. All low areas, holes or depressions in the subgrade shall be brought to grade. Scarifying, blading, rolling and other methods shall be performed to provide a thoroughly compacted subgrade shaped to the lines and grades shown on the plans. All ruts or rough places that develop in the completed subgrade shall be graded, re-compacted, and retested. The Contractor shall protect the subgrade from damage and limit hauling over the finished subgrade to only traffic essential for construction purposes.

The Contractor shall maintain the completed course in satisfactory condition throughout placement of subsequent layers. No subbase, base, or surface course shall be placed on the subgrade until the subgrade has been accepted by the RPR.

152-2.12 HAUL. All hauling will be considered a necessary and incidental part of the work. The Contractor shall include the cost in the contract unit price for the pay of items of work involved. No payment will be made separately or directly for hauling on any part of the work.

The Contractor's equipment shall not cause damage to any excavated surface, compacted lift or to the subgrade as a result of hauling operations. Any damage caused as a result of the Contractor's hauling operations shall be repaired at the Contractor's expense.

The Contractor shall be responsible for providing, maintaining and removing any haul roads or routes within or outside of the work area, and shall return the affected areas to their former condition, unless otherwise authorized in writing by the Owner. No separate payment will be made for any work or materials associated with providing, maintaining and removing haul roads or routes.

152-2.13 SURFACE TOLERANCES. In those areas on which a subbase or base course is to be placed, the surface shall be tested for smoothness and accuracy of grade and crown. Any portion lacking the required smoothness or failing in accuracy of grade or crown shall be scarified to a depth of at least 3 inches (75 mm), reshaped and re-compacted to grade until the required smoothness and accuracy are obtained and approved by the RPR. The Contractor shall perform all final smoothness and grade checks in the presence of the RPR. Any deviation in surface tolerances shall be corrected by the Contractor at the Contractor's expense.

- a. **Smoothness.** The finished surface shall not vary more than +/- ½ inch (12 mm) when tested with a 12-foot (3.7-m) straightedge applied parallel with and at right angles to the centerline. The straightedge shall be moved continuously forward at half the length of the 12-foot (3.7-m) straightedge for the full length of each line on a 50-foot (15-m) grid.
- b. **Grade.** The grade and crown shall be measured on a 50-foot (15-m) grid and shall be within +/-0.05 feet (15 mm) of the specified grade.

On safety areas, turfed areas and other designated areas within the grading limits where no subbase or base is to be placed, grade shall not vary more than 0.10 feet (30 mm) from specified grade. Any deviation in excess of this amount shall be corrected by loosening, adding or removing materials, and reshaping.

152-2.14 TOPSOIL. When topsoil is specified or required as shown on the plans or under Item T-905, it shall be salvaged from stripping or other grading operations. The topsoil shall meet the requirements of Item T-905. If, at the time of excavation or stripping, the topsoil cannot be placed in its final section of finished construction, the material shall be stockpiled at approved locations. Stockpiles shall be located as shown on the plans and the approved CSPP, and shall not be placed on areas that subsequently will require any excavation or embankment fill. If, in the judgment of the RPR, it is practical to place the salvaged topsoil at the time of excavation or stripping, the material shall be placed in its final position without stockpiling or further re-handling.

Upon completion of grading operations, stockpiled topsoil shall be handled and placed as shown on the plans and as required in Item T-905. Topsoil shall be paid for as provided in Item T-905. No direct payment will be made for topsoil under Item P-152.

METHOD OF MEASUREMENT

152-3.1 No separate measurement shall be made.

BASIS OF PAYMENT

152-4.1 Payment will be provided per lump sum.

Payment will be made under:

Item P-152-1 Excavation and Embankment – per Lump Sum (LS)

REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

American Association of State Highway and Transportation Officials (AASHTO)

AASHTO T-180 Standard Method of Test for Moisture-Density Relations of Soils Using a 4.54-kg (10-lb) Rammer and a 457-mm (18-in.) Drop

ASTM International (ASTM)

ASTM D698 Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Standard Effort (12,400 ft-lbf/ft³ (600 kN-m/m³))

ASTM D1556 Standard Test Method for Density and Unit Weight of Soil in Place by the Sand-Cone Method

ASTM D1557 Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lbf/ft³ (2700 kN-m/m³))

ASTM D6938 Standard Test Methods for In-Place Density and Water Content of Soil and Soil-Aggregate by Nuclear Methods (Shallow Depth)

Advisory Circulars (AC)

AC 150/5370-2 Operational Safety on Airports During Construction Software

Software

FAARFIELD – FAA Rigid and Flexible Iterative Elastic Layered Design

U.S. Department of Transportation

FAA RD-76-66 Design and Construction of Airport Pavements on Expansive Soils

END OF ITEM P-152

**ITEM P-154
SUBBASE COURSE**

DESCRIPTION

154-1.1 This item shall consist of a subbase course composed of granular materials constructed on a prepared subgrade or underlying course in accordance with these specifications, and in conformity with the dimensions and typical cross-section shown on the plans.

MATERIALS

154-2.1 MATERIALS. The subbase material shall consist of hard durable particles or fragments of granular. The material may be obtained from gravel pits, stockpiles, or may be produced from a crushing and screening plant with proper blending. The materials from these sources shall meet the requirements for gradation, quality, and consistency. The material shall be free from vegetative matter, excessive amounts of clay, and other objectionable substances; uniformly blended; and be capable of being compacted into a dense, stable subbase.

The subbase material shall exhibit a California Bearing Ratio (CBR) value of at least 20 when tested in accordance with ASTM D1883. The subbase material shall meet the gradation specified in the table below.

Subbase Gradation Requirements

Sieve designation	Percentage by weight passing sieves		Contractor's Final Gradation	Job Control Grading Band Tolerances ¹ (Percent)
	Subbase Aggregate	Recycled pavement (RAP or RCO)		
3 inch (75 mm)	100			0
1 1/2 inch (37.5 mm)		100		0
3/4 inch (19.0 mm)	70-100	70-100		±10
No. 10 (2.00 mm)	20-100	20-100		±10
No. 40 (425 µm)	5-60	5-60		±5
No. 200 (75 µm)	0-15	0-15		±5

¹The "Job Control Grading Band Tolerances" shall be applied to "Contractor's Final Gradation" to establish the job control grading band.

The portion of the material passing the No. 40 (425 μm) sieve shall have a liquid limit of not more than 25 and a plasticity index of not more than six (6) when tested in accordance with ASTM D4318.

154-2.2 SAMPLING AND TESTING.

a. Aggregate base materials. Samples shall be taken by the Contractor per ASTM D75 for initial aggregate subbase requirements and gradation. Material shall meet the requirements in paragraphs 154-2.1. The Contractor shall submit to the Resident Project Representative (RPR) certified test results showing that the aggregate meets the Material requirements of this section. Tests shall be representative of the material to be used for the project.

b. Gradation requirements. The Contractor shall take at least one aggregate subbase sample per day in the presence of the RPR to check the final gradation. Samples shall be taken from the in-place, un-compacted material at sampling locations determined by the RPR on a random basis per ASTM D3665. Sampling shall be per ASTM D75 and tested per ASTM C136 and ASTM C117. Results shall be furnished to the RPR by the Contractor each day during construction. Material shall meet the requirements in paragraph 154-2.1.

154-2.3 SEPARATION GEOTEXTILE. Not used.

154-2.4 GEOGRID. Not used.

CONSTRUCTION METHODS

154-3.1 GENERAL. The subbase course shall be placed where designated on the plans or as directed by the RPR. The material shall be shaped and thoroughly compacted within the tolerances specified.

Granular subbases which, due to grain sizes or shapes, are not sufficiently stable to support the construction equipment without movement, shall be mechanically modified to the depth necessary to provide stability as directed by the RPR. The mechanical modification shall include the addition of a fine-grained medium to bind the particles of the subbase material sufficiently to furnish a bearing strength, so the course will not deform under construction equipment traffic.

154-3.2 PREPARING UNDERLYING COURSE. Prior to constructing the subbase course, clean the underlying course or subgrade of all foreign substances. The surface of the underlying course or subgrade shall meet specified compaction and surface tolerances in accordance with Item P-152. Correct ruts, soft yielding spots in the underlying courses, and subgrade areas having inadequate compaction and/or deviations of the surface from the specified requirements, by loosening and removing soft or unsatisfactory material, adding approved material, reshaping to line and grade, and recompacting to specified density requirements. For cohesionless underlying courses or subgrades containing sands or gravels, as defined in ASTM D2487, the surface shall be stabilized prior to placement of the overlying course by mixing the overlying course material into the underlying course, and compacting by approved methods. The stabilized material shall be considered as part of the underlying course and shall meet all requirements for the underlying course. The finished underlying course shall not be disturbed by traffic or other operations and shall be maintained in a satisfactory condition until the overlying course is placed. The underlying course shall be checked and accepted by the RPR before placing and spreading operations are started.

To protect the subgrade and to ensure proper drainage, spreading of the subbase shall begin along the centerline of the pavement on a crowned section or on the high side of pavements with a one-way slope.

154-3.3 CONTROL STRIP. The first half-day of subbase construction shall be considered as a control strip for the Contractor to demonstrate, in the presence of the RPR, that the materials, equipment, and construction processes meet the requirements of this specification. The sequence and manner of rolling necessary to obtain specified density requirements shall be determined. The maximum compacted thickness may be increased to a maximum of 12 inches (300 mm) upon the Contractor's demonstration that approved equipment and operations will uniformly compact the lift to the specified density. The RPR must witness this demonstration and approve the lift thickness prior to full production.

Control strips that do not meet specification requirements shall be reworked, re-compacted, or removed and replaced at the Contractor's expense. Full operations shall not begin until the control strip has been accepted by the RPR. The Contractor shall use the same equipment, materials, and construction methods for the remainder of construction, unless adjustments made by the Contractor are approved in advance by the RPR.

154-3.4 PLACEMENT. The material shall be placed and spread on the prepared underlying layer by spreader boxes or other devices as approved by the RPR, to a uniform thickness and width. The equipment shall have positive thickness controls to minimize the need for additional manipulation of the material. Dumping from vehicles that require re-handling shall not be permitted. Hauling over the uncompacted base course shall not be permitted. The material shall not be placed when the underlying course is soft or yielding.

The material shall meet gradation and moisture requirements prior to compaction. Material may be free-draining and the minimum moisture content shall be established for placement and compaction of the material.

The material shall be constructed in lifts as established in the control strip, but not less than 4 inches (100 mm) nor more than 12 inches (300 mm) of compacted thickness.

When more than one lift is required to establish the layer thickness shown on the plans, the construction procedure described here shall apply to each lift. No lift shall be covered by subsequent lifts until tests verify that compaction requirements have been met. The Contractor shall rework, re-compact and retest any material placed which does not meet the specifications.

154-3.5 COMPACTION. The subbase material shall be compacted, adjusting moisture as necessary, to be within $\pm 2\%$ of optimum moisture. The field density of the compacted material shall be at least 100% of the maximum density as specified in paragraph 154-3.9a. If the specified density is not attained, the area of the lift represented by the test shall be reworked and/or re-compacted and additional random tests made. This procedure shall be followed until the specified density is reached. Maximum density refers to maximum dry density at optimum moisture content unless otherwise specified.

154-3.6 WEATHER LIMITATION. Material shall not be placed unless the ambient air temperature is at least 40°F (4°C) and rising. Work on subbase course shall not be conducted when the subgrade is wet or frozen or the subbase material contains frozen material.

154-3.7 MAINTENANCE. No base or surface course shall be placed on the subbase until the subbase has been accepted by the RPR. The Contractor shall maintain the completed course in satisfactory condition throughout placement of subsequent layers. When material has been exposed to excessive rain, snow, or freeze-thaw conditions, the Contractor shall verify that materials still meet all specification requirements before placement of additional material. Equipment may be routed over completed sections of subbase course, provided the equipment does not damage the subbase course and the equipment is routed over the full width of the completed subbase course. Any damage to the subbase course from routing equipment over the subbase course shall be repaired by the Contractor at their expense.

154-3.8 SURFACE TOLERANCE. In those areas on which a subbase or base course is to be placed, the surface shall be tested for smoothness and accuracy of grade and crown. Any portion lacking the required smoothness or failing in accuracy of grade or crown shall be scarified to a depth of at least 3 inches (75 mm), reshaped and re-compacted to grade until the required smoothness and accuracy are obtained and approved by the RPR. The Contractor shall perform all final smoothness and grade checks in the presence of the RPR. Any deviation in surface tolerances shall be corrected by the Contractor at the Contractor's expense.

a. Smoothness. The finished surface shall not vary more than +/- ½ inch (12 mm) when tested with a 12-foot (3.7-m) straightedge applied parallel with and at right angles to the centerline. The straightedge shall be moved continuously forward at half the length of the 12-foot (3.7-m) straightedge for the full length of each line on a 50-foot (15-m) grid.

b. Grade. The grade and crown shall be measured on a 50-foot (15-m) grid and shall be within +/-0.05 feet (15 mm) of the specified grade.

154-3.9 ACCEPTANCE SAMPLING AND TESTING. The aggregate base course shall be accepted for density and thickness on an area basis. Two test shall be made for density and thickness for each 1200 square yards (1000 square meters). Sampling locations will be determined on a random basis per ASTM D3665.

a. Density. The RPR shall perform all density tests.

Each area shall be accepted for density when the field density is at least 100% of the maximum density of laboratory specimens compacted and tested per ASTM D1557. The in-place field density shall be determined per ASTM D1556. The machine shall be calibrated in accordance with ASTM D6938. If the specified density is not attained, the area represented by the failed test shall be reworked and/or recompacted and two additional random tests made. This procedure shall be followed until the specified density is reached. Maximum density refers to maximum dry density at optimum moisture content unless otherwise specified.

When the material has greater than 30 percent retained on the ¾ inch (19.0 mm) sieve, use methods in ASTM D1557 and the procedures in AASHTO T180 Annex for correction of maximum dry density and optimum moisture for oversized particles.

b. Thickness. The thickness of the base course shall be within +0 and -1/2 inch (12 mm) of the specified thickness as determined by depth tests taken by the Contractor in the presence of the RPR for each area. Where the thickness is deficient by more than 1/2-inch (12 mm), the Contractor shall correct such areas at no additional cost by scarifying to a depth of at least 3 inches (75 mm), adding new material of proper gradation, and the material shall be blended and

recompacted to grade. The Contractor shall replace, at his expense, base material where depth tests have been taken.

METHOD OF MEASUREMENT

154-4.1 Subbase course shall be measured by the number of square yards of subbase course material placed and compacted to specified density and plan thickness requirements in the completed course. The quantity of subbase course material shall be measured in final position based upon depth tests or cores taken as directed by the RPR, at the rate of two test per each 1200 square yards (1000 square meters) of subbase course. On individual depth measurements, thicknesses more than 1/2 inch (12 mm) in excess of that shown on the plans shall be considered as the specified thickness plus 1/2 inch (12 mm) in computing the yardage for payment. Subbase materials shall not be included in any other excavation quantities.

BASIS OF PAYMENT

154-5.1 Payment shall be made at the contract unit price per square yard for subbase course. This price shall be full compensation for furnishing all materials; for all preparation, hauling, and placing of these materials; and for all labor, equipment, tools, and incidentals necessary to complete the item.

154-5.2 Payment shall be made at the contract unit price per square yard.

Payment will be made under:

Item P-154-1	Stabilized Subbase Course - per Square Yard (SY)
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REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

ASTM International (ASTM)

ASTM C117	Standard Test Method for Materials Finer than 75- μ m (No. 200) Sieve in Mineral Aggregates by Washing
ASTM C136	Standard Test Method for Sieve Analysis of Fine and Coarse Aggregates
ASTM D75	Standard Practice for Sampling Aggregates
ASTM D698	Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Standard Effort (12,400 ft-lbf/ft ³ (600 kN-m/m ³))
ASTM D1556	Standard Test Method for Density and Unit Weight of Soil in Place by the Sand-Cone Method

ASTM D1557	Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lbf/ft ³ (2,700 kN-m/m ³))
ASTM D2487	Standard Practice for Classification of Soils for Engineering Purposes (Unified Soil Classification System)
ASTM D4253	Standard Test Methods for Maximum Index Density and Unit Weight of Soils Using a Vibratory Table
ASTM D4759	Practice for Determining the Specification Conformance of Geosynthetics
ASTM D4318	Standard Test Methods for Liquid Limit, Plastic Limit, and Plasticity Index of Soils
ASTM D6938	Standard Test Method for In-Place Density and Water Content of Soil and Soil-Aggregate by Nuclear Methods (Shallow Depth)

American Association of State Highway and Transportation Officials (AASHTO)

M 288	Geotextile Specification for Highway Applications
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END OF ITEM P-154

**ITEM P-211
LIME ROCK BASE COURSE**

DESCRIPTION

211-1.1 This item shall consist of a base course composed of lime rock constructed on the prepared underlying course per these specifications and shall conform to the dimensions and typical cross-section shown on the plans.

MATERIALS

211-2.1 MATERIALS. The lime rock base course material shall consist of fossiliferous limestone of uniform quality. The material shall not contain hard or flinty pieces that will cause a rough surface containing pits and pockets. The rock shall show no tendency to “air slake” or undergo chemical change when exposed to the weather. The material when watered and rolled shall be capable of compacting to a dense and well-bonded base.

Lime Rock Base Course Material Properties²

	Oolitic	Non-Oolitic
Carbonates of calcium and magnesium ¹	70% minimum	75% minimum
Oxides of iron and aluminum ¹	Less than or equal to 2%	Less than or equal to 2%
Liquid limit	NA	Not greater than 35
Plasticity Index	NA	Not greater than 6
Organic or foreign matter	Not more than 0.5%	Not more than 0.5%
Lime Bearing Ratio (LBR) ³ at 0 to +1.5% optimum	125	125

¹ The combined amount of carbonates, oxides, and silica shall be at least 97%. The material shall be non-plastic.

² The chemical analysis of lime rock shall consist of determining the insoluble silica, iron oxide, and alumina by solution of the sample in hydrochloric (HCl) acid, evaporating, dehydrating, re-dissolving the residue, and neutralizing with ammonium hydroxide, filtering, washing, and igniting the residue lime rock. The difference between the percentage of insoluble matter and 100% is reported as carbonates of calcium and magnesium.

³ FM 5-515, Florida Method of Test for Lime Rock Bearing Ratio

Lime Rock Base Course Gradation

Sieve Designation (square openings)	Percentage by Weight Passing Sieves
3-1/2 inch (87.5 mm)	100
3/4 inch (19.0 mm)	50-100

All fine material shall consist entirely of dust of fracture (fine portion passing the No. 10 (2.00 mm) sieve).

211-2.2 SAMPLING AND TESTING.

a. Aggregate base materials. The Contractor shall take samples of the aggregate base in accordance with ASTM D75 to verify initial aggregate base requirements and gradation. Material shall meet the requirements in paragraph 211-2.1. This sampling and testing will be the basis for approval of the aggregate base quality requirements.

b. Gradation requirements. The Contractor shall take at least two aggregate base samples per day in the presence of the Resident Project Representative (RPR) to check the final gradation. Sampling shall be per ASTM D75. Material shall meet the requirements in paragraph 209-2.1. The lot will be consistent with the lot size used for density. The samples shall be taken from the in-place, un-compacted material at sampling points and intervals designated by the RPR.

211-2.3 SEPARATION GEOTEXTILE. Not used.

CONSTRUCTION METHODS

211-3.1 CONTROL STRIP. The first half-day of construction shall be considered the control strip. The Contractor shall demonstrate, in the presence of the RPR, that the materials, equipment, and construction processes meet the requirements of the specification. The sequence and manner of rolling necessary to obtain specified density requirements shall be determined. Control strips that do not meet specification requirements shall be removed and replaced at the Contractor's expense. Full operations shall not continue until the control strip has been accepted by the RPR. Upon acceptance of the control strip by the RPR, the Contractor shall use the same equipment, materials, and construction methods for the remainder of construction, unless adjustments made by the Contractor are approved in advance by the RPR.

211-3.2 PREPARING UNDERLYING COURSE. The RPR shall check and accept the underlying course before placing and spreading operations are started. Any ruts or soft yielding places caused by improper drainage conditions, hauling, or any other cause shall be corrected at the Contractor's expense before the base course is placed. Material shall not be placed on frozen subgrade.

211-3.3 PLACEMENT. The material shall be placed and spread on the prepared underlying layer by spreader boxes or other devices as approved by the RPR, to a uniform thickness and width. The equipment shall have positive thickness controls to minimize the need for additional manipulation of the material. Dumping from vehicles that require re-handling shall not be permitted. Hauling over the uncompacted base course shall not be permitted.

The material shall meet gradation and moisture requirements prior to compaction. The layer shall be constructed in lifts as established in the control strip, but not less than 4 inches (100 mm) nor more than 12 inches (300 mm) of compacted thickness.

When more than one lift is required to establish the layer thickness shown on the plans, the construction procedure described here shall apply to each lift. No lift shall be covered by subsequent lifts until tests verify that compaction requirements have been met. The Contractor shall rework, re-compact and retest any material placed which does not meet the specifications.

211-3.4 COMPACTION. Immediately upon completion of the spreading operations, compact each layer of the base course, as specified, with approved compaction equipment. The number, type, and weight of rollers shall be sufficient to compact the material to the required density within the same day that the aggregate is placed on the subgrade. The field density of each compacted lift of material shall be at least 100% of the maximum density of laboratory specimens prepared from samples of the subbase material delivered to the jobsite. The moisture content of the material during placing operations shall be within ± 2 percentage points of the optimum moisture content. Maximum density refers to maximum dry density at optimum moisture content unless otherwise specified.

211-3.5 FINISHING. After the watering and rolling of the base course, the entire surface shall be scarified to a depth of at least 3 inches (75 mm) and shaped to the exact crown and cross-section with a blade grader. The scarified material shall be rewetted and thoroughly rolled. Rolling shall continue until the base is bonded and compacted to a dense, unyielding mass, true to grade and cross-section. Scarifying and rolling of the surface of the base shall follow the initial rolling of the lime rock by not more than four (4) days. When the lime rock base is constructed in two layers, the scarifying of the surface shall be to a depth of 2 inches (50 mm).

If cracks or checks appear in the base before the surface course is laid, the Contractor shall rescarify, reshaping, watering, add lime rock where necessary, and recompact. If the underlying material becomes mixed with the base course material, the Contractor shall, without additional compensation, remove, reshape, and recompact the mixture.

211-3.6 WEATHER LIMITATIONS. Material shall not be placed unless the ambient air temperature is at least 40°F (4°C) and rising. Work on base course shall not be conducted when the subgrade or subbase is wet or frozen or the base material contains frozen material.

211-3.7 MAINTENANCE. The base course shall be maintained in a condition that will meet all specification requirements until the work is accepted by the RPR. When material has been exposed to excessive rain, snow, or freeze-thaw conditions, prior to placement of additional material, the Contractor shall verify that materials still meet all specification requirements. Equipment may be routed over completed sections of base course, provided that no damage results and the equipment is routed over the full width of the completed base course. Any damage resulting to the base course from routing equipment over the base course shall be repaired by the Contractor at the Contractor's expense.

211-3.8 SURFACE TOLERANCE. After the course has been compacted, the surface shall be tested for smoothness and accuracy of grade and crown. Any portion lacking the required smoothness or failing in accuracy of grade or crown shall be scarified to a depth of at least 3 inches (75 mm), reshaped and recompact to grade until the required smoothness and accuracy are obtained and approved by the RPR. Any deviation in surface tolerances shall be corrected by the Contractor at the Contractor's expense. The smoothness and accuracy requirements specified here apply only to the top layer when base course is constructed in more than one layer.

a. Smoothness. The finished surface shall not vary more than 3/8-inch (9 mm) when tested with a 12-foot (3.7-m) straightedge applied parallel with and at right angles to the centerline. The straightedge shall be moved continuously at half the length of the 12-foot (3.7-m) straightedge for the full length of each line on a 50-foot (15-m) grid.

b. Grade. The grade and crown shall be measured on a 50-foot (15-m) grid and shall be within +0 and -1/2 inch (12 mm) of the specified grade.

211-3.9 ACCEPTANCE SAMPLING AND TESTING. Lime rock base course shall be accepted for density on an area basis. Two tests shall be made for density and thickness for each 1200 square yds (1000 m²). Sampling locations will be determined on a random basis per ASTM D3665.

a. Density. The RPR shall perform all density tests.

Each area shall be accepted for density when the field density is at least 100% of the maximum density of laboratory specimens compacted and tested per ASTM D1557. The in-place field density shall be determined per ASTM D1556. If the specified density is not attained, the entire area shall be reworked and/or recompacted and two additional random tests made. This procedure shall be followed until the specified density is reached. Maximum density refers to maximum dry density at optimum moisture content unless otherwise specified.

b. Thickness. Depth tests shall be made by test holes or cores at least 3 inches (75 mm) in diameter that extend through the base. The thickness of the base course shall be within +0 and -1/2 inch (12 mm) of the specified thickness as determined by depth tests taken by the Contractor in the presence of the RPR for each area. Where the thickness is deficient by more than 1/2-inch (12 mm), the Contractor shall correct such areas at no additional cost by scarifying to a depth of at least 3 inches (75 mm), adding new material of proper gradation, and the material shall be blended and recompacted to grade. The Contractor shall replace, at his expense, base material where depth tests have been taken.

METHOD OF MEASUREMENT

211-4.1 The quantity of lime rock base course shall be the number of square yards. On individual depth measurements, thicknesses more than 1/2 inch (12 mm) in excess of that shown on the plans shall be considered as the specified thickness plus 1/2 inch (12 mm) in computing the yardage for payment.

BASIS OF PAYMENT

211-5.1 Payment shall be made at the contract unit price per square yards (square meters) for lime rock base course. This price shall be full compensation for furnishing all materials and for all preparation, hauling, and placing of these materials, and for all labor, equipment, tools, and incidentals necessary to complete the item.

The cost of removing cracks and checks including the labor, and the additional lime rock necessary for crack elimination, will not be paid for separately but shall be included in the contract price per square yard (square meter) for lime rock base course.

Payment will be made under:

Item P-211-1	Existing Base Course Preparation - per Square Yard (SY)
Item P-211-2	Limerock Base Course (10") – per Square Yard (SY)

REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

ASTM International (ASTM)

ASTM C136	Standard Test Method for Sieve or Screen Analysis of Fine and Coarse Aggregates
ASTM D75	Standard Practice for Sampling Aggregates
ASTM D698	Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Standard Effort (12,400 ft-lbf/ft ³ (600 kN-m/m ³))
ASTM D1556	Standard Test Method for Density and Unit Weight of Soil in Place by the Sand-Cone Method
ASTM D1557	Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Modified Effort (56,000 ft-lbf/ft ³ (2700 kN-m/m ³))
ASTM D3665	Standard Practice for Random Sampling of Construction Materials
ASTM D4318	Standard Test Methods for Liquid Limit, Plastic Limit, and Plasticity Index of Soils
ASTM D4491	Standard Test Methods for Water Permeability of Geotextiles by Permittivity
ASTM D4751	Standard Test Methods for Determining Apparent Opening Size of a Geotextile

American Association of State Highway and Transportation Officials (AASHTO)

M288	Standard Specification for Geosynthetic Specification for Highway Applications
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END OF ITEM P-211

**ITEM P-401
ASPHALT MIX PAVEMENT**

DESCRIPTION

401-1.1 This item shall consist of pavement courses composed of mineral aggregate and asphalt binder mixed in a central mixing plant and placed on a prepared base or stabilized course in accordance with these specifications and shall conform to the lines, grades, thicknesses, and typical cross-sections shown on the plans. Each course shall be constructed to the depth, typical section, and elevation required by the plans and shall be rolled, finished, and approved before the placement of the next course.

MATERIALS

401-2.1 AGGREGATE. Aggregates shall consist of crushed stone, crushed gravel, crushed slag, screenings, natural sand, and mineral filler, as required. The aggregates should have no known history of detrimental pavement staining due to ferrous sulfides, such as pyrite. Coarse aggregate is the material retained on the No. 4 (4.75 mm) sieve. Fine aggregate is the material passing the No. 4 (4.75 mm) sieve.

a. Coarse aggregate. Coarse aggregate shall consist of sound, tough, durable particles, free from films of matter that would prevent thorough coating and bonding with the asphalt material and free from organic matter and other deleterious substances. Coarse aggregate material requirements are given in the table below.

Coarse Aggregate Material Requirements

Material Test	Requirement	Standard
Resistance to Degradation	Loss: 40% maximum	ASTM C131
Soundness of Aggregates by Use of Sodium Sulfate or Magnesium Sulfate	Loss after 5 cycles: 12% maximum using Sodium sulfate - or - 18% maximum using magnesium sulfate	ASTM C88
Clay lumps and friable particles	1.0% maximum	ASTM C142
Percentage of Fractured Particles	For pavements designed for aircraft gross weights of 60,000 pounds (27200 kg) or more: Minimum 75% by weight of particles with at least two fractured faces and 85% with at least one fractured face ¹	ASTM D5821
	For pavements designed for aircraft gross weights less than 60,000 pounds (27200 kg): Minimum 50% by weight of particles with at least two fractured faces and 65% with at least one fractured face ¹	
Flat, Elongated, or Flat and Elongated Particles	8% maximum, by weight, of flat, elongated, or flat and elongated particles at 5:1 ²	ASTM D4791

Material Test	Requirement	Standard
Bulk density of slag ³	Weigh not less than 70 pounds per cubic foot (1.12 Mg/cubic meter)	ASTM C29.

¹ The area of each face shall be equal to at least 75% of the smallest mid-sectional area of the piece. When two fractured faces are contiguous, the angle between the planes of fractures shall be at least 30 degrees to count as two fractured faces.

² A flat particle is one having a ratio of width to thickness greater than five (5); an elongated particle is one having a ratio of length to width greater than five (5).

³ Only required if slag is specified.

b. Fine aggregate. Fine aggregate shall consist of clean, sound, tough, durable, angular shaped particles produced by crushing stone, slag, or gravel and shall be free from coatings of clay, silt, or other objectionable matter. Natural (non-manufactured) sand may be used to obtain the gradation of the fine aggregate blend or to improve the workability of the mix. Fine aggregate material requirements are listed in the table below.

Fine Aggregate Material Requirements

Material Test	Requirement	Standard
Liquid limit	25 maximum	ASTM D4318
Plasticity Index	4 maximum	ASTM D4318
Soundness of Aggregates by Use of Sodium Sulfate or Magnesium Sulfate	Loss after 5 cycles: 10% maximum using Sodium sulfate - or - 15% maximum using magnesium sulfate	ASTM C88
Clay lumps and friable particles	1.0% maximum	ASTM C142
Sand equivalent	45 minimum	ASTM D2419
Natural Sand	0% to 15% maximum by weight of total aggregate	ASTM D1073

c. Sampling. ASTM D75 shall be used in sampling coarse and fine aggregate.

401-2.2 MINERAL FILLER. Mineral filler (baghouse fines) may be added in addition to material naturally present in the aggregate. Mineral filler shall meet the requirements of ASTM D242.

Mineral Filler Requirements

Material Test	Requirement	Standard
Plasticity Index	4 maximum	ASTM D4318

401-2.3 ASPHALT BINDER. Asphalt binder shall conform to ASTM D6373 Performance Grade (PG) 76-22.

[

Asphalt Binder PG Plus Test Requirements

Material Test	Requirement	Standard
Elastic Recovery	75% minimum	ASTM D6084 ¹

¹ Follow procedure B on RTFO aged binder.]

401-2.4 ANTI-STRIPPING AGENT. Any anti-stripping agent or additive (anti-strip) shall be heat stable and shall not change the asphalt binder grade beyond specifications. Anti-strip shall be an approved material of the Department of Transportation of the State in which the project is located.

COMPOSITION

401-3.1 COMPOSITION OF MIXTURE(S). The asphalt mix shall be composed of a mixture of aggregates, filler and anti-strip agent if required, and asphalt binder. The aggregate fractions shall be sized, handled in separate size groups, and combined in such proportions that the resulting mixture meets the grading requirements of the job mix formula (JMF).

401-3.2 JOB MIX FORMULA (JMF) LABORATORY. The laboratory used to develop the JMF shall possess a current certificate of accreditation, listing D3666 from a national accrediting authority and all test methods required for developing the JMF; and be listed on the accrediting authority's website. A copy of the laboratory's current accreditation and accredited test methods shall be submitted to the Resident Project Representative (RPR) prior to start of construction.

401-3.3 JOB MIX FORMULA (JMF). No asphalt mixture shall be placed until an acceptable mix design has been submitted to the RPR for review and accepted in writing. The RPR's review shall not relieve the Contractor of the responsibility to select and proportion the materials to comply with this section.

When the project requires asphalt mixtures of differing aggregate gradations and/or binders, a separate JMF shall be submitted for each mix. Add anti-stripping agent to meet tensile strength requirements.

The JMF shall be prepared by an accredited laboratory that meets the requirements of paragraph 401-3.2. The asphalt mixture shall be designed using procedures contained in Asphalt Institute MS-2 Mix Design Manual, 7th Edition. Samples shall be prepared and compacted using the gyratory compactor in accordance with ASTM D6925.

Should a change in sources of materials be made, a new JMF must be submitted to the RPR for review and accepted in writing before the new material is used. After the initial production JMF has been approved by the RPR and a new or modified JMF is required for whatever reason, the subsequent cost of the new or modified JMF, including a new control strip when required by the RPR, will be borne by the Contractor.

The RPR may request samples at any time for testing, prior to and during production, to verify the quality of the materials and to ensure conformance with the applicable specifications.

The JMF shall be submitted in writing by the Contractor at least 30 days prior to the start of paving operations. The JMF shall be developed within the same construction season using aggregates proposed for project use.

The JMF shall be dated, and stamped or sealed by the responsible professional Engineer of the laboratory and shall include the following items as a minimum:

- Manufacturer's Certificate of Analysis (COA) for the asphalt binder used in the JMF in accordance with paragraph 401-2.3. Certificate of asphalt performance grade is with modifier already added, if used and must indicate compliance with ASTM D6373. For plant modified asphalt binder, certified test report indicating grade certification of modified asphalt binder.
- Manufacturer's Certificate of Analysis (COA) for the anti-stripping agent if used in the JMF in accordance with paragraph 401-2.4.
- Certified material test reports for the coarse and fine aggregate and mineral filler in accordance with paragraphs 401-2.1.
- Percent passing each sieve size for individual gradation of each aggregate cold feed and/or hot bin; percent by weight of each cold feed and/or hot bin used; and the total combined gradation in the JMF.
- Specific Gravity and absorption of each coarse and fine aggregate.
- Percent natural sand.
- Percent fractured faces.
- Percent by weight of flat particles, elongated particles, and flat and elongated particles (and criteria).
- Percent of asphalt.
- Number of blows or gyrations
- Laboratory mixing and compaction temperatures.
- Supplier-recommended field mixing and compaction temperatures.
- Plot of the combined gradation on a 0.45 power gradation curve.
- Graphical plots of air voids, voids in the mineral aggregate (VMA), and unit weight versus asphalt content. To achieve minimum VMA during production, the mix design needs to account for material breakdown during production.
- Tensile Strength Ratio (TSR).
- Type and amount of Anti-strip agent when used.
- Asphalt Pavement Analyzer (APA) results.

- Date the JMF was developed. Mix designs that are not dated or which are from a prior construction season shall not be accepted.

Table 1. Asphalt Design Criteria

Test Property	Value	Test Method
Number of blows or gyrations	75	
Air voids (%)	3.5	ASTM D3203
Percent voids in mineral aggregate (VMA), minimum	See Table 2	ASTM D6995
Tensile Strength Ratio (TSR) ¹	not less than 80 at a saturation of 70-80%	ASTM D4867

- ¹ Test specimens for TSR shall be compacted at 7 ± 1.0 % air voids. In areas subject to freeze-thaw, use freeze-thaw conditioning in lieu of moisture conditioning per ASTM D4867.
- ² AASHTO T340 at 100 psi hose pressure at 64°C test temperature may be used in the interim. If this method is used the required Value shall be less than 5 mm @ 8000 passes
- ³ Where APA not available, use Hamburg wheel test (AASHTO T-324) 10mm @ 20,000 passes at 50°C.

The mineral aggregate shall be of such size that the percentage composition by weight, as determined by laboratory sieves, will conform to the gradation or gradations specified in Table 2 when tested in accordance with ASTM C136 and ASTM C117.

The gradations in Table 2 represent the limits that shall determine the suitability of aggregate for use from the sources of supply; be well graded from coarse to fine and shall not vary from the low limit on one sieve to the high limit on the adjacent sieve, or vice versa.

Table 2. Aggregate - Asphalt Pavements

Sieve Size	Percentage by Weight Passing Sieve
1 inch (25.0 mm)	--
3/4 inch (19.0 mm)	100
1/2 inch (12.5 mm)	79-99
3/8 inch (9.5 mm)	68-88
No. 4 (4.75 mm)	48-68
No. 8 (2.36 mm)	33-53
No. 16 (1.18 mm)	20-40
No. 30 (600 µm)	14-30
No. 50 (300 µm)	9-21
No. 100 (150 µm)	6-16
No. 200 (75 µm)	3-6

Sieve Size	Percentage by Weight Passing Sieve
Minimum Voids in Mineral Aggregate (VMA)¹	15%
Asphalt Percent:	
Stone or gravel	5.0-7.5
Slag	6.5-9.5
Recommended Minimum Construction Lift Thickness	2 inches

¹To achieve minimum VMA during production, the mix design needs to account for material breakdown during production.

The aggregate gradations shown are based on aggregates of uniform specific gravity. The percentages passing the various sieves shall be corrected when aggregates of varying specific gravities are used, as indicated in the Asphalt Institute MS-2 Mix Design Manual, 7th Edition.

401-3.4 RECLAIMED ASPHALT PAVEMENT (RAP). RAP shall not be used.

401-3.5 CONTROL STRIP. Full production shall not begin until an acceptable control strip has been constructed and accepted in writing by the RPR. The Contractor shall prepare and place a quantity of asphalt according to the JMF. The underlying grade or pavement structure upon which the control strip is to be constructed shall be the same as the remainder of the course represented by the control strip.

The Contractor will not be allowed to place the control strip until the Contractor quality control program (CQCP), showing conformance with the requirements of paragraph 401-5.1, has been accepted, in writing, by the RPR.

The control strip will consist of at least 250 tons (227 metric tons) or 1/2 subplot, whichever is greater. The control strip shall be placed in two lanes of the same width and depth to be used in production with a longitudinal cold joint. The cold joint must be cut back in accordance with paragraph 401-4.14 using the same procedure that will be used during production. The cold joint for the control strip will be an exposed construction joint at least four (4) hours old or when the mat has cooled to less than 160°F (71°C). The equipment used in construction of the control strip shall be the same type, configuration and weight to be used on the project.

The control strip will be considered acceptable by the RPR if the gradation, asphalt content, and VMA are within the action limits specified in paragraph 401-5.5a; and Mat density greater than or equal to 94.5%, air voids 3.5% ± 1%, and joint density greater than or equal to 92.5%.

If the control strip is unacceptable, necessary adjustments to the JMF, plant operation, placing procedures, and/or rolling procedures shall be made and another control strip shall be placed. Unacceptable control strips shall be removed at the Contractor's expense.

The control strip will be considered one lot for payment based upon the average of a minimum of 3 samples (no sublots required for control strip). Payment will only be made for an acceptable control strip in accordance with paragraph 401-8.1 using a lot pay factor equal to 100.]

CONSTRUCTION METHODS

401-4.1 WEATHER LIMITATIONS. The asphalt shall not be placed upon a wet surface or when the surface temperature of the underlying course is less than specified in Table 4. The temperature requirements may be waived by the RPR, if requested; however, all other requirements including compaction shall be met.

Table 4. Surface Temperature Limitations of Underlying Course

Mat Thickness	Base Temperature (Minimum)	
	°F	°C
3 inches (7.5 cm) or greater	40 ¹	4
Greater than 2 inches (50 mm) but less than 3 inches (7.5 cm)	45	7

401-4.2 ASPHALT PLANT. Plants used for the preparation of asphalt shall conform to the requirements of American Association of State Highway and Transportation Officials (AASHTO) M156 including the following items.

a. Inspection of plant. The RPR, or RPR's authorized representative, shall have access, at all times, to all areas of the plant for checking adequacy of equipment; inspecting operation of the plant; verifying weights, proportions, and material properties; and checking the temperatures maintained in the preparation of the mixtures.

b. Storage bins and surge bins. The asphalt mixture stored in storage and/or surge bins shall meet the same requirements as asphalt mixture loaded directly into trucks. Asphalt mixture shall not be stored in storage and/or surge bins for a period greater than twelve (12) hours. If the RPR determines there is an excessive heat loss, segregation, or oxidation of the asphalt mixture due to temporary storage, temporary storage shall not be allowed.

401-4.3 AGGREGATE STOCKPILE MANAGEMENT. Aggregate stockpiles shall be constructed in a manner that prevents segregation and intermixing of deleterious materials. Aggregates from different sources shall be stockpiled, weighed and batched separately at the asphalt batch plant. Aggregates that have become segregated or mixed with earth or foreign material shall not be used.

A continuous supply of materials shall be provided to the work to ensure continuous placement.

401-4.4 HAULING EQUIPMENT. Trucks used for hauling asphalt shall have tight, clean, and smooth metal beds. To prevent the asphalt from sticking to the truck beds, the truck beds shall be lightly coated with a minimum amount of paraffin oil, lime solution, or other material approved by the RPR. Petroleum products shall not be used for coating truck beds. Each truck shall have a suitable cover to protect the mixture from adverse weather. When necessary, to ensure that the mixture will be delivered to the site at the specified temperature, truck beds shall be insulated or heated and covers shall be securely fastened.

401-4.4.1 Material transfer vehicle (MTV). Material transfer vehicles used to transfer the material from the hauling equipment to the paver, shall use a self-propelled, material transfer vehicle with a swing conveyor that can deliver material to the paver without making contact with the paver. The MTV shall be able to move back and forth between the hauling equipment and the paver providing material transfer to the paver, while allowing the paver to operate at a constant speed. The Material Transfer Vehicle will have remixing and storage capability to prevent physical and thermal segregation.

401-4.5 ASPHALT PAVERS. Asphalt pavers shall be self-propelled with an activated heated screed, capable of spreading and finishing courses of asphalt that will meet the specified thickness, smoothness, and grade. The paver shall have sufficient power to propel itself and the hauling equipment without adversely affecting the finished surface. The asphalt paver shall be equipped with a control system capable of automatically maintaining the specified screed grade and elevation.

If the spreading and finishing equipment in use leaves tracks or indented areas, or produces other blemishes in the pavement that are not satisfactorily corrected by the scheduled operations, the use of such equipment shall be discontinued.

The paver shall be capable of paving to a minimum width specified in paragraph 401-4.12.

401-4.6 ROLLERS. The number, type, and weight of rollers shall be sufficient to compact the asphalt to the required density while it is still in a workable condition without crushing of the aggregate, depressions or other damage to the pavement surface. Rollers shall be in good condition, clean, and capable of operating at slow speeds to avoid displacement of the asphalt. All rollers shall be specifically designed and suitable for compacting asphalt concrete and shall be properly used. Rollers that impair the stability of any layer of a pavement structure or underlying soils shall not be used.

401-4.7 DENSITY DEVICE. The Contractor shall have on site a density gauge during all paving operations in order to assist in the determination of the optimum rolling pattern, type of roller and frequencies, as well as to monitor the effect of the rolling operations during production paving. The Contractor shall supply a qualified technician during all paving operations to calibrate the gauge and obtain accurate density readings for all new asphalt. These densities shall be supplied to the RPR upon request at any time during construction. No separate payment will be made for supplying the density gauge and technician.

401-4.8 PREPARATION OF ASPHALT BINDER. The asphalt binder shall be heated in a manner that will avoid local overheating and provide a continuous supply of the asphalt binder to the mixer at a uniform temperature. The temperature of unmodified asphalt binder delivered to the mixer shall be sufficient to provide a suitable viscosity for adequate coating of the aggregate particles, but shall not exceed 325°F (160°C) when added to the aggregate. The temperature of modified asphalt binder shall be no more than 350°F (175°C) when added to the aggregate.

401-4.9 PREPARATION OF MINERAL AGGREGATE. The aggregate for the asphalt shall be heated and dried. The maximum temperature and rate of heating shall be such that no damage occurs to the aggregates. The temperature of the aggregate and mineral filler shall not exceed 350°F (175°C) when the asphalt binder is added. Particular care shall be taken that aggregates high in calcium or magnesium content are not damaged by overheating. The temperature shall not be lower than is required to obtain complete coating and uniform distribution on the aggregate particles and to provide a mixture of satisfactory workability.

401-4.10 PREPARATION OF ASPHALT MIXTURE. The aggregates and the asphalt binder shall be weighed or metered and mixed in the amount specified by the JMF. The combined materials shall be mixed until the aggregate obtains a uniform coating of asphalt binder and is thoroughly distributed throughout the mixture. Wet mixing time shall be the shortest time that will produce a satisfactory mixture, but not less than 25 seconds for batch plants. The wet mixing time for all plants shall be established by the Contractor, based on the procedure for determining the percentage of coated particles described in ASTM D2489, for each individual plant and for each type of aggregate used. The wet mixing time will be set to achieve 95% of coated particles. For continuous mix plants, the minimum mixing time shall be determined by dividing the weight of its contents at operating level by the weight of the mixture delivered per second by the mixer. The moisture content of all asphalt upon discharge shall not exceed 0.5%.

401-4.11 APPLICATION OF PRIME AND TACK COAT. Immediately before placing the asphalt mixture, the underlying course shall be cleaned of all dust and debris.

A prime coat in accordance with Item P-602 shall be applied to aggregate base prior to placing the asphalt mixture.

A tack coat shall be applied in accordance with Item P-603 to all vertical and horizontal asphalt and concrete surfaces prior to placement of the first and each subsequent lift of asphalt mixture.

401-4.12 LAYDOWN PLAN, TRANSPORTING, PLACING, AND FINISHING. Prior to the placement of the asphalt, the Contractor shall prepare a laydown plan with the sequence of paving lanes and width to minimize the number of cold joints; the location of any temporary ramps; laydown temperature; and estimated time of completion for each portion of the work (milling, paving, rolling, cooling, etc.). The laydown plan and any modifications shall be approved by the RPR.

Deliveries shall be scheduled so that placing and compacting of asphalt is uniform with minimum stopping and starting of the paver. Hauling over freshly placed material shall not be permitted until the material has been compacted, as specified, and allowed to cool to approximately ambient temperature. The Contractor, at their expense, shall be responsible for repair of any damage to the pavement caused by hauling operations.

Contractor shall survey each lift of asphalt surface course and certify to RPR that every lot of each lift meets the grade tolerances of paragraph 401-6.2d before the next lift can be placed.

Edges of existing asphalt pavement abutting the new work shall be saw cut and the cut off material and laitance removed. Apply a tack coat in accordance with P-603 before new asphalt material is placed against it.

The speed of the paver shall be regulated to eliminate pulling and tearing of the asphalt mat. Placement of the asphalt mix shall begin along the centerline of a crowned section or on the high side of areas with a one way slope unless shown otherwise on the laydown plan as accepted by the RPR. The asphalt mix shall be placed in consecutive adjacent lanes having a minimum width of 12 feet (m) except where edge lanes require less width to complete the area. Additional screed sections attached to widen the paver to meet the minimum lane width requirements must include additional auger sections to move the asphalt mixture uniformly along the screed extension.

The longitudinal joint in one course shall offset the longitudinal joint in the course immediately below by at least one foot (30 cm); however, the joint in the surface top course shall be at the

centerline of crowned pavements. Transverse joints in one course shall be offset by at least 10 feet (3 m) from transverse joints in the previous course. Transverse joints in adjacent lanes shall be offset a minimum of 10 feet (3 m). On areas where irregularities or unavoidable obstacles make the use of mechanical spreading and finishing equipment impractical, the asphalt may be spread and luted by hand tools.

The RPR may at any time, reject any batch of asphalt, on the truck or placed in the mat, which is rendered unfit for use due to contamination, segregation, incomplete coating of aggregate, or overheated asphalt mixture. Such rejection may be based on only visual inspection or temperature measurements. In the event of such rejection, the Contractor may take a representative sample of the rejected material in the presence of the RPR, and if it can be demonstrated in the laboratory, in the presence of the RPR, that such material was erroneously rejected, payment will be made for the material at the contract unit price.

Areas of segregation in the surface course, as determined by the RPR, shall be removed and replaced at the Contractor's expense. The area shall be removed by saw cutting and milling a minimum of the construction lift thickness as specified in paragraph 401-3.3, Table 2 for the approved mix design. The area to be removed and replaced shall be a minimum width of the paver and a minimum of 10 feet (3 m) long.

401-4.13 COMPACTION OF ASPHALT MIXTURE. After placing, the asphalt mixture shall be thoroughly and uniformly compacted by self-propelled rollers. The surface shall be compacted as soon as possible when the asphalt has attained sufficient stability so that the rolling does not cause undue displacement, cracking or shoving. The sequence of rolling operations and the type of rollers used shall be at the discretion of the Contractor. The speed of the roller shall, at all times, be sufficiently slow to avoid displacement of the hot mixture and be effective in compaction. Any surface defects and/or displacement occurring as a result of the roller, or from any other cause, shall be corrected at the Contractor's expense.

Sufficient rollers shall be furnished to handle the output of the plant. Rolling shall continue until the surface is of uniform texture, true to grade and cross-section, and the required field density is obtained. To prevent adhesion of the asphalt to the roller, the wheels shall be equipped with a scraper and kept moistened with water as necessary.

In areas not accessible to the roller, the mixture shall be thoroughly compacted with approved power tampers.

Any asphalt that becomes loose and broken, mixed with dirt, contains check-cracking, or in any way defective shall be removed and replaced with fresh hot mixture and immediately compacted to conform to the surrounding area. This work shall be done at the Contractor's expense. Skin patching shall not be allowed.

401-4.14 JOINTS. The formation of all joints shall be made to ensure a continuous bond between the courses and obtain the required density. All joints shall have the same texture as other sections of the course and meet the requirements for smoothness and grade.

The roller shall not pass over the unprotected end of the freshly laid asphalt except when necessary to form a transverse joint. When necessary to form a transverse joint, it shall be made by means of placing a bulkhead or by tapering the course. The tapered edge shall be cut back to its full depth and width on a straight line to expose a vertical face prior to placing the adjacent

lane. In both methods, all contact surfaces shall be coated with an asphalt tack coat before placing any fresh asphalt against the joint.

Longitudinal joints which have been left exposed for more than four (4) hours; the surface temperature has cooled to less than 175°F (80°C); or are irregular, damaged, uncompacted or otherwise defective shall be cut back with a cutting wheel or pavement saw a maximum of 3 inches (75 mm) to expose a clean, sound, uniform vertical surface for the full depth of the course. All cutback material and any laitance produced from cutting joints shall be removed from the project. Asphalt tack coat in accordance with P-603 shall be applied to the clean, dry joint prior to placing any additional fresh asphalt against the joint. The cost of this work shall be considered incidental to the cost of the asphalt.

401-4.15 SAW-CUT GROOVING. Saw-cut grooving is not required.

401-4.16 DIAMOND GRINDING. Diamond grinding shall be completed prior to pavement grooving. Diamond grinding shall be accomplished by sawing with saw blades impregnated with industrial diamond abrasive.

Diamond grinding shall be performed with a machine designed specifically for diamond grinding capable of cutting a path at least 3 feet (0.9 m) wide. The saw blades shall be 1/8-inch (3-mm) wide with a sufficient number of blades to create grooves between 0.090 and 0.130 inches (2 and 3.5 mm) wide; and peaks and ridges approximately 1/32 inch (1 mm) higher than the bottom of the grinding cut. The actual number of blades will be determined by the Contractor and depend on the hardness of the aggregate. Equipment or grinding procedures that cause ravels, aggregate fractures, spalls or disturbance to the pavement will not be permitted. Contractor shall demonstrate to the RPR that the grinding equipment will produce satisfactory results prior to making corrections to surfaces. Grinding will be tapered in all directions to provide smooth transitions to areas not requiring grinding. The slurry resulting from the grinding operation shall be continuously removed and the pavement left in a clean condition. The Contractor shall apply a surface treatment per P-608 to all areas that have been subject to grinding.

401-4.17 NIGHTTIME PAVING REQUIREMENTS. The Contractor shall provide adequate lighting during any nighttime construction. A lighting plan shall be submitted by the Contractor and approved by the RPR prior to the start of any nighttime work. All work shall be in accordance with the approved CSPP and lighting plan.

CONTRACTOR QUALITY CONTROL (CQC)

401-5.1 GENERAL. The Contractor shall develop a Contractor Quality Control Program (CQCP) in accordance with Item C-100. No partial payment will be made for materials without an approved CQCP.

401-5.2 CONTRACTOR QUALITY CONTROL (QC) FACILITIES. The Contractor shall provide or contract for testing facilities in accordance with Item C-100. The RPR shall be permitted unrestricted access to inspect the Contractor's QC facilities and witness QC activities. The RPR will advise the Contractor in writing of any noted deficiencies concerning the QC facility, equipment, supplies, or testing personnel and procedures. When the deficiencies are serious enough to be adversely affecting the test results, the incorporation of the materials into the work shall be suspended immediately and will not be permitted to resume until the deficiencies are satisfactorily corrected.

401-5.3 CONTRACTOR QC TESTING. The Contractor shall perform all QC tests necessary to control the production and construction processes applicable to these specifications and as set forth in the approved CQCP. The testing program shall include, but not necessarily be limited to, tests for the control of asphalt content, aggregate gradation, temperatures, aggregate moisture, field compaction, and surface smoothness. A QC Testing Plan shall be developed as part of the CQCP.

a. Asphalt content. A minimum of two tests shall be performed per day in accordance with ASTM D6307 or ASTM D2172 for determination of asphalt content. When using ASTM D6307, the correction factor shall be determined as part of the first test performed at the beginning of plant production; and as part of every tenth test performed thereafter. The asphalt content for the day will be determined by averaging the test results.

b. Gradation. Aggregate gradations shall be determined a minimum of twice per day from mechanical analysis of extracted aggregate in accordance with ASTM D5444, ASTM C136, and ASTM C117.

c. Moisture content of aggregate. The moisture content of aggregate used for production shall be determined a minimum of once per day in accordance with ASTM C566.

d. Moisture content of asphalt. The moisture content shall be determined once per day in accordance with AASHTO T329 or ASTM D1461.

e. Temperatures. Temperatures shall be checked, at least four times per day, at necessary locations to determine the temperatures of the dryer, the asphalt binder in the storage tank, the asphalt at the plant, and the asphalt at the job site.

f. In-place density monitoring. The Contractor shall conduct any necessary testing to ensure that the specified density is being achieved. A nuclear gauge may be used to monitor the pavement density in accordance with ASTM D2950.

g. Smoothness for Contractor Quality Control.

The Contractor shall perform smoothness testing in transverse and longitudinal directions daily to verify that the construction processes are producing pavement with variances less than ¼ inch in 12 feet, identifying areas that may pond water which could lead to hydroplaning of aircraft. If the smoothness criteria is not met, appropriate changes and corrections to the construction process shall be made by the Contractor before construction continues.

The Contractor may use a 12-foot (3.7 m) straightedge, a rolling inclinometer meeting the requirements of ASTM E2133 or rolling external reference device that can simulate a 12-foot (3.7m) straightedge approved by the RPR. Straight-edge testing shall start with one-half the length of the straightedge at the edge of pavement section being tested and then moved ahead one-half the length of the straightedge for each successive measurement. Testing shall be continuous across all joints. The surface irregularity shall be determined by placing the freestanding (unleveled) straightedge on the pavement surface and allowing it to rest upon the two highest spots covered by its length, and measuring the maximum gap between the straightedge and the pavement surface in the area between the two high points. If the rolling inclinometer or external reference device is used, the data may be evaluated using either the FAA profile program, ProFAA, or FHWA ProVal, using the 12-foot straightedge simulation function.

Smoothness readings shall not be made across grade changes or cross slope transitions. The transition between new and existing pavement shall be evaluated separately for conformance with the plans.

(1) Transverse measurements. Transverse measurements shall be taken for each day's production placed. Transverse measurements shall be taken perpendicular to the pavement centerline each 50 feet (15 m) or more often as determined by the RPR. The joint between lanes shall be tested separately to facilitate smoothness between lanes.

(2) Longitudinal measurements. Longitudinal measurements shall be taken for each day's production placed. Longitudinal tests shall be parallel to the centerline of paving; at the center of paving lanes when widths of paving lanes are less than 20 feet (6 m); and at the third points of paving lanes when widths of paving lanes are 20 ft (6 m) or greater. When placement abuts previously placed material the first measurement shall start with one half the length of the straight edge on the previously placed material.

Deviations on the final surface course in either the transverse or longitudinal direction that will trap water greater than 1/4 inch (6 mm) shall be corrected with diamond grinding per paragraph 401-4.16 or by removing and replacing the surface course to full depth. Grinding shall be tapered in all directions to provide smooth transitions to areas not requiring grinding. All areas in which diamond grinding has been performed shall be subject to the final pavement thickness tolerances specified in paragraph 401-6.1d(3). Areas that have been ground shall be sealed with a surface treatment in accordance with Item P-608. To avoid the surface treatment creating any conflict with runway or taxiway markings, it may be necessary to seal a larger area.

Control charts shall be kept to show area of each day's placement and the percentage of corrective grinding required. Corrections to production and placement shall be initiated when corrective grinding is required. If the Contractor's machines and/or methods produce significant areas that need corrective actions in excess of 10 percent of a day's production, production shall be stopped until corrective measures are implemented by the Contractor.

h. Grade. Grade shall be evaluated daily to allow adjustments to paving operations when grade measurements do not meet specifications. As a minimum, grade shall be evaluated prior to and after the placement of the first lift and after placement of the surface lift.

Measurements will be taken at appropriate gradelines (as a minimum at center and edges of paving lane) and longitudinal spacing as shown on cross-sections and plans. The final surface of the pavement will not vary from the gradeline elevations and cross-sections shown on the plans by more than 1/2 inch (12 mm) vertically and 0.1 feet (30 mm) laterally. The documentation will be provided by the Contractor to the RPR within 24 hours.

Areas with humps or depressions that exceed grade or smoothness criteria and that retain water on the surface must be ground off provided the course thickness after grinding is not more than 1/2 inch (12 mm) less than the thickness specified on the plans. Grinding shall be in accordance with paragraph 401-4.16.

The Contractor shall repair low areas or areas that cannot be corrected by grinding by removal of deficient areas to the depth of the final course plus 1/2 inch and replacing with new material. Skin patching is not allowed.

401-5.4 SAMPLING. When directed by the RPR, the Contractor shall sample and test any material that appears inconsistent with similar material being sampled, unless such material is voluntarily removed and replaced or deficiencies corrected by the Contractor. All sampling shall be in accordance with standard procedures specified.

401-5.5 CONTROL CHARTS. The Contractor shall maintain linear control charts for both individual measurements and range (i.e. difference between highest and lowest measurements) for aggregate gradation, asphalt content, and VMA. The VMA for each day will be calculated and monitored by the QC laboratory.

Control charts shall be posted in a location satisfactory to the RPR and kept current. As a minimum, the control charts shall identify the project number, the contract item number, the test number, each test parameter, the Action and Suspension Limits applicable to each test parameter, and the Contractor's test results. The Contractor shall use the control charts as part of a process control system for identifying potential problems and assignable causes before they occur. If the Contractor's projected data during production indicates a problem and the Contractor is not taking satisfactory corrective action, the RPR may suspend production or acceptance of the material.

a. Individual measurements. Control charts for individual measurements shall be established to maintain process control within tolerance for aggregate gradation, asphalt content, and VMA. The control charts shall use the job mix formula target values as indicators of central tendency for the following test parameters with associated Action and Suspension Limits:

Control Chart Limits for Individual Measurements

Sieve	Action Limit	Suspension Limit
3/4 inch (19.0 mm)	±6%	±9%
1/2 inch (12.5 mm)	±6%	±9%
3/8 inch (9.5 mm)	±6%	±9%
No. 4 (4.75 mm)	±6%	±9%
No. 16 (1.18 mm)	±5%	±7.5%
No. 50 (300 µm)	±3%	±4.5%
No. 200 (75 µm)	±2%	±3%
Asphalt Content	±0.45%	±0.70%
Minimum VMA	-0.5%	-1.0%

b. Range. Control charts shall be established to control gradation process variability. The range shall be plotted as the difference between the two test results for each control parameter. The Suspension Limits specified below are based on a sample size of n = 2. Should the Contractor elect to perform more than two tests per lot, the Suspension Limits shall be adjusted by multiplying the Suspension Limit by 1.18 for n = 3 and by 1.27 for n = 4.

Control Chart Limits Based on Range

Sieve	Suspension Limit
1/2 inch (12.5 mm)	11%
3/8 inch (9.5 mm)	11%
No. 4 (4.75 mm)	11%
No. 16 (1.18 mm)	9%
No. 50 (300 µm)	6%
No. 200 (75 µm)	3.5%
Asphalt Content	0.8%

c. Corrective Action. The CQCP shall indicate that appropriate action shall be taken when the process is believed to be out of tolerance. The Plan shall contain rules to gauge when a process is out of control and detail what action will be taken to bring the process into control. As a minimum, a process shall be deemed out of control and production stopped and corrective action taken, if:

(1) One point falls outside the Suspension Limit line for individual measurements or range;
or

(2) Two points in a row fall outside the Action Limit line for individual measurements.

401-5.6 QC REPORTS. The Contractor shall maintain records and shall submit reports of QC activities daily, in accordance with Item C-100.

MATERIAL ACCEPTANCE

401-6.1 ACCEPTANCE SAMPLING AND TESTING. Unless otherwise specified, all acceptance sampling and testing necessary to determine conformance with the requirements specified in this section will be performed by the RPR at no cost to the Contractor except that coring as required in this section shall be completed and paid for by the Contractor.

a. Quality assurance (QA) testing laboratory. The QA testing laboratory performing these acceptance tests will be accredited in accordance with ASTM D3666. The QA laboratory accreditation will be current and listed on the accrediting authority's website. All test methods required for acceptance sampling and testing will be listed on the lab accreditation.

b. Lot size. A standard lot will be equal to one day's production divided into approximately equal sublots of between 400 to 600 tons. When only one or two sublots are produced in a day's production, the sublots will be combined with the production lot from the previous or next day.

Where more than one plant is simultaneously producing asphalt for the job, the lot sizes will apply separately for each plant.

c. Asphalt air voids. Plant-produced asphalt will be tested for air voids on a subplot basis.

(1) Sampling. Material from each subplot shall be sampled in accordance with ASTM D3665. Samples shall be taken from material deposited into trucks at the plant or at the job site

in accordance with ASTM D979. The sample of asphalt may be put in a covered metal tin and placed in an oven for not less than 30 minutes nor more than 60 minutes to maintain the material at or above the compaction temperature as specified in the JMF.

(2) Testing. Air voids will be determined for each subplot in accordance with ASTM D3203 for a set of three compacted specimens prepared in accordance with ASTM D6926.

d. In-place asphalt mat and joint density. Each subplot will be tested for in-place mat and joint density as a percentage of the theoretical maximum density (TMD).

(1) Sampling. The Contractor will cut minimum 5 inch (125 mm) diameter samples in accordance with ASTM D5361. The Contractor shall furnish all tools, labor, and materials for cleaning, and filling the cored pavement. Laitance produced by the coring operation shall be removed immediately after coring, and core holes shall be filled within one day after sampling in a manner acceptable to the RPR.

(2) Bond. Each lift of asphalt shall be bonded to the underlying layer. If cores reveal that the surface is not bonded, additional cores shall be taken as directed by the RPR to determine the extent of unbonded areas. Unbonded areas shall be removed by milling and replaced at no additional cost as directed by the RPR.

(3) Thickness. Thickness of each lift of surface course will be evaluated by the RPR for compliance to the requirements shown on the plans after any necessary corrections for grade. Measurements of thickness will be made using the cores extracted for each subplot for density measurement. The maximum allowable deficiency at any point will not be more than 1/4 inch (6 mm) less than the thickness indicated for the lift. Average thickness of lift, or combined lifts, will not be less than the indicated thickness. Where the thickness tolerances are not met, the lot or subplot shall be corrected by the Contractor at his expense by removing the deficient area and replacing with new pavement. The Contractor, at his expense, may take additional cores as approved by the RPR to circumscribe the deficient area.

(4) Mat density. One core shall be taken from each subplot. Core locations will be determined by the RPR in accordance with ASTM D3665. Cores for mat density shall not be taken closer than one foot (30 cm) from a transverse or longitudinal joint. The bulk specific gravity of each cored sample will be determined in accordance with ASTM D2726. The percent compaction (density) of each sample will be determined by dividing the bulk specific gravity of each subplot sample by the TMD for that subplot.

(5) Joint density. One core centered over the longitudinal joint shall be taken for each subplot that has a longitudinal joint. Core locations will be determined by the RPR in accordance with ASTM D3665. The bulk specific gravity of each core sample will be determined in accordance with ASTM D2726. The percent compaction (density) of each sample will be determined by dividing the bulk specific gravity of each joint density sample by the average TMD for the lot. The TMD used to determine the joint density at joints formed between lots will be the lower of the average TMD values from the adjacent lots.

401-6.2 ACCEPTANCE CRITERIA.

a. General. Acceptance will be based on the implementation of the Contractor Quality Control Program (CQCP) and the following characteristics of the asphalt and completed pavements: air voids, mat density, joint density, grade.

b. Air Voids and Mat density. Acceptance of each lot of plant produced material for mat density and air voids will be based on the percentage of material within specification limits (PWL). If the PWL of the lot equals or exceeds 90%, the lot will be acceptable. Acceptance and payment will be determined in accordance with paragraph 401-8.1.

c. Joint density. Acceptance of each lot of plant produced asphalt for joint density will be based on the PWL. If the PWL of the lot is equal to or exceeds 90%, the lot will be considered acceptable. If the PWL is less than 90%, the Contractor shall evaluate the reason and act accordingly. If the PWL is less than 80%, the Contractor shall cease operations and until the reason for poor compaction has been determined. If the PWL is less than 71%, the pay factor for the lot used to complete the joint will be reduced by five (5) percentage points. This lot pay factor reduction will be incorporated and evaluated in accordance with paragraph 401-8.1.

d. Grade. The final finished surface of the pavement shall be surveyed to verify that the grade elevations and cross-sections shown on the plans do not deviate more than 1/2 inch (12 mm) vertically or 0.1 feet (30 mm) laterally.

Cross-sections of the pavement shall be taken at a minimum 50-foot (15-m) longitudinal spacing at all longitudinal grade breaks, and at start and end of each lane placed. Minimum cross-section grade points shall include grade at centerline.

The survey and documentation shall be stamped and signed by a licensed surveyor. Payment for sublots that do not meet grade for over 25% of the sublot shall not be more than 95%.

e. Profilograph roughness for QA Acceptance. Not used.

401-6.3 PERCENTAGE OF MATERIAL WITHIN SPECIFICATION LIMITS (PWL). The PWL will be determined in accordance with procedures specified in Item C-110. The specification tolerance limits (L) for lower and (U) for upper are contained in Table 5.

Table 5. Acceptance Limits for Air Voids and Density

Test Property	Pavements Specification Tolerance Limits	
	L	U
Air Voids Total Mix (%)	2.0	5.0
Surface Course Mat Density (%)	92.8	-
Base Course Mat Density (%)	92.0	-
Joint density (%)	90.5	--

a. Outliers. All individual tests for mat density and air voids will be checked for outliers (test criterion) in accordance with ASTM E178, at a significance level of 5%. Outliers will be discarded, and the PWL will be determined using the remaining test values. The criteria in Table 5 is based on production processes which have a variability with the following standard deviations: Surface Course Mat Density (%), 1.30; Base Course Mat Density (%), 1.55; Joint Density (%), 1.55.

The Contractor should note that (1) 90 PWL is achieved when consistently producing a surface course with an average mat density of at least 94.5% with 1.30% or less variability, (2) 90 PWL is achieved when consistently producing a base course with an average mat density of at least 94.0% with 1.55% or less variability, and (3) 90 PWL is achieved when consistently producing joints with an average joint density of at least 92.5% with 1.55% or less variability.

401-6.4 RESAMPLING PAVEMENT FOR MAT DENSITY.

a. General. Resampling of a lot of pavement will only be allowed for mat density, and then, only if the Contractor requests same, in writing, within 48 hours after receiving the written test results from the RPR. A retest will consist of all the sampling and testing procedures contained in paragraphs 401-6.1d and 401-6.2b. Only one resampling per lot will be permitted.

(1) A redefined PWL will be calculated for the resampled lot. The number of tests used to calculate the redefined PWL will include the initial tests made for that lot plus the retests.

(2) The cost for resampling and retesting shall be borne by the Contractor.

b. Payment for resampled lots. The redefined PWL for a resampled lot will be used to calculate the payment for that lot in accordance with Table 6.

c. Outliers. Check for outliers in accordance with ASTM E178, at a significance level of 5%.

401-6.5 LEVELING COURSE. The leveling course is the first variable thickness lift placed to correct surface irregularities prior to placement of subsequent courses. The leveling course shall meet the aggregate gradation in Table 2, paragraph 401-3.3. The leveling course shall meet the requirements of paragraph 401-3.3, 401-6.2b for air voids, but shall not be subject to the density requirements of paragraph 401-6.2b for mat density and 401-6.2c for joint density. The leveling course shall be compacted with the same effort used to achieve density of the control strip. The leveling course shall not exceed the lift thickness associated with each gradation in Table 2, paragraph 401-3.3.

METHOD OF MEASUREMENT

401-7.1 MEASUREMENT. Asphalt shall be measured by the number of tons of asphalt used in the accepted work. Batch weights or truck scale weights will be used to determine the basis for the tonnage.

BASIS OF PAYMENT

401-8.1 PAYMENT. Payment for a lot of asphalt meeting all acceptance criteria as specified in paragraph 401-6.2 shall be made based on results of tests for mat density and air voids. Payment for acceptable lots shall be adjusted according to paragraph 401-8.1c for mat density and air voids; and paragraph 401-6.2c for joint density, subject to the limitation that:

a. The total project payment for plant mix asphalt pavement shall not exceed 100 percent of the product of the contract unit price and the total number of tons (kg) of asphalt used in the accepted work.

b. The price shall be compensation for furnishing all materials, for all preparation, mixing, and placing of these materials, and for all labor, equipment, tools, and incidentals necessary to complete the item.

c. **Basis of adjusted payment.** The pay factor for each individual lot shall be calculated in accordance with Table 6. A pay factor shall be calculated for both mat density and air voids. The lot pay factor shall be the higher of the two values when calculations for both mat density and air voids are 100% or higher. The lot pay factor shall be the product of the two values when only one of the calculations for either mat density or air voids is 100% or higher. The lot pay factor shall be the lower of the two values when calculations for both mat density and air voids are less than 100%. If PWL for joint density is less than 71% then the lot pay factor shall be reduced by 5% but be no higher than 95%.

For each lot accepted, the adjusted contract unit price shall be the product of the lot pay factor for the lot and the contract unit price. Payment shall be subject to the total project payment limitation specified in paragraph 401-8.1a. Payment in excess of 100% for accepted lots of asphalt shall be used to offset payment for accepted lots of asphalt pavement that achieve a lot pay factor less than 100%.

Payment for sublots which do not meet grade in accordance with paragraph 401-6.2d after correction for over 25% of the subplot shall be reduced by 5%.

Table 6. Price adjustment schedule¹

Percentage of material within specification limits (PWL)	Lot pay factor (percent of contract unit price)
96 – 100	106
90 – 95	PWL + 10
75 – 89	0.5 PWL + 55
55 – 74	1.4 PWL – 12
Below 55	Reject ²

¹ Although it is theoretically possible to achieve a pay factor of 106% for each lot, actual payment above 100% shall be subject to the total project payment limitation specified in paragraph 401-8.1a.

² The lot shall be removed and replaced. However, the RPR may decide to allow the rejected lot to remain. In that case, if the RPR and Contractor agree in writing that the lot shall not be removed, it shall be paid for at 50% of the contract unit price and the total project payment shall be reduced by the amount withheld for the rejected lot.

d. **Profilograph Roughness.** Not used.

401-8.1 PAYMENT.

Payment will be made under:

Item P-401-1 Bituminous Surface Course - per ton

REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

ASTM International (ASTM)

ASTM C29	Standard Test Method for Bulk Density (“Unit Weight”) and Voids in Aggregate
ASTM C88	Standard Test Method for Soundness of Aggregates by Use of Sodium Sulfate or Magnesium Sulfate
ASTM C117	Standard Test Method for Materials Finer than 75- μ m (No. 200) Sieve in Mineral Aggregates by Washing
ASTM C127	Standard Test Method for Density, Relative Density (Specific Gravity) and Absorption of Coarse Aggregate
ASTM C131	Standard Test Method for Resistance to Degradation of Small-Size Coarse Aggregate by Abrasion and Impact in the Los Angeles Machine
ASTM C136	Standard Test Method for Sieve or Screen Analysis of Fine and Coarse Aggregates
ASTM C142	Standard Test Method for Clay Lumps and Friable Particles in Aggregates
ASTM C566	Standard Test Method for Total Evaporable Moisture Content of Aggregate by Drying
ASTM D75	Standard Practice for Sampling Aggregates
ASTM D242	Standard Specification for Mineral Filler for Bituminous Paving Mixtures
ASTM D946	Standard Specification for Penetration-Graded Asphalt Cement for Use in Pavement Construction
ASTM D979	Standard Practice for Sampling Asphalt Paving Mixtures
ASTM D1073	Standard Specification for Fine Aggregate for Asphalt Paving Mixtures
ASTM D1188	Standard Test Method for Bulk Specific Gravity and Density of Compacted Bituminous Mixtures Using Coated Samples
ASTM D2172	Standard Test Method for Quantitative Extraction of Bitumen from Asphalt Paving Mixtures

ASTM D1461	Standard Test Method for Moisture or Volatile Distillates in Asphalt Paving Mixtures
ASTM D2041	Standard Test Method for Theoretical Maximum Specific Gravity and Density of Bituminous Paving Mixtures
ASTM D2419	Standard Test Method for Sand Equivalent Value of Soils and Fine Aggregate
ASTM D2489	Standard Practice for Estimating Degree of Particle Coating of Bituminous-Aggregate Mixtures
ASTM D2726	Standard Test Method for Bulk Specific Gravity and Density of Non-Absorptive Compacted Bituminous Mixtures
ASTM D2950	Standard Test Method for Density of Bituminous Concrete in Place by Nuclear Methods
ASTM D3203	Standard Test Method for Percent Air Voids in Compacted Dense and Open Bituminous Paving Mixtures
ASTM D3381	Standard Specification for Viscosity-Graded Asphalt Cement for Use in Pavement Construction
ASTM D3665	Standard Practice for Random Sampling of Construction Materials
ASTM D3666	Standard Specification for Minimum Requirements for Agencies Testing and Inspecting Road and Paving Materials
ASTM D4318	Standard Test Methods for Liquid Limit, Plastic Limit, and Plasticity Index of Soils
ASTM D4552	Standard Practice for Classifying Hot-Mix Recycling Agents
ASTM D4791	Standard Test Method for Flat Particles, Elongated Particles, or Flat and Elongated Particles in Coarse Aggregate
ASTM D4867	Standard Test Method for Effect of Moisture on Asphalt Concrete Paving Mixtures
ASTM D5361	Standard Practice for Sampling Compacted Asphalt Mixtures for Laboratory Testing
ASTM D5444	Standard Test Method for Mechanical Size Analysis of Extracted Aggregate
ASTM D5821	Standard Test Method for Determining the Percentage of Fractured Particles in Coarse Aggregate
ASTM D6084	Standard Test Method for Elastic Recovery of Bituminous Materials by Ductilometer

ASTM D6307	Standard Test Method for Asphalt Content of Hot Mix Asphalt by Ignition Method
ASTM D6373	Standard Specification for Performance Graded Asphalt Binder
ASTM D6752	Standard Test Method for Bulk Specific Gravity and Density of Compacted Bituminous Mixtures Using Automatic Vacuum Sealing Method
ASTM D6925	Standard Test Method for Preparation and Determination of the Relative Density of Hot Mix Asphalt (HMA) Specimens by Means of the SuperPave Gyrotory Compactor.
ASTM D6926	Standard Practice for Preparation of Bituminous Specimens Using Marshall Apparatus
ASTM D6927	Standard Test Method for Marshall Stability and Flow of Bituminous Mixtures
ASTM D6995	Standard Test Method for Determining Field VMA based on the Maximum Specific Gravity of the Mix (Gmm)
ASTM E11	Standard Specification for Woven Wire Test Sieve Cloth and Test Sieves
ASTM E178	Standard Practice for Dealing with Outlying Observations
ASTM E1274	Standard Test Method for Measuring Pavement Roughness Using a Profilograph
ASTM E950	Standard Test Method for Measuring the Longitudinal Profile of Traveled Surfaces with an Accelerometer Established Inertial Profiling Reference
ASTM E2133	Standard Test Method for Using a Rolling Inclinator to Measure Longitudinal and Transverse Profiles of a Traveled Surface

American Association of State Highway and Transportation Officials (AASHTO)

AASHTO M156	Standard Specification for Requirements for Mixing Plants for Hot-Mixed, Hot-Laid Bituminous Paving Mixtures.
AASHTO T329	Standard Method of Test for Moisture Content of Hot Mix Asphalt (HMA) by Oven Method
AASHTO T324	Standard Method of Test for Hamburg Wheel-Track Testing of Compacted Asphalt Mixtures
AASHTO T 340	Standard Method of Test for Determining the Rutting Susceptibility of Hot Mix Asphalt (APA) Using the Asphalt Pavement Analyzer (APA)

Asphalt Institute (AI)

Asphalt Institute Handbook MS-26, Asphalt Binder

Asphalt Institute MS-2Mix Design Manual, 7th Edition

AI State Binder Specification Database

Federal Highway Administration (FHWA)

Long Term Pavement Performance Binder Program

Advisory Circulars (AC)

AC 150/5320-6 Airport Pavement Design and Evaluation

FAA Orders

5300.1 Modifications to Agency Airport Design, Construction, and
Equipment Standards

Software

FAARFIELD

END OF ITEM P-401

**ITEM P-602
EMULSIFIED ASPHALT PRIME COAT**

DESCRIPTION

602-1.1 This item shall consist of an application of emulsified asphalt material on the prepared base course in accordance with these specifications and in reasonably close conformity to the lines shown on the plans.

MATERIALS

602-2.1 EMULSIFIED ASPHALT MATERIAL. The emulsified asphalt material shall be as specified in ASTM D3628 for use as a prime coat appropriate to local conditions. The Contractor shall provide a copy of the manufacturer's Certificate of Analysis (COA) for the emulsified asphalt material. The COA shall be provided to and approved by the Resident Project Representative (RPR) before the emulsified asphalt material is applied. The furnishing of the COA for the emulsified asphalt material shall not be interpreted as a basis for final acceptance. The manufacturer's COA may be subject to verification by testing the material delivered for use on the project.

CONSTRUCTION METHODS

602-3.1 WEATHER LIMITATIONS. The emulsified asphalt prime coat shall be applied only when the existing surface is dry; the atmospheric temperature is 50°F (10°C) or above, and the temperature has not been below 35°F (2°C) for the 12 hours prior to application; and when the weather is not foggy or rainy. The temperature requirements may be waived when directed by the RPR.

602-3.2 EQUIPMENT. The equipment shall include a self-powered pressure asphalt material distributor and equipment for heating asphalt material.

Provide a distributor with pneumatic tires of such size and number that the load produced on the base surface does not exceed 65.0 psi (4.5 kg/sq cm) of tire width to prevent rutting, shoving or otherwise damaging the base, surface or other layers in the pavement structure. Design and equip the distributor to spray the asphalt material in a uniform coverage at the specified temperature, at readily determined and controlled rates from 0.05 to 1.0 gallons per square yard (0.23 to 4.5 L/square meter), with a pressure range of 25 to 75 psi (172.4 to 517.1 kPa) and with an allowable variation from the specified rate of not more than ±5%, and at variable widths. Include with the distributor equipment a separate power unit for the bitumen pump, full-circulation spray bars, tachometer, pressure gauges, volume-measuring devices, adequate heaters for heating of materials to the proper application temperature, a thermometer for reading the temperature of tank contents, and a hand hose attachment suitable for applying asphalt material manually to areas inaccessible to the distributor. Equip the distributor to circulate and agitate the asphalt material during the heating process. If the distributor is not equipped with an operable quick shutoff valve, the prime operations shall be started and stopped on building paper.

A power broom and power blower suitable for cleaning the surfaces to which the asphalt coat is to be applied shall be provided.

Asphalt distributors must be calibrated annually in accordance with ASTM D2995. The Contractor must furnish a current calibration certification for the asphalt distributor truck from any State or other agency as approved by the RPR.

602-3.3 APPLICATION OF EMULSIFIED ASPHALT MATERIAL. Immediately before applying the prime coat, the full width of the surface to be primed shall be swept with a power broom to remove all loose dirt and other objectionable material.

The asphalt emulsion material shall be uniformly applied with an asphalt distributor at the rate of 0.15 to 0.30 gallons per square yard (0.68 to 1.36 liters per square meter) depending on the base course surface texture. The type of asphalt material and application rate shall be approved by the RPR prior to application.

Following application of the emulsified asphalt material and prior to application of the succeeding layer of pavement, allow the asphalt coat to cure and to obtain evaporation of any volatiles or moisture. Maintain the coated surface until the succeeding layer of pavement is placed, by protecting the surface against damage and by repairing and recoating deficient areas. Allow the prime coat to cure without being disturbed for a period of at least 48 hours or longer, as may be necessary to attain penetration into the treated course. Furnish and spread sand to effectively blot up and cure excess asphalt material. The Contractor shall remove blotting sand prior to asphalt concrete lay down operations at no additional expense to the Owner. Keep traffic off surfaces freshly treated with asphalt material. Provide sufficient warning signs and barricades so that traffic will not travel over freshly treated surfaces.

602-3.4 TRIAL APPLICATION RATES. The Contractor shall apply a minimum of three lengths of at least 100 feet (30 m) for the full width of the distributor bar to evaluate the amount of emulsified asphalt material that can be satisfactorily applied with the equipment. Apply three different application rates of emulsified asphalt materials within the application range specified in paragraph 602-3.3. Other trial applications can be made using various amounts of material as directed by the RPR. The trial application is to demonstrate the equipment can uniformly apply the emulsified asphalt material within the rates specified and determine the application rate for the project.

602-3.5 FREIGHT AND WAYBILLS. The Contractor shall submit waybills and delivery tickets during the progress of the work. Before the final estimate is allowed, file with the RPR certified waybills and certified delivery tickets for all emulsified asphalt materials used in the construction of the pavement covered by the contract. Do not remove emulsified asphalt material from storage until the initial outage and temperature measurements have been taken. The delivery or storage units will not be released until the final outage has been taken.

METHOD OF MEASUREMENT

602-4.1 No separate measurement will be made.

BASIS OF PAYMENT

602-5.1 No separate payment will be made. This item is incidental to P-401.

REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

ASTM International (ASTM)

ASTM D2995	Standard Practice for Estimating Application Rate and Residual Application Rate of Bituminous Distributors
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ASTM D3628	Standard Practice for Selection and Use of Emulsified Asphalts
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END OF ITEM P-602

**ITEM P-603
EMULSIFIED ASPHALT TACK COAT**

DESCRIPTION

603-1.1 This item shall consist of preparing and treating an asphalt or concrete surface with asphalt material in accordance with these specifications and in reasonably close conformity to the lines shown on the plans.

MATERIALS

603-2.1 ASPHALT MATERIALS. The asphalt material shall be an emulsified asphalt as specified in ASTM D3628 as an asphalt application for tack coat appropriate to local conditions. The emulsified asphalt shall not be diluted. The Contractor shall provide a copy of the manufacturer's Certificate of Analysis (COA) for the asphalt material to the Resident Project Representative (RPR) before the asphalt material is applied for review and acceptance. The furnishing of COA for the asphalt material shall not be interpreted as a basis for final acceptance. The manufacturer's COA may be subject to verification by testing the material delivered for use on the project.

CONSTRUCTION METHODS

603-3.1 WEATHER LIMITATIONS. The tack coat shall be applied only when the existing surface is dry and the atmospheric temperature is 50°F (10°C) or above; the temperature has not been below 35°F (2°C) for the 12 hours prior to application; and when the weather is not foggy or rainy. The temperature requirements may be waived when directed by the RPR.

603-3.2 EQUIPMENT. The Contractor shall provide equipment for heating and applying the emulsified asphalt material. The emulsion shall be applied with a manufacturer-approved computer rate-controlled asphalt distributor. The equipment shall be in good working order and contain no contaminants or diluents in the tank. Spray bar tips must be clean, free of burrs, and of a size to maintain an even distribution of the emulsion. Any type of tip or pressure source is suitable that will maintain predetermined flow rates and constant pressure during the application process with application speeds under eight (8) miles per hour (13 km per hour) or seven (700) feet per minute (213 m per minute).

The equipment will be tested under pressure for leaks and to ensure proper set-up before use to verify truck set-up (via a test-shot area), including but not limited to, nozzle tip size appropriate for application, spray-bar height and pressure and pump speed, evidence of triple-overlap spray pattern, lack of leaks, and any other factors relevant to ensure the truck is in good working order before use.

The distributor truck shall be equipped with a minimum 12-foot (3.7-m) spreader spray bar with individual nozzle control with computer-controlled application rates. The distributor truck shall have an easily accessible thermometer that constantly monitors the temperature of the emulsion, and have an operable mechanical tank gauge that can be used to cross-check the computer accuracy. If the distributor is not equipped with an operable quick shutoff valve, the prime operations shall be started and stopped on building paper.

The distributor truck shall be equipped to effectively heat and mix the material to the required temperature prior to application as required. Heating and mixing shall be done in accordance with the manufacturer's recommendations. Do not overheat or over mix the material.

The distributor shall be equipped with a hand sprayer.

Asphalt distributors must be calibrated annually in accordance with ASTM D2995. The Contractor must furnish a current calibration certification for the asphalt distributor truck from any State or other agency as approved by the RPR.

A power broom and/or power blower suitable for cleaning the surfaces to which the asphalt tack coat is to be applied shall be provided.

603-3.3 APPLICATION OF EMULSIFIED ASPHALT MATERIAL. The emulsified asphalt shall not be diluted. Immediately before applying the emulsified asphalt tack coat, the full width of surface to be treated shall be swept with a power broom and/or power blower to remove all loose dirt and other objectionable material.

The emulsified asphalt material shall be uniformly applied with an asphalt distributor at the rates appropriate for the conditions and surface specified in the table below. The type of asphalt material and application rate shall be approved by the RPR prior to application.

Emulsified Asphalt

Surface Type	Residual Rate, gal/SY (L/square meter)	Emulsion Application Bar Rate, gal/SY (L/square meter)
New asphalt	0.02-0.05 (0.09-0.23)	0.03-0.07 (0.13-0.32)
Existing asphalt	0.04-0.07 (0.18-0.32)	0.06-0.11 (0.27-0.50)
Milled Surface	0.04-0.08 (0.18-0.36)	0.06-0.12 (0.27-0.54)
Concrete	0.03-0.05 (0.13-0.23)	0.05-0.08 (0.23-0.36)

After application of the tack coat, the surface shall be allowed to cure without being disturbed for the period of time necessary to permit drying and setting of the tack coat. This period shall be determined by the RPR. The Contractor shall protect the tack coat and maintain the surface until the next course has been placed. When the tack coat has been disturbed by the Contractor, tack coat shall be reapplied at the Contractor's expense.

603-3.4 FREIGHT AND WAYBILLS. The Contractor shall submit waybills and delivery tickets, during progress of the work. Before the final statement is allowed, file with the RPR certified waybills and certified delivery tickets for all emulsified asphalt materials used in the construction of the pavement covered by the contract. Do not remove emulsified asphalt material from storage until the initial outage and temperature measurements have been taken. The delivery or storage units will not be released until the final outage has been taken.

METHOD OF MEASUREMENT

603-4.1 No separate measurement will be made.

BASIS OF PAYMENT

603.5-1 No separate payment will be made. This item is incidental to P-401.

REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

ASTM International (ASTM)

ASTM D1250	Standard Guide for Use of the Petroleum Measurement Tables
ASTM D2995	Standard Practice for Estimating Application Rate and Residual Application Rate of Bituminous Distributors
ASTM D3628	Standard Practice for Selection and Use of Emulsified Asphalts

END ITEM P-603

**ITEM P-605
JOINT SEALANTS FOR PAVEMENTS**

DESCRIPTION

605-1.1 This item shall consist of providing and installing a resilient and adhesive joint sealing material capable of effectively sealing joints in pavement; joints between different types of pavements; and cracks in existing pavement.

MATERIALS

605-2.1 JOINT SEALANTS. Joint sealant materials shall meet the requirements of P-606.

Each lot or batch of sealant shall be delivered to the jobsite in the manufacturer's original sealed container. Each container shall be marked with the manufacturer's name, batch or lot number, the safe heating temperature, and shall be accompanied by the manufacturer's certification stating that the sealant meets the requirements of this specification.

605-2.2 BACKER ROD. The material furnished shall be a compressible, non-shrinking, non-staining, non-absorbing material that is non-reactive with the joint sealant in accordance with ASTM D5249. The backer-rod material shall be $25\% \pm 5\%$ larger in diameter than the nominal width of the joint.

605-2.3 BOND BREAKING TAPES. Provide a bond breaking tape or separating material that is a flexible, non-shrinkable, non-absorbing, non-staining, and non-reacting adhesive-backed tape. The material shall have a melting point at least 5°F (3°C) greater than the pouring temperature of the sealant being used when tested in accordance with ASTM D789. The bond breaker tape shall be approximately $1/8$ inch (3 mm) wider than the nominal width of the joint and shall not bond to the joint sealant.

CONSTRUCTION METHODS

605-3.1 TIME OF APPLICATION. Joints shall be sealed as soon after completion of the curing period as feasible and before the pavement is opened to traffic, including construction equipment. The pavement temperature shall be 50°F (10°C) and rising at the time of application of the poured joint sealing material. Do not apply sealant if moisture is observed in the joint.

605-3.2 EQUIPMENT. Machines, tools, and equipment used in the performance of the work required by this section shall be approved before the work is started and maintained in satisfactory condition at all times. Submit a list of proposed equipment to be used in performance of construction work including descriptive data, 7 days prior to use on the project.

a. Tractor-mounted routing tool. Provide a routing tool, used for removing old sealant from the joints, of such shape and dimensions and so mounted on the tractor that it will not damage the sides of the joints. The tool shall be designed so that it can be adjusted to remove the old material to varying depths as required. The use of V-shaped tools or rotary impact routing devices will not be permitted. Hand-operated spindle routing devices may be used to clean and enlarge random cracks.

b. Concrete saw. Provide a self-propelled power saw, with water-cooled diamond or abrasive saw blades, for cutting joints to the depths and widths specified.

c. Sandblasting equipment. Sandblasting is not allowed.

d. Hand tools. Hand tools may be used, when approved, for removing defective sealant from a crack and repairing or cleaning the crack faces. Hand tools should be carefully evaluated for potential spalling effects prior to approval for use.

605-3.3 PREPARATION OF JOINTS. Pavement joints for application of material in this specification must be dry, clean of all scale, dirt, dust, curing compound, and other foreign matter. The Contractor shall demonstrate, in the presence of the RPR, that the method cleans the joint and does not damage the joint.

a. Sawing. All joints shall be sawed in accordance with specifications and plan details. Immediately after sawing the joint, the resulting slurry shall be completely removed from joint and adjacent area by flushing with a jet of water, and by use of other tools as necessary.

b. Sealing. Immediately before sealing, the joints shall be thoroughly cleaned of all remaining laitance, curing compound, filler, protrusions of hardened concrete, old sealant and other foreign material from the sides and upper edges of the joint space to be sealed. Cleaning shall be accomplished by tractor-mounted routing equipment or concrete saw as specified in paragraph 605-3.2. The newly exposed concrete joint faces and the pavement surface extending a minimum of 1/2 inch (12 mm) from the joint edge shall be sandblasted clean. Sandblasting shall be accomplished in a minimum of two passes. One pass per joint face with the nozzle held at an angle directly toward the joint face and not more than 3 inches (75 mm) from it. After final cleaning and immediately prior to sealing, blow out the joints with compressed air and leave them completely free of debris and water. The joint faces shall be surface dry when the seal is applied.

c. Backer Rod. When the joint opening is of a greater depth than indicated for the sealant depth, plug or seal off the lower portion of the joint opening using a backer rod in accordance with paragraph 605-2.2 to prevent the entrance of the sealant below the specified depth. Take care to ensure that the backer rod is placed at the specified depth and is not stretched or twisted during installation.

d. Bond-breaking tape. Where inserts or filler materials contain bitumen, or the depth of the joint opening does not allow for the use of a backup material, insert a bond-separating tape breaker in accordance with paragraph 605-2.3 to prevent incompatibility with the filler materials and three-sided adhesion of the sealant. Securely bond the tape to the bottom of the joint opening so it will not float up into the new sealant.

605-3.4 INSTALLATION OF SEALANTS. Joints shall be inspected for proper width, depth, alignment, and preparation, and shall be approved by the RPR before sealing is allowed. Sealants shall be installed in accordance with the following requirements:

Immediately preceding, but not more than 50 feet (15 m) ahead of the joint sealing operations, perform a final cleaning with compressed air. Fill the joints from the bottom up to 1/4 inch below the top of pavement surface; or bottom of groove for grooved pavement. Remove and discard excess or spilled sealant from the pavement by approved methods. Install the sealant in such a manner as to prevent the formation of voids and entrapped air. In no case shall gravity methods or pouring pots be used to install the sealant material. Traffic shall not be permitted over newly

sealed pavement until authorized by the RPR. When a primer is recommended by the manufacturer, apply it evenly to the joint faces in accordance with the manufacturer's instructions. Check the joints frequently to ensure that the newly installed sealant is cured to a tack-free condition within the time specified.

605-3.5 INSPECTION. The Contractor shall inspect the joint sealant for proper rate of cure and set, bonding to the joint walls, cohesive separation within the sealant, reversion to liquid, entrapped air and voids. Sealants exhibiting any of these deficiencies at any time prior to the final acceptance of the project shall be removed from the joint, wasted, and replaced as specified at no additional cost to the airport.

605-3.6 CLEAN-UP. Upon completion of the project, remove all unused materials from the site and leave the pavement in a clean condition.

METHOD OF MEASUREMENT

605-4.1 Joint sealing material shall be measured by the linear foot (meter) of sealant in place, completed, and accepted.

BASIS OF PAYMENT

605-5.1 Payment for joint sealing material shall be made at the contract unit price per linear foot. The price shall be full compensation for furnishing all materials, for all preparation, delivering, and placing of these materials, and for all labor, equipment, tools, and incidentals necessary to complete the item.

Payment will be made under:

Item P-605-1	Joint Sealing Filler - per Linear Foot (LF)
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REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

ASTM International (ASTM)

ASTM D789	Standard Test Method for Determination of Relative Viscosity of Polyamide (PA)
ASTM D5249	Standard Specification for Backer Material for Use with Cold- and Hot-Applied Joint Sealants in Portland-Cement Concrete and Asphalt Joints
ASTM D5893	Standard Specification for Cold Applied, Single Component, Chemically Curing Silicone Joint Sealant for Portland Cement Concrete Pavements

Advisory Circulars (AC)

AC 150/5340-30 Design and Installation Details for Airport Visual Aids

END OF ITEM P-605

**ITEM P-620
RUNWAY AND TAXIWAY MARKING**

DESCRIPTION

620-1.1 This item shall consist of the preparation and painting of numbers, markings, and stripes on the surface of runways, taxiways, and aprons, in accordance with these specifications and at the locations shown on the plans, or as directed by the Resident Project Representative (RPR). The terms “paint” and “marking material” as well as “painting” and “application of markings” are interchangeable throughout this specification.

MATERIALS

620-2.1 MATERIALS ACCEPTANCE. The Contractor shall furnish manufacturer’s certified test reports, for materials shipped to the project. The certified test reports shall include a statement that the materials meet the specification requirements. This certification along with a copy of the paint manufacturer’s surface preparation; marking materials, including adhesion, flow promoting and/or floatation additive; and application requirements must be submitted and approved by the Resident Project Representative (RPR) prior to the initial application of markings. The reports can be used for material acceptance or the RPR may perform verification testing. The reports shall not be interpreted as a basis for payment. The Contractor shall notify the RPR upon arrival of a shipment of materials to the site. All material shall arrive in sealed containers that are easily quantifiable for inspection by the RPR.

620-2.2 MARKING MATERIALS.

Table 1. Marking Materials

Paint¹				Glass Beads²	
Type	Color	Fed Std. 595 Number	Application Rate Maximum	Type	Application Rate Minimum
Type II	Yellow	33538 or 33655	115 ft ² /gal (2.8 m ² /l)	III	10 lb/gal (1.2 kg/l)
Type II	White	37925	115 ft ² /gal (2.8 m ² /l)	None	N/A
Type II	Black	37038	115 ft ² /gal (2.8 m ² /l)	None	N/A

¹ See paragraph 620-2.2a

² See paragraph 620-2.2b

a. Paint. Paint shall be waterborne in accordance with the requirements of this paragraph. Paint colors shall comply with Federal Standard No. 595.

Waterborne. Paint shall meet the requirements of Federal Specification TT-P-1952F, Type II. The non-volatile portion of the vehicle for all paint types shall be composed of a 100% acrylic polymer as determined by infrared spectral analysis.

b. Reflective media. Glass beads for white and yellow paint shall meet the requirements for Federal Specification TT-B-1325D Type III.

Glass beads shall be treated with all compatible coupling agents recommended by the manufacturers of the paint and reflective media to ensure adhesion and embedment.

Glass beads shall not be used in black and green paint.

Type III glass beads shall not be used in red and pink paint.

CONSTRUCTION METHODS

620-3.1 WEATHER LIMITATIONS. Painting shall only be performed when the surface is dry, and the ambient temperature and the pavement surface temperature meet the manufacturer's recommendations in accordance with paragraph 620-2.1. Painting operations shall be discontinued when the ambient or surface temperatures does not meet the manufacturer's recommendations. Markings shall not be applied when the wind speed exceeds 10 mph unless windscreens are used to shroud the material guns. Markings shall not be applied when weather conditions are forecasts to not be within the manufacturers' recommendations for application and dry time.

620-3.2 EQUIPMENT. Equipment shall include the apparatus necessary to properly clean the existing surface, a mechanical marking machine, a bead dispensing machine, and such auxiliary hand-painting equipment as may be necessary to satisfactorily complete the job.

The mechanical marker shall be an atomizing spray-type or airless type marking machine with automatic glass bead dispensers suitable for application of traffic paint. It shall produce an even and uniform film thickness and appearance of both paint and glass beads at the required coverage and shall apply markings of uniform cross-sections and clear-cut edges without running or spattering and without over spray. The marking equipment for both paint and beads shall be calibrated daily.

620-3.3 PREPARATION OF SURFACES. Immediately before application of the paint, the surface shall be dry and free from dirt, grease, oil, laitance, or other contaminates that would reduce the bond between the paint and the pavement. Use of any chemicals or impact abrasives during surface preparation shall be approved in advance by the RPR. After the cleaning operations, sweeping, blowing, or rinsing with pressurized water shall be performed to ensure the surface is clean and free of grit or other debris left from the cleaning process.

a. Preparation of new pavement surfaces. The area to be painted shall be cleaned by broom, blower, water blasting, or by other methods approved by the RPR to remove all contaminants, including PCC curing compounds, minimizing damage to the pavement surface.

b. Preparation of pavement to remove existing markings. Existing pavement markings shall be removed by rotary grinding, water blasting, or by other methods approved by the RPR minimizing damage to the pavement surface. The removal area may need to be larger than the area of the markings to eliminate ghost markings. After removal of markings on asphalt pavements, apply a fog seal or seal coat to 'block out' the removal area to eliminate 'ghost' markings.

c. Preparation of pavement markings prior to remarking. Prior to remarking existing markings, loose existing markings must be removed minimizing damage to the pavement surface, with a method approved by the RPR. After removal, the surface shall be cleaned of all residue or debris.

Prior to the application of markings, the Contractor shall certify in writing that the surface is dry and free from dirt, grease, oil, laitance, or other foreign material that would prevent the bond of the paint to the pavement or existing markings. This certification along with a copy of the paint manufactures application and surface preparation requirements must be submitted to the RPR prior to the initial application of markings.

620-3.4 LAYOUT OF MARKINGS. The proposed markings shall be laid out in advance of the paint application. The locations of markings to receive glass beads shall be shown on the plans.

620-3.5 APPLICATION. A period of 30 days shall elapse between placement of surface course or seal coat and application of the permanent paint markings. Paint shall be applied at the locations and to the dimensions and spacing shown on the plans. Paint shall not be applied until the layout and condition of the surface has been approved by the RPR.

The edges of the markings shall not vary from a straight line more than 1/2 inch (12 mm) in 50 feet (15 m), and marking dimensions and spacing shall be within the following tolerances:

Marking Dimensions and Spacing Tolerance

Dimension and Spacing	Tolerance
36 inch (910 mm) or less	±1/2 inch (12 mm)
greater than 36 inch to 6 feet (910 mm to 1.85 m)	±1 inch (25 mm)
greater than 6 feet to 60 feet (1.85 m to 18.3 m)	±2 inch (50 mm)
greater than 60 feet (18.3 m)	±3 inch (76 mm)

The paint shall be mixed in accordance with the manufacturer’s instructions and applied to the pavement with a marking machine at the rate shown in Table 1. The addition of thinner will not be permitted.

Glass beads shall be distributed upon the marked areas at the locations shown on the plans to receive glass beads immediately after application of the paint. A dispenser shall be furnished that is properly designed for attachment to the marking machine and suitable for dispensing glass beads. Glass beads shall be applied at the rate shown in Table 1. Glass beads shall not be applied to black paint or green paint. Glass beads shall adhere to the cured paint or all marking operations shall cease until corrections are made. Different bead types shall not be mixed. Regular monitoring of glass bead embedment and distribution should be performed.

620-3.6 APPLICATION--PREFORMED THERMOPLASTIC AIRPORT PAVEMENT MARKINGS.

Preformed thermoplastic pavement markings not used.

620-3.7 CONTROL STRIP. Prior to the full application of airfield markings, the Contractor shall prepare a control strip in the presence of the RPR. The Contractor shall demonstrate the surface preparation method and all striping equipment to be used on the project. The marking equipment must achieve the prescribed application rate of paint and population of glass beads (per Table 1) that are properly embedded and evenly distributed across the full width of the marking. Prior to acceptance of the control strip, markings must be evaluated during darkness to ensure a uniform appearance.

620-3.8 RETRO-REFLECTANCE. Reflectance shall be measured with a portable retro-reflectometer meeting ASTM E1710 (or equivalent). A total of 6 readings shall be taken over a 6 square foot area with 3 readings taken from each direction. The average shall be equal to or above the minimum levels of all readings which are within 30% of each other.

Minimum Retro-Reflectance Values

Material	Retro-reflectance mcd/m ² /lux		
	White	Yellow	Red
Initial Type III	600	300	35

620-3.9 PROTECTION AND CLEANUP. After application of the markings, all markings shall be protected from damage until dry. All surfaces shall be protected from excess moisture and/or rain and from disfiguration by spatter, splashes, spillage, or drippings. The Contractor shall remove from the work area all debris, waste, loose reflective media, and by-products generated by the surface preparation and application operations to the satisfaction of the RPR. The Contractor shall dispose of these wastes in strict compliance with all applicable state, local, and federal environmental statutes and regulations.

METHOD OF MEASUREMENT

620-4.1b The quantity of markings shall be paid for shall be measured by the number of square feet (square meters) of painting.

620-4.1c No separate payment shall be made for reflective media.

BASIS OF PAYMENT

620-5.1 This price shall be full compensation for furnishing all materials and for all labor, equipment, tools, and incidentals necessary to complete the item complete in place and accepted by the RPR in accordance with these specifications.

620-5.1a Payment for surface preparation shall be made at the contract price for incidental to the marking item of which it is a part.

620-5.2b Payment for markings shall be made at the contract price for the number of square feet (square meters) of paint.

620-5.3c Payment for reflective media shall be incidental to paint item of which it is a part.

Payment will be made under:

Item P-620-1	Pavement Markings with Reflective Media, Yellow – per Square Foot (SF)
Item P-620-2	Pavement Markings without Reflective Media, Black – per Square Foot (SF)
Item P-620-3	Pavement Markings without Reflective Media, White, Numerals – per Each (EA)

REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

ASTM International (ASTM)

ASTM D476	Standard Classification for Dry Pigmentary Titanium Dioxide Products
ASTM D968	Standard Test Methods for Abrasion Resistance of Organic Coatings by Falling Abrasive
ASTM D1652	Standard Test Method for Epoxy Content of Epoxy Resins
ASTM D2074	Standard Test Method for Total, Primary, Secondary, and Tertiary Amine Values of Fatty Amines by Alternative Indicator Method
ASTM D2240	Standard Test Method for Rubber Property - Durometer Hardness
ASTM D7585	Standard Practice for Evaluating Retroreflective Pavement Markings Using Portable Hand-Operated Instruments
ASTM E303	Standard Test Method for Measuring Surface Frictional Properties Using the British Pendulum Tester
ASTM E1710	Standard Test Method for Measurement of Retroreflective Pavement Marking Materials with CEN-Prescribed Geometry Using a Portable Retroreflectometer
ASTM E2302	Standard Test Method for Measurement of the Luminance Coefficient Under Diffuse Illumination of Pavement Marking Materials Using a Portable Reflectometer
ASTM G154	Standard Practice for Operating Fluorescent Ultraviolet (UV) Lamp Apparatus for Exposure of Nonmetallic Materials

Code of Federal Regulations (CFR)

40 CFR Part 60, Appendix A-7, Method 24
Determination of volatile matter content, water content, density,
volume solids, and weight solids of surface coatings

29 CFR Part 1910.1200 Hazard Communication

Federal Specifications (FED SPEC)

FED SPEC TT-B-1325D Beads (Glass Spheres) Retro-Reflective

FED SPEC TT-P-1952F Paint, Traffic and Airfield Marking, Waterborne

FED STD 595 Colors used in Government Procurement

Commercial Item Description

A-A-2886B Paint, Traffic, Solvent Based

Advisory Circulars (AC)

AC 150/5340-1 Standards for Airport Markings

AC 150/5320-12 Measurement, Construction, and Maintenance of Skid Resistant
Airport Pavement Surfaces

END OF ITEM P-620

**ITEM D-701
PIPE FOR STORM DRAINS AND CULVERTS**

Pipes and/or structures located within Runway or Taxiway Safety areas must be designed to accommodate the single wheel load of the largest aircraft that can utilize the airport, the largest maintenance equipment load, or the earth load, whichever is greater. Underground piping and components used in drainage systems for terminal and aircraft fueling ramp drainage shall be noncombustible and inert to fuel in accordance with National Fire Protection Association (NFPA) 415.

Typically, drainage pipes are designed for highway loadings, however, a modified design will be necessary when aircraft loadings are greater than AASHTO HS20 live loads.

It is acceptable to specify storm drains and drainage structures meeting state DOT specifications for materials. Bedding, embedment and overfull are critical to long-term performance of the piping system. Include all referenced state specifications in the project specification.

DESCRIPTION

701-1.1 This item shall consist of the construction of pipe culverts and storm drains in accordance with these specifications and in reasonably close conformity with the lines and grades shown on the plans.

MATERIALS

701-2.1 Materials shall meet the requirements shown on the plans and specified below. Underground piping and components used in drainage systems for terminal and aircraft fueling ramp drainage shall be noncombustible and inert to fuel in accordance with National Fire Protection Association (NFPA) 415.

The Engineer should indicate the required class, schedule, standard dimension ratio (SDR), gauge, and/or strength of pipe desired.

The Engineer shall select the pipe used for the project and delete inappropriate requirements from paragraph 701-2.2 and from the list of material requirements. The Engineer shall include industry standard references (for example, ASTM and/or AASHTO) for installation if necessary.

701-2.2 PIPE. The pipe shall be of the type called for on the plans or in the proposal and shall be in accordance with the following appropriate requirements:

- [American Association of State Highway and Transportation Officials (AASHTO) M167 Standard Specification for Corrugated Steel Structural Plate, Zinc-Coated, for Field-Bolted Pipe, Pipe-Arches, and Arches
- AASHTO M190 Standard Specification for Bituminous-Coated Corrugated Metal Culvert Pipe and Pipe Arches
- AASHTO M196 Standard Specification for Corrugated Aluminum Pipe for Sewers and Drains
- AASHTO M219 Standard Specification for Corrugated Aluminum Alloy Structural Plate for Field-Bolted Pipe, Pipe-Arches, and Arches
- AASHTO M243 Standard Specification for Field-Applied Coating of Corrugated Metal Structural Plate for Pipe, Pipe-Arches, and Arches
- AASHTO M252 Standard Specification for Corrugated Polyethylene Drainage Pipe
- AASHTO M294 Standard Specification for Corrugated Polyethylene Pipe, 300- to 1500-mm (12- to 60-in.) Diameter
- AASHTO M304 Standard Specification for Poly (Vinyl Chloride) (PVC) Profile Wall Drain Pipe and Fittings Based on Controlled Inside Diameter
- AASHTO MP20 Standard Specification for Steel Reinforced Polyethylene (PE) Ribbed Pipe, 300- to 900-mm (12- to 36-in.) Diameter
- AASHTO R73 Standard Practice for Evaluation of Precast Concrete Drainage Productions
- ASTM A760 Standard Specification for Corrugated Steel Pipe, Metallic-Coated for Sewers and Drains
- ASTM A761 Standard Specification for Corrugated Structural Steel Plate, Zinc-Coated, for Field-Bolted Pipe, Pipe-Arches, and Arches
- ASTM A762 Standard Specification for Corrugated Steel Pipe, Polymer Precoated for Sewers and Drains
- ASTM A849 Standard Specification for Post Applied Coatings, Pavings, and Linings for Corrugated Steel Sewer and Drainage Pipe
- ASTM B745 Standard Specification for Corrugated Aluminum Pipe for Sewers and Drains
- ASTM C14 Standard Specification for Nonreinforced Concrete Sewer, Storm Drain, and Culvert Pipe

ASTM C76	Standard Specification for Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe
ASTM C506	Standard Specification for Reinforced Concrete Arch Culvert, Storm Drain, and Sewer Pipe
ASTM C507	Standard Specification for Reinforced Concrete Elliptical Culvert, Storm Drain, and Sewer Pipe
ASTM C655	Standard Specification for Reinforced Concrete D-Load Culvert, Storm Drain, and Sewer Pipe
ASTM C1433	Standard Specification for Precast Reinforced Concrete Monolithic Box Sections for Culverts, Storm Drains, and Sewers
ASTM C1479	Standard Practice for Installation of Precast Concrete Sewer, Storm Drain, and Culvert Pipe Using Standard Installations
ASTM C1577	Standard Specification for Precast Reinforced Concrete Monolithic Box Sections for Culverts, Storm Drains, and Sewers Designed According to AASHTO LRFD
ASTM C1786	Standard Specification for Segmental Precast Reinforced Concrete Box Sections for Culverts, Storm Drains, and Sewers Designed According to AASHTO LRFD
ASTM C1840	Standard Practice for Inspection and Acceptance of Installed Reinforced Concrete Culvert, Storm Drain, and Storm Sewer Pipe
ASTM D3262	Standard Specification for "Fiberglass" (Glass-Fiber-Reinforced Thermosetting-Resin) Sewer Pipe
ASTM D4161	Standard Specification for "Fiberglass" (Glass-Fiber-Reinforced Thermosetting-Resin) Pipe Joints Using Flexible Elastomeric Seals
ASTM F667	Standard Specification for 3 through 24 in Corrugated Polyethylene Pipe and Fittings
ASTM F714	Standard Specification for Polyethylene (PE) Plastic Pipe (DR-PR) Based on Outside Diameter
ASTM F794	Standard Specification for Poly (Vinyl Chloride) (PVC) Profile Gravity Sewer Pipe and Fittings Based on Controlled Inside Diameter
ASTM F894	Standard Specification for Polyethylene (PE) Large Diameter Profile Wall Sewer and Drain Pipe

ASTM F949	Standard Specification for Poly (Vinyl Chloride) (PVC) Corrugated Sewer Pipe with a Smooth Interior and Fittings
ASTM F2435	Standard Specification for Steel Reinforced Polyethylene (PE) Corrugated Pipe
ASTM F2562	Specification for Steel Reinforced Thermoplastic Ribbed Pipe and Fittings for Non-Pressure Drainage and Sewerage
ASTM F2736	Standard Specification for 6 to 30 in. (152 to 762 mm) Polypropylene (PP) Corrugated Single Wall Pipe and Double Wall Pipe
ASTM F2764	Standard Specification for 30 to 60 in. (750 to 1500 mm) Polypropylene (PP) Triple Wall Pipe and Fittings for Non-Pressure Sanitary Sewer Applications
ASTM F2881	Standard Specification for 12 to 60 in. (300 to 1500 mm) Polypropylene (PP) Dual Wall Pipe and Fittings for Non-Pressure Storm Sewer Applications
ASTM D3034	Standard Specification for Type PSM Poly (Vinyl Chloride) (PVC) Sewer Pipe and Fittings]

701-2.3 CONCRETE. [Concrete for pipe cradles shall have a minimum compressive strength of 2000 psi (13.8 MPa) at 28 days and conform to the requirements of ASTM C94.] [Not used.]

701-2.4 RUBBER GASKETS. [Rubber gaskets for rigid pipe shall conform to the requirements of ASTM C443. Rubber gaskets for PVC pipe, polyethylene, and polypropylene pipe shall conform to the requirements of ASTM F477. Rubber gaskets for zinc-coated steel pipe and pre-coated galvanized pipe shall conform to the requirements of ASTM D1056, for the "RE" closed cell grades. Rubber gaskets for steel reinforced thermoplastic ribbed pipe shall conform to the requirements of ASTM F477.] [Not used.]

701-2.5 JOINT MORTAR. [Pipe joint mortar shall consist of one part Portland cement and two parts sand. The Portland cement shall conform to the requirements of ASTM C150, Type I. The sand shall conform to the requirements of ASTM C144.] [Not used.]

701-2.6 JOINT FILLERS. [Poured filler for joints shall conform to the requirements of ASTM D6690.] [Not used.]

701-2.7 PLASTIC GASKETS. [Plastic gaskets shall conform to the requirements of ASTM C990.] [Not used.]

701-2.8. CONTROLLED LOW-STRENGTH MATERIAL (CLSM). [Controlled low-strength material shall conform to the requirements of Item P-153. When CLSM is used, all joints shall have gaskets.] [Not used.]

The locations where CLSM is permitted shall be shown on the plans. This paragraph must agree with paragraph 701-3.5.

701-2.9 PRECAST BOX CULVERTS. Manufactured in accordance with and conforming to ASTM C1433.

701-2.10 Precast concrete pipe. Precast concrete structures shall be furnished by a plant meeting National Precast Concrete Association Plant Certification Program or American Concrete Pipe Association QCast Plant Certification program.

CONSTRUCTION METHODS

701-3.1 EXCAVATION. The width of the pipe trench shall be sufficient to permit satisfactory jointing of the pipe and thorough tamping of the bedding material under and around the pipe, but it shall not be less than the external diameter of the pipe plus 12 inches (300 mm) on each side. The trench walls shall be approximately vertical.

The Contractor shall comply with all current federal, state and local rules and regulations governing the safety of men and materials during the excavation, installation and backfilling operations. Specifically, the Contractor shall observe that all requirements of the Occupational Safety and Health Administration (OSHA) relating to excavations, trenching and shoring are strictly adhered to. The width of the trench shall be sufficient to permit satisfactorily jointing of the pipe and thorough compaction of the bedding material under the pipe and backfill material around the pipe, but it shall not be greater than the widths shown on the plans trench detail.

Where rock, hardpan, or other unyielding material is encountered, the Contractor shall remove it from below the foundation grade for a depth of at least 8 inch (200 mm) or 1/2 inch (12 mm) for each foot of fill over the top of the pipe (whichever is greater) but for no more than three-quarters of the nominal diameter of the pipe. The excavation below grade should be filled with granular material to form a uniform foundation.

Where a firm foundation is not encountered at the grade established, due to soft, spongy, or other unstable soil, the unstable soil shall be removed and replaced with approved granular material for the full trench width. The RPR shall determine the depth of removal necessary. The granular material shall be compacted to provide adequate support for the pipe.

The excavation for pipes placed in embankment fill shall not be made until the embankment has been completed to a height above the top of the pipe as shown on the plans.

701-3.2 BEDDING. The bedding surface for the pipe shall provide a foundation of uniform density to support the pipe throughout its entire length.

a. Rigid pipe. The pipe bedding shall be constructed uniformly for the full length of the pipe barrel, as required on the plans. The maximum aggregate size shall be 1 in when the bedding thickness is less than 6 inches, and 1-1/2 in when the bedding thickness is greater than 6 inches. Bedding shall be loosely placed uncompacted material under the middle third of the pipe prior to placement of the pipe.

b. Flexible pipe. For flexible pipe, the bed shall be roughly shaped to fit the pipe, and a bedding blanket of sand or fine granular material shall be provided as follows:

Flexible Pipe Bedding

Pipe Corrugation Depth		Minimum Bedding Depth	
inch	mm	inch	mm
1/2	12	1	25
1	25	2	50
2	50	3	75
2-1/2	60	3-1/2	90

c. Other pipe materials. For PVC, polyethylene, polypropylene, or fiberglass pipe, the bedding material shall consist of coarse sands and gravels with a maximum particle size of 3/4 inches (19 mm). For pipes installed under paved areas, no more than 12% of the material shall pass the No. 200 (0.075 mm) sieve. For all other areas, no more than 50% of the material shall pass the No. 200 (0.075 mm) sieve. The bedding shall have a thickness of at least 6 inches (150 mm) below the bottom of the pipe and extend up around the pipe for a depth of not less than 50% of the pipe's vertical outside diameter.

701-3.3 LAYING PIPE. The pipe laying shall begin at the lowest point of the trench and proceed upgrade. The lower segment of the pipe shall be in contact with the bedding throughout its full length. Bell or groove ends of rigid pipes and outside circumferential laps of flexible pipes shall be placed facing upgrade.

Paved or partially lined pipe shall be placed so that the longitudinal center line of the paved segment coincides with the flow line.

Elliptical and elliptically reinforced concrete pipes shall be placed with the manufacturer's reference lines designating the top of the pipe within five degrees of a vertical plane through the longitudinal axis of the pipe.

701-3.4 JOINING PIPE. Joints shall be made with (1) cement mortar, (2) cement grout, (3) rubber gaskets, (4) plastic gaskets, (5) coupling bands [] or (6) [] .

Mortar joints shall be made with an excess of mortar to form a continuous bead around the outside of the pipe and shall be finished smooth on the inside. Molds or runners shall be used for grouted

joints to retain the poured grout. Rubber ring gaskets shall be installed to form a flexible watertight seal.

a. Concrete pipe. Concrete pipe may be either bell and spigot or tongue and groove. Pipe sections at joints shall be fully seated and the inner surfaces flush and even. [Concrete pipe joints shall be sealed with rubber gaskets meeting ASTM C443 when leak resistant joints are required.] [Concrete pipe joints shall be sealed with butyl mastic meeting ASTM C990 or mortar when soil tight joints are required. Joints shall be thoroughly wetted before applying mortar or grout.]

b. Metal pipe. Metal pipe shall be firmly joined by form-fitting bands conforming to the requirements of ASTM A760 for steel pipe and AASHTO M196 for aluminum pipe.

c. PVC, Polyethylene, or Polypropylene pipe. Joints for PVC, Polyethylene, or Polypropylene pipe shall conform to the requirements of ASTM D3212 when leak resistant joints are required. Joints for PVC and Polyethylene pipe shall conform to the requirements of AASHTO M304 when soil tight joints are required. Fittings for polyethylene pipe shall conform to the requirements of AASHTO M252 or ASTM M294. Fittings for polypropylene pipe shall conform to ASTM F2881, ASTM F2736, or ASTM F2764.

d. Fiberglass pipe. Joints and fittings shall be as detailed on the plans and in accordance with the manufacturers recommendations. [Joints shall meet the requirements of ASTM D4161 for flexible elastomeric seals.] [Enter manufacturers joint installation requirements.]

701-3.5 EMBEDMENT AND OVERFILL. Pipes shall be inspected before any fill material is placed; any pipes found to be out of alignment, unduly settled, or damaged shall be removed and re-laid or replaced at the Contractor's expense.

701-3.5-1 Embedment Material Requirements

a. Concrete Pipe. Embedment material and compaction requirements shall be in accordance with the applicable Type of Standard Installation (Types 1, 2, 3, or 4) per ASTM C1479. If a concrete cradle or CLSM embedment material is used, it shall conform to the plan details.

b. Plastic and fiberglass Pipe. Embedment material shall meet the requirements of ASTM D3282, A-1, A-2-4, A-2-5, or A-3. Embedment material shall be free of organic material, stones larger than 1.5 inches in the greatest dimension, or frozen lumps. Embedment material shall extend to 12 inches above the top of the pipe.

c. Metal Pipe. Embedment material shall be granular as specified in the contract document and specifications, and shall be free of organic material, rock fragments larger than 1.5 inches in the greatest dimension and frozen lumps. As a minimum, backfill materials shall meet the requirements of ASTM D3282, A-1, A-2, or A-3. Embedment material shall extend to 12 inches above the top of the pipe.

701-3.5-2 Placement of Embedment Material

The embedment material shall be compacted in layers not exceeding 6 inches (150 mm) on each side of the pipe and shall be brought up one foot (30 cm) above the top of the pipe or to natural

ground level, whichever is greater. Thoroughly compact the embedment material under the haunches of the pipe without displacing the pipe. Material shall be brought up evenly on each side of the pipe for the full length of the pipe.

When the top of the pipe is above the top of the trench, the embedment material shall be compacted in layers not exceeding 6 inches (150 mm) and shall be brought up evenly on each side of the pipe to one foot (30 cm) above the top of the pipe. All embedment material shall be compacted to a density required under Item P-152.

Concrete cradles and flowable fills, such as controlled low strength material (CLSM) or controlled density fill (CDF), may be used for embedment provided adequate flotation resistance can be achieved by restraints, weighing, or placement technique.

It shall be the Contractor's responsibility to protect installed pipes and culverts from damage due to construction equipment operations. The Contractor shall be responsible for installation of any extra strutting or backfill required to protect pipes from the construction equipment.

701-3.6 OVERFILL

Pipes shall be inspected before any overfill is in place. Any pipes found to be out of alignment, unduly settled, or damaged shall be removed and relaid or replaced at the Contractor's expense. Evaluation of any damage to RCP shall be evaluated based on AASHTO R73.

Overfill material shall be placed and compacted in layers as required to achieve compaction to at least 95 percent standard proctor per [ASTM D698] [ASTM D1557]. The soil shall contain no debris, organic matter, frozen material, or stones with a diameter greater than one half the thickness of the compacted layers being placed.

701-3.7 INSPECTION REQUIREMENTS

An initial post installation inspection shall be performed by the RPR no sooner than 30 days after completion of installation and final backfill. Clean or flush all lines prior to inspection.

[Use a camera with lighting suitable to allow a clear picture of the entire periphery of the pipe interior. Center the camera in the pipe both vertically and horizontally and be able to pan and tilt to a 90 degree angle with the axis of the pipe rotating 360 degrees. Use equipment to move the camera through the pipe that will not obstruct the camera's view or interfere with proper documentation of the pipe's condition. The video image shall be clear, focused, and relatively free from roll, static, or other image distortion qualities that would prevent the reviewer from evaluating the condition of the pipe.]

[For pipe sizes larger than 48 inches, a walk-through visual inspection shall be performed.]

Incorporate specific inspection requirements for the various types of pipes beneath the general inspection requirements.

[Reinforced concrete pipe shall be inspected, evaluated, and reported on in accordance with ASTM C1840, "Standard Practice for Inspection and Acceptance of Installed Reinforced Concrete Culvert, Storm Drain, and Storm Sewer Pipe." Any issues reported shall include still photo and video documentation. The zoom ratio shall be provided for all still or video images that document any issues of concern by the inspection firm.]

[Flexible pipes shall be inspected for rips, tears, joint separations, soil migration, cracks, localized buckling, settlement, alignment, and deflection.] [Determine whether the allowable deflection has been exceeded by use of a laser profiler for internal pipe diameters of 48 inches or less, or direct measurement for internal pipe diameters greater than 48 inches. Laser profile equipment shall utilize low barrel distortion video equipment. Deflection of installed pipe shall not exceed the limits provided in the table below, as a percentage of the average inside diameter of the pipe.

Maximum Allowable Pipe Deflection

Type of Pipe	Maximum Allowable Deflection (%)
Corrugated Metal Pipe	5
Concrete Lined CMP	3
Thermoplastic Pipe	5
Fiberglass	5

If deflection readings in excess of the allowable deflection are obtained, remove the pipe with excessive deflection and replace with new pipe. Isolated areas may exceed allowable by 2.5% with concurrence of RPR. Repair or replace any pipe with cracks exhibiting displacement across the crack, bulges, creases, tears, spalls, or delaminations. The report for flexible pipe shall include as a minimum, the deflection results and final post installation inspection report. The inspection report shall include: a copy of all video taken, pipe location identification, equipment used for inspection, inspector name, deviation from design line and grade, and inspector's notes.]

METHOD OF MEASUREMENT

701-4.1 The length of pipe shall be measured in linear feet (m) of pipe in place, completed, and accepted. It shall be measured along the centerline of the pipe from end or inside face of structure to the end or inside face of structure, whichever is applicable. The [identify each class, types and size of pipe] shall be measured separately. All fittings shall be included in the footage as typical pipe sections in the pipe being measured.

701-4.2. [Precast box culverts shall be measured by individual unit and size.] [Not used.]

701-4.3 [The volume of concrete for pipe cradles shall be the number of cubic yards (cubic meters) of concrete that is completed in place and accepted.] [Not used.]

701-4.4 [The volume of rock, hardpan, or other unyielding material shall be the number of cubic yards (cubic meters) excavated. No payment shall be made for the cushion material placed for the bed of the pipe.] [Not used.]

BASIS OF PAYMENT

701-5.0 These prices shall fully compensate the Contractor for furnishing all materials and for all preparation, excavation, and installation of these materials; and for all labor, equipment, tools, and incidentals necessary to complete the item.

701-5.1 Payment will be made at the contract unit price per linear foot (meter) for [identify each class and size of pipe].

701-5.2 Payment will be made at the contract unit price per unit for [identify each class and size of precast box culvert.]. [Not used.]

701-5.3 [Payment will be made at the contract unit price per cubic yard (cubic meter) of concrete for pipe cradles.] [Not used.]

701-5.4 [Payment will be made at the contract unit price per cubic yard (cubic meter) for rock, hardpan, or other unyielding material excavation.] [Not used.]

Payment will be made under:

- Item 701-5.1 [] inch [] per linear foot (meter)
- Item 701-5.2 [Precast box culvert per unit.] [Not used.]
- Item 701-5.3 [Concrete for pipe cradles - per cubic yard (cubic meter)]
 [Not used.]
- Item 701-5.4 [Rock, hardpan, or other unyielding material excavation - per
 cubic yard (cubic meter)] [Not used.]

The Engineer shall indicate the size and type of storm drains and culverts as shown on the plans.

REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

American Association of State Highway and Transportation Officials (AASHTO)

AASHTO M167	Standard Specification for Corrugated Steel Structural Plate, Zinc-Coated, for Field-Bolted Pipe, Pipe-Arches, and Arches
AASHTO M190	Standard Specification for Bituminous-Coated Corrugated Metal Culvert Pipe and Pipe Arches
AASHTO M196	Standard Specification for Corrugated Aluminum Pipe for Sewers and Drains
AASHTO M219	Standard Specification for Corrugated Aluminum Alloy Structural Plate for Field-Bolted Pipe, Pipe-Arches, and Arches
AASHTO M243	Standard Specification for Field Applied Coating of Corrugated Metal Structural Plate for Pipe, Pipe-Arches, and Arches
AASHTO M252	Standard Specification for Corrugated Polyethylene Drainage Pipe
AASHTO M294	Standard Specification for Corrugated Polyethylene Pipe, 300- to 1500-mm (12- to 60-in.) Diameter
AASHTO M304	Standard Specification for Poly (Vinyl Chloride) (PVC) Profile Wall Drain Pipe and Fittings Based on Controlled Inside Diameter
AASHTO MP20	Standard Specification for Steel Reinforced Polyethylene (PE) Ribbed Pipe, 300- to 900-mm (12- to 36-in.) Diameter

ASTM International (ASTM)

ASTM A760	Standard Specification for Corrugated Steel Pipe, Metallic Coated for Sewers and Drains
ASTM A761	Standard Specification for Corrugated Steel Structural Plate, Zinc Coated, for Field-Bolted Pipe, Pipe-Arches, and Arches
ASTM A762	Standard Specification for Corrugated Steel Pipe, Polymer Precoated for Sewers and Drains
ASTM A849	Standard Specification for Post-Applied Coatings, Pavings, and Linings for Corrugated Steel Sewer and Drainage Pipe
ASTM B745	Standard Specification for Corrugated Aluminum Pipe for Sewers and Drains
ASTM C14	Standard Specification for Nonreinforced Concrete Sewer, Storm Drain, and Culvert Pipe

ASTM C76	Standard Specification for Reinforced Concrete Culvert, Storm Drain, and Sewer Pipe
ASTM C94	Standard Specification for Ready Mixed Concrete
ASTM C144	Standard Specification for Aggregate for Masonry Mortar
ASTM C150	Standard Specification for Portland Cement
ASTM C443	Standard Specification for Joints for Concrete Pipe and Manholes, Using Rubber Gaskets
ASTM C506	Standard Specification for Reinforced Concrete Arch Culvert, Storm Drain, and Sewer Pipe
ASTM C507	Standard Specification for Reinforced Concrete Elliptical Culvert, Storm Drain and Sewer Pipe
ASTM C655	Standard Specification for Reinforced Concrete D-Load Culvert, Storm Drain and Sewer Pipe
ASTM C990	Standard Specification for Joints for Concrete Pipe, Manholes, and Precast Box Sections Using Preformed Flexible Joint Sealants
ASTM C1433	Standard Specification for Precast Reinforced Concrete Monolithic Box Sections for Culverts, Storm Drains, and Sewers
ASTM D1056	Standard Specification for Flexible Cellular Materials Sponge or Expanded Rubber
ASTM D3034	Standard Specification for Type PSM Poly (Vinyl Chloride) (PVC) Sewer Pipe and Fittings
ASTM D3212	Standard Specification for Joints for Drain and Sewer Plastic Pipes Using Flexible Elastomeric Seals
ASTM D3262	Standard Specification for "Fiberglass" (Glass-Fiber Reinforced Thermosetting Resin) Sewer Pipe
ASTM D3282	Standard Practice for Classification of Soils and Soil-Aggregate Mixtures for Highway Construction Purposes
ASTM D4161	Standard Specification for "Fiberglass" (Glass-Fiber Reinforced Thermosetting Resin) Pipe Joints Using Flexible Elastomeric Seals
ASTM D6690	Standard Specification for Joint and Crack Sealants, Hot Applied, for Concrete and Asphalt Pavements

ASTM F477	Standard Specification for Elastomeric Seals (Gaskets) for Joining Plastic Pipe
ASTM F667	Standard Specification for 3 through 24 in. Corrugated Polyethylene Pipe and Fittings
ASTM F714	Standard Specification for Polyethylene (PE) Plastic Pipe (DR PR) Based on Outside Diameter
ASTM F794	Standard Specification for Poly (Vinyl Chloride) (PVC) Profile Gravity Sewer Pipe & Fittings Based on Controlled Inside Diameter
ASTM F894	Standard Specification for Polyethylene (PE) Large Diameter Profile Wall Sewer and Drain Pipe
ASTM F949	Standard Specification for Poly (Vinyl Chloride) (PVC) Corrugated Sewer Pipe with a Smooth Interior and Fittings
ASTM F2435	Standard Specification for Steel Reinforced Polyethylene (PE) Corrugated Pipe
ASTM F2562	Specification for Steel Reinforced Thermoplastic Ribbed Pipe and Fittings for Non-Pressure Drainage and Sewerage
ASTM F2736	Standard Specification for 6 to 30 in. (152 to 762 mm) Polypropylene (PP) Corrugated Single Wall Pipe and Double Wall Pipe
ASTM F2764	Standard Specification for 30 to 60 in. (750 to 1500 mm) Polypropylene (PP) Triple Wall Pipe and Fittings for Non-Pressure Sanitary Sewer Applications
ASTM F2881	Standard Specification for 12 to 60 in. (300 to 1500 mm) Polypropylene (PP) Dual Wall Pipe and Fittings for Non-Pressure Storm Sewer Applications

National Fire Protection Association (NFPA)

NFPA 415	Standard on Airport Terminal Buildings, Fueling Ramp Drainage, and Loading Walkways
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END OF ITEM D-701

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**ITEM D-751
MANHOLES, CATCH BASINS, INLETS AND INSPECTION HOLES**

Structures within Runway or Taxiway Safety areas must be designed to accommodate the single wheel load of the largest aircraft that can utilize the airport, the largest maintenance equipment load, or the earth load, whichever is greater. Underground piping and components used in drainage systems for terminal and aircraft fueling ramp drainage shall be noncombustible and inert to fuel in accordance with National Fire Protection Association (NFPA) 415.

Typically, structures are designed for highway loadings, however, a modified design will be necessary when aircraft loadings are greater than AASHTO HS20 live loads.

It is acceptable to specify structures meeting state DOT specifications for materials. Bedding, embedment and overfull are critical to long-term performance of the piping system. Include all referenced state specifications in the project specification.

DESCRIPTION

751-1.1 This item shall consist of construction of manholes, catch basins, inlets, and inspection holes, in accordance with these specifications, at the specified locations and conforming to the lines, grades, and dimensions shown on the plans or required by the RPR.

MATERIALS

751-2.1 BRICK. The brick shall conform to the requirements of ASTM C32, Grade MS.

751-2.2 MORTAR. Mortar shall consist of one part Portland cement and two parts sand. The cement shall conform to the requirements of ASTM C150, Type I. The sand shall conform to the requirements of ASTM C144.

751-2.3 CONCRETE. Plain and reinforced concrete used in structures, connections of pipes with structures, and the support of structures or frames shall conform to the requirements of Item P-610.

751-2.4 PRECAST CONCRETE PIPE MANHOLE RINGS. Precast concrete pipe manhole rings shall conform to the requirements of ASTM C478. Unless otherwise specified, the risers and offset cone sections shall have an inside diameter of not less than 36 inches (90 cm) nor more than 48 inches (120 cm). There shall be a gasket between individual sections and sections cemented together with mortar on the inside of the manhole. Gaskets shall conform to the requirements of ASTM C443.

751-2.5 CORRUGATED METAL. Corrugated metal shall conform to the requirements of American Association of State Highway and Transportation Officials (AASHTO) M36.

751-2.6 FRAMES, COVERS, AND GRATES. The castings shall conform to one of the following requirements:

- a. ASTM A48, Class 35B: Gray iron castings
- b. ASTM A47: Malleable iron castings
- c. ASTM A27: Steel castings
- d. ASTM A283, Grade D: Structural steel for grates and frames
- e. ASTM A536, Grade 65-45-12: Ductile iron castings
- f. ASTM A897: Austempered ductile iron castings

All castings or structural steel units shall conform to the dimensions shown on the plans and shall be designed to support the loadings, aircraft gear configuration and/or direct loading, specified.

Each frame and cover or grate unit shall be provided with fastening members to prevent it from being dislodged by traffic but which will allow easy removal for access to the structure.

All castings shall be thoroughly cleaned. After fabrication, structural steel units shall be galvanized to meet the requirements of ASTM A123.

751-2.7 STEPS. The steps or ladder bars shall be gray or malleable cast iron or galvanized steel. The steps shall be the size, length, and shape shown on the plans and those steps that are not galvanized shall be given a coat of asphalt paint, when directed.

751-2.8 PRECAST INLET STRUCTURES. Manufactured in accordance with and conforming to ASTM C913.

CONSTRUCTION METHODS

751-3.1 UNCLASSIFIED EXCAVATION.

a. The Contractor shall excavate for structures and footings to the lines and grades or elevations, shown on the plans, or as staked by the RPR. The excavation shall be of sufficient size to permit the placing of the full width and length of the structure or structure footings shown. The elevations of the bottoms of footings, as shown on the plans, shall be considered as approximately only; and the RPR may direct, in writing, changes in dimensions or elevations of footings necessary for a satisfactory foundation.

b. Boulders, logs, or any other objectionable material encountered in excavation shall be removed. All rock or other hard foundation material shall be cleaned of all loose material and cut

to a firm surface either level, stepped, or serrated, as directed by the RPR. All seams or crevices shall be cleaned out and grouted. All loose and disintegrated rock and thin strata shall be removed. Where concrete will rest on a surface other than rock, the bottom of the excavation shall not be disturbed and excavation to final grade shall not be made until immediately before the concrete or reinforcing is placed.

c. The Contractor shall do all bracing, sheathing, or shoring necessary to implement and protect the excavation and the structure as required for safety or conformance to governing laws. The cost of bracing, sheathing, or shoring shall be included in the unit price bid for the structure.

d. All bracing, sheathing, or shoring involved in the construction of this item shall be removed by the Contractor after the completion of the structure. Removal shall not disturb or damage finished masonry. The cost of removal shall be included in the unit price bid for the structure.

e. After excavation is completed for each structure, the Contractor shall notify the RPR. No concrete or reinforcing steel shall be placed until the RPR has approved the depth of the excavation and the character of the foundation material.

751-3.2 BRICK STRUCTURES.

a. **Foundations.** A prepared foundation shall be placed for all brick structures after the foundation excavation is completed and accepted. Unless otherwise specified, the base shall consist of reinforced concrete mixed, prepared, and placed in accordance with the requirements of Item P-610.

b. **Laying brick.** All brick shall be clean and thoroughly wet before laying so that they will not absorb any appreciable amount of additional water at the time they are laid. All brick shall be laid in freshly made mortar. Mortar not used within 45 minutes after water has been added shall be discarded. Retempering of mortar shall not be permitted. An ample layer of mortar shall be spread on the beds and a shallow furrow shall be made in it that can be readily closed by the laying of the brick. All bed and head joints shall be filled solid with mortar. End joints of stretchers and side or cross joints of headers shall be fully buttered with mortar and a shoved joint made to squeeze out mortar at the top of the joint. Any bricks that may be loosened after the mortar has taken its set, shall be removed, cleaned, and re-laid with fresh mortar. No broken or chipped brick shall be used in the face, and no spalls or bats shall be used except where necessary to shape around irregular openings or edges; in which case, full bricks shall be placed at ends or corners where possible, and the bats shall be used in the interior of the course. In making closures, no piece of brick shorter than the width of a whole brick shall be used; and wherever practicable, whole brick shall be used and laid as headers.

c. **Joints.** All joints shall be filled with mortar at every course. Exterior faces shall be laid up in advance of backing. Exterior faces shall be plastered or parged with a coat of mortar not less than 3/8 inch (9 mm) thick before the backing is laid up. Prior to parging, all joints on the back of face courses shall be cut flush. Unless otherwise noted, joints shall be not less than 1/4 inch (6 mm) nor more than 1/2 inch (12 mm) wide and the selected joint width shall be maintained uniform throughout the work.

d. Pointing. Face joints shall be neatly struck, using the weather-struck joint. All joints shall be finished properly as the laying of the brick progresses. When nails or line pins are used, the holes shall be immediately plugged with mortar and pointed when the nail or pin is removed.

e. Cleaning. Upon completion of the work all exterior surfaces shall be thoroughly cleaned by scrubbing and washing with water. If necessary to produce satisfactory results, cleaning shall be done with a 5% solution of muriatic acid which shall then be rinsed off with liberal quantities of water.

f. Curing and cold weather protection. The brick masonry shall be protected and kept moist for at least 48 hours after laying the brick. Brick masonry work or pointing shall not be done when there is frost on the brick or when the air temperature is below 50°F (10°C) unless the Contractor has, on the project ready to use, suitable covering and artificial heating devices necessary to keep the atmosphere surrounding the masonry at a temperature of not less than 60°F (16°C) for the duration of the curing period.

751-3.3 CONCRETE STRUCTURES. Concrete structures which are to be cast-in-place within the project boundaries shall be built on prepared foundations, conforming to the dimensions and shape indicated on the plans. The construction shall conform to the requirements specified in Item P-610. Any reinforcement required shall be placed as indicated on the plans and shall be approved by the RPR before the concrete is placed.

All invert channels shall be constructed and shaped accurately to be smooth, uniform, and cause minimum resistance to flowing water. The interior bottom shall be sloped to the outlet.

751-3.4 PRECAST CONCRETE STRUCTURES. Precast concrete structures shall be furnished by a plant meeting National Precast Concrete Association Plant Certification Program or another RPR approved third party certification program.

Precast concrete structures shall conform to ASTM C478. Precast concrete structures shall be constructed on prepared or previously placed slab foundations conforming to the dimensions and locations shown on the plans. All precast concrete sections necessary to build a completed structure shall be furnished. The different sections shall fit together readily. Joints between precast concrete risers and tops shall be full-bedded in cement mortar and shall: (1) be smoothed to a uniform surface on both interior and exterior of the structure or (2) utilize a rubber gasket per ASTM C443. The top of the upper precast concrete section shall be suitably formed and dimensioned to receive the metal frame and cover or grate, or other cap, as required. Provision shall be made for any connections for lateral pipe, including drops and leads that may be installed in the structure. The flow lines shall be smooth, uniform, and cause minimum resistance to flow. The metal or metal encapsulated steps that are embedded or built into the side walls shall be aligned and placed in accordance to ASTM C478. When a metal ladder replaces the steps, it shall be securely fastened into position.

751-3.5 CORRUGATED METAL STRUCTURES. Corrugated metal structures shall be prefabricated. All standard or special fittings shall be furnished to provide pipe connections or branches with the correct dimensions and of sufficient length to accommodate connecting bands. The fittings shall be welded in place to the metal structures. The top of the metal structure shall be designed so that either a concrete slab or metal collar may be attached to allow the fastening of a standard metal frame and grate or cover. Steps or ladders shall be furnished as shown on

the plans. Corrugated metal structures shall be constructed on prepared foundations, conforming to the dimensions and locations as shown on the plans. When indicated, the structures shall be placed on a reinforced concrete base.

751-3.6 INLET AND OUTLET PIPES. Inlet and outlet pipes shall extend through the walls of the structures a sufficient distance beyond the outside surface to allow for connections. They shall be cut off flush with the wall on the inside surface of the structure, unless otherwise directed. For concrete or brick structures, mortar shall be placed around these pipes to form a tight, neat connection.

751-3.7 PLACEMENT AND TREATMENT OF CASTINGS, FRAMES, AND FITTINGS. All castings, frames, and fittings shall be placed in the positions indicated on the plans or as directed by the RPR, and shall be set true to line and elevation. If frames or fittings are to be set in concrete or cement mortar, all anchors or bolts shall be in place before the concrete or mortar is placed. The unit shall not be disturbed until the mortar or concrete has set.

When frames or fittings are placed on previously constructed masonry, the bearing surface of the masonry shall be brought true to line and grade and shall present an even bearing surface so the entire face or back of the unit will come in contact with the masonry. The unit shall be set in mortar beds and anchored to the masonry as indicated on the plans or as directed by the RPR. All units shall set firm and secure.

After the frames or fittings have been set in final position, the concrete or mortar shall be allowed to harden for seven (7) days before the grates or covers are placed and fastened down.

751-3.8 INSTALLATION OF STEPS. The steps shall be installed as indicated on the plans or as directed by the RPR. When the steps are to be set in concrete, they shall be placed and secured in position before the concrete is placed. When the steps are installed in brick masonry, they shall be placed as the masonry is being built. The steps shall not be disturbed or used until the concrete or mortar has hardened for at least seven (7) days. After seven (7) days, the steps shall be cleaned and painted, unless they have been galvanized.

When steps are required with precast concrete structures they shall meet the requirements of ASTM C478. The steps shall be cast into the side of the sections at the time the sections are manufactured or set in place after the structure is erected by drilling holes in the concrete and cementing the steps in place.

When steps are required with corrugated metal structures, they shall be welded into aligned position at a vertical spacing of 12 inches (300 mm).

Instead of steps, prefabricated ladders may be installed. For brick or concrete structures, the ladder shall be held in place by grouting the supports in drilled holes. For metal structures, the ladder shall be secured by welding the top support to the structure and grouting the bottom support into drilled holes in the foundation or as directed by the RPR.

751-3.9 BACKFILLING.

a. After a structure has been completed, the area around it shall be backfilled with approved material, in horizontal layers not to exceed 8 inches (200 mm) in loose depth, and compacted to

the density required in Item P-152. Each layer shall be deposited evenly around the structure to approximately the same elevation. The top of the fill shall meet the elevation shown on the plans or as directed by the RPR.

b. Backfill shall not be placed against any structure until approved by the RPR. For concrete structures, approval shall not be given until the concrete has been in place seven (7) days, or until tests establish that the concrete has attained sufficient strength to withstand any pressure created by the backfill and placing methods.

c. Backfill shall not be measured for direct payment. Performance of this work shall be considered an obligation of the Contractor covered under the contract unit price for the structure involved.

When structures are located within the runway safety area, POFA, RPZ, etc., the elevation of the structures shall be set to meet the grading requirements of these areas. Structures shall not exceed 3 inches (75 mm) above the elevation the surrounding areas.

751-3.10 CLEANING AND RESTORATION OF SITE. After the backfill is completed, the Contractor shall dispose of all surplus material, dirt, and rubbish from the site. Surplus dirt may be deposited in embankments, shoulders, or as approved by the RPR. The Contractor shall restore all disturbed areas to their original condition. The Contractor shall remove all tools and equipment, leaving the entire site free, clear, and in good condition.

METHOD OF MEASUREMENT

751-4.1 Manholes, catch basins, inlets, and inspection holes shall be measured by the unit.

BASIS OF PAYMENT

751-5.1 The accepted quantities of manholes, catch basins, inlets, and inspection holes will be paid for at the contract unit price per each in place when completed. This price shall be full compensation for furnishing all materials and for all preparation, excavation, backfilling and placing of the materials; furnishing and installation of such specials and connections to pipes and other structures as may be required to complete the item as shown on the plans; and for all labor equipment, tools and incidentals necessary to complete the structure.

Payment will be made under:

- | | |
|----------------|-------------------------|
| Item D-751-5.1 | Manholes - per each |
| Item D-751-5.2 | Catch Basins - per each |

Item D-751-5.3	Inlets - per each
Item D-751-5.4	Inspection Holes - per each

REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

ASTM International (ASTM)

ASTM A27	Standard Specification for Steel Castings, Carbon, for General Application
ASTM A47	Standard Specification for Ferritic Malleable Iron Castings
ASTM A48	Standard Specification for Gray Iron Castings
ASTM A123	Standard Specification for Zinc (Hot-Dip Galvanized) Coatings on Iron and Steel Products
ASTM A283	Standard Specification for Low and Intermediate Tensile Strength Carbon Steel Plates
ASTM A536	Standard Specification for Ductile Iron Castings
ASTM A897	Standard Specification for Austempered Ductile Iron Castings
ASTM C32	Standard Specification for Sewer and Manhole Brick (Made from Clay or Shale)
ASTM C144	Standard Specification for Aggregate for Masonry Mortar
ASTM C150	Standard Specification for Portland Cement
ASTM C443	Standard Specification for Joints for Concrete Pipe and Manholes, Using Rubber Gaskets.
ASTM C478	Standard Specification for Precast Reinforced Concrete Manhole Sections
ASTM C913	Standard Specification for Precast Concrete Water and Wastewater Structures.

American Association of State Highway and Transportation Officials (AASHTO)

AASHTO M36	Standard Specification for Corrugated Steel Pipe, Metallic-Coated, for Sewers and Drains
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Okaloosa County
D-751 Manholes, Catch Basins, Inlets and
Inspection Holes

Bob Sikes Airport
CEW South Apron Rehabilitation

END OF ITEM D-751

**ITEM
T-904 SODDING**

Wildlife Hazard Attractants and Mitigation: Through the appropriate selection of turf materials for the project(s), the Engineer must address the elimination and/or mitigation of materials that could attract hazardous wildlife on and/or around an airport. The Engineer should refer to the following documents and sites for guidance on wildlife hazards at Airports for all projects:

(1) Advisory circular (AC) 150/5200-33, Hazardous Wildlife Attractants on or Near Airports, contains guidance on certain land uses that have the potential to attract hazardous wildlife on or near airports. The AC is available at: http://www.faa.gov/airports/resources/advisory_circulars/.

(2) Wildlife Hazard Management at Airports, A Manual for Airport Personnel, is available at:

http://www.faa.gov/airports/airport_safety/wildlife/problem/media/2005_FAA_Manual_complete.pdf.

(3) Additional information on wildlife issues can be found on the FAA Guidance on Wildlife website at:

http://www.faa.gov/airports/airport_safety/wildlife/guidance

It is acceptable to specify that sodding be constructed in accordance with state specifications. All referenced state specifications must be included in project specifications.

The United States Department of Agriculture (USDA) / Animal and Plant Health Inspection Service (APHIS) / Wildlife Service staff should be consulted to ensure sod recommended is not a hazardous wildlife attractant.

DESCRIPTION

904-1.1 This item shall consist of furnishing, hauling, and placing approved live sod on prepared areas in accordance with this specification at the locations shown on the plans or as directed by the RPR.

MATERIALS

904-2.1 SOD. Sod furnished by the Contractor shall have a good cover of living or growing grass. This shall be interpreted to include grass that is seasonally dormant during the cold or dry seasons and capable of renewing growth after the dormant period. All sod shall be obtained from areas where the soil is reasonably fertile and contains a high percentage of loamy topsoil. Sod shall be cut or stripped from living, thickly matted turf relatively free of weeds or other undesirable foreign

plants, large stones, roots, or other materials that might be detrimental to the development of the sod or to future maintenance. At least 70% of the plants in the cut sod shall be composed of the species stated in the special provisions, and any vegetation more than 6 inches (150 mm) in height shall be mowed to a height of 3 inches (75 mm) or less before sod is lifted. Sod, including the soil containing the roots and the plant growth showing above, shall be cut uniformly to a thickness not less than that stated in the special provisions.

The specific species and varieties used should be based on recommendations of the local Agriculture Cooperative Extension Office. Modify sod thickness as required for species specified. State certified is usually more stringently monitored than State approved.

The United States Department of Agriculture (USDA) / Animal and Plant Health Inspection Service (APHIS) / Wildlife Service staff should be consulted to ensure sod stock recommended is not a hazardous wildlife attractant.

904-2.2 LIME. [Lime shall be ground limestone containing not less than 85% of total carbonates, and shall be ground to such fineness that 90% will pass through a No. 20 (850 µm) mesh sieve and 50% will pass through a No. 100 (150 µm) mesh sieve. Coarser material will be acceptable, providing the rates of application are increased to provide not less than the minimum quantities and depth specified in the special provisions on the basis of the two sieve requirements above. Dolomitic lime or a high magnesium lime shall contain at least 10% of magnesium oxide. Lime shall be applied at the rate of []. All liming materials shall conform to the requirements of ASTM C602.] [Not required.]

The Engineer shall specify the application rate in pounds per acre.

904-2.3 FERTILIZER. [Fertilizer shall be standard commercial fertilizers supplied separately or in mixtures containing the percentages of total nitrogen, available phosphoric acid, and water-soluble potash. They shall be applied at the rate and to the depth specified, and shall meet the requirements of applicable state laws. They shall be furnished in standard containers with name, weight, and guaranteed analysis of contents clearly marked thereon. No cyanamide compounds or hydrated lime shall be permitted in mixed fertilizers.

The fertilizers may be supplied in one of the following forms:

- a. A dry, free-flowing fertilizer suitable for application by a common fertilizer spreader;
- b. A finely-ground fertilizer soluble in water, suitable for application by power sprayers; or
- c. A granular or pellet form suitable for application by blower equipment.

Fertilizers shall be commercial fertilizer and shall be spread at the rate of .]

[Not required.]

The Engineer shall specify the analysis and the application rate in pounds per acre.

Check with the local Agricultural Cooperative Extension Office for recommended fertilizer mixture for local conditions.

Paragraphs 904-2.2 and 904-2.3 shall be deleted if not applicable.

904-2.4 WATER. The water shall be sufficiently free from oil, acid, alkali, salt, or other harmful materials that would inhibit the growth of grass.

904-2.5 SOIL FOR REPAIRS. The soil for fill and topsoiling of areas to be repaired shall be at least of equal quality to that which exists in areas adjacent to the area to be repaired. The soil shall be relatively free from large stones, roots, stumps, or other materials that will interfere with subsequent sowing of seed, compacting, and establishing turf, and shall be approved by the RPR before being placed.

CONSTRUCTION METHODS

904-3.1 GENERAL. Areas to be solid, strip, or spot sodded shall be shown on the plans. Areas requiring special ground surface preparation such as tilling and those areas in a satisfactory condition that are to remain undisturbed shall also be shown on the plans.

Suitable equipment necessary for proper preparation of the ground surface and for the handling and placing of all required materials shall be on hand, in good condition, and shall be approved by the RPR before the various operations are started. The Contractor shall demonstrate to the RPR before starting the various operations that the application of required materials will be made at the specified rates.

904-3.2 PREPARING THE GROUND SURFACE. After grading of areas has been completed and before applying fertilizer and limestone, areas to be sodded shall be raked or otherwise cleared of stones larger than 2 inches (50 mm) in any diameter, sticks, stumps, and other debris which might interfere with sodding, growth of grasses, or subsequent maintenance of grass-covered areas. If any damage by erosion or other causes occurs after grading of areas and before beginning the application of fertilizer and ground limestone, the Contractor shall repair such damage. This may include filling gullies, smoothing irregularities, and repairing other incidental damage.

904-3.3 APPLYING FERTILIZER AND GROUND LIMESTONE. Following ground surface preparation, fertilizer shall be uniformly spread at a rate which will provide not less than the minimum quantity of each fertilizer ingredient, as stated in the special provisions. If use of ground limestone is required, it shall then be spread at a rate that will provide not less than the minimum

quantity stated in the special provisions. These materials shall be incorporated into the soil to a depth of not less than 2 inches (50 mm) by discing, raking, or other suitable methods. Any stones larger than 2 inches (50 mm) in any diameter, large clods, roots, and other litter brought to the surface by this operation shall be removed.

904-3.4 OBTAINING AND DELIVERING SOD. After inspection and approval of the source of sod by the RPR, the sod shall be cut with approved sod cutters to such a thickness that after it has been transported and placed on the prepared bed, but before it has been compacted, it shall have a uniform thickness of not less than 2 inches (50 mm). Sod sections or strips shall be cut in uniform widths, not less than 10 inches (250 mm), and in lengths of not less than 18 inches (0.5 m), but of such length as may be readily lifted without breaking, tearing, or loss of soil. Where strips are required, the sod must be rolled without damage with the grass folded inside. The Contractor may be required to mow high grass before cutting sod.

The sod shall be transplanted within 24 hours from the time it is stripped, unless circumstances beyond the Contractor's control make storing necessary. In such cases, sod shall be stacked, kept moist, and protected from exposure to the air and sun and shall be kept from freezing. Sod shall be cut and moved only when the soil moisture conditions are such that favorable results can be expected. Where the soil is too dry, approval to cut sod may be granted only after it has been watered sufficiently to moisten the soil to the depth the sod is to be cut.

904-3.5 LAYING SOD. Sodding shall be performed only during the seasons when satisfactory results can be expected. Frozen sod shall not be used and sod shall not be placed upon frozen soil. Sod may be transplanted during periods of drought with the approval of the RPR, provided the sod bed is watered to moisten the soil to a depth of at least 4 inches (100 mm) immediately prior to laying the sod.

The sod shall be moist and shall be placed on a moist earth bed. Pitch forks shall not be used to handle sod, and dumping from vehicles shall not be permitted. The sod shall be carefully placed by hand, edge to edge and with staggered joints, in rows at right angles to the slopes, commencing at the base of the area to be sodded and working upward. The sod shall immediately be pressed firmly into contact with the sod bed by tamping or rolling with approved equipment to provide a true and even surface, and ensure knitting without displacement of the sod or deformation of the surfaces of sodded areas. Where the sod may be displaced during sodding operations, the workmen, when replacing it, shall work from ladders or treaded planks to prevent further displacement. Screened soil of good quality shall be used to fill all cracks between sods. The quantity of the fill soil shall not cause smothering of the grass. Where the grades are such that the flow of water will be from paved surfaces across sodded areas, the surface of the soil in the sod after compaction shall be set approximately one inch (25 mm) below the pavement edge. Where the flow will be over the sodded areas and onto the paved surfaces around manholes and inlets, the surface of the soil in the sod after compaction shall be placed flush with pavement edges.

On slopes steeper than one (1) vertical to 2-1/2 horizontal and in v-shaped or flat-bottom ditches or gutters, the sod shall be pegged with wooden pegs not less than 12 inches (300 mm) in length and have a cross-sectional area of not less than 3/4 sq inch (18 sq mm). The pegs shall be driven flush with the surface of the sod.

904-3.6 WATERING. Adequate water and watering equipment must be on hand before sodding begins, and sod shall be kept moist until it has become established and its continued growth

assured. In all cases, watering shall be done in a manner that will avoid erosion from the application of excessive quantities and will avoid damage to the finished surface.

904-3.7 ESTABLISHING TURF. The Contractor shall provide general care for the sodded areas as soon as the sod has been laid and shall continue until final inspection and acceptance of the work. All sodded areas shall be protected against traffic or other use by warning signs or barricades approved by the RPR. The Contractor shall mow the sodded areas with approved mowing equipment, depending upon climatic and growth conditions and the needs for mowing specific areas. Weeds or other undesirable vegetation shall be mowed and the clippings raked and removed from the area.

904-3.8 REPAIRING. When the surface has become gullied or otherwise damaged during the period covered by this contract, the affected areas shall be repaired to re-establish the grade and the condition of the soil, as directed by the RPR, and shall then be sodded as specified in paragraph 904-3.5.

METHOD OF MEASUREMENT

904-4.1 This item shall be measured on the basis of the area in square yards (square meters) of the surface covered with sod and accepted.

BASIS OF PAYMENT

904-5.1 This item will be paid for on the basis of the contract unit price per square yard (square meter) for sodding, which price shall be full compensation for all labor, equipment, material, staking, and incidentals necessary to satisfactorily complete the items as specified.

Payment will be made under:

Item T-904-5.1	Sodding	- per Square Yard (Square Meter)
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REFERENCES

The publications listed below form a part of this specification to the extent referenced. The publications are referred to within the text by the basic designation only.

ASTM International (ASTM)

ASTM C602	Standard Specification for Agricultural Liming Materials
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Advisory Circulars (AC)

AC 150/5200-33	Hazardous Wildlife Attractants on or Near Airports
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FAA/United States Department of Agriculture

Wildlife Hazard Management at Airports, A Manual for Airport Personnel

Okaloosa County
T-904 Sodding

Bob Sikes Airport
CEW South Apron Rehabilitation

END OF ITEM T-904

STATE OF FLORIDA DEPARTMENT OF TRANSPORTATION
**PUBLIC TRANSPORTATION
 GRANT AGREEMENT**

Form 125-107-11
 01/04/13
 DEVELOPMENT
 DSG 4100

Financial Project Number(s): <small>(Must include all applicable)</small> 4239074-94-01	Fund(s):	DDR, DPTO	FLAIR Category:	088719
	Work Activity Code/Function:	215	Object Code:	751000
	Federal Number/Federal Award		Org. Code:	55032020529
	Identification Number (FA/N) - Transit only:	N/A	Vendor Number:	VF596000766015
Contract Number:	GTX18	Federal Award Date:	N/A	
CFDA Number:	N/A	Agency OMB Number:		
CFDA Title:	N/A			
CSFA Number:	55.004			
CSFA Title:	Aviation Grant Program			

THIS PUBLIC TRANSPORTATION GRANT AGREEMENT ("Agreement") is entered into on June 4, 2021, by and between the State of Florida, Department of Transportation, ("Department"), and Ocala County, ("Agency"). The Department and the Agency are sometimes referred to in this Agreement as a "Party" and collectively as the "Parties."

NOW, THEREFORE, in consideration of the mutual benefits to be derived from joint participation on the Project, the Parties agree to the following:

1. **Authority.** The Agency, by Resolution or other form of official authorization, a copy of which is attached as **Exhibit "D", Agency Resolution** and made a part of this Agreement, has authorized its officers to execute this Agreement on its behalf. The Department has the authority pursuant to Section(s) 332.007, Florida Statutes, to enter into this Agreement.

2. **Purpose of Agreement.** The purpose of this Agreement is to provide for the Department's participation in Rehab South Area at Bob Sikes Airport - Construction, as further described in **Exhibit "A", Project Description and Responsibilities**, attached and incorporated in to this Agreement ("Project"), to provide Department financial assistance to the Agency, state the terms and conditions upon which Department funds will be provided, and to set forth the manner in which the Project will be undertaken and completed.

3. **Program Area.** For identification purposes only, this Agreement is implemented as part of the Department program area selected below (select all programs that apply):

- Aviation
- Seaports
- Transit
- Intermodal
- Rail Crossing Closure
- Match to Direct Federal Funding (Aviation or Transit)
- (Note: Section 15 and Exhibit G do not apply to federally matched funding)
- Other

4. **Exhibits.** The following Exhibits are attached and incorporated into this Agreement:

- Exhibit A: Project Description and Responsibilities
- Exhibit B: Schedule of Financial Assistance
- Exhibit B1: Deferred Reimbursement Financial Provisions
- Exhibit B2: Advance Payment Financial Provisions
- Exhibit C: Terms and Conditions of Construction
- Exhibit D: Agency Resolution
- Exhibit E: Program Specific Terms and Conditions
- Exhibit F: Contract Payment Requirements
- Exhibit G: Audit Requirements for Awards of State Financial Assistance
- Exhibit H: Audit Requirements for Awards of Federal Financial Assistance

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BASE BID				
ITEM NO.	BID ITEM	ITEM DESCRIPTION	UNIT	QTY
1	C-100-1	CONTRACTOR QUALITY CONTROL PROGRAM	LS	1
2	C-102-1	EROSION AND POLLUTION CONTROL	LS	1
3	C-105-1	MOBILIZATION	LS	1
4	C-105-1	SAFETY, SECURITY, AND MAINTENANCE OF TRAFFIC	LS	1
5	P-101-1	PAVEMENT REMOVAL - COMPLETE ASPHALT REMOVAL (Ø)	SY	6,900
6	P-101-2	PAVEMENT REMOVAL - COMPLETE ASPHALT REMOVAL (Ø)	SY	10,200
7	P-101-6	MISCELLANEOUS DEMOLITION	LS	1
8	P-101-6	TIE-DOWN REMOVAL	EA	37
9	P-211-1	EXISTING BASE COURSE PREPARATION	SY	11,900
10	P-154-1	STABILIZED SUBBASE COURSE (Ø)	TON	2,050
11	P-205-1	RANDOM ROAD V GARD AND SEAL	LF	200
12	P-620-1	PAVEMENT MARKINGS WITH REFLECTIVE MEDIA, YELLOW	SF	800
13	P-620-2	PAVEMENT MARKINGS WITHOUT REFLECTIVE MEDIA, BLACK	SF	1,800
14	P-620-3	PAVEMENT MARKINGS WITHOUT REFLECTIVE MEDIA, WHITE, NUMERALS	EA	4
15	Td-1	NEW TIE-DOWN, COMPLETE	EA	29

ADDITIVE ALTERNATE NO. 1				
ITEM NO.	BID ITEM	ITEM DESCRIPTION	UNIT	QTY
1	C-100-1	CONTRACTOR QUALITY CONTROL PROGRAM	LS	1
2	C-102-1	EROSION AND POLLUTION CONTROL	LS	1
3	C-105-1	MOBILIZATION	LS	1
4	C-105-1	SAFETY, SECURITY, AND MAINTENANCE OF TRAFFIC	LS	1
5	P-101-2	PAVEMENT REMOVAL - COMPLETE ASPHALT REMOVAL (Ø)	SY	10,900
6	P-101-3	PAVEMENT REMOVAL - COMPLETE ASPHALT REMOVAL (Ø)	SY	950
7	P-101-4	CONCRETE PAVEMENT REMOVAL	SY	250
8	P-101-5	MISCELLANEOUS DEMOLITION	LS	1
9	P-101-6	TIE-DOWN REMOVAL	EA	118
10	P-152-1	EXCAVATION AND EMBANKMENT	LS	1
11	P-154-1	STABILIZED SUBBASE COURSE (Ø)	SY	950
12	P-211-1	EXISTING BASE COURSE PREPARATION	SY	10,900
13	P-212-1	LIMEROCK BASE COURSE (Ø)	SY	900
14	P-401-1	BITUMINOUS SURFACE COURSE	TON	3,050
15	P-620-1	PAVEMENT MARKINGS WITH REFLECTIVE MEDIA, YELLOW	SF	1,150
16	P-620-2	PAVEMENT MARKINGS WITHOUT REFLECTIVE MEDIA, BLACK	SF	2,250
17	P-620-3	PAVEMENT MARKINGS WITHOUT REFLECTIVE MEDIA, WHITE, NUMERALS	EA	90
18	Td-1	NEW TIE-DOWN, COMPLETE	EA	117

ADDITIVE ALTERNATE NO. 2				
ITEM NO.	BID ITEM	ITEM DESCRIPTION	UNIT	QTY
1	C-100-1	CONTRACTOR QUALITY CONTROL PROGRAM	LS	1
2	C-102-1	EROSION AND POLLUTION CONTROL	LS	1
3	C-105-1	MOBILIZATION	LS	1
4	C-105-1	SAFETY, SECURITY, AND MAINTENANCE OF TRAFFIC	LS	1
5	P-101-2	PAVEMENT REMOVAL - COMPLETE ASPHALT REMOVAL (Ø)	SY	2,800
6	P-101-3	PAVEMENT REMOVAL - COMPLETE ASPHALT REMOVAL (Ø)	SY	3,800
7	P-101-6	TIE-DOWN REMOVAL	EA	19
8	P-152-1	EXCAVATION AND EMBANKMENT	LS	1
9	P-154-1	STABILIZED SUBBASE COURSE (Ø)	SY	3,800
10	P-211-1	EXISTING BASE COURSE PREPARATION	SY	2,000
11	P-212-1	LIMEROCK BASE COURSE (Ø)	SY	3,800
12	P-401-1	BITUMINOUS SURFACE COURSE	TON	1,600
13	P-620-1	PAVEMENT MARKINGS WITH REFLECTIVE MEDIA, YELLOW	SF	405
14	P-620-2	PAVEMENT MARKINGS WITHOUT REFLECTIVE MEDIA, BLACK	SF	810
15	P-620-3	PAVEMENT MARKINGS WITHOUT REFLECTIVE MEDIA, WHITE, NUMERALS	EA	1
16	Td-1	NEW TIE-DOWN, COMPLETE	EA	117
17	L-108-1	NO. 100 TYPE I, UNHESHEDED #6 AWG R/YV CABLE	LF	200
18	L-108-2	NO. 2 AWG SOLID COPPER COUNTERPOLE WIRE	LF	200
19	L-110-1	1/2" SCHEDULE 40 PVC DIRECT BURIED BURIED DUCT	LF	200
20	L-125-1	L-ØØ(TL) OMNIDIRECTIONAL BLUE, LED, TAXWAY EDGE LIGHT (T)	LF	4
21	ØØ-1	Ø" SCHEDULE 40 PVC WITH BACKFILL, COMPLETE	LF	200

ADDITIVE ALTERNATE NO. 3				
ITEM NO.	BID ITEM	ITEM DESCRIPTION	UNIT	QTY
1	C-100-1	CONTRACTOR QUALITY CONTROL PROGRAM	LS	1
2	C-102-1	EROSION AND POLLUTION CONTROL	LS	1
3	C-105-1	MOBILIZATION	LS	1
4	C-105-1	SAFETY, SECURITY, AND MAINTENANCE OF TRAFFIC	LS	1
5	P-101-2	PAVEMENT REMOVAL - COMPLETE ASPHALT REMOVAL (Ø)	SY	6,900
6	P-101-3	PAVEMENT REMOVAL - COMPLETE ASPHALT REMOVAL (Ø)	SY	1,700
7	P-101-6	MISCELLANEOUS DEMOLITION	LS	1
8	P-101-6	TIE-DOWN REMOVAL	EA	8
9	P-152-1	EXCAVATION AND EMBANKMENT	LS	1
10	P-154-1	STABILIZED SUBBASE COURSE (Ø)	SY	1,700
11	P-211-1	EXISTING BASE COURSE PREPARATION	SY	6,900
12	P-212-1	LIMEROCK BASE COURSE (Ø)	SY	1,700
13	P-401-1	BITUMINOUS SURFACE COURSE	TON	2,100
14	P-620-1	PAVEMENT MARKINGS WITH REFLECTIVE MEDIA, YELLOW	SF	500
15	P-620-2	PAVEMENT MARKINGS WITHOUT REFLECTIVE MEDIA, BLACK	SF	240
16	P-620-3	PAVEMENT MARKINGS WITHOUT REFLECTIVE MEDIA, WHITE, NUMERALS	EA	2
17	Td-1	NEW TIE-DOWN, COMPLETE	EA	8

ADDITIVE ALTERNATE NO. 4				
ITEM NO.	BID ITEM	ITEM DESCRIPTION	UNIT	QTY
1	C-102-1	EROSION AND POLLUTION CONTROL	LS	1
2	C-105-1	MOBILIZATION	LS	1
3	C-105-1	SAFETY, SECURITY, AND MAINTENANCE OF TRAFFIC	LS	1
4	P-152-1	EXCAVATION AND EMBANKMENT	LS	1
5	D-751-1	TYPE H TOP (Ø) GRATE WITH TYPE J BOTTOM (Ø-Ø) (Ø)	EA	2
6	D-751-2	TYPE H TOP (Ø) GRATE WITH TYPE J BOTTOM (Ø-Ø) (Ø)	EA	4
7	D-701-1	Ø" Ø" RCP, CLASS III	LF	161
8	D-701-2	Ø" Ø" RCP, CLASS III	LF	1,164
9	D-701-3	Ø" RCP	LF	258
10	T04-1	ØØØØØ ARGENTINE BANNA	SY	2,500
11	PV-1	PIRANAT	SY	7,400

ADDITIVE ALTERNATE NO. 5				
ITEM NO.	BID ITEM	ITEM DESCRIPTION	UNIT	QTY
1	P-101-7	CONCRETE FOUNDATION DEMOLITION	EA	5
2	ØØØ-1	FOUNDATION AND INSTALL FROM MAINT LIGHTS NO. 2 AND 5, COMPLETE	LS	1



AVCON, INC.
ENGINEERS & PLANNERS

239 BA WINDY DRIVE, SUITE A, MCDONALD, FL 32064-0408
OFFICE: (904) 241-1100, FAX: (904) 241-1106
CORPORATE OFFICE: 1000 W. UNIVERSITY BLVD., SUITE 1000, GAITHERSBURG, MD 20878

ENGINEER OF RECORD:
NAME: JOHN R. COLLINS
FL LICENSE NO. 75419

AVCON, INC.
100 BAYSHORE DRIVE, SUITE A
MCDONALD, FL 32078
PHONE: (904) 275-0000
FAX: (904) 275-0000

FBR CERTIFICATE OF AUTHORIZATION NO. 3557

**BOB SIKES AIRPORT
CRESTVIEW, FL**

**SOUTH APRON
REHABILITATION**

**INDEX OF DRAWINGS &
SUMMARY OF
QUANTITIES**

THIS DOCUMENT CONTAINS REVISIONS AND PROCEEDS BY AVCON, INC. FOR THE PROJECT. ANY CHANGES TO THIS DOCUMENT SHALL BE MADE BY AVCON, INC. OR BY THE CLIENT. APPROVED FOR THE CLIENT BY THE CLIENT'S REPRESENTATIVE. NO PART OF THIS DOCUMENT SHALL BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM, WITHOUT PERMISSION IN WRITING FROM AVCON, INC.

REVISIONS:			
NO.	DATE	BY	DESCRIPTION

RELEASE FOR BID

DESIGNED BY: J.R.C.
DRAWN BY: C.A.P.
CHECKED BY: J.R.C.
APPROVED BY: V.C.L.
DATE: MARCH 2023

AVCON PROJECT NO. 2017.059.09
SHEET NUMBER
G-2

SAFETY NOTES:

- SAFETY GUIDELINES** - IN THE INTEREST OF SAFETY, THE CONTRACTOR IS ALSO DIRECTED TO ACQUAINT HIS/HER EMPLOYEES WITH THE PROVISIONS OF THE MOST RECENT VERSION OF THE FOLLOWING FEDERAL AVIATION ADMINISTRATION ADVISORY CIRCULARS:
 - 150/5370-3 - OPERATIONAL SAFETY ON AIRPORTS DURING CONSTRUCTION.
 - 150/5210-5 - PAINTING, MARKING AND LIGHTING OF VEHICLES USED ON AN AIRPORT
 - 150/5201-18 - AIRPORT SAFETY SELF-INSPECTION
 - 150/5340-5 - STANDARDS FOR AIRPORT NAVIGATION
 - ORDER OF 3200.5 - SAFETY REQUIREMENTS ON AIRPORTS DURING ACTIVE FLUNDED CONSTRUCTION ACTIVITY
- AFTER COMPLETION OF WORK**, THE CONTRACTOR SHALL RE-STRIPPE ALL/ANY EXISTING RUNWAY, TAXIWAY, OR TAXIWAY CENTERLINE MARKINGS WHICH WERE TEMPORARILY REMOVED FOR CONSTRUCTION OR DAMAGED DURING CONSTRUCTION, MATCHING ORIGINAL CONDITION TO THE SATISFACTION OF THE OWNER OR OWNER'S REPRESENTATIVE.
- CONTRACTOR SHALL RELOCATE AND RESTORE AFTER COMPLETION OF CONSTRUCTION**, ANY TAXIWAY CENTER LIGHTS, EDGE LIGHTS, OR GUIDANCE SIGNS THAT MAY EXIST WITHIN THE CONSTRUCTION AREA, IF REMOVED OR RELOCATED. CONTRACTOR SHALL PROVIDE "JUMPER CABLES" TO KEEP ELECTRICAL CIRCUITS IN OPERATION.
- AIRPORT OPERATIONS** - THE CONTRACTOR SHALL APPOINT SAFETY OFFICERS IN ACCORDANCE WITH THE PROJECT MANUAL. THE CONTRACTOR SHALL ALSO ACQUAINT ALL SUPERVISORS AND EMPLOYEES WITH THE ACTIVITIES OF THE BOB SIKES AIRPORT AND OPERATIONS THAT ARE INHERENT AT THIS ACTIVE AIRPORT AND SHALL CONDUCT CONSTRUCTION ACTIVITIES TO CONFORM TO ALL ROUTINE AND EMERGENCY AIR TRAFFIC REQUIREMENTS AND GUIDELINES AS SPECIFIED IN THE PROJECT MANUAL AND AS SPECIFIED BY THE FIELD REPRESENTATIVE AND THE FAA.
- VEHICLE IDENTIFICATION** - ALL CONTRACTOR VEHICLES THAT ARE AUTHORIZED TO OPERATE ON THE AIRPORT SHALL DISPLAY IN FULL VIEW ABOVE THE VEHICLE A 3' X 3' OR LARGER ORANGE AND WHITE CHECKERED FLAG, EACH CHECK BEING 1" SQUARE. COMPANY DECALS WITH NOT LESS THAN 8" LETTERS MAY BE SUBSTITUTED FOR FLAGS ON SUPERVISORY VEHICLES AND LIGHT TRUCKS. ALL VEHICLES OPERATING IN THE ACTIVE AIRPORT OPERATIONS AREA (AOA) DURING THE HOURS OF DARKNESS SHALL BE EQUIPPED WITH A FLASHING YELLOW DOME - TYPE LIGHT MOUNTED ON TOP OF THE VEHICLE AND OF SUCH INTENSITY TO CONFORM TO LOCAL CODES FOR MAINTENANCE AND EMERGENCY VEHICLES.
- GROUND CONTROL** - NO CONTRACTOR VEHICLES OR EQUIPMENT SHALL ACCESS OR CROSS ACTIVE RUNWAYS, TAXIWAYS, OBJECT FREE AREAS AND APPROACH CLEAR ZONES. ACCESS INTO THE EXISTING SOUTH APRON SHALL BE LIMITED TO THE SOUTH 1,300 FT OF THE GENERAL APRON PAVEMENT.
- WORK REQUIRING PAVEMENT CLOSURE** SHALL BE PERFORMED IN ACCORDANCE WITH THE SAFETY PLANS AND AIRPORT PROJECT MANUAL. NO AIRPORT OR AIRPORT ROADWAY SHALL BE CLOSED WITHOUT APPROVAL OF AIRPORT MANAGEMENT. TO ENABLE NECESSARY NOTICES TO AIRMAIL (NOTAMS) OR ADVISORIES TO AIRPORT SERVICES OR TOWELS, A MINIMUM OF SEVENTY-TWO (72) HOURS WRITTEN NOTICE OF REQUESTED CLOSING SHALL BE DIRECTED TO THE OWNER, WHO WILL COORDINATE THE REQUEST WITH AIRPORT OPERATIONS.
- OPEN TRENCHES** - ANY CONSTRUCTION ABOVE 3" OR OPEN TRENCHES IN EXCESS OF 3" WITHIN 150' OF AN ACTIVE RUNWAY CENTERLINE OR WITHIN 40' FROM AN ACTIVE TAXIWAY CENTERLINE WILL REQUIRE CLOSURE OF THE AFFECTED RUNWAY OR TAXIWAY, UNLESS OTHERWISE APPROVED BY THE OWNER. (SEE NOTE 4 ABOVE). ALL TRENCHING MUST BE CONSTRUCTED TO MEET ALL FEDERAL, STATE (FLORIDA TRENCH SAFETY ACT) AND LOCAL LAWS (INCLUDES OSHA STANDARDS).
- TRENCH MARKING** - OPEN TRENCHES AND EXCAVATIONS LOCATED WITHIN 250' FROM AN ACTIVE TAXIWAY CENTERLINE SHALL BE PROMINENTLY MARKED WITH FLAGS AND LIGHTED BY APPROVED LIGHT UNITS (FLARE POTS NOT ALLOWED) DURING HOURS OF RESTRICTED VISIBILITY AND DARKNESS. THE CONTRACTOR WILL ENSURE THAT AN EMPLOYEE REMAINS ON-CALL TWENTY-FOUR (24) HOURS PER DAY FOR EMERGENCY MAINTENANCE OF HAZARD LIGHTING AND BARRIAGES. NO OPEN TRENCHES ARE PERMITTED ADJACENT TO ACTIVE AOA UNLESS APPROVED BY AIRSIDE OPERATIONS. THESE TRENCHES SHALL BE BACKFILLED WHEN THE CONTRACTOR IS NOT PERFORMING CONSTRUCTION IN THESE TRENCHES. SIGNS OR EXCAVATIONS PERMITTED TO REMAIN OPEN SHALL BE COMPLETELY ENCLOSED WITHIN AIRPORT-TYPE BARRIAGES AND PROPERLY LIGHTED. INDIVIDUAL FLAGS AND/OR LIGHTS WILL NOT BE PERMITTED AROUND OPEN TRENCHES/EXCAVATIONS DURING NIGHTTIME HOURS.
- OPEN FLAME** - OPEN FLAME, WELDING OR TORCH-CUTTING OPERATIONS ARE PROHIBITED UNLESS ADEQUATE FIRE AND SAFETY PRECAUTIONS HAVE BEEN TAKEN AND THE PROCEDURE APPROVED BY AIRPORT OPERATIONS.
- STOCKPILE BURN AND DUST CONTROL** - STOCKPILED MATERIAL AND OPEN EXCAVATIONS SHALL BE TRACKED IN SUCH A MANNER AS TO PREVENT INADEQUATE RESULTING FROM AIRCRAFT BLAST OR WIND CONDITIONS IN EXCESS OF 10 KNOTS. STOCKPILED MATERIALS SHALL NOT BE PERMITTED WITHIN 250' OF AN ACTIVE RUNWAY CENTERLINE OR 65.5' FROM AN ACTIVE TAXIWAY CENTERLINE.
- DEBRIS CONTROL** - DEBRIS, WASTE AND LOOSE MATERIAL SHALL NOT BE ALLOWED ON ACTIVE AIRPORT MOVEMENT AREAS OR APRONS. IF OBSERVED TO BE ON ACTIVE AIRPORT MOVEMENT AREAS OR APRONS, THE MATERIAL WILL BE REMOVED IMMEDIATELY BY THE CONTRACTOR. THE FIELD REPRESENTATIVE MAY DIRECT THAT DEBRIS PROBLEMS DURING CONSTRUCTION NOT CORRECTED BY THE CONTRACTOR BE CORRECTED BY OTHERS AT THE EXPENSE OF CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE TO KEEP THE PAVEMENTS ADJACENT TO THE WORK AREA CLEAR OF DEBRIS AND POO AT ALL TIMES.
- INSPECTION BY OPERATIONS** - PRIOR TO OPENING FOR AIRCRAFT USE AND THE DEPARTURE OF THE CONTRACTOR'S WORK CREWS, THE FIELD REPRESENTATIVE WILL ARRIVE FOR INSPECTION BY AIRPORT OPERATIONS OF ANY RUNWAY, TAXIWAY SAFETY AREA, OR APRON THAT HAS BEEN CLOSED FOR WORK, OR THAT HAS BEEN USED FOR A CROSSING POINT OR HAUL ROUTE BY THE CONTRACTOR. THESE AREAS MUST COMPLY WITH THE SAFETY REQUIREMENTS DEFINED BY FEDERAL AVIATION REGULATIONS PART 139 AND INTERPRETED BY THE DESIGNATED OPERATIONS INSPECTOR BEFORE PERMISSION FOR THE CONTRACTOR'S WORK CREWS TO DEPART WILL BE GRANTED.
- NO SMOKING SHALL BE ALLOWED WITHIN THE AOA.**
- DESIGNATED AIRPORT REPRESENTATIVE SHALL HAVE THE AUTHORITY TO DISCONTINUE CONSTRUCTION OPERATIONS AT ANY TIME, FOR ANY REASON. THE AIRPORT REPRESENTATIVE CAN REQUIRE THE CONTRACTOR TO LEAVE THE AIRSIDE AOA AND/OR AIRPORT PROPERTY AND EVACUATE THE WORK AREA WITHIN THIRTY (30) MINUTES AFTER RECEIVING NOTICE.**
- ALL BARRICADE LIGHTING, TEMPORARY SIGNAGE AND CONES SHALL BE VERIFIED BY THE CONTRACTOR FOR PROPER OPERATION AT THE END OF EACH DAY BEFORE THE CONTRACTOR CROSSES OPERATION. THE INTENSITY OF THE LIGHTS AND THE SPACING FOR BARRIAGES, SHALL BE ADEQUATE TO DELINEATE THE HAZARDOUS AREA WITHOUT AMBIGUITY. NO MORE THAN 10% OF THE LIGHTS FOR BARRIAGES SHALL BE INOPERABLE AT ANY TIME, AND AT NO TIME SHALL TWO (2) CONSECUTIVE LIGHTS BE INOPERABLE. THE CONTRACTOR SHALL IMMEDIATELY REPLACE ANY BARRIAGES, LIGHTS OR FLAGS WHICH IN THE OPINION OF THE FIELD REPRESENTATIVE OR AIRPORT OPERATIONS ARE NOT ADEQUATE.**
- THE CONTRACTOR AT ALL TIMES SHALL MAINTAIN VEHICLES, EQUIPMENT AND MATERIALS OFF THE AIRCRAFT CONTAINMENT LINE DURING CONSTRUCTION. THE CONTRACTOR MAY BE REQUIRED TO WORK 24 HOURS EACH DAY IN DESIGNATED AREAS IN ORDER TO MINIMIZE THE SHUT DOWN TIME. NO ADDITIONAL CONTRACT COST SHALL BE ALLOWED FOR WORK TO BE ACCOMPLISHED "AROUND THE CLOCK" (24 HOURS PER DAY).**
- CONTRACTOR SHALL REMOVE ALL EQUIPMENT FROM OBJECT FREE AREAS DURING HOURS OF AIRCRAFT OPERATIONS.**
- THE FINAL LIFT OF ASPHALT SHALL BE CONSTRUCTED DURING DAYLIGHT HOURS, UNLESS OTHERWISE APPROVED BY THE ENGINEER.**
- ALL MARKINGS WITHIN THE CONSTRUCTION AREA IN CONFLICT WITH THE SAFETY PLANS SHALL BE REMOVED & REPLACED AS REQUIRED AND IN ACCORDANCE WITH P-620 OF THE PROJECT MANUAL.**
- ALL EQUIPMENT, MATERIAL AND CONSTRUCTION PERSONNEL SHALL BE KEPT AT LEAST 250' FROM CENTERLINE OF ACTIVE RUNWAY, 65.5' FROM AN ACTIVE TAXIWAY AT ALL TIMES.**
- CONTRACTOR IS REQUIRED TO MONITOR RADIO COMMUNICATIONS AT ALL TIMES. CTAF (COMMON TRAFFIC ADVISORY FREQUENCY) & UNCOM FREQUENCY: 122.65**
- NO EQUIPMENT OR MATERIALS SHALL EXCEED A HEIGHT OF 35 FT WITHOUT PRIOR APPROVAL FROM ENGINEER.**

SECURITY NOTES:

- GENERAL** - THE CONTRACTOR SHALL COMPLY WITH ALL SECURITY REQUIREMENTS SPECIFIED IN THE CONTRACT MANUAL. THE CONTRACTOR SHALL DEBRIEF IN WRITING TO THE FIELD REPRESENTATIVE, THE NAME OF THE "CONTRACTOR SECURITY OFFICER", THE CONTRACTOR SECURITY OFFICER SHALL REPRESENT THE CONTRACTOR ON THE SECURITY REQUIREMENTS OF THE CONTRACT.
- CONTRACTOR SECURITY COMMITTEE** - A COMMITTEE SHALL BE ESTABLISHED CONCURRENT WITH THE LIFE OF THIS CONTRACT TO MONITOR AND COORDINATE SECURITY PROVISIONS, ADOPT NEW SECURITY PROVISIONS IF REQUIRED AND REVIEW AND APPROVE ALL MATTERS OF AIRPORT SECURITY RELATED TO THIS CONTRACT. MEETINGS SHALL BE SCHEDULED BY THE FIELD REPRESENTATIVE. COMMITTEE MEMBERSHIP SHALL INCLUDE THE CONTRACTOR SECURITY OFFICER, FIELD REPRESENTATIVE AND AIRPORT OPERATIONS.
- CONTRACTOR PERSONNEL SECURITY ORIENTATION** - THE CONTRACTOR SECURITY OFFICER SHALL BE RESPONSIBLE FOR BREEFING ALL CONTRACTOR PERSONNEL ON THESE REQUIREMENTS AND FROM TIME TO TIME, OTHER SECURITY PROVISIONS ADOPTED BY THE CONSTRUCTION SECURITY COMMITTEE. ALL NEW CONTRACTOR EMPLOYEES SHALL BE BRIEFED ON THESE REQUIREMENTS PRIOR TO WORKING IN THE CONSTRUCTION AREA.
- ACCESS TO THE SITE** - CONTRACTOR'S ACCESS TO THE SITE SHALL BE AS SHOWN ON THE PLANS OR AS DIRECTED BY THE FIELD REPRESENTATIVE. THE CONTRACTOR SHALL NOT PERMIT ANY UNAUTHORIZED PERSONNEL OR TRAFFIC ON THE SITE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TRAFFIC CONTROL TO AND FROM THE VARIOUS CONSTRUCTION AREAS ON THE SITE. THE CONTRACTOR IS RESPONSIBLE FOR THE IMMEDIATE CLEANUP OF ANY DEBRIS DEPOSITED ALONG ANY ACCESS ROAD AS A RESULT OF THE CONSTRUCTION (E.G. TRAFFIC). DIRECTIONAL SIGNING AT THE ACCESS GATE AND ALONG THE DELIVERY ROUTE TO THE STORAGE AREA OR WORK SITE SHALL NOT BE PERMITTED.
- MATERIALS DELIVERY TO THE SITE** - ALL CONTRACTOR'S MATERIAL ORDERS FOR DELIVERY TO THE SITE WILL USE THE ACCESS POINT AT THE CONTRACTOR'S STAGING AREA AS A DELIVERY ADDRESS AT THE AIRPORT. ALL ASSOCIATED COSTS SHALL BE INCIDENTAL TO VARIOUS OTHER BID ITEMS.
- CONSTRUCTION AREA LIMITS** - THE LIMITS OF CONSTRUCTION, MATERIAL STORAGE AREAS, EQUIPMENT STORAGE AREA, PARKING AREA AND OTHER AREAS REQUIRED FOR THE CONTRACTOR'S EXCLUSIVE USE DURING CONSTRUCTION SHALL BE MARKED BY THE CONTRACTOR AND APPROVED BY THE FIELD REPRESENTATIVE. THE CONTRACTOR SHALL ERECT AND MAINTAIN SUITABLE FENCING, SIGNAGE AND WARNING DEVICES VISIBLE FOR BOTH DAY/NIGHT USE TO DELINEATE THE PERIMETER OF ALL SUCH AREAS.
- VEHICLE IDENTIFICATION** - THE CONTRACTOR, THROUGH THE CONTRACTOR SECURITY OFFICER, SHALL ESTABLISH AND MAINTAIN A LIST OF CONTRACTOR AND SUBCONTRACTOR VEHICLES AUTHORIZED TO OPERATE ON THE SITE. THE CONTRACTOR SECURITY OFFICER WILL REQUIRE EACH VEHICLE TO DISPLAY A LARGE COMPANY SIGN (WITH NOT LESS THAN 8" LETTERING) ON BOTH SIDES OF THE VEHICLE. THE CONTRACTOR SHALL PROVIDE A CURRENT LISTING OF VEHICLES AND COMPANIES AUTHORIZED TO ENTER AND CONDUCT WORK ON THE AIRPORT TO THE FIELD REPRESENTATIVE. CONTRACTOR'S EMPLOYEE PERSONAL VEHICLES SHALL BE RESTRICTED TO THE CONTRACTOR'S STAGING AREA OR CONTRACTOR'S EMPLOYEE PARKING AREA AND ARE NOT ALLOWED ON THE AIRFIELD AT ANY TIME.
- OPERATORS OF VEHICLES MUST POSSESS A VALID DRIVER'S LICENSE. FOR THE VEHICLE BEING OPERATED, CONTRACTOR SHALL BE RESPONSIBLE FOR ALL EMPLOYEES DRIVING WITHIN THE AOA, AND SHALL LIMIT EMPLOYEE ACCESS TO RUNWAY AND TAXIWAY OBJECT FREE AREAS TO THOSE WHOSE FUNCTIONS ARE ABSOLUTELY NECESSARY. DRIVERS SHALL MONITOR BOB SIKES AIRPORT UNCOM FREQUENCY AT ALL TIMES WHEN DRIVING WITHIN ANY RUNWAY OR TAXIWAY OBJECT FREE AREA, AND SHALL BE PREPARED TO LEAVE THE AREA IMMEDIATELY IF NECESSARY.**
- ALL ACCESS GATES SHALL REMAIN LOCKED OR MONITORED AT ALL TIMES. THE COST OF PROVIDING FLAGGER AND SECURITY GUARDS, IF NEEDED, SHALL BE INCIDENTAL AND INCLUDED IN THE VARIOUS CONTRACT ITEMS.**



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**BOB SIKES AIRPORT
CRESTVIEW, FL**

**SOUTH APRON
REHABILITATION**

**SAFETY AND SECURITY
NOTES**

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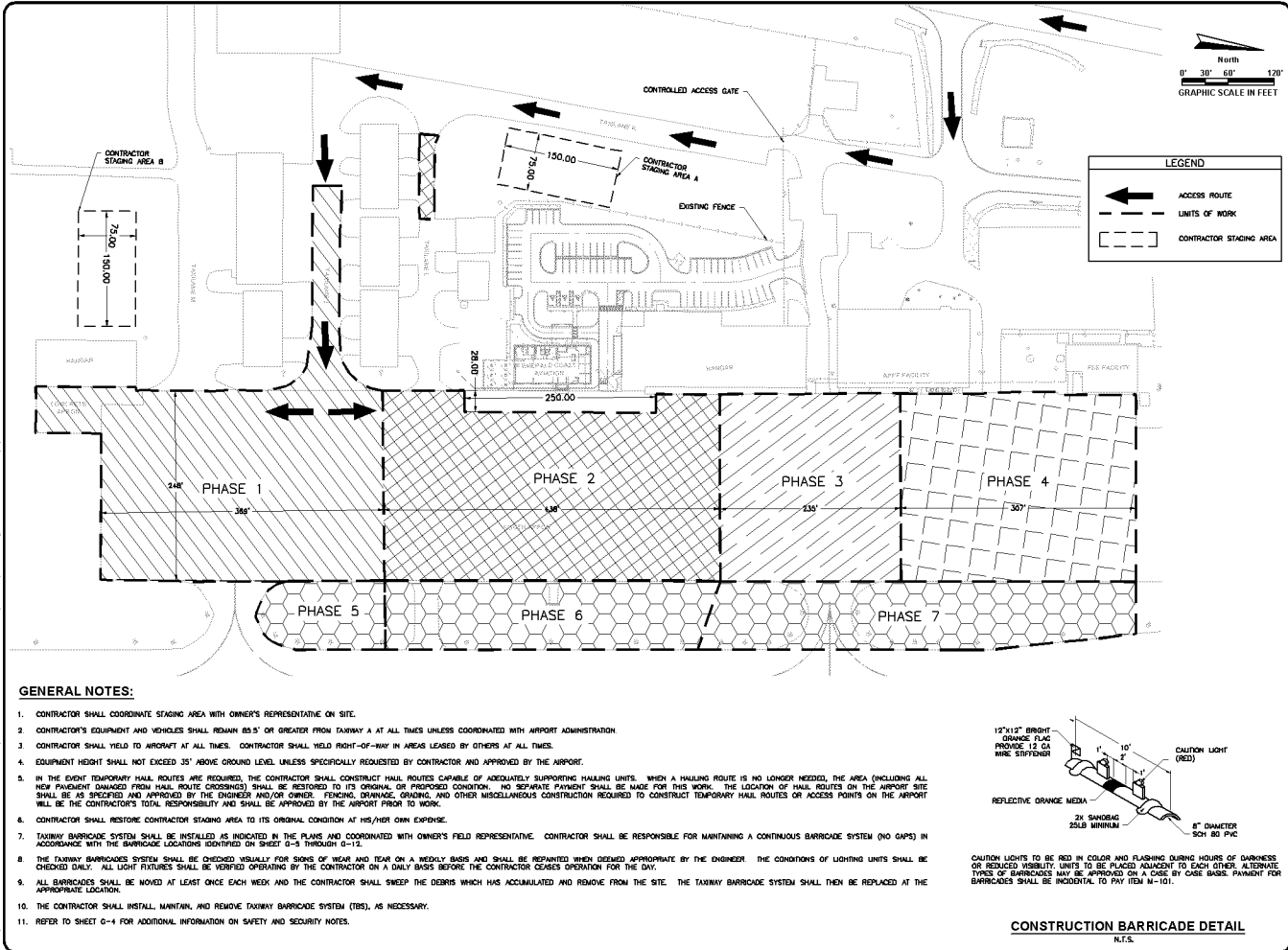
RELEASE FOR BID

DESIGNED BY: J.R.C.
DRAWN BY: C.A.P.
CHECKED BY: J.R.C.
APPROVED BY: V.C.L.
DATE: MARCH 2023

AVCON PROJECT NO. 2017.059.09

SHEET NUMBER

G-4



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ISSUED 04/26/2016

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FSPB CERTIFICATE OF AUTHORIZATION NO. 5557

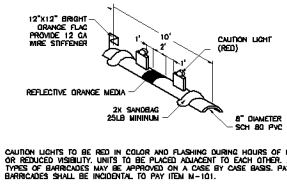
**BOB SIKES AIRPORT
CRESTVIEW, FL**

**SOUTH APRON
REHABILITATION**

**OVERALL
CONSTRUCTION
SAFETY AND PHASING
PLAN**

GENERAL NOTES:

- CONTRACTOR SHALL COORDINATE STAGING AREA WITH OWNER'S REPRESENTATIVE ON SITE.
- CONTRACTOR'S EQUIPMENT AND VEHICLES SHALL REMAIN 85' OR GREATER FROM TAXWAY A AT ALL TIMES UNLESS COORDINATED WITH AIRPORT ADMINISTRATION.
- CONTRACTOR SHALL YIELD TO AIRCRAFT AT ALL TIMES. CONTRACTOR SHALL YIELD RIGHT-OF-WAY IN AREAS LEASED BY OTHERS AT ALL TIMES.
- EQUIPMENT HEIGHT SHALL NOT EXCEED 35' ABOVE GROUND LEVEL UNLESS SPECIFICALLY REQUESTED BY CONTRACTOR AND APPROVED BY THE AIRPORT.
- IN THE EVENT TEMPORARY HALL ROUTES ARE REQUIRED, THE CONTRACTOR SHALL CONSTRUCT HALL ROUTES CAPABLE OF ADEQUATELY SUPPORTING HAULING UNITS. WHEN A HAULING ROUTE IS NO LONGER NEEDED, THE AREA (INCLUDING ALL NEW PAVEMENT DAMAGED FROM HALL ROUTE CROSSINGS) SHALL BE RESTORED TO ITS ORIGINAL OR PROPOSED CONDITION. NO SEPARATE PAYMENT SHALL BE MADE FOR THIS WORK. THE LOCATION OF HALL ROUTES ON THE AIRPORT SITE SHALL BE AS SPECIFIED AND APPROVED BY THE ENGINEER AND/OR OWNER. FENCING, DRAINAGE, GRADING, AND OTHER MISCELLANEOUS CONSTRUCTION REQUIRED TO CONSTRUCT TEMPORARY HALL ROUTES OR ACCESS POINTS ON THE AIRPORT WILL BE THE CONTRACTOR'S TOTAL RESPONSIBILITY AND SHALL BE APPROVED BY THE AIRPORT PRIOR TO WORK.
- CONTRACTOR SHALL RESTORE CONTRACTOR STAGING AREA TO ITS ORIGINAL CONDITION AT HIS/HER OWN EXPENSE.
- TAXIWAY BARRICADE SYSTEM SHALL BE INSTALLED AS INDICATED IN THE PLANS AND COORDINATED WITH OWNER'S FIELD REPRESENTATIVE. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING A CONTINUOUS BARRICADE SYSTEM (NO GAPS) IN ACCORDANCE WITH THE BARRICADE LOCATIONS IDENTIFIED ON SHEET G-5 THROUGH G-12.
- THE TAXIWAY BARRICADES SYSTEM SHALL BE CHECKED VISUALLY FOR SIGNS OF WEAR AND TEAR ON A DAILY BASIS AND SHALL BE REPAINTED WHEN DEEMED APPROPRIATE BY THE ENGINEER. THE CONDITIONS OF LIGHTING UNITS SHALL BE CHECKED DAILY. ALL LIGHT FIXTURES SHALL BE VERIFIED OPERATING BY THE CONTRACTOR ON A DAILY BASIS BEFORE THE CONTRACTOR CEASES OPERATION FOR THE DAY.
- ALL BARRICADES SHALL BE MOVED AT LEAST ONCE EACH WEEK AND THE CONTRACTOR SHALL SWEEP THE DEBRIS WHICH HAS ACCUMULATED AND REMOVE FROM THE SITE. THE TAXIWAY BARRICADE SYSTEM SHALL THEN BE REPLACED AT THE APPROPRIATE LOCATION.
- THE CONTRACTOR SHALL INSTALL, MAINTAIN, AND REMOVE TAXIWAY BARRICADE SYSTEM (TBS), AS NECESSARY.
- REFER TO SHEET G-4 FOR ADDITIONAL INFORMATION ON SAFETY AND SECURITY NOTES.



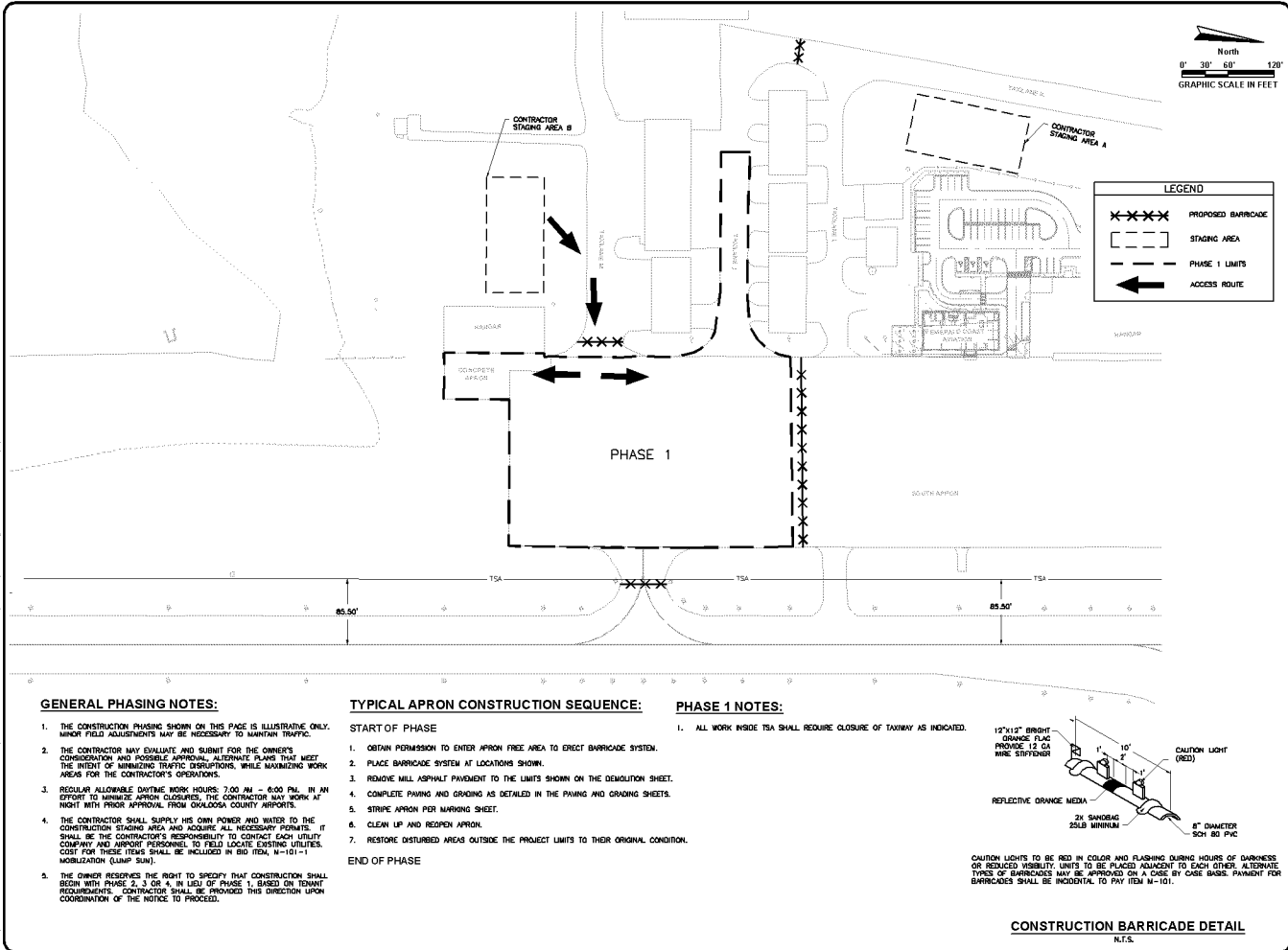
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RELEASE FOR BID

DESIGNED BY: J.R.C.
DRAWN BY: C.A.P.
CHECKED BY: J.R.C.
APPROVED BY: V.C.L.
DATE: MARCH 2023

AVCON PROJECT NO. 2017.059.09
SHEET NUMBER
G-5



GENERAL PHASING NOTES:

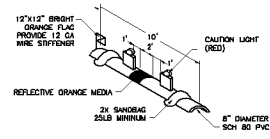
1. THE CONSTRUCTION PHASING SHOWN ON THIS PAGE IS ILLUSTRATIVE ONLY. MINOR FIELD ADJUSTMENTS MAY BE NECESSARY TO MAINTAIN TRAFFIC.
2. THE CONTRACTOR MAY EVALUATE AND SUBMIT FOR THE OWNER'S CONSIDERATION AND POSSIBLE APPROVAL, ALTERNATE SLABS THAT MEET THE INTENT OF MINIMIZING TRAFFIC DISRUPTIONS, WHILE MAXIMIZING WORK AREAS FOR THE CONTRACTOR'S OPERATIONS.
3. REGULAR ALLOWABLE DAYTIME WORK HOURS: 7:00 AM - 6:00 PM. IN AN EFFORT TO MINIMIZE APRON CLOSURES, THE CONTRACTOR MAY WORK AT NIGHT WITH PRIOR APPROVAL FROM Ocala County Airports.
4. THE CONTRACTOR SHALL SUPPLY HIS OWN POWER AND WATER TO THE CONSTRUCTION STAGING AREA AND ACQUIRE ALL NECESSARY PERMITS. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CONTACT EACH UTILITY COMPANY AND AIRPORT PERSONNEL TO FIELD LOCATE EXISTING UTILITIES. COST FOR THESE ITEMS SHALL BE INCLUDED IN BID ITEM, N-101-1 MOBILIZATION (LUMP SUM).
5. THE OWNER RESERVES THE RIGHT TO SPECIFY THAT CONSTRUCTION SHALL BEGIN WITH PHASE 2, 3 OR 4, IN LIEU OF PHASE 1, BASED ON TENANT REQUIREMENTS. CONTRACTOR SHALL BE PROVIDED THIS DIRECTION UPON COORDINATION OF THE NOTICE TO PROCEED.

TYPICAL APRON CONSTRUCTION SEQUENCE:

- START OF PHASE**
1. OBTAIN PERMISSION TO ENTER APRON FREE AREA TO ERECT BARRICADE SYSTEM.
 2. PLACE BARRICADE SYSTEM AT LOCATIONS SHOWN.
 3. REMOVE MILL ASPHALT PAVEMENT TO THE LIMITS SHOWN ON THE DEMOLITION SHEET.
 4. COMPLETE PAVING AND GRADING AS DETAILED IN THE PAVING AND GRADING SHEETS.
 5. STRIPE APRON PER MARKING SHEET.
 6. CLEAN UP AND REOPEN APRON.
 7. RESTORE DISTURBED AREAS OUTSIDE THE PROJECT LIMITS TO THEIR ORIGINAL CONDITION.
- END OF PHASE**

PHASE 1 NOTES:

1. ALL WORK INSIDE TSA SHALL REQUIRE CLOSURE OF TAXIWAY AS INDICATED.



CONSTRUCTION BARRICADE DETAIL
N.T.S.

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BOB SIKES AIRPORT
CRESTVIEW, FL

SOUTH APRON
REHABILITATION

CONSTRUCTION
SAFETY AND PHASING
PLAN - PHASE 1

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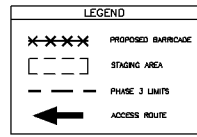
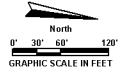
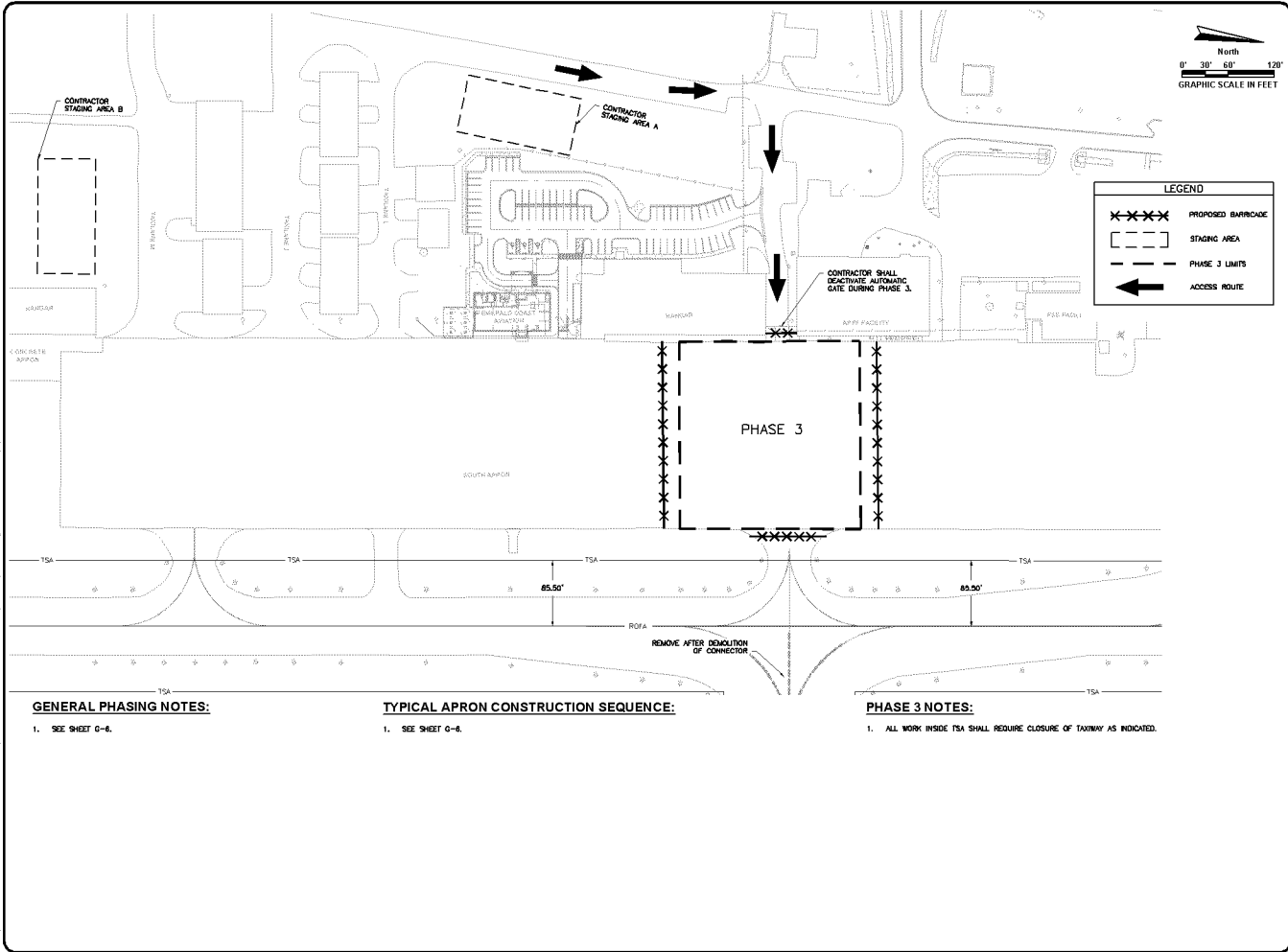
REVISIONS:

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RELEASE FOR BID

DESIGNED BY: J.R.C.
DRAWN BY: C.A.P.
CHECKED BY: J.R.C.
APPROVED BY: V.C.L.
DATE: MARCH 2023

AVCON PROJECT NO. 2017.059.09
SHEET NUMBER
G-6



GENERAL PHASING NOTES:
1. SEE SHEET C-4.

TYPICAL APRON CONSTRUCTION SEQUENCE:
1. SEE SHEET C-4.

PHASE 3 NOTES:
1. ALL WORK INSIDE TSA SHALL REQUIRE CLOSURE OF TAXIWAY AS INDICATED.

**BOB SIKES AIRPORT
FLY CEW
CRESTVIEW**

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**BOB SIKES AIRPORT
CRESTVIEW, FL**

**SOUTH APRON
REHABILITATION**

**CONSTRUCTION
SAFETY AND PHASING
PLAN - PHASE 3**

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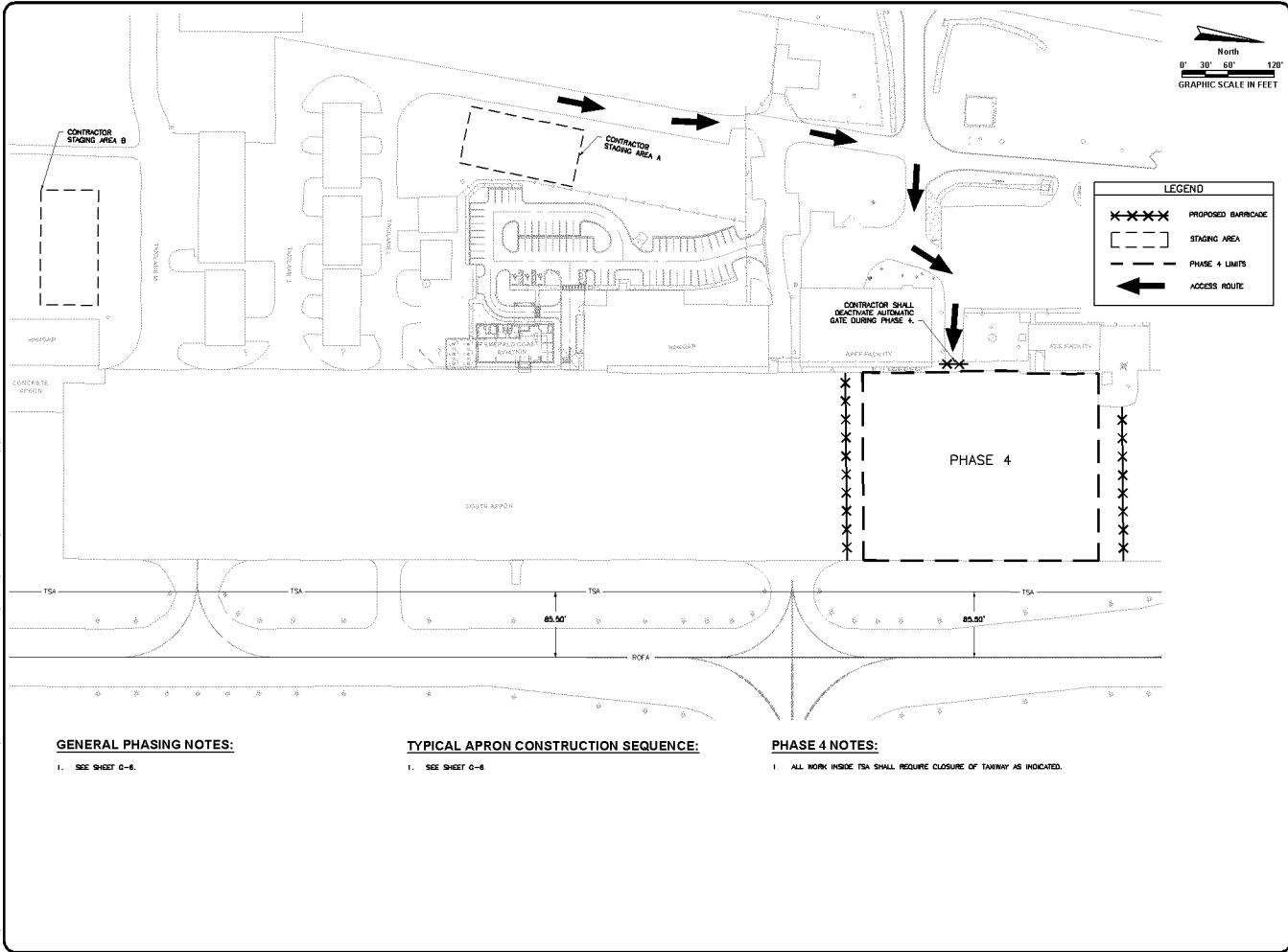
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RELEASE FOR BID

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DRAWN BY: C.A.P.
CHECKED BY: J.R.C.
APPROVED BY: V.C.L.
DATE: MARCH 2023

AVCON PROJECT NO. 2017.050.09
**SHEET NUMBER
G-8**



BOB SIKES AIRPORT
CRESTVIEW

AVCON

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BOB SIKES AIRPORT
CRESTVIEW, FL

SOUTH APRON
REHABILITATION

CONSTRUCTION
SAFETY AND PHASING
PLAN - PHASE 4

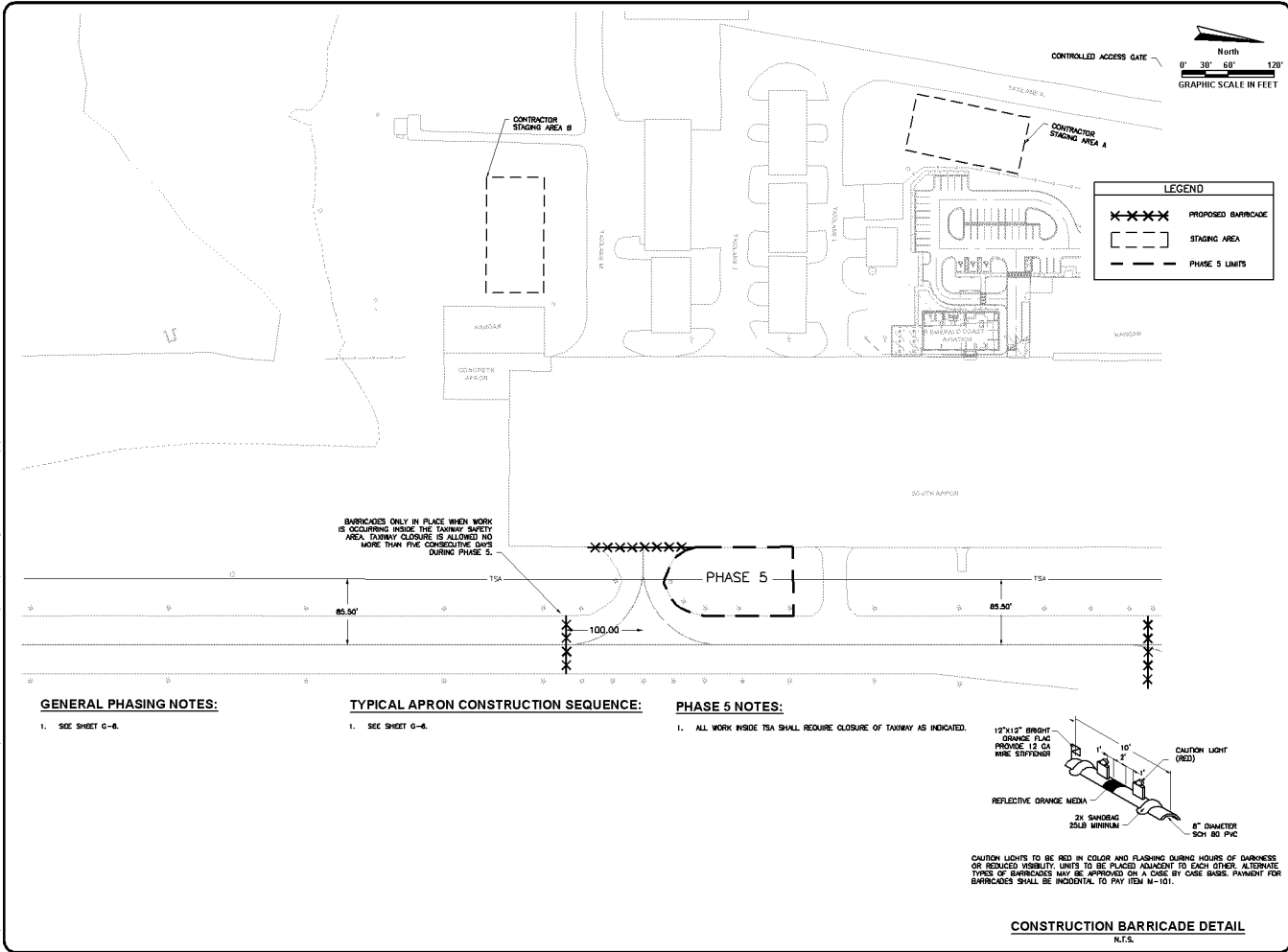
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RELEASE FOR BID

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APPROVED BY: V.C.L.
DATE: MARCH 2023

AVCON PROJECT NO. 2017.059.09
SHEET NUMBER
G-9



**BOB SIKES AIRPORT
FLY CEW
CRESTVIEW**

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**BOB SIKES AIRPORT
CRESTVIEW, FL**

**SOUTH APRON
REHABILITATION**

**CONSTRUCTION
SAFETY AND PHASING
PLAN - PHASE 5**

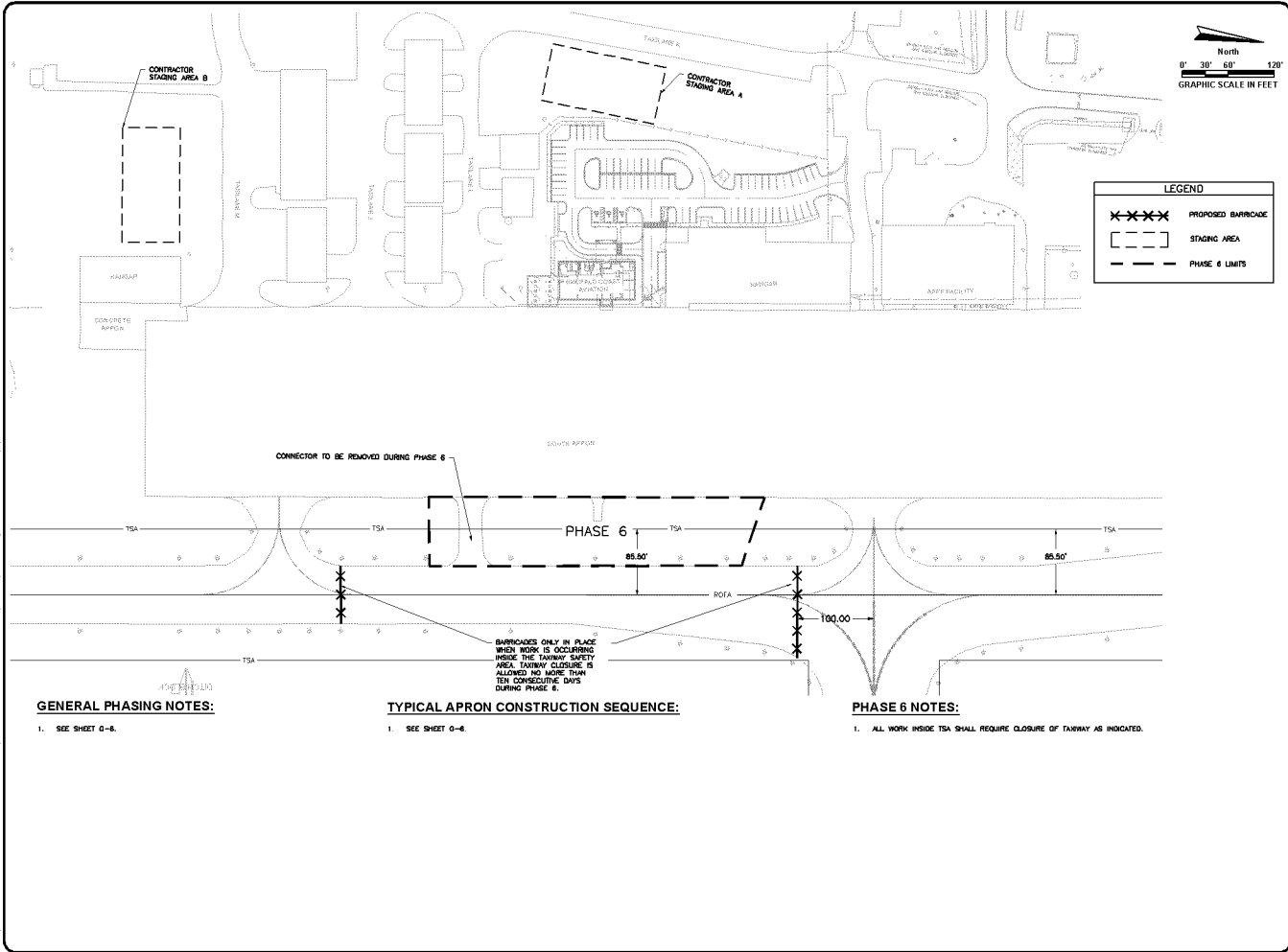
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RELEASE FOR BID

DESIGNED BY: J.R.C.
DRAWN BY: C.A.P.
CHECKED BY: J.R.C.
APPROVED BY: V.C.L.
DATE: MARCH 2023

AVCON PROJECT NO. 2017.059.09
**SHEET NUMBER
G-10**



AVCON, INC.
ENGINEERS & PLANNERS

739 BAYSHORE DRIVE, SUITE A, ANDYVILLE, FL 32018-4418
OFFICE: 904.284.9494 FAX: 904.284.9496
CORPORATE OFFICE: 10000 W. UNIVERSITY BLVD., SUITE 1000, BOCA RATON, FL 33433

ENGINEER OF RECORD:
NAME: JOHN R. COLLINS
FL LICENSE NO. 75419

AVCON, INC.
320 BAYSHORE DRIVE, SUITE A
ANDYVILLE, FL 32018
PHONE: (904) 284-9494
FAX: (904) 284-9496

FSR CERTIFICATE OF AUTHORIZATION NO. 0557

**BOB SIKES AIRPORT
CRESTVIEW, FL**

**SOUTH APRON
REHABILITATION**

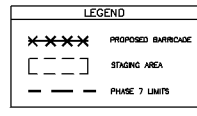
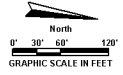
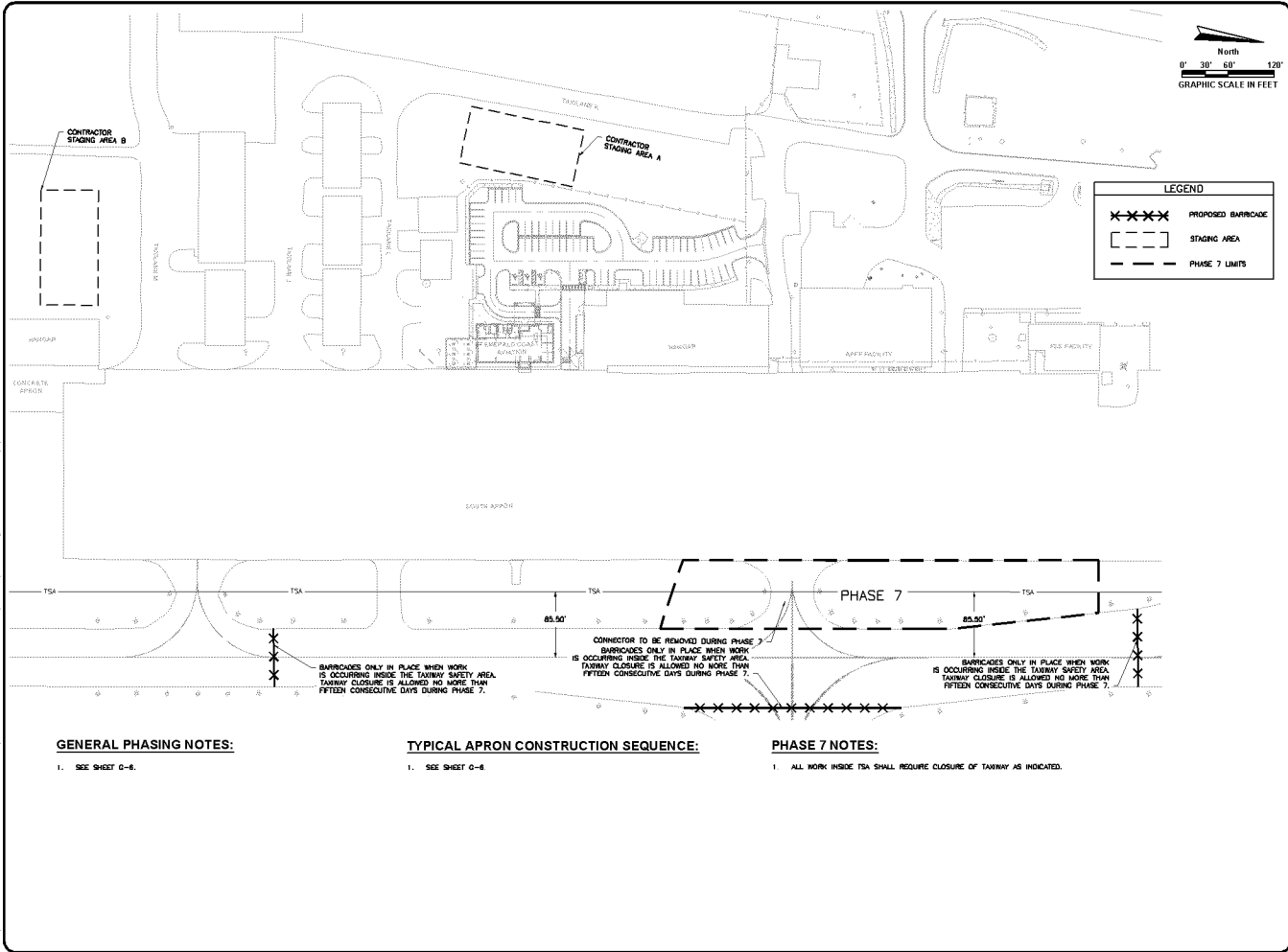
**CONSTRUCTION
SAFETY AND PHASING
PLAN - PHASE 6**

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RELEASE FOR BID

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DATE: MARCH 2023

AVCON PROJECT NO. 2017.050.09
SHEET NUMBER
G-11



BARRICADES ONLY IN PLACE WHEN WORK IS OCCURRING INSIDE THE TAXIWAY SAFETY AREA. TAXIWAY CLOSURE IS ALLOWED NO MORE THAN FIFTEEN CONSECUTIVE DAYS DURING PHASE 7.

CONNECTOR TO BE REMOVED DURING PHASE 7. BARRICADES ONLY IN PLACE WHEN WORK IS OCCURRING INSIDE THE TAXIWAY SAFETY AREA. TAXIWAY CLOSURE IS ALLOWED NO MORE THAN FIFTEEN CONSECUTIVE DAYS DURING PHASE 7.

BARRICADES ONLY IN PLACE WHEN WORK IS OCCURRING INSIDE THE TAXIWAY SAFETY AREA. TAXIWAY CLOSURE IS ALLOWED NO MORE THAN FIFTEEN CONSECUTIVE DAYS DURING PHASE 7.

GENERAL PHASING NOTES:
1. SEE SHEET C-6.

TYPICAL APRON CONSTRUCTION SEQUENCE:
1. SEE SHEET C-6

PHASE 7 NOTES:
1. ALL WORK INSIDE TSA SHALL REQUIRE CLOSURE OF TAXIWAY AS INDICATED.

AVCON, INC.
ENGINEERS & PLANNERS
239 BAYSHORE DRIVE, SUITE A, AUSTIN, TX 78745
OFFICE: (512) 426-1111, (512) 426-1112
CONVYANCE CERTIFICATE OF QUALIFICATION FOR AIRPORTS AND AIRWAYS
ISSUED 04/20/2017

ENGINEER OF RECORD:
NAME: JOHN R. COLLINS
FL LICENSE NO. 75419

AVCON, INC.
320 BAYSHORE DRIVE, SUITE A
AUSTIN, TX 78745
PHONE: (512) 426-1111
FAX: (512) 426-1112

FBR CERTIFICATE OF AUTHORIZATION NO. 0557

**BOB SIKES AIRPORT
CRESTVIEW, FL**

**SOUTH APRON
REHABILITATION**

**CONSTRUCTION
SAFETY AND PHASING
PLAN - PHASE 7**

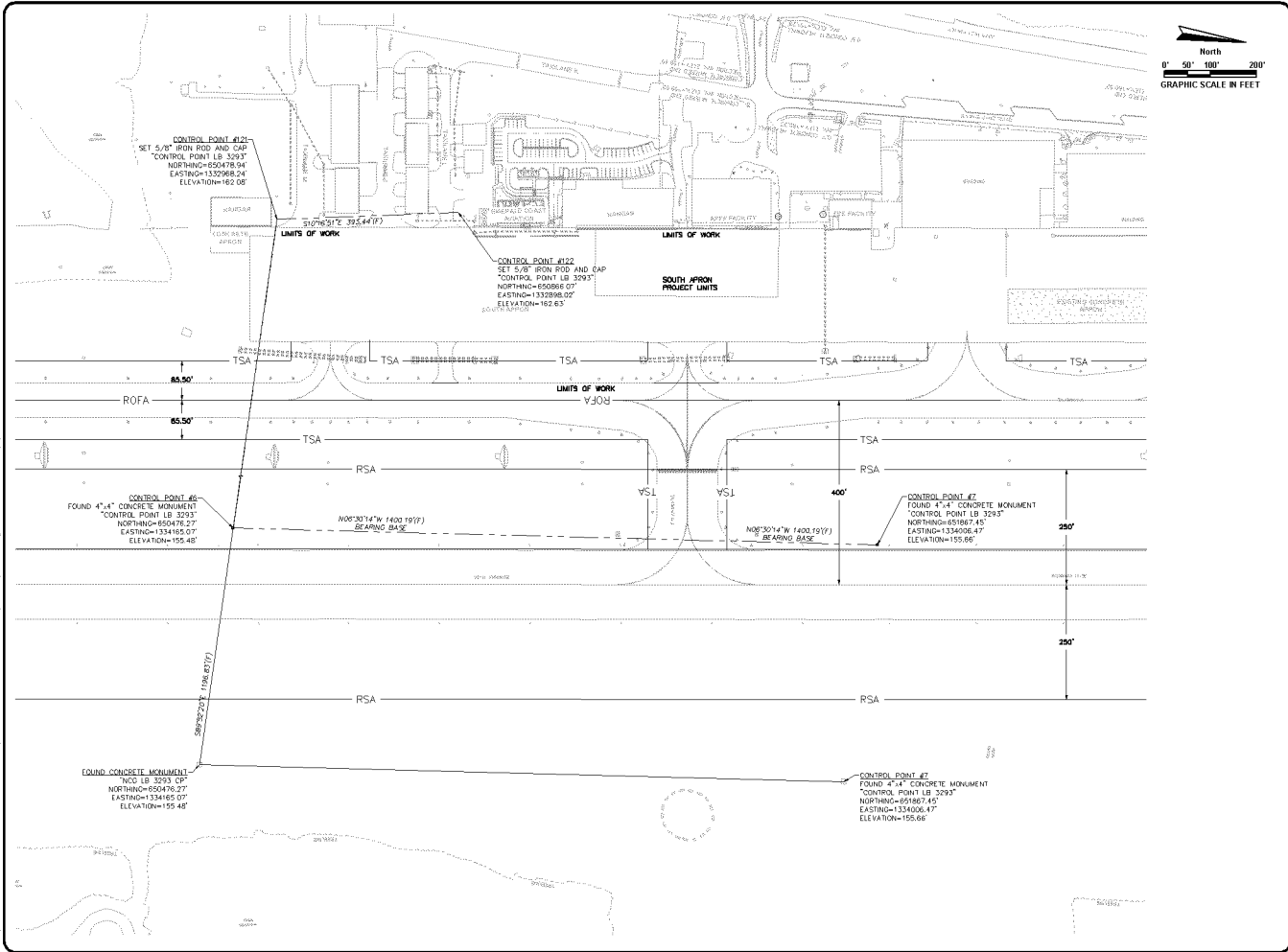
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NO.	DATE	BY	DESCRIPTION

RELEASE FOR BID

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DRAWN BY: C.A.P.
CHECKED BY: J.R.C.
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DATE: MARCH 2023

AVCON PROJECT NO. 2017.059.09
SHEET NUMBER
G-12




**BOB SIKES AIRPORT
CRESTVIEW, FL**


AVCON, INC.
 ENGINEERS & PLANNERS
 739 BAYSHORE DRIVE, SUITE A, AUSTIN, TX 78748-4438
 OFFICE: (512) 426-7400 FAX: (512) 426-7406
 CORPORATE CERTIFICATE OF REGISTRATION FOR NUMBER 8471
 WITH EXPIRES DATE

ENGINEER OF RECORD:
 NAME: JOHN R. COLLINS
 FL LICENSE NO. 75419
 AVCON, INC.
 320 BAYSHORE DRIVE, SUITE A
 AUSTIN, TX 78748
 PHONE: (512) 426-7400
 FAX: (512) 426-7406
 FSRB CERTIFICATE OF AUTHORIZATION NO. 00557

**BOB SIKES AIRPORT
CRESTVIEW, FL**

**SOUTH APRON
REHABILITATION**

**MASTER SITE PLAN AND
SURVEY PLAN (LAND)**

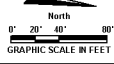
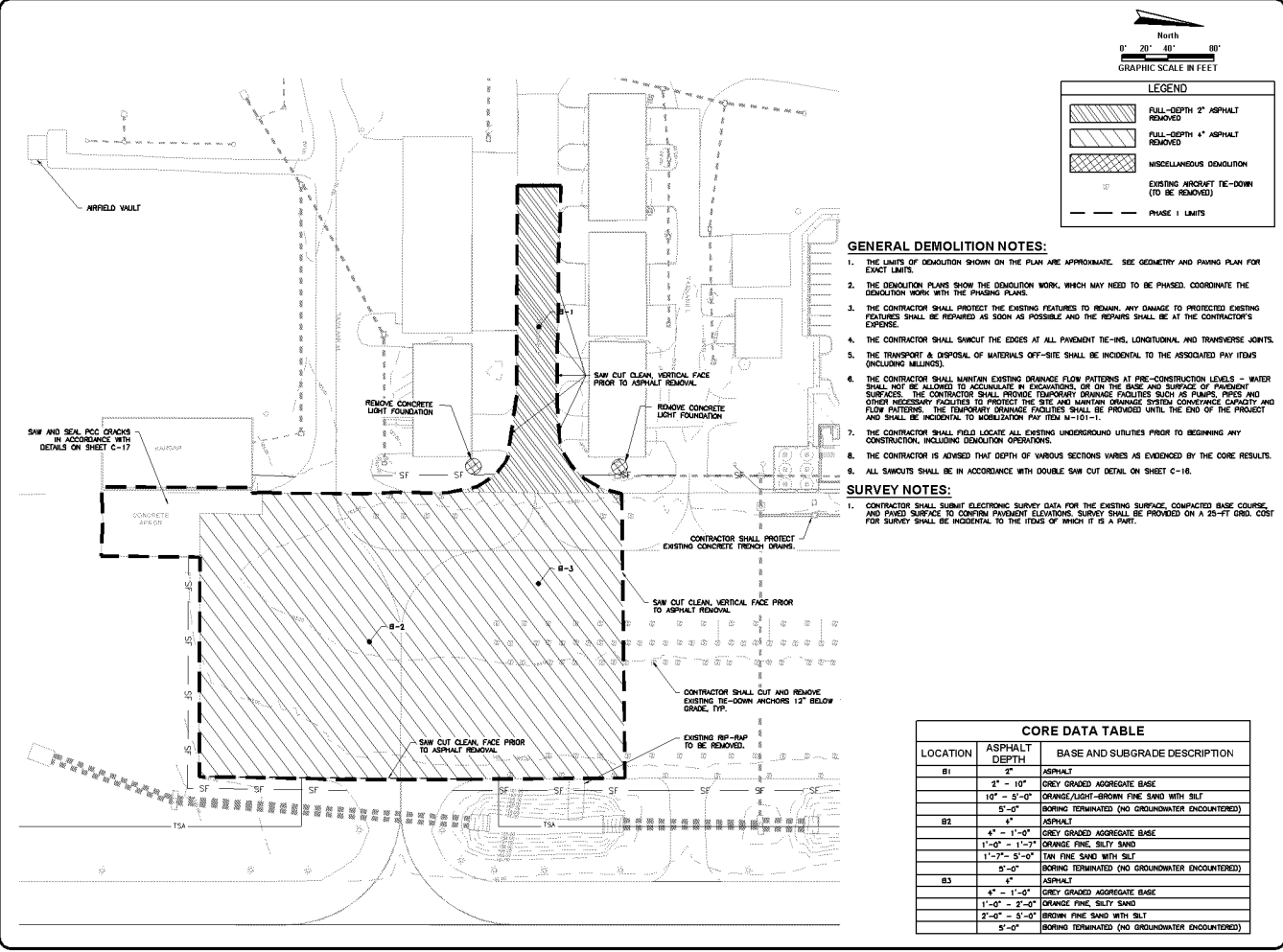
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 CHECKED BY: J.R.C.
 APPROVED BY: V.C.L.
 DATE: MARCH 2023

AVCON PROJECT NO. 2017.050.09
SHEET NUMBER
G-15



LEGEND

[Hatched pattern]	FULL-DEPTH 2" ASPHALT REMOVED
[Hatched pattern]	FULL-DEPTH 4" ASPHALT REMOVED
[Cross-hatched pattern]	MISCELLANEOUS DEMOLITION
[Dashed line]	EXISTING AIRCRAFT TIE-DOWN (TO BE REMOVED)
[Dashed line]	PHASE 1 LIMITS

- GENERAL DEMOLITION NOTES:**
1. THE LIMITS OF DEMOLITION SHOWN ON THE PLAN ARE APPROXIMATE. SEE GEOMETRY AND PAVING PLAN FOR EXACT LIMITS.
 2. THE DEMOLITION PLANS SHOW THE DEMOLITION WORK, WHICH MAY NEED TO BE PHASED. COORDINATE THE DEMOLITION WORK WITH THE PAVING PLANS.
 3. THE CONTRACTOR SHALL PROTECT THE EXISTING FEATURES TO REMAIN. ANY DAMAGE TO PROTECTED EXISTING FEATURES SHALL BE REPAIRED AS SOON AS POSSIBLE AND THE REPAIRS SHALL BE AT THE CONTRACTOR'S EXPENSE.
 4. THE CONTRACTOR SHALL SAWCUT THE EDGES AT ALL PAVEMENT TIE-INS, LONGITUDINAL AND TRANSVERSE JOINTS.
 5. THE TRANSPORT & DISPOSAL OF MATERIALS OFF-SITE SHALL BE INCIDENTAL TO THE ASSOCIATED PAY ITEMS (INCLUDING MILLING).
 6. THE CONTRACTOR SHALL MAINTAIN EXISTING DRAINAGE FLOW PATTERNS AT PRE-CONSTRUCTION LEVELS - WATER SHALL NOT BE ALLOWED TO ACCUMULATE IN ENCLOSURES, OR ON THE BASE AND SURFACE OF PAVEMENT SURFACES. THE CONTRACTOR SHALL PROVIDE TEMPORARY DRAINAGE FACILITIES SUCH AS PUMPS, PIPES AND OTHER NECESSARY FACILITIES TO PROTECT THE SITE AND MAINTAIN DRAINAGE SYSTEM CAPACITY AND FLOW PATTERNS. THE TEMPORARY DRAINAGE FACILITIES SHALL BE PROVIDED UNTIL THE END OF THE PROJECT AND SHALL BE INCIDENTAL TO MOBILIZATION PAY ITEM N-101-1.
 7. THE CONTRACTOR SHALL FIELD LOCATE ALL EXISTING UNDERGROUND UTILITIES PRIOR TO BEGINNING ANY CONSTRUCTION, INCLUDING DEMOLITION OPERATIONS.
 8. THE CONTRACTOR IS ADVISED THAT DEPTH OF VARIOUS SECTIONS VARIES AS EVIDENCED BY THE CORE RESULTS.
 9. ALL SAWCUTS SHALL BE IN ACCORDANCE WITH DOUBLE SAW CUT DETAIL ON SHEET C-18.

- SURVEY NOTES:**
1. CONTRACTOR SHALL SUBMIT ELECTRONIC SURVEY DATA FOR THE EXISTING SURFACE, COMPACTED BASE COURSE, AND PAVED SURFACE TO CONFIRM PAVEMENT ELEVATIONS. SURVEY SHALL BE PROVIDED ON A 25-FIT ORD. COST FOR SURVEY SHALL BE INCIDENTAL TO THE ITEMS OF WHICH IT IS A PART.

CORE DATA TABLE

LOCATION	ASPHALT DEPTH	BASE AND SUBGRADE DESCRIPTION
B1	2"	ASPHALT
	2" - 10"	GREY GRANDED AGGREGATE BASE
	10" - 5'-0"	ORANGE/LIGHT-BROWN FINE SAND WITH SILT
B2	5'-0"	BORING TERMINATED (NO GROUNDWATER ENCOUNTERED)
	4" - 1'-0"	ASPHALT
	1'-0" - 1'-3"	GREY GRANDED AGGREGATE BASE
	1'-3" - 5'-0"	TAN FINE SAND WITH SILT
B3	5'-0"	BORING TERMINATED (NO GROUNDWATER ENCOUNTERED)
	4" - 1'-0"	ASPHALT
	1'-0" - 2'-0"	GREY GRANDED AGGREGATE BASE
	2'-0" - 5'-0"	ORANGE FINE SILTY SAND
	5'-0"	BORING TERMINATED (NO GROUNDWATER ENCOUNTERED)

**BOB SIKES AIRPORT
FLY CEW
CRESTVIEW**

AVCON INC.
ENGINEERS & PLANNERS

AVCON, INC.
230 BAYSHORE DRIVE, SUITE A
NICEVILLE, FL 32578
PHONE: (904) 720-0500
FAX: (904) 720-0500
FIRM CERTIFICATE OF AUTHORIZATION NO. 35557

ENGINEER OF RECORD:
NAME: JOHN R. COLLINS
FL LICENSE NO. 75419

**BOB SIKES AIRPORT
CRESTVIEW, FL**

**SOUTH APRON
REHABILITATION**

**EXISTING CONDITIONS
AND DEMOLITION PLAN
- PHASE 1**

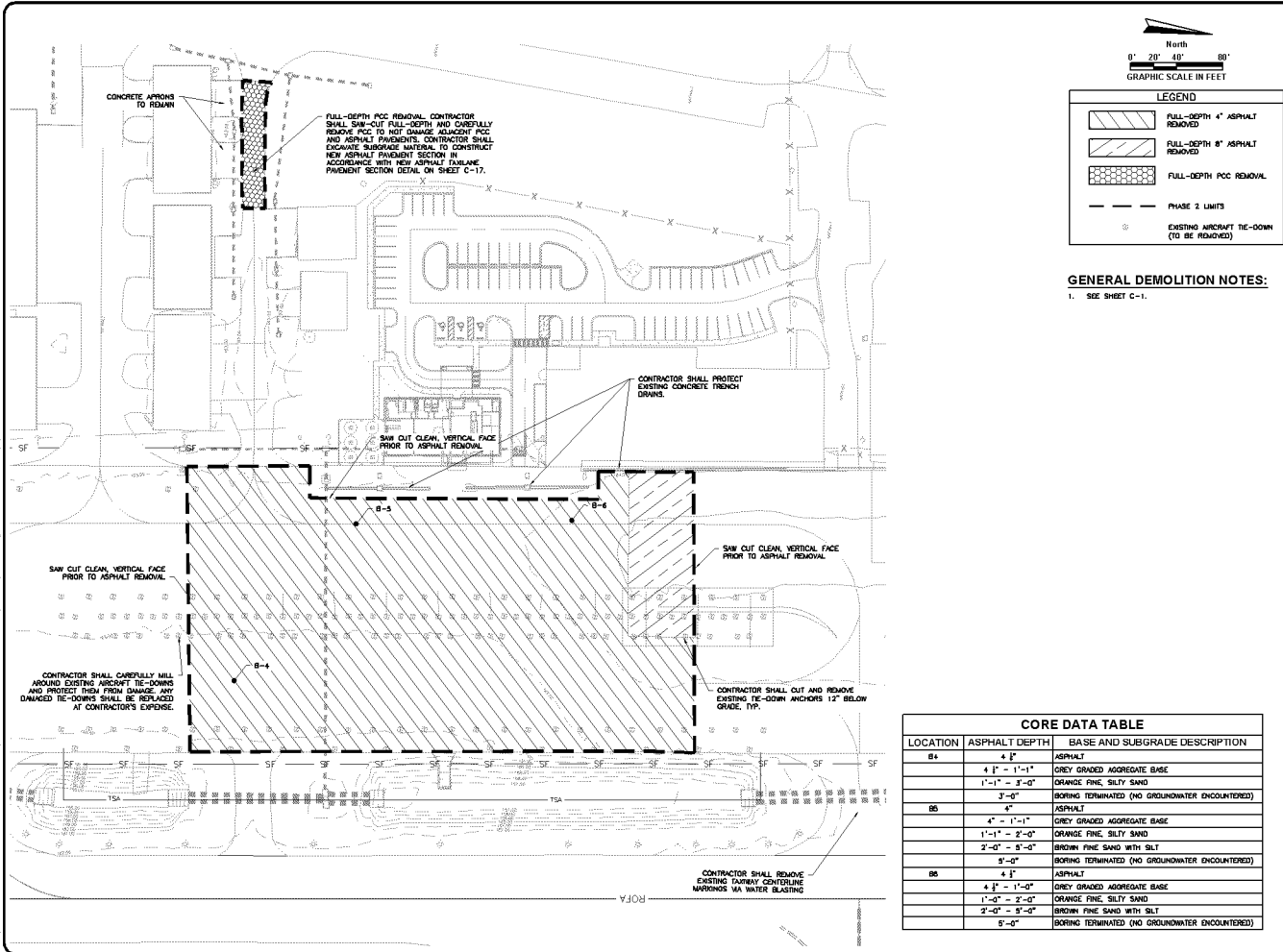
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RELEASE FOR BID

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DRAWN BY: C.A.P.
CHECKED BY: J.R.C.
APPROVED BY: V.C.L.
DATE: MARCH 2023

AVCON PROJECT NO. 2017.059.09
SHEET NUMBER
C-1



**BOB SIKES AIRPORT
FLY CEW
CRESTVIEW**

AVCON INC.
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FL LICENSE NO. 75419

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AUSTIN, TX 78745
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FAX: (512) 444-1111

FBPR CERTIFICATE OF AUTHORIZATION NO. 0557

**BOB SIKES AIRPORT
CRESTVIEW, FL**

**SOUTH APRON
REHABILITATION**

**EXISTING CONDITIONS
AND DEMOLITION PLAN
-PHASE 2**

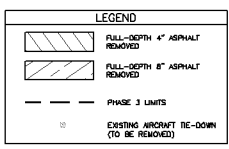
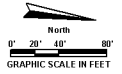
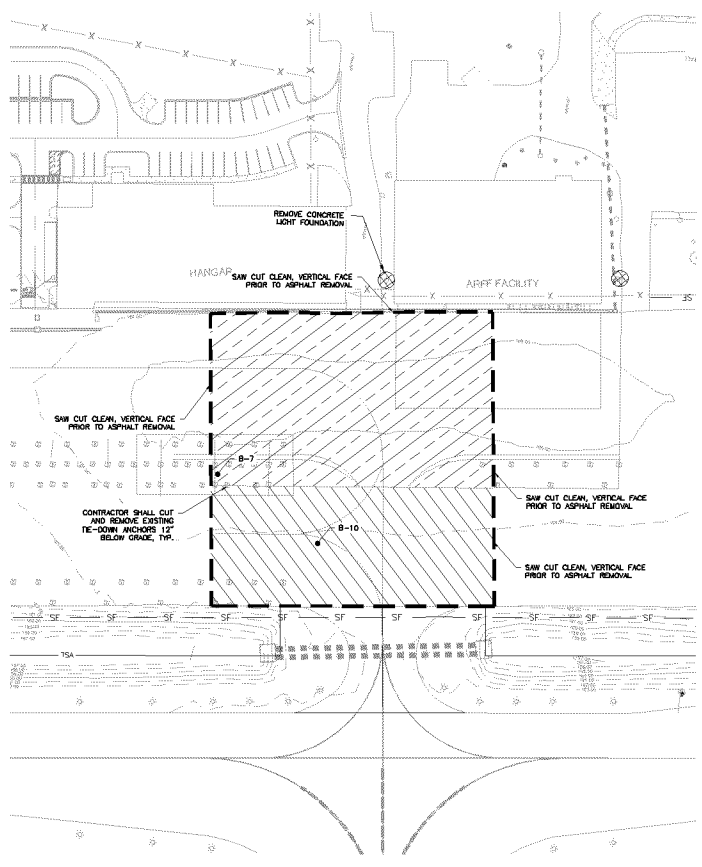
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DRAWN BY: C.A.P.
CHECKED BY: J.R.C.
APPROVED BY: V.C.L.
DATE: MARCH 2023

AVCON PROJECT NO. 2017.059.09
**SHEET NUMBER
C-2**

C:\Users\jcollins\OneDrive\Documents\Projects\2023\20230301\20230301_01\20230301_01.dwg



- GENERAL DEMOLITION NOTES:**
- SEE SHEET C-1.
 - DEMOLISH EXISTING CABLE AND CONDUIT TO NEAREST BASE CAN.

CORE DATA TABLE

LOCATION	ASPHALT DEPTH	BASE AND SUBGRADE DESCRIPTION
B7	8"	ASPHALT
	8" - 2'-4"	BROWN FINE SAND WITH SILT WITH TRACE GRAVEL
	2'-0" - 5'-0"	BROWN FINE SAND WITH SILT
	5'-0"	BORING TERMINATED (NO GROUNDWATER ENCOUNTERED)
B10	4 1/2"	ASPHALT
	4 1/2" - 1'-0"	GREY GRADED AGGREGATE BASE
	1'-0" - 2'-0"	ORANGE FINE SILTY SAND
	2'-0" - 3'-0"	BROWN FINE SAND WITH SILT
	3'-0"	BORING TERMINATED (NO GROUNDWATER ENCOUNTERED)



AVCON, INC.
ENGINEERS & PLANNERS

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NICEVILLE, FL 32578
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FAX: (904) 726-0000

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FL LICENSE NO. 75419

AVCON, INC.
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FAX: (904) 726-0000

FBPR CERTIFICATE OF AUTHORIZATION NO. 9557

**BOB SIKES AIRPORT
CRESTVIEW, FL**

**SOUTH APRON
REHABILITATION**

**EXISTING CONDITIONS
AND DEMOLITION PLAN
- PHASE 3**

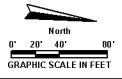
REVISIONS:

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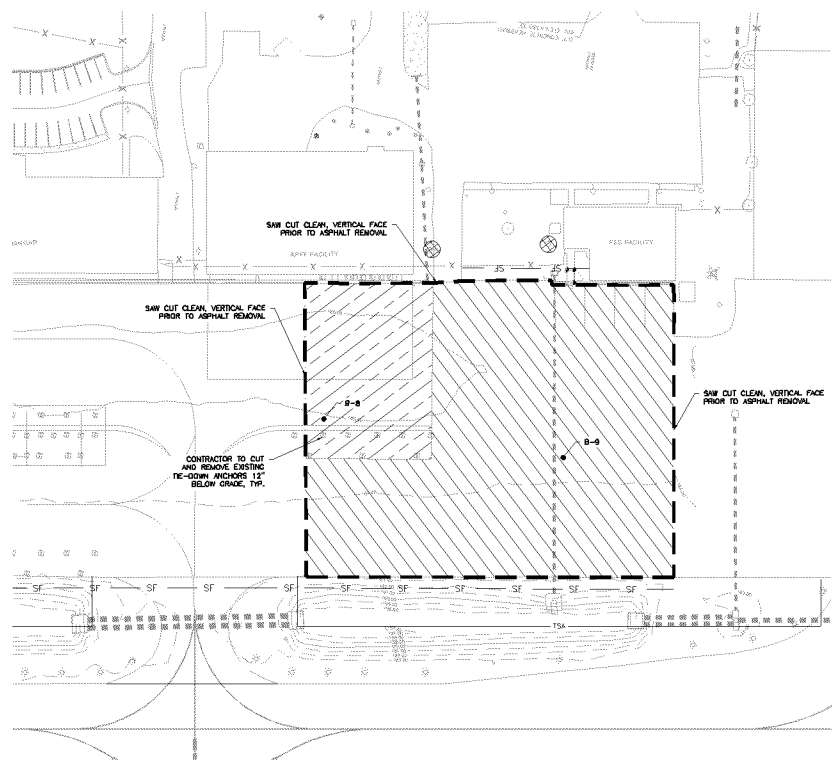
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 CHECKED BY: J.R.C.
 APPROVED BY: V.C.L.
 DATE: MARCH 2023

AVCON PROJECT NO. 2017.059.09
SHEET NUMBER
C-3



LEGEND	
	FULL-DEPTH 4" ASPHALT REMOVED
	FULL-DEPTH 8" ASPHALT REMOVED
	PHASE 4 LIMITS
	EXISTING AIRPORT TIE-DOWN (TO BE REMOVED)

GENERAL DEMOLITION NOTES:
 1. SEE SHEET C-1



CORE DATA TABLE		
LOCATION	ASPHALT DEPTH	BASE AND SUBGRADE DESCRIPTION
BB	8"	ASPHALT
	8" - 2'-0"	BROWN FINE SAND WITH SILT WITH TRACE GRAVEL
	2'-0" - 5'-0"	BROWN FINE SAND WITH SILT
BB	5'-0"	BOHRING TERMINATED (NO GROUNDWATER ENCOUNTERED)
	4"	ASPHALT
	4" - 1'-0"	GRADED AGGREGATE BASE MATERIAL
	1'-0" - 2'-0"	ORANGE FINE, SILTY SAND
	2'-0" - 5'-0"	BROWN FINE SAND WITH SILT
	5'-0"	BOHRING TERMINATED (NO GROUNDWATER ENCOUNTERED)

AVCON, INC.
 ENGINEERS & PLANNERS

AVCON, INC.
 739 BAYSHORE DRIVE, SUITE A, AUSTIN, TX 78748-4439
 OFFICE: (512) 478-1000, FAX: (512) 478-1006
 CORPORATE OFFICE: 10000 W. BRIDLE TRAIL, SUITE 1000, FORT WORTH, TX 76150-4000

ENGINEER OF RECORD:
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 FL LICENSE NO. 75419

AVCON, INC.
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 FAX: (512) 478-1006

PEBR CERTIFICATE OF AUTHORIZATION NO. 5557

**BOB SIKES AIRPORT
 CRESTVIEW, FL**

**SOUTH APRON
 REHABILITATION**

**EXISTING CONDITIONS
 AND DEMOLITION PLAN
 - PHASE 4**

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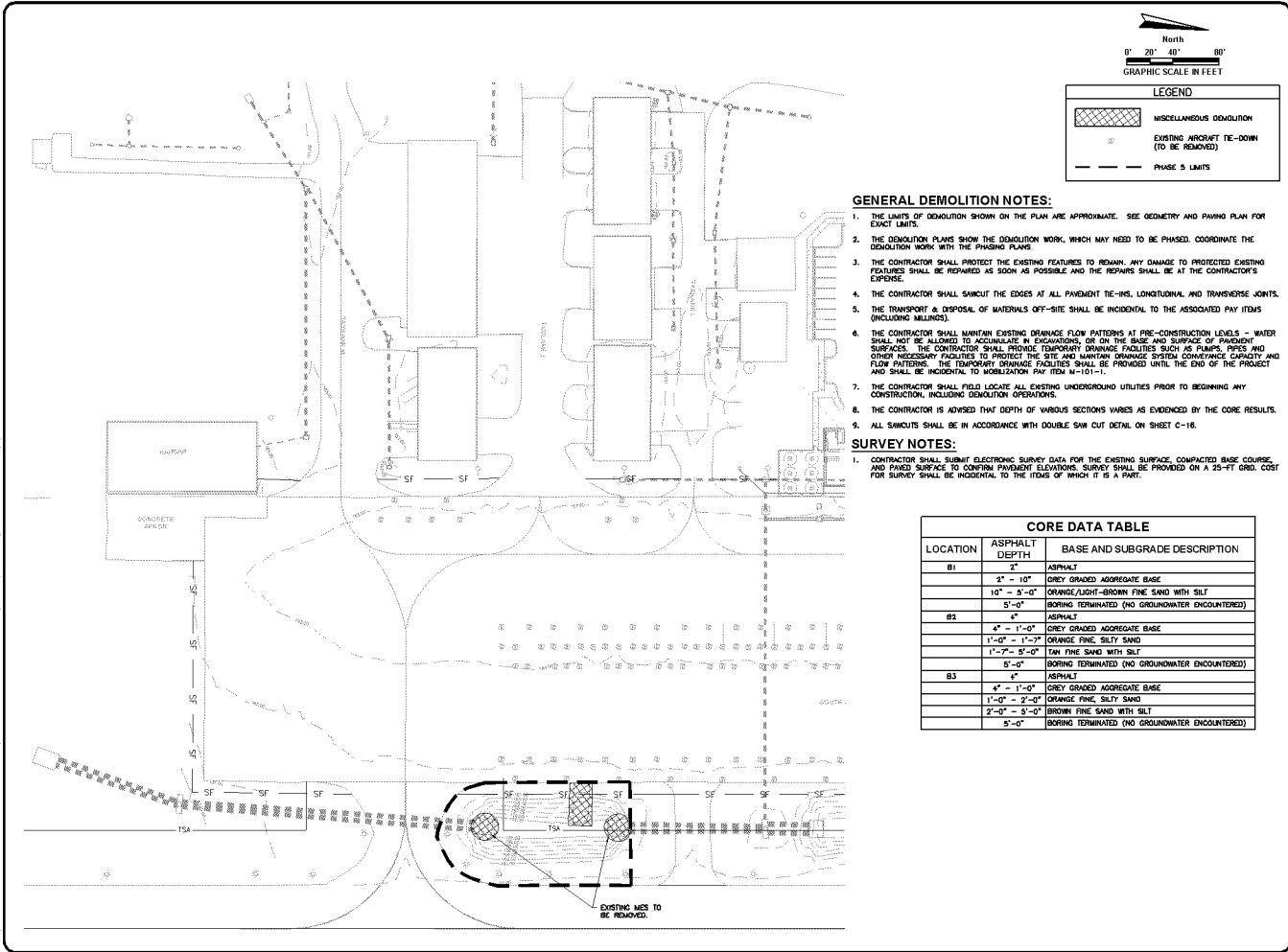
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 DATE: MARCH 2023

AVCON PROJECT NO. 2017.059.09
**SHEET NUMBER
 C-4**



**BOB SIKES AIRPORT
CRESTVIEW**

AVCON INC.
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ENGINEER OF RECORD:
NAME: JOHN R. COLLINS
FL LICENSE NO. 75419

FIRM CERTIFICATE OF AUTHORIZATION NO. 00507

**BOB SIKES AIRPORT
CRESTVIEW, FL**

**SOUTH APRON
REHABILITATION**

**EXISTING CONDITIONS
AND DEMOLITION PLAN
- PHASE 5**

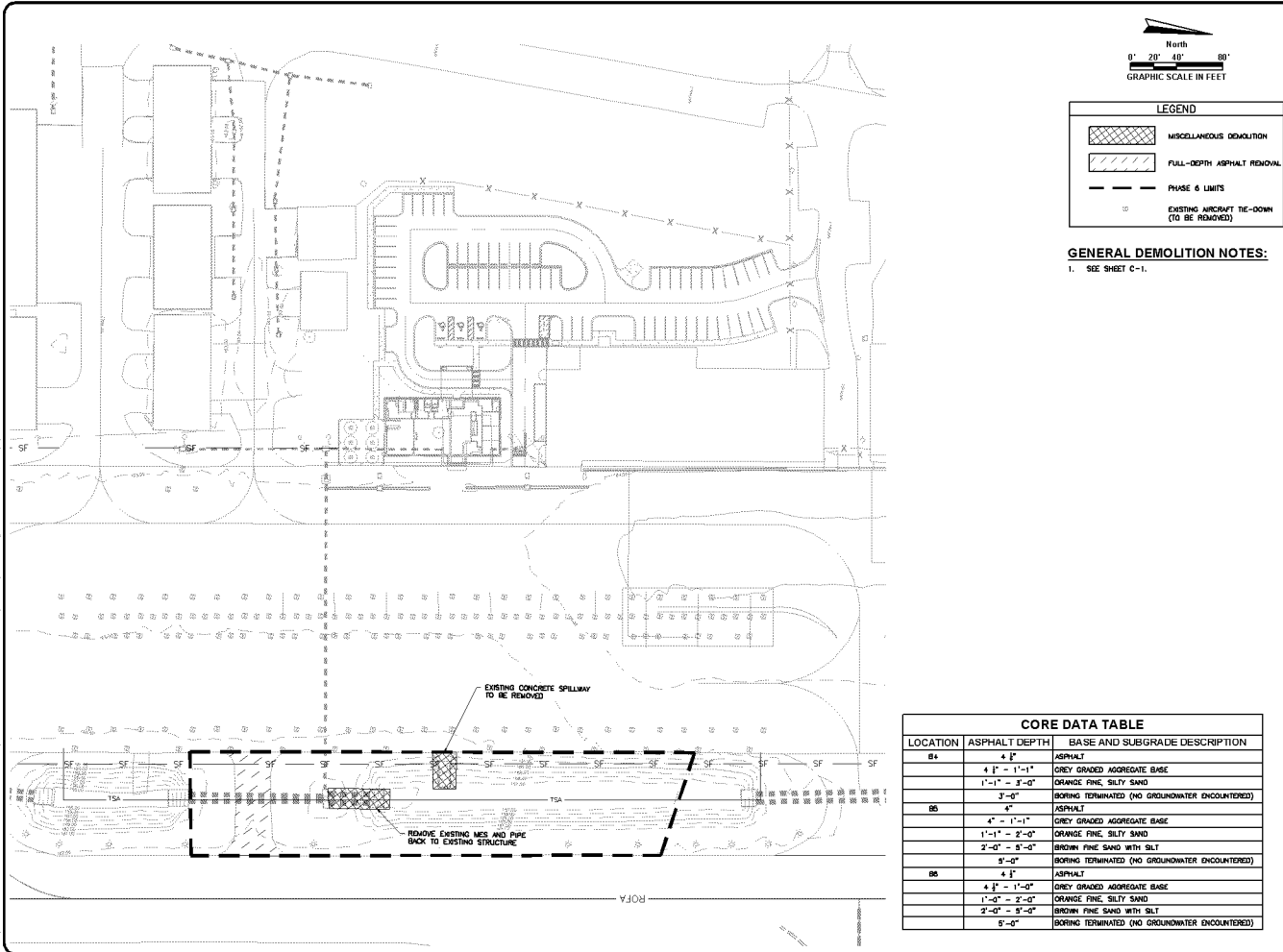
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APPROVED BY: V.C.L.
DATE: MARCH 2023

AVCON PROJECT NO. 2017.059.09
**SHEET NUMBER
C-5**



CORE DATA TABLE

LOCATION	ASPHALT DEPTH	BASE AND SUBGRADE DESCRIPTION
B4	4'-0"	ASPHALT
	4'-0" - 1'-11"	GREY GRADED AGGREGATE BASE
	1'-11" - 3'-0"	ORANGE FINE, SILTY SAND
B5	3'-0"	BORING TERMINATED (NO GROUNDWATER ENCOUNTERED)
	4'-0"	ASPHALT
	4'-0" - 1'-11"	GREY GRADED AGGREGATE BASE
B6	1'-11" - 2'-0"	ORANGE FINE, SILTY SAND
	2'-0" - 3'-0"	BROWN FINE SAND WITH SILT
	3'-0"	BORING TERMINATED (NO GROUNDWATER ENCOUNTERED)
B7	4'-0"	ASPHALT
	4'-0" - 1'-0"	GREY GRADED AGGREGATE BASE
	1'-0" - 2'-0"	ORANGE FINE, SILTY SAND
B8	2'-0" - 3'-0"	BROWN FINE SAND WITH SILT
	3'-0"	BORING TERMINATED (NO GROUNDWATER ENCOUNTERED)

**BOB SIKES AIRPORT
FLY CEW
CRESTVIEW**

AVCON

AVCON, INC.
ENGINEERS & PLANNERS

739 BAYSHORE DRIVE, SUITE A, AUSTIN, TX 78748
OFFICE: 512.454.4444 FAX: 512.454.4444
CORPORATE CERTIFICATE OF AUTHORITY FOR STATE OF TEXAS
NO. 00000000000000000000000000000000

ENGINEER OF RECORD:
NAME: JOHN R. COLLINS
FL LICENSE NO. 75419

AVCON, INC.
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PHONE: (512) 454-4444
FAX: (512) 454-4444

FBR CERTIFICATE OF AUTHORIZATION NO. 0057

**BOB SIKES AIRPORT
CRESTVIEW, FL**

**SOUTH APRON
REHABILITATION**

**EXISTING CONDITIONS
AND DEMOLITION PLAN
- PHASE 6**

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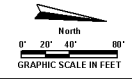
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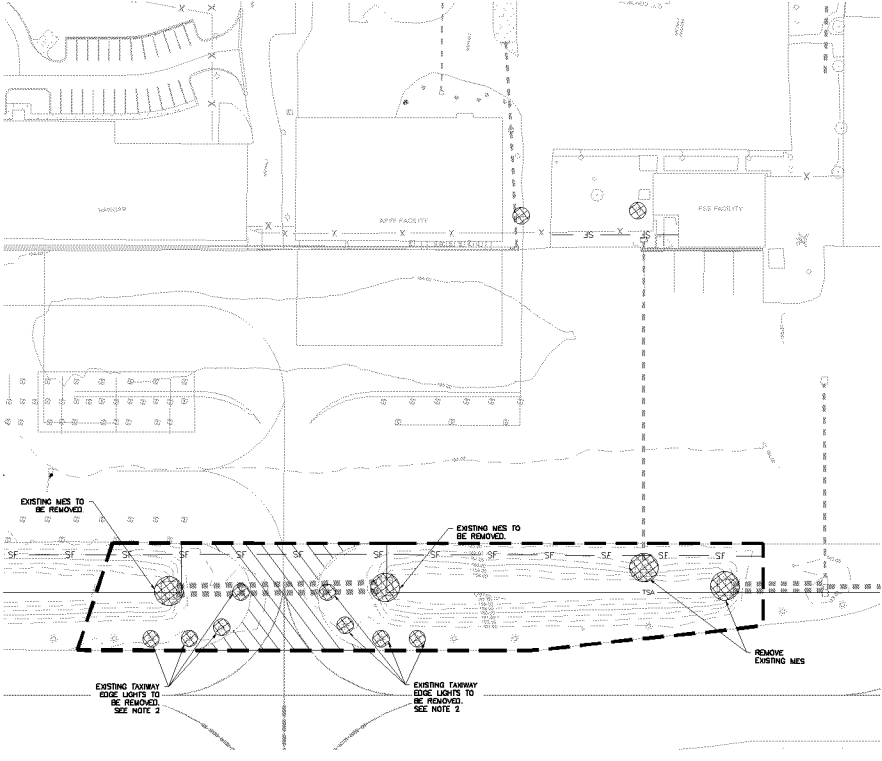
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DRAWN BY: C.A.P.
CHECKED BY: J.R.C.
APPROVED BY: V.C.L.
DATE: MARCH 2023

AVCON PROJECT NO. 2017.059.09
**SHEET NUMBER
C-6**



LEGEND	
	FULL-DEPTH 4" ASPHALT REMOVED
	MISCELLANEOUS DEMOLITION
	PHASE 7 LIMITS
	EXISTING AIRCRAFT TI-O-DOWN (TO BE REMOVED)

GENERAL DEMOLITION NOTES:
 1. SEE SHEET C-1.



CORE DATA TABLE		
LOCATION	ASPHALT DEPTH	BASE AND SUBGRADE DESCRIPTION
BB	8"	ASPHALT
	8" - 2'-0"	BROWN FINE SAND WITH SILT WITH TRACE GRAVEL
	2'-0" - 5'-0"	BROWN FINE SAND WITH SILT
BB	5'-0"	BORING TERMINATED (NO GROUNDWATER ENCOUNTERED)
	4"	ASPHALT
	4" - 1'-0"	GRADED AGGREGATE BASE MATERIAL
	1'-0" - 2'-0"	ORANGE FINE, SILTY SAND
	2'-0" - 5'-0"	BROWN FINE SAND WITH SILT
	3'-0"	BORING TERMINATED (NO GROUNDWATER ENCOUNTERED)

AVCON, INC.
 ENGINEERS & PLANNERS

AVCON, INC.
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ENGINEER OF RECORD:
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 FL LICENSE NO. 75419

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 FAX: (904) 634-7446

FBPR CERTIFICATE OF AUTHORIZATION NO. 9557

**BOB SIKES AIRPORT
 CRESTVIEW, FL**

**SOUTH APRON
 REHABILITATION**

**EXISTING CONDITIONS
 AND DEMOLITION PLAN
 - PHASE 7**

REVISIONS:

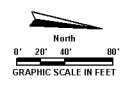
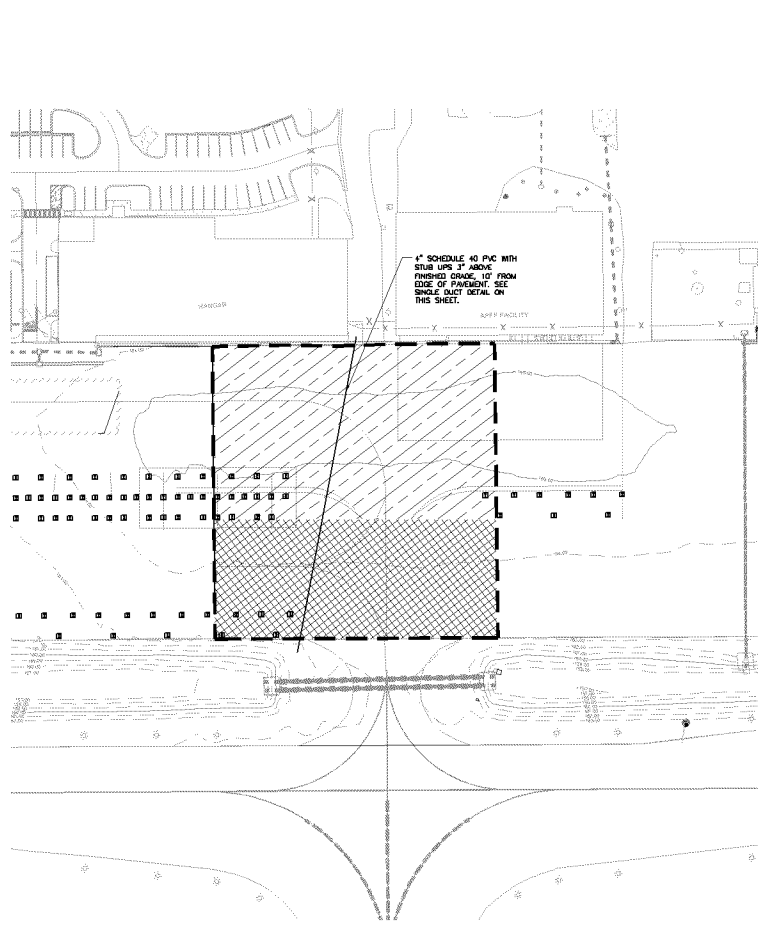
NO.	DATE	BY	DESCRIPTION

RELEASE FOR BID

DESIGNED BY: J.R.C.
 DRAWN BY: C.A.P.
 CHECKED BY: J.R.C.
 APPROVED BY: V.C.L.
 DATE: MARCH 2023

AVCON PROJECT NO. 2017.059.09
**SHEET NUMBER
 C-7**

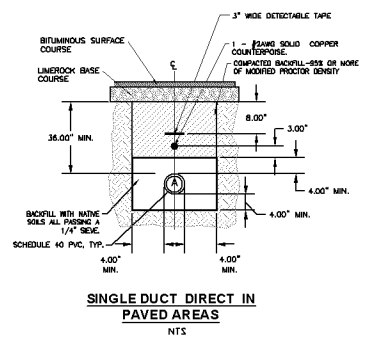
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LEGEND	
	SCAFFRY TOP 4" OF LINEROCK BASE AND RECOMPACT. SEE NOTE 1
	GRADE AND COMPACT EXISTING SUBGRADE, PLACE 10" LINEROCK SECTION. SEE NOTE 2.
	PHASE LIMITS
	NEW AIRCRAFT TIE-DOWN

NOTES:

1. SEE NOTES ON SHEET C-5.
2. SEE SHEET C-8.



SINGLE DUCT DIRECT IN PAVED AREAS
NTS

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**BOB SIKES AIRPORT
CRESTVIEW, FL**

**SOUTH APRON
REHABILITATION**

**PAVEMENT
PREPARATION PLAN -
PHASE 3**

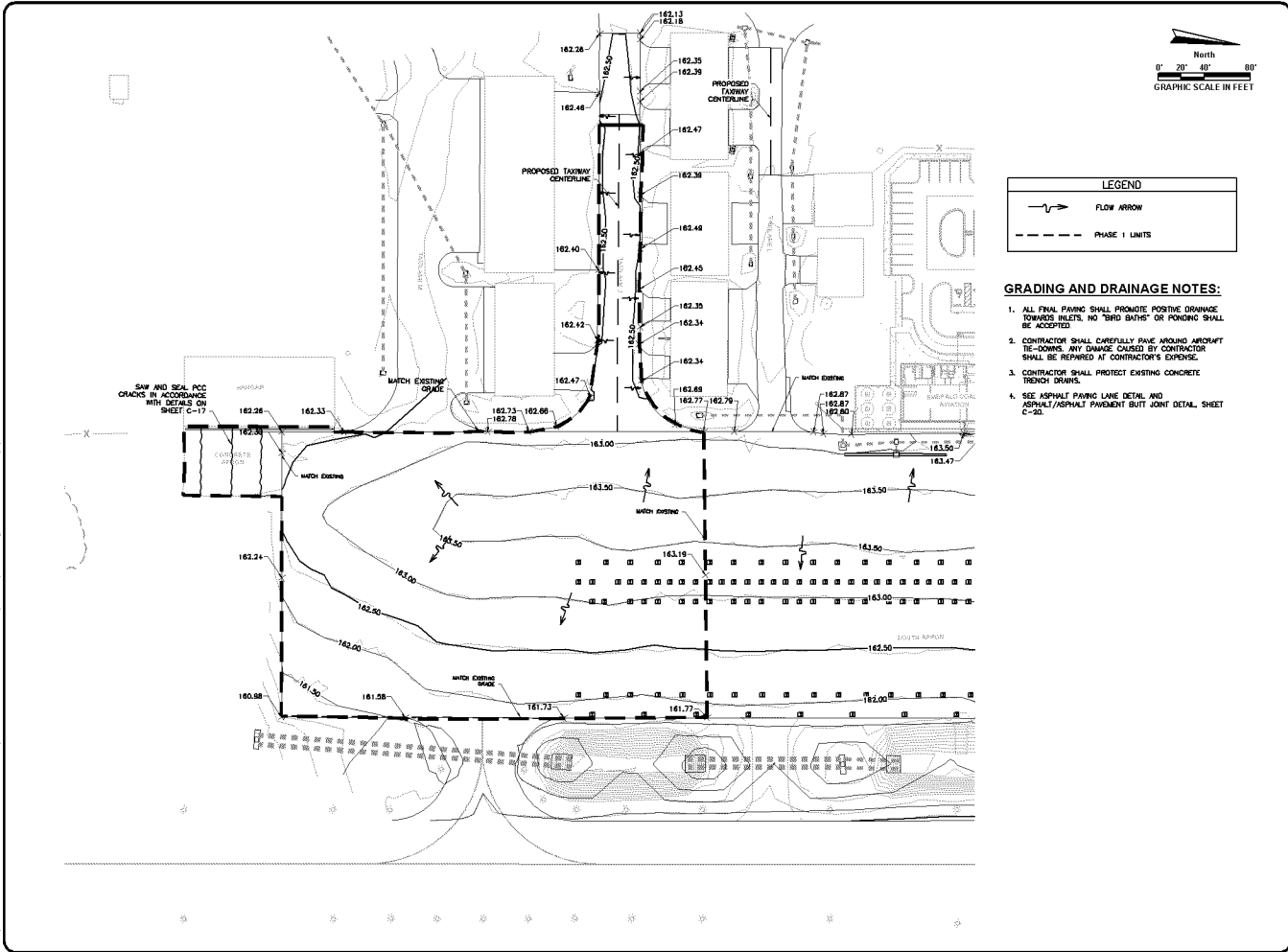
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APPROVED BY: V.C.L.
DATE: MARCH 2023

AVCON PROJECT NO. 2017.059.09
SHEET NUMBER
C-10



LEGEND

	FLOW ARROW
	PHASE 1 LIMITS

GRADING AND DRAINAGE NOTES:

1. ALL FINAL PAVING SHALL PROMOTE POSITIVE DRAINAGE TOWARDS INLETS. NO "BIRD BATHS" OR PONDING SHALL BE ACCEPTED.
2. CONTRACTOR SHALL CAREFULLY PAVE AROUND AIRPORT TE-DOWNS. ANY DAMAGE CAUSED BY CONTRACTOR SHALL BE REPAIRED AT CONTRACTOR'S EXPENSE.
3. CONTRACTOR SHALL PROTECT EXISTING CONCRETE TRENCH DRAINS.
4. SEE ASPHALT PAVING LANE DETAIL AND ASPHALT/ASPHALT PAVEMENT BUTT JOINT DETAIL SHEET C-20.

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**SOUTH APRON
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PAVING PLAN - PHASE 1

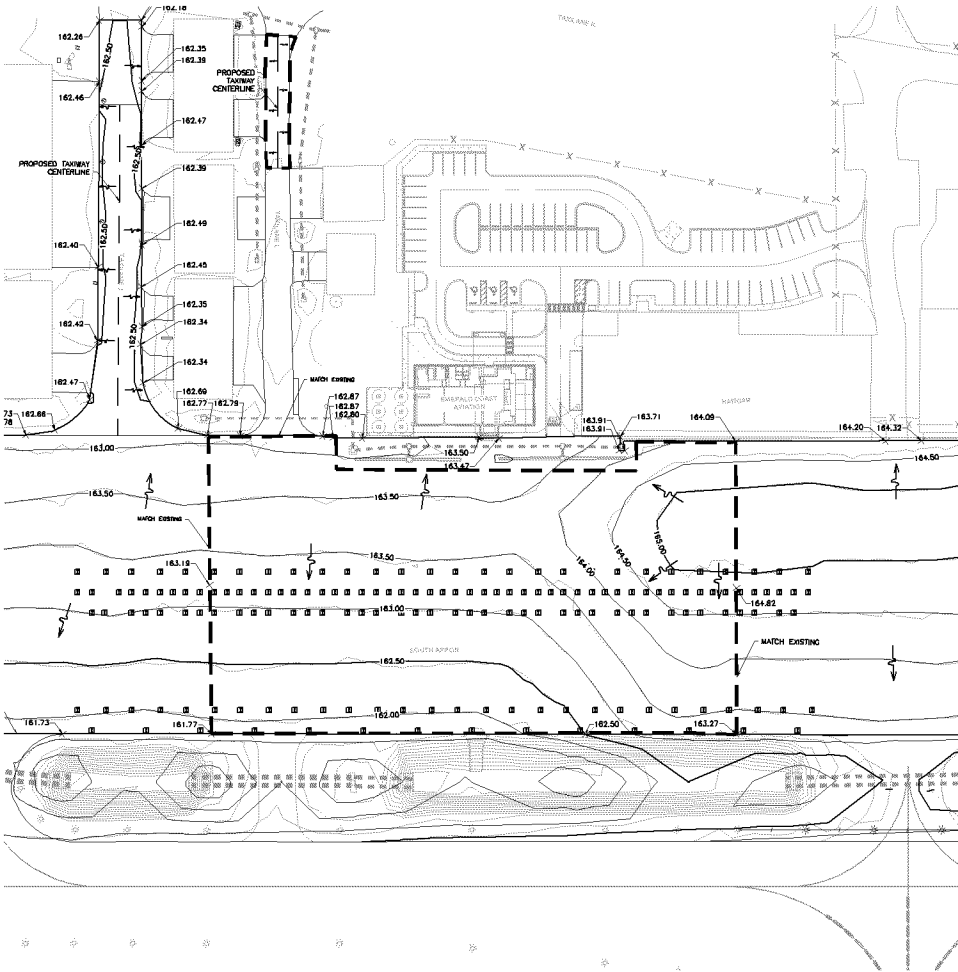
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 DATE: MARCH 2023

AVCON PROJECT NO. 2017.050.09
SHEET NUMBER
C-12



LEGEND

	FLOW ARROW
	PHASE 2 LIMITS

- GRADING AND DRAINAGE NOTES:**
1. ALL FINAL PAVING SHALL PROMOTE POSITIVE DRAINAGE TOWARD INLETS, NO "BIRD BATHS" OR PONDING SHALL BE ACCEPTED.
 2. CONTRACTOR SHALL CAREFULLY PAVE AROUND AIRPORT TIE-DOORS. ANY DAMAGE CAUSED BY CONTRACTOR SHALL BE REPAIRED AT CONTRACTOR'S EXPENSE.
 3. CONTRACTOR SHALL PROTECT EXISTING CONCRETE TRENCH DRAINS.
 4. SEE ASPHALT PAVING LANE DETAIL AND ASPHALT/ASPHALT PAVEMENT BUTT JOINT DETAIL, SHEET C-20.

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**BOB SIKES AIRPORT
CRESTVIEW, FL**

**SOUTH APRON
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PAVING PLAN - PHASE 2

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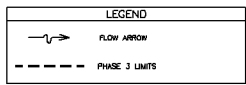
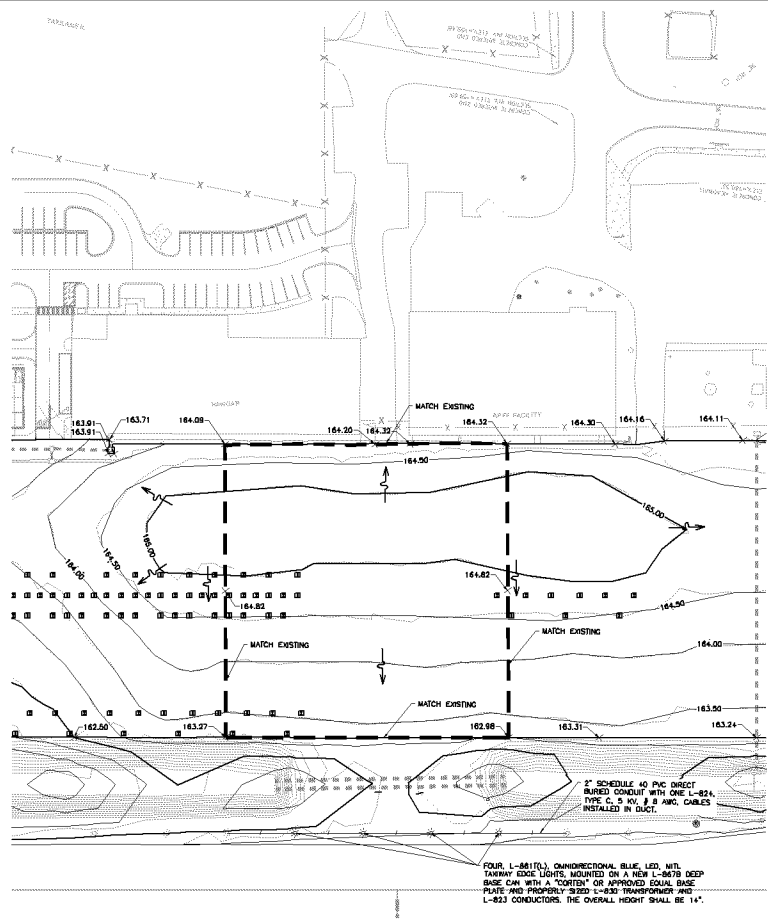
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SHEET NUMBER
C-13



- GRADING AND DRAINAGE NOTES:**
1. ALL FINAL PAVING SHALL PROMOTE POSITIVE DRAINAGE TOWARDS INLETS, NO "BIRD BATHS" OR PONDING SHALL BE ACCEPTED.
 2. CONTRACTOR SHALL CAREFULLY PAVE AROUND AIRCRAFT TIE-DOWNS. ANY DAMAGE CAUSED BY CONTRACTOR SHALL BE REPAIRED AT CONTRACTOR'S EXPENSE.
 3. CONTRACTOR SHALL PROTECT EXISTING CONCRETE TRENCH DRAINS.
 4. SEE ASPHALT PAVING LANE DETAIL AND ASPHALT/ASPHALT PAVEMENT BUTT JOINT DETAIL, SHEET C-20.

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**BOB SIKES AIRPORT
CRESTVIEW, FL**

**SOUTH APRON
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PAVING PLAN - PHASE 3

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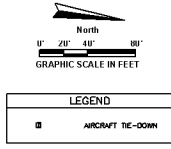
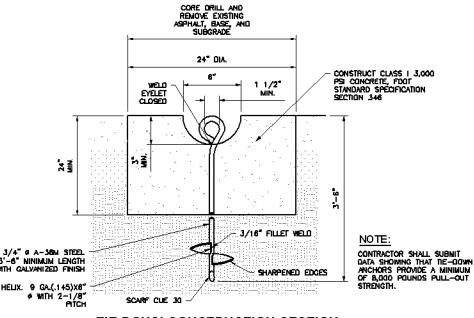
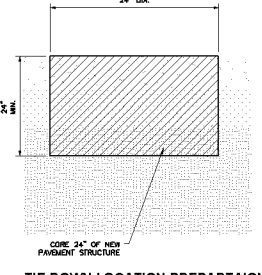
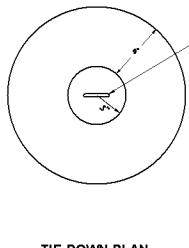
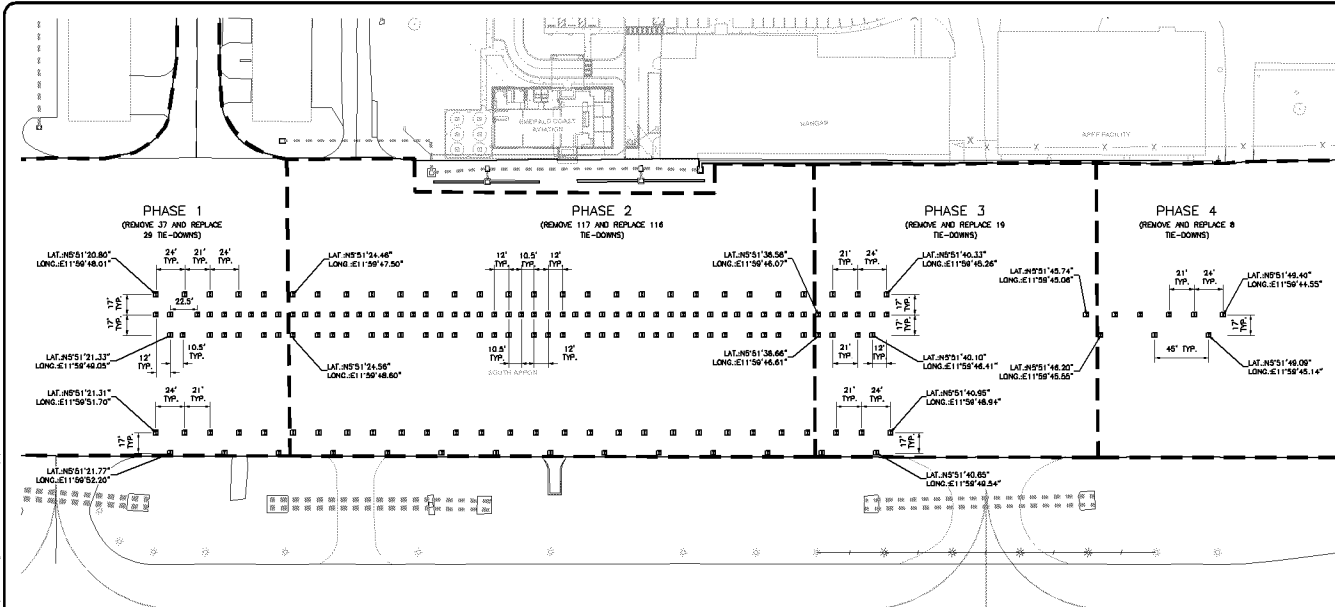
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SOUTH APRON
REHABILITATION

TIE-DOWN ANCHOR
PLAN & DETAILS

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**BOB SIKES AIRPORT
 CRESTVIEW, FL**

**SOUTH APRON
 REHABILITATION**

**GRADING AND
 DRAINAGE PLAN**

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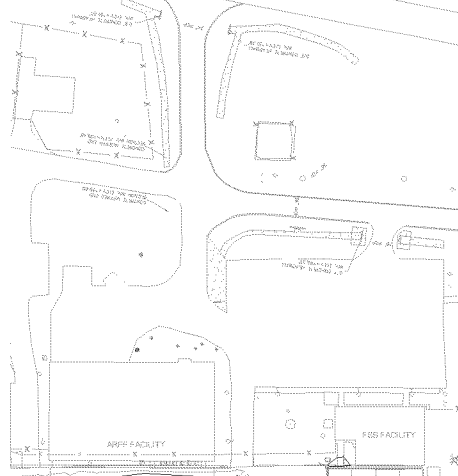
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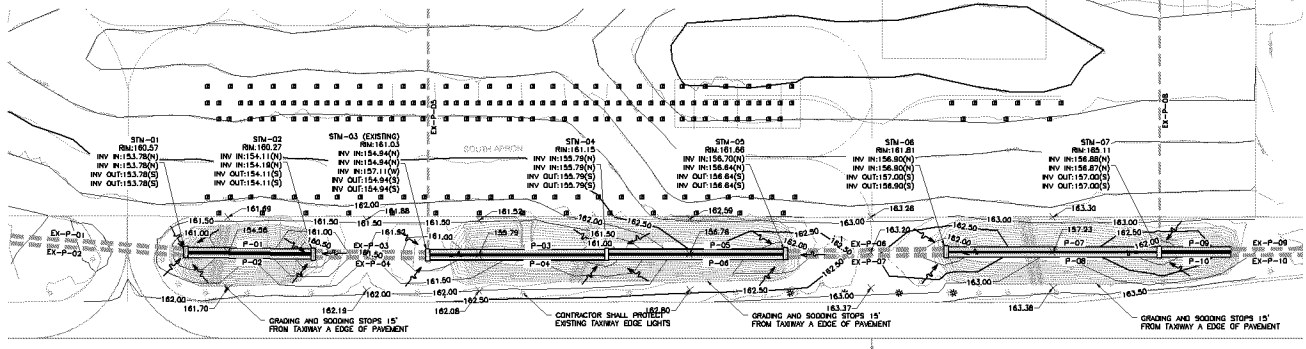
**SHEET NUMBER
 C-17**

STORMWATER STRUCTURE TABLE				
STRUCTURE NAME:	STRUCTURE TYPE:	DETAILS:	NORTHING:	EASTING:
STM-01	TYPE "H" TOP (4-GRADE) TYPE "J" BOTTOM (4'-8" X 14')	RM = 160.57 INV IN = 153.78 INV IN = 153.78 INV OUT = 153.78	850895.54	1333243.79
STM-02	TYPE "H" TOP (4-GRADE) TYPE "J" BOTTOM (4'-8" X 14')	RM = 160.27 INV IN = 154.11 INV IN = 154.10 INV OUT = 154.11	850827.31	1333227.49
STM-03 (EXISTING)	EXISTING STRUCTURE (TO REMAIN)	RM = 161.03 INV IN = 154.84 INV IN = 157.11 INV OUT = 154.84	850845.55	1333211.85
STM-04	TYPE "H" TOP (4-GRADE) TYPE "J" BOTTOM (4'-8" X 15'-0")	RM = 161.15 INV IN = 155.78 INV IN = 155.78 INV OUT = 155.78	851130.17	1333185.28
STM-05	TYPE "H" TOP (4-GRADE) TYPE "J" BOTTOM (4'-8" X 15'-0")	RM = 161.86 INV IN = 156.70 INV IN = 156.64 INV OUT = 156.64	851314.76	1333198.87
STM-06	TYPE "H" TOP (4-GRADE) TYPE "J" BOTTOM (4'-8" X 15'-0")	RM = 161.81 INV IN = 156.80 INV IN = 157.00 INV OUT = 156.80	851478.82	1333133.23
STM-07	TYPE "H" TOP (4-GRADE) TYPE "J" BOTTOM (4'-8" X 15'-0")	RM = 165.11 INV IN = 158.88 INV IN = 158.80 INV OUT = 157.00	851898.72	1333102.81

STORMWATER PIPE TABLE			
NAME	DESCRIPTION	LENGTH	SLOPE
EX-P-01	EXISTING 48" RCP	288.58'	0.11%
EX-P-02	EXISTING 48" RCP	284.50'	0.07%
EX-P-03	EXISTING 48" RCP	119.18'	0.70%
EX-P-04	EXISTING 48" RCP	114.88'	0.65%
EX-P-05	EXISTING 24" RCP	289.25'	0.81%
EX-P-06	EXISTING 34" X 53" ERCP	162.51'	0.18%
EX-P-07	EXISTING 34" X 53" ERCP	162.47'	0.18%
EX-P-08	EXISTING 24" RCP	275.71'	0.82%
EX-P-09	EXISTING 28" X 45" ERCP	74.98'	0.37%
EX-P-10	EXISTING 28" X 45" ERCP	75.25'	0.22%
P-01	48" RCP	128.23'	0.28%
P-02	48" RCP	128.32'	0.28%
P-03	34" X 53" ERCP	182.04'	0.47%
P-04	34" X 53" ERCP	181.88'	0.47%
P-05	34" X 53" ERCP	182.02'	0.47%
P-06	34" X 53" ERCP	182.02'	0.47%
P-07	34" X 53" ERCP	217.48'	0.05%
P-08	34" X 53" ERCP	217.53'	0.05%
P-09	28" X 45" ERCP	72.83'	0.27%
P-10	28" X 45" ERCP	72.48'	0.22%





NOTE: SEE SHEETS C-12 TO C-15 FOR PAVEMENT GRADES.

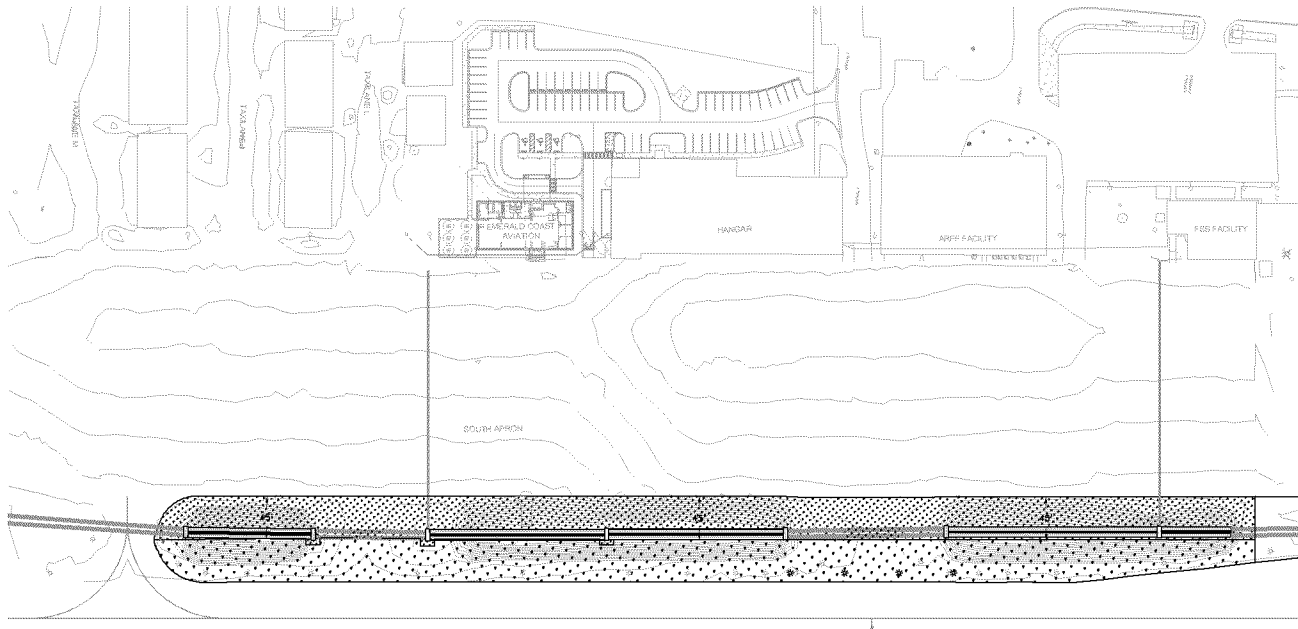
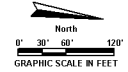


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LANDSCAPING NOTES:

1. CONTRACTOR IS SOLELY RESPONSIBLE FOR ENSURING THE SOD ESTABLISHES. CONTRACTOR SHALL IMMEDIATELY REPLACE SOD IF CROCKED FOLLOWING A RAIN EVENT AND SHALL INSTALL TEMPORARY EROSION CONTROL IMPROVEMENTS TO PROTECT SOD UNTIL IT ESTABLISHES. ALL COSTS REQUIRED TO ESTABLISH SOD SHALL BE INCIDENTAL TO PAY ITEM, T-904, SOODING, BAWA ARGENTINA.

LEGEND	
	SOD
	PYRAM WITH SOD



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**BOB SIKES AIRPORT
CRESTVIEW, FL**

**SOUTH APRON
REHABILITATION**

LANDSCAPE PLAN

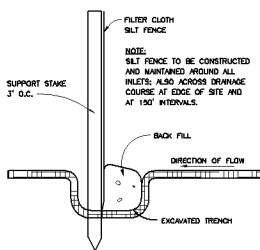
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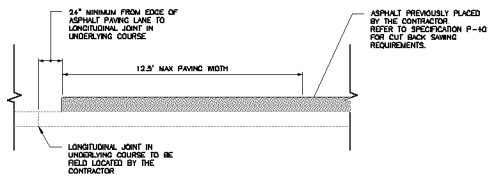
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SHEET NUMBER
C-18



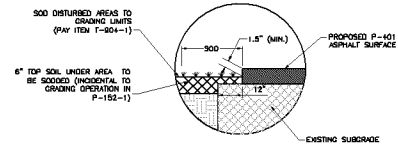
SILT FENCE DETAIL
N.T.S.

EROSION NOTES:

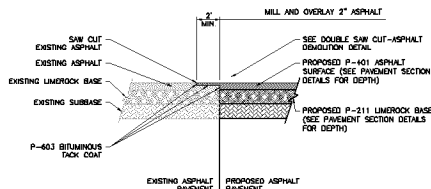
1. EROSION PROTECTION: SOIL EROSION SEDIMENTATION MUST BE CONTROLLED AND REMOVED ON SITE DURING CONSTRUCTION. THEREFORE, EROSION PROTECTION, SUCH AS STAKED BALED HAY AND SILT FENCE BARRIERS, MUST BE INSTALLED PRIOR TO START OF CONSTRUCTION.
2. SILT FENCE BARRIER SHALL BE INSTALLED AS SHOWN ON PLANS, AND IN ALL AREAS SUBJECT TO SOIL EROSION SEDIMENTATION.
3. STORMWATER DETENTION AREAS SHALL BE SOGGED.



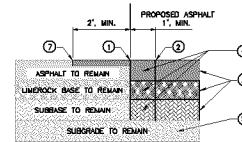
ASPHALT PAVING LANE DETAIL
N.T.S.



PAVEMENT DROP-OFF DETAIL
N.T.S.



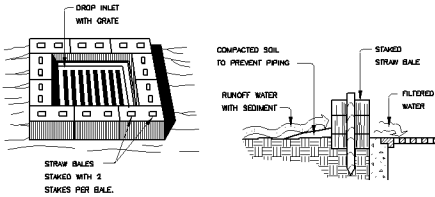
ASPHALT / ASPHALT PAVEMENT BUTT JOINT DETAIL
N.T.S.



DOUBLE SAW CUT - ASPHALT / ASPHALT DEMOLITION DETAIL
N.T.S.

SEQUENCING OF ASPHALT PAVEMENT DEMOLITION:

1. FINAL FOOTPRINT OF NEW ASPHALT. CONTRACTOR SHALL SAW CUT AROUND THE FINAL FOOTPRINT TO THE FULL DEPTH OF THE ASPHALT PAVEMENT STRUCTURE.
2. THE CONTRACTOR SHALL THEN OFFSET 1' (ONE FOOT) MINIMUM TO THE INTERIOR SIDES OF THE PROPOSED ASPHALT AND SAW CUT THE FULL DEPTH OF THE ASPHALT PAVEMENT.
3. CONTRACTOR SHALL REMOVE ASPHALT PAVEMENT ON THE INTERIOR OF CUT 2, BUT LEAVE REMAINING 1' OF ASPHALT BETWEEN CUTS 1 AND 2 FOR PROTECTION OF ASPHALT TO REMAIN.
4. CONTRACTOR MAY THEN REMOVE REMAINING ASPHALT STRIP BY BREAKING IT DOWN INTO SMALLER MORE MANAGEABLE SIZED PIECES FOR REMOVAL.
5. REMOVE SUBGRADE MATERIAL SUFFICIENT TO PLACE REQUIRED AMOUNT OF SUBBASE, BASE, AND ASPHALT PER PLAN. COMPACT SUBGRADE TO 100% OF THE MODIFIED PROCTOR VALUE AT OPTIMUM MOISTURE PER P-152.
6. PLACE NEW P-211 LIMEROCK BASE MATERIAL TO THICKNESSES SPECIFIED IN PLANS, COMPACTING EACH TO 100% OF THE MODIFIED PROCTOR VALUE AT OPTIMUM MOISTURE PER P-211.
7. CONTRACTOR SHALL OFFSET 2' (TWO FEET) MINIMUM TO THE EXTERIOR SIDES OF THE PROPOSED ASPHALT AND SAW CUT TO A DEPTH OF 2". THE 2" WIDE STRIP WILL THEN BE MILLED TO A DEPTH OF 2".
8. PAVE FINISHED SURFACES TO MATCH EXISTING ASPHALT GRADES AT ALL COMMON EDGES (SEE GRADING PLANS).



STRAW BALE DROP INLET SEDIMENT FILTER
N.T.S.

SPECIFIC APPLICATION:

THIS METHOD OF INLET PROTECTION IS APPLICABLE WHERE THE INLET DRAINS A RELATIVELY FLAT AREA (SLOPES NOT GREATER THAN 5 PERCENT) WHERE SHEET OR OVERLAND FLOWS (NOT EXCEEDING 0.5 CFS) ARE TYPICAL. THE METHOD SHALL NOT APPLY TO INLETS RECEIVING CONCENTRATED FLOWS, SUCH AS IN STREET OR HIGHWAY MEDIANS.

**BOB SIKES AIRPORT
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**BOB SIKES AIRPORT
CRESTVIEW, FL**

**SOUTH APRON
REHABILITATION**

**PAVEMENT DETAILS
(1 OF 2)**

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CHECKED BY: J.R.C.
APPROVED BY: V.C.L.
DATE: MARCH 2023

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SHEET NUMBER
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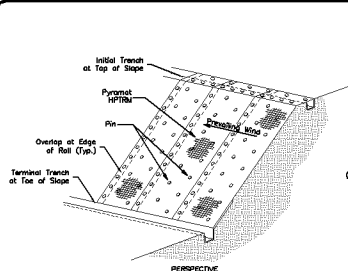


FIGURE 1: OVERVIEW OF PYRAMAT@HPTRM ON SLOPE

Note: For Clarity, Perspective View does not show all pins

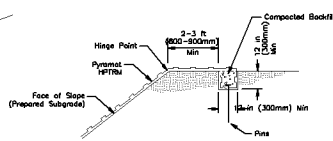


FIGURE 2: INITIAL TRENCH AT TOP OF SLOPE DETAIL

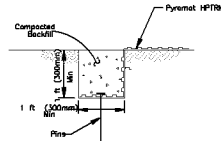


FIGURE 3: LONGITUDINAL EDGE TRENCH DETAIL

PYRAMAT@HPTRM ON A SLOPE

PRE-CONSTRUCTION
 • A pre-construction meeting should be held with the construction team and a representative from Prolog. This meeting should be scheduled by the contractor with at least two weeks notice. Also, Prolog suggests that installation monitoring of the Pyramat@HPTRM be performed by a qualified independent third party.

SITE PREPARATION

- Grade and compact area of Pyramat@HPTRM installation as directed and approved by Engineer. Subgrade shall be uniform and smooth. Remove all rocks, cobbles, vegetation or other objects so the installed mat will have direct contact with soil surface.
- Prepare seedbed by loosening the top 2-3 in (50-75 mm) minimum of soil.
- Incorporate amendments such as lime and fertilizer and/or wet the soil, if needed.
- Do not mulch areas where mat is to be placed.

SEEDING

- Apply seed to soil surface before installing mat. Disturbed areas shall be reseeded.
- Consult project plans and/or specifications for seed types and application rates.

INSTALLATION ON A SLOPE

- Figure 1 shows general installation layout and details for Pyramat@HPTRM on a slope.
- Excavate initial trench 12 in wide x 12 in deep (300 mm x 300 mm) minimum 2-3 ft (600-900 mm) over crest of slope (see Figure 2).
- Excavate longitudinal edge trenches 12 in wide x 12 in deep (300 mm x 300 mm) minimum along both sides of the installation to bury edges of mat (see Figure 3). The longitudinal edge trenches shall be located along the first and last installed rolls.
- Beginning at the downstream end of prevailing winds, place roll end into the initial trench and secure with pinning devices on 12 in (300 mm) centers (see Figure 2). Position adjacent rolls and secure in trench in same manner. Backfill and compact soil into trench as directed and approved by Engineer.
- Unroll mat down the slope over the compacted initial trench.
- Secure longitudinal edge trench with pinning devices on 12 in (300 mm) centers (see Figure 3).
- Continual installation as described above, overlapping adjacent rolls as follows:
 - Roll edge overlap: 6 in (150 mm) minimum overlap with upstream mat on top. Secure with one row of ground pinning devices on 12 in (300 mm) centers (see Figure 4).
 - Roll end overlap: 12 in (300 mm) minimum overlap with upstage mat on top. Secure with two rows of ground pinning devices staggered 12 in (300 mm) apart on 12 in (300 mm) centers (see Figure 5).
- Secure mat using suggested ground pinning devices (for appropriate frequency and pattern shown on the Pin Pattern Guide (see Figure 6)).
- For slope heights greater than 45 ft (13.7 m), install simulated check slots per Figure 7. This method includes placing two staggered rows of pins on 4 in (100 mm) centers at 30 ft (9.1 m) intervals (see Figure 7) or across the midpoint of the slope height for slope heights less than 45 ft (13.7 m).
- Excavate terminal trench 12 in wide by 12 in deep (300 mm x 300 mm) minimum 12 in (300 mm) from the toe of slope (see Figure 8).
- Pin, backfill and compact end of mat in terminal trench (see Figure 8). Terminal trench pinning devices should be spaced on 12 in (300 mm) centers (see Figure 8).

GROUND PINNING DEVICES

- Metal pins should be at least 0.20 in (5 mm) diameter steel with a 1 1/2 in (38 mm) steel washer at the head of the pin (see Figure 9). Metal pins should be driven flush to the soil surface. Pins should be between 6-24 in (150-600 mm) long and have sufficient ground penetration to resist pullout. Longer pins may be required for looser soils. Harder metal alloys may be required in rocky soils. Depending on soil pH and design life of the pin, galvanized or stainless steel pins may be required. Consult project plans and/or specifications for the device details.

SPECIAL TRANSITIONS

- *For applications that require special transitions (i.e. connections to curbs, concrete, headwalls, etc.) refer to Page 6 of the Installation Guidelines for Land@-TRMs and Pyramat@HPTRMs.

SOIL FILLING

- *Installed Pyramat@HPTRM shall be re-seeded and soil-filled.
- After seeding, spread and lightly rake 1/2 - 3/4 in (12-19 mm) of fine soil or topsoil into the mat and completely fill the voids using backside of rake or other flat tool.
- If equipment must operate on the mat, make sure it is of the rubber-tired type. No tracked equipment or sharp turns are allowed on the mat.
- Avoid any traffic over the mat if loose or wet soil conditions exist.
- Smooth soil-fill in order to just expose the top of Pyramat@HPTRM. Do not place excessive soil above the mat.
- Broadcast additional seed and install a Land@-ECB above the soil-filled mat (if desired).
- Irrigate as necessary to establish/maintain vegetation. Do not over irrigate.

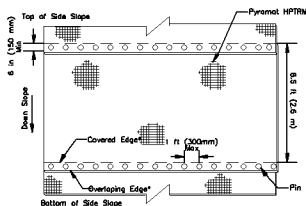


FIGURE 4: PYRAMAT@HPTRM OVERLAP AT ROLL EDGE DETAIL

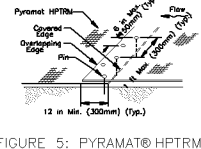


FIGURE 5: PYRAMAT@HPTRM OVERLAP AT ROLL END DETAIL

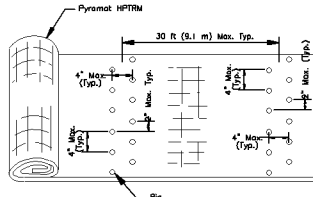


FIGURE 7: SIMULATED CHECK SLOT DETAIL

*Note: Pyramat@HPTRM Edge Slings/Overlap placement depends on down slope direction (i.e. Slings in the direction of the down slope)

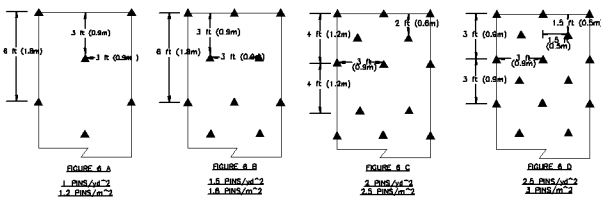


FIGURE 6: PIN PATTERN DETAIL

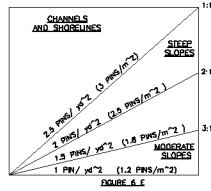


FIGURE 8: PIN PATTERN GUIDE

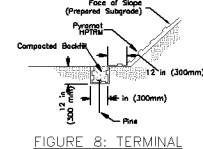


FIGURE 8: TERMINAL TRENCH AT TOE OF SLOPE DETAIL

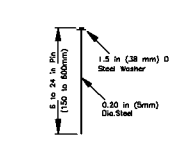


FIGURE 9: PIN DETAIL

AVCON INC.
 ENGINEER & PLANNERS
 739 BAYSHORE DRIVE, SUITE A, AUSTIN, TX 78748
 OFFICE: (512) 426-1111 FAX: (512) 426-1112
 CORPORATE OFFICE: 10000 N. FORT WORTH AVENUE, SUITE 2000, FORT WORTH, TX 76177

ENGINEER OF RECORD:
 NAME: JOHN R. COLLINS
 FL LICENSE NO. 75419

AVCON INC.
 320 BAYSHORE DRIVE, SUITE A
 AUSTIN, TX 78748
 PHONE: (512) 426-1111
 FAX: (512) 426-1112

PEIN CERTIFICATE OF AUTHORIZATION NO. 50557

BOB SIKES AIRPORT CRESTVIEW, FL

SOUTH APRON REHABILITATION

PYRAMAT DETAILS

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REVISIONS:			
NO.	DATE	BY	DESCRIPTION

RELEASE FOR BID

DESIGNED BY:	J.R.C.
DRAWN BY:	C.A.P.
CHECKED BY:	J.R.C.
APPROVED BY:	V.C.L.
DATE:	MARCH 2023

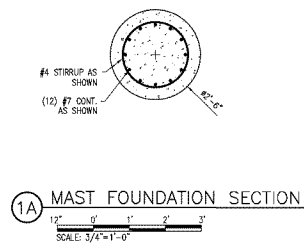
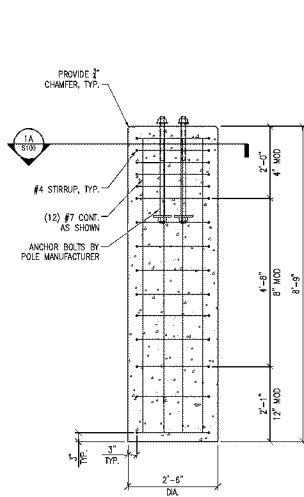
AVCON PROJECT NO. 2017.059.09

SHEET NUMBER

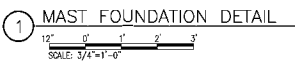
C-22

1.00 STRUCTURAL – GENERAL NOTES

- TO THE BEST OF OUR KNOWLEDGE, THE STRUCTURAL PLANS AND SPECIFICATIONS COMPLY WITH THE APPLICABLE REQUIREMENTS OF THE FOLLOWING GOVERNING DESIGN CODES:
 - FLORIDA BUILDING CODE 2017 EDITION
 - ACI STEEL CONSTRUCTION MANUAL (14TH EDITION)
 - BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE, (ACI 318-14)
 - MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES (ASCE 7-10)
- THE STRUCTURAL DOCUMENTS ARE TO BE USED IN CONJUNCTION WITH THE ELECTRICAL AND CIVIL DOCUMENTS. USE THESE NOTES IN CONJUNCTION WITH THE PROJECT SPECIFICATIONS. IF A CONFLICT EXISTS, THE MORE STRINGENT GOVERNS.
- THE CONTRACTOR SHALL REVIEW ALL CONTRACT DOCUMENTS, INCLUDING DIMENSIONS, AND SITE CONDITIONS AND COORDINATE WITH FIELD DIMENSIONS AND PROJECT SHOP DRAWINGS PRIOR TO CONSTRUCTION. ANY AND ALL DISCREPANCIES SHALL BE SUBMITTED IN WRITING TO ARCHITECT / ENGINEER. DO NOT MODIFY OR CHANGE THE SIZE OR DIMENSIONS OF STRUCTURAL MEMBERS WITHOUT WRITTEN INSTRUCTIONS FROM THE STRUCTURAL ENGINEER OF RECORD.
- IT SHALL BE THE RESPONSIBILITY OF THE SUBCONTRACTOR TO LOCATE ANY AND ALL EXISTING UTILITIES WHETHER SHOWN HEREON OR NOT, AND TO PROTECT EXISTING FACILITIES, STRUCTURES AND UTILITY LINES FROM ALL DAMAGE. EACH CONTRACTOR SHALL PROTECT HIS WORK, ADJACENT PROPERTY AND THE PUBLIC. EACH CONTRACTOR IS SOLELY RESPONSIBLE FOR DAMAGE OR INJURY DUE TO HIS ACT OR NEGLIGENCE.
- DESIGN LOAD CRITERIA:
 - RISK CATEGORY I
 - GRAVITY LOADS:
 - SELF WEIGHT
 - WIND LOADS:
 - ULTIMATE DESIGN WIND SPEED 128 MPH
 - NOMINAL DESIGN WIND SPEED 99 MPH
 - WIND EXPOSURE CATEGORY D
- THE SPECIALTY ENGINEER, DEFINED AS – A PROFESSIONAL ENGINEER, LICENSED IN THE STATE WHERE THE PROJECT IS LOCATED, WHO PERFORMS SPECIALTY STRUCTURAL ENGINEERING SERVICES FOR SELECTED SPECIALTY-ENGINEERED ELEMENTS IDENTIFIED IN THE CONTRACT DOCUMENTS, AND WHO HAS EXPERIENCE AND TRAINING IN THE SPECIALTY DOCUMENTS SHOWN AND SEALED BY THE SPECIALTY ENGINEER SHALL BE COMPLETED BY OR UNDER THE DIRECT SUPERVISION OF THE SPECIALTY ENGINEER. AT A MINIMUM, ALL STRUCTURAL SYSTEMS, INCLUDING POLE AND MAST ARM DESIGN FOR LIGHTING SHALL BE DESIGNED BY A SPECIALTY ENGINEER TO CONFORM TO ALL LOADING REQUIREMENTS.
- DO NOT SCALE THE DRAWINGS. USE DIMENSIONS SHOWN ON PLAN IN CONJUNCTION WITH THE ARCHITECTURAL DOCUMENTS. IF A CONFLICT EXISTS, NOTIFY ARCHON IN WRITING FOR RESOLUTION OF ANY AND ALL CONFLICTS.



- NOTES:**
- CONTRACTOR TO FIELD LOCATE PLACEMENT OF NEW FOUNDATION WITH ELECTRICAL AND CIVIL DOCUMENTS.
 - CONTRACTOR TO COORDINATE ANCHOR BOLT REQUIREMENTS WITH POLE MANUFACTURER PRODUCT, ANCHOR BOLT SIZE AND NUMBER SHALL BE PROVIDED BY THE POLE MANUFACTURER.
 - FOUNDATION DESIGN IS BASED ON SANDY MATERIAL WITH SOIL FRICTION OF 30%. CONTRACTOR TO NOTIFY THE ENGINEER/ARCHON IF SOIL CONDITIONS DIFFER. CONTRACTOR REQUIRED TO HAVE A GEOTECHNICAL ENGINEER LICENSED IN THE STATE OF FLORIDA TO PERFORM AT LEAST ONE STANDARD PENETRATION TEST TO DETERMINE SOIL FRICTION ANGLE AND PROVIDE A CERTIFIED LETTER FROM THE LICENSED GEOTECHNICAL ENGINEER CONFIRMING THAT THE SOIL FRICTION ANGLE IS AT LEAST 30% FOR THE WORK AREA.



2.00 STRUCTURAL – CONCRETE NOTES

- ALL CAST-IN-PLACE CONCRETE WORK SHALL BE IN ACCORDANCE WITH ACI 318-14 AND ACI 301, EXCEPT AS MODIFIED BY THE PROJECT CONSTRUCTION DOCUMENTS.
- ALL CONCRETE SHALL MEET THE PROJECT SPECIFICATIONS AND SHALL DEVELOP COMPRESSIVE STRENGTHS AS FOLLOWS (28 DAY STRENGTH):
 - NORMAL WEIGHT CONCRETE (145 PCF)
 - FOUNDATIONS 4000 PSI
 PROVIDE CURRENT (MAX. 1 YEAR OLD) STATISTICAL DATA FOR EACH CONCRETE MIX SUBMITTED IN ACCORDANCE WITH ACI 318-11.
- ALL REINFORCING BARS FOR CONCRETE SHALL HAVE A MINIMUM YIELD STRENGTH OF 60,000 PSI AND MEET THE REQUIREMENTS OF ASTM A-615. FOR PLACEMENT OF REINFORCING CONFORM TO ACI-301, ACI-315, ACI-318, AND CSI "MANUAL OF STANDARD PRACTICE". ALL REINFORCING SHALL BE ACCURATELY PLACED, PROPERLY SUPPORTED, AND FIRMLY TIED IN PLACE WITH BAR SUPPORTS AND SPACERS IN ACCORDANCE WITH THE ABOVE REQUIREMENTS. PROVIDE CLASS "B" LAP SPLICE FOR CONTINUOUS BARS.
- ALL REINFORCING BARS, ANCHOR BOLTS, DOWELS AND OTHER CONCRETE INSERTS SHALL BE SECURED ADEQUATELY IN POSITION PRIOR TO PLACEMENT OF CONCRETE. CONTRACTOR SHALL USE TEMPORARIES TO INSURE ACCURATE PLACEMENT OF ANCHOR BOLTS, DOWELS, ETC.
- ALL CONCRETE SHALL BE CONSOLIDATED BY USE OF A MECHANICAL VIBRATOR OR OTHER MEANS APPROVED BY THE ENGINEER.
- CONCRETE SHALL COMPLY WITH ALL THE REQUIREMENTS OF ASTM STANDARD C94 FOR MEASURING, MIXING, TRANSPORTING, ETC. CONCRETE TICKETS SHALL BE TIME STAMPED WHEN CONCRETE IS BATCHED. CONCRETE SHALL BE PLACED IN ITS FINAL POSITION WITHIN 90 MINUTES AFTER ADDITION OF BATCH WATER. CONCRETE SHALL BE DISCARDED IF THE FORDING ELAPSED TIME IS EXCEEDED.
- MAXIMUM WATER TO CEMENT RATIO SHALL BE 0.50.
- CEMENT SHALL BE TYPE I OR I/II
- SAMPLE CONCRETE IN A RATE OF EVERY 25 C.Y. AND NO LESS THAN ONE SAMPLE PER DAY. EACH SAMPLE SHALL PRODUCE (3) 6X12 CYLINDERS FOR COMPRESSIVE TESTING. TEST TWO SAMPLES AT 7 DAYS AND TWO SAMPLES AT 28 DAYS. HOLD REMAINING TWO CYLINDERS FOR RESERVE.

**BOB SIKES AIRPORT
CRESTVIEW, FL**

**SOUTH APRON
REHABILITATION**

**REINFORCED CONCRETE
POLE BASE DETAIL**

SCALE: AS NOTED

REVISIONS:			
NO.	DATE	BY	DESCRIPTION

RELEASE FOR BID

DESIGNED BY: DJM
 DRAWN BY: WEH
 CHECKED BY: DJM
 APPROVED BY: DJM
 DATE: SEPT 2018

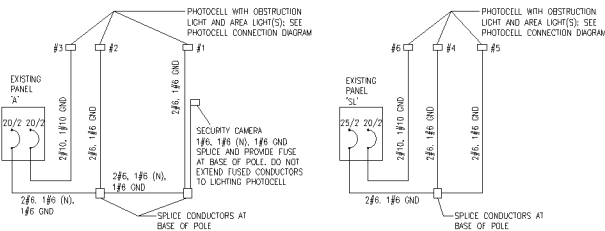
AVCON PROJECT NO. 2017.050.06
SHEET NUMBER
S1

ELECTRICAL GENERAL NOTES

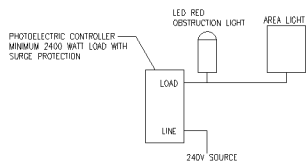
- FURNISH ALL EQUIPMENT AND LABOR, PERFORM ALL LABOR WITH SUPERVISION, BEAR ALL EXPENSES, AS NECESSARY FOR THE SATISFACTORY COMPLETION OF ALL WORK READY FOR OPERATION.
- COMPLY WITH ALL LOCAL CODES APPLICABLE TO ELECTRICAL WORK, THE NATIONAL ELECTRIC CODE, AND THE STATEMENT OF WORK. OBTAIN ALL PERMITS REQUIRED BY LOCAL ORDINANCES.
- THE GENERAL CONTRACTOR SHALL NOTIFY THE DESIGNER OF RECORD OF ANY CONFLICTS/DISCREPANCIES BETWEEN DISCIPLINES BEFORE ORDERING.
- ALL CONDUCTORS INDICATED ON PLAN SHALL BE COPPER, UNLESS NOTED OTHERWISE.
- ALL ELECTRICAL WORK AND MATERIALS USED IN THIS PROJECT SHALL BE NEW, UNDERWRITERS' LABORATORIES (UL) LISTED AND LABELED, AND SHALL BE FURNISHED AND INSTALLED BY THE CONTRACTOR UNLESS NOTED OTHERWISE.
- CONDUIT ROUTINGS AND DEVICE/EQUIPMENT LOCATIONS SHOWN ARE DIAGRAMMATIC ONLY. CONTRACTOR SHALL FIELD ROUTE AND LOCATE AS REQUIRED. CONDUIT ROUTINGS SHALL BE PARALLEL OR PERPENDICULAR TO BUILDING LINES.
- THE CONDUIT SYSTEMS UTILIZED SHALL BE AS FOLLOWS:
 - BELOW GRADE - PVC SCHEDULE 80
 - TRANSITIONS FROM BELOW GRADE (WHICH SHALL INCLUDE A 90° FACTORY 90 DEGREE ELBOW) TO ABOVE GRADE AND/OR THRU SLAB - GALVANIZED RIGID STEEL (GRS)
 - EXTERIOR OF BUILDING EXPOSED ABOVE FINISHED GRADE - RIGID STEEL CONDUIT (RSC) OR INTERMEDIATE METAL CONDUIT (IMC) UNLESS NOTED OTHERWISE.
- ALL NEW CONDUITS RUN UNDERGROUND SHALL HAVE A MINIMUM BURIAL DEPTH OF 36" UNLESS NOTED OTHERWISE.
- WHERE CONFLICTS OCCUR ON ELECTRICAL DRAWINGS BETWEEN DRAWINGS SUBMIT AN RFI FOR CLARIFICATION PRIOR TO PERFORMING WORK.
- PROVIDE WORKING SPACE CLEARANCE FOR ALL ELECTRICAL EQUIPMENT IN ACCORDANCE WITH NFPA 70, TABLE 110.26(A)(1).
- IF MORE THAN THREE CURRENT-CARRYING CONDUCTORS ARE INSTALLED IN A SINGLE RACEWAY, CONDUCTORS SHALL BE RATED IN ACCORDANCE WITH NEC TABLE B.310.15(B)(2)(11).
- ALL CIRCUITS SHALL HAVE SEPARATE NEUTRALS. A MAXIMUM OF 3-CIRCUITS (PHASES) SHALL BE COMBINED IN A SINGLE CONDUIT. NEUTRAL CONDUCTORS SHALL BE COUNTED AS CURRENT CARRYING, WHEN ADJUSTING WIRE SIZES PER NEC DUE TO NUMBER OF CURRENT CARRYING CONDUCTORS.
- CONTRACTOR SHALL PROVIDE MINIMUM 36" x 36" x 36" H20 RATED HANDHOLES AS REQUIRED TO ACCOMMODATE DIRECTIONAL DRILLING AND CONDUIT.

OBSTRUCTION LIGHT NOTE:
 PROVIDE A RED LED OBSTRUCTION LIGHT AT THE TOP OF EACH POLE. THE RED OBSTRUCTION LIGHT AND APRON LIGHTING SHALL BE OPERATED BY A PHOTOELECTRIC CONTROLLER ADJUSTED SO THE LIGHTS WILL BE TURNED ON WHEN THE NORTHERN SKY ILLUMINANCE REACHING A VERTICAL SURFACE FALLS BELOW A LEVEL OF 60 FOOT-CANDELES (645.8 LUX) BUT BEFORE REACHING A LEVEL OF 36 FOOT-CANDELES (376.7 LUX). THE CONTROL DEVICE SHOULD TURN THE LIGHTS OFF WHEN THE NORTHERN SKY ILLUMINANCE RISES TO A LEVEL OF NOT MORE THAN 60 FOOT-CANDELES (645.8 LUX). THE SENSING DEVICE SHOULD, IF PRACTICAL, FACE THE NORTHERN SKY IN THE NORTHERN HEMISPHERE.

OBSTRUCTION LIGHT SHALL BE MOUNTED ON 1" RIGID CONDUIT PIPE STEM AND SHALL BE BRACED TO MEET WIND LOADING REQUIREMENTS. CONTRACTOR SHALL COORDINATE OBSTRUCTION LIGHT MOUNTING WITH POLE MANUFACTURER.

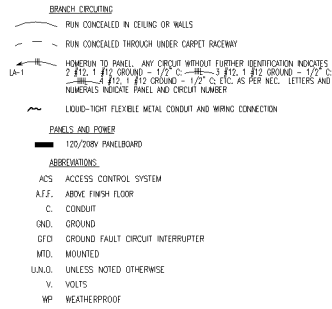


CIRCUIT WIRING DIAGRAM



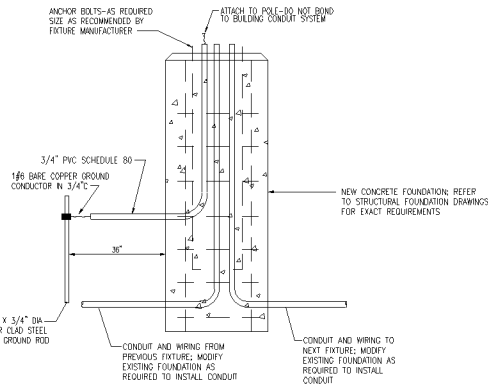
PHOTOCELL CONNECTION DIAGRAM

ELECTRICAL LEGEND



EQUAL FIXTURES AND ASSOCIATED FOOTCANDLE CALCULATIONS SHOWING DISTRIBUTION SHALL BE SUBMITTED A MINIMUM OF 10 DAYS PRIOR TO BID FOR APPROVAL.

LIGHTING FIXTURE SCHEDULE				
MARK	MANUFACTURER AND CATALOG No.	LUMPS		MOUNTING
		No.	Type	
FL1	DARCOO OS-PFF-276L-1A-NW-01-SF-ARR-240-SP2		LED	55' ABOVE GRADE
POLE	VALMONT DS210-W504550-P2-FP-[FINISH]-FBO-AB			



ELECTRICAL POLE GROUNDING DETAIL

NOT TO SCALE

BAGWELL ENGINEERING, INC
 210 E. Government St. FL Authorization No. 30167
 Pensacola, FL 32502 FL P.E. No. 59251
 Phone: (850) 452-8040 Job Number: 17-089



AVCON, INC.
 ENGINEERING & PLANNING
 700 W. BAY STREET, SUITE 1000, TAMPA, FL 33606
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McCarthy
 CONSTRUCTION
 1100 N. W. 10th Street, Suite 1000
 Fort Lauderdale, FL 33304
 Phone: (954) 470-1100
 MBE project: P2017-157

**BOB SIKES AIRPORT
 CRESTVIEW, FL**

**SOUTH APRON
 REHABILITATION**

**ELECTRICAL LEGEND
 GENERAL NOTES**

DATE: 11/15/17

SCALE: AS NOTED

NO.	DATE	BY	DESCRIPTION

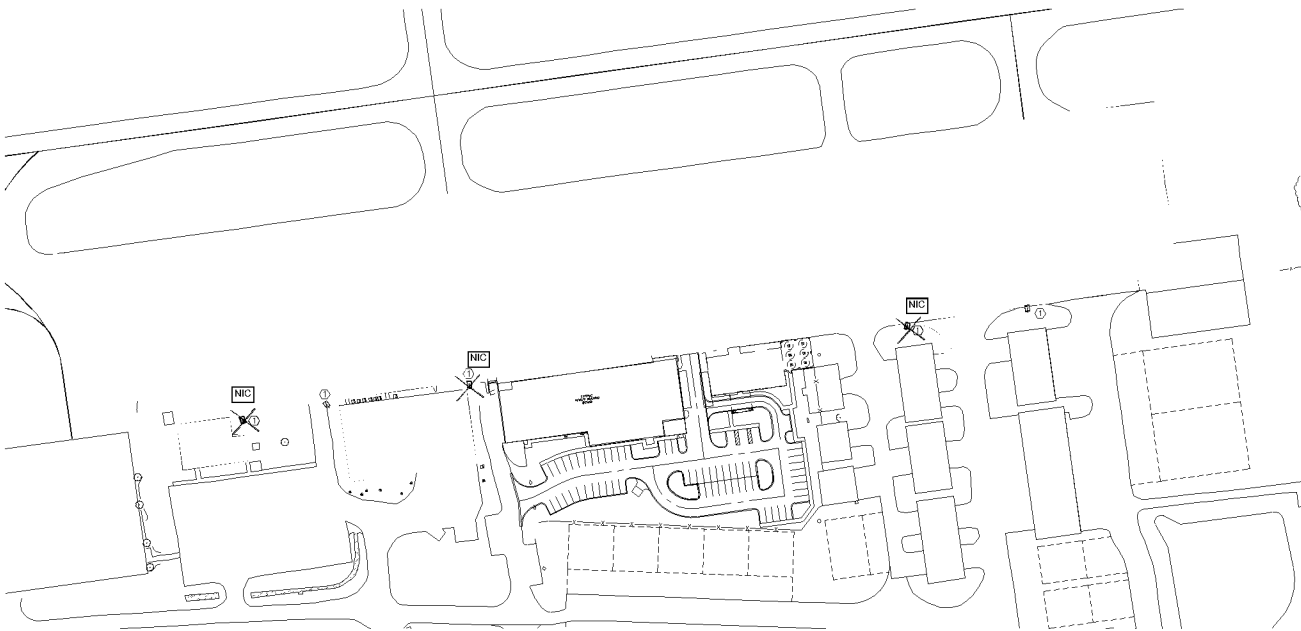
RELEASE FOR BID

DESIGNED BY: DCC
 DRAWN BY: CTK
 CHECKED BY: DMB
 APPROVED BY: DMB
 DATE: SEP 2018

AVCON PROJECT NO. 2017.050.06

SHEET NUMBER

E1



APRON LIGHTING DEMOLITION PLAN
 SCALE: 1/8" = 1'-0"

KEYNOTES:

- ① EXISTING POLE MOUNTED LIGHT AND POLE TO BE REMOVED PER BID SCHEDULE. ASSOCIATED EXISTING WIRING SHALL BE REMOVED BACK TO SOURCE. ASSOCIATED EXISTING CONDUIT SHALL BE CAPPED BELOW GRADE AND ABANDONED IN PLACE. IF EXISTING POLE IS TO REMAIN DUE TO ALTERNATE NOT BEING AWARDED, THEN THE CIRCUIT SHALL BE REWORKED AS REQUIRED FOR THE EXISTING LIGHT TO REMAIN OPERATIONAL.

Be BAGWELL ENGINEERING, INC
 216 E. Government St. FL Authorization No. 30187
 Pensacola, FL 32502 FL P.E. No. 59251
 Phone: (850) 453-8040 Job Number: 17-089

CRESTVIEW
FLY CEW
BOB SIKES AIRPORT

AVCON
ENGINEERS & PLANNERS
 1900 BOB SIKES AVENUE, SUITE 100, CRESTVIEW, FL 32117
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 CORPORATE: (904) 399-1111 EXT. 1000
 MOBILE: (904) 399-1111
 FAX: (904) 399-1111

McCarthy
ENGINEERS
 P.O. BOX 10000, TAMPA, FL 33610
 PENSACOLA, FL 32502
 PHONE: (813) 442-1000 FAX: (813) 442-1010
 MBI PROJECT: P2017-157

BOB SIKES AIRPORT
CRESTVIEW, FL

SOUTH APRON
REHABILITATION

APRON LIGHTING
DEMOLITION PLAN

DATE PLOTTED: 9/11/18

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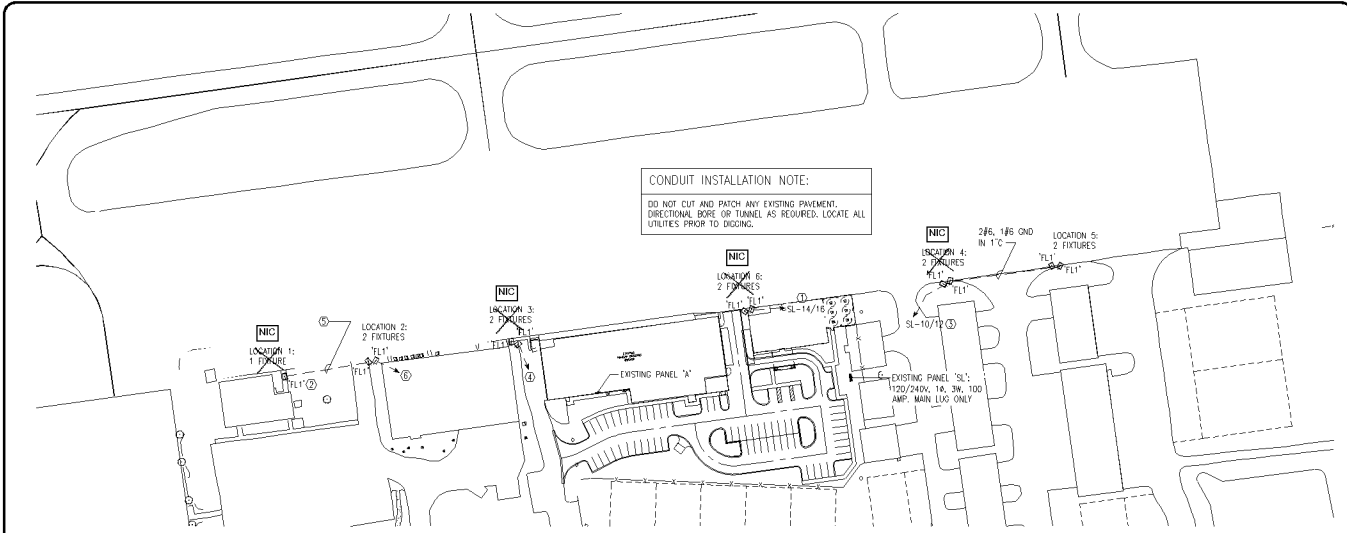
SCALE: AS NOTED

REVISIONS:		
NO.	DATE	DESCRIPTION

RELEASE FOR BID

DESIGNED BY: DCC
 DRAWN BY: CTK
 CHECKED BY: DMB
 APPROVED BY: DMB
 DATE: SEPT 2018

AVCON PROJECT NO. 2017-050-06
SHEET NUMBER
E2



NEW WORK APRON LIGHTING PLAN
 SCALE: 1/64" = 1'-0"

KEYNOTES:

- ① INSTALL 2#6, 1#6 NEUTRAL, 1#6 GND IN 1" C TO EXISTING PANEL "A". NEUTRAL CONDUCTOR SHALL BE UTILIZED FOR CONNECTION TO THE SECURITY CAMERA. THE SECURITY CAMERA SHALL BE WIRED FOR 24 HOUR CONTINUOUS OPERATION. REMOVE EXISTING BREAKER SERVING APRON LIGHTING. INSTALL NEW 20A/2 POLE BREAKER IN EXISTING BREAKER LOCATION AND CONNECT TO NEW CIRCUIT WIRING.

Be BAGWELL ENGINEERING, INC
 216 E. Government St. FL Authorization No. 30167
 Pensacola, FL 32502 FL P.E. No. 59251
 Phone: (850) 452-8040 Job Number: 17-089

CRESTVIEW
FLY CEW
BOB SIKES AIRPORT

AVCON
AVCON, INC.
 ENGINEERING & PLANNING
 700 W. BAYVIEW BLVD. SUITE 1000
 MIAMI, FL 33149
 CORPORATE CONTACT FOR AUTHORIZATION NUMBER: 30167
 305.556.2200

McCarthy
ENGINEERING
 FL. CA LICENSE NUMBER: 0000141
 1201 S. W. 87th Ave.
 Hialeah, Florida 33018
 P: (305) 426-1000 F: (305) 426-4610
 MBE project: P2017-157

BOB SIKES AIRPORT
CRESTVIEW, FL

SOUTH APRON
REHABILITATION

NEW WORK
APRON LIGHTING PLAN

ATTENTION:
 THE FOLLOWING CONTRACT DOCUMENTS APPLY TO THIS PROJECT:
 1. STANDARD SPECIFICATIONS FOR CONSTRUCTION, 2013 EDITION, PART 1, SECTION 2800, AIRPORT LIGHTING.
 2. AIRPORT LIGHTING CONTRACT DOCUMENT, PART 1, SECTION 2800, AIRPORT LIGHTING.
 3. AIRPORT LIGHTING CONTRACT DOCUMENT, PART 1, SECTION 2800, AIRPORT LIGHTING.
 4. AIRPORT LIGHTING CONTRACT DOCUMENT, PART 1, SECTION 2800, AIRPORT LIGHTING.
 5. AIRPORT LIGHTING CONTRACT DOCUMENT, PART 1, SECTION 2800, AIRPORT LIGHTING.

SCALE: AS NOTED

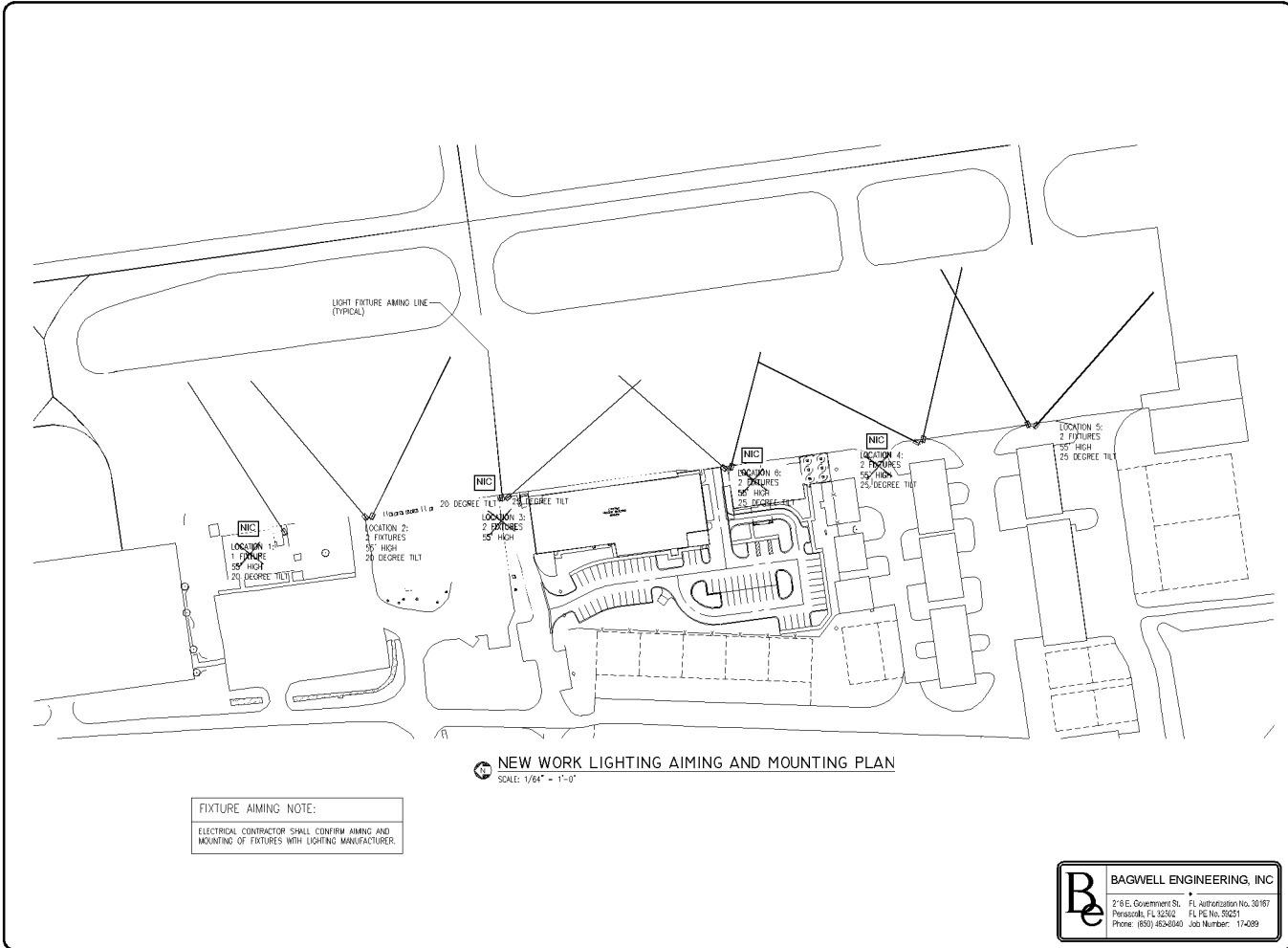
REVISIONS:

NO.	DATE	BY	DESCRIPTION

RELEASE FOR BID

DESIGNED BY: DCC
DRAWN BY: CTK
CHEKED BY: DMB
APPROVED BY: DMB
DATE: SEPT 2018

AVCON PROJECT NO. 2017-050-06
SHEET NUMBER
E3



FIXTURE AIMING NOTE:
ELECTRICAL CONTRACTOR SHALL CONFIRM AIMING AND MOUNTING OF FIXTURES WITH LIGHTING MANUFACTURER.

Be BAGWELL ENGINEERING, INC
216 E. Government St. FL Authorization No. 30187
Pensacola, FL 32502 FL P.E. No. 59251
Phone: (850) 453-8040 Job Number: 17-089

CRESTVIEW
FLY CEIV
BOB SIKES AIRPORT

AVCON
AVCON, INC.
ENGINEERING & PLANNING
29 SW 10TH ST. SUITE 100, CRESTVIEW, FL 32636
OFFICE: (904) 328-1111 FAX: (904) 328-1111
CORPORATE CERTIFICATE OF AUTHORIZATION NUMBER: 0487
ISSUED: 04/15/2010

McCarthy
ENGINEERING
FL CONTRACT NUMBER: 0487
ISSUED: 04/15/2010
PROJECT: BOB SIKES AIRPORT
MEP PROJECT: P2017-157

BOB SIKES AIRPORT
CRESTVIEW, FL

SOUTH APRON
REHABILITATION

NEW WORK LIGHTING
AIMING AND MOUNTING
PLAN

ATTENTION:
THIS DOCUMENT CONTAINS PROPRIETARY AND CONFIDENTIAL INFORMATION. ALL INFORMATION CONTAINED HEREIN IS THE PROPERTY OF AVCON, INC. AND SHALL REMAIN THE PROPERTY OF AVCON, INC. ANY REPRODUCTION, DISTRIBUTION, OR DISSEMINATION OF THIS DOCUMENT, IN WHOLE OR IN PART, IS STRICTLY PROHIBITED.

SCALE: AS NOTED

NO.	DATE	BY	DESCRIPTION

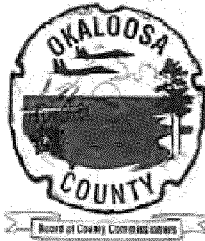
RELEASE FOR BID

DESIGNED BY: DCC
DRAWN BY: CTK
CHECKED BY: DMB
APPROVED BY: DMB
DATE: SEPT 2018

AVCON PROJECT NO. 2017-050-06
SHEET NUMBER
E4

Attachment "B"

Vendor's Proposal



INVITATION TO BID (ITB) & RESPONDENT'S ACKNOWLEDGEMENT

ITB TITLE: CEW South Apron Rehabilitation**RFP NUMBER:****ITB AP 46-23**

<u>ISSUE DATE:</u>	May 30, 2023	8:00 A.M. CST
<u>PRE BID MEETING:</u>	June 6, 2023	2:00 P.M. CST.
<u>LAST DAY FOR QUESTIONS:</u>	June 16, 2023	3:00 P.M. CST.
<u>ITB OPENING DATE & TIME:</u>	June 28, 2023	3:00 P.M. CST.

NOTE: BIDS RECEIVED AFTER THE BID OPENING DATE & TIME WILL NOT BE CONSIDERED.

Okaloosa County, Florida solicits your company to submit a bid on the above referenced goods or services. All terms, specifications and conditions set forth in this ITB are incorporated into your response. A bid will not be accepted unless all conditions have been met. All bids must have an authorized signature in the space provided below. All bids must be submitted electronically by the time and date listed above. Bids may not be withdrawn for a period of ninety (120) days after the bid opening unless otherwise specified.

RESPONDENT ACKNOWLEDGEMENT FORM BELOW MUST BE COMPLETED, SIGNED, AND RETURNED AS PART OF YOUR BID. BIDS WILL NOT BE ACCEPTED WITHOUT THIS FORM, SIGNED BY AN AUTHORIZED AGENT OF THE RESPONDENT.

COMPANY NAME Gum Creek Farms, Inc.
EMAILING ADDRESS david@gumcreek.net
CITY, STATE, ZIP DeFuniak Springs, FL
FEDERAL EMPLOYER'S IDENTIFICATION NUMBER (FEIN): 59- 3122167
TELEPHONE NUMBER: 850-892-0291
FAX NUMBER: 850-892-6331
EMAIL: perry@gumcreek.net

I CERTIFY THAT THIS BID IS MADE WITHOUT PRIOR UNDERSTANDING, AGREEMENT, OR CONNECTION WITH ANY OTHER RESPONDENT SUBMITTING A BID FOR THE SAME MATERIALS, SUPPLIES, EQUIPMENT OR SERVICES, AND IS IN ALL RESPECTS FAIR AND WITHOUT COLLUSION OR FRAUD. I AGREE TO ABIDE BY ALL TERMS AND CONDITIONS OF THIS BID AND CERTIFY THAT I AM AUTHORIZED TO SIGN THIS BID FOR THE RESPONDENT.

AUTHORIZED SIGNATURE: 
TYPED OR PRINTED NAME: Perry Bell
TITLE: President **DATE:** 7/12/23

Okaloosa County Board of County Commissioners

CEW South Apron Rehabilitation at
Bob Sikes Airport
Crestview, Florida 32539

AIP Project No. _____
FDOT FM No. _____

PROPOSAL FORM

TO: Owner Okaloosa County Board of County Commissioners
Address 5479A Old Bethel Rd.
City, State, Zip Crestview, FL 32536

FROM: Bidder Gum Creek Farms, Inc.
Address 1097 Hwy 83
City/State/Zip DeFuniak Springs, Florida 32433

DATE: _____

1. The undersigned hereby certifies that he/ she has examined the form of contract, plans and specification other associated Contract Document for **CEW South Apron Rehabilitation** project copies of which are on file in the Office of the Airports Director, Destin-Fort Walton Beach Airport, 1701 State Road 85 N., Eglin AFB, FL 32542-1498. The undersigned further certifies that he/she has examined the site of the work, has determined for himself/herself the conditions affecting the work and subject to acceptance of the proposal, agrees to provide at his/her expense, all labor, insurance, superintendence, machinery, plant, equipment, tools, apparatus, appliances, and means of construction, and all materials and supplies complete the entire work, including work incidental thereto, in conformance with the plans, specifications, and associated contract documents.
2. The undersigned acknowledges that the Contract Documents consist of the Invitation for Bid, Instruction to Bidders, all issued Addenda, Proposal, Statement of Qualifications, Anticipated Sub-Contracts, Form of Proposal Guaranty, Notice of Award, Contract Agreement, Performance & Payment bonds, Notice to Proceed, Notice of Contractor's Settlement, Wage Rates, General Provisions, Special Provisions, Plans, Technical Specifications, attached appendices and referenced documents.
3. The undersigned, in compliance with the Notice to Bidders / Invitation for Bids, hereby proposes to do the work called for in said contract and specifications and shown on said plans and to furnish all materials, tools, labor, and all appliances and appurtenances necessary for the said work at the following rates and prices:
4. The undersigned understands that the above quantities of work to be done are approximate only and are intended principally to serve as a guide in evaluating the bids.

The contract will be awarded on the basis of the bids shown on the Bid Form. See Special Provision No. 19 for additional information.

In the event any discrepancy exists between unit prices and total amount shown on the Standard Form of Bid, the unit prices shall govern.

5. It is understood that the schedule of minimum wage rates, as established by the Secretary of Labor and included in the Specifications, are to govern on this project, and the undersigned certifies that he or she has examined this schedule of wage rates and that the prices bid are based on such established wage rates.
6. The undersigned prime contractor, if not a certified DBE, hereby assures that they will make sufficient and reasonable efforts to meet the DBE goals, that they will subcontract 7.12% of the dollar value of the prime contract to DBE firms, and that they will include the DBE clauses required by the sponsor's DBE Program in all subcontracts which offer subcontracting opportunities. The undersigned will complete and submit with the bid the attached DBE Participation Form, including a demonstration of a good faith effort if the DBE goal is not met.
7. The undersigned acknowledges a mandatory pre-bid meeting was held for this project. If the Contractor did not attend the pre-bid meeting, his bid will be automatically disqualified.
8. The undersigned agree upon written notice of the acceptance of this bid, within one hundred twenty (120) days after the opening of the bids, that he or she will execute the contract in accordance with the bid as accepted and give contract (Performance and Payment) bond on attached forms within ten (10) days after the prescribed forms are presented for signature.

If awarded the contract, the undersigned agrees to commence and complete the construction in compliance with the terms stated in the Notice to Bidders / Invitation for Bids. The undersigned agrees to accept as full payment for the completed construction work an amount equal to the total of the prices as hereinafter set forth, subject to adjustments due to changes as may be officially ordered during the progress of the work.

9. The undersigned agrees that if awarded the contract, the work of construction shall be started not later than 10 days after receipt by the Contractor of the Notice to Proceed and shall be substantially complete within **165 calendar days**, subject to any extension of time that may be granted by the Okaloosa County Board of County Commissioners. Failure to complete the work within the time period allowed shall subject the Contractor to the liquidated damages as defined in Special Provision 13.
10. As an evidence of good faith in submitting this proposal, the undersigned encloses a certified check or proposal bond in the amount of 5% of bid which, in case the undersigned refuses or fails to accept an award and to enter into a contract and file the required bonds within the prescribed time, shall be forfeited to the Okaloosa County Board of County Commissioners, as liquidated damages.

11. The undersigned certifies that he does not maintain or provide for his employees any segregated facilities at any of his establishments, and that he does not permit his employees to perform their services at any location, under his control, where segregated facilities are maintained. The undersigned certifies further that he will not maintain or provide for his employees any segregated facilities at any of his establishments and that he will not permit his employees to perform their services at any location under his control, where segregated facilities are maintained. The undersigned agrees that a breach of this certification is a violation of the Equal Opportunity Clause in this contract. As used in this certification, the term "segregated facilities" means any waiting rooms, work areas, restrooms and washrooms, restaurants and other eating areas, time clocks, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation and housing facilities provided for employees which are segregated by explicit directive or are in fact segregated on the basis of race, color, religion, or national origin, because of habit, local custom, or any other reason. The undersigned agrees that (except where he has obtained identical certifications from proposed subcontractor for specific time periods) he will obtain identical certifications from proposed subcontractors prior to award of subcontracts exceeding \$10,000 which are not exempt from the provisions of the Equal Opportunity Clause, and that he will retain such certifications in his files.
12. It is a condition of this contract, and shall be made a condition of each subcontract entered into pursuant to this contract, that the contractor and any subcontractor shall not require any laborer or mechanic employed in performance of the contract to work in surroundings or under working conditions which are unsanitary, hazardous, or dangerous to his health or safety, as determined under Construction Safety and Health Standard (Title 29 Code of Federal Regulation, Part 1518) (36 F.R. 7340) promulgated by the United States Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act, (82 Stat. 96).
13. By entering into this contract, the Contractor certifies that neither it (nor he/she) nor any person or firm who has an interest in the Contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of Section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).
14. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of Section 3(a) of the Davis-Bacon Act or CFR 5.12(a)(1).
15. The undersigned hereby declares that the only parties interested in this proposal are named herein, that this proposal is made without collusion with any other person, firm, or corporation, that no member of the Okaloosa County Board of County Commissioners is directly or indirectly financially interested in this bid.
16. The undersigned acknowledges receipt of the following Addenda:

Addendum No.:	<u>1</u>	Date Received	<u>June 6, 2023</u>
Addendum No.:	<u>2</u>	Date Received	<u>July 5, 2023</u>
Addendum No.:	_____	Date Received:	_____
Addendum No.:	_____	Date Received:	_____

BID SCHEDULE - UNIT PRICES

CONTRACTOR: Gum Creek Farms, Inc. DATE: 7/12/23

PROJECT NAME: CEW South Apron Rehabilitation

Base Bid

Bid Item No.	Item No.	Item Description & Unit Price Bid In Words	Unit	Estimated Quantity	Unit Price	Total Amount/Item
1	C-100-1	Contractor Quality Control Program <u>SEVENTEEN THOUSAND DOLLARS AND ZERO CENTS</u>	LS	1	\$17,000.00	\$17,000.00
2	C-102-1	Erosion and Pollution Control <u>TWENTYONE THOUSAND FORTY DOLLARS AND ZERO CENTS</u>	LS	1	\$ 21,040.00	\$ 21,040.00
3	C-105-1	Mobilization <u>FIFTY TWO THOUSAND SIX HUNDRED FIFTEEN DOLLARS AND ZERO CENTS</u>	LS	1	\$ 52,615.00	\$ 52,615.00
4	C-106-1	Safety, Security, and Maintenance of Traffic <u>THIRTY THOUSAND NINE HUNDRED DOLLARS AND ZERO CENTS</u>	LS	1	\$ 30,900.00	\$ 30,900.00
5	P-101-1	Pavement Removal – Complete Asphalt Removal (2") <u>SIX DOLLARS AND ZERO CENTS</u>	SY	1,600	\$ 6.00	\$ 9,600.00

Bid Item No.	Item No.	Item Description & Unit Price In Words	Bid Unit	Estimated Quantity	Unit Price	Total Amount/ Item
6	P-101-2	Pavement Removal – Complete Asphalt Removal (4") <u>SIX DOLLARS</u> AND <u>FIFTY CENTS</u>	SY	10300	\$6.50	\$66,950.00
7	P-101-5	Miscellaneous Demolition <u>ONE THOUSAND FIVE HUNDRED DOLLARS</u> AND <u>ZERO CENTS</u>	LS	1	\$1,500.00	\$1,500.00
8	P-101-6	Tie-Down Removal <u>ONE HUNDRED SEVENTY DOLLARS AND</u> <u>ZERO CENTS</u>	EA	37	\$170.00	\$6,290.00
9	P-211-1	Existing Base Course Preparation <u>ONE DOLLAR AND</u> <u>FIFTY CENTS</u>	SY	11,900	\$1.50	\$17,850.00
10	P-401-1	Bituminous Surface Course <u>TWO HUNDRED TWELVE DOLLARS AND</u> <u>ZERO CENTS</u>	TON	2,650	\$212.00	\$561,800.00
11	P-605-1	Joint Sealing Filler <u>ONE HUNDRED TWENTY-THREE DOLLARS</u> AND <u>ZERO CENTS</u>	LF	200	\$123.00	\$24,600.00
12	P-620-1	Pavement Markings with Reflective Media, Yellow <u>SIX DOLLARS AND</u> <u>TWENTY CENTS</u>	SF	900	\$6.20	\$ 5,580.00

Bid Item No.	Item No.	Item Description & Unit Price Bid In Words	Unit	Estimated Quantity	Unit Price	Total Amount/Item
13	P-620-2	Pavement Markings Without Reflective Media, Black <u>THREE DOLLARS AND TWENTY CENTS</u>	SF	1800	\$3.20	\$5,760.00
14	P-620-3	Pavement Markings Without Reflective Media, White, Numerals <u>ONE HUNDRED EIGHTY FIVE DOLLARS AND ZERO CENTS</u>	EA	4	\$185.00	\$740.00
15	TD-1	New Tie-Down, Complete <u>ONE THOUSAND ONE HUNDRED THIRTY DOLLARS AND ZERO CENTS</u>	EA	29	\$1,130.00	\$32,770.00

For all work required to perform the work in accordance with the construction drawings, specifications, and other contract documents, including all costs related to the work, and any required permits, taxes, bonds and insurance, the undersigned submits a Total Base Bid Amount of:

TOTAL BASE BID AMOUNT (in words): _____
EIGHT HUNDRED FIFTY-FOUR THOUSAND NINE HUNDRED NINETY-FIVE DOLLARS
 \$ _____ 854,995.00
 (amount in numbers)

Note: Total Bid Amount shall equal the total amount for Bid Item No. 1 through 15.

Additive Alternate No. 1

Bid Item No.	Item No.	Item Description & Unit Price Bid In Words	Unit	Estimated Quantity	Unit Price	Total Amount/Item
1	C-100-1	Contractor Quality Control Program <u>EIGHTEEN THOUSAND NINE HUNDRED EIGHTY AND ZERO CENTS</u>	LS	1	\$ 18,980.00	\$ 18,980.00

Bid Item No.	Item No.	Item Description & Unit Price Bid In Words	Unit	Estimated Quantity	Unit Price	Total Amount/Item
2	C-102-1	Erosion and Pollution Control <u>FOUR THOUSAND NINE HUNDRED AND ZERO CENTS</u>	LS	1	\$ 4,900.00	\$ 4,900.00
3	C-105-1	Mobilization <u>FIFTY TWO THOUSAND FIVE HUNDRED FIFTY ONE AND ZERO CENTS</u>	LS	1	\$ 52,551.00	\$ 52,551.00
4	C-106-1	Safety, Security, and Maintenance of Traffic <u>TWENTY FIVE THOUSAND ONE HUNDRED SEVENTY FIVE AND ZERO CENTS</u>	LS	1	\$ 25,175.00	\$ 25,175.00
5	P-101-2	Pavement Removal- Complete Asphalt Removal (4") <u>SIX DOLLARS AND ZERO CENTS</u>	SY	10,850	\$ 6.00	\$ 65,100.00
6	P-101-3	Pavement Removal- Complete Asphalt Removal (8") <u>TEN DOLLARS AND FIFTY CENTS</u>	SY	950	\$ 10.50	\$ 9,975.00
7	P-101-4	Concrete Pavement Removal <u>FORTY SEVEN DOLLARS AND ZERO CENTS</u>	SY	250	\$ 47.00	\$ 11,750.00
8	P-101-5	Miscellaneous Demolition <u>ONE THOUSAND FIVE HUNDRED DOLLARS AND ZERO CENTS</u>	LS	1	\$ 1,500.00	\$ 1,500.00

Bid Item No.	Item No.	Item Description & Unit Price Bid In Words	Unit	Estimated Quantity	Unit Price	Total Amount/Item
9	P-101-6	Tie-Down Removal <u>ONE HUNDRED SEVENTY DOLLARS AND ZERO CENTS</u>	EA	118	\$ 170.00	\$ 20,060.00
10	P-152-1	Excavation and Embankment <u>TWENTY EIGHT THOUSAND SIX HUNDRED TWENTY FIVE DOLLARS AND ZERO CENTS</u>	LS	1	\$ 28,625.00	\$ 28,625.00
11	P-154-1	Stabilized Subbase Course (8") <u>TEN DOLLARS AND ZERO CENTS</u>	SY	950	\$ 10.00	\$ 9,500.00
12	P-211-1	Existing Base Course Preparation <u>ONE DOLLAR AND FIFTY CENTS</u>	SY	10,850	\$ 1.50	\$ 16,275.00
13	P-211-2	Limerock Base Course (10") <u>THIRTY THREE DOLLARS AND TWENTY FIVE CENTS</u>	SY	950	\$ 33.25	\$ 31,587.50
14	P-401-1	Bituminous Surface Course <u>TWO HUNDRED SEVEN DOLLARS AND ZERO CENTS</u>	TON	3,050	\$ 207.00	\$ 631,350.00
15	P-620-1	Pavement Markings with Reflective Media, Yellow <u>SIX DOLLARS AND TWENTY CENTS</u>	SF	1,150	\$ 6.20	\$ 7,130.00

Bid Item No.	Item No.	Item Description & Unit Price Bid In Words	Unit	Estimated Quantity	Unit Price	Total Amount/Item
16	P-620-2	Pavement Markings without Reflective Media, Black <u>THREE DOLLARS AND TWENTY CENTS</u>	SF	2,250	\$ 3.20	\$ 7,200.00
17	P-620-3	Pavement Markings without Reflective Media, White, Numerals <u>ONE HUNDRED EIGHTY FIVE DOLLARS AND ZERO CENTS</u>	EA	10	\$ 185.00	\$ 1,850.00
18	TD-1	New Tie-Downs, Complete <u>ONE THOUSAND ONE HUNDRED THIRTY DOLLARS AND ZERO CENTS</u>	EA	117	\$ 1,130.00	\$ 132,210.00

For all work required to perform the work in accordance with the construction drawings, specifications, and other contract documents, including all costs related to the work, and any required permits, taxes, bonds and insurance, the undersigned submits a Total Additive Alternate No. 1 Amount of:

TOTAL ADDITIVE ALTERNATE NO. 1 AMOUNT (in words): ONE MILLION SEVENTY-FIVE THOUSAND SEVEN HUNDRED EIGHTEEN DOLLARS AND FIFTY CENTS
 (\$1,075,718.50)

(amount in)

Note: Total Additive Alternate No. 1 Amount shall equal the total amount for Bid Item No. 1 through 18.

Additive Alternate No. 2

Bid item No.	Item No.	Item Description & Unit Price Bid In Words	Unit	Estimated Quantity	Unit Price	Total Amount/Item
1	C-100-1	Contractor Quality Control Program <u>NINETEEN THOUSAND THREE HUNDRED EIGHTY DOLLARS AND ZERO CENTS</u>	LS	1	\$ 19,380.00	\$ 19,380.00

Bid Item No.	Item No.	Item Description & Unit Price Bid In Words	Unit	Estimated Quantity	Unit Price	Total Amount/Item
2	C-102-1	Erosion and Pollution Control <u>FOUR THOUSAND ONE HUNDRED FORTY DOLLARS AND ZERO CENTS</u>	LS	1	\$ 4,140.00	\$ 4,140.00
3	C-105-1	Mobilization <u>FORTY FIVE THOUSAND TWO HUNDRED FIFTY DOLLARS AND ZERO CENTS</u>	LS	1	\$ 45,250.00	\$ 45,250.00
4	C-106-1	Safety, Security, and Maintenance of Traffic <u>NINETEEN THOUSAND EIGHT HUNDRED SEVENTY DOLLARS AND ZERO CENTS</u>	LS	1	\$ 19,870.00	\$ 19,870.00
5	P-101-2	Pavement Removal- Complete Asphalt Removal (4") <u>SIX DOLLARS AND FIFTY CENTS</u>	SY	2,600	\$ 6.50	\$ 16,900.00
6	P-101-3	Pavement Removal- Complete Asphalt Removal (8") <u>TEN DOLLARS AND FIFTY CENTS</u>	SY	3,800	\$ 10.50	\$ 39,900.00
7	P-101-6	Tie-Down Removal <u>ONE HUNDRED SEVENTY DOLLARS AND ZERO CENTS</u>	EA	19	\$ 170.00	\$ 3,230.00
8	P-152-1	Excavation and Embankment <u>FIFTY TWO THOUSAND SIX HUNDRED DOLLARS AND ZERO CENTS</u>	LS	1	\$ 52,600.00	\$ 52,600.00

Bid Item No.	Item No.	Item Description & Unit Price Bid In Words	Unit	Estimated Quantity	Unit Price	Total Amount/Item
9	P-154-1	Stabilized Subbase Course (8") <u>TEN DOLLARS AND</u> <u>ZERO CENTS</u>	SY	3,800	\$ 10.00	\$ 38,000.00
10	P-211-1	Existing Base Course Preparation <u>ONE DOLLAR AND</u> <u>FIFTY CENTS</u>	SY	2,600	\$ 1.50	\$ 3,900.00
11	P-211-2	Limerock Base Course (10") <u>THIRTY THREE DOLLARS AND</u> <u>TWENTY FIVE CENTS</u>	SY	3,800	\$ 33.25	\$ 126,350.00
12	P-401-1	Bituminous Surface Course <u>TWO HUNDRED FOURTEEN DOLLARS</u> <u>AND</u> <u>ZERO CENTS</u>	TON	1,620	\$ 214.00	\$ 346,680.00
13	P-620-1	Pavement Markings With Reflective Media, Yellow <u>SIX DOLLARS AND</u> <u>TWENTY CENTS</u>	SF	405	\$ 6.20	\$ 2,511.00
14	P-620-2	Pavement Markings Without Reflective Media, Black <u>THREE DOLLARS AND</u> <u>TWENTY CENTS</u>	SF	810	\$ 3.20	\$ 2,592.00
15	P-620-3	Pavement Markings Without Reflective Media, White, Numerals <u>ONE HUNDRED EIGHTY FIVE DOLLARS</u> <u>AND</u> <u>ZERO CENTS</u>	SF	1	\$ 185.00	\$ 185.00

Bid Item No.	Item No.	Item Description & Unit Price Bid In Words	Unit	Estimated Quantity	Unit Price	Total Amount/Item
16	TD-1	New Tie-Downs, Complete <u>ONE THOUSAND ONE HUNDRED THIRTY DOLLARS AND ZERO CENTS</u>	EA	19	\$ 1,130.00	\$ 21,470.00
17	L-108-1	1/C L-824 Type C- Unshielded #8 AWG 5 KV Cable <u>SEVEN DOLLARS AND FIFTY CENTS</u>	LF	220	\$ 7.50	\$ 1,650.00
18	L-108-2	1/C #2 AWG Solid Copper Counterpoise Wire <u>EIGHT DOLLARS AND SEVENTY FIVE CENTS</u>	LF	220	\$ 8.75	\$ 1,925.00
19	L-110-1	1W2" Schedule 40 PVC Direct Earch Buried Duct <u>TWENTY DOLLARS AND ZERO CENTS</u>	LF	220	\$ 20.00	\$ 4,400.00
20	L-125-1	L-861 T(L) Omnidirectional, Blue, LED, Taxiway Edge Light (T) <u>TEN THOUSAND FOUR HUNDRED FOUR DOLLARS AND ZERO CENTS</u>	LF	4	\$ 10,404.00	\$ 41,616.00
21	DD-1	4" Schedule 40 PVC with Backfill, Complete <u>THIRTY SEVEN DOLLARS AND FIFTY CENTS</u>	LF	290	\$ 37.50	\$ 10,875.00

For all work required to perform the work in accordance with the construction drawings, specifications, and other contract documents, including all costs related to the work, and any required permits, taxes, bonds and insurance, the undersigned submits a Total Additive Alternate No. 2 Amount of:

TOTAL ADDITIVE ALTERNATE NO. 2 AMOUNT (in words): _____

EIGHT HUNDRED THREE THOUSAND FOUR HUNDRED TWENTY-FOUR DOLLARS AND ZERO CENTS

\$803,424.00
 (amount)

Note: Total Additive Alternate No. 2 Amount shall equal the total amount for Bid Item No. 1 through 21.

Additive Alternate No. 3

Bid Item No.	Item No.	Item Description & Unit Price Bid In Words	Unit	Estimated Quantity	Unit Price	Total Amount/ Item
1	C-100-1	Contractor Quality Control Program <u>SEVENTEEN THOUSAND THREE HUNDRED THIRTY FIVE AND ZERO CENTS</u>	LS	1	\$ 17,335.00	\$ 17,335.00
2	C-102-1	Erosion and Pollution Control <u>TWO THOUSAND FIVE HUNDRED SEVENTY FIVE AND ZERO CENTS</u>	LS	1	\$ 2,575.00	\$ 2,575.00
3	C-105-1	Mobilization <u>THIRTY FIVE THOUSAND EIGHTY ONE DOLLARS AND ZERO CENTS</u>	LS	1	\$ 35,081.00	\$ 35,081.00
4	C-106-1	Safety, Security, and Maintenance of Traffic <u>NINETEEN THOUSAND SIX HUNDRED EIGHTY FIVE AND ZERO CENTS</u>	LS	1	\$ 19,685.00	\$ 19,685.00

Bid Item No.	Item No.	Item Description & Unit Price Bid In Words	Unit	Estimated Quantity	Unit Price	Total Amount/Item
5	P-101-2	Pavement Removal- Complete Asphalt Removal (4") <u>SIX DOLLARS AND FIFTY CENTS</u>	SY	6,650	\$ 6.50	\$ 43,225.00
6	P-101-3	Pavement Removal- Complete Asphalt Removal (8") <u>TEN DOLLARS AND FIFTY CENTS</u>	SY	1,730	\$ 10.50	\$ 18,165.00
7	P-101-5	Miscellaneous Demolition <u>ONE THOUSAND FIVE HUNDRED DOLLARS AND ZERO CENTS</u>	LS	1	\$ 1,500.00	\$ 1,500.00
8	P-101-6	Tie-Down Removal <u>ONE HUNDRED SEVENTY DOLLARS AND ZERO CENTS</u>	EA	8	\$ 170.00	\$ 1,360.00
9	P-152-1	Excavation and Embankment <u>TWENTY THREE THOUSAND FOUR HUNDRED FIFTY DOLLARS AND ZERO CENTS</u>	LS	1	\$ 23,450.00	\$ 23,450.00
10	P-154-1	Stabilized Subbase Course (8") <u>TEN DOLLARS AND ZERO CENTS</u>	SY	1,730	\$ 10.00	\$ 17,300.00
11	P-211-1	Existing Base Course Preparation <u>ONE DOLLAR AND FIFTY CENTS</u>	SY	6,650	\$ 1.50	\$ 9,975.00

Bid Item No.	Item No.	Item Description & Unit Price Bid In Words	Unit	Estimated Quantity	Unit Price	Total Amount/Item
12	P-211-2	Limerock Base Course (10") <u>THIRTY THREE DOLLARS AND</u> <u>TWENTY FIVE CENTS</u>	SY	1,730	\$ 33.25	\$ 57,522.50
13	P-401-1	Bituminous Surface Course <u>TWO HUNDRED THIRTEEN DOLLARS</u> <u>AND</u> <u>ZERO CENTS</u>	TON	2,100	\$ 213.00	\$ 447,300.00
14	P-620-1	Pavement Markings With Reflective Media, Yellow <u>SIX DOLLARS AND</u> <u>TWENTY FIVE CENTS</u>	SF	120	\$ 6.25	\$ 750.00
15	P-620-2	Pavement Markings Without Reflective Media, Black <u>THREE DOLLARS AND</u> <u>TWENTY CENTS</u>	SF	240	\$ 3.20	\$ 768.00
16	P-620-3	Pavement Markings Without Reflective Media, White, Numerals <u>ONE HUNDRED EIGHTY SEVEN</u> <u>DOLLARS AND</u> <u>FORTY CENTS</u>	SF	2	\$ 187.40	\$ 374.80
17	TD-1	New Tie-Downs, Complete <u>ONE THOUSAND ONE HUNDRED</u> <u>THIRTY DOLLARS AND</u> <u>ZERO CENTS</u>	EA	8	\$ 1,130.00	\$ 9,040.00

For all work required to perform the work in accordance with the construction drawings, specifications, and other contract documents, including all costs related to the work, and any required permits, taxes, bonds and insurance, the undersigned submits a Total Additive Alternate No. 3 Amount of:

TOTAL ADDITIVE ALTERNATE NO. 3 AMOUNT (in words): _____

SEVEN HUNDRED FIVE THOUSAND FOUR HUNDRED SIX DOLLARS AND THIRTY CENTS

(\$ 705,406.30)

amount in numbers

Note: Total Additive Alternate No. 3 Amount shall equal the total amount for Bid Item No. 1 through 17.

Additive Alternate No. 4

Bid Item No.	Item No.	Item Description & Unit Price Bid In Words	Unit	Estimated Quantity	Unit Price	Total Amount/Item
1	C-102-1	Erosion and Pollution Control <u>TEN THOUSAND ONE HUNDRED FIFTY DOLLARS AND ZERO CENTS</u>	LS	1	\$ 10,150.00	\$ 10,150.00
2	C-105-1	Mobilization <u>FORTY THREE THOUSAND TWO HUNDRED SEVENTY DOLLARS AND ZERO CENTS</u>	LS	1	\$ 43,270.00	\$ 43,270.00
3	C-106-1	Safety, Security, and Maintenance of Traffic <u>SEVENTEEN THOUSAND SEVEN HUNDRED EIGHTY DOLLARS AND ZERO CENTS</u>	LS	1	\$ 17,780.00	\$ 17,780.00
4	P-152-1	Excavation and Embankment <u>TWO HUNDRED FIVE THOUSAND SEVEN HUNDRED TWENTY FIVE AND ZERO CENTS</u>	LS	1	\$ 205,725.00	\$ 205,725.00
5	D-751-1	Type H Top (4-Grate) With Type J Bottom (4'-6" x 14') <u>TWELVE THOUSAND ONE HUNDRED FIVE DOLLARS AND ZERO CENTS</u>	EA	2	\$ 12,105.00	\$ 24,210.00

Bid Item No.	Item No.	Item Description & Unit Price Bid In Words	Unit	Estimated Quantity	Unit Price	Total Amount/Item
6	D-751-2	Type H Top (4-Grate) With Type J Bottom (4'-6" x 15') <u>TWENTY THOUSAND SEVEN HUNDRED SEVENTY DOLLARS AND ZERO CENTS</u>	EA	4	\$ 20,770.00	\$ 83,080.00
7	D-701-1	29" x 45" ERCP, Class III <u>THREE HUNDRED FORTY EIGHT DOLLARS AND ZERO CENTS</u>	LF	151	\$ 348.00	\$ 52,548.00
8	D-701-2	34" x 53" ERCP, Class III <u>FOUR HUNDRED FIFTY FIVE DOLLARS AND ZERO CENTS</u>	LF	1,164	\$ 455.00	\$ 529,620.00
9	D-701-3	48" RCP <u>THREE HUNDRED FORTY FIVE DOLLARS AND ZERO CENTS</u>	LF	258	\$ 345.00	\$ 89,010.00
10	T-904-1	Sodding, Argentine Bahia <u>FIVE DOLLARS AND ZERO CENTS</u>	SY	7,350	\$ 5.00	\$ 36,750.00
11	PY-1	Pyramat <u>TWENTY TWO DOLLARS AND TWENTY FIVE CENTS</u>	SY	7,450	\$ 22.25	\$ 165,762.50

For all work required to perform the work in accordance with the construction drawings, specifications, and other contract documents, including all costs related to the work, and any required permits, taxes, bonds and insurance, the undersigned submits a Total Additive Alternate No. 4 Amount of:

TOTAL ADDITIVE ALTERNATE NO. 4 AMOUNT (in words): _____

ONE MILLION TWO HUNDRED FIFTY SEVEN THOUSAND NINE HUNDRED FIVE DOLLARS AND FIFTY CENTS

(\$ 1,257,905.50)

(amount in numbers)

Note: Total Additive Alternate No. 4 Amount shall equal the total amount for Bid Item No. 1 through 11.

Additive Alternate No. 5

Bid Item No.	Item No.	Item Description & Unit Price Bid In Words	Unit	Estimated Quantity	Unit Price	Total Amount/Item
1	P-101-7	Concrete Foundation Demolition <u>FIVE THOUSAND ONE HUNDRED DOLLARS AND ZERO CENTS</u>	EA	5	\$ 5,100.00	\$ 25,500.00
2	ELEC-1	Furnish and Install High Mast Lights, No. 2 and 5, Complete <u>ONE HUNDRED SEVENTY FIVE THOUSAND EIGHT HUNDRED FIFTY DOLLARS AND ZERO CENTS</u>	LS	1	\$ 175,850.00	\$ 175,850.00

For all work required to perform the work in accordance with the construction drawings, specifications, and other contract documents, including all costs related to the work, and any required permits, taxes, bonds and insurance, the undersigned submits a Total Additive Alternate No. 5 Amount of:

TOTAL ADDITIVE ALTERNATE NO. 5 AMOUNT (in words): _____

TWO HUNDRED ONE THOUSAND THREE HUNDRED FIFTY DOLLARS AND ZERO CENTS

cents

(\$ 201,350.00)

(amount in numbers)

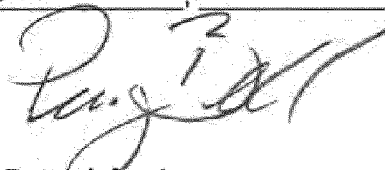
Note: Total Additive Alternate No. 5 Amount shall equal the total amount for Bid Item No. 1 and 2.

BID SUMMARY

TOTAL BID AMOUNT (IN NUMBERS): \$854,995.00

TOTAL BASE AMOUNT (IN WORDS): EIGHT HUNDRED FIFTY FOUR THOUSAND
NINE HUNDRED NINETY FIVE DOLLARS AND ZERO CENTS

Dated and signed at GCF, this 12th day of July, 2023

SIGNATURE OF BIDDER: 

By Perry Bell, President
Name and Title of Authorized Agent

Gum Creek Farms, Inc.
Name of Company

1097 Hwy 83
Address of Company

DeFuniak Springs, FL 32433
City, State, Zip Code

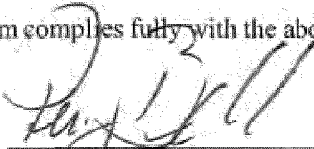
850-892-0291
Telephone Number of Company

RESPONSE DOCUMENT #1: DRUG-FREE WORKPLACE CERTIFICATION

THE BELOW SIGNED RESPONDENT CERTIFIES that it has implemented a drug-free workplace program. In order to have a drug-free workplace program, a business shall:

1. Publish a statement notifying employees that the unlawful manufacture, distribution, dispensing, possession, or use of a controlled substance is prohibited in the workplace and specifying the actions that will be taken against employees for violations of such prohibition.
2. Inform employees about the dangers of drug abuse in the workplace, the business's policy of maintaining a drug-free workplace, any available drug counseling, rehabilitation and employee assistance programs, and the penalties that may be imposed upon employees for drug abuse violations.
3. Give each employee engaged in providing the commodities or contractual services that are under quote a copy of the statement specified in subsection 1.
4. In the statement specified in subsection 1, notify the employees that, as a condition of working on the commodities or contractual services that are under quote, the employee will abide by the terms of the statement and will notify the employer of any conviction of, or plea of guilty or nolo contendere to, any violation of Chapter 893, Florida Statutes, or of any controlled substance law of the United States or any state, for a violation occurring in the workplace no later than five (5) days after such conviction.
5. Impose a sanction on, or require the satisfactory participation in, drug abuse assistance or rehabilitation program if such is available in employee's community, by any employee who is convicted.
6. Make a good faith effort to continue to maintain a drug-free workplace through implementation of this section.

As the person authorized to sign this statement, I certify that this firm complies fully with the above requirements.

DATE:	<u>7/12/2023</u>	SIGNATURE:	
COMPANY:	<u>Gum Creek Farms, Inc.</u>	NAME:	<u>Perry Bell</u>
ADDRESS:	<u>1097 Hwy 32</u>		<u>(TYPED OR PRINTED)</u>
	<u>DeFuniak Springs</u>	TITLE:	<u>President</u>
	<u>Florida 32433</u>		
PHONE #:	<u>850-892-0291</u>	E-MAIL:	<u>perry@gumcreek.net</u>

RESPONSE DOCUMENT #2: CONFLICT OF INTEREST DISCLOSURE FORM

For purposes of determining any possible conflict of interest, all Respondents, must disclose if any Okaloosa Board of County Commissioner, employee(s), elected officials(s), or if any of its agencies is also an owner, corporate officer, agency, employee, etc., of their business.

Indicate either "yes" (a county employee, elected official, or agency is also associated with your business), or "no." If yes, give person(s) name(s) and position(s) with your business.

YES: _____ NO: X

NAME(S)

POTISTION(S)

FIRM NAME: Gum Creek Farms, Inc.

BY (PRINTED): Perry Bell

BY (SIGNATURE): 

TITLE: President

ADDRESS: 1097 Hwy 83

DeFuniak Springs, FL 32433

PHONE NUMBER: 850-892-0291

E-MAIL: perry@gumcreek.net


DATE: 7/12/2023

RESPONSE DOCUMENT #3: FEDERAL E-VERIFY COMPLIANCE CERTIFICATION

In accordance with Okaloosa County Policy and Executive Order Number 11-116 from the office of the Governor of the State of Florida, Respondent hereby certifies that the U.S. Department of Homeland Security's E-Verify system will be used to verify the employment eligibility of all new employees hired by the Respondent during the contract term, and shall expressly require any subcontractors performing work or providing services pursuant to the contract to likewise utilize the U.S. Department of Homeland Security's E-Verify system to verify the employment eligibility of all new employees hired by the subcontractor during the contract term; and shall provide documentation such verification to the COUNTY upon request.

As the person authorized to sign this statement, I certify that this company complies/will comply fully with the above requirements.

DATE: 7/12/2023
COMPANY: Gum Creek Farms, Inc.
ADDRESS: 1097 Hwy 83
DeFuniak Springs,
Florida 32433
E-MAIL: perry@gumcreek.net
PHONE #: 850-892-0291

SIGNATURE: 
NAME: Perry Bell
TITLE: President

RESPONSE DOCUMENT #4: CONE OF SILENCE FORM

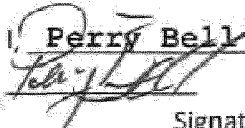
The Board of County Commissioners have established a solicitation silence policy (Cone of Silence) that prohibits oral and written communication regarding all formal solicitations for goods and services (ITB, RFP, ITQ, ITN, and RFQ) or other competitive solicitation between the bidder (or its agents or representatives) or other entity with the potential for a financial interest in the award (or their respective agents or representatives) regarding such competitive solicitation, and any County Commissioner or County employee, selection committee member or other persons authorized to act on behalf of the Board including the County's Architect, Engineer or their sub-consultants, or anyone designated to provide a recommendation to award a particular contract, other than the Purchasing Department Staff.

The period commences from the time of advertisement until contract award.

Any information thought to affect the committee or staff recommendation submitted after bids are due, should be directed to the Purchasing Manager or an appointed representative. It shall be the Purchasing Manager's decision whether to consider this information in the decision process.

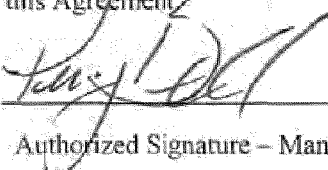
Any violation of this policy shall be grounds to disqualify the Respondent from consideration during the selection process.

All Respondents must agree to comply with this policy by signing the following statement and including it with their submittal.

I, Perry Bell representing Gum Creek Farms, Inc.

Signature Company Name
on this 12th day of July 2023, I hereby agree to
abide by the County's "Cone of Silence Clause" and understand violation of this
policy shall result in disqualification of my proposal/submittal.

RESPONSE DOCUMENT #5: INDEMNIFICATION AND HOLD HARMLESS

CONTRACTOR shall indemnify and hold harmless COUNTY, its officers and employees from liabilities, damages, losses, and costs including but not limited to reasonable attorney fees, to the extent caused by the negligence, recklessness, or intentional wrongful conduct of the CONTRACTOR and other persons employed or utilized by the CONTRACTOR in the performance of this Agreement.

<u>Gum Creek Farms, Inc.</u>	
Proposer's Company Name	Authorized Signature - Manual
<u>1097 Hwy 83, DeFuniak Springs, Florida 32433</u>	<u>Perry Bell</u>
Physical Address	Authorized Signature - Typed
<u>1097 Hwy 83, DeFuniak Springs, Florida 32433</u>	<u>President</u>
Mailing Address	Title
<u>850-892-0291</u>	<u>850-892-6331</u>
Phone Number	FAX Number
<u>850-305-0093</u>	<u>850-305-0093</u>
Cellular Number	After-Hours Number(s)
<u>7/12/2023</u>	
Date	

RESPONSE DOCUMENT #8: SYSTEM FOR AWARD MANAGEMENT (OCT 2016)

(a) Definitions. As used in this provision.

“Electronic Funds Transfer (EFT) indicator” means a four-character suffix to the unique entity identifier. The suffix is assigned at the discretion of the commercial, nonprofit, or Government entity to establish additional System for Award Management records for identifying alternative EFT accounts (see subpart 32.11) for the same entity.

“Registered in the System for Award Management (SAM) database” means that.

(1) The Offeror has entered all mandatory information, including the unique entity identifier and the EFT indicator, if applicable, the Commercial and Government Entity (CAGE) code, as well as data required by the Federal Funding Accountability and Transparency Act of 2006 (see subpart 4.14) into the SAM database;

(2) The offeror has completed the Core, Assertions, and Representations and Certifications, and Points of Contact sections of the registration in the SAM database;

(3) The Government has validated all mandatory data fields, to include validation of the Taxpayer Identification Number (TIN) with the Internal Revenue Service (IRS). The offeror will be required to provide consent for TIN validation to the Government as a part of the SAM registration process; and

(4) The Government has marked the record “Active”.

“Unique entity identifier” means a number or other identifier used to identify a specific commercial, nonprofit, or Government entity. See www.sam.gov for the designated entity for establishing unique entity identifiers.

(b)(1) By submission of an offer, the offeror acknowledges the requirement that a prospective awardee shall be registered in the SAM database prior to award, during performance, and through final payment of any contract, basic agreement, basic ordering agreement, or blanket purchasing agreement resulting from this solicitation.

(2) The Offeror shall enter, in the block with its name and address on the cover page of its offer, the annotation “Unique Entity Identifier” followed by the unique entity identifier that identifies the Offeror’s name and address exactly as stated in the offer. The Offeror also shall enter its EFT indicator, if applicable. The unique entity identifier will be used by the Contracting Officer to verify that the Offeror is registered in the SAM database.

(c) If the Offeror does not have a unique entity identifier, it should contact the entity designated at www.sam.gov for establishment of the unique entity identifier directly to obtain one. The Offeror should be prepared to provide the following information:

- (1) Company legal business name.
- (2) Tradestyle, doing business, or other name by which your entity is commonly recognized.
- (3) Company Physical Street Address, City, State, and Zip Code.
- (4) Company Mailing Address, City, State and Zip Code (if separate from physical).
- (5) Company telephone number.

(6) Date the company was started.

(7) Number of employees at your location.

(8) Chief executive officer/key manager.

(9) Line of business (industry).

(10) Company Headquarters name and address (reporting relationship within your entity).

(d) If the Offeror does not become registered in the SAM database in the time prescribed by the Contracting Officer, the Contracting Officer will proceed to award to the next otherwise successful registered Offeror.

(e) Processing time, which normally takes 48 hours, should be taken into consideration when registering. Offerors who are not registered should consider applying for registration immediately upon receipt of this solicitation.

(f) Offerors may obtain information on registration at <https://www.acquisition.gov>.

Offerors SAM information:

Entity Name: GCF, Inc. Gum Creek Farms, Inc.

Entity Address: 1097 Hwy 83, DeFuniak Springs, Fl 32433

Sam.gov Unique Entity Identifier: G454C9MSHWE7

CAGE Code: 1YBA1

RESPONSE DOCUMENT #9: LIST OF REFERENCES

1. Owner's Name and Address: Okaloosa County BOC
5479 Old Bethel Road, Crestview, FL 32536
Contact Person: Darita Mason Telephone # (850) 689-5050 or 850-423-1542
*Email: dmason@myokaloosa.com

2. Owner's Name and Address: Okaloosa County Airport
1701 State Road 85N, Eglin AFB, 32542
Contact Person: Robert C. Rogers Telephone # (850) 651-7160
*Email: rrogers@myokaloosa.com

3. Owner's Name and Address: Dominguez Design Build
314 N. Spring Street, Pensacola, FL 32501
Contact Person: Ben Martin Telephone # (850) 390-4740
*Email: ben@ddbconstruct.com

4. Owner's Name and Address: Childers Construction Company
3472 Weems Road, Tallahassee, FL 32317
(850) 222-2281
Contact Person: John Daum Telephone # (850) 519-2998
*Email: jdaum@childers-construction.com

5. Owner's Name and Address: Walton County BCC
97 Montgomery Circle, DeFuniak Springs, FL 32435
Contract Person: Jim Harman Telephone # (850) 892-8108
*Email: harjim@c.walton.fl.us

RESPONSE DOCUMENT #10: LOBBYING - 31 U.S.C. 1352, 49 CFR Part 19, 49 CFR Part 20

APPENDIX A, 49 CFR PART 20--CERTIFICATION REGARDING LOBBYING

Certification for Contracts, Grants, Loans, and Cooperative Agreements
(To be submitted with each bid or offer exceeding \$100,000)

The undersigned [Contractor] certifies, to the best of his or her knowledge and belief, that:

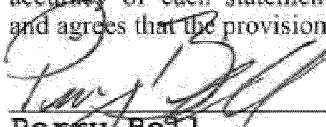
1. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

2. If any funds other than Federal appropriated funds have been paid or will be paid to any person for making lobbying contacts to an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form--LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions [as amended by "Government wide Guidance for New Restrictions on Lobbying," 61 Fed. Reg. 1413 (1/19/96). Note: Language in paragraph (2) herein has been modified in accordance with Section 10 of the Lobbying Disclosure Act of 1995 (P.L. 104-65, to be codified at 2 U.S.C. 1601, *et seq.*)]

3. The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31U.S.C. § 1352 (as amended by the Lobbying Disclosure Act of 1995). Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

[Note: Pursuant to 31 U.S.C. § 1352(c)(1)-(2)(A), any person who makes a prohibited expenditure or fails to file or amend a required certification or disclosure form shall be subject to a civil penalty of not less than \$10,000 and not more than

\$100,000 for each such expenditure or failure.] The Contractor, , certifies or affirms the truthfulness and accuracy of each statement of its certification and disclosure, if any. In addition, the Contractor understands and agrees that the provisions of 31 U.S.C. A 3801, *et seq.*, apply to this certification and disclosure, if any.



Signature of Contractor's Authorized Official

Perry Bell
President Name and Title of Contractor's Authorized Official

7/12/2023 Date

**RESPONSE DOCUMENT #11: SWORN STATEMENT UNDER SECTION 287.133 (3) (a),
FLORIDA STATUTES, ON PUBLIC ENTITY CRIMES**

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

1. This sworn statement is submitted for Gum Creek Farms, Inc.
2. This sworn statement is submitted by Perry Bell, 1097 Hwy 83, DFS, FL 32433 whose business address is: _____ and (if applicable) its Federal Employer Identification Number (FEIN) is (If entity has no FEIN, include the Social Security Number of the individual signing this sworn statement: 59-3122167
3. My name is Perry Bell and my relationship to the entity named above is President
4. I understand that a "public entity crime" as defined in Section 287.133(1)(g), Florida Statutes, means a violation of any state or federal law by a person with respect to and directly related to the transaction of business with any public entity or with an agency or political subdivision of any other state or of the United States, including, but not limited to, any bid or contract for goods or services to be provided to any public entity or an agency or political subdivision of any other state or of the United States and involving antitrust, fraud, theft, bribery, collusion, racketeering, conspiracy, or material misrepresentation.
5. I understand that "convicted" or "conviction" as defined in Section 287.133 (1) (b), Florida Statutes, means a finding of guilt or a conviction of a public entity crime, with or without adjudication of guilt, in any federal or state trial court of record, relating to charges brought by indictment or information after July 1, 1989, as a result of a jury verdict, non-jury trial, or entry of a plea of guilty or nolo contendere.
6. I understand that an "affiliate" as defined in Section 287.133(1) (a), Florida Statutes, means:
 - (1) A predecessor or successor of a person convicted of a public entity crime; or
 - (2) An entity under the control of any natural person who is active in the management of the entity and who has been convicted of a public entity crime. The term "affiliate" includes those officers, directors, executives, partners, shareholders, employees, members, and agents who are active in the management of an affiliate. The ownership by one person of shares constituting a controlling interest in another person, or a pooling of equipment or income among persons when not for fair market value under an arm's length agreement, shall be a prima facie case that one person controls another person. A person who knowingly enters into a joint venture with a person who has been convicted of a public entity crime in Florida during the preceding 36 months shall be considered an affiliate.
7. I understand that a "person" as defined in Section 287.133(1) (e), Florida Statutes, means any natural person or entity organized under the laws of any state or of the United States with the legal power to enter into a binding contract and which bids or applies to bid on contracts for the provision of goods or services let by a public entity, or which otherwise transacts or applies to transact business with a public entity. The term "person" includes those officers, directors, executives, partners, shareholders, employees, members, and agents who are active in management of an entity.

8. Based on information and belief, that statement which I have marked below is true in relation to the entity submitting this sworn statement. [Please indicate which statement applies.]

X Neither the entity submitting this sworn statement, nor one or more of the officers, directors, executives, partners, shareholders, employees, members, or agents who are active in the management of the entity, nor any affiliate of the entity, has been charged with and convicted of public entity crime subsequent to July 1, 1989.

___ There has been a proceeding concerning the conviction before a hearing officer of the State of Florida, Division of Administrative Hearings. The final order entered by the hearing officer did not place the person or affiliate on the convicted vendor list. [Please attach a copy of the Final Order.]

___ The person or affiliate was placed on the convicted vendor list. There has been a subsequent proceeding before a hearing officer of the State of Florida, Division of Administrative Hearings. The final order entered by the hearing officer determined that it was in the public interest to remove the person or affiliate from the convicted vendor list. [Please attach a copy of the Final Order.]

___ The person or affiliate has not been placed on the convicted vendor list. [Please describe any action taken by or pending with the Department of General Services.]

Date: 7/12/2023 Signature: [Handwritten Signature]

STATE OF: ~~TEXAS~~ Florida

COUNTY OF: WALTON

PERSONALLY APPEARED BEFORE ME, the undersigned authority, who after first being sworn by me, affixed his/her signature in the space provided above on this 12 day of July, in the year 2023.

My commission expires:

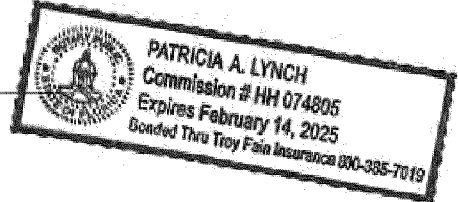
Notary Public

[Handwritten Signature]

Print, Type, or Stamp of Notary Public

Personally known to me, or Produced Identification:

Type of ID



RESPONSE DOCUMENT #12: GOVERNMENT DEBARMENT & SUSPENSION

Instructions

1. By signing and submitting this form, the prospective lower tier participant is providing the certification set out in accordance with these instructions.
2. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension or debarment.
3. The prospective lower tier participant shall provide immediate written notice to the person(s) to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
4. The terms "covered transaction," "debarred," "suspended," "ineligible," "lower tier covered transaction," "participant," "person," "primary covered transaction," "principal," "proposal," and "voluntarily excluded," as used in this clause, have the meanings set out in the Definitions and Coverage sections of the rules implementing Executive Orders 12549, at Subpart C of OMB 2 C.F.R. Part 180 and 3000.332. You may contact the department or agency to which this proposal is being submitted for assistance in obtaining a copy of those regulations.
5. The prospective lower tier participant agrees by submitting this form that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.
6. The prospective lower tier participant further agrees by submitting this form that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion - Lower Tier Covered Transactions," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.
7. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the System for Award Management (SAM) database.

8. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of a participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
9. Except for transactions authorized under paragraph (5) of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

**RESPONSE DOCUMENT #12 CONTINUED: CERTIFICATION REGARDING DEBARMENT, SUSPENSION,
INELIGIBILITY AND VOLUNTARY EXCLUSION LOWER TIER COVERED TRANSACTIONS**

The following statement is made in accordance with the Privacy Act of 1974 (5 U.S.C. § 552(a), as amended). This certification is required by the regulations implementing Executive Orders 12549, Debarment and Suspension, and OMB 2 C.F.R.

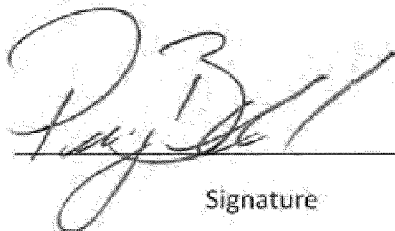
Part 180, Participants' responsibilities. The regulations were amended and published on August 31, 2005, in 70 Fed. Reg. 51865-51880.

[READ INSTRUCTIONS ON PREVIOUS PAGE BEFORE COMPLETING CERTIFICATION]

1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any Federal or State department or agency;
2. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal

Perry Bell, President

Printed Name and Title of Authorized Representative


Signature

Date: 7/12/2023

RESPONSE DOCUMENT #13: VENDORS ON SCRUTINIZED COMPANIES LISTS

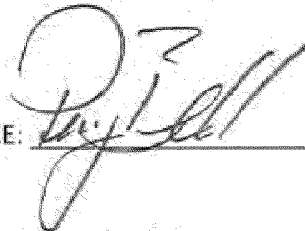
By executing this Certificate Gum Creek Farms, Inc., the bid proposer, certifies that it is not: (1) listed on the Scrutinized Companies that Boycott Israel List, created pursuant to section 215.4725, Florida Statutes, (2) engaged in a boycott of Israel, (3) listed on the Scrutinized Companies with Activities in Sudan List or the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List, created pursuant to section 215.473, Florida Statutes, or (4) engaged in business operations in Cuba or Syria. Pursuant to section 287.135(5), Florida Statutes, the County may disqualify the bid proper immediately or immediately terminate any agreement entered into for cause if the bid proposer is found to have submitted a false certification as to the above or if the Contractor is placed on the Scrutinized Companies that Boycott Israel List, is engaged in a boycott of Israel, has been placed on the Scrutinized Companies with Activities in Sudan List or the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List, or has been engaged in business operations in Cuba or Syria, during the term of the Agreement. If the County determines that the bid proposer has submitted a false certification, the County will provide written notice to the bid proposer. Unless the bid proposer demonstrates in writing, within 90 calendar days of receipt of the notice, that the County's determination of false certification was made in error, the County shall bring a civil action against the bid proposer. If the County's determination is upheld, a civil penalty shall apply, and the bid proposer will be ineligible to bid on any Agreement with a Florida agency or local governmental entity for three years after the date of County's determination of false certification by bid proposer.

As the person authorized to sign this statement, I certify that this firm complies fully with the above requirements.

DATE:

7/12/2023

SIGNATURE:



COMPANY:

Gum Creek Farms, Inc.

NAME: Perry Bell

(Typed or Printed)

ADDRESS:

1097 Hwy 32

TITLE: President

DeFuniak Springs,

E-MAIL: perry@gumcreek.net

Florida 32433

PHONE NO.:

850-892-0291

RESPONSE DOCUMENT #14 GRANT FUNDED CLAUSES

This Exhibit is hereby incorporated by reference into the main *Procurement*.

FEDERAL PROVISION RELATED TO GRANT FUNDS THAT MAY BE USED TO FUND THE SERVICES AND GOODS UNDER THIS SOLICITATION

This *solicitation* is fully Federally Grant funded. To the extent applicable, in accordance with Federal law, respondents shall comply with the clauses as enumerated below. *Proposer* shall adhere to all grant conditions as set forth in the requirements of grant. Including, but not limited to, those set forth below, as well as those listed below, which are incorporated herein by reference:

- a. 2 CFR. 25.110
- b. 2 CFR Part 170 (including Appendix A), 180, 200 (including Appendixes), and 3000
- c. Executive Orders 12549 and 12689
- d. 41 CFR s. 60-1(a) and (d)
- e. Consolidated Appropriations Act, 2021, Public Law 116-260 related to salary limitations

These cited regulations are hereby incorporated and made part of this *Solicitation* as if fully set forth herein. As stated above, this list is not all inclusive, any other requirement of law applicable in accordance with the Federal, State or grant requirements are also applicable and hereby incorporated into this *Solicitation*. If *Proposer* cannot adhere to or objects to any of the applicable federal requirements, *Proposer's* proposal may be deemed by the County as unresponsive. The provisions in this exhibit are supplemental and in addition to all other provisions within the *procurement*. In the event of any conflict between the terms and conditions of this Exhibit and the terms and conditions of the remainder of the *procurement*, the conflicting terms and conditions of this Exhibit shall prevail. However, in the event of any conflict between the terms and conditions of this Exhibit and the terms and conditions of any federal grant funding document provided specific to the funds being used to contract services or goods under this *Procurement* the conflicting terms and conditions of that document shall prevail.

Drug Free Workplace Requirements (Drug-Free Workplace Act of 1988 (41 U.S.C. § 701 et seq.), 2 CFR § 182): Applicability: As required in the Drug-free workplace requirements in accordance with Drug Free Workplace Act of 1988 (Pub I 100-690, Title V, Subtitle D). Requirement: to the extent applicable, *proposer* must comply with Federal Drug Free workplace requirements as Drug Free Workplace Act of 1988.

Conflict of Interest (2 CFR § 200.112): Applicability: Any federal grant funded Contract or Contract that may receive federal grant funds. Requirement: The *proposer* must disclose in writing any potential conflict of interest to the County or pass-through entity in accordance with applicable Federal policy. Further, the County is required to maintain conflict of interest policies as it relates to procured contracts. In accordance with the Okaloosa County Purchasing Manual section 41.05(8), a conflict of interest exists when and of

the following occur: i. Because of other activities, relationships, or contracts, a *proposer* is unable, or potentially unable, to render impartial assistance or advice; ii. A *proposer's* objectivity in performing the contract work is or might be otherwise impaired; or iii. The *proposer* has an unfair competitive advantage.

Mandatory Disclosures (31 U.S.C. §§ 3799 – 3733): Applicability: All Contracts using federal grants funds, or which may use federal grant funds. Requirement: *proposer* acknowledges that 31 U.S.C. Chapter 38 (Administrative Remedies for False Claims and Statements) applies to the *proposer's* actions pertaining to this *solicitation*. The contractor must disclose in writing all violations of Federal criminal law involving fraud, bribery, or gratuity violations potentially affecting the Federal award.

Utilization of Minority and Women Firms (M/WBE) (2 CFR § 200.321): Applicability: All federally grant funded Contracts or Contracts which may use federal grant funds. Requirement: The *proposer* must take all necessary affirmative steps to assure that minority businesses, women's business enterprises, and labor surplus area firms are used when possible, in accordance with 2CFR 200.321. If subcontracts are to be let, prime *proposer* will require compliance by all sub-contractors. Prior to contract award, the *proposer* shall document efforts to utilize M/WBE firms including what firms were solicited as suppliers and/or subcontractors as applicable and submit this information with their bid submittal. Information regarding certified M/WBE firms can be obtained from:

Florida Department of Management Services (Office of Supplier Diversity)

Florida Department of Transportation

Minority Business Development Center in most large cities and

Local Government M/DBE programs in many large counties and cities

Equal Employment Opportunity (As per 2 CFR Part 200, Appendix II(C); 41 CFR § 61-1.4; 41 CFR § 61-4.3; Executive Order 11246 as amended by Executive Order 11375): Applicability: except as otherwise provided under 41 CFR Part 60, applies to all contracts that meet the definition of "federally assisted construction contract" in 41 CFR Part 60-1.3. Requirement: During the performance of this Contract, the *proposer* agrees as follows: (1) The *Proposer* will not discriminate against any employee or applicant for employment because of race, color, religion, sex, or national origin. The *Proposer* will take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, religion, sex, sexual orientation, gender identify, or national origin. Such action shall include, but not be limited to, the following: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff, or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. The *Proposer* agrees to post in conspicuous places, available to employees and applicants for employment, notices to be provided setting forth the provisions of this nondiscrimination clause; (2) The *Proposer* will, in all solicitations or advertisements for employees placed by or on behalf of the *Proposer*, state that all qualified applicants

will receive considerations for employment without regard to race, color, religion, sex, or national origin; (3) The *Proposer* will send to each labor union or representative of workers with which it has a collective bargaining Contract or other contract or understanding, a notice to be provided advising the said labor union or workers' representatives of the *Proposer's* commitments under this section and shall post copies of the notice in conspicuous places available to employees and applicants for employment; (4) The *Proposer* will comply with all provisions of Executive Order 11246 of September 24, 1965, and of the rules, regulations, and relevant orders of the Secretary of Labor; (5) The *Proposer* will furnish all information and reports required by Executive Order 11246 of September 24, 1965, and by rules, regulations, and orders of the Secretary of Labor, or pursuant thereto, and will permit access to his books, records, and accounts by the administering agency and the Secretary of Labor for purposes of investigation to ascertain compliance with such rules, regulations, and orders.; (6) In the event of the *Proposer's* noncompliance with the nondiscrimination clauses of this contract or with any of the said rules, regulations, or orders, this contract may be canceled, terminated, or suspended in whole or in part and the *Proposer* may be declared ineligible for further Government contracts or federally assisted construction contracts in accordance with procedures authorized in Executive Order 11246 of September 24, 1965, and such other sanctions may be imposed and remedies invoked as provided in Executive Order 11246 of September 24, 1965, or by rule, regulation, or order of the Secretary of Labor, or as otherwise provided by law.; (7) *Proposer* will include the portion of the sentence immediately preceding paragraph (1) and the provisions of paragraphs (1) through (7) in every subcontract or purchase order unless exempted by rules, regulations, or orders of the Secretary of Labor issued pursuant to section 204 of Executive Order 11246 of September 24, 1965, so that such provisions will be binding upon each subcontractor or vendor. The *Proposer* will take such action with respect to any subcontract or purchase order as the administering agency may direct as a means of enforcing such provisions, including sanctions for noncompliance: Provided, however, that in the event a *Proposer* becomes involved in, or is threatened with, litigation with a subcontractor or vendor as a result of such direction by the administering agency the *Proposer* may request the United States to enter into such litigation to protect the interests of the United States.

Davis-Bacon Act (40 U.S.C. §§ 3141-3144 and 3146-3148, as supplemented by 29 CFR Part 5):

Applicability: When required by Federal Program legislation, grant funding, and all prime construction contracts in excess of \$2,000 awarded by non-Federal entities, including Okaloosa County. Requirement: If applicable to this *solicitation*, the *proposer* agrees to comply with all provisions of the Davis Bacon Act as amended (40 U.S.C. 3141-3148). *Proposer* are required to pay wages to laborers and mechanics at a rate not less than the prevailing wages specified in a wage determination made by the Secretary of Labor. In addition, contractors must be required to pay wages not less than once a week. If the grant award contains Davis Bacon provisions, the County will place a copy of the current prevailing wage determination issued by the Department of Labor in the solicitation document. The decision to award a contract shall be conditioned upon the acceptance of the wage determination.

Copeland Anti Kick Back Act (40 U.S.C. § 3145 as supplemented by 29 CFR Part 3):

Applicability: When required by Federal Program legislation, grant funding, and all prime construction contracts in excess of \$2,000 awarded by non-Federal entities, including Okaloosa County. Requirement: If applicable to this *Solicitation*, *proposer* shall comply with all the requirements of 18 U.S.C. § 874, 40 U.S.C. § 3145, 29 CFR

Part 3 which are incorporated by reference to this *solicitation*. *Proposer* are prohibited from inducing by any means any person employed in the construction, completion or repair of public work to give up any part of the compensation to which he or she is otherwise entitled.

Contract Work Hours and Safety Standards Act (40 U.S.C. 3701–3708 as supplemented by 29 CFR Part 5): Applicability: All contracts awarded in excess of \$100,000 that involve the employment of mechanics or laborers. Requirement: All contracts awarded in excess of \$100,000 that involve the employment of mechanics or laborers must be in compliance with 40 U.S.C. 3702 and 3704, as supplemented by Department of Labor regulations (29 CFR Part 5). Under 40 U.S.C. 3702 of the Act, each contractor is required to compute the wages of every mechanic and laborer on the basis of a standard work week of 40 hours. Work in excess of the standard work week is permissible provided that the worker is compensated at a rate of not less than one and a half times the basic rate of pay for all hours worked in excess of 40 hours in the work week. The requirements of 40 U.S.C. 3704 are applicable to construction work and provide that no laborer or mechanic must be required to work in surroundings or under working conditions, which are unsanitary, hazardous or dangerous. These requirements do not apply to the purchases of supplies or materials or articles ordinarily available on the open market, or contracts for transportation or transmission of intelligence.

Clean Air Act (42 U.S.C. 7401–7671q.) and the Federal Water Pollution Control Act (33 U.S.C. 1251–1387, as amended): Applicability: Contracts and subgrants of amounts in excess of \$150,000.00. Requirement: *proposer* agrees to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act (42 U.S.C. 7401–7671q) and the Federal Water Pollution Control Act as amended (33 U.S.C. 1251–1387). Violations must be reported to the Federal awarding agency and the Regional Office of the Environmental Protection Agency (EPA).

Debarment and Suspension (2 CFR part 180, Executive Orders 12549 and 12689): Applicability: All contracts with federal grant funding or possibility of federal grant funds being used. Requirement: *proposer* certifies that it and its principals, if applicable, are not presently debarred or suspended by any Federal department or agency from participating in this transaction. *Proposer* now agrees to verify, to the extent applicable that for each lower tier subcontractor that exceeds \$25,000 as a “covered transaction” under the Services to be provided is not presently disbarred or otherwise disqualified from participating in the federally assisted services. The *proposer* agrees to accomplish this verification by: (1) Checking the System for Award Management at website: <http://www.sam.gov>; (2) Collecting a certification statement similar to the Certification of Offeror /Bidder Regarding Debarment, herein; (3) Inserting a clause or condition in the covered transaction with the lower tier contract.

Byrd Anti-Lobbying Amendment (31 U.S.C. 1352): Applicability: Applicable to any individual/entity that applies or bids/procures an award in excess of \$100,000. Requirement: *proposer* must file the required certification, attached to the procurement. Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to

influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any Federal contract, grant or any other award covered by 31 U.S.C. 1352. Each tier must also disclose any lobbying with non-Federal funds that takes place in connection with obtaining any Federal award. Such disclosures are forwarded from tier to tier up to the non-Federal award. The contractor shall certify compliance.

Rights to Inventions Made Under a Contract or Agreement (37 CFR Part 401): Applicability: If the Federal award meets the definition of "funding agreement" under 37 CFR § 401.2 additional Standard patent rights clauses in accordance with 37 CFR § 401.14 shall apply. Requirement: Please contact the County for further information related to the applicable standard patent rights clauses.

Procurement of Recovered Materials (2 CFR 200.323 and 40 CFR Part 247): Applicability: All contractors of Okaloosa County when federal funds may be or are being used under the Contract. Requirement: *proposer* must comply with section 6002 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act. The requirements of Section 6002 include procuring only items designated in guidelines of the Environmental Protection Agency (EPA) at 40 CFR part 247 that contain the highest percentage of recovered materials practicable, consistent with maintaining a satisfactory level of competition, where the purchase price of the item exceeds \$10,000 or the value of the quantity acquired during the preceding fiscal year exceeded \$10,000; procuring solid waste management services in a manner that maximizes energy and resource recovery; and establishing an affirmative procurement program for procurement of recovered materials identified in the EPA guidelines.

Access to Records and Reports: Applicability: All Contracts that received or may receive federal grant funding. Requirement: *Proposer* will make available to the County's granting agency, the granting agency's Office of Inspector General, the Government Accountability Office, the Comptroller General of the United States, Okaloosa County, Okaloosa County Clerk of Court's Inspector General, or any of their duly authorized representatives any books, documents, papers or other records, including electronic records, of the contractor that are pertinent to the County's grant award, in order to make audits, investigations, examinations, excerpts, transcripts, and copies of such documents. The right also includes timely and reasonable access to the contractor's personnel during normal business hours for the purpose of interview and discussion related to such documents. This right of access shall continue as long as records are retained.

Record Retention: Applicability: All Contracts that received or may receive **Federal or State** grant funding. Requirement: ~~Okaloosa County~~ ~~Contractor~~ will retain of all required records pertinent to this contract for a period of five years, after all funds have been expended or returned to the County. Wherever practicable, such records should be collected, transmitted, and stored in open and machine-readable formats. Your company must agree to provide or make available such records to the County upon request, in order to conduct audits or other investigations and retain these records in compliance with the OMB guidance 2 C.F.R. §200.334.

Federal Changes: *Proposer* shall comply with all applicable Federal agency regulations, policies, procedures and directives, including without limitation those listed directly or by reference, as they may be amended or promulgated from time to time during the term of *any awarded contract*.

Termination for Default (Breach or Cause): Applicability: All Contracts that may receive federal funds or that are federally funded above the micro-purchase amount. Requirement: If Contractor does not deliver supplies in accordance with the contract delivery schedule, or, if the contract is for services, the Contractor fails to perform in the manner called for in the contract, or if the Contractor fails to comply with any other provisions of the contract, the County may terminate the contract for default. Termination shall be effected by serving a notice of termination on the contractor setting forth the manner in which the Contractor is in default. The contractor will only be paid the contract price for supplies delivered and accepted, or services performed in accordance with the manner of performance set forth in the contract.

Termination for Convenience: Applicability: All Contracts that may receive federal funds or that are federally funded above the micro-purchase amount. Requirement: *Any Awarded Contract* may be terminated by Okaloosa County in whole or in part at any time, upon ten (10) days written notice. If the Contract is terminated before performance is completed, the *Contractor* shall be paid only for that work satisfactorily performed for which costs can be substantiated.

Safeguarding Personal Identifiable Information (2 CFR § 200.82): Applicability: All Contracts receiving, or which may receive federal grant funding. Requirement: *proposer* will take reasonable measures to safeguard protected personally identifiable information and other information designated as sensitive by the awarding agency or is considered sensitive consistent with applicable Federal, state and/or local laws regarding privacy and obligations of confidentiality.

Prohibition On Utilization Of Cost Plus A Percentage Of Cost Contracts (2 CFR Part 200): Applicability: All Contracts receiving or which may receive federal grant funding. Requirement: The County will not award contracts containing Federal funding on a cost-plus percentage of cost basis.

Energy Policy and Conservation Act (43 U.S.C. § 6201 and 2 CFR Part 200 Appendix II (H)): Applicability: For any contracts except micro-purchases (\$3000 or less, except for construction contracts over \$2000). Requirement: *proposer* shall comply with mandatory standards and policies relating to energy efficiency, stating in the state energy conservation plan issued in compliance with the Energy Policy and Conservation act. (Pub. L. 94-163, 89 Stat. 871) [53 FR 8078, 8087, Mar. 11, 1988, as amended at 60 FR 19639, 19645, Apr. 19, 1995].

Trafficking Victims Protection Act (2 CFR Part 175): Applicability: All federally grant funded contracts or contracts which may become federally grant funded. Requirement: *Proposer* will comply with the requirements of Section 106(g) of the Trafficking Victims Protection Act (TVPA) of 2000, as amended (22 U.S.C. 7104) which prohibits *Proposer* from (1) engaging in severe forms of trafficking in persons during the period of time that *resulting contract* is in effect; (2) procuring a commercial sex act during the period of time that *resulting contract* is in effect; or (3) using forced labor in the performance of the contracted services under a *resulting contract*. A *resulting contract* may be unilaterally terminated immediately by County for *Proposer's* violating this provision, without penalty.

Domestic Preference For Procurements (2 CFR § 200.322): Applicability: All Contracts using federal grant funds or which may use federal grant funds. Requirement: As appropriate and to the extent consistent with law, to the greatest extent practicable when using federal funds for the services provided in a *resulting contract*, shall provide a preference for the purchase, acquisition, or use of goods and products or materials produced in the United States.

Buy America (Build America, Buy America Act (Public Law 117-58, 29 U.S.C. § 50101, Executive Order 14005): Applicability: Applies to purchases of iron, steel, manufactured products and construction materials permanently incorporated into infrastructure projects, where federal grant funding agency requires it or if the grant funds which may come from any federal agency, but most commonly: the U.S. Environmental Protection Agency (EPA), the U.S. Federal Transit Administration (FTA), the US Federal Highway Administration (FHWA), the U.S. Federal Railroad Administration (FRA), Amtrak and the U.S. Federal Aviation Administration (FAA). Requirement: All iron, steel, manufactured products and construction materials used under a federally grant funded project must be produced in the United States. Additional requirements may apply depending on the Federal Granting Agency provisions, please check with Okaloosa County for further details. Proposers shall be required to submit a completed Buy America Certificate with this procurement, an incomplete certificate may deem the proposer's submittal non-responsive.

Prohibition On Certain Telecommunications And Video Surveillance Services Or Equipment (2 CFR § 200.216): Applicability: All Contracts using federal grant funds or which may use federal grant funds. Requirement: *Proposer* and any subcontractors are prohibited to obligate or spend grant funds to: (1) procure or obtain, (2) extend or renew a contract to procure or obtain; or (3) enter into a contract to procure or obtain equipment, services, or systems that use covered telecommunications equipment or services as a substantial or essential component of any system, or as critical technology as part of any system. As described in Pub. L. 115-232, section 889, covered telecommunications equipment is telecommunications equipment produced by Huawei Technologies Company or ZTE Corporation (or any subsidiary or affiliate of such entities). i. For the purpose of public safety, security of government FACILITY, physical security surveillance of critical infrastructure, and other national security purposes, video surveillance and telecommunications equipment produced by Hytera Communications Corporation, Hangzhou Hikvision Digital Technology Company, or Dahua Technology Company (or any subsidiary or affiliate of such entities). ii. Telecommunications or video surveillance services provided by such entities

or using such equipment. iii. Telecommunications or video surveillance equipment or services produced or provided by an entity that the Secretary of Defense, in consultation with the Director of the National Intelligence or the Director of the Federal Bureau of Investigation, reasonably believes to be an entity owned or controlled by, or otherwise, connected to the government of a covered foreign country.

Enhanced Whistleblower Protections (41 U.S.C. § 4712): Applicability: National Defense Authorization Act of 2013 extending whistleblower protections to *Proposer* employees may apply to the Federal grant award dollars involved with a *resulting contract*. Requirement: See 42 U.S. Code § 4712 for further requirements. Requirement: An employee of *Proposer* and/or its subcontractors may not be discharged, demoted, or otherwise discriminated against as a reprisal for disclosing to a person or body described in 42 U.S.C. § 4712(a)(2) information that the employee reasonably believes is evidence of gross mismanagement of a Federal contract or grant, a gross waste of Federal funds, an abuse of authority relating to a Federal contract or grant, a substantial and specific danger to public health or safety, or a violation of law, rule, or regulation related to a Federal contract (including the competition for or negotiation of a contract) or grant.

Federal Funding Accountability and Transparency Act (FFATA) (2 CFR § 200.300; 2 CFR Part 170): Applicability: All Contracts that may receive federal grant funding or are funded with federal grant funding. Requirement: In accordance with FFATA, the *Proposer* shall, upon request, provide Okaloosa County the names and total compensation of the five most highly compensated officers of the entity, if the entity in the preceding fiscal year received 80 percent or more of its annual gross revenues in federal awards, received \$25,000,000 or more in annual gross revenues from federal awards, and if the public does not have access to information about the compensation of the senior executives of the entity through periodic reports filed under section 13(a) or 15(d) of the Securities Exchange Act of 1934 or section 6104 of the Internal Revenue Code of 1986.

Federal Awardee Performance and Integrity Information System (FAPIS) (The Duncan Hunter National Defense Authorization Act of 2009 (Public Law 110-417 and 2 CFR Part 200 Appendix XII)): Applicability: All Contracts that may receive federal grant funding or are funded with federal grant funding. Requirement: The *Proposer* shall update the information in the Federal Awardee Performance and Integrity Information System (FAPIS) on a semi-annual basis, throughout the life of this contract, by posting the required information in the System for Award Management via <https://www.sam.gov>.

Never Contract With The Enemy (2 CFR Part 183): Applicability: only to grant and cooperative agreements in excess of \$50,000 performed outside of the United States, Including U.S. territories and are in support of a contingency operation in which members of the Armed Forces are actively engaged in hostilities. Requirement: *proposer* must exercise due diligence to ensure that none of the funds, including supplies and services, received are provided directly or indirectly (including through subawards or contracts) to a

person or entity who is actively opposing the United States or coalition forces involved in a contingency operation in which members of the Armed Forces are actively engaged in hostilities, which must be completed through 2 CFR 180.300 prior to issuing a subcontract.

Federal Agency Seals, Logos and Flags: Applicability: All Contracts that may receive federal grant funding or are funded with federal grant funding. Requirement: The *proposer* shall not use any Federal Agency seal(s), logos, crests, or reproductions of flags or likenesses of any federal agency officials without specific federal agency pre-approval.

No Obligation by Federal Government: Applicability: All Contracts that may receive federal grant funding or are funded with federal grant funding. Requirement: The Federal Government is not a party to this contract and is not subject to any obligations or liabilities to the non-Federal entity, contractor, or any other party pertaining to any matter resulting from *a resulting contract*.

RESPONSE DOCUMENT #14: GRANT FUNDED CLAUSES

The President on behalf of Gum Creek Farms, Inc. the *proposer* is authorized to sign below and confirm the *proposer* is fully able to comply with these requirements, federal terms and conditions and has made any inquiries and/or further examination of the law and requirements as is necessary to comply.

DATE: 7/12/2023

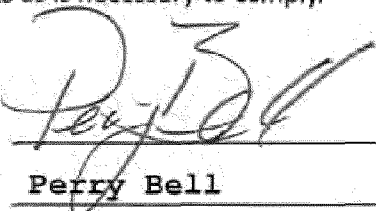
COMPANY: Gum Creek Farms, Inc.

ADDRESS: 1097 Hwy 83

DeFuniak Springs FL 32433

E-MAIL: perry@gumcreek.net

PHONE NO.: 850-892-0291

SIGNATURE: 
NAME: Perry Bell
TITLE: President

Okaloosa County Board of County Commissioners

PROPOSAL BOND

(NOT TO BE FILLED OUT IF A CERTIFIED OR CASHIER'S CHECK IS SUBMITTED)

KNOW ALL MEN BY THESE PRESENTS: That we, the undersigned bidder _____
Gum Creek Farms, Inc., as Principal, and The Gray Insurance Company as a
Corporation Surety authorized under the laws of the State of Florida, and authorized to write this
type of bond through a resident agent of the corporation located in the State of _____,
as, surety, are held and firmly bound unto the Okaloosa County Board of County Commissioners in
the sum of FIVE percent of the amount bid Dollars (\$ 5%
_____) for the payment of which, well and truly to be made, we hereby jointly and severally bind
ourselves and our heirs, executors, administrators, successors and assigns.

The condition of the above obligation is such that if the attached proposal of _____
CEW South Apron Rehabilitation for the improvement of airport facilities stipulated in said proposal in
accordance with the Plans and Specifications provided therefore, is accepted and the Contract
awarded to the above named Bidder, and the said Bidder shall within ten (10) calendar days after
notice of said award enter into a Contract in writing and furnish the required Payment and
Performance Bonds with surety, or sureties, to be approved by the Okaloosa County Board of
County Commissioners this obligation shall be void. Otherwise, the same shall be in full force and
virtue of law, and the full amount of this Proposal Bond will be paid to the Okaloosa County Board of
County Commissioners as stipulated for liquidated damages.

Signed this 12 day of July, 2023.

(PRINCIPAL MUST INDICATE WHETHER
CORPORATION, PARTNERSHIP, COMPANY
OR INDIVIDUAL)

THIS PERSON SIGNING SHALL IN HIS
OWN HANDWRITING SIGN THE PRINCIPAL'S
NAME, AND HIS TITLE. BY WHERE THE
PERSON SIGNING FOR A CORPORATION IS
OTHER THAN THE PRESIDENT OR VICE
PRESIDENT, HE MUST, BY AFFIDAVIT AS
CONTAINED HEREIN, SHOW HIS AUTHORITY
TO BIND THE CORPORATION.

Gum Creek Farms, Inc.

1097 Highway 83 North Defuniak Springs, FL 32433

Principal (Seal)

By:

Perry H. Bell, President

(Name and Title)

The Gray Insurance Company
P.O. Box 6202 Metairie, LA 70009-6202

Surety (Seal)

By:

K. Wayne Walker

(Name and Title)

**THE GRAY INSURANCE COMPANY
THE GRAY CASUALTY & SURETY COMPANY**

GENERAL POWER OF ATTORNEY

Bond Number: TBD

Principal: Gum Creek Farms, Inc.

Project: CEW South Apron Rehabilitation; Bob Sikes Airport-5535 John Givens Rd, Crestview, FL

KNOW ALL BY THESE PRESENTS, THAT The Gray Insurance Company and The Gray Casualty & Surety Company, corporations duly organized and existing under the laws of Louisiana, and having their principal offices in Metairie, Louisiana, do hereby make, constitute, and appoint: **Benjamin H. French, Rebekah E. Sharp, L. Dale Waldorff, K. Wayne Walker, Trava Ridlon, Joshua T. Morgan, Ronald J. Hays, and Paul A. Lucascio of Fort Walton Beach, Florida jointly and severally** on behalf of each of the Companies named above its true and lawful Attorney(s)-in-Fact, to make, execute, seal and deliver, for and on its behalf and as its deed, bonds, or other writings obligatory in the nature of a bond, as surety, contracts of suretyship as are or may be required or permitted by law, regulation, contract or otherwise, provided that no bond or undertaking or contract of suretyship executed under this authority shall exceed the amount of \$25,000,000.00.

This Power of Attorney is granted and is signed by facsimile under and by the authority of the following Resolutions adopted by the Boards of Directors of both The Gray Insurance Company and The Gray Casualty & Surety Company at meetings duly called and held on the 26th day of June, 2003.

*RESOLVED, that the President, Executive Vice President, any Vice President, or the Secretary be and each or any of them hereby is authorized to execute a power of Attorney qualifying the attorney named in the given Power of Attorney to execute on behalf of the Company bonds, undertakings, and all contracts of surety, and that each or any of them is hereby authorized to attest to the execution of such Power of Attorney, and to attach the seal of the Company; and it is

FURTHER RESOLVED, that the signature of such officers and the seal of the Company may be affixed to any such Power of Attorney or to any certificate relating thereto by facsimile, and any such Power of Attorney or certificate bearing such facsimile signature or facsimile seal shall be binding upon the Company now and in the future when so affixed with regard to any bond, undertaking or contract of surety to which it is attached.

IN WITNESS WHEREOF, The Gray Insurance Company and The Gray Casualty & Surety Company have caused their official seals to be hereinto affixed, and these presents to be signed by their authorized officers this 4th day of November, 2022.



By:

Michael T. Gray

Michael T. Gray
President
The Gray Insurance Company

Cullen S. Piske

Cullen S. Piske
President
The Gray Casualty & Surety Company



State of Louisiana

ss:

Parish of Jefferson

On this 4th day of November, 2022, before me, a Notary Public, personally appeared Michael T. Gray, President of The Gray Insurance Company, and Cullen S. Piske, President of The Gray Casualty & Surety Company, personally known to me, being duly sworn, acknowledged that they signed the above Power of Attorney and affixed the seals of the companies as officers of, and acknowledged said instrument to be the voluntary act and deed, of their companies.



Leigh Anne Henican
Notary Public
Notary ID No. 92653
Orleans Parish, Louisiana

Leigh Anne Henican

Leigh Anne Henican
Notary Public, Parish of Orleans State of Louisiana
My Commission is for Life

I, Mark S. Manguno, Secretary of The Gray Insurance Company, do hereby certify that the above and forgoing is a true and correct copy of a Power of Attorney given by the companies, which is still in full force and effect. IN WITNESS WHEREOF, I have set my hand and affixed the seals of the Company this 12 day of July, 2023

Mark S. Manguno

I, Leigh Anne Henican, Secretary of The Gray Casualty & Surety Company, do hereby certify that the above and forgoing is a true and correct copy of a Power of Attorney given by the companies, which is still in full force and effect. IN WITNESS WHEREOF, I have set my hand and affixed the seals of the Company this 12 day of July, 2023

Leigh Anne Henican



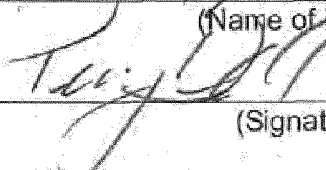
EQUAL EMPLOYMENT OPPORTUNITY REPORT STATEMENT
As Required by 41 CFR 60-1.7(b)

The bidder (proposer) shall complete the following statement by checking the appropriate boxes. Failure to complete these blanks may be grounds for rejection of bids.

1. The bidder (proposer) has _____ has not developed and has on file at each establishment Affirmative Action Programs pursuant to 41 CFR 60-1.4 and 41 CFR 60-2.
2. The bidder (proposer) has _____ has not participated in any previous contract or subcontract subject to the Equal Opportunity Clause prescribed by Executive Order 11246, as amended.
3. The bidder (proposer) has _____ has not filed with the Joint Reporting Committee the annual compliance report on Standard Form 100 (EEO-1 Report).
4. The bidder (proposer) does _____ does not employ fifty (50) or more employees.

Gum Creek Farms, Inc. Perry Bell
(Name of Bidder)

BY:


(Signature)

TITLE:

President

DATE:

July 12, 2023

BIDDERS QUALIFICATIONS

Each bidder shall furnish with his bid the following completed and signed statements on "evidence of competency" and "evidence of financial responsibility" in accordance with General Provision 20-02. In addition, the Owner reserves the right to conduct such additional investigation into the competency and responsibility of the bidders (or any particular bidder) as the Owner may deem necessary.

1. Name of Bidder: Gum Creek Farms, Inc.
2. Business address: 1097 Hwy 83, DeFuniak Springs, FL 32433
3. Telephone number: 850-892-0291
4. When organized: 1992
5. Where incorporated: Florida
6. How many years have you been engaged in the contracting business under the present firm name?
31
7. What is the type of construction work in which you are principally engaged?
Earthwork, Base, Asphalt Paving (New Highways)
8. On separate sheet, list major contracts in past ten years.
9. On separate sheet, list equipment and plant available for this project.
10. Enclose evidence of financial responsibility per General Provisions Section 20-02.
11. Credit available for this Contract \$ 600,000.00
12. On a separate sheet, list all projects presently under Contract by name, gross amount, and percent complete.
13. Have you ever refused to sign a Contract at your original bid? No
14. Have you ever been declared in default on a Contract? No
15. Total amount of bonding capacity \$ In excess of \$10M
16. Total bonding capacity available for the project \$ 10M
17. Remarks:

(The above statements must be subscribed and sworn to before a Notary Public.)

Date: 7/12/2023

Firm Name: Gum Creek Farms, Inc.

By: *Perry Bell*
(Signature) Perry Bell

Title: President

(Personally Known to me)

STATE OF FLORIDA

COUNTY OF WALTON

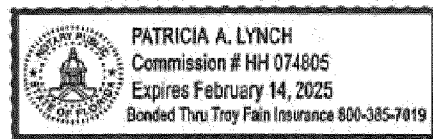
Subscribed and sworn to before me, a Notary Public, in and for the County and State aforesaid by
Perry Bell duly authorized so to sign this 12th day of
July, 2023.

Notary Public

My Commission Expires:

Patricia Lynch

END OF SECTION B3



**UTILIZATION STATEMENT
Disadvantage Business Enterprise**

The undersigned bidder/offeror has satisfied the requirements of the bid specification in the following manner. *(Please mark the appropriate box)*

- The bidder/offeror is committed to a minimum of 7.12% DBE utilization on this contract.
- The bidder/offeror, while unable to meet the DBE goal of 7.12%, hereby commits to a minimum of 0 % DBE utilization on this contract and also submits documentation, as an attachment, demonstrating good faith efforts (GFE).

The undersigned hereby further assures that the information included herein is true and correct, and that the DBE firm(s) listed herein have agreed to perform a commercially useful function in the work items noted for each firm. The undersigned further understands that no changes to this statement may be made without prior approval from the Civil Right Staff of the Federal Aviation Administration.

Gum Creek Farms, Inc.
Bidder's/Offeror's Firm Name

Perry Bell
Signature **Perry Bell**

7/12/23
Date

DBE UTILIZATION SUMMARY

<u>Percentage</u>	<u>Contract Amount</u>	<u>DBE Amount</u>	<u>Contract</u>
DBE Prime Contractor	\$ _____ x 1.00 =	\$ _____	_____ %
DBE Subcontractor	\$ _____ x 1.00 =	\$ _____	_____ %
DBE Supplier	\$ _____ x 0.60 =	\$ _____	_____ %
DBE Manufacturer	\$ _____ x 1.00 =	\$ _____	_____ %
Total Amount DBE		\$ _____	_____ %
DBE Goal		\$ _____	_____ %

* If the total proposed DBE participation is less than the established DBE goal, Bidder must provide written documentation of the good faith efforts as required by 49 CFR Part 26.

LETTER OF INTENT
Disadvantage Business Enterprise
(This page shall be submitted for each DBE firm)

Bidder/Offer Name: _____
Address: _____
City: _____ State: _____ Zip: _____

DBE Firm: DBE Firm: _____
Address: _____
City: _____ State: _____ Zip: _____

DBE Contact Person: Name: _____ Phone: (____) _____

DBE Certifying Agency: _____ Expiration Date: _____

Each DBE Firm shall submit evidence (such as a photocopy) of their certification status.

Classification: Prime Contractor Subcontractor Joint Venture
 Manufacturer Supplier

Work item(s) to be performed by DBE	Description of Work Item	Quantity	Total

The bidder/offeror is committed to utilizing the above-named DBE firm for the work described above. The estimated participation is as follows:

DBE contract amount: _____ Percent of total contract: _____%

AFFIRMATION:

The above-named DBE firm affirms that it will perform that portion of the contract for the estimated dollar value as stated herein above.

By: _____
(Signature) (Title)

*In the event the bidder/offeror does not receive award of the prime contract, any and all representations in this Letter of Intent and Affirmation shall be null and void.

**REPORT OF CERTIFIED DBE CONTRACTORS
USED ON FAA-ASSISTED CONTRACTS**

(THESE FORMS ARE TO BE COMPLETED BY THE SUCCESSFUL BIDDER AT CLOSEOUT)

Name of Airport: Bob Sikes Airport
AIP No: TBD
Project Name: CEW South Apron Rehabilitation
Contractor: _____
City/State: _____
Prepared by: _____
Telephone No: _____
Date: _____

List below information about DBE's that performed work on FAA-assisted contracts during the goal period, which just expired. If no DBE firms participated on FAA-assisted contracts, write "none" below.

Name of DBE Firm: _____
Address: _____
City/State/Zip: _____
County: _____
Telephone No: _____

Ethnicity & Gender: Black American Hispanic American Native American
 Subcont. Asian American Asian Pacific American Non-Minority Women
 Other

Type of Work: _____
\$ Amount of Work: _____

Who Certified Firm as DBE: _____
(Provide copy of certification to the Okaloosa County Board of County Commissioners.)

(Use One Sheet per Subcontractor)

**REPORT OF SUB-CONTRACTORS
USED ON FAA-ASSISTED CONTRACTS**

Name of Airport: Bob Sikes Airport

AIP No: TBD

Project Name: CEW South Apron Rehabilitation

Contractor: _____

City/State: _____

Prepared by: _____

Telephone No: _____

Date: _____

List below information about Sub-contractors that performed work on FAA-assisted contracts during the goal period.

Name of Sub-Contractor: _____

Address: _____

City/State/Zip: _____

County: _____

Telephone No: _____

Ethnicity & Gender: Black American Hispanic American Native American
 Subcont. Asian American Asian Pacific American Non-Minority Women

Type of Work: _____

\$ Amount of Work: _____

Please fill this form out for every Subcontractor used on job that is not a DBE.



GUM CREEK FARMS, INC.
1097 Hwy 83
DeFuniak Springs, FL 32433
850-892-0291

CURRENT ACTIVE JOBS LIST	%COMPLETE	AMOUNT
Walton County Sheriff's Office Access Road	98%	621,175
Tram Road	40%	653,617
Grayton Beach State Park	60%	886,563
Restore US Coast Guard Panama City Station	1%	1,894,929
Falling Waters State Park	98%	308,150
Eastern Lake Road Municipal Parking	95%	502,673
Ft Rucker Shell Field	30%	1,875,998
Eglin Credit Union – Freeport	50%	614,187
DeFuniak Springs Airport Terminal, Hanger, And Apron Expansion	49%	1,779,029



GUM CREEK FARMS, INC.
1097 Hwy 83
DeFuniak Springs, FL 32433
850-892-0291

PROJECTS

2023 Walton County Sheriff's Office Access Road
2022-23 Tram Road
2023 Grayton Beach State Park
2023 Restore US Coast Guard Panama City Station
2023 Falling Waters State Park
2023 Eastern Lake Road Municipal Parking
2023 Ft Rucker Shell Field
2023 Eglin Credit Union – Freeport
2022-23 DeFuniak Springs Airport Terminal, Hanger,
And Apron Expansion
2021-22 Cr 280 B Walton Co.
2021-22 Eglin RX
2020 Obstruction, Clearing & Fencing Okaloosa Co.
2020 Bonifay-Gritney Rd Holmes Co
2019 Gold Links Drainage Impr. Okaloosa Co.
2019 F-35 Integrated Training Eglin
2019 Watercrest Senior Living Fac Korte Co.

**BUY AMERICAN PREFERENCE STATEMENT
BUY AMERICAN PREFERENCE**

The contractor agrees to comply with 49 USC § 50101, which provides that Federal funds may not be obligated unless all steel and manufactured goods used in AIP funded projects are produced in the United States, unless the FAA has issued a waiver for the product; the product is listed as an Excepted Article, Material Or Supply in Federal Acquisition Regulation subpart 25.108; or is included in the FAA Nationwide Buy American Waivers Issued list.

A bidder or offeror must complete and submit the Buy America certification included herein with their bid or offer. The Owner will reject as nonresponsive any bid or offer that does not include a completed Certificate of Buy American Compliance.

CERTIFICATE OF BUY AMERICAN COMPLIANCE FOR TOTAL FACILITY

As a matter of bid responsiveness, the bidder or offeror must complete, sign, date, and submit this certification statement with their proposal. The bidder or offeror must indicate how they intend to comply with 49 USC § 50101 by selecting one of the following certification statements. These statements are mutually exclusive. Bidder must select one or the other (i.e. not both) by inserting a checkmark (✓) or the letter "X".

- Bidder or offeror hereby certifies that it will comply with 49 USC. 50101 by:
- a) Only installing steel and manufactured products produced in the United States; or
 - b) Installing manufactured products for which the FAA has issued a waiver as indicated by inclusion on the current FAA Nationwide Buy American Waivers Issued listing; or
 - c) Installing products listed as an Excepted Article, Material or Supply in Federal Acquisition Regulation Subpart 25.108.

By selecting this certification statement, the bidder or offeror agrees:

1. To provide to the Owner evidence that documents the source and origin of the steel and manufactured product.
 2. To faithfully comply with providing US domestic products.
 3. To refrain from seeking a waiver request after establishment of the contract, unless extenuating circumstances emerge that the FAA determines justified.
- The bidder or offeror hereby certifies it cannot comply with the 100% Buy American Preferences of 49 USC § 50101(a) but may qualify for either a Type 3 or Type 4 waiver under 49 USC § 50101(b). By selecting this certification statement, the apparent bidder or offeror with the apparent low bid agrees:
1. To the submit to the Owner within 15 calendar days of the bid opening, a formal waiver request and required documentation that support the type of waiver being requested.
 2. That failure to submit the required documentation within the specified timeframe is cause for a non-responsive determination that may result in rejection of the proposal.
 3. To faithfully comply with providing US domestic products at or above the approved US domestic content percentage as approved by the FAA.
 4. To furnish US domestic product for any waiver request that the FAA rejects.
 5. To refrain from seeking a waiver request after establishment of the contract, unless extenuating circumstances emerge that the FAA determines justified.

Required Documentation

Type 3 Waiver - The cost of components and subcomponents produced in the United States is more that 60% of the cost of all components and subcomponents of the "facility". The required documentation for a type 3 waiver is:

- a) Listing of all manufactured products that are not comprised of 100% US domestic content (Excludes products listed on the FAA Nationwide Buy American Waivers Issued listing and products excluded by Federal Acquisition Regulation Subpart 25.108; products of unknown origin must be considered as non-domestic products in their entirety)
- b) Cost of non-domestic components and subcomponents, excluding labor costs associated with final assembly and installation at project location.
- c) Percentage of non-domestic component and subcomponent cost as compared to total "facility" component and subcomponent costs, excluding labor costs associated with final assembly and installation at project location.

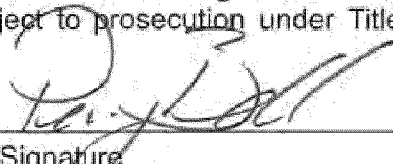
Type 4 Waiver – Total cost of project using US domestic source product exceeds the total project cost using non-domestic product by 25%. The required documentation for a type 4 of waiver is:

- a) Detailed cost information for total project using US domestic product
- b) Detailed cost information for total project using non-domestic product

False Statements: Per 49 USC § 47126, this certification concerns a matter within the jurisdiction of the Federal Aviation Administration and the making of a false, fictitious or fraudulent certification may render the maker subject to prosecution under Title 18, United States Code.

7/12/23
Date

Gum Creek Farms, Inc.
Company Name


Signature

Perry Bell, President
Title

CERTIFICATE OF BUY AMERICAN COMPLIANCE FOR MANUFACTURED PRODUCTS

As a matter of bid responsiveness, the bidder or offeror must complete, sign, date, and submit this certification statement with their proposal. The bidder or offeror must indicate how they intend to comply with 49 USC § 50101 by selecting one on the following certification statements. These statements are mutually exclusive. Bidder must select one or the other (not both) by inserting a checkmark (✓) or the letter "X".

- Bidder or offeror hereby certifies that it will comply with 49 USC § 50101 by:
- a) Only installing steel and manufactured products produced in the United States, or;
 - b) Installing manufactured products for which the FAA has issued a waiver as indicated by inclusion on the current FAA Nationwide Buy American Waivers Issued listing, or;
 - c) Installing products listed as an Excepted Article, Material or Supply in Federal Acquisition Regulation Subpart 25.108.

By selecting this certification statement, the bidder or offeror agrees:

1. To provide to the Owner evidence that documents the source and origin of the steel and manufactured product.
 2. To faithfully comply with providing US domestic product
 3. To furnish US domestic product for any waiver request that the FAA rejects
 4. To refrain from seeking a waiver request after establishment of the contract, unless extenuating circumstances emerge that the FAA determines justified.
- The bidder or offeror hereby certifies it cannot comply with the 100% Buy American Preferences of 49 USC § 50101(a) but may qualify for either a Type 3 or Type 4 waiver under 49 USC § 50101(b). By selecting this certification statement, the apparent bidder or offeror with the apparent low bid agrees:
1. To submit to the Owner within 15 calendar days of the bid opening, a formal waiver request and required documentation that support the type of waiver being requested.
 2. That failure to submit the required documentation within the specified timeframe is cause for a non-responsive determination may result in rejection of the proposal.
 3. To faithfully comply with providing US domestic products at or above the approved US domestic content percentage as approved by the FAA.
 4. To refrain from seeking a waiver request after establishment of the contract, unless extenuating circumstances emerge that the FAA determines justified.

REQUIRED DOCUMENTATION

Type 3 Waiver - The cost of the item components and subcomponents produced in the United States is more than 60% of the cost of all components and subcomponents of the "item". The required documentation for a type 3 waiver is:

- a) Listing of all product components and subcomponents that are not comprised of 100% US domestic content (Excludes products listed on the FAA Nationwide Buy American Waivers Issued listing and products excluded by Federal Acquisition Regulation Subpart 25.108; products of unknown origin must be considered as non-domestic products in their entirety).

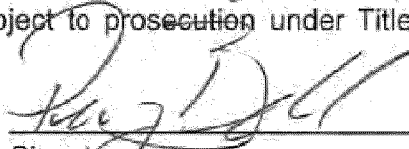
- b) Cost of non-domestic components and subcomponents, excluding labor costs associated with final assembly at place of manufacture.
- c) Percentage of non-domestic component and subcomponent cost as compared to total "item" component and subcomponent costs, excluding labor costs associated with final assembly at place of manufacture.

Type 4 Waiver – Total cost of project using US domestic source product exceeds the total project cost using non-domestic product by 25%. The required documentation for a type 4 of waiver is:

- a) Detailed cost information for total project using US domestic product
- b) Detailed cost information for total project using non-domestic product

False Statements: Per 49 USC § 47126, this certification concerns a matter within the jurisdiction of the Federal Aviation Administration and the making of a false, fictitious or fraudulent certification may render the maker subject to prosecution under Title 18, United States Code.

7/12/2023
Date
Gum Creek Farms, Inc.
Company Name


Signature
Perry Bell, President
Title

CERTIFICATION OF NON-SEGREGATED FACILITIES FORM

The Contractor certifies that no segregated facilities are maintained and will not be maintained during the execution of this contract at any of its establishments.

The Contractor further certifies that none of its employees are permitted to perform their services at any location under the Contractor's control during the life of this contract where segregated facilities are maintained.

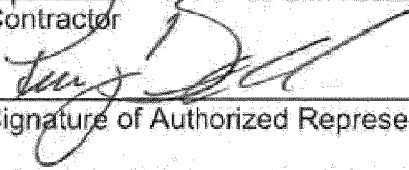
The Contractor certifies further that it will not maintain or provide for its employees any segregated facilities at any of its establishments, and that he will not permit his employees to perform their services at any location, under his control, where segregated facilities are maintained.

As used in this certification, the term "segregated facilities" means any waiting rooms, work area, rest rooms and wash rooms, restaurants and other eating areas, time clocks, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing facilities provided for employees which are segregated by explicit directive or are in fact segregated on the basis of race, creed, color or national origin, because of habit, local custom, or otherwise.

The Contractor agrees that (except where it has obtained identical certification from proposed subcontractors for specific time periods) it will obtain identical certifications from proposed subcontractors prior to the award of subcontract exceeding \$10,000 and that it will retain such certifications in its files.

Gum Creek Farms, Inc.

Contractor


Signature of Authorized Representative

07/12/2023
Date

Perry Bell, President

Printed or Typed Name and Title of Authorized Representative

END OF SECTION

FLORIDA STATUTES ON PUBLIC ENTITY CRIMES AFFIDAVIT

Project Name: Bob Sikes Airport - CEW South Apron Rehabilitation

Bid No.: ITB AP 64-23

The Affiant identified below attests to the following:

1. I understand that a "public entity crime" as defined in Section 287.133(1)(g), Florida Statutes, means a violation of any State or Federal law by a person with respect to and directly related to the transaction of business with any public entity or with an agency or political subdivision of any other state or with the United States, including, but not limited to, any bid or contract for goods or services to be provided to any public entity or an agency or political subdivision of any other state or of the United States and involving antitrust, fraud, theft, bribery, collusion, racketeering, conspiracy, or material misrepresentation.
2. I understand that "convicted" or "conviction" as defined in Paragraph 287.133(1)(b), Florida Statutes, means a finding of guilt or a conviction of a public entity crimes, with or without an adjudication of guilt, in any Federal or state trial court of record relating to charges brought by indictment or information after July 1, 1989, as a result of a jury verdict, non-jury trial, or entry of a plea of guilty or nolo contendere.
3. I understand that an "affiliate" as defined in Section 287.133(1)(a), Florida Statutes, means: A predecessor or successor of a person convicted of a public entity crime; or an entity under the control of any natural person who is active in the management of the entity and how has been convicted of a public entity crime. The term "affiliate" includes those officers, directors, executives, partners, shareholders, employees, members, and agents who are active in the management of an affiliate. The ownership by one (1) person of shares constituting a controlling interest in another person, or a pooling of equipment or income among persons when not for fair market value under an arm's length agreement, shall be a prima facie case that one person controls another person. A person who knowingly enters into a joint venture with a person who has been convicted of a public entity crime in Florida during the preceding thirty-six (36) months shall be considered an affiliate.
4. I understand that a "person" as defined in Section 287.133(1)(e), Florida Statutes, means any natural person or entity organized under the laws of any state or of the United States with the legal power to enter into a binding contract and which bids or applies to bid on contracts for the provision of goods or services let by a public entity, or which otherwise transacts or applies to transact business with a public entity. The term "person" includes those officers, directors, executives, partners, shareholders, employees, members, and agents who are active in management of an entity.
5. Based on information and belief, the statement which I have marked below is true in relation to the entity submitting this sworn statement. (Note: indicate which of the below statements apply)

 X Neither the entity submitting this sworn statement, nor any officers, directors, executives, partners, shareholders, employees, members, or agents who are active in

management of the entity, nor the affiliate of the entity has been charged with and convicted of a public entity crime subsequent to July 1, 1989.

_____The entity submitting this sworn statement, or one or more of the officers, directors, executives, partners, shareholders, employees, members or agent who are active in management of the entity, or an affiliate of the entity, has been charged with and convicted of a public entity crime subsequent to July 1, 1989.

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

I understand that the submission of this form to the Owner and is for the Owner only and, that this form is valid through December 31, of the calendar year in which it is filed. I also understand that i am required to inform the Owner prior to entering in to a contract in excess of the threshold amount provided in section 287.017, Florida Statues, for category two of any change in the information contained in this form.

Gum Creek Farms, Inc. 59-3122167
Bidder FEIN No.

[Signature] 7/12/2023
Signature of Authorized Representative (Affiant) Date

Perry Bell, President
Printed or Typed Name and Title of Authorized Representative (Affiant)

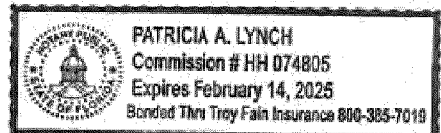
COUNTY OF WALTON
STATE OF FLORIDA

On this 12th day of July, 20 23, before me, the undersigned Notary Public of the State of Florida, personally appeared PERRY BELL, PRESIDENT whose name(s) is/are subscribed to the within instrument, and he/she/they acknowledge that he/she/they executed it. WITNESS my hand and official seal. He/She is personally known to me or has produced _____, as identification.

[Signature]
(Notary Public in and for the County and State Aforementioned)

SEAL My commission expires: _____

END OF SECTION



**CERTIFICATION OF OFFERER/BIDDER REGARDING
TAX DELINQUENCY AND FELONY CONVICTIONS**

The applicant must complete the following two certification statements. The applicant must indicate its current status as it relates to tax delinquency and felony conviction by inserting a checkmark () in the space following the applicable response. The applicant agrees that, if awarded a contract resulting from this solicitation, it will incorporate this provision for certification in all lower tier subcontracts.

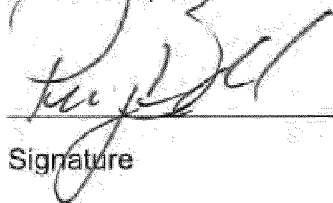
Certifications:

1. The applicant represents that it is () is not () a corporation that has any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability.
2. The applicant represents that it is () is not () is not a corporation that was convicted of a criminal violation under any Federal law within the preceding 24 months.

The undersigned swear or affirm that the foregoing statements are correct and include all material information necessary to identify and explain the terms and operation of our joint venture and the intended participation by each joint venture in the undertaking. Further, the undersigned covenant and agree to provide to the Owner current, complete and accurate information regarding actual joint venture work and the payment therefore and any proposed changes in any of the joint venture arrangements and to permit the audit and examination of the books, records and files of the joint venture, or those of each joint venture relevant to the joint venture, by authorized representatives of the Owner or the Federal funding agency. Any material misrepresentation will be grounds for terminating any contract which may be awarded and for initiating action under Federal or State laws concerning false statements.

Gum Creek Farms, Inc.

Name of Firm



Signature

Perry Bell

Name

President

Title

Perry Bell (Personally Known to me)

Date

7/12/2023

State of Florida

County of Walton

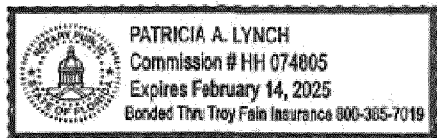
On this 12th day of July, 2023, before me appeared (name) Perry Bell, to me personally known, who, being duly sworn, did execute the foregoing affidavit, and did state that he or she was properly authorized by (name of firm) Gum Creek Farms, Inc. to execute the affidavit and did so as his or her free act and deed.

Notary Public

Patricia Lynch

Commission Expires _____

(Seal)



GENERAL CIVIL RIGHTS PROVISIONS

The contractor agrees to comply with pertinent statutes, Executive Orders and such rules as are promulgated to ensure that no person shall, on the grounds of race, creed, color, national origin, sex, age, or disability be excluded from participating in any activity conducted with or benefiting from Federal assistance.

This provision binds the contractor and subtier contractors from the bid solicitation period through the completion of the contract. This provision is in addition to that required of Title VI of the Civil Rights Act of 1964.

Title VI Solicitation Notice

The **Okaloosa County Board of County Commissioners**, in accordance with the provisions of Title VI of the Civil Rights Act of 1964 (78 Stat. 252, 42 U.S.C. §§ 2000d to 2000d-4) and the Regulations, hereby notifies all bidders that it will affirmatively ensure that any contract entered into pursuant to this advertisement, disadvantaged business enterprises will be afforded full and fair opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, or national origin in consideration for an award.

Compliance with Nondiscrimination Requirements

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the "contractor") agrees as follows:

1. **Compliance with Regulations:** The contractor (hereinafter includes consultants) will comply with the Title VI List of Pertinent Nondiscrimination Acts and Authorities, as they may be amended from time to time, which are herein incorporated by reference and made a part of this contract.
2. **Non-discrimination:** The contractor, with regard to the work performed by it during the contract, will not discriminate on the grounds of race, color, or national origin in the selection and retention of subcontractors, including procurements of materials and leases of equipment. The contractor will not participate directly or indirectly in the discrimination prohibited by the Nondiscrimination Acts and Authorities, including employment practices when the contract covers any activity, project, or program set forth in Appendix B of 49 CFR part 21.
3. **Solicitations for Subcontracts, Including Procurements of Materials and Equipment:** In all solicitations, either by competitive bidding, or negotiation made by the contractor for work to be performed under a subcontract, including procurements of materials, or leases of equipment, each potential subcontractor or supplier will be notified by the contractor of the contractor's obligations under this contract and the Nondiscrimination Acts and Authorities on the grounds of race, color, or national origin.

4. **Information and Reports:** The contractor will provide all information and reports required by the Acts, the Regulations, and directives issued pursuant thereto and will permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the sponsor or the Federal Aviation Administration to be pertinent to ascertain compliance with such Nondiscrimination Acts and Authorities and instructions. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish the information, the contractor will so certify to the sponsor or the Federal Aviation Administration, as appropriate, and will set forth what efforts it has made to obtain the information.

5. **Sanctions for Noncompliance:** In the event of a contractor's noncompliance with the Non-discrimination provisions of this contract, the sponsor will impose such contract sanctions as it or the Federal Aviation Administration may determine to be appropriate, including, but not limited to:
 - a. Withholding payments to the contractor under the contract until the contractor complies; and/or
 - b. Cancelling, terminating, or suspending a contract, in whole or in part.

6. **Incorporation of Provisions:** The contractor will include the provisions of paragraphs one through six in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Acts, the Regulations and directives issued pursuant thereto. The contractor will take action with respect to any subcontract or procurement as the sponsor or the Federal Aviation Administration may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, that if the contractor becomes involved in, or is threatened with litigation by a subcontractor, or supplier because of such direction, the contractor may request the sponsor to enter into any litigation to protect the interests of the sponsor. In addition, the contractor may request the United States to enter into the litigation to protect the interests of the United States.

**CLAUSES FOR CONSTRUCTION/USE/ACCESS TO REAL PROPERTY ACQUIRED
UNDER THE ACTIVITY, FACILITY OR PROGRAM**

The following clauses will be included in deeds, licenses, permits, or similar instruments/agreements entered into by the **Okaloosa County Board of County Commissioners** pursuant to the provisions of the Airport Improvement Program grant assurances.

- A. The (grantee, licensee, permittee, etc., as appropriate) for himself/herself, his/her heirs, personal representatives, successors in interest, and assigns, as a part of the consideration hereof, does hereby covenant and agree (in the case of deeds and leases add, "as a covenant running with the land") that (1) no person on the ground of race, color, or national origin, will be excluded from participation in, denied the benefits of, or be otherwise subjected to discrimination in the use of said facilities, (2) that in the construction of any improvements on, over, or under such land, and the furnishing of services thereon, no person on the ground of race, color, or national origin, will be excluded from participation in, denied the benefits of, or otherwise be subjected to discrimination, (3) that the (grantee, licensee, lessee, permittee, etc.)

will use the premises in compliance with all other requirements imposed by or pursuant to the List of discrimination Acts And Authorities.

- B. With respect to (licenses, leases, permits, etc.), in the event of breach of any of the above nondiscrimination covenants, **Okaloosa County Board of County Commissioners** will have the right to terminate the (license, permit, etc., as appropriate) and to enter or re-enter and repossess said land and the facilities thereon, and hold the same as if said (license, permit, etc., as appropriate) had never been made or issued.*
- C. With respect to deeds, in the event of breach of any of the above nondiscrimination covenants, **Okaloosa County Board of County Commissioners** will there upon revert to and vest in and become the absolute property of **Okaloosa County Board of County Commissioners** and its assigns.*

Title VI List of Pertinent Nondiscrimination Acts and Authorities

During the performance of this contract, the contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the "contractor") agrees to comply with the following non-discrimination statutes and authorities; including but not limited to:

- Title VI of the Civil Rights Act of 1964 (42 U.S.C. § 2000d *et seq.*, 78 stat. 252), (prohibits discrimination on the basis of race, color, national origin);
- 49 CFR part 21 (Non-discrimination in Federally-Assisted Programs of The Department of Transportation—Effectuation of Title VI of The Civil Rights Act of 1964);
- The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, (42 U.S.C. § 4601), (prohibits unfair treatment of persons displaced or whose property has been acquired because of Federal or Federal-aid programs and projects);
- Section 504 of the Rehabilitation Act of 1973, (29 U.S.C. § 794 *et seq.*), as amended, (prohibits discrimination on the basis of disability); and 49 CFR part 27;
- The Age Discrimination Act of 1975, as amended, (42 U.S.C. § 6101 *et seq.*), (prohibits discrimination on the basis of age);
- Airport and Airway Improvement Act of 1982, (49 USC § 471, Section 47123), as amended, (prohibits discrimination based on race, creed, color, national origin, or sex);
- The Civil Rights Restoration Act of 1987, (PL 100-209), (Broadened the scope, coverage and applicability of Title VI of the Civil Rights Act of 1964, The Age Discrimination Act of 1975 and Section 504 of the Rehabilitation Act of 1973, by expanding the definition of the terms "programs or activities" to include all of the programs or activities of the Federal-aid recipients, sub-recipients and contractors, whether such programs or activities are Federally funded or not);
- Titles II and III of the Americans with Disabilities Act of 1990, which prohibit discrimination on the basis of disability in the operation of public entities, public and private transportation systems, places of public accommodation, and certain testing entities (42 U.S.C. §§ 12131 – 12189) as implemented by Department of Transportation regulations at 49 CFR parts 37 and 38;
- The Federal Aviation Administration's Non-discrimination statute (49 U.S.C. § 47123) (prohibits discrimination on the basis of race, color, national origin, and sex);

- Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, which ensures non-discrimination against minority populations by discouraging programs, policies, and activities with disproportionately high and adverse human health or environmental effects on minority and low-income populations;
- Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency, and resulting agency guidance, national origin discrimination includes discrimination because of limited English proficiency (LEP). To ensure compliance with Title VI, you must take reasonable steps to ensure that LEP persons have meaningful access to your programs (70 Fed. Reg. at 74087 to 74100);
- Title IX of the Education Amendments of 1972, as amended, which prohibits you from discriminating because of sex in education programs or activities (20 U.S.C. 1681 et seq).

CLEAN AIR AND WATER POLLUTION CONTROL

Contractor agrees to comply with all applicable standards, orders, and regulations issued pursuant to the Clean Air Act (42 U.S.C. § 740-7671q) and the Federal Water Pollution Control Act as amended (33 U.S.C. § 1251-1387). The Contractor agrees to report any violation to the Owner immediately upon discovery. The Owner assumes responsibility for notifying the Environmental Protection Agency (EPA) and the Federal Aviation Administration.

Contractor must include this requirement in all subcontracts that exceed \$150,000.

CERTIFICATION REGARDING LOBBYING

The bidder or offeror certifies by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

- (1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the Bidder or Offeror, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
- (2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.
- (3) The undersigned shall require that the language of this certification be included in the award documents for all sub-awards at all tiers (including subcontracts, sub-grants, and contracts under grants, loans, and cooperative agreements) and that all sub-recipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

PROCUREMENT OF RECOVERED MATERIALS

Contractor and subcontractor agree to comply with Section 6002 of the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act, and the regulatory provisions of 40 CFR Part 247. In the performance of this contract and to the extent practicable, the Contractor and subcontractors are to use of products containing the highest percentage of recovered materials for items designated by the Environmental Protection Agency (EPA) under 40 CFR Part 247 whenever:

- a) The contract requires procurement of \$10,000 or more of a designated item during the fiscal year; or,
- b) The contractor has procured \$10,000 or more of a designated item using Federal funding during the previous fiscal year.

The list of EPA-designated items is available at:
www.epa.gov/epawaste/consolve/tools/cpg/products/.

Section 6002(c) establishes exceptions to the preference for recovery of EPA-designated products if the contractor can demonstrate the item is:

- a) Not reasonably available within a timeframe providing for compliance with the contract performance schedule;
- b) Fails to meet reasonable contract performance requirements; or
- c) Is only available at an unreasonable price.

Attachment “C”

Insurance Requirements

GENERAL SERVICES INSURANCE REQUIREMENTS

REVISED: 08/13/2018

Contractor's Insurance

- A. The **CONTRACTOR** shall not commence any work in connection with this Agreement until he has obtained all required insurance and the certificate of insurance has been approved by the Okaloosa County Risk Manager.
- B. All insurance policies shall be with insurers authorized to do business in the State of Florida.
- C. All insurance shall include the interest of all entities named and their respective officials, employees & volunteers of each and all other interests as may be reasonably required by Okaloosa County. The coverage afforded the Additional Insured under this policy shall be primary insurance. If the Additional Insured have other insurance that is applicable to the loss, such other insurance shall be on an excess or contingent basis. The amount of the company's liability under this policy shall not be reduced by the existence of such other insurance.
- D. The County of Okaloosa shall be listed as Additional Insured by policy endorsement on all insurance contracts applicable to this Agreement except Workers' Compensation. The Florida Department of Transportation shall be listed as Additional Insured and PRIMARY on the General Liability Insurance applicable to this Agreement.
- E. The County shall retain the right to reject all insurance policies that do not meet the requirement of this Agreement. Further, the County reserves the right to change these insurance requirements with 60-day prior written notice to the Contractor.
- F. The County reserves the right at any time to require the Contractor to provide copies (redacted if necessary) of any insurance policies to document the insurance coverage specified in this Agreement.
- G. Any subsidiaries used shall also be required to obtain and maintain the same insurance requirements as are being required herein of the Contractor.
- H. Any exclusions or provisions in the insurance maintained by the Contractor that excludes coverage for work contemplated in this agreement shall be deemed unacceptable and shall be considered breach of contract.

Workers' Compensation Insurance

- 1. The Contractor shall secure and maintain during the life of this Agreement Workers' Compensation insurance for all of his employees employed for the project or any site connected with the work, including supervision, administration or management, of this project and in case any work is sublet, with the approval of the County, the Contractor shall require the Subcontractor similarly to provide Workers'

Compensation insurance for all employees employed at the site of the project, and such evidence of insurance shall be furnished to the County not less than ten (10) days prior to the commencement of any and all sub-contractual Agreements which have been approved by the County.

2. Contractor must be in compliance with all applicable State and Federal workers' compensation laws, including the U.S. Longshore Harbor Workers' Act or Jones Act, if applicable.
3. No class of employee, including the Contractor himself, shall be excluded from the Workers' Compensation insurance coverage. The Workers' Compensation insurance shall also include Employer's Liability coverage.

Business Automobile Liability

Coverage must be afforded for all Owned, Hired, Scheduled, and Non-Owned vehicles for Bodily Injury and Property Damage in an amount not less than \$1,000,000 combined single limit each accident. If the contractor does not own vehicles, the contractor shall maintain coverage for Hired & Non-Owned Auto Liability, which may be satisfied by way of endorsement to the Commercial General Liability policy or separate Business Auto Policy. Contractor must maintain this insurance coverage throughout the life of this Agreement.

COMMERCIAL GENERAL LIABILITY INSURANCE

1. The Contractor shall carry Commercial General Liability insurance against all claims for Bodily Injury, Property Damage and Personal and Advertising Injury caused by the Contractor.
2. Commercial General Liability coverage shall include the following:
 - 1.) Premises & Operations Liability
 - 2.) Bodily Injury and Property Damage Liability
 - 3.) Independent Contractors Liability
 - 4.) Contractual Liability
3. Contractor shall agree to keep in continuous force Commercial General Liability coverage for the length of the contract.

INSURANCE LIMITS OF LIABILITY

The insurance required shall be written for not less than the following, or greater if required by law and shall include Employer's liability with limits as prescribed in this contract:

LIMIT

1.	Workers' Compensation	
	1.) State	Statutory
	2.) Employer's Liability	\$500,000 each accident
2.	Business Automobile (A combined single limit)	\$3,000,000.00 M each accident
3.	Commercial General Liability	\$5,000,000.00 M each occurrence for Bodily Injury & Property Damage
		\$5,000,000.00 M Each occurrence Products and completed operations
4.	Personal and Advertising Injury	\$1,000,000.00 M each occurrence

NOTICE OF CLAIMS OR LITIGATION

The Contractor agrees to report any incident or claim that results from performance of this Agreement. The County representative shall receive written notice in the form of a detailed written report describing the incident or claim within ten (10) days of the Contractor's knowledge. In the event such incident or claim involves injury and/or property damage to a third party, verbal notification shall be given the same day the Contractor becomes aware of the incident or claim followed by a written detailed report within ten (10) days of verbal notification.

INDEMNIFICATION & HOLD HARMLESS

To the fullest extent permitted by law, Contractor shall indemnify and hold harmless the County, its officers and employees from liabilities, damages, losses, and costs including but not limited to reasonable attorney fees, to the extent caused by the negligence, recklessness, or wrongful conduct of the Contractor and other persons employed or utilized by the Contractor in the performance of this contract.

CERTIFICATE OF INSURANCE

1. Certificates of insurance indicating the job site and evidencing all required coverage must be submitted not less than 10 days prior to the commencement of any of the work. The certificate holder(s) shall be as follows: Okaloosa County, 5479A Old Bethel Road, Crestview, Florida, 32536.
2. The contractor shall provide a Certificate of Insurance to the County with a thirty (30) day prior written notice of cancellation; ten (10 days' prior written notice if cancellation is for nonpayment of premium).
3. In the event that the insurer is unable to accommodate the cancellation notice requirement, it shall be the responsibility of the contractor to provide the proper notice. Such notification shall be in writing by registered mail, return receipt requested, and addressed to the Okaloosa County Purchasing Department at 5479-A Old Bethel Road, Crestview, FL 32536.

4. In the event the contract term goes beyond the expiration date of the insurance policy, the contractor shall provide the County with an updated Certificate of insurance no later than ten (10) days prior to the expiration of the insurance currently in effect. The County reserves the right to suspend the contract until this requirement is met.
5. The certificate shall indicate if coverage is provided under a claims-made or occurrence form. If any coverage is provided on a claims-made form, the certificate will show a retroactive date, which should be the same date of the initial contract or prior.
6. All certificates shall be subject to Okaloosa County's approval of adequacy of protection.
7. All deductibles or SIRs, whether approved by Okaloosa County or not, shall be the Contractor's full responsibility.
8. In no way will the entities listed as Additional Insured be responsible for, pay for, be damaged by, or limited to coverage required by this schedule due to the existence of a deductible or SIR.

GENERAL TERMS

Any type of insurance or increase of limits of liability not described above which, the Contractor required for its own protection or on account of statute shall be its own responsibility and at its own expense.

Any exclusions or provisions in the insurance maintained by the contractor that excludes coverage for work contemplated in this contract shall be deemed unacceptable and shall be considered breach of contract.

The carrying of the insurance described shall in no way be interpreted as relieving the Contractor of any responsibility under this contract.

Should the Contractor engage a subcontractor or sub-subcontractor, the same conditions will apply under this Agreement to each subcontractor and sub-subcontractor.

The Contractor hereby waives all rights of subrogation against Okaloosa County and its employees under all the foregoing policies of insurance.

EXCESS/UMBRELLA INSURANCE

The Contractor shall have the right to meet the liability insurance requirements with the purchase of an EXCESS/UMBRELLA insurance policy. In all instances, the combination of primary and EXCESS/UMBRELLA liability coverage must equal or exceed the minimum liability insurance limits stated in this Agreement.

Liquidated Damages:

In case of failure on the part of the Contractor to complete the work within the time(s) specified in the contract, or within such additional time(s) as may be granted by Okaloosa County, the County will suffer damage, the amount of which may be difficult, if not impossible, to ascertain. Therefore, the Contractor shall pay to the County, as liquidated damages, the amount established in the schedule below for each calendar day of delay that actual completion extends beyond the time limit specified until such reasonable time as may be required for final completion of the work. In no way shall costs for liquidated damages be construed as penalty on the contractor.

Daily Charge

<u>Original Contract Amount</u>	<u>Per Calendar Day</u>
\$50,000 and under	\$ 311
Over \$50,000 but less than \$250,000	\$ 972
\$250,000 but less than \$500,000	\$1584
\$500,000 but less than \$2,500,000	\$1924
\$2,500,000 but less than \$5,000,000	\$2694
\$5,000,000 but less than \$10,000,000	\$3902
\$10,000,000 but less than \$15,000,000	\$6102
\$15,000,000 but less than \$20,000,000	\$7022
\$20,000,000 and over	\$7022

Determination of Number of Days of Default: For all contracts, regardless of whether the contract

time is stipulated in calendar days or working days, the default days shall be counted in calendar days. Construction Time is stipulated in Section 5 of the BID FORMS.

Conditions under which Liquidated Damages are Imposed: Should the Contractor or, in case of his default, the Surety, fail to complete the work within the time stipulated in the contract, or within such extra time as may have been granted by the County, the Contractor or, in case of his default, the Surety, shall pay to the County, not as a penalty, but as liquidated damages, the amount so due as determined by the Daily Charge requirements, as provided above.

Right of Collection: The County shall have the right to apply as payment on such liquidated damages any money which is due to the Contractor by the County.

Permitting Contractor to Finish Work: Permitting the Contractor to continue and to finish the work, or any part of it, after the expiration of the contract time allowed, including extensions of time

granted to the Contractor, shall in no way act as a waiver on the part of the County the liquidated damages due under the contract.

Completion of Work by County: In case of default of the contract and the completion of the work by the County, the Contractor and his Surety shall be liable for the liquidated damages under the contract, but no liquidated damages shall be chargeable for any delay in the final completion of the work by the County due to any unreasonable action or delay on the part of the County.

END OF OKALOOSA COUNTY STANDARD CLAUSES

Attachment “D”

Title VI List of Pertinent Nondiscrimination Acts and Authorities

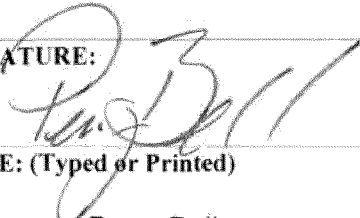
During the performance of this Agreement, the Contractor, for itself, its assignees, and successors in interest (hereinafter referred to as the “Contractor”), as applicable, agrees to comply with the following non-discrimination statutes and authorities; including but not limited to:

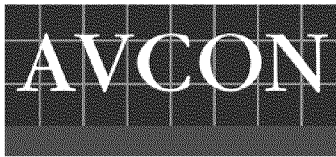
- Title VI of the Civil Rights Act of 1964 (42 USC § 2000d *et seq.*, 78 stat. 252) (prohibits discrimination on the basis of race, color, national origin);
- 49 CFR part 21 (Non-discrimination in Federally-assisted programs of the Department of Transportation—Effectuation of Title VI of the Civil Rights Act of 1964);
- The Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, (42 USC § 4601) (prohibits unfair treatment of persons displaced or whose property has been acquired because of Federal or Federal-aid programs and projects);
- Section 504 of the Rehabilitation Act of 1973 (29 USC § 794 *et seq.*), as amended (prohibits discrimination on the basis of disability); and 49 CFR part 27;
- The Age Discrimination Act of 1975, as amended (42 USC § 6101 *et seq.*) (prohibits discrimination on the basis of age);
- Airport and Airway Improvement Act of 1982 (49 USC § 471, Section 47123), as amended (prohibits discrimination based on race, creed, color, national origin, or sex);
- The Civil Rights Restoration Act of 1987 (PL 100-209) (broadened the scope, coverage and applicability of Title VI of the Civil Rights Act of 1964, the Age Discrimination Act of 1975 and Section 504 of the Rehabilitation Act of 1973, by expanding the definition of the terms “programs or activities” to include all of the programs or activities of the Federal-aid recipients, sub-recipients and contractors, whether such programs or activities are Federally funded or not);
- Titles II and III of the Americans with Disabilities Act of 1990, which prohibit discrimination on the basis of disability in the operation of public entities, public and private transportation systems, places of public accommodation, and certain testing entities (42 USC §§ 12131 – 12189) as implemented by U.S. Department of Transportation regulations at 49 CFR parts 37 and 38;
- The Federal Aviation Administration’s Nondiscrimination statute (49 USC § 47123) (prohibits discrimination on the basis of race, color, national origin, and sex);
- Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, which ensures nondiscrimination against minority populations by discouraging programs, policies, and activities with disproportionately high and adverse human health or environmental effects on minority and low-income populations;
- Executive Order 13166, Improving Access to Services for Persons with Limited English Proficiency, and resulting agency guidance, national origin discrimination includes discrimination because of limited English proficiency (LEP). To ensure compliance with Title VI, you must take reasonable steps to ensure that LEP persons have meaningful access to your programs (70 Fed. Reg. at 74087 to 74100);
- Title IX of the Education Amendments of 1972, as amended, which prohibits you from discriminating because of sex in education programs or activities (20 USC 1681 *et seq.*).

Vendors on Scrutinized List

VENDORS ON SCRUTINIZED COMPANIES LIST

By executing this Certificate Gum Creek Farms, Inc. the bid proposer, certifies that it is not: (1) listed on the Scrutinized Companies that Boycott Israel List, created pursuant to section 215.4725, Florida Statutes, (2) engaged in a boycott of Israel, (3) listed on the Scrutinized Companies with Activities in Sudan List or the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List, created pursuant to section 215.473, Florida Statutes, or (4) engaged in business operations in Cuba or Syria. Pursuant to section 287.135(5), Florida Statutes, the County may disqualify the bid proper immediately or immediately terminate any agreement entered into for cause if the bid proposer is found to have submitted a false certification as to the above or if the Contractor is placed on the Scrutinized Companies that Boycott Israel List, is engaged in a boycott of Israel, has been placed on the Scrutinized Companies with Activities in Sudan List or the Scrutinized Companies with Activities in the Iran Petroleum Energy Sector List, or has been engaged in business operations in Cuba or Syria, during the term of the Agreement. If the County determines that the bid proposer has submitted a false certification, the County will provide written notice to the bid proposer. Unless the bid proposer demonstrates in writing, within 90 calendar days of receipt of the notice, that the County's determination of false certification was made in error, the County shall bring a civil action against the bid proposer. If the County's determination is upheld, a civil penalty shall apply, and the bid proposer will be ineligible to bid on any Agreement with a Florida agency or local governmental entity for three years after the date of County's determination of false certification by bid proposer. As the person authorized to sign this statement, I certify that this firm complies fully with the above requirements.

DATE:	SIGNATURE:
10/09/2023	
COMPANY:	NAME: (Typed or Printed)
Gum Creek Farms, Inc.	Perry Bell
ADDRESS:	TITLE:
1097 Hwy 83 N, DeFuniak Springs, FL 32433	President
PHONE NO:	EMAIL:
850-892-0291	perrygcfbell@yahoo.com



July 21, 2023

Mr. Tracy Stage, A.A.E.
Airports Director
Okaloosa County Airports
1701 State Road 85 North
Eglin Air Force Base, FL 32542

**Reference: Tabulation of Bids and Recommendation of Award
CEW South Apron Rehabilitation
Bob Sikes Airport**

Dear Mr. Stage:

On Wednesday, July 12, 2023 at 3:00 pm, bids were received for the CEW South Apron Rehabilitation project at Bob Sikes Airport. Two separate bids were received from Gum Creek Farms, Inc. (GCF) and C.W. Roberts Contracting, Inc. (CWR).

Upon review of the bid submittals, the bids submitted by GCF and CWR were both deemed responsive. A tabulation of the bids is provided in **Attachment A** and a summary is provided below:

	Engineer's Opinion of Probable Cost	Gum Creek Farms, Inc.	C.W. Roberts Contracting, Inc.
Base Bid	\$764,830.00	\$854,995.00	\$1,078,418.00
Additive Alternate No. 1	\$1,031,167.50	\$1,075,718.50	\$1,223,739.50
Additive Alternate No. 2	\$646,349.00	\$803,424.00	\$1,158,972.00
Additive Alternate No. 3	\$641,963.30	\$705,406.30	\$1,176,507.50
Additive Alternate No. 4	\$779,878.00	\$1,257,860.50	\$2,419,248.00
Additive Alternate No. 5	\$148,500.00	\$201,350.00	\$312,550.00
Total:	\$4,012,687.80	\$4,898,754.30	\$7,369,435.00

The apparent lowest responsive bidder is GCF. GCF is a local general contractor specializing in grading, drainage, and paving work and documented their qualifications in their bid proposal. A representative from GCF attended the Pre-Bid Conference on June 6.

The total bid amount submitted by GCF is approx. 22% higher than the Engineer's Opinion of Probable Cost. Most of the bid amounts were within 10% of the Engineer's Estimate; however, the bid amounts for Additive Alternate No. 4 (infield drainage improvements) and Additive Alternate No. 5 (new high mast lights) exceeded the Engineer's Estimate by approx. 61% and 35% respectively. Based on recent discussions with nearby municipalities and local contractors, it appears these elevated bid amounts reflect the current construction industry which is being impacted by labor shortages, supply chain delays, and inflation, specifically impacting drainage and electrical work. The bid submitted by GCF does appear to be competitive based on the significantly higher bid amount submitted by CWR.

Tabulation of Bids and Recommendation of Award
CEW South Apron Rehabilitation
Bob Sikes Airport

July 21, 2023

The Disadvantaged Business Enterprise (DBE) goal for this project is 7.12% and GCF is proposing to provide 0% DBE participation. We discussed the good faith effort with GCF and indicated they reviewed a DBE directory and identified three DBE contractors in this service area who could provide these services. GCF contacted each of the three contractors and none of the three returned their phone calls. Comparatively, CWR proposed a DBE participation of 2.95%, also short of the goal. Based on the difference between the two bids of \$2,470,680.70, it does not appear that the lack of DBE participation from GCF affected the outcome of this award.

The County has procured FDOT PTGA G1X18 in the amount of \$1,750,000 with a local match of \$450,000, yielding a total funding amount of \$2,187,500. In consideration of this, and notwithstanding the Airport's final legal review of the bid submittals, we recommend award of the Base Bid and Additive Alternate No. 1 for the CEW South Apron Rehabilitation project to Gum Creek Farms, Inc. in the amount of \$1,930,713.50, subject to funding availability. The County also reserves the right to award additional additive alternates if additional funding becomes available.

We stand ready to assist the County in the implementation of this project based on your determination of the desirability of the award at this time. Should you have any questions or require additional information, please do not hesitate to contact us at your convenience.

Sincerely,

AVCON, INC.



John Collins, P.E.
Senior Project Manager

**ATTACHMENT A : BID TABULATION
CEW SOUTH APRON REHABILITATION**

21-Jul-23

BASE BID					Engineer's Estimate		Gum Creek Farms, Inc.		C.W. Roberts Contracting, Inc.		
ITEM NO.	BID ITEM	ITEM DESCRIPTION	UNIT	QTY	UNIT PRICE	EXTENDED TOTAL	UNIT PRICE	EXTENDED TOTAL	UNIT PRICE	EXTENDED TOTAL	
1	C-100-1	CONTRACTOR QUALITY CONTROL PROGRAM	LS	1	\$ 10,000.00	\$ 10,000.00	\$ 17,000.00	\$ 17,000.00	\$ 90,000.00	\$ 90,000.00	
2	C-102-1	EROSION AND POLLUTION CONTROL	LS	1	\$ 5,000.00	\$ 5,000.00	\$ 21,040.00	\$ 21,040.00	\$ 48,000.00	\$ 48,000.00	
3	C-105-1	MOBILIZATION	LS	1	\$ 60,000.00	\$ 60,000.00	\$ 52,615.00	\$ 52,615.00	\$ 105,000.00	\$ 105,000.00	
4	C-106-1	SAFETY, SECURITY, AND MAINTENANCE OF TRAFFIC	LS	1	\$ 5,000.00	\$ 5,000.00	\$ 30,900.00	\$ 30,900.00	\$ 155,000.00	\$ 155,000.00	
5	P-101-1	PAVEMENT REMOVAL - COMPLETE ASPHALT REMOVAL (2")	SY	1,600	\$ 4.00	\$ 6,400.00	\$ 6.00	\$ 9,600.00	\$ 5.45	\$ 8,720.00	
6	P-101-2	PAVEMENT REMOVAL - COMPLETE ASPHALT REMOVAL (4")	SY	10,300	\$ 8.00	\$ 82,400.00	\$ 8.50	\$ 86,950.00	\$ 5.95	\$ 61,285.00	
7	P-101-5	MISCELLANEOUS DEMOLITION	LS	1	\$ 4,000.00	\$ 4,000.00	\$ 1,500.00	\$ 1,500.00	\$ 4,910.00	\$ 4,910.00	
8	P-101-6	TIE-DOWN REMOVAL	EA	37	\$ 250.00	\$ 9,250.00	\$ 170.00	\$ 6,290.00	\$ 338.00	\$ 12,506.00	
9	P-211-1	EXISTING BASE COURSE PREPARATION	SY	11,800	\$ 3.90	\$ 41,650.00	\$ 1.50	\$ 17,850.00	\$ 5.15	\$ 61,285.00	
10	P-401-1	BITUMINOUS SURFACE COURSE	TON	2,650	\$ 160.00	\$ 424,000.00	\$ 212.00	\$ 561,800.00	\$ 189.50	\$ 499,525.00	
11	P-605-1	RANDOM-ROTARY SAW AND SEAL	LF	200	\$ 40.00	\$ 8,000.00	\$ 123.00	\$ 24,600.00	\$ 40.30	\$ 8,060.00	
12	P-620-1	PAVEMENT MARKINGS WITH REFLECTIVE MEDIA, YELLOW	SF	900	\$ 4.00	\$ 3,600.00	\$ 6.20	\$ 5,580.00	\$ 5.75	\$ 5,175.00	
13	P-620-2	PAVEMENT MARKINGS WITHOUT REFLECTIVE MEDIA, BLACK	SF	1,800	\$ 3.00	\$ 5,400.00	\$ 3.20	\$ 5,760.00	\$ 1.45	\$ 2,610.00	
14	P-620-3	PAVEMENT MARKINGS WITHOUT REFLECTIVE MEDIA, WHITE, NUMERALS	EA	4	\$ 400.00	\$ 1,600.00	\$ 185.00	\$ 740.00	\$ 431.50	\$ 1,726.00	
15	TD-1	NEWTIE-DOWN, COMPLETE	EA	29	\$ 1,000.00	\$ 29,000.00	\$ 1,130.00	\$ 32,770.00	\$ 504.00	\$ 14,818.00	
					Sub-Total Base Bid:		\$ 686,300.00	\$ 864,995.00	\$ 1,078,418.00		

ADDITIVE ALTERNATE NO. 1										
ITEM NO.	BID ITEM	ITEM DESCRIPTION	UNIT	QTY	UNIT PRICE	EXTENDED TOTAL	UNIT PRICE	EXTENDED TOTAL	UNIT PRICE	EXTENDED TOTAL
1	C-100-1	CONTRACTOR QUALITY CONTROL PROGRAM	LS	1	\$ 5,000.00	\$ 5,000.00	\$ 18,980.00	\$ 18,980.00	\$ 56,000.00	\$ 56,000.00
2	C-102-1	EROSION AND POLLUTION CONTROL	LS	1	\$ 5,000.00	\$ 5,000.00	\$ 4,900.00	\$ 4,900.00	\$ 12,500.00	\$ 12,500.00
3	C-105-1	MOBILIZATION	LS	1	\$ 80,000.00	\$ 80,000.00	\$ 52,551.00	\$ 52,551.00	\$ 102,000.00	\$ 102,000.00
4	C-106-1	SAFETY, SECURITY, AND MAINTENANCE OF TRAFFIC	LS	1	\$ 5,000.00	\$ 5,000.00	\$ 25,175.00	\$ 25,175.00	\$ 116,000.00	\$ 116,000.00
5	P-101-2	PAVEMENT REMOVAL - COMPLETE ASPHALT REMOVAL (4")	SY	10,850	\$ 8.00	\$ 86,800.00	\$ 8.00	\$ 86,800.00	\$ 5.80	\$ 62,930.00
6	P-101-3	PAVEMENT REMOVAL - COMPLETE ASPHALT REMOVAL (8")	SY	950	\$ 16.00	\$ 15,200.00	\$ 10.50	\$ 9,975.00	\$ 12.50	\$ 11,875.00
7	P-101-4	CONCRETE PAVEMENT REMOVAL	SY	250	\$ 40.00	\$ 10,000.00	\$ 47.00	\$ 11,750.00	\$ 82.00	\$ 20,500.00
8	P-101-5	MISCELLANEOUS DEMOLITION	LS	1	\$ 6,000.00	\$ 6,000.00	\$ 1,500.00	\$ 1,500.00	\$ 7,310.00	\$ 7,310.00
9	P-101-6	TIE-DOWN REMOVAL	EA	118	\$ 290.00	\$ 29,000.00	\$ 170.00	\$ 20,060.00	\$ 338.00	\$ 39,884.00
10	P-152-1	EXCAVATION AND EMBANKMENT	LS	1	\$ 10,000.00	\$ 10,000.00	\$ 28,625.00	\$ 28,625.00	\$ 35,230.00	\$ 35,230.00
11	P-154-1	STABILIZED SUBBASE COURSE (8")	SY	950	\$ 10.00	\$ 9,500.00	\$ 10.00	\$ 9,500.00	\$ 13.50	\$ 12,825.00
12	P-211-1	EXISTING BASE COURSE PREPARATION	SY	10,850	\$ 3.50	\$ 37,975.00	\$ 1.50	\$ 16,275.00	\$ 5.80	\$ 62,930.00
13	P-211-2	LIMEROCK BASE COURSE (10")	SY	950	\$ 18.00	\$ 17,100.00	\$ 33.25	\$ 31,587.50	\$ 41.00	\$ 39,350.00
14	P-401-1	BITUMINOUS SURFACE COURSE	TON	3,050	\$ 160.00	\$ 488,000.00	\$ 207.00	\$ 631,350.00	\$ 188.50	\$ 574,925.00
15	P-620-1	PAVEMENT MARKINGS WITH REFLECTIVE MEDIA, YELLOW	SF	1,150	\$ 4.00	\$ 4,600.00	\$ 6.20	\$ 7,130.00	\$ 2.90	\$ 3,335.00
16	P-620-2	PAVEMENT MARKINGS WITHOUT REFLECTIVE MEDIA, BLACK	SF	2,250	\$ 3.00	\$ 6,750.00	\$ 3.20	\$ 7,200.00	\$ 1.45	\$ 3,262.50
17	P-620-3	PAVEMENT MARKINGS WITHOUT REFLECTIVE MEDIA, WHITE, NUMERALS	EA	10	\$ 400.00	\$ 4,000.00	\$ 185.00	\$ 1,850.00	\$ 431.50	\$ 4,315.00
18	TD-1	NEWTIE-DOWN, COMPLETE	EA	117	\$ 1,000.00	\$ 117,000.00	\$ 1,130.00	\$ 132,210.00	\$ 504.00	\$ 58,968.00
					Sub-Total Additive Alternate No. 1:		\$ 937,425.00	\$ 1,075,718.50	\$ 1,223,739.50	

ADDITIVE ALTERNATE NO. 2										
ITEM NO.	BID ITEM	ITEM DESCRIPTION	UNIT	QTY	UNIT PRICE	EXTENDED TOTAL	UNIT PRICE	EXTENDED TOTAL	UNIT PRICE	EXTENDED TOTAL
1	C-100-1	CONTRACTOR QUALITY CONTROL PROGRAM	LS	1	\$ 5,000.00	\$ 5,000.00	\$ 19,380.00	\$ 19,380.00	\$ 95,000.00	\$ 95,000.00
2	C-102-1	EROSION AND POLLUTION CONTROL	LS	1	\$ 5,000.00	\$ 5,000.00	\$ 4,140.00	\$ 4,140.00	\$ 10,000.00	\$ 10,000.00
3	C-105-1	MOBILIZATION	LS	1	\$ 60,000.00	\$ 60,000.00	\$ 45,250.00	\$ 45,250.00	\$ 110,000.00	\$ 110,000.00
4	C-106-1	SAFETY, SECURITY, AND MAINTENANCE OF TRAFFIC	LS	1	\$ 5,000.00	\$ 5,000.00	\$ 19,870.00	\$ 19,870.00	\$ 170,000.00	\$ 170,000.00
5	P-101-2	PAVEMENT REMOVAL - COMPLETE ASPHALT REMOVAL (4")	SY	2,600	\$ 8.00	\$ 20,800.00	\$ 6.50	\$ 16,900.00	\$ 7.80	\$ 20,280.00
6	P-101-3	PAVEMENT REMOVAL - COMPLETE ASPHALT REMOVAL (8")	SY	3,800	\$ 16.00	\$ 60,800.00	\$ 10.50	\$ 39,900.00	\$ 11.50	\$ 43,700.00
7	P-101-6	TIE-DOWN REMOVAL	EA	19	\$ 230.00	\$ 4,370.00	\$ 170.00	\$ 3,230.00	\$ 338.00	\$ 6,422.00
8	P-152-1	EXCAVATION AND EMBANKMENT	LS	1	\$ 10,000.00	\$ 10,000.00	\$ 52,600.00	\$ 52,600.00	\$ 96,900.00	\$ 96,900.00
9	P-154-1	STABILIZED SUBBASE COURSE (8")	SY	3,800	\$ 10.00	\$ 38,000.00	\$ 10.00	\$ 38,000.00	\$ 10.90	\$ 41,420.00
10	P-211-1	EXISTING BASE COURSE PREPARATION	SY	2,600	\$ 3.90	\$ 9,100.00	\$ 1.50	\$ 3,900.00	\$ 5.95	\$ 15,470.00
11	P-211-2	LIMEROCK BASE COURSE (10")	SY	3,800	\$ 18.00	\$ 68,400.00	\$ 33.25	\$ 126,350.00	\$ 35.40	\$ 134,520.00
12	P-401-1	BITUMINOUS SURFACE COURSE	TON	1,820	\$ 160.00	\$ 291,200.00	\$ 214.00	\$ 389,680.00	\$ 195.50	\$ 356,710.00
13	P-620-1	PAVEMENT MARKINGS WITH REFLECTIVE MEDIA, YELLOW	SF	405	\$ 4.00	\$ 1,620.00	\$ 6.20	\$ 2,511.00	\$ 4.30	\$ 1,741.50
14	P-620-2	PAVEMENT MARKINGS WITHOUT REFLECTIVE MEDIA, BLACK	SF	810	\$ 3.00	\$ 2,430.00	\$ 3.20	\$ 2,592.00	\$ 2.90	\$ 2,349.00
15	P-620-3	PAVEMENT MARKINGS WITHOUT REFLECTIVE MEDIA, WHITE, NUMERALS	EA	1	\$ 400.00	\$ 400.00	\$ 185.00	\$ 185.00	\$ 431.50	\$ 431.50
16	TD-1	NEWTIE-DOWN, COMPLETE	EA	19	\$ 1,000.00	\$ 19,000.00	\$ 1,130.00	\$ 21,470.00	\$ 504.00	\$ 9,576.00
17	L-109-1	1/2" 1824 TYPE CC UNSHIELDED #8 AWG 5 KV CABLE	LF	220	\$ 3.00	\$ 660.00	\$ 7.50	\$ 1,650.00	\$ 5.45	\$ 1,199.00
18	L-109-2	1/2" #2 AWG SOLID COPPER COUNTERPOISE WIRE	LF	220	\$ 5.00	\$ 1,100.00	\$ 8.75	\$ 1,925.00	\$ 12.60	\$ 2,772.00
19	L-110-1	1W2" SCHEDULE 40 PVC DIRECT BURIED BURIED DUCT	LF	220	\$ 9.00	\$ 1,980.00	\$ 20.00	\$ 4,400.00	\$ 36.00	\$ 7,920.00
20	L-125-1	L-861(T) OMNIDIRECTIONAL, BLUE, LED, TAXIWAY EDGE LIGHT (T)	LF	4	\$ 2,500.00	\$ 10,000.00	\$ 10,404.00	\$ 41,616.00	\$ 14,740.00	\$ 58,960.00
21	DD-1	4" SCHEDULE 40 PVC WITH BACKFILL, COMPLETE	LF	290	\$ 15.00	\$ 4,350.00	\$ 37.50	\$ 10,875.00	\$ 46.90	\$ 13,601.00
					Sub-Total Additive Alternate No. 2:		\$ 587,590.00	\$ 803,424.00	\$ 1,158,972.00	

ADDITIVE ALTERNATE NO. 3										
ITEM NO.	BID ITEM	ITEM DESCRIPTION	UNIT	QTY	UNIT PRICE	EXTENDED TOTAL	UNIT PRICE	EXTENDED TOTAL	UNIT PRICE	EXTENDED TOTAL
1	C-100-1	CONTRACTOR QUALITY CONTROL PROGRAM	LS	1	\$ 5,000.00	\$ 5,000.00	\$ 17,335.00	\$ 17,335.00	\$ 60,790.00	\$ 60,790.00
2	C-102-1	EROSION AND POLLUTION CONTROL	LS	1	\$ 5,000.00	\$ 5,000.00	\$ 2,575.00	\$ 2,575.00	\$ 9,890.00	\$ 9,890.00
3	C-105-1	MOBILIZATION	LS	1	\$ 50,000.00	\$ 50,000.00	\$ 35,081.00	\$ 35,081.00	\$ 109,000.00	\$ 109,000.00
4	C-106-1	SAFETY, SECURITY, AND MAINTENANCE OF TRAFFIC	LS	1	\$ 5,000.00	\$ 5,000.00	\$ 19,685.00	\$ 19,685.00	\$ 345,340.00	\$ 345,340.00
5	P-101-2	PAVEMENT REMOVAL - COMPLETE ASPHALT REMOVAL (4")	SY	6,650	\$ 8.00	\$ 53,200.00	\$ 6.50	\$ 43,225.00	\$ 6.55	\$ 43,557.50
6	P-101-3	PAVEMENT REMOVAL - COMPLETE ASPHALT REMOVAL (8")	SY	1,730	\$ 16.00	\$ 27,680.00	\$ 10.50	\$ 18,165.00	\$ 13.00	\$ 22,490.00
7	P-101-5	MISCELLANEOUS DEMOLITION	LS	1	\$ 5,000.00	\$ 5,000.00	\$ 1,500.00	\$ 1,500.00	\$ 4,910.00	\$ 4,910.00
8	P-101-6	TIE-DOWN REMOVAL	EA	8	\$ 250.00	\$ 2,000.00	\$ 170.00	\$ 1,360.00	\$ 338.00	\$ 2,704.00
9	P-152-1	EXCAVATION AND EMBANKMENT	LS	1	\$ 20,000.00	\$ 20,000.00	\$ 23,450.00	\$ 23,450.00	\$ 45,260.00	\$ 45,260.00
10	P-154-1	STABILIZED SUBBASE COURSE (8")	SY	1,730	\$ 10.00	\$ 17,300.00	\$ 10.00	\$ 17,300.00	\$ 14.40	\$ 24,912.00
11	P-211-1	EXISTING BASE COURSE PREPARATION	SY	6,650	\$ 3.90	\$ 25,725.00	\$ 1.50	\$ 9,975.00	\$ 5.70	\$ 37,905.00
12	P-211-2	LIMEROCK BASE COURSE (10")	SY	1,730	\$ 18.00	\$ 31,140.00	\$ 33.25	\$ 57,523.00	\$ 40.40	\$ 69,892.00
13	P-401-1	BITUMINOUS SURFACE COURSE	TON	2,100	\$ 160.00	\$ 336,000.00	\$ 213.00	\$ 447,300.00	\$ 187.50	\$ 393,750.00
14	P-620-1	PAVEMENT MARKINGS WITH REFLECTIVE MEDIA, YELLOW	SF	120	\$ 4.00	\$ 480.00	\$ 6.25	\$ 750.00	\$ 4.30	\$ 516.00
15	P-620-2	PAVEMENT MARKINGS WITHOUT REFLECTIVE MEDIA, BLACK	SF	240	\$ 3.00	\$ 720.00	\$ 3.20	\$ 768.00	\$ 2.90	\$ 696.00
16	P-620-3	PAVEMENT MARKINGS WITHOUT REFLECTIVE MEDIA, WHITE, NUMERALS	EA	2	\$ 400.00	\$ 800.00	\$ 187.40	\$ 749.60	\$ 431.50	\$ 863.00
17	TD-1	NEWTIE-DOWN, COMPLETE	EA	8	\$ 1,000.00	\$ 8,000.00	\$ 1,130.00	\$ 9,040.00	\$ 504.00	\$ 4,032.00
					Sub-Total Additive Alternate No. 3:		\$ 583,603.00	\$ 706,406.30	\$ 1,176,607.50	

ADDITIVE ALTERNATE NO. 4										
ITEM NO.	BID ITEM	ITEM DESCRIPTION	UNIT	QTY	UNIT PRICE	EXTENDED TOTAL	UNIT PRICE	EXTENDED TOTAL	UNIT PRICE	EXTENDED TOTAL
1	C-102-1	EROSION AND POLLUTION CONTROL	LS	1	\$ 9,000.00	\$ 9,000.00	\$ 10,105.00	\$ 10,105.00	\$ 76,000.00	\$ 76,000.00
2	C-105-1	MOBILIZATION	LS	1	\$ 45,000.00	\$ 45,000.00	\$ 43,270.00	\$ 43,270.00	\$ 235,000.00	\$ 235,000.00
3	C-106-1	SAFETY, SECURITY, AND MAINTENANCE OF TRAFFIC	LS	1	\$ 8,000.00	\$ 8,000.00	\$ 17,780.00	\$ 17,780.00	\$ 450,000.00	\$ 450,000.00
4	P-152-1	EXCAVATION AND EMBANKMENT	LS	1	\$ 150,000.00	\$ 150,000.00	\$ 205,725.00	\$ 205,725.00	\$ 110,000.00	\$ 110,