



Invitation for Bid No. 2026-005

Union County Landfill Expansion

Due Date: Tuesday July 29, 2025
Time: 2:00 PM Local Time
Receipt Location: Union County Government Center
Procurement & Contract Management Department
500 N. Main Street, Suite 709
Monroe, NC 28112

Non-Mandatory Pre-Bid Conference and Site Visit

Due Date: Thursday, July 10, 2025
Time: 10:00 AM Local Time
Location: Union County Landfill Non-Commercial Property
2125 Austin Chaney Road
Wingate, NC 28174

Procurement Representative:

Vicky Watts,
Senior Procurement Specialist
Procurement Department
(704) 283-3601
Vicky.Watts@unioncountync.gov

Prepared by:

Civil & Environmental
Consultants, Inc.
3701 Arco Corporate Drive,
Suite 400.
Charlotte, NC 28273



Invitation for Bid No. 2026-005
Union County Landfill Expansion



TABLE OF CONTENTS

SPECIFICATIONS

C-111	ADVERTISEMENT
C-200	INSTRUCTIONS TO BIDDERS
C-410	BID FORM
C-430	BID BOND
C-520	AGREEMENT
C-550	NOTICE TO PROCEED
C-610	PERFORMANCE BOND
C-615	PAYMENT BOND
C-620	APPLICATION FOR PAYMENT FORM
C-625	SUBSTANTIAL COMPLETION
C-700	STANDARD GENERAL CONDITIONS
C-800	SUPPLEMENTARY CONDITIONS
C-940	WORK CHANGE DIRECTIVE FORM
C-941	CHANGE ORDER FORM
C-942	FIELD ORDER FORM
00 43 28	TAX REBATE FORMS
00 45 19	NON-COLLUSION AFFIDAVIT
00 73 00	SPECIAL CONDITIONS
01 02 05	MEASUREMENT AND PAYMENT
01 71 13	MOBILIZATION
31 01 00	EARTHWORK
31 02 00	CLEARING AND GRUBBING
31 03 00	WASTE MATERIAL DISPOSAL
31 04 00	EXCAVATION AND BACKFILL
31 05 00	UNCLASSIFIED EXCAVATION
31 06 00	DITCH EXCAVATION
31 07 00	SUBGRADE
31 08 00	RIP RAP
32 01 00	SITE STABILIZATION
32 02 00	RESTORATION OF SURFACES
32 03 00	TOP SOIL

32 04 00	SEEDING, FERTILIZING, AND MULCHING
33 05 00	DRAINAGE MATERIALS
33 06 00	MINOR DRAINAGE STRUCTURES
33 11 00	AGGREGATE BASE COURSE

**UNION COUNTY
UNION COUNTY, NORTH CAROLINA**

**Union County Landfill Expansion
IFB # 2026-005**

ADVERTISEMENT FOR BIDS

Sealed Bids for the construction of the Union County Landfill Expansion will be received, by the Union County Procurement Department **until 2:00 PM** local time on **Tuesday, July 29, 2025**, at 500 N. Main Street, Suite 709, Monroe, North Carolina, at which time the Bids received will be **publicly** opened and read. Late bids will not be accepted.

If a Bid is sent by mail or other delivery system, the sealed envelope containing the Bid shall be enclosed in a separate package plainly marked on the outside with the notation "BID ENCLOSED -2026-005" and shall be addressed to Union County Procurement Department, Attn: Vicky Watts, 500 North Main Street, Suite 709, Monroe, NC 28112.

A Non-Mandatory Pre-Bid Conference and Site Visit will be held on **Thursday, July 10 2025 at 10:00 AM** local time at the **Union County Landfill Non-Commercial property, 2125 Austin Chaney Road, Wingate, North Carolina, 28174**. Representatives from Union County and the Engineer will be present. Attendance at this meeting is strongly encouraged.

Scope of Work: This project consists of construction of a new landfill cell subgrade to include excavation, a perimeter road, stormwater BMP. The project is located at Union County Landfill Non-Commercial property, 2125 Austin Chaney Road, Wingate North Carolina 28174 located in Union County, NC.

Bids will be received for a single prime Contract. Bids shall be on a unit price basis as indicated in the Bid Form.

All questions about the meaning or intent of the Bidding Documents are to be submitted in writing to the Procurement contact person listed on the cover page (vicky.watts@unioncountync.gov). Deadline for questions is Tuesday, July 15, 2025 at 5:00 PM local time

The Issuing Office for the Bidding Documents is:

**Civil & Environmental Consultants, Inc.
3701 Arco Corporate Drive Suite 400.
Charlotte, NC 28273
Contact: Nathan Bivins, P.E.
980-260-2113**

Prices for Printed Bid Sets are **\$200.00 per set made payable by check to Civil & Environmental Consultants, Inc. Set includes Full Size Drawings and Specifications.** Printed copies of the Bidding Documents may be obtained from the Issuing Office, during the hours indicated below, upon payment at Issuing Office for each set.

Prospective Bidders may examine the Bidding Documents at the Issuing Office or the Union County Procurement Department at 500 North Main Street, Suite 709, Monroe, North Carolina on Mondays through Fridays between the hours of 8:30 am and 5:00 pm. Bid Documents may also be accessed by emailing Hannah Cupples with Civil and Environmental Consultants, Inc. at **hcupples@cecinc.com**.

Partial sets of Bidding Documents will not be available from the Issuing Office. Neither Owner nor Engineer will be responsible for full or partial sets of Bidding Documents, including Addenda if any, obtained from sources other than the Issuing Office.

Bidders must have a license to do work as a general contractor in the State of North Carolina, as set forth under Article 1 of Chapter 87 of the North Carolina General Statutes. The Contractor's North Carolina License number shall be designated on the outside of the envelope containing the bid.

Bidders are required to comply with the non-collusion requirements set forth in the Bidding Documents.

As provided by statute, a deposit of cash, cashier's check or certified check on some bank or trust company insured by the Federal Deposit insurance Company, or a bid bond executed by corporate surety licensed under the laws of North Carolina to execute such bonds in the amount of 5% of the bid must accompany each bid. The payee shall be "Union County". Said deposit shall guarantee that the Agreement will be entered into by the successful bidder if award is made. Such deposit may be held by Union County until the successful bidder has executed and delivered all required Contract documents to Union County.

Bidders should note the provisions of the Supplementary instruction to bidders contained in the Bid Documents regarding minority participation. Union County encourages good faith effort outreach as described in the Union County MBE and Small business Outreach Plan. Compliance with Union County Minority and Small Business Guidelines and Outreach Plan goals apply. **Union County encourages good faith effort outreach to Minority Businesses (HUB Certified) and Small Businesses.**

Union County reserves the right to reject any or all bids including without limitation, nonconforming, nonresponsive, unbalanced, or conditional Bids. Owner further reserves the right to reject the Bid and Bidder whom they find, after reasonable inquiry and evaluation, to not be responsible. Owner may also reject the Bid and Bidder if the owner believes that would not be in the best interest of the Project to make an award to that Bidder. Owner also reserves the right to waive all informalities and technicalities not involving price, time, or changes in the Work and to negotiate, as allowed by law, contract terms with the Successful Bidder.

+ + END OF ADVERTISEMENT FOR BIDS + +



License Agreement

Before you use this EJCDC document:

1. **Read this License Agreement in its entirety.** As purchaser, you agree to comply with and are bound by the License Agreement's terms, conditions, and instructions when you use the attached EJCDC document.
Commencement of use of the attached document indicates your acceptance of these terms, conditions, and instructions. If you do not agree to them, you should promptly return the materials to the vendor.
2. **This License Agreement applies to the attached document only. Other licensing terms and instructions may apply to other EJCDC documents.**
3. The Engineers Joint Contract Documents Committee ("EJCDC") provides **EJCDC Design and Construction Related Documents (including but not limited to the EJCDC document that is attached, and all other documents in the EJCDC Construction Series, Engineering Series, Design-Build Series, Remediation Series, Procurement Series, and Narrative Series)** and licenses their use worldwide. You assume sole responsibility for the selection of specific documents or portions thereof to achieve your intended results, and for the installation, use, and results obtained from **EJCDC Design and Construction Related Documents**.
4. You acknowledge that you understand that the text of the **EJCDC Design and Construction Related Documents** has important legal consequences and that consultation with an attorney is recommended with respect to use or modification of the text. You further acknowledge that EJCDC documents are protected by the copyright laws of the United States.
5. Make sure that you have the correct word processing software for the attached EJCDC document, which is distributed in Microsoft Word (.doc) format.
6. EJCDC allows the end user wide discretion in using and editing the attached document, subject to the provisions of the License Agreement. You are advised, however, that EJCDC documents contain numeric and other cross-references, and that changes to one part of the document may affect other parts. It is solely your responsibility to assure the adequacy and consistency of the final document for your purposes.

How to Use This Document:

1. Although EJCDC has made reasonable efforts to achieve uniformity of formatting, some document controls (e.g., bold, underline, font size, indentation, numbering,

pagination, table of contents) may be affected by software versioning and translators, user settings, changes during editing, and other factors, and may require user intervention to restore intended format and appearance.

2. The attached document is intended to be revised and modified to meet the project-specific needs of each use or application of the document. For the attached EJCDC document, it is **not** necessary to show changes to the text, through "Track Changes," redline/strikeout, highlighting, or other means. Users may choose to retain the attribution to EJCDC and its supporting organizations, such as document numbers, footers, and logos; or the user may delete these items, at user's option. Both approaches are permitted. In other situations, the user may use only selected clauses from the document (for example, for inclusion in a different contract document). This is a permitted use. In all cases, however, the user must include one of the copyright notices set out in the License Agreement below.
3. The attached EJCDC document may contain "Notes to User," bracketed comments, or prompts that provide instructions for filling in project-specific information, selecting the appropriate clause from a list of options, or making additions or deletions, or that give background information regarding a particular provision. The user may (and in most cases should) delete these notes, comments, and prompts during the drafting process.
4. The License Agreement typically is removed when a document is being prepared for use on a specific project. The terms of the License Agreement remain in effect regardless of whether it has been removed or remains attached to the document.
5. When a document is being prepared for use on a specific project, the user has the option of removing the EJCDC front cover page, and the "inside front cover page" containing specific information regarding the EJCDC sponsoring organizations.

Limited License:

As purchaser, you have a limited nonexclusive license to:

1. Use the attached EJCDC document on any number of machines owned, leased, or rented by your company or organization.
2. Use the attached EJCDC document for bona fide contractual and project purposes. Such purposes expressly include controlled distribution to bona fide

bidders and proposers, either through direct transmittal in printed or electronic format or posting on a website or other electronic distribution point to which access is limited to bona fide bidders and proposers or others having direct interest in the contract or project.

3. Copy the attached EJCDC document into any machine-readable or printed form for backup or modification purposes in support of your use of the document.

You further agree:

1. To comply with all terms, conditions, and instructions in this License Agreement.
2. That all proprietary and intellectual property rights in the attached EJCDC document and all other **EJCDC Design and Construction Related Documents** are and shall remain the property of EJCDC and its sponsoring organizations.
3. To include the appropriate EJCDC copyright notice (selected from the versions below) on any copy, modified or finalized version, or portion of the attached EJCDC document. For this document, at a minimum one of the following EJCDC copyright notices must appear in a prominent location:

If revisions are minimal, then use the copyright that is already stated in the published document:

- Copyright © [EJCDC document date] National Society of Professional Engineers, American Council of Engineering Companies, and American Society of Civil Engineers. All rights reserved.

If revisions are extensive, or if only portions of the EJCDC document have been used, then use the following copyright notice:

- **This document is a MODIFIED version of EJCDC® Z-xxx, Copyright © 20xx by the National Society of Professional Engineers, American Society of Civil Engineers, and American Council of Engineering Companies, or is based in part on excerpts from EJCDC documents. Those portions of the text that originated in published EJCDC documents remain subject to the copyright.**
4. To not use, copy, modify, or transfer the attached EJCDC document or any other **EJCDC Design and Construction Related Documents**, or any copy, modification or merged portion, in whole or in part, except as expressly provided for in this license. Reproduction of the attached EJCDC document, or any other **EJCDC Design and Construction Related Document**, in printed or machine-readable format for resale, and any resale of this document in any format, are expressly prohibited. **Making the attached EJCDC document or any other EJCDC Design and Construction Related Document, in whole or in part, available or accessible on an uncontrolled, public-access website or other uncontrolled electronic**

distribution point—in any format whatever, whether with or without watermarks, as a Microsoft Word document or in portable document format (PDF)—is expressly prohibited.

5. As an EJCDC limited licensee you may seek advance written permission from the EJCDC Copyright Administrator to use the attached EJCDC document for educational purposes, subject to terms and conditions to be established by the Copyright Administrator for the specific educational use.

Term:

This license is effective for three years after date of purchase, or six years after the last day of the year of issuance for the attached document (shown in the copyright notice), whichever occurs later, and shall terminate at that time, unless earlier terminated as provided herein, or unless EJCDC extends the term of this license to you, in writing, or publishes on the ejcdc.org website or the websites of the National Society of Professional Engineers, American Council of Engineering Companies, and American Society of Civil Engineers, an applicable extension of the term of license for a certain period of time for bona fide contractual and project or other authorized uses. You agree upon termination to destroy the attached **EJCDC Design and Construction Related Document along with all copies, modifications and merged portions in any form (except those copies already in actual project or contract use, or maintained in files or records of completed projects).**

EJCDC reserves the right during the term of this agreement to provide access to the purchased document through alternative means, based on improvements or changes in technology, or to transition the document to secure document platforms or other formats, while maintaining user's access privileges.

EJCDC from time to time publishes new, updated editions of the **EJCDC Design and Construction Related Documents**. EJCDC highly recommends the use of the most current editions of its documents. EJCDC may, at its sole discretion, withdraw from authorized use any document that has been subsequently updated and for which the license has expired.

You may terminate the license at any time by destroying the attached EJCDC document together with all copies, modifications and merged portions in any form (except those copies already in actual project or contract use, or maintained in files or records of completed projects). It will also terminate upon conditions set forth elsewhere in this License Agreement or if you fail to comply with any term or condition of this License Agreement.

Limited Warranty:

If EJCDC has distributed this document on a compact disc, then EJCDC warrants the CD on which this document is furnished to be free from physical defects in materials and workmanship under normal use for a period of ninety (90) days from the date of delivery to you as evidenced by a copy of your receipt.

There is no other warranty of any kind, either express or implied, including, but not limited to the implied warranties

of merchantability and fitness for a particular purpose. Some states do not allow the exclusion of implied warranties, so the above exclusion may not apply to you. You may also have other rights which vary from state to state.

EJCDC does not warrant that the functions contained in **EJCDC Design and Construction Related Documents** will meet your requirements or that the operation of **EJCDC Design and Construction Related Documents** will be uninterrupted or error free.

Limitations of Remedies:

EJCDC's entire liability and your exclusive remedy shall be:

1. the replacement of the CD (if any) distributed by EJCDC, containing this document, provided such CD does not meet EJCDC's "Limited Warranty" and is returned to EJCDC's selling agent with a copy of your receipt, or
2. if EJCDC's selling agent is unable to deliver a replacement CD which is free of defects in materials and workmanship, you may terminate this Agreement by returning EJCDC Document and your money will be refunded.

As purchaser, you assume full responsibility for determining the suitability of this document to your purposes, and for the application and use of this document for contractual or project purposes. To the fullest extent permitted by law, in no event will EJCDC, its sponsoring organizations, its committee members, attorneys, consultants, authorized vendors, or advisors, or their respective staff members, employees, agents, or contractors, be liable to you or any other party for any damages, including any lost profits, lost savings, contractual liabilities, disappointed commercial expectations, economic loss, or other direct, incidental, or consequential damages arising out of the content, unenforceability, insufficiency, inadequacy, use or inability to use the attached EJCDC document or any other **EJCDC Design and Construction Related Documents**, even if EJCDC has been advised of the possibility of such damages, or for any claim by any other party.

Some states do not allow the limitation or exclusion of liability for incidental or consequential damages, so portions of the above limitation or exclusion may not apply to you.

General:

You may not sublicense, assign, or transfer this license except as expressly provided in this License Agreement. Any attempt otherwise to sublicense, assign, or transfer any of the rights, duties, or obligations hereunder is void. **If you transfer or purport to transfer such rights, duties, or obligations to another party, your license is automatically terminated.**

This License Agreement shall be governed by the laws of the State of Virginia. If you have any questions concerning this License Agreement, or any requests or inquiries regarding the EJCDC copyright, you may contact EJCDC by writing to:

EJCDC Copyright Administrator
c/o National Society of Professional Engineers
1420 King Street
Alexandria, VA 22314
Phone: (703) 684-2845
Fax: (703) 836-4875
e-mail: aschwartz@nspe.org

You acknowledge that you have read this License Agreement, understand it and agree to be bound by its terms and conditions. You further agree that it is the complete and exclusive statement of the License Agreement and supersedes any proposal or prior agreement, oral or written, and any other communications between us relating to the subject matter of this License Agreement.

Information regarding the content of the attached EJCDC document and other **EJCDC Design and Construction Related Documents** may be obtained at ejcdc.org or from the following EJCDC sponsoring organizations:

National Society of Professional Engineers
1420 King Street, Alexandria, VA 22314-2794
(703) 684-2882
www.nspe.org

American Council of Engineering Companies
1015 15th Street N.W., Washington, D.C. 20005
(202) 347-7474
www.acec.org

American Society of Civil Engineers
1801 Alexander Bell Drive, Reston, VA 20191-4400
(800) 548-2723
www.asce.org

This document has important legal consequences; consultation with an attorney is encouraged with respect to its use or modification. This document should be adapted to the particular circumstances of the contemplated Project and the controlling Laws and Regulations.

SUGGESTED INSTRUCTIONS TO BIDDERS FOR CONSTRUCTION CONTRACTS

Prepared by



Issued and Published Jointly by



Copyright © 2013:

National Society of Professional Engineers
1420 King Street, Alexandria, VA 22314-2794
(703) 684-2882
www.nspe.org

American Council of Engineering Companies
1015 15th Street N.W., Washington, DC 20005
(202) 347-7474
www.acec.org

American Society of Civil Engineers
1801 Alexander Bell Drive, Reston, VA 20191-4400
(800) 548-2723
www.asce.org

The copyright for this EJCDC document is owned jointly by the three sponsoring organizations listed above. The National Society of Professional Engineers is the Copyright Administrator for the EJCDC documents; please direct all inquiries regarding EJCDC copyrights to NSPE.

NOTE: EJCDC publications may be purchased at www.ejcdc.org, or from any of the sponsoring organizations above.

INTRODUCTION

These Suggested Instructions to Bidders for Construction Contracts ("Instructions to Bidders" or "Instructions") have been prepared for use with the Suggested Bid Form for Construction Contracts ("Bid Form") (EJCDC® C-410, 2013 Edition); the Agreement between Owner and Contractor for Construction Contract ("Agreement") (EJCDC® C-520, Stipulated Sum, or C-525, Cost-Plus, 2013 Editions); and the Standard General Conditions of the Construction Contract ("General Conditions") (EJCDC® C-700, 2013 Edition). Their provisions are interrelated, and a change in one may necessitate a change in the others. See also the Guide to the Preparation of Supplementary Conditions (EJCDC® C-800, 2013 Edition) and the Commentary on the 2013 EJCDC Construction Documents (EJCDC® C-001, 2013 Edition).

These Instructions assume a competitive bidding process and the use of a Project Manual that contains the following documentary information for a construction project:

- Bidding Requirements, which include the Advertisement or invitation to bid, the Instructions to Bidders, the Bid Form that is suggested or prescribed, all of which provide information and guidance for all Bidders, and Bid Form supplements (if any) such as Bid Bond Form and Qualifications Statement; and,
- Contract Documents, which include the Agreement, performance and payment bonds, the General Conditions, the Supplementary Conditions, the Drawings, and the Specifications. (Note also that the Supplementary Conditions and other Contract Documents may refer to other documents that are provided to or made available to Bidders for reference purposes, but which are not Contract Documents.)

Together, the Bidding Requirements and the Contract Documents are referred to as the Bidding Documents. (The terms "Bidding Documents," "Bidding Requirements," and "Contract Documents" are defined in Article 1 of the General Conditions.) The Bidding Requirements are not Contract Documents because much of their substance pertains to the relationships prior to the award of the Contract, and has little effect or impact thereafter. Many contracts are awarded without even going through a bidding process, and thus have no Bidding Requirements, illustrating that the bidding items are typically superfluous to the formation of a binding and comprehensive construction contract. In some cases, however, a bid or proposal will contain numerous line items and their prices; in such case the actual bid or proposal document may be attached as an exhibit to the Agreement to avoid extensive rekeying.

The Instructions are accompanied by "Notes to User" and bracketed notes and prompts to assist in preparing the Instructions prior to distribution to prospective Bidders. The provisions have been coordinated with the other forms produced by EJCDC. Much of the language should be usable on most projects, but modifications and additional provisions often will be necessary. When modifying the suggested language or writing additional provisions, the user must check the other documents thoroughly for conflicts and coordination of terms, and make appropriate revisions in all affected documents.

All parties involved in a construction project benefit significantly from a standardized approach in the location of subject matter throughout the documents. Experience confirms the danger of addressing the same subject matter in more than one location; doing so frequently leads to confusion and unanticipated legal consequences. When preparing documents for a construction project, careful attention should be given to the guidance provided in EJCDC® N-122/AIA® A521, Uniform Location of Subject Matter (2012 Edition), available at no charge from the EJCDC website, www.ejcdc.org, and from the websites of EJCDC's sponsoring organizations.

If CSI's MasterFormat™ is being used for the Project Manual, consult MasterFormat™ for the appropriate document number and number the pages accordingly.

Instructions and restrictions regarding the use of this document are set out in the License Agreement that accompanied the document at the time of purchase. To prepare this document for use on a specific project, (1) remove the cover pages and this Introduction, (2) fill in Project-specific information and make revisions to the document, following the guidance in the Notes to Users and bracketed notes and prompts, and the advice of legal counsel, and (3) delete the Notes to Users and bracketed notes and prompts.

SUGGESTED INSTRUCTIONS TO BIDDERS

TABLE OF CONTENTS

	Page
ARTICLE 1 – Defined Terms	1
ARTICLE 2 – Copies of Bidding Documents	1
ARTICLE 3 – Qualifications of Bidders	2
ARTICLE 4 – Site and Other Areas; Existing Site Conditions; Examination of Site; Owner’s Safety Program; Other Work at the Site	4
ARTICLE 5 – Bidder’s Representations	7
ARTICLE 6 – Pre-Bid Conference	8
ARTICLE 7 – Interpretations and Addenda.....	9
ARTICLE 8 – Bid Security	9
ARTICLE 9 – Contract Times	11
ARTICLE 10 – Liquidated Damages.....	11
ARTICLE 11 – Substitute and “Or-Equal” Items.....	11
ARTICLE 12 – Subcontractors, Suppliers, and Others	12
ARTICLE 13 – Preparation of Bid	14
ARTICLE 14 – Basis of Bid	15
ARTICLE 15 – Submittal of Bid.....	18
ARTICLE 16 – Modification and Withdrawal of Bid.....	19
ARTICLE 17 – Opening of Bids	20
ARTICLE 18 – Bids to Remain Subject to Acceptance	20
ARTICLE 19 – Evaluation of Bids and Award of Contract	20
ARTICLE 20 – Bonds and Insurance.....	23
ARTICLE 21 – Signing of Agreement.....	24
ARTICLE 22 – MINORITY PARTICIPATION	24



ARTICLE 1 – DEFINED TERMS

- 1.01 Terms used in these Instructions to Bidders have the meanings indicated in the General Conditions and Supplementary Conditions. Additional terms used in these Instructions to Bidders have the meanings indicated below:

A. *Issuing Office* – The office from which the Bidding Documents are to be issued.

NOTE(S) TO USER:

1. *In addition to terms specifically defined, terms with initial capital letters in the Bidding Requirements include references to identified articles and paragraphs, and the titles of other documents or forms.*
2. *Additional defined terms applicable to the Bidding Requirements should be included here and should be used uniformly throughout the Bidding Requirements with initial capitals. Additional defined terms applicable to the Contract Documents should be included in the Supplementary Conditions. Note the difference in the meanings of the terms “Bidding Requirements” and “Bidding Documents,” as defined in the General Conditions, Paragraph 1.01.A.*
3. *It is strongly recommended that the Issuing Office be identified in the invitation to bid or advertisement. See EJCDC® C-111, Suggested Advertisement for Bids for Construction Contracts. If not, it should be identified in these Instructions.*

ARTICLE 2 – COPIES OF BIDDING DOCUMENTS

- 2.01 Complete sets of the Bidding Documents may be obtained from the Issuing Office in the number and format stated in the advertisement or invitation to bid.
- 2.02 Complete sets of Bidding Documents shall be used in preparing Bids; neither Owner nor Engineer assumes any responsibility for errors or misinterpretations resulting from the use of incomplete sets of Bidding Documents.
- 2.03 Owner and Engineer, in making copies of Bidding Documents available on the above terms, do so only for the purpose of obtaining Bids for the Work and do not authorize or confer a license for any other use.

NOTE(S) TO USER:

1. *Practices vary in the manner of issuing Bidding Documents, recording the names of document holders, and requiring deposits, charges, and refunding of deposits.*
2. *Many owners levy a non-refundable charge for a hard copy of the Bidding Documents, rather than using a deposit and refund system. If the Issuing Office charges a deposit, then advise potential Bidders, either in the advertisement or invitation to bid, or when the copy is requested, of the terms under which the deposit will be returned (for example that the deposit will be refunded to each document holder of record that returns a complete set of Bidding Documents in good condition within 30 days after opening of Bids).*

3. *Some Owners will provide a digital version of the Bidding Documents to potential bidders, or allow the Bidding Documents to be posted and accessed in plan rooms; or in some cases will make the Bidding Documents available only electronically. If Bidding Documents are provided electronically, it is typical to use a secure PDF or similar format, with caveats regarding discrepancies between the electronic copy and hard copy. In certain cases the bidding process and the project may benefit from making some of the Bidding Documents available in accessible electronic format that allows bidders to make detailed quantity measurements and take-offs; if this is done, the Owner and Engineer must make decisions about risk allocations with respect to the accessible documents, and include appropriate terms, conditions, and disclaimers in these Instructions. Refer to General Conditions, Articles 2 and 3.*
4. *The duties of Engineer during the Bidding Phase should coincide with those assigned to Engineer in the professional services contract between Owner and Engineer (see Agreement between Owner and Engineer for Professional Services, EJCDC® E-500, Exhibit A).*

ARTICLE 3 – QUALIFICATIONS OF BIDDERS

- 3.01 To demonstrate Bidder's qualifications to perform the Work, Bidder shall submit with its Bid (a) written evidence establishing its qualifications such as financial data, previous experience, and present commitments, and (b) the following additional information:
- A. Evidence of Bidder's authority to do business in the state where the Project is located.
 - B. Bidder's state or other contractor license number, if applicable.
 - C. Subcontractor and Supplier qualification information; coordinate with provisions of Article 12 of these Instructions, "Subcontractors, Suppliers, and Others."
 - D. [Other required information regarding qualifications]

Specific qualification requirements to be submitted with the Bid are stated in Article 7 of the Bid Form. The Owner reserves the right to request additional documentation of qualifications following the bid opening. The Bidder shall submit said additional qualifications within five (5) days of the Owner's request.

NOTE(S) TO USER:

1. *Use one of the three alternative Paragraphs 3.01.*
2. *As drafted, the first alternative 3.01 assumes that Owner's request for qualifying information will be made after the Bids have been received and opened. The time allowed for Bidder to submit Owner-requested qualifications data varies. Five to 10 days is typical. It is recommended that the qualifications be requested from the three lowest Bidders, but in some cases—for example, an exceptionally tight bid spread, or low bids that seem unrealistic—Owner may wish to request the information from all Bidders.*
3. *If Owner will prequalify Bidders, such that only prequalified Bidders may submit Bids, then use the second alternative 3.01. The procedures and intricacies involved in the prequalification of Bidders require careful consideration before appropriate language is drafted. Also, many*

governmental bodies have specific requirements with respect to the prequalification of Bidders. The second alternative 3.01 is meant to provide a starting point for prequalification; some additional drafting likely will be needed.

- 4. If Owner prefers to obtain qualifying information from all Bidders at the time Bids are submitted, then use the third alternative 3.01.*
 - 5. Requirements for Bidders to obtain either authorized business status or state contractor licensing or both prior to submitting a Bid may preclude some entities, such as out-of-state corporations, from bidding due to the time required to obtain such status or license. Some Owners modify the requirement to require only that Bidder submit evidence of its ability to obtain required authority or licenses within the time for acceptance of Bids. In all cases the bidding requirements must be consistent with state Laws or Regulations regarding business status and licensing.*
 - 6. Request submittal of contractor licensing information when the state in which the Project is located requires contractor licensing for the type of Project to be constructed.*
 - 7. It is desirable to itemize the data that all Bidders will be required to submit in order to demonstrate their qualifications for an award. Also, standards or criteria that will be applied in Bidder evaluation should be stated. These data should appear in this Article 3 in their entirety and may include specific language required by Laws or Regulations.*
 - 8. It is a good practice for Owner and Engineer to discuss the Bidder qualifications appropriate to each Project. If a Bidder's qualification form is to be completed and submitted by Bidders, it should be provided with the Bidding Documents. Governmental bodies frequently have prescribed qualification forms. EJCDC recommends EJCDC® C-451, Qualifications Statement. This form is suitable for submission by Bidders before, with, or after the Bid.*
 - 9. If there is a Disadvantaged Business Enterprise [DBE] requirement for the Contract, so indicate here. The DBE requirements are typically contract terms and should be stated in the Contract Documents. If reference is made here in the Instructions to Bidders to the required level of DBE participation, the criteria to be used, or other specific DBE requirements, such references must be fully consistent with the actual contract clauses.*
- 3.02 A Bidder's failure to submit required qualification information within the times indicated may disqualify Bidder from receiving an award of the Contract.
- 3.03 No requirement in this Article 3 to submit information will prejudice the right of Owner to seek additional pertinent information regarding Bidder's qualifications.
- 3.04 Bidder is advised to carefully review those portions of the Bid Form requiring Bidder's representations and certifications.

NOTE(S) TO USER:

Bidders are usually asked to make certain representations as to genuineness of their Bids, the lack of collusion in connection therewith, and other related matters (see Bid Form, Articles 3 and 4).

ARTICLE 4 – SITE AND OTHER AREAS; EXISTING SITE CONDITIONS; EXAMINATION OF SITE; OWNER'S SAFETY PROGRAM; OTHER WORK AT THE SITE

4.01 Site and Other Areas

- A. The Site is identified in the Bidding Documents. By definition, the Site includes rights-of-way, easements, and other lands furnished by Owner for the use of the Contractor. Any additional lands required for temporary construction facilities, construction equipment, or storage of materials and equipment, and any access needed for such additional lands, are to be obtained and paid for by Contractor.

NOTE(S) TO USER:

Any conditions set forth in easements obtained by Owner, including their availability to Contractor when Notice to Proceed is given, which may affect cost or performance of the Work, should be disclosed to Bidder. If the information is available at the time Bidding Documents are prepared, it should be added to Paragraph 4.01, and the exact language and anticipated availability of the easement or right-of-way should be included in the Contract Documents (usually the Supplementary Conditions). If important information is not yet available, appropriate statements should be made concerning assumptions to be made by Bidder and upon which Bidder may rely.

4.02 Existing Site Conditions

- A. Subsurface and Physical Conditions; Hazardous Environmental Conditions
1. The Supplementary Conditions identify:
 - a. those reports known to Owner of explorations and tests of subsurface conditions at or adjacent to the Site.
 - b. those drawings known to Owner of physical conditions relating to existing surface or subsurface structures at the Site (except Underground Facilities).
 - c. reports and drawings known to Owner relating to Hazardous Environmental Conditions that have been identified at or adjacent to the Site.
 - d. Technical Data contained in such reports and drawings.
 2. Owner will make copies of reports and drawings referenced above available to any Bidder on request. These reports and drawings are not part of the Contract Documents, but the Technical Data contained therein upon whose accuracy Bidder is entitled to rely, as provided in the General Conditions, has been identified and established in the Supplementary Conditions. Bidder is responsible for any interpretation or conclusion Bidder draws from any Technical Data or any other data, interpretations, opinions, or information contained in such reports or shown or indicated in such drawings.

NOTE(S) TO USER:

1. *Any cost to Bidders for obtaining copies of reports and drawings in Paragraph 4.02.A should be addressed here.*
2. *Note that the reports and drawings referenced in Paragraph 4.02 above are not Contract Documents. EJCDC recommends that they not be bound with or attached as an Appendix or otherwise to the Contract Documents in any*

manner that they might give the appearance of being part of the Contract Documents.

3. *If Owner decides that it does not wish to identify any subsurface data in the reports and drawings furnished as Technical Data entitled to reliance by Bidders, and does not want the default definition of Technical Data to apply—a decision that would be contrary to EJCDC’s recommended practices—then the Supplementary Conditions and these Instructions should affirmatively state that there is no data on which Bidders may rely, and Owner should revise the General Conditions’ definition of Technical Data to avoid its default operation.*
4. *If the Contract Documents include use of a Geotechnical Baseline Report, it should be furnished to the Bidder as a proposed Contract Document and included in the Project Manual. Revise Paragraph 4.02 above to include the following Paragraph 4.02.A.4:*
3. Geotechnical Baseline Report: The Bidding Documents contain a Geotechnical Baseline Report (GBR). The GBR describes certain select subsurface conditions that are anticipated to be encountered by Contractor during construction in specified locations (“Baseline Conditions”). The GBR is a Contract Document.

The Baseline Conditions in the GBR are intended to reduce uncertainty and the degree of contingency in submitted Bids. However, Bidders cannot rely solely on the Baseline Conditions. Bids should be based on a comprehensive approach that includes an independent review and analysis of the GBR, all other Contract Documents, Technical Data, other available information, and observable surface conditions. Not all potential subsurface conditions are baselined.

Nothing in the GBR is intended to relieve Bidders of the responsibility to make their own determinations regarding construction costs, bidding strategies, and Bid prices, nor of the responsibility to select and be responsible for the means, methods, techniques, sequences, and procedures of construction, and for safety precautions and programs incident thereto.

- B. Underground Facilities: Information and data shown or indicated in the Bidding Documents with respect to existing Underground Facilities at or contiguous to the Site are set forth in the Contract Documents and are based upon information and data furnished to Owner and Engineer by owners of such Underground Facilities, including Owner, or others.
- C. Adequacy of Data: Provisions concerning responsibilities for the adequacy of data furnished to prospective Bidders with respect to subsurface conditions, other physical conditions, and Underground Facilities, and possible changes in the Bidding Documents due to differing or unanticipated subsurface or physical conditions appear in Paragraphs 4.02, 4.03, and 4.04 of the General Conditions. Provisions concerning responsibilities for the adequacy of data furnished to prospective Bidders with respect to a Hazardous Environmental Condition at the Site, if any, and possible changes in the Contract Documents due to any Hazardous Environmental Condition uncovered or revealed at the Site which was not shown or indicated in the Drawings or Specifications or identified in the Contract Documents to be within the scope of the Work, appear in Paragraph 4.06 of the General Conditions.

NOTE(S) TO USER:

1. *The Technical Data upon which Bidder may rely should be identified in the Supplementary Conditions (see discussion in the Note following Paragraph*

4.02 above, with respect to subsurface conditions, and in the Commentary, EJCDC® C-001).

2. *In the event there are no data of the types referred to, it may be appropriate to revise the paragraphs above, and expressly state that there are no such data.*

4.03 *Site Visit and Testing by Bidders*

- A. Bidder shall conduct the required Site visit during normal working hours, and shall not disturb any ongoing operations at the Site.

NOTE(S) TO USER:

1. *If Site visits are to be conducted by appointment only, so indicate, and provide instructions for arranging the visit.*
2. *Any limitations on the time, area, or other terms and conditions of access for the Site visit should be stated.*

- B. Bidder is not required to conduct any subsurface testing, or exhaustive investigations of Site conditions.

NOTE(S) TO USER:

Ordinarily Owner should not require Bidders to conduct detailed Site and subsurface testing and investigation because of the constraints of time and other practical considerations. However, under some circumstances it may be necessary for Owner to require such testing and investigation. If Owner chooses to require the Bidders to conduct testing or detailed investigations, the sentence above should be deleted and the specific testing or examination requirements inserted. Any such requirements for pre-Bid Site testing or examination should be realistic and clearly stated. Reasonable time must be allowed in the bidding period to permit Bidders to carry out these efforts. Owner must make the Site available, and Owner should establish terms and conditions governing the investigations and tests, addressing such issues as Bidder's liability insurance, locating and protecting existing utilities, Site restoration, and compliance with safety programs pertaining to the Site.

- C. On request, and to the extent Owner has control over the Site, and schedule permitting, the Owner will provide Bidder access to the Site to conduct such additional examinations, investigations, explorations, tests, and studies as Bidder deems necessary for preparing and submitting a successful Bid. Owner will not have any obligation to grant such access if doing so is not practical because of existing operations, security or safety concerns, or restraints on Owner's authority regarding the Site.
- D. Bidder shall comply with all applicable Laws and Regulations regarding excavation and location of utilities, obtain all permits, and comply with all terms and conditions established by Owner or by property owners or other entities controlling the Site with respect to schedule, access, existing operations, security, liability insurance, and applicable safety programs.
- E. Bidder shall fill all holes and clean up and restore the Site to its former condition upon completion of such explorations, investigations, tests, and studies.

4.04 *Owner's Safety Program*

- A. Site visits and work at the Site may be governed by an Owner safety program. As the General Conditions indicate, if an Owner safety program exists, it will be noted in the Supplementary Conditions.

4.05 *Other Work at the Site*

- A. Reference is made to Article 7 of the Supplementary Conditions for the identification of the general nature of other work of which Owner is aware (if any) that is to be performed at the Site by Owner or others (such as utilities and other prime contractors) and relates to the Work contemplated by these Bidding Documents. If Owner is party to a written contract for such other work, then on request, Owner will provide to each Bidder access to examine such contracts (other than portions thereof related to price and other confidential matters), if any.

NOTE(S) TO USER:

Article 7 of the General Conditions indicates that if such other work is to be performed, it will be noted in the Supplementary Conditions.

ARTICLE 5 – BIDDER'S REPRESENTATIONS

5.01 It is the responsibility of each Bidder before submitting a Bid to:

- A. examine and carefully study the Bidding Documents, and any data and reference items identified in the Bidding Documents;
- B. visit the Site, conduct a thorough, alert visual examination of the Site and adjacent areas, and become familiar with and satisfy itself as to the general, local, and Site conditions that may affect cost, progress, and performance of the Work;

NOTE(S) TO USER:

Bidder is expected to visit the Site and conduct an alert, heads-up, eyes-open, reasonable examination of the area and the conditions under which the Work is to be performed, and that is the intent of Paragraph 5.01.B. Any special requirements for such examination are to be set forth in writing (Paragraph 4.03 is the preferable location for such requirements).

- C. become familiar with and satisfy itself as to all Laws and Regulations that may affect cost, progress, and performance of the Work;
- D. carefully study all: (1) reports of explorations and tests of subsurface conditions at or adjacent to the Site and all drawings of physical conditions relating to existing surface or subsurface structures at the Site that have been identified in the Supplementary Conditions, especially with respect to Technical Data in such reports and drawings, and (2) reports and drawings relating to Hazardous Environmental Conditions, if any, at or adjacent to the Site that have been identified in the Supplementary Conditions, especially with respect to Technical Data in such reports and drawings;

NOTE(S) TO USER:

If there are no reports or drawings of the type referred to in this representation, either modify or delete the paragraph, and expressly state that there are none.

- E. consider the information known to Bidder itself; information commonly known to contractors doing business in the locality of the Site; information and observations obtained

from visits to the Site; the Bidding Documents; and the Site-related reports and drawings identified in the Bidding Documents, with respect to the effect of such information, observations, and documents on (1) the cost, progress, and performance of the Work; (2) the means, methods, techniques, sequences, and procedures of construction to be employed by Bidder; and (3) Bidder's safety precautions and programs;

NOTE(S) TO USER:

If the Bidding Documents do not identify any Site-related reports and drawings, modify this paragraph accordingly.

- F. agree, based on the information and observations referred to in the preceding paragraph, that at the time of submitting its Bid no further examinations, investigations, explorations, tests, studies, or data are necessary for the determination of its Bid for performance of the Work at the price bid and within the times required, and in accordance with the other terms and conditions of the Bidding Documents;
- G. become aware of the general nature of the work to be performed by Owner and others at the Site that relates to the Work as indicated in the Bidding Documents;
- H. promptly give Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder discovers in the Bidding Documents and confirm that the written resolution thereof by Engineer is acceptable to Bidder;
- I. determine that the Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for the performance and furnishing of the Work; and
- J. agree that the submission of a Bid will constitute an incontrovertible representation by Bidder that Bidder has complied with every requirement of this Article, that without exception the Bid and all prices in the Bid are premised upon performing and furnishing the Work required by the Bidding Documents.

NOTE(S) TO USER:

The representations by Bidder in EJCDC's Bid Form (EJCDC® C-410) and in both of its Owner-Contractor Agreements (EJCDC® C-520, Stipulated Sum, and EJCDC® C-525, Cost-Plus) are closely coordinated with the wording in this Article so that a change in one would necessitate changes in the others.

ARTICLE 6 – PRE-BID CONFERENCE

- 6.01 A pre-Bid conference will be held at the time and location stated in the invitation or advertisement to bid. Representatives of Owner and Engineer will be present to discuss the Project. Bidders are encouraged to attend and participate in the conference. Engineer will transmit to all prospective Bidders of record such Addenda as Engineer considers necessary in response to questions arising at the conference. Oral statements may not be relied upon and will not be binding or legally effective.

NOTE(S) TO USER:

1. *EJCDC recommends that Engineer record the prospective Bidders in attendance at the beginning and at the end of the pre-bid conference, and keep a record of the proceedings. If regulatory authorities having jurisdiction are also present, their attendance should be noted.*

2. *It is most common for attendance at the pre-bid conference to be encouraged but not required, though practices vary by jurisdiction. Mandatory pre-Bid conferences are not allowed in some jurisdictions. If Owner makes it mandatory that Bidders attend the pre-bid conference, this should be made clear in the instruction above and in the advertisement or invitation to bid, and the instruction should state the consequences of failure to attend.*

ARTICLE 7 – INTERPRETATIONS AND ADDENDA

- 7.01 All questions about the meaning or intent of the Bidding Documents are to be submitted to Engineer in writing. Interpretations or clarifications considered necessary by Engineer in response to such questions will be issued by Addenda delivered to all parties recorded as having received the Bidding Documents. Questions received less than one hundred twenty (120) hours (five calendar days) prior to the date for opening of Bids may not be answered. Only questions answered by Addenda will be binding. All such changes or interpretations will be made in writing in the form of Addenda, and, if issued, will be mailed or sent by available means to all known prospective bidders not later than seventy two (72) hours prior to the established bid opening date time. Oral and other interpretations or clarifications will be without legal effect.
- 7.02 Addenda may be issued to clarify, correct, supplement, or change the Bidding Documents.

NOTE(S) TO USER:

1. *The time in which Bidders' questions must be submitted to receive consideration, set by EJCDC as seven days prior to the opening of bids, may be governed by Laws or Regulations, and should be modified in Paragraph 7.01 if necessary.*
2. *Addenda are not to be issued after Bid opening. If the administration of the bidding procedures is not conducted by Engineer (for example, if questions are to be submitted to Owner or to a construction manager), it may be appropriate to amend Article 7.*

ARTICLE 8 – BID SECURITY

- 8.01 A Bid must be accompanied by Bid security made payable to Owner in an amount of [] percent of Bidder's maximum Bid price (determined by adding the base bid and all alternates) and in the form of a certified check, bank money order, or a Bid bond (on the form included in the Bidding Documents) issued by a surety meeting the requirements of Paragraphs 5.01 and 5.02 of the General Conditions.



NOTE(S) TO USER:

1. *Reference should be made to statutory requirements and applicable governmental regulations with respect to Bid security required on public projects. It may be necessary to delete Article 8 in its entirety and replace it with specific language required by Laws and Regulations. In the event such language does not provide for the release of Bid security to Bidders who decline to substitute Subcontractors, Suppliers, or other individuals or entities requested by Owner, as provided in Article 12 below, it may be necessary to make coordinated revisions.*

2. *Article 5 of the Bid Form should be carefully reviewed to ensure there will be no misunderstanding of the term "Bidder's maximum Bid price."*
3. *For recommended bid bond forms see EJCDC® C 430 (Penal Sum Form) and EJCDC® C 435 (Damages Form).*
4. *If a specific bid bond form, such as EJCDC® C-430 or EJCDC® C-435, is required, the form should be included in the Bidding Documents.*
5. *Bid security is not universally used or required. When used, it is typically in the range of 5-10 percent.*

8.02 The Bid security of the apparent Successful Bidder will be retained until Owner awards the contract to such Bidder, and such Bidder has executed the Contract Documents, furnished the required contract security, and met the other conditions of the Notice of Award, whereupon the Bid security will be released. If the Successful Bidder fails to execute and deliver the Contract Documents and furnish the required contract security within ten (10) days after the Notice of Award, Owner may consider Bidder to be in default, annul the Notice of Award, and the Bid security of that Bidder will be forfeited.

NOTE(S) TO USER:

1. *The remedy provided Owner by Paragraph 8.02 for Bidder default presumes that a certified check, money order, or a Penal Sum Form Bid Bond, such as EJCDC® C-430, will be required.*
2. *If EJCDC's Damages Form Bid Bond (EJCDC® C-435) or similar damages form is specified or permitted, the second sentence of Paragraph 8.02 should be revised to state that "...Owner may consider Bidder to be in default, annul the Notice of Award, and exercise its rights under the Bid Bond."*

8.03 The Bid security of other Bidders that Owner believes to have a reasonable chance of receiving the award may be retained by Owner until the earlier of seven days after the Effective Date of the Contract or one (1) day more than the period for which Bids are subject to acceptance, whereupon Bid security furnished by such Bidders will be released.

NOTE(S) TO USER:

1. *Retaining the Bid security of those other Bidders that may be in line for contract award in the event of default by the initial Successful Bidder is a standard practice that provides Owner with similar security if award to one of the other Bidders becomes necessary.*
2. *The "61 days" is based on the fact that, as provided in Paragraph 2.01 of the Bid Form, Bids will remain subject to acceptance "for 60 days after the Bid opening." Therefore, on the sixty-first day the Bids are no longer effective. Also see the Commentary on the 2013 EJCDC Construction Series Documents, EJCDC® C-001, in the section discussing Article 4 of the General Conditions, regarding the suggested schedule of events between opening of Bids and starting of Contract Times.*

8.04 Bid security of other Bidders that Owner believes do not have a reasonable chance of receiving the award will be released within seven days after the Bid opening.

ARTICLE 9 – CONTRACT TIMES

- 9.01 The number of days within which, or the dates by which, **[Milestones are to be achieved and]** the Work is to be substantially completed and ready for final payment are set forth in the Agreement.

NOTE(S) TO USER:

*Use one of the two alternative Paragraphs 9.01, and delete the other. The first (and most common) alternative anticipates that the times for Milestones, if any, Substantial Completion, and completion of the Work in readiness for final payment have been set forth in the Agreement that is included in the Bidding Documents. The second alternative may be used to permit Bidders to designate the time of Substantial Completion in the Bids, as a factor in determining the Successful Bidder. **In most cases Bidders will not be asked to designate the time in which it commits to achieving Milestones or readiness for final payment, and hence the sentence in brackets above should in most cases be deleted.** See note regarding price-plus-time (“A+B”) bidding following Paragraph 19.03 below.*

ARTICLE 10 – LIQUIDATED DAMAGES

- 10.01 Provisions for liquidated damages, if any, are set forth in the Agreement.

NOTE(S) TO USER:

Liquidated damages amounts and terms should be stated in Article 4 of the Agreement.

ARTICLE 11 – SUBSTITUTE AND “OR-EQUAL” ITEMS

NOTE(S) TO USER:

The EJCDC presumptive practice is that no substitute or “or-equal” materials or equipment will be considered until after the Effective Date of the Contract. However, some practitioners do consider, and some Laws and Regulations require, evaluations of substitutions and “or-equals” during the bidding period and issuance of Addenda when a substitute or “or-equal” is accepted. In such cases, use the second alternative Paragraph 11.01, immediately below.

- 11.01 The Contract for the Work, as awarded, will be on the basis of materials and equipment specified or described in the Bidding Documents, and those “or-equal” or substitute or materials and equipment subsequently approved by Engineer prior to the submittal of Bids and identified by Addendum. No item of material or equipment will be considered by Engineer as an “or-equal” or substitute unless written request for approval has been submitted by Bidder and has been received by Engineer at least 15 days prior to the date for receipt of Bids. Each such request shall comply with the requirements of Paragraph 6.05 of the General Conditions. The burden of proof of the merit of the proposed item is upon Bidder. Engineer’s decision of approval or disapproval of a proposed item will be final. If Engineer approves any such proposed item, such approval will be set forth in an Addendum issued to all prospective Bidders. Bidders shall not rely upon approvals made in any other manner.

It is the intent of the Contract Documents to comply with N.C.G.S. §133-3 and to encourage free and open competition on public contracts. However, nothing in this Subparagraph is intended to permit bidders to submit proposals for the use of products or materials which have not been

approved by Engineer prior to the receipt of bids as provided by N.C.G.S. §133-3. All submittals for substitution approval shall be made in accordance with the provisions of these Instructions to Bidders:

.1 Wherever the Specifications list only required performance and design characteristics for a product or material, bidders wishing to provide such a product or material shall submit such for approval.

.2 Where the Specifications list three or more names of products or materials, the listed examples are used only to denote the quality standard of product desired and do not restrict bidders to a specific brand, make, manufacturer or specific name. Rather, they are used only to set forth and convey to bidders the general style, type, character and quality of product desired. Products of similar general style, type, character appearance, and quality may be submitted for approval.

.3 Where the Specifications list fewer than three names of product or material, such products are the only products known to Engineer that comply with the required style, type, character appearance, and quality necessary for this product. Bidders wishing to propose equivalent products may do so.

11.02 All prices that Bidder sets forth in its Bid shall be based on the presumption that the Contractor will furnish the materials and equipment specified or described in the Bidding Documents, as supplemented by Addenda. Any assumptions regarding the possibility of post-Bid approvals of "or-equal" or substitution requests are made at Bidder's sole risk.

ARTICLE 12 – SUBCONTRACTORS, SUPPLIERS, AND OTHERS

12.01 In addition to any identification of Subcontractors, Suppliers, individuals, or entities required to be submitted to Owner by the Supplementary Conditions (see third full paragraph below), Bidders shall include in their Bid a list of all subcontractors which the Bidder intends to use for each of the following categories of work:



1. Heating, ventilating, and air conditioning (Mechanical);
2. Plumbing;
3. Electrical;
4. General.

A contractor whose Bid is accepted shall not substitute any person as subcontractor in the place of the subcontractor listed in the original bid, except (i) if the listed subcontractor's bid is later determined by the contractor to be nonresponsive or nonresponsive or the listed subcontractor refuses to enter into a contract for the complete performance of the bid work, or (ii) with the approval of the awarding authority for good cause shown by the contractor. The terms, conditions, and requirements of each contract between Contractor and a subcontractor performing work under a subdivision or branch of work listed in this subsection shall incorporate by reference the terms, conditions, and requirements of the Contract between Contractor and Owner. Failure to include this list of subcontractors may cause a Bid to be rejected as nonresponsive by Owner.

If the Supplementary Conditions require the identity of certain Subcontractors, Suppliers, individuals, or entities to be submitted to Owner in advance of a specified date prior to the Effective Date of the Agreement, the apparent Successful Bidder, and any other Bidder so requested, shall within five days after Bid opening, submit to Owner a list of all such Subcontractors, Suppliers,

individuals, or entities proposed for those portions of the Work for which such identification is required. Such list shall be accompanied by an experience statement with pertinent information regarding similar projects and other evidence of qualification for each such Subcontractor, Supplier, individual, or entity if requested by Owner. If Owner or Engineer, after due investigation, has reasonable objection to any proposed Subcontractor, Supplier, individual, or entity, Owner may, before the Notice of Award is given, request apparent Successful Bidder to submit a substitute, without an increase in the Bid.

- 12.02 Subsequent to the submittal of the Bid, Owner may not require the Successful Bidder or Contractor to retain any Subcontractor, Supplier, or other individual or entity against which Contractor has reasonable objection.

NOTE(S) TO USER:

1. *The matter of Owner retaining the right to disapprove of or reject certain Subcontractors, Suppliers, individuals, or entities (including those who are to furnish the principal items of material and equipment) which apparent Successful Bidder proposes for the Work has not been approached uniformly nor with unanimous endorsement by various interested organizations. Prequalification of certain Subcontractors, Suppliers, individuals, or entities prior to the submission of Bids is one approach, but the effort, procedures, and intricacies involved require careful consideration, and prequalification may not be permitted on public works projects in some jurisdictions. Provisions dealing with this matter after the submittal of a Bid are contained in Paragraph 6.06 of the General Conditions. EJCDC believes that, as a general principle, Contractors should be entitled to retain Subcontractors, Suppliers, individuals, or entities of their own choosing, that occasions when Owner and Engineer will wish to either require use of specific Subcontractors, Suppliers, or personnel, or to disapprove or reject proposed or retained Subcontractors, Suppliers, or personnel will arise infrequently, and that the right to reject should be exercised only with appropriate supporting data. It is recognized, however, that there will be situations in which, because of the peculiarities of a given project, it will be important for Owner and Engineer to have the right to reject certain Subcontractors, Suppliers, individuals, or entities that are proposed for or have been retained for the Work.*
2. *Provisions dealing with the prequalification of Subcontractors, Suppliers, individuals, or entities prior to the opening of Bids should be set forth in Article 12, as should provisions dealing with Owner's right to disapprove between the time of the opening of Bids and the giving of the Notice of Award. Coordination of the language with Article 3 and Article 19 of these Instructions should not be overlooked. It is important to remember that Owner's right to reject will apply only to those Subcontractors, Suppliers, individuals, or entities whose identity is to be submitted to Owner as required by these Instructions; accordingly, unless a particular trade, manufacturer, etc., has been so singled out, the right to reject would not exist (except as generally provided in Paragraph 6.06 of the General Conditions). In the event Subcontractors, Suppliers, individuals, or entities are not required to be identified, it may be appropriate to delete some or all of Article 12.*
3. *Requiring the apparent Successful Bidder to retain a substitute Subcontractor, Supplier, individual, or entity that is acceptable to Owner and Engineer may*

have a serious effect on the Bid price first submitted, and there are various ways of dealing with the situation should it arise. EJCDC's suggested approach is set forth in the last sentence of Paragraph 12.03. Most owners favor this approach as being more equitable to contractors and for its tendency to produce a lower initial Bid.

Others may prefer an alternative approach that does not allow a price increase, because of legal constraints applicable to public works projects or because of the desire to hold firm the initial Bid even though this may result generally in higher Bids. This alternative may be accomplished by revising the last sentence of Paragraph 12.03 to state:

*"If Owner or Engineer, after due investigation, has reasonable objection to any proposed Subcontractor, Supplier, individual, or entity, Owner may, before the Notice of Award is given, request apparent Successful Bidder to submit an acceptable substitute, **without an increase in Bid price.**"*

In addition, under the alternative approach Owner and its advisors may conclude that it would be inequitable to claim a Bid security forfeiture, hence the second sentence of Paragraph 12.04 would be revised to state:

*"Declining to make requested substitutions will **not** constitute grounds for forfeiture of the Bid security of any Bidder."*

There are other sound ways to address these problems. The entire matter should be reviewed by Owner and Owner's legal counsel prior to finalizing these Instructions.

4. *Any restrictions or limitations on subcontracting should appear in SC 7.06, and cross-references to that location should appear here in Article 12.*
5. *Reference should be made to applicable Laws and Regulations with respect to Subcontractors, Suppliers, individuals or entities. Specific provisions may be required by Laws or Regulations, in which case Article 12 may require amending or deletion and replacement with the required language. Note also that Article 12 as written contemplates that Subcontractors and Suppliers required to be identified by apparent Successful Bidder prior to award of the Contract will be listed here in the Instructions. If these requirements instead will be established in the Supplementary Conditions, the Bid Form, or other location, such specific location should be noted here in Article 12.*

ARTICLE 13 – PREPARATION OF BID

13.01 The Bid Form is included with the Bidding Documents.

- A. All blanks on the Bid Form shall be completed in ink and the Bid Form signed in ink. Erasures or alterations shall be initialed in ink by the person signing the Bid Form.
- B. If the Bid Form expressly indicates that submitting pricing on a specific alternate item is optional, and Bidder elects to not furnish pricing for such optional alternate item, then Bidder may enter the words "No Bid" or "Not Applicable."

NOTE(S) TO USER:

Coordinate these paragraphs carefully with the Bid Form and edit as required.

- 13.02 A Bid by a corporation shall be executed in the corporate name by a corporate officer (whose title must appear under the signature), accompanied by evidence of authority to sign. The corporate address and state of incorporation shall be shown. The corporate seal shall be affixed and attested by the corporate secretary or an assistant corporate secretary.

NOTE(S) TO USER:

A corporate seal may be required in some jurisdictions. If so, add appropriate wording. The following is an example: "The corporate seal shall be affixed and attested by the corporate secretary or an assistant corporate secretary."

A Bid by a partnership shall be executed in the partnership name and signed by a partner (whose title must appear under the signature), accompanied by evidence of authority to sign. The official address of the partnership shall be shown.

- 13.03 A Bid by a limited liability company shall be executed in the name of the firm by a member or other authorized person and accompanied by evidence of authority to sign. The state of formation of the firm and the official address of the firm shall be shown.
- 13.04 A Bid by an individual shall show the Bidder's name and official address.
- 13.05 A Bid by a joint venture shall be executed by an authorized representative of each joint venturer in the manner indicated on the Bid Form. The official address of the joint venture shall be shown.
- 13.06 All names shall be printed in ink below the signatures.
- 13.07 The Bid shall contain an acknowledgment of receipt of all Addenda, the numbers of which shall be filled in on the Bid Form.
- 13.08 Postal and e-mail addresses and telephone number for communications regarding the Bid shall be shown.
- 13.09 The Bid shall contain evidence of Bidder's authority and qualification to do business in the state where the Project is located, or Bidder shall covenant in writing to obtain such authority and qualification prior to award of the Contract and attach such covenant to the Bid. Bidder's state contractor license number, if any, shall also be shown on the Bid Form.

NOTE(S) TO USER:

See Note to User 5, Paragraph 3.01.

ARTICLE 14 – BASIS OF BID

14.01 Lump Sum

- A. Bidders shall submit a Bid on a lump sum basis as set forth in the Bid Form.

[or]

14.01 Base Bid with Alternates

- A. Bidders shall submit a Bid on a lump sum basis for the base Bid and include a separate price for each alternate described in the Bidding Documents and as provided for in the Bid Form. The price for each alternate will be the amount added to or deleted from the base Bid if Owner selects the alternate.
- B. In the comparison of Bids, alternates will be applied in the same order of priority as listed in the Bid Form.

[or]

14.01 Sectional Bids

- A. Bidders may submit a Bid on any individual section or any combination of sections, as set forth in the Bid Form.
- B. Submission of a Bid on any section signifies Bidder's willingness to enter into a Contract for that section alone at the price offered.
- C. If Bidder submits Bids on individual sections and a Bid based on a combination of those sections, such combined Bid need not be the sum of the Bids on the individual sections.
- D. Bidders offering a Bid on one or more sections shall be capable of completing the Work covered by those sections within the time period stated in the Agreement.

[or]

14.01 Cost-Plus-Fee Bids

- A. Bidders shall submit a Bid on the Contractor's fee, which shall be in addition to compensation for Cost of the Work. Such fee shall be either (1) a fixed fee or (2) percentages of categories of costs, as set forth in the Bid Form.
- B. If the Contractor's fee, as set forth in the Bid Form, is to be based on percentages of categories of cost, Bidders shall enter a maximum amount limiting the total fee if required by the Bid Form to do so.
- C. Bidders shall submit a Bid on the Guaranteed Maximum Price, setting a maximum amount on the compensable Cost of the Work plus Contractor's fee, if required by the Bid Form to do so.

NOTE(S) TO USER:

1. *Paragraph 14.01 gives four frequently used alternatives for defining the basis and determination of Bid prices. The user should select one and delete the others. For a particular project, a unique, customized set or combination of paragraphs may be necessary, following the concept shown above; for example, sectional bids together with alternates. The user should carefully review Paragraph 14.01 and compare to the final Bid Form for clarity and consistency.*
2. *The fourth alternative above addresses bidding on cost-plus-fee contracts. See EJCDC® C-525, Agreement Between Owner and Contractor for Construction Contract (Cost-Plus). Such contracts are more frequently formed through a negotiation or proposal/selection process, but may in some cases be competitively bid. The Instruction above, the Bid comparison provisions of Paragraph 19.03 below, and Article 5 of the Bid Form all assume that the principal means of comparing cost-plus-fee bids will be the Guaranteed Maximum Price. An alternative to this would be to make a selection based on the Contractor's fee, either because no Guaranteed Maximum Price is to be included as part of the specific contract or bidding process, or because in a particular case the Contractor's fee is judged to be the more critical criterion for Contractor selection. The Instructions and Bid Form must be customized to accommodate a selection based on Contractor's fee.*

3. *Also note the importance of including the following paragraph, 14.02, when unit prices are part of the Bid. It is common for bid forms to be structured to require lump sum prices for specified portions of the Work, and unit prices for other Work items.*

14.02 Unit Price

- A. Bidders shall submit a Bid on a unit price basis for each item of Work listed in the unit price section of the Bid Form.
- B. The "Bid Price" (sometimes referred to as the extended price) for each unit price Bid item will be the product of the "Estimated Quantity" (which Owner or its representative has set forth in the Bid Form) for the item and the corresponding "Bid Unit Price" offered by the Bidder. The total of all unit price Bid items will be the sum of these "Bid Prices"; such total will be used by Owner for Bid comparison purposes. The final quantities and Contract Price will be determined in accordance with Paragraph 11.03 of the General Conditions.
- C. Discrepancies between the multiplication of units of Work and unit prices will be resolved in favor of the unit prices. Discrepancies between the indicated sum of any column of figures and the correct sum thereof will be resolved in favor of the correct sum.

NOTE(S) TO USER:

Some lettings may be based exclusively on unit prices. As noted following Paragraph 14.01 above, it is also common for bid forms to be structured to require lump sum prices for specified portions of the Work, and unit prices for other Work items. Unit prices on select items can also be used in combination with other pricing methods such as cost-plus-fee; see Article 5 of EJCDC® C-525, Agreement between Owner and Contractor for Construction Contract (Cost-Plus).

14.03 Allowances

- A. For cash allowances the Bid price shall include such amounts as the Bidder deems proper for Contractor's overhead, costs, profit, and other expenses on account of cash allowances, if any, named in the Contract Documents, in accordance with Paragraph 11.02.B of the General Conditions.

14.04 Price-Plus-Time Bids

- A. The Owner will consider the time of Substantial Completion commitment made by the Bidder in the comparison of Bids.
- B. Bidder shall designate the number of days required to achieve Substantial Completion of the Work and enter that number in the Bid Form as the total number of calendar days to substantially complete the Work.
- C. The total number of calendar days for Substantial Completion designated by Bidder shall be less than or equal to a maximum of [], but not less than the minimum of []. If Bidder purports to designate a time for Substantial Completion that is less than the allowed minimum, or greater than the allowed maximum, Owner will reject the Bid as nonresponsive.
- D. The Agreement as executed will contain the Substantial Completion time designated in Successful Bidder's Bid, and the Contractor will be assessed liquidated damages at the rate stated in the Agreement for failure to attain Substantial Completion within that time.
- E. [Bidder shall also designate the time in which it will achieve Milestones, and achieve readiness for final payment. Such time commitments shall be consistent with the "Time of

Substantial Completion” to which Bidder commits. The Agreement as executed will contain, as binding Contract Times, Successful Bidder’s time commitments regarding Milestones, as applicable, and readiness for final payment.]

NOTE(S) TO USER:

1. *Paragraph 14.04 should be used if Bidder is permitted to designate the Contract Times and it is therefore necessary to explain the manner in which differences in completion time will be compared in determining the Successful Bidder. In the more common situation in which the Contract Times are fixed by Owner (by setting them out in the Agreement that has been included in the Bidding Documents), delete Paragraph 14.04.*
2. *The primary purpose of this price-plus-time bidding procedure is to encourage the shortening of the construction duration. It is commonly referred to as A+B bidding. This procedure is beneficial to the Owner in situations in which it is advantageous for the Work to be completed early. The apparent low bidder is determined based on a monetary combination of the traditional Contract bid item(s) (A) and the time component (B) proposed by Bidder.*
3. *When price-plus-time (A+B) bidding is used, the date of completion in readiness for final payment should be linked in the Agreement to the date of Substantial Completion; typically Bidders should not be asked to separately designate such date of final completion. Similarly, establishing intermediate Milestones (or asking Bidders to designate times to achieve Milestones) may be difficult because of the uncertainty of the date required for Substantial Completion, pending receipt of the Bids. For these reasons, in most cases Paragraph 14.04.E will not be needed, and should be deleted.*
4. *Check that the jurisdiction of the project permits consideration of the time proposed by the Bidder when determining the lowest responsive bid.*
5. *Another means of encouraging early completion is to offer a monetary incentive (bonus) for early completion.*
6. *If no liquidated damages for late completion of the Work are specified, it will be necessary to specify an adjusting amount or formula for comparing bids and Paragraph 14.04.D modified accordingly.*
7. *Note that the Bidder may intend to achieve the reduced project duration resulting from this price-plus-time bidding procedure by accelerated work schedules. As such the Owner and Engineer may require increased personnel for testing and inspection as well as other resources to accommodate the accelerated schedule.*
8. *This bidding procedure is not appropriate for all contracts. Site access limitations, safety concerns, potential third party conflicts, trade-stacking worries, and scheduling complexities (including those associated with Milestones) may make it too risky to encourage contractors to strive for an early completion.*

ARTICLE 15 – SUBMITTAL OF BID

- 15.01 With each copy of the Bidding Documents, a Bidder is furnished one separate unbound copy of the Bid Form, and, if required, the Bid Bond Form. The unbound copy of the Bid Form is to be

completed and submitted with the Bid security and the other documents required to be submitted under the terms of Article 7 of the Bid Form.

NOTE(S) TO USER:

- 1. The language of Paragraph 15.01 may be modified to require submittal of a bound copy of the Bidding Documents intact with the Bid. This is not recommended by EJCDC, but may be required by Laws and Regulations.*
- 2. Some public and private owners allow for some form of electronic submittal of bids, or for preparation and submittal of bids on spreadsheets or in similar formats that allow bidders to process and manage entries, particularly unit prices, with speed and accuracy. Article 15 is an appropriate location for providing instructions regarding such submittals.*

- 15.02 A Bid shall be received no later than the date and time prescribed and at the place indicated in the advertisement or invitation to bid and shall be enclosed in a plainly marked package with the Project title (and, if applicable, the designated portion of the Project for which the Bid is submitted), the name and address of Bidder, and shall be accompanied by the Bid security and other required documents. If a Bid is sent by mail or other delivery system, the sealed envelope containing the Bid shall be enclosed in a separate package plainly marked on the outside with the notation "BID ENCLOSED." A mailed Bid shall be addressed to [REDACTED].
- 15.03 Bids received after the date and time prescribed for the opening of bids, or not submitted at the correct location or in the designated manner, will not be accepted and will be returned to the Bidder unopened.

NOTE(S) TO USER:

- 1. Bids are usually submitted to and opened at the Owner's office, and this is frequently different from the Issuing Office.*
- 2. Practices vary with respect to the documentation required to be submitted with Bids. It is usually necessary to supplement Article 15.*

ARTICLE 16 – MODIFICATION AND WITHDRAWAL OF BID

- 16.01 A Bid may be withdrawn by an appropriate document duly executed in the same manner that a Bid must be executed and delivered to the place where Bids are to be submitted prior to the date and time for the opening of Bids. Upon receipt of such notice, the unopened Bid will be returned to the Bidder.
- 16.02 If a Bidder wishes to modify its Bid prior to Bid opening, Bidder must withdraw its initial Bid in the manner specified in Paragraph 16.01 and submit a new Bid prior to the date and time for the opening of Bids.
- 16.03 A bid may be modified or withdrawn under the conditions set forth in N.C.G.S §143-129.1. Thereafter, if the Work is rebid, that Bidder will be disqualified from further bidding on the Work.

NOTE(S) TO USER:

- 1. Paragraph 16.02 allows Bidders who withdraw bids prior to opening to submit a second bid. This may not be permitted in all jurisdictions.*
- 2. Withdrawal of any Bid that is demonstrated to contain a substantial mistake is permitted under Paragraph 16.03. However, it is recognized that some Laws*

and Regulations or Owners' standards or policies may differ and that it may be necessary to modify or delete Paragraph 16.03.

ARTICLE 17 – OPENING OF BIDS

- 17.01 Bids will be opened at the time and place indicated in the advertisement or invitation to bid and, unless obviously non-responsive, read aloud publicly. An abstract of the amounts of the base Bids and major alternates, if any, will be made available to Bidders after the opening of Bids.

NOTE(S) TO USER:

Two paragraphs are provided, one for public opening and one for private opening.

ARTICLE 18 – BIDS TO REMAIN SUBJECT TO ACCEPTANCE

- 18.01 All Bids will remain subject to acceptance for the period of time stated in the Bid Form, but Owner may, in its sole discretion, release any Bid and return the Bid security prior to the end of this period.

NOTE(S) TO USER:

- 1. Provisions on the commencement of Contract Times appear in Paragraph 2.03 of the General Conditions. Note that the period of time during which Bids are to remain open and by which a Notice of Award is to be given are interrelated with the date when the Contract Times commence to run. The EJCDC suggested schedule of events between the opening of Bids and the starting of the Contract Times is discussed in the Commentary on the EJCDC Construction Documents, EJCDC® C-001, in the section commenting on Article 4 of the General Conditions. Any changes must be carefully coordinated among all of the Bidding Documents.*
- 2. In some cases it may be feasible to extend the time that a Bid remains subject to acceptance by mutual written agreement of Owner and one or more Bidders and their respective sureties. Note, however, that the time for performance and completion of the Work are material terms of the Contract, and an extension could create a conflict with those terms. In many instances it may be better practice to rebid the Work rather than issuing lengthy extensions of the time for acceptance of bids.*

ARTICLE 19 – EVALUATION OF BIDS AND AWARD OF CONTRACT

- 19.01 Owner reserves the right to reject any or all Bids, including without limitation, nonconforming, nonresponsive, unbalanced, or conditional Bids. Owner will reject the Bid of any Bidder that Owner finds, after reasonable inquiry and evaluation, to not be responsible. If Bidder purports to add terms or conditions to its Bid, takes exception to any provision of the Bidding Documents, or attempts to alter the contents of the Contract Documents for purposes of the Bid, then the Owner will reject the Bid as nonresponsive; provided that Owner also reserves the right to waive all minor informalities not involving price, time, or changes in the Work.
- 19.02 If Owner awards the contract for the Work, such award shall be to the responsible Bidder submitting the lowest responsive Bid. Award of a bid by the Owner's governing body represents a preliminary determination as to the qualification of the Bidder, but the Bidder understands and

agrees that no legally binding acceptance of Bidder's offer occurs until the Owner's governing body, or its designee, executes a formal contract with the Bidder.

NOTE(S) TO USER:

The statement in Paragraph 19.02 is the prevailing rule for competitively bid public projects, and is commonly used in private construction procurements as well. The clear, unequivocal statement of the basic rule for winning the award—that the contract will go to the qualified bidder submitting the low bid—will encourage participation, stimulate competitive pricing, and avoid bid disputes. If governing ordinances or statutes, or Owner preferences, require a different rule, then amend this paragraph accordingly.

19.03 Evaluation of Bids

- A. In evaluating Bids, Owner will consider whether or not the Bids comply with the prescribed requirements, and such alternates, unit prices, and other data, as may be requested in the Bid Form or prior to the Notice of Award.
- B. In the comparison of Bids, alternates will be applied in the same order of priority as listed in the Bid Form. To determine the Bid prices for purposes of comparison, Owner shall announce to all bidders a "Base Bid plus alternates" budget after receiving all Bids, but prior to opening them. For comparison purposes alternates will be accepted, following the order of priority established in the Bid Form, until doing so would cause the budget to be exceeded. After determination of the Successful Bidder based on this comparative process and on the responsiveness, responsibility, and other factors set forth in these Instructions, the award may be made to said Successful Bidder on its base Bid and any combination of its additive alternate Bids for which Owner determines funds will be available at the time of award.

[or]

- B. For determination of the apparent low Bidder(s) when sectional bids are submitted, Bids will be compared on the basis of the aggregate of the Bids for separate sections and the Bids for combined sections that result in the lowest total amount for all of the Work.

[or]

- B. For the determination of the apparent low Bidder when unit price bids are submitted, Bids will be compared on the basis of the total of the products of the estimated quantity of each item and unit price Bid for that item, together with any lump sum items.

[or]

- B. For the determination of the apparent low Bidder when cost-plus bids are submitted, Bids will be compared on the basis of the Guaranteed Maximum Price set forth by Bidder on the Bid Form.

NOTE(S) TO USER:

Paragraph 19.03.B provides alternative choices for comparison of bids. This must be carefully coordinated with the basis of Bid price set forth in Paragraph 14.03 above and in the Bid Form. With respect to cost-plus-fee contracts, see Note to User 2 following Paragraph 14.01 above.

NOTE(S) TO USER:

The following should be included in these Instructions only when Paragraph 14.04, establishing a process for Bidders to commit to a shortened time for attaining Substantial Completion, will be used (price-plus-time or “A+B” bidding).

- C. Bid prices will be compared after adjusting for differences in time of Substantial Completion (total number of calendar days to substantially complete the Work) designated by Bidders. The adjusting amount will be determined at the rate set forth in the Agreement for liquidated damages for failing to achieve Substantial Completion, or such other amount that Owner has designated in the Bid Form.
 - 1. The method for calculating the lowest bid for comparison will be the summation of the Bid price shown in the Bid Form plus the product of the Bidder-specified time of Substantial Completion (in calendar days) times the rate for liquidated damages [**or other Owner-designated daily rate**] (in dollars per day).
 - 2. This procedure is only used to determine the lowest bid for comparison and contractor selection purposes. The Contract Price for compensation and payment purposes remains the Bid price shown in the Bid Form.

NOTE(S) TO USER:

- 1. *The monetary value of each calendar day to complete the Work will typically be the liquidated damages amount set forth in the Agreement for failing to achieve Substantial Completion. Thus note the importance of setting and documenting the liquidated damages for late completion to a realistic value accurately reflecting the daily effect of delays to the project or benefits of earlier completion. In appropriate cases (for example, if there are no liquidated damages stated) an alternative per-day amount can be used, such as “Monetary Value for each Calendar Day.” Regardless of the label, Owner or its representative (drafter) should specify the per-day amount in the Bid Form before distribution to Bidders.*
 - 2. *The required payment and performance bonds will be based on the total construction cost shown in the Bid Form—the Successful Bidder’s Bid Price including any accepted alternates.*
 - 3. *This provision must be closely coordinated with the corresponding content of the Bid Form and the Agreement.*
- 19.04 In evaluating whether a Bidder is responsible, Owner will consider the qualifications of the Bidder and may consider the qualifications and experience of Subcontractors and Suppliers proposed for those portions of the Work for which the identity of Subcontractors and Suppliers must be submitted as provided in the Bidding Documents.
- 19.05 Owner may conduct such investigations as Owner deems necessary to establish the responsibility, qualifications, and financial ability of Bidders and any proposed Subcontractors or Suppliers.

NOTE(S) TO USER:

- 1. *Certain rights of Owner stated in Article 19, such as those regarding waiver of informalities in submitted Bids, or pertaining to qualifications and experience of Subcontractors, Suppliers, individuals and entities, may not be available in public bidding.*

2. *Note particularly the relationship of Paragraph 19.05 to Notes to User accompanying Article 12.*
3. *Many factors not included in Article 19 as written may be important to consider in evaluating Bids for any particular project, and it will often be necessary to amend or supplement Article 19. When factors in addition to price will be significant in evaluating Bids, the manner in which evaluations will be made should be fully described in Article 19.*
4. *In the event major equipment is included in the Work, it may be appropriate to consider differences in operating efficiency and service support facilities. Relevant factors may include, for example, Owner-required inventory of spare parts; building design changes that may be required to accommodate the proposed equipment; experience and performance record of the Supplier or the manufacturer; and maintenance and frequency of inspections required to assure reliable performance of the equipment. Equipment-related bidding criteria may be stated in a manner similar to the following example:*

“The evaluation of Supplier’s or manufacturer’s data on [] submitted with the Bid, or submitted upon request prior to the Notice of Award, will include consideration of the efficiency and related operating expense during the anticipated useful life of the equipment and the availability of service support facilities. Costs related to efficiency will be calculated as follows:

Anticipated useful life 15 years.

Annual service 4,000 hours.

Average energy costs \$0.08/kwh.

Capitalization at 10% interest.”
5. *Note the time within which Notice of Award may be issued is governed by the need to allow the Successful Bidder sufficient time in which to sign the Agreement—see Article 21 below.*
6. *EJCDC® C-510, Notice of Award, is recommended for use in awarding the Contract.*

ARTICLE 20 – BONDS AND INSURANCE

- 20.01 Article 5 of the General Conditions, as may be modified by the Supplementary Conditions, sets forth Owner’s requirements as to performance and payment bonds and insurance. When the Successful Bidder delivers the Agreement (executed by Successful Bidder) to Owner, it shall be accompanied by required bonds and insurance documentation.

NOTE(S) TO USER:

In the event bonds are not required, it would be appropriate to modify Paragraph 20.01. For recommended Performance and Payment Bond Forms, see EJCDC® C-610 and C-615.

ARTICLE 21 – SIGNING OF AGREEMENT

21.01 When Owner issues a Notice of Award to the Successful Bidder, it shall be accompanied by the unexecuted counterparts of the Agreement along with the other Contract Documents as identified in the Agreement. Within ten (10) days thereafter, Successful Bidder shall execute and deliver the required number of counterparts of the Agreement (and any bonds and insurance documentation required to be delivered by the Contract Documents) to Owner. Thereafter, Owner shall deliver one fully executed counterpart of the Agreement to Successful Bidder, together with printed and electronic copies of the Contract Documents as stated in Paragraph 2.02 of the General Conditions.

NOTE(S) TO USER:

1. *Practices vary widely, and it is recognized that the procedures described in Article 21 may often require amending. See Commentary on the 2013 EJCDC Construction Documents, EJCDC® C-001 (section commenting on Article 4 of the General Conditions) for discussion of EJCDC's suggested scheduling of events prior to starting of the Contract Times.*
2. *It is customary for Owner to fill in the date on the signature page of the Agreement in order to indicate when it is to become effective (the Effective Date of the Contract) so that the required bonds may be properly dated.*

ADDITIONAL ARTICLES

Articles 1 through 21 of these Suggested Instructions to Bidders for Construction Contracts, when used as intended with the other EJCDC construction related documents, address the basic subject matter required for Instructions to Bidders on most projects. However, it is often necessary to supplement the Instructions to Bidders with additional articles addressing:

1. prevailing wage rates statements required by Laws or Regulations, funding agencies, or appropriate reference thereto;
2. purchasing by Owner and subsequent assignment of procurement contracts to Contractor;
3. Owner's special tax exemption; or
4. intended use of partnering.

Examples of some supplementary articles are presented in Articles 22 and 23.

ARTICLE 22 – MINORITY PARTICIPATION

Bidders shall comply with the Guidelines for Recruitment and Selection of Minority Businesses for Participation in Union County Construction Contracts, attached and incorporated into the Contract Documents. Forms referenced below are included in the Bidding Documents.

Pursuant to N.C.G.S. §143-128.2(c), the Bidder shall identify on its Bid the minority businesses that it will use on the Project and the total dollar value of the bid that will be performed by the minority businesses and list the good faith efforts (Affidavit A) made to solicit participation. Union County does not certify minority businesses. In order to qualify as a minority business and count towards the 10 % participation goal, the business must be certified as a historically underutilized business ("HUB") by the North Carolina Department of Administration Office for Historically Underutilized Businesses.

Note: A contractor that performs all of the work with its own workforce may submit an Affidavit (B) to that effect in lieu of the Affidavit (A) required above.

After the Bid opening, Owner will consider all bids and alternates and determine the lowest responsible, responsive bidder. Upon notification of being the apparent low Bidder, the Bidder shall then file within 72 hours of the notification of being the apparent lowest bidder, the following:

An Affidavit (C) that includes a description of the portion of work to be executed by minority businesses, expressed as a percentage of the total contract price, which is equal to or more than the 10% goal established. This affidavit shall give rise to the presumption that the Bidder has made the required good faith effort;

Or

An Affidavit (D) of its good faith effort to meet the goal. The document must include evidence of all good faith efforts that were implemented, including any advertisements, solicitations and other specific actions demonstrating recruitment and selection of minority businesses for participation in the contract.

Note: Bidders must submit with their bid the *Identification of Minority Business Participation* list and *Affidavit A* or *Affidavit B* as applicable. Failure to file a required affidavit or documentation with the Bid or after being notified apparent low Bidder may be grounds for rejection of the Bid.



License Agreement

Before you use this EJCDC document:

1. **Read this License Agreement in its entirety.** As purchaser, you agree to comply with and are bound by the License Agreement's terms, conditions, and instructions when you use the attached EJCDC document. **Commencement of use of the attached document indicates your acceptance of these terms, conditions, and instructions.** If you do not agree to them, you should promptly return the materials to the vendor.
2. **This License Agreement applies to the attached document only. Other licensing terms and instructions may apply to other EJCDC documents.**
3. The Engineers Joint Contract Documents Committee ("EJCDC") provides **EJCDC Design and Construction Related Documents (including but not limited to the EJCDC document that is attached, and all other documents in the EJCDC Construction Series, Engineering Series, Design-Build Series, Remediation Series, Procurement Series, and Narrative Series)** and licenses their use worldwide. You assume sole responsibility for the selection of specific documents or portions thereof to achieve your intended results, and for the installation, use, and results obtained from **EJCDC Design and Construction Related Documents**.
4. You acknowledge that you understand that the text of the **EJCDC Design and Construction Related Documents** has important legal consequences and that consultation with an attorney is recommended with respect to use or modification of the text. You further acknowledge that EJCDC documents are protected by the copyright laws of the United States.
5. Make sure that you have the correct word processing software for the attached EJCDC document, which is distributed in Microsoft Word (.doc) format.
6. EJCDC allows the end user wide discretion in using and editing the attached document, subject to the provisions of the License Agreement. You are advised, however, that EJCDC documents contain numeric and other cross-references, and that changes to one part of the document may affect other parts. It is solely your responsibility to assure the adequacy and consistency of the final document for your purposes.

How to Use This Document:

1. Although EJCDC has made reasonable efforts to achieve uniformity of formatting, some document controls (e.g.,

bold, underline, font size, indentation, numbering, pagination, table of contents) may be affected by software versioning and translators, user settings, changes during editing, and other factors, and may require user intervention to restore intended format and appearance.

2. The attached document is intended to be revised and modified to meet the project-specific needs of each use or application of the document. For the attached EJCDC document, it is **not** necessary to show changes to the text, through "Track Changes," redline/strikeout, highlighting, or other means. Users may choose to retain the attribution to EJCDC and its supporting organizations, such as document numbers, footers, and logos; or the user may delete these items, at user's option. Both approaches are permitted. In other situations, the user may use only selected clauses from the document (for example, for inclusion in a different contract document). This is a permitted use. In all cases, however, the user must include one of the copyright notices set out in the License Agreement below.
3. The attached EJCDC document may contain "Notes to User," bracketed comments, or prompts that provide instructions for filling in project-specific information, selecting the appropriate clause from a list of options, or making additions or deletions, or that give background information regarding a particular provision. The user may (and in most cases should) delete these notes, comments, and prompts during the drafting process.
4. The License Agreement typically is removed when a document is being prepared for use on a specific project. The terms of the License Agreement remain in effect regardless of whether it has been removed or remains attached to the document.
5. When a document is being prepared for use on a specific project, the user has the option of removing the EJCDC front cover page, and the "inside front cover page" containing specific information regarding the EJCDC sponsoring organizations.

Limited License:

As purchaser, you have a limited nonexclusive license to:

1. Use the attached EJCDC document on any number of machines owned, leased, or rented by your company or organization.

2. Use the attached EJCDC document for bona fide contractual and project purposes. Such purposes expressly include controlled distribution to bona fide bidders and proposers, either through direct transmittal in printed or electronic format or posting on a website or other electronic distribution point to which access is limited to bona fide bidders and proposers or others having direct interest in the contract or project.
3. Copy the attached EJCDC document into any machine-readable or printed form for backup or modification purposes in support of your use of the document.

You further agree:

1. To comply with all terms, conditions, and instructions in this License Agreement.
2. That all proprietary and intellectual property rights in the attached EJCDC document and all other **EJCDC Design and Construction Related Documents** are and shall remain the property of EJCDC and its sponsoring organizations.
3. To include the appropriate EJCDC copyright notice (selected from the versions below) on any copy, modified or finalized version, or portion of the attached EJCDC document. For this document, at a minimum one of the following EJCDC copyright notices must appear in a prominent location:

If revisions are minimal, then use the copyright that is already stated in the published document:

- Copyright © [EJCDC document date] National Society of Professional Engineers, American Council of Engineering Companies, and American Society of Civil Engineers. All rights reserved.

If revisions are extensive, or if only portions of the EJCDC document have been used, then use the following copyright notice:

- **This document is a MODIFIED version of EJCDC® Z-xxx, Copyright © 20xx by the National Society of Professional Engineers, American Society of Civil Engineers, and American Council of Engineering Companies, or is based in part on excerpts from EJCDC documents. Those portions of the text that originated in published EJCDC documents remain subject to the copyright.**
4. To not use, copy, modify, or transfer the attached EJCDC document or any other **EJCDC Design and Construction Related Documents**, or any copy, modification or merged portion, in whole or in part, except as expressly provided for in this license. Reproduction of the attached EJCDC document, or any other **EJCDC Design and Construction Related Document**, in printed or machine-readable format for resale, and any resale of this document in any format, are expressly prohibited. **Making the attached EJCDC**

document or any other EJCDC Design and Construction Related Document, in whole or in part, available or accessible on an uncontrolled, public-access website or other uncontrolled electronic distribution point—in any format whatever, whether with or without watermarks, as a Microsoft Word document or in portable document format (PDF)—is expressly prohibited.

5. As an EJCDC limited licensee you may seek advance written permission from the EJCDC Copyright Administrator to use the attached EJCDC document for educational purposes, subject to terms and conditions to be established by the Copyright Administrator for the specific educational use.

Term:

This license is effective for three years after date of purchase, or six years after the last day of the year of issuance for the attached document (shown in the copyright notice), whichever occurs later, and shall terminate at that time, unless earlier terminated as provided herein, or unless EJCDC extends the term of this license to you, in writing, or publishes on the ejcdc.org website or the websites of the National Society of Professional Engineers, American Council of Engineering Companies, and American Society of Civil Engineers, an applicable extension of the term of license for a certain period of time for bona fide contractual and project or other authorized uses. You agree upon termination to destroy the attached **EJCDC Design and Construction Related Document** along with all copies, modifications and merged portions in any form (except those copies already in actual project or contract use, or maintained in files or records of completed projects).

EJCDC reserves the right during the term of this agreement to provide access to the purchased document through alternative means, based on improvements or changes in technology, or to transition the document to secure document platforms or other formats, while maintaining user's access privileges.

EJCDC from time to time publishes new, updated editions of the **EJCDC Design and Construction Related Documents**. EJCDC highly recommends the use of the most current editions of its documents. EJCDC may, at its sole discretion, withdraw from authorized use any document that has been subsequently updated and for which the license has expired.

You may terminate the license at any time by destroying the attached EJCDC document together with all copies, modifications and merged portions in any form (except those copies already in actual project or contract use, or maintained in files or records of completed projects). It will also terminate upon conditions set forth elsewhere in this License Agreement or if you fail to comply with any term or condition of this License Agreement.

Limited Warranty:

If EJCDC has distributed this document on a compact disc, then EJCDC warrants the CD on which this document is furnished to be free from physical defects in materials and workmanship

under normal use for a period of ninety (90) days from the date of delivery to you as evidenced by a copy of your receipt.

There is no other warranty of any kind, either express or implied, including, but not limited to the implied warranties of merchantability and fitness for a particular purpose. Some states do not allow the exclusion of implied warranties, so the above exclusion may not apply to you. You may also have other rights which vary from state to state.

EJCDC does not warrant that the functions contained in **EJCDC Design and Construction Related Documents** will meet your requirements or that the operation of **EJCDC Design and Construction Related Documents** will be uninterrupted or error free.

Limitations of Remedies:

EJCDC's entire liability and your exclusive remedy shall be:

1. the replacement of the CD (if any) distributed by EJCDC, containing this document, provided such CD does not meet EJCDC's "Limited Warranty" and is returned to EJCDC's selling agent with a copy of your receipt, or
2. if EJCDC's selling agent is unable to deliver a replacement CD which is free of defects in materials and workmanship, you may terminate this Agreement by returning EJCDC Document and your money will be refunded.

As purchaser, you assume full responsibility for determining the suitability of this document to your purposes, and for the application and use of this document for contractual or project purposes. To the fullest extent permitted by law, in no event will EJCDC, its sponsoring organizations, its committee members, attorneys, consultants, authorized vendors, or advisors, or their respective staff members, employees, agents, or contractors, be liable to you or any other party for any damages, including any lost profits, lost savings, contractual liabilities, disappointed commercial expectations, economic loss, or other direct, incidental, or consequential damages arising out of the content, unenforceability, insufficiency, inadequacy, use or inability to use the attached EJCDC document or any other **EJCDC Design and Construction Related Documents**, even if EJCDC has been advised of the possibility of such damages, or for any claim by any other party.

Some states do not allow the limitation or exclusion of liability for incidental or consequential damages, so portions of the above limitation or exclusion may not apply to you.

General:

You may not sublicense, assign, or transfer this license except as expressly provided in this License Agreement. Any attempt otherwise to sublicense, assign, or transfer any of the rights, duties, or obligations hereunder is void. **If you transfer or purport to transfer such rights, duties, or obligations to another party, your license is automatically terminated.**

This License Agreement shall be governed by the laws of the State of Virginia. If you have any questions concerning this

License Agreement, or any requests or inquiries regarding the EJCDC copyright, you may contact EJCDC by writing to:

EJCDC Copyright Administrator
c/o National Society of Professional Engineers
1420 King Street
Alexandria, VA 22314
Phone: (703) 684-2845
Fax: (703) 836-4875
e-mail: aschwartz@nspe.org

You acknowledge that you have read this License Agreement, understand it and agree to be bound by its terms and conditions. You further agree that it is the complete and exclusive statement of the License Agreement and supersedes any proposal or prior agreement, oral or written, and any other communications between us relating to the subject matter of this License Agreement.

Information regarding the content of the attached EJCDC document and other **EJCDC Design and Construction Related Documents** may be obtained at ejcdc.org or from the following EJCDC sponsoring organizations:

National Society of Professional Engineers
1420 King Street, Alexandria, VA 22314-2794
(703) 684-2882
www.nspe.org

American Council of Engineering Companies
1015 15th Street N.W., Washington, D.C. 20005
(202) 347-7474
www.acec.org

American Society of Civil Engineers
1801 Alexander Bell Drive, Reston, VA 20191-4400
(800) 548-2723
www.asce.org

This document has important legal consequences; consultation with an attorney is encouraged with respect to its use or modification. This document should be adapted to the particular circumstances of the contemplated Project and the controlling Laws and Regulations.

BID FORM FOR CONSTRUCTION CONTRACTS

Prepared by



Issued and Published Jointly by



Copyright © 2013:

National Society of Professional Engineers
1420 King Street, Alexandria, VA 22314-2794
(703) 684-2882
www.nspe.org

American Council of Engineering Companies
1015 15th Street N.W., Washington, DC 20005
(202) 347-7474
www.acec.org

American Society of Civil Engineers
1801 Alexander Bell Drive, Reston, VA 20191-4400
(800) 548-2723
www.asce.org

The copyright for this EJCDC document is owned jointly by the three sponsoring organizations listed above. The National Society of Professional Engineers is the Copyright Administrator for the EJCDC documents; please direct all inquiries regarding EJCDC copyrights to NSPE.

NOTE: EJCDC publications may be purchased at www.ejcdc.org, or from any of the sponsoring organizations above.

INTRODUCTION

This Bid Form for Construction Contracts (“Bid Form”) has been prepared for use with the Suggested Instructions to Bidders for Construction Contracts (“Instructions”) (EJCDC® C-200, 2013 Edition); the Agreement between Owner and Contractor for Construction Contract (“Agreement”) (EJCDC® C-520, Stipulated Sum, or C-525, Cost-Plus, 2013 Editions); and the Standard General Conditions of the Construction Contract (“General Conditions”) (EJCDC® C-700, 2013 Edition). Their provisions are interrelated, and a change in one may necessitate a change in the others. See also the Guide to the Preparation of Supplementary Conditions (EJCDC® C-800, 2013 Edition) and the Commentary on the 2013 EJCDC Construction Documents (EJCDC® C-001, 2013 Edition).

The Bid Form assumes a competitive bidding process and the use of a Project Manual that contains the following documentary information for a construction project:

- Bidding Requirements, which include the Advertisement or invitation to bid, the Instructions to Bidders, the Bid Form that is suggested or prescribed, all of which provide information and guidance for all Bidders, and Bid Form supplements (if any) such as Bid Bond Form and Qualifications Statement; and,
- Contract Documents, which include the Agreement, performance and payment bonds, the General Conditions, the Supplementary Conditions, the Drawings, and the Specifications. (Note also that the Supplementary Conditions and other Contract Documents may refer to other documents that are provided to or made available to Bidders for reference purposes, but which are not Contract Documents.)

Together, the Bidding Requirements and the Contract Documents are referred to as the Bidding Documents. (The terms “Bidding Documents,” “Bidding Requirements,” and “Contract Documents” are defined in Article 1 of the General Conditions.) The Bidding Requirements are not Contract Documents because much of their substance pertains to the relationships prior to the award of the Contract, and has little effect or impact thereafter. Many contracts are awarded without even going through a bidding process, and thus have no Bidding Requirements, illustrating that the bidding items are typically superfluous to the formation of a binding and comprehensive construction contract.

The Bid Form itself ordinarily should not be included as one of the Contract Documents. In most cases the pricing information contained in the Bid Form is transferred into the Agreement. However, there are situations where, to avoid errors incident to rekeying, it may prove wise to attach the Bid Form (or a reproduced copy of it) as an exhibit to the Agreement. The likelihood of such errors increases with many unit-price bid items. The Bid Form should not contain basic contractual provisions since it is only an offer to perform the Work as required by and in accordance with the Contract Documents.

Suggested provisions are accompanied by “Notes to User” and bracketed notes and prompts to assist in preparing the Bid Form prior to distribution to prospective Bidders. The provisions have been coordinated with the other forms produced by EJCDC. Much of the language should be usable on most projects, but modifications and additional provisions often will be necessary. When modifying the suggested language or writing additional provisions, the user must check the other documents thoroughly for conflicts and coordination of terms, and make appropriate revisions in all affected documents.

All parties involved in a construction project benefit significantly from a standardized approach in the location of subject matter throughout the documents. Experience confirms the danger of addressing the same subject matter in more than one location; doing so frequently leads to confusion and unanticipated legal consequences. When preparing documents for a construction project, careful attention should be given to the guidance provided in EJCDC® N-122/AIA® A521, Uniform Location of Subject Matter (2012

Edition), available at no charge from the EJCDC website, www.ejcdc.org, and from the websites of EJCDC's sponsoring organizations.

If CSI's MasterFormat™ is being used for the Project Manual, consult MasterFormat™ for the appropriate document number and number the pages accordingly.

Instructions and restrictions regarding the use of this document are set out in the License Agreement that accompanied the document at the time of purchase. To prepare this document for use on a specific project, (1) remove the cover pages and this Introduction, (2) fill in Project-specific information and make revisions to the document, following the guidance in the Notes to Users and bracketed notes and prompts, and the advice of legal counsel, and (3) delete the Notes to Users and bracketed notes and prompts.

BID FORM

Union County Landfill Expansion IFB 2026-005

NOTE(S) TO USER:

1. *Refer to Article 1 of the General Conditions for definition of the term "Project." If applicable, also indicate designated portion of Project for which Bid is submitted.*
2. *Contract identification, including title, number, and date, that appears in the other Bidding Documents is to be included in above identification.*

TABLE OF CONTENTS

	Page
ARTICLE 1 – Bid Recipient	1
ARTICLE 2 – Bidder’s Acknowledgements.....	1
ARTICLE 3 – Bidder’s Representations	2
ARTICLE 4 – Bidder’s Certification.....	3
ARTICLE 5 – Basis of Bid	4
ARTICLE 6 – Time of Completion.....	10
ARTICLE 7 – Attachments to this Bid.....	11
ARTICLE 8 – Defined Terms.....	12
ARTICLE 9 – Bid Submittal.....	13

ARTICLE 1 – BID RECIPIENT

- 1.01 This Bid is submitted to:

UNION COUNTY
500 N. Main Street
Monroe, NC 28112

- 1.02 The undersigned Bidder proposes and agrees, if this Bid is accepted, to enter into an Agreement with Owner in the form included in the Bidding Documents to perform all Work as specified or indicated in the Bidding Documents for the prices and within the times indicated in this Bid and in accordance with the other terms and conditions of the Bidding Documents.

NOTE(S) TO USER:

The party to which the Bid is submitted should be the specific entity that will enter into the Agreement with the Successful Bidder.

ARTICLE 2 – BIDDER’S ACKNOWLEDGEMENTS

- 2.01 Bidder accepts all of the terms and conditions of the Instructions to Bidders, including without limitation those dealing with the disposition of Bid security. This Bid will remain subject to acceptance for 60 days after the Bid opening, or for such longer period of time that Bidder may agree to in writing upon request of Owner.

NOTE(S) TO USER:

- 1. Bid acceptance periods may vary, particularly if funding agency reviews and approvals are required.*
- 2. Bid acceptance periods should be coordinated with Paragraph 2.03 of the General Conditions. See Commentary on the 2013 EJCDC Construction Documents, EJCDC® C-001 (section commenting on Article 4 of the General Conditions) for discussion.*
- 3. Bid acceptance periods may also be set by statute.*
- 4. When the Contractor is required to accept assignment of a procurement contract, previously entered into by the Owner (as “Buyer”) with a supplier or manufacturer (as “Seller”) for the direct purchase of goods and special services, insert at this location in the Bid Form language regarding the assignment. For model language, refer to EJCDC® P-200, Notes to User at Article 23. See also the “Stipulated Lump Sum” for this assignment, in Article 5 below. For additional information on assigning a procurement contract, refer to EJCDC® P-001, Commentary on the EJCDC Procurement Documents.*

ARTICLE 3 – BIDDER’S REPRESENTATIONS

3.01 In submitting this Bid, Bidder represents that:

- A. Bidder has examined and carefully studied the Bidding Documents, and any data and reference items identified in the Bidding Documents, and hereby acknowledges receipt of the following Addenda:

<u>Addendum No.</u>	<u>Addendum, Date</u>
_____	_____
_____	_____
_____	_____
_____	_____

NOTE(S) TO USER:

It is important that all Bidders receive and acknowledge receipt of all Addenda. To be certain that Bidders receive all Addenda, use of methods providing proof of receipt, such as courier services or return receipt requested mail, is suggested. (If fax or e-mail is used, Bidders should be requested to confirm receipt by the same means.) Ensure any specific requirement of the Owner concerning issuing and receipt of Addenda are reviewed and addressed. Note also the definition of Addenda in Article 1 of General Conditions, indicating that by definition Addenda are documents issued prior to the opening of Bids.

- B. Bidder has visited the Site, conducted a thorough, alert visual examination of the Site and adjacent areas, and become familiar with and satisfied itself as to the general, local, and Site conditions that may affect cost, progress, and performance of the Work.

NOTE(S) TO USER:

It is important for Bidder to visit the Site before submitting its Bid and to conduct an alert, heads-up, eyes-open examination of the area and conditions under which the Work is to be performed. See Instructions, Article 4.

- C. Bidder is familiar with and has satisfied itself as to all Laws and Regulations that may affect cost, progress, and performance of the Work.
- D. Bidder has carefully studied all: (1) reports of explorations and tests of subsurface conditions at or adjacent to the Site and all drawings of physical conditions relating to existing surface or subsurface structures at the Site that have been identified in the Supplementary Conditions, especially with respect to Technical Data in such reports and drawings, and (2) reports and drawings relating to Hazardous Environmental Conditions, if any, at or adjacent to the Site that have been identified in the Supplementary Conditions, especially with respect to Technical Data in such reports and drawings.

NOTE(S) TO USER:

If there are no reports or drawings of the type referred to in this representation, either modify or delete the paragraph.

- E. Bidder has considered the information known to Bidder itself; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Bidding Documents; and any Site-related reports and

drawings identified in the Bidding Documents, with respect to the effect of such information, observations, and documents on (1) the cost, progress, and performance of the Work; (2) the means, methods, techniques, sequences, and procedures of construction to be employed by Bidder; and (3) Bidder's safety precautions and programs.

- F. Bidder agrees, based on the information and observations referred to in the preceding paragraph, that no further examinations, investigations, explorations, tests, studies, or data are necessary for the determination of this Bid for performance of the Work at the price bid and within the times required, and in accordance with the other terms and conditions of the Bidding Documents.
- G. Bidder is aware of the general nature of work to be performed by Owner and others at the Site that relates to the Work as indicated in the Bidding Documents.
- H. Bidder has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Bidder has discovered in the Bidding Documents, and confirms that the written resolution thereof by Engineer is acceptable to Bidder.
- I. The Bidding Documents are generally sufficient to indicate and convey understanding of all terms and conditions for the performance and furnishing of the Work.
- J. The submission of this Bid constitutes an incontrovertible representation by Bidder that Bidder has complied with every requirement of this Article, and that without exception the Bid and all prices in the Bid are premised upon performing and furnishing the Work required by the Bidding Documents.

NOTE(S) TO USER:

If any changes to these representations are made in the Bid Form, corresponding changes may need to be made in both the Instructions to Bidders and the Agreement.

ARTICLE 4 – BIDDER'S CERTIFICATION

4.01 Bidder certifies that:

- A. This Bid is genuine and not made in the interest of or on behalf of any undisclosed individual or entity and is not submitted in conformity with any collusive agreement or rules of any group, association, organization, or corporation;
- B. Bidder has not directly or indirectly induced or solicited any other Bidder to submit a false or sham Bid;
- C. Bidder has not solicited or induced any individual or entity to refrain from bidding; and
- D. Bidder has not engaged in corrupt, fraudulent, collusive, or coercive practices in competing for the Contract. For the purposes of this Paragraph 4.01.D:
 - 1. "corrupt practice" means the offering, giving, receiving, or soliciting of any thing of value likely to influence the action of a public official in the bidding process;
 - 2. "fraudulent practice" means an intentional misrepresentation of facts made (a) to influence the bidding process to the detriment of Owner, (b) to establish bid prices at artificial non-competitive levels, or (c) to deprive Owner of the benefits of free and open competition;

3. “collusive practice” means a scheme or arrangement between two or more Bidders, with or without the knowledge of Owner, a purpose of which is to establish bid prices at artificial, non-competitive levels; and
4. “coercive practice” means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the bidding process or affect the execution of the Contract.

NOTE(S) TO USER:

For public work, relevant requirements of Laws and Regulations in the jurisdiction where Work is to be performed should be coordinated with the language of this paragraph.

ARTICLE 5 – BASIS OF BID

- 5.01 Bidder will complete the Work in accordance with the Contract Documents for the following price(s):

NOTE(S) TO USER:

1. *Note that language is provided for lump sum (three suggested formats), lump sum allowances (two formats), a stipulated lump sum for an assigned contract, unit price Bids, a price-plus-time bidding option, and cost-plus-fee (two suggested fee formats). The contract pricing may include various combinations of these methods. Inapplicable methods and language should be deleted.*
2. *Provide sufficient space and arrange format so that Bidders will have uniform understanding of how to submit prices.*

[SUGGESTED FORMATS FOR LUMP SUM BID]

Lump Sum Bid Price	\$
--------------------	----

[or]

Lump Sum Bid Price for Base Bid	\$
Alternate A [Add] [Deduct]	\$
Alternate B [Add] [Deduct]	\$

[or]

Lump Sum Bid Price for Section I only	\$
Lump Sum Bid Price for Section II only	\$
Lump Sum Bid Price for Sections I and II	\$

[and (if applicable)]

NOTE(S) TO USER:

Drafter should fill in the amounts below for allowances prior to distribution of Bid Form

Lump Sum for Cash Allowances	\$
------------------------------	----

All specified cash allowances are included in the price(s) set forth above, and have been computed in accordance with Paragraph 11.02 of the General Conditions.

[or] [and]

Lump Sum Contingency Allowance	\$
--------------------------------	----

NOTE(S) TO USER:

1. *If alternate Bids are requested, it is preferable that they be all “deductive” or all “additive.” Alternates should be clearly specified in Division 01 of the Specifications (General Requirements). The itemization in the Bid Form should be clearly identifiable and carefully follow the Division 01 presentation. The Instructions should contain appropriate guidance for preparing the Bid. Alternates should be accepted in a particular order, which should be explained in the Instructions. The alternates should be listed here in the Bid Form in order of priority.*
2. *To minimize the risk of error and to ensure objectivity in comparison of Bids, a single lump sum Bid price for a complete project or section is preferable to a total price determined by the sum of a list of individual lump sum items.*
3. *Allowances are addressed at Paragraph 11.02 of the General Conditions. Cash allowances, if such are to be used, should be clearly specified in Division 01. Language such as the following is typically used: "Allow the lump sum of [\$] for the supply and installation of: [1. Amount and description of Cash Allowance 1] [2. Amount and description of Cash Allowance 2]." Owner or its representative (“drafter”) should add the cash allowances and as noted above enter the sum in the Bid Form prior to making the Bid Form available to prospective Bidders. Similarly, the Owner establishes the contingency allowance, if any, and drafter should enter it in the location indicated. If the contingency is to apply only to certain categories of the Work, or if there are to be multiple contingency allowances, revise as needed.*
4. *The following provisions apply only when a separate contract entered into by the Owner for the Project will be assigned to the Contractor—in such case, include the provisions as part of this Article 5 of the Bid Form:*
 - 4a. *Below is a suggested format for incorporating into the Bid Form language in support of the assignment of a procurement contract for the purchase by Owner (as “Buyer”) of goods and special services from an equipment manufacturer (as “Seller”), where the Owner intends to assign the procurement contract to the Contractor.*
 - 4b. *When the Project includes a procurement contract that will be assigned to the Contractor, EJCDC suggests including in the construction contract Bid Form a separate bid item for each procurement contract, with the associated balance of the procurement contract price that has not yet been paid by the Owner to the Seller at the time of the construction contract’s Effective Date (Effective Date of the Contract). The drafter of the construction contract Bid Form should explicitly indicate the specific amount before the construction contract is advertised for Bids or negotiated, as applicable. Thus, the*

construction Contract Price will include the unpaid balance of the procurement contract price, allowing the Contractor to invoice the Owner for payments that Contractor will make to the Seller after the assignment is effective, and ensuring that the Contractor's performance bond and payment bond are each in an amount equal to the total price of construction plus the amount of the procurement contract for which the Contractor will be responsible. When the Contractor will furnish builder's risk or installation floater insurance for the Work, inclusion in the construction Contract Price of the unpaid procurement contract amount will aid in attaining insurance coverage that is sufficient to cover the procured item.

4c. The amount to be stipulated for this bid item in the construction Bid Form will often be the total procurement contract price minus the amount paid by Owner to Seller for approval of the procurement contract shop drawings.

4d. When the construction will be implemented under multiple prime construction contracts, provisions relating to the assignment of the procurement contract should be included only on the construction Bid Form for the prime construction contract that is to incorporate the stipulated procurement contract bid item.

4e. For additional information on assigning a procurement contract, refer to EJCDC® P-001, Commentary on the EJCDC Procurement Documents. For other recommended language on assignment to be incorporated into the construction Bidding Requirements and construction Contract Documents, refer to the Notes to User at Article 23 of EJCDC® P-200, Suggested Instructions to Bidders for Procurement Contracts.

5. Drafter to specify amount below; see Note to User Nos. 4a-e, above.

Lump Sum Price for Contractor's payment obligation to [indicate here equipment being purchased, such as "centrifuge"] supplier or manufacturer, as "Seller", for goods and special services set forth in assigned Procurement Contract No. 	\$
--	--

Bidder to include in other Bid item(s) the other costs (if any) associated with accepting such assignment and administering the assigned contract.

Total of All Lump Sums \$

[SUGGESTED FORMAT FOR UNIT PRICE BID]

Base Bid/Unit Price Schedule					
No.	Item	Units	Estimated Quantity	Bid Unit Price	Bid Total
A	Site Preparation				
A1	Mobilization/Demobilization (6%)	LS	1		
A2	Bonds & Insurance (3%)	LS	1		
A3	Surveying & Material Testing	LS	1		
B	Demolition				
B3	Clearing and Grubbing	AC	9.00		
C	Site Improvements				
C1	Excavation Grading	CY	34,100		
C2	Fill Placement	CY	13,000		
D	Perimeter Road				
D1	8" Gravel Pavement	TONS	1,350		
E	Storm Water Infrastructure				
E1	24" ø RCP Storm Drain	LF	50		
E2	36" ø RCP Storm Drain	LF	100		
E3	Flared End Section	EA	4		
E4	Rip-Rap Outlet Dissipator	EA	2		
E5	Permanent Dry Denton Pond Conversion	LS	1		
F	Erosion Control				
F1	Construction Entrance	EA	1		
F2	Silt Fence	LF	2,060		
F3	Concrete Washout	EA	1		
F4	Sediment Basin Construction including skimmer/baffles/Riser Outlet Structure	LS	1		
F5	Erosion Control Matting	SY	12,730		
F6	Silt Fence Outlets	EA	15		
F7	Rock Check Dams	EA	15		
F8	Drainage Ditches	LF	1,780		
G	Miscellaneous				
G1					
	Contingency (5%)	LS	1		
		BASE BID TOTAL			
Note:					
1.	Based on Union County Landfill Expansion Drawings Dated 6/24/2025.				

Bidder acknowledges that (1) each Bid Unit Price includes an amount considered by Bidder to be adequate to cover Contractor's overhead and profit for each separately identified item, and (2) estimated quantities are not guaranteed, and are solely for the purpose of comparison of Bids, and final payment for all unit price Bid items will be based on actual quantities, determined as provided in the Contract Documents.

Total of Lump Sum and Unit Price Bids = Total Bid Price \$ _____

NOTE(S) TO USER:

If unit prices are requested, whether it be a unit price Bid or in connection with a lump sum or cost-plus contract, appropriate guidance for completing the Bid Form should appear in the Instructions, and details with respect to what is included in each unit price item should be included in the Specifications. Owner or its representative should provide an estimated quantity in the Bid Form for each item as defined or indicated in the Specifications. Read specifically Paragraph 11.03 of the General Conditions and Paragraph SC-11.03 of the Supplementary Conditions.

[SUGGESTED FORMAT FOR PRICE-PLUS-TIME BID]

Total Bid Price \$ _____.

Total number of calendar days to substantially complete the Work: _____ days.

Liquidated Damages Rate (from Agreement): \$ _____ /day.

NOTE(S) TO USER:

[Drafter should fill in the Liquidated Damages Rate, from Agreement, for use by all Bidders.]

Amount for Comparison = Total Bid Price + (Calendar days for completion x Liquidated Damages Rate) = _____.

The purpose of the formula above is only to calculate the lowest price-plus-time bid amount for bid comparison purposes. The price for completion of the Work (the Contract Price) is the Total Bid Price.

Bonds required under Paragraph 5.01 of the General Conditions will be based on the Contract Price.

NOTE(S) TO USER:

- 1. The monetary value of each calendar day to complete the Work will typically be the liquidated damages amount set forth in the Agreement for failing to achieve Substantial Completion. In appropriate cases (for example, if there are no liquidated damages stated) alternate wording to "Liquidated Damages Rate" can be used, such as "Monetary Value for each Calendar Day." Regardless of the label, as noted above the per-day amount should be specified in the Bid Form by Owner or its representative ("drafter") before distribution to Bidders.*
- 2. If bids are on a cost-plus-fee basis (see suggested formats below), subject to a guaranteed maximum price that will be used as the basis of comparison, the "Price-Plus-Time" process can be used, with the following structure:*

Guaranteed Maximum Price: \$ _____.

Total number of calendar days to substantially complete the Work: _____ days.

Liquidated Damages Rate (from Agreement): \$_____ /day. ***[Drafter should fill in the Liquidated Damages Rate, from Agreement, for use by all Bidders.]***

Amount for Comparison = Guaranteed Maximum Price + (Calendar days for completion x Liquidated Damages Rate) = _____.

The purpose of the formula above is only to calculate the lowest price-plus-time bid amount for bid comparison purposes. The price for completion of the Work (the Contract Price) is based on the cost of the Work, plus a fee, subject to a guaranteed maximum price, as set forth in the Agreement.

Bonds required under Paragraph 5.01 of the General Conditions will be based on the Contract Price.

[SUGGESTED FORMATS FOR COST-PLUS-FEE BID]

The cost of the Work (other than Unit Price and other excluded Work), determined as provided in Paragraph 11.01 of the General Conditions, together with the following fee, and subject to the Guaranteed Maximum Price:

NOTE(S) TO USER:

Select one of the following methods to determine the Bidder's fee.

Contractor's fee will be a fixed sum of \$_____.

[or]

Contractor's fee will be determined by applying the following percentages to the various portions of the Cost of the Work as defined in Article 11 of the General Conditions:

	<u>Percent</u>
Payroll costs	_____
Material and Equipment Costs	_____
Amounts paid to Subcontractors	_____
Amounts paid to special consultants	_____
Supplemental costs	_____

None of the costs described in Paragraph 11.01.B of the General Conditions will be included in determining Contractor's fee.

The maximum amount payable to Contractor on account of this percentage fee will not exceed: \$_____.

The Guaranteed Maximum Price to Owner of the Cost of the Work including Contractor's Fee will not exceed \$_____.

NOTE(S) TO USER:

1. *In cost-plus-fee contracts, provide space for the Bid figures to be included in the Agreement, such as varying percentages on which the Contractor's fee may be based and amount of Work to be subcontracted. Provide space for the guaranteed maximum price(s) where applicable. See EJCDC® C-525, Agreement between Owner and Contractor for Construction Contract, Cost-Plus, 2013 Edition.*

2. *The Bid Form must be identical with that of the proposed Agreement, and the format for submission of percentages and maximum amount organized so as to permit the easy transfer of information in the Bid of the Successful Bidder to the final Agreement that Owner and Contractor will execute.*
3. *In most cases cost-plus-fee contracts are negotiated or part of a proposal-based selection process, rather than competitively bid. When competitive bidding is used for cost-plus-fee, the most common criterion for comparison of bids is a Guaranteed Maximum Price. For that reason, EJCDC assumes for purposes of this Bid Form that a Guaranteed Maximum Price will apply to the Cost of the Work plus Contractor's fee, and thus on cost-plus-fee contracts the drafter should include and Bidders should complete the Guaranteed Maximum Price provision. See EJCDC® C-525, Agreement between Owner and Contractor for Construction Contract (Cost-Plus), 2013 Edition, Article 8.*
4. *See also the Instructions, Articles 14 and 19, including discussion of customized bidding procedures for cost-plus-fee that use the Contractor's Fee for comparison purposes.*

[END OF SUGGESTED BID FORMATS]

ARTICLE 6 – TIME OF COMPLETION

- 6.01 Bidder agrees that the Work will be substantially complete and will be completed and ready for final payment in accordance with Paragraph 14.07 of the General Conditions on or before the dates or within the number of calendar days indicated in the Agreement.

[or]

- 6.01 Bidder agrees that the Work will be substantially complete on or before , and will be completed and ready for final payment in accordance with Paragraph 14.07 of the General Conditions on or before .

[or]

- 6.01 Bidder agrees that the Work will be substantially complete within calendar days after the date when the Contract Times commence to run as provided in Paragraph 2.03 of the General Conditions, and will be completed and ready for final payment in accordance with Paragraph 14.07 of the General Conditions within calendar days after the date when the Contract Times commence to run.

NOTE(S) TO USER:

1. *Select one of the above paragraphs to establish the Contract Times for the Work.*
2. *If the Contract Times are designated by the Owner prior to the receipt of Bids, the first option should be selected in order to avoid a potential conflict with the Agreement.*
3. *If Bidders are permitted to designate the Contract Times by calendar date, the second option should be selected.*
4. *If Bidders are permitted to designate the Contract Times by calendar days, the third option should be selected.*

5. *Bid Form language should follow exactly the language of the Agreement. For some projects it may be desirable to include space for Bidders to indicate variations in completion times, but note that in some jurisdictions it is required that an award be made to the lowest Bidder regardless of time for completion.*
6. *When the basis of award is a price-plus-time Bid, these time-of-completion provisions must be carefully coordinated with the criteria for Bid comparisons.*

6.02 Bidder accepts the provisions of the Agreement as to liquidated damages.

NOTE(S) TO USER:

Provisions for liquidated damages should appear in the Agreement and may be cross-referenced in other places in the Bidding Requirements and the Contract Documents. It is unwise to repeat liquidated damages provisions in the Bid or to summarize or paraphrase them here or elsewhere.

ARTICLE 7 – ATTACHMENTS TO THIS BID

7.01 The following documents are submitted with and made a condition of this Bid:

- A. Required Bid security;
- B. List of Proposed Subcontractors;
- C. List of Proposed Suppliers;
- D. List of Project References;
- E. Evidence of authority to do business in the state of the Project; or a written covenant to obtain such license within the time for acceptance of Bids;
- F. Contractor's License No.: **[or]** Evidence of Bidder's ability to obtain a State Contractor's License and a covenant by Bidder to obtain said license within the time for acceptance of Bids;
- G. Required Bidder Qualification Statement with supporting data; and
- H. *[List other documents and edit above as pertinent]*

NOTE(S) TO USER:

1. *The above paragraph should be coordinated with the Instructions. Some of the items, such as the List of Proposed Subcontractors and List of Proposed Suppliers, are commonly required to be submitted within a prescribed number of days after the Bid, not with the Bid, and only by the apparent Successful Bidder. See Instructions, Article 12. If no documents are required to be submitted with the Bid, the paragraph may be eliminated.*
2. *Requirements as to Bid security should be contained in the Instructions (See Instructions, Article 8). For recommended form of Bid Bond see EJCDC® C-430 (Bid Bond, Penal Sum Form) and C-435 (Bid Bond, Damages Form).*
3. *Requirements for identifying Subcontractors and Suppliers, and for indicating the amount of Work to be subcontracted in the case of cost-plus-fee contracts, are to be set forth in the Instructions and Supplementary Conditions.*

4. *Requirements as to qualifications of Bidders appear in the Instructions at Article 3. EJCDC recommends the use of EJCDC® C-451, Qualifications Statement.*
5. *Additional documents may have to be submitted with the Bid because of Laws and Regulations applicable to the Project. List all of these so Bidders are informed as to what is required.*

ARTICLE 8 – DEFINED TERMS

- 8.01 The terms used in this Bid with initial capital letters have the meanings stated in the Instructions to Bidders, the General Conditions, and the Supplementary Conditions.

NOTE(S) TO USER:

Careful attention to proper use of terms defined in the Instructions to Bidders, the General Conditions, and Supplementary Conditions is most important.

ARTICLE 9 – BID SUBMITTAL

BIDDER: *[Indicate correct name of bidding entity]*

By:

[Signature] _____

[Printed name] _____

(If Bidder is a corporation, a limited liability company, a partnership, or a joint venture, attach evidence of authority to sign.)

Attest:

[Signature] _____

[Printed name] _____

Title: _____

Submittal Date: _____

Address for giving notices:

Telephone Number: _____

Fax Number: _____

Contact Name and e-mail address: _____

Bidder's License No.: _____

(where applicable)

NOTE TO USER: *Use in those states or other jurisdictions where applicable or required.*

BID BOND

Any singular reference to Bidder, Surety, Owner or other party shall be considered plural where applicable.

BIDDER (*Name and Address*):

SURETY (*Name and Address of Principal Place of Business*):

OWNER (*Name and Address*):

BID

Bid Due Date:

Description (*Project Name and Include Location*):

BOND

Bond Number:

Date (*Not earlier than Bid due date*):

Penal sum _____ \$ _____
(Words) (Figures)

Surety and Bidder, intending to be legally bound hereby, subject to the terms set forth below, do each cause this Bid Bond to be duly executed by an authorized officer, agent, or representative.

BIDDER**SURETY**

Bidder's Name and Corporate Seal (Seal) Surety's Name and Corporate Seal (Seal)

By: _____
Signature

By: _____
Signature (Attach Power of Attorney)

Print Name

Print Name

Title

Title

Attest: _____
Signature

Attest: _____
Signature

Title

Title

Note: Above addresses are to be used for giving any required notice. Provide execution by any additional parties, such as joint venturers, if necessary.

1. Bidder and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors, and assigns to pay to Owner upon default of Bidder the penal sum set forth on the face of this Bond. Payment of the penal sum is the extent of Bidder's and Surety's liability. Recovery of such penal sum under the terms of this Bond shall be Owner's sole and exclusive remedy upon default of Bidder.
2. Default of Bidder shall occur upon the failure of Bidder to deliver within the time required by the Bidding Documents (or any extension thereof agreed to in writing by Owner) the executed Agreement required by the Bidding Documents and any performance and payment bonds required by the Bidding Documents.
3. This obligation shall be null and void if:
 - 3.1 Owner accepts Bidder's Bid and Bidder delivers within the time required by the Bidding Documents (or any extension thereof agreed to in writing by Owner) the executed Agreement required by the Bidding Documents and any performance and payment bonds required by the Bidding Documents, or
 - 3.2 All Bids are rejected by Owner, or
 - 3.3 Owner fails to issue a Notice of Award to Bidder within the time specified in the Bidding Documents (or any extension thereof agreed to in writing by Bidder and, if applicable, consented to by Surety when required by Paragraph 5 hereof).
4. Payment under this Bond will be due and payable upon default of Bidder and within 30 calendar days after receipt by Bidder and Surety of written notice of default from Owner, which notice will be given with reasonable promptness, identifying this Bond and the Project and including a statement of the amount due.
5. Surety waives notice of any and all defenses based on or arising out of any time extension to issue Notice of Award agreed to in writing by Owner and Bidder, provided that the total time for issuing Notice of Award including extensions shall not in the aggregate exceed 120 days from Bid due date without Surety's written consent.
6. No suit or action shall be commenced under this Bond prior to 30 calendar days after the notice of default required in Paragraph 4 above is received by Bidder and Surety and in no case later than one year after Bid due date.
7. Any suit or action under this Bond shall be commenced only in a court of competent jurisdiction located in the state in which the Project is located.
8. Notices required hereunder shall be in writing and sent to Bidder and Surety at their respective addresses shown on the face of this Bond. Such notices may be sent by personal delivery, commercial courier, or by United States Registered or Certified Mail, return receipt requested, postage pre-paid, and shall be deemed to be effective upon receipt by the party concerned.
9. Surety shall cause to be attached to this Bond a current and effective Power of Attorney evidencing the authority of the officer, agent, or representative who executed this Bond on behalf of Surety to execute, seal, and deliver such Bond and bind the Surety thereby.
10. This Bond is intended to conform to all applicable statutory requirements. Any applicable requirement of any applicable statute that has been omitted from this Bond shall be deemed to be included herein as if set forth at length. If any provision of this Bond conflicts with any applicable statute, then the provision of said statute shall govern and the remainder of this Bond that is not in conflict therewith shall continue in full force and effect.
11. The term "Bid" as used herein includes a Bid, offer, or proposal as applicable.

**Engineers Joint Documents Committee
Design and Construction Related Documents
Instructions and License Agreement**

Instructions

Before you use any EJCDC document:

1. Read the License Agreement. You agree to it and are bound by its terms when you use the EJCDC document.
2. Make sure that you have the correct version for your word processing software.

How to Use:

1. While EJCDC has expended considerable effort to make the software translations exact, it can be that a few document controls (e.g., bold, underline) did not carry over.
2. Similarly, your software may change the font specification if the font is not available in your system. It will choose a font that is close in appearance. In this event, the pagination may not match the control set.
3. If you modify the document, you must follow the instructions in the License Agreement about notification.
4. Also note the instruction in the License Agreement about the EJCDC copyright.

License Agreement

You should carefully read the following terms and conditions before using this document.

Commencement of use of this document indicates your acceptance of these terms and conditions. If you do not agree to them, you should promptly return the materials to the vendor, and your money will be refunded.

The Engineers Joint Contract Documents Committee ("EJCDC") provides **EJCDC Design and Construction Related Documents** and licenses their use worldwide. You assume sole responsibility for the selection of specific documents or portions thereof to achieve your intended results, and for the installation, use, and results obtained from **EJCDC Design and Construction Related Documents**.

You acknowledge that you understand that the text of the contract documents of **EJCDC Design and Construction Related Documents** has important legal consequences and that consultation with an attorney is recommended with respect to use or modification of the text. You further acknowledge that EJCDC documents are protected by the copyright laws of the United States.

License:

You have a limited nonexclusive license to:

1. Use **EJCDC Design and Construction Related Documents** on any number of machines owned, leased or rented by your company or organization.
2. Use **EJCDC Design and Construction Related Documents** in printed form for bona fide contract documents.
3. Copy **EJCDC Design and Construction Related Documents** into any machine readable or printed form for backup or modification purposes in support of your use of **EJCDC Design and Construction Related Documents**.

You agree that you will:

1. Reproduce and include EJCDC's copyright notice on any printed or machine-readable copy, modification, or portion merged into another document or program. All proprietary rights in **EJCDC Design and Construction Related Documents** are and shall remain the property of EJCDC.
2. Not represent that any of the contract documents you generate from **EJCDC Design and Construction Related Documents** are EJCDC documents unless (i) the document text is used without alteration or (ii) all additions and changes to, and deletions from, the text are clearly shown.

You may not use, copy, modify, or transfer EJCDC Design and Construction Related Documents, or any copy, modification or merged portion, in whole or in part, except as expressly provided for in this license. Reproduction of EJCDC Design and Construction Related Documents in printed or machine-readable format for resale or educational purposes is expressly prohibited.

If you transfer possession of any copy, modification or merged portion of EJCDC Design and Construction Related Documents to another party, your license is automatically terminated.

Term:

The license is effective until terminated. You may terminate it at any time by destroying **EJCDC Design and Construction Related Documents** altogether with all copies, modifications and merged portions in any form. It will also terminate upon conditions set forth elsewhere in this Agreement or if you fail to comply with any term or condition of this Agreement. You agree upon such termination to destroy **EJCDC Design and Construction Related Documents** along with all copies, modifications and merged portions in any form.

Limited Warranty:

EJCDC warrants the CDs and diskettes on which **EJCDC Design and Construction Related Documents**

is furnished to be free from defects in materials and workmanship under normal use for a period of ninety (90) days from the date of delivery to you as evidenced by a copy of your receipt.

Phone: (703) 684-2845
Fax: (703) 836-4875
e-mail: aschwartz@nspe.org

There is no other warranty of any kind, either expressed or implied, including, but not limited to the implied warranties of merchantability and fitness for a particular purpose. Some states do not allow the exclusion of implied warranties, so the above exclusion may not apply to you. This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

You acknowledge that you have read this agreement, understand it and agree to be bound by its terms and conditions. You further agree that it is the complete and exclusive statement of the agreement between us which supersedes any proposal or prior agreement, oral or written, and any other communications between us relating to the subject matter of this agreement.

EJCDC does not warrant that the functions contained in **EJCDC Design and Construction Related Documents** will meet your requirements or that the operation of **EJCDC Design and Construction Related Documents** will be uninterrupted or error free.

Limitations of Remedies:

EJCDC's entire liability and your exclusive remedy shall be:

1. the replacement of any document not meeting EJCDC's "Limited Warranty" which is returned to EJCDC's selling agent with a copy of your receipt, or
2. if EJCDC's selling agent is unable to deliver a replacement CD or diskette which is free of defects in materials and workmanship, you may terminate this Agreement by returning EJCDC Document and your money will be refunded.

In no event will EJCDC be liable to you for any damages, including any lost profits, lost savings or other incidental or consequential damages arising out of the use or inability to use **EJCDC Design and Construction Related Documents** even if EJCDC has been advised of the possibility of such damages, or for any claim by any other party.

Some states do not allow the limitation or exclusion of liability for incidental or consequential damages, so the above limitation or exclusion may not apply to you.

General:

You may not sublicense, assign, or transfer this license except as expressly provided in this Agreement. Any attempt otherwise to sublicense, assign, or transfer any of the rights, duties, or obligations hereunder is void.

This Agreement shall be governed by the laws of the State of Virginia. Should you have any questions concerning this Agreement, you may contact EJCDC by writing to:

Arthur Schwartz, Esq.
General Counsel
National Society of Professional Engineers
1420 King Street
Alexandria, VA 22314

Notice of Award

Date: _____

Project:

Owner: **UNION COUNTY**

Owner's Contract No.: 2026-005

Contract:

Engineer's Project No.: 352-171

Bidder:

Bidder's Address: *[send Notice of Award Certified Mail, Return Receipt Requested]*

You are notified that your Bid dated _____ for the above Contract has been considered. You are the Successful Bidder and are awarded a Contract for _____

[Indicate total Work, alternates, or sections of Work awarded.]

The Contract Price of your Contract is _____ Dollars (\$_____).

[Insert appropriate data if unit prices are used. Change language for cost-plus contracts.]

_____ copies of the proposed Contract Documents (except Drawings) accompany this Notice of Award.

_____ sets of the Drawings will be delivered separately or otherwise made available to you immediately.

You must comply with the following conditions precedent within ten (10) days of the date you receive this Notice of Award.

1. Deliver to the Owner five (5) fully executed counterparts of the Contract Documents.
2. Deliver with the executed Contract Documents the Contract security [Bonds] as specified in the Instructions to Bidders (Article 20) and General Conditions (Paragraph 5.01)

Failure to comply with these conditions within the time specified will entitle Owner to consider you in default, annul this Notice of Award, and declare your Bid security forfeited.

Within thirty (30) days after you comply with the above conditions, Owner will return to you one fully executed counterpart of the Contract Documents.

Caleb Sinclair for **UNION COUNTY**

Owner

By: _____

Authorized Signature

Solid Waste Director

Title

Copy to Engineer

This document has important legal consequences; consultation with an attorney is encouraged with respect to its use or modification. This document should be adapted to the particular circumstances of the contemplated Project and the controlling Laws and Regulations. **This document has been modified by Owner. Changes are shown in bold text with additions underlined and deletions struck through.**

SUGGESTED FORM OF AGREEMENT BETWEEN OWNER AND CONTRACTOR FOR CONSTRUCTION CONTRACT (STIPULATED PRICE)

Prepared by

ENGINEERS JOINT CONTRACT DOCUMENTS COMMITTEE

and

Issued and Published Jointly by



AMERICAN COUNCIL OF ENGINEERING COMPANIES

ASSOCIATED GENERAL CONTRACTORS OF AMERICA

AMERICAN SOCIETY OF CIVIL ENGINEERS

PROFESSIONAL ENGINEERS IN PRIVATE PRACTICE
A Practice Division of the
NATIONAL SOCIETY OF PROFESSIONAL ENGINEERS

Endorsed by



CONSTRUCTION SPECIFICATIONS INSTITUTE

This Suggested Form of Agreement has been prepared for use with the Standard General Conditions of the Construction Contract (EJCDC C-700, 2007 Edition). Their provisions are interrelated, and a change in one may necessitate a change in the other. The language contained in the Suggested Instructions to Bidders (EJCDC C-200, 2007 Edition) is also carefully interrelated with the language of this Agreement. Their usage is discussed in the Narrative Guide to the 2007 EJCDC Construction Documents (EJCDC C-001, 2007 Edition).

Copyright © 2007 National Society of Professional Engineers
1420 King Street, Alexandria, VA 22314-2794
(703) 684-2882
www.nspe.org

American Council of Engineering Companies
1015 15th Street N.W., Washington, DC 20005
(202) 347-7474
www.acec.org

American Society of Civil Engineers
1801 Alexander Bell Drive, Reston, VA 20191-4400
(800) 548-2723
www.asce.org

Associated General Contractors of America
2300 Wilson Boulevard, Suite 400, Arlington, VA 22201-3308
(703) 548-3118
www.agc.org

The copyright for this EJCDC document is owned jointly by the four EJCDC sponsoring organizations and held in trust for their benefit by NSPE.

INTRODUCTION

This Suggested Form of Agreement between Owner and Contractor for Construction Contract (Stipulated Price) ("Agreement") has been prepared for use with the Suggested Instructions to Bidders for Construction Contracts ("Instructions to Bidders") (EJCDC C-200, 2007 Edition); the Suggested Bid Form for Construction Contracts ("Bid Form") (EJCDC C-410, 2007 Edition); and the Standard General Conditions of the Construction Contract ("General Conditions") (EJCDC C-700, 2007 Edition). Their provisions are interrelated, and a change in one may necessitate a change in the others. See also the Guide to the Preparation of Supplementary Conditions (EJCDC C-800, 2007 Edition), and the Narrative Guide to the 2007 EJCDC Construction Documents (EJCDC C-001, 2007 Edition).

This Agreement form assumes use of a Project Manual that contains the following documentary information for a construction project:

- Bidding Requirements, which include the advertisement or invitation to bid, the Instructions to Bidders, and the Bid Form that is suggested or prescribed, all of which provide information and guidance for all Bidders; and
- Contract Documents, which include the Agreement, performance and payment bonds, the General Conditions, the Supplementary Conditions, the Drawings, and the Specifications.

The Bidding Requirements are not Contract Documents because much of their substance pertains to the relationships prior to the award of the Contract and has little effect or impact thereafter, and because many contracts are awarded without going through the bidding process. In some cases, however, the actual Bid may be attached as an exhibit to the Agreement to avoid extensive rekeying. (The definitions of terms used in this Agreement, including "Bidding Documents," "Bidding Requirements," and "Contract Documents," are set forth Article 1 of the General Conditions.)

Suggested provisions are accompanied by "Notes to User" to assist in preparing the Agreement. The provisions have been coordinated with the other forms produced by EJCDC. Much of the language should be usable on most projects, but modifications and additional provisions will often be necessary. When modifying the suggested language or writing additional provisions, the user must check the other documents thoroughly for conflicts and coordination of terms and make appropriate revisions in all affected documents.

All parties involved in construction projects benefit significantly from a standardized approach in the location of subject matter throughout the documents. Experience confirms the danger of addressing the same subject matter in more than one location: doing so frequently leads to confusion and unanticipated legal consequences. When preparing documents for a construction project, careful attention should be given to the guidance provided in the Uniform Location of Subject Matter (EJCDC N-122).

EJCDC has designated Section 00520 for this Agreement. If this convention is used, the first page of the Agreement would be numbered 00520-1. If CSI's MasterFormat 04™ is being used for the Project Manual, consult MasterFormat 04 for the appropriate section number and number the pages accordingly.

For brevity, paragraphs of the Instructions to Bidders are referenced with the prefix "I," those of the Bid Form are referenced with the prefix "BF," and those of this Agreement are referenced with the prefix "A."

NOTE: EJCDC publications may be purchased from any of the organizations listed on the page immediately following the cover page of this document.

**SUGGESTED FORM OF AGREEMENT
BETWEEN OWNER AND CONTRACTOR
FOR CONSTRUCTION CONTRACT (STIPULATED PRICE)**

THIS AGREEMENT is by and between _____ UNION COUNTY _____ (“Owner”) and
_____ (“Contractor”).

Owner and Contractor hereby agree as follows:

ARTICLE 1 – WORK

- 1.01 Contractor shall complete all Work as specified or indicated in the Contract Documents. The Work is generally described as follows:

ARTICLE 2 – THE PROJECT

- 2.01 The Project for which the Work under the Contract Documents may be the whole or only a part is generally described as follows:

ARTICLE 3 – ENGINEER

- 3.01 The Project has been designed by _____ (Engineer), which is to act as Owner’s representative, assume all duties and responsibilities, and have the rights and authority assigned to Engineer in the Contract Documents in connection with the completion of the Work in accordance with the Contract Documents.

ARTICLE 4 – CONTRACT TIMES

4.01 *Time of the Essence*

- A. All time limits for Milestones, if any, Substantial Completion, and completion and readiness for final payment as stated in the Contract Documents are of the essence of the Contract.

4.02 *Dates for Substantial Completion and Final Payment*

- A. The Work will be substantially completed on or before _____, and completed and ready for final payment in accordance with Paragraph 14.07 of the General Conditions on or before _____.

[or]

4.02 *Days to Achieve Substantial Completion and Final Payment*

- A. The Work will be substantially completed within _____ days after the date when the Contract Times commence to run as provided in Paragraph 2.03 of the General Conditions, and completed and ready for final payment in accordance with Paragraph 14.07 of the General Conditions within _____ days after the date when the Contract Times commence to run.

4.03 *Liquidated Damages*

- A. Contractor and Owner recognize that time is of the essence as stated in Paragraph 4.01 above and that Owner will suffer financial loss if the Work is not completed within the times specified in Paragraph 4.02 above, plus any extensions thereof allowed in accordance with Article 12 of the General Conditions. The parties also recognize the delays, expense, and difficulties involved in proving in a legal ~~or arbitration~~ proceeding the actual loss suffered by Owner if the Work is not completed on time. Accordingly, instead of requiring any such proof, Owner and Contractor agree that as liquidated damages for delay (but not as a penalty), Contractor shall pay Owner \$_____ for each day that expires after the time specified in Paragraph 4.02 above for Substantial Completion until the Work is substantially complete. After Substantial Completion, if Contractor shall neglect, refuse, or fail to complete the remaining Work within the Contract Time or any proper extension thereof granted by Owner, Contractor shall pay Owner \$_____ for each day that expires after the time specified in Paragraph 4.02 above for completion and readiness for final payment until the Work is completed and ready for final payment.
- B. **In addition to liquidated damages, Contractor shall reimburse Owner all fees and costs paid to or incurred by Engineer in administering the construction of the Project beyond the time specified in Paragraph 4.02 above for Substantial Completion. All fees and costs may be deducted from monies due Contractor for the performance of the Work.**

NOTE TO USER

If failure to reach a Milestone on time is of such consequence that the assessment of liquidated damages for failure to reach one or more Milestones on time is to be provided, appropriate amending or supplementing language should be inserted here.

ARTICLE 5 – CONTRACT PRICE

- 5.01 Owner shall pay Contractor for completion of the Work in accordance with the Contract Documents an amount in current funds equal to the sum of the amounts determined pursuant to Paragraphs 5.01.A, 5.01.B, and 5.01.C below:

- A. For all Work other than Unit Price Work, a lump sum of: \$_____

All specific cash allowances are included in the above price in accordance with Paragraph 11.02 of the General Conditions.

- B. 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 actual quantity of that ~~item~~: item. Unit Prices are as specified in Contractor's Bid.

<u>UNIT PRICE WORK</u>					
<u>Item No.</u>	<u>Description</u>	<u>Unit</u>	<u>Estimate Quantity</u>	<u>Bid Unit Price</u>	<u>Bid Price</u>

Total of all Bid Prices (Unit Price Work) \$ _____

The Bid prices for Unit Price Work set forth as of the Effective Date of the Agreement are based on estimated quantities. As provided in Paragraph 11.03 of the General Conditions, estimated quantities are not guaranteed, and determinations of actual quantities and classifications are to be made by Engineer as provided in Paragraph 9.06 of the General Conditions.

- C. For all Work, at the prices stated in Contractor's Bid, attached hereto as an exhibit.

NOTES TO USER

1. *If adjustment prices for variations from stipulated Base Bid quantities have been agreed to, insert appropriate provisions.*
2. *Depending upon the particular project bid form used, use 5.01.A alone, 5.01.A and 5.01.B together, 5.01.B alone, or 5.01.C alone, deleting those not used and renumbering accordingly. If 5.01.C is used, Contractor's Bid is attached as an exhibit and listed as a Contract Document in A-9.*

ARTICLE 6 – PAYMENT PROCEDURES

6.01 Submittal and Processing of Payments

- A. Contractor shall submit Applications for Payment in accordance with Article 14 of the General Conditions. Applications for Payment will be processed by Engineer as provided in the General Conditions. Owner shall make payments within thirty (30) days after presentation of the Application for Payment to Owner by Engineer with Engineer's recommendation for payment.

6.02 Progress Payments; Retainage

- A. Owner shall make monthly progress payments on account of the Contract Price on the basis of Contractor's Applications for Payment ~~on or about the _____ day of each month~~ during

performance of the Work as provided in Paragraph 6.02.A.1 below. All such payments will be measured by the schedule of values established as provided in Paragraph 2.07.A of the General Conditions (and in the case of Unit Price Work based on the number of units completed) or, in the event there is no schedule of values, as provided in the General Requirements.

1. Prior to Substantial Completion, progress payments will be made in an amount equal to the percentage indicated below but, in each case, less the aggregate of payments previously made and less such amounts as Engineer may determine or Owner may withhold, including but not limited to liquidated damages, in accordance with Paragraph 14.02 of the General Conditions.
 - a. **95%** percent of Work completed (with the balance being retainage). If the Work has been 50 percent completed as determined by Engineer, and if the character and progress of the Work have been satisfactory to Owner and Engineer, then as long as the character and progress of the Work remain satisfactory to Owner and Engineer, there will be no additional retainage; and
 - b. **95%** percent of cost of materials and equipment not incorporated in the Work (with the balance being retainage).
- B. Upon Substantial Completion, Owner shall pay an amount sufficient to increase total payments to Contractor to **100%** percent of the Work completed, less such amounts as Engineer shall determine in accordance with Paragraph 14.02.B.5 of the General Conditions and less **200%** percent of Engineer's estimate of the value of Work to be completed or corrected as shown on the tentative list of items to be completed or corrected attached to the certificate of Substantial Completion.

NOTE TO USER

Typical values used in Paragraph 6.02.B are 100 percent and 200 percent respectively.

6.03 Final Payment

- A. Upon final completion and acceptance of the Work in accordance with Paragraph 14.07 of the General Conditions, Owner shall pay the remainder of the Contract Price as recommended by Engineer as provided in said Paragraph 14.07.

ARTICLE 7 – INTEREST

- 7.01 All moneys not paid when due as provided in Article 14 of the General Conditions shall bear interest at the rate of **4%** percent per annum.

ARTICLE 8 – CONTRACTOR'S REPRESENTATIONS

- 8.01 In order to induce Owner to enter into this Agreement, Contractor makes the following representations:

- A. Contractor has examined and carefully studied the Contract Documents and the other related data identified in the Bidding Documents.
- B. Contractor has visited the Site and become familiar with and is satisfied as to the general, local, and Site conditions that may affect cost, progress, and performance of the Work.
- C. Contractor is familiar with and is satisfied as to all federal, state, and local Laws and Regulations that may affect cost, progress, and performance of the Work.
- D. Contractor has carefully studied all: (1) reports of explorations and tests of subsurface conditions at or contiguous to the Site and all drawings of physical conditions relating to existing surface or subsurface structures at the Site (except Underground Facilities), if any, that have been identified in Paragraph SC-4.02 of the Supplementary Conditions as containing reliable "technical data," and (2) reports and drawings of Hazardous Environmental Conditions, if any, at the Site that have been identified in Paragraph SC-4.06 of the Supplementary Conditions as containing reliable "technical data."

NOTE TO USER

Modify the above paragraph if there are no such reports or drawings.

- E. Contractor has considered the information known to Contractor; information commonly known to contractors doing business in the locality of the Site; information and observations obtained from visits to the Site; the Contract Documents; and the Site-related reports and drawings identified in the Contract Documents, with respect to the effect of such information, observations, and documents on (1) the cost, progress, and performance of the Work; (2) the means, methods, techniques, sequences, and procedures of construction to be employed by Contractor, including any specific means, methods, techniques, sequences, and procedures of construction expressly required by the Contract Documents; and (3) Contractor's safety precautions and programs.

NOTE TO USER

If the Contract Documents do not identify any Site-related reports and drawings, modify this paragraph accordingly.

- F. Based on the information and observations referred to in Paragraph 8.01.E above, Contractor does not consider that further examinations, investigations, explorations, tests, studies, or data are necessary for the performance of the Work at the Contract Price, within the Contract Times, and in accordance with the other terms and conditions of the Contract Documents.
- G. Contractor is aware of the general nature of work to be performed by Owner and others at the Site that relates to the Work as indicated in the Contract Documents.
- H. Contractor has given Engineer written notice of all conflicts, errors, ambiguities, or discrepancies that Contractor has discovered in the Contract Documents, and the written resolution thereof by Engineer is acceptable to Contractor.
- I. The Contract Documents are **generally** sufficient to indicate and convey **an** understanding of all terms and conditions for performance and furnishing of the Work.

ARTICLE 9 – CONTRACT DOCUMENTS

9.01 Contents

A. The Contract Documents consist of the following:

1. This Agreement (pages 1 to __, inclusive).
2. Performance bond (pages ____ to ____, inclusive).
3. Payment bond (pages ____ to ____, inclusive).
4. Other bonds (pages ____ to ____, inclusive).
 - a. ____ (pages ____ to ____, inclusive).
 - b. ____ (pages ____ to ____, inclusive).
 - c. ____ (pages ____ to ____, inclusive).
5. General Conditions (pages ____ to 68, inclusive).
6. Supplementary Conditions (pages ____ to ____, inclusive).
7. Specifications as listed in the table of contents of the Project Manual.
8. Drawings consisting of ____ sheets with each sheet bearing the following general title: ____ [or] the Drawings listed on attached sheet index. **Drawings are separately bound and therefore not attached to this Agreement.**
9. Addenda (numbers ____ to ____, inclusive).
10. Exhibits to this Agreement (enumerated as follows):
 - a. Contractor's Bid (pages ____ to ____, inclusive).
 - b. Documentation submitted by Contractor prior to Notice of Award (pages ____ to ____, inclusive).
 - c. *[List other required attachments (if any), such as documents required by funding or lending agencies].*
11. The following which may be delivered or issued on or after the Effective Date of the Agreement and are not attached hereto:
 - a. Notice to Proceed (pages ____ to ____, inclusive).
 - b. Work Change Directives.
 - c. Change Orders.

12. The following Minority Participation Documents:

- a. Guidelines for Recruitment and Selection of Minority Businesses for Participation in Union County Construction Contracts.**
- b. Identification of Minority Business Participation form.**
- c. Affidavits A, B, C, D, and Appendix E, as appropriate.**

NOTE TO USER

If any of the items listed are not to be included as Contract Documents, remove such item from the list and renumber the remaining items.

- B. The documents listed in Paragraph 9.01.A are attached to this Agreement (except as expressly noted otherwise above).
- C. There are no Contract Documents other than those listed above in this Article 9.
- D. The Contract Documents may only be amended, modified, or supplemented as provided in Paragraph 3.04 of the General Conditions.

ARTICLE 10 – MISCELLANEOUS

10.01 Terms

- A. Terms used in this Agreement will have the meanings stated in the General Conditions and the Supplementary Conditions.

10.02 Assignment of Contract

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

10.03 Successors and Assigns

- A. Owner and Contractor each binds itself, its partners, successors, assigns, and legal representatives to the other party hereto, its partners, successors, assigns, and legal representatives in respect to all covenants, agreements, and obligations contained in the Contract Documents.

10.04 Severability

- A. Any provision or part of the Contract Documents held to be void or unenforceable under any Law or Regulation shall be deemed stricken, and all remaining provisions shall continue to be

valid and binding upon Owner and Contractor, who agree that the Contract Documents shall be reformed to replace such stricken provision or part thereof with a valid and enforceable provision that comes as close as possible to expressing the intention of the stricken provision.

10.05 *Contractor's Certifications*

- A. Contractor certifies that it has not engaged in corrupt, fraudulent, collusive, or coercive practices in competing for or in executing the Contract. For the purposes of this Paragraph 10.05:
1. "corrupt practice" means the offering, giving, receiving, or soliciting of any thing of value likely to influence the action of a public official in the bidding process or in the Contract execution;
 2. "fraudulent practice" means an intentional misrepresentation of facts made (a) to influence the bidding process or the execution of the Contract to the detriment of Owner, (b) to establish Bid or Contract prices at artificial non-competitive levels, or (c) to deprive Owner of the benefits of free and open competition;
 3. "collusive practice" means a scheme or arrangement between two or more Bidders, with or without the knowledge of Owner, a purpose of which is to establish Bid prices at artificial, non-competitive levels; and
 4. "coercive practice" means harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the bidding process or affect the execution of the Contract.

10.06 *Other Provisions*

NOTES TO USER

1. *If Owner intends to assign a procurement contract (for goods and services) to the Contractor, see Notes to User at Article 23 of Suggested Instructions to Bidders for Procurement Contracts (EJCDC P-200, 2000 Edition) for provisions to be inserted in this Article.*
2. *Insert other provisions here if applicable.*

IN WITNESS WHEREOF, Owner and Contractor have signed this Agreement. Counterparts have been delivered to Owner and Contractor. All portions of the Contract Documents have been signed or have been identified by Owner and Contractor or on their behalf.

NOTE TO USER

See I-21 and correlate procedures for format and signing of the documents.

This Agreement will be effective on _____ (which is the Effective Date of the Agreement).

NOTE TO USER

The Effective Date of the Agreement and the dates of any Construction Performance Bond (EJCDC C-610) and Construction Payment Bond (EJCDC C-615) should be the same, if possible. In no case may the date of any bonds be earlier than the Effective Date of the Agreement.

OWNER:

UNION COUNTY

By: _____

Title: County Manager

Attest: _____

Title: _____

Address for giving notices:

500 N. Main Street

Suite 600

Monroe, NC 28112

(If Owner is a corporation, attach evidence of authority to sign. If Owner is a public body, attach evidence of authority to sign and resolution or other documents authorizing execution of this Agreement.)

CONTRACTOR

By: _____

Title: _____

(If Contractor is a corporation, a partnership, or a joint venture, attach evidence of authority to sign.)

Attest: _____

Title: _____

Address for giving notices:

License No.: _____

(Where applicable)

NOTE TO USER: Use in those states or other jurisdictions where applicable or required.

Agent for service of process:

Notice to Proceed

Date: _____

Project: Union County Landfill Expansion

Owner: **UNION COUNTY**

Owner's Contract No.: 2026-005

Contract:

Engineer's Project No.: 352-171

Contractor:

Contractor's Address: *[send Certified Mail, Return Receipt Requested]*

You are notified that the Contract Times under the above Contract will commence to run on _____. On or before that date, you are to start performing your obligations under the Contract Documents. In accordance with Article 4 of the Agreement, the date of Substantial Completion is _____, and the date of readiness for final payment is _____ [(or) the number of days to achieve Substantial Completion is _____, and the number of days to achieve readiness for final payment is _____].

Before you may start any Work at the Site, Paragraph 2.01.B of the General Conditions provides that you and Owner must each deliver to the other (with copies to Engineer and other identified additional insureds and loss payees) certificates of insurance which each is required to purchase and maintain in accordance with the Contract Documents.

Also, before you may start any Work at the Site, you must:

_____ *[add other requirements]*.

UNION COUNTY

Owner

Given by:

Authorized Signature

Title

Date

Copy to Engineer

PERFORMANCE BOND

CONTRACTOR *(name and address)*:

SURETY *(name and address of principal place of business)*:

OWNER *(name and address)*: **UNION COUNTY**

500 N. Main Street, Suite 600

Monroe, North Carolina, 28112

CONSTRUCTION CONTRACT

Effective Date of the Agreement:

Amount:

Description *(name and location)*:

BOND

Bond Number:

Date *(not earlier than the Effective Date of the Agreement of the Construction Contract)*:

Amount:

Modifications to this Bond Form: ☐ None ☐ See Paragraph 16

Surety and Contractor, intending to be legally bound hereby, subject to the terms set forth below, do each cause this Performance Bond to be duly executed by an authorized officer, agent, or representative.

CONTRACTOR AS PRINCIPAL

SURETY

Contractor's Name and Corporate Seal

Surety's Name and Corporate Seal

By: _____
Signature

By: _____
Signature *(attach power of attorney)*

Print Name

Print Name

Title

Title

Attest: _____
Signature

Attest: _____
Signature

Title

Title

Notes: (1) Provide supplemental execution by any additional parties, such as joint venturers. (2) Any singular reference to Contractor, Surety, Owner, or other party shall be considered plural where applicable.

1. The Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors, and assigns to the Owner for the performance of the Construction Contract, which is incorporated herein by reference.

2. If the Contractor performs the Construction Contract, the Surety and the Contractor shall have no obligation under this Bond, except when applicable to participate in a conference as provided in Paragraph 3.

3. If there is no Owner Default under the Construction Contract, the Surety's obligation under this Bond shall arise after:

3.1 The Owner first provides notice to the Contractor and the Surety that the Owner is considering declaring a Contractor Default. Such notice shall indicate whether the Owner is requesting a conference among the Owner, Contractor, and Surety to discuss the Contractor's performance. If the Owner does not request a conference, the Surety may, within five (5) business days after receipt of the Owner's notice, request such a conference. If the Surety timely requests a conference, the Owner shall attend. Unless the Owner agrees otherwise, any conference requested under this Paragraph 3.1 shall be held within ten (10) business days of the Surety's receipt of the Owner's notice. If the Owner, the Contractor, and the Surety agree, the Contractor shall be allowed a reasonable time to perform the Construction Contract, but such an agreement shall not waive the Owner's right, if any, subsequently to declare a Contractor Default;

3.2 The Owner declares a Contractor Default, terminates the Construction Contract and notifies the Surety; and

3.3 The Owner has agreed to pay the Balance of the Contract Price in accordance with the terms of the Construction Contract to the Surety or to a contractor selected to perform the Construction Contract.

4. Failure on the part of the Owner to comply with the notice requirement in Paragraph 3.1 shall not constitute a failure to comply with a condition precedent to the Surety's obligations, or release the Surety from its obligations, except to the extent the Surety demonstrates actual prejudice.

5. When the Owner has satisfied the conditions of Paragraph 3, the Surety shall promptly and at the Surety's expense take one of the following actions:

5.1 Arrange for the Contractor, with the consent of the Owner, to perform and complete the Construction Contract;

5.2 Undertake to perform and complete the Construction Contract itself, through its agents or independent contractors;

5.3 Obtain bids or negotiated proposals from qualified contractors acceptable to the Owner for a contract for performance and completion of the Construction Contract, arrange for a contract to be prepared for execution by the Owner and a contractor selected with the Owners concurrence, to be secured with performance and payment bonds executed by a qualified surety equivalent to the bonds issued on the Construction Contract, and pay to the Owner the amount of damages as described in Paragraph 7 in excess of the Balance of

the Contract Price incurred by the Owner as a result of the Contractor Default; or

5.4 Waive its right to perform and complete, arrange for completion, or obtain a new contractor, and with reasonable promptness under the circumstances:

5.4.1 After investigation, determine the amount for which it may be liable to the Owner and, as soon as practicable after the amount is determined, make payment to the Owner; or

5.4.2 Deny liability in whole or in part and notify the Owner, citing the reasons for denial.

6. If the Surety does not proceed as provided in Paragraph 5 with reasonable promptness, the Surety shall be deemed to be in default on this Bond seven days after receipt of an additional written notice from the Owner to the Surety demanding that the Surety perform its obligations under this Bond, and the Owner shall be entitled to enforce any remedy available to the Owner. If the Surety proceeds as provided in Paragraph 5.4, and the Owner refuses the payment or the Surety has denied liability, in whole or in part, without further notice the Owner shall be entitled to enforce any remedy available to the Owner.

7. If the Surety elects to act under Paragraph 5.1, 5.2, or 5.3, then the responsibilities of the Surety to the Owner shall not be greater than those of the Contractor under the Construction Contract, and the responsibilities of the Owner to the Surety shall not be greater than those of the Owner under the Construction Contract. Subject to the commitment by the Owner to pay the Balance of the Contract Price, the Surety is obligated, without duplication for:

7.1 the responsibilities of the Contractor for correction of defective work and completion of the Construction Contract;

7.2 additional legal, design professional, and delay costs resulting from the Contractor's Default, and resulting from the actions or failure to act of the Surety under Paragraph 5; and

7.3 liquidated damages, or if no liquidated damages are specified in the Construction Contract, actual damages caused by delayed performance or non-performance of the Contractor.

8. If the Surety elects to act under Paragraph 5.1, 5.3, or 5.4, the Surety's liability is limited to the amount of this Bond.

9. The Surety shall not be liable to the Owner or others for obligations of the Contractor that are unrelated to the Construction Contract, and the Balance of the Contract Price shall not be reduced or set off on account of any such unrelated obligations. No right of action shall accrue on this Bond to any person or entity other than the Owner or its heirs, executors, administrators, successors, and assigns.

10. The Surety hereby waives notice of any change, including changes of time, to the Construction Contract or to related subcontracts, purchase orders, and other obligations.

11. Any proceeding, legal or equitable, under this Bond may be instituted in any court of competent jurisdiction in the location in which the work or part of the work is located and shall be instituted within two years after a declaration of Contractor Default or within

two years after the Contractor ceased working or within two years after the Surety refuses or fails to perform its obligations under this Bond, whichever occurs first. If the provisions of this paragraph are void or prohibited by law, the minimum periods of limitations available to sureties as a defense in the jurisdiction of the suit shall be applicable.

12. Notice to the Surety, the Owner, or the Contractor shall be mailed or delivered to the address shown on the page on which their signature appears.

13. When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the construction was to be performed, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted herefrom and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. When so furnished, the intent is that this Bond shall be construed as a statutory bond and not as a common law bond.

14. Definitions

14.1 Balance of the Contract Price: The total amount payable by the Owner to the Contractor under the Construction Contract after all proper adjustments have been made including allowance for the Contractor for any amounts received or to be received by the Owner in settlement of insurance or other claims for damages to which the Contractor is entitled, reduced by all valid and proper payments made to or on behalf of the Contractor under the Construction Contract.

14.2 Construction Contract: The agreement between the Owner and Contractor identified on the cover page, including all Contract Documents and changes made to the agreement and the Contract Documents.

14.3 Contractor Default: Failure of the Contractor, which has not been remedied or waived, to perform or otherwise to comply with a material term of the Construction Contract.

14.4 Owner Default: Failure of the Owner, which has not been remedied or waived, to pay the Contractor as required under the Construction Contract or to perform and complete or comply with the other material terms of the Construction Contract.

14.5 Contract Documents: All the documents that comprise the agreement between the Owner and Contractor.

15. If this Bond is issued for an agreement between a contractor and subcontractor, the term Contractor in this Bond shall be deemed to be Subcontractor and the term Owner shall be deemed to be Contractor.

16. Modifications to this Bond are as follows:

PAYMENT BOND

CONTRACTOR *(name and address)*:

SURETY *(name and address of principal place of business)*:

OWNER *(name and address)*: **UNION COUNTY**
500 N. Main Street, Suite 600
Monroe, North Carolina 28112

CONSTRUCTION CONTRACT
Effective Date of the Agreement:
Amount:
Description *(name and location)*:

BOND
Bond Number:
Date *(not earlier than the Effective Date of the Agreement of the Construction Contract)*:
Amount:
Modifications to this Bond Form: ☐ None ☐ See Paragraph 18

Surety and Contractor, intending to be legally bound hereby, subject to the terms set forth below, do each cause this Payment Bond to be duly executed by an authorized officer, agent, or representative.

CONTRACTOR AS PRINCIPAL

SURETY

Contractor's Name and Corporate Seal

Surety's Name and Corporate Seal

By: _____
Signature

By: _____
Signature *(attach power of attorney)*

Print Name

Print Name

Title

Title

Attest: _____
Signature

Attest: _____
Signature

Title

Title

Notes: (1) Provide supplemental execution by any additional parties, such as joint venturers. (2) Any singular reference to Contractor, Surety, Owner, or other party shall be considered plural where applicable.

1. The Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors, and assigns to the Owner to pay for labor, materials, and equipment furnished for use in the performance of the Construction Contract, which is incorporated herein by reference, subject to the following terms.
2. If the Contractor promptly makes payment of all sums due to Claimants, and defends, indemnifies, and holds harmless the Owner from claims, demands, liens, or suits by any person or entity seeking payment for labor, materials, or equipment furnished for use in the performance of the Construction Contract, then the Surety and the Contractor shall have no obligation under this Bond.
3. If there is no Owner Default under the Construction Contract, the Surety's obligation to the Owner under this Bond shall arise after the Owner has promptly notified the Contractor and the Surety (at the address described in Paragraph 13) of claims, demands, liens, or suits against the Owner or the Owner's property by any person or entity seeking payment for labor, materials, or equipment furnished for use in the performance of the Construction Contract, and tendered defense of such claims, demands, liens, or suits to the Contractor and the Surety.
4. When the Owner has satisfied the conditions in Paragraph 3, the Surety shall promptly and at the Surety's expense defend, indemnify, and hold harmless the Owner against a duly tendered claim, demand, lien, or suit.
5. The Surety's obligations to a Claimant under this Bond shall arise after the following:
 - 5.1 Claimants who do not have a direct contract with the Contractor,
 - 5.1.1 have furnished a written notice of non-payment to the Contractor, stating with substantial accuracy the amount claimed and the name of the party to whom the materials were, or equipment was, furnished or supplied or for whom the labor was done or performed, within ninety (90) days after having last performed labor or last furnished materials or equipment included in the Claim; and
 - 5.1.2 have sent a Claim to the Surety (at the address described in Paragraph 13).
 - 5.2 Claimants who are employed by or have a direct contract with the Contractor have sent a Claim to the Surety (at the address described in Paragraph 13).
6. If a notice of non-payment required by Paragraph 5.1.1 is given by the Owner to the Contractor, that is sufficient to satisfy a Claimant's obligation to furnish a written notice of non-payment under Paragraph 5.1.1.
7. When a Claimant has satisfied the conditions of Paragraph 5.1 or 5.2, whichever is applicable, the Surety shall promptly and at the Surety's expense take the following actions:
 - 7.1 Send an answer to the Claimant, with a copy to the Owner, within sixty (60) days after receipt of the Claim, stating the amounts that are undisputed and the basis for challenging any amounts that are disputed; and
 - 7.2 Pay or arrange for payment of any undisputed amounts.
 - 7.3 The Surety's failure to discharge its obligations under Paragraph 7.1 or 7.2 shall not be deemed to constitute a waiver of defenses the Surety or Contractor may have or acquire as to a Claim, except as to undisputed amounts for which the Surety and Claimant have reached agreement. If, however, the Surety fails to discharge its obligations under Paragraph 7.1 or 7.2, the Surety shall indemnify the Claimant for the reasonable attorney's fees the Claimant incurs thereafter to recover any sums found to be due and owing to the Claimant.
8. The Surety's total obligation shall not exceed the amount of this Bond, plus the amount of reasonable attorney's fees provided under Paragraph 7.3, and the amount of this Bond shall be credited for any payments made in good faith by the Surety.
9. Amounts owed by the Owner to the Contractor under the Construction Contract shall be used for the performance of the Construction Contract and to satisfy claims, if any, under any construction performance bond. By the Contractor furnishing and the Owner accepting this Bond, they agree that all funds earned by the Contractor in the performance of the Construction Contract are dedicated to satisfy obligations of the Contractor and Surety under this Bond, subject to the Owner's priority to use the funds for the completion of the work.
10. The Surety shall not be liable to the Owner, Claimants, or others for obligations of the Contractor that are unrelated to the Construction Contract. The Owner shall not be liable for the payment of any costs or expenses of any Claimant under this Bond, and shall have under this Bond no obligation to make payments to or give notice on behalf of Claimants, or otherwise have any obligations to Claimants under this Bond.
11. The Surety hereby waives notice of any change, including changes of time, to the Construction Contract or to related subcontracts, purchase orders, and other obligations.
12. No suit or action shall be commenced by a Claimant under this Bond other than in a court of competent jurisdiction in the state in which the project that is the subject of the Construction Contract is located or after the expiration of one year from the date (1) on which the Claimant sent a Claim to the Surety pursuant to Paragraph 5.1.2 or 5.2, or

(2) on which the last labor or service was performed by anyone or the last materials or equipment were furnished by anyone under the Construction Contract, whichever of (1) or (2) first occurs. If the provisions of this paragraph are void or prohibited by law, the minimum period of limitation available to sureties as a defense in the jurisdiction of the suit shall be applicable.

13. Notice and Claims to the Surety, the Owner, or the Contractor shall be mailed or delivered to the address shown on the page on which their signature appears. Actual receipt of notice or Claims, however accomplished, shall be sufficient compliance as of the date received.

14. When this Bond has been furnished to comply with a statutory or other legal requirement in the location where the construction was to be performed, any provision in this Bond conflicting with said statutory or legal requirement shall be deemed deleted herefrom and provisions conforming to such statutory or other legal requirement shall be deemed incorporated herein. When so furnished, the intent is that this Bond shall be construed as a statutory bond and not as a common law bond.

15. Upon requests by any person or entity appearing to be a potential beneficiary of this Bond, the Contractor and Owner shall promptly furnish a copy of this Bond or shall permit a copy to be made.

16. Definitions

16.1 **Claim:** A written statement by the Claimant including at a minimum:

1. The name of the Claimant;
2. The name of the person for whom the labor was done, or materials or equipment furnished;
3. A copy of the agreement or purchase order pursuant to which labor, materials, or equipment was furnished for use in the performance of the Construction Contract;
4. A brief description of the labor, materials, or equipment furnished;
5. The date on which the Claimant last performed labor or last furnished materials or equipment for use in the performance of the Construction Contract;
6. The total amount earned by the Claimant for labor, materials, or equipment furnished as of the date of the Claim;
7. The total amount of previous payments received by the Claimant; and
8. The total amount due and unpaid to the Claimant for labor, materials, or equipment furnished as of the date of the Claim.

16.2 **Claimant:** An individual or entity having a direct contract with the Contractor or with a subcontractor of the Contractor to furnish labor, materials, or equipment for use in the performance of the Construction Contract. The term Claimant also includes any individual or entity that has rightfully asserted a claim under an applicable mechanic's lien or similar statute against the real property upon which the Project is located. The intent of this Bond

shall be to include without limitation in the terms of "labor, materials, or equipment" that part of the water, gas, power, light, heat, oil, gasoline, telephone service, or rental equipment used in the Construction Contract, architectural and engineering services required for performance of the work of the Contractor and the Contractor's subcontractors, and all other items for which a mechanic's lien may be asserted in the jurisdiction where the labor, materials, or equipment were furnished.

16.3 **Construction Contract:** The agreement between the Owner and Contractor identified on the cover page, including all Contract Documents and all changes made to the agreement and the Contract Documents.

16.4 **Owner Default:** Failure of the Owner, which has not been remedied or waived, to pay the Contractor as required under the Construction Contract or to perform and complete or comply with the other material terms of the Construction Contract.

16.5 **Contract Documents:** All the documents that comprise the agreement between the Owner and Contractor.

17. If this Bond is issued for an agreement between a contractor and subcontractor, the term Contractor in this Bond shall be deemed to be Subcontractor and the term Owner shall be deemed to be Contractor.

18. Modifications to this Bond are as follows:

Contractor's Application for Payment No. _____

Application Period:		Application Date:	
To UNION COUNTY (Owner): 500 N. Main Street, Suite 600, Monroe, NC 28112	From (Contractor):	Via (Engineer): Civil & Environmental Consultants, Inc.	
Project: Union County Landfill Expansion	Contract:		
Owner's Contract No.: 2026-005	Contractor's Project No.:	Engineer's Project No.: 352-171	

Application For Payment Change Order Summary

Approved Change Orders			1. ORIGINAL CONTRACT PRICE..... \$ _____
Number	Additions	Deductions	2. Net change by Change Orders..... \$ _____
			3. Current Contract Price (Line 1 ± 2)..... \$ _____
			4. TOTAL COMPLETED AND STORED TO DATE (Column F on Progress Estimate)..... \$ _____
			5. RETAINAGE:
			a. X _____ Work Completed..... \$ _____
			b. X _____ Stored Material..... \$ _____
			c. Total Retainage (Line 5a + Line 5b)..... \$ _____
			6. AMOUNT ELIGIBLE TO DATE (Line 4 - Line 5c)..... \$ _____
			7. LESS PREVIOUS PAYMENTS (Line 6 from prior Application)..... \$ _____
			8. AMOUNT DUE THIS APPLICATION..... \$ _____
			9. BALANCE TO FINISH, PLUS RETAINAGE (Column G on Progress Estimate + Line 5 above)..... \$ _____
TOTALS			
NET CHANGE BY CHANGE ORDERS			

Contractor's Certification

The undersigned Contractor certifies that to the best of its knowledge: (1) all previous progress payments received from Owner on account of Work done under the Contract have been applied on account to discharge Contractor's legitimate obligations incurred in connection with Work covered by prior Applications for Payment; (2) title of all Work, materials and equipment incorporated in said Work or otherwise listed in or covered by this Application for Payment will pass to Owner at time of payment free and clear of all Liens, security interests and encumbrances (except such as are covered by a Bond acceptable to Owner indemnifying Owner against any such Liens, security interest or encumbrances); and (3) all Work covered by this Application for Payment is in accordance with the Contract Documents and is not defective.

By:

Date:

Payment of: \$ _____
(Line 8 or other - attach explanation of the other amount)

is recommended by: _____ (Date)
(Engineer)

Payment of: \$ _____
(Line 8 or other - attach explanation of the other amount)

is approved by: _____ (Date)
(Owner) - UNION COUNTY

Approved by: _____ (Date)
Funding Agency (if applicable)

Certificate of Substantial Completion

Project: Union County Landfill Expansion

Owner: **UNION COUNTY**

Owner's Contract No.: 2026-005

Contract:

Engineer's Project No.: 352-171

This definitive Certificate of Substantial Completion applies to:

☐ All Work under the Contract Documents: ☐ The following specified portions of the Work:

Date of Substantial Completion

The Work to which this Certificate applies has been inspected by authorized representatives of Owner, Contractor, and Engineer, and found to be substantially complete. The Date of Substantial Completion of the Project or portion thereof designated above is hereby declared and is also the date of commencement of applicable warranties required by the Contract Documents, except as stated below.

A definitive list of items to be completed or corrected is attached hereto. This list may not be all-inclusive, and the failure to include any items on such list does not alter the responsibility of the Contractor to complete all Work in accordance with the Contract Documents.

The responsibilities between Owner and Contractor for security, operation, safety, maintenance, heat, utilities, insurance and warranties shall be as provided in the Contract Documents except as amended as follows:

☐ Amended Responsibilities ☐ Not Amended

Owner's Amended Responsibilities:

Contractor's Amended Responsibilities:

The following documents are attached to and made part of this Certificate:

This Certificate does not constitute an acceptance of Work not in accordance with the Contract Documents nor is it a release of Contractor's obligation to complete the Work in accordance with the Contract Documents.

_____ Executed by Engineer	_____ Date
-------------------------------	---------------

_____ Accepted by Contractor	_____ Date
---------------------------------	---------------

_____ Accepted by Owner	_____ Date
----------------------------	---------------

This document has important legal consequences; consultation with an attorney is encouraged with respect to its use or modification. This document should be adapted to the particular circumstances of the contemplated Project and the controlling Laws and Regulations.

This document has been modified by Owner. Changes are shown in bold text with additions underlined and deletions struck through. The Table of Contents has been updated to reflect modifications.

STANDARD GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT

Prepared by

ENGINEERS JOINT CONTRACT DOCUMENTS COMMITTEE

and

Issued and Published Jointly by



AMERICAN COUNCIL OF ENGINEERING COMPANIES

ASSOCIATED GENERAL CONTRACTORS OF AMERICA

AMERICAN SOCIETY OF CIVIL ENGINEERS

PROFESSIONAL ENGINEERS IN PRIVATE PRACTICE
A Practice Division of the
NATIONAL SOCIETY OF PROFESSIONAL ENGINEERS

Endorsed by



CONSTRUCTION SPECIFICATIONS INSTITUTE

These General Conditions have been prepared for use with the Suggested Forms of Agreement Between Owner and Contractor (EJCDC C-520 or C-525, 2007 Editions). Their provisions are interrelated and a change in one may necessitate a change in the other. Comments concerning their usage are contained in the Narrative Guide to the EJCDC Construction Documents (EJCDC C-001, 2007 Edition). For guidance in the preparation of Supplementary Conditions, see Guide to the Preparation of Supplementary Conditions (EJCDC C-800, 2007 Edition).

Copyright © 2007 National Society of Professional Engineers
1420 King Street, Alexandria, VA 22314-2794
(703) 684-2882
www.nspe.org

American Council of Engineering Companies
1015 15th Street N.W., Washington, DC 20005
(202) 347-7474
www.acec.org

American Society of Civil Engineers
1801 Alexander Bell Drive, Reston, VA 20191-4400
(800) 548-2723
www.asce.org

Associated General Contractors of America
2300 Wilson Boulevard, Suite 400, Arlington, VA 22201-3308
(703) 548-3118
www.agc.org

The copyright for this EJCDC document is owned jointly by the four EJCDC sponsoring organizations and held in trust for their benefit by NSPE.

STANDARD GENERAL CONDITIONS OF THE CONSTRUCTION CONTRACT

TABLE OF CONTENTS

	Page
Article 1 – Definitions and Terminology	1
1.01 Defined Terms.....	1
1.02 Terminology	5
Article 2 – Preliminary Matters	6
2.01 Delivery of Bonds and Evidence of Insurance.....	6
2.02 Copies of Documents.....	6
2.03 Commencement of Contract Times; Notice to Proceed	6
2.04 Starting the Work	6
2.05 Before Starting Construction	7
2.06 Preconstruction Conference; Designation of Authorized Representatives	7
2.07 Initial Acceptance of Schedules	7
Article 3 – Contract Documents: Intent, Amending, Reuse	8
3.01 Intent.....	8
3.02 Reference Standards	8
3.03 Reporting and Resolving Discrepancies	8
3.04 Amending and Supplementing Contract Documents	9
3.05 Reuse of Documents	9
3.06 Electronic Data.....	10
Article 4 – Availability of Lands; Subsurface and Physical Conditions; Hazardous Environmental Conditions; Reference Points	10
4.01 Availability of Lands	10
4.02 Subsurface and Physical Conditions	11
4.03 Differing Subsurface or Physical Conditions.....	11
4.04 Underground Facilities	13
4.05 Reference Points	14
4.06 Hazardous Environmental Condition at Site.....	14
Article 5 – Bonds and Insurance	16
5.01 Performance, Payment, and Other Bonds	16
5.02 Licensed Sureties and Insurers	16
5.03 Certificates of Insurance	17
5.04 Contractor’s Insurance	17
5.05 Owner’s Liability Insurance	20
5.06 Property Insurance	20
5.07 Waiver of Rights	22
5.08 Receipt and Application of Insurance Proceeds	22
5.09 Acceptance of Bonds and Insurance; Option to Replace.....	23

5.10	Partial Utilization, Acknowledgment of Property Insurer	23
Article 6 – Contractor’s Responsibilities		23
6.01	Supervision and Superintendence	23
6.02	Labor; Working Hours.....	24
6.03	Services, Materials, and Equipment	24
6.04	Progress Schedule	24
6.05	Substitutes and “Or-Equals”	25
6.06	Concerning Subcontractors, Suppliers, and Others	27
6.07	Patent Fees and Royalties	28
6.08	Permits.....	29
6.09	Laws and Regulations	29
6.10	Taxes	29
6.11	Use of Site and Other Areas	31
6.12	Record Documents.....	31
6.13	Safety and Protection	32
6.14	Safety Representative	33
6.15	Hazard Communication Programs	33
6.16	Emergencies	33
6.17	Shop Drawings and Samples	33
6.18	Continuing the Work	35
6.19	Contractor’s General Warranty and Guarantee.....	35
6.20	Indemnification	36
6.21	Delegation of Professional Design Services	37
Article 7 – Other Work at the Site.....		37
7.01	Related Work at Site	37
7.02	Coordination.....	38
7.03	Legal Relationships.....	38
7.04	<u>Damage to Work of Another Contractor</u>	39
Article 8 – Owner’s Responsibilities		39
8.01	Communications to Contractor.....	39
8.02	Replacement of Engineer.....	39
8.03	Furnish Data	39
8.04	Pay When Due	39
8.05	Lands and Easements; Reports and Tests	39
8.06	Insurance	39
8.07	Change Orders	39
8.08	Inspections, Tests, and Approvals	39
8.03	Limitations on Owner’s Responsibilities	40
8.04	Undisclosed Hazardous Environmental Condition	40
8.04	Evidence of Financial Arrangements	40
8.05	Compliance with Safety Program.....	40
Article 9 – Engineer’s Status During Construction		40
9.01	Owner’s Representative.....	40
9.02	Visits to Site	40

9.03	Project Representative	41
9.04	Authorized Variations in Work	41
9.05	Rejecting Defective Work	41
9.06	Shop Drawings, Change Orders and Payments	41
9.06	Determinations for Unit Price Work	42
9.07	Decisions on Requirements of Contract Documents and Acceptability of Work	42
9.08	Limitations on Engineer's Authority and Responsibilities	42
9.09	Compliance with Safety Program	43
Article 10	– Changes in the Work; Claims	43
10.01	Authorized Changes in the Work	43
10.02	Unauthorized Changes in the Work	43
10.03	Execution of Change Orders	43
10.04	Notification to Surety	44
10.05	Claims	44
Article 11	– Cost of the Work; Allowances; Unit Price Work	45
11.01	Cost of the Work	45
11.02	Allowances	47
11.03	Unit Price Work	48
Article 12	– Change of Contract Price; Change of Contract Times	49
12.01	Change of Contract Price	49
12.02	Change of Contract Times	50
12.03	Delays	50
Article 13	– Tests and Inspections; Correction, Removal or Acceptance of Defective Work	51
13.01	Notice of Defects	51
13.02	Access to Work	51
13.03	Tests and Inspections	51
13.04	Uncovering Work	52
13.05	Owner May Stop the Work	52
13.06	Correction or Removal of Defective Work	52
13.07	Correction Period	53
13.08	Acceptance of Defective Work	54
13.09	Owner May Correct Defective Work	54
Article 14	– Payments to Contractor and Completion	55
14.01	Schedule of Values	55
14.02	Progress Payments	55
14.03	Contractor's Warranty of Title	57
14.04	Substantial Completion	58
14.05	Partial Utilization	58
14.06	Final Inspection	59
14.07	Final Payment	59
14.08	Final Completion Delayed	60
14.09	Waiver of Claims	60

Article 15 – Suspension of Work and Termination	61
15.01 Owner May Suspend Work	61
15.02 Owner May Terminate for Cause	61
15.03 Owner May Terminate For Convenience.....	62
15.04 Contractor May Stop Work or Terminate	63
Article 16 – Dispute Resolution	63
16.01 Methods and Procedures.....	63
Article 17 – Miscellaneous.....	64
17.01 Giving Notice.....	64
17.02 Computation of Times	64
17.03 Cumulative Remedies	64
17.04 Survival of Obligations.....	64
17.05 Controlling Law	64
17.06 Headings.....	65
17.07 <u>E-Verify</u>	65
17.08 <u>Iran Divestment Act</u>	65
17.09 <u>Confidentiality</u>	65
17.10 <u>Severability</u>	66
17.11 <u>Minority Participation</u>	66

ARTICLE 1 – DEFINITIONS AND TERMINOLOGY

1.01 *Defined Terms*

- A. Wherever used in the Bidding Requirements or Contract Documents and printed with initial capital letters, the terms listed below will have the meanings indicated which are applicable to both the singular and plural thereof. In addition to terms specifically defined, terms with initial capital letters in the Contract Documents include references to identified articles and paragraphs, and the titles of other documents or forms.
1. *Addenda*—Written or graphic instruments issued prior to the opening of Bids which clarify, correct, or change the Bidding Requirements or the proposed Contract Documents.
 2. *Agreement*—The written instrument which is evidence of the agreement between Owner and Contractor covering the Work.
 3. *Application for Payment*—The form acceptable to Engineer **and Owner** which is to be used by Contractor during the course of the Work in requesting progress or final payments and which is to be accompanied by such supporting documentation as is required by the Contract Documents.
 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.
 5. *Bid*—The offer or proposal of a Bidder submitted on the prescribed form setting forth the prices for the Work to be performed.
 6. *Bidder*—The individual or entity who submits a Bid directly to Owner.
 7. *Bidding Documents*—The Bidding Requirements and the proposed Contract Documents (including all Addenda).
 8. *Bidding Requirements*—The advertisement or invitation to bid, Instructions to Bidders **(including any bid schedule)**, Bid security of acceptable form, if any, and the Bid Form with any supplements.
 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.
 10. *Claim*—A demand or assertion by Owner or Contractor seeking an adjustment of Contract Price or Contract Times, or both, or other relief with respect to the terms of the Contract. A demand for money or services by a third party is not a Claim.
 11. *Contract*—The entire and integrated written ~~agreement~~ **Agreement** between the Owner and Contractor concerning the Work. The Contract supersedes prior **and contemporaneous** negotiations, representations, or agreements, whether written or oral. **The Contract may not be modified or altered except by a writing signed by both the Owner and Contractor.**

12. *Contract Documents*—Those items so designated in the Agreement. Only printed or hard copies of the items listed in the Agreement are Contract Documents. Approved Shop Drawings, other Contractor submittals, and the reports and drawings of subsurface and physical conditions are not Contract Documents.
13. *Contract Price*—The moneys 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 11.03 in the case of Unit Price Work).
14. *Contract Times*—The number of days or the dates stated in the Agreement to: (i) achieve Milestones, if any; (ii) achieve Substantial Completion; and (iii) complete the Work so that it is ready for final payment as evidenced by Engineer's written recommendation of final payment.
15. *Contractor*—The individual or entity with whom Owner has entered into the Agreement.
16. *Cost of the Work*—See Paragraph 11.01 for definition.
17. *Drawings*—That part of the Contract Documents prepared or approved by Engineer which graphically shows the scope, extent, and character of the Work to be performed by Contractor. Shop Drawings and other Contractor submittals are not Drawings as so defined.
18. *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.
19. *Engineer*—The individual or entity named as such in the Agreement.
20. *Field Order*—A written order issued by Engineer which requires minor changes in the Work but which does not involve a change in the Contract Price or the Contract Times.
21. *General Requirements*—~~Sections of~~ Division 1 of the Specifications.
22. *Hazardous Environmental Condition*—The presence at the Site of Asbestos, PCBs, Petroleum, Hazardous Waste, or Radioactive Material in such quantities or circumstances that may present a substantial danger to persons or property exposed thereto.
23. *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.
24. *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.
25. *Liens*—Charges, security interests, or encumbrances upon Project funds, real property, or personal property.
26. *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.

27. *Notice of Award*—The written notice by Owner to the Successful Bidder stating that upon timely compliance by the Successful Bidder with the conditions precedent listed therein, Owner will sign and deliver the Agreement.
28. *Notice to Proceed*—A written notice given by Owner to Contractor fixing the date on which the Contract Times will commence to run and on which Contractor shall start to perform the Work under the Contract Documents.
29. *Owner*—The individual or entity with whom Contractor has entered into the Agreement and for whom the Work is to be performed.
30. *PCBs*—Polychlorinated biphenyls.
31. *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 Waste and crude oils.
32. *Progress Schedule*—A schedule, prepared and maintained by Contractor, describing the sequence and duration of the activities comprising the Contractor's plan to accomplish the Work within the Contract Times.
33. *Project*—The total construction of which the Work to be performed under the Contract Documents may be the whole, or a part.
34. *Project Manual*—The bound documentary information prepared for bidding and constructing the Work. A listing of the contents of the Project Manual, which may be bound in one or more volumes, is contained in the table(s) of contents.
35. *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.
36. *Resident Project Representative*—The authorized representative of Engineer who may be assigned to the Site or any part thereof.
37. *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.
38. *Schedule of Submittals*—A schedule, prepared and maintained by Contractor, of required submittals **and Shop Drawings** and the time requirements to support scheduled performance of related construction activities.
39. *Schedule of Values*—A schedule, prepared and maintained by Contractor, allocating portions of the Contract Price to various portions of the Work and used as the basis for reviewing Contractor's Applications for Payment.

40. *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.
41. *Site*—Lands or areas indicated in the Contract Documents as being furnished by Owner upon which the Work is to be performed, including rights-of-way and easements for access thereto, and such other lands furnished by Owner which are designated for the use of Contractor.
42. *Specifications*—That part of the Contract Documents consisting of written requirements for materials, equipment, systems, standards and workmanship as applied to the Work, and certain administrative requirements and procedural matters applicable thereto.
43. *Subcontractor*—An individual or entity having a direct contract with Contractor or with any other Subcontractor for the performance of a part of the Work at the Site.
44. *Substantial Completion*—The time at which the Work (or a specified part thereof) has progressed to the point where, in the opinion of Engineer, the Work (or a specified part thereof) is sufficiently complete, in accordance with the Contract Documents, so that the Work (or a specified part thereof) can be utilized or occupied for the purposes for which it is intended. The terms “substantially complete” and “substantially completed” as applied to all or a specified part of the Work refer to Substantial Completion thereof.
45. *Successful Bidder*—The Bidder submitting a responsive Bid to whom Owner makes an award.
46. *Supplementary Conditions*—That part of the Contract Documents which amends or supplements these General Conditions.
47. *Supplier*—A manufacturer, fabricator, supplier, distributor, materialman, or vendor having a direct contract with Contractor or with any Subcontractor to furnish materials or equipment to be incorporated in the Work by Contractor or Subcontractor.
48. *Underground Facilities*—All underground pipelines, conduits, ducts, cables, wires, manholes, vaults, tanks, tunnels, or other such facilities or attachments, and any encasements containing such facilities, including those that convey electricity, gases, steam, liquid petroleum products, telephone or other communications, cable television, water, wastewater, storm water, other liquids or chemicals, or traffic or other control systems.
49. *Unit Price Work*—Work to be paid for on the basis of unit prices.
50. *Work*—The entire construction or the various separately identifiable parts thereof required to be provided under the Contract Documents. Work includes and is the result of performing or providing all labor, services, and documentation necessary to produce such construction, and furnishing, installing, and incorporating all materials and equipment into such construction, all as required by the Contract Documents.
51. *Work Change Directive*—A written statement 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 subsurface or physical conditions under which the Work is to be performed or to emergencies. A Work

Change Directive will not change the Contract Price or the Contract Times but is evidence that the parties expect that the change ordered 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.

1.02 *Terminology*

A. The words and terms discussed in Paragraph 1.02.B through F are not defined but, when used in the Bidding Requirements or Contract Documents, have the indicated meaning.

B. *Intent of Certain Terms or Adjectives:*

1. The Contract Documents include the terms “as allowed,” “as approved,” “as ordered,” “as directed” or terms of like effect or import to authorize an exercise of professional judgment by Engineer. In addition, the adjectives “reasonable,” “suitable,” “acceptable,” “proper,” “satisfactory,” or adjectives of like effect or import are used to describe an action or determination of Engineer as to the Work. It is intended that such exercise of professional judgment, action, or determination will be solely to evaluate, in general, the Work for compliance with the information in the Contract Documents and with the design concept of the 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 is not intended to and shall not be effective to assign to Engineer any duty or authority to supervise or direct the performance of the Work, or any duty or authority to undertake responsibility contrary to the provisions of Paragraph 9.09 or any other provision of the Contract Documents.

C. *Day:*

1. The word “day” means a calendar day of 24 hours measured from midnight to the next midnight.

D. *Defective:*

1. The word “defective,” when modifying the word “Work,” refers to Work that is unsatisfactory, faulty, or deficient in that it:
 - a. does not conform to the Contract Documents; or
 - b. does not meet the requirements of any applicable inspection, reference standard, test, or approval referred to in the Contract Documents; or
 - c. 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 14.04 or 14.05).

E. *Furnish, Install, Perform, Provide:*

1. The word “furnish,” when used in connection with services, materials, or equipment, shall mean to supply and deliver said services, materials, or equipment to the Site (or some other specified location) ready for use or installation and in usable or operable condition.

2. The word “install,” when used in connection with services, materials, or equipment, shall mean to put into use or place in final position said services, materials, or equipment complete and ready for intended use.
 3. The words “perform” or “provide,” when used in connection with services, materials, or equipment, shall mean to furnish and install said services, materials, or equipment complete and ready for intended use.
 4. When “furnish,” “install,” “perform,” or “provide” is not used in connection with services, materials, or equipment in a context clearly requiring an obligation of Contractor, “provide” is implied.
- F. Unless stated otherwise in the Contract Documents, words or phrases that have a well-known technical or construction industry or trade meaning are used in the Contract Documents in accordance with such recognized meaning.

ARTICLE 2 – PRELIMINARY MATTERS

2.01 *Delivery of Bonds and Evidence of Insurance*

- A. When Contractor delivers the executed counterparts of the Agreement to Owner, Contractor shall also deliver to Owner such bonds as Contractor may be required to furnish.
- B. *Evidence of Insurance:* 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 Article 5.

2.02 *Copies of Documents*

- A. Owner shall furnish to Contractor up to ~~ten~~ **five** printed or hard copies of the Drawings and Project Manual. Additional copies will be furnished upon request at the cost of reproduction.

2.03 *Commencement of Contract Times; Notice to Proceed*

- A. 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 30 days after the Effective Date of the Agreement. In no event will the Contract Times commence to run later than the sixtieth day after the day of Bid opening or the thirtieth day after the Effective Date of the Agreement, whichever date is earlier.~~

2.04 *Starting the Work*

- A. Contractor shall start to perform the Work on the date when the Contract Times commence to run. No Work shall be done at the Site prior to the date on which the Contract Times commence to run.

2.05 *Before Starting Construction*

- A. *Preliminary Schedules:* Within 10 days after the Effective Date of the Agreement (unless otherwise specified in the General Requirements), Contractor shall submit to Engineer for timely review:
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. a preliminary Schedule of Submittals; and
 3. a preliminary Schedule of Values for all of the Work which includes quantities and prices of items which when added together equal the Contract Price and subdivides the Work into component parts in sufficient detail to serve as the basis for progress payments during performance of the Work. Such prices will include an appropriate amount of overhead and profit applicable to each item of Work.

2.06 *Preconstruction Conference; Designation of Authorized Representatives*

- A. Before any Work at the Site is started, a conference attended by Owner, 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 2.05.A, procedures for handling Shop Drawings and other submittals, processing Applications for Payment, and maintaining required records.
- B. At this conference Owner, **Engineer,** and Contractor each shall designate, in writing, a specific individual to act as its authorized representative with respect to the services and responsibilities under the Contract. Such individuals shall have the authority to transmit instructions, receive information, render decisions relative to the Contract, and otherwise act on behalf of each respective party.

2.07 *Initial Acceptance of Schedules*

- A. At least 10 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~~ **Progress Schedule** submitted in accordance with Paragraph 2.05.A. Contractor shall have an additional 10 days to make corrections and adjustments and to complete and resubmit the ~~schedules.~~ **Progress Schedule.** No progress payment shall be made to Contractor until **an** acceptable ~~schedules are~~ **Project Schedule is** submitted to Engineer.
1. The Progress Schedule will be acceptable to Engineer if it provides an orderly progression of the Work to completion within the Contract Times. Such acceptance will not impose on Engineer responsibility for the Progress Schedule, for sequencing, scheduling, or progress of the Work, nor interfere with or relieve Contractor from Contractor's full responsibility therefor.
 2. Contractor's Schedule of Submittals will be acceptable to Engineer if it provides a workable arrangement for reviewing and processing the required submittals.

3. Contractor's Schedule of Values will be acceptable to Engineer as to form and substance if it provides a reasonable allocation of the Contract Price to component parts of the Work.

ARTICLE 3 – CONTRACT DOCUMENTS: INTENT, AMENDING, REUSE

3.01 *Intent*

- A. The Contract Documents are ~~complementary;~~ **fully-integrated;** what is required by ~~one each document which is part of the Contract Documents~~ is as binding as if required ~~by~~ **or set forth in all of the Contract Documents.**
- B. It is the intent of the Contract Documents to describe a functionally complete ~~project~~ **Project** (or part thereof) to be constructed in accordance with the Contract Documents. Any labor, documentation, services, materials, or equipment that reasonably may be inferred from the Contract Documents or from prevailing custom or trade usage as being required to produce the indicated result will be provided whether or not specifically called for, at no additional cost to Owner.
- C. Clarifications and interpretations of the Contract Documents shall be issued by Engineer as provided in Article 9.

3.02 *Reference Standards*

- A. Standards, Specifications, Codes, Laws, and Regulations
 1. Reference to standards, specifications, manuals, or codes of any technical society, organization, or association, or to Laws or Regulations, whether such reference be specific or by implication, shall mean the 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.
 2. No provision of any such standard, specification, manual, or code, or any instruction of a Supplier, shall be effective to change the duties or responsibilities of Owner, Contractor, or Engineer, or any of their subcontractors, consultants, agents, or employees, from those set forth in the Contract Documents. No such provision or instruction shall be effective to assign to Owner, Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors, any duty or authority to supervise or direct the performance of the Work or any duty or authority to undertake responsibility inconsistent with the provisions of the Contract Documents.

3.03 *Reporting and Resolving Discrepancies*

A. *Reporting Discrepancies:*

1. *Contractor's Review of Contract Documents Before Starting Work:* Before undertaking each part of the Work, Contractor shall carefully study and compare the Contract Documents and check and verify pertinent figures therein and all applicable field measurements. Contractor shall promptly report in writing to Engineer any conflict, error, ambiguity, or discrepancy which Contractor discovers, or has actual knowledge of, and shall obtain a written

interpretation or clarification from Engineer before proceeding with any Work affected thereby.

2. *Contractor's Review of Contract Documents During Performance of Work:* 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 (a) any applicable Law or Regulation, (b) any standard, specification, manual, or code, or (c) any instruction of any Supplier, then Contractor shall promptly report it to Engineer in writing. Contractor shall not proceed with the Work affected thereby (except in an emergency as required by Paragraph 6.16.A) until an amendment or supplement to the Contract Documents has been issued by one of the methods indicated in Paragraph 3.04.
3. 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 had actual knowledge thereof.

B. Resolving Discrepancies:

1. Except as may be otherwise specifically stated in the Contract Documents, 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:
 - a. the provisions of any standard, specification, manual, or code, or the instruction of any Supplier (whether or not specifically incorporated by reference in the Contract Documents); or
 - b. the provisions of any 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).

3.04 Amending and Supplementing Contract Documents

- A. The Contract Documents may be amended to provide for additions, deletions, and revisions in the Work or to modify the terms and conditions thereof by either a Change Order or a Work Change Directive.
- B. The requirements of the Contract Documents may be supplemented, and minor variations and deviations in the Work may be authorized, by one or more of the following ways:
 1. A Field Order;
 2. Engineer's approval of a Shop Drawing or Sample (subject to the provisions of Paragraph 6.17.D.3); or
 3. Engineer's written interpretation or clarification.

3.05 Reuse of Documents

- A. Contractor and any Subcontractor or Supplier shall not:

1. 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 its consultants, including electronic media editions; or
 2. reuse any such Drawings, Specifications, other documents, or copies thereof on extensions of the Project or any other project without written consent of Owner and Engineer and specific written verification or adaptation by Engineer.
- B. The prohibitions of this Paragraph 3.05 will survive final payment, or termination of the Contract. Nothing herein shall preclude Contractor from retaining copies of the Contract Documents for record purposes.

3.06 *Electronic Data*

- A. Unless otherwise stated in the Supplementary Conditions, the data furnished by Owner or Engineer to Contractor, or by Contractor to Owner or Engineer, that may be relied upon are limited to the printed copies (also known as hard copies). Files in electronic media format of text, data, graphics, or other types are furnished only for the convenience of the receiving party. Any conclusion or information obtained or derived from such electronic files will be at the user's sole risk. If there is a discrepancy between the electronic files and the hard copies, the hard copies govern.
- B. Because data stored in electronic media format can deteriorate or be modified inadvertently or otherwise without authorization of the data's creator, the party receiving electronic files agrees that it will perform acceptance tests or procedures within 60 days, after which the receiving party shall be deemed to have accepted the data thus transferred. Any errors detected within the 60-day acceptance period will be corrected by the transferring party.
- C. When transferring documents in electronic media format, the transferring party makes no representations as to long term compatibility, usability, or readability of documents resulting from the use of software application packages, operating systems, or computer hardware differing from those used by the data's creator.

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

4.01 *Availability of Lands*

- A. Owner shall furnish the Site. Owner shall notify Contractor of any encumbrances or restrictions not of general application but specifically related to use of the Site with which Contractor must comply in performing the Work. Owner will obtain in a timely manner and pay for easements for permanent structures or permanent changes in existing facilities. If Contractor and Owner are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in the Contract Price or Contract Times, or both, as a result of any delay in Owner's furnishing the Site or a part thereof, Contractor may make a Claim therefor as provided in Paragraph 10.05.
- B. Upon reasonable written request, Owner shall furnish Contractor with a current 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 or construction lien against such lands in accordance with applicable Laws and Regulations.

- C. Contractor shall provide for all additional lands and access thereto that may be required for temporary construction facilities or storage of materials and equipment.

4.02 *Subsurface and Physical Conditions*

A. *Reports and Drawings:* The Supplementary Conditions identify:

1. those reports known to Owner of explorations and tests of subsurface conditions at or contiguous to the Site; and
2. those drawings known to Owner of physical conditions relating to existing surface or subsurface structures at the Site (except Underground Facilities).

B. *Limited Reliance by Contractor on Technical Data Authorized:* Contractor may rely upon the 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 Supplementary Conditions. Except for such reliance on such "technical data," Contractor may not rely upon or make any claim against Owner or Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors with respect to:

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
2. other data, interpretations, opinions, and information contained in such reports or shown or indicated in such drawings; or
3. any Contractor interpretation of or conclusion drawn from any "technical data" or any such other data, interpretations, opinions, or information.

C. **Site Visit: Contractor represents that is has visited the Site and has become familiar with and satisfied as to the general, local, and Site conditions that may affect cost, progress, performance, and furnishing of the Work.**

4.03 *Differing Subsurface or Physical Conditions*

A. *Notice:* If Contractor believes that any subsurface or physical condition that is uncovered or revealed either:

1. is of such a nature as to establish that any "technical data" on which Contractor is entitled to rely as provided in Paragraph 4.02 is materially inaccurate; or
2. is of such a nature as to require a change in the Contract Documents; or
3. differs materially from that shown or indicated in the Contract Documents; or

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 within twenty-four (24) hours** after becoming aware thereof and before further disturbing the subsurface or physical conditions or performing any Work in connection therewith (except in an emergency as required by Paragraph 6.16.A), notify Owner and Engineer in writing about such condition. Contractor shall not further disturb such condition or perform any Work in connection therewith (except as aforesaid) until receipt of written order to do so.

- B. *Engineer's Review:* After receipt of written notice as required by Paragraph 4.03.A, Engineer **will promptly shall within seven (7) calendar days** review the pertinent condition, 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.

C. *Possible Price and Times Adjustments:*

1. The Contract Price or the Contract Times, or both, will be equitably adjusted to the extent that the existence of such differing subsurface or physical condition causes an increase or decrease in Contractor's cost of, or time required for, performance of the Work; subject, however, to the following:
 - a. such condition must meet any one or more of the categories described in Paragraph 4.03.A; and
 - b. 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 ~~9.07~~ **9.06** and 11.03; **and**
 - c. **Contractor shall not be entitled to, and Owner shall not be liable for, any remobilization fees or equipment charges as a result of any work stoppage pursuant to Paragraph 4.03.**
2. Contractor shall not be entitled to any adjustment in the Contract Price or Contract Times if:
 - a. Contractor knew of the existence of such conditions at the time Contractor made a final commitment to Owner with respect to Contract Price and Contract Times by the submission of a Bid or becoming bound under a negotiated contract; or
 - b. 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 Bidding Requirements or Contract Documents to be conducted by or for Contractor prior to Contractor's making such final commitment; or
 - c. Contractor failed to give the written notice as required by Paragraph 4.03.A.
3. If Owner and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in the Contract Price or Contract Times, or both, a Claim may be made therefor as provided in Paragraph 10.05. However, neither Owner or Engineer, or any of their

officers, directors, members, partners, employees, agents, consultants, or subcontractors shall be liable to Contractor for any claims, costs, losses, or 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) sustained by Contractor on or in connection with any other project or anticipated project.

4.04 *Underground Facilities*

A. *Shown or Indicated:* The information, ~~and data,~~ and locations 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, including Owner, or by others. Unless it is otherwise expressly provided in the Supplementary Conditions:

1. Owner and Engineer shall not be responsible for the accuracy or completeness of any such information or data provided by others; and
2. the cost of all of the following will be included in the Contract Price, and Contractor shall have full responsibility for:
 - a. reviewing and checking all such information and data;
 - b. locating all Underground Facilities shown or indicated in the Contract Documents;
 - c. coordination of the Work with the owners of such Underground Facilities, including Owner, during construction; and
 - d. the safety and protection of all such Underground Facilities and repairing any damage thereto resulting from the Work.

B. *Not Shown or Indicated:*

1. If an Underground Facility is uncovered or revealed at or contiguous to the Site which was not shown or indicated, or not shown or indicated with reasonable accuracy in the Contract Documents, Contractor shall, promptly within twenty-four (24) hours 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 6.16.A), identify the owner of such Underground Facility and give written notice to that owner and to Owner and Engineer. Engineer ~~will promptly~~ shall within forty-eight (48) hours 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 or location of the Underground Facility. During such time, Contractor shall be responsible for the safety and protection of such Underground Facility.
2. If Engineer concludes that a change in the Contract Documents is required, a Work Change Directive or a Change Order will be issued to reflect and document such ~~consequences.~~ change. An equitable adjustment shall be made in the Contract Price or Contract Times, or both, to the extent that they are attributable to the existence or location of any Underground Facility that was not shown or indicated or not shown or indicated with reasonable accuracy

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 on the amount or extent, if any, of any such adjustment in Contract Price or Contract Times, Owner or Contractor may make a Claim therefor as provided in Paragraph 10.05.

4.05 *Reference Points*

- A. 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 property monuments, and shall make no changes or relocations without the prior written approval of Owner. Contractor shall report to Engineer whenever any reference point or property monument 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 or property monuments by professionally qualified personnel.

4.06 *Hazardous Environmental Condition at Site*

- A. *Reports and Drawings:* The Supplementary Conditions identify those reports and drawings known to Owner relating to Hazardous Environmental Conditions that have been identified at the Site.
- B. *Limited Reliance by Contractor on Technical Data Authorized:* Contractor may rely upon the 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 Supplementary Conditions. Except for such reliance on such "technical data," Contractor may not rely upon or make any claim against Owner or Engineer, or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors with respect to:
 - 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
 - 2. other data, interpretations, opinions and information contained in such reports or shown or indicated in such drawings; or
 - 3. any Contractor interpretation of or conclusion drawn from any "technical data" or any such other data, interpretations, opinions or information.
- C. Contractor shall not be responsible for any Hazardous Environmental Condition 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. Contractor shall be responsible for a Hazardous Environmental Condition created with any materials brought to the Site by Contractor, Subcontractors, Suppliers, or anyone else for whom Contractor is responsible.
- D. If Contractor encounters a Hazardous Environmental Condition or if Contractor or anyone for whom Contractor is responsible creates a Hazardous Environmental Condition, Contractor shall

immediately: (i) secure or otherwise isolate such condition; (ii) stop all Work in connection with such condition and in any area affected thereby (except in an emergency as required by Paragraph 6.16.A); and (iii) notify Owner and Engineer (and promptly thereafter confirm such notice in writing). Owner shall **promptly within seven (7) calendar days** consult with Engineer concerning the necessity for Owner to retain a qualified expert to evaluate such condition or take corrective action, if any. ~~Promptly after~~ **After** consulting with Engineer, Owner shall take such actions as are necessary to permit Owner to timely obtain required permits and provide Contractor the written notice required by Paragraph 4.06.E.

- E. Contractor shall not be required to resume Work in connection with such condition or in any affected area until after Owner has obtained any required permits related thereto and delivered written notice to Contractor: (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 on the amount or extent, if any, of any adjustment in Contract Price or Contract Times, or both, as a result of such Work stoppage or such special conditions under which Work is agreed to be resumed by Contractor, either party may make a Claim therefor as provided in Paragraph 10.05.
- F. If after receipt of such 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 the portion of the Work that is in the area affected by such condition to be deleted from the Work. If Owner and Contractor cannot agree as to entitlement to or on the amount or extent, if any, of an adjustment in Contract Price or Contract Times as a result of deleting such portion of the Work, then either party may make a Claim therefor as provided in Paragraph 10.05. Owner may have such deleted portion of the Work performed by Owner's own forces or others in accordance with Article 7.
- ~~G. To the fullest extent permitted by Laws and Regulations, Owner shall indemnify and hold harmless Contractor, Subcontractors, and Engineer, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors 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) arising out of or relating to a Hazardous Environmental Condition, provided that such Hazardous Environmental Condition: (i) was not shown or indicated in the Drawings or Specifications or identified in the Contract Documents to be included within the scope of the Work, and (ii) was not created by Contractor or by anyone for whom Contractor is responsible. Nothing in this Paragraph 4.06.G shall obligate Owner to indemnify any individual or entity from and against the consequences of that individual's or entity's own negligence.~~
- H. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors 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) arising out of or relating to a Hazardous Environmental Condition created by Contractor or by anyone for whom Contractor is responsible. Nothing in this Paragraph 4.06.H shall obligate Contractor to indemnify

any individual or entity from and against the consequences of that individual's or entity's own negligence.

- I. The provisions of Paragraphs 4.02, 4.03, and 4.04 do not apply to a Hazardous Environmental Condition uncovered or revealed at the Site.

ARTICLE 5 – BONDS AND INSURANCE

5.01 *Performance, Payment, and Other Bonds*

- A. 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 of Contractor's obligations under the Contract Documents. These bonds shall remain in effect until one year after the date when final payment becomes due or until completion of the correction period specified in Paragraph 13.07, whichever is later, 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 Contract Documents.

The Contractor shall provide surety bonds wherein surety waives notice of any and all modifications, omissions, additions, changes and advance payments or deferred payments in or about the Contract, and agrees that the obligations undertaken by the bond shall not be impaired in any manner by reason of such modifications, omissions, additions, changes, and advance payments or deferred payments. The surety bond must set forth no requirement that suit be initiated prior to the time stipulated in applicable North Carolina statutes of limitation.

- B. 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 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 Financial Management Service, Surety Bond Branch, U.S. Department of the Treasury. All bonds signed by an agent or attorney-in-fact must be accompanied by a certified copy of that individual's authority to bind the surety. The evidence of authority shall show that it is effective on the date the agent or attorney-in-fact signed each bond.
- C. If the surety on any bond furnished by Contractor is declared 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 5.01.B, Contractor shall promptly notify Owner and Engineer and shall, within 20 days after the event giving rise to such notification, provide another bond and surety, both of which shall comply with the requirements of Paragraphs 5.01.B and 5.02.

5.02 *Licensed Sureties and Insurers*

- A. 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 **and have a financial standing rating from A.M. Best Company equal to or better than A-VII.** Such surety and insurance companies shall also meet

such additional requirements and qualifications as may be provided in the Supplementary Conditions.

5.03 *Certificates of Insurance*

- A. Contractor shall deliver to Owner, with copies to each additional insured and loss payee 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.
- B. Owner shall deliver to Contractor, with copies to each additional insured and loss payee identified in the Supplementary Conditions, certificates of insurance (and other evidence of insurance requested by Contractor or any other additional insured) which Owner is required to purchase and maintain.
- C. Failure of Owner to demand such certificates or other evidence of Contractor's full compliance with these insurance requirements or failure of Owner to identify a deficiency in compliance from the evidence provided shall not be construed as a waiver of Contractor's obligation to maintain such insurance.
- D. Owner does not represent that insurance coverage and limits established in this Contract necessarily will be adequate to protect Contractor.
- E. The insurance and insurance limits required herein shall not be deemed as a limitation on Contractor's liability under the indemnities granted to Owner in the Contract Documents.

5.04 *Contractor's Insurance*

- A. Contractor shall purchase and maintain such insurance as is appropriate for the Work being performed and as will provide protection from claims set forth below which may arise out of or result from Contractor's performance of the Work and Contractor's other obligations under the Contract Documents, whether it is to be performed by Contractor, any Subcontractor or Supplier, or by anyone directly or indirectly employed by any of them to perform any of the Work, or by anyone for whose acts any of them may be liable:
 - 1. claims under workers' compensation, disability benefits, and other similar employee benefit acts;
 - 2. claims for damages because of bodily injury, occupational sickness or disease, or death of Contractor's employees;
 - 3. claims for damages because of bodily injury, sickness or disease, or death of any person other than Contractor's employees;
 - 4. claims for damages insured by reasonably available personal injury liability coverage which are sustained:
 - a. by any person as a result of an offense directly or indirectly related to the employment of such person by Contractor, or

- b. by any other person for any other reason;
 - 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
 - 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.
- B. The policies of insurance required by this Paragraph 5.04 shall:
- 1. with respect to insurance required by Paragraphs 5.04.A.3 through 5.04.A.6 inclusive, be written on an occurrence basis, include as additional insureds (subject to any customary exclusion regarding professional liability) Owner and Engineer, and any other individuals or entities identified in the Supplementary Conditions, all of whom shall be listed as additional insureds, and include coverage for the respective officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of all such additional insureds, and the insurance afforded to these additional insureds shall provide primary coverage for all claims covered thereby;
 - 2. include at least the specific coverages and be written for not less than the limits of liability provided in ~~the Supplementary Conditions~~ **Paragraph 5.04(C)** or required by Laws or Regulations, whichever is greater;
 - 3. include contractual liability insurance covering Contractor's indemnity obligations under Paragraphs 6.11 and 6.20;
 - 4. contain a provision or endorsement that the coverage afforded will not be canceled, materially changed or renewal refused until at least 30 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 5.03 will so provide);
 - 5. 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 13.07; and
 - 6. include completed operations coverage:
 - a. Such insurance shall remain in effect for two years after final payment.
 - b. 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.
- C. The Policies of insurance required by Paragraph 5.04 shall include the specific coverages and be written for not less than the limits of liability provided below or required by Laws or Regulations, whichever is greater.**

Worker's Compensation and Employer's Liability Insurance. This insurance shall protect Contractor against all claims under applicable state workers' compensation laws, including coverage as necessary for the benefits provided under the United States Longshoremen's and Harbor Workers' Act and the Jones Act. Contractor shall also be protected against claims for injury, disease, or death of employees which, for any reason, may not fall within the provisions of a workers' compensation law. This policy shall include an "all states" or "other states" endorsement.

The liability limits shall be not less than:

Workers' compensation

Statutory

Employers' liability

\$1,000,000 each occurrence

Business Automobile Liability Insurance. This insurance shall be occurrence type, written on Insurance Services Office (ISO) form CA 00 01, or a substitute form providing equivalent liability coverage, and shall protect Contractor, Owner, and Engineer as additional insureds, against all claims for injuries to members of the public and damage to property of others arising from the use of motor vehicles, either on or off the project site whether they are owned, nonowned, or hired.

The liability limits shall be not less than:

Bodily injury and property damage

\$1,000,000 combined single limit for each occurrence

Commercial General Liability Insurance. This insurance shall be written on ISO "occurrence" form CG 00 01 or its equivalent, and shall protect Contractor, Owner, and Engineer as additional insureds, against claims arising from injuries, sickness, disease, or death of any person or damage to property arising out of performance of the Work. The Owner shall be included as an additional insured by ISO endorsements CG 20 10 or CG 20 33 and CG 20 37 or their equivalents; and the Engineer as additional insured by ISO endorsement CG 20 07 or CG 20 32 or its equivalent. The policy shall also include a per project aggregate limit endorsement, personal injury liability coverage, contractual liability coverage, completed operations and products liability coverage, and coverage for blasting, explosion, collapse of buildings, and damage to underground property.

The liability limits shall be not less than:

Bodily injury and property damage

\$1,000,000 combined single limit for each occurrence

\$1,000,000 general aggregate

Umbrella Liability Insurance. This insurance shall protect Contractor, Owner, and Engineer as additional insureds, against claims in excess of the limits provided under workers' compensation and employers' liability, business automobile liability, and commercial general liability policies. The umbrella policy shall follow the form of the primary insurance, including the application of the primary limits.

The liability limits shall be not less than:

Bodily injury and property damage

\$4,000,000 combined single limit for each occurrence

\$4,000,000 general aggregate

5.05 *Owner's Liability Insurance*

- A. In addition to the insurance required to be provided by Contractor under Paragraph 5.04, 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.

5.06 *Property Insurance*

- A. Unless otherwise provided in the Supplementary Conditions, ~~Owner~~ **Contractor** shall purchase and maintain property insurance upon the Work at the Site in the amount of the full replacement cost thereof (subject to such deductible amounts as may be provided in the Supplementary Conditions or required by Laws and Regulations). This insurance shall:
1. include the interests of Owner, Contractor, Subcontractors, and Engineer, and any other individuals or entities identified in the Supplementary Conditions, and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them, each of whom is deemed to have an insurable interest and shall be listed as a loss payee;
 2. be written on a Builder's Risk "all-risk" policy form that shall at **a minimum cover the perils under the ISO special causes of loss policy form (CP 10 30)** and ~~least~~ include insurance for physical loss or damage to the Work, temporary buildings, falsework, and materials and equipment in transit, and shall insure against at least the following perils or causes of loss: fire, lightning, extended coverage, theft, vandalism and malicious mischief, earthquake, collapse, debris removal, demolition occasioned by enforcement of Laws and Regulations, water damage (other than that caused by flood), and such other perils or causes of loss as may be specifically required by the Supplementary Conditions.

CONTRACTOR shall purchase and maintain boiler and machinery insurance required by the contract documents or by law, covering insured objects during installation and until final acceptance by Owner. In lieu of this separate policy, the contractor may have the boiler and machinery exclusion removed from the builder's risk policy.

3. include expenses incurred in the repair or replacement of any insured property (including but not limited to fees and charges of engineers and architects);
 4. cover materials and equipment 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;
 5. allow for partial utilization of the Work by Owner;
 6. include testing and startup; and
 7. be maintained in effect until final payment is made unless otherwise agreed to in writing by Owner, Contractor, and Engineer with 30 days written notice to each other loss payee to whom a certificate of insurance has been issued.
- B. Owner shall purchase and maintain such equipment breakdown insurance or additional property insurance as may be required by the Supplementary Conditions or Laws and Regulations which will include the interests of Owner, Contractor, Subcontractors, and Engineer, and any other individuals or entities identified in the Supplementary Conditions, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them, each of whom is deemed to have an insurable interest and shall be listed as a loss payee.
- C. All the policies of insurance (and the certificates or other evidence thereof) required to be purchased and maintained in accordance with this Paragraph 5.06 will contain a provision or endorsement that the coverage afforded will not be canceled or materially changed or renewal refused until at least 30 days prior written notice has been given to Owner and Contractor and to each other loss payee to whom a certificate of insurance has been issued and will contain waiver provisions in accordance with Paragraph 5.07.
- ~~D. Owner shall not be responsible for purchasing and maintaining any property insurance specified in this Paragraph 5.06 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, Subcontractors, 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.~~
- E. If ~~Contractor~~ Owner requests in writing that other special insurance be included in the property insurance policies provided under this Paragraph 5.06, ~~Owner~~ Contractor shall, if possible, include such insurance, and the cost thereof will be charged to ~~Contractor~~ Owner by appropriate Change Order. Prior to commencement of the Work at the Site, ~~Owner~~ Contractor shall in writing advise ~~Contractor~~ Owner whether or not such other insurance has been procured by ~~Owner-Contractor~~.

5.07 *Waiver of Rights*

- A. Owner and Contractor intend that all policies purchased in accordance with Paragraph 5.06 will protect Owner, Contractor, Subcontractors, and Engineer, and all other individuals or entities identified in the Supplementary Conditions as loss payees (and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them) in such policies and will provide primary coverage for all losses and damages caused by the perils or causes of loss covered thereby. All such policies shall contain provisions to the effect that in the event of payment of any loss or damage the insurers will have no rights of recovery against any of the insureds or loss payees thereunder. Owner and Contractor waive all rights against each other and their respective officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them for all losses and damages caused by, arising out of or resulting from any of the perils or causes of loss covered by such policies and any other property insurance applicable to the Work; and, in addition, waive all such rights against Subcontractors and Engineer, and all other individuals or entities identified in the Supplementary Conditions as loss payees (and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them) under such policies for losses and damages so caused. None of the above waivers shall extend to the rights that any party making such waiver may have to the proceeds of insurance held by Owner as trustee or otherwise payable under any policy so issued.
- B. Owner waives all rights against Contractor, Subcontractors, and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them for:
1. loss due to business interruption, loss of use, or other consequential loss extending beyond direct physical loss or damage to Owner's property or the Work caused by, arising out of, or resulting from fire or other perils whether or not insured by Owner; and
 2. loss or damage to the completed Project or part thereof caused by, arising out of, or resulting from fire or other insured peril or cause of loss covered by any property insurance maintained on the completed Project or part thereof by Owner during partial utilization pursuant to Paragraph 14.05, after Substantial Completion pursuant to Paragraph 14.04, or after final payment pursuant to Paragraph 14.07.
- C. Any insurance policy maintained by Owner covering any loss, damage or consequential loss referred to in Paragraph 5.07.B shall contain provisions to the effect that in the event of payment of any such loss, damage, or consequential loss, the insurers will have no rights of recovery against Contractor, Subcontractors, or Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors of each and any of them.

5.08 *Receipt and Application of Insurance Proceeds*

- A. Any insured loss under the policies of insurance required by Paragraph 5.06 will be adjusted with Owner and made payable to Owner ~~as fiduciary~~ for the loss payees, as their interests may appear, subject to the requirements of ~~any applicable mortgage clause and of~~ Paragraph 5.08.B. 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.

- B. 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 15 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.~~

5.09 *Acceptance of Bonds and Insurance; Option to Replace*

- A. If either 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 10 days after receipt of the certificates (or other evidence requested) required by Paragraph 2.01.B. 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.

5.10 *Partial Utilization, Acknowledgment of Property Insurer*

- A. If Owner finds it necessary to occupy or use a portion or portions of the Work prior to Substantial Completion of all the Work as provided in Paragraph 14.05, no such use or occupancy shall commence before the insurers providing the property insurance pursuant to Paragraph 5.06 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 canceled or permitted to lapse on account of any such partial use or occupancy.

ARTICLE 6 – CONTRACTOR'S RESPONSIBILITIES

6.01 *Supervision and Superintendence*

- A. 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. ~~Contractor shall not be responsible for the negligence of Owner or Engineer 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.~~

- B. At all times during the progress of the Work, Contractor shall assign a competent resident superintendent who shall not be replaced without written notice to Owner and Engineer **except under extraordinary circumstances.**

6.02 *Labor; Working Hours*

- A. Contractor shall provide competent, suitably qualified personnel to survey and lay out the Work and perform construction as required by the Contract Documents. Contractor shall at all times maintain good discipline and order at the Site.
- B. 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 stated in the Contract Documents, all Work at the Site shall be performed during regular working hours. Contractor will not permit the performance of Work on a Saturday, Sunday, or any legal holiday without Owner's written consent (which will not be unreasonably withheld) given after prior written notice to Engineer.

6.03 *Services, Materials, and Equipment*

- A. Unless otherwise specified in the Contract Documents, Contractor shall provide and assume full responsibility for all services, 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 performance, testing, start-up, and completion of the Work.
- B. All materials and equipment incorporated into the Work shall be as specified or, if not specified, shall be of good quality and new, except as otherwise provided in the Contract Documents. All special warranties and guarantees required 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 source, kind, and quality of materials and equipment.
- C. All materials and equipment shall be stored, applied, installed, connected, erected, protected, used, cleaned, and conditioned in accordance with instructions of the applicable Supplier, except as otherwise may be provided in the Contract Documents.

6.04 *Progress Schedule*

- A. Contractor shall adhere to the Progress Schedule established in accordance with Paragraph 2.07 as it may be adjusted from time to time as provided below.
 - 1. Contractor shall submit to Engineer for acceptance (to the extent indicated in Paragraph 2.07) proposed adjustments in the Progress Schedule that will not result in changing the Contract Times. Such adjustments will comply with any provisions of the General Requirements applicable thereto.
 - 2. Proposed adjustments in the Progress Schedule that will change the Contract Times shall be submitted in accordance with the requirements of Article 12. Adjustments in Contract Times may only be made by a Change Order.

6.05 *Substitutes and “Or-Equals”*

- A. 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, appearance, 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 submitted to Engineer for review under the circumstances described below.
1. *“Or-Equal” Items:* 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 approval of proposed substitute items. For the purposes of this Paragraph 6.05.A.1, a proposed item of material or equipment will be considered functionally equal to an item so named if:
 - a. in the exercise of reasonable judgment Engineer determines that:
 - 1) it is at least equal in materials of construction, quality, durability, appearance, strength, and design characteristics;
 - 2) it will reliably perform at least equally well the function and achieve the results imposed by the design concept of the completed Project as a functioning whole; and
 - 3) it has a proven record of performance and availability of responsive service.
 - b. Contractor certifies that, if approved and incorporated into the Work:
 - 1) there will be no increase in cost to the Owner or increase in Contract Times; and
 - 2) it will conform substantially to the detailed requirements of the item named in the Contract Documents.
 2. *Substitute Items:*
 - a. If in Engineer’s sole discretion an item of material or equipment proposed by Contractor does not qualify as an “or-equal” item under Paragraph 6.05.A.1, it will be considered a proposed substitute item.
 - b. Contractor shall submit sufficient information as provided below to allow Engineer to determine if the item of material or equipment proposed is essentially equivalent to that named and an acceptable substitute therefor. Requests for review of proposed substitute items of material or equipment will not be accepted by Engineer from anyone other than Contractor.

- c. The requirements for review by Engineer will be as set forth in Paragraph 6.05.A.2.d, as supplemented by the General Requirements, and as Engineer may decide is appropriate under the circumstances.
- d. Contractor shall make written application to Engineer for review of a proposed substitute item of material or equipment that Contractor seeks to furnish or use. The application:
 - 1) shall certify that the proposed substitute item will:
 - a) perform adequately the functions and achieve the results called for by the general design,
 - b) be similar in substance to that specified, and
 - c) be suited to the same use as that specified;
 - 2) will state:
 - a) the extent, if any, to which the use of the proposed substitute item will **prejudice** delay Contractor's achievement of Substantial Completion on time,
 - b) whether use of the proposed substitute item 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 other work on the Project) to adapt the design to the proposed substitute item, and
 - c) whether incorporation or use of the proposed substitute item in connection with the Work is subject to payment of any license fee or royalty;
 - 3) will identify:
 - a) all variations of the proposed substitute item from that specified, and
 - b) available engineering, sales, maintenance, repair, and replacement services; and
 - 4) shall contain an itemized estimate of all costs or credits that will result directly or indirectly from use of such substitute item, including costs of redesign and claims of other contractors affected by any resulting change.

B. *Substitute Construction Methods or Procedures:* If a specific means, method, technique, sequence, or procedure of construction is expressly required by the Contract Documents, Contractor may furnish or utilize a substitute means, method, technique, sequence, or procedure of construction approved by 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 requirements for review by Engineer will be similar to those provided in Paragraph 6.05.A.2.

C. *Engineer's Evaluation:* Engineer will be allowed a reasonable time within which to evaluate each proposal or submittal made pursuant to Paragraphs 6.05.A and 6.05.B. Engineer may require Contractor to furnish additional data about the proposed substitute item. Engineer will be the sole

judge of acceptability. No “or equal” or substitute will be ordered, installed or utilized until Engineer’s review is complete, which will be evidenced by a Change Order in the case of a substitute and an approved Shop Drawing for an “or equal.” Engineer will advise Contractor in writing of any negative determination.

- D. *Special Guarantee:* Owner may require Contractor to furnish at Contractor’s expense a special performance guarantee or other surety with respect to any substitute.
- E. *Engineer’s Cost Reimbursement:* Engineer will record Engineer’s costs in evaluating a substitute proposed or submitted by Contractor pursuant to Paragraphs 6.05.A.2 and 6.05.B. Whether or not Engineer approves a substitute so proposed or submitted by Contractor, Contractor shall reimburse Owner for the reasonable charges of Engineer for evaluating each such proposed substitute. Contractor shall also reimburse Owner for the reasonable charges of Engineer for making changes in the Contract Documents (or in the provisions of any other direct contract with Owner) resulting from the acceptance of each proposed substitute.
- F. *Contractor’s Expense:* Contractor shall provide all data in support of any proposed substitute or “or-equal” at Contractor’s expense.

6.06 *Concerning Subcontractors, Suppliers, and Others*

- A. Contractor shall not employ any Subcontractor, Supplier, or other individual or entity (including those acceptable to Owner as indicated in Paragraph 6.06.B), whether initially or as a replacement, against whom Owner may have reasonable objection. Contractor shall not be required to employ any Subcontractor, Supplier, or other individual or entity to furnish or perform any of the Work against whom Contractor has reasonable objection.
- B. If the Supplementary Conditions require the identity of certain Subcontractors, Suppliers, or other individuals or entities to be submitted to Owner in advance for acceptance by Owner by a specified date prior to the Effective Date of the Agreement, and if Contractor has submitted a list thereof in accordance with the Supplementary Conditions, Owner’s acceptance (either in writing or by failing to make written objection thereto by the date indicated for acceptance or objection in the Bidding Documents or the Contract Documents) of any such Subcontractor, Supplier, or other individual or entity so identified may be revoked on the basis of reasonable objection after due investigation. Contractor shall submit an acceptable replacement for the rejected Subcontractor, Supplier, or other individual or entity, and the Contract Price will be adjusted by the difference in the cost occasioned by such replacement, and an appropriate Change Order will be issued. No acceptance by Owner of any such Subcontractor, Supplier, or other individual or entity, whether initially or as a replacement, shall constitute a waiver of any right of Owner or Engineer to reject defective Work.
- C. Contractor shall be fully responsible to Owner and Engineer for all acts and omissions of the Subcontractors, Suppliers, and other individuals or entities performing or furnishing any of the Work just as Contractor is responsible for Contractor’s own acts and omissions. Nothing in the Contract Documents:
 - 1. shall create for the benefit of any such Subcontractor, Supplier, or other individual or entity any contractual relationship between Owner or Engineer and any such Subcontractor, Supplier or other individual or entity; nor

2. shall 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 individual or entity except as may otherwise be required by Laws and Regulations.
- D. Contractor shall be solely responsible for scheduling and coordinating the Work of Subcontractors, Suppliers, and other individuals or entities performing or furnishing any of the Work under a direct or indirect contract with Contractor.
- E. Contractor shall require all Subcontractors, Suppliers, and such other individuals or entities performing or furnishing any of the Work to communicate with Engineer through Contractor.
- F. 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.
- G. All Work performed for 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 a loss payee on the property insurance provided in Paragraph 5.06, 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, and all other individuals or entities identified in the Supplementary Conditions to be listed as insureds or loss payees (and the officers, directors, members, partners, employees, agents, consultants, and subcontractors of each and any of them) for all losses and damages caused by, arising out of, relating to, or resulting from any of the perils or causes of loss 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.

6.07 *Patent Fees and Royalties*

- A. 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.
- ~~B. To the fullest extent permitted by Laws and Regulations, Owner shall indemnify and hold harmless Contractor, and its officers, directors, members, partners, employees, agents, consultants, and subcontractors 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) arising out of or relating to 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 specified in the Contract Documents, but not identified~~

~~as being subject to payment of any license fee or royalty to others required by patent rights or copyrights.~~

- C. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors 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) arising out of or relating to 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.

6.08 *Permits*

- A. Unless otherwise provided in the Supplementary Conditions, ~~Contractor~~ **Owner** 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.~~ Owner shall pay all charges of utility owners for connections for providing permanent service to the Work.

6.09 *Laws and Regulations*

- A. Contractor shall give all notices required by and shall comply with all Laws and Regulations applicable to the 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.
- B. 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 (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) arising out of or relating to such Work. However, it shall not be Contractor's responsibility to make certain that the Specifications and Drawings are in accordance with Laws and Regulations, but this shall not relieve Contractor of Contractor's obligations under Paragraph 3.03.
- C. Changes in Laws or Regulations not known at the time of opening of Bids (or, on the Effective Date of the Agreement if there were no Bids) having an effect on the cost or time of performance of the Work shall be the subject of an adjustment in Contract Price or Contract Times. If Owner and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any such adjustment, a Claim may be made therefor as provided in Paragraph 10.05.

6.10 *Taxes*

- A. 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.

B. Pursuant to N.C.G.S. § 105-164.14, Owner is eligible for sales and use tax refunds on all materials which become a permanent part of the construction. Contractor agrees to provide Owner such documentation as may be necessary to meet the requirements of the North Carolina Department of Revenue regarding requests for refund of sales and use taxes. Such requirements include those described in the North Carolina Department of Revenue Sales and Use Tax Technical Bulletins § 18-2(F), outlined below:

1. To substantiate a refund claim for sales or use taxes paid on purchases of building materials, supplies, fixtures, and equipment by a contractor, Owner must secure from a contractor certified statements setting forth the specific required information. A “certified statement” is a statement signed by a contractor’s owner, a corporate officer of a contractor, or an employee of a contractor who is authorized to provide information set forth in the statement. The certified statement must include all of the following information:
 - a. The date the property was purchased;
 - b. The type of property purchased;
 - c. The cost of property purchased and the amount of sales and use taxed paid thereon;
 - d. The vendor from whom the property was purchased;
 - e. The project for which the property was purchased;
 - f. If the property was purchased in the State of North Carolina, the county to which it was delivered, or, if the property was not purchased in the State of North Carolina, the county in which the property was used; and
 - g. The invoice number of the purchase.
2. In the event Contractor makes several purchases from the same vendor, such certified statement must indicate the invoice numbers, the inclusive dates of the invoices, the total amount of the invoices, and the State and local sales and use taxes paid thereon. Such statement must also include the cost of any tangible personal property withdrawn from Contractor’s warehouse stock and the amount of State and local sales or use tax paid thereon by Contractor. Any local sales or use taxes included in Contractor’s statements must be shown separately from the State sales or use taxes. Contractor’s statements must not contain sales or use taxes paid on purchases of tangible personal property purchased by Contractor for use in performing the Contract which does not annex to, affix to or in some manner become a part of the building or structure that is owned or leased by a governmental agency and is being erected, altered or repaired for use by a governmental entity as defined by N.C.G.S. § 105-164.14(c). Examples of property on which sales or use tax has been paid by Contractor and which shall not be included in Contractor’s certified statement are scaffolding, forms for concrete, fuel for the operation of machinery and equipment, tools, equipment, equipment repair parts and equipment rentals. Similar certified statements by Subcontractors must be obtained by Contractor and furnished to Owner.

3. **Contractor shall submit notarized sales tax certificates which meet the requirements detailed above with each Application for Payment. Payment will not be made until the sales tax certificate(s) have been submitted to Owner. Owner is the recipient of sales tax refunds and no such funds shall be provided to Contractor, or claim made by Contractor therefor.**

6.11 *Use of Site and Other Areas*

A. *Limitation on Use of Site and Other Areas:*

1. Contractor shall confine construction equipment, the storage of materials and equipment, and the operations of workers to the Site and other areas permitted by Laws and Regulations, and shall not unreasonably encumber the Site and other areas 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.
2. 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.
3. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors 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) arising out of or relating to 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.

B. *Removal of Debris During Performance of the Work:* During the progress of the Work Contractor shall keep the Site and other areas free from accumulations of waste materials, rubbish, and other debris. Removal and disposal of such waste materials, rubbish, and other debris shall conform to applicable Laws and Regulations.

C. *Cleaning:* Prior to Substantial Completion of the Work Contractor shall clean the Site and the Work and make it ready for utilization by Owner. At the completion of the Work Contractor shall remove from the Site all tools, appliances, construction equipment and machinery, and surplus materials and shall restore to original condition all property not designated for alteration by the Contract Documents.

D. *Loading Structures:* 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.

6.12 *Record Documents*

A. Contractor shall maintain in a safe place at the Site one record copy of all Drawings, Specifications, Addenda, Change Orders, Work Change Directives, Field Orders, and written

interpretations and clarifications in good order and annotated to show 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.

6.13 *Safety and Protection*

- A. Contractor shall be solely responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the Work. Such responsibility does not relieve Subcontractors of their responsibility for the safety of persons or property in the performance of their work, nor for compliance with applicable safety Laws and Regulations. Contractor shall take all necessary precautions for the safety of, and shall provide the necessary protection to prevent damage, injury or loss to:
1. all persons on the Site or who may be affected by the Work;
 2. all the Work and materials and equipment to be incorporated therein, whether in storage on or off the Site; and
 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.
- B. Contractor shall comply with all applicable Laws and Regulations relating to the safety of persons or property, or to the protection of persons or property 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 other 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.
- C. Contractor shall comply with the applicable requirements of Owner's safety programs, if any. The Supplementary Conditions identify any Owner's safety programs that are applicable to the Work.
- D. Contractor shall inform Owner and Engineer of the specific requirements of Contractor's safety program with which Owner's and Engineer's employees and representatives must comply while at the Site.
- E. All damage, injury, or loss to any property referred to in Paragraph 6.13.A.2 or 6.13.A.3 caused, directly or indirectly, in whole or in part, by Contractor, any Subcontractor, Supplier, or any other individual or entity directly or indirectly employed by any of them to perform 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 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 individual or entity directly or indirectly employed by any of them).~~

- F. 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 14.07.B that the Work is acceptable (except as otherwise expressly provided in connection with Substantial Completion).

6.14 *Safety Representative*

- A. 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.

6.15 *Hazard Communication Programs*

- A. 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.

6.16 *Emergencies*

- A. In emergencies affecting the safety or protection of persons or the Work or property at the Site or adjacent thereto, Contractor 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 or are required as a result thereof. 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.

6.17 *Shop Drawings and Samples*

- A. Contractor shall submit Shop Drawings and Samples to Engineer for review and approval in accordance with the accepted Schedule of Submittals (as required by Paragraph 2.07). Each submittal will be identified as Engineer may require.

1. *Shop Drawings:*

- a. Submit number of copies specified in the General Requirements.
- b. Data shown on the Shop Drawings will be complete with respect to quantities, dimensions, specified performance and design criteria, materials, and similar data to show Engineer the services, materials, and equipment Contractor proposes to provide and to enable Engineer to review the information for the limited purposes required by Paragraph 6.17.D.

2. *Samples:*

- a. Submit number of Samples specified in the Specifications.
- b. Clearly identify each Sample as to material, Supplier, pertinent data such as catalog numbers, the use for which intended and other data as Engineer may require to enable Engineer to review the submittal for the limited purposes required by Paragraph 6.17.D.

- B. Where a Shop Drawing or Sample is required by the Contract Documents or the Schedule of Submittals, 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.

C. *Submittal Procedures:*

1. Before submitting each Shop Drawing or Sample, Contractor shall have:
 - a. 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;
 - b. determined and verified all field measurements, quantities, dimensions, specified performance and design criteria, installation requirements, materials, catalog numbers, and similar information with respect thereto;
 - c. determined and verified the suitability of all materials offered with respect to the indicated application, fabrication, shipping, handling, storage, assembly, and installation pertaining to the performance of the Work; and
 - d. determined and verified all information relative to Contractor's responsibilities for means, methods, techniques, sequences, and procedures of construction, and safety precautions and programs incident thereto.
2. Each submittal shall bear a stamp or specific written certification that Contractor has satisfied Contractor's obligations under the Contract Documents with respect to Contractor's review and approval of that submittal.
3. With each submittal, Contractor shall give Engineer specific written notice of any variations that the Shop Drawing or Sample may have from the requirements of the Contract Documents. This notice shall be both a written communication separate from the Shop Drawings or Sample submittal; and, in addition, by a specific notation made on each Shop Drawing or Sample submitted to Engineer for review and approval of each such variation.

D. *Engineer's Review:*

1. Engineer will provide timely review of Shop Drawings and Samples in accordance with the Schedule of Submittals acceptable to Engineer. 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.
2. 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.

3. Engineer's review and approval shall not relieve Contractor from responsibility for any variation from the requirements of the Contract Documents unless Contractor has complied with the requirements of Paragraph 6.17.C.3 and Engineer has given written approval of each such variation by specific written notation thereof incorporated in or accompanying the Shop Drawing or Sample. Engineer's review and approval shall not relieve Contractor from responsibility for complying with the requirements of Paragraph 6.17.C.1.

E. *Resubmittal Procedures:*

1. Contractor shall make corrections required by Engineer and shall return the required number of corrected copies of Shop Drawings and ~~submit~~, **resubmit**, 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. **All resubmittals by Contractor to Engineer shall be within fourteen (14) calendar days after receipt by Contractor unless additional time is approved in writing by Engineer.**
- F. **Contractor shall furnish required submittals with sufficient information and accuracy in order to obtain required approval of an item with no more than three (3) submittals. Engineer will record Engineer's time for reviewing submittals subsequent to the third submittal and Contractor shall reimburse Owner for Engineer's charges for such time.**
- G. **In the event Contractor requests a substitution for a previously approved item, Contractor shall reimburse Owner for Engineer's charges for such time.**

6.18 *Continuing the Work*

- A. 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 15.04 or as Owner and Contractor may otherwise agree in writing.

6.19 *Contractor's General Warranty and Guarantee*

- A. Contractor warrants and guarantees to Owner that all Work will be in accordance with the Contract Documents and will not be defective. Engineer and its officers, directors, members, partners, employees, agents, consultants, and subcontractors shall be entitled to rely on representation of Contractor's warranty and guarantee.
- B. Contractor's warranty and guarantee hereunder excludes defects or damage caused by:
 1. abuse, modification, or improper maintenance or operation by persons other than Contractor, Subcontractors, Suppliers, or any other individual or entity for whom Contractor is responsible; or
 2. normal wear and tear under normal usage.
- C. 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:

1. observations by Engineer;
2. recommendation by Engineer or payment by Owner of any progress or final payment;
3. the issuance of a certificate of Substantial Completion by Engineer or any payment related thereto by Owner;
4. use or occupancy of the Work or any part thereof by Owner;
5. any review and approval of a Shop Drawing or Sample submittal or the issuance of a notice of acceptability by Engineer;
6. any inspection, test, or approval by others; or
7. any correction of defective Work by Owner.

6.20 *Indemnification*

- A. To the fullest extent permitted by Laws and Regulations, Contractor shall indemnify and hold harmless Owner and Engineer, and the officers, directors, members, partners, employees, agents, consultants and subcontractors 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) arising out of or relating to the performance of the Work, provided that 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 but only to the extent caused by any negligent act or omission of Contractor, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work or anyone for whose acts any of them may be liable .
- B. In any and all claims against Owner or Engineer or any of their officers, directors, members, partners, employees, agents, consultants, or subcontractors by any employee (or the survivor or personal representative of such employee) of Contractor, any Subcontractor, any Supplier, or any individual or entity directly or indirectly employed by any of them to perform any of the Work, or anyone for whose acts any of them may be liable, the indemnification obligation under Paragraph 6.20.A 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 individual or entity under workers' compensation acts, disability benefit acts, or other employee benefit acts.
- C. The indemnification obligations of Contractor under Paragraph 6.20.A shall not extend to the liability of Engineer and Engineer's officers, directors, members, partners, employees, agents, consultants and subcontractors arising out of:
 1. the preparation or approval of, or the failure to prepare or approve maps, Drawings, opinions, reports, surveys, Change Orders, designs, or Specifications; or

2. giving directions or instructions, or failing to give them, if that is the primary cause of the injury or damage.

6.21 *Delegation of Professional Design Services*

- A. Contractor will not be required to provide professional design services unless such services are specifically required by the Contract Documents for a portion of the Work or unless such services are required to carry out Contractor's responsibilities for construction means, methods, techniques, sequences and procedures. Contractor shall not be required to provide professional services in violation of applicable law.
- B. If professional design services or certifications by a design professional related to systems, materials or equipment are specifically required of Contractor by the Contract Documents, Owner and Engineer will specify all performance and design criteria that such services must satisfy. Contractor shall cause such services or certifications to be provided by a properly licensed professional, whose signature and seal shall appear on all drawings, calculations, specifications, certifications, Shop Drawings and other submittals prepared by such professional. Shop Drawings and other submittals related to the Work designed or certified by such professional, if prepared by others, shall bear such professional's written approval when submitted to Engineer.
- C. Owner and Engineer shall be entitled to rely upon the adequacy, accuracy and completeness of the services, certifications or approvals performed by such design professionals, ~~provided Owner and Engineer have specified to Contractor all performance and design criteria that such services must satisfy.~~
- D. Pursuant to this Paragraph 6.21, Engineer's review and approval of design calculations and design drawings will be only for the limited purpose of checking for conformance with performance and design criteria given and the design concept expressed in the Contract Documents. Engineer's review and approval of Shop Drawings and other submittals (except design calculations and design drawings) will be only for the purpose stated in Paragraph 6.17.D.1.
- E. Contractor shall not be responsible for the adequacy of the performance or design criteria required by the Contract Documents.

ARTICLE 7 – OTHER WORK AT THE SITE

7.01 *Related Work at Site*

- A. Owner may perform other work related to the Project at the Site with Owner's employees, or through other direct contracts therefor, or have other work performed by utility owners. If such other work is not noted in the Contract Documents, then:
 - ~~1. written notice thereof will be given to Contractor prior to starting any such other work; and~~
 - ~~2. if Owner and Contractor are unable to agree on entitlement to or on the amount or extent, if any, of any adjustment in the Contract Price or Contract Times that should be allowed as a result of such other work, a Claim may be made therefor as provided in Paragraph 10.05.~~

- B. Contractor shall afford each other contractor who is a party to such a direct contract, each utility owner, and Owner, if Owner is performing other work with Owner's employees, proper and safe access to the Site, provide a reasonable opportunity for the introduction and storage of materials and equipment and the execution of such other work, and properly coordinate the Work ~~with theirs.~~ **in accordance with Section 7.02.** Contractor shall do all cutting, fitting, and patching of the Work that may be required to properly connect or otherwise make its several parts come together and properly integrate with such other work. Contractor shall not endanger any work of others by cutting, excavating, or otherwise altering such work; provided, however, that Contractor may cut or alter others' 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.
- C. 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 to so report will constitute an acceptance of such other work as fit and proper for integration with Contractor's Work except for latent defects and deficiencies in such other work.

7.02 *Coordination*

- A. If Owner intends to contract with others for the performance of other work on the Project at the Site, the following will be set forth in Supplementary Conditions:
1. the individual or entity who will have authority and responsibility for coordination of the activities among the various contractors will be identified;
 2. the specific matters to be covered by such authority and responsibility will be itemized; and
 3. the extent of such authority and responsibilities will be provided.
- B. Unless otherwise provided in the Supplementary Conditions, Owner shall have sole authority and responsibility for such coordination.

7.03 *Legal Relationships*

- A. Paragraphs 7.01.A and 7.02 are not applicable for utilities not under the control of Owner.
- B. Each other direct contract of Owner under Paragraph 7.01.A shall provide that the other contractor is liable to Owner and Contractor for the reasonable direct delay and disruption costs incurred by Contractor as a result of the other contractor's wrongful actions or inactions.
- C. Contractor shall be liable to Owner and any other contractor under direct contract to Owner for the reasonable direct delay and disruption costs incurred by such other contractor as a result of Contractor's wrongful action or inactions.

7.04 *Damage to Work of Another Contractor*

- A. *Should Contractor cause damage to the work or property of any other contractor at the Site, or should any claim arising out of Contractor's performance of the Work at the Site be made by any other contractor against Owner or Engineer, Contractor shall promptly attempt to settle with such contractor by agreement, or otherwise resolve the dispute by mediation or at law.*

ARTICLE 8 – OWNER'S RESPONSIBILITIES

8.01 *Communications to Contractor*

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

8.02 *Replacement of Engineer*

- A. In case of termination of the employment of Engineer, Owner shall appoint an engineer ~~to whom Contractor makes no reasonable objection~~, whose status under the Contract Documents shall be that of the former Engineer.

~~8.03 *Furnish Data*~~

- ~~A. Owner shall promptly furnish the data required of Owner under the Contract Documents.~~

~~8.04 *Pay When Due*~~

- ~~A. Owner shall make payments to Contractor when they are due as provided in Paragraphs 14.02.C and 14.07.C.~~

~~8.05 *Lands and Easements; Reports and Tests*~~

- ~~A. Owner's duties with respect to providing lands and easements and providing engineering surveys to establish reference points are set forth in Paragraphs 4.01 and 4.05. Paragraph 4.02 refers to Owner's identifying and making available to Contractor copies of reports of explorations and tests of subsurface conditions and drawings of physical conditions relating to existing surface or subsurface structures at the Site.~~

~~8.06 *Insurance*~~

- ~~A. Owner's responsibilities, if any, with respect to purchasing and maintaining liability and property insurance are set forth in Article 5.~~

~~8.07 *Change Orders*~~

- ~~A. Owner is obligated to execute Change Orders as indicated in Paragraph 10.03.~~

~~8.08 *Inspections, Tests, and Approvals*~~

- ~~A. Owner's responsibility with respect to certain inspections, tests, and approvals is set forth in Paragraph 13.03.B.~~

8.03 *Limitations on Owner's Responsibilities*

- A. 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 performance of the Work. Owner will not be responsible for Contractor's failure to perform the Work in accordance with the Contract Documents.

~~8.04 *Undisclosed Hazardous Environmental Condition*~~

- ~~A. **Owner's responsibility in respect to an undisclosed Hazardous Environmental Condition is set forth in Paragraph 4.06.**~~

8.04 *Evidence of Financial Arrangements*

- A. Upon request of Contractor, Owner shall furnish Contractor reasonable evidence that financial arrangements have been made to satisfy Owner's obligations under the Contract Documents.

8.05 *Compliance with Safety Program*

- A. While at the Site, Owner's employees and representatives shall comply with the specific applicable requirements of Contractor's safety programs of which Owner has been informed pursuant to Paragraph 6.13.D.

ARTICLE 9 – ENGINEER'S STATUS DURING CONSTRUCTION

9.01 *Owner's Representative*

- A. 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.

9.02 *Visits to Site*

- A. 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, for the benefit of Owner, will determine, in general, if the Work is proceeding in accordance with the Contract Documents. Engineer will not be required to make exhaustive or continuous inspections on the Site 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 observations, Engineer will keep Owner informed of the progress of the Work and will endeavor to guard Owner against defective Work.
- B. Engineer's visits and observations are subject to all the limitations on Engineer's authority and responsibility set forth in Paragraph 9.09. Particularly, but without limitation, during or as a result of Engineer's 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 performance of the Work.

9.03 *Project Representative*

- A. If Owner and Engineer agree, Engineer will furnish a Resident Project Representative to assist Engineer in providing more extensive observation of the Work. The authority and responsibilities of any such Resident Project Representative and assistants will be as provided in the Supplementary Conditions, and limitations on the responsibilities thereof will be as provided in Paragraph ~~9.09~~, **9.08**. 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 individual or entity will be as provided in the Supplementary Conditions.

9.04 *Authorized Variations in Work*

- A. 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 Contract Times, or both, and the parties are unable to agree on entitlement to or on the amount or extent, if any, of any such adjustment, a Claim may be made therefor as provided in Paragraph 10.05.

9.05 *Rejecting Defective Work*

- A. Engineer will have authority to reject Work which Engineer believes to be defective, or that Engineer believes will not produce a completed 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 13.04, whether or not the Work is fabricated, installed, or completed.

~~9.06 *Shop Drawings, Change Orders and Payments*~~

- ~~A. In connection with Engineer's authority, and limitations thereof, as to Shop Drawings and Samples, see Paragraph 6.17.~~
- ~~B. In connection with Engineer's authority, and limitations thereof, as to design calculations and design drawings submitted in response to a delegation of professional design services, if any, see Paragraph 6.21.~~
- ~~C. In connection with Engineer's authority as to Change Orders, see Articles 10, 11, and 12.~~
- ~~D. In connection with Engineer's authority as to Applications for Payment, see Article 14.~~

9.06 *Determinations for Unit Price Work*

- A. 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 (except as modified by Engineer to reflect changed factual conditions or more accurate data) upon Owner and Contractor, subject to the provisions of Paragraph 10.05.

9.07 *Decisions on Requirements of Contract Documents and Acceptability of Work*

- A. Engineer will be the initial interpreter of the requirements of the Contract Documents and judge of the acceptability of the Work thereunder. All matters in question and other matters between Owner and Contractor arising prior to the date final payment is due relating to the acceptability of the Work, and the interpretation of the requirements of the Contract Documents pertaining to the performance of the Work, will be referred initially to Engineer in writing within **30 seven (7) calendar** days of the event giving rise to the question.
- B. Engineer will, ~~with reasonable promptness,~~ **within seven (7) days,** render a written decision on the issue referred. If Owner or Contractor believes that any such decision entitles them to an adjustment in the Contract Price or Contract Times or both, a Claim may be made under Paragraph 10.05. The date of Engineer's decision shall be the date of the event giving rise to the issues referenced for the purposes of Paragraph 10.05.B.
- C. Engineer's written decision on the issue referred will be final and binding on Owner and Contractor, subject to the provisions of Paragraph 10.05.
- D. When functioning as interpreter and judge under this Paragraph 9.08, 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.

9.08 *Limitations on Engineer's Authority and Responsibilities*

- A. 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 in contract, tort, or otherwise owed by Engineer to Contractor, any Subcontractor, any Supplier, any other individual or entity, or to any surety for or employee or agent of any of them.
- B. 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 performance of the Work. Engineer will not be responsible for Contractor's failure to perform the Work in accordance with the Contract Documents.
- C. Engineer will not be responsible for the acts or omissions of Contractor or of any Subcontractor, any Supplier, or of any other individual or entity performing any of the Work.

- D. Engineer's review of the final Application for Payment and accompanying documentation and all maintenance and operating instructions, schedules, guarantees, bonds, certificates of inspection, tests and approvals, and other documentation required to be delivered by Paragraph 14.07.A 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.
- E. The limitations upon authority and responsibility set forth in this Paragraph 9.09 shall also apply to the Resident Project Representative, if any, and assistants, if any.

9.09 *Compliance with Safety Program*

- A. While at the Site, Engineer's employees and representatives shall comply with the specific applicable requirements of Contractor's safety programs of which Engineer has been informed pursuant to Paragraph 6.13.D.

ARTICLE 10 – CHANGES IN THE WORK; CLAIMS

10.01 *Authorized Changes in the Work*

- A. Without invalidating the Contract and without notice to any surety, Owner may, at any time or from time to time, unilaterally order additions, deletions, or revisions in the Work by a Change Order, or a Work Change Directive, including, but not limited to, variations in quantities between estimated and actual quantities. 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).
- B. If Owner and Contractor are unable to agree on entitlement to, or on the amount or extent, if any, of an adjustment in the Contract Price or Contract Times, or both, that should be allowed as a result of a Work Change Directive, a Claim may be made therefor as provided in Paragraph 10.05.

10.02 *Unauthorized Changes in the Work*

- A. 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, or supplemented as provided in Paragraph 3.04, except in the case of an emergency as provided in Paragraph 6.16 or in the case of uncovering Work as provided in Paragraph 13.04.D.

10.03 *Execution of Change Orders*

- A. Owner and Contractor shall execute appropriate Change Orders recommended by Engineer covering:
 - 1. changes in the Work which are: (i) ordered by Owner pursuant to Paragraph 10.01.A, (ii) required because of acceptance of defective Work under Paragraph 13.08.A or Owner's correction of defective Work under Paragraph 13.09, or (iii) agreed to by the parties;

2. changes in the Contract Price or Contract Times which are agreed to by the parties, including any undisputed sum or amount of time for Work actually performed in accordance with a Work Change Directive; and
3. changes in the Contract Price or Contract Times which embody the substance of any written decision rendered by Engineer pursuant to Paragraph 10.05; 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 6.18.A.

10.04 *Notification to Surety*

- A. If the provisions of any bond require notice to be given to a surety 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), the giving of any such notice will be Contractor's responsibility. The amount of each applicable bond will be adjusted to reflect the effect of any such change.

10.05 *Claims*

- A. *Engineer's Decision Required:* All Claims, except those waived pursuant to Paragraph 14.09, shall be referred to the Engineer for decision. A decision by Engineer shall be required as a condition precedent to any exercise by Owner or Contractor of any rights or remedies either may otherwise have under the Contract Documents or by Laws and Regulations in respect of such Claims.
- B. *Notice:* Written notice stating the general nature of each Claim shall be delivered by the claimant to Engineer and the other party to the Contract ~~promptly (but in no event later than 30 days)~~ **within seven (7) calendar days** after the start of the event giving rise thereto. The responsibility to substantiate a Claim shall rest with the party making the Claim. Notice of the amount or extent of the Claim, with supporting data shall be delivered to the Engineer and the other party to the Contract within ~~60~~ **thirty (30)** days after the start of such event (unless Engineer allows additional time for claimant to submit additional or more accurate data in support of such Claim). A Claim for an adjustment in Contract Price shall be prepared in accordance with the provisions of Paragraph 12.01.B. A Claim for an adjustment in Contract Times shall be prepared in accordance with the provisions of Paragraph 12.02.B. Each Claim shall be accompanied by claimant's written **statement certification** that the adjustment claimed is the entire adjustment to which the claimant believes it is entitled as a result of said event. The opposing party shall submit any response to Engineer and the claimant within ~~30~~ **twenty (20)** days after receipt of the claimant's last submittal (unless Engineer allows additional time).
- C. *Engineer's Action:* Engineer will review each Claim and, within 30 days after receipt of the last submittal of the claimant or the last submittal of the opposing party, if any, take one of the following actions in writing:
 1. deny the Claim in whole or in part;
 2. approve the Claim; or

3. notify the parties that the Engineer is unable to resolve the Claim if, in the Engineer's sole discretion, it would be inappropriate for the Engineer to do so. For purposes of further resolution of the Claim, such notice shall be deemed a denial.
- D. In the event that Engineer does not take action on a Claim within said 30 days, the Claim shall be deemed denied.
- E. Engineer's written action under Paragraph 10.05.C or denial pursuant to Paragraphs 10.05.C.3 or 10.05.D will be final and binding upon Owner and Contractor, unless Owner or Contractor invoke the dispute resolution procedure set forth in Article 16 within 30 days of such action or denial.
- F. No Claim for an adjustment in Contract Price or Contract Times will be valid if not submitted in **strict** accordance with this Paragraph 10.05 **and failure to submit such Claim in strict accordance with this Paragraph 10.05 shall be deemed a WAIVER of such Claim.**

ARTICLE 11 – COST OF THE WORK; ALLOWANCES; UNIT PRICE WORK

11.01 *Cost of the Work*

- A. *Costs Included:* The term Cost of the Work means the sum of all costs, except those excluded in Paragraph 11.01.B, necessarily incurred and paid by Contractor in the proper performance of the Work. When the value of any Work covered by a Change Order or when a Claim for an adjustment in Contract Price is determined on the basis of Cost of the Work, the costs to be reimbursed to Contractor will be only those additional or incremental costs required because of the change in the Work or because of the event giving rise to the Claim. 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 not include any of the costs itemized in Paragraph 11.01.B, and shall include only the following items:
 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 on the Work. 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 outside of regular working hours, on Saturday, Sunday, or legal holidays, shall be included in the above to the extent authorized by Owner.
 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.

3. Payments made by Contractor to Subcontractors for Work performed 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 acceptable. 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 this Paragraph 11.01.
4. **If prior written approval by Owner is obtained, costs** ~~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.
5. Supplemental costs including the following:
 - a. **If prior written approval by Owner is obtained, the** ~~The~~ proportion of necessary transportation, travel, and subsistence expenses of Contractor's employees incurred in discharge of duties connected with the Work.
 - b. 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.
 - c. 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, assembly, dismantling, and removal thereof. All such costs shall be 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.
 - d. Sales, consumer, use, and other similar taxes related to the Work, and for which Contractor is liable, as imposed by Laws and Regulations.
 - e. 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.
 - f. 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 of the Work (except losses and damages within the deductible amounts of property insurance established in accordance with Paragraph 5.06.D), provided such losses and damages 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.
 - g. The cost of utilities, fuel, and sanitary facilities at the Site.

- h. Minor expenses such as telegrams, long distance telephone calls, telephone service at the Site, express and courier services, and similar petty cash items in connection with the Work.
- i. The costs of premiums for all bonds and insurance Contractor is required by the Contract Documents to purchase and maintain.

B. *Costs Excluded:* The term Cost of the Work shall not include any of the following items:

- 1. Payroll costs and other compensation of Contractor's officers, executives, principals (of partnerships and sole proprietorships), general managers, safety 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 branch office for general administration of the Work and not specifically included in the agreed upon schedule of job classifications referred to in Paragraph 11.01.A.1 or specifically covered by Paragraph 11.01.A.4, all of which are to be considered administrative costs covered by the Contractor's fee.
- 2. Expenses of Contractor's principal and branch offices other than Contractor's office at the Site.
- 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.
- 4. 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.
- 5. Other overhead or general expense costs of any kind and the costs of any item not specifically and expressly included in Paragraphs 11.01.A.

C. *Contractor's Fee:* When all the Work is performed on the basis of cost-plus, Contractor's fee shall be determined as set forth in the Agreement. When the value of any Work covered by a Change Order or when a Claim for an adjustment in Contract Price is determined on the basis of Cost of the Work, Contractor's fee shall be determined as set forth in Paragraph 12.01.C.

D. *Documentation:* Whenever the Cost of the Work for any purpose is to be determined pursuant to Paragraphs 11.01.A and 11.01.B, Contractor will establish and maintain records thereof in accordance with generally accepted accounting practices and submit in a form acceptable to Engineer an itemized cost breakdown together with supporting data.

11.02 Allowances

A. It is understood that Contractor has included in the Contract Price all allowances so named in the Contract Documents and shall cause the Work so covered to be performed for such sums and by such persons or entities as may be acceptable to Owner and Engineer.

B. *Cash Allowances:*

1. Contractor agrees that:

- a. the cash allowances include the cost to Contractor (less any applicable trade discounts) of materials and equipment required by the allowances to be delivered at the Site, and all applicable taxes; and
- b. Contractor's costs for unloading and handling on the Site, labor, installation, overhead, profit, and other expenses contemplated for the cash allowances have been included in the Contract Price and not in the allowances, and no demand for additional payment on account of any of the foregoing will be valid.

C. *Contingency Allowance:*

1. Contractor agrees that a contingency allowance, if any, is for the sole use of Owner to cover unanticipated costs.

D. Prior to final payment, an appropriate Change Order will be issued as recommended by Engineer to reflect actual amounts due Contractor on account of Work covered by allowances, and the Contract Price shall be correspondingly adjusted.

11.03 *Unit Price Work*

- A. 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 unit price for each separately identified item of Unit Price Work times the estimated quantity of each item as indicated in the Agreement.
- B. 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 subject to the provisions of Paragraph 9.07.
- C. 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.
- D. Owner or Contractor may make a Claim for an adjustment in the Contract Price in accordance with Paragraph 10.05 if:
 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
 2. there is no corresponding adjustment with respect to any other item of Work; and
 3. 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 PRICE; CHANGE OF CONTRACT TIMES

12.01 *Change of Contract Price*

- A. 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 submitted by the party making the Claim to the Engineer and the other party to the Contract in accordance with the provisions of Paragraph 10.05. **No change in the Contract Price will be approved for defective pricing upon Bid submission and award, or errors in bidding.**
- B. 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:
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 Paragraph 11.03); or
 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 12.01.C.2); or
 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 12.01.B.2, on the basis of the Cost of the Work (determined as provided in Paragraph 11.01) plus a Contractor's fee for overhead and profit (determined as provided in Paragraph 12.01.C).
- C. *Contractor's Fee:* The Contractor's fee for overhead and profit shall be determined as follows:
1. a mutually acceptable fixed fee; or
 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:
 - a. for costs incurred under Paragraphs 11.01.A.1 and 11.01.A.2, the Contractor's fee shall be 15 percent;
 - b. for costs incurred under Paragraph 11.01.A.3, the Contractor's fee shall be five percent;
 - c. 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 12.01.C.2.a and 12.01.C.2.b is that the Subcontractor who actually performs the Work, at whatever tier, will be paid a fee of 15 percent of the costs incurred by such Subcontractor under Paragraphs 11.01.A.1 and 11.01.A.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;
 - d. no fee shall be payable on the basis of costs itemized under Paragraphs 11.01.A.4, 11.01.A.5, and 11.01.B;

- e. 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
- f. 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 12.01.C.2.a through 12.01.C.2.e, inclusive.

12.02 *Change of Contract Times*

- A. The Contract Times may only be changed by a Change Order. Any Claim for an adjustment in the Contract Times shall be based on written notice submitted by the party making the Claim to the Engineer and the other party to the Contract in accordance with the provisions of Paragraph 10.05.
- B. Any adjustment of the Contract Times covered by a Change Order or any Claim for an adjustment in the Contract Times will be determined in accordance with the provisions of this Article 12.

12.03 *Delays*

- A. Where Contractor is prevented from completing any part of the Work within the Contract Times due to delay beyond the control of Contractor, the Contract Times will be extended in an amount equal to the time lost due to such delay if a Claim is made therefor as provided in Paragraph 12.02.A. 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.
- B. If Owner, Engineer, or other contractors or utility owners performing other work for Owner as contemplated by Article 7, or anyone for whom Owner is responsible, delays, disrupts, or interferes with the performance or progress of the Work, then Contractor shall be entitled to an equitable adjustment in the Contract Price or the Contract Times, or both. Contractor's entitlement to an adjustment of the Contract Times is conditioned on such adjustment being essential to Contractor's ability to complete the Work within the Contract Times.
- C. If Contractor is delayed in the performance or progress of the Work by fire, flood, epidemic, abnormal weather conditions, acts of God, acts or failures to act of utility owners not under the control of Owner, or other causes not the fault of and beyond control of Owner and Contractor, then Contractor shall be entitled to an equitable adjustment in Contract Times, if such adjustment is essential to Contractor's ability to complete the Work within the Contract Times. Such an adjustment shall be Contractor's sole and exclusive remedy for the delays described in this Paragraph 12.03.C.
- D. Owner, Engineer, and their officers, directors, members, partners, employees, agents, consultants, or subcontractors shall not be liable to Contractor for any claims, costs, losses, or 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) sustained by Contractor on or in connection with any other project or anticipated project.

- E. Contractor shall not be entitled to an adjustment in Contract Price or Contract Times for delays within the control of Contractor. Delays attributable to and within the control of a Subcontractor or Supplier shall be deemed to be delays within the control of Contractor.

ARTICLE 13 – TESTS AND INSPECTIONS; CORRECTION, REMOVAL OR ACCEPTANCE OF DEFECTIVE WORK

13.01 *Notice of Defects*

- A. Prompt notice of all defective Work of which Owner or Engineer has actual knowledge will be given to Contractor. Defective Work may be rejected, corrected, or accepted as provided in this Article 13.

13.02 *Access to Work*

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

13.03 *Tests and Inspections*

- A. 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.
- B. Owner shall employ and pay for the services of an independent testing laboratory to perform all inspections, tests, or approvals required by the Contract Documents except:
 - 1. for inspections, tests, or approvals covered by Paragraphs 13.03.C and 13.03.D below;
 - 2. that costs incurred in connection with tests or inspections conducted pursuant to Paragraph 13.04.B shall be paid as provided in Paragraph 13.04.C; and
 - 3. as otherwise specifically provided in the Contract Documents.
- C. 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.
- D. Contractor shall 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 acceptance of materials, mix designs, or equipment submitted for approval prior to Contractor's purchase thereof for incorporation in the Work. Such inspections, tests, or approvals shall be performed by organizations acceptable to Owner and Engineer.

- E. 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, Contractor shall, if requested by Engineer, uncover such Work for observation.
- F. Uncovering Work as provided in Paragraph 13.03.E 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.

13.04 *Uncovering Work*

- A. 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.
- B. 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.
- C. If it is found that the uncovered Work is defective, Contractor shall pay 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) arising out of or relating to 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. If the parties are unable to agree as to the amount thereof, Owner may make a Claim therefor as provided in Paragraph 10.05.
- D. If the uncovered 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 both, directly attributable to such uncovering, exposure, observation, inspection, testing, replacement, and reconstruction. If the parties are unable to agree as to the amount or extent thereof, Contractor may make a Claim therefor as provided in Paragraph 10.05.

13.05 *Owner May Stop the Work*

- A. If the Work is defective, or Contractor fails to supply sufficient skilled workers or suitable materials or equipment, or fails to 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, any Subcontractor, any Supplier, any other individual or entity, or any surety for, or employee or agent of any of them.

13.06 *Correction or Removal of Defective Work*

- A. Promptly after receipt of written notice, Contractor shall correct all defective Work, whether or not fabricated, installed, or completed, or, if the Work has been rejected by Engineer, remove it from the Project and replace it with Work that is not defective. Contractor shall pay 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) arising out of or relating to such correction or removal (including but not limited to all costs of repair or replacement of work of others).

- B. When correcting defective Work under the terms of this Paragraph 13.06 or Paragraph 13.07, Contractor shall take no action that would void or otherwise impair Owner's special warranty and guarantee, if any, on said Work.

13.07 *Correction Period*

- A. If within one year after the date of Substantial Completion (or such longer period of time as may be prescribed 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, or if the repair of any damages to the land or areas made available for Contractor's use by Owner or permitted by Laws and Regulations as contemplated in Paragraph 6.11.A is found to be defective, Contractor shall promptly, without cost to Owner and in accordance with Owner's written instructions:
 - 1. repair such defective land or areas; or
 - 2. correct such defective Work; or
 - 3. if the defective Work has been rejected by Owner, remove it from the Project and replace it with Work that is not defective, and
 - 4. satisfactorily correct or repair or remove and replace any damage to other Work, to the work of others or other land or areas resulting therefrom.
- B. If Contractor does not promptly comply with the terms of Owner's written instructions, or in an emergency where delay would cause serious risk of loss or damage, Owner may have the defective Work corrected or repaired or may have the rejected Work removed and replaced. 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) arising out of or relating to such correction or repair or such removal and replacement (including but not limited to all costs of repair or replacement of work of others) will be paid by Contractor.
- C. 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.
- D. Where defective Work (and damage to other Work resulting therefrom) has been corrected or removed and replaced under this Paragraph 13.07, 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.
- E. Contractor's obligations under this Paragraph 13.07 are in addition to any other obligation or warranty. The provisions of this Paragraph 13.07 shall not be construed as a substitute for, or a waiver of, the provisions of any applicable statute of limitation or repose.

13.08 *Acceptance of Defective Work*

- A. If, instead of requiring correction or removal and replacement of defective Work, Owner (and, prior to Engineer's recommendation of final payment, Engineer) prefers to accept it, Owner may do so. Contractor shall pay 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) attributable to Owner's evaluation of and determination to accept such defective Work (such costs to be approved by Engineer as to reasonableness) and for the diminished value of the Work to the extent not otherwise paid by Contractor pursuant to this sentence. 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, reflecting the diminished value of Work so accepted. If the parties are unable to agree as to the amount thereof, Owner may make a Claim therefor as provided in Paragraph 10.05. If the acceptance occurs after such recommendation, an appropriate amount will be paid by Contractor to Owner.

13.09 *Owner May Correct Defective Work*

- A. If Contractor fails within ~~a reasonable time~~ **fourteen (14) calendar days** after written notice from Engineer to correct defective Work, or to remove and replace rejected Work as required by Engineer in accordance with Paragraph 13.06.A, 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~~ **fourteen (14) calendar** days written notice to Contractor, correct, or remedy any such deficiency. **If additional time is required due to unforeseen circumstances, a written notice is required detailing the circumstances and delay within seven (7) days of written notice from Engineer.**
- B. In exercising the rights and remedies under this Paragraph 13.09, Owner shall proceed expeditiously. In connection with such corrective or 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 representatives, 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.
- C. 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) incurred or sustained by Owner in exercising the rights and remedies under this Paragraph 13.09 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. If the parties are unable to agree as to the amount of the adjustment, Owner may make a Claim therefor as provided in Paragraph 10.05. 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.

- D. Contractor shall not be allowed an extension of the Contract Times because of any delay in the performance of the Work attributable to the exercise by Owner of Owner's rights and remedies under this Paragraph 13.09.

ARTICLE 14 – PAYMENTS TO CONTRACTOR AND COMPLETION

14.01 *Schedule of Values*

- A. The Schedule of Values established as provided in Paragraph 2.07.A 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.

14.02 *Progress Payments*

A. *Applications for Payments:*

1. At least 20 days before the date established in the Agreement 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 or other arrangements to protect Owner's interest therein, all of which must be satisfactory to Owner.
2. Beginning with the second Application for Payment, each Application shall include an affidavit of Contractor stating that all previous progress payments received on account of the Work have been applied on account to discharge Contractor's legitimate obligations associated with prior Applications for Payment.
3. The amount of retainage with respect to progress payments will be as stipulated in the Agreement.

B. *Review of Applications:*

1. Engineer will, within ~~10~~ **fourteen (14) calendar** 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.
2. Engineer's recommendation of any payment requested in an Application for Payment will constitute a representation by Engineer to Owner, based on Engineer's 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:

- a. the Work has progressed to the point indicated;
 - b. 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, the results of any subsequent tests called for in the Contract Documents, a final determination of quantities and classifications for Unit Price Work under Paragraph 9.07, and any other qualifications stated in the recommendation); and
 - c. 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.
3. By recommending any such payment Engineer will not thereby be deemed to have represented that:
- a. inspections made to check the quality or the quantity of the Work as it has been performed have been exhaustive, extended to every aspect of the Work in progress, or involved detailed inspections of the Work beyond the responsibilities specifically assigned to Engineer in the Contract Documents; or
 - b. 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.
4. Neither Engineer's review of Contractor's Work for the purposes of recommending payments nor Engineer's recommendation of any payment, including final payment, will impose responsibility on Engineer:
- a. to supervise, direct, or control the Work, or
 - b. for the means, methods, techniques, sequences, or procedures of construction, or the safety precautions and programs incident thereto, or
 - c. for Contractor's failure to comply with Laws and Regulations applicable to Contractor's performance of the Work, or
 - d. to make any examination to ascertain how or for what purposes Contractor has used the moneys paid on account of the Contract Price, or
 - e. to determine that title to any of the Work, materials, or equipment has passed to Owner free and clear of any Liens.
5. 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 stated in Paragraph 14.02.B.2. Engineer may also refuse to recommend any such payment or, because of subsequently discovered evidence or the results of subsequent inspections or tests, revise or revoke any such payment recommendation previously made, to such extent as may be necessary in Engineer's opinion to protect Owner from loss because:

- a. the Work is defective, or completed Work has been damaged, requiring correction or replacement;
- b. the Contract Price has been reduced by Change Orders;
- c. Owner has been required to correct defective Work or complete Work in accordance with Paragraph 13.09; or
- d. Engineer has actual knowledge of the occurrence of any of the events enumerated in Paragraph 15.02.A.

C. Payment Becomes Due:

- 1. ~~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 Paragraph 14.02.D) become due, and when due will be paid by Owner to Contractor.

D. Reduction in Payment:

- 1. Owner may refuse to make payment of the full amount recommended by Engineer because:
 - a. claims have been made against Owner on account of Contractor's performance or furnishing of the Work;
 - b. Liens **(whether or not permissible)** 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;
 - c. there are other items entitling Owner to a set-off against the amount recommended **including but not limited to liquidated damages**; or
 - d. Owner has actual knowledge of the occurrence of any of the events enumerated in Paragraphs 14.02.B.5.a through 14.02.B.5.c or Paragraph 15.02.A.
- 2. If Owner refuses to make payment of the full amount recommended by Engineer, Owner will give Contractor immediate written notice (with a copy to Engineer) stating the reasons for such action and promptly pay Contractor any amount remaining after deduction of the amount so withheld. Owner shall promptly pay Contractor the amount so withheld, or any adjustment thereto agreed to by Owner and Contractor, when Contractor remedies the reasons for such action.
- 3. Upon a subsequent determination that Owner's refusal of payment was not justified, the amount wrongfully withheld shall be treated as an amount due as determined by Paragraph 14.02.C.1 and subject to interest as provided in the Agreement.

14.03 *Contractor's Warranty of Title*

- A. 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.

14.04 *Substantial Completion*

- A. 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.
- B. Promptly after Contractor's notification, 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 therefor.
- C. If Engineer considers the Work substantially complete, Engineer will deliver to Owner a **tentative preliminary** 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 14 days after submission of the tentative certificate to Owner, notify Contractor in writing, stating the reasons therefor. If, after consideration of Owner's objections, Engineer considers the Work substantially complete, Engineer will, within said 14 days, execute and deliver to Owner and Contractor a **definitive final** 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.
- D. 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, and protection of the Work, 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.
- E. Owner shall have the right to exclude Contractor from the Site after the date of Substantial Completion subject to allowing Contractor reasonable access to remove its property and complete or correct items on the tentative list.

14.05 *Partial Utilization*

- A. Prior to Substantial Completion of all the Work, Owner may use or occupy any substantially completed part of the Work which has specifically been identified in the Contract Documents, or which 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, subject to the following conditions:
 - 1. Owner at any time may request Contractor in writing to permit Owner to use or occupy any such part of the Work which Owner believes to be ready for its intended use and substantially complete. If and when Contractor agrees that such part of the Work is substantially complete,

Contractor, Owner, and Engineer will follow the procedures of Paragraph 14.04.A through D for that part of the Work.

2. 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.
3. 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 therefor. If Engineer considers that part of the Work to be substantially complete, the provisions of Paragraph 14.04 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.
4. No use or occupancy or separate operation of part of the Work may occur prior to compliance with the requirements of Paragraph 5.10 regarding property insurance.

14.06 *Final Inspection*

- A. Upon written notice from Contractor that the entire Work or an agreed portion thereof is complete, Engineer will promptly 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.

14.07 *Final Payment*

A. *Application for Payment:*

1. After Contractor has, in the opinion of Engineer, satisfactorily completed all corrections identified during the final inspection and has delivered, in accordance with the Contract Documents, all maintenance and operating instructions, schedules, guarantees, bonds, certificates or other evidence of insurance, certificates of inspection, marked-up record documents (as provided in Paragraph 6.12), and other documents, Contractor may make application for final payment following the procedure for progress payments.
2. The final Application for Payment shall be accompanied (except as previously delivered) by:
 - a. all documentation called for in the Contract Documents, including but not limited to the evidence of insurance required by Paragraph 5.04.B.6;
 - b. consent of the surety, if any, to final payment;
 - c. a list of all Claims against Owner that Contractor believes are unsettled; and
 - d. complete and legally effective releases or waivers (satisfactory to Owner) of all Lien rights arising out of or Liens filed in connection with the Work.

3. In lieu of the releases or waivers of Liens specified in Paragraph 14.07.A.2 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 might in any way be responsible, or which might in any way result in liens or other burdens on Owner's property, 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.

B. Engineer's Review of Application and Acceptance:

1. 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 for Payment 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 14.09. Otherwise, Engineer will return the Application for Payment 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 for Payment.

C. Payment Becomes Due:

1. Thirty days after the presentation to Owner of the Application for Payment and accompanying documentation, the amount recommended by Engineer, less any sum Owner is entitled to set off against Engineer's recommendation, including but not limited to liquidated damages, will become due and will be paid by Owner to Contractor.

14.08 Final Completion Delayed

- A. 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 (for Work fully completed and accepted) and recommendation of Engineer, and without terminating the Contract, 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 5.01, 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.

14.09 Waiver of Claims

- A. The making and acceptance of final payment will constitute:

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 14.06, 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
2. a waiver of all Claims by Contractor against Owner other than those previously made in accordance with the requirements herein and expressly acknowledged by Owner in writing as still unsettled.

ARTICLE 15 – SUSPENSION OF WORK AND TERMINATION

15.01 *Owner May Suspend Work*

- A. At any time and without cause, Owner may suspend the Work or any portion thereof for a period of not more than 90 consecutive 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 granted an adjustment in the Contract Price or an extension of the Contract Times, or both, directly attributable to any such suspension if Contractor makes a Claim therefor as provided in Paragraph 10.05.

15.02 *Owner May Terminate for Cause*

- A. The occurrence of any one or more of the following events will justify termination for cause:
 1. Contractor's persistent failure 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 2.07 as adjusted from time to time pursuant to Paragraph 6.04);
 2. Contractor's disregard of Laws or Regulations of any public body having jurisdiction;
 3. Contractor's repeated disregard of the authority of Engineer; or
 4. Contractor's violation in any substantial way of any provisions of the Contract Documents.
- B. If one or more of the events identified in Paragraph 15.02.A occur, Owner may, after giving Contractor (and surety) seven days written notice of its intent to terminate the services of Contractor:
 1. 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);
 2. 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
 3. complete the Work as Owner may deem expedient.

- C. If Owner proceeds as provided in Paragraph 15.02.B, Contractor shall not be entitled to receive any further payment until the Work is completed. If the unpaid balance of the Contract Price exceeds 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) sustained by Owner arising out of or relating to 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. When exercising any rights or remedies under this Paragraph, Owner shall not be required to obtain the lowest price for the Work performed.
- D. Notwithstanding Paragraphs 15.02.B and 15.02.C, Contractor's services will not be terminated if Contractor begins within seven days of receipt of notice of intent to terminate to correct its failure to perform and proceeds diligently to cure such failure within no more than 30 days of receipt of said notice.
- E. 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.
- F. If and to the extent that Contractor has provided a performance bond under the provisions of Paragraph 5.01.A, the termination procedures of that bond shall supersede the provisions of Paragraphs 15.02.B and 15.02.C.

15.03 *Owner May Terminate For Convenience*

- A. Upon seven days written notice to Contractor and Engineer, Owner may, without cause and without prejudice to any other right or remedy of Owner, terminate the Contract. In such case, Contractor shall be paid for (without duplication of any items):
 - 1. 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;
 - 2. 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;
 - 3. 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) incurred in settlement of terminated contracts with Subcontractors, Suppliers, and others; and
 - 4. reasonable expenses directly attributable to termination.
- B. 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.

15.04 *Contractor May Stop Work or Terminate*

- A. If, through no act or fault of Contractor, (i) the Work is suspended for more than 90 consecutive days by Owner or under an order of court or other public authority, or (ii) Engineer fails to act on any Application for Payment within 30 days after it is submitted, or (iii) Owner fails for 30 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 Contract and recover from Owner payment on the same terms as provided in Paragraph 15.03.
- B. In lieu of terminating the Contract and without prejudice to any other right or remedy, if Engineer has failed to act on an Application for Payment within 30 days after it is submitted, or Owner has failed for 30 days to pay Contractor any sum finally determined to be due, Contractor may, seven days after written notice to Owner and Engineer, stop the Work until payment is made of all such amounts due Contractor, including interest thereon. The provisions of this Paragraph 15.04 are not intended to preclude Contractor from making a Claim under Paragraph 10.05 for an adjustment in Contract Price or Contract Times or otherwise for expenses or damage directly attributable to Contractor's stopping the Work as permitted by this Paragraph.

ARTICLE 16 – DISPUTE RESOLUTION

16.01 *Methods and Procedures*

- A. **In accordance with N.C.G.S. § 143-128(f1), Owner and Contractor agree to use the dispute resolution process adopted by the North Carolina State Building Commission pursuant to G.S. 143-135.26(11). This dispute resolution process will be available to all parties involved in the Project including Owner, Architect, Contractor, and the first-tier and lower-tier Subcontractors, and it shall be available for any issues arising out of the Contract or construction process, provided that the amount in controversy is \$15,000 or more. Contractor shall make this process available to its Subcontractors by inclusion of this provision in the Subcontractor agreements. Costs of the process will be divided between the parties to the dispute with at least one-third of the cost to be paid by Owner, if Owner is a party to the dispute. Participation in mediation concerning a dispute shall be a precondition to initiating litigation concerning the dispute.** Either Owner or Contractor may request mediation of any Claim submitted to Engineer for a decision under Paragraph 10.05 before such decision becomes final and binding. ~~The mediation will be governed by the Construction Industry Mediation Rules of the American Arbitration Association in effect as of the Effective Date of the Agreement.~~ The request for mediation shall be submitted in writing to the ~~American Arbitration Association and the~~ other party to the Contract. Timely submission of the request shall stay the effect of Paragraph 10.05.E.
- B. Owner and Contractor shall participate in the mediation process in good faith. The process shall be concluded within 60 days of filing of the request. The date of termination of the mediation shall be determined by application of the mediation rules referenced above.
- C. If the Claim is not resolved by mediation, Engineer's action under Paragraph 10.05.C or a denial pursuant to Paragraphs 10.05.C.3 or 10.05.D shall become final and binding 30 days after termination of the mediation unless, within that time period, Owner or Contractor:

- ~~1. elects in writing to invoke any dispute resolution process provided for in the Supplementary Conditions; or~~
1. agrees with the other party to submit the Claim to another dispute resolution process; or
2. gives written notice to the other party of the intent to submit the Claim to a court of competent jurisdiction.

ARTICLE 17 – MISCELLANEOUS

17.01 *Giving Notice*

- A. Whenever any provision of the Contract Documents requires the giving of written notice, it will be deemed to have been validly given if:
 1. 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
 2. delivered at or sent by registered or certified mail, postage prepaid, to the last business address known to the giver of the notice.

17.02 *Computation of Times*

- A. 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.

17.03 *Cumulative Remedies*

- A. The duties and obligations imposed by these General Conditions and the rights and remedies available hereunder to the parties hereto 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. 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.

17.04 *Survival of Obligations*

- A. 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 or termination or completion of the Contract or termination of the services of Contractor.

17.05 *Controlling Law*

- A. This Contract is to be governed by the law of the state in which the Project is located.

17.06 *Headings*

- A. Article and paragraph headings are inserted for convenience only and do not constitute parts of these General Conditions.

17.07 *E-Verify*

A. E-Verify is the federal program operated by the United States Department of Homeland Security and other federal agencies, or any successor or equivalent program, used to verify the work authorization of newly hired employees pursuant to federal law. Contractor shall ensure that Contractor and any Subcontractor performing work under this Contract: (i) uses E-Verify if required to do so; and (ii) otherwise complies with applicable law.

17.08 *Iran Divestment Act*

A. Pursuant to Article 6E of Chapter 147 of the North Carolina General Statutes, Owner must require most entities with which it contracts, which would include Contractor under this Contract, to certify that the entity is not identified on a list created by the State Treasurer pursuant to N.C.G.S. § 147-86.58 (the "Final Divestment List"). This requirement is related to ensuring that entities with which local governments contract are not involved in investment activities in Iran. Contractor certifies that: (i) it is not listed on the Final Divestment List, and (ii) it will not utilize any Subcontractor performing work under this Contract which is listed on the Final Divestment List.

17.09 *Confidentiality*

A. Contractor warrants and represents that Contractor shall not knowingly or negligently communicate or disclose at any time to any person or entity any information in connection with the Work or the Project (including, without limitation, information containing specific details of public security plans and arrangements or the detailed plans and drawings of public buildings and infrastructure facilities), except (i) with prior written consent of Owner, (ii) information that was in the public domain prior to the date of this Agreement, (iii) information that becomes part of the public domain by publication or otherwise not due to any unauthorized act or omission of Contractor, or (iv) as may be required to perform the Work by any applicable law, including any set of Drawings, Specifications, and other documents which Contractor is permitted to retain. Specific information shall not be deemed to fall within the scope of the foregoing exceptions merely because it is embraced by more generic information which falls within the scope of one or more of those exceptions. Contractor shall not disclose to others that specific information was received from Owner even though it falls within the scope of one or more of those exceptions. Contractor acknowledges and agrees that the existence of the Owner's particular interests and plans in the geographical area of the Project is a type of such specific information. In the event that Contractor is required by any court of competent jurisdiction or legally constituted authority to disclose any such of Owner's information, prior to any disclosure thereof, Contractor shall notify Owner and shall give Owner the opportunity to challenge any such disclosure order or to seek protection for those portions that it regards as confidential.

17.10 **Severability**

A. The provisions hereof are severable, and should any provision be determined to be invalid, unlawful or otherwise null and void by any court of competent jurisdiction, the other provisions shall remain in full force and effect and shall not thereby be affected unless such ruling shall make further performance hereunder impossible or impose an unconscionable burden upon one of the parties. The parties shall endeavor in good faith to replace the invalid, illegal, or unenforceable provisions with valid provisions the economic effect of which comes as close as practicable to that of the invalid, illegal, or unenforceable provisions.

17.11 **Minority Participation**

A. Because the Project entails the construction, alteration, erection, or repair of a building, Contractor shall comply with the requirements of the Guidelines for Recruitment and Selection of Minority Businesses for Participation in Union County Construction Contracts and with the representations made in the various affidavits provided pursuant to these Guidelines, such documents having been incorporated into the Contract by reference.

SUPPLEMENTARY CONDITIONS

These Supplementary Conditions amend or supplement the Standard General Conditions of the Construction Contract, EJCDC® C-700 (2007 Edition). All provisions that are not so amended or supplemented remain in full force and effect.

The terms used in these Supplementary Conditions have the meanings stated in the General Conditions. Additional terms used in these Supplementary Conditions have the meanings stated below, which are applicable to both the singular and plural thereof.

The address system used in these Supplementary Conditions is the same as the address system used in the General Conditions, with the prefix "SC" added thereto.

ARTICLE 4 – AVAILABILITY OF LANDS; SUBSURFACE AND PHYSICAL CONDITIONS; HAZARDOUS ENVIRONMENTAL CONDITIONS

SC-4.02 *Subsurface and Physical Conditions*

SC 4.02 Delete Paragraphs 4.02.A and 4.02.B in their entirety and insert the following:

- A. No reports of explorations or tests of subsurface conditions at or adjacent to the Site, or drawings of physical conditions relating to existing surface or subsurface structures at the Site, are known to Owner. [NOTE: MODIFY IF THERE ARE SUCH REPORTS].**

SC-4.06 *Hazardous Environmental Conditions*

SC 4.06 Delete Paragraphs 4.06.A and 4.06.B in their entirety and insert the following:

- A. No reports or drawings related to Hazardous Environmental Conditions at the Site are known to Owner. [NOTE: MODIFY IF THERE ARE SUCH REPORTS].**
- B. Not Used.**

ARTICLE 6 – CONTRACTOR'S RESPONSIBILITIES

SC-6.02 *Labor; Working Hours*

SC-6.02.B. Add the following new subparagraphs immediately after Paragraph 6.02.B:

- 1. Regular working hours are defined as, Monday through Friday, excluding Owner's legal holidays, between the hours of 7:00 am and 6:00 pm. 2. Owner's legal holidays are:**
 - a. New Year's Day**
 - b. Martin Luther King, Jr.'s Birthday**
 - c. Good Friday**
 - d. Memorial Day**
 - e. Independence Day**
 - f. Labor Day**
 - g. Veterans Day**

- h. Thanksgiving Day
- i. Day after Thanksgiving
- j. Christmas Eve
- k. Christmas Day
- l. Day after Christmas

ARTICLE 8 – OWNER’S RESPONSIBILITIES [NOTE: ONLY USE IF USING A SITE REPRESENTATIVE/RPR. OTHERWISE, DELETE THIS HIGHLIGHTED LANGUAGE].

SC-8.06 Add the following new paragraph immediately after Paragraph 8.05 of the General Conditions:

SC-8.06 Owner will furnish an “Owner’s Site Representative” to represent Owner at the Site and assist Owner in observing the progress and quality of the Work. The Owner’s Site Representative is not Engineer’s consultant, agent, or employee.

ARTICLE 9 – ENGINEER’S STATUS DURING CONSTRUCTION

SC-9.03 *Project Representative*

SC-9.03 Add the following new paragraphs immediately after Paragraph 9.03.A:

- B. The Resident Project Representative (RPR) will be Engineer's representative at the Site, will act as directed by and under the supervision of Engineer, and will confer with Engineer regarding RPR's actions.**
 - 1. General: RPR's dealings in matters pertaining to the Work in general shall be with Engineer and Contractor. RPR's dealings with Subcontractors shall only be through or with the full knowledge and approval of Contractor. RPR shall generally communicate with Owner only with the knowledge of and under the direction of Engineer.**
 - 2. Schedules: Review the progress schedule, schedule of Shop Drawing and Sample submittals, and Schedule of Values prepared by Contractor and consult with Engineer concerning acceptability.**
 - 3. Conferences and Meetings: Attend meetings with Contractor, such as preconstruction conferences, progress meetings, job conferences, and other Project-related meetings, and prepare and circulate copies of minutes thereof.**
 - 4. Liaison:**
 - a. Serve as Engineer’s liaison with Contractor. Working principally through Contractor’s authorized representative or designee, assist in providing information regarding the provisions and intent of the Contract Documents.**
 - b. Assist Engineer in serving as Owner’s liaison with Contractor when Contractor’s operations affect Owner’s on-Site operations.**
 - c. Assist in obtaining from Owner additional details or information, when required for proper execution of the Work.**

5. Interpretation of Contract Documents: Report to Engineer when clarifications and interpretations of the Contract Documents are needed and transmit to Contractor clarifications and interpretations as issued by Engineer.
6. Shop Drawings and Samples:
 - a. Record date of receipt of Samples and Contractor-approved Shop Drawings.
 - b. Receive Samples which are furnished at the Site by Contractor, and notify Engineer of availability of Samples for examination.
 - c. Advise Engineer and Contractor of the commencement of any portion of the Work requiring a Shop Drawing or Sample submittal for which RPR believes that the submittal has not been approved by Engineer.
7. Modifications: Consider and evaluate Contractor's suggestions for modifications in Drawings or Specifications and report such suggestions, together with RPR's recommendations, if any, to Engineer. Transmit to Contractor in writing decisions as issued by Engineer.
8. Review of Work and Rejection of Defective Work:
 - a. Conduct on-Site observations of Contractor's work in progress to assist Engineer in determining if the Work is in general proceeding in accordance with the Contract Documents.
 - b. Report to Engineer whenever RPR believes that any part of Contractor's work in progress is defective, will not produce a completed Project that conforms generally to the Contract Documents, or will imperil the integrity of the design concept of the completed Project as a functioning whole as indicated in 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 of that part of work in progress that RPR believes should be corrected or rejected or should be uncovered for observation, or requires special testing, inspection or approval.
9. Inspections, Tests, and System Start-ups:
 - a. Verify that tests, equipment, and systems start-ups and operating and maintenance training are conducted in the presence of appropriate Owner's personnel, and that Contractor maintains adequate records thereof.
 - b. Observe, record, and report to Engineer appropriate details relative to the test procedures and systems start-ups.
10. Records:
 - a. Prepare a daily report or keep a diary or log book, recording Contractor's hours on the Site, Subcontractors present at the Site, weather conditions, data relative to questions of Change Orders, Field Orders, Work Change Directives, or changed conditions, Site visitors, deliveries of equipment or materials, 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.

- b. Record names, addresses, fax numbers, e-mail addresses, web site locations, and telephone numbers of all Contractors, Subcontractors, and major Suppliers of materials and equipment.
- c. Maintain records for use in preparing Project documentation.

11. Reports:

- a. Furnish to Engineer 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.
- b. Draft and recommend to Engineer proposed Change Orders, Work Change Directives, and Field Orders. Obtain backup material from Contractor.
- c. Immediately notify Engineer of the occurrence of any Site accidents, emergencies, acts of God endangering the Work, force majeure or delay events, damage to property by fire or other causes, or the discovery of any Constituent of Concern or Hazardous Environmental Condition.

12. Payment Requests: 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.

13. Certificates, Operation and Maintenance Manuals: During the course of the Work, verify that materials and equipment certificates, operation and maintenance manuals and other data required by the Contract Documents to be assembled and furnished by Contractor are applicable to the items actually installed and in accordance with the Contract Documents, and have these documents delivered to Engineer for review and forwarding to Owner prior to payment for that part of the Work.

14. Completion:

- a. Participate in Engineer's visits to the Site to determine Substantial Completion, assist in the determination of Substantial Completion and the preparation of a punch list of items to be completed or corrected.
- b. Participate in Engineer's final visit to the Site to determine completion of the Work, in the company of Owner and Contractor, and prepare a final punch list of items to be completed and deficiencies to be remedied.
- c. Observe whether all items on the final list have been completed or corrected and make recommendations to Engineer concerning acceptance and issuance of the notice of acceptability of the work.

C. The RPR shall not:

- 1. Authorize any deviation from the Contract Documents or substitution of materials or equipment (including “or-equal” items).**
- 2. Exceed limitations of Engineer’s authority as set forth in the Contract Documents.**
- 3. Undertake any of the responsibilities of Contractor, Subcontractors, or Suppliers.**
- 4. Advise on, issue directions relative to, or assume control over any aspect of the means, methods, techniques, sequences or procedures of Contractor’s work.**
- 5. Advise on, issue directions regarding, or assume control over security or safety practices, precautions, and programs in connection with the activities or operations of Owner or Contractor.**
- 6. Participate in specialized field or laboratory tests or inspections conducted off-site by others except as specifically authorized by Engineer.**
- 7. Accept Shop Drawing or Sample submittals from anyone other than Contractor.**
- 8. Authorize Owner to occupy the Project in whole or in part.**

Work Change Directive No.

Date of Issuance: _____ Effective Date: _____
Owner: **UNION COUNTY** Owner's Contract No.: _____
Contractor: _____ Contractor's Project No.: _____
Engineer: Civil & Environmental Consultants, Inc. Engineer's Project No.: 352-171
Project: Union County Landfill Expansion Contract Name: _____

Contractor is directed to proceed promptly with the following change(s):

Description:

Attachments: *[List documents supporting change]*

Purpose for Work Change Directive:

Directive to proceed promptly with the Work described herein, prior to agreeing to changes on Contract Price and Contract Time, is issued due to: *[check one or both of the following]*

- ☐ Non-agreement on pricing of proposed change.
☐ Necessity to proceed for schedule or other Project reasons.

Estimated Change in Contract Price and Contract Times (non-binding, preliminary):

Contract Price \$ _____ [increase] [decrease].
Contract Time _____ days [increase] [decrease].

Basis of estimated change in Contract Price:

- ☐ Lump Sum ☐ Unit Price
☐ Cost of the Work ☐ Other

RECOMMENDED:

AUTHORIZED BY:

RECEIVED:

By:	By:	By:
Engineer (Authorized Signature)	Owner (Authorized Signature)	Contractor (Authorized Signature)
Title:	Title:	Title:
Date:	Date:	Date:

Approved by Funding Agency (if applicable)

By: _____ Date: _____
Title: _____

Change Order

No.

Date of Issuance: _____ Effective Date: _____

Project : Union County Landfill Expansion	Owner: UNION COUNTY	Owner's Contract No.:
Contract:		Date of Contract:
Contractor:		Engineer's Project No.: 352-171

The Contract Documents are modified as follows upon execution of this Change Order:

Description:

Attachments (list documents supporting change):

CHANGE IN CONTRACT PRICE:	CHANGE IN CONTRACT TIMES:
Original Contract Price: \$ _____	Original Contract Times: <input type="checkbox"/> Working Days <input type="checkbox"/> Calendar Days
Current Contract Price: \$ _____	Substantial completion (days or date): _____ Ready for final payment (days or date): _____
Contract Contingency: \$ _____	<input type="checkbox"/> Increase <input type="checkbox"/> Decrease from previously approved Change Orders No. _____ to No. _____: Substantial completion (days): _____ Ready for final payment (days): _____
Current Available Contingency: \$ _____	Contract Times Prior to this Change Order: Substantial Completion (Days or Date): _____ Ready for Final Payment (Days or Date): _____
Amount of this Change Order: \$ _____	<input type="checkbox"/> Increase <input type="checkbox"/> Decrease of this Change Order: Substantial Completion Date (Days or Date): _____ Ready for Final Payment (Days or Date): _____
Change Order to be Funded Through: <input type="checkbox"/> Contingency <input type="checkbox"/> Contract Price	Contract Times with all approved Change Orders: Substantial completion (days or date): _____ Ready for final payment (days or date): _____
Contingency Incorporating this Change Order: \$ _____	
Contract Price Incorporating this Change Order: \$ _____	

RECOMMENDED:	ACCEPTED:	ACCEPTED:
By: _____ Engineer (Authorized Signature)	By: _____ Owner (Authorized Signature)	By: _____ Contractor (Authorized Signature)
Date: _____	Date: _____	Date: _____
Approved by Funding Agency (if applicable): _____		Date: _____

Change Order

Instructions

A. GENERAL INFORMATION

This document was developed to provide a uniform format for handling contract changes that affect Contract Price or Contract Times. Changes that have been initiated by a Work Change Directive must be incorporated into a subsequent Change Order if they affect Price or Times.

Changes that affect Contract Price or Contract Times should be promptly covered by a Change Order. The practice of accumulating Change Orders to reduce the administrative burden may lead to unnecessary disputes.

If Milestones have been listed in the Agreement, any effect of a Change Order thereon should be addressed.

For supplemental instructions and minor changes not involving a change in the Contract Price or

Contract

Times, a Field Order should be used.

B. COMPLETING THE CHANGE ORDER FORM

Engineer normally initiates the form, including a description of the changes involved and attachments based upon documents and proposals submitted by Contractor, or requests from Owner, or both.

Once Engineer has completed and signed the form, all copies should be sent to Owner or Contractor for approval, depending on whether the Change Order is a true order to the Contractor or the formalization of a negotiated agreement for a previously performed change. After approval by one contracting party, all copies should be sent to the other party for approval. Engineer should make distribution of executed copies after approval by both parties.

If a change only applies to price or to times, cross out the part of the tabulation that does not apply.

Field Order

No. _____

Date of Issuance: _____ Effective Date: _____

Project: Union County Landfill Expansion	Owner: UNION COUNTY	Owner's Contract No.:
Contract:		Date of Contract:
Contractor:		Engineer's Project No.: 352-171

Attention:

You are hereby directed to promptly execute this Field Order issued in accordance with General Conditions Paragraph 9.04.A, for minor changes in the Work without changes in Contract Price or Contract Times. If you consider that a change in Contract Price or Contract Times is required, please notify the Engineer immediately and before proceeding with this Work.

Reference: _____
(Specification Section(s)) (Drawing(s) / Detail(s))

Description:

Attachments:

Engineer:

Receipt Acknowledged by Contractor:	Date:
-------------------------------------	-------

Copy to Owner

SALES TAX REPORT

CONTRACTOR NAME:

CONTRACTOR ADDRESS:

PROJECT NAME: 2026-005 Union County Landfill Expansion

DATE:

FOR PERIOD OF:

INVOICE DATE	INVOICE No.	VENDOR NAME	TAXABLE AMOUNT OF INVOICE	NC STATE TAX 4.75%	COUNTY TAX	COUNTY NAME	ADDITIONAL MECKLENBURG COUNTY TAX 0.50%	TOTAL TAX	INVOICE TOTAL
				\$ -			\$ -	\$ -	\$ -
				\$ -			\$ -	\$ -	\$ -
				\$ -			\$ -	\$ -	\$ -
				\$ -			\$ -	\$ -	\$ -
				\$ -			\$ -	\$ -	\$ -
				\$ -			\$ -	\$ -	\$ -
				\$ -			\$ -	\$ -	\$ -
				\$ -			\$ -	\$ -	\$ -
				\$ -			\$ -	\$ -	\$ -
				\$ -			\$ -	\$ -	\$ -
				\$ -			\$ -	\$ -	\$ -
				\$ -			\$ -	\$ -	\$ -
				\$ -			\$ -	\$ -	\$ -
				\$ -			\$ -	\$ -	\$ -
				\$ -			\$ -	\$ -	\$ -
				\$ -			\$ -	\$ -	\$ -
				\$ -			\$ -	\$ -	\$ -
				\$ -			\$ -	\$ -	\$ -
Totals from additional pages:									
GRAND TOTAL:			\$ -	\$ -	\$ -		\$ -	\$ -	\$ -

I certify that the following is a true and correct summary of North Carolina State and Local taxes paid for materials purchased in connection with the above project.

Subscribed and sworn to before me this _____ day of _____, 20_____.

By: _____

Notary Public

My commission expires:

Instructions for Completing
Certificate for North Carolina Sales Tax Form

Union County may apply for a refund of all sales and/or use taxes paid in North Carolina by the County's contractors on purchases of building materials, supplies, fixtures and equipment which become a part of or are annexed to any building or structure being erected, altered or repaired under contract with the County. Contractors shall include and must pay all other taxes imposed by governmental authorities which are applicable to the contract work. Examples of property on which sales and use tax has been paid by the contractor and for which the contractor will not be reimbursed by the County are scaffolding, forms for concrete, fuel for the operation of machinery and equipment, tools, equipment repair parts and equipment rentals, blueprints, etc, or any other items which do not become a part of or are not annexed to the building or structure being erected, altered, or repaired.

Please submit with this form invoices (or copies of invoices) from vendors covering the items purchased. This form should still be submitted as "0" if no sales tax was paid for the period covered.

Requests for sales tax reimbursements should be filed with each request for contract payment.

Project or Contract Number: The name of the project, or the County Contract Number.

Date: The date the form was completed.

Trade: Your trade, e.g., electrical, plumbing, concrete contractor, etc.

Contractor: The name of your company.

Invoice Date: The date the materials were purchased.

Invoice Number: The vendor's invoice number.

Name of Vendor: The vendor's name.

Description of Materials: The type of materials purchased, e.g., concrete, nails, roofing material, etc.

Item Cost: The cost of the item(s) before any taxes are added.

State Tax: The North Carolina State tax, currently 4.75% of the item cost.

County Tax: The County tax, currently 2% of the item cost.

Total Invoice: The sum of the Item Cost, State Tax, and County Tax.

County Name: County where material was purchased and sales tax paid, e.g., Mecklenburg, Union, Cabarrus, etc. The owner or an officer of the company must certify that the statement is correct. The signature should also be notarized.

Trade: _____

Contractor: _____

Project or Contract Number: _____

Date: _____

NOTE: Last page must be the certified page.

Certificate for North Carolina Sales Tax

Trade: _____

Contractor: _____

Project or Contract Number: _____

Date: _____

Invoice Date	Invoice Number	Name of Vendor	Description of Materials	Item Cost	State Tax	County Tax	Total Invoice	County Name
Totals:								

This is to certify that the above materials purchased on the invoices listed were used in the construction of the _____ and that the Sales Tax listed (State and County) is not included on the monthly estimate for contract payment or any other certificate for North Carolina sales tax. Further, that the items listed are annexed to, affixed to, or in some manner have become a part of the building or structure being erected, altered or repaired.

Certified to be correct by: _____
Owner or Officer of Company

Sworn to and Subscribed before me this _____ day of _____ 20_____

_____(SEAL)
Notary Public

My Commission Expires: _____

NON-COLLUSION AFFIDAVIT

STATE OF NORTH CAROLINA
COUNTY OF UNION

I _____, being first duly sworn, deposes and says that:

1. He/She is the _____ of _____,
the Bidder that has submitted the attached Bid;
2. He/She is fully informed respecting the preparation and contents of the attached Bid and of all pertinent circumstances respecting such Bid;
3. Such Bid is genuine and is not a collusive or sham bid;
4. Neither the said Bidder nor any of its officers, partners, owners agents, representatives, employees or parties of interest, including this affiant, has in any way colluded, conspired, connived or agreed, directly or indirectly, with any other bidder, firm or person to submit a collusive or sham bid in connection with the contract for which the attached Bid has been submitted or to refrain from bidding in connection with such contract, or has in any manner, directly or indirectly, sought by agreement or collusion or communication or conference with any other bidder, firm or person to fix the price or prices in the attached bid or of any other bidder, or to fix any overhead, profit or cost element of the bid price of any other bidder or to secure through collusion, conspiracy, connivance or unlawful agreement any advantage against the Owner or any person interested in the proposed contract; and
5. The price or prices quoted in the attached Bid are fair and proper and are not tainted by any collusion, conspiracy, connivance or unlawful agreement on the part of the Bidder or any of its agents, representatives, owners, employees, or parties in interest, including this affiant.

TITLE

Subscribed and sworn before me, this _____ day of _____, 20____

Notary Public

My Commission Expires _____

END OF DOCUMENT 00 45 19

IFB 2026-005 UNION COUNTY LANDFILL EXPANSION
UNION COUNTY, NORTH CAROLINA

SECTION 00 73 00

SPECIAL CONDITIONS

PART 1 GENERAL

1.1 SUMMARY OF WORK

- A. This project generally includes the following:

The project generally consists of site demolition, clearing, grubbing, grading, drainage, erosion control measures, fine grading, paving sections, utility extensions, seeding, grassing, and landscaping to serve the proposed development of the project.

1.2 PROJECT MEETINGS

- A. Preconstruction Conference: A preconstruction conference will be scheduled by the Engineer after issuance of the Notice of Award. The Contractor and his major subcontractors shall attend the meeting, which will be chaired by the Engineer or his representative. The purpose of the pre-construction conference will be to discuss administration of the Contract and the execution of work, and to answer any questions relative to performance of work under these Contract Documents. All decisions, instructions and interpretations made at this conference shall be binding and conclusive. The proceedings of this conference will be recorded and copies of the proceeding minutes will be issued to the Contractor for his use and distribution to his subcontractors.
- B. Progress Meetings: The Contractor and any subcontractors, material suppliers or vendors whose presence is necessary or requested shall attend meetings, referred to as Progress Meetings, when requested by the Engineer or his representative for the purpose of discussing the execution of work. Each meeting will be held at the time and place designated by the Engineer or his representative. Any decisions, instructions and interpretations at these meetings shall be binding and conclusive on the Contractor and such decisions, instructions and interpretations shall be confirmed in writing by the Engineer or his representative. The proceedings of these meetings will be recorded and the Contractor will be furnished with a reasonable number of copies for his use and for his distribution to the subcontractors, material suppliers and vendors involved.

1.3 PROJECT PAYMENTS AND RETAINAGE

- A. The Owner may retain a portion of the amount otherwise due the Contractor. Except as provided elsewhere, the amount retained by the Owner shall be limited to the following:
1. Withholding of not more than 5% of the payment claimed until work is 50% complete.
 2. When the contract is 50% complete no further retainage shall be withheld from periodic payments. However, the Owner may reinstate retainage (up to 5%) if

IFB 2026-005 UNION COUNTY LANDFILL EXPANSION
UNION COUNTY, NORTH CAROLINA

- they feel the work is unsatisfactory. The Owner may withhold additional retainage as necessary from periodic payments in a sum necessary to maintain total retainage of 2.5% of contract cost through the completion of the project.
3. When the work is substantially complete (operational or beneficial occupancy), the withheld amount shall be further reduced below 5% to only that amount necessary to assure completion.
 4. The Owner may accept securities negotiable without recourse, conditions or restrictions, a release of retainage bond or an irrevocable letter of credit provided by the Contractor in lieu of all or part of the cash retainage.
- B. For unit price projects, the Contractor may use the "Unit Bid Item Summary" form included at the end of this section, or a similar form that provides the required information.
- C. Sales Tax Statement: When requested by the Owner, each request for progress payment submitted by the Contractor shall include a sales tax reimbursement statement. The Contractor shall utilize the form provided at the end of this section, or a similar form that provides the required information and certification.

1.4 SUBMITTALS

- A. General: All transmittals from the Contractor shall be accompanied by a transmittal cover form that includes pertinent information related to the project and the particular transmittal. The Contractor shall use the "Transmittal Form" provided at the end of this section, or a similar form that includes the required information.
- B. Construction Schedule: The Contractor shall, within ten (10) days after receipt of the Notice of Award, prepare and submit to the Engineer for approval a practicable construction schedule showing the order in which the Contractor proposes to carry on the work, the date on which he will start the several salient features and the contemplated dates for completing such salient features. The schedule may be in any form, at the option of the Contractor, but shall maintain current with each submittal for progress payment, at least the following information.
1. The various classes and area of work broken down into times projected for submittals, approvals and procurement; times for installation and erection; and times for testing and inspection.
 2. The work completed and the work remaining to complete the project.
 3. Any items of work which will delay the start or completion of other major items of work so as to delay completion of the whole project.
- C. Schedule of Values: For lump sum projects, the Contractor shall, within thirty (30) days after the Notice of Award and prior to submitting the first Application for Payment, submit to the Engineer for approval a Schedule of Values for the project. The Schedule of Values shall establish the actual value of the components of the work and, after approval by the Engineer, shall be the basis for the Contractor's

IFB 2026-005 UNION COUNTY LANDFILL EXPANSION
UNION COUNTY, NORTH CAROLINA

Applications for Payment. The Schedule of Values shall include separate line items for all major portions of the work.

- D. Material Suppliers and Subcontractor Listings: As soon as possible, but in no case more than 30 days after receipt of the Notice of Award, the Contractor shall supply the names and addresses of all major material suppliers and subcontractors to the Engineer.
- E. Shop Drawings and Samples: The Contractual requirements for shop drawings and samples are specified in the General Conditions and in the individual specification sections for each item. The Contractor shall submit shop drawings and samples accompanied by the "Submittal and Routing Form" included at the end of this section. Resubmissions, where required, shall be in accordance with the procedures established for the initial submittal.
- F. Record Documents: Record drawings will not be required of the Contractor; however, to enable the Owner to prepare record drawings, the Contractor shall keep a complete and accurate record of changes and/or deviations from the Contract Documents and shop drawings, indicating the work as actually installed. Changes shall be neatly and correctly shown on the respective portion of the affected document, using prints of the Drawings affected, or the Specifications, with appropriate supplementary notes. The record set of marked-up Drawings, shop drawings, and Specifications shall be kept at the job site during construction and be available for inspection by the Engineer and the Owner. These marked prints shall be included in the package of final documentation submitted before final payment is required.

1.5 DELIVERY, STORAGE AND HANDLING

- A. The Contractor shall be responsible for delivery, storage and handling of all materials and equipment, unless otherwise noted. All material and equipment shall be shipped to arrive at the job site on the dates indicated on the purchase order. The following information shall be supplied:
 - 1. The contents and bill of lading, number of shipments.
 - 2. The method of shipments.
 - 3. The date of shipment.
 - 4. The name of the construction project.
- B. Prior to shipment, all items shall be properly prepared to protect all critical areas from the effects of weather, normal expected transport and on site handling.
- C. Items shall be tagged and marked with equipment and/or motor numbers as per the manner stipulated in the purchase order.

IFB 2026-005 UNION COUNTY LANDFILL EXPANSION
UNION COUNTY, NORTH CAROLINA

- D. All spare parts and expendable supplies shall be properly crated, marked, and shipped to the job site on the date specified.

PART 2 PRODUCTS

2.1 EQUIPMENT AND MATERIAL STANDARDS

- A. All equipment and materials of construction described in this specification shall meet the more stringent requirements of the applicable codes listed below:
1. OSHA - Occupational Safety and Health Administration.
 2. ASTM - American Society for Testing Materials.
 3. ANSI - American National Standards Institute.
 4. AGMA - American Gear Manufacturers Association.
 5. AISC - American Institute of Steel Construction.
 6. AWS - American Welding Society.
 7. NEC - National Electric Code.
 8. NEMA - National Electrical Manufacturers Association.
 9. API - American Petroleum Institute.

2.2 QUALITY ASSURANCE

- A. All equipment shall, after installation by the Contractor, shall be inspected, tested and started up by a qualified representative of the equipment manufacturer. The Contractor and the manufacturer's representative shall complete the "Equipment Start-up Form" provided at the end of this section and submit the completed form to the Engineer.
- B. The listing of a manufacturer in the specifications does not necessarily imply that the manufacturer's standard equipment meets the requirements of the specifications, but that the manufacturer listed has the capability to meet the requirements of the specifications.

PART 3 EXECUTION

3.1 SPECIAL REQUIREMENTS

- A. Limits of Construction: The Contractor shall confine all operations and personnel to the limits of construction as shown on the plans. There shall be no disturbance whatsoever of any areas outside the limits of construction nor shall the workmen be allowed to travel at will through the surrounding private property.
- B. Construction Superintendent: The Contractor shall place in charge of the work a competent and reliable superintendent, who shall have the authority to act for the Contractor and who shall be accountable to the Engineer. The Contractor shall, at all times, employ labor and equipment sufficient to accomplish the several classes of work to full completion in the manner and time specified.

IFB 2026-005 UNION COUNTY LANDFILL EXPANSION
UNION COUNTY, NORTH CAROLINA

C. Site Conditions:

1. The Contractor shall maintain the work and project grounds free from rubbish, debris and waste materials during all phases of the work.
2. Immediately upon completion of the work and prior to final acceptance, the Contractor shall remove all rubbish, debris, temporary structures, equipment, excess or waste materials and shall leave the work and project grounds in a neat and orderly condition that is satisfactory to the Engineer and Owner.

D. Right of Entry: The Engineer and his representative will at all times have access to the work. In addition, authorized representatives and agents of any participating Federal or State agency shall be permitted to inspect all work, materials, payrolls, records of personnel, invoices of materials, and other relevant data and records.

E. Temporary Construction Services and Facilities: The Contractor shall obtain all necessary permits, licenses, etc. and shall pay all costs incident to the furnishing, installing and maintenance of temporary utility services and facilities required for the duration of the work.

F. Control of Erosion, Siltation, and Pollution:

1. Surface drainage from cuts and fills within the construction limits, whether or not completed, and from borrow and waste disposal areas, shall, if turbidity producing materials are present, be graded to control erosion within acceptable limits. Temporary erosion and sediment control measures such as berms, dikes or drains, if required to meet the above standards, shall be provided and maintained until permanent drainage and erosion control facilities are completed and operative. The area of bare soil exposed at any one time by construction operations should be held to a minimum. Fills and waste areas shall be constructed by selective placement to eliminate silts or clays on the surface that will erode and contaminate adjacent streams.
2. The Contractor shall take whatever measures are necessary to minimize soil erosion and siltation, water pollution, and air pollution caused by his operations. The Contractor shall also comply with the applicable regulations of all legally constituted authorities relating to pollution prevention and control. The Contractor shall keep himself fully informed of all such regulations which in any way affect the conduct of the work, and shall at all times observe and comply with all such regulations. In the event of conflict between such regulations and the requirements of the specifications, the more restrictive requirements shall apply.
3. The Engineer shall have the authority to limit the area over which clearing and grubbing, excavation, borrow, and embankment operations are performed whenever the Contractor's operations do not make effective use of construction practices and temporary measures which will minimize erosion, or whenever construction operations have not been coordinated to effectively minimize erosion, or whenever permanent erosion control features are not being completed as soon as permitted by construction operations.
4. The Contractor shall control dust throughout the life of the project within the project area and at all other areas affected by the construction of the project, including, but not specifically limited to, unpaved secondary roads, haul roads, access roads, disposal sites, borrow and material pits, and production sites. Dust control shall not be considered effective where the amount of dust creates a

IFB 2026-005 UNION COUNTY LANDFILL EXPANSION
UNION COUNTY, NORTH CAROLINA

- potential or actual unsafe condition, public nuisance, or condition endangering the value, utility, or appearance of any property.
5. The Contractor will not be directly compensated for any dust control measures necessary, as this work will be considered incidental to the work covered by the various contract items.
- G. Disposal of Materials: Debris and waste materials, including all combustibles, shall be removed by the Contractor from the construction area unless otherwise approved in writing by the Owner or his Representative.
- H. Quantities of Estimate: The estimated quantities of work to be done and materials to be furnished under this Contract shown in any of the documents, including the proposal, are given for use in comparing bids and to indicate approximately the total amount of the contract; and the right is especially reserved, except as herein otherwise specifically limited to, to increase or diminish the quantities as may be reasonably necessary or desirable by the Owner to complete the work contemplated by this Contract.
- I. Utility Coordination: The Contractor shall make all necessary arrangements with private and public utility companies to avoid any possible damage to or interruption of utility equipment or service. The Contractor shall be responsible for all inquiries concerning locations of utility lines. Repair of any damage to public or private utilities resulting from this work shall be the responsibility of the Contractor.
- J. Construction Surveying: All work shall be constructed in accordance with the lines, grades and elevations shown on the plans or as given by the Engineer in the field. The Contractor shall be fully responsible for maintaining alignment and grade. All principal controlling points and base lines for locating the principal components of the work together with a suitable number of benchmarks adjacent to the work will be provided by the Engineer. From this information, the Contractor shall verify benchmarks and develop and make all detail surveys needed for construction. The Contractor shall protect and safeguard all points, stakes, grade marks, monuments, and benchmarks at the site of the work and shall re-establish, at his own expense, any marks which are removed or destroyed due to his construction operations.
- K. Laying Out Work:
1. It is imperative that the Contractor work within the shown rights of way or easements at all times, unless approved otherwise by the property owner and the Engineer.
 2. The Contractor shall, at his expense, provide competent engineering survey services and shall provide and maintain accurate, detailed, survey work.
 3. The plans and supplementary drawings shall not be scaled and the Contractor must verify all dimensions and elevations at the site prior to proceeding with the work. The Contractor shall also verify existing utility locations prior to purchasing materials affected by these locations.
- L. Use of Explosives:
1. If the use of explosives is necessary for the execution of the work, the Contractor shall exercise the utmost care not to endanger life or property. The Contractor shall be responsible for any and all damage or injury to persons or property resulting from the use of explosives. Such responsibility shall include, but shall in no way

IFB 2026-005 UNION COUNTY LANDFILL EXPANSION
UNION COUNTY, NORTH CAROLINA

- be limited to, all damages arising from all forms of trespass to adjacent property as a result of blasting by the Contractor.
2. All explosives shall be stored in a secure manner, in compliance with all laws, and all such storage places shall be marked clearly "DANGEROUS EXPLOSIVES".
- M. Use of Chemicals: All chemicals used during project construction, whether herbicide, pesticide, disinfectant, polymer, reactant or of other classification, must show approval of either EPA or USDA. Use of all such chemicals and disposal of residues shall be in conformance with instructions.
- N. Safety and Health Regulations:
1. The Contractor shall comply with all Federal, State and Local Safety and Health Regulations including the Department of Labor Safety and Health Regulations for construction promulgated under the Occupational Safety and Health Act of 1970 (P.L. 91 - 596) and under Section 107 of the Contract Work Hours and Safety Standards Act (P.L. 91-54).
 2. The Contractor shall provide continuous, safe access to all properties, both public and private, along the project in all cases where such access will be provided by the completed facility and shall conduct his operations in such a manner that inconvenience to the property owners will be held to a minimum.
- O. Equipment and Material Storage: The Contractor shall plan his activities so that all materials and equipment can be stored within the project limits. There shall be no disturbance whatsoever of any areas outside the project limits without the prior approval of the Engineer.
- P. Disturbed Areas: All areas disturbed as a result of the work of the Contractor shall be restored to the original or better condition. Reasonable care shall be taken during construction to avoid damage to the Owner's property or that of any adjacent property owner(s).
- Q. Tree and Plant Protection: No trees or shrubs except those specifically indicated, shall be removed or trimmed without prior approval from the Engineer. All trees and shrubs within the construction limits to be retained by the Owner shall be properly protected by fencing, posts or other means approved by the Engineer. Where any trees or shrubs are damaged or where limbs are required to be trimmed or removed because of operations under this Contract a qualified horticulturist shall be consulted and the trimming performed in the proper manner. Any landscape plantings severely damaged or which die as a result of the Contractor's operations shall be replaced at no additional cost to the Owner.
- R. Temporary Sanitary Facilities: The Contractor shall be solely responsible for furnishing and maintaining temporary sanitary facilities during the construction period. Such facilities shall include but not be limited to, potable water supply and toilet facilities. Such facilities shall be in compliance with all applicable state and local laws, codes, and ordinances and shall be placed convenient to work stations and secluded from public observation. Once the project is completed all temporary sanitary facilities shall be removed by the Contractor.
- S. Traffic Maintenance:

IFB 2026-005 UNION COUNTY LANDFILL EXPANSION
UNION COUNTY, NORTH CAROLINA

1. The Contractor shall provide, erect, and maintain all necessary barricades, suitable and sufficient warning lights, danger signals, and signs, shall provide a sufficient number of flagmen to direct the traffic and shall take all necessary precautions for the protection of the work and the safety of the public.
2. All barricades and obstructions or hazardous conditions shall be illuminated as necessary to provide for safe traffic conditions.
3. Warning and caution signs shall be posted throughout the length of any portion of the project where traffic flow is restricted.

3.2 WEATHER DELAYS

A. Extensions of Contract Time for Abnormal Weather:

1. If the basis exists for an extension of time in accordance with article 12.03 of the Standard General Conditions of the Construction Contract, an extension of time on the basis of Abnormal Weather may be granted only for the number of Weather Delay Days in excess of the number of days listed as the Standard Baseline for the period of the contract.
2. In the event adverse weather other than those conditions described in Section C, "Adverse Weather and Rain Delay Days", delays construction activity, such as temperature extremes. The baseline must be adjusted to reflect the number of expected days as described in Section D, "Development of Adverse Weather Baseline".
3. In order to determine precipitation at the contract site the contractor shall maintain a rain gauge on site. The rain gauge should be read daily and documentation of Adverse Weather Days should be coordinated with the Engineer's Representative.

B. Standard Baseline for Average Climactic Range:

1. The Engineer has reviewed weather data available from the National Oceanic and Atmospheric Administration (NOAA) and determined a Standard Baseline of average climatic range for the City of Charlotte, North Carolina. In the event that the standard baseline for the construction site differs significantly from the Charlotte, North Carolina Standard Baseline it will be the Contractor's responsibility to provide documentation of said differences.
2. Standard Baseline shall be regarded as the normal and anticipatable number calendar days for each month during which construction activity shall be expected to be prevented and suspended by cause of adverse weather. Suspension of construction activity for the number of days each month as listed in the Standard Baseline is included in the Work and is not eligible for extension of Contract Time.
3. Standard Baseline is as follows:

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
8	6	6	7	5	8	7	5	6	3	5	7

C. Adverse Weather and Rain Delay Days:

1. Adverse Weather is defined as the occurrence of one or more of the following conditions which prevents exterior construction activity or access to the site within twenty-four (24) hours:

IFB 2026-005 UNION COUNTY LANDFILL EXPANSION
UNION COUNTY, NORTH CAROLINA

- a. Precipitation (rain, snow, and/or ice) in excess of two-tenths inch (0.20") liquid measure.
 - b. Standing snow in excess of one inch (1.00").
2. Adverse Weather may include, if appropriate, "dry-out" or "mud" days:
- a. For rain days above the standard baseline,
 - b. Only if there is a hindrance to site access or site work such as excavation, backfill, footings; and,
 - c. At a rate no greater than 1 make-up day for each day or consecutive days of rain beyond the standard baseline that total 1.0 inch or more, liquid measure, unless specifically recommended otherwise by the Engineer.
3. A Weather Delay Day may be counted if adverse weather prevents work on the project for fifty percent (50%) or more of the Contractor's scheduled work day, including a weekend day or holiday if the Contractor has scheduled construction activity for that day.

D. Development of Adverse Weather Baseline:

1. Development of Adverse Weather Data – This is the process of collecting, compiling and analyzing the raw weather data (NOAA and other sources) that forms the baseline for estimating anticipated delays and project durations and determining the occurrence of unusually severe weather. The following actions make up the development process:
 - a. Analyze the project scope and site geography to determine which weather parameters (temperature, precipitation, wind, etc.) are applicable. The parameters selected should present adverse conditions that could potentially delay construction activities.
 - b. Review the technical specifications to determine the numerical values that will be assigned to each parameter in order to establish the anticipated adverse weather. Usually when two or more construction phases are affected by the same parameter, the less severe numerical value should be used (i.e. if roofing work is delayed by temperatures below 40 degrees and concrete work is delayed by temperatures below 32 degrees, then the numerical value used to define adverse weather should be 40 degrees unless some other factor renders the roofing phase insignificant in terms of schedule criticality).
 - c. Compile the number of days per month that the anticipated weather is expected to be adverse by analysis of NOAA or other weather data. When at all possible, the last 10 years of consecutive data should be used to establish the baseline. However, in the absence of 10 years of data, a shorter period may be used. It may be necessary to extrapolate the number of calendar days that the temperature is expected to fall below the selected numerical value (say, 40 degrees) from raw data.
 - d. Adverse weather data must be periodically updated in order to reflect changes in the 10-year averages and incorporate any necessary corrections derived from actual field experience. It is recommended that data used for establishing adverse weather baselines be reviewed annually.

IFB 2026-005 UNION COUNTY LANDFILL EXPANSION
UNION COUNTY, NORTH CAROLINA

3.3 PROJECT CLOSE-OUT

- A. Final Documentation: Prior to final payment, and before the issuance of a final certificate for payment in accordance with the provisions of the General Conditions, the Contractor shall file with the Engineer the documents listed hereinafter:
 - 1. Guarantees: The Contractor's one (1) year guarantee required by the General Conditions and all other guarantees stated in the Specifications.
 - 2. Affidavit and Waiver of Liens: As required by General Conditions. The Contractor shall utilize the form provided at the end of this section.
 - 3. Consent of Surety Company to Final Payment.
 - 4. Certified Final Sales Tax Statement (as required)
 - 5. Certified Payroll Records (as required)
 - 6. Project Record Documents: Record documents shall be as specified in Section 01200-1.04.F.
 - 7. Operation and Maintenance Manuals: Submit at least three (3) sets of operation and maintenance manuals for all equipment, electrical valve actuators, electrical devices, and all other materials or devices with special operating and maintenance requirements.
- B. Submittals: The above records shall be arranged in order, in accordance with the various sections of the Specifications, and properly indexed. At the completion of the work, the Contractor shall certify by endorsement thereof that each of the revised and marked-up prints of the Drawings and Specifications is complete and accurate.
- C. No review or receipt of such records by the Engineer or the Owner shall be a waiver of any change from the Contract Documents or the shop drawings, or in any way relieve the Contractor of his responsibility to perform the work as required by the Contract Documents, and the shop drawings to the extent they are in accordance with the Contract Documents.

END OF SECTION

(Recommended Standard Forms follow)

UNIT BID ITEM SUMMARY

[illegible]

SALES TAX REIMBURSEMENT FORM

CONTRACTOR _____

PROJECT _____

OWNER _____

FOR PERIOD _____

VENDOR	ADDRESS	INVOICE	DATE	AMOUNT	N.C. TAX	COUNTY TAX	COUNTY NAME

I, _____, being duly sworn, certify that the foregoing statement of sales tax paid in connection with the referenced contract does not contain sales or use taxes paid on purchases of tangible personal property purchased by such contractors for use in performing the contract which does not annex to, affix to or in some manner become a part of the building or structure being erected, altered or repaired for the governmental entities as defined by G.S. 105-164.14(c) and is to the best of his/her belief, true and correct.

Signature

Title

Sworn to before me this _____ day of _____, 20 _____

My commission expires _____

Notary Public

() Shop Drawings
() Printed Materials
() Other

Project
Owner
Address
Location

FOR: ☐ Transmittal Only
 ☐ Approval
 ☐ Approved as noted
 ☐ Revise & Resubmit

Name
Company
Address
telephone/fax

Name
Company
Address
telephone/fax

Project Ref. No. _____

Signature

CONTRACTOR'S FINAL AFFIDAVIT AND WAIVER OF LIEN

PROJECT: _____ OWNER: _____

CONTRACTOR: _____

CONTRACT AMOUNT: _____

STATE OF: _____

CONTRACT DATE: _____

COUNTY OF: _____

DATE: _____

This is to certify that all claims for labor, material, services and any other just claims arising out of the performance of this Contract have been satisfied, except for payment to subcontractors to be made out of retainage presently being held by the Owner, and that no claims or liens exist against this Contractor in connection with this contract; that to the best of our knowledge no claims or liens exist, and if any such claims or liens appear after payment of the retained amount due on the Contract, this Contractor shall save the Owner harmless on account thereof. After payment of the retained amount the undersigned does hereby waive, release and relinquish any and all claims or rights of lien presently held or hereafter accruing upon the above project.

CONTRACTOR: _____

BY: _____

TITLE: _____

Sworn to and subscribed before me this
_____ day of _____ 20 _____

(Notary Public)

My Commission expires: _____

IFB 2026-005 UNION COUNTY LANDFILL EXPANSION
UNION COUNTY, NORTH CAROLINA

SECTION 01 71 13

MOBILIZATION

PART 1 GENERAL

1.1 SCOPE OF WORK

- A. The work covered by this section consists of preparatory work and operations, including but not limited to those necessary for the movement of personnel, equipment, supplies, and incidentals to the project site; for the establishment of all offices, building, and other facilities necessary for work on the project; and for all other work and operations which must be performed or costs incurred prior to beginning work on the various items on the project site. Included in this item will be the erection of all construction signs and signals, traffic warning devices, project sign and other preparatory signs.

PART 2 NOT USED

PART 3 NOT USED

END OF SECTION

IFB 2026-005 UNION COUNTY LANDFILL EXPANSION
UNION COUNTY, NORTH CAROLINA

SECTION 01025

MEASUREMENT AND PAYMENT

PART 1 - GENERAL

1.1 DESCRIPTION

- A. The items listed below beginning with Article 1.5, refer to and are the same pay items listed in the Bid Form. They constitute all of the pay items for the completion of the Work. No direct or separate payment will be made for providing miscellaneous temporary or accessory works, plant, services, CONTRACTOR'S or ENGINEER'S field offices, layout surveys, job signs, sanitary requirements, testing, safety devices, approval and record drawings, water supplies, power, maintaining traffic, removal of waste, watchmen, bonds, insurance, and all other requirements of the General Conditions, Supplementary Conditions, and the General Requirements. Compensation for all such services, things and materials shall be included in the prices stipulated for the lump sum and extra work unit price pay items listed herein.
- B. Each lump sum and unit price bid 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.

1.2 ENGINEER'S ESTIMATE OF QUANTITIES

- A. ENGINEER'S estimated quantities for unit price pay items, as listed in the Bid Form, are approximate only and are included solely for the purpose of comparison of Bids. OWNER does not expressly or by implication agree that the nature of the materials encountered below the surface of the ground or the actual quantities of material encountered or required will correspond therewith and reserves the right to increase or decrease any quantity or to eliminate any quantity as OWNER may deem necessary. Except as provided in Article 1.3, below, CONTRACTOR nor OWNER will not be entitled to any adjustment in a unit bid price as a result of any change in an estimated quantity and agrees to accept the aforesaid unit bid prices as complete and total compensation for any additions caused by changes or alterations in the Work ordered by OWNER.

1.3 ADJUSTMENT OF UNIT PRICES FOR INCREASE OR DECREASE OF ESTIMATED QUANTITIES

- A. For bid items paid for on a unit price basis, increases or decreases in the quantity of an item of Work will be determined by comparing the total payable quantity of Work with ENGINEER's estimated quantity as shown in the Bid Form.
- B. Notwithstanding any other provision of the Contract Documents, if the total payable quantity of any unit price item of Work, which has an as-bid computed total value of five percent or more of the sum of the as-bid computed total values of all items bid,

IFB 2026-005 UNION COUNTY LANDFILL EXPANSION
UNION COUNTY, NORTH CAROLINA

varies from ENGINEER's estimate of quantity therefore by more than 25 percent above or below the estimated quantity, the unit price of that item will be a subject of review by ENGINEER. If warranted, an equitable adjustment will be made by means of a Change Order to credit OWNER with any reduction in cost or to compensate CONTRACTOR for any increase in cost resulting from the change in quantity. Said equitable adjustment will be based on any increase or decrease in costs due solely to the variation above 125 percent or below 75 percent of the ENGINEER's estimated quantity.

- C. ENGINEER's review for possible adjustment will be made at a time ENGINEER deems reasonable and proper.
- D. Payment for any unit price item of Work, which has an as-bid computed total value of less than five percent of the sum of the as-bid computed total values of all items bid, will be made at the unit price bid regardless of an increase or decrease in quantity.

1.4 RELATED PROVISIONS

- A. Payments to CONTRACTOR: Refer to General Conditions and Contract.
- B. Changes in Contract Price: General Conditions.
- C. Schedule of Values: Section 01026.

1.5 GENERAL WORK ITEMS

A. Site Preparation Section:

Bid Item No. A1 – Mobilization & Demobilization

a. Measurement

The Work required for this Item will be measured on the basis of satisfactory evidence of mobilization of sufficient labor, equipment, and material to adequately advance the Work.

b. Payment

The Lump Sum Price for this Item shall be paid in two installments (75% upon full mobilization and 25% upon completion of the work and demobilization of all equipment and materials) for all labor, equipment, material, and other incidentals for mobilization/demobilization of equipment, facilities, personnel, and materials to/from the Site, as well as CONTRACTOR provided utilities and ongoing related expenses considered normal for administration of the work.

c. Definition

IFB 2026-005 UNION COUNTY LANDFILL EXPANSION
UNION COUNTY, NORTH CAROLINA

“Mobilization” shall include all costs for Contractor’s temporary facilities, safety measures, general requirements for the contract, and all other miscellaneous costs.

Bid Item No. A2 – Bonds & Insurance

a. Measurement

The Work required for this bid item will not be measured for payment.

b. Payment

The lump sum price for Item A2 shall be full compensation for providing the required Payment Bond, Performance Bond, and insurance in accordance with the requirements of the General Conditions. Payment will be made per the percentage of the work that has been completed and accepted by the OWNER within the invoice cycle.

Bid Item No. A3 – Surveying

a. Measurement

The Work required for Item A3 will be measured on the basis of satisfactory evidence of surveying to adequately perform the Work in accordance with the Construction Drawings and Contract Documents

b. Payment

The Lump Sum Price for “Surveying” shall be paid in equal monthly increments throughout the duration of the project for all labor, equipment, material, and other incidentals necessary to perform construction stakeout survey, intermediate surveying as required by CONTRACTORS personnel to further construction and an as-built survey of stormwater management system and retention pond.

B. Demolition Section:

Bid Item No. B1 – Site Clearing & Grubbing

a. Measurement

The quantity of clearing and grubbing paid under Item B2 shall be the actual number of acres cleared and grubbed as measured by computing the aerial limits of clearing and grubbing.

IFB 2026-005 UNION COUNTY LANDFILL EXPANSION
UNION COUNTY, NORTH CAROLINA

b. Payment

Payment will be made at the Unit Price per acres listed in the Bid Form for this Item. Payment will be made per the percentage of the work that has been completed and accepted by the OWNER within the invoice cycle. No payment shall be made for clearing and grubbing beyond the defined limits of construction shown on the Drawings. Payment shall include materials, equipment, labor, and disposal of all clearing and grubbing debris necessary for clearing of trees and shrubs within the limits of construction shown on the Construction Drawings.

C. Site Improvements:

Bid Item No. C1 – Excavation Grading

a. Measurement

Measurement for payment will be the actual number of cubic yards of excavated material removed as measured by comparing topographic surveys performed before and after excavation.

b. Payment

The Unit Price bid per cubic yard for excavation grading activities will be paid for accordance with the Contract Documents, including but not limited to labor, equipment, excavation, and hauling to either fill placement area or adjacent soil stockpile area. The unit price per cubic yard for Item No. C1 will be full compensation for measuring, excavating, and temporary stockpiling as needed and all other work required or incidental to the satisfactory completion of excavation activities. Payment will be made per the percentage of work that has been completed and accepted by the OWNER within the invoice cycle. See Drawings for delineation of site work and final grade elevations.

Bid Item No. C2 – Fill Placement

a. Measurement

The quantity of fill and backfill that will be paid for under Item No. C2 will be the actual number of in-place cubic yards of fill material placed as measured by comparing topographic surveys performed before and after placement of the fill and backfill materials.

b. Payment

The unit price per cubic yard for Item No. C2 will be full compensation for measuring, hauling, placing, grading, compaction, testing, and topographic surveys required to establish the elevations shown on the Drawings. CQA

IFB 2026-005 UNION COUNTY LANDFILL EXPANSION
UNION COUNTY, NORTH CAROLINA

Engineer must approve all work to be completed under this item prior to execution by the Contractor. Payment will be made per the percentage of work that has been completed and accepted by the OWNER within the invoice cycle.

D. Perimeter Road Construction:

Bid Item No. D1 –8” Gravel Pavement Structure

a. Measurement

The quantity of Gravel pavement structure shall be paid by the square yard of material installed and included in the accepted work. The materials included in this pay item shall be the gravel course as shown on the proposed gravel cross-section. Thickness and width of materials shall be installed as shown on Sheet C802.

b. Payment

The unit price bid shall include all cost for providing the necessary labor, materials, hauling, placing and compacting. Pavement structure shall be paid for at the unit price bid for the total number of tons completed at the specified thickness.

E. Storm Water Infrastructure:

Bid Item No. E1-E2 –24” & 36” Stormwater RCP Piping

a. Measurement

Class III storm pipe will be measured from the exact beginning of the pipe to the end of the pipe for the size and class pipe specified.

b. Payment

Storm pipe will be paid for at the contract unit price per linear foot for pipe of the wall thickness, class, and pipe size specified, complete in place. This price shall include pipe, trench excavation, stone bedding if specified, shoring or use of trench box, installation, pumping, joint compound, backfilling, compaction, and disposal of excess material.

Bid Item No. E3 – Flared End Section

a. Measurement

Measurement for payment will be the actual number of flared sections installed.

IFB 2026-005 UNION COUNTY LANDFILL EXPANSION
UNION COUNTY, NORTH CAROLINA

b. Payment

The unit price bid shall include all cost for providing the necessary labor, and materials for the installation of flared end section to storm drainage system outfall. Flared end section shall be paid for at the unit price bid for the actual number of flared end sections installed per drawings.

Bid Item No. E4 – Riprap Outlet Dissipator

c. Measurement

Measurement for payment will be the actual number of riprap outlet dissipators installed at storm drain or ditch outfalls at locations shown on the drawings.

d. Payment

Payment under this item includes, but is not limited to, labor, materials, tools, equipment, delivery of Rip Rap materials, storage, placement, and protection of the installed Work. Rip rap outlet dissipators shall be paid for at the unit price bid per for the actual number of rip rap outlet dissipators installed and accepted by the engineer.

F. Erosion Control:

Bid Item No. F1-F8 – Erosion Control

a. Measurement

This item of work shall consist of installation and maintenance of all erosion control measures required for construction as shown on the plans including sediment basins with skimmers, riser and barrel systems, sediment fence, check dams, temporary diversion ditches, construction entrances, rip rap dissipators, check dams, etc. Maintenance of erosion control measures as well as removal and restoration of surfaces shall also be included in the lump sum price.

b. Payment

Payment shall be made on a lump sum basis for all work. Partial payment will be made based upon an agreed upon percentage completed during any given month during the construction period.

PART 2 - PRODUCTS (NOT USED)

PART 3 - EXECUTION (NOT USED)

IFB 2026-005 UNION COUNTY LANDFILL EXPANSION
UNION COUNTY, NORTH CAROLINA

END OF SECTION

IFB 2026-005 UNION COUNTY LANDFILL EXPANSION
UNION COUNTY, NORTH CAROLINA

SECTION 31 01 00

EARTHWORK

PART 1 GENERAL

1.1 SCOPE OF WORK

A. GENERAL

The work included in this section consists of the grading of the project area. The work includes:

1. Site clearing and off-site disposal of all debris and unsuitable material.
2. Removal of all topsoil, organically contaminated soil and existing unsuitable fill.
3. Proofrolling and grading of the property to the prescribed elevations.
4. Stockpiling or wasting on site of any excess cut material for providing acceptable material as required to obtain the desired grades.

1.2 SITE CONDITIONS

A. SITE INFORMATION

The boring logs and related information depict approximate subsurface conditions only at these specific locations and at the particular time designated on the logs. Subsurface conditions at other locations may differ from those reported at the boring locations. It is expressly understood that neither the Owner nor the Engineer will be responsible for interpretations or conclusions drawn from the boring data by the Contractor. The data are made available for the convenience of the Contractor. Additional test borings and other exploratory operations may be undertaken by the Contractor at his own expense provided such operations are acceptable to the Owner.

See "Geotechnical Engineering Report Union County Operations Center" prepared by ECS Southeast, LLP dated August 29, 2018 for specific soils information and compaction requirements.

PART 2 PRODUCTS

2.1 MATERIALS

A. UNSTABLE MATERIAL

1. Organically contaminated soils must be removed from the area of grading operations. At the discretion of the Engineer, topsoil within the area to be stripped shall be stockpiled in a convenient area, selected by the Engineer, for later use in

IFB 2026-005 UNION COUNTY LANDFILL EXPANSION
UNION COUNTY, NORTH CAROLINA

planting area. All topsoil shall be graded by the Engineer as suitable and shall be stockpiled separately as directed by the Engineer in the field.

2. Soft or excessively yielding material shall be removed and replaced with inert controlled fill.

B. FILL MATERIAL

1. Material to be used for fill shall be approved by the Engineer.
2. All roots, organic matter, trash, debris, and other unsuitable materials that may find their way into otherwise acceptable fill material shall be removed during the dumping and spreading operations.
3. Broken rock and boulders larger than 6" in any dimension may not be used as fill without the specific approval of the Engineer.
4. Frozen soil shall not be used for fill.
5. Fill material shall have a maximum laboratory dry weight, ASTM D-698, of at least 100 pounds per cubic foot unless specifically exempted from this requirement by the Engineer.

PART 3 EXECUTION

3.1 PREPARATION

A. SURFACE PREPARATION

1. After removal of all existing topsoil, debris, and other undesirable material, the areas which are to receive fill, which have been cut to the desired grade, or which are at the approximate required subgrade elevation without additional earthwork, should be proofrolled to locate any soft or yielding area. Proofrolling shall be done with at least four overlapping passes of a heavy-duty flat wheel vibratory roller, at least 20 tons, or by its approved equivalent.
2. Any soft, or excessively yielding material revealed by the proofrolling shall be removed and replaced with inert controlled fill. The Engineer shall be the sole judge of what constitutes soft or excessively yielding material.
3. Drainage from existing watercourses, springs or other sources should be rerouted out of the earthwork area. The Contractor shall take special care to remove all organically contaminated sediment, saturated soil, and other undesirable material from existing watercourses.

B. BLASTING AND DAMAGES

Where blasting is done, it shall be done by qualified personnel and in accordance with all federal, state or local requirements and procedures. The Contractor shall be responsible for any damage done to adjoining properties, or to persons, by reason of the blasting or other earthwork operations. The Contractor shall also be responsible for damage to embankments and cut areas, and sewer, water, gas or other underground lines which may

IFB 2026-005 UNION COUNTY LANDFILL EXPANSION
UNION COUNTY, NORTH CAROLINA

result from blasting or earthwork operations. All such damage shall be repaired and made good by the Contractor in a timely manner.

3.2 INSTALLATION

A. FILLING AND COMPACTION

1. After a stable non-yielding surface has been established, the surface of the area to be filled shall be scarified with a disc or harrow to a depth of 4" to 6". An initial 3" layer of fill material shall then be spread over the scarified surface and the entire area compacted as specified below.
2. No fill shall be placed on any area until that area has been inspected and approved by the Engineer. Fill shall not be placed on a snow covered or frozen surface. Fill materials shall be spread in uniform horizontal layers not exceeding 8" in uncompacted thickness. Alternating layers of cohesive and granular fill soils shall not be permitted. Spreading and compacting of fill material should be started at the lowest portion of the site. All fill must be placed in horizontal layers. Sloping fill planes will not be permitted. Fill material shall be distributed over the full width of the embankment, and in no case will deep ruts be allowed to form.
3. Keyways shall be provided at the toe of each fill slope as shown on the drawings. As each layer of fill meets the natural grade of a slope, a bench, approximately 7 to 8 feet wide, shall be cut into the existing grade with each layer of newly placed fill. If rock is encountered at the face of the natural grade, the original ground shall be cut in vertical steps of 4 to 5 feet and a horizontal bench cut into the rock at the top of each vertical increment. A horizontal plateau, approximately 15 to 20 feet wide, should be provided in the existing slope at vertical intervals of roughly 25 feet. Subsurface drains shall be installed at the toe of the slope and wherever springs or excessive seepage are encountered. Drains should be led to the outside face of the embankment and the water picked up and carried away in such a manner as to avoid softening the embankment or its toe, or producing erosion gullies.
4. Before compaction begins, the fill shall be brought to a water content that will permit proper compaction. This may require aerating the material if it is too wet, or the addition of water if it is too dry. If additional water is required, it should be uniformly distributed through the use of approved water wagons, and shall be thoroughly incorporated into the material by means of discs or other suitable mixing equipment. Care shall be taken to avoid trapping water within the fill.
5. The standard Proctor method of moisture-density relationship test, ASTM D 698 or AASHTO T-99, shall be used to determine the maximum laboratory dry density and the optimum moisture content of the material which is to be used for fill.
6. Each layer of fill material shall be compacted until its density is not less than 95% of the maximum laboratory dry density for the same material (100% for the top two (2) feet below pavements). The moisture content of compacted cohesive materials shall not vary by more than two (2) percentage points from the optimum moisture content for the same material, providing excessive yielding is not produced within this range of moisture contents. Where, in the opinion of the Engineer, proposed fill material is

IFB 2026-005 UNION COUNTY LANDFILL EXPANSION
UNION COUNTY, NORTH CAROLINA

too wet to permit drying in a reasonable length of time, the Engineer may reject the material and it must be removed from the work area.

7. The above compaction requirements are to be satisfied for all soil and weathered or soft rock fills. Weathered or soft rocks are those that can be broken down and disintegrated under normal compaction procedures and equipment.
8. At the close of each day's work, or where work is to be interrupted for a period of time, the surface of the site shall be shaped to drain freely, and sealed. If after a prolonged rainfall, the surface of the area to be filled or cut is too wet to work properly, the unsuitable material shall be removed to expose workable soil. The wet material removed may be dried and reused. Construction traffic shall be controlled so as to prevent rutting of graded areas and to avoid overrolling of any section.
9. All cut areas shall be rolled and compacted to produce a compaction equal to that of the filled area. If soft or yielding material is encountered in cuts, or fills as a result of trapping water, overrolling or improper control of construction traffic, and cannot be satisfactorily stabilized by moisture control, compaction or other means approved by the Engineer, the unstable material shall be excavated to the depth required by the Engineer. The excavation shall then be filled with suitable compacted material in accordance with the requirements outlined above.

B. GRADING

1. Elevations shown on the plans are finished ground unless otherwise noted. Grading shall be maintained in such a manner as to provide free surface drainage of the site at all times without any ponding of water.
2. Provide ditches and swales to the cross-sections and grades shown on the drawings. Cut ditch subgrades 4" below the grades shown and provide 4" of topsoil where the plans call for seeding or sodding of the ditch. Keep ditches and swales free of accumulations of debris or washed in material until final acceptance of work by the Engineer.
3. Shape all surfaces to within not more than 0.10 feet above or below the required subgrade elevations and free from irregular surface changes.

C. MAINTENANCE

1. The Contractor shall be responsible during construction and until final acceptance for the maintenance of all embankments made under the Contract.
2. During construction and until final acceptance, the Contractor shall construct temporary or permanent earth berms along the outer edges of the top surface of the embankment, construct temporary ditches, shape the embankment surface to provide for the drainage of surface runoff along and throughout the length of the embankments, and use any other methods necessary to maintain the work covered by this section so that the work will not contribute to excessive soil erosion. The Contractor shall construct brush dikes, or install temporary or permanent slope drains or other drainage features to assist in controlling erosion.
3. The Contractor shall replace, at no cost to the Owner, any portion of embankment which have become displaced or damaged due to carelessness or neglect on the part of the Contractor. Where the work has been properly constructed, completely

IFB 2026-005 UNION COUNTY LANDFILL EXPANSION
UNION COUNTY, NORTH CAROLINA

drained and properly maintained, and damage occurs due to natural causes, the Contractor will be paid at the Contract unit price for the excavated material required to make necessary repairs to such damage.

4. All embankments shall be brought to the grade and cross section shown on the plans or established by the Engineer, prior to final inspection and acceptance by the Engineer.

3.3 FIELD QUALITY CONTROL

A. QUALITY CONTROL AND TESTING

1. The services of qualified soils testing personnel may be engaged by the Owner for the making of tests to determine the moisture-density relationships, relative densities, plastic and liquid limits and suitability of materials for compaction and for inspection and control of the site preparation, selection, placing and compaction of the fill. Such tests will be provided and paid for by the Owner, except that tests which reveal non-conformance with the Specifications and all succeeding tests for the same area, until conformance with the Specifications is established, shall be at the expense of the Contractor. The Owner will be responsible for paying for only the successful tests. A copy of the testing personnel's daily field report including results of in-place density and moisture content tests should be forwarded to the Owner and the Engineer at the end of each working day.
2. The Contractor shall cooperate with the testing personnel so as to permit proper inspection and control of the work without unnecessary delays.

END OF SECTION

IFB 2026-005 UNION COUNTY LANDFILL EXPANSION
UNION COUNTY, NORTH CAROLINA

SECTION 31 02 00

CLEARING AND GRUBBING

PART 1 GENERAL

1.1 SCOPE OF WORK

- A. Clearing and grubbing shall consist of the removal and satisfactory disposal of all trees, brush, stumps, logs, grass, weeds, roots, decayed vegetable matter, posts, fences, stubs, rubbish and all other objectionable matter resting on or protruding through the original ground surface and occurring within the construction limits or right-of-way of any excavation, borrow area, or embankment.

PART 2 NOT USED

PART 3 EXECUTION

3.1 GENERAL

- A. Clearing and grubbing operations shall be completed sufficiently in advance of grading operations as may be necessary to prevent any of the debris from the clearing and grubbing operations from interfering with the excavation or embankment operations. All work under this section shall be performed in a manner which will cause minimum soil erosion. The Contractor shall perform such erosion control work, temporary or permanent, as may be directed by the Engineer in order to satisfactorily minimize erosion resulting from clearing and grubbing operations.

1. Clearing:

- a. The work of clearing shall be performed within the limits established by the plans, specifications, or the Engineer.
- b. Clearing shall consist of the felling and cutting up, or the trimming of trees, and the satisfactory disposal of the trees and other vegetation together with the down timber, snags, brush and rubbish occurring within the areas to be cleared. Trees and other vegetation, except such individual trees, groups of trees, and vegetation, as may be indicated on the plans to be left standing, and all stumps, roots and brush in the areas to be cleared shall be cut off six inches above the original ground surface.
- c. Individual trees and groups of trees designated to be left standing within cleared areas shall be trimmed of all branches to such heights and in such manner as may be necessary to prevent interference with construction operations. All limbs and branches required to be trimmed shall be neatly cut

IFB 2026-005 UNION COUNTY LANDFILL EXPANSION
UNION COUNTY, NORTH CAROLINA

close to the whole of the tree or to main branches, and the cuts thus made shall be painted with an approved tree wound paint. Individual trees, groups of trees, and other vegetation, to be left standing shall be thoroughly protected from damage incident to construction operations by the erection of barriers or by such other means as the circumstances require.

- d. The Engineer will designate all areas of growth or individual trees which are to be preserved due to their desirability for landscape or erosion control purposes. When the trees to be preserved are located within the construction limits, they will be shown on the plans or designated by the Engineer.
 - e. Clearing operations shall be conducted so as to prevent damage by falling trees to trees left standing, to existing structures and installations, and to those under construction, and so as to provide for the safety of employees and others. When such damages occur, all damaged areas shall be repaired, removed or otherwise resolved utilizing generally accepted practices at the Contractor's expense.
2. Grubbing:
- a. Grubbing shall consist of the removal and disposal of all stumps, roots and matted roots from all cleared areas, except as herein specified.
 - b. All depressions excavated below the natural ground surface for or by the removal of stumps and roots shall be refilled with suitable material and compacted to make the surface conform to the surrounding ground surface.
3. Disposal of Cleared and Grubbed Material: Saw logs, pulp wood, cord wood or other merchantable timber removed incidental to clearing and grubbing shall remain the property of the Owner. All combustible matter shall be deposited at locations approved by the Engineer. Combustible matter may be burned or may be disposed of as stated above. Debris shall not be burned unless written permission or permit is issued by the Fire Marshall having jurisdiction in the area if applicable. The Contractor shall adhere to all limitations and conditions set forth in the permit. Burning shall be done at such time and such manner as to prevent fire from spreading and to prevent any damage to adjacent cover and shall further be subject to all requirements of State or Federal Governments pertaining to the burning. Disposal by burning shall be kept under constant attendance until all fires have burned out or have been extinguished.

END OF SECTION

IFB 2026-005 UNION COUNTY LANDFILL EXPANSION
UNION COUNTY, NORTH CAROLINA

SECTION 31 03 00

WASTE MATERIAL DISPOSAL

PART 1 GENERAL

1.1 SCOPE OF WORK

- A. The work covered by this section consists of the disposal of waste and debris in accordance with the requirements of these specifications. Waste will be considered to be all excavated, grubbed or removed materials which are not utilized in the construction of the project.

PART 2 NOT USED

PART 3 EXECUTION

3.1 GENERAL REQUIREMENTS

- A. Waste shall be disposed of in areas that are outside of the project area and provided by the Contractor, unless otherwise required by the plans or special provisions or unless disposal within the project area is permitted by the Engineer.
- B. Concrete that is painted must be disposed of in accordance with requirements and regulations of the North Carolina Department of Environmental Quality (NCDEQ) Solid Waste Section. Prior to disposal of painted concrete, the Contractor shall submit a written certification to NCDENR that the paint on the concrete is not lead-based. Certification that paint on concrete is not lead-based paint is required prior to management as inert debris. Lead-based paint is defined by federal statute (Title X of the Housing and Community Development Act and the Toxic Substances Control Act, by reference). Concrete that is painted with lead-based paint, or paint that has not been certified to the satisfaction of the North Carolina Department of Environment and Natural Resources Solid Waste Section to be below the federal standard to be considered lead-based paint, must be disposed of at a properly permitted construction and demolition landfill or a permitted municipal solid waste landfill.
- C. The Contractor shall maintain the earth surfaces of all waste areas, both during the work and until the completion of all seeding and mulching or other erosion control measures specified, in a manner which will effectively control erosion and siltation.

IFB 2026-005 UNION COUNTY LANDFILL EXPANSION
UNION COUNTY, NORTH CAROLINA

- D. The following requirements shall also be applicable to all waste or disposal areas other than active public waste or disposal areas:
1. Rock waste shall be shaped to contours which are comparable to and blend in with the adjacent topography where practical, and shall be covered with a minimum 6" thick layer of earth material either from the project waste or from borrow.
 2. Earth waste shall be shaped to contours which are comparable to and blend in with the adjacent topography where practicable, but in no case will slopes steeper than 2:1 be permitted.
 3. Construction debris, grubbed debris and all broken pavement and masonry shall be covered with a minimum 6" thick layer of earth waste material from the project or borrow. The completed waste area shall be shaped as required above for disposal of earth waste.
 4. Seeding and mulching shall be performed over all earth or earth covered waste areas. The work of seeding and mulching shall be performed in accordance with Section 02931.
 5. Where the Engineer has granted permission to dispose of waste and debris within the project, the Engineer will have the authority to establish whatever additional requirements may be necessary to insure the satisfactory appearance of the completed project.

Disposal of waste or debris in active public waste or disposal areas will not be permitted without prior approval by the Engineer. Such disposal will not be permitted when, in the opinion of the Engineer, it will result in excessive siltation or pollution.

END OF SECTION

IFB 2026-005 UNION COUNTY LANDFILL EXPANSION
UNION COUNTY, NORTH CAROLINA

SECTION 31 04 00

EXCAVATION AND BACKFILL

PART 1 GENERAL

1.1 SCOPE OF WORK

A. General:

1. The work covered by this section shall consist of furnishing all materials, labor, equipment and services for the excavation and backfill at all areas within the limits of the project. Work is limited to the areas of construction, and includes (but is not necessarily limited to) stockpiling of topsoil, site grading, excavation of footings and trenches, filling, backfilling, compaction, finish grading, spreading of topsoil, disposal of waste material, and proof rolling.
2. Perform all excavation, dewatering, sheeting, bracing, and backfilling in such a manner as to eliminate all possibility of undermining or disturbing the foundations of existing structures.
3. Requirements of the General and Supplemental Conditions apply to all work in this section. Provide all labor, materials, equipment, and services indicated on the drawings, or specified herein, or reasonably necessary for or incidental to a complete job.
4. Excavations shall provide adequate working space and clearances for the work to be performed therein and for installation and removal of concrete forms. In no case shall excavation faces be undercut for extended footings.
5. Subgrade surfaces shall be clean and free of loose material of any kind when concrete is placed thereon.
6. Backfilling during freezing weather shall not be done except by permission of the Engineer. No backfill, fill, or embankment materials shall be installed on frozen surfaces, nor shall frozen materials, snow, or ice be placed in any backfill, fill, or embankment.

1.2 SYSTEM DESCRIPTION

- A. Excavation, General: Excavation consists of the removal and disposal of all materials encountered for footings, foundations, pipework, and other construction as shown on the drawings. Perform all excavation work in compliance with applicable requirements of governing authorities having jurisdiction.

1.3 QUALITY ASSURANCE

- A. Referenced Standards: Unless otherwise indicated, all referenced standards shall be the latest edition available at the time of bidding. Any requirements of these specifications shall in no way invalidate the minimum requirements of the referenced

IFB 2026-005 UNION COUNTY LANDFILL EXPANSION
UNION COUNTY, NORTH CAROLINA

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

1. ASTM C33: Standard Specifications for Concrete Aggregate
2. ASTM D698: Standard Test Methods for Moisture-Density Relations of Soils and Soil-Aggregate Mixtures Using 5.5 lb. Rammer and 12" Drop.
3. ASTM D3282: Standard Recommended Practice for Classification of Soils and Soil-Aggregate Mixtures for Highway Construction Purposes.
4. Standard Specifications for Roads and Structures, North Carolina Department of Transportation, January 1, 2002 edition.
5. Erosion and Sediment Control Planning and Design Manual.

B. Unauthorized Excavation: Except where otherwise authorized, indicated, or specified, all materials excavated below the bottom of concrete walls, footings, slabs on grade, and foundations shall be replaced, by and at the expense of the Contractor, with concrete placed at the same time and monolithic with the concrete above.

C. Existing Utilities:

1. Locate existing underground utilities in the area of work. If utilities are to remain in place, provide adequate means of protection during earthwork operations.
2. Should uncharted or incorrectly charted piping or other utilities be encountered during excavation, consult the Engineer immediately for directions as to procedure. Cooperate with Owner and utility companies in keeping respective services and facilities in operation. Repair damaged utilities to the satisfaction of utility companies.

PART 2 PRODUCTS

2.1 MATERIALS

A. Classification of Excavated Materials: Classification of excavated materials will be made as follows:

1. Rock is defined as being sandstone, limestone, flint, graphite, quartzite, slate, hard shale, or similar material that cannot be excavated without systematic drilling and blasting.

B. Classification of Other Materials:

1. Satisfactory Subgrade Soil Materials: Soils complying with ASTM D 3282, soil classification Groups A-1, A-2-4, A-2-5, and A-3.
2. Unsatisfactory Subgrade Soil Materials: Soils described in ASTM D 3282, soil classification groups A-2-6, A-2-7, A-4, A-5, A-6, and A-7; also peat and other highly organic soils, unless otherwise acceptable to the Engineer.
3. Cohesionless Soil Materials: Gravels, sand-gravel mixtures, sands, and gravelly-sands.

IFB 2026-005 UNION COUNTY LANDFILL EXPANSION
UNION COUNTY, NORTH CAROLINA

4. Cohesive Soil Materials: Clayey and silty gravels, sand-clay mixtures, gravel-silt mixtures, clayey and silty sands, sand-silt mixtures, clays, silts, and very fine sands.
5. Backfill and Fill Materials: Provide satisfactory soil materials for backfill and fill, free of masonry, rock, or gravel larger than 4" in any dimension, and free of metal, gypsum, lime, debris, waste, frozen materials, vegetable, and other deleterious matter. Use only excavated material that has been sampled, tested, and certified as satisfactory soil material.
6. Select Backfill: Select backfill is defined as backfill and fill material that is transported to the site from outside the project limits, and which meets the soil requirements specified above under "Backfill and Fill Materials." Material excavated in conjunction with the construction of this project cannot be considered as "select backfill" for payment purposes.
7. Pipe Bedding: Crushed stone or crushed gravel meeting the requirements of ASTM C 33, Gradation 67.
8. Inundated Sand: Sand for inundated sand backfill shall be clean with not more than 25% retained on a No. 4 sieve and not more than 7% passing a No. 200 sieve and shall have an effective size between 0.10 mm and 0.30 mm. Sand shall be deposited in, or placed simultaneously with application of, water so that the sand shall be compacted by a mechanical probe type vibrator. Inundated sand shall be compacted to 70% relative density as determined by ASTM D4253 and D4254.
9. Graded Gravel: Gravel for compacted backfill shall conform to the following gradation:

Sieve Size	Percent Passing by Weight
1"	100
3/4"	85 - 100
3/8"	50 - 80
No. 4	35 - 60
No. 40	15 - 30
No. 200	05 - 10

The gravel mixture shall contain no clay lumps or organic matters. The fraction passing the No. 4 sieve shall have a liquid limit not greater than 25 and a plasticity index not greater than 5. Gravel backfill shall be deposited in uniform layers not exceeding 12" in uncompacted thickness. The backfill shall be compacted by a suitable vibratory roller or platform vibrator to not less than 70% relative density as determined by ASTM D4253 and D4254.

- C. Any rock or unsuitable material removed and/or replaced without the direction/approval of the Owner's testing agency will not be paid for by unit prices.

IFB 2026-005 UNION COUNTY LANDFILL EXPANSION
UNION COUNTY, NORTH CAROLINA

2.1 EQUIPMENT

A. Mechanical Excavation:

1. The use of mechanical equipment will not be permitted in locations where its operation would cause damage to trees, buildings, culverts, or other existing property, utilities, or structures above or below ground. In all such locations, hand excavating methods shall be used.
2. Mechanical equipment used for trench excavation shall be of a type, design, and construction and shall be controlled, that uniform trench widths and vertical sidewalls are obtained at least from an elevation one foot above the top of the installed pipe to the bottom of the trench, and that trench alignment is such that pipe when accurately laid to specified alignment will be centered in the trench with adequate clearance between the pipe and sidewalls of the trench. Undercutting the trench sidewall to obtain clearance will not be permitted.

PART 3 EXECUTION

3.1 PREPARATION

A. Dewatering:

1. The Contractor shall provide and maintain adequate dewatering equipment to remove and dispose of all surface water and groundwater entering excavations, trenches, or other parts of the work. Each excavation shall be kept dry during subgrade preparation and continually thereafter until the structure to be built, or the pipe to be installed therein, is completed to the extent that no damage from hydrostatic pressure, flotation, or other cause will result.
2. All excavations for concrete structures or trenches that extend down to or below groundwater shall be dewatered by lowering and keeping the groundwater level beneath such excavations 12" or more below the bottom of the excavation.
3. Surface water shall be diverted or otherwise prevented from entering excavated areas or trenches without causing damage to adjacent property.
4. The Contractor is responsible for obtaining any required permits or permissions necessary for the disposal of groundwater that is removed. Any discharged groundwater shall be clean and free of sediment.
5. The Contractor shall be responsible for the condition of any pipe or conduit which he may use for drainage purposes, and all such pipes or conduits which he may use for drainage purposes, and all such pipes or conduits shall be left clean and free of sediment.
6. Where trench sheeting is left in place, such sheeting shall not be braced against the pipe, but shall be supported in a manner which will preclude concentrated loads or horizontal thrusts on the pipe. Cross braces installed above the pipe to support sheeting may be removed after pipe embedment has been completed.

B. Stabilization:

IFB 2026-005 UNION COUNTY LANDFILL EXPANSION
UNION COUNTY, NORTH CAROLINA

1. Subgrades for concrete structures and trench bottoms shall be firm, dense, and thoroughly compacted and consolidated; free from mud and muck; and sufficiently stable to remain firm and intact under the feet of the workmen.
2. Subgrades for concrete structures or trench bottoms, which are otherwise solid but which become mucky on top due to construction operations, shall be reinforced with one or more layers of crushed rock or gravel. The stabilizing material shall be spread and compacted to a depth of not less than 6" below the bottom of the structure or pipe. Not more than 1/2" depth of mud or muck shall be allowed to remain on stabilized trench bottoms when the pipe bedding material is placed thereon. The finished elevation of stabilized subgrades for concrete structures shall not be above subgrade elevations indicated on the drawings.

C. Cutting Concrete or Asphalt Surface Construction:

1. All pavement cutting and repair shall be done in accordance with local ordinances. Cuts in concrete and asphaltic concrete shall be no larger than necessary to provide adequate working space for proper installation of pipe and appurtenances. Cutting shall be performed with a concrete saw in a manner which will provide a clean groove the complete thickness of the surface material along each side of the trench and along the perimeter of cuts for structures.
2. Concrete and asphaltic concrete over trenches excavated for pipelines shall be removed so that a shoulder not less than 12" in width at any point is left between the cut edge of the surface and the top edge of the trench. Trench width at the bottom shall not be greater than at the top and no undercutting will be permitted. Cuts shall be made to and between straight or accurately marked curved lines which, unless otherwise required, shall be parallel to the center line of the trench.
3. Pavement or other surfaces removed for connections to existing lines or structures shall not be of greater extent than necessary for the installation.
4. Where the trench parallels the length of concrete walks and the trench location is all or partially under the walk, the entire walk shall be removed and replaced. Where the trench crosses drives, walks, curbs, or other surface construction, the surface construction shall be removed and replaced between existing joints or between saw cuts as specified for payment.

D. Site Grade:

1. General: Uniformly grade areas within limits of grading under this section, including adjacent transition areas. Smooth finish the surface within specified tolerances; compact with uniform levels or slopes between points where elevations are shown, or between such points and existing grades.
2. Ground Surface Preparation: Remove vegetation, debris, unsatisfactory soil materials, obstructions, and deleterious materials from ground surface prior to placement of fills. Plow, strip, or break up sloped surfaces steeper than 1 vertical to 4 horizontal so that fill material will bond with existing surface. Shape the subgrade as indicated on the drawings by forking, furrowing, or plowing so that the first layer of new material placed thereon will be well bonded to it.

3.2 FIELD MEASUREMENTS

IFB 2026-005 UNION COUNTY LANDFILL EXPANSION
UNION COUNTY, NORTH CAROLINA

- A. Alignment, Grade, and Minimum Cover:
 - 1. Vertical and horizontal alignment of pipes, and the maximum joint deflection used in connection therewith, shall be in conformity with requirements of the section covering installation of pipe.
 - 2. Where pipe grades or elevations are not definitely fixed by the contract drawings, trenches shall be excavated to a depth sufficient to provide a minimum depth of backfill cover over the top of the pipe cover depths may be necessary on vertical curves or to provide necessary clearance beneath existing pipes, conduits, drains, drainage structures, or other obstructions encountered at normal pipe grades. Measurement of pipe cover depth shall be made vertically from the outside top of pipe to finished ground or pavement surface elevation except where future surface elevations are indicated on the drawings.
- B. Limiting Trench Widths: Trenches shall be excavated to a width that will provide adequate working space and sidewall clearances for proper pipe installation, jointing, and embedment. For the purposes of quantity measurements and payments, maximum trench widths shall be no greater than the pipe outside diameter plus 24" (12" either side of pipe).

3.3 PROTECTION

- A. Temporary Protection: Protect structures, utilities, sidewalks, pavements, and other facilities from damages caused by settlement, lateral movement, undermining, washout, and other hazards created by earthwork operations.
- B. Sheet piling and Bracing: Make all excavations in accordance with Federal, State, and Local health and safety rules and regulations, including those promulgated by the Department of Labor, Occupational Safety and Health Administration, "Safety and Health Regulations for Construction". Furnish, put in place, and maintain such sheet piling, bracing, etc., as may be necessary to support the sides of the excavation to comply with the above mentioned rules and regulations.
- C. Blasting:
 - 1. The Contractor shall be responsible for all damage caused by blasting operations. Suitable methods shall be employed to confine all materials lifted by blasting within the limits of the excavation or trench.
 - 2. All rock which cannot be handled and compacted as earth shall be kept separate from other excavated materials and shall not be mixed with backfill or embankment materials except as specified or directed.
- D. Care and Restoration of Property:
 - 1. Enclose the trunks of trees which are to remain adjacent to the work with substantial wooden boxes of such height as may be necessary to protect them from piled material, equipment or equipment operation. Use excavating machinery and

IFB 2026-005 UNION COUNTY LANDFILL EXPANSION
UNION COUNTY, NORTH CAROLINA

cranes of suitable type and operate the equipment with care to prevent injury to remaining tree trunks, roots, branches and limbs.

2. Do not cut branches, limbs, and roots except by permission of the Engineer. Cut smoothly and neatly without splitting or crushing. In case of cutting or unavoidable injury to branches, limbs, and trunks of trees, neatly trim the cut or injured portions and cover with an application of grafting wax and tree healing paint as directed.
 3. Protect by suitable means all cultivated hedges, shrubs and plants that might be injured by the Contractor's operations. Promptly heel in any such trees or shrubbery necessary to be removed and replanted. Perform heeling in and replanting under the direction of a licensed and experienced nurseryman. Replant in their original position all removed shrubbery and trees after construction operations have been substantially completed and care for until growth is reestablished.
 4. Replace cultivated hedges, shrubs, and plants injured to such a degree as to affect their growth or diminish their beauty or usefulness, by items of kind and quality at least equal to the kind and quality existing at the start of the work.
 5. Do not operate tractors, bulldozers or other power-operated equipment on paved surfaces if the treads or wheels of the equipment are so shaped as to cut or otherwise injure the surfaces.
 6. Restore all surfaces, including lawns, grassed, and planted areas that have been injured by the Contractor's operations, to a condition at least equal to that in which they were found immediately before the work was begun. Use suitable materials and methods for such restoration. Maintain all restored plantings by cutting, trimming, fertilizing, etc., until acceptance. Restore existing property or structures as promptly as practicable and do not leave until the end of construction period.
- E. Protection of Streams: Exercise reasonable precaution to prevent the silting of streams. Provide at Contractor's expense temporary erosion and sediment control measures to prevent the silting of streams and existing drainage facilities. The Contractor shall size structures and conform fully with the North Carolina Sedimentation Pollution Control Act.
- F. Air Pollution:
1. Comply with all pollution control rules, regulations, ordinances, and statutes which apply to any work performed under the Contract, including any air pollution control rules, regulations, ordinances and statutes, or any municipal regulations pertaining to air pollution.
 2. During the progress of the work, maintain the area of activity, including sweeping and sprinkling of streets as necessary, so as to minimize the creation and dispersion of dust. If the Engineer decides that it is necessary to use calcium chloride or more effective dust control, furnish and spread the material, as directed, and without additional compensation.

3.4 TRENCH EXCAVATION

IFB 2026-005 UNION COUNTY LANDFILL EXPANSION
UNION COUNTY, NORTH CAROLINA

- A. Length of Trench:
 - 1. No more trenches shall be opened in advance of pipe laying than is necessary to expedite the work. One block or 400 feet (whichever is the shorter) shall be the maximum length of open trench on any line under construction.
 - 2. Except where tunneling is indicated on the drawings, is specified, or is permitted by the Engineer, all trench excavation shall be open cut from the surface.

- B. Trench Excavation:
 - 1. General: Perform all excavation of every description and of whatever substance encountered so that the pipe can be laid to the alignment and depth shown on the drawings.
 - 2. Brace and shore all trenches, where required, in accordance with Federal, State, and Local health and safety rules and regulations, including those promulgated by the Department of Labor, Occupation Safety and Health Administration, "Safety and Health Regulations for Construction".
 - 3. Make all excavations by open cut unless otherwise specified or indicated on the drawings.
 - 4. Width of Trenches: Excavate trenches sufficiently wide to allow proper installation of pipe, fittings and other materials. Measurement and payment quantities will be based on a maximum trench width of not more than 12" clear of pipe on either side at any point. Do not widen trenches by scraping or loosening materials from the sides.
 - 5. Trench Excavation in Earth: Earth excavation includes all excavation of whatever substance encountered. In locations where pipe is to be bedded in earth excavated trenches, fine grade the bottoms of such trenches to allow firm bearing for the bottom of the pipe on undisturbed earth. Where any part of the trench has been excavated below the grade of the pipe, fill the part excavated below such grade with pipe bedding material and compact at the Contractor's expense.
 - 6. Trench Excavation in Fill: If pipe is to be laid in embankments or other recently filled material, first place the fill material to the finish grade or to a height of at least one foot above the top of the pipe, whichever is the lesser. Take particular care to ensure maximum consolidation of material under the pipe location. Excavate the pipe trench as though in undisturbed material.
 - 7. Trench Bottom in Poor Soil: Excavate and remove unstable or unsuitable soil to a width and depth, as directed by the Engineer, and refill with a thoroughly compacted gravel bedding.
 - 8. Bell Holes: Provide bell holes at each joint to permit the joint to be made properly and to provide a continuous bearing and support for the pipe.

- C. Trench Backfill:
 - 1. General: Unless otherwise specified or indicated on the drawings, use suitable material for backfill which was removed in the course of making the construction excavations. Do not use frozen material for the backfill and do not place backfill on frozen material. Remove previously frozen material before new backfill is placed. Start backfilling as soon as practicable after the pipes have been laid, or the structures have been built and are structurally adequate to support the loads,

IFB 2026-005 UNION COUNTY LANDFILL EXPANSION
UNION COUNTY, NORTH CAROLINA

including construction loads to which they will be subjected, and proceed until its completion.

2. With the exception mentioned below in this paragraph, do not backfill trenches at pipe joints until after that section of the pipeline has successfully passed any specified tests required. Should the Contractor wish to minimize the maintenance of lights, and barricades, and the obstruction of traffic, he may, at his own risk, backfill the entire trench as soon as practicable after installation of pipe, and the related structures have acquired a suitable degree of strength. He shall, however, be responsible for removing and later replacing such backfill, at his own expense, should he be ordered to do so in order to locate and repair or replace leaking or defective joints or pipe.
3. Material: The nature of the materials will govern both their acceptability for backfill and the methods best suited for their placement and compaction in the backfill. Both are subject to the approval of the Engineer. Do not place stone or rock fragments larger than 4" in greatest dimension in the backfill. Do not drop large masses of backfill material into the trench in such a manner as to endanger the pipeline. Use a timber grillage to break the fall of material dropped from a height of more than 5 feet. Exclude pieces of bituminous pavement from the backfill unless their use is expressly permitted.
4. Zone Around Pipe: Place bedding material to the level shown on the Drawings and work material carefully around the pipe to insure that all voids are filled, particularly in bell holes. For backfill up to a level of 2 feet over the top of the pipe, use only selected materials containing no rock, clods or organic materials. Place the backfill and compact thoroughly under the pipe haunches and up to the mid-line of the pipe in layers not exceeding 6" in depth. Place each layer and tamp carefully and uniformly so as to eliminate the possibility of lateral displacement. Place and compact the remainder of the zone around the pipe and to a height of one foot above the pipe in layers not exceeding 6" and compact to a maximum density of at least 100 % as determined by ASTM D0698.
5. Tamping: Deposit and spread backfill materials in uniform, parallel layers not exceeding 12" thick before compaction. Tamp each layer before the next layer is placed to obtain a thoroughly compacted mass. Furnish and use, if necessary, an adequate number of power driven tampers, each weighing at least 20 pounds for this purpose. Take care that the material close to the bank, as well as in all other portions of the trench, is thoroughly compacted. When the trench width and the depth to which backfill has been placed are sufficient to make it feasible, and it can be done effectively and without damage to the pipe, backfill may, on approval of the Engineer, be compacted by the use of suitable rollers, tractors, or similarly powered equipment instead of by tamping. For compaction by tamping (or rolling), the rate at which backfilling material is deposited in the trench shall not exceed that permitted by the facilities for its spreading, leveling and compacting as furnished by the Contractor.
6. Wet the material by sprinkling, if necessary, to insure proper compaction by tamping (or rolling). Perform no compaction by tamping (or rolling) when the material is too wet either from rain or applied water to be compacted properly.

IFB 2026-005 UNION COUNTY LANDFILL EXPANSION
UNION COUNTY, NORTH CAROLINA

7. Trench Compaction: Compact backfill in pipe trenches to the maximum density as shown on the drawings, or as listed in the subsection entitled COMPACTION, with a moisture content within the range of values of maximum density as indicated by the moisture-density relationship curve.

3.5 SITE GRADE

A. Placement and Compaction:

1. Place backfill and fill material in layers not more than 8" in loose depth. Before compaction, moisten or aerate each layer as necessary to provide the optimum moisture content. Compact each layer to the required percentage of maximum density for each area classification. Do not place backfill or material on surfaces that are muddy, frozen, or contain frost or ice.
2. In areas not accessible to rollers or compactors, compact the fill with mechanical hand tampers. If the mixture is excessively moistened by rain, aerate the material by means of blade graders, harrows, or other approved equipment, until the moisture content of the mixture is satisfactory. Finish the surface of the layer by blading or rolling with a smooth roller, or a combination thereof, and leave the surface smooth and free from waves and inequalities.
3. Place backfill and fill materials evenly adjacent to structures, to the required elevations. Take care to prevent wedging action of backfill against structures. Carry the material uniformly around all parts of the structure to approximately the same elevation in each lift.
4. When existing ground surface has a density less than that specified under the subsection entitled COMPACTION for the particular area classification, break up the ground surface, pulverize, moisture-condition to the optimum moisture content, and compact to required depth and percentage of maximum density.

B. Grading Outside Building Lines: Grade to drain away from structures to prevent ponding of water. Finish surface free from irregular surface changes.

C. Planting Areas: Finish areas to receive topsoil to within not more than one inch (1") above or below the required subgrade elevations, compacted as specified, and free from irregular surface changes.

D. Walks: Shape the surface of areas under walks to line, grade, and cross-section, with the finish surface not more than 0" above or 1" below the required subgrade elevation, compacted as specified, and graded to prevent ponding of water after rains.

E. Pavements:

1. Shape the surface of the areas under pavement to line, grade and cross section, with finish surface not more than 1/2" above or below the required subgrade elevation, compacted as specified, and graded to prevent ponding of water after rains. Include such operations as plowing, discing, and any moisture or aerating required to provide the optimum moisture content for compaction.

IFB 2026-005 UNION COUNTY LANDFILL EXPANSION
UNION COUNTY, NORTH CAROLINA

2. Fill low areas resulting from removal of unsatisfactory soil materials, obstructions, and other deleterious materials, using satisfactory soil material.
 3. Shape to line, grade, and cross section as shown on the drawings.
- F. Protection of Graded Areas: Protect newly graded areas from traffic and erosion, and keep free of trash and debris. Repair and re-establish grades in settled, eroded, and rutted areas to specified tolerances.
- G. Reconditioning Compacted Areas: Where completed compacted areas are disturbed by subsequent construction operations or adverse weather prior to acceptance of work, scarify surface, reshape, and compact to required density prior to further construction.
- H. Unauthorized Excavation:
1. Unauthorized excavation consists of the removal of materials beyond indicated elevations without the specific direction of the Engineer. Under footings, foundations, bases, etc., fill unauthorized excavation by extending the indicated bottom elevation of the concrete to the bottom of the excavation, without altering the required top elevation. Lean concrete fill may be used to bring elevations to proper position only when acceptable to the Engineer.
 2. For pipe trenches and elsewhere, backfill and compact unauthorized excavations as specified for authorized excavations of the same classification, unless otherwise directed by the Engineer.

3.6 BACKFILL AROUND STRUCTURES

- A. General: Unless otherwise specified or indicated on the drawings, use suitable material for backfill which was removed in the course of making the backfill and do not place backfill which was removed in the course of making the construction excavations. Do not use frozen material for the backfill and do not place backfill upon frozen material. Remove previously frozen material before new backfill is placed.
- B. Material: Approved selected materials available from the excavations may be used for backfilling around structures. Obtain material needed in addition to that of construction excavations from off-site borrow pits selected by the Contractor. Furnish all borrow material needed on the work. Place and compact all material, whether from the excavation or borrow, to make a dense, stable fill. Use fill material which contains no vegetation, masses of roots, individual roots over 18" long or more than 1/2" in diameter, stones over 4" in diameter, or porous matter. Organic matter must not exceed negligible quantities.

IFB 2026-005 UNION COUNTY LANDFILL EXPANSION
UNION COUNTY, NORTH CAROLINA

- C. Placing Backfill: Do not place backfill against or on structures until they have attained sufficient strength to support the loads (including construction loads) to which they will be subjected, without distortion, cracking, or other damage. Make special leakage tests, if required, as soon as practicable after the structures are structurally adequate and other necessary work has been done. Use the best of the excavated materials in backfilling within 2 feet of the structure. Avoid unequal soil pressures by depositing the material evenly around the structure.

3.7 COMPACTION

- A. General: Control soil compaction during construction providing at least the minimum percentage of density specified for each area classification.
- B. Percentage of Maximum Density Requirements: After compaction, all fill will be tested in accordance with Method "C" of ASTM D-698, unless specified otherwise. Except as noted otherwise for the zone around pipe, provide not less than the following percentages of maximum density of soil material compacted at optimum moisture content, for the actual density of each layer of soil material-in-place:

UNPAVED AREAS	Compact Full Depth to 92%
DRIVES AND PARKING	Top 24" - 100%
TRENCH BACKFILL (PAVED AREAS)	Compact full depth to 100%
TRENCH BACKFILL (UNPAVED AREAS)	Compact full depth to 95%
ALL OTHER BACKFILL	Compact full depth to 95%

- C. Moisture Control: Where subgrade or layer of soil material must be moisture conditioned before compaction, uniformly apply water to surface of subgrade, or layer of soil material, to prevent free water appearing on surface during or subsequent to compaction operations. Remove and replace, or scarify and air dry, soil material that is too wet to permit compaction to specified density. Soil material that has been removed because it is too wet to permit compaction may be stockpiled or spread and allowed to dry. Assist drying by discing, harrowing or pulverizing, until moisture content is reduced to a satisfactory value, as determined by moisture-density relation tests.
- D. Disposal of Surface Material: Upon approval of the Engineer, haul all surplus materials not needed or acceptable for backfill off-site.

3.8 FIELD QUALITY CONTROL

- A. Soil Testing and Inspection Service: Compaction tests of all fill areas will be made by an independent testing laboratory. Such tests will be provided and paid for by the Owner, except that tests that reveal non-conformance with the specifications and all succeeding tests for the same area shall be at the expense of the Contractor until conformance with the specifications is established. The Owner will be responsible for paying for only the successful tests.

IFB 2026-005 UNION COUNTY LANDFILL EXPANSION
UNION COUNTY, NORTH CAROLINA

END OF SECTION

IFB 2026-005 UNION COUNTY LANDFILL EXPANSION
UNION COUNTY, NORTH CAROLINA

SECTION 31 05 00

UNCLASSIFIED EXCAVATION

PART 1 GENERAL

1.1 SCOPE OF WORK

- A. The work covered by this section consists of the excavation, placement, and compaction or satisfactory disposal of all unclassified materials encountered within the limits of the work.
- B. All materials excavated under this section, regardless of its nature or composition, shall be classified as Unclassified Excavation.

PART 2 NOT USED

PART 3 EXECUTION

3.1 GENERAL

- A. All suitable material removed in the excavation shall be used as far as practical in the formation of embankments, subgrades, and shoulders and at such other places as may be indicated on the plans or directed by the Engineer. No excavation shall be wasted except as may be permitted by the Engineer.
- B. The Engineer will designate materials that are unsuitable and their disposal location.
- C. Where suitable materials containing excessive moisture encountered above grade in cuts, the Contractor shall construct above grade ditch drains prior to the excavation of the cut material when in the opinion of the Engineer such measures are necessary to provide proper construction.
- D. Widening of cuts or flattening of cut slopes will not be required in rock or material which required ripping. When rock is unexpectedly encountered, any widening or flattening already begun shall be transitioned to leave the cut with a pleasing and safe appearance.
- E. Excavation in the earth beyond the specified lines and grades shall be corrected by filling the resulting voids with approved compacted earth fill, except that, if the earth

IFB 2026-005 UNION COUNTY LANDFILL EXPANSION
UNION COUNTY, NORTH CAROLINA

is to become the subgrade for riprap, rock fill, sand or gravel bedding, or drain fill, the voids may be filled with material conforming to the specifications for the riprap, rock fill, bedding or drain fill.

- F. Slide and overbreaks which occur prior to final acceptance of the project due to natural causes shall be removed and disposed of by the Contractor as directed by the Engineer.
- G. Where slides or overbreaks occur due to negligence or carelessness on the part of the Contractor, the Contractor shall remove and dispose of the material at no cost to the Owner.
- H. Where it is necessary for existing utilities to remain in their original location, the Contractor shall conduct his earthwork operations in a manner which will not disturb these facilities.

END OF SECTION

IFB 2026-005 UNION COUNTY LANDFILL EXPANSION
UNION COUNTY, NORTH CAROLINA

SECTION 31 06 00

DITCH EXCAVATION

PART 1 GENERAL

1.1 SCOPE OF WORK

- A. The work covered by this section consists of the excavation and satisfactory disposal of all material excavated in the construction of ditches.

1.2 QUALITY ASSURANCE

- A. The excavation shall be done to the lines, grades, typical sections and details shown on the plans or established by the Engineer. All work covered by this section shall be coordinated with the grading, and shall be maintained in a satisfactory condition so that adequate drainage is provided at all times. Ditches shall be landscaped in accordance with Section 02931.
- B. The ditches shall be maintained by the Contractor until the final acceptance of the project.

PART 2 - NOT USED

PART 3 – EXECUTION

3.1 PREPARATION

- A. Silt Detention: When directed by the Engineer or shown on the drawings, the Contractor shall excavate silt detention basins and silt ditches to the dimensions and at the locations established by the Engineer for the purpose of siltation control. Silt detention basins shall be cleaned out, when so directed by the Engineer, if necessary to maintain their effectiveness. Silt detention basins and silt ditches shall be backfilled and shaped for seeding and mulching prior to the completion of the project unless otherwise directed by the Engineer.
- B. All roots, stumps, and other foreign matter in the sides and bottom of ditches shall be cut one foot below finish grade. Care shall be taken not to over-excavate ditches below the grades indicated. Any excessive ditch excavation due to removal of roots, stumps, etc., or due to over-excavation shall be backfilled to grade either with suitable material, thoroughly compacted, or with suitable stone or cobble to form an adequate

IFB 2026-005 UNION COUNTY LANDFILL EXPANSION
UNION COUNTY, NORTH CAROLINA

invert, as directed. The Contractor shall maintain all ditches excavated under this specification free from detrimental quantities of leaves, sticks, and other debris until final acceptance of the work.

3.2 DISPOSAL OF MATERIALS

- A. All excavated materials shall be utilized in the construction of embankments except where otherwise directed by the Engineer. Materials which are excess to the needs of the project may be deposited alongside the ditch, and spread to form a low, flat, inconspicuous spoil bank of sufficiently regular contour to permit seeding and mowing to be performed.

END OF SECTION

IFB 2026-005 UNION COUNTY LANDFILL EXPANSION
UNION COUNTY, NORTH CAROLINA

SECTION 31 07 00

SUBGRADE

PART 1 GENERAL

1.1 SCOPE OF WORK

- A. The work covered by this section consists of the preparation, shaping, and compaction of that portion of the roadbed upon which base or pavement, including base and paving for shoulders, is to be placed.

PART 2 NOT USED

PART 3 EXECUTION

3.1 CONSTRUCTION

- A. The subgrade shall be shaped to the lines, grades, and typical sections shown on the plans. All unsuitable material, boulders, and all vegetative matter shall be removed and replaced with suitable material. Suitable material, when not available from the subgrade work, shall be taken from roadway excavation or borrow pits.
- B. Material excavated in preparing the subgrade shall be stored or stockpiled in such a manner as to not interfere with proper drainage or any of the subsequent operations of placing base or pavement.
- C. The subgrade shall be compacted at a moisture content which is approximately that required to produce the maximum density. The Contractor shall dry or add moisture to the subgrade when required to provide a uniformly compacted and acceptable subgrade.

3.2 QUALITY CONTROL

- A. A tolerance of plus or minus 1/2" from the established grade will be permitted after the subgrade has been graded to a uniform surface.
- B. Ditches and drains shall be provided and maintained when required to satisfactorily drain the subgrade. Where previously approved subgrade is damaged by natural causes, by hauling equipment, or by other traffic, the Contractor shall restore the subgrade to the required lines, grades, and typical sections and to the required density at no cost to the Owner.

END OF SECTION

IFB 2026-005 UNION COUNTY LANDFILL EXPANSION
UNION COUNTY, NORTH CAROLINA

SECTION 31 08 00

RIP RAP

PART 1 GENERAL

1.1 SCOPE OF WORK

- A. The work covered by this section consists of the construction of plain rip rap in accordance with the requirements of the plans and these specifications and at the locations designated by the Engineer.

PART 2 PRODUCTS

2.1 DEFINITIONS

- A. Plain Rip Rap: Plain rip rap shall consist of quarry run stone, or field stone or granite stone, etc., and shall be classified by size into Class 1, or Class 2. The class and thickness to be used will be called for on the plans.
- B. Class 1 Rip Rap: Stone shall vary in weight from 5 to 200 pounds. At least 30% of the total weight of the rip rap shall be in individual pieces weighing a minimum of 60 pounds each. Not more than 10% of the total weight of the rip rap may be in individual pieces weighing less than 15 pounds each.
- C. Class 2 Rip Rap: Stone shall vary in weight from 25 to 250 pounds. At least 60% of the total weight shall be in individual pieces weighing a minimum of 100 pounds each and not more than 100 pounds each and not more than 5% of the total weight may be individual pieces weighing less than 50 pounds each.

PART 3 EXECUTION

3.1 PLACEMENT OF RIP RAP

- A. Unless otherwise indicated or directed by the Engineer, the stone shall be placed upon a slope which shall be no steeper than the angle of repose. The stone shall be graded so that the smaller stones are uniformly distributed throughout the mass. The area and thickness shall be as shown on the plans or as designated by the Engineer.

IFB 2026-005 UNION COUNTY LANDFILL EXPANSION
UNION COUNTY, NORTH CAROLINA

The Contractor may place the stone by mechanical methods, augmented by hand placing where necessary, provided that when the rip rap is completed it forms a properly graded, dense, neat layer of stone.

END OF SECTION

IFB 2026-005 UNION COUNTY LANDFILL EXPANSION
UNION COUNTY, NORTH CAROLINA

SECTION 32 01 00

SITE STABILIZATION

PART 1 GENERAL

1.1 SCOPE OF WORK

- A. This section covers the furnishing of all labor, equipment and materials necessary for the establishment of vegetation of all areas of the site disturbed by construction operations and all earth surfaces of embankments including rough and fine grading, topsoil if required, fertilizer, lime, seeding and mulching. The Contractor shall adapt his operations to variations in weather or soil conditions as necessary for the successful establishment and growth of the grasses and legumes.

PART 2 PRODUCTS

2.1 MATERIALS

- A. Fertilizer:
1. The quality of fertilizer and all operations in connection with the furnishing of this material shall comply with the requirements of the North Carolina Fertilizer Law and regulations adopted by the North Carolina Board of Agriculture.
 2. Fertilizer shall be 10-10-10 grade. Upon written approval of the Engineer a different grade of fertilizer may be used, provided the rate of application is adjusted to provide the same amounts of plant food.
 3. During handling and storing, the fertilizer shall be cared for in such a manner that it will be protected against hardening, caking, or loss of plant food values. Any hardened or caked fertilizer shall be pulverized to its original conditions before being used.
- B. Lime:
1. The quality of lime and all operations in connection with the furnishing of this material shall comply with the requirements of the North Carolina Lime Law and regulations adopted by the North Carolina Board of Agriculture.
 2. During the handling and storing, the lime shall be cared for in such a manner that it will be protected against hardening and caking. Any hardened or caked lime shall be pulverized to its original conditions before being used.
 3. Lime shall be agriculture grade ground dolomitic limestone. It shall contain not less than 85% of the calcium and magnesium carbonates and shall be of such fineness that at least 90% will pass a No. 10 sieve and at least 50% will pass a No. 100 sieve.

IFB 2026-005 UNION COUNTY LANDFILL EXPANSION
UNION COUNTY, NORTH CAROLINA

C. Seed:

1. The quality of seed and all operations in connection with the furnishing of this material shall comply with the requirements of the North Carolina Seed Law and regulations adopted by the North Carolina Board of Agriculture. Seed shall have been approved by the North Carolina Department of Agriculture or any agency approved by the Engineer before being sown, and no seed will be accepted with a date of test more than 9 months prior to the date of sowing. Such testing however, will not relieve the Contractor from responsibility for furnishing and sowing seed that meets these specifications at the time of sowing. When a low percentage of germination causes the quality of the seed to fall below the minimum pure live seed specified, the Contractor may elect, subject to the approval of the Engineer, to increase the rate of seeding sufficiently to obtain the minimum pure live seed contents specified, provided that such an increase in seeding does not cause the quantity of noxious weed seed per square yard to exceed the quantity that would be allowable at the regular rate of seed.
2. During handling and storing, the seed shall be cared for in such a manner that it will be protected from damage by heat, moisture, rodents or other causes.
3. Seed shall be entirely free from bulblets or seed of Johnson Grass, Nutgrass, Sandbur, Wild Onion, Wild Garlic, and Bermuda Grass. The specifications for restricted noxious weed seed refers to the number per pound, singly or collectively, of Blessed Thistle, Wild Radish, Canada Thistle, Corncockle, Field Bindweed, Quackgrass, Dodders, Dock, Horsenettle, Bracted Plantain, Buckhorn or Wild Mustard; but in no case shall the number of Blessed Thistle or Wild Radish exceed 27 seeds of each per pound. No tolerance on weed seed will be allowed.

D. Mulch: Straw Mulch shall be threshed straw of oats, rye or wheat free from matured seed of obnoxious weeds or other species which would grow and be detrimental to the specified grass.

E. Tackifier: Emulsified asphalt or organic tackifier such as Reclamare R2400 shall be sprayed uniformly on mulch as it is ejected from blower or immediately thereafter. Tackifier shall be applied evenly over area creating uniform appearance. Rates of application will vary with conditions. Asphalt shall not be used in freezing weather.

PART 3 EXECUTION

3.1 PREPARATION

A. Protection of Existing Trees and Vegetation:

1. Protect existing trees and other vegetation indicated to remain in place against cutting, breaking or skinning of roots, skinning and bruising of bark, smothering of trees by stockpiling construction materials or excavated materials within drip line, excess foot or vehicular traffic, or parking of vehicles within drip line. Provide wood or metal stakes set on 8 to 10 foot centers and connected at a 4'-0"

IFB 2026-005 UNION COUNTY LANDFILL EXPANSION
UNION COUNTY, NORTH CAROLINA

height by 2" minimum brightly colored flagging tape to protect trees and vegetation to remain. Set perimeter of protection at the drip line of trees to remain unless approved otherwise by the Engineer.

2. Provide protection for roots over 1-1/2" diameter cut during construction operations. Cleanly cut off end of damaged root and coat cut faces with an emulsified asphalt, or other acceptable coating, formulated for use on damaged plant tissues. Temporarily cover exposed roots with wet burlap to prevent roots from drying out and cover with earth as soon as possible.
3. The Contractor shall not remove or damage trees and shrubs which are outside the Clearing Limits established by the Owner or those within the Clearing Limits designated to remain.
4. Repair trees scheduled to remain and damaged by construction operations in a manner acceptable to the Engineer. Repair damaged trees promptly to prevent progressive deterioration caused by damage.
5. Replace trees scheduled to remain and damaged beyond repair by construction operations, as determined by the Engineer with trees of similar size and species. Repair and replacement of trees scheduled to remain and damaged by construction operations or lack of adequate protection during construction operations shall be at the Contractor's expense.

B. Grading:

1. Rough grading shall be done as soon as all excavation required in the area has been backfilled. The necessary earthwork shall be accomplished to bring the existing ground to the desired finish elevations as shown on the Contract Drawings or otherwise directed.
2. Fine grading shall consist of shaping the final contours for drainage and removing all large rock, clumps of earth, roots and waste construction material. It shall also include thorough loosening of the soil to a depth of 6" by plowing, discing, harrowing or other approved methods until the area is acceptable as suitable for subsequent landscaping operations. The work of establishing vegetation shall be performed on a section by section basis immediately upon completion of earthwork or pipeline installation.
3. Upon failure or neglect on the part of the Contractor to coordinate his grading with seeding and mulching operations and diligently pursue the control of erosion and siltation, the Engineer may suspend the Contractor's grading operations until such time as the work is coordinated in a manner acceptable to the Engineer.

C. Seedbed Preparation:

1. The Contractor shall cut and satisfactorily dispose of weeds or other unacceptable growth on the areas to be seeded. Uneven and rough areas outside the graded section, such as crop rows, farm contours, ditches and ditch spoil banks, fence line and hedgerow soil accumulations, and other minor irregularities which cannot be obliterated by normal seedbed preparation operations, shall be shaped and smoothed as directed by the Engineer to provide for more effective seeding and for ease of subsequent mowing operations.

IFB 2026-005 UNION COUNTY LANDFILL EXPANSION
UNION COUNTY, NORTH CAROLINA

2. The soil shall then be scarified or otherwise loosened to a depth of not less than 6" except as otherwise provided below or otherwise directed by the Engineer. Clods shall be broken and the top 2" to 3" of soil shall be worked into an acceptable seedbed by the use of soil pulverizers, drags, or harrows; or by other methods approved by the Engineer.
3. On 2:1 slopes a seedbed preparation will be required that is the same depth as that required on flatter areas, although the degree of smoothness may be reduced from that required on the flatter areas if so permitted by the Engineer.
4. On cut slopes that are steeper than 2:1, both the depth of preparation and the degree of smoothness of the seedbed may be reduced as permitted by the Engineer, but in all cases the slope surface shall be scarified, grooved, trenched, or punctured so as to provide pockets, ridges, or trenches in which the seeding materials can lodge.
5. On cut slopes that are either 2:1 or steeper, the Engineer may permit the preparation of a partial or complete seedbed during the grading of the slope. If at the time of seeding and mulching operations such preparation is still in condition acceptable to the Engineer, additional seedbed preparation may be reduced or eliminated.
6. The preparation of seedbeds shall not be done when the soil is frozen, extremely wet, or when the Engineer determines that it is in an otherwise unfavorable working condition.

3.2 APPLICATION

- A. Seed shall be applied by means of a hydro-seeder or other approved methods. The rates of application of seed, fertilizer and limestone shall be as stated in Table I.
- B. Equipment to be used for the application, covering or compaction of limestone, fertilizer, and seed shall have been approved by the Engineer before being used on the project. Approval may be revoked at any time if equipment is not maintained in satisfactory working condition, or if the equipment operation damages the seed.
- C. Limestone, fertilizer, and seed shall be applied within 24 hours after completion of seedbed preparation unless otherwise permitted by the Engineer, but no limestone or fertilizer shall be distributed and no seed shall be sown when the Engineer determines that weather and soil conditions are unfavorable for such operations.
- D. Limestone may be applied as a part of the seedbed preparation, provided it is immediately worked into the soil. If not so applied, limestone and fertilizer shall be distributed uniformly over the prepared seedbed at the specified rate of application and then harrowed, raked, or otherwise thoroughly worked or mixed into the seedbed. Seed shall be distributed uniformly over the seedbed at the required rate of application, and immediately harrowed, dragged, raked, or otherwise worked so as to cover the seed with a layer of soil. The depth of covering shall be as directed by the Engineer. If two kinds of seed are to be used which require different depths of covering, they shall be sown separately.

IFB 2026-005 UNION COUNTY LANDFILL EXPANSION
UNION COUNTY, NORTH CAROLINA

- E. When a combination seed and fertilizer drill is used, fertilizer may be drilled in with the seed after limestone has been applied and worked into the soil. If two kinds of seed are being used which require different depths of covering, the seed requiring the lighter covering may be sown broadcast or with a special attachment to the drill, or drilled lightly following the initial drilling operation.
- F. When a hydraulic seeder is used for application of seed and fertilizer, the seed shall not remain in water containing fertilizer for more than 30 minutes prior to application unless otherwise permitted by the Engineer.
- G. Immediately after seed has been properly covered the seedbed shall be compacted in the manner and degree approved by the Engineer.
- H. When adverse seeding conditions are encountered due to steepness of slope, height of slope, or soil conditions, the Engineer may direct or permit that modifications be made in the above requirements which pertain to incorporating limestone into the seedbed; covering limestone, seed, and fertilizer; and compaction of the seedbed.

Such modifications may include but not be limited to the following:

- 1. The incorporation of limestone into the seedbed may be omitted on (a) cut slopes steeper than 2:1; (b) on 2:1 cut slopes when a seedbed has been prepared during the excavation of the cut and is still in an acceptable condition; or (c) on areas of slopes where the surface of the area is too rocky to permit the incorporation of the limestone.
 - 2. The rates of application of limestone, fertilizer, and seed on slopes 2:1 or steeper or on rocky surfaces may be reduced or eliminated.
 - 3. Compaction after seeding may be reduced or eliminated on slopes 2:1 or steeper, on rocky surfaces, or on other areas where soil conditions would make compaction undesirable.
- I. Mulching:
- 1. All seeded areas shall be mulched unless otherwise indicated in the special provisions or directed by the Engineer.
 - 2. It shall be spread uniformly at a rate of two tons per acre in a continuous blanket over the areas specified.
 - 3. Before mulch is applied on cut or fill slopes which are 3:1 or flatter, and ditch slopes, the Contractor shall remove and dispose of all exposed stones in excess of 3" in diameter and all roots or other debris which will prevent proper contact of the mulch with the soil. Mulch shall be applied within 24 hours after the completion of seeding unless otherwise permitted by the Engineer. Care shall be exercised to prevent displacement of soil or seed or other damage to the seeded area during the mulching operation.
 - 4. Mulch shall be uniformly spread by hand or by approved mechanical spreaders or blowers which will provide an acceptable application. An acceptable application

IFB 2026-005 UNION COUNTY LANDFILL EXPANSION
UNION COUNTY, NORTH CAROLINA

will be that which will allow some sunlight to penetrate and air to circulate but also partially shade the ground, reduce erosion, and conserve soil moisture.

5. Mulch shall be held in place by applying a sufficient amount of asphalt or other approved binding material to assure that the mulch is properly held in place. The rate and method of application of binding material shall meet the approval of the Engineer. Where the binding material is not applied directly with the mulch it shall be applied immediately following the mulch application.
6. The Contractor shall take sufficient precautions to prevent mulch from entering drainage structures through displacement by wind, water, or other causes and shall promptly remove any blockage to drainage facilities which may occur.

3.3 MAINTENANCE

- A. The Contractor shall keep all seeded areas in good condition, reseeding if and when necessary, until an acceptable stand of grass is established over the entire area seeded and shall maintain these areas in an approved condition until final acceptance of the Contract.
- B. Grassed areas will be accepted when a 95% cover by permanent grasses is obtained and weeds are not dominant. On slopes, the Contractor shall provide against washouts by an approved method. Any washouts which occur shall be regraded and reseeded until a good sod is established.
- C. Areas of damage or failure due to any cause shall be corrected by being repaired or by being completely redone as may be directed by the Engineer. Areas of damage or failure resulting either from negligence on the part of the Contractor in performing subsequent construction operations or from not taking adequate precautions to control erosion and siltation as required throughout the various sections of the specifications, shall be repaired by the Contractor as directed by the Engineer at no cost to the Owner.

TABLE I - APPLICATION RATES

A. Lime and Fertilizer:

In the absence of a soil test, the following rates of application of limestone and fertilizer shall be:

1. 4,000 pounds limestone per acre
2. 1000 pounds 10-10-10 (N-P₂O₅-K₂O) fertilizer per acre and the remaining quantity applied when vegetation is three inches in height or 45 days after seeding, whichever comes first.

B. Mulch:

IFB 2026-005 UNION COUNTY LANDFILL EXPANSION
UNION COUNTY, NORTH CAROLINA

Mulch shall be applied at the following rates per acre:

1. 3,000-4,000 pounds straw mulch, or
2. 1,500-2,000 pounds wood cellulose fiber.
3. 35-40 cubic yards of shredded or hammermilled hardwood bark
4. 1,200-1,400 pounds of fiberglass roving

C. Seed:

The kinds of seed and the rates of application shall be as contained in this table. All rates are in pounds per acre. See Notes 1 and 2.

1. Fall and Winter (Normally August 1 to June 1)
80 pounds of Ky-31 tall fescue and 15 pounds of rye grain
2. Summer (Normally May 1 to September 1)
100 pounds of Ky-31 tall fescue

NOTES

1. On cut and fill slopes having 2:1 or steeper slopes, add 40 pounds of sericea lespedeza per acre to the planned seeding (hulled in spring and summer unhulled in fall and winter) plus 15 pounds of sudangrass in summer seeding or 25 pounds of rye cereal per acre in fall and winter seeding, if seeded September to February.
2. These seeding rates are prescribed for all sites with less than 50% ground cover and for sites with more than 50% ground cover where complete seeding is necessary to establish effective erosion control vegetative cover. On sites having 50% to 80% ground cover where complete seeding is not necessary to establish vegetative cover, reduce the seeding rate at least one-half the normal rate.

END OF SECTION

IFB 2026-005 UNION COUNTY LANDFILL EXPANSION
UNION COUNTY, NORTH CAROLINA

SECTION 32 02 00

RESTORATION OF SURFACES

PART 1 GENERAL

1.1 SCOPE OF WORK

- A. This section covers the furnishing of all labor, equipment and materials necessary for the proper restoration of existing surfaces disturbed or damaged as a result of construction operations which are not specifically scheduled or specified for topsoil and seeding, paving, landscaping or other surfacing.
- B. In general, the types of replacement included in this section are seeding along pipelines, concrete sidewalks, driveways, roadways, ditches, lawns and landscaped areas, curb and gutter.
- C. Any damage to existing structures shall be repaired using materials and workmanship equal to those of original construction.

PART 2 NOT USED

PART 3 EXECUTION

3.1 RESTORATION OF SURFACES

- A. Seeding Along Pipelines:
 - 1. All ground surfaces along pipelines, which are not classified as lawns, landscaped areas, or pavement areas, but would be classified as open fields, shall be raked smooth and seeded in accordance with the section entitled Seeding, Fertilizing and Mulching. Large rocks, clumps of earth and excessive spoil material shall be removed from the area prior to seeding.
 - 2. Shoulders of all roads shall be restored as specific for lawns and landscaped areas.
 - 3. Wooded areas, not classified as lawns shall be restored to as near their original condition as possible.
- B. Concrete Sidewalks:
 - 1. Concrete walks removed in connection with, or damaged as a result of, construction operations under the Contract shall be replaced with new construction. Such walks shall be constructed of Class B concrete on a thoroughly compacted subgrade, shall have a vertical thickness, unless otherwise

IFB 2026-005 UNION COUNTY LANDFILL EXPANSION
UNION COUNTY, NORTH CAROLINA

noted, of not less than 4" or the thickness of the replaced walk where greater than 4".

2. Walks shall be float finished, edged with an edging tool, and grooved at intermediate intervals not in excess of the width of the walk, uniform throughout the length of the walk in any one direction.

C. Driveways:

1. Unless otherwise noted, unpaved driveways shall be surfaced with not less than 4" of CABC, topped with 4" of stone, gravel, or other materials equal to that found in the original driveway. Driveways shall be left in a condition better than their original condition.
2. Concrete drives shall be replaced with Class B concrete and shall have equal thickness and reinforcing steel to that of the original drive. Prior to placing the concrete a 6" aggregate base course shall be placed in the drive area.
3. Unless otherwise noted, bituminous or Asphaltic concrete drives shall be restored to original base and asphalt thicknesses or a minimum of 6" aggregate base course and a 2" surface course, whichever is greater. Base material shall be compacted in 3-inch lifts and type I-2 asphalt compacted in 2-inch lifts to match existing pavement section. All work shall be in accordance with the section entitled Bituminous Pavement Repairs.

D. Roadway Replacement:

1. Bituminous or Asphaltic pavements shall include all areas paved with blacktop; built-up pavements or oil and stone, tar and stone and similar pavements constructed with a bituminous or asphalt and stone materials.
2. Immediately upon completion of installation of underground piping and structures, the trench shall be backfilled and the roadway shall be repaired. Provide materials as specified in the Contract Drawings. If, in the opinion of the Engineer, the area adjacent to the excavation has not been damaged to the extent that the base course need to be replaced, restoration may consist of a surface course of sufficient thickness to meet the existing pavement.
3. Portland cement concrete roadways shall be replaced with Class B Concrete and shall have equal thickness and reinforcing steel as the original roadway. An aggregate of 6" shall be placed prior to the placing of concrete.
4. Differential settlement of restored pavements shall be corrected immediately.
5. The Contractor shall repair and restripe any traffic markings that were damaged, removed or covered during construction. All work shall be done in accordance with NCDOT requirements and specifications.
6. All existing manhole and valve covers shall be raised as required by the Contractor prior to paving. The cost of this work shall be included in the unit bid prices for other related work and no additional payment shall be made.

- E. Ditches: Ditches shall be regraded to the original grade and line. The surface of all ditches shall be returned to the same condition as found before commencing work.

IFB 2026-005 UNION COUNTY LANDFILL EXPANSION
UNION COUNTY, NORTH CAROLINA

- F. Lawns and Landscaped Areas:
 - 1. Lawns and landscaped areas shall be regraded and replaced as follows:
 - a. Grading shall be to the grade existing before construction of the work under this Contract.
 - b. Lawn replacement shall be in accordance with the section entitled Landscaping. Topsoiled areas shall be replaced with topsoil of equal quality and quantity.
 - 2. Landscaped areas shall be replaced with shrubs, hedges, ornamental trees, flowers, or other items to original condition.
- G. Curb and Gutter: Curb and gutter removed with, or damaged as a result of construction operations, injured or disturbed by the Contractor, his agents, or employees, shall be replaced with new construction to a condition similar and equal to that existing before damage was incurred. Class B Concrete shall be used in curb and gutter replacement.
- H. Damage to Structures: Any damage to existing structures shall be repaired of materials and workmanship equal to those of original construction. Extensively damaged structures, where the structural stability has been affected or which cannot be repaired in a suitable fashion shall be replaced entirely. Replacement shall not commence until approval of the plan of replacement has been given by the Engineer. Replacement costs shall be responsibility of the Contractor.

END OF SECTION

IFB 2026-005 UNION COUNTY LANDFILL EXPANSION
UNION COUNTY, NORTH CAROLINA

SECTION 32 03 00

TOP SOIL

PART 1 GENERAL

1.1 SCOPE OF WORK

- A. The work of this section consists of furnishing and placing topsoil for turf areas to be seeded, fertilized, and mulched. No topsoil shall be furnished, nor will be paid for, under this section until all job-stockpiles have been exhausted.

1.2 SUBMITTALS

- A. Soil Analysis Certificates: Submit six (6) copies of soil analysis certificates covering grain size and additive recommendations from the State University Agricultural Extension Service or other certified testing laboratory.

1.3 DELIVERY

- A. Product Handling: Do not deliver topsoil in frozen or muddy conditions.

PART 2 PRODUCTS

2.1 MATERIALS

A. TOPSOIL

Natural, friable, loamy soil, typical of local topsoil which produces heavy vegetative growth; free from subsoil, weeds, sods, stiff clay, stones larger than 1 inch, toxic substances, litter, or other foreign material harmful to plant growth; having a pH between 6.0 and 7.0.

B. GRADING ANALYSIS

Sieve	Minimum Percent Passing
2 inch	100
No. 4	90
No. 10	80

Topsoil shall contain sand, silt, and clay as required by AASHTO M146.

IFB 2026-005 UNION COUNTY LANDFILL EXPANSION
UNION COUNTY, NORTH CAROLINA

	Minimum Percent	Maximum Percent
Sand	20	75
Silt	10	60
Clay	5	30

PART 3 EXECUTION

3.1 PREPARATION

- A. Job Conditions: Do not perform tilling operations when ground is frozen or excessively wet.

3.2 INSTALLATION

- A. General:
1. Use equipment and methods to prevent damage to existing structures, utilities, lawns and plantings.
 2. Prior to placing topsoil, shape the subgrade to graded lines, and cross sections to provide for 2 inches of compacted topsoil. Clear the subgrade of materials larger than 2 inches. Excavate to depth of 12 inches all areas that have become saturated with oil, gasoline, or bituminous products; backfill with approved material.
 3. After alignment of subgrade, loosen and till to a depth of 6 inches by disking, harrowing, rototilling, or other approved methods.
 4. After approval, place and spread topsoil to secure required depth after compaction; rake and remove materials larger than 2 inches. Compact with approved roller equipment. Finish smoothing even, and true to lines and grades indicated.

END OF SECTION

IFB 2026-005 UNION COUNTY LANDFILL EXPANSION
UNION COUNTY, NORTH CAROLINA

SECTION 32 04 00

SEEDING, FERTILIZING, AND MULCHING

PART 1 GENERAL

1.1 SCOPE OF WORK

- A. This section covers the furnishing of all labor, equipment and materials necessary for the landscaping of all areas of the site disturbed by construction operations and all earth surfaces of embankments including rough and fine grading, topsoil if required, fertilizer, lime, seeding and mulching. The Contractor shall adapt his operations to variations in weather or soil conditions as necessary for the successful establishment and growth of the grasses or legumes.

PART 2 PRODUCTS

2.1 MATERIALS

- A. Fertilizer:
1. The quality of fertilizer and all operations in connection with the furnishing of this material shall comply with the requirements of the North Carolina Fertilizer Law and regulations adopted by the North Carolina Board of Agriculture.
 2. Fertilizer shall be 10-10-10 grade. Upon written approval of the Engineer a different grade of fertilizer may be used, provided the rate of application is adjusted to provide the same amounts of plant food.
 3. During handling and storing, the fertilizer shall be cared for in such a manner that it will be protected against hardening, caking, or loss of plant food values. Any hardened or caked fertilizer shall be pulverized to its original conditions before being used.
- B. Lime:
1. The quality of lime and all operations in connection with the furnishing of this material shall comply with the requirements of the North Carolina Lime Law and regulations adopted by the North Carolina Board of Agriculture.
 2. During the handling and storing, the lime shall be cared for in such a manner that it will be protected against hardening and caking. Any hardened or caked lime shall be pulverized to its original condition before being used.
 3. Lime shall be agriculture grade ground dolomitic limestone. It shall contain not less than 85% of the calcium and magnesium carbonates and shall be of such fineness that at least 90% will pass a No. 10 sieve and at least 50% will pass a No. 100 sieve.

IFB 2026-005 UNION COUNTY LANDFILL EXPANSION
UNION COUNTY, NORTH CAROLINA

C. Seed:

1. The quality of seed and all operations in connection with the furnishing of this material shall comply with the requirements of the North Carolina Seed Law and regulations adopted by the North Carolina Board of Agriculture.
2. Seed shall have been approved by the North Carolina Department of Agriculture or any agency approved by the Engineer before being sown, and no seed will be accepted with a date of test more than nine (9) months prior to the date of sowing. Such testing however, will not relieve the Contractor from responsibility for furnishing and sowing seed that meets these specifications at the time of sowing. When a low percentage of germination causes the quality of the seed to fall below the minimum pure live seed specified, the Contractor may elect, subject to the approval of the Engineer, to increase the rate of seeding sufficiently to obtain the minimum pure live seed contents specified, provided that such an increase in seeding does not cause the quantity of noxious weed seed per square yard to exceed the quantity that would be allowable at the regular rate of seed.
3. During handling and storing, the seed shall be cared for in such a manner that it will be protected from damage by heat, moisture, rodents, or other causes.
4. Seed shall be entirely free from bulblets or seed of Johnson Grass, Nutgrass, Sandbur, Wild Onion, Wild Garlic, and Bermuda Grass. The specifications for restricted noxious weed seed refers to the number per pound, singly or collectively, of Blessed Thistle, Wild Radish, Canada Thistle, Corncockle, Field Bindweed, Quackgrass, Dodders, Dock, Horsenettle, Bracted Plantain, Buckhorn or Wild Mustard; but in no case shall the number of Blessed Thistle or Wild Radish exceed 27 seeds of each per pound. No tolerance on weed seed will be allowed.

D. Mulch: Straw mulch shall be threshed straw of oats, rye or wheat free from matured seed of obnoxious weeds or other species which would grow and be detrimental to the specified grass.

E. Tackifier: Emulsified asphalt or organic tackifier such as Reclamare R2400 shall be sprayed uniformly on mulch as it is ejected from blower or immediately thereafter. Tackifier shall be applied evenly over area creating uniform appearance. Rates of application will vary with conditions. Asphalt shall not be used in freezing weather.

PART 3 EXECUTION

3.1 PREPARATION

A. Protection of Existing Trees and Vegetation:

1. Protect existing trees and other vegetation indicated to remain in place against unnecessary cutting, breaking or skinning of roots, skinning and bruising of bark, smothering of trees by stockpiling construction materials or excavated materials

IFB 2026-005 UNION COUNTY LANDFILL EXPANSION
UNION COUNTY, NORTH CAROLINA

- within drip line, excess foot or vehicular traffic, or parking of vehicles within drip line. Provide temporary guards to protect trees and vegetation to be left standing.
2. Provide protection for roots over 1-1/2" diameter cut during construction operations. Coat cut faces with an emulsified asphalt, or other acceptable coating, formulated for use on damaged plant tissues. Temporarily cover exposed roots with wet burlap to prevent roots from drying out and cover with earth as soon as possible.
 3. The Contractor shall not remove or damage trees and shrubs which are outside the Clearing Limits established by the Owner or those within the Clearing Limits designated to remain.
 4. Repair trees scheduled to remain and damaged by construction operations in a manner acceptable to the Engineer. Repair damaged trees promptly to prevent progressive deterioration caused by damage.
 5. Replace trees scheduled to remain and damaged beyond repair by construction operations, as determined by the Engineer with trees of similar size and species. Repair and replacement of trees scheduled to remain and damaged by construction operations or lack of adequate protection during construction operations shall be at the Contractor's expense.
- B. Grading:
1. Rough grading shall be done as soon as all excavation required in the area has been backfilled. The necessary earthwork shall be accomplished to bring the existing ground to the desired finish elevations as shown on the Contract Drawings or otherwise directed.
 2. Fine grading shall consist of shaping the final contours for drainage and removing all large rock, clumps of earth, roots and waste construction materials. It shall also include thorough loosening of the soil to a depth of 6" by plowing, disking, harrowing or other approved methods until the area is acceptable as suitable for subsequent landscaping operations. The work of landscaping shall be performed on a section by section basis immediately upon completion of earthwork.
 3. Upon failure or neglect on the part of the Contractor to coordinate his grading with seeding and mulching operations and diligently pursue the control of erosion and siltation, the Engineer may suspend the Contractor's grading operations until such time as the work is coordinated in a manner acceptable to the Engineer.
- C. Seedbed Preparation:
1. The Contractor shall cut and satisfactorily dispose of weeds or other unacceptable growth on the areas to be seeded. Uneven and rough areas outside of the graded section, such as crop rows, farm contours, ditches and ditch spoil banks, fence line and hedgerow soil accumulations, and other minor irregularities which cannot be obliterated by normal seedbed preparation operations, shall be shaped and smoothed as directed by the Engineer to provide for more effective seeding and for ease of subsequent mowing operations.
 2. The soil shall then be scarified or otherwise loosened to a depth of not less than 6" except as otherwise provided below or otherwise directed by the Engineer. Clods shall be broken and the top 2" to 3" of soil shall be worked into an acceptable

IFB 2026-005 UNION COUNTY LANDFILL EXPANSION
UNION COUNTY, NORTH CAROLINA

- seedbed by the use of soil pulverizers, drags, or harrows; or by other methods approved by the Engineer.
3. On 2:1 slopes a seedbed preparation will be required that is the same depth as that required on flatter areas, although the degree of smoothness may be reduced from that required on the flatter areas if so permitted by the Engineer.
 4. On cut slopes that are steeper than 2:1, both the depth of preparation and the degree of smoothness of the seedbed may be reduced as permitted by the Engineer, but in all cases the slope surface shall be scarified, grooved, trenched, or punctured so as to provide pockets, ridges, or trenches in which the seeding materials can lodge.
 5. On cut slopes that are either 2:1 or steeper, the Engineer may permit the preparation of a partial or complete seedbed during the grading of the slope. If at the time of seeding and mulching operations such preparation is still in a condition acceptable to the Engineer, additional seedbed preparation may be reduced or eliminated.
 6. The preparation of seedbeds shall not be done when the soil is frozen, extremely wet, or when the Engineer determines that it is in an otherwise unfavorable working condition.
- D. Application Rates: Seed shall be applied by means of a hydro-seeder or other approved methods. The rates of application of seed, fertilizer and limestone shall be as stated below.
1. Lime and Fertilizer: In the absence of a soil test, the following rates of application of limestone and fertilizer shall be:
 - a. 4,000 pounds limestone per acre
 - b. 1000 pounds 10-10-10 (N-P₂O₅-K₂O) fertilizer per acre and the remaining quantity applied when vegetation is three inches in height or 45 days after seeding, whichever comes first.
 2. Mulch: Mulch shall be applied at the following rates per acre:
 - a. 3,000-4,000 pounds straw mulch, or
 - b. 1,500-2,000 pounds wood cellulose fiber.
 - c. 35-40 cubic yards of shredded or hammermilled hardwood bark
 - d. 1,200-1,400 pounds of fiberglass roving
 3. Seed: The kinds of seed and the rates of application shall be as contained in this table. All rates are in pounds per acre. *See Notes 1 and 2.*
 - a. Fall and Winter (Normally August 1 to June 1)
80 pounds of Ky-31 tall fescue and 15 pounds of rye grain
 - b. Summer (Normally May 1 to September 1)
100 pounds of Ky-31 tall fescue
- NOTE:
1. On cut and fill slopes having 2:1 or steeper slopes, add 40 pounds of sericea lespedeza per acre to the planned seeding (hulled in spring and summer unhulled

IFB 2026-005 UNION COUNTY LANDFILL EXPANSION
UNION COUNTY, NORTH CAROLINA

- in fall and winter) plus 15 pounds of sudangrass in summer seeding or 25 pounds of rye cereal per acre in fall and winter seeding, if seeded September to February.
2. These seeding rates are prescribed for all sites with less than 50% ground cover and for sites with more than 50% ground cover where complete seeding is necessary to establish effective erosion control vegetative cover. On sites having 50% to 80% ground cover where complete seeding is not necessary to establish vegetative cover, reduce the seeding rate at least one-half the normal rate.

E. Application:

1. Equipment to be used for the application, covering or compaction of limestone, fertilizer, and seed shall have been approved by the Engineer before being used on the project. Approval may be revoked at any time if equipment is not maintained in satisfactory working condition, or if the equipment operation damages the seed.
2. Limestone, fertilizer, and seed shall be applied within 24 hours after completion of seedbed preparation unless otherwise permitted by the Engineer, but no limestone or fertilizer shall be distributed and no seed shall be sown when the Engineer determines that weather and soil conditions are unfavorable for such operations.
3. Limestone may be applied as a part of the seedbed preparation, provided it is immediately worked into the soil. If not so applied, limestone and fertilizer shall be distributed uniformly over the prepared seedbed at the specific rate of application and then harrowed, raked, or otherwise thoroughly worked or mixed into the seedbed.
4. Seed shall be distributed uniformly over the seedbed at the required rate of application, and immediately harrowed, dragged, raked, or otherwise worked so as to cover the seed with a layer of soil. The depth of covering shall be as directed by the Engineer. If two kinds of seed are to be used which require different depths of covering, they shall be sown separately.
5. When a combination seed and fertilizer drill is used, fertilizer may be drilled in with the seed after limestone has been applied and worked into the soil. If two kinds of seed are being used which require different depths of covering, the seed requiring the lighter covering may be sown broadcast or with a special attachment to the drill, or drilled lightly following the initial drilling operation.
6. When a hydraulic seeder is used for application of seed and fertilizer, the seed shall not remain in water containing fertilizer for more than 30 minutes prior to application unless otherwise permitted by the Engineer.
7. Immediately after seed has been properly covered the seedbed shall be compacted in the manner and degree approved by the Engineer.
8. When adverse seeding conditions are encountered due to steepness of slope, height of slope, or soil conditions, the Engineer may direct or permit that modifications be made in the above requirements which pertain to incorporating limestone into the seedbed; covering limestone, seed, and fertilizer; and compaction of the seedbed.
9. Such modifications may include but not be limited to the following:
 - a. The incorporation of limestone into the seedbed may be omitted on

IFB 2026-005 UNION COUNTY LANDFILL EXPANSION
UNION COUNTY, NORTH CAROLINA

- i. cut slopes steeper than 2:1;
- ii. on 2:1 cut slopes when a seedbed has been prepared during the excavation of the cut and is still in an acceptable condition; or
- iii. on areas of slopes where the surface of the area is too rocky to permit the incorporation of the limestone.
- b. The rates of application of limestone, fertilizer, and seed on slopes 2:1 or steeper or on rocky surfaces may be reduced or eliminated.
- c. Compaction after seeding may be reduced or eliminated on slopes 2:1 or steeper, on rocky surfaces, or on other areas where soil conditions would make compaction undesirable.

F. Mulching:

- 1. All seeded areas shall be mulched unless otherwise indicated in the special provisions or directed by the Engineer.
- 2. It shall be spread uniformly at a rate of two tons per acre in a continuous blanket over the areas specified.
- 3. Before mulch is applied on cut or fill slopes which are 3:1 or flatter, and ditch slopes, the Contractor shall remove and dispose of all exposed stones in excess of 3" in diameter and all roots or other debris which will prevent proper contact of the mulch with the soil.
- 4. Mulch shall be applied within 24 hours after the completion of the seeding unless otherwise permitted by the Engineer. Care shall be exercised to prevent displacement of soil or seed or other damage to the seeded area during the mulching operations.
- 5. Mulch shall be uniformly spread by hand or by approved mechanical spreaders or blowers which will provide an acceptable application. An acceptable application will be that which will allow some sunlight to penetrate and air to circulate but also partially shade the ground, reduce erosion, and conserve soil moisture.
- 6. Mulch shall be held in place by applying a sufficient amount of asphalt or other approved binding material to assure that the mulch is properly held in place. The rate and method of application of binding material shall meet the approval of the Engineer. Where the binding material is not applied directly with the mulch it shall be applied immediately following the mulch operation.
- 7. The Contractor shall take sufficient precautions to prevent mulch from entering drainage structures through displacement by wind, water, or other causes and shall promptly remove any blockage to drainage facilities which may occur.

G. Maintenance:

- 1. The Contractor shall keep all seeded areas in good condition, reseeding and mowing if and when necessary as directed by the Engineer, until a good lawn is established over the entire area seeded and shall maintain these areas in an approved condition until final acceptance of the Contract.
- 2. Grassed areas will be accepted when a 95% cover by permanent grasses is obtained and weeds are not dominant. On slopes, the Contractor shall provide

IFB 2026-005 UNION COUNTY LANDFILL EXPANSION
UNION COUNTY, NORTH CAROLINA

against washouts by an approved method. Any washouts which occur shall be regraded and reseeded until a good sod is established.

3. Areas of damage or failure due to any cause shall be corrected by being repaired or by being completely redone as may be directed by the Engineer. Areas of damage or failure resulting either from negligence on the part of the Contractor in performing subsequent construction operations or from not taking adequate precautions to control erosion and siltation as required throughout the various sections of the specifications, shall be repaired by the Contractor as directed by the Engineer at no cost to the Owner.

END OF SECTION

SECTION 33 05 00

DRAINAGE MATERIALS

PART 1 GENERAL

1.1 SCOPE OF WORK

- A. This section covers providing and installing the storm drainage and underdrainage collection systems, including pipe culverts, French drains and appurtenant structures. Storm drainage systems shall be constructed as shown on the Contract drawings and as specified herein.

1.2 DELIVERY, STORAGE AND HANDLING

- A. Unloading and Handling: All pipe and storm drainage material shall be unloaded and handled with reasonable care. Pipe shall not be rolled or dragged over gravel or rock during handling. When any joint or section of pipe is damaged during unloading or handling, the undamaged portions of the joint or section may be used where partial lengths are needed, or if damaged sufficiently, the Engineer will reject the joint or section as being unfit for installation and the Contractor shall remove such rejected pipe from the project.

1.3 QUALITY ASSURANCE

- A. Pipe and drainage materials shall meet the following reference requirements:
 - 1. ASTM C76 Reinforced Concrete Pipe
 - 2. ASTM C55 Concrete Brick
 - 3. AASHTO M-36 Corrugated Metal Pipe

1.4 SUBMITTALS

- A. The Contractor shall submit for approval of the Engineer shop drawings which describe in detail the materials to be utilized. Six (6) copies of shop drawings shall be submitted. Prior to submittal all shop drawings are to be reviewed by the Contractor, and shall be stamped and signed as to compliance with the referenced specification. Any variance to the specification shall be noted.

The following shop drawings shall be submitted:

- 1. Drainage Pipe
- 2. Underdrain Pipe
- 3. Underdrain or Pipe Bedding
- 4. Drainage Structure Castings
- 5. Precast Drainage Structures

IFB 2026-005 UNION COUNTY LANDFILL EXPANSION
UNION COUNTY, NORTH CAROLINA

1.5 WARRANTY

- A. All pipe and materials shall be warranted for a period of one (1) year following installation and acceptance by the Owner.

PART 2 PRODUCTS

2.1 REINFORCED CONCRETE PIPE

- A. Reinforced concrete pipe shall conform to ASTM C-76, latest revision. Pipe shall be Class III with Wall B, unless otherwise noted. All pipe shall have interior surfaces free from roughness, projection, indentations, offset or irregularities of any kind.
- B. Joint material for reinforced concrete pipe shall be either "O" ring type joints utilizing a rubber "O" ring, or bell and spigot type utilizing a mastic joint material equal to Ram-Neck.

2.2 CORRUGATED METAL PIPE

- A. Corrugated metal pipe shall conform to AASHTO M-36, latest revision. Bituminous coating, where required by the drawings, shall consist of asphalt cement having a minimum thickness of 0.04" measured at the crest of the corrugations. Paved inverts in corrugated metal pipe, where required by the drawings, shall consist of asphalt cement applied on the inside of the pipe for one quarter of its circumference (bottom of pipe when installed). The pavement shall have a minimum thickness of 0.50" tapering to 0.1" at the sides.

- B. Corrugated metal pipe shall have 2-2/3" x 1/2" corrugations and shall be of the following minimum gauges:

18" and smaller pipes	16 gauge
21" - 30" pipes	14 gauge
36" - 48" pipes	12 gauge
56" and larger pipes.....	10 gauge

- C. Corrugated Metal Pipe shall have rerolled ends to accommodate corrugated coupling bands. Coupling bands shall conform to NCDOT 932-3(A). Dimple bands shall not be used.

2.3 CASTINGS

- A. Castings shall be sound and free from warp, holes and other defects that impair their strength or appearance. Exposed surfaces shall have a smooth finish and sharp, well defined lines and arises. Machined joints, where required, shall be milled to a close fit. Provide all necessary lugs and brackets so that work can be assembled in a neat, substantial manner.

IFB 2026-005 UNION COUNTY LANDFILL EXPANSION
UNION COUNTY, NORTH CAROLINA

2.4 AGGREGATE FOR UNDERDRAINS

- A. Aggregate for underdrains shall be washed stone, standard size number 67 per North Carolina Department of Transportation specifications, Section 905.

PART 3 EXECUTION

3.1 PREPARATION OF PIPE FOUNDATION

- A. Lines and Grades: The pipe foundation shall be prepared to be uniformly firm and shall be true to the lines and grades as shown on the plans. Any deviation or field adjustments will require the approval of the Engineer. When an Inspector is present on the site and is so requested by the Contractor, he shall check the position of grades and lines; but the Contractor shall be responsible for the finished drain line being laid to exact and proper line and grade.
- B. Pipe Foundation:
1. Whenever the nature of the ground will permit, the excavation at the bottom of the trench shall have the shape and dimensions of the outside lower third of the circumference of the pipe, care being taken to secure a firm bearing support uniformly throughout the length of the pipe. A space shall be excavated under and around each bell to sufficient depth to relieve it of any load and to allow ample space for filling and finishing the joint. The pipe, when thus bedded firmly, shall be on the exact grade. In case the bed shaped in the bottom of the trench is too low, the pipe shall be completely removed from position, and earth of suitable quality shall be placed and thoroughly tamped to prepare a new foundation for the pipe.
 2. In no case shall the pipe be brought to grade by blocking up under the barrel or bell of same, but a new and uniform support must be provided for the full length of the pipe. Where rock or boulders are encountered in the bottom of the trench, the same shall be removed to such depth that no part of the pipe, when laid to grade, will be closer to the rock or boulders than 6". A suitably tamped and shaped foundation of suitable earth shall be placed to bring the bottom of the trench to proper subgrade over rock or boulders.
 3. Where the foundation material is found to be of poor supporting value, the Engineer may make minor adjustment in the location of the pipe to provide a more suitable foundation. Where this is not practical, the foundation shall be conditioned by removing the existing foundation material by undercutting to the depth as directed by the Engineer, within the limits established on the plans, and backfilling with either a suitable local material secured from unclassified excavation or borrow excavation at the nearest accessible location along the project, or foundation conditioning material consisting of crushed stone or gravel or a combination of sand and crushed stone or gravel approved by the Engineer as being suitable for the purpose intended. The selection of the type of backfill material to be used for foundation conditioning will be made by the Engineer.

IFB 2026-005 UNION COUNTY LANDFILL EXPANSION
UNION COUNTY, NORTH CAROLINA

- C. Water in Trenches: The Contractor shall remove all water which may be encountered or which may accumulate in the trenches by pumping or bailing; and no pipes shall be laid until the water has been removed from the trench. The Contractor will not be permitted to drain water through the storm drain within a period of twenty-four (24) hours after the pipe has been laid, and the open end of the pipe in the trench shall be kept closed with a tight fitting plug to prevent washing of dirt or debris into the line. Water so removed from the trench must be disposed of in such manner as not to cause injury to work completed or in progress.
- D. Special Foundations: Whenever the bottom of the trench shall be of such nature as to provide unsatisfactory foundation for the pipe, the Engineer will require the pipe to be laid on timber or concrete cradle foundations. Such foundations whether of single plank, plank cradle, plank cradle supported on piles, or poured concrete cradle, shall be placed by the Contractor; and compensation will be allowed the Contractor for the materials so used.

3.2 LAYING PIPE

- A. General: All piping is to be installed in strict accordance with the manufacturer's recommendations. Installation manuals from various material suppliers shall be furnished the Engineer for his review and approval prior to installation of any material. The Engineer may augment any manufacturer's installation recommendations, if in his opinion it will best serve the interest of the Owner.
- B. Laying Pipe:
 - 1. No pipe shall be laid except in the presence of the Engineer or his inspector, or without special permission from the Engineer. Proper tools, implements, and facilities satisfactory to the Engineer shall be provided and used for the safe and convenient prosecution of pipe laying. All pipe, fittings, valves, and other materials used in the laying of pipe will be lowered into the trench piece by piece by means of suitable equipment in such a manner to prevent damage to the pipe materials, to the protective coating on the pipe materials, and to provide a safe working condition to all personnel in the trench. Each piece of pipe being lowered into the trench shall be carefully given a final inspection to see that it is clean, sound and free of defects. It shall be laid on the prepared foundation to produce a straight line on a uniform grade, each pipe being laid as to form a close abutted joint with a preceding pipe, so as to form a smooth and straight inside flow line. Each pipe will be tested for its exact position after it is in its final position. The pipes shall be fitted together in order to insure sufficient space for joint gaskets, and other jointing material. Pipe shall be removed at any time if broken, injured or displaced in the process of laying same, or of backfilling the trench.
 - 2. When cutting short lengths of pipe, a pipe cutter as approved by the Engineer will be used, and care will be taken to make the cut at right angles to the center line of the pipe, or on the exact skew as shown on the plans. In the case of push-on pipe, the cut ends shall be tapered with a portable grinder, of course file to match the manufactured taper.

IFB 2026-005 UNION COUNTY LANDFILL EXPANSION
UNION COUNTY, NORTH CAROLINA

3. When coupling bands for annular or helical corrugated metal pipe are used, the pipe sections shall be joined and fully bolted so that the circumferencial and longitudinal strength will be sufficient to preserve the alignment, prevent separation of the sections, and to prevent infiltration of backfill material.

3.3 BACKFILLING

- A. The backfill around the pipe shall be placed in layers not to exceed 6" loose and compacted to 95% Standard Proctor test for all areas directly beneath subgrade (100% for the top two (2) feet of subgrade beneath pavements). From the bottom of the trench to the centerline of the pipe the backfill material shall be compacted by approved hand tamps. From the centerline of the pipe to the top of the trench other mechanical tamps as approved by the Engineer may be used. All backfill material shall have been approved by the Engineer. Select backfill material shall be used when called for on the plans.
- B. Care shall be taken during backfill and compaction operations to maintain alignment and prevent damage to the joints. The backfill shall be kept free from stones, frozen lumps, chunks of highly plastic clay, or other objectionable materials.
- C. All pipe backfill areas shall be graded and maintained in such a condition that erosion or saturation will not damage the pipe bed or backfill.
- D. Heavy equipment shall not be operated over any pipe until it has been properly backfilled and has a minimum cover as required by the plans. Where any part of the required cover is above the proposed finish grade, the Contractor shall place, maintain, and finally remove such material at no cost to the Owner. Pipe which becomes misaligned, shows excessive settlement, or has been otherwise damaged by the Contractor's operations shall be removed and replaced by the Contractor at no cost to the Owner.

3.4 TESTING

- A. Upon completion, installed lines shall show a full circle of light when "Lamped" between catch basins. This test shall be performed by the Engineer.
- B. Other tests may be required by the Engineer, such as exfiltration. In this event the results shall meet the minimum standards that the manufacturer states are obtainable.

END OF SECTION

IFB 2026-005 UNION COUNTY LANDFILL EXPANSION
UNION COUNTY, NORTH CAROLINA

SECTION 33 06 00

MINOR DRAINAGE STRUCTURES

PART 1 GENERAL

1.1 SCOPE OF WORK

- A. The work covered by this section consists of the construction of reinforced concrete or brick masonry inlets, catch basins, junction boxes, and other minor drainage structures, excluding headwalls, together with all necessary metal grates, covers, frames, and other hardware, in accordance with the requirements shown on the plans and the provisions of these specifications.

1.2 QUALITY ASSURANCE

- A. All precast concrete structures and other fabricated materials shall be manufactured by suppliers with at least five (5) years of experience in the manufacture of similar materials.

1.3 SUBMITTALS

- A. Shop Drawings: The Contractor shall submit at least six (6) copies of shop drawings to the Engineer, including dimensional drawings, materials of construction, catalogue cut sheets, and other pertinent information.

1.4 DELIVERY, STORAGE AND HANDLING

- A. All materials shall be delivered, stored and handled in strict accordance with the manufacturer's recommendations, and in a manner which preserves the structural integrity of the materials.

1.5 WARRANTY

- A. All materials and equipment shall be warranted to be free from defects in workmanship and materials for one (1) year after final acceptance.

PART 2 PRODUCTS

2.1 MATERIALS

- A. Concrete and Masonry:
 - 1. All concrete shall be Class B 4000 psi unless otherwise indicated on the plans.

IFB 2026-005 UNION COUNTY LANDFILL EXPANSION
UNION COUNTY, NORTH CAROLINA

2. Where necessary to fit field conditions, the dimensions of the structure and footings shall be varied as directed by the Engineer.
- B. Fittings and Connections:
1. Where fittings enter the masonry, they shall be placed as the work is built up, thoroughly bonded, and accurately spaced and aligned.
 2. Pipe connections shall be cut off flush with the inside wall of the drainage structure and grouted as necessary to make smooth and uniform surfaces on the inside of the structure.
 3. Metal frames for grates and covers shall be set in full mortar beds or secured by methods approved by the Engineer.
- C. Backfill: After the structure has been completed, and all forms, falsework, sheeting, and bracing have been removed, the excavation shall be backfilled with approved material compacted to a density of 95% standard proctor. Backfilling shall not be done until the concrete or brick masonry has cured for at least seven (7) curing days, unless otherwise permitted by the Engineer.
- D. Pipe Collars and Pipe Plugs: Pipe collars and pipe plugs shall be constructed in accordance with the details shown on the plans or as directed by the Engineer.

PART 3 EXECUTION

3.1 INSTALLATION

- A. Drainage structures shall be built to the lines, grades and dimensions as shown on the plans. The Contractor shall adjust the final grades in the field as necessary to provide positive drainage to the structures or to match final pavement or grade elevation.
- B. Excavations for drainage structures shall be made with care so as not to disturb the surrounding areas more than necessary. All excavations shall be maintained water free until completion of the drainage structure, including backfilling. The Contractor shall provide adequate pumping capacity as required.
- C. Where the foundation material is found to be of poor supporting value, the existing foundation material shall be removed by undercutting to the depth directed by the Engineer and backfilled with suitable material secured from locations along the project or from a borrow pit. The backfill placed in the undercut area shall be compacted to a degree satisfactory to the Engineer.
- D. For cast-in-place structures the Contractor shall use care in placing rebar and concrete. Unless otherwise approved, the bottom slabs shall be poured separate from the walls. A minimum of seven (7) days cure time shall be provided between completion of pouring the bottom and the walls.

IFB 2026-005 UNION COUNTY LANDFILL EXPANSION
UNION COUNTY, NORTH CAROLINA

- E. When drainage structures are constructed with concrete brick, only new, sound brick shall be used. Mortar mix shall be mixed on site using an approved mortar mix consisting of Portland Cement (Type S), and clean sand. Following construction of the drainage boxes, both the interior and exterior shall be plastered with a minimum 1/2" thick coat of Portland Cement and sand mixture.

3.2 QUALITY CONTROL AND FIELD TESTING

- A. The Contractor shall demonstrate to the Owner and Engineer that all drainage structures operate as intended and designed. All drainage structures shall be field tested by the Contractor in the presence of the Engineer prior to final acceptance.

END OF SECTION

IFB 2026-005 UNION COUNTY LANDFILL EXPANSION
UNION COUNTY, NORTH CAROLINA

SECTION 33 11 00

AGGREGATE BASE COURSE

PART 1 GENERAL

1.1 SCOPE OF WORK

- A. The work covered by this section consists of the construction of a base composed of an approved aggregate material hauled to the site, placed on the site, compacted, and shaped to conform to the lines, grades, depths, and typical sections shown on the plans or established by the Engineer.

PART 2 PRODUCTS

2.1 MATERIALS

- A. Aggregate base course materials shall consist of crushed stone or uncrushed gravel, or other similar material having hard, strong, durable particles free of adherent coatings.
- B. The Contractor shall furnish aggregate base course material produced in accordance with the requirements indicated herein for Type A, aggregate unless otherwise specified in the special provisions.
- C. All aggregates shall be from approved sources. Sources will not be approved unless the material has satisfactory soundness and satisfactory resistance to abrasion. Satisfactory soundness will be considered to be a weighted average loss of not greater than 15% when subjected to five (5) alternations of the sodium sulfate soundness test in accordance with AASHTO T104. Satisfactory resistance to abrasion will be considered to be a percentage of wear of not greater than 55% when tested in accordance with AASHTO T96.
- D. Aggregates shall be handled in such a manner as to minimize segregation.
- E. Sites for aggregate stockpiles shall be grubbed and cleaned prior to storing aggregates, and the ground surface shall be firm, smooth, and well drained. A cover of at least 3" of aggregate shall be maintained over the ground surface in order to avoid the inclusion of soil or foreign material. Stockpiles shall be built in such a manner as to minimize segregation. When it is necessary to operate trucks or other equipment on a stockpile in the process of building the stockpile, it shall be done in a manner approved by the Engineer.

IFB 2026-005 UNION COUNTY LANDFILL EXPANSION
UNION COUNTY, NORTH CAROLINA

- F. Stockpiles of different types or sizes of aggregates shall be spaced far enough apart, or else separated by suitable walls or partitions, to prevent the mixing of the aggregates.
- G. Any method of stockpiling aggregates which allows the stockpile to become contaminated with foreign matter or causes excessive degradation of the aggregate will not be permitted. Excessive degradation will be determined by sieve tests of samples taken from any portion of the stockpile over which equipment has been operated, and failure of such samples to meet all grading requirements for the aggregate will be considered cause for discontinuance of such stockpiling procedure.
- H. Gradation: All standard sizes of aggregates shall meet the gradation requirements when tested in accordance with AASHTO T27.

PART 3 EXECUTION

3.1 CONSTRUCTION OF STONE BASE

- A. The aggregate material shall be spread on the subgrade to a uniform loose depth and without segregation.
- B. Where the required compacted thickness of base is 8" or less the base material may be spread and compacted in one layer. Where the required compacted thickness of base is more than 8", the base material shall be spread and compacted in 2 or more approximately equal layers. The minimum compacted thickness of any one layer shall be approximately 4".
- C. Each layer of material shall have been sampled, tested, compacted, and approved prior to placing succeeding layers of base material or pavement. Such tests will be provided and paid for by the Owner, except that tests which reveal non-conformance with the Specifications and all succeeding tests for the same area, until conformance with the Specifications is established, shall be at the expense of the Contractor. The Owner will be responsible for paying for only the successful tests. The minimum compaction for each layer shall be 100% standard proctor.
- D. No base material shall be placed on frozen subgrade or base. Hauling equipment shall not be operated on subgrade or a previously completed layer of base material soft enough to rut or weave beneath the equipment.
- E. The maximum speed of trucks hauling or traveling over any part of the subgrade or base shall be 5 miles per hour.
- F. The Contractor shall utilize methods of handling, hauling, and placing which will minimize segregation and contamination. If segregation occurs, the Engineer may

IFB 2026-005 UNION COUNTY LANDFILL EXPANSION
UNION COUNTY, NORTH CAROLINA

require that changes be made in the Contractor's methods to minimize segregation, and may also require mixing on the road which may be necessary to correct any segregated material. No additional compensation will be allowed for the work of road mixing as may be required under this provision. Aggregate which is contaminated with foreign materials to the extent the base course will not adequately serve its intended use shall be removed and replaced by the Contractor at no additional cost to the Owner. The above requirements will be applicable regardless of the type of aggregate placed and regardless of prior acceptance.

3.2 QUALITY CONTROL

- A. Tolerances:
 - 1. After final shaping and compacting the base, the Engineer will check the surface of the base for conformance to grade and typical section and will determine the base thickness.
 - 2. The minimum thickness of the base shall be as required by the plans.
- B. Maintenance: Where the base material is placed in a trench section, the Contractor shall provide adequate drainage through the shoulders to protect the subgrade and base until such time as shoulders are completed. The Contractor shall maintain the surface of the base by watering, machining, and rolling or dragging when necessary to prevent damage to the base by weather or traffic.

END OF SECTION