#### **INVITATION FOR BIDS**

#### LAKE NORMAN WOODS WWTP

#### TEMPORARY SLUDGE HOLDING TANK REPAIRS PROJECT

IFB NO: 26-1006



# catawba county

MAKING. LIVING. BETTER.

Date of Issue: December 1, 2025

**Pre-Bid Meeting: December 10, 2025** 

**Bid Due Date: December 30, 2025** 

**Time: 3:00 PM ET** 

#### **Issued for:**

Catawba County Utilities & Engineering Department 25 Government Drive Newton, North Carolina 28658

#### Issued by:

Catawba County Purchasing Manager 25 Government Drive Newton, North Carolina 28658 (828) 465-8224

#### **SCOPE OF WORK**

On behalf of the Lake Norman Woods Homeowner Association, Catawba County is soliciting informal bids for emergency repairs to the sludge holding system for the Lake Norman Woods Waste Water Treatment Plant (WWTP) (NPDES Permit: NC0071528). The project involves the installation of a temporary sludge holding tank to provide dedicated sludge storage, as the internal wall of the existing sludge holding tank has failed. The temporary tank will maintain operations during the interim period while the wastewater treatment plant is replaced under future contract. The scope of work includes a 2,500-gallon fiberglass reinforced, HDPE or plastic replacement tank for the failing Sludge Holding Tank and associated PVC piping and ball valves for the waste sludge piping, decant and drainage piping, aeration piping and diffusers. Provide all labor, materials, equipment, tools, services and incidentals necessary to complete all work required by the Contract Documents to furnish and install all work as shown on the Drawings and specified herein including connections to existing WWTP and pump station, site restoration and fencing.

For further detail and project requirements, please see technical specifications attached hereto as **Attachment C** and construction plans attached hereto as **Attachment D**.

The Contractor will be responsible for providing all tools, equipment and materials to complete the work. The successful bidder will be required to enter into a construction contract, attached hereto as **Attachment B**, for services referenced above. In addition, Successful Bidder will be responsible for meeting the minimum insurance requirements as specified in the attached construction contract.

#### TIME FOR COMPLETION

The Contractor will be required to complete the project as described herein no later than one hundred twenty (120) days after issuance of a Notice to Proceed.

#### INVITATION FOR BID (IFB) SCHEDULE

The table below shows the *intended* schedule for this IFB. Catawba County will make every effort to adhere to this schedule.

Event	Responsibility	Date and Time
Issue IFB	County	December 1, 2025
Pre-Bid Meeting	County/Contractor	December 10 at 3:00 PM
Submit Written Questions	Contractor	December 18 by 5:00 PM
Provide Responses to Questions	County	December 22 by 5:00 PM
Submit Bid Response	Contractor	December 30 by 3:00 PM
Contract Award	County	TBA
Contract Effective Date	County	Upon Execution

The bid response shall be submitted no later than 3:00 PM ET on December 30, 2025. No submittals will be accepted after the deadline.

#### **BID QUESTIONS AND ADDENDA**

Upon review of the IFB documents, Contractors may have questions to clarify or interpret the scope of work in order to submit the best bid response possible. To accommodate the Bid Questions process, Contractors shall submit any such questions by the above due date. Written questions shall be emailed to <a href="mailto:tinawright@catawbacountync.gov">tinawright@catawbacountync.gov</a> by the date and time specified above. Contractor should enter "IFB #: 26-1006 – Questions" as the subject for the email. Questions received prior to the submission deadline date, the

County's response, and any additional terms deemed necessary by the County will be posted in the form of an addendum to the Catawba County website, <a href="https://www.catawbacountync.gov/county-services/purchasing/bid-notices/">https://www.catawbacountync.gov/county-services/purchasing/bid-notices/</a> and shall become an Addendum to this IFB. No information, instruction or advice provided orally or informally by any County personnel, whether made in response to a question or otherwise in connection with this IFB, shall be considered authoritative or binding. Contractors shall rely only on written material contained in an Addendum to this IFB.

#### PRE-BID MEETING / SITE INSPECTIONS

A non-mandatory pre-bid meeting will be held onsite December 10, 2025 at 3:00 PM ET. Interested Contractors should meet County at the Lake Norman Woods WWTP, located at 8458 Marina Drive, Catawba, North Carolina 28609. The purpose of this visit is for prospective Contractors to apprise themselves with the conditions and requirements which will affect the performance of work called for in this IFB.

#### **SUBMISSION OF BIDS**

The Bid Form attached hereto as **Attachment A** shall be used for the bid submission and shall not be altered. Bids will be received for a single prime Contract. Bids shall be on a lump sum fixed price basis as indicated on the Bid Form.

This is an informal bid. Bids received will remain confidential until awarded. Bids must be submitted no later than 3:00 PM ET, on December 30, 2025. Bid submissions may be hand-delivered to the address below, mailed to the address below, faxed to (828) 548-2378 or e-mailed to Tina Wright at <a href="mailto:tinawright@catawbacountync.gov">tinawright@catawbacountync.gov</a>.

Mailing address for delivery of bid via US Postal Service	Office Address of delivery by any other method (hand delivery, overnight, or any other carrier)
IFB No: 26-1006 Catawba County Government Center Attn: Purchasing Department Post Office Box 389 Newton, North Carolina 28658	IFB No: 26-1006 Catawba County Government Center Attn: Purchasing Department 25 Government Drive Newton, North Carolina 28658

Catawba County reserves the right to reject any and all Bid responses and to waive informalities as may be permitted by law.

#### PAYMENT AND PERFORMANCE BONDS

No bonds are required for this project.

#### **QUALIFICATION OF BIDDERS**

The County may make such investigation as it deems necessary to determine the qualifications of the Bidder to perform the work and the Bidder shall furnish to the County all such information and data for this purpose as the County may request. The County reserves the right to reject any Bid if the evidence submitted by, or investigation of, such Bidder fails to satisfy the County that such Bidder is properly qualified to carry out the obligations of the contract, and to complete the work contemplated therein. Conditional Bids will not be accepted.

All Bidders are hereby notified that they must be properly licensed under the state laws governing their prospective trades. In addition, Bidders shall comply with all applicable

laws regulating the practice of General Contracting as contained in Chapter 87 of the General Statutes of North Carolina.

#### **RESPONSIBILITIES OF BIDDERS**

Each Bidder shall, by careful examination, satisfy himself as to the nature and location of the work, the configuration of the ground, the character quality and quantity of the facilities needed preliminary to and during the prosecution of the work, the general and local conditions, and all other matters which can in any way affect the work or the cost thereof under the Contract.

The failure or omission of any Bidder to thoroughly examine and familiarize himself with the Contract Documents or to receive or examine any form, instrument or document or to visit the site and acquaint himself with the conditions there existing shall in no way relieve any Bidder from any obligation in respect to their Bid.

No verbal agreement or conversation with any officer, agent or employee of the County, either before or after the execution of the Contract, shall affect or modify any of the terms or obligations therein.

#### **TAXES**

The Contractor shall include in Bid the cost of all sales and use taxes and furnish to the County at the end of each month and/or upon completion of the Contract, a statement setting forth all such taxes paid. This statement shall indicate the amount paid to each vendor and be adequate for audit by the State Department of Revenue.

#### AWARD OF CONTRACT

The award of the Contract will be made to the lowest responsive, and responsible bidder, who, in the opinion of the County, is qualified to perform the work required and is responsible and reliable. These Bids are asked for in good faith, and awards will be made as soon as practicable, provided satisfactory Bids are received.

The County may consider informal and reject any Bid not prepared and submitted in accordance with the provisions hereof. The right is reserved to waive informalities in bidding, to reject any or all Bids, or to accept a Bid other than the lowest submitted if such action is deemed to be in the best interest of the County.

#### COMMENCEMENT OF WORK

Contractor is required to notify the County and the Engineer at least two (2) weeks prior to starting construction activities.

#### **EQUAL EMPLOYMENT OPPORTUNITY**

Attention of Bidders is particularly called to the requirements for ensuring that employees and applicants for employment are not discriminated against because of their race, color, religion, sex, or national origin.

## ATTACHMENT A BID FORM IFB NO: 26-1006

### FOR: LAKE NORMAN WOODS WWTP TEMPORARY SLUDGE HOLDING TANK REPAIRS PROJECT

Company Name	-
Company Address	-
License Number	-
_()	-
E-Mail	-
The undersigned, as bidder, proposes and agrees if this bid is accepted to concatawba County for the furnishing of all materials, equipment, and labor no complete the construction of the work described in these documents in full an accordance with plans, specifications, and contract documents, and to the full satisfaction of Catawba County for the lump sum of:	ecessary to ad complete
TOTAL CONTRACT BID AMOUNT	
TOTAL CONTRACT BID AMOUNT	
TOTAL CONTRACT BID AMOUNT  Dollars (\$  Addenda received and used in computing bid (if applicable):	
Dollars (\$	)
Addenda received and used in computing bid (if applicable):	and in good amined the all special
Addenda received and used in computing bid (if applicable):  Addendum No. 1 Addendum No. 2 Addendum No. 3 _  The undersigned, as bidder, hereby declares that this bid is in all respects fair a faith without collusion or fraud. This bidder further declares that he has exist of the work and the contract documents relative thereto, and has read provisions furnished prior to the bid submission due date; that he has satisf	and in good amined the all special
Addenda received and used in computing bid (if applicable):  Addendum No. 1 Addendum No. 2 Addendum No. 3 _  The undersigned, as bidder, hereby declares that this bid is in all respects fair a faith without collusion or fraud. This bidder further declares that he has example of the work and the contract documents relative thereto, and has read provisions furnished prior to the bid submission due date; that he has satisficiently to the work to be performed.	and in good amined the all special
Addenda received and used in computing bid (if applicable):  Addendum No. 1 Addendum No. 2 Addendum No. 3 _  The undersigned, as bidder, hereby declares that this bid is in all respects fair a faith without collusion or fraud. This bidder further declares that he has example of the work and the contract documents relative thereto, and has read provisions furnished prior to the bid submission due date; that he has satisficiently to the work to be performed.	and in good amined the all special

#### ATTACHMENT B

# CONSTRUCTION CONTRACT FOR LAKE NORMAN WOODS WWTP TEMPORARY SLUDGE HOLDING TANK REPAIRS PROJECT

THIS AGREEMENT made as of the	day of, 2025, by and between Catawba
County, a body politic and a political subdi-	vision of the State of North Carolina, (hereinafte
"County") and	, a North Carolina Corporation, (hereinafte
"Contractor"). County and Contractor are refera	red to herein each as a "Party" and collectively as the
"Parties".	
Project: Lake Norman Woods WWTP Temp	oorary Sludge Holding Tank Repairs Project
Owner:	
Catawba County	
25 Government Drive	
Newton, North Carolina 28658	
Contractor:	
N	CGC License #:
Qu	ualifier Name:

#### WITNESSETH:

Contractor and County, in consideration of the mutual covenants and agreements herein contained, agree as follows:

1. <u>SCOPE OF WORK</u>: Contractor shall furnish and deliver all of the materials and perform all of the work for the emergency repairs to the sludge holding system for the Lake Norman Woods WWTP as described in the Contract Documents ("Work"), except as specifically indicated in the Contract Documents to be the responsibility of others.

The Construction Agreement ("hereinafter Agreement") consists of the Contract Documents which includes this Contract, the General Conditions of the Construction Contract, Invitation for Bids, Specifications, Plans or Drawings, any Addenda issued prior to execution of this Contract or other documents listed in this Contract or incorporated herein by reference, and any Modifications executed by the Parties after execution of this Contract, all of which form the Agreement, and are as fully a part of this Agreement as if attached to this Contract or repeated herein. The Agreement represents the entire and integrated agreement between the Parties hereto and supersedes prior negotiations, representations, or agreements, either written or oral. The Contract Documents consist of this Contract and the following:

- 1. General Conditions to Construction Contract, attached as Exhibit A.
- 2. Invitation for Bids dated , 2025.
- 3. Technical Specifications bearing the general title "Lake Norman Woods WWTP Temporary Sludge Holding Tank Repairs Project" ("Specifications").
- 4. Drawings bearing the general title "Catawba County WWTP Emergency Services" ("Plans").

- 5. Addenda numbers [\_\_] to [\_\_].
- 6. Completed Bid Form, attached as Exhibit B ("Bid").
- 7. Insurance, attached as Exhibit C ("COI").
- 8. Change Orders or Modifications Subsequently Executed by the Parties ("Modifications").

2.	TIME OF COMPLETION: The Cont	ractor shall commence Work to be performed under this
	Agreement on or about	and shall fully complete all work hereunder on or
	before, or within a	approximately One Hundred Twenty (120) consecutive
	calendar days from issuance of the N	Notice to Proceed ("Time of Completion"). "Substantial
	Completion" as used herein shall hav	e the meaning assigned to it in Exhibit A, attached.

Where Contractor is prevented from completing any part of the Work within the Time of Completion due to delay beyond the control of Contractor, the Time of Completion may be extended in an amount equal to the time lost due to the delay if a Claim is made as provided in Section 4.2 of the of the General Conditions and if the performance of the Work is not, was not, or would not have been delayed by any other cause for which the Contractor is not entitled to an extension of the Time of Completion under the Contract Documents. Delays beyond the control of Contractor include, but are not limited to, acts or neglect by Owner, acts or neglect of utility owners or other contractors performing other work, fires, floods, epidemics, abnormal weather conditions, or acts of God. Contractor acknowledges and agrees that adjustments in the Time of Completion will be permitted for a delay only to the extent such delay (i) is not caused, or could not have been anticipated, by Contractor; (ii) could not be limited or avoided by the Contractor's timely notice to Owner of the delay or reasonable likelihood that a delay will occur; and (iii) is of a duration not less than one day. In no event will claims for delay be allowed where alleged delays do not impact the critical path of the Contractor as demonstrated on the relevant schedule provided by the Contractor for the period of time in which the delay allegedly occurred.

If Contractor is delayed in the performance or progress of the Work by fire, flood, epidemic, supply chain disruptions, material or labor shortages, 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 is entitled to an equitable adjustment in Time of Completion, if the adjustment is essential to Contractor's ability to complete the Work within the Time of Completion. An adjustment in the Time of Completion is Contractor's sole and exclusive remedy for the delays described in this Section.

Furthermore, to the fullest extent permitted by law, and notwithstanding anything to the contrary in the Contract Documents, an extension of the Time of Completion pursuant to Section 8.3 of the General Conditions, shall be the sole remedy of Contractor for any (i) delay in the commencement, prosecution, or completion of the Work, (ii) hindrance or obstruction in the performance of the Work, (iii) loss of productivity, or (iv) other similar claims (collectively referred to in this Section as "Delays") whether or not such Delays are foreseeable, unless a Delay is caused by acts of Owner constituting active interference with Contractor's performance of the Work, and only to the extent such acts continue after Contractor furnishes Owner with notice of such interference. In no event shall Contractor be entitled to any compensation with any Delay, including, without limitation, consequential damages, lost opportunity costs, impact damages, or other similar remuneration. Owner's exercise of any of its rights under the Contract Documents (including, without limitation, ordering changes in the Work, or directing suspension, rescheduling, or correction of the

Work), regardless of the extent or frequency of Owner's exercise of such rights or remedies, shall not be construed as active interference with Contractor's performance of the Work.

If the Time of Completion is not adjusted, then for each day in excess of the Time of Completion in which the Work is not complete, the Contractor shall pay the Owner the amount of Five Hundred Dollars (\$500.00) as liquidated damages, the rate of which is reasonably estimated and mutually agreed upon in advance, to cover the losses to be incurred by the Owner should the Contractor fail to complete the Work within the time specified.

3. <u>CONTRACT ADMINISTRATON</u>: County's Utilities and Engineering Director shall serve as the Contract Administrator for this Project.

Owner's Point of Contact for Project:
Contractor's Point of Contact for Project:
This Project was designed by:

WithersRavenel
115 MacKenan Dr

Cary, North Carolina 27511

- 5. <u>PAYMENT:</u> Contractor shall submit Applications for Payment when all work has been completed. Applications for Payment will be reviewed and approved by Catawba County.
- 6. PAYMENT BOND: Reserved.
- 7. <u>PERFORMANCE BOND</u>: *Reserved*.
- 8. <u>CONTRACTOR REPRESENTATIONS:</u> In order to induce Owner to enter into this Contract, Contractor makes the following representations:
  - A. Contractor has examined and carefully studied the Contract Documents, including Addenda.
  - B. Contractor has visited the Site, conducted a thorough visual examination of the Site and adjacent areas, and become familiar with the general, local, and Site conditions that may affect cost, progress, and performance of the Work.
  - C. Contractor is familiar with all Laws and Regulations that may affect cost, progress, and performance of the Work.
  - D. Contractor has carefully studied the reports of explorations and tests of subsurface conditions at or adjacent to the Site and the drawings of physical conditions relating to existing surface or subsurface structures at the Site with respect to the Technical Data in such reports and drawings, if any.
  - E. Contractor has carefully studied the reports and drawings relating to Hazardous Environmental Conditions, if any, at or adjacent to the Site.
  - F. Contractor has considered the information known to Contractor itself; 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

- Technical Data (a) the cost, progress, and performance of the Work; (b) the means, methods, techniques, sequences, and procedures of construction to be employed by Contractor; and (c) Contractor's safety precautions and programs.
- G. Based on the information and observations referred to in the preceding paragraph, Contractor agrees that no 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.
- H. 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.
- I. Contractor has given Contract Administrator written notice of all conflicts, errors, ambiguities, or discrepancies that Contractor has discovered in the Contract Documents, and of discrepancies between Site conditions and the Contract Documents, and the written resolution thereof by Engineer is acceptable to Contractor.
- J. The Contract Documents are generally sufficient to indicate and convey understanding of all terms and conditions for performance and furnishing of the Work.
- K. Contractor's entry into this Contract constitutes an incontrovertible representation by Contractor that without exception all prices in the Agreement are premised upon performing and furnishing the Work required by the Contract Documents.
- 9. <u>CONTRACTOR'S CERTIFICATIONS:</u> 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:
  - A. "corrupt practice" means the offering, giving, receiving, or soliciting of anything of value likely to influence the action of a public official in the bidding process or in the Contract execution;
  - B. "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;
  - C. "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
  - D. "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. <u>NOTICES</u>: Any notice required by this Agreement shall be in writing and delivered by certified or registered mail, return receipt requested to the following:

Owner:Contractor:Designer:Catawba CountyWithersRavenelAttn: Pete Shonka201 S Tryon St, Ste 80025 Government DriveCharlotte, NC 28202Post Office Box 389Newton, NC 28658

11. <u>UTILITIES</u>: Owner may provide certain utilities such as power or water, with connections and extensions by the Contractor.

- 12. <u>ACCESS CONTROL</u>: Owner will provide Contractor access to the Project site as reasonably necessary to perform the Work. The Contractor will be issued construction badges that will allow access to building / departments. These badges will be required to be turned back in to Owner before final payment is issued.
- 13. <u>POINT OF CONTACT</u>: The Contractor's Point of Contact ("POC") for this Project is the Catawba County Utilities and Engineering Director, (828) 465-8943. Any questions regarding the Project shall be directed to him.
- 14. <u>HOURS OF OPERATION</u>: The normal hours of operation are Monday through Friday, 8:00 a.m. to 5:00 p.m. If Contractor anticipates working outside of those normal hours for any reason, Contractor must coordinate that with the Catawba County Utilities and Engineering Director at (828) 465-8943.
- 15. <u>NO SMOKING POLICY</u>: All Catawba County grounds and buildings are smoke and tobacco free. During the performance of the Work under this Agreement, Contractor agrees to enforce this policy and to require all employees and any subcontractors or material providers to abide by this policy when on County property.
- 16. <u>E-VERIFY</u>: Contractor shall comply with the requirements of Article 2 of Chapter 64 of the North Carolina General Statutes. Further, if Contractor utilizes a subcontractor, Contractor shall require the subcontractor to comply with the requirements of Article 2 of Chapter 64 of the North Carolina Statutes.
- 17. <u>TIME OF THE ESSENCE</u>: Time is of the essence in the performance of this Agreement.
- 18. <u>COMPLIANCE WITH LAWS</u>: Contractor represents that it is qualified and possesses the necessary skill and experience to perform the Work under this Agreement and that it will complete the Work in compliance with all applicable laws, ordinances, codes, rules and regulations. Contractor shall comply with all laws, ordinances, codes, rules, regulations, and licensing requirements that are applicable to the conduct of its business, including those of federal, state, and local agencies having jurisdiction and/or authority, during the term of this Agreement.
- 19. <u>WAIVER OF DEFAULT</u>: Waiver by the County of any default or breach in compliance with the terms of this Agreement by Contractor shall not be deemed a waiver of any subsequent default or breach and shall not be construed to be a modification of the terms of this Agreement unless stated to be such in writing, signed by an authorized representative of the County and the Contractor and attached to the Agreement, and then only to the extent expressly stated.
- 20. <u>CHOICE OF LAW</u>: This Agreement shall be governed and construed in accordance with the laws of the State of North Carolina. Venue for any adversarial proceeding shall be set in Catawba County.
- 21. <u>ENTIRE AGREEMENT</u>: This Agreement constitutes the entire agreement and understanding between the Parties respecting the subjects covered herein, and shall not be modified in any respect except in a writing that is signed by both Parties. The Parties may enter into additional agreements to the extent they are not inconsistent with the terms hereof. In the event there is an inconsistency, the terms of this Agreement shall prevail.

- 22. <u>EXECUTION</u>: This Agreement may be executed electronically and in multiple counterparts, with each part so executed being deemed an original, however, collectively constituting but a single document.
- 23. <u>HEADINGS</u>: The Section and Paragraph headings in this Agreement are not material parts of the agreement and should not be used to construe the meaning thereof.
- 24. <u>SEVERABILITY</u>: In the event that a court of competent jurisdiction holds that a provision or requirement of this contract violates any applicable law, each such provision or requirement shall continue to be enforced to the extent it is not in violation of law or is not otherwise unenforceable and all other provisions and requirements of this contract shall remain in full force and effect.
- 25. <u>FORCE MAJEURE</u>: If Contractor's performance of Work is delayed by a force majeure, Contractor shall immediately, but in no case more than forty-eight (48) hours after such conditions become known, notify County of the delay, the reasons therefore and the anticipated duration of any such delay. Contractor's delay in the performance of services shall be excused during the duration of such force majeure, provided Notice was timely given under this Section.
- 26. <u>INDEMNIFICATION</u>: The Work to be performed by Contractor under this Agreement shall be performed entirely at Contractor's own risk. Contractor shall indemnify and save harmless the County, its commissioners, employees, agents and representatives from any and all liabilities and claims of every kind, including attorney's fees, to which County may be subjected on account of loss, destruction or damage to property or injury to or death of persons, including Contractor and persons employed by Contractor, arising out of or in connection with performance of this Agreement. The provisions of this paragraph shall not be applicable to loss or damage caused by the negligent act of omission of County or its employees.

INSURANCE: Contractor will carry and maintain, throughout the period of this Agreement, at Contractor's sole expense, general liability insurance of no less than \$1,000,000 per occurrence and \$2,000,000 annual aggregate; and worker's compensation insurance providing statutory limit coverage, plus Employer's Liability coverage with limits of not less than \$1,000,000 per accident and \$1,000,000 for each employee for injury by disease. Defense costs shall be in excess of the limit of liability. Contractor shall also provide automobile insurance coverage, when applicable, for any owned, hired, or rented vehicle with a limit of not less than \$1,000,000 per occurrence combined single limit for bodily injury and property damage liability and a limit of not less than \$15,000 for medical payment coverage. If employees, agents or representatives of Contractor, including specifically independent contractors under contract to Contractor, transport County's clients in their personal vehicles, Contractor will ensure that any such transportation service is covered by insurance, whether it be the insurance of Contractor or of the vehicle County, and that vehicles are maintained in a condition that imposes no apparent risk to the clients and/or to the public.

Catawba County shall be named as an additional insured under Contractor's general liability insurance company. In the event of a loss arising out of, or related to the Contractor's services performed under this Agreement, Contractor's Liability insurance shall be primary (pay first) with respect to any other insurance which may be available to the County, regardless of how the "other insurance" provisions may read.

Contractor has provided a Certificate of Insurance ("COI") which is attached hereto as Exhibit C. Contractor agrees to indemnify County if the insurance policy referenced in the COI does not contain, at a minimum, the coverage amounts listed on the COI. All insurance policies put forth to satisfy the above requirements shall require the insurer issuing the underlying policy to provide County with a minimum of thirty (30) days' notice prior to modification or cancellation of said policy. The maintenance of such insurance will not in any manner affect Contractor's obligation to indemnify County as described herein.

- 27. <u>ASSIGNMENT</u>: This Agreement or any right hereunder, shall not be assigned by either party, nor shall any duty hereunder be delegated by either party, without the express written consent of the other party. Any attempt at assignment or delegation without such consent shall be void.
- 28. <u>INDEPENDENT CONTRACTOR</u>: This Agreement does not constitute Contractor an employee, agent, representative, joint venture or partner of County for any purpose whatsoever. Contractor is not authorized to make any contract, agreement, warranty or representation, express or implied, on behalf of County. Neither Contractor nor any employee or agent of Contractor has an employment status with County and are not entitled to participate in any benefits extended by County to its own employees. All persons employed by Contractor to perform Services hereunder shall be subject to the exclusive direction and control of Contractor, it being the intention of the parties that Contractor and its employees shall remain independent contractors, not subject to the control of County.
- 29. <u>SIGNATURE WARRANTY</u>: The undersigned represent and warrant that they are authorized to bind their principals to the terms of this Agreement.
- 30. <u>NON-DISCRIMINATION</u>: Neither Party nor its employees will discriminate against any person based on race, religion, creed, color, sex, gender identity and expression, pregnancy, childbirth, breastfeeding, medical conditions related to pregnancy, childbirth, or breastfeeding, sexual orientation, marital status, age, national origin, ancestry, genetic information, disability, veteran status, low income status or any class protected by local, state, or federal law in the performance of this Agreement.

[Signatures of Following Page]

Execution of this document in the space provided below acknowledges approval of the terms and provisions of this Agreement.

OWNER:	
CATAWBA COUNTY	
Pete Shonka, Utilities and Enginee	ring Director
Date	
CONTRACTOR:	
Name, Title	
Date	
THIS INSTRUMENT has been proposed and Fiscal Control Act as amended	re-audited in the manner required by the Local Government Budge l.
Date:	Mary Morrison, Chief Financial Officer Account Number: Amount: \$ Source: Federal State _X_ Local
APPROVED AS TO FORM	
Date:	Joshua Teague, Assistant County Attorney
Date:	Jake Robinson, Risk Management

## Exhibit A GENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION

#### **ARTICLE 1 GENERAL PROVISIONS**

#### 1.1. BASIC DEFINITIONS

- 1.1.1 Contract for Construction ("Agreement"). The Contract Documents form the Agreement. The Agreement represents the entire and integrated agreement between the Parties hereto and supersedes prior negotiations, representations or agreements, either written or oral. The Agreement may be amended or modified only by a Modification.
- 1.1.2 Contract Documents. The Contract Documents consist of the Contract between Owner and Contractor (hereinafter the Contract), Conditions of the Contract (General, Supplementary and other Conditions as applicable), Drawings, Specifications, Addenda issued prior to execution of the Contract, advertisement or invitation to bid, Instructions to Bidders, other documents listed in the Agreement and Modifications issued after execution of the Contract. In the event of conflicts among the contract documents, the Specifications shall take precedence over the Drawings, and the Supplementary Conditions (if provided) shall take precedence over the General Conditions. The Contract Documents shall not be construed to create a contractual relationship of any kind between the Owner and a Subcontractor or Sub-subcontractor.
- 1.1.3 Contractor. The person or entity identified as such in the Agreement and is referred to throughout the Contract Documents as if singular in number. Unless otherwise stated, the term "Contractor" means the General Contractor or the General Contractor's authorized representative.
- 1.1.4 Drawings. The Drawings are the graphic and pictorial portions of the Contract Documents, wherever located and whenever issued, showing the design, location and dimensions of the Work, generally including plans, elevations, sections, details, schedules and diagrams.
- 1.1.5 Designer. The Architect or Engineer registered in accordance with the provisions of Chapter 89C of the NC General Statutes, identified as such in the Agreement and is referred to throughout the Contract Documents as if singular in number. The term "Designer" refers to the Designer or the Designer's authorized representative(s). The Designer shall be entitled to performance and enforcement of obligations under the Agreement intended to facilitate performance of the Designers' duties.
- 1.1.6 Modification. A Modification is (1) a written amendment to the Contract signed by the parties, (2) a Change Order, (3) a Construction Change Directive, or (4) a written order for a minor change in the Work issued by the Designer.
- 1.1.7 Owner. The person or entity identified as such in the Agreement and is referred to throughout the Contract Documents as if singular in number. The term "Owner" means the Owner or the Owner's authorized representative.
- 1.1.8 Project. The Project is the total construction of which the Work performed under the Contract Documents may be the whole or a part and which may include construction by the Owner or by separate contractors.
- 1.1.9 Project Manual. The Project Manual is the volume usually assembled for the Work which may include the bidding requirements, sample forms, Conditions of the Contract and Specifications.

- 1.1.10 Specifications. The Specifications are that portion of the Contract Documents consisting of the written requirements for materials, equipment, construction systems, standards and workmanship for the Work, and performance of related services.
- 1.1.11 Work. The term "Work" means the construction and services required by the Contract Documents, whether completed or partially completed, and includes all other labor, materials, equipment and services provided or to be provided by the Contractor to fulfill the Contractor's obligations. The Work may constitute the whole or a part of the project.

#### 1.2 EXECUTION, CORRELATION, AND INTENT

- 1.2.1 The Contract Documents shall be signed by the Owner and Contractor as provided in the Agreement. If either the Owner or Contractor or both do not sign all the Contract Documents, the Designer shall identify such unsigned Documents and insure that they are properly signed by the necessary Parties.
- 1.2.2 Execution of the Contract by the Contractor is a representation that the Contractor has visited the site, become familiar with local conditions under which the Work is to be performed, correlated personal observations with requirements of the Contract Documents, has checked and verified all site conditions, and hereby waives any and all claims, present or future, for misrepresentation on the part of the Owner or Designer.
- 1.2.3 The intent of the Contract Documents is to include all items necessary for the proper execution and completion of the Work by the Contractor. The Contract Documents are complementary, and what is required by one shall be as binding as if required by all.
- 1.2.4 Organization of the Specifications into divisions, sections and articles, and arrangement of Drawings shall not control the Contractor in dividing the Work among Subcontractors or in establishing the extent of Work to be performed by any Subcontractor.
- 1.2.5 Unless otherwise stated in the Contract Documents, words which have well-known technical or construction industry meanings are used in the Contract Documents in accordance with such recognized meanings.
- 1.3 OWNERSHIP AND USE OF DESIGNER'S DRAWINGS, SPECIFICATIONS AND OTHER DOCUMENTS. The Drawings, Specifications and other documents prepared by the Designer are instruments of the Designer's service through which the Work to be executed by the Contractor is described. The Contractor may retain one contract record set. Neither the Contractor nor any Subcontractor, Sub-subcontractor or material or equipment supplier shall own or claim a copyright in the Drawings, Specifications and other documents prepared by the Designer. The Owner will retain all common law, statutory and other reserved rights, in addition to the copyright of the drawings, specifications and other documents prepared by the Designer. All copies of them, except the Contractor's record set, shall be returned or suitably accounted for to the Designer, on request, upon completion of the Work. The Drawings, Specifications and other documents prepared by the Designer, and copies thereof furnished to the Contractor, are for use solely with respect to this Project; they are not to be used by the Contractor or any Subcontractor, Sub-subcontractor or material or equipment supplier on other projects without the specific written consent of the Owner and Designer. The Contractor, Subcontractors, Sub-subcontractors and material or equipment suppliers are granted a limited license to use and reproduce applicable portions of the Drawings, Specifications and other documents prepared by the Designer appropriate to and for use in the execution of their Work under the Contract Documents. All copies made under this license shall bear the statutory copyright notice, if any, shown on the Drawings, Specifications and other documents prepared by the Designer. Submittal or distribution to meet official regulatory requirements or for other purposes in connection with this Project is not to be construed as publication in derogation of the Owner's copyright or other reserved rights.

- 1.4 CAPITALIZATION. Terms capitalized in these General Conditions include those which are (1) specifically defined, (2) the titles of numbered articles and identified references to Paragraphs, Subparagraphs and Clauses in the document or (3) the titles of other documents.
- 1.5 INTERPRETATION. In the interest of brevity, the Contract Documents frequently omit modifying words such as "all" and "any" and articles such as "the" and "an," but the fact that a modifier or an article is absent from one statement and appears in another is not intended to affect the interpretation of either statement.

#### **ARTICLE 2 OWNER**

- 2.1 INFORMATION AND SERVICES REQUIRED OF THE OWNER
- 2.1.1 The Owner shall furnish plans and profiles of existing County utilities. The Contractor is responsible for locating all existing utilities prior to Work.
- 2.1.2 Except for permits and fees which are the responsibility of the Contractor under the Contract Documents, the Owner shall secure and pay for necessary approvals, easements, assessments and charges required for construction, use or occupancy of permanent structures or for permanent changes in existing facilities.
- 2.1.3 Information or services under the Owner's control shall be furnished by the Owner with reasonable promptness to avoid delay in orderly progress of the Work.
- 2.1.4 Unless otherwise provided in the Contract Documents, the Contractor will be furnished, free of charge, such copies of Drawings and Project Manuals as are reasonably necessary for execution of the Work.
- 2.2 OWNER'S RIGHT TO CARRY OUT THE WORK. If the Contractor defaults or neglects to carry out the Work in accordance with the Contract Documents and fails within a seven-day period after receipt of written notice from the Owner to commence and continue correction of such default or neglect with diligence and promptness, the Owner may after such seven-day period, without prejudice to other remedies the Owner may have, correct such deficiencies. In such case, an appropriate Change Order shall be issued deducting from payments then or thereafter due the Contractor the cost of correcting such deficiencies, including compensation for the Designer's additional services and expenses made necessary by such default, neglect or failure. If payments then or thereafter due the Contractor are not sufficient to cover such amounts, the Contractor shall pay the difference to the Owner.

#### **ARTICLE 3 CONTRACTOR**

- 3.1. REVIEW OF CONTRACT DOCUMENTS AND FIELD CONDITIONS BY CONTRACTOR
- 3.1.1 The Contractor shall carefully study and compare the Contract Documents with each other and with information furnished by the Owner pursuant to Section 2.1, and shall at once report to the Designer and to the Owner errors, inconsistencies or omissions discovered. If the Contractor performs any construction activity knowing, or where Contractor should have known, it involves an error, inconsistency or omission in the Contract Documents without such notice to the Designer and Owner, the Contractor shall assume full responsibility for such performance and shall bear the full costs for correction.
- 3.1.2 The Contractor shall take field measurements and verify field conditions and shall carefully compare such field measurements and conditions and other information known to the Contractor with the Contract Documents before commencing activities. Errors, inconsistencies or omissions discovered shall be reported to the Designer and Owner immediately.

3.1.3 The Contractor shall perform the Work in accordance with the Contract Documents and submittals approved pursuant to Section 3.11.

#### 3.2 SUPERVISION AND CONSTRUCTION PROCEDURES

- 3.2.1 The Contractor shall supervise and direct the Work using the Contractor's best skill and attention. The Contractor shall be solely responsible for and have control over construction means, methods, techniques, sequences and procedures and for coordinating all portions of the Work under the Contract, unless Contract Documents give other specific instructions concerning these matters.
- 3.2.2 The Contractor shall be responsible to the Owner for acts and omissions of the Contractor's employees, Subcontractors and their agents and employees, and other persons performing portions of the Work under a contract with the Contractor.
- 3.2.3 The Contractor shall not be relieved of obligations to perform the Work in accordance with the Contract Documents either by activities or duties of the Designer in the Designer's administration of the Contract, or by tests, inspections or approvals required or performed by persons other than the Contractor.
- 3.2.4 The Contractor shall be responsible for inspection of portions of Work already performed under this Contract to determine that such portions are in proper condition to receive subsequent Work.

#### 3.3 LABOR AND MATERIALS

- 3.3.1 Unless otherwise provided in the Contract Documents, the Contractor shall provide and pay for labor, materials, equipment, tools, construction equipment and machinery, water, heat, utilities, transportation, and other facilities and services necessary for proper execution and completion of the Work, whether temporary or permanent and whether or not incorporated or to be incorporated in the Work.
- 3.3.2 The Contractor shall enforce strict discipline, good order and compliance with all applicable laws, ordinances and County policies among the Contractor's employees and other persons carrying out the Work under the Agreement. The Contractor shall not permit employment of unfit persons or persons not skilled in tasks assigned to them.
- 3.3.3 Materials, equipment or items required for a complete job which are shown on the drawings but not mentioned in the specifications or materials, equipment or items required by the specifications but not shown on the drawings, shall be furnished and installed the same as though both shown on the drawings and required by the specifications.

#### 3.4 WARRANTY

- 3.4.1 The Contractor warrants to the Owner and Designer that materials and equipment furnished under the Contract will be fit for their intended purpose, of good quality and new unless otherwise required or permitted by the Contract Documents; that the Work will be free from defects not inherent in the quality required or permitted; and that the Work will conform with the requirements of the Contract Documents. Work not conforming to these requirements, including substitutions not properly approved and authorized, may be considered defective. If required by the Owner or Designer, the Contractor shall furnish satisfactory evidence as to the kind and quality of materials and equipment.
- 3.4.2 Except as otherwise specifically stated below, the Contractor shall guarantee his materials and workmanship against defect due to faulty materials or faulty workmanship or negligence for a period of twelve (12) months following Substantial Completion of the Work, unless otherwise provided for by the Parties in the certificate of completion. Where the manufacturer's warranty on equipment or parts thereof

exceeds twelve (12) months, the guarantee period on such equipment or parts thereof shall be extended to include the full warranty of the manufacturer. The Contractor shall repair or replace such defective materials, equipment or workmanship to the full satisfaction of the Owner within the stipulated guarantee period without cost to the Owner.

3.5 TAXES The Contractor shall pay sales, consumer, use and similar taxes for the Work or portions thereof provided by the Contractor which are legally enacted when bids are received or negotiations concluded, whether or not yet effective or merely scheduled to go into effect.

#### 3.6 PERMITS, FEES AND NOTICES

- 3.6.1 Unless otherwise provided in the Contract Documents, the Contractor shall secure and pay for the building permit and other permits and governmental fees, licenses and inspections necessary for proper execution and completion of the Work which are customarily secured after execution of the Agreement and which are legally required when bids are received or negotiations concluded.
- 3.6.2 The Contractor shall comply with and give notices required by laws, ordinances, rules, regulations, and lawful orders of public authorities bearing on performance of the Work.
- 3.6.3 It is not the Contractor's responsibility to ascertain that the Contract Documents are in accordance with applicable laws, statutes, ordinances, building codes, and rules and regulations. However, if the Contractor observes that portions of the Contract Documents are at variance therewith, the Contractor shall promptly notify the Designer and Owner in writing, and necessary changes shall be accomplished by appropriate Modification.
- 3.6.4 If the Contractor performs Work the Contractor knows or should have known to be contrary to laws, statutes, ordinances, building codes, and rules and regulations without such notice to the Designer and Owner, the Contractor shall assume full responsibility for such Work and shall bear the attributable costs.

#### 3.7 ALLOWANCES

- 3.7.1 The Contractor shall include in the Contract Sum all allowances stated in the Contract Documents. Items covered by allowances shall be supplied for such amounts and by such persons or entities as the Owner may direct, but the Contractor shall not be required to employ persons or entities against which the Contractor makes reasonable objection.
- 3.7.2 Unless otherwise provided in the Contract Documents: (1) materials and equipment under an allowance shall be selected promptly by the Owner to avoid delay in the Work; (2) allowances shall cover the cost to the Contractor of materials and equipment delivered to the site and all required taxes, less applicable trade discounts; (3) Contractor's costs for unloading and handling at the site, labor, installation costs, overhead, profit and other expenses contemplated for stated allowance amounts shall be included in the Contract Sum and not in the allowances; (4) whenever costs are more than or less than allowances, the Contract Sum shall be adjusted accordingly by a Change Order. The amount of the Change Order shall reflect (a) the difference between actual costs and the allowances under Clause 3.7.2.(2) and (b) changes in Contractor's costs under Clause 3.7.2.(3).
- 3.8 SUPERINTENDENT. The Contractor shall employ a competent superintendent and necessary assistants who shall be in attendance at the Project site during performance of the Work. The superintendent shall represent the Contractor, and communications given to the superintendent shall be as binding as if given to the Contractor. Important communications shall be confirmed in writing upon request.

- 3.9.1 Promptly after being awarded the Contract, the Contractor shall prepare and submit for the Designer's review and comment a construction schedule for the Work. The schedule shall not exceed time limits provided in the Contract Documents, shall be revised at appropriate intervals as required by the conditions of the Work and Project, shall be related to the entire Project to the extent required by the Contract Documents, and shall provide for expeditious and practicable execution of the Work. If separate prime contracts are awarded by the Owner in connection with this Project, the Contractor shall additionally submit a Contractor's construction schedule for the Work to the General Contractor in order for the General Contractor to carry out its duties under Article 6.
- 3.9.2 The Contractor shall prepare and keep current, for the Designer's approval, a schedule of submittals which is coordinated with the Contractor's construction schedule and allows the Designer reasonable time to review submittals.
- 3.9.3 The Contractor shall conform to the most recent schedules.
- 3.10 DOCUMENTS AND SAMPLES AT THE SITE. The Contractor shall maintain at the site for the Owner one record copy of the Drawings, Specifications, addenda, Change Orders and other Modifications, in good order and marked currently to record changes and selections made during construction, and in addition approved Shop Drawings, Product Data, Samples and similar required submittals. These shall be available to the Designer and shall be delivered to the Designer for submittal to the Owner upon completion of the Work.
- 3.11 SHOP DRAWINGS, PRODUCT DATA AND SAMPLES
- 3.11.1 Shop Drawings are drawings, diagrams, schedules and other data specially prepared for the Work by the Contractor or a Subcontractor, Sub-subcontractor, manufacturer, supplier or distributor to illustrate some portion of the Work.
- 3.11.2 Product Data are illustrations, standard schedules, performance charts, instructions, brochures, diagrams and other information furnished by the Contractor to illustrate materials or equipment for some portion of the Work.
- 3.11.3 Samples are physical examples, which illustrate materials, equipment or workmanship and establish standards by which the Work will be judged.
- 3.11.4 Shop Drawings, Product Data, Samples and similar submittals are not Contract Documents. The purpose of their submittal is to demonstrate for those portions of the Work for which submittals are required the way the Contractor proposes to conform to the information given and the design concept expressed in the Contract Documents. Review by the Designer is subject to the limitations of Paragraph 4.1.6.
- 3.11.5 The Contractor shall review, approve and submit to the Designer Shop Drawings, Product Data, Samples and similar submittals required by the Contract Documents with reasonable promptness and in such sequence as to cause no delay in the Work or in the activities of the Owner or of separate contractors. Submittals made by the Contractor which are not required by the Contract Documents may be returned without action.
- 3.11.6 The Contractor shall perform no portion of the Work requiring submittal and review of Shop Drawings, Product Data, Samples or similar submittals until the respective submittal has been reviewed and approved or other appropriate action taken by the Designer. Such Work shall be in accordance with approved submittals.

- 3.11.7 By approving and submitting Shop Drawings, Product Data, Samples and similar submittals, the Contractor represents that the Contractor has determined and verified materials, field measurements and field construction criteria related thereto, or will do so, and has checked and coordinated the information contained within such submittals with the requirements of the Work and of the Contract Documents.
- 3.11.8 The Contractor shall not be relieved of responsibility for deviations from requirements of the Contract Documents by the Designer's review and approval of Shop Drawings, Product Data, Samples or similar submittals unless the Contractor has specifically informed the Owner and Designer in writing of such deviation at the time of submittal and the Designer, after consultation with the Owner, has given written approval to the specific deviation. The Contractor shall not be relieved of responsibility for errors or omissions in Shop Drawings, Product Data, Samples or similar submittals by the Designer's approval thereof.
- 3.11.9 The Contractor shall direct specific attention, in writing or on resubmitted Shop Drawings, product Data, Samples or similar submittals, to revisions other than those requested by the Designer on previous submittals.
- 3.11.10 Informational submittals upon which the Designer is not expected to take responsive action may be so identified in the Contract Documents.
- 3.11.11 When professional certification of performance criteria of materials, systems or equipment is required by the Contract Documents, the Designer shall be entitled to rely upon the accuracy and completeness of such calculations and certifications.
- 3.12 USE OF SITE. The Contractor shall confine operations at the site to areas permitted by law, ordinances, permits, and the Contract Documents and shall not unreasonably encumber the site with materials or equipment.

#### 3.13 CUTTING AND PATCHING

- 3.13.1 The Contractor shall be responsible for cutting, fitting or patching required to complete the Work or to make its parts fit together properly.
- 3.13.2 The Contractor shall not damage or endanger a portion of the work or fully or partially completed construction of the Owner or separate contractors by cutting, patching, or otherwise altering such construction, or by excavation. The Contractor shall not cut or otherwise alter such construction by the Owner or a separate contractor except with written consent of the Owner and of such separate contractor; such consent shall not be unreasonably withheld. The Contractor shall not unreasonably withhold from the Owner or a separate contractor the Contractor's consent to cutting or otherwise altering the Work.

#### 3.14 CLEANING UP

- 3.14.1 The Contractor shall keep the premises and surrounding area free from accumulation of waste materials or rubbish caused by operations under the Contract. At completion of the Work the Contractor shall remove from and about the Project waste materials, rubbish, the Contractor's tools, construction equipment, machinery, and surplus materials.
- 3.14.2 If the Contractor fails to clean up as provided in the Contract Documents, the Owner may do so and the cost thereof shall be charged to the Contractor, or deducted from the next payment to the Contractor.
- 3.15 ACCESS TO WORK. The Contractor shall provide the Owner and Designer access to the Work in preparation and progress wherever located.

3.16 ROYALTIES AND PATENTS. The Contractor shall pay all royalties and license fees. The Contractor shall defend suits or claims for infringement of patent rights and shall hold the Owner and Designer harmless from loss unless a particular design, process or product of a particular manufacturer or manufacturers is required by the Contract Documents. However, if the Contractor has, or should have, reason to believe that the required design, process or product is an infringement of a patent, the Contractor shall be responsible for such loss unless such information is promptly furnished to the Designer.

#### 3.17 INDEMNIFICATION

- 3.17.1 To the fullest extent permitted by law, the Contractor shall indemnify and hold harmless the Owner, Designer, Designer's consultants, and agents, commissioners and employees of any of them from and against claims, damages, economic losses and expenses of any kind (including but not limited to fees and charges of engineers, attorneys, and other professionals and costs related to court action or mediation), arising out of or resulting from performance of the Work under this Agreement, provided such claim, damage, loss or expense is attributable to bodily injury, sickness, disease or death, or to injury to or destruction of tangible property (other than the Work itself) including loss of use resulting therefrom, caused in whole or in part by negligent acts or omissions of the Contractor, a Subcontractor, anyone directly or indirectly employed by them or anyone for whose acts they may be liable unless caused in whole or part by the negligence of Owner. Such obligation shall not be construed to negate, abridge, or reduce other rights or obligations of indemnity which would otherwise exist as to a party or person described in this Section 3.17.
- 3.17.2 In claims against any person or entity indemnified under this Section 3.17, by an employee of the Contractor, a Subcontractor, anyone directly or indirectly employed by them or anyone for whose acts they may be liable, the indemnification obligation under this Section 3.17, shall not be limited by a limitation on amount or type of damages, compensation or benefits payable by or for the Contractor or a Subcontractor under workers' compensation acts, disability benefit acts or other employee benefit acts.
- 3.17.3 The obligations of the Contractor under this Section 3.17, shall not extend to the liability of the Designer, the Designer's consultants, and agents and employees of any of them arising out of (a) the preparation or approval of maps, drawings, opinions, reports, surveys, Change Orders, designs or specifications, or (b) the giving of or the failure to give directions or instructions by the Designer, the Designer's consultants, and agents and employees of any of them provided such giving or failure to give is the primary cause of the injury or damage.

#### **ARTICLE 4 ADMINISTRATION OF THE CONTRACT**

#### 4.1 ADMINISTRATION OF THE CONTRACT

- 4.1.1 The Designer, in consultation with the Owner's Construction Manager ("Construction Manager"), will provide administration of the Contract as described in the Contract Documents, and will be the Owner's representative during construction through final payment, and with the Owner's concurrence, from time to time during the correction period described in Paragraph 11.2. The Designer will advise and consult with the Owner. The Designer will have authority to act on behalf of the Owner only to the extent provided in the Contract Documents, unless otherwise modified by written instrument in accordance with other provisions of the Contract.
- 4.1.2 The Designer will not have control over or charge of and will not be responsible for construction means, methods, techniques, sequences or procedures, or for safety precautions and programs in connection with the Work, since these are solely the Contractor's responsibility as provided in Paragraph 3.2. The Designer will not be responsible for the Contractor's failure to carry out the Work in accordance with the Contract Documents. The Designer will not have control over or charge of and will not be

responsible for acts or omissions of the Contractor, Subcontractors, or their agents or employees, or of any other persons performing portions of the Work.

- 4.1.3 Communications Facilitating Contract Administration. Except as otherwise provided in the Contract Documents or when direct communications have been specially authorized, the Owner and Contractor shall endeavor to communicate through the Designer. Communications by and with the Designer's consultants shall be through the Designer. Communications by and with Subcontractors and material suppliers shall be through the Contractor. Communications by and with separate contractors shall be through the Designer.
- 4.1.4 Based on the Designer's inspections, observations and evaluations of the Contractor's Applications for Payment, the Designer will review and certify the amounts due the Contractor and will issue Certificates for Payment in such amounts.
- 4.1.5 The Designer will have authority to reject Work which does not conform to the Contract Documents. Whenever the Designer considers it necessary or advisable for implementation of the intent of the Contract Documents, the Designer will have authority to require additional inspection or testing of the Work in accordance with Paragraphs 12.7.2 and 12.7.3, whether or not such Work is fabricated, installed or completed. However, neither this authority of the Designer nor a decision made in good faith either to exercise or not to exercise such authority shall give rise to a duty or responsibility of the Designer to the Contractor, Subcontractors, material and equipment suppliers, their agents or employees, or other persons performing portions of the Work.
- 4.1.6 The Designer will review and approve or take other appropriate action upon the Contractor's submittals such as Shop Drawings, Product Data and Samples but only for the limited purpose of checking for conformance with information given and the design concept expressed in the Contract Documents. The Designer's action will be taken with such reasonable promptness as to cause no delay in the Work or in the activities of the Owner, Contractor or separate contractors, while allowing sufficient time in the Designer's professional judgment to permit adequate review. Review of such submittals is not conducted for the purpose of determining the accuracy and completeness of other details such as dimensions and quantities, or for substantiating instructions for installation or performance of equipment or systems, all of which remain the responsibility of the Contractor as required by the Contract Documents. The Designer's review of the Contractor's submittals shall not relieve the Contractor of the obligations under Article 3. The Designer's review shall not constitute approval of safety precautions or, unless otherwise specifically stated by the Designer, of any construction means, methods, techniques, sequences or procedures. The Designer's approval of a specific item shall not indicate approval of an assembly of which the item is a component.
- 4.1.7 The Designer, in consultation with the Construction Manager, will prepare Change Orders and Construction Change Directives, and may authorize minor changes in the Work as provided in Paragraph 7.4.
- 4.1.8 The Designer will conduct inspections to determine the date or dates of Substantial Completion and the date of final completion, will receive and forward to the Owner for the Owner's review and records, written warranties and related documents required by the Contract and assembled by the Contractor, and will issue a final Certificate for Payment upon compliance with the requirements of the Contract Documents.
- 4.1.9 The Designer will interpret and decide matters concerning performance under and requirements of the Contract documents on written request of either the Owner or Contractor. The Designer's response to such requests will be made with reasonable promptness and within any time limits agreed upon. If no agreement is made concerning the time within which interpretations required of the Designer shall be furnished in compliance with this Paragraph 4.1.9, then delay shall not be recognized on account of failure by the Designer to furnish such interpretations until 15 days after written request is made for them.

- 4.1.10 Interpretations and decisions of the Designer will be consistent with the intent of and reasonably inferable from the Contract Documents and will be in writing or in the form of drawings. When making such interpretations and decisions, the Designer will endeavor to secure faithful performance by both Owner and Contractor, and will not show partiality to either.
- 4.1.11 The Designer's decisions on matters relating to aesthetic effect will be final if consistent with the intent expressed in the Contract Documents.
- 4.1.12 If the Contractor fails to correct Work which is not in accordance with the requirements of the Contract Documents as required by Article 11.2 or persistently fails to carry out Work in accordance with the Contract Documents, the Designer may order the Contractor to stop the Work, or any portion thereof, until the cause for such order has been eliminated; however, the right of the Designer to stop the Work shall not give rise to a duty on the part of the Designer to exercise this right for the benefit of the Contractor or any other person or entity.

#### **4.2 CLAIMS AND DISPUTES**

- 4.2.1 A Claim is a demand or assertion by one of the Parties seeking, as a matter of right, adjustment or interpretation of Contract terms, payment of money, extension of time or other relief with respect to the terms of the Contract. The term "Claim" also includes other disputes and matters in question between the Owner and Contractor arising out of or relating to the Agreement. Claims must be made pursuant to the Dispute Resolution Procedure set forth in Paragraph 4.4. The responsibility to substantiate Claims shall rest with the party making the Claim.
- 4.2.2 DECISION OF DESIGNER. Claims, including those alleging an error or omission by the Designer, shall be referred initially to the Designer for action as provided in Paragraph 4.4. A decision by the Designer shall be required as a condition precedent to mediation and litigation of a Claim between any Party involved in this construction Project as to all such matters arising prior to the date final payment is due, regardless of whether such matters relate to execution and progress of the Work or the extent to which the Work has been completed. The decision by the Designer in response to a Claim shall not be a condition precedent to litigation in the event (1) the position of Designer is vacant, (2) the Designer has not received evidence or has failed to render a decision within agreed time limits, or (3) 45 days have passed after the Claim has been referred to the Designer.
- 4.2.3 TIME LIMITS ON CLAIMS. Claims by the Contractor must be made within 10 days after occurrence of the event giving rise to such Claim or within 10 days after the Contractor first recognizes the condition giving rise to the Claim, whichever is later. Claims must be made by written notice. An additional Claim made after the initial Claim has been implemented by Change Order will not be considered.
- 4.2.4 CONTINUING CONTRACT PERFORMANCE. Pending final resolution of a Claim, unless otherwise agreed in writing, the Contractor shall proceed diligently with performance of the Contract and the Owner shall continue to make payments in accordance with the Contract Documents.
- 4.2.5 WAIVER OF CLAIMS: FINAL PAYMENT. The making of final payment shall constitute a waiver of Claims by the Owner except those arising from: (1) unsettled claims arising out of the Agreement; or (2) failure of the Work to comply with the requirements of the Contract Documents; or (3) terms of special warranties required by the Contract Documents.
- 4.2.6 CLAIMS FOR CONCEALED OR UNKNOWN CONDITIONS. If conditions are encountered at the site which are (a) subsurface or otherwise concealed physical conditions which differ materially from those indicated in the Contract Documents or (b) unknown physical conditions of an unusual nature, which differ materially from those ordinarily found to exist and generally recognized as inherent in construction activities of the

character provided for in the Contract Documents, then notice by the observing party shall be given to the other party promptly before conditions are disturbed and in no event later than ten (10) days after first observance of the conditions. The Designer will promptly investigate such conditions and, if they differ materially and cause an increase or decrease in the Contractor's cost of, or time required for, performance of any part of the Work, will recommend an equitable adjustment in the Contract Sum or Contract Time, or both. If the Designer determines that the conditions at the site are not materially different from those indicated in the Contract Documents and that no change in the terms of the Contract is justified, the Designer shall so notify the Owner and Contractor in writing stating the reasons, Claims by either party in opposition to such determination must be made within twenty-one (21) days after the Designer has given notice of the decision. If the Owner and Contractor cannot agree on an adjustment in the Contract Sum or Contract Time, the adjustment shall be referred to the Designer for initial determination, subject to further proceedings pursuant to Paragraph 4.4.

- 4.2.7 CLAIMS FOR ADDITIONAL COST. If the Contractor wishes to make Claim for an increase in the Contract Sum, written notice as provided herein shall be given before proceeding to execute the Work. Prior notice is not required for Claims relating to an emergency endangering life or property arising under Paragraph 10.3. If the Contractor believes additional cost is involved for reasons including but not limited to (a) a written interpretation from the Designer, (b) a written order for a minor change in the Work issued by the Designer, (c) termination of the Contract by the Owner, Claim shall be filed in accordance with the procedure established herein. This Article and Article 7, shall be the exclusive means by which the Contractor may claim additional cost or damages from the Owner, and the Contractor hereby waives any and all right to claim additional cost or damages by any other remedy including, without limitation, *quantum meruit*, subrogation, or implied contract.
- 4.2.8 CLAIMS FOR ADDITIONAL TIME. If the Contractor wishes to make Claim for an increase in the Time of Completion, written notice as provided herein shall be given. The Contractor's Claim shall include an estimate of cost and of probable effect of delay on progress of the Work. In the case of a continuing delay only one Claim is necessary. Adverse weather conditions shall not be a basis for a Claim for additional time nor costs.
- 4.3 INJURY OR DAMAGE TO PERSON OR PROPERTY. If either party to the Contract suffers injury or damage to person or property because of an act or omission of the other party, of any of the other party's employees or agents, or of others for whose acts such party is legally liable, written notice as such injury or damage, whether or not insured, shall be given to the other party within a reasonable time not exceeding ten (10) days after first observance. The notice shall provide sufficient detail to enable the other party to investigate the matter. If a Claim for additional cost or time related to this Claim is to be asserted, it shall be filed as provided in Subparagraphs 4.2.7 or 4.2.8.

#### 4.4 DISPUTE RESOLUTION PROCEDURE

- 4.4.1 To prevent disputes and litigation, it is agreed by the Parties that any claim, question, difficulty or dispute arising from this Agreement or the construction process shall be first submitted to the Designer to address the issue. Upon review of the Claim, the Designer shall take one or more of the following preliminary actions within ten (10) days of receipt of a Claim: (1) request additional supporting data from the claimant, (2) submit a schedule to the parties indicating when the Designer expects to take action, (3) reject the Claim in whole or in part stating reasons for rejection, (4) recommend approval of the Claim by the other Party, or (5) suggest a compromise. The Designer may also, but is not obligated to, notify the surety, if any, of the nature and amount of the Claim.
- 4.4.2 If a Claim has been resolved, the Designer will prepare or obtain appropriate documentation.

- 4.4.3 The laws of the State of North Carolina shall apply to the interpretation and enforcement of this Agreement. Prior to initiating a legal action, any Party to this Agreement shall initiate the mediation process as provided in **Appendix A** to these General Conditions. Mediation, pursuant to this Section, shall be a precondition to initiating litigation concerning the dispute. During the pendency of any dispute and after a determination thereof, the Parties to the dispute shall act in good faith to mitigate any potential damages including utilization of construction schedule changes and alternate means of construction. All mediation sessions shall be held in Catawba County, North Carolina.
- 4.4.4 If the disputed issue cannot be resolved in mediation, the parties may seek resolution in the exclusive venue of the General Court of Justice in the County of Catawba and the State of North Carolina.
- 4.4.5 The dispute resolution procedure set forth in this Section shall be made available to any party involved in this construction Project including County, Contractor, Designer, Subcontractors as well as Subsubcontractors and is a precondition to initiation of litigation concerning the dispute.

#### **ARTICLE 5 SUBCONTRACTORS**

#### 5.1 DEFINITIONS

- 5.1.1 A Subcontractor is a person or entity who has a direct contract with the Contractor to perform a portion of the Work at the site. The term "Subcontractor" is referred to throughout the Contract Documents as if singular in number and means a Subcontractor or an authorized representative of the Subcontractor. The term "Subcontractor" does not include a separate contractor or subcontractors of a separate contractor.
- 5.1.2 A Sub-subcontractor is a person or entity who has a direct or indirect contract with a Subcontractor to perform a portion of the Work at the site. The term "Sub-subcontractor" is referred to throughout the Contract Documents as if singular in number and means a Sub-subcontractor or an authorized representative of the Sub-subcontractor.

#### 5.2 AWARD OF SUBCONTRACTS AND OTHER CONTRACTS FOR PORTIONS OF THE WORK

- 5.2.1 Unless otherwise stated in the Contract Documents or the bidding requirements, the Contractor, as soon as practicable after award of the Contract, shall furnish in writing to the Owner through the Designer the names of persons or entities (including those who are to furnish materials or equipment fabricated to a special design) proposed for each principal portion of the Work, including (1) Heating, ventilating, and air conditioning, (2) Plumbing, (3) Electrical, and (4) General. The Designer will promptly reply to the Contractor in writing stating whether or not the Owner or the Designer, after due investigation, has reasonable objection to any such proposed person or entity. Failure of the Owner or Designer to reply promptly shall constitute notice of no reasonable objection.
- 5.2.2 The Contractor shall NOT substitute any person or company listed in the Contractor's original Bid Proposal, except (1) if the listed subcontractor's bid is later determined by the Contractor to be non-responsible or non-responsive or the listed subcontractor refuses to enter into a contract for the complete performance of the work, or (2) with the approval of the Owner for good cause shown by the Contractor.
- 5.3 SUBCONTRACTUAL RELATIONS. By appropriate agreement, written where legally required for validity, the Contractor shall require each Subcontractor, to the extent of the Work to be performed by the Subcontractor, to be bound to the Contractor by terms and conditions of the Contract Documents and this Agreement, and to assume toward the Contractor all the obligations and responsibilities which the Contractor, by these documents, assumes toward the Owner and Designer. Each subcontract agreement shall incorporate by reference the applicable terms of this Agreement, and shall preserve and protect the

rights of the Owner and Designer under the Contract Documents with respect to the Work to be performed by the Subcontractor so that subcontracting thereof will not prejudice such rights, and shall allow to the Subcontractor, unless specifically provided otherwise in the subcontract agreement, the benefit of all rights, remedies and redress against the Contractor that the Contractor, by the Contract Documents, has against the Owner. Where appropriate, the Contractor shall require each Subcontractor to enter into similar agreements with Sub-subcontractors. The Contractor shall make available to each proposed Subcontractor, prior to the execution of the subcontract agreement, copies of the Contract Documents to which the Subcontractor will be bound, and, upon written request of the Subcontractor, identify to the Subcontractor terms and conditions of the proposed subcontract agreement which may be at variance with the Contract Documents. Subcontractors shall similarly make copies of applicable portions of such documents available to their respective proposed Sub-subcontractors.

#### ARTICLE 6 CONSTRUCTION BY OWNER OR BY SEPARATE CONTRACTORS

#### 6.1 OWNER'S RIGHT TO PERFORM CONSTRUCTION AND TO AWARD SEPARATE CONTRACTS

- 6.1.1 The Owner reserves the right to perform construction or operations related to the Project with the Owner's own forces, and to award separate contracts in connection with other portions of the Project or other construction or operations on the site.
- 6.1.2 When separate contracts are awarded for different portions of the Project or other construction or operations on the site, the term "Contractor" in the Contract Documents in each case shall mean the Contractor who executes each separate Owner-Contractor Agreement.
- 6.1.3 The General Contractor shall provide for coordination of the activities of each separate Contractor with the Work of the Contractor, who shall cooperate with them. The Contractor shall participate with other separate Contractors and the General Contractor in reviewing their construction schedules. The Contractor shall make any revisions to the construction schedule deemed necessary after a joint review and mutual agreement. The construction schedules shall then constitute the schedules to be used by the Contractor and separate contractors until subsequently revised.
- 6.1.4 Unless otherwise provided in the Contract Documents, when the Owner performs construction or operations related to the Project with the Owner's own forces, the Owner shall be deemed to be subject to the same obligations and to have the same rights which apply to the Contractor under the Conditions of the Contract, including, without excluding others, those stated in Article 3, this Article 6, and Articles 10 and 11.
- 6.1.5 The General Contractor shall be responsible for scheduling the work of all contractors; the maintenance of the progress schedule for all prime contractors for this Project; and for the notification of the Designer of any changes in the progress schedule.

#### **6.2 MUTUAL RESPONSIBILITY**

- 6.2.1 The Contractor shall afford the Owner and separate Contractors reasonable opportunity for introduction and storage of their materials and equipment and performance of their activities and shall connect and coordinate the Contractor's construction and operations with theirs as required by the Contract Documents.
- 6.2.2 If part of the Contractor's Work depends for proper execution or results upon construction or operations by the Owner or a separate Contractor, the Contractor shall, prior to proceeding with that portion of the Work, promptly report to the Construction Manager and Designer apparent discrepancies or defects in such other construction that would render it unsuitable for such proper execution and results. Failure of the Contractor to so report shall constitute an acknowledgment that the Owner's or separate

Contractors' completed or partially completed construction is fit and proper to receive the Contractor's Work, except as to defects not then reasonably discoverable.

- 6.2.3 Costs caused by delays, by improperly timed activities, defective construction, or any other damages shall be borne by the Party responsible therefor. The Owner shall not be liable nor responsible for any delays or damages to the Contractor caused by separate Contractors or the Designer.
- 6.2.4 The Contractor shall promptly remedy damage wrongfully caused by the Contractor to completed or partially completed construction or to property of the Owner or separate Contractors as provided in Paragraph 10.2.5.
- 6.2.5 Claims and other disputes and matters in question between the Contractor and a separate Contractor shall be subject to the provisions of Sections 4.2 and 4.4, provided the separate Contractor has reciprocal obligations.
- 6.2.6 The Owner and each separate Contractor shall have the same responsibilities for cutting and patching as are described for the Contractor in Paragraph 3.13.
- 6.3 OWNER'S RIGHT TO CLEAN UP. If a dispute arises among the Contractor, separate Contractors and the Owner as to the responsibility under their respective contracts for maintaining the premises and surrounding area free from waste materials and rubbish as described in Paragraph 3.14, the Owner may clean up and allocate the cost among those responsible as the Designer determines to be just.

#### ARTICLE 7 CHANGES IN THE WORK

#### 7.1 CHANGES

- 7.1.1 Changes in the Work may be accomplished after execution of the Contract, and without invalidating the Contract, by Change Order, Construction Change Directive, or order for a minor change in the Work, subject to the limitations stated in this Article 7 and elsewhere in the Contract Documents.
- 7.1.2 A Change Order shall be based upon agreement among the Owner, Contractor, and Designer; a Construction Change Directive requires agreement by the Owner and Designer and may or may not be agreed to by the Contractor; an order for a minor change in the Work may be issued by the Designer alone pursuant to Paragraph 7.4.
- 7.1.3 Changes in the work shall be performed under applicable provisions of the Contract Documents, and the Contractor shall proceed promptly, unless otherwise provided in the Change Order, Construction Change Directive, or order for a minor change in the Work.
- 7.1.4 If unit prices are stated in the Contract Documents or subsequently agreed upon, and if quantities originally contemplated are so changed in a proposed Change Order or Construction Change Directive that application of such unit prices to quantities of Work proposed will cause substantial inequity to the Owner or Contractor, the applicable unit prices shall be equitably adjusted.
- 7.1.5 Overhead and profit shall not exceed 10% of the value of labor and material for work performed by any contractor or subcontractor.

#### 7.2 CHANGE ORDERS

7.2.1 A Change Order is a written instrument prepared by the Designer and signed by the Owner, Contractor, and Designer, stating their agreement upon all of the following: (1) a change in the Work; (2) the amount of

the adjustment in the Contract Sum, if any; and (3) the extent of the adjustment in the Time of Completion, if any.

7.2.2 Methods used in determining adjustments to the Contract Sum may include those listed in Paragraph 7.3.3.

#### 7.3 CONSTRUCTION CHANGE DIRECTIVES

- 7.3.1 A Construction Change Directive is a written order prepared by the Designer and signed by the Owner and Designer, directing a change in the Work and stating a proposed basis for adjustment, if any, in the Contract Sum or Time of Completion, or both. The Owner may by Construction Change Directive, without invalidating the Contract, order changes in the Work within the general scope of the Contract consisting of additions, deletions or other revisions, the Contract Sum and Time of Completion being adjusted accordingly.
- 7.3.2 A Construction Change Directive shall be used in the absence of total agreement on the terms of a Change Order.
- 7.3.3 If the Construction Change Directive provides for an adjustment to the Contract Sum, the adjustment shall be based on one of the following methods: (1) mutual acceptance of a lump sum properly itemized and supported by sufficient substantiating data to permit evaluation; (2) unit prices stated in the Contract Documents or subsequently agreed upon; (3) cost to be determined in a manner agreed upon by the parties and a mutually acceptable fixed or percentage fee; or (4) as provided in Paragraph 7.3.6.
- 7.3.4 Upon receipt of a Construction Change Directive, the Contractor shall promptly proceed with the change in the Work involved and advise the Designer of the Contractor's agreement or disagreement with the method, if any, provided in the Construction Change Directive for determining the proposed adjustment in the Contract Sum or Time of Completion.
- 7.3.5 A Construction Change Directive signed by the Contractor indicates the agreement of the Contractor therewith, including adjustment in Contract Sum and Time of Completion or the method for determining them. Such agreement shall be effective immediately and shall be recorded as a Change Order.
- 7.3.6 If the Contractor does not respond promptly or disagrees with the method for adjustment in the Contract Sum, the method and the adjustment shall be determined by the Designer on the basis of reasonable expenditures and savings of those performing the Work attributable to the change, including, in case of an increase in the Contract Sum, a reasonable allowance for overhead and profit. In such case, and also under clause 7.3.3(3), the Contractor shall keep and present, in such form as the Designer may prescribe, an itemized accounting together with appropriate supporting data. Unless otherwise provided in the Contract Documents, costs for the purposes of this Paragraph 7.3.6 shall be limited to the following: costs of labor, including social security, old age and unemployment insurance, fringe benefits required by agreement or custom, and workers' compensation insurance; costs of materials, supplies and equipment, including cost of transportation, whether incorporated or consumed; rental costs of machinery and equipment, exclusive of hand tools, whether rented from the Contractor or others; costs of premiums for all bonds and insurance, permit fees, and sales, use or similar taxes related to the Work; and additional costs of supervision and field office personnel directly attributable to the change.
- 7.3.7 Pending final determination of cost to the Owner, amounts not in dispute may be included in Applications for Payment. The amount of credit to be allowed by the Contractor to the Owner for a deletion or change which results in a net decrease in the Contract Sum shall be actual net cost as confirmed by the Designer. When both additions and credits covering related Work or substitutions are involved in a change,

the allowance for overhead and profit shall be figured on the basis of net increase, if any, with respect to that change.

- 7.3.8 If the Owner and Contractor do not agree with the adjustment in Time of Completion or the method for determining it, the adjustment or the method shall be referred to the Designer for determination.
- 7.3.9 When the Owner and Contractor agree with the determination made by the Designer concerning the adjustments in the Contract Sum and Time of Completion, or otherwise reach agreement upon the adjustments, such agreement shall be effective immediately and shall be recorded by preparation and execution of an appropriate Change Order.
- 7.4 MINOR CHANGES IN THE WORK. The Designer or Construction Manager will have authority to order minor changes in the Work not involving adjustment in the Contract Sum or extension of the Time of Completion and not inconsistent with the intent of the Contract Documents. Such changes shall be effected by written order and shall be binding on the Owner and Contractor. The Contractor shall carry out such written orders promptly.

#### **ARTICLE 8 TIME**

#### 8.1 DEFINITIONS

- 8.1.1 Unless otherwise provided, Time of Completion is the period of time, including authorized adjustments, allotted in the Contract Documents for Substantial Completion of the Work.
- 8.1.2 The date of commencement of the Work is the date established in the Agreement. The date shall not be postponed by the failure to act of the Contractor or of persons or entities for whom the Contractor is responsible.
- 8.1.3 The date of Substantial Completion is the date certified by the Designer in accordance with Paragraph 9.9.
- 8.1.4 The term "day" as used in the Contract Documents shall mean calendar day unless otherwise specifically defined.

#### 8.2 PROGRESS AND COMPLETION

- 8.2.1 Time limits stated in the Contract Documents are of the essence of the Contract. By executing the Agreement, the Contractor confirms that the Time of Completion is a reasonable period for performing the Work. The Contractor and the Contractor's surety shall be liable for and shall pay the Owner such sums as shall be set forth in the Agreement between Owner and Contractor as liquidated damages each calendar day of delay until the work is substantially complete.
- 8.2.2 The Contractor shall not knowingly, except by agreement or instruction of the Owner in writing, prematurely commence operations on the site or elsewhere prior to the effective date of insurance required by the Agreement to be furnished by the Contractor. The date of commencement of the work shall not be changed by the effective date of such insurance. Unless the date of commencement is established by a notice to proceed given by the Designer, the Contractor shall notify the Owner and Designer in writing not less than five days before commencing the Work.
- 8.2.3 The Contractor shall proceed expeditiously with adequate forces and shall achieve Substantial Completion within the Time of Completion.

#### 8.3 DELAYS AND EXTENSIONS OF TIME

- 8.3.1 If the Contractor is delayed at any time in progress of the Work by an act or neglect of the Owner or Designer, or of an employee of either, or of a separate Contractor employed by the Owner, or by changes ordered in the Work, or by labor disputes, fire, unusual delay in deliveries, unavoidably casualties or other causes beyond the Contractor's control, or by delay authorized by the Owner pending litigation, or by other causes which the Designer determines may justify delay, then the Time of Completion shall be extended by Change Order for such reasonable time as the Designer may determine.
- 8.3.2 Claims relating to time shall be made in accordance with applicable provisions of Paragraph 4.2.8.
- 8.3.3 Should the Work be interrupted or hindered by the Owner or Designer, the Contractor shall be entitled to an extension of time pursuant to Paragraph 4.2 in an amount equal to such interruption or hindrance but such interruption or hindrance shall not constitute a claim for damages nor for loss of anticipated profits by the Contractor.
- 8.3.4 Should the Work be delayed in whole by any act or acts of the Contractor, the Contractor shall not be entitled to an extension of time pursuant to Paragraph 4.2, nor shall such delay constitute a claim either for damages or for loss of anticipated profits by the Contractor. Should the Work be delayed in part by any act or acts of the Contractor and in part by any act or acts of the Owner or Designer, the Contractor shall be entitled to an extension of time pursuant to Paragraph 4.2 in an amount equal to that portion of the delay for which the Contractor is not responsible, but such delay shall not constitute a claim either for damages or for loss of anticipated profits by the Contractor.
- 8.3.5 Should the Work be delayed, interrupted or hindered, in whole or in part, by any act or acts of any separate prime contractors, the Contractor shall be entitled to an extension of time pursuant to Paragraph 4.2.8 in an amount equal to such delay, interruption or hindrance but such delay, interruption or hindrance shall not constitute a claim for damages nor for loss of anticipated profits by the Contractor.

#### **ARTICLE 9 PAYMENTS AND COMPLETION**

- 9.1 CONTRACT SUM. The Contract Sum is stated in the Agreement and, including authorized adjustments, is the total amount payable by the Owner to the Contractor for performance of the Work under the Contract Documents.
- 9.2 SCHEDULE OF VALUES. Before the first Application for Payment, the Contractor shall submit to the Designer a Schedule of Values allocated to various portions of the Work, prepared in such form and supported by such data to substantiate its accuracy as the Designer may require. This Schedule of Values, unless objected to by the Designer, shall be used as a basis for reviewing the Contractor's Applications for Payment.

#### 9.3 APPLICATIONS FOR PAYMENT

- 9.3.1 At least twenty (20) days before the date established for each progress payment, the Contractor shall submit to the Designer an itemized Application for Payment for operations completed in accordance with the schedule of values. Such application shall be notarized, supported by such data substantiating the Contractor's right to payment as the Owner or Designer may require, such as copies of requisitions from subcontractors and material suppliers and reflecting retainage if provided for elsewhere in the Contract Documents.
- 9.3.2 Such applications may include requests for payment on account of changes in the Work which have been properly authorized by Construction Change Directives but not yet included in Change Orders.

- 9.3.3 Such applications may not include requests for payment of amounts the Contractor does not intend to pay to a Subcontractor or material supplier because of a dispute or other reason.
- 9.3.4 Unless otherwise provided in the Contract Documents, payments shall be made on account of materials and equipment delivered and suitably stored at the site for subsequent incorporation in the Work. If approved in advance by the Owner, payment may similarly be made for materials and equipment suitably stored off the site at a location agreed upon in writing. Payment for materials and equipment stored on or off the site shall be conditioned upon compliance by the Contractor with procedures satisfactory to the Owner to establish the Owner's title to such materials and equipment or otherwise protect the Owner's interest, and shall include applicable insurance, storage and transportation to the site for such materials and equipment stored off the site.
- 9.3.5 The Contractor warrants that title to all Work covered by an Application for Payment will pass to the Owner no later than the time of payment. The Contractor further warrants that upon submittal of an Application for Payment all Work for which Certificates for Payment have been previously issued and payments received from the Owner shall, to the best of the Contractor's knowledge, information and belief, and as represented by signed releases or lien waivers, be free and clear of liens, claims, security interests, or encumbrances in favor of the Contractor, Subcontractors, material suppliers, or other persons or entities making a claim by reason of having provided labor, materials, and equipment relating to the Work.
- 9.3.6 Provided an Application for Payment is received by the Designer not later than the tenth (10th) day of a month, the Owner shall make payment to the Contractor not later than the thirtieth (30th) day of the month.

9.4 RETAINAGE. To ensure proper performance of this Contract, Owner shall retain five percent (5%) of the amount of each approved Application for Payment until the Project Work is 50% complete provided that the Contractor continues to perform satisfactorily and any non-conforming Work identified in writing prior to that date has been corrected by the Contractor and accepted by the Owner. Thereafter, if the Owner determines the Contractor's performance is unsatisfactory, the Owner may reinstate retainage in the amount of 5% for each subsequent periodic Application for Payment until the Contractor's performance becomes satisfactory. The Project shall be deemed fifty percent (50%) complete when the Contractor's gross Project invoices, excluding the value of materials stored off-site, equal or exceed fifty percent (50%) of the value of the Contract Sum, except the value of materials stored on-site shall not exceed twenty percent (20%) of the Contractor's gross Project invoices for the purpose of determining whether the Project is fifty percent (50%) complete. Following 50% completion of the Project, the Owner may also withhold additional retainage from any subsequent periodic payment, not to exceed 5%, in order to allow the Owner to retain 2 ½% total retainage through the completion of the Project. Within sixty (60) days after the submission of a final pay application, the Owner with written consent of the Surety shall release to the Contractor all retainage on payments held by the Owner if (1) the Owner receives a certificate of substantial completion from the Designer or design consultant in charge of this Project, or (2) the Owner receives beneficial occupancy or use of the Project. However, the Owner may retain sufficient funds to secure completion of the Project or corrections to any Work. If the Owner retains funds, the amount retained shall not exceed two and one half times the estimated cost of the Work to be completed or corrected. Any reduction in the amount of retainage on payments shall be with the consent of the Contractor's Surety. Retainer provisions contained in Contractor's subcontracts may not exceed the terms and conditions for retainage provided herein. Contractor is further required to satisfy the retainage provisions of N.C.G.S. 143-134.1(b2) with regard to subcontracts for early finishing trades (structural steel, piling, caisson, and demolition) and to coordinate the release of retainage for such trades from the retainage held by Owner from the Contractor pursuant to statute. Nothing herein shall prevent the Owner from withholding payment to the Contractor in addition to the amounts identified herein for unsatisfactory job progress, defective construction not remedied, disputed work, or third party claims filed against the owner or reasonable evidence that a third party claim will be filed.

#### 9.5 CERTIFICATES FOR PAYMENT

- 9.5.1 The Designer will, within seven (7) days after receipt of the Contractor's Application for Payment, either issue to the Owner a Certificate for Payment, with a copy to the Contractor, for such amount as the Designer determines is properly due, or notify the Contractor and Owner in writing of the Designer's reasons for withholding certification in whole or in part as provided in Paragraph 9.6.1.
- 9.5.2 The Designer's certification for payment shall constitute a representation to the Owner, based on the Designer's inspections at the site and on the data comprising the Contractor's Application for Payment, that the Work has progressed to the point indicated and that the inspections of the construction, repairs, or installations have been conducted with the degree of care and professional skill and judgment ordinarily exercised by a member of his profession; and that to the best of his knowledge and in the professional opinion of the Designer, the Contractor has fulfilled the obligations of such plans, specifications, and contract. The Designer's certification for payment shall be signed and sealed by the Designer and presented to the Owner. The foregoing representations are subject to an evaluation of the Work for conformance with the Contract Documents upon Substantial Completion, to results of subsequent tests and inspections, to minor deviations from the Contract Documents correctable prior to completion and to specific qualifications expressed by the Designer. The issuance of a Certificate for Payment shall further constitute a representation by the Designer, that the Contractor is entitled to payment in the amount certified.

#### 9.6 DECISIONS TO WITHHOLD CERTIFICATION

9.6.1 The Designer may decide not to certify payment and may withhold a Certificate for Payment in whole or in part, to the extent reasonably necessary to protect the Owner, if in the Designer's opinion, the representations to the Owner required by Paragraph 9.5.2 cannot be made. If the Designer is unable to certify payment in the amount of the Application, the Designer will notify the Contractor and Owner as provided in Paragraph 9.5.1. If the Contractor and Designer cannot agree on a revised amount, the Designer will promptly issue a Certificate for Payment for the amount for which the Designer is able to make such representations to the Owner. The Designer may also decide not to certify payment or, because of subsequently discovered evidence or subsequent observations, may nullify the whole or a part of a Certificate for Payment previously issued, to such extent as may be necessary in the Designer's opinion to protect the Owner from loss due to: defective Work not remedied; third party claims filed or reasonable evidence indicating probable filing of such claims; failure of the Contractor to make payments properly to Subcontractors or for labor, materials or equipment; reasonable evidence that the Work cannot be completed for the unpaid balance of the Contract Sum; damage to the Owner or another contractor; reasonable evidence that the Work will not be completed within the Time of Completion, and that the unpaid balance would not be adequate to cover actual or liquidated damages for the anticipated delay; or persistent failure to carry out the Work in accordance with the Contract Documents.

9.6.2 When the above reasons for withholding certification are removed, certification will be made for amounts previously withheld.

#### 9.7 PROGRESS PAYMENTS

- 9.7.1 After the Designer has issued a Certificate for Payment, the Owner shall make payment in the manner and within the time provided in the Contract Documents, and shall so notify the Designer.
- 9.7.2 The Contractor must promptly pay each Subcontractor, upon receipt of payment from the Owner, out of the amount paid to the Contractor on account of such Subcontractor's portion of the Work, the amount to which said Subcontractor is entitled, reflecting percentages actually retained from payments to the Contractor on account of such Subcontractor's portion of the Work. The Contractor must, by appropriate

agreement with each Subcontractor, require each Subcontractor to make payments to Sub-subcontractors in similar manner.

- 9.7.3 The Designer will furnish to a Subcontractor, upon request and if practicable, information regarding percentages of completion or amounts applied for by the Contractor and action taken thereon by the Designer and Owner on account of portions of the Work done by such Subcontractor.
- 9.7.4 Neither the Owner nor Designer shall have an obligation to pay or to see to the payment of money to a Subcontractor except as may otherwise be required by law.
- 9.7.5 Payment to material suppliers must be treated in a manner similar to that provided in Paragraphs 9.7.2, 9.7.3, and 9.7.4.
- 9.7.6 A Certificate for Payment, a progress payment, or partial or entire use or occupancy of the Project by the Owner shall not constitute acceptance of Work not in accordance with the Contract Documents.
- 9.8 FAILURE OF PAYMENT. The Contractor must not stop the Work for the failure of the Designer to issue a Certificate of Payment or the Owner to make timely payment.

#### 9.9 SUBSTANTIAL COMPLETION

- 9.9.1 Substantial Completion is the stage in the progress of the Project when the Work or designated portion thereof is sufficiently complete in accordance with the Contract Documents, so the Owner can occupy or utilize the Work for its intended use.
- 9.9.2 When the Contractor considers that the Work, or a portion thereof which the Owner agrees to accept separately, is substantially complete, the Contractor shall prepare and submit to the Designer a comprehensive list of items to be completed or corrected. The Contractor shall proceed promptly to complete and correct items on the list. Failure to include an item or such list does not alter the responsibility for the Contractor to complete all Work in accordance with the contract Documents. Upon receipt of the Contractor's list, the Designer will make an inspection to determine whether the Work or designated portion thereof is substantially complete. If the Designer's inspection discloses any item, whether or not included on the Contractor's list, which is not in accordance with the requirements of the Contract Documents, the Contractor shall, before issuance of the Certificate of Substantial Completion, complete or correct such item upon notification by the Designer. The Contractor shall then submit a request for another inspection by the Designer to determine Substantial Completion. When the Work or designated portion thereof is substantially complete, the Designer will prepare a Certificate of Substantial Completion which shall establish the date of Substantial Completion, shall establish responsibilities of the Owner and Contractor for security, maintenance, heat, utilities, damage to the Work and insurance, and shall fix the time within which the Contractor shall finish all items on the list accompanying the Certificate. Warranties required by the Contract Documents shall commence on the date of Substantial Completion of the Work or designated portion thereof unless otherwise provided in the Certificate of Substantial Completion. The Certificate of Substantial Completion shall be submitted to the Owner and Contractor for their written acceptance of responsibilities assigned to them in such Certificate.
- 9.9.3 Upon Substantial Completion of the Work or designated portion thereof and upon application by the Contractor and certification by the Designer, the Owner shall make payment, reflecting adjustment in retainage, if any, for such Work or portion thereof as provided in the Contract Documents.

#### 9.10 PARTIAL OCCUPANCY OR USE

9.10.1 The Owner may occupy or use any completed or partially completed portion of the Work at any stage when such portion is designated by separate agreement with the Contractor, provided such occupancy or use is authorized by public authorities having jurisdiction over the Work. Such partial occupancy or use may commence whether or not the portion is substantially complete, provided the Owner and Contractor have accepted in writing the responsibilities assigned to each of them for payments, retainage if any, security, maintenance, heat, utilities, damage to the Work and insurance, and have agreed in writing concerning the period for correction of the Work and commencement of warranties required by the Contract Documents. When the Contractor considers a portion substantially complete, the Contractor shall prepare and submit a list to the Designer as provided under Subparagraph 9.9.2. Consent of the Contractor to partial occupancy or use shall not be unreasonably withheld. The stage of the progress of the Work shall be determined by written agreement between the Owner and Contractor or, if no agreement is reached, by decision of the Designer.

9.10.2 Immediately prior to such partial occupancy or use, the Owner, Contractor and Designer shall jointly inspect the area to be occupied or portion of the Work to be used in order to determine and record the condition of the Work.

9.10.3 Unless otherwise agreed upon, partial occupancy or use of a portion or portions of the Work shall not constitute acceptance of Work not complying with the requirements of the Contract Documents.

#### 9.11 FINAL COMPLETION AND FINAL PAYMENT

9.11.1 Upon receipt of written notice that the Work is ready for final inspection and acceptance and upon receipt of a final Application for Payment, the Designer will promptly make such inspections and, when the Designer finds the Work acceptable under the Contract Documents and the Contract fully performed, the Designer will promptly issue a Final Certificate for Payment stating that to the best of the Designer's knowledge, information and belief, and on the basis of the Designer's observations and inspections, the Work has been completed in accordance with terms and conditions of the Contract Documents and that the entire balance found to be due the Contractor and noted in said Final Certificate is due and payable. The Designer's Final Certificate for Payment will constitute a further representation that the conditions listed in Paragraph 9.11.2 as precedent to the Contractor's being entitled to final payment have been fulfilled.

9.11.2 Neither final payment nor any remaining retained percentage shall become due until the Contractor submits to the Designer (1) an affidavit that payrolls, bills for materials and equipment, and other indebtedness connected with the Work for which the Owner or the Owner's property might be responsible or encumbered (less amounts withheld by Owner) have been paid or otherwise satisfied, (2) a certificate evidencing that insurance required by the Agreement to remain in force after final payment is currently in effect and will not be canceled or allowed to expire until at least 30 days prior written notice has been given to the Owner, (3) a written statement that the Contractor knows of no substantial reason that the insurance will not be renewable to cover the period required by the Contract Documents, (4) consent of surety, if any, to final payment and (5) if required by the Owner, other or additional data establishing payment or satisfaction of obligations, such as receipts, releases and waivers of liens, claims, security interests or encumbrances rising out of the Contract, to the extent and in such form as may be designated by the Owner. If a Subcontractor refuses to furnish a release or waiver required by the Owner, the Contractor may furnish a bond satisfactory to the Owner to indemnify the Owner against such lien. If such lien remains unsatisfied after payments are made, the Contractor shall refund to the Owner all money that the Owner may be compelled to pay in discharging such lien, including all costs and reasonable attorneys' fees.

9.11.3 If, after Substantial Completion of the Work, final completion thereof is materially delayed through no fault of the Contractor or by issuance of Change Orders affecting final completion, and the Designer so confirms, the Owner shall, upon application by the Contractor and certification by the Designer, 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 for work not fully completed and accepted is less than retainage stipulated in the Contract Documents, and if bonds have been furnished, the written consent of surety to payment of the balance due for that portion of the Work fully completed and accepted shall be submitted by the Contractor to the Designer prior to certification of such payment. Such payment shall be made under terms and conditions governing final payment, except that it shall not constitute a waiver of claims.

9.11.4 Acceptance of final payment by the Contractor, Subcontractor or material supplier shall constitute a waiver of claims by that payee except those previously made in writing and identified by that payee as unsettled at the time of final Application for Payment.

#### ARTICLE 10 PROTECTION OF PERSONS AND PROPERTY

#### 10.1 SAFETY PRECAUTIONS AND PROGRAMS

- 10.1.1 The Contractor shall be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the performance of the Contract and construction of the Project.
- 10.1.2 In the event the Contractor encounters on the site material reasonably believed to be asbestos or polychlorinated biphenyl (hereinafter "PCB") which has not been rendered harmless, the Contractor shall immediately stop Work in the area affected and report the condition to the Owner and Designer by phone and in writing. The Work in the affected area shall not thereafter be resumed except by written agreement of the Owner and Contractor if in fact the material is asbestos or PCB and has not been rendered harmless. The Work in the affected area shall be resumed in the absence of asbestos or PCB, or when it has been rendered harmless, by written agreement of the Owner and Contractor, or in accordance with final determination by the Designer.
- 10.1.3 The Contractor shall not be required to perform without consent of Owner and Designer any Work relating to asbestos or PCB.

#### 10.2 SAFETY OF PERSONS AND PROPERTY

- 10.2.1 The Contractor shall take reasonable precautions for safety of, and shall provide reasonable protection to prevent damage, injury or loss to: employees working on the Project and other persons who may be affected thereby; the Work and materials and equipment to be incorporated therein, whether in storage on or off the site, under care, custody or control of the Contractor or the Contractor's Subcontractors or Sub-subcontractors; and other property at the site or adjacent thereto, such as trees, shrubs, lawns, walks, pavements, roadways, structures and utilities not designated for removal, relocation or replacement in the course of construction.
- 10.2.2 The Contractor shall give notices and comply with applicable laws, ordinances, rules, regulations, and lawful orders of public authorities bearing on safety of persons or property or their protection from damage, injury, or loss.
- 10.2.3 The Contractor shall erect and maintain, as required by existing conditions and performance of the Contract, reasonable safeguards for safety and protection, including erecting necessary barricades or other temporary walls and structures as required during the period of construction, posting danger signs and other warnings against hazards, promulgating safety regulations, and notifying owners and users of adjacent sites and utilities.

- 10.2.4 When use or storage of explosives or other hazardous materials or equipment or unusual methods are necessary for execution of Work, the Contractor shall exercise utmost care and carry on such activities under supervision of properly qualified personnel.
- 10.2.5 The Contractor shall promptly remedy damage and loss to property referred to in Paragraphs 10.2.1.(2) and (3), caused in whole or in part by the Contractor, Subcontractor, a Sub-subcontractor, or anyone directly or indirectly employed by any of them, or by anyone for whose acts they may be liable and for which the Contractor is responsible under Paragraphs 10.2.1.(2) and (3), except damage or loss attributable to acts or omissions of the Owner or Designer and not attributable to the fault or negligence of the Contractor. The foregoing obligations of the Contractor are in addition to the Contractor's obligations under Article 3. All costs to repair any damage and loss to property referred to in Paragraphs 10.2.1.(2) and (3), shall be the sole responsibility of the Contractor and such repair or replacement shall be performed expeditiously without cost to the Owner.
- 10.2.6 The Contractor shall designate a responsible member of the Contractor's organization at the site whose duty shall be the prevention of accidents. This person shall be the Contractor's Superintendent, required under Paragraph 3.8, unless otherwise designated by the Contractor in writing to the Owner and Designer.
- 10.2.7 The Contractor shall not load or permit any part of the construction or site to be loaded so as to endanger its safety.
- 10.2.8 Existing utilities have been identified and described in the Contract Documents insofar as information is reasonably available, however, it is the Contractor's responsibility to verify such information and to preserve all existing utilities whether shown in the Contract Documents or not. If utility conflicts are encountered by the Contractor during construction, Contractor shall file sufficient notice to the owners of the utilities so that they may make the necessary adjustments, as well as the Designer or Designer.
- 10.3 EMERGENCIES. In an emergency affecting the safety of persons or property, the Contractor shall act, at the Contractor's discretion, to prevent threatened damage, injury or loss. Additional compensation or extension of time claimed by the Contractor on account of an emergency shall be determined as provided in Paragraphs 4.2.7, 4.2.8 and Article 7. As soon as practicable, the Contractor must notify the Construction manager and Designer of any such emergency.

#### ARTICLE 11 UNCOVERING AND CORRECTION OF WORK

#### 11.1 UNCOVERING OF WORK

- 11.1.1 If a portion of the Work is covered contrary to the Designer's request or to requirements specifically expressed in the Contract Documents, it must, if required in writing by the Designer, be uncovered for the Designer's observation and be replaced at the Contractor's sole expense without change in the Time of Completion.
- 11.1.2 If a portion of the Work has been covered which the Designer has not specifically requested to observe prior to its being covered, the Designer may request to see such Work and it shall be uncovered by the Contractor. If such Work is not in accordance with the Contract Documents, the Contractor shall pay such costs unless the condition was caused by the Owner or a separate contractor in which event the Owner or separate contractor shall be responsible for payment of such costs. If such work is in accordance with the Contract Documents, the Owner, by appropriate Change Order, shall be charged with the cost of uncovering and replacement.

#### 11.2 CORRECTION OF WORK

- 11.2.1 The Contractor shall promptly correct Work rejected by the Designer or failing to conform to the requirements of the Contract Documents, whether observed before or after Substantial Completion and whether or not fabricated, installed or completed. The Contractor shall bear any and all costs of correcting such rejected Work, including additional testing and inspections and compensation for the Designer's services and expenses made necessary thereby.
- 11.2.2 If, within one year after the date of Substantial Completion of the Work or designated portion thereof, or after the date for commencement of warranties established under Paragraph 9.10.1 or by terms of an applicable special warranty required by the Contract Documents, any of the Work is found to be not in accordance with the requirements of the Contract Documents, the Contractor shall correct it promptly after receipt of written notice from the Owner to do so unless the Owner has previously given the Contractor a written acceptance of such condition. This period of one year shall be extended with respect to portions of Work first performed after Substantial Completion by the period of time between Substantial Completion and the actual performance of the work. This obligation under this Paragraph 11.2.2 shall survive acceptance of the Work under the Contract and termination of the Contract. The Owner shall give such notice promptly after discovery of the condition.
- 11.2.3 The Contractor shall remove from the site portions of the Work which are not in accordance with the requirements of the Contract Documents and are neither corrected by the Contractor nor accepted by the Owner.
- 11.2.4 If the Contractor fails to correct nonconforming Work within a reasonable time, the Owner may correct it in accordance with Paragraph 2.2. If the Contractor does not proceed with correction of such nonconforming Work within a reasonable time fixed by written notice from the Designer, the Owner may remove it and store the salvageable materials or equipment at the Contractor's expense. If the Contractor does not pay costs of such removal and storage within ten (10) days after written notice, the Owner may upon ten (10) additional days' written notice sell such materials and equipment at auction or at private sale and shall account for the proceeds thereof, after deducting costs and damages that should have been borne by the Contractor, including compensation for the Designer's services and expenses made necessary thereby. If such proceeds of sale do not cover costs which the Contractor should have borne, the Contract Sum shall be reduced by the deficiency. If payments then or thereafter due the Contractor are not sufficient to cover such amount, the Contractor shall pay the difference to the Owner.
- 11.2.5 The Contractor shall bear the cost of correcting destroyed or damaged construction, whether completed or partially completed, of the Owner or separate contractors caused by the Contractor's correction or removal of Work which is not in accordance with the requirements of the Contract Documents.
- 11.2.6 Nothing contained in this Section 11.2 shall be construed to establish a period of limitation with respect to other obligations which the Contractor might have under the Contract Documents. Establishment of the time period of one year as described in Paragraph 11.2.2, relates only to the specific obligation of the Contractor to correct the Work, and has no relationship to the time within which the obligation to comply with the Contract Documents may be sought to be enforced nor to the time within which proceedings may be commenced to establish the Contractor's liability with respect to the Contractor's obligations other than specifically to correct the work.
- 11.3 ACCEPTANCE OF NONCONFORMING WORK. If the Owner prefers to accept Work which is not in accordance with the requirements of the Contract Documents, the Owner may do so instead of requiring its removal and correction, in which case the Contract Sum will be reduced as appropriate and equitable. Such adjustment shall be effected whether or not final payment has been made.

#### **ARTICLE 12 MISCELLANEOUS PROVISIONS**

- 12.1 GOVERNING LAW. This Agreement shall be governed by and in accordance with the laws of the State of North Carolina. All actions relating in any way to this Contract, shall be brought exclusively in the General Court of Justice in the County of Catawba and the State of North Carolina, after exhausting the dispute resolution procedure set forth in Section 4.4, herein.
- 12.2 SUCCESSORS AND ASSIGNS. The Owner and Contractor respectively bind themselves, their partners, successors, assigns, and legal representatives to the other Party hereto and to partners, successors, assigns, and legal representatives of such other Party in respect to covenants, agreements, and obligations contained in the Contract Documents. Neither Party to the Contract shall assign the Contract as a whole without written consent of the other. If either Party attempts to make such an assignment without such consent, that Party shall nevertheless remain legally responsible for all obligations under the Contract.
- 12.3 WRITTEN NOTICE. Written notice shall be deemed to have been duly served if delivered in person to the individual or a member of the firm or entity or to an officer of the corporation for which it was intended, or if delivered at or sent by registered or certified mail to the business address listed in the Agreement.
- 12.4 RIGHTS AND REMEDIES. Duties and obligations imposed by the Contract Documents and rights and remedies available thereunder shall be in addition to and not a limitation of duties, obligations, rights and remedies otherwise imposed or available by law.
- 12.5 WAIVER OF RIGHTS. No action or failure to act by the Owner or Designer shall constitute an obligation or duty afforded them under the Contract, nor shall such action or failure to act constitute approval of or acquiescence in a breach thereunder, except as may be specifically agreed in writing.
- 12.6 COMPLIANCE WITH LAWS. Contractor represents that it is in compliance with all Federal, State, and local laws, regulations or orders, as amended or supplemented. The implementation of this contract will be carried out in strict compliance with all Federal, State, or local laws regarding discrimination in employment.

#### 12.7 TESTS AND INSPECTIONS

- 12.7.1 Tests, inspections, and approvals of portions of the Work required by the Contract Documents or by laws, ordinances, rules, regulations or orders of public authorities having jurisdiction shall be made at an appropriate time. Unless otherwise provided, the Contractor shall make arrangements for such tests, inspections, and approvals with an independent testing laboratory or entity acceptable to the Owner, or with the appropriate public authority, and the Owner shall bear the costs of tests, inspections, and approvals. Should any retest be necessary due to the failure of the Work to pass the first test or for any other reason whatsoever, the Contractor shall bear all related costs of retests, inspections or re-inspections, and approvals. The Contractor shall give the Designer timely notice of when and where tests and inspections are to be made so the Designer may observe such procedures.
- 12.7.2 If the Designer, Owner, or public authorities having jurisdiction determine that portions of the Work require additional testing, inspection, or approval not included under Paragraph 12.7.1, the Designer will, upon written authorization from the Owner, instruct the Contractor to make arrangements for such additional testing, inspection, or approval by an entity acceptable to the Owner, and the Contractor shall give timely notice to the Designer of when and where tests and inspections are to be made so the Designer may observe such procedures.
- 12.7.3 If such procedures for testing, inspection or approval under Paragraphs 12.7.1 and 12.7.2 reveal failure of the portions of the Work to comply with requirements established by the Contract Documents, the Contractor shall bear all costs made necessary by such failure including the costs of bringing the Work

into compliance with the Contract Documents as well as the costs of any repeated procedures, testing, inspection or approval and the compensation for the additional services and expenses of the Designer.

- 12.7.4 Required certificates of testing, inspection, or approval shall, unless otherwise required by the Contract Documents, be secured by the Contractor and promptly delivered to the Designer.
- 12.7.5 If the Designer is required by the Contract Documents to observe tests, inspections, or approvals, the Designer will do so promptly and, where practicable, at the normal place of testing.
- 12.7.6 Tests or inspections conducted pursuant to the Contract Documents shall be made promptly to avoid unreasonable delay in the Work.

#### 12.8 COMMENCEMENT OF STATUTORY LIMITATION PERIOD. As between the Owner and Contractor:

Before Substantial Completion. As to acts or failures to act occurring prior to the relevant date of Substantial Completion, any applicable statute of limitations shall commence to run and any alleged cause of action shall be deemed to have accrued in any and all events not later than such date of Substantial Completion.

Between Substantial Completion and Final Certificate for Payment. As to acts or failures to act occurring subsequent to the relevant date of Substantial Completion and prior to issuance of the Final Certificate for Payment, any applicable statute of limitations shall commence to run and any alleged cause of action shall be deemed to have accrued in any and all events not later than the date of issuance of the Final Certificate for Payment.

After Final Certificate for Payment. As to acts or failures to act occurring after the relevant date of issuance of the Final Certificate for Payment, any applicable statute of limitations shall commence to run and any alleged cause of action shall be deemed to have accrued in any and all events not later than the date of any act or failure to act by the Contractor pursuant to any warranty provided under Paragraph 3.4, the date of any correction of the Work or failure to correct the Work by the Contractor under Section 11.2 or the date of actual commission of any other act or failure to perform any duty or obligation by the Contractor or Owner, whichever occurs last.

#### **ARTICLE 13 TERMINATION OR SUSPENSION OF THE CONTRACT**

#### 13.1 TERMINATION BY THE CONTRACTOR

- 13.1.1 The Contractor may terminate the Contract if the Work is stopped for a period of 180 consecutive days through no act or fault of the Contractor or a Subcontractor, Sub-subcontractor or their agents or employees or any other persons performing portions of the Work under contract with the Contractor, for any of the following reasons: issuance of an order of a court or other public authority having jurisdiction; an act of government, such as a declaration of national emergency, making material unavailable; because the Designer has not issued a Certificate for Payment and has not notified the Contractor of the reason for withholding certification as provided in Paragraph 9.6.
- 13.1.2 If one of the above reasons exists, Contractor shall send written notice of the condition to Owner and Designer and Owner and Designer shall have thirty (30) days to cure or correct the condition. If owner fails to cure the Condition, the Contractor may, upon seven (7) additional days' written notice to the Owner and Designer, terminate the Contract and recover from the Owner payment for work executed and for proven loss with respect to materials, equipment, tools, and construction equipment and machinery, not including overhead, profit, or damages. In no event shall Owner be responsible for lost profits, special or consequential damages.

#### 13.2 TERMINATION BY THE OWNER FOR CAUSE

- 13.2.1 The Owner may terminate the Contract if the Contractor: refuses or fails to supply enough properly skilled workers or proper materials; fails to make payment to Subcontractors for materials or labor in accordance with the respective agreements between the Contractor and the Subcontractors; persistently disregards laws, ordinances, or rules, regulations or orders of a public authority having jurisdiction; or otherwise is in substantial breach of a provision of the Contract Documents.
- 13.2.2 When any of the above reasons exist, the Owner, upon certification by the Designer that sufficient cause exists to justify such action, may without prejudice to any other rights or remedies of the Owner and after giving the Contractor and the Contractor's surety, if any, seven (7) days written notice and opportunity to cure, terminate employment of the Contractor and may, subject to any prior rights of surety: take possession of the site and of all materials, equipment, tools, and construction equipment and machinery thereon owned by the Contractor; and finish the Work by whatever reasonable method the Owner may deem expedient.
- 13.2.3 When the Owner terminates the Contract for one of the reasons stated in Paragraph 13.2.1, the Contractor shall not be entitled to receive further payment.
- 13.2.4 If the unpaid balance of the Contract Sum does not cover the cost of finishing the Work, the Contractor shall pay the difference to the Owner. The amount to be paid to the Owner, shall be certified by the Designer, upon application, and this obligation for payment shall survive termination of the Contract.

#### 13.3 SUSPENSION BY THE OWNER FOR CONVENIENCE

13.3.1 The Owner may, without cause, order the Contractor in writing to suspend, delay, or interrupt the Work in whole or in part for such period of time as the Owner may determine.

#### 13.4 TERMINATION BY OWNER FOR CONVENIENCE

- 13.4.1 The Owner may, at any time, terminate the Contract for the Owner's Convenience and without cause.
- 13.4.2 Upon receipt of written notice from the Owner of such termination for the Owner's convenience, the Contractor shall:
- 1. Cease operations as directed by the Owner in the notice;
- 2. Take actions necessary, or that the Owner may direct, for the protection and preservation of the Work; and
- 3. Except for Work directed to be performed prior to the effective date of termination stated in the notice, terminate all existing subcontracts and purchase orders and enter into no further subcontracts and purchase orders.
- 13.4.3 In case of such termination for the Owner's convenience, the Contractor shall be entitled to receive payment for Work properly executed and costs incurred by reason of such termination. Termination shall not relieve the Contractor of its responsibilities for any completed portion of the Work nor shall it relieve its sureties of their obligation for and concerning any claims arising out of the Work performed.
- 13.4.4 In the event of termination by the Owner for convenience, the Contractor shall not be entitled to any other compensation, including compensation for lost profit, lost opportunity, or any other direct, special or consequential cost, loss or damage.

#### 13.5 BANKRUPTCY

- 13.5.1 The bankruptcy of the Contractor shall not terminate this Contract until such time that it is specifically rejected by the Trustee or Contractor in bankruptcy. During the election period the Contractor has to assume or reject this Contract, the Contractor shall continue to perform its Work under the Contract.
- 13.5.2 In the event the Contractor in Bankruptcy assumes the Contract, the Contractor shall apply progress payments to all of its unpaid obligations on this Project before using any of these monies for either administrative expenses of the bankruptcy or as general assets of the estate.

#### 13.6 SECURITY OF NON-PUBLIC RECORDS.

13.6.1 Pursuant to NCGS § 132-1.7 entitled, "Sensitive Public Security Information", public records, as defined in NCGS § 132-1, shall not include information containing specific details of public security plans and arrangements or the detailed plans and drawings of public buildings and infrastructure facilities. Therefore, all information provided, received, gathered or obtained by Contractor containing specific details of public security plans and arrangements or the detailed plans and drawings of public buildings and infrastructure facilities shall be held confidential and shall be used by the Contractor only for the purpose of fulfilling the terms of this Agreement. All plans and drawings shall be returned to the County, or otherwise destroyed at the direction of the County, upon termination or expiration of this Agreement. Any breach of this paragraph by Contractor shall result in the immediate termination of this contract.

#### Appendix A

#### RULES IMPLEMENTING MEDIATED SETTLEMENT CONFERENCES IN CATAWBA COUNTY

Adopted: February 5, 2024

#### Table of Rules

#### **RULE**

- 1. Initiating Mediated Settlement Conferences
  - A. Purpose of Mandatory Settlement Conferences
  - B. Initiating the Dispute Resolution Process
  - C. Condition Precedent to Litigation
- 2. Selection of a Mediator
  - A. Selection of a Certified Mediator by Agreement of the Parties
  - B. Withdrawal or Disqualification of a Mediator
- 3. The Mediated Settlement Conference
  - A. Where the Conference is to be Held
  - B. When the Conference is to be Held
  - C. Requests to Extend the Deadline for Completion
  - D. Recesses
  - E. Postponements
  - F. Construction Projects
- 4. Duties of Parties and Other Participants
  - A. Attendance
  - B. Finalizing the Agreement
  - C. Mediation Fee
  - D. Failure to Compensate the Mediator
- 5. Authority and Duties of Mediators
  - A. Authority of Mediators
  - B. Duties of Mediators
- 6. Compensation of the Mediator
- 7. Mediator Certification
- 8. Rule Amendments
- 9. Time Limits
- 10. No Recording

#### RULE 1. INITIATING MEDIATED SETTLEMENT CONFERENCES

A. Purpose of Mandatory Settlement Conferences. Pursuant to Catawba County Code Section 8-35 and NCGS §143-128(f1), these Rules are promulgated to implement a system of settlement events which are designated to focus the parties' attention on settlement rather than on claim preparation and to provide a structured opportunity for settlement negotiations to take place. Nothing herein is intended to limit or prevent the parties from engaging in settlement procedures voluntarily at any time prior to or during commencement of the dispute resolution process.

#### B. Initiating the Dispute Resolution Process.

- 1. Any party to a Catawba County contract governed by Catawba County Code Chapter(s) 8 or 30 and who is a party to a dispute arising out of the construction process in which the amount in controversy is at least \$15,000 may submit a written request to Catawba County for mediation of the dispute.
- 2. Prior to submission of a written request for mediation to Catawba County, the parties should give notice of any and all claims in accordance with their respective contracts, obtain decisions on the claims as required or allowed by their respective contracts, and attempt to resolve the dispute according to the terms and conditions in their respective contracts. The Mediator may adjourn any mediated settlement conference if the Mediator believes, in his or her sole discretion, that the parties have not satisfied all of the terms and conditions of their respective contracts and that doing so will enhance the prospects for a negotiated settlement.
- C. <u>Condition Precedent to Litigation</u>. Before any party to a Contract may commence a civil action against Catawba County seeking remedies for breach or non-performance of the Contract by the County, said party must first initiate the dispute resolution process under these rules and attend and participate in good faith in the mediated settlement conference.

#### RULE 2. SELECTION OF A MEDIATOR

- A. <u>Selection of a Certified Mediator by Agreement of the Parties</u>. The parties shall select a Certified Mediator within twenty-one (21) days of receipt by the County of the request for mediation. If the Mediator selected is not available or declines to participate for any reason, the parties shall select another Certified Mediator. If the parties are unable to agree on a mediator within twenty-one (21) days of the request for mediation, the County shall have the right in its absolute discretion to appoint a Certified Mediator.
- B. Withdrawal or Disqualification of a Mediator. Any party may request replacement of a mediator by Catawba County for good cause. If a mediator withdraws or is disqualified, then the parties shall select another Certified Mediator within three (3) days of the notice of withdrawal or disqualification. A mediator who has withdrawn or been disqualified shall not be entitled to receive an administrative fee, unless the mediation has been commenced. If the parties do not select and designate a mediator within three (3) days from the notice of withdrawal or disqualification, the County shall have the right in its absolute discretion to appoint a Certified Mediator.

#### RULE 3. THE MEDIATED SETTLEMENT CONFERENCE

- A. Where the Conference is to be Held. Unless all parties and the mediator otherwise agree, the mediated settlement conference shall be held in Catawba County. The mediator shall be responsible for reserving a place and making arrangements for the conference and for giving timely notice of the time and location of the conference to all attorneys, unrepresented parties and other persons and entities required to attend.
- B. When the Conference is to be Held. The mediation shall be completed within ninety (90) days after selection of the mediator.
- C. Request to Extend the Deadline for Completion. A party, or the mediator, may request that Catawba County extend the deadline for completion of the mediated settlement conference. Such request shall state the reasons the extension is sought and shall be served by the moving party upon the other parties and the mediator. If any party does not consent to the request, said party shall promptly communicate its objection, and the reasons for its objection, to Catawba County. Catawba County may grant the request by setting a new deadline for completion of the conference, or deny the request to extend the deadline, resulting in an impasse of the mediation.
- D. <u>Recesses</u>. The mediator may recess the mediated settlement conference at any time and may set times for reconvening. If the time for reconvening is set before the conference is recessed, no further notification is required for persons present at the conference.
- E. <u>Postponements</u>. A mediated settlement conference session may be postponed for good cause only after notice by the movant to all parties of the reason for the postponement and a finding of good cause by Catawba County.
- F. <u>Construction Project</u>. The mediated settlement conference or the matter subject of the mediated settlement conference shall not be cause for the delay of the construction project which is the focus of the dispute.

#### RULE 4. DUTIES OF PARTIES AND OTHER PARTICIPANTS

#### A. Attendance.

- 1. All parties to the dispute must attend the mediated settlement conference. Failure of a party to a construction contract to attend the mediated settlement conference will result in Catawba County's withholding of monthly payment to that party until such party attends the mediated settlement conference.
- 2. Attendance shall constitute physical attendance, not by telephone or other electronic means. Notwithstanding the foregoing, all parties and persons required to attend a mediated settlement conference may agree to conduct the conference using remote technology, or using a hybrid of in-person attendance and remote technology.
- 3. Any party that is a nongovernmental entity shall be represented at the mediated settlement conference by an officer, employee, or agent who is not the entity's outside counsel and who has been authorized to decide whether, and on what terms, to settle the action on behalf of the entity, or who has been authorized

to negotiate on behalf of the entity and can promptly communicate during the conference with persons who have decision-making authority to settle the action; provided, however, that if a specific procedure is required by law (e.g., a statutory pre-audit certificate) or the entity's governing documents (e.g., articles of incorporation, bylaws, partnership agreement, articles of organization, or operating agreement) to approve the terms of the settlement, then the representative shall have the authority to negotiate and make recommendations to the applicable approval authority in accordance with that procedure.

- 4. Any party that is a governmental entity shall be represented at the mediated settlement conference by an employee or agent who is not the entity's outside counsel and who: (i) has authority to decide on behalf of the entity whether and on what terms to settle the action; (ii) has been authorized to negotiate on behalf of the entity and can promptly communicate during the conference with persons who have decision-making authority to settle the action; or (iii) has authority to negotiate on behalf of the entity and to make a recommendation to the entity's governing board, if under applicable law the proposed settlement terms can be approved only by the entity's governing board. Notwithstanding anything in these rules to the contrary, any agreement reached which involves a governmental entity may be subject to the provisions of NCGS §159-28(a).
- 5. Attorneys on behalf of parties may attend the mediated settlement conference but are not required to do so.
- 6. Sureties or insurance company representatives are not required to attend the mediated settlement conference unless any monies paid or to be paid as a result of any agreement reached as a result of mediation require their presence or acquiescence. If such agreement or presence is required, then authorized representatives of the surety or insurance company must attend the mediation.
- B. <u>Finalizing the Agreement</u>. If an agreement is reached in the mediated settlement conference, parties to the agreement shall reduce the terms to writing and sign it along with their counsel, if counsel is present, prior to the adjournment of the conference. If additional time is required to formalize an agreement, the mediator may recess the conference and set a time certain for reconvening pursuant to Rule 3(D). The time for reconvening shall be as soon as practicable to allow for formalization of the agreement.
- C. <u>Mediation Fee</u>. The mediation fee and any ancillary fees shall be paid in accordance with Rule 6 Compensation of the Mediator.
- D. <u>Failure to Compensate the Mediator</u>. Any party's failure to compensate the mediators in accordance with Rule 6 shall subject that party to a withholding of said amount of money from the party's monthly payment by Catawba County.

#### RULE 5. AUTHORITY AND DUTIES OF MEDIATORS

#### A. Authority of Mediators.

1. <u>Control of Conference</u>. The mediator shall at all times be in control of the mediated settlement conference and the procedures to be followed.

- 2. <u>Private Consultation</u>. The mediator may communicate privately with any participant or counsel prior to and during the mediated settlement conference. The fact that private communications have occurred with a participant shall be disclosed to all other participants at the beginning of the conference.
- 3. <u>Scheduling the Conference</u>. The mediator shall make a good faith effort to schedule the mediated settlement conference at a time that is convenient with the participants, attorneys and mediator. In the absence of agreement, the mediator shall select the date for the mediated settlement conference.

#### B. Duties of Mediators.

- 1. The mediator shall define and describe the following at the beginning of the mediated settlement conference:
  - a. The process of mediation;
  - b. The difference between mediation and other forms of conflict resolution:
  - c. The costs of the mediated settlement conference;
  - d. That the mediated settlement conference is not a trial, the mediator is not a judge, and the parties retain their legal rights if they do not reach settlement:
  - e. The circumstances under which the mediator may meet and communicate privately with any of the parties or with any other person;
  - f. Whether and under what conditions communications with the mediator will be held in confidence during the conference;
  - g. The inadmissibility of conduct and statements as provided by NCGS §7A-38.1(1);
  - h. The duties and responsibilities of the mediator and the participants; and
  - i. Any agreement reached will be reached by mutual consent.
- 2. <u>Disclosure</u>. The mediator has a duty to be impartial and to advise all participants of any circumstance bearing on possible bias, prejudice or partiality.
- 3. <u>Declaring an Impasse</u>. It is the duty of the mediator to timely determine that an impasse exists and that the mediated settlement conference should end.
- 4. Reporting the Results of the Conference. The mediator shall report to Catawba County within ten (10) days of the mediated settlement conference whether or not an agreement was reached by the parties. If an agreement was reached, the report shall state the nature of said agreement. The mediator's report shall inform Catawba County of the absence of any party known to the mediator to have been absent from the mediated settlement conference without permission. Catawba County must require the mediator to provide statistical data for evaluation of the mediated settlement conference program.
- 5. <u>Scheduling and Holding the Conference</u>. It is the duty of the mediator to schedule the mediated settlement conference and conduct it prior to the deadline of completion set by these Rules. Deadlines for completion of the conference shall be strictly

observed by the mediator unless said time limit is changed by a written order from Catawba County.

#### RULE 6. COMPENSATION OF THE MEDIATOR

The parties shall compensate the mediator for mediation services, and any ancillary fees related to the mediation, at the rate in accordance with the rate charged for Superior Court mediation. The parties shall also pay to the mediator a one-time per case administration rate in accordance with the rate charged for Superior Court mediation, which is due upon appointment.

#### RULE 7. MEDIATOR CERTIFICATION

All mediators shall be properly certified in accordance with the rules certifying mediators in Superior Court in North Carolina. (Except when otherwise allowed by Catawba County upon the request of the parties to the mediation.) When selecting mediators, the parties may designate a preference for mediators with a background in construction law or public construction contracting. Such requirements, while preferred, are not mandatory under these Rules. All mediators chosen must either demonstrate they are certified in accordance with the Rules for Mediated Settlement Conferences in Superior Court or must gain the consent of Catawba County to mediate any dispute in accordance with these Rules.

#### RULE 8. RULE AMENDMENTS

These Rules are subject to amendment by Catawba County at any time the County deems appropriate.

#### RULE 9. TIME LIMITS

Any time limit provided for by these Rules may be waived or extended by the County for good cause shown.

#### RULE 10. NO RECORDING

There shall be no stenographic, audio, or video recording of the mediation process by any participant. This prohibition includes recording either surreptitiously or with the agreement of the parties.



## **TECHNICAL SPECIFICATIONS**

for the

# **Catawba County**

# Lake Norman Woods WWTP Temporary Sludge Holding Tank Repairs Project

10/24/2025

WithersRavenel Project No. 24-0326-002

Michael Wicker, P.E.





#### WithersRavenel

115 MacKenan Drive | Cary, NC 27511

Office Phone | Fax: 919.467.6008 | www.withersravenel.com | License No. F-1479

Asheville | Cary | Charlotte | Greensboro | Pittsboro | Powells Point | Raleigh | Southern Pines | Wilmington

#### **SECTION 01 01 00**

#### **SUMMARY OF WORK**

#### PART 1 GENERAL

#### 1.01. LOCATION OF WORK

A. Lake Norman Wood Homeowner Association Wastewater Treatment Facility, Marina Lane, Lake Norman, Catawba County, North Carolina

#### 1.02. WORK TO BE DONE

- A. On behalf of the Lake Norman Wood Homeowner Association, Catawba County is soliciting bids for emergency repairs to the sludge holding system for the Lake Norman Woods WWTP (NPDES Permit: NC0071528). The project involves the installation of a temporary sludge holding tank to provide dedicated sludge storage, as the internal wall of the existing sludge holding tank has failed. The temporary tank will maintain operations during the interim period while the wastewater treatment plant is replaced under future contract. The scope of work includes a 2,500 gallon fiberglass reinforced, HDPE or plastic replacement tank for the failing Sludge Holding Tank and associated PVC piping and ball valves for the waste sludge piping, decant and drainage piping, aeration piping and diffusers. Provide all labor, materials, equipment, tools, services and incidentals necessary to complete all work required by the Contract Documents to furnish and install all work as shown on the Drawings and specified herein including connections to existing WWTP and pump station, site restoration and fencing.
- B. Complete the Work, in place, tested, and ready for continuous service. Perform or provide repairs, replacements, and restoration required because of damages resulting from construction operations.
- C. Furnish and install all materials, equipment, and incidentals, which are reasonably and properly inferable and necessary for the proper completion of the Work, whether specifically indicated in the Contract Documents, or not.

#### 1.03. DRAWINGS AND SPECIFICATIONS FURNISHED TO THE CONTRACTOR FOR CONSTRUCTION

A. A total of **(three)** sets of Drawings and **(three)** sets of Specifications shall be furnished to the CONTRACTOR for construction at no charge. Additional sets may be purchased at the cost of reproduction.

#### 1.04. ABBREVIATIONS AND REFERENCES

- A. Whenever reference is made to the furnishing of materials or testing thereof to conform to the standards of any technical society, organization or body, it shall be construed to mean the latest standard, code, specification or tentative specification adopted and published at the date of advertisement for bids, even if reference has been made to an earlier standard. Where standards, specifications or codes of the various technical societies, organizations or bodies have been referred to throughout the Specifications, the referenced standard, specification or code is hereby made a part of the Contract the same as if herein repeated in full.
- B. In the event of any conflict between any of these specifications, standards, codes or tentative specifications, and the Specifications, the latter shall govern.

C. Reference to a technical society, organization, or body may be made in the Specifications by abbreviations, in accordance with the following list:

AASHTO	American Association of State Highway and Transportation Officials
ACI	American Concrete Institute
AGA	American Gas Association
AISC	American Institute of Steel Construction
AISI	American Iron and Steel Institute
ANSI	American National Standards Institute
ASCE	American Society of Civil Engineers
ASME	American Society at Mechanical Engineers
ASTM	American Society of Testing Materials
AWS	American Welding Society
AWWA	American Water Works Association
DIPRA	Ductile Iron Pipe Research Association
EPA	Environmental Protection Agency
FED.SPEC.	Federal Specifications
IEEE	Institute of Electrical and Electronic Engineers
NCDOT	North Carolina Department of Transportation
NCDEQ	North Carolina Department of Environmental Quality
NEMA	National Electrical Manufacturers Association
OSHA	Occupational Safety and Health Administration

D. When no reference is made to a code, standard, or specification, the standard specifications of the ASTM, the ANSI, the ASME, the IEEE, or the NEMA shall govern.

#### 1.05. LOCATION OF UNDERGROUND FACILITIES

A. CONTRACTOR is responsible for the location of all underground utilities. Known existing utilities have been located from the information available. It is the CONTRACTOR's responsibility to accurately locate both horizontally and vertically all existing utilities prior to start of construction. CONTRACTOR is responsible for contacting the NC One Call Center at 800.632.4949. All costs associated with any damage to known or unknown existing utilities resulting from the CONTRACTOR's failure to adequately protect the existing utilities during construction shall be borne solely by the CONTRACTOR.

#### 1.06. CONSTRUCTION SEQUENCE

- A. Notify the OWNER and ENGINEER at least two weeks prior to starting construction activities.
- B. Notify the OWNER and ENGINEER at least 72 hours prior to starting excavation work.
- C. Install all erosion control measures prior to beginning land disturbing activities.
- D. Follow all additional construction sequences shown on the construction plans.

#### 1.07. TANK SPECIFICATIONS

- A. The basis of the design on the plans is the 2,500 gallon Norwesco Vertical Chemical Storage Tank with a diameter of 96-inches and height of 96-inches and weight of 364 pounds. The tanks is constructed with UV stabilized resins, s.g. of 1.5, polyethylene material, natural white, 16-inch fill opening, withmultiple bung holes to accommodate the decant and drain piping at intervals noted on the plans. A three (3) year warranty shall be provided. Notify the OWNER and ENGINEER at least two weeks prior to starting construction activities.
- B. Equivalent 2,500-gallon tanks of HDPE, FRP or RFG are acceptable by Norwesco, Augustas Fiberglass, Assman or equal.

#### 1.08. SCHEDULE 80 PVC PIPING SPECIFICATIONS

A. Waste sludge, decant and drain piping and aeration piping shall conform to ASTM 1785, Schedule 80. Material used to produce the pipe, couplings and fittings shall conform to ASTM D-1784, Type 1, Grade 1, 2000 psi design stress. Fittings shall conform to ASTM D-2467 for socket type and ASTM D-2464 for threaded type.

#### 1.09. PVC BALL VALVES

A. PVC Ball Valves shall be manufactured from Type 1, Grade 1, Polyvinyl Chloride as outlined in ASTM D1784. The ball valves shall have All O rings shall be EDPM or FKM. The valves shall carry a minimum pressure rating of 150 psi at 73 degrees F. All valve handles shall be polypropylene. Valves ½" to 2" shall be true union design and 3" and larger valves shall be single union design. Valves shall be industrial grade and manufactured to ASTM F 1970. Valves shall be Asahi, GF, Hayward, Spears or equal.

#### 1.10. AERATION DIFFUSER

A. Provide 66 mm OD, 600 mm perforated length final bubble aeration diffuser with air flow of 0-7 scfm normal, 12 scfm max, 2.5-5 scfm average for attachment to the PVC aeration drop leg into the sludge holding tank. Heavy duty PVC full membrane, EPDM or Urethane membrane for wastewater use, with fouling resistant design, 24" long, %-inch mounting nipple. Manufacturers shall have over 10 years of operation history. EDI Flex Air T-Series, Sanitaire MT-2 and Wyss Flex-A-Tube fine bubble diffusers or equal shall be provided.

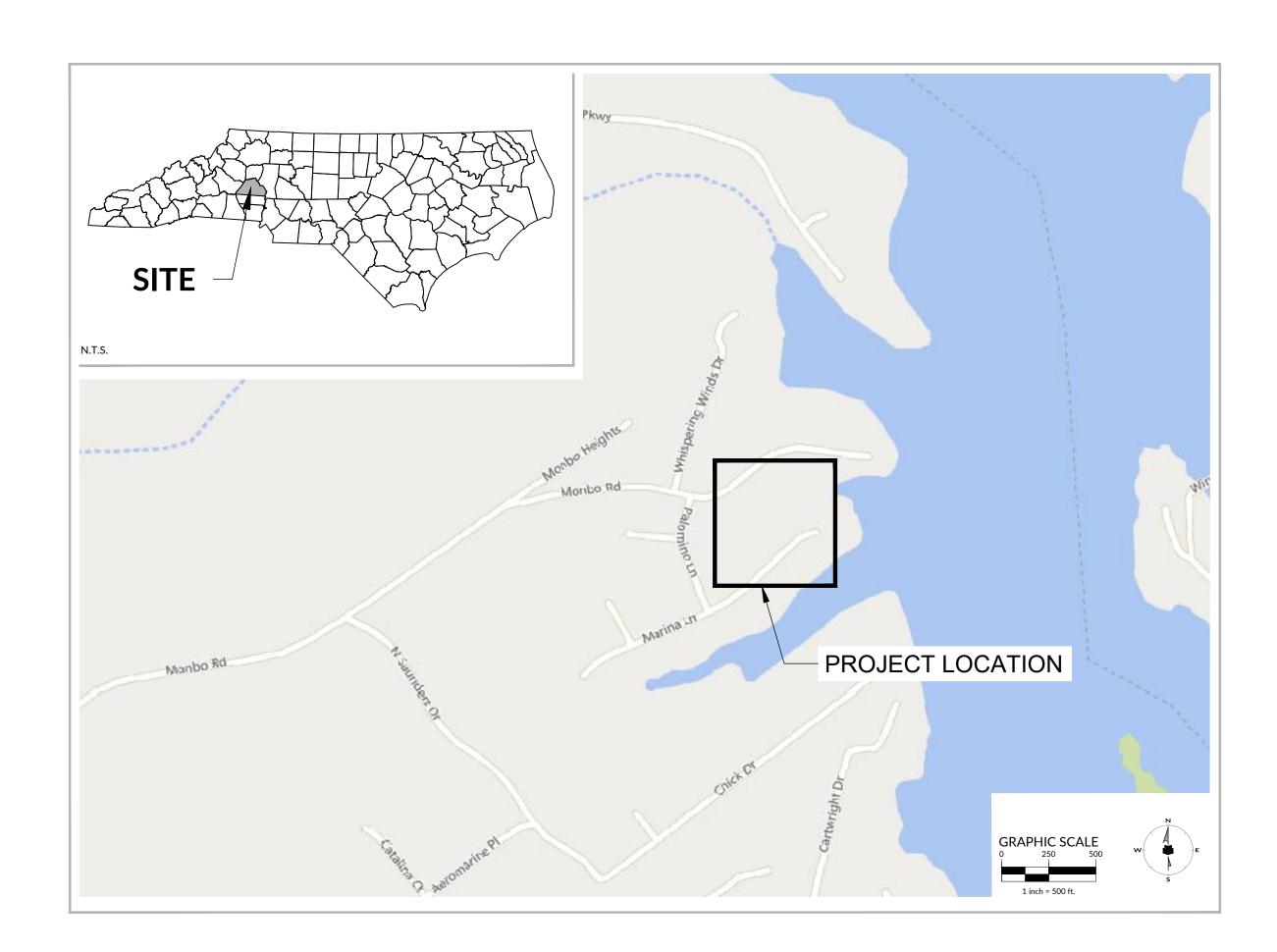
#### **END OF SECTION**

# CATAWBA COUNTY WWTP EMERGENCY SERVICES

LAKE NORMAN WOODS WWTP NPDES NC0071528

CATAWBA, NC 28609 | CATAWBA COUNTY

OCTOBER 24, 2025



# **Sheet List Table**

Sheet Number Sheet Title COVER

C4.01

GENERAL NOTES, LEGEND AND ABBREVIATIONS

C1.00 SITE PLAN

C2.00 WWTP DETAILS

C3.00 STANDARD DETAILS

C4.00 EROSION CONTROL DETAILS

**EROSION CONTROL NOTES** 

**SURVEY BENCHMARK** 

BENCHMARK IS LOCAL TO SITE.
SEE SHEET G1.00 FOR BENCHMARK INFORMATION.
VERTICAL DATUM BASED ON NAVD 88.

FINAL DRAWING - FOR REVIEW PURPOSES ONLY - NOT RELEASED FOR CONSTRUCTION

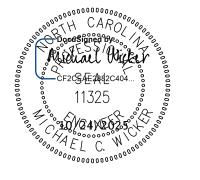
FINAL DRAWING

FOR REVIEW PURPOSES ONLY
NOT RELEASED FOR CONSTRUCTION

CONTACT LIST:

Senior Technical Consultant Michael Wicker WithersRavenel 340 Commerce Ave., Suite 12 Southern Pines, NC 28387 919-238-0390 mwicker@withersravenel.com











NEWTON, NC 28658

PHONE #: (828) 465-9469 ATTENTION: NATHALIA QUEEN

**OWNER:** 

CATAWBA COUNTY WWTP EMERGENCY SERVICES WR PROJECT NO.24-0326-002

- EASEMENTS ON THE JOB SITE PRIOR TO COMMENCING WORK AND THROUGHOUT THE DURATION OF CONSTRUCTION.
- CONSTRUCTION AND MATERIAL SPECIFICATIONS MUST CONFORM TO THE STATE OF NORTH CAROLINA AND CATAWBA COUNTY STANDARD SPECIFICATIONS AND CONSTRUCTION DETAILS, AND THE CONTRACT DOCUMENTS.
- THE CONTRACTOR IS RESPONSIBLE FOR HORIZONTALLY AND VERTICALLY LOCATING, AND SUBSEQUENTLY PROTECTING PUBLIC AND PRIVATE UTILITIES (SHOWN OR NOT SHOWN) THAT LIF IN OR AD JACENT TO THE PROJECT SITE. THE CONTRACTOR MUST DETERMINE THE LOCATION OF EXISTING UTILITIES BEFORE COMMENCING WORK AND AGREES TO BE FULLY RESPONSIBLE FOR ANY DAMAGES WHICH MIGHT BE OCCASIONED BY THE UNDERGROUND UTILITIES. NOT ALL UTILITIES AND FACILITIES ARE NECESSARILY SHOWN.
- THE CONTRACTOR IS TO NOTIFY THE ENGINEER WITHIN 48 HOURS OF ANY CONFLICTS BETWEEN EXISTING UTILITIES AND THE PROPOSED ROUTE OF UTILITY LINE TO ALLOW ADEQUATE TIME FOR THE ENGINEER AND OWNER TO CONSIDER REALIGNMENT OR CHANGES THAT MAY BE REQUIRED.

HAND DIGGING TO PROTECT UTILITIES FROM DAMAGE MAY BE REQUIRED.

- THE CONTRACTOR MUST MAKE A REASONABLE EFFORT TO SAVE PROPERTY IRONS, MONUMENTS, OTHER PERMANENT POINTS AND LINES OF REFERENCE AND CONSTRUCTION STAKES. A PROFESSIONAL LAND SURVEYOR REGISTERED IN THE STATE OF NORTH CAROLINA MUST REPLACE PROPERTY IRONS, MONUMENTS, AND OTHER PERMANENT POINTS OF REFERENCE DESTROYED BY THE CONTRACTOR AT THE CONTRACTOR'S EXPENSE.
- THE CONTRACTOR WILL CLEAR AND GRUB UTILITY EASEMENTS TO INSTALL NEW UTILITIES. ON ROADWAY RIGHT-OF-WAYS, THE CONTRACTOR WILL ONLY REMOVE THE TREES MARKED ON THE PLANS AND MUST MAKE EVERY EFFORT DURING CONSTRUCTION TO PROTECT THE TREES THAT WILL NOT BE REMOVED. CONTRACTOR MAY LEAVE MULCH FROM CLEARING OPERATIONS WITHIN THE PERMANENT UTILITY EASEMENT EXCEPT IN AREAS DESIGNATED AS WETLANDS OR OTHERWISE DIRECTED BY THE OWNER.
- THE CONTRACTOR MUST FURNISH, INSTALL, AND MAINTAIN NECESSARY EROSION CONTROL MEASURES AS PER THE REQUIREMENTS OUTLINED IN THE EROSION AND SEDIMENT CONTROL PERMIT, WHETHER OR NOT SHOWN ON THE PLANS TO PROTECT ADJACENT CREEKS, RIVERS, ROADWAYS, ETC. FROM SILTATION AND EROSION.
- 9. THE CONTRACTOR IS RESPONSIBLE FOR THE RELOCATION OF EXISTING UTILITIES IF REQUIRED DURING THE INSTALLATION OF NEW WORK. RELOCATION OF EXISTING UTILITIES MUST BE COORDINATED WITH THE AFFECTED UTILITY COMPANY. 10. THE CONTRACTOR MUST SUPPORT UTILITY POLES AS NECESSARY. THE CONTRACTOR MUST COORDINATE UTILITY POLE SUPPORT
- WITH THE APPROPRIATE UTILITY COMPANIES. 11. THE CONTRACTOR MUST RESTORE/REPLACE SIGNS, MAILBOXES, ETC. ENCOUNTERED DURING CONSTRUCTION TO ORIGINAL
- 12. THE CONTRACTOR MUST RESTORE DISTURBED AREAS TO THE EXISTING GRADE UNLESS OTHERWISE NOTED ON THE DRAWINGS.
- 13. ROADWAY DITCHES DISTURBED DURING CONSTRUCTION MUST BE RESTORED TO PRE-CONSTRUCTION CONDITION OR BETTER AND CONFORM TO NCDOT REQUIREMENTS, DITCHES MUST BE LINED WITH EROSION CONTROL MATTING UNLESS OTHERWISE NOTED.
- 14. EXCAVATED MATERIAL MUST BE PLACED WITHIN THE LIMITS OF DISTURBANCE DURING UTILITY INSTALLATION. THE CONTRACTOR MUST PROVIDE THE NECESSARY SEDIMENT AND EROSION CONTROL MEASURES TO CONTROL RUN-OFF. EXCESS EXCAVATED MATERIAL MUST BE REMOVED FROM THE CONSTRUCTION SITE AND DISPOSED OF LEGALLY.
- 15. TOPOGRAPHIC SURVEY SHOWN AS PROVIDED BY WITHERSRAVENEL AND SUPPLEMENTED WITH AVAILABLE LIDAR DATA OBTAINED FROM NCONEMAP.GOV.
- 16. HORIZONTAL DATUM IS NAD 83.
- 17. VERTICAL DATUM IS NAVD 88.

DESCRIPTION

1' CONTOUR INTERVAL

5' CONTOUR INTERVAL

RIGHT OF WAY LIMITS

ROADWAY CENTELINE

CURB & GUTTER

WATER MAIN

WATER-RECLAIM

OVERHEAD ELECTRIC

OVERHEAD TELEPHONE

**FIBEROPTIC** 

TFI FPHONE

UTILITY-OH

RAILROAD

STRUCTURES

FLOODWAY

WOODS LINE

WFTI ANDS

FENCING STRUCTURE

EDGE OF PAVEMENT

SANITARY SEWER FACILITIES

FIRE HYDRANT ASSEMBLY

- 18. SHORING MUST BE IN ACCORDANCE WITH OSHA TRENCHING STANDARDS PART 126, SUBPART P, AMENDED TO DATE. CONTRACTOR MUST SUBMIT SHORING PLANS TO THE ENGINEER PRIOR TO EXCAVATION. SHORING PLANS MUST BE SIGNED AND SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE OF NORTH CAROLINA.
- 19. RESTORE DRIVES, FENCING, PAVEMENT, AND GRASSED AREAS TO THEIR ORIGINAL CONDITION AND MAINTAIN UNTIL FINAL ACCEPTANCE OF THE PROJECT.
- 20. THE CONTRACTOR MUST NOT REMOVE, TRIM, OR DAMAGE TREES DURING CONSTRUCTION ACTIVITIES, EXCEPT WHERE NOTED. NOT ALL TREES ARE SHOWN ON THE PLANS.
- 21. WHEN EXISTING UTILITY LINES ARE EXPOSED DURING CONSTRUCTION THE CONTRACTOR MUST PROVIDE SUPPORT AS NECESSARY TO PREVENT DAMAGE TO THE EXISTING UTILITY. DAMAGE TO EXPOSED UTILITIES MUST BE REPAIRED AT THE CONTRACTORS'
- 22. ONLY PIPE AND MATERIALS THAT ARE TO BE INSTALLED WITHIN THE WORKDAY MAY BE STORED WITHIN THE RIGHT-OF-WAY. MATERIAL MUST BE BARRICADED, SEPARATED FROM TRAFFIC, AND HAVE PROPER SIGNAGE.

**EXISTING** 

\_\_\_\_\_

\_\_\_\_\_

-----

— — FM— — — FM— — — FM— —

--E--E---E---E---

--OHE---OHE---OHE--

--T---T---T---T--

---OHT----OHT---

--U--U--U---U--

\_\_\_\_\_\_

- 23. PROVIDE SCREENINGS TO PREVENT DAMAGE TO PAVEMENT WHERE MATERIAL IS PLACED ON ROADWAY. THE CONTRACTOR MUST REPAIR ANY PAVEMENT DAMAGED OUTSIDE THE DESIGNATED TRENCH AREA. ROADS IN THE WORK AREA MUST BE CLEANED AT THE
- 24. ACCESS DURING CONSTRUCTION FOR FIRE TRUCKS AND OTHER EMERGENCY RESPONSE VEHICLES MUST BE COORDINATED WITH THE CATAWBA COUNTY EMS (828) 465-8230.

**LEGEND** (UNLESS OTHERWISE DENOTED)

PROPOSED

-----E-----E------E

N/A

N/A

N/A

N/A

N/A

N/A

- 25. THE CONTRACTOR MUST VERIFY MATERIALS, LOCATION, ELEVATIONS, DIMENSIONS, AND LAYOUT OF EXISTING PIPING TO BE CONNECTED TO PRIOR TO ORDERING MATERIALS OR COMMENCING CONSTRUCTION.
- 26. ITEMS THAT ARE REMOVED AND REPLACED OR DISTURBED DURING CONSTRUCTION ARE TO BE REPLACED WITH EQUAL OR BETTER QUALITY THAN THE ORIGINAL. WATER AND SEWER PIPES THAT ARE TO BE ABANDONED MUST BE FILLED WITH FLOWABLE FILL.
- 27. THE CONTRACTOR MUST MAINTAIN ACCESS TO AFFECTED PROPERTIES DURING CONSTRUCTION.
- 28. THE CONTRACTOR IS RESPONSIBLE FOR THE PREPARATION, SUBMISSION, AND OBTAINING REQUIRED PERMITS ASSOCIATED WITH
- STREET CUTS, LANE/ROAD CLOSURES, AND TRAFFIC CONTROL INSPECTIONS. 29. THE CONTRACTOR MUST PREVENT WATER ASSOCIATED WITH CONCRETE OR ASPHALT CUTTING FROM ENTERING STORM DRAINS. IF
- CUTTING WATER ENTERS THE STORM DRAIN, THE CONTRACTOR WILL BE RESPONSIBLE FOR ITS REMOVAL.
- 30. THE CONTRACTOR MUST IMMEDIATELY CLEAN ANY SOIL WHICH IS TRACKED OFF WORK SITE.
- 31. THE CONTRACTOR MUST PROVIDE FULL DEPTH PAVEMENT REPLACEMENT AT POINTS WHERE PAVEMENT IS REMOVED. THE CONTRACTOR WILL MILL AND OVERLAY TO THE EXTENTS SHOWN AND PROVIDE THE REQUIRED PAVEMENT MARKINGS.
- 32. THE CONTRACTOR MUST SECURE AND PLATE PITS THAT ARE TO REMAIN OPEN FOR LONGER THAN THE COURSE OF A WORKDAY. THE CONTRACTOR MUST ENGAGE THE SERVICE OF A PROFESSIONAL STRUCTURAL ENGINEER REGISTERED IN THE STATE OF NORTH CAROLINA TO DETERMINE THE APPROPRIATE METHODS FOR SHORING AND PLATING OPEN PITS.
- 33. THE MINIMUM SEPARATION BETWEEN WATER AND SEWER MAINS IS 10 FEET HORIZONTALLY, MEASURED FROM OUTSIDE OF EACH PIPE. IF A 10 FOOT HORIZONTAL SEPARATION CANNOT BE MAINTAINED THE WATER AND SEWER MAINS MUST BE IN SEPARATE TRENCHES WITH THE ELEVATION OF THE BOTTOM OF THE WATER MAIN A MINIMUM OF 18 INCHES ABOVE THE TOP OF THE SEWER MAIN WHEN IT IS NECESSARY FOR A WATER MAIN TO CROSS OVER A SEWER THE FLEVATION OF THE BOTTOM OF THE WATER MAIN MUST BE A MINIMUM OF 18 INCHES ABOVE THE TOP OF THE SEWER. IF A WATER MAIN CROSSES UNDER A SEWER BOTH THE WATER MAIN AND THE SEWER MUST BE CONSTRUCTED OF FERROUS MATERIAL WITH JOINTS EQUIVALENT TO WATER MAIN STANDARDS FOR A DISTANCE OF 10 FEET ON EACH SIDE OF THE POINT OF CROSSING. THE SECTION OF WATER MAIN PIPE MUST BE CENTERED AT THE POINT OF CROSSING.
- 34. THE MINIMUM SEPARATION FROM PRIVATE AND PUBLIC WELLS PER STATE MINIMUM REQUIREMENTS IS 25' FOR PRIVATE WELLS AND 50' FOR PUBLIC WELLS.
- 35. CURBS, SIDEWALKS, CONCRETE DRIVEWAYS, AND CONCRETE ROADWAYS MUST BE REPLACED TO THE FIRST EXPANSION JOINT BEYOND THE TRENCH EXCAVATION LIMITS AND MUST MATCH EXISTING.
- 36. THE CONTRACTOR IS RESPONSIBLE FOR PROTECTING EXISTING UTILITIES IN CONFLICT WITH THE TRENCH. TEMPORARY RELOCATION OF WIRES AND CABLES ALONG OR TO THE SIDE OF THE TRENCH MAY BE REQUIRED.
- 37. THE CONTRACTOR MUST PROVIDE TRAFFIC CONTROL, BARRIERS, LANDSCAPING, AND TRENCH COVER, TO PERFORM THE WORK IN ACCORDANCE WITH NCDOT STANDARDS, CATAWBA COUNTY REQUIREMENTS, AND MUTCO.
- 38. THE LOCATION AND DISPOSAL OF MATERIAL WILL BE DETERMINED BY THE CONTRACTOR AND THE CONTRACTOR MUST FOLLOW APPLICABLE LOCAL, STATE AND FEDERAL REGULATIONS DURING DISPOSAL PROCESS.
- 39. A PROJECT SIGN MUST BE POSTED AT EACH CONSTRUCTION ENTRANCE LOCATION.

#### **CONSTRUCTION SEQUENCE:**

DESCRIPTION

**BLOW OFF** 

**CATCH BASIN** 

**CLEAN OUT** 

DROP INLET

**GUY WIRE** 

LIGHT POLE

POWER POLE

TV PEDESTAL

WATER METER

WATER VALVE

UTILITY MANHOLE

**ELECTRICAL PEDESTAL** 

FIBER OPTIC MARKER

SPOT ELEVATION

PROPERTY IRON

MAIL BOX

TREE

SIGN

**CONTROL POINT** 

FIBER OPTIC BOX

FLARED END SECTION

STORM DRAINAGE MANHOLE

UNDERGROUND TELEPHONE BOX

**EXISTING** 

THH

 $\bowtie$ 

- CONTRACTOR TO NOTIFY CATAWBA COUNTY, HOA AND ENGINEER A MINIMUM OF 2 WEEKS HOURS BEFORE MOBILIZATION TO THE SITE AND A MINIMUM OF 72 HOURS BEFORE BEGINNING ANY CONSTRUCTION ON THE SITE.
- 2. CONTRACTOR TO REMOVE EXISTING FENCING IN CONFLICT WITH CONSTRUCTION OF THE TEMPORARY SLUDGE HOLDING TANK AND REESTABLISH FENCING UPON COMPLETION. DURING CONSTRUCTION TEMPORARY FENCING SHALL BE INSTALLED TO
- 3. CONTRACTOR TO ESTABLISH SITE DRAINAGE, SILT FENCE AND TREE PROTECTION FENCING AND EROSION CONTROL MEASURES PRIOR TO DISTURBING SITE.
- 4. CONTRACTOR SHOULD ESTABLISH GRADE AND STONE BASE FOR TEMPORARY SLUDGE HOLDING TANK PRIOR TO SETTING TANK.
- 5. PROPOSED SLUDGE HOLDING TANK SHOULD BE SET, LEVELED AND ACCEPTED PRIOR TO BEGINNING PIPING.
- 6. NEW DECANT PIPING, DRAIN PIPING, AERATION PIPING AND VALVES SHOULD BE INSTALLED AND TESTED PRIOR TO CONNECTION TO THE EXISTING WETWELL, SLUDGE HOLDING TANK, SLUDGE RETURN/WASTE PIPING AND AIR PIPING.
- CONTRACTOR TO COORDINATE WITH COUNTY, HOA, ENGINEER AND WWTP ORC PRIOR TO START UP OF THE TEMPORARY SLUDGE HANDLING SYSTEM.
- 8. SITE SHALL BE RESTORED TO ORIGINAL CONDITION, FENCING RE-STABLISHED PRIOR TO FULL DEMOBILIZATION AND FINAL ACCEPTANCE.



1" = 500'

# RRREVIATIONS

PROPOSED	
•	
•	
N/A	
N/A	
N/A	
<b>\$</b>	
N/A	
0	
N/A	
N/A	
N/A	
•	
H	
N/A	
N/A	
N/A	
N/A	
N/A	
N/A	

CO

CLEAN OUT

CONC CONCRETE

	AND	СРР
ASHTO	AT AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS	CS CV CY
ВС	AGGREGATE BASE COURSE	DI
BS	ACRYLONITRILE BUTADIENE STYRENE	DIA/Ø
C	AIR CONDITIONER	DIP
CP	ASBESTOS CEMENT PIPE	DK
CI	AMERICAN CONCRETE INSTITUTE	DMH
	AREA INLET	DP
ΙP	ANGLE IRON FOUND	Е
LBC	ALUMINUM BOX CULVERT	EA
NSI	AMERICAN NATIONAL STANDARDS INSTITUTE	EC
RV	AIR RELEASE VALVE	EG
STM	AMERICAN SOCIETY FOR TESTING AND MATERIALS	EGCL
WWA	AMERICAN WATER WORKS ASSOCIATION	EL
XF	AXLE FOUND	ELEC
	BOLLARD	EM
В	BACK TO BACK	EMH
Ē	BASE FLOOD ELEVATION	EO
FFE	BASEMENT FINISHED FLOOR ELEVATION	EOP
-P	BACK FLOW PREVENTER	EPD
-V	BUTTERFLY VALVE	ESO
-W	BOTTOM FACE OF WALL	EW
-	BORE HOLE	EX
.DG	BUILDING	FAL
M	BENCHMARK	FBD
DA DD	BLOW OFF ASSEMBLY	FBW
OB OC	BOTTOM OF BANK	FCA
OC R	BACK OF CURB BIKE RACK	FCL
RKRW	BRICK RETAINING WALL	FDC FEL
RL	BUILDING RESTRICTION LINE	FEMA
RW	BLOCK RETAINING WALL	FES
λG	CURB & GUTTER	F-F
4	COMMON AREA	FFE
ABC	COARSE AGGREGATE BASE COURSE	FNC
AMA	COASTAL AREA MANAGEMENT ACT	FOB
٩P	CORRUGATED ALUMINUM PIPE	FOM
APA	CORRUGATED ALUMINUM PIPE ARCH	FP
ΔTV	CABLE TELEVISION	FPE
3	CATCH BASIN	FPT
3X	CABLE TV BOX	FPVC
·C	CENTER TO CENTER	FSR
F	CUBIC FOOT (FEET)	FSTL
FS	CUBIC FEET PER SECOND	FG
HH	CABLE TV HANDHOLE	FGCL
P	CAST IRON PIPE	FHA
SP	CAST IRON SOIL PIPE	FL
_	CENTERLINE	FM
_M	COLUMN	FOC
_R	CLEAR SPACE	FT/'
MF	CONCRETE MONUMENT FOUND	FVL
MP	CORRUGATED METAL PIPE	FWD
MU	CONCRETE MASONRY UNIT	FWI

		ABBREVIATIONS
CORRUGATED PLASTIC PIPE	GALV	GALVANIZED
CURB STOP	GB	GRADE BREAK
CONTROL VALVE	GFFE	GARAGE FINISHED FLOOR ELEVATION
CUBIC YARD	GLT	GROUND LIGHT
DROP INLET	GM	GAS METER
DIAMETER	GPE	GRADED PAD ELEVATION
DUCTILE IRON PIPE	GPM	GALLONS PER MINUTE
DECK	GR	GUARD RAIL
STORM MANHOLE	GTMH	GREASE TRAP MANHOLE
DOG WASTE DISPOSAL BIN	GTS	GAS TEST STATION
EAST	GV	GATE VALVE
EACH	GW	GUY WIRE
EDGE OF CONCRETE	HBX	HOT BOX
EXISTING GRADE	HCR	HANDICAP RAMP
EXISTING GRADE CENTERLINE	HCS	HANDINCAP SIGN
ELEVATION	HDD	HORIZONTAL DIRECTIONAL DRILL
ELECTRICAL	HDPE	HIGH DENSITY POLYETHYLENE PIPE
ELECTRIC METER	HORIZ	HORIZONTAL
ELECTRIC MANHOLE	HPT	HIGH POINT
ELECTRIC OUTLET	HPPP	HIGH PERFORMANCE POLYPROPYLENE PIPE
EDGE OF PAVEMENT	HR	HANDRAIL
ELECTRIC PEDESTAL	HVAC	HATING, VENTILATION AND AIR CONDITION
ELECTRIC STUBOUT	HW	HEADWALL
EDGE OF WATER	IC	INTERCOM
EXISTING	ICV	IRRIGATION CONTROL VALVE
ALUMINUM FENCE	IN/"	INCH
BOARD FENCE	INV	INVERT
BARBED WIRE FENCE	IPF	IRON PIPE FOUND
ACCESS CONTROL FENCE	IPS	IRON PIPE SET
CHAIN LINK FENCE	IRF	IRON ROD FOUND
FIRE DEPARTMENT CONNECTION	IRM	IRRIGATION METER
ELECTRIC FENCE	IRS	IRON ROD SET
FEDERAL EMERGENCY MANAGEMENT AGENCY	JB	JUNCTION BOX
FLARED END SECTION	LA	LANDSCAPE AREA
FACE TO FACE	LAT	LATITUDE
FINISHED FLOOR ELEVATION	LF	LINEAR FEET
FENCE	LOD	LIMIT OF DISTURBANCE
FIBER OPTIC BOX	LONG	LONGITUDE
FIBER OPTIC MARKER	LP	LIGHT POLE
FLAG POLE	LPT	LOW POINT
FINISHED PAD ELEVATION	LT	LEFT
PICKETT FENCE	MAX	MAXIMUM
PVC/PLASTIC FENCE	MFR	MANUFACTURER
SPLIT RAIL FENCE	MGD	MILLION GALLONS PER DAY
STEEL FENCE	MH	MANHOLE
FINISHED GRADE	MIN	MINIMUM
FUTURE OR FINISHED GRADE CENTERLINE	MJ	MECHANICAL JOINT
FIRE HYDRANT ASSEMBLY	MK	MAIL KIOSK
FLOW LINE	MNF	MAG NAIL FOUND
FORCE MAIN	MNS	MAG NAIL SET
FACE OF CURB	MW	MONITORING WELL
FOOT/ FEET	MWSE	MAXIMUM WATER SURFACE ELEVATION
VINYL FENCE	N	NORTH
WOOD FENCE	NCGS	NORTH CAROLINA GEODETIC MONUMENT
WROUGHT IRON FENCE	NE	NORTH EAST
WOVEN WIRE FENCE	NG	NATURAL GROUND
GAUGE	NIC	NOT IN CONTRACT

FWW

	ABBREVIATIONS
,	CALVANIZED
	GALVANIZED
	GRADE BREAK GARAGE FINISHED FLOOR ELEVATION
	GROUND LIGHT
	GAS METER
	GRADED PAD ELEVATION
	GALLONS PER MINUTE
	GUARD RAIL
4	GREASE TRAP MANHOLE
-	GAS TEST STATION
	GATE VALVE
	GUY WIRE
	HOT BOX
	HANDICAP RAMP
	HANDINCAP SIGN
	HORIZONTAL DIRECTIONAL DRILL
-	HIGH DENSITY POLYETHYLENE PIPE
Z	HORIZONTAL
	HIGH POINT
	HIGH PERFORMANCE POLYPROPYLENE PIPE
	HANDRAIL
•	HATING, VENTILATION AND AIR CONDITIONING
	HEADWALL INTERCOM
	IRRIGATION CONTROL VALVE
	INCH
	INVERT
	IRON PIPE FOUND
	IRON PIPE SET
	IRON ROD FOUND
	IRRIGATION METER
	IRON ROD SET
	JUNCTION BOX
	LANDSCAPE AREA
	LATITUDE
	LINEAR FEET
	LIMIT OF DISTURBANCE
ì	LONGITUDE
	LIGHT POLE
	LOW POINT
	LEFT
	MAXIMUM MANUFACTURER
	MILLION GALLONS PER DAY
	MANHOLE
	MINIMUM
	MECHANICAL JOINT
	MAIL KIOSK
	MAG NAIL FOUND
	MAG NAIL SET
	MONITORING WELL
Ε	MAXIMUM WATER SURFACE ELEVATION
	NORTH

NO./# NUMBER NO PARKING NOT TO SCALE ON CENTER OUTSIDE DIAMETER OVERHEAD UTILITY OHG **BUILDING OVERHANG OVERHEAD TELEPHONE** OPEN SPACE PLANTING AREA POUNDS PER CUBIC FOOT POLYETHYLENE PROPOSED GRADE POST INDICATOR VALVE PK NAII FOUND PPLP **PUMP STATION** RADIUS RIGHT OF WAY **REBAR FOUND** REBAR SET **RCBC RGRCP** RESTRAINED JOINT **RWALL RETAINING WALL RWM** RWV STANDARD CURB SCHEDULE SDR SOUTH EAST SQUARE FEET SPILL CURB SPIGOT SPRINKLER HEAD TRAVERSE SPIKE SANITARY SEWER STAINLESS STEEL STATION SEWER VALVE SOUTH WEST SQUARE YARD

OVERHEAD ELECTRICAL LINE PROPOSED GRADE CENTERLINE POWER POLE WITH LIGHT POUNDS PER SQUARE INCH POLYVINYL CHLORIDE PIPE REINFORCED CONCRETE BOX CULVERT REINFORCED CONCRETE PIPE ROLLED EROSION CONTROL PRODUCT RING-GASKETED REINFORCED CONCRETE PIPE RIGHT OF WAY MONUMENT FOUND RIGHT OF WAY MONUMENT RECLAIMED WATER VALVE STORMWATER CONTROL MEASURE STANDARD DIMENSION RATIO SANITARY SEWER MANHOLE

TREE CONSERVATION AREA TCP TERRA COTTA PIPE TEMPORARY DIVERSION DITCH TDD TFW TOP FACE OF WALL THH **TELEPHONE HANDHOLE** TLP TELEPHONE PEDESTAL TOB TOP OF BANK TOC TOP OF CURB TOE TOE OF SLOPE TOP TOP OF SLOPE ELECTRIC TRANSFORMER TRAFFIC HANDHOLE TURF REINFORCEMENT MAT TOP OF SLAB TRAFFIC SIGNAL BOX TRAFFIC SIGNAL POLE TSV TRACER WIRE TEST STATION VALVE TYP TYPICAL TVPED CABLE TV PEDESTAL UG UNDERGROUND UNLESS OTHERWISE NOTED UON UTILITY POLE UNITED STATES GEOLOGICAL SURVEY USGS UTILITY VALVE **VERT** VERTICAL VCP VITRIFIED CLAY PIPE VLTC CABLE VAULT VLTE ELECTRIC VAULT FIBER OPTIC VAULT VLTG GAS VAULT TELEPHONE VAULT VLTP VLTR RECLAIMED VAULT **VLTS** SEWER VAULT UTILITY VAULT VLTW WATER VAULT SEWER VENT PIPE WITH WDL WOODLINE WF WETLAND FLAG WH WELL HOUSE WATER METER/WATER MAIN WMH WATER MANHOLE

RECLAIMED WATER MANHOLE

WATER SURFACE ELEVATION

NOT RELEASED FOR CONSTRUCTION

WATER RECEPTACLE

WOVEN WIRE FABRIC

WATER VALVE

WWM WELDED WIRE MESH

YARD INLET

WMR

WSE

WWF

TEMPORARY BENCHMARK

TELEPHONE BOX

TBX

**FINAL DRAWING** FOR REVIEW PURPOSES ONLY

**GENERAL NOTES.** LEGEND AND

INITIAL PLAN DATE: 10/01/2025 REVISIONS:

MER

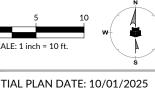
1 - 10/22/2025 RKP **60% SUBMITTAL** 

Know what's below. **Call** before you dig. WR JOB NUMBER 24-0326-002 DRN: RP DGN: MW CKD: AE

**ABBREVIATIONS** 



CATAWBA COUNTY
WWTP EMERGENCY SERVICES

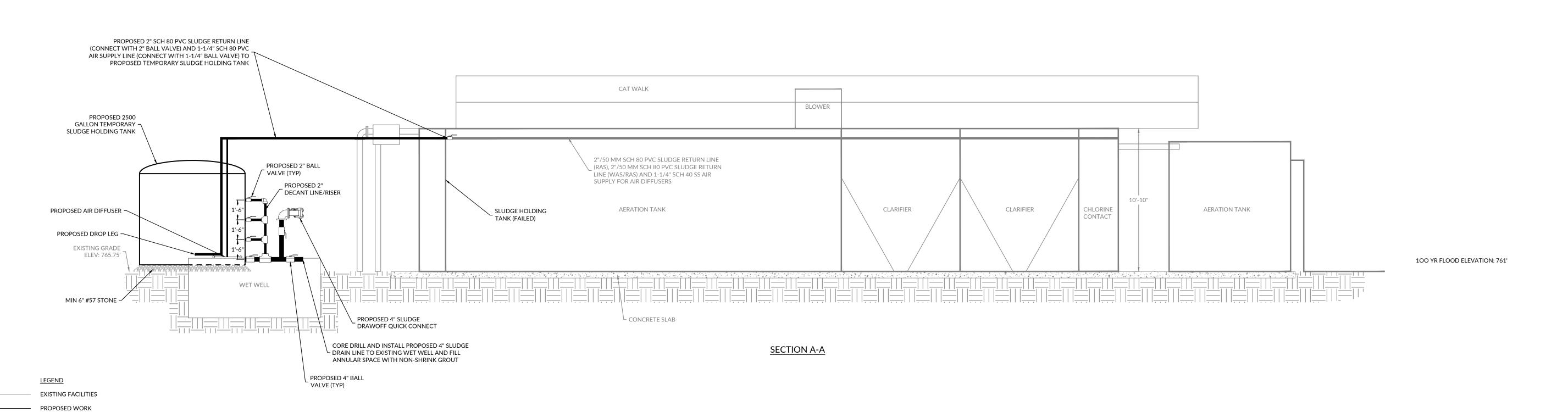


INITIAL PLAN DATE: 10/01/2025 REVISIONS: 1 - 10/22/2025 RKP 60% SUBMITTAL

Know what's below.

Call before you dig. WR JOB NUMBER 24-0326-002 DRN: RP DGN: MW CKD: AE

SITE PLAN



WWTP EMERGENCY UPGRADES SCALE: 1/4" = 1'-0"

> FINAL DRAWING FOR REVIEW PURPOSES ONLY

NOT RELEASED FOR CONSTRUCTION



CATAWBA COUNTY
WWTP EMERGENCY SERVICE

INITIAL PLAN DATE: 10/01/2025 REVISIONS: 1 - 10/22/2025 RKP **60% SUBMITTAL** 

Know what's below. Call before you dig. WR JOB NUMBER 24-0326-002 DRN: RP DGN: MW CKD: AE

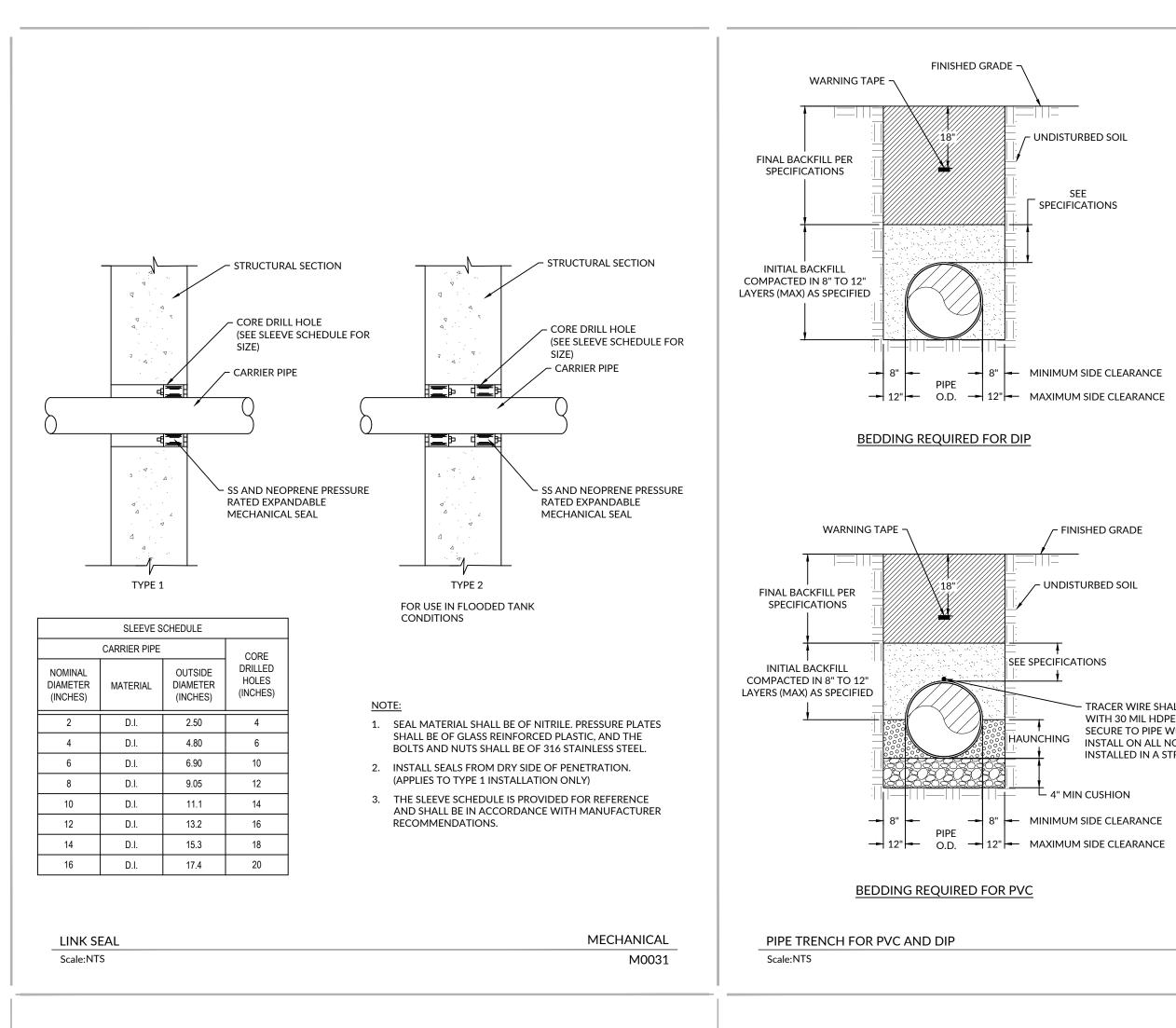
WWTP DETAILS

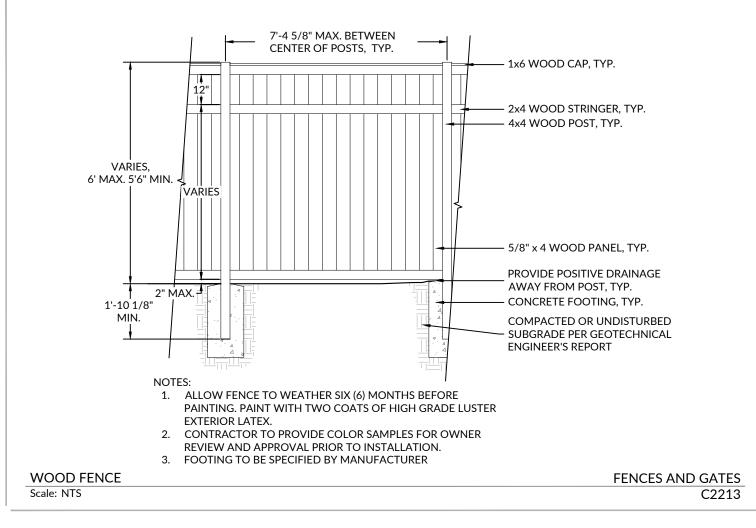
Know what's below.
Call before you dig.
WR JOB NUMBER 24-0326-002
DRN: RP DGN: MW CKD: AE

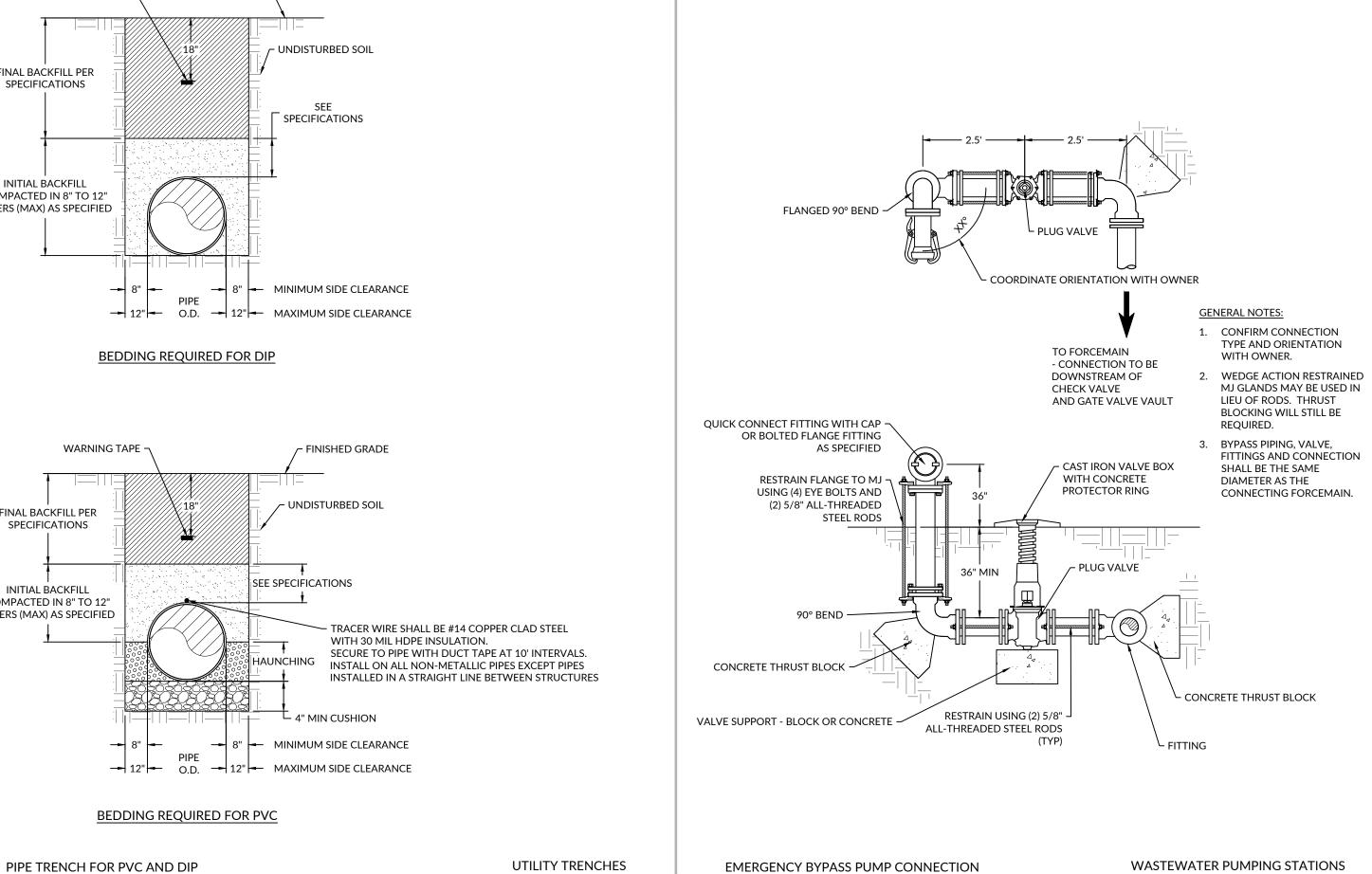
STANDARD DETAILS

C3.00







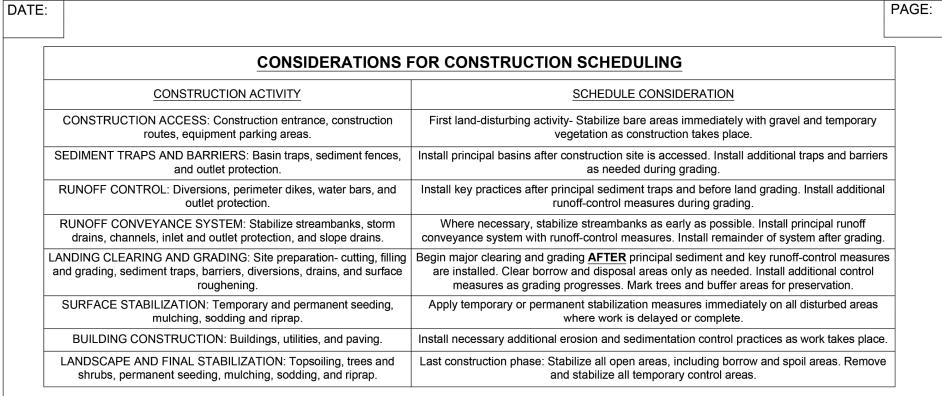


C5001

C7532

DRN: RP DGN: MW CKD: AE

**EROSION CONTROL DETAILS** 



NOTE: The above are the main aspects of a typical construction sequence in general terms. A detailed Construction Sequence should be site specific based

- on your project and site needs. As a minimum, the construction sequence schedule should show the following: The erosion and sedimentation control practices to be installed,
  - Principal development activities,
  - What measures should be in place before other activities are begun, and
  - Compatibility with the general construction schedule of the contract.

Many timely construction techniques can reduce the erosion potential of a site, such as (1) shaping earthen fills daily to prevent overflows and (2) constructing temporary diversions ahead of anticipated storms. These types of activities cannot be put on the construction sequence schedule, but should be used whenever possible.

CONSTRUCTION SEQUENCING

DATE:

V- DITCH SECTION VIEW

TRAPEZOIDAL DITCH SECTION VIEW

MIN. 2 STAKES ON UPSLOPE -

DATE:

MIN. 4 STAKES ON DOWNSLOPE

Effective Date: 9/1/2023 In accordance with the 2013 Design Manual Updates

DATE:

Rye (grain)

extend beyond June.

Piedmont—Jan. 1 - May 1

Coastal Plain—Dec. 1 - Apr. 15

used as a mulch anchoring tool.

Annual lespedeza (Kobe in

Piedmont and Coastal Plain Korean in Mountains)

Mountains—Above 2500 feet: Feb. 15 - May 15

immediately following erosion or other damage.

Below 2500 feet: Feb. 1- May 1

TEMPORARY SEEDING RECOMMENDATIONS FOR LATE WINTER AND EARLY SPRING

Omit annual lespedeza when duration of temporary cover is not to

Soils with a pH of 6 or higher need not be limed.

**TEMPORARY SEEDING** 

TEMPORARY SEEDING RECOMMENDATIONS FOR SUMMER

n the Piedmont and Mountains, a small-stemmed Sudangrass ma

**SEED BED PREPARATION:** 

substituted at a rate of 50 lb/acre.

Mountains — May 15 - Aug. 15

Coastal Plain — Apr. 15 - Aug. 15

immediately following erosion or other damage.

incorporated into the top 4-6 inches of soil. If a hydraulic seeder is used, do not mix seed and fertilizer more than 30 minutes before application.

Piedmont — May 1 - Aug. 15

Apply 4,000 lb/acre straw. Anchor straw by tacking with asphalt, netting, Apply 4,000 lb/acre straw. Anchor straw by tacking with asphalt,

or a mulch anchoring tool. A disk with blades set nearly straight can be nearly straight ca

Planting is to be done immediately after finished grades are obtained and seedbed preparation is completed.

Rye (grain)

Mountains — Aug. 15 - Dec. 15

15 lbs/acre

2.5-3.5 lbs/acre\*

5-7 lbs/acre\*

5-7 lbs/acre\*

Seeding Dates

In accordance with the 2013 Design Manual Updates

Page:

SILT FENCE

BURY WIRE FENCE,

AND HARDWARE

**CLOTH IN TRENCH** 

PAGE: DATE: TO WEDGE WATTLE TOP OF BANK NON-INVASIVE PERMANENT SEEDING RECOMMENDATIONS FOR FALL NON-INVASIVE PERMANENT SEEDING RECOMMENDATIONS SEEDING MIXTURE NON-INVASIVE PERMANENT SEEDING FOR LATE WINTER AND EARLY SPRING RECOMMENDATIONS FOR SUMMER Hard Fescue SEEDING MIXTURE Switchgrass Centipede 5 lbs/acre Indian Grass Indian Woodoats 1.5-2.5 lbs/acre\* Indian Woodoats 1.5-2.5 lbs/acre\* ISOMETRIC VIEW Big Bluestem Virginia Wild Rye 4-6 lbs/acre Virginia Wild Rye 4-6 lbs/acre\* Indian Woodoats 1.5-2.5 lbs/acre\* Virginia Wild Rye 4-6 lbs/acre\* Spacing Between Socks / Wattles (Feet) \*Depending upon mix with other species. See table 6.11.d \*Depending upon mix with other species. See table 6.11.d from Chapter 6 of the NC \*Depending upon mix with other species. See table 6.11.d from from Chapter 6 of the NC Erosion and Sediment Control Erosion and Sediment Control Planning | Chapter 6 of the NC Erosion and Sediment Control Planning and Planning and Design Manual. DITCH SLOPE and Design Manual. Design Manual. Coastal or Eastern Piedmont for Centipede- Sept. 1 - May 1 PLAN VIEW Coastal and Piedmont for Indian Woodoats and Virginia Mountains - July 15- Aug 15 Mountains - Hard Fescue- Aug 1 - June 1 1. Other materials providing equivalent protection against erosive velocities may be substituted for Wild Rye- Feb 15 - April 1 Piedmont - Aug 15 - Oct 15 Mountains- Switchgrass, Indian Grass, Big Bluestem- Dec 1 - April 15 compost use in silt socks or wattles. Mountains for Indian Woodoats and Virginia Wild Rye-Piedmont and Coastal- Switchgrass, Indian Grass, Big Bluestem-2. Fill silt sock/wattle netting uniformly to the desired length such that logs do not deform. March 1 - May 15 MIN. 4 STAKES ON DOWNSLOPE MIN. 2 STAKES ON UPSLOPE Dec 1 - April 1 3. Use 24 inch long wooden stakes with a 2 inch x 2 inch nominal cross section. Indian Woodoats and Virginia Wild Rye Coastal- Indian Woodoats and Virginia Wild Rye- Sept 1 - Nov 1 4. Install silt sock/wattle(s) to a height on slope so flow will not wash around silt sock/wattle and are both sun and shade tolerant. Significant maintenance may be required to obtain desired 5. Install a minimum of two up-slope stakes and four down-slope stakes at an angle to wedge silt Hard Fescue is not recommended for slopes > 5%. Prefers shade. sock/wattle to ground at bottom ditch. Use staples to secure silt sock/wattle to the ground to LIMING- Apply lime according to soil test recommendations. If the pH (acidity) of the soil is not known, an application of ground agricultural limestone at the rate of 1 to 1½ tons/acre on coarse0textured soils 6. The use of flocculants such as Polyacrylamide (PAM) is recommended. Apply flocculants on top

> 3. If ponding becomes excessive, the silt sock/wattle may need to be replaced with a larger diameter or a different measure. 4. Reinstall if damaged or dislodged 5. Silt socks/Wattles shall be inspected until land disturbance is compete and the area above the measure is permanently stabilized. Effective Date: 9/1/2023 SILT SOCK / WATTLE FOR CHECK DAM In accordance with the 2013

1. Inspect all measures weekly and after each rainfall of 1.0 inch or greater. Remove accumulated

of sock/wattle and to matting on either side of sock/wattle according to manufacturer

recommended rates. Reapply after each 1.0 inch rainfall.

2. Silt sock/Wattle(s) must be replaced if clogged or torn.

MAINTENANCE:

sediment and any debris.

Design Manual Updates

PAGE:

. Permanent seeding, sodding or other means of stabilization are required when all construction work is completed according to the NPDES timeframes table. A North Carolina Department of Agriculture soils test (or equal) is highly recommended to be obtained for all areas to be seeded, sprigged, sodded or planted.

Use a seeding mix that will produce fast0growing nurse crops and includes non-invasive species that will eventually provide a permanent groundcover. Soil blankets may be used in lieu of nurse crops. Mat, tack or crimp mulch, as needed to stabilize seeded areas until root establishment. Mulch must cover at leaser 80% of the soil surface. Ground cover shall be maintained until permanent vegetation is established and stable against accelerated erosion.

FERTILIZER- Base application rates on soil tests. When these are not possible, apply a 10-10-10 grade fertilizer at 700-1,000 lb/acre. Both fertilizer and lime should be incorporated into the top 4-6 inches of

sealed or crusted, loosen it just prior to seeding by raking, harrowing, or other suitable methods for fine grading, the finished grade shall be a smooth even soil surface with a loosen uniformly fine texture.

SURFACE ROUGHENING- If recent tillage operations have resulted in a loose surface additional roughening may not be required, except to break up large clods. If rainfall causes the surface to become

all ridges and depressions shall be removed and filled to provide the approved surface drainage . Planting is to be done immediately after finished grades are obtained and seedbed preparation is

PERMANENT SEEDING

and 2-3 tons/acre on fine-textured soils is usually sufficient. Apply limestone uniformly and incorporate into the top 4-6 inches of soil. Soils with a pH of 6 or higher need not be limed.

Date:

FILTER OF #57

WASHED STONE

soil. If a hydraulic seeder is used, do not mix seed and fertilizer more than 30 minutes before application.

TOP OF SILT FENCE MUST BE AT LEAST 1' ABOVE THE TOP OF THE WASHED STONE STEEL FENCE POST WIRE FENCE **FRONT VIEW** HARDWARE CLOTH

3' FILTER FABRIC

ON GROUND

TEMPORARY GRAVEL CONSTRUCTION ENTRANCE/EXIT

Effective Date: 9/1/2023 In accordance with the 2013 Design Manual Updates

BURY WIRE FENCE / AND HARDWARE CLOTH FILTER FABRIC IN TRENCH **SECTION VIEW** 

or greater rainfall event. Complete any required repairs immediately. BURY 6" OF UPPER EDGE OF Freshen stone when sediment accumulation exceeds 6 inches. Keep mesh free of debris to provide adequate flow.

1. Hardware cloth and gravel should overlay the silt fence at least 12 inches.

2. Stone outlets should be placed on low elevation areas of silt fence and

1. Per NCG-01, inspect outlet at lest once a week and after each 1 inch

2. Remove sediment when half of stone outlet is covered 3. Replace stone as needed to facilitate de-watering.

STEEL FENCE POST

SET MAX 2' APART MIN. 18" INTO SOLID

based on field conditions.

MAINTENANCE:

NORTH CAROLINA Environmental Quality FECTIVE DATE: 11/12/2020

SILT FENCE OUTLET

**GEOTEXTILE FABRIC** TO BE USED IN LOCATIONS SUBJECT TO SEEPAGE OR HIGH WATER TABLE. 2-3" COURSE AGGREGATE 1. Clear the entrance and exit area of all vegetation, roots, and other objectionable 1. Inspect all measures at least weekly and after each rainfall of 1.0 inch or greater. material and properly grade it. Make any required repairs immediately. 2. Place the gravel to the specific grade and dimensions shown on the plans, and 2. Maintain the gravel pad in a condition to prevent mud or sediment from leaving the construction site. This may require periodic topdressing with 2-inch stone. 3. Provide drainage to carry water to a sediment trap or other suitable outlet. 3. Sediment on roadways is to be removed immediately by broom and shovel, either by 4. Use geotextile fabrics in order to improve stability of the foundation in locations manual or mechanical means, and not to be washed off where it has the potential to subject to seepage or high water table. enter a stream, drainage way or storm drain system.

GENERAL NOTES CITY OF HICKORY TEMPORARY SILT FENCE Effective Date: 9/1/2023 In accordance with the 2013 Design Manual Updates

TEMPORARY SEEDING RECOMMENDATIONS FOR FALL Coastal Plain and Piedmont — Aug. 15 - Dec. 31 Apply 4,000 lb/acre straw. Anchor straw by tacking with asphalt, etting, or a mulch anchoring tool. A disk with blades set nearly straight can be used as a mulch anchoring tool. Repair and refertilize damaged areas immediately. Topdress with 50 lb/acre of nitrogen in March. If it is necessary to extend temporary over beyond June 15, overseed with 50 lb/acre Kobe (Piedmont and Refertilize if growth is not fully adequate. Reseed, refertilize and mulch Refertilize if growth is not fully adequate. Reseed, refertilize and mulch Coastal Plain) or Korean (Mountains) lespedeza in late February or LIMING- Apply lime according to soil test recommendations. If the pH (acidity) of the soil is not known, an application of ground agricultural limestone at the rate of 1-1½ tons/acre on coarse-textured soils and 2-3 tons/acre on fine-textured soils is usually sufficient. Apply limestone uniformly and incorporate into the top 4-6 inches of soil. FERTILIZER- Base application rates on soil tests. When these are not possible, apply a 10-10-10 grade fertilizer at 700 - 1,000 lb/acre. Both fertilizer and lime should be SURFACE ROUGHENING- If recent tillage operations have resulted in a loose surface additional roughening may not be required, except to break up large clods. If rainfall causes the surface to become sealed or crusted, loosen it just prior to seeding by raking, harrowing, or other suitable methods for fine grading. The finished grade shall be a smooth even soil surface with a loosen uniformly fine texture. All ridges and depressions shall be removed and filled to provide the approved surface drainage.

IF SILT FENCE FABRIC IS NOT - SILT FENCE FABRIC METAL POSTS (WOODEN POSTS NOT ALLOWED) ALTERNATE TRENCHING DETAIL FENCE FABRIC SHAL

NOTE: POSTS SHALL BE SPACED AT A MAXIMUM O

8' IF FENCE IS SUPPORTED WITH WIRE, ANI A MAXIMUM OF 6' IF FENCES USES EXTRA

AND SHALL HAVE A MINMUM OF 6 LINE WIRES WITH 12" 4) BACKFILL OVERTOP OF FABRIC SHALL BE COMPACTED TO A MINIMUM OF 95% MODIFIED PROTECTOR APPROVED MATERIAL MEETING AN APPROVED MATERIAL MEETING AN 85% MIN. FILTERING EFFICIENCY
AND MIN. 30 LB./ LIN IN TENSILE
STRENGTH WITH A MIN 6 MONTH
EXPECTED USEABLE CONSTRUCTION
LIFE. INSTALL FABRIC IN
ACCORDANCE WITH MANUFACTURER'S
INSTRUCTIONS

NOT TO SCALE

STD. NO.

2-1-07

FINAL DRAWING FOR REVIEW PURPOSES ONLY NOT RELEASED FOR CONSTRUCTION NOTIFY THE STATE OF NORTH CAROLINA DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES (MOORESVILLE REGIONAL OFFICE) AT 704-235-2100 OF CONSTRUCTION COMMENCEMENT AND SCHEDULE PRE-CONSTRUCTION CONFERENCE IF REQUIRED BY STATE OF NORTH CAROLINA ENVIRONMENTAL ENGINEER.

3. FLAG PROPERTY LINES, EASEMENTS, BUFFERS, AND TREE PROTECTION AREAS.

4. INSTALL CONSTRUCTION ENTRANCES, SILT FENCE, STONE DRAINS, AND OTHER MEASURES AS SHOWN ON THE DRAWINGS. CLEAR ONLY AS REQUIRED TO INSTALL THESE DEVICES.

5. INSTALL TEMPORARY STREAM CROSSINGS USING BRIDGE MATS.

6. BEGIN LIMITED CLEARING AND GRUBBING ACTIVES AS DIRECTED BY THE OWNER.

7. STOCKPILE TOPSOIL AND SUITABLE FILL MATERIAL. INSTALL SILT FENCE AROUND STOCKPILE AREAS. DISPOSE OF UNSUITABLE SOILS AND ALL OTHER WASTE MATERIALS OFF-SITE IN A LEGAL MANNER. THE CONTRACTOR WILL BE RESPONSIBLE FOR LOCATIONS OF ALL STOCKPILES AND ALL ADDITIONAL SEDIMENT AND EROSION CONTROLS MEASURERS REQUIRED.

8. BEGIN EXCAVATION AND TRENCHING ACTIVITIES ONLY AFTER ALL REQUIRED EROSION CONTROL MEASURES HAVE BEEN INSTALLED.

9. BEGIN CONSTRUCTION AND INSTALLATION OF UTILITY LINE(S).

10. ALL EXCAVATED DIRT IS TO BE PLACED WITHIN THE LAKE NORMAN HOA OWNED EASEMENT AND AREAS WHERE TEMPORARY CONSTRUCTION EASEMENTS HAVE BEEN OBTAINED. NO EXCAVATED MATERIAL WILL BE PERMITTED OUTSIDE OF THE EASEMENTS.

12. BACKFILL AND ESTABLISH FINISHED GRADE IMMEDIATELY AFTER PIPES HAVE BEEN INSTALLED.

13. GROUNDCOVER SHALL BE PROVIDED IN ACCORDANCE TO THE GROUND STABILIZATION CHART.

14. CONTRACTOR TO CONDUCT A WEEKLY SITE INSPECTION, AFTER EACH RAINFALL EVENT IN EXCESS  $\frac{1}{2}$ -INCH AND PERFORM ANY NECESSARY MAINTENANCE,

15. MAINTENANCE CONSIST OF REMOVE SEDIMENT FROM CHECK DAMS AND FROM BEHIND SILT FENCES, MAKE NECESSARY REPAIRS AS DIRECTED BY INSPECTOR, OWNER, OR ENGINEER.

16. THE CONTRACTOR SHALL FAITHFULLY MAINTAIN ALL EROSION AND SEDIMENTATION CONTROL MEASURES AND TAKE ALL PRECAUTIONARY MEASURES NECESSARY TO ENSURE THAT NO SILT LEAVES THE PROJECT SITE AND ENTERS ANY NATURAL STREAM OR WATERWAY AND MAINTAIN EROSION AND SEDIMENTATION CONTROL MEASURES UNTIL PERMANENT GROUND COVER IS ESTABLISHED.

17. ALL EXISTING VEGETATION NOT SCHEDULED FOR REMOVAL SHALL BE PROTECTED VIA TREE PROTECTION FENCING. LOCATE FENCING AS FAR AS PRACTICABLE FROM THE VEGETATION THE FENCE IS TO PROTECT.

18. STABILIZE SITE AS AREAS ARE BROUGHT TO FINISHED GRADE WITH VEGETATION OR STONE BASE. ALL AREAS INDICATED TO BE PAVED SHALL BE STABILIZED WITH STONE AS SOON AS THEY ARE BROUGHT TO FINAL GRADE. MAINTAIN DIVERSIONS, INLET PROTECTION AND SEDIMENT BASINS UNTIL SITE IS COMPLETELY STABILIZED.

19. SLOPES SHALL BE NO STEEPER THAN 2:1 FOR VEGETATIVE COVER.

20. SEED, FERTILIZE, AND MULCH ALL DISTURBED AREAS, INCLUDING ALL STORAGE, STAGING, AND OFF SITE STAGING, IN ACCORDANCE WITH THE REQUIREMENTS SET FORTH ON THE PLANS.

21. WHEN CONSTRUCTION IS COMPLETE AND ALL AREAS ARE STABILIZED, CALL NCDENR @ 704-235-2100 FOR AN INSPECTION BY AN ENVIRONMENTAL INSPECTOR.

22. IF SITE IS APPROVED, REMOVE ANY TEMPORARY DIVERSIONS, SILT FENCES, SEDIMENT TRAPS, ETC., AND REGRADE AND SEED OR STABILIZE ANY RESULTING DISTURBED AREAS.

23. WHEN VEGETATION HAS BECOME ESTABLISHED, CALL NCDENR @ 704-235-2100 FOR A FINAL SITE INSPECTION BY AN ENVIRONMENTAL INSPECTOR. OBTAIN CERTIFICATE OF COMPLETION.

24. THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING AND MAINTAINING ALL TEMPORARY EROSION AND SEDIMENTATION CONTROL DEVICES SHOWN ON THE DRAWINGS.

25. THE CONTRACTOR SHALL PROVIDE ADDITIONAL SILT FENCING AROUND SPOIL PILES AT BORING PITS IF PIT IS LEFT OPEN OVERNIGHT OR IF A RAIN EVEN IS EMINENT. PLASTIC SHEETING MAY ALSO BE USED TO COVER PILES.

NARRATIVE:

1. PROJECT DESCRIPTION

THE PURPOSE OF THE PROJECT IS TO ADD A SLUDGE HOLDING TANK AT AN EXISTING WWTP IN ORDER TO IMPROVE THE SITE'S OVERALL SYSTEM WHILE A NEW WWTP IS INSTALLED ON SITE.

2. SITE DESCRIPTION

THIS WWTP INSTALLATION WILL TAKE PLACE WITHIN LAKE NORMAN HOA PROPERTY.

3. PERMANENT STABILIZATION

ALL AREAS DISTURBED BY CONSTRUCTION WILL BE STABILIZED WITH PERMANENT SEEDING IMMEDIATELY FOLLOWING FINISH GRADING. SEEDING WILL CONSIST OF GRASSES TYPICAL OF THE AREA AND INSPECTION AND MAINTENANCE PERFORMED TO CONFIRM ESTABLISHMENT.

4. PLANNED EROSION AND SEDIMENTATION CONTROL PRACTICES

A. STOCKPILES

STOCKPILES WILL BE USED WHEN THE STORAGE OF EXCESS FILL MATERIAL IS NECESSARY. THE CONTRACTOR WILL BE RESPONSIBLE FOR LOCATIONS OF ALL STOCKPILES AND ALL ADDITIONAL SEDIMENT AND EROSION CONTROLS MEASURERS REQUIRED. STOCKPILES SHOULD BE STABILIZED AND/OR SURROUNDED WITH SEDIMENT FENCE TO PREVENT RUNOFF.

B. CONSTRUCTION ENTRANCES

CONSTRUCTION ENTRANCES WILL BE PROVIDED TO REDUCE EROSION OF SEDIMENT INTO WETLANDS AND WATERWAYS CAUSED BY HEAVY TRUCKS AND MACHINERY ENTERING AND LEAVING THE PROJECT SITE. THIS PRACTICE ALSO PLAYS AN IMPORTANT ROLE IN COMMUNITY PERCEPTION OF THE PROJECT BY MINIMIZING THE DIRT AND MUD THAT IS TRACKED ONTO STREETS.

C. SILT FENCE

SEDIMENT FENCE WILL BE CONSTRUCTED AS NECESSARY TO PREVENT SEDIMENT FROM ENTERING DITCHES AND ADJACENT WATERWAYS.

D. SILT FENCE OUTLETS/STONE DRAINS

SILT FENCE OUTLETS SHALL BE INSTALLED ALONG THE SILT FENCE AT LOCATIONS WERE SIGNS OF CONCENTRATED FLOW OCCUR AND WILL BE FIELD ADJUSTED AS REQUIRED. THE STONE DRAINS ARE USED TO LET WATER TRAPPED BEHIND THE SILT FENCE TO ESCAPE DOWNSTREAM HELPING TO PREVENT THE WEIGHT OF DETAINED WATER FROM COLLAPSING THE SILT FENCE AND ALLOWING TRAPPED SEDIMENT TO ENTER ADJACENT PROPERTY, WETLANDS, AND WATERWAYS.

E. EROSION CONTROL MATTING

EROSION CONTROL MATTING SHALL BE USED ON DISTURBED DITCHES AND SWALES. MATTING IS INTENDED TO STABILIZE SOIL ON DISTURBED SLOPES WHILE HOLDING SEED AND MULCH IN PLACE ALLOWING VEGETATION TO BECOME ESTABLISHED. DEPENDING UPON THE SLOPE AND DEPTH OF ANTICIPATED RUNOFF, DIFFERENT MATTING TYPES MAY BE NECESSARY FOR DIFFERENT APPLICATIONS.

F. EROSION CONTROL STONE

EROSION CONTROL STONE SHALL BE USED ON DISTURBED CREEK AND STREAM CROSSINGS. EROSION CONTROL STONE IS INTENDED TO STABILIZE SIDES AND BOTTOMS ON DISTURBED CREEK AND STREAM CROSSINGS WHILE ALLOWING VEGETATION TO BECOME ESTABLISHED. DEPENDING UPON THE SLOPE AND DEPTH OF ANTICIPATED RUNOFF, DIFFERENT GRADES OF EROSION CONTROL STONE MAY BE NECESSARY FOR DIFFERENT APPLICATIONS.

G. SEEDING, FERTILIZING, AND MULCHING

SEEDING, FERTILIZING, AND MULCHING ARE A PERMANENT FORM OF EROSION CONTROL GROUNDCOVER SHALL BE PROVIDED WITHIN 14 CALENDAR DAYS FOLLOWING COMPLETION OF ANY PHASE OF GRADING. PERMANENT GROUNDCOVER SHALL BE PROVIDED FOR ALL DISTURBED AREAS WITHIN 14 CALENDAR DAYS FOLLOWING COMPLETION OF CONSTRUCTION ACTIVITIES.

EROSION CONTROL NOTES:

1. ANY AREA DISTURBANCES BY CONTRACTOR NOT SHOWN ON THE CONSTRUCTION DRAWINGS ARE TO BE PERMITTED THROUGH THE APPROPRIATE PERMITTING AGENCY.

2. PURSUANT TO G.S. 113A-57(2), THE ANGLE FOR GRADED SLOPES AND FILLS SHALL BE NO GREATER THAN THE ANGLE THAT CAN BE RETAINED BY VEGETATIVE COVER OR OTHER ADEQUATE EROSION CONTROL DEVICE OR STRUCTURE.

3. PROVIDE A ROLLED EROSION CONTROL PRODUCT (RECP) TO STABILIZE DISTURBED DITCHES IF ANY SIGNS OF SCOURING ARE EVIDENT EVEN IF NO RECP HAS BEEN SHOWN ON THE CONSTRUCTION DRAWINGS.

4. NO STOCK OR WASTE PILES ARE ALLOWED WITHIN 50' OF STREAMS OR DRAINAGE STRUCTURES.

5. WHERE DEWATERING OF TRENCHES, PITS, AND OTHER EXCAVATIONS BECOMES NECESSARY THE DISCHARGE MUST BE DIVERTED TO A SEDIMENT FILTER BAG BEFORE BEING DISCHARGED TO THE GROUND.

6. ADEQUATE EROSION CONTROL MEASURES MUST BE INSTALLED, MAINTAINED, AND ADJUSTED AS NEEDED DURING THE DEMOLITION OR CLEARING AND GRUBBING PHASES AS WELL AS THROUGHOUT THE LIFE OF THE PROJECT AND UNTIL PERMANENT VEGETATION IS ESTABLISHED.

### SURFACE RESTORATION

A. CONTRACTOR SHALL PROVIDE ALL LABOR, EQUIPMENT, AND MATERIALS NECESSARY FOR FINAL GRADING, TOPSOIL PLACEMENT, AND MISCELLANEOUS SITE WORK NOT INCLUDED UNDER OTHER SECTIONS BUT REQUIRED TO COMPLETE THE WORK AS SHOWN ON THE DRAWINGS AND SPECIFIED HEREIN.

B. TOPSOIL SHALL MEET THE REQUIREMENTS OF SPECIFICATION SECTION 02100 - SITE PREPARATION.

C. FOLLOWING APPROVAL OF ROUGH GRADING THE SUBGRADE SHALL BE PREPARED AS FOLLOWS:

 FOR RIPRAP, BARE SOIL 18-INCHES BELOW FINISH GRADE OR AS DIRECTED BY ENGINEER. - WHERE BURNING HAS BEEN PERFORMED, DISTRIBUTE ASHES EVENLY OVER THE AREA TO RECEIVE

- FOR TOPSOIL, SCARIFY 2-INCHES DEEP PRIOR TO PLACING.

D. TOPSOIL PLACEMENT SHALL BE COMPLETED AS FOLLOWS:

TOPSOIL SHALL BE PLACED OVER ALL AREAS DISTURBED DURING CONSTRUCTION UNDER ANY CONTRACT EXCEPT THOSE AREAS THAT WILL BE PAVED, GRAVELED OR RIP RAPPED.

TOPSOIL SHALL BE SPREAD IN PLACE FOR LAWN AND ROAD SHOULDER SEED AREAS AT A 3-INCH CONSOLIDATED DEPTH AND AT A SUFFICIENT QUANTITY FOR PLANT BEDS AND BACKFILL FOR SHRUBS AND TREES.

TOPSOIL SHALL NOT BE PLACED IN A FROZEN OR MUDDY CONDITION.

- FINAL SURFACE SHALL BE HAND OR MECHANICALLY RAKED TO AN EVEN FINISHED SURFACE TO FINISH GRADE AS SHOWN ON DRAWINGS.

- ALL STONES AND ROOTS OVER 4-INCHES AND RUBBISH AND OTHER DELETERIOUS MATERIALS SHALL BE REMOVED AND DISPOSED OF.

EROSION CONTROL LEGEND EXISTING MINOR CONTOUR --- --- EXISTING MAJOR CONTOUR LIMIT OF DISTURBANCE PROPOSED TREE PROTECTION FENCE PROPOSED SILT FENCE/TREE PROTECTION PROPOSED STRAW WATTLE PROPOSED SILT FENCE OUTLET PROPOSED INLET PROTECTION PROPOSED EROSION CONTROL MATTING

PROPOSED PIPE/CULVERT INLET PROTECTION PROPOSED ROCK CONSTRUCTION ENTRANCE

EMER



INITIAL PLAN DATE: 10/01/2025 REVISIONS: 1 - 10/22/2025 RKP 60% SUBMITTAL

Know what's below. **Call** before you dig. WR JOB NUMBER 24-0326-002 DRN: RP DGN: MW CKD: AE

**EROSION CONTROL NOTES**